



## Database Reference Manual

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# Database Reference Manual

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## BEST PRACTICES GUIDELINES FOR ESTIMATING AND PROCESSING AUTO PHYSICAL DAMAGE CLAIMS

The Collision Industry Conference "Write It Right" Committee, a dedicated volunteer group of insurers and repairers, produced a set of working guidelines of unprecedented value to our industry. They represent

A Consensus on how to work together for the benefit of the vehicle owner  
in the spirit of good faith business practice and mutual respect.

Now the members of the Collision Industry Conference ask that all responsible repairers and insurers endorse and adopt these nineteen common-sense practices.

Prior to visiting the shop the adjuster should call to...

- 1 Verify that the car is there
- 2 Provide an accurate description of vehicle and area of damage
- 3 Determine if the repair facility has the owner's signed authorization to tear down/repair
- 4 Review towing, authorize tear down, and agree on pre-tear down photos

At the initial inspection the repairer and insurance company representative should...

- 5 Exchange business cards that identify the company and representative
- 6 Document all administrative data
- 7 Identify coverage and payment issues prior to adjuster/appraiser leaving facility and repairs begin started
- 8 Document the usage of appropriate new, used or alternative parts
- 9 Document unrelated damage
- 10 Share the responsibility to protect the vehicle during the repair process
- 11 Leave a copy of the repair estimate

The repairer should...

- 12 Document any changes to the repair process as they occur or daily
- 13 Inspect and test drive the vehicle where damage or repairs could possibly affect the vehicle safety or integrity

Repairers and insurers together...

- 14 Should be able to communicate electronically
- 15 Should eliminate unnecessary requirements, which add cost to the claim and delay the repair and payment process
- 16 Must not participate in the illegal, unethical, and fraudulent practice of cost shifting
- 17 Must list as line items on the estimate all procedures and parts necessary to repair the vehicle to pre-accident condition, whether or not included or recognized in the information providers' systems
- 18 Must produce a final estimate/final invoice which is a true and accurate report of the repairs
- 19 Must write true judgment time that reflects the costs of all labor and economic factors necessary to perform the repair

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## Best Practices Guidelines

The **Collision Industry Conference Insurer-Repairer Task Force**, a dedicated volunteer group of insurers, repairers, and industry partners have produced a set of working guidelines that represent:

A consensus on how to work together for the benefit of the vehicle owner using good faith business practices and mutual respect in the event of a collision or an event that results in the need for collision repair

**Now the members of the Collision Industry Conference ask that all responsible repairers and insurers endorse and adopt common-sense practices.**

**NOTE:** This is a “living” document, designed to be modular in approach. It is intended to be global in nature and will provide the framework for all collision industry Best Practices. This is a draft and is not intended to be acted upon in any way other than review and comment from interested industry colleagues.

1. Event Notification
  - a. Insurer
    - i. Receives notification from insured/claimant
    - ii. Take the notice of loss
    - iii. Verify and inform insured/claimant of coverage and rights pertaining to the claim
    - iv. Inform insured/claimant of actions to be taken, who is responsible
  - b. Repairer
    - i. Repairer is contacted by consumer and/or insured/claimant
      1. Ensures that the insurer has been informed (if applicable)
      2. Inspect and communicate damage and recommended repair process to consumer and/or insured/claimant and insurer
        - a. Repair v. replace
        - b. Parts to be used
      3. Photograph vehicle
      4. Protect from additional damage as possible
      5. Obtain repair authorization
      6. Disassemble vehicle to determine parts and labor required for repair
      7. Order parts
      8. Establish target delivery date and begin repair
      9. Keep consumer informed of progress, repair process and any change in status or associated costs
    - ii. Repairer is contacted by insurer (separate DRP/non-DRP) (drivable v. non-drivable)
      1. Contact consumer and/or insured/claimant
      2. Inspect and communicate damage to insured/claimant and insurer
      3. Photograph vehicle
      4. Protect from additional damage
      5. Obtain repair authorization
      6. Disassemble vehicle if required
      7. Order parts, determine anticipated delivery date for parts
      8. Schedule start date
      9. Establish target delivery date for vehicle and begin repair
      10. Inform consumer and/or insured/claimant of actions to be taken, responsible party including:
        - a. Estimate process
        - b. Repair options
        - c. Repair
        - d. Towing (if applicable)
        - e. Payment amount and timing
        - f. Replacement/rental vehicle options/substitute transportation

Continued Reverse Side

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2. Best Practices: Pre-Production (prior to repair)
  - a. Obtain vehicle (tow-in v. drive-in)
  - b. Determine if the vehicle is safely drivable v. non-drivable
  - c. Perform vehicle drop-off inspection (with vehicle owner)
  - d. Obtain signed repair authorization
  - e. Process appropriate forms (legal, regulatory, other)
  - f. Non-drivable
    - i. Disassemble to determine damage and complete repair plan (if applicable)
    - ii. Determine type of parts to be used in repair
    - iii. Communicate to consumer and/or insured/claimant any changes in repair plan, type of parts to be used, all relevant repair information
    - iv. Obtain repair authorization
    - v. Order parts
    - vi. Establish and communicate estimated completion date
    - vii. Schedule for repair
  - g. Drivable
    - i. Determine type parts to be used in repair
    - ii. Communicate to consumer and/or insured/claimant any changes in repair plan, type of parts to be used, all relevant repair information
    - iii. Obtain repair authorization
    - iv. Order parts
    - v. Establish and communicate estimated completion date
    - vi. Schedule for repair
3. Repair Process
  - a. Complete disassembly and audit estimate to determine damage and complete repair plans
    - i. Communicate any changes to consumer and/or insured/claimant and/or insurer, if applicable
  - b. Receive, inspect and validate parts
  - c. Determine and communicate any changes to consumer and insurer, if applicable
  - d. Communicate progress to consumer and/or insured/claimant including target completion date on a regular basis
  - e. Verify payment process including deductible
4. Pre-Delivery Process
  - a. Perform pre-delivery inspection to ensure complete, safe and proper repair
  - b. Road test vehicle if required
  - c. Clean/detail vehicle
  - d. Reconcile parts list, repair order and damage estimate
5. Delivery of Vehicle
  - a. Schedule delivery time with consumer and/or insured/claimant
  - b. Present vehicle to owner, confirm and review repairs
  - c. Present consumer and/or insured/claimant with estimate, repair order, warranty
  - d. Transmit, deliver final package to insurer if required, including any regulatory requirements, if applicable.
6. Post-Delivery Process
  - a. One or two days after pick-up/delivery of vehicle, contact consumer and/or insured/claimant to ensure satisfaction with repairs
  - b. Respond accordingly to any issues that may have to be dealt with.
  - c. Ensure that a CSI survey is performed whether by the repairer, insurer or a third party.

Adopted July 23, 2008

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## Feather/Prime/Block Collision Industry Conference April 2006

- The repair process associated with damaged painted body panels typically involves multiple operations: body repair, feather, prime, block and refinish.
- The body repair process includes metal finishing and/or the use of body fillers to return the body panel to its undamaged contour. The repaired area is finished to 150-grit and free of surface imperfections.
- Feather, prime and block are not-included refinish operations that complete the process from 150-grit to the condition of a new undamaged panel and are outlined and documented in printed and/or electronic time guides.
- The body/paint labor and materials necessary to prepare the repaired area from 150-grit to the condition of a new undamaged part are valid and required steps in the process. The labor and material allowance for these operations requires an on-the-spot evaluation of the specific vehicle and damage.

## Section 1-1 Acknowledgements

### Acknowledgements

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Audatex, a Solera company, gratefully acknowledges and thanks the vehicle manufacturers that participate with us in the development of Audatex products. Additionally, we acknowledge I-CAR for permission to reproduce materials contained herein (clearly marked as I-CAR materials). We also wish to thank the many automotive refinish, parts, and equipment manufacturers who have cooperated.

All labor times included in Audatex products are the property and proprietary information of Audatex. They are developed through independent time studies conducted by Audatex, coupled with service procedures provided by the vehicle manufacturers. They do not reflect vehicle manufacturers' warranty times.

Some vehicle manufacturers have specific and recommended repair processes and procedures as well as recommended equipment to maintain vehicle warranty. For details, please check with the applicable manufacturer. Known manufacturer recommendations are as follows:

- **BMW** recommends:
  - the use of specific paint products in the refinish process.
  - the use of specific unibody straightening equipment in the repair of their vehicles
  - specific processes and procedures for repair of aluminum parts.
  - specific processes and procedures for repair Carbon fiber parts.
- **Audi** recommends:
  - specific processes and procedures for repair of aluminum parts.
  - the use of specific unibody straightening equipment in the repair of their vehicles
- **Ford** recommends:
  - specific processes and procedures for repair of aluminum parts.
- **Land Rover** recommends:
  - specific processes and procedures for repair of aluminum parts.
  - the use of specific unibody straightening equipment in the repair of their vehicles
- **Cadillac** recommends:
  - specific processes and procedures for repair of aluminum parts.
  - the use of specific unibody straightening equipment in the repair of some vehicles
- **Jaguar** recommends:
  - specific processes and procedures for repair of aluminum parts.
  - the use of specific unibody straightening equipment in the repair of their vehicles
- **Mercedes-Benz** recommends:
  - the use of specific unibody straightening equipment in the repair of their vehicles.
  - specific processes and procedures for repair of aluminum parts
  - the use of specific paint products in the refinish process.
  - specific processes and procedures for repair of boron steel parts.
- **Porsche** recommends:
  - specific processes and procedures for repair of boron steel parts.
  - the use of specific unibody straightening equipment in the repair of their vehicles
  - specific processes and procedures for repair of aluminum parts
- **Volvo** recommends:
  - specific processes and procedures for repair of boron steel parts.
- **Toyota** recommends:
  - performing a "Health Check" diagnostic scan before and after every repair to identify and document DTCs.
- **Honda** recommends:
  - a preliminary diagnostic scan during the repair estimation phase to determine what DTCs may be present, and a post repair diagnostic scan to confirm that no DTCs remain.

## Section 1-1 Acknowledgements

- **Chrysler** recommends:
  - safety and security related systems, such as antilock brakes, supplemental restraint systems (SRS - air bags), occupant restraint controller (ORC), seat belts, active head restraints, forward facing camera and radar, blind spot monitoring, and other automated electronic driver assistance systems, MUST be tested for fault codes (DTCs) that could be active (current) or stored following a collision.
- **Nissan** recommends:
  - vehicles be scanned following a collision repair to help ensure the vehicles' systems are communicating properly with no trouble codes outstanding. It is also recommended that, where appropriate, a pre-repair scan also be completed for reasons mentioned above.
- **Tesla** recommends:
  - the use of specific paint products in the refinish process.
  - the use of specific unibody straightening equipment in the repair of their vehicles
  - specific processes and procedures for repair of aluminum parts
  - Toolbox is Tesla's diagnostic and repair software. Some operations require the use of Toolbox to reset controllers, program newly-installed components, test newly-installed components, or update firmware.

Audatex gratefully acknowledges vehicle manufacturers for providing parts and pricing information, service manuals, and other technical support data. Audatex acknowledges specific proprieties of the following manufacturers and entities:

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## Section 2-1 How to Read the Audatex Estimate

### Reports Explained

#### How to Read the Audatex Estimate

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##### Overview of the Audatex Estimate

Audatex estimating applications, coupled with the Audatex database, provide access to millions of pieces of information on parts, prices, and labor.

Audatex automatically:

- provides OEM part numbers, part prices, and labor.
- performs all necessary calculations and totals including any discounts, markups, adjustments, and tax computations.
- deducts overlap (defined as any operation common to the replacement of two or more parts). Net labor after deduction for overlap is provided in the estimate printout.

Audatex provides the estimate preparer an accurate, legible, professional quality estimate. The following pages show examples of Audatex estimates and labor reports. These examples explain all terms and codes necessary to read the estimate.

##### Reading an Audatex Estimate

The Audatex estimate is easy to read. It provides complete documentation of the work to be done on a damaged vehicle.

Asterisks on an estimate are used to denote user-entered values. They do not imply that the operation noted is not a necessary procedure.

Manual entries on an estimate do not imply that the part/operation entered is not a necessary procedure.

If you find additional damage to the vehicle that is not listed on the estimate, you can generate a supplement to the original estimate.

The Audatex supplement feature will:

- automatically recalculate all previous totals
- print out the new total at the bottom of the estimate

On the printout, any new entries and changes made as part of the supplement will be marked with an "S." You can generate as many supplements as needed. The estimate will show which entries were entered by each supplement with a number next to the "S" (S1, S2, S3, etc.).

In addition, there is a configurable correction feature so you can make corrections to an estimate. The Audatex application will recalculate the entire estimate, but any changes will not display the distinctive "S" used for supplements.

 **Important Note:** Report examples are provided as samples and may differ in Audatex Estimating due to monthly updates.

**Section 2-2 An Explanation of the Audatex Estimate**

|  |  |
|--|--|
| *****<br>TEST COLLISION REPAIR<br>FOR TESTING PURPOSES ONLY<br>*****<br>FOR FALCON USA - SHPPAL1   |  |
| *** ESTIMATE ***   |  |
| 07/26/2010 08:30 AM  |  |
| <b>Owner</b>   |  |
| Owner: Anita Smith<br>Address: 2356 Martin Ave<br><br>City State Zip: Johnson City, NY 13790<br>Email: ASmith@Audatextrainingemail.com   | Work/Day: (807)555-2123<br>Cell: (807)555-5122<br>FAX:   |
| <b>Control Information</b>   |  |
| Claim # : TEST-20100726-1<br>Loss Date/Time: 07/25/2010 08:22 AM<br>Deductible: \$500.00<br><br>Ins. Company: Sample Training Insurance Co<br>Address: 459 Main St.<br>City State Zip: Chicago, IL 60606<br><br>Insured: Anita Smith<br>Address: 2356 Martin Ave<br><br>City State Zip: Johnson City, NY 13790<br>Email: ASmith@Audatextrainingemail.com<br><br>Claimant: N/A<br><br>Claim Rep: Sample Training Insurance Co<br>Contact: Joe Adjuster<br>Address: 459 Main St.<br>City State Zip: Chicago, IL 60606<br><br>Loss Payee: Owner / Insured<br><br>Second Payee: StaySafe Sample Bank<br>Contact: John King<br>Address: 9568 Franklin St.<br>City State Zip: Saratoga Springs, NY 12866 | Insured Policy # : 20100726-1<br>Loss Type: Collision<br><br>Work/Day: (555)555-5126<br>FAX:<br><br>Work/Day: (807)555-2123<br>Home/Evening: (807)555-5122<br>FAX:<br><br>Work/Day: (555)555-5126<br>FAX:<br><br>Work/Day: (518)555-5859<br>FAX: |
| <b>Inspection</b>  |  |
| Inspection Date: 07/26/2010 08:38 AM<br>Inspection Location: Owner Residence<br>City State Zip: Johnson City, NY 13790<br>Primary Impact: Left Front Corner<br>Driveable: No<br><br>Company: Sample Training Insurance Co<br>Contact: Keith Benton<br>Address: 459 Main St.<br>City State Zip: Chicago, IL 60606   | Inspection Type: Field<br>Contact:<br>FAX:<br>Secondary Impact:<br>Rental Assisted: No<br><br>Appraiser License # :<br><br>Work/Day: (555)555-5126<br>FAX:   |
| <b>Repairer</b>  |  |
| Repairer: Certified Collision<br>Address: 45 Portland Way<br>City State Zip: Binghamton, NY 13902<br>Email: TJ@certcolladxtrain.com<br>License # : NY123456  | Contact: Ted Johnson<br>Work/Day: (807)555-9954<br>Work/Day:<br><br>Regulation ID:   |
| <b>Remarks</b>   |  |
| 3<br>Owner paid tow bill directly to tower   |  |

Section 2-2 An Explanation of the Audatex Estimate

|   |                 |    |       |                          |  |  |           |                         |    |                     |    |
|---|-----------------|----|-------|--------------------------|--|--|-----------|-------------------------|----|---------------------|----|
| 2008 Chevrolet Malibu LS 4 DR Sedan<br>Claim #: TEST-20100726-1               |                 |    |       |                          |  |  |           |                         |    | 07/26/2010 09:30 AM |    |
| <b>Vehicle</b>  |                 |    |       |                          |  |  |           |                         |    |                     |    |
| 2008 Chevrolet Malibu LS 4 DR Sedan<br>4cyl Gasoline 2.4<br>4 Speed Automatic |                 |    |       |                          |  |  |           |                         |    |                     |    |
| Lic.Plate: 123ABC   |                 |    |       | Lic State: NY            |  |  |           | VIN: 1G1ZG57B98F222299  |    |                     |    |
| Lic Expire:   |                 |    |       | Mileage: 31,259          |  |  |           | Mileage Type: Actual    |    |                     |    |
| Prod Date:  |                 |    |       | Code: U2663B             |  |  |           | Int. Color: Light Gray  |    |                     |    |
| Veh Insp#:  |                 |    |       | Int. Refinish: Two-Stage |  |  |           | Int. Trim Code:         |    |                     |    |
| Condition: Good   |                 |    |       |                          |  |  |           |                         |    |                     |    |
| Ext. Color: RED JEWEL   |                 |    |       |                          |  |  |           |                         |    |                     |    |
| Ext. Refinish: Two-Stage  |                 |    |       |                          |  |  |           |                         |    |                     |    |
| Ext. Paint Code: 301N   |                 |    |       |                          |  |  |           |                         |    |                     |    |
| <b>Options 4</b>  |                 |    |       |                          |  |  |           |                         |    |                     |    |
| AM/FM CD Player   |                 |    |       | Air Conditioning         |  |  |           | Alarm System            |    |                     |    |
| Anti-lock Brakes  |                 |    |       | Bucket Seats             |  |  |           | Center Console          |    |                     |    |
| Cruise Control  |                 |    |       | Dual Airbags             |  |  |           | Floor Mats              |    |                     |    |
| Halogen Headlights  |                 |    |       | Head Airbags             |  |  |           | Intermittent Wipers     |    |                     |    |
| Keyless Entry System  |                 |    |       | Lighted Entry System     |  |  |           | MP3 Player              |    |                     |    |
| OnStar System   |                 |    |       | Power Brakes             |  |  |           | Power Door Locks        |    |                     |    |
| Power Mirrors   |                 |    |       | Power Steering           |  |  |           | Power Windows           |    |                     |    |
| Rear Window Defroster   |                 |    |       | Rem Trunk-L/Gate Release |  |  |           | Side Airbags            |    |                     |    |
| Tachometer  |                 |    |       | Theft Deterrent System   |  |  |           | Tilt & Telescopic Steer |    |                     |    |
| Tinted Glass  |                 |    |       | Tire Pressure Monitor    |  |  |           | Traction Control System |    |                     |    |
| Trip Computer   |                 |    |       | Velour/Cloth Seats       |  |  |           | XM Satellite Radio      |    |                     |    |
| <b>Damages</b>  |                 |    |       |                          |  |  |           |                         |    |                     |    |
| <b>5</b>  | Line            | Op | Guide | MC                       | Description                                  | MFR.Part No.                                       | Price     | ADJ%                    | B% | Hours               | R  |
|   | 1               | EP | 6     |                          | Cover,Front Bumper                           | Replace PXN  | \$329.85  |                         |    | 3.0                 | SM |
|   | 2               | L  | 6     | 13                       | Cover,Front Bumper                           | Refinish   |           |                         |    | 3.7                 | RF |
|   |                 |    |       |                          |  | 2.6 Surface  |           |                         |    |                     |    |
|   |                 |    |       |                          |  | 0.6 Two-stage setup                                |           |                         |    |                     |    |
|   |                 |    |       |                          |  | 0.5 Two-stage                                      |           |                         |    |                     |    |
|   | 3               | E  | 1218  |                          | Ret,Frt Bumper Cover                         | MULTI-PART GM Part                                 | \$5.68    |                         |    |                     | SM |
|   | 4               | E  | 174   |                          | Grille,Frt Bmpr Cvr LT                       | 25905343 GM Part                                   | \$74.32   |                         |    | INC                 | SM |
|   | 5               | E  | 1042  |                          | Sensor,Temperature                           | 25775833 GM Part                                   | \$8.40    |                         |    | 0.2                 | SM |
|   | 6               | E  | 11    |                          | Emblem,Frt Bmpr Cover                        | 25981384 GM Part                                   | \$30.02   |                         |    | 0.2                 | SM |
|   | 7               | E  | 47    | 48                       | Defi,Front Bumper Lwr                        | 15826166 GM Part                                   | \$34.28   |                         |    | INC                 | SM |
|   | 8               | E  | 1028  | 48                       | Retainer,Front Bumper                        | 21077123 GM Part                                   | \$5.40    |                         |    | INC                 | SM |
|   | 9               | RI | 78    |                          | Panel,Frt Bmpr License                       | R & I Assembly                                     |           |                         |    | 0.2                 | SM |
|   | 10              | E  | 50    | 48                       | Absorber,Front Bumper                        | 15823697 GM Part                                   | \$58.68   |                         |    | INC                 | SM |
|   | 11              | E  | 1281  |                          | Brkt,Front Bumper Mtg LT                     | 25993224 GM Part                                   | \$11.79   |                         |    | INC                 | SM |
|   | 12              | E  | 1282  |                          | Brkt,Front Bumper Mtg RT                     | 25993225 GM Part                                   | \$11.79   |                         |    | 0.1                 | SM |
|   | 13              | EC | 103   | 48                       | Fender,Front LT                              | Replace Economy                                    | \$120.00* |                         |    | 0.6                 | SM |
|   |                 |    |       |                          | >> AM Quote 345 from John S.                 |  |           |                         |    |                     |    |
|   | 14              | L  | 103   |                          | Fender,Front LT                              | Refinish   |           |                         |    | 3.2                 | RF |
|   |                 |    |       |                          |  | 2.2 Surface  |           |                         |    |                     |    |
|   |                 |    |       |                          |  | 0.5 Edge   |           |                         |    |                     |    |
|   |                 |    |       |                          |  | 0.5 Two-stage                                      |           |                         |    |                     |    |
|   | 15              | EU | 905   |                          | Wheel,Front LT                               | Replace Recycled                                   | \$100.00  | +25.00                  |    | 0.4                 | SM |
|   | 16              | N  | 974   |                          | Suspension Align,Frt                         | Additional Labor                                   |           |                         |    | 1.5                 | ME |
|   | 17              | E  | 655   |                          | Knuckle,Steering L/F                         | 25872803 GM Part                                   | \$139.22  |                         |    | 1.0                 | ME |
|   | 18              | EC | 653   | 48                       | Arm,Lower Control L/F                        | Replace Economy                                    | \$170.00* |                         |    | 1.3                 | ME |
|   | 19              | EC |       |                          | ASSURANCE LF                                 | Replace Economy                                    | \$123.50  |                         |    | 0.3*                | SM |
|   |                 |    |       |                          | >> GOODYEAR 215/65R17 736432285 0 10 98T Yes |  |           |                         |    |                     |    |
|   |                 |    |       |                          | >> Moores Tire Sales                         |  |           |                         |    |                     |    |
|   | <b>19 Items</b> |    |       |                          |  |  |           |                         |    |                     |    |
|   |                 |    |       | <b>6</b>                 | <b>MC</b>                                    | <b>Message</b>                                     |           |                         |    |                     |    |
|   |                 |    |       |                          | 13   | INCLUDES 0.6 HOURS FIRST PANEL TWO-STAGE ALLOWANCE |           |                         |    |                     |    |
|   |                 |    |       |                          | 46   | PRINTABLE ALTERNATE PARTS COMPARE                  |           |                         |    |                     |    |
| 07/26/2010 09:35 AM   |                 |    |       |                          |  |  |           |                         |    | Page 2 of 3         |    |

Section 2-2 An Explanation of the Audatex Estimate

|  |                                |                            |                   |
|--|--------------------------------|----------------------------|-------------------|
| 2008 Chevrolet Malibu LS 4 DR Sedan<br>Claim #: TEST-20100725-1  |                                | 07/26/2010 08:30 AM        |                   |
| <b>Estimate Total &amp; Entries 7</b>  |                                |                            |                   |
| Gross Parts  |                                | \$377.58                   |                   |
| Other Parts  |                                | \$843.35                   |                   |
| Paint Materials  |                                | \$151.80                   |                   |
| Line Item Markup   |                                | \$25.00                    |                   |
| Parts & Material Total   |                                |                            | \$1,397.73        |
| Tax on Parts & Material  | @ 8.000%                       |                            | \$111.82          |
| <b>Labor 8</b>   | <b>Rate</b>                    | <b>Replace Hrs</b>         | <b>Repair Hrs</b> |
|  |                                |                            | <b>Total Hrs</b>  |
| Sheet Metal (SM)   | \$46.00                        | 4.7                        | 4.7               |
| Mech/Elec (ME)   | \$80.00                        | 2.6                        | 1.5               |
| Frame (FR)   | \$60.00                        |                            |                   |
| Refinish (RF)  | \$46.00                        | 6.9                        | 6.9               |
| Paint Materials  | \$22.00                        |                            |                   |
| Labor Total  |                                |                            | 15.7 Hours        |
| Tax on Refinish Labor  |                                | @ 8.000%                   | \$779.60          |
| Gross Total 9  |                                |                            | \$25.39           |
| Less: Deductible 10 or 11  |                                |                            | \$2,314.54        |
| Net Total 12   |                                |                            | \$500.00-         |
|  |                                |                            | \$1,814.54        |
| Alternate Parts Y/06/01/00/05/03 CUM 06/01/00/05/03 Zip Code: 13790 13790 13   |                                |                            |                   |
| Recycled Parts Y/3/1 Zip Code: 13790 INV DATE: 07/26/2010  |                                |                            |                   |
| Audatex Estimating 6.0.455 ES 07/26/2010 09:35 AM REL 6.0.455 DT 07/01/2010 DB 07/15/2010<br>Copyright (C) 2009 Audatex North America, Inc.  |                                |                            |                   |
| 1.6 HRS WERE ADDED TO THIS ESTIMATE BASED ON AUDATEX'S TWO-STAGE REFINISH FORMULA.   |                                |                            |                   |
| <b>Op Codes</b>  |                                |                            |                   |
| * = User-Entered Value   | E = Replace OEM                | NG = Replace NAGS          |                   |
| EC = Replace Economy   | OE = Replace PXN OE Srpls      | UE = Replace OE Surplus    |                   |
| ET = Partial Replace Labor   | EP = Replace PXN               | EU = Replace Recycled      |                   |
| TE = Partial Replace Price   | PM = Replace PXN Reman/Reblt   | UM = Replace Reman/Rebuilt |                   |
| L = Refinish   | PC = Replace PXN Reconditioned | UC = Replace Reconditioned |                   |
| TT = Two-Tone  | SB = Sublet Repair             | N = Additional Labor       |                   |
| BR = Blend Refinish  | I = Repair                     | IT = Partial Repair        |                   |
| CG = Chipguard   | RI = R & I Assembly            | P = Check                  |                   |
| AA = Appearance Allowance  | RP = Related Prior Damage      |                            |                   |
| This report contains proprietary information of Audatex and may not be disclosed to any third party (other than the insured, claimant and others on a need to know basis in order to effectuate the claims process) without Audatex's prior written consent. |                                |                            |                   |
| Copyright (C) 2009 Audatex North America, Inc.<br>Audatex Estimating is a trademark of Audatex North America, Inc.   |                                |                            |                   |
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## Section 2-2 An Explanation of the Audatex Estimate

1. **Custom Heading:** The client-specific heading, and estimate date appear here.
2. **Administrative Data:** Section contains pertinent information about vehicle owner, repairer, and inspection regarding the claim.
3. **Remarks:** Section contains the estimate preparer's notes on this estimate.
4. **Vehicle Identification / Options:** Section contains the make, model, engine, and vehicle option descriptions.
5. **The Body of the Estimate**

**OP – Operation Codes:** The Audatex system uses one- or two-character operation codes to specify the work to be done. These codes are explained below.

  - **\* – User-Entered Value:** Indicates Price, Labor, or Rate Code entered by estimate preparer, and appears next to the amount or code.
  - **E – Replace (Remove and Replace):** An operation or group of operations required to remove the damaged part and replace with a new OEM part.
    - The Remove and Replace (R&R) time:
      - includes normal adjustment and alignment for correct fit
      - does not include any duplicated effort

Replace includes any operations over and above the Remove and Install (R&I) operations.
  - **EC – Replace with Economy Part:** “EC” is used when replacing with other than an OEM part (e.g., rebuilt, re-chromed, aftermarket, etc). The part price is supplied by the estimate preparer. For labor calculations, the system assumes aftermarket parts to be equivalent to OEM parts in fit, composition, corrosion protective coatings, and finish.
  - **PC – PXN Reconditioned Part:** A used OEM/aftermarket part brought back to “like new” condition (e.g., dealer takes off wheels to replace with custom). Prices supplied by Audatex from the Parts Exchange Database.
  - **PM – PXN Remanufactured/Rebuilt Part:** A used OEM/aftermarket part that has been completely rebuilt mostly with new parts (e.g., radiator, starter, alternator, tail lamp). Prices supplied by Audatex from the Parts Exchange Database.
  - **UC – Reconditioned Part:** A used OEM part brought back to “like new” condition.
  - **UM – Remanufactured/Rebuilt Part:** A used OEM part that has been completely rebuilt mostly with new parts. The part price is supplied by the estimate preparer.
  - **UE – OE Surplus:** New and possibly slightly blemished OEM parts available at a discount through normal and varying OE distribution channels.
  - **OE – PXN OE Surplus:** New and possibly slightly blemished surplus parts available at a discount from outside normal and varying OE distribution channels. Prices supplied by Audatex from the Parts Exchange Database.
  - **EU – Replace with Recycled Part or Assembly:** An OEM part removed from one vehicle for reinstallation into another vehicle. Audatex provides part descriptions and labor to replace recycled parts or assemblies. For labor calculations, the system assumes that recycled replacement parts are complete and in good condition. A recycled part is also known as LKQ (Like Kind and Quality).
  - **NG – Replace with NAGS Glass Part:** New glass part that was not manufactured under the sponsorship of the OEM. Audatex estimates provide NAGS glass part description, part number, price, and Audatex labor to replace the glass.
  - **EP – Replace with Parts Exchange New (PXN) Part:** New part that was manufactured by a source other than the original equipment manufacturer. The associated PXN part report details the part supplier and PXN part classification information such as OEM reconditioned and CAPA certified aftermarket.
  - **ET/TE – Partial Replacement with OEM Part:** The partial replacement of damaged parts using portions of a new part. Operation code “ET” reflects labor for removal of a partial section and replacement with an OEM part. This code is used for:
    - sheet metal and structural component cut and splice operations.
    - replacement of mouldings, stripes, overlays, and other parts that are supplied in kit form.

Operation “TE” which supplies the OEM part number and price must be used with “ET.”

## Section 2-2 An Explanation of the Audatex Estimate

- **IT – Partial Repair:** This is judgment labor supplied by the estimate preparer for repairs to the unreplaced portion of a partially replaced panel.
- **I – Repair/Align Labor:** This is judgment labor supplied by the estimate preparer.
- **SB – Sublet:** Labor dollars and/or hours entered by the estimate preparer for tasks that are typically handled by a sublet repairer. Exception: The system automatically supplies R&I time for the radiator, air conditioning condenser, and fuel tank.
- **P – Visual Inspection:** This code tells the repairer to inspect a part or system for possible damage or required service. Price or labor amount is supplied by the estimate preparer.
- **L – Refinish:** Part descriptions and labor to refinish parts. Paint material cost is calculated automatically based on total net refinish labor multiplied by paint and material rate (Rate Code 5) as supplied by the estimate preparer. Audatex refinish labor is for new and undamaged parts (for more detailed information, see [Refinish](#) sections).
- **BR – Blend Refinish:** Part description and labor to blend refinish parts. Blend refinish is calculated at 50% of the Audatex refinish labor (for more detailed information, see [Refinish](#) sections).
- **TT – Two-Tone:** Part description and labor to apply two-tone refinish to applicable parts (for more detailed information, see [Refinish](#) sections).
- **CG – Chipguard:** Part description and labor to apply Chipguard refinish to applicable parts (for more detailed information, see [Refinish](#) sections).
- **N – Additional Operations:** Labor for additional operations, which may be necessary, but are not considered as included operations (e.g., aim headlamps or align front suspension, etc.). This labor will appear in the estimate under Repair Hours Totals.
- **RI – R&I (Remove & Install):** An operation or group of operations that are required to remove and install the part or assembly. Audatex time:
  - includes normal adjustment and alignment for correct fit.
  - does not include any duplicated effort.

The installation is for the originally attached part. This labor will appear in the estimate under Replace Hours Totals.
- **AA – Appearance Allowance:** A specific dollar amount, determined by the estimator, paid or credited to a vehicle owner in lieu of a part repair or replacement.
- **RP – Related Prior Damage:** An adjustment based on prior damage in the same area as the current collision. This code indicates the estimate preparer's judgment in either dollar or labor amounts, which are automatically deducted from the estimate gross total.
- **UP – Unrelated Prior Damage:** The estimate may also be adjusted based upon prior damage in a different area from the current collision. This code indicates that in the estimate preparer's judgment, damage exists from a prior incident which has no effect on the damage in the current estimate. This may be accounted for either in monetary values or labor time. The total UP amount will be printed separately from all other estimate totals. Overlap is applied between the current estimate and the Unrelated Damage portion of the estimate.
- **M Code – Manual Entry:** This column allows the estimate preparer to enter:
  - parts or operations not provided by Audatex
  - labor operations at a specific Labor Rate Code

The estimate preparer can:

  - input these entries manually or use the Standard Manual Entries provided by Audatex (see [Section 5-1](#)). Standard Manual Entries provide the description and a default rate code.
  - override default rate codes to provide for local accepted practice. All other information must be supplied by the estimate preparer.

The totals will be added to the gross estimate total.
- **GDE – Guide Numbers:** These numbers identify parts, assemblies, and/or operations.
- **Description:** The description name Audatex has given the part, assembly, or operation.
- **MFG. PART NO. – Manufacturer's Part Number:** The manufacturer's part number for OEM and NAGS replacement parts or descriptions on all other operations (e.g., repair/align, sublet, etc.).
- **Refinish:** Can display a breakout of refinish considerations, which include:

## Section 2-2 An Explanation of the Audatex Estimate

- Surface refinish after any overlap considerations
- Edge, Jamb, Underside considerations for replaced parts
- Two-stage setup
- Two-stage considerations
- Three-stage setup
- Three-stage considerations
- **Price:** Displays suggested list prices for OEM replacement parts, NAGS glass, system generated Parts Exchange New (PXN), and system generated Parts Exchange Salvage (PXS), as well as manually entered recycled, sublet or aftermarket prices.
  - An asterisk (\*) means the price has been manually entered.
  - "INC" means the price is included in an assembly elsewhere in the estimate.
- **ADJ% – Adjustment:** Percentage entered for markup or discount on individual parts and operations.
  - A plus sign [+] indicates part price markup.
  - A minus sign [-] indicates part price discount.
- **B% – Betterment:** Percentage manually entered for betterment assessment.
- **S – Supplement:** Indicates the entry was entered or adjusted as a Supplement. Supplemental information may be added as many times as needed. The estimate will note the entries for each supplement by displaying a number next to the "S" (S1, S2, S3, etc.).
- **Hours:** The suggested labor after overlap and included operations are considered.
  - An asterisk (\*) means the hours have been manually entered.
  - "INC" means the assigned labor value has been considered elsewhere in the estimate.
- **R – Rate**
  - Labor rate used for each operation.
  - FR ^ – Frame
  - GL – Glass (optional feature)
  - ME ^ – Mechanical/Electrical
  - MR – Multiple Rates (optional feature)
  - RF ^ – Refinish
  - SM ^ – Sheet metal
  - ST – Structural (optional feature)
  - U1 - User Defined 1 (label may be customized (optional feature))
  - U2 - User Defined 2 (label may be customized (optional feature))
  - An asterisk (\*) means the rate has been manually entered

^ Labor rate codes are provided and used to segment each type of work being performed. Several factors go into each classification including technician skill level required, special tools required, part function, and the physical attributes and/or location of the component being repaired/replaced.

- 6. MC – Message Codes:** These are special notes provided by Audatex regarding Estimate entries. These notes will print after the damage entries for all products, except where noted.

|  |   |
|--|---|
| # - Multiple message codes exist for one guide number.                   | 01 - Call dealer for exact part number / price          |
| 02 - Part number discontinued, call dealer for exact part number / price | 03 - GSMP Part – Contact dealer for exact price         |
| 04 - Price not yet available, call your local dealer                     | 07 - Structural part as identified by I-CAR             |
| 10 - Includes time to clear entire panel                                 | 13 - Includes 0.6 hours first panel two-stage allowance |
| 14 - Includes 1.0 hours first panel three-stage allowance                | 15 - Includes 0.4 hours first panel two-tone allowance  |
| 46 - Printable alternate parts compare                                   | 49 - Unprinted alternate parts compare                  |

|   |   |
|---|---|
| 50 - See previous estimate for supplier information   | 60 - Alternate parts part prices include Labor                  |
| 61 - Alternate parts glass part price includes Labor  | 70 - Recycled/Salvage Audatex SPPL                              |
| 71 - Recycled/Salvage 800#                            | 80 - 3rd party betterment applied and included in other changes |
| 85 – Source in Parts Trader                           | 90 – Task assigned a different labor rate                       |
| 91 – All tasked changed to system assigned labor rate |   |

## 7. Final Calculations & Entries

- **Gross Parts:** Dollar total of new OEM replacement parts.
- **Adjustments:** Total dollar amount of all line item markups or discounts.
- **Other Parts:** Dollar total of non-OEM parts (e.g., recycled, economy, NAGS glass, etc.).
- **Paint Material:** Dollar amount for paint and related materials, calculated by multiplying dollar value in Rate 5 by total net refinish labor in Rate 4.
- **Shop Materials:** Dollar amount for shop materials calculated by multiplying the dollar value in rate 6 by total net sheet metal, mechanical/ electrical, and frame labor in rates 1, 2, and 3.  
Note: This calculation applies only in Canada.
- **Parts Total:** Net total of all above items.

## 8. Labor Rate: Hourly dollar amount the estimate preparer assigned for each Labor Rate Code.

- **Replace Hours:** Total replace hours of each rate in the estimate.
- **Repair Hours:** Total hours of repair in the estimate.
- **Labor Total:** Calculated by adding the total dollars of labor rates 1 – 4.

## • Sublet Repairs (not shown): Total amount of all prices entered as sublet operations.

## 9. Gross Total: Equals the sum total of the Parts, Labor, Sublet Repairs, Storage, Towing, and Tax.

## 10. Less: Deductible: Insurance deductible amount entered by estimate preparer.

## 11. Less: Betterment: Dollar total of all percentage entries in the betterment (B%) field.

- Betterment is always applied to the part price.
- Betterment may also be applied to the labor and paint materials (if applicable) at the user's option.

**Note:** For Canadian users, shop materials may also have Betterment applied.

- **Less Other:** User-entered dollar amount that is deducted from the Gross Total of the estimate.

## 12. Net Total: The net estimate total after any Betterment, Deductible, Appearance Allowance, Less Other, and/or Related Prior amounts when applicable

## • Parts Exchange New (PXN) (not shown): Audatex's parts locator is an optional feature that provides information on alternative replacement parts. When using PXN, you specify:

- Lowest price, average price, or highest price options
- Selection of preferred suppliers
- Geocode (zip code) of the location to which parts would be delivered
- Threshold savings (optional)
- Vehicle year to exclude (optional)

## 13. Parts Exchange Audit Trail

- **PXN:** Information from the current estimate or supplement.
- **CUM-PXN:** Information from the current estimate or supplement, it also includes any previous estimates or supplements.
- **Audit Trail:** The PXN Audit Line has been expanded to include the:

## Section 2-2 An Explanation of the Audatex Estimate

- Geocode (zip code)
- Search Area name
- Results count for the current estimate (shown next to letters PXN)
- Cumulative counts for the claim set (shown next to letters CUM)
- The PXN and CUM audit line numbers have the same meaning. Note:
  - The PXN counts are for the current estimate only
  - The CUM counts include all estimates, including any supplements

Example: A / B / C / D / E / F            B / C / D / E / F

Alternate Parts - PXN Y / 01 / 01 / 00 / 00 / 00 CUM 01 / 01 / 00 / 00 / 00 Zip Code:  
94583 California

- A: displays;
  - "Y" if PXN is active
  - "N" if PXN is not active (appears only after PXN)
  - "C" if PXN is not applicable (e.g., current year excluded, or generic est.)
- B: shows the total number of PXN "applicable parts" found, based on the suppliers you have selected in setup
- C: shows the actual number of PXN parts used
- D: shows the number of PXN parts that were selected for the claim but were not cost effective
- E: shows the number of PXN parts found but not used within claim
- F: shows the number of PXN parts not used that were cost effective
- **Parts Exchange Salvage (PXS):** Shows recycled parts or assemblies that have been inserted based on information provided by the Audatex system.
- **Vehicle Identification:** Section contains the make, model, engine, and vehicle option descriptions.
  - **Options:** In the selection of PXS parts, Audatex considers vehicle options as entered by the estimate preparer. Check vehicle to verify options (including engine size) before ordering any part or assembly listed in the PXS Recycled Parts Locate Report.
- **EU**
  - Identifies a recycled part or assembly in the estimate and directs the reader to the Recycled Parts Locate Report (see [Section 2-6](#)). The price shown:
    - is assumed to be for a complete and undamaged part or assembly
    - includes any applicable markup
    - is assumed to include freight.

## Section 2-2 An Explanation of the Audatex Estimate

When the Labor Rate Breakout feature is enabled, changes to included operations appears on the Estimate Report under the replace operation description and MR\* or MR^ displays under R column depending on display options.

| Damages   |    |       |             |  |   |                  |         |    |          |     |
|---|----|-------|-------------|--|---|------------------|---------|----|----------|-----|
| Line  | Op | Guide | MC          | Description  | MFR.Part No.  | Price            | ADJ%    | B% | Hours    | R   |
| 1   | ET | 625   | 07          | Pillar,Windshield LT                                 | Partial Replace Labor<br>1.0 Mech / Elec<br>2.8 Structural<br>3.4 Glass |                  |         |    | 7.2      | MR* |
| 2   | L  | 625   | 13          | Pillar,Windshield LT                                 | Refinish<br>0.7 Surface<br>0.6 Two-stage setup<br>0.1 Two-stage         |                  |         |    | 1.4      | RF  |
| 3   | TE | 163   | 07          | Panel,Bodyside Front LT<br>Ultra High Strength Steel | Partial Replace Price   | \$932.13         |         |    |          | SM  |
| <b>3 Items</b>  |    |       |             |  |   |                  |         |    |          |     |
|   |    |       | <b>MC</b>   | <b>Message</b>                                       |   |                  |         |    |          |     |
|   |    |       | 07          | STRUCTURAL PART AS IDENTIFIED BY I-CAR               |   |                  |         |    |          |     |
|   |    |       | 13          | INCLUDES 0.6 HOURS FIRST PANEL TWO-STAGE ALLOWANCE   |   |                  |         |    |          |     |
| Estimate Total & Entries  |    |       |             |  |   |                  |         |    |          |     |
| 05/10/2016 01:34 PM <span style="float: right;">Page 2 of 4</span>  |    |       |             |  |   |                  |         |    |          |     |
| 2014 BMW 535xi Gran Turismo 4 DR Hatchback <span style="float: right;">05/03/2016 11:15 AM</span><br>Claim #: MM-20160404-016 |    |       |             |  |   |                  |         |    |          |     |
| <b>Gross Parts</b>  |    |       |             |  |   | \$932.13         |         |    |          |     |
| <b>Parts &amp; Material Total</b>   |    |       |             |  |   |                  |         |    | \$932.13 |     |
| <b>Labor</b>  |    |       | <b>Rate</b> | <b>Replace</b>                                       | <b>Repair Hrs</b>   | <b>Total Hrs</b> |         |    |          |     |
|   |    |       |             | <b>Hrs</b>   |   |                  |         |    |          |     |
| <b>Sheet Metal (SM)</b>   |    |       | \$55.00     |  |   |                  |         |    |          |     |
| <b>Mech/Elec (ME)</b>   |    |       | \$55.00     |  |   |                  |         |    |          |     |
| <b>Frame (FR)</b>   |    |       | \$45.00     |  |   |                  |         |    |          |     |
| <b>Refinish (RF)</b>  |    |       | \$45.00     | 1.4  |   | 1.4              | \$63.00 |    |          |     |

## Section 2-2 An Explanation of the Audatex Estimate

The new labor rates show in the Rates@ column and Totals section on the Estimate.

| Damages                             |       |       |      |  |                     |           |            |    |            |            |
|-------------------------------------|-------|-------|------|--|---------------------|-----------|------------|----|------------|------------|
| Line                                | Op    | Guide | MC   | Description  | MFR.Part No.        | Price     | ADJ%       | B% | Hours      | R          |
| <b>Front Body And Windshield</b>    |       |       |      |  |                     |           |            |    |            |            |
| 1                                   | E     | 83    |      | Panel,Hood   | 8H0823029A          | \$620.00  |            |    | 1.2        | U2*        |
| 2                                   | L     | 83    | 13   | Panel,Hood   | Refinish            |           |            |    | 5.5        | RF         |
|                                     |       |       |      |  | 2.9 Surface         |           |            |    |            |            |
|                                     |       |       |      |  | 1.2 Edge            |           |            |    |            |            |
|                                     |       |       |      |  | 0.6 Two-stage setup |           |            |    |            |            |
|                                     |       |       |      |  | 0.8 Two-stage       |           |            |    |            |            |
| 3                                   | E     | 103   |      | Fender,Front LT                                    | 8H0821105           | \$344.00  |            |    | 4.0        | ST*        |
| 4                                   | L     | 103   |      | Fender,Front LT                                    | Refinish            |           |            |    | 2.9        | RF         |
|                                     |       |       |      |  | 1.9 Surface         |           |            |    |            |            |
|                                     |       |       |      |  | 0.5 Edge            |           |            |    |            |            |
|                                     |       |       |      |  | 0.5 Two-stage       |           |            |    |            |            |
| 4                                   | Items |       |      |  |                     |           |            |    |            |            |
|                                     |       |       | MC   | Message  |                     |           |            |    |            |            |
|                                     |       |       | 13   | INCLUDES 0.6 HOURS FIRST PANEL TWO-STAGE ALLOWANCE |                     |           |            |    |            |            |
| <b>Estimate Total &amp; Entries</b> |       |       |      |  |                     |           |            |    |            |            |
| Gross Parts                         |       |       |      |  |                     | \$964.00  |            |    |            |            |
| Paint & Materials                   |       |       |      |  |                     | \$84.00   |            |    |            |            |
| Parts & Material Total              |       |       |      |  |                     |           | \$1,048.00 |    |            |            |
| Tax On Parts Only                   |       |       |      |  |                     |           | \$428.44   |    |            |            |
| Labor                               |       |       |      |  |                     |           |            |    |            |            |
|                                     |       |       | Rate | Replace  | Repair Hrs          | Total Hrs |            |    |            |            |
|                                     |       |       |      | Hrs  |                     |           |            |    |            |            |
| Sheet Metal (SM)                    |       |       |      |  |                     | \$45.00   |            |    |            |            |
| Mech/Elec (ME)                      |       |       |      |  |                     | \$45.00   |            |    |            |            |
| Frame (FR)                          |       |       |      |  |                     | \$50.00   |            |    |            |            |
| Refinish (RF)                       |       |       |      |  |                     | \$42.00   | 8.4        |    | 8.4        | \$352.80   |
| Structural (ST)                     |       |       |      |  |                     | \$42.00   | 4.0        |    | 4.0        | \$168.00   |
| User Defined 2 (U2)                 |       |       |      |  |                     | \$45.00   | 1.2        |    | 1.2        | \$54.00    |
| Labor Total                         |       |       |      |  |                     |           |            |    | 13.6 Hours | \$574.80   |
| Gross Total                         |       |       |      |  |                     |           |            |    |            | \$2,051.24 |
| Less: Deductible                    |       |       |      |  |                     |           |            |    |            | \$500.00-  |

## Section 2-3 The Audatex Labor Report

### Audatex Labor Report

Shows the operations that may be performed for each panel on the estimate. This report includes:

- the guide number where any overlap has been considered
- the full labor of the panel before overlap consideration
- all operations that may be applicable for a specific estimate

The Labor Report is specific for each vehicle and provides a breakdown of included operations. This report is viewable on screen or printable for any estimate.

## Section 2-3 The Audatex Labor Report

| Labor Report  |   |   |                                |                |                               |             |           |   |             |             |
|---|---|---|--------------------------------|----------------|-------------------------------|-------------|-----------|---|-------------|-------------|
| *****<br>TEST COLLISION REPAIR<br>FOR TESTING PURPOSES ONLY<br>*****<br>FOR FALCON USA - SHPFAL1  |   |   |                                |                |                               |             |           |   |             |             |
| Claim # : TEST-20100726-1   |   |   |                                |                | Insured Policy # : 20100726-1 |             |           |   |             |             |
| Owner Name: Anita Smith   |   |   |                                |                |                               |             |           |   |             |             |
| Appraiser Name:   |   |   |                                |                |                               |             |           |   |             |             |
| Each Op Code / Guide Number displays ALL operations WHICH MAY BE CONSIDERED in the Net Labor. Including parts and operations which MAY NOT HAVE been selected for this specific estimate.<br>NET VALUE TOTALS include ONLY those operations for the EXACT MODEL, ENGINE and OPTIONS actually entered. |   |   |                                |                |                               |             |           |   |             |             |
| <b>Operation Types:</b>   |   |   |                                |                |                               |             |           |   |             |             |
| BASE  | Any unique labor necessary AFTER all other operations are performed.          |   |                                |                |                               |             |           |   |             |             |
| OVERLAP   | Operation common to the replacement of more than one part.                    |   |                                |                |                               |             |           |   |             |             |
| OVERRIDE  | Values entered by the estimate writer   |   |                                |                |                               |             |           |   |             |             |
| OVERHAUL  | Operation which includes disassembling and reassembling to allow replacement. |   |                                |                |                               |             |           |   |             |             |
| R & I   | Remove and install part or assembly.  |   |                                |                |                               |             |           |   |             |             |
| REMOVE  | Value assigned for removal of old stripe / overlay.                           |   |                                |                |                               |             |           |   |             |             |
| REPLACE   | 1   | An operation or group of operations necessary for replacement of this item. |                                |                |                               |             |           |   |             |             |
| <b>Elimination:</b>   |   |   |                                |                |                               |             |           |   |             |             |
| PARTS   | Included in another part selection  |   |                                |                |                               |             |           |   |             |             |
| LABOR   | Included in another labor operation   |   |                                |                |                               |             |           |   |             |             |
| <b>Vehicle</b>  |   |   |                                |                |                               |             |           |   |             |             |
| 2008 Chevrolet Malibu LS 4 DR Sedan   |   |   |                                |                |                               |             |           |   |             |             |
| 4cyl Gasoline 2.4   |   |   |                                |                |                               |             |           |   |             |             |
| 4 Speed Automatic   |   |   |                                |                |                               |             |           |   |             |             |
| <b>Options</b>  |   |   |                                |                |                               |             |           |   |             |             |
| AM/FM CD Player   | 2   | Air Conditioning  |                                |                | Alarm System                  |             |           |   |             |             |
| Anti-lock Brakes  |   | Bucket Seats  |                                |                | Center Console                |             |           |   |             |             |
| Cruise Control  |   | Dual Airbags  |                                |                | Floor Mats                    |             |           |   |             |             |
| Halogen Headlights  |   | Head Airbags  |                                |                | Intermittent Wipers           |             |           |   |             |             |
| Keyless Entry System  |   | Lighted Entry System  |                                |                | MP3 Player                    |             |           |   |             |             |
| OnStar System   |   | Power Brakes  |                                |                | Power Door Locks              |             |           |   |             |             |
| Power Mirrors   |   | Power Steering  |                                |                | Power Windows                 |             |           |   |             |             |
| Rear Window Defroster   |   | Rem Trunk-L/Gate Release  |                                |                | Side Airbags                  |             |           |   |             |             |
| Tachometer  |   | Theft Deterrent System  |                                |                | Tilt & Telescopic Steer       |             |           |   |             |             |
| Tinted Glass  |   | Tire Pressure Monitor   |                                |                | Traction Control System       |             |           |   |             |             |
| Trip Computer   |   | Velour/Cloth Seats  |                                |                | XM Satellite Radio            |             |           |   |             |             |
| <b>LABOR</b>  |   |   |                                |                |                               |             |           |   |             |             |
| Line  | Op  | Guide   | Description                    | Operation Type | Full Value                    | Elim. Value | Net Value | R | Elimination |             |
| 1   | EP  | 8   | Cover,Front Bumper             | BASE           | 0.0                           | 0.0         | 0.0       |   |             |             |
|   |   |   | COVER,FRONT BUMPER             | R & I          | 1.4                           | 0.0         | 1.4       |   |             |             |
|   |   |   | SKIRT,INNER FENDER RT          | R & I          | 0.1                           |             |           |   |             |             |
|   |   |   | COVER,RAD SUPT PNL             | R & I          | 0.2                           |             |           |   |             |             |
|   |   |   | SKIRT,INNER FENDER LT          | R & I          | 0.1                           |             |           |   |             |             |
|   |   |   | DEFL,FRONT BUMPER LWR (SPLASH) | R & I          | 0.4                           |             |           |   |             |             |
|   |   |   | DEFL,FRONT BUMPER LWR          | R & I          | 0.2                           |             |           |   |             |             |
|   |   |   | COVER,FRONT BUMPER             | OVERHAUL       | 1.2                           | 0.0         | 1.2       |   |             |             |
|   | 3   |   | GRILLE ASSEMBLY                | R & I          | 0.2                           |             |           |   |             |             |
|   |   |   | LAMP ASSEMBLY,FOG RT           | R & I          | 0.2                           |             |           |   |             |             |
| 07/26/2010 10:48 AM   |   |   |                                | 4              | 5                             | 6           | 7         | 8 | 9           | Page 1 of 4 |

Section 2-3 The Audatex Labor Report

| 2008 Chevrolet Malibu LS 4 DR Sedan |    |     |                                |         |       |       |       |            |  |
|-------------------------------------|----|-----|--------------------------------|---------|-------|-------|-------|------------|--|
|                                     |    |     | LAMP ASSEMBLY,FOG LT           | R & I   | 0.2   |       |       |            |  |
|                                     |    |     | GRILLE,FRT BMPR CVR LT         | R & I   | 0.1   |       |       |            |  |
|                                     |    |     | GRILLE,FRT BMPR CVR RT         | R & I   | 0.1   |       |       |            |  |
|                                     |    |     | FRAME,GRILLE                   | R & I   | 0.3   |       |       |            |  |
|                                     |    |     | GRILLE,UPPER                   | R & I   | 0.2   |       |       |            |  |
|                                     |    |     | SUPPORT,GRILLE                 | R & I   | 0.1   |       |       |            |  |
|                                     |    |     | FRAME,GRILLE                   | R & I   | 0.3   |       |       |            |  |
|                                     |    |     | GRILLE,LOWER                   | R & I   | 0.2   |       |       |            |  |
|                                     |    |     | ABSORBER,FRONT BUMPER          | R & I   | 0.1   |       |       |            |  |
|                                     |    |     | COMBINATION,FRT SUSP           | OVERLAP | 0.2   | 0.0   | 0.2   |            |  |
|                                     |    |     | WHEEL,FRONT LT                 | R & I   | 0.1   | 0.0   | 0.1   |            |  |
|                                     |    |     | WHEEL,FRONT RT                 | R & I   | 0.1   | 0.0   | 0.1   |            |  |
|                                     |    |     |                                |         | ----- | ----- | ----- |            |  |
|                                     |    |     | <b>10</b> TOTALS               |         | 3.0   | 0.0   | 3.0   | SM         |  |
| 2                                   | E  | 11  | Emblem,Frt Bmpr Cover          | BASE    | 0.0   | 0.0   | 0.0   |            |  |
|                                     |    |     | N/PLATE,EBLEM (FRT BMPR)       | R & I   | 0.2   | 0.0   | 0.2   |            |  |
|                                     |    |     |                                |         | ----- | ----- | ----- |            |  |
|                                     |    |     | TOTALS                         |         | 0.2   | 0.0   | 0.2   | SM         |  |
| 3                                   | E  | 47  | Defl,Front Bumper Lwr          | BASE    | 0.0   | 0.0   | 0.0   |            |  |
|                                     |    |     | DEFL,FRONT BUMPER LWR (SPLASH) | R & I   | 0.4   | 0.4   | 0.0   | LABOR 6 EP |  |
|                                     |    |     | DEFL,FRONT BUMPER LWR          | R & I   | 0.2   |       |       |            |  |
|                                     |    |     | COMBINATION,FRT SUSP           | OVERLAP | 0.2   | 0.2   | 0.0   | LABOR 6 EP |  |
|                                     |    |     |                                |         | ----- | ----- | ----- |            |  |
|                                     |    |     | TOTALS                         |         | 0.6   | 0.6   | 0.0   | SM         |  |
| 4                                   | E  | 50  | Absorber,Front Bumper          | BASE    | 0.0   | 0.0   | 0.0   |            |  |
|                                     |    |     | COVER,FRONT BUMPER             | R & I   | 1.4   | 1.4   | 0.0   | LABOR 6 EP |  |
|                                     |    |     | SKIRT,INNER FENDER RT          | R & I   | 0.1   |       |       |            |  |
|                                     |    |     | COVER,RAD SUPT PNL             | R & I   | 0.2   |       |       |            |  |
|                                     |    |     | SKIRT,INNER FENDER LT          | R & I   | 0.1   |       |       |            |  |
|                                     |    |     | DEFL,FRONT BUMPER LWR (SPLASH) | R & I   | 0.4   |       |       |            |  |
|                                     |    |     | DEFL,FRONT BUMPER LWR          | R & I   | 0.2   |       |       |            |  |
|                                     |    |     | ABSORBER,FRONT BUMPER          | R & I   | 0.1   | 0.1   | 0.0   | LABOR 6 EP |  |
|                                     |    |     | COMBINATION,FRT SUSP           | OVERLAP | 0.2   | 0.2   | 0.0   | LABOR 6 EP |  |
|                                     |    |     | WHEEL,FRONT LT                 | R & I   | 0.1   | 0.1   | 0.0   | LABOR 6 EP |  |
|                                     |    |     | WHEEL,FRONT RT                 | R & I   | 0.1   | 0.1   | 0.0   | LABOR 6 EP |  |
|                                     |    |     |                                |         | ----- | ----- | ----- |            |  |
|                                     |    |     | TOTALS                         |         | 1.9   | 1.9   | 0.0   | SM         |  |
| 5                                   | RI | 76  | Panel,Frt Bmpr License         | BASE    | 0.0   | 0.0   | 0.0   |            |  |
|                                     |    |     | BRKT,FRONT LIC PLATE           | R & I   | 0.2   | 0.0   | 0.2   |            |  |
|                                     |    |     |                                |         | ----- | ----- | ----- |            |  |
|                                     |    |     | TOTALS                         |         | 0.2   | 0.0   | 0.2   | SM         |  |
| 6                                   | EC | 103 | Fender,Front LT                | BASE    | 0.0   | 0.0   | 0.0   |            |  |
|                                     |    |     | COVER,FRONT BUMPER             | R & I   | 1.4   | 1.4   | 0.0   | LABOR 6 EP |  |
|                                     |    |     | SKIRT,INNER FENDER RT          | R & I   | 0.1   |       |       |            |  |
|                                     |    |     | COVER,RAD SUPT PNL             | R & I   | 0.2   |       |       |            |  |
|                                     |    |     | SKIRT,INNER FENDER LT          | R & I   | 0.1   |       |       |            |  |
|                                     |    |     | DEFL,FRONT BUMPER LWR (SPLASH) | R & I   | 0.4   |       |       |            |  |
|                                     |    |     | DEFL,FRONT BUMPER LWR          | R & I   | 0.2   |       |       |            |  |
|                                     |    |     | FENDER,FRONT LT                | REPLACE | 0.6   | 0.0   | 0.6   |            |  |
|                                     |    |     | BRKT,FRONT BUMPER MTG LT       | R & I   | 0.1   |       |       |            |  |
|                                     |    |     | BRKT,FRONT BUMPER MTG RT       | R & I   | 0.2   |       |       |            |  |
|                                     |    |     | LAMP,SIDE MARKER (08) LT       | R & I   | 0.1   |       |       |            |  |
|                                     |    |     | COMBINATION,FRT SUSP           | OVERLAP | 0.2   | 0.2   | 0.0   | LABOR 6 EP |  |
|                                     |    |     | WHEEL,FRONT LT                 | R & I   | 0.1   | 0.1   | 0.0   | LABOR 6 EP |  |
|                                     |    |     | WHEEL,FRONT RT                 | R & I   | 0.1   | 0.1   | 0.0   | LABOR 6 EP |  |
|                                     |    |     |                                |         | ----- | ----- | ----- |            |  |
|                                     |    |     | TOTALS                         |         | 2.4   | 1.8   | 0.6   | SM         |  |
| 7                                   | E  | 174 | Grille,Frt Bmpr Cvr LT         | BASE    | 0.0   | 0.0   | 0.0   |            |  |
|                                     |    |     | COVER,FRONT BUMPER             | R & I   | 1.4   | 1.4   | 0.0   | LABOR 6 EP |  |
|                                     |    |     | SKIRT,INNER FENDER RT          | R & I   | 0.1   |       |       |            |  |
|                                     |    |     | COVER,RAD SUPT PNL             | R & I   | 0.2   |       |       |            |  |
|                                     |    |     | SKIRT,INNER FENDER LT          | R & I   | 0.1   |       |       |            |  |
|                                     |    |     | DEFL,FRONT BUMPER LWR (SPLASH) | R & I   | 0.4   |       |       |            |  |
|                                     |    |     | DEFL,FRONT BUMPER LWR          | R & I   | 0.2   |       |       |            |  |
|                                     |    |     | GRILLE,FRT BMPR CVR LT         | R & I   | 0.1   | 0.1   | 0.0   | LABOR 6 EP |  |
|                                     |    |     | COMBINATION,FRT SUSP           | OVERLAP | 0.2   | 0.2   | 0.0   | LABOR 6 EP |  |

## Section 2-3 The Audatex Labor Report

1. **Operation Types:** A detailed definition of each Operation Type used on the estimate.
  - **Base:** Labor unique to the referenced part.
  - **Overlap:** is defined as any operation common to the replacement of two or more parts.
    - Audatex will only include the labor for an operation once.
 Overlap is the safeguard built in to the software to prevent duplicate labor allowances.
  - **Override :** A manually entered value.
  - **Overhaul:** Operation that includes disassembly and reassembly of a part to allow for replacement or repair.
  - **R&I (Remove and Install):** An operation or group of operations that are required to remove and install the part or assembly. Audatex time:
    - includes normal adjustment and alignment for correct fit.
    - does not include any duplicated effort.
 The installation is for the originally attached part.
  - **Replace (Remove and Replace):** Is an operation or group of operations that are required to remove the damaged part and replace with the new OEM or new alternative part. The Remove and Replace (R&R) time:
    - includes normal adjustment and alignment for correct fit.
    - does not include any duplicated effort.
 Replace includes any operations over and above the R&I operations.
  - **Remove:** Value assigned to the removal of old stripe or decal.
2. **Vehicle Identification / Options:** Includes the make, model, engine code, and complete option descriptions for the vehicle.
3. **OP GDE Description:** Section displays the Operation Code, Guide Number, and Part Description of the part undergoing the operations shown.
4. **Indented Operations:** Indented text indicates inclusion in the operation directly above (e.g., Back Glass R&I includes labor to R&I the UPR and LWR BK GLS MLDGS).
5. **Full Value:** All labor for any specific operation before overlap consideration.
6. **Elim.:** Labor value for an operation already considered in another guide number. A zero (0.0) indicates that no labor has been considered elsewhere on the estimate.
7. **Net Value:** Total labor hours for a particular operation.
8. **R (Rate):** The labor rate code for the referenced part. It prints at the end of the list of operations for each part.
9. **Elimination:** The guide number in which an operation was considered for elimination.
  - **Parts:** This item is a component of a part assembly already included in the estimate.
  - **Labor:** Labor required to perform this particular operation is included in another entry listed in the estimate.
10. **Totals:** The totals of each column on the labor report.
  - **Full Value:** The total labor hours for the panel before overlap consideration.
  - **Elim.:** The amount of overlap considered in the specific estimate.
  - **Net Value:** The total labor for those operations entered.

## Section 2-4 The Supplement Reconciliation Report

### Supplement Reconciliation Report

- Allows the estimate preparer to easily identify any changes made through the supplement process.
- Is generated for each supplement.
- Reflects the changes made during that specific supplement.

| *** SUPPLEMENT RECONCILIATION ***   |  |  |             |            |   |                              |    |                 |      |
|---|--|--|-------------|------------|---|------------------------------|----|-----------------|------|
| Supplement S1   |  |  |             |            |   |                              |    |                 |      |
| <b>1</b>  | Claim # : TEST-20100726-1                    |  |             |            | Insured Policy # : 20100726-1             |                              |    |                 |      |
|   | File # :                                     |  |             |            | Claim Rep: Sample Training Insurance Co   |                              |    |                 |      |
|   | Insured: Anita Smith                         |  |             |            | Inspection Date/Time: 07/26/2010 08:38 AM |                              |    |                 |      |
|   | Owner Name: Anita Smith                      |  |             |            |   |                              |    |                 |      |
|   | Appraiser Name:                              |  |             |            |   |                              |    |                 |      |
|   | Vehicle: 2008 Chevrolet Malibu LS 4 DR Sedan |  |             |            |   |                              |    |                 |      |
| <b>Deleted Lines 2</b>  |  |  |             |            |   |                              |    |                 |      |
| Line  | Guide  | Part   | Operation   |            | Price                                     | ADJ%                         | B% | Labor           | Rate |
| 1   | 1028   | Retainer,Front Bumper  | Replace OEM |            | \$5.40                                    |                              |    | INC             | SM   |
| <b>Added Lines 3</b>  |  |  |             |            |   |                              |    |                 |      |
| Line  | Guide  | Part   | Operation   |            | Price                                     | ADJ%                         | B% | Labor           | Rate |
| 2   | 911  | Brkt,Strut Mounting L/F  | Replace OEM | S1         | \$9.28                                    |                              |    | 0.8             | ME   |
| <b>Changed Lines 4</b>  |  |  |             |            |   |                              |    |                 |      |
| Line  | Guide  | Part   | Operation   |            | Price                                     | ADJ%                         | B% | Labor           | Rate |
| 3   | 855  | Knuckle,Steering L/F   | Replace OEM | S1         | \$158.00*                                 |                              |    | 1.0             | ME   |
|   |  | Knuckle,Steering L/F   |             |            | \$139.22                                  |                              |    | 1.0             | ME   |
| <b>Calculation Changes 5</b>  |  |  |             |            |   |                              |    |                 |      |
|   |  |  | From        |            | To  |                              |    | Difference      |      |
|   |  | Gross Parts  |             | \$377.58   |   | \$400.22                     |    | \$22.64+        |      |
|   |  | Tax on Parts & Material  | 8.000%      | \$111.82   | 8.000%                                    | \$113.63                     |    | \$1.81+         |      |
|   |  | ME - Mech/Electrical   | \$80.00     | \$248.00   | \$80.00                                   | \$294.00                     |    | \$48.00+        |      |
|   |  | <b>Actual Supplement 1 Net Total</b>   |             |            |   |                              |    | <b>\$72.45+</b> |      |
| <b>Summary 7</b>  |  |  |             |            |   |                              |    |                 |      |
|   |  |  | Net Total   | Date       | Time                                      | Appraiser                    |    |                 |      |
|   |  | Original Estimate  | \$1,814.54  | 07/26/2010 | 08:21 AM                                  | Sample Training Insurance Co |    |                 |      |
|   |  | Supplement 1   | \$1,886.99  | 07/26/2010 | 10:02 AM                                  |                              |    |                 |      |
|  |  | This report contains proprietary information of Audatex and may not be disclosed to any third party (other than the insured, claimant and others on a need to know basis in order to effectuate the claims process) without Audatex's prior written consent. |             |            |   |                              |    |                 |      |
|   |  | Copyright (C) 2009 Audatex North America, Inc.<br>Audatex Estimating is a trademark of Audatex North America, Inc.   |             |            |   |                              |    |                 |      |

## Section 2-4 The Supplement Reconciliation Report

1. **Estimate Identification:** Section displays the vehicle owner's name, appraiser's name, and vehicle description.
2. **Deleted Lines:** Displays any lines removed from the estimate. Included on the report are the guide number, description, operation, price, adjustments, betterment, net labor, and rate.
3. **Added Lines:** Displays any lines added to the estimate. Included are the guide number, description, operation, supplement number (e.g., S1, S2, S3, etc.), price, adjustments, betterment, net labor, and rate.
4. **Changed Lines:** Displays changes made either manually or automatically by adding, changing, or deleting damage entries. The code SY indicates an automatic or system change.
5. **Calculation Changes / Gross Parts:** Displays the total OEM parts from original estimate, the parts added or deleted during the supplement, and the total difference either added to [+] or subtracted from [-] estimate.
  - **Other Parts** - Displays:
    - the total non-OEM parts from the original estimate
    - the parts added or deleted during the supplement
    - the total difference either added to [+] or subtracted from [-] the estimate
  - **Paint Material** - Displays:
    - the original hourly rate
    - the original dollar amount
    - any changes to either the hourly rate or dollar amount
  - **Line Item Adjustment** - Displays:
    - the original discount or markup
    - any changes made to these line items
  - **Tax on Parts / Materials** - Displays:
    - the tax rate
    - the total tax applied to parts in the original estimate
    - the tax rate and total tax applied to parts in the supplement

**Note:** *If materials tax is activated, the totals will also include material tax.*
  - **Rate Codes** - Displays:
    - the rate codes applicable in the estimate with their original hourly rate and total value
    - the changes in the hourly rate and total value
6. **Net Total:** Displays the total difference between the original estimate to the supplement(s). A plus sign [+] indicates an increase; a minus sign [-] indicates a decrease.
7. **Summary:** Displays:
  - Net total
  - Date
  - Time
  - Appraiser

Displays the original estimate and any supplements. Data displayed is based on the current supplement vs. the prior estimate, which could be another supplement (e.g., S1, S2, S3 etc.).

## **Section 2-5 The Parts Exchange New (PXN) Report**

### **Parts Exchange New (PXN) Locate Report**

Parts Exchange Locate Report appears directly after the Audatex Estimate. It lists in detail alternate parts that have been inserted.

## Section 2-5 The Parts Exchange New (PXN) Report

| Audatex Alternate Parts Locate Report   |   |  |                                 |                                |     |     |
|---|---|--|---------------------------------|--------------------------------|-----|-----|
| <b>Vehicle</b>  |   |  |                                 |                                |     |     |
| 2008 Chevrolet Malibu LS 4 DR Sedan<br>4cyl Gasoline 2.4<br>4 Speed Automatic   |   |  |                                 |                                |     |     |
| <b>Options</b>  |   |  |                                 |                                |     |     |
| AM/FM CD Player<br>Anti-lock Brakes<br>Cruise Control<br>Halogen Headlights<br>Keyless Entry System<br>OnStar System<br>Power Mirrors<br>Rear Window Defroster<br>Tachometer<br>Tinted Glass<br>Trip Computer | Air Conditioning<br>Bucket Seats<br>Dual Airbags<br>Head Airbags<br>Lighted Entry System<br>Power Brakes<br>Power Steering<br>Rem Trunk-L/Gate Release<br>Theft Deterrent System<br>Tire Pressure Monitor<br>Velour/Cloth Seats | Alarm System<br>Center Console<br>Floor Mats<br>Intermittent Wipers<br>MP3 Player<br>Power Door Locks<br>Power Windows<br>Side Airbags<br>Tilt & Telescopic Steer<br>Traction Control System<br>XM Satellite Radio |                                 |                                |     |     |
| Line  | Part Description  | Supplier Part Number   | Substituted For OEM Part Number | Supplier Code                  | CLS | SRC |
| 1   | 1 Cover,Front Bumper  | GM1000858 2  | 20832808                        | >                              | 1   | 1   |
|   |   | GM1000858R   | 20832808                        | 3                              | 2   | 3   |
|   |   |  |                                 | 4                              | 5   | 6   |
| > = ESTIMATE TOTAL IS BASED ON PRICE QUOTED BY THIS SUPPLIER  |   |  |                                 |                                |     |     |
| <b>Key to Classification / Source Codes</b>   |   |  |                                 |                                |     |     |
| <b>CLS = Classification Code</b>  |   |  |                                 |                                |     |     |
| C - CAPA CERTIFIED PART QUOTED BY LISTED SUPPLIER<br>M - REMANUFACTURED / REBUILT PART<br>R - RECONDITIONED PART<br>S - OEM SURPLUS PART  |   |  |                                 |                                |     |     |
| <b>SRC = Source Code</b>  |   |  |                                 |                                |     |     |
| 1 - NON ORIGINAL EQUIPMENT MANUFACTURER PART<br>3 - ORIGINAL EQUIPMENT MANUFACTURER (OEM) PART  |   |  |                                 |                                |     |     |
| <b>Detailed Distributor List</b>  |   |  |                                 |                                |     |     |
| <b>7</b>  |   |  |                                 |                                |     |     |
| 1   | PXN4481   | MILLER AUTO TEAM<br>4455 VESTAL PARKWAY<br>VESTAL, NY 13851  |                                 | (800)777-8181<br>(607)797-5111 |     |     |
| 2   | PXN5070   | KEYSTONE AUTO RCND<br>433 LAWRENCE STREET<br>OLD FORGE, PA 18518   |                                 | (800)446-7088<br>(570)457-6464 |     |     |
| Audatex Estimating 6.0.455 ES 07/28/2010 09:04 AM REL 6.0.455 DT 07/01/2010 DB 07/15/2010   |   |  |                                 |                                |     |     |
| Zip Code: 13790 Search Area: 13790  |   |  |                                 |                                |     |     |
| Copyright (C) 2009 Audatex North America, Inc.  |   |  |                                 |                                |     |     |

## Section 2-5 The Parts Exchange New (PXN) Report

1. **Guide No. / Line No.:** Guide Numbers and Part descriptions for EP parts in the Estimate.
2. **Supplier Part Number:** The part supplier provides this information to Audatex.
3. **Carat Symbol (>):** The parts denoted with this symbol are available from the supplier at or below the price shown in the Estimate.
4. **SPL CDE (Supplier Code):** This code identifies the supplier in the Supplier Information section of the Report.
5. **CLS (Classification Code):**
  - C = CAPA part (part is certified by the Certified Automotive Parts Association)
  - M = Remanufactured part (an OEM part that has been rebuilt with new parts)
  - R = Reconditioned part (an OEM part brought back to “like new” condition)
  - S = OEM surplus part
6. **SRC (Source Code):**
  - 1 = Non-original equipment manufacturer part
  - 3 = Original equipment manufacturer (OEM) part
7. **Supplier Information:** Section contains supplier code, company name, IDs, addresses, comments, and telephone numbers.

## Section 2-6 The Parts Exchange Salvage (PXS) Report

### Recycled Parts Locate Report – Parts Exchange Salvage (PXS)

- Provides detailed information on locally listed recycled part items.
- Identifies the recyclers that list each item.

|  |  |  |      |         |                |         |                 |  |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
|--|--|--|------|---------|----------------|---------|-----------------|--|--------------|------------------|--------------|----------------|----------------|--------------|------------|--------------------|--------------|---------------------|----------------------|----------------------|------------|---------------|--------------|------------------|---------------|----------------|---------------|-----------------------|--------------------------|--------------|------------|------------------------|-------------------------|--------------|-----------------------|-------------------------|---------------|--------------------|--------------------|
| *****<br>TEST COLLISION REPAIR<br>FOR TESTING PURPOSES ONLY<br>*****<br>FOR FALCON USA - SHPFAL1   |  |  |      |         |                |         |                 |  |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
| <b>Recycled Real Steel Locate Report</b>   |  |  |      |         |                |         |                 |  |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
| Owner Name: Anita Smith<br>Claim #: TEST-20100726-1  |  |  |      |         |                |         |                 |  |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
| <b>Vehicle</b>   |  |  |      |         |                |         |                 |  |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
| 2008 Chevrolet Malibu LS 4 DR Sedan<br>4cyl Gasoline 2.4<br>4 Speed Automatic  |  |  |      |         |                |         |                 |  |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
| <b>Options</b>   |  |  |      |         |                |         |                 |  |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
| <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">AM/FM CD Player</td> <td style="width: 33%;">Air Conditioning</td> <td style="width: 33%;">Alarm System</td> </tr> <tr> <td>Anti-lock Brakes</td> <td>Bucket Seats</td> <td>Center Console</td> </tr> <tr> <td>Cruise Control</td> <td>Dual Airbags</td> <td>Floor Mats</td> </tr> <tr> <td>Halogen Headlights</td> <td>Head Airbags</td> <td>Intermittent Wipers</td> </tr> <tr> <td>Keyless Entry System</td> <td>Lighted Entry System</td> <td>MP3 Player</td> </tr> <tr> <td>OnStar System</td> <td>Power Brakes</td> <td>Power Door Locks</td> </tr> <tr> <td>Power Mirrors</td> <td>Power Steering</td> <td>Power Windows</td> </tr> <tr> <td>Rear Window Defroster</td> <td>Rem Trunk-L/Gate Release</td> <td>Side Airbags</td> </tr> <tr> <td>Tachometer</td> <td>Theft Deterrent System</td> <td>Tilt &amp; Telescopic Steer</td> </tr> <tr> <td>Tinted Glass</td> <td>Tire Pressure Monitor</td> <td>Traction Control System</td> </tr> <tr> <td>Trip Computer</td> <td>Velour/Cloth Seats</td> <td>XM Satellite Radio</td> </tr> </table> |  |  |      |         |                |         | AM/FM CD Player | Air Conditioning   | Alarm System | Anti-lock Brakes | Bucket Seats | Center Console | Cruise Control | Dual Airbags | Floor Mats | Halogen Headlights | Head Airbags | Intermittent Wipers | Keyless Entry System | Lighted Entry System | MP3 Player | OnStar System | Power Brakes | Power Door Locks | Power Mirrors | Power Steering | Power Windows | Rear Window Defroster | Rem Trunk-L/Gate Release | Side Airbags | Tachometer | Theft Deterrent System | Tilt & Telescopic Steer | Tinted Glass | Tire Pressure Monitor | Traction Control System | Trip Computer | Velour/Cloth Seats | XM Satellite Radio |
| AM/FM CD Player  | Air Conditioning   | Alarm System   |      |         |                |         |                 |  |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
| Anti-lock Brakes   | Bucket Seats   | Center Console   |      |         |                |         |                 |  |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
| Cruise Control   | Dual Airbags   | Floor Mats   |      |         |                |         |                 |  |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
| Halogen Headlights   | Head Airbags   | Intermittent Wipers  |      |         |                |         |                 |  |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
| Keyless Entry System   | Lighted Entry System   | MP3 Player   |      |         |                |         |                 |  |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
| OnStar System  | Power Brakes   | Power Door Locks   |      |         |                |         |                 |  |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
| Power Mirrors  | Power Steering   | Power Windows  |      |         |                |         |                 |  |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
| Rear Window Defroster  | Rem Trunk-L/Gate Release   | Side Airbags   |      |         |                |         |                 |  |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
| Tachometer   | Theft Deterrent System   | Tilt & Telescopic Steer  |      |         |                |         |                 |  |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
| Tinted Glass   | Tire Pressure Monitor  | Traction Control System  |      |         |                |         |                 |  |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
| Trip Computer  | Velour/Cloth Seats   | XM Satellite Radio   |      |         |                |         |                 |  |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
| <span style="margin-right: 100px;"><b>1</b></span> <span><b>2</b></span>   |  |  |      |         |                |         |                 |  |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
| Line   | Part Description   | Year/Make / Notes  | VIN? | Cleanup | Supplier ID    | Stock # |                 |  |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
| 6  | Wheel,Front LT   | 2006 MNR MARK Geo/GMC/Chevrolet  | Y    |         | S078401        | G9854W  |                 |  |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
| > = ESTIMATE TOTAL IS BASED ON PRICE QUOTED BY THIS SUPPLIER. REPAIRERS MAY USE THE SUPPLIER OF THEIR CHOICE AND MAY NEGOTIATE SPECIFIC TERMS OF PURCHASE WITH THAT SUPPLIER.  |  |  |      |         |                |         |                 |  |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
| <b>Detailed Distributor List</b>   |  |  |      |         |                |         |                 |  |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
| S078401  | <b>3</b>   | New World Recycled Parts, Inc.<br>2627 Johnson Ave.<br>New Castle PA 16101 |      |         | (800) 555-2226 |         |                 |  |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
| Audatex Estimating 6.0.455 ES 07/28/2010 09:05 AM REL 6.0.455 DT 07/01/2010 DB 07/15/2010<br>Zip Code: 13790 Search Area: 13790<br>Copyright (C) 2009 Audatex North America, Inc.  |  |  |      |         |                |         |                 |  |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
| <table style="width: 100%; border: none;"> <tr> <td style="width: 20%; text-align: center; vertical-align: middle;"> </td> <td style="padding-left: 10px;">                 This report contains proprietary information of Audatex and may not be disclosed to any third party (other than the insured, claimant and others on a need to know basis in order to effectuate the claims process) without Audatex's prior written consent.<br/><br/>                 Copyright (C) 2009 Audatex North America, Inc.<br/>                 Audatex Estimating is a trademark of Audatex North America, Inc.             </td> </tr> </table>   |  |  |      |         |                |         |                 | This report contains proprietary information of Audatex and may not be disclosed to any third party (other than the insured, claimant and others on a need to know basis in order to effectuate the claims process) without Audatex's prior written consent.<br><br>Copyright (C) 2009 Audatex North America, Inc.<br>Audatex Estimating is a trademark of Audatex North America, Inc. |              |                  |              |                |                |              |            |                    |              |                     |                      |                      |            |               |              |                  |               |                |               |                       |                          |              |            |                        |                         |              |                       |                         |               |                    |                    |
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## Section 2-6 The Parts Exchange Salvage (PXS) Report

1. **Description, Supplier, Stock Number, Year:** The first line describes the part.
  - In the Supplier ID column, the number identifies the recycler that lists the part.
  - In the Stock NUM/YR column:
    - the upper figure shows the unique identifier assigned by the recycler to the source vehicle. When ordering the part, please use this number.
    - the lower figure identifies the year of the vehicle from which the part came.
2. **VIN, Cleanup, MFG/Division:** If the recycler has the vehicle's identification number on file for this part, the line below the part description displays a "Y" and the "cleanup" hours suggested by the recycler. The estimate price (per Cost Comparison Report) assumes that the part is complete and undamaged.\*
3. **Distributor List / Supplier Information:** This area contains names, addresses, and phone numbers of the recyclers listing PXS available part(s).

**Note:** *This is an optional feature. It will appear on the report only if the company preparing the estimate has selected this feature.*

## Section 3-1 Parts in the Audatex System

### Parts and Pricing

#### Parts in the Audatex System

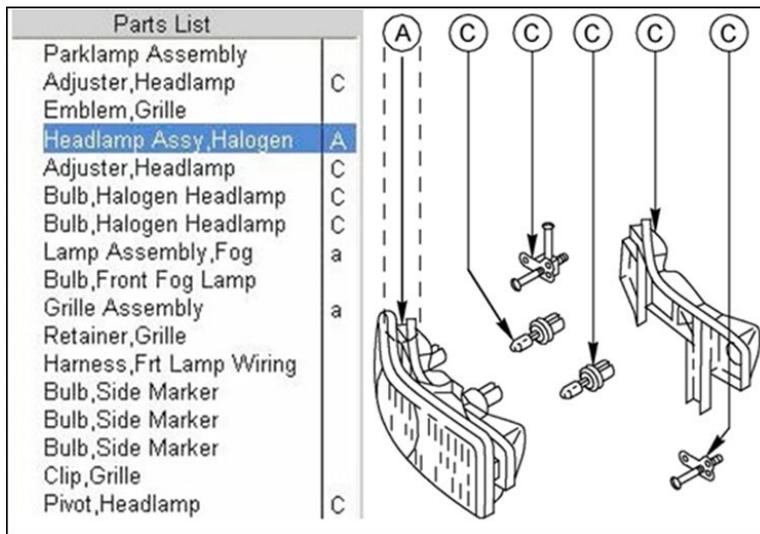
Parts in the Audatex system are entered into the Audatex database by our experienced parts development staff. They use the information supplied to Audatex by vehicle manufacturers, physically examine vehicles, research available options, engines, style editions; and contact dealerships to ensure all information is current, correct, and complete.

The Audatex product undergoes several Quality Assurance steps to ensure estimate preparers receive the most accurate information available at the time of development.

#### Manufacturers Assemblies in the Audatex System

The Audatex system will not allow an estimate to include duplicate parts when the manufacturer supplies an assembly. This procedure will allow the estimate preparer to receive only the selected assembly or only the component part(s). If any component parts are selected, in addition to the assembly, they will appear with a message code on the estimate, but component part prices and labor times will not be included.

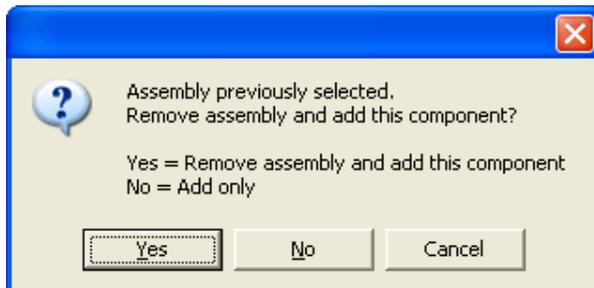
Audatex indicates assemblies and component parts as shown below:



The system identifies:

- major assemblies with code A/a
- component parts with code C/c

If the estimate preparer selects both an assembly (A) and a component part (C) of the assembly, the following message will appear:



If 'No' is selected, the estimate will appear as shown below:

## Section 3-1 Parts in the Audatex System

**Example:** Vehicle: 2005 CHEVROLET SILVERADO K15 HD LT 4 DR CREW CAB 8CYL  
GASOLINE 6.0

| OP | GDE  | MC | DESCRIPTION             |    | MFG.PART NO.        | PRICE  | AJ%<br>B% | HOURS | R |
|----|------|----|-------------------------|----|---------------------|--------|-----------|-------|---|
| E  | 0041 | 01 | HEADLAMP ASSY,<br>HALOG | LT | 15136536 GM<br>PART | 288.81 |           | 0.5   | 1 |
| E  | 0041 | 01 | HEADLAMP ASSY,<br>HALOG | RT | 15136537 GM<br>PART | 288.81 |           | 0.5   | 1 |
|    | 1021 |    | PIVOT, HEADLAMP         | LT | REPLACE OEM         | INC    |           |       | 1 |
|    | 1022 |    | PIVOT, HEADLAMP         | RT | REPLACE OEM         | INC    |           |       | 1 |
|    | 0167 |    | BULB, HALOGEN<br>HEADLA | LT | REPLACE OEM         | INC    |           |       | 1 |
|    | 0168 |    | BULB, HALOGEN<br>HEADLA | RT | REPLACE OEM         | INC    |           |       | 1 |
|    | 0199 |    | BULB, HALOGEN<br>HEADLA | LT | REPLACE OEM         | INC    |           |       | 1 |
|    | 0200 |    | BULB, HALOGEN<br>HEADLA | RT | REPLACE OEM         | INC    |           |       | 1 |
|    | 0101 |    | ADJUSTER, HEADLAMP      | LT | REPLACE OEM         | INC    |           |       | 1 |
|    | 0102 |    | ADJUSTER, HEADLAMP      | RT | REPLACE OEM         | INC    |           |       | 1 |
|    | 0030 |    | ADJUSTER, HEADLAMP      | LT | REPLACE OEM         | INC    |           |       | 1 |
|    | 0031 |    | ADJUSTER, HEADLAMP      | RT | REPLACE OEM         | INC    |           |       | 1 |

This feature of the Audatex system provides the estimate preparer with a more accurate estimate by preventing duplicate selection of parts.

### Parts Exclusions

Within the Audatex system, certain parts are not available, such as:

- shop materials (Canada only)
- some miscellaneous parts (e.g., adhesives, etc.)
- seam sealant (other than automotive metal restoration compounds and corrosion-resistant materials)
- some dealer installed accessories or aftermarket accessories
- resistors and some electrical components and/or wiring

Some fasteners may or may not be suitable for reuse. Some may be designated for one-time use only. It should be agreed which fasteners may require replacement even though they may not appear to be damaged.

### Receiving the Correct Option Conditioned Part

Another feature of the Audatex system is the correct part and labor selection. Audatex ensures the correct part number and labor are inserted into the estimate. An exact match determines the correct part number by comparing year, style model, engine, and options entered for the damaged vehicle with those offered by the manufacturer.

**Example:** 2003 ½ Ton Standard and Extended Cab Damaged Left Bedside Panel (Outer)

| Style Model                | Option * | Part Number   | Price  |
|----------------------------|----------|---------------|--------|
| Flareside w/o Supercharged | -        | F65Z8327841AT | 653.72 |

|                             |         |               |         |
|-----------------------------|---------|---------------|---------|
| "                           | A       | F65Z8327841BT | 703.50  |
| "                           | B       | F65Z8327841AT | 653.72  |
| "                           | C       | F65Z8327841AT | 653.72  |
| "                           | A, B    | F65Z8327841BT | 703.50  |
| "                           | A, C    | F65Z8327841BT | 703.50  |
| "                           | B, C    | F65Z8327841AT | 653.72  |
| "                           | A, B, C | F65Z8327841BT | 703.50  |
| Flareside with Supercharged |         | XL3Z8327841BA | 765.90  |
| Styleside Short Bed         | -       | F75Z9927841BA | 775.13  |
| "                           | A       | F75Z9927841DA | 670.80  |
| "                           | B       | F75Z9927841BA | 775.13  |
| "                           | A, B    | F75Z9927841DA | 670.80  |
| Styleside Long Bed          | -       | F65Z9927841GM | 775.13  |
| "                           | A       | F75Z9927841CB | 1009.30 |
| "                           | B       | F65Z9927841GM | 775.13  |
| "                           | A, B    | F75Z9927841CB | 1009.30 |

\* - = No Option A = Wheel Flares B = Rear Step Bumper C = Side Deflectors

This table illustrates the wide variety of part numbers that may be provided by a manufacturer. If more style models, years, engines, or options were available, these would also exist in the Audatex system.

- Audatex searches this information until the correct match is located
- Audatex displays the result in the estimate

### Section 3-1 Pricing in the Audatex System

**Part Numbers:** On Audatex estimates, the part numbers and prices shown reflect the most current manufacturers' information available. Information such as suggested retail price, part number supersession, and part discontinuance is updated in the Audatex database by manufacturer-supplied media in accordance with the manufacturer effective date.

**Effective Dates:** Effective dates vary by manufacturer. Several manufacturers follow a monthly schedule with prices effective on the first of each month. Manufacturers may:

- have special price changes which do not follow their normal schedule
- not meet their regularly scheduled effective date

Audatex recommends that you check with a local dealer to confirm actual effective dates.

**Price Updates:** Price updates can have a significant impact on estimates. If an estimate is held for any length of time before the parts are ordered, a price update may have occurred in the interim. If current prices are required, the estimate may be updated with the response "N" to original prices.

**Dynamic Part Pricing:** Audatex Estimating features a service that automatically retrieves real time OEM pricing from the manufacturers. This feature may not be available for all manufacturers and/or users.

**Electronic Price Updates:** This Audatex feature allows you to download the most current OEM part price information directly from Audatex several times throughout the month. This process will capture any special price changes outside of the manufacturer's normal schedule, as well as any late information that may have been received after the creation of our monthly product.

**Core Charges:** Core charges may be required when purchasing some types of parts. The pricing provided by Audatex does not include any core charges (e.g. OEM, PXN, PXS, remanufactured bumpers, wheels, etc). When necessary the need for core charges should be understood by all parties involved.

**Shipping and Freight Charges:** These fees are not included with the prices reflected in Audatex Estimating.

**Manufacturer Messages on Estimates:** If a pricing issue arises with a specific manufacturer, a message will appear on your estimate suggesting that you verify prices with a local dealer. This message will also appear when selecting parts with a mid-year change in part numbers, or Order-by-Color, that are not attributable to available options, engines, or style models. (See, [Message Codes](#)).

## Section 4-1 Labor Overview

### Labor

#### Introduction

---

Labor supplied in an Audatex estimate is intended for use as a guide for collision repair. Labor allotments suggested by Audatex estimates are for replacement of new and undamaged parts. Additional allowances are provided for optional equipment supplied by the vehicle manufacturer by selecting the appropriate options and parts. Because each vehicle's collision damage is unique, automation cannot cover every situation. The flexibility of the Audatex system, coupled with the estimate preparer's knowledge and expertise, provides for adjustment of any estimate to meet the needs presented by each collision situation.

#### How Labor is Determined

---

Audatex's labor is developed through an in-depth process that establishes incremental values for each connection point that must be accessed to replace a given part. These incremental labor values are determined in several ways that include:

- Review of manufacturer service manuals and engineering drawings to define the necessary operations
- Independent time and motion studies conducted in repair and research facilities
- Analysis of Audatex historical information, in which like operations are reviewed in existing vehicles for use in new vehicles of similar construction
- Review of technical bulletins from:
  - independent sources
  - original equipment manufacturers
  - paint manufacturers
  - research groups
- Requests from repairers and estimate preparers to review established labor and procedures (Request for Review)
- Extensive experience of the Audatex technical staff in collision repair
- Continuous training in the latest repair techniques including I-CAR training

Labor times are provided in increments of .1 hours, or 6 minutes. Any operation taking less than 6 minutes will not receive a system generated labor time.

#### Automatic Overlap

---

Overlap is defined as any operation common to the replacement of two or more parts. Overlap values are automatically considered to avoid the calculation of duplicate labor.

**Example** - Replace Quarter Panel and Rear Body Panel:

| QUARTER PANEL; LABOR 16.3                          |      | REAR BODY PANEL; LABOR 6.3                         |     |
|--|------|--|-----|
| Carpet/insulation rollback (in trunk)              | 0.3  | Carpet/insulation rollback (in trunk)              | 0.3 |
| Rear bumper R&I                                    | 0.5  | Rear bumper R&I                                    | 0.5 |
| Rear bumper cover R&I                              | 0.8  | Rear bumper cover R&I                              | 0.8 |
| Detach and weld right quarter panel from rear body | 0.5  | Detach and weld right quarter panel from rear body | 0.5 |
| Right taillamp assembly R&I                        | 0.3  | Right taillamp assembly R&I                        | 0.3 |
| Right sill plate R&I                               | 0.2  | Detach and weld left quarter panel from rear body  | 0.5 |
| Back glass R&I                                     | 2.1  | Left taillamp assembly R&I                         | 0.3 |
| Right body Weatherstrip pullback                   | *0.3 | Left license lamp R&I                              | 0.1 |

## Section 4-1 Labor Overview

*Database Reference Manual*

|   |      |  |      |
|---|------|--|------|
| Raise and support   | 0.2  | Right license lamp R&I                           | 0.1  |
| Package tray trim R&I                                       | 0.2  | Detach and weld rear body from rear cross member | 1.0  |
| Right rear wheel R&I  | 0.1  | Transfer of miscellaneous brackets and braces    | 0.4  |
| Rear seat R&I   | 0.2  | Detach and weld rear body from floor pan         | 0.8  |
| Detach and weld roof from quarter panel                     | 1.6  | Rear body Weatherstrip pullback                  | *0.2 |
| Right quarter glass R&I                                     | 1.0  | Wiring pullback for access                       | *0.2 |
| Right quarter trim R&I                                      | 0.4  | Seam sealing                                     |      |
| Right lower quarter trim R&I                                | 0.2  |  |      |
| Fuel door R&I   | 0.3  |  |      |
| Seam sealing  | *0.4 |  |      |
| Disconnect/connect fuel filler neck from fuel filler pocket | 0.2  |  |      |
| Right door striker R&I                                      | 0.2  |  |      |
| Detach and weld right quarter panel from inner panels       | 4.6  |  |      |
| Detach and weld right quarter panel from rocker panel       | 1.2  |  |      |
| Wiring pullback for access                                  | *0.5 |  |      |

\*Seam sealing, weatherstrip pullback, and wiring pullback are for the specific panel only; no overlap is or should be considered.

The following operations are required in the replacement of both of these panels:

|  |          |
|--|----------|
| Carpet/insulation rollback (in trunk)              | 0.3 hour |
| Rear bumper R&I                                    | 0.5 hour |
| Rear bumper cover R&I                              | 0.8 hour |
| Detach and weld right quarter panel from rear body | 0.5 hour |
| Right taillamp assembly R&I                        | 0.3 hour |

The labor to detach and weld the right quarter panel from the rear body panel and the right taillamp assembly R&I will be:

- included in the labor for the quarter panel
- deducted from the labor for the rear body panel.

The labor for the carpet / insulation rollback in the trunk area, the rear bumpers cover R&I, and the rear bumper R&I will be:

- included in the labor for the rear body panel
- deducted from the labor for the quarter panel.

On an estimate for these two panels, the labor shown would be:

- Quarter Panel Replace 14.7 hours
- Rear Body Replace 5.5 hours

The above operations are performed only once. Therefore, the Audatex system will include the labor for an operation only one time.

There are two methods of overlap deduction. They are:

## Section 4-1 Labor Overview

- **Guide Number Order:** This method will include an operation on the lowest guide number first and then not count it on any higher guide number.
- **Internal Labor Coding:** In this method, labor operations are internally coded within the Audatex system. Related groups of operations that are collectively required to perform one specific operation are internally coded to allow the Audatex estimate to include commonly performed operations. When this type of coding is done and the main operation has been included in the estimate, the subordinate operations will generally be accounted for in that main operation. If the main operation is not selected, the subordinate operations will be accounted for by the guide number order method.

Inner panel labor is with outer welded panel removed. The labor on the estimate for these parts is after applicable overlap is deducted.

Audatex vehicle files released after April 1992 include labor to remove outer panels for the following inner panel areas:

|                  |                       |
|------------------|-----------------------|
| Radiator support | Inner bodyside        |
| Inner fender     | Rear side rail        |
| Front side rail  | Inner rear body panel |
| Inner rocker     | Rear floor pan        |
| Inner quarter    |                       |

## Section 4-1 Labor Overview

### Labor Rate Breakout

Audatex Estimating now supports the allocation of two or more labor rates for a single damage entry, such that the labor calculation reflects the type of repair work completed.

The screenshot displays the 'Part Edit for Pillar, Windshield' dialog box within the Audatex software. The dialog is titled 'Partial Replace Labor' and shows a table of labor operations. A context menu is open over the 'A...' column header, with 'Included Operations' selected. The table lists the following operations:

| Operation   | Price | H... | R... | Adj | B... | Total  | U..                      | V...                     | O...                     | Remarks                                  |
|-------------|-------|------|------|-----|------|--------|--------------------------|--------------------------|--------------------------|--|
|             |       |      |      |     |      | 396.00 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| Feather, P  |       |      |      |     |      |        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
| Block Alloc |       |      |      |     |      |        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Time & Block to be allocated to Refinish |
|             |       |      |      |     |      | 31.50  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
|             |       |      |      |     |      | 18.00  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
|             |       |      |      |     |      | 9.00   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |
|             |       |      |      |     |      | 13.50  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |  |

The 'Included Operations' menu includes the following options:

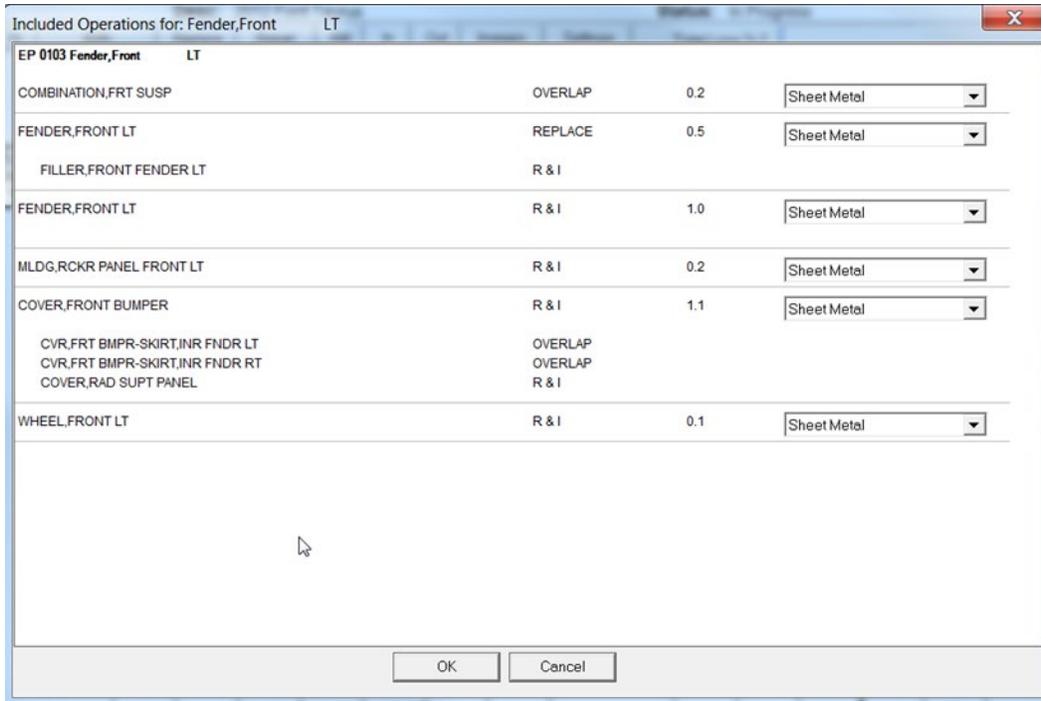
- Edit Line Remarks
- Included Operations
- Use Base Price
- Price is Included
- Use Base Labor Hours
- Labor Hours are Included
- Assembly Breakout
- Adjustment is Markup
- Adjustment is Discount
- Pop up 10-Key Pad
- Pop up Keyboard

At the bottom of the dialog, the 'Operations' button is highlighted with a mouse cursor.

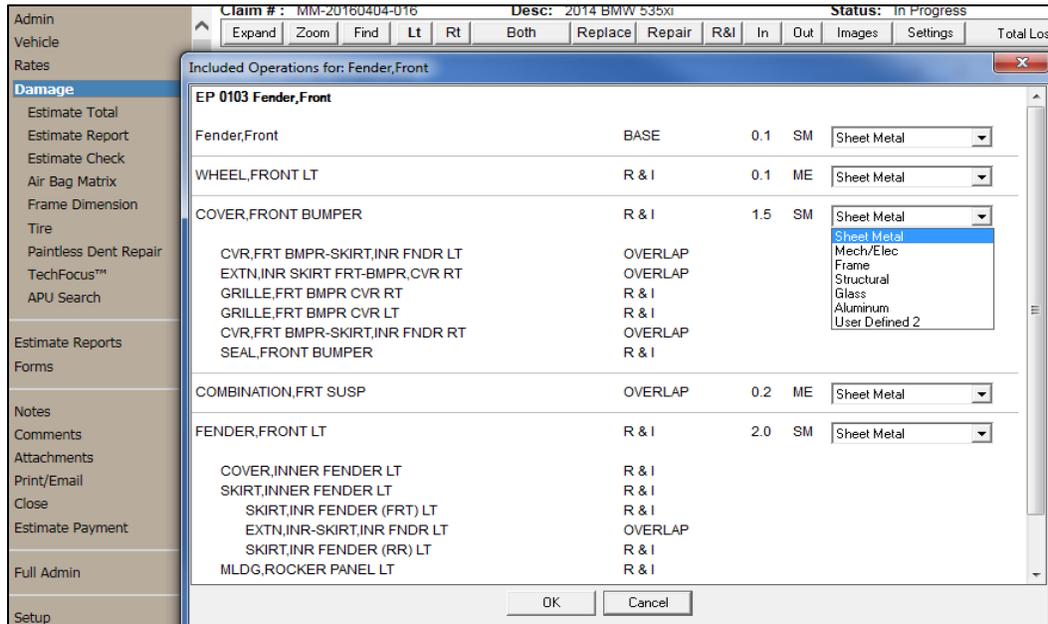
For the labor rate breakout feature, there will be two display options available in the Included Operations dialog window:

- Default part record labor rate in the drop-down list.

### Section 4-1 Labor Overview



- Default part record labor rate in the drop-down list and the system assigned labor rate found in the vehicle data.



The MR (Multiple Rates) code will display when the labor task rate is changed. There will be an asterisk (\*) or chevron (^) depending on these rules:

| Display Option | Action   | Result     |
|----------------|--|------------|
| 1              | Override the labor rate on the task  | <b>MR*</b> |
| 2              | Override the labor rate on the task and it matches the system-assigned labor rate        | <b>MR^</b> |
| 2              | Override the labor rate on the task and it does not match the system assigned labor rate | <b>MR*</b> |

## Section 4-2 Labor Exclusions

### Labor Exclusions

---

Because each vehicle's collision damage is unique, labor to perform some of the following operations may vary. In other cases, the operation is performed less than 80% of the time and may or may not be required due to the collision damage. To address these situations, Audatex provides:

- 'Standard Manual Entries' that are entered by the estimate preparer (for a complete listing, see [Section 5-1](#)).
- 'Additional Labor' operations which are Audatex pre-stored labor for many of these operations.

When the operation has a 'Standard Manual Entry' or an 'Additional Labor' operation available, a note will appear next to the appropriate exclusion.

- Additional labor for removal of parts that have been impeded by crash damage (access labor). (Standard Manual Entry M62 is available).
- Adhesive curing times.
- OEM aesthetic appearance matching of sealants, sound deadening or bonding materials
- Alignment of front or rear suspension ('Additional Labor').
- Alignment of parts adjacent to parts being replaced.
- Application of lubricant or similar material.
- Bleeding of brake, cooling, or hydraulic systems ('Additional Labor' for brake bleeding).
- Body Materials are not included in Audatex labor values.
- Calibration of Advanced Driver Assistance Systems (ADAS) components.
- Complete R&I of brake line, transmission line, or fuel line.
- Cutting and splicing of lamp wiring.
- Detailing.
- Disabling and enabling of Hybrid Vehicle components (i.e. high voltage systems, battery packs, and power cables).
- Diagnosis and testing of electronic components or systems (e.g., airbags).
- Disassembly of recycled parts and assemblies.
- ~~Disconnect and reconnect of un-deployed airbag.~~
- Disconnect / reconnect computer modules for welding purposes.
- Drain, refill and/or top off engine oil.
- Drain, Refill and/or Topoff Windshield Washer Fluid.
- Drain or refill fuel tank.
- Drain, refill and/or top off transmission fluid.
- Evacuate and recharge air conditioning system ('Additional Labor').
- ~~Filling and finishing of unneeded holes.~~
- Glass or other collision debris cleanup (Standard Manual Entry M69 is available).
- Hazardous waste removal (Standard Manual Entry M60 is available).
- Labor for drilling necessary to attach parts (e.g., ornamentation, antennas, etc.). (Standard Manual Entry M61 is available).
- Lock cylinder coding (Standard Manual Entry M73 is available).
- Manual or electronic aiming of headlamps ('Additional Labor').
- Pre and/or Post Repair Diagnostic Scans
- Recover, evacuate and recharge air conditioning system ('Additional Labor').
- Refinish Materials are not included in Audatex refinish labor values.
- Removal of bed liner materials on repaired panels.
- Removal of bed liner materials on replaced panels for access to welded areas.
- Removal of panel bonding adhesive material.
- R&I of audio and video components and optional computers.
- R&I of Injected / Structural foam.
- R&I of non-standard equipment not identified as options.
- R&I of wiring harness, fuse box, and relay box.

- R&I or masking of mouldings and ornamentation (e.g., nameplates, emblems, ornaments, tape, etc.). For exceptions, see specific sections.  
**Note:** *R&I labor for mouldings and ornamentation can be obtained by selecting R&I or by selecting replacement of the part and overriding the pre-stored part price to zero.*
- Refrigerant recovery ('Additional Labor').
- Removal of debris, grease, corrosion, protective coatings, or other materials impeding replacement, R&I, or refinishing of parts.
- Removal of moulding(s), decal(s), tape, or overlay adhesive.
- Removal of part number labels.
- Removal of protective coatings from replacement parts.
- Repair, fitting, or modification of new replacement parts (unless part is being sectioned).
- Repair, fitting, trimming, or modification of recycled parts.
- Replace labor does not include additional labor to repair the replaced panel and or adjacent panels which may become distorted, burned or damaged by welding, drilling, grinding and straightening.
- Reset of electronic components (e.g., airbags, active headrests, computers, modules, clock, radio, tire pressure monitors, adaptive cruise control, etc.). (Standard Manual Entry M67 is available).
- Restoration of corrosion-protective coatings (e.g., galvanizing, zinc coatings, E-coat 'equivalent,' and other like materials). (Standard Manual Entry M14 is available). For more detailed information, see [Refinish](#) section.
- Setup of a vehicle on a frame machine, dedicated bench, or other measuring / straightening devices. Pulling time is not included (Standard Manual Entry M31 is available).
- Setup of welding equipment, welding materials and/or test welding.
- Steam cleaning of or rust removal from fuel tanks.
- Test drive to relearn system.
- Transfer of attached items from original parts to recycled parts.
- Wheel balancing (Standard Manual Entries M22 through M25 are available).

## Section 4-3 Replacement &amp; Recycled Operations

**Replacement and Recycled Operations**

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## **Air Bag Information**

The Air Bag charts are developed in cooperation with I-CAR, the Inter-Industry Conference on Auto Collision Repair. The contents are based on the information available at the time of publication. To ensure the most recent information is used, always refer to the vehicle manufacturer's technical information before working with airbags and other passive restraint systems

## **Air Bag Cautions**

Handle deployed front Air Bags with care.

Front airbags have two initiators (squibs) in the airbag. Both inflators may or may not be deployed. This could leave live pyrotechnic material within the inflators.

Do not dispose of these airbags unless you are certain of complete deployment.

## **Replaced SRS Control Modules**

Following installation, some modules require that a separate programming procedure be carried out. For instructions, refer to the OEM specific module removal and installation procedures.

## **Replacement and Recycled Operations**

The following is a general overview of operations included in Audatex's labor allowances. Each part or operation shows which specific operations are included, as well as those that are not included. Operations listed in the "Not Included" column may or may not need to be performed. To make that determination, an assessment needs to be made at the time of inspection. Review the completed estimate to see the estimate preparer's considerations and allowances for the specific vehicle repair. It is the ultimate responsibility of the estimate preparer to ensure estimate compliance, and that all necessary operations needed are included in the estimate.

All operations and labor allowances in the Audatex system are for like, kind, and quality panels, including new and undamaged OEM panels. Refer to the Audatex Labor Report for operations specific to the vehicle being repaired.

## **Remove and Install (R&I)**

---

R&I is an operation or group of operations that are required to remove and install the part or assembly. Audatex time:

- includes normal adjustment and alignment for correct fit.
- does not include any duplicated effort such as test fitting.

The installation is for the originally attached part.

## **Remove, Remove and Install (R, R& I)**

---

R, R&I is an operation or group of operations that are required to remove the component part from the vehicle, remove the part from a recycled assembly being installed, and re-installing the necessary component part from the vehicle. Audatex time:

- Includes time to remove the component part from the vehicle, remove the part from a recycled assembly being installed and re-installing the necessary component part from the vehicle (e.g. trim panel, lock cylinder, etc.)
- Includes normal adjustment and alignment for correct fit.

The installation is for the part originally attached to the vehicle.

## **Audatex's definition of Remove and Replace (R&R)**

---

Is an operation or group of operations that are required to remove the damaged part and replace with a new OEM or new alternative part. Audatex time:

## Section 4-3 Replacement & Recycled Operations

- includes normal adjustment and alignment for correct fit.
- does not include any duplicated effort such as test fitting.

Replace includes any operations over and above the R&I operations.

### Replacement and Recycled Operations Overview

Audatex labor allowances include time to fabricate sleeves when they can be made from existing parts. If the sleeve needs to be fabricated from raw stock, the time to fabricate the sleeve is not included.

Sandwiched panel replacement includes time to separate the panels by drilling out the spot welds and sliding the replacement panel in between, rewelding and smoothing welds if necessary. Any sheetmetal damage occurring during the separation of sandwiched panels is not included in Audatex provided labor values and would be a manual consideration.

A required labor operation that is not listed as either “Included” or “Not Included” is usually not included in Audatex labor times. This applies to the content of the DBRM and the specific operations listed for each vehicle through the Labor Report.

Asterisks on an estimate are used to denote user entered values. They do not imply that the operation noted is not a necessary procedure.

Manual entries on an estimate do not imply that the part/operation entered is not a necessary procedure.

### Full Panel Replacement

Audatex labor is for replacement at factory seams when possible. Many vehicles now have panels that may not be replaced at roof seams because of overlapping panels. If a quarter panel is designed in this manner and a “Partial” repair time is not shown, the Audatex time represents replacement of the panel at the most practical area – usually in the window openings below the roof seam. This method is considered a full panel replacement.

### Partial Panel Replacement (Sectioning)

Partial Panel Replacement is the replacement of a portion of a welded OEM panel at either a factory seam or using a viable sectioning procedure.

Always consult current OEM service information before starting a partial body repair. Any lines appearing in Audatex graphics are intended only to designate the general area of the cut, and show that a partial replacement may be a valid repair option available for selection. Cut locations should only be determined through the use of OEM service information, I-CAR Training and/or personal experience of the repairer. Stamped lines or laser weld lines appearing on a part should also not be construed as cut lines for a partial repair procedure unless verified by the OEM.

**The following list of Included/Not Included labor operations are a guide that illustrates Audatex’s labor methodology. Please be advised each vehicle is unique in nature and certain operations may differ based on the OEM repair procedures.**

|  |   |                   |   |
|--|---|-------------------|---|
| <b>Bumper R&amp;I and Bumper Recycled</b><br>Recycled panel replacement may or may not be recommended by the vehicle manufacturer. |   |                   |  |
| <b>New Part Replacement (OEM and non-OEM new parts) Operations</b>   | <b>Recycled Part Replacement Operations</b> | <b>Operations</b> |   |

| Included Operations | Not Included Operations | Included Operations | Not Included Operations |   |
|---------------------|-------------------------|---------------------|-------------------------|---|
| ✓                   |                         | ✓                   |                         | Front lamps R&I (when required)   |
| ✓                   |                         | ✓                   |                         | Parklamps R&I (when required)   |
| ✓                   |                         | ✓                   |                         | Grille assembly R&I (when required)   |
| ✓                   |                         | ✓                   |                         | Valance panel R&I (when required)   |
| ✓                   |                         | ✓                   |                         | Remove assembly from frame or energy absorber   |
| ✓                   |                         | ✓                   |                         | Reinstall assembly  |
| ✓                   |                         |                     |                         | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware) |
|                     | ✓                       |                     | ✓                       | License plate bracket R&I   |
|                     | ✓                       |                     | ✓                       | Trimming, repair, or modification of part   |
|                     | ✓                       |                     | ✓                       | R&I of mouldings, emblems, nameplates and ornaments   |
|                     | ✓                       |                     | ✓                       | R&I of non-standard equipment not identified as options   |
| n/a                 | n/a                     |                     | ✓                       | Disassembly, cleaning, and reassembly of assemblies   |

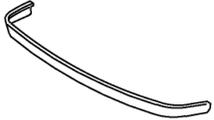
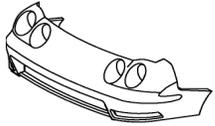
### Bumper Overhaul

**Special Note:** Included and not included operations will vary based on vehicle model options selected.



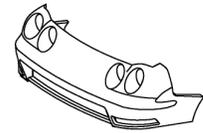
| Included Operations | Not Included Operations | Operations  |
|---------------------|-------------------------|---|
| ✓                   |                         | Assembly R&I  |
| ✓                   |                         | Parklamps R&I (when required)   |
| ✓                   |                         | Bumper reinforcement R&I (when required)  |
| ✓                   |                         | Valance panel R&I (when required)   |
| ✓                   |                         | Mouldings R&I   |
| ✓                   |                         | License plate bracket R&I (rear bumper)   |
| ✓                   |                         | License plate R&I (rear bumper)   |
| ✓                   |                         | Reasonable alignment to vehicle (as defined by the manufacturer using conventional fasteners and/or hardware) |
|                     | ✓                       | License plate bracket R&I (front bumper)  |
|                     | ✓                       | License plate R&I (front bumper)  |
|                     | ✓                       | Ornamentation R&I   |
|                     | ✓                       | Trimming, repair, or modification of part   |
|                     | ✓                       | R&I of non-standard equipment not identified as options   |

## Section 4-3 Replacement & Recycled Operations

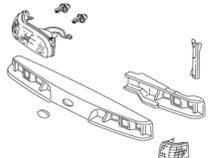
| Valance Replacement   |                         |   |
|---|-------------------------|---|
|   |                         |                                |
| Included Operations   | Not Included Operations | New Part Replacement (OEM and non-OEM new parts) Operations   |
| ✓   |                         | Disconnect and connect skid plates and braces   |
| ✓   |                         | Bumper R&I (when required)  |
| ✓   |                         | Air dams R&I (when required)  |
|   | ✓                       | Trimming, repair, or modification of part   |
|   | ✓                       | R&I of mouldings, emblems, nameplates and ornaments   |
|   | ✓                       | R&I of non-standard equipment not identified as options   |
| Front End Cover R&I   |                         |   |
| <p><b>Special Note:</b> This is a one-piece cover that takes the place of the bumper and front-end panel and surrounds the headlamps.</p> |                         |                                |
| Included Operations   | Not Included Operations | Operations  |
| ✓   |                         | Grille R&I (when required)  |
| ✓   |                         | Front lamps R&I (when required)   |
| ✓   |                         | R&I cover at attaching points   |
| ✓   |                         | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware) |
|   | ✓                       | Bumper impact bar R&I   |
|   | ✓                       | Aim headlamps (Additional Labor)  |
|   | ✓                       | Trimming, repair, or modification of part   |
|   | ✓                       | R&I of mouldings, emblems, nameplates and ornaments   |
|   | ✓                       | R&I of non-standard equipment not identified as options   |

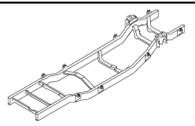
### Section 4-3 Replacement & Recycled Operations

| <b>Front End Cover</b><br><b>Replacement and Recycled</b><br>Recycled panel replacement may or may not be recommended by the vehicle manufacturer.<br><i>Special Note: This is a one-piece cover that takes the place of the bumper and front-end panel and surrounds the headlamps.</i> |  |   |  |   |
|--|--|---|--|---|
| <b>New Part Replacement<br/>(OEM and non-OEM new parts)</b>  |  | <b>Recycled Part<br/>Replacement Operations</b> |  | <b>Operations</b>   |
| <b>Included<br/>Operations</b>   | <b>Not<br/>Included<br/>Operations</b> | <b>Included<br/>Operations</b>                  | <b>Not<br/>Included<br/>Operations</b> |   |
| ✓  |  |   | ✓                                      | Bumper R&I (when required)  |
| ✓  |  | ✓   |  | Front cover R&I   |
| ✓  |  |   | ✓                                      | Grille assembly R&I   |
| ✓  |  |   | ✓                                      | Front lamps R&I (as assemblies)   |
| ✓  |  |   | ✓                                      | Parklamp assemblies R&I (when required)   |
| ✓  |  |   | ✓                                      | Front cover reinforcements R&I  |
| ✓  |  | ✓   |  | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware) |
|  | ✓                                      |   | ✓                                      | Bumper impact bar R&I   |
|  | ✓                                      |   | ✓                                      | License plate bracket R&I   |
|  | ✓                                      |   | ✓                                      | License plate R&I   |
|  | ✓                                      |   | ✓                                      | Aim headlamps (Additional Labor)  |
|  | ✓                                      |   | ✓                                      | Trimming, repair, or modification of part   |
|  | ✓                                      |   | ✓                                      | R&I of mouldings, emblems, nameplates and ornaments   |
|  | ✓                                      |   | ✓                                      | R&I of non-standard equipment not identified as options   |
| n/a  | n/a                                    |   | ✓                                      | Disassembly, cleaning, and reassembly of assemblies   |



### Section 4-3 Replacement & Recycled Operations

| <b>Front End Panel Replacement and Recycled</b><br>Recycled panel replacement may or may not be recommended by the vehicle manufacturer.  |                                |   |                                |   |
|--|--------------------------------|---|--------------------------------|---|
| <b>New Part Replacement (OEM and non-OEM new parts) Operations</b>   |                                | <b>Recycled Part Replacement Operations</b> |                                | <b>Operations</b>   |
| <b>Included Operations</b>   | <b>Not Included Operations</b> | <b>Included Operations</b>                  | <b>Not Included Operations</b> |   |
| ✓  |                                | ✓   |                                | Bumper R&I (when required)  |
| ✓  |                                | ✓   |                                | Grille R&I (when required)  |
| ✓  |                                | ✓   |                                | Front end panel R&I   |
| ✓  |                                |   | ✓                              | Front lamps R&I (as assemblies) (when required)   |
| ✓  |                                |   | ✓                              | Transfer of attached bolted parts   |
| ✓  |                                | ✓   |                                | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware) |
|  | ✓                              |   | ✓                              | Aim headlamps (Additional Labor)  |
|  | ✓                              |   | ✓                              | Trimming, repair, or modification of part   |
|  | ✓                              |   | ✓                              | R&I of mouldings, emblems, nameplates and ornaments   |
|  | ✓                              |   | ✓                              | R&I non-standard equipment not identified as options  |
| n/a  | n/a                            |   | ✓                              | Disassembly, cleaning, and reassembly of assemblies   |

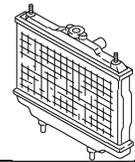
| <b>Frame Replacement and Recycled</b><br>Recycled panel replacement may or may not be recommended by the vehicle manufacturer.  |                                |   |                                |                           |
|--|--------------------------------|---|--------------------------------|---------------------------|
| <b>New Part Replacement (OEM and non-OEM new parts) Operations</b>   |                                | <b>Recycled Part Replacement Operations</b> |                                | <b>Operations</b>         |
| <b>Included Operations</b>   | <b>Not Included Operations</b> | <b>Included Operations</b>                  | <b>Not Included Operations</b> |                           |
| ✓  |                                | ✓   |                                | Front bumper R&I          |
| ✓  |                                | ✓   |                                | Front bumper brackets R&I |
| ✓  |                                | ✓   |                                | Hood panel R&I            |
| ✓  |                                | ✓   |                                | Radiator R&I              |

|   |   |   |   |   |
|---|---|---|---|---|
| ✓ |   | ✓ |   | A/C condenser R&I, <b>including A/C line disconnect / connect, Line Cap Off</b> (when required)   |
| ✓ |   | ✓ |   | Raise and support vehicle   |
| ✓ |   | ✓ |   | Underside covers R&I  |
| ✓ |   | ✓ |   | Steering gear and components R&I  |
| ✓ |   | ✓ |   | Front suspension assemblies / axle assembly R&I   |
| ✓ |   | ✓ |   | Disconnect / connect brake lines  |
| ✓ |   | ✓ |   | Engine and transmission assembly R&I  |
| ✓ |   | ✓ |   | Bolted transmission cross member R&I (when required)  |
| ✓ |   | ✓ |   | Rear bumper R&I (when required)   |
| ✓ |   | ✓ |   | Rear bumper brackets R&I (when required)  |
| ✓ |   | ✓ |   | Rear valance R&I (when required)  |
| ✓ |   | ✓ |   | Muffler and components R&I  |
| ✓ |   | ✓ |   | Fuel tank R&I   |
| ✓ |   | ✓ |   | Disconnect / connect fuel lines   |
| ✓ |   | ✓ |   | Rear suspension assembly / axle assembly R&I  |
| ✓ |   | ✓ |   | Bed assembly R&I on trucks  |
| ✓ |   | ✓ |   | Spare tire carrier R&I (when attached to frame)   |
| ✓ |   | ✓ |   | Disconnect / connect battery  |
| ✓ |   | ✓ |   | Disconnect / connect wiring harness for access  |
| ✓ |   | ✓ |   | Disconnect / connect radiator support panel to frame assembly                                     |
| ✓ |   | ✓ |   | Cab assembly R&I on trucks and utility vehicles   |
| ✓ |   | ✓ |   | Transfer braces and brackets  |
| ✓ |   | ✓ |   | Transfer mounts and bushings  |
| ✓ |   | ✓ |   | Disconnect / connect body assembly to frame assembly on passenger cars, utility vehicles, or vans |
|   | ✓ |   | ✓ | Evacuate and recharge A/C system (Additional Labor)   |
|   | ✓ |   | ✓ | Refrigerant recovery (Additional Labor)   |
|   | ✓ |   | ✓ | Drain and replace oil and fluids  |
|   | ✓ |   | ✓ | Bleed brakes (Additional Labor)   |
|   | ✓ |   | ✓ | Wheel alignment (Additional Labor)  |
|   | ✓ |   | ✓ | Adjust linkage  |
|   | ✓ |   | ✓ | Wiring harness R&I  |
|   | ✓ |   | ✓ | Corrosion protection  |

|  |   |  |   |   |
|--|---|--|---|---|
|  | ✓ |  | ✓ | Test drive  |
|  | ✓ |  | ✓ | Carpet rollback   |
|  | ✓ |  | ✓ | Interior trim panels                                    |
|  | ✓ |  | ✓ | Interior bolted parts                                   |
|  | ✓ |  | ✓ | R&I of non-standard equipment not identified as options |
|  | ✓ |  | ✓ | Trimming, repair, or modification of part               |
|  | ✓ |  | ✓ | Disassembly, cleaning, and reassembly of assemblies     |

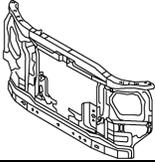
**Radiator Replacement and Recycled**

Recycled panel replacement may or may not be recommended by the vehicle manufacturer.

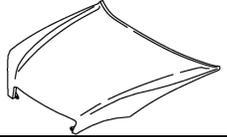


| New Part Replacement (OEM and non-OEM new parts) Operations |                         | Recycled Part Replacement Operations |                         | Operations   |
|---|-------------------------|--------------------------------------|-------------------------|--|
| Included Operations   | Not Included Operations | Included Operations                  | Not Included Operations |  |
| ✓   |                         | ✓                                    |                         | Drain and refill radiator                                    |
| ✓   |                         | ✓                                    |                         | Disconnect and connect hoses                                 |
| ✓   |                         | ✓                                    |                         | Transmission coolant line disconnect/connect (when required) |
| ✓   |                         | ✓                                    |                         | Air baffle R&I (when required)                               |
| ✓   |                         | ✓                                    |                         | Shroud R&I   |
| ✓   |                         | ✓                                    |                         | Electric fan R&I (when required)                             |
|   | ✓                       |                                      | ✓                       | Flush and pressure test                                      |
|   | ✓                       |                                      | ✓                       | Purge and bleed  |
|   | ✓                       |                                      | ✓                       | Trimming, repair, or modification of part                    |
|   | ✓                       |                                      | ✓                       | R&I of non-standard equipment not identified as options      |
| n/a   | n/a                     |                                      | ✓                       | Disassembly, cleaning, and reassembly of assemblies          |

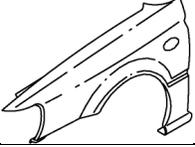
### Section 4-3 Replacement & Recycled Operations

| Radiator Support Panel Replacement and Recycled   |                         |                                      |                         |              |
|---|-------------------------|--------------------------------------|-------------------------|---|
| Recycled panel replacement may or may not be recommended by the vehicle manufacturer.   |                         |                                      |                         |   |
| <b>Important Reminder:</b><br>This is considered a structural part of the vehicle. Replacing structural panels requires: <ul style="list-style-type: none"> <li>• following specific OEM replacement procedures</li> <li>• using specified installation materials</li> <li>• returning the vehicle to OEM structural integrity for occupant safety</li> </ul> |                         |                                      |                         |   |
| New Part Replacement (OEM and non-OEM new parts) Operations   |                         | Recycled Part Replacement Operations |                         | Operations  |
| Included Operations   | Not Included Operations | Included Operations                  | Not Included Operations |   |
| ✓   |                         | ✓                                    |                         | Bumper R&I  |
| ✓   |                         | ✓                                    |                         | Energy absorber R&I (when required)   |
| ✓   |                         | ✓                                    |                         | Valance panel R&I   |
| ✓   |                         | ✓                                    |                         | Front end panel, header panel, cover panel R&I  |
| ✓   |                         | ✓                                    |                         | Fender R&I, or loosen fender at front   |
| ✓   |                         | ✓                                    |                         | Hood R&I (if hinged at support panel)   |
| ✓   |                         | ✓                                    |                         | Radiator R&I  |
| ✓   |                         | ✓                                    |                         | A/C condenser R&I, including A/C line disconnect / connect, <b>Line Cap Off</b> (when required) |
| ✓   |                         | ✓                                    |                         | Airbag sensors R&I (when required)  |
| ✓   |                         | ✓                                    |                         | Battery and tray R&I (when required)  |
| ✓   |                         | ✓                                    |                         | Attached bolted parts R&I   |
| ✓   |                         | ✓                                    |                         | Washer and coolant reservoir tank R&I (when required)   |
| ✓   |                         | ✓                                    |                         | Disconnect and connect engine mounts (when required)  |
| ✓   |                         | ✓                                    |                         | Disconnect / connect battery  |
| ✓   |                         | ✓                                    |                         | Disconnect / connect wiring harness for access  |
| ✓   |                         | ✓                                    |                         | Detach and weld to adjacent panels  |
| ✓   |                         | ✓                                    |                         | Application of weld-through primer (Welded areas)   |
| ✓   |                         | ✓                                    |                         | Seam sealing  |
| ✓   |                         | ✓                                    |                         | Climate control sensors (when required)   |
| ✓   |                         | ✓                                    |                         | Horns R&I (when required)   |
| ✓   |                         | ✓                                    |                         | Engine mount R&I (when required)  |
| ✓   |                         | ✓                                    |                         | A/C receiver / dehydrator R&I (when required)   |

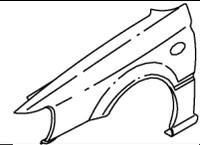
|     |     |  |   |   |
|-----|-----|--|---|---|
|     | ✓   |  | ✓ | Bumper overhaul   |
|     | ✓   |  | ✓ | Aim headlamps (Additional Labor)                        |
|     | ✓   |  | ✓ | Evacuate and recharge A/C system (Additional Labor)     |
|     | ✓   |  | ✓ | Refrigerant recovery (Additional Labor)                 |
|     | ✓   |  | ✓ | Specification labels R&I and/or replacement             |
|     | ✓   |  | ✓ | Fuel vapor canister R&I                                 |
|     | ✓   |  | ✓ | Disconnect / connect of power steering lines            |
|     | ✓   |  | ✓ | Wiring harness, fuse box, and relay R&I                 |
|     | ✓   |  | ✓ | Corrosion protection                                    |
|     | ✓   |  | ✓ | Trimming, repair, or modification of part               |
|     | ✓   |  | ✓ | R&I of non-standard equipment not identified as options |
| n/a | n/a |  | ✓ | Disassembly, cleaning, and reassembly of assemblies     |

|   |                                |   |                                |   |
|---|--------------------------------|---|--------------------------------|---|
| <b>Hood</b>   |                                |   |                                |   |
| <b>Replacement and Recycled</b>   |                                |   |                                |                               |
| Recycled panel replacement may or may not be recommended by the vehicle manufacturer. |                                |   |                                |   |
| <b>New Part Replacement (OEM and non-OEM new parts) Operations</b>                    |                                | <b>Recycled Part Replacement Operations</b> |                                | <b>Operations</b>   |
| <b>Included Operations</b>  | <b>Not Included Operations</b> | <b>Included Operations</b>                  | <b>Not Included Operations</b> |   |
| ✓   |                                | ✓   |                                | R&I at hinges / hydraulic rod   |
| ✓   |                                |   | ✓                              | Hood lamp R&I (when required)   |
| ✓   |                                |   | ✓                              | Safety catch R&I (on Hood)  |
| ✓   |                                |   | ✓                              | Striker R&I (on Hood)   |
| ✓   |                                |   | ✓                              | Weatherstrip (on Hood)  |
| ✓   |                                |   | ✓                              | Windshield washer hose (when required)  |
| ✓   |                                |   | ✓                              | Windshield washer nozzles (when required)   |
| ✓   |                                |   | ✓                              | Air inlet system R&I (when required)  |
| ✓   |                                | ✓   |                                | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware) |
|   | ✓                              |   | ✓                              | Insulator pad R&I   |
|   | ✓                              |   | ✓                              | Specification labels R&I or replacement   |
|   | ✓                              |   | ✓                              | Hinge R&I from vehicle  |

|     |     |  |   |   |
|-----|-----|--|---|---|
|     | ✓   |  | ✓ | Wiring R&I  |
|     | ✓   |  |   | Seam sealing  |
|     | ✓   |  |   | Trimming, repair, or modification of part               |
|     | ✓   |  | ✓ | R&I of mouldings, emblems, nameplates and ornaments     |
|     | ✓   |  | ✓ | R&I of non-standard equipment not identified as options |
| n/a | n/a |  | ✓ | Disassembly, cleaning, and reassembly of assemblies     |

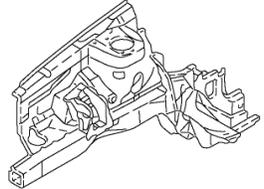
|   |                                |   |                                |   |
|---|--------------------------------|---|--------------------------------|---|
| <b>Fender</b>   |                                |   |                                |   |
| <b>Replacement and Recycled</b>   |                                |   |                                |   |
| Recycled panel replacement may or may not be recommended by the vehicle manufacturer. |                                |   |                                |   |
|    |                                |   |                                |   |
| <b>New Part Replacement (OEM and non-OEM new parts) Operations</b>                    |                                | <b>Recycled Part Replacement Operations</b> |                                | <b>Operations</b>   |
| <b>Included Operations</b>  | <b>Not Included Operations</b> | <b>Included Operations</b>                  | <b>Not Included Operations</b> |   |
| ✓   |                                | ✓   |                                | Bumper assembly R&I (when required)   |
| ✓   |                                | ✓   |                                | Loosen bumper and fillers (when required)   |
| ✓   |                                | ✓   |                                | Grille R&I (when required)  |
| ✓   |                                | ✓   |                                | Bolted cowl top panel R&I (when required)   |
| ✓   |                                | ✓   |                                | Headlamp components R&I (when required)   |
| ✓   |                                | ✓   |                                | Side marker lamp R&I  |
| ✓   |                                | ✓   |                                | Rocker panel moulding R&I (when required)   |
| ✓   |                                | ✓   |                                | Spoilers and flares R&I (when required) (OEM only)  |
| ✓   |                                |   | ✓                              | Mud guard R&I (when required)   |
| ✓   |                                | ✓   |                                | Skirt R&I (when required)   |
| ✓   |                                | ✓   |                                | Fender R&I  |
| ✓   |                                |   | ✓                              | Cornering lamp R&I  |
| ✓   |                                | ✓   |                                | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware) |
| ✓   |                                | ✓   |                                | Bumper R&I (when required)  |
| ✓   |                                | ✓   |                                | Fender assembly R&I   |
|   | ✓                              |   | ✓                              | Antenna assembly R&I  |
|   | ✓                              |   | ✓                              | Drilling hole for antenna installation (Manual Entry M61 available)   |

|     |     |  |   |   |
|-----|-----|--|---|---|
|     | ✓   |  | ✓ | Seam sealing  |
|     | ✓   |  | ✓ | Corrosion protection                                    |
|     | ✓   |  | ✓ | Aim headlamps (Additional Labor)                        |
|     | ✓   |  | ✓ | Stripe removal  |
|     | ✓   |  | ✓ | Trimming, repair, or modification of part               |
| ✓   |     |  | ✓ | Battery and battery tray R&I (when required)            |
|     | ✓   |  | ✓ | R&I of mouldings, emblems, nameplates and ornaments     |
|     | ✓   |  | ✓ | R&I of non-standard equipment not identified as options |
| n/a | n/a |  | ✓ | Disassembly, cleaning, and reassembly of assemblies     |

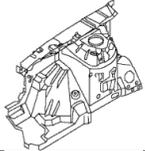
**Fender R&I**

| Included Operations | Not Included Operations | Operations  |
|---------------------|-------------------------|---|
| ✓                   |                         | Bumper assembly R&I (when required)   |
| ✓                   |                         | Loosen bumper and fillers (when required)   |
| ✓                   |                         | Grille R&I (when required)  |
| ✓                   |                         | Bolted cowl top panel R&I (when required)   |
| ✓                   |                         | Headlamp components R&I (when required)   |
| ✓                   |                         | Side marker lamp R&I (when required)  |
| ✓                   |                         | Rocker panel moulding R&I (when required)   |
| ✓                   |                         | Spoilers and flares R&I (when required) (OEM only)  |
| ✓                   |                         | Skirt R&I (when required)   |
| ✓                   |                         | Fender assembly R&I   |
| ✓                   |                         | Cornering lamp R&I (when required)  |
| ✓                   |                         | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware) |
|                     | ✓                       | Antenna R&I   |
|                     | ✓                       | Stripe removal  |
|                     | ✓                       | Trimming, repair, or modification of part   |
|                     | ✓                       | R&I of mouldings, emblems, nameplates and ornaments   |

## Section 4-3 Replacement & Recycled Operations

| <b>Inner Fender Panel</b><br><b>Welded with Side Rail Replacement</b>   |                         |  |
|---|-------------------------|--|
|    |                         |  |
| <b>Important Reminder:</b> <i>This is considered a structural part of the vehicle. Replacing structural panels requires:</i> <ul style="list-style-type: none"> <li>• following specific OEM replacement procedures</li> <li>• using specified installation materials</li> <li>• returning the vehicle to OEM structural integrity for occupant safety</li> </ul> |                         |  |
| Included Operations   | Not Included Operations | New Part Replacement (OEM and non-OEM new parts) Operations                        |
| ✓   |                         | Bumper R&I   |
| ✓   |                         | Energy absorber R&I (when required)  |
| ✓   |                         | Hood panel R&I (when required)   |
| ✓   |                         | Hood hinges and hydraulic rod R&I (when required)                                  |
| ✓   |                         | Hood prop rod R&I (when required)  |
| ✓   |                         | Fender R&I   |
| ✓   |                         | Battery and tray R&I (when required)   |
| ✓   |                         | Washer and coolant reservoir tank R&I (when required)                              |
| ✓   |                         | Sill plate R&I   |
| ✓   |                         | Cowl trim R&I  |
| ✓   |                         | Carpet / insulation rollback   |
| ✓   |                         | Raise and support vehicle  |
| ✓   |                         | Front wheel R&I  |
| ✓   |                         | Air inlet system R&I (when required)   |
| ✓   |                         | Disconnect / connect battery   |
| ✓   |                         | Disconnect / connect wiring harness for access                                     |
| ✓   |                         | Detach and weld at floor pan, radiator support panel, hinge pillar, and cowl panel |
| ✓   |                         | Fabrication of sleeves (when required)   |
| ✓   |                         | Transfer of welded brackets and reinforcements                                     |
| ✓   |                         | Application of weld-through primer (Welded areas)                                  |
| ✓   |                         | Seam sealing   |
| ✓   |                         | Horns R&I (when required)  |
| ✓   |                         | Reasonable alignment   |
| ✓   |                         | Disconnect and connect shock/strut at inner fender                                 |
| ✓   |                         | Disconnect and connect side rail at engine cradle or suspension cross member       |
|   | ✓                       | Hood release cable R&I   |

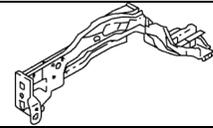
|   |   |   |
|---|---|---|
|   | ✓ | Electronic components R&I   |
|   | ✓ | Fuse box R&I  |
|   | ✓ | Vacuum booster R&I  |
|   | ✓ | Exhaust system R&I for access   |
|   | ✓ | Parking brake assembly R&I  |
|   | ✓ | Master cylinder R&I   |
|   | ✓ | Brake line R&I  |
|   | ✓ | Bleed brakes (Additional Labor)   |
|   | ✓ | Wheel alignment (Additional Labor)  |
|   | ✓ | Front suspension assembly R&I (Additional Labor)  |
|   | ✓ | Engine R&I (Additional Labor)   |
|   | ✓ | R&I engine and transaxle, suspension and steering assemblies, and cradle as a unit (Additional Labor) |
|   | ✓ | Wiring harness R&I  |
|   | ✓ | Dash R&I  |
|   | ✓ | Corrosion protection  |
|   | ✓ | Disconnect and connect engine mounts  |
|   | ✓ | Steering components R&I   |
|   | ✓ | Trimming, repair, or modification of part   |
| ✓ |   | Raise and support engine (when required)  |
|   | ✓ | R&I of non-standard equipment not identified as options   |

| <p><b>Inner Fender Panel</b><br/>without Side Rail Replacement</p>   |                         |   |
|---|-------------------------|---|
| <p><b>Important Reminder:</b> This is considered a structural part of the vehicle. Replacing structural panels requires:</p> <ul style="list-style-type: none"> <li>• following specific OEM replacement procedures</li> <li>• using specified installation materials</li> <li>• returning the vehicle to OEM structural integrity for occupant safety</li> </ul> |                         |   |
| Included Operations   | Not Included Operations | New Part Replacement (OEM and non-OEM new parts) Operations |
| ✓   |                         | Bumper R&I  |
| ✓   |                         | Energy absorber R&I (when required)                         |
| ✓   |                         | Hood panel R&I (when required)                              |
| ✓   |                         | Hood hinges and hydraulic rod R&I (when required)           |
| ✓   |                         | Hood prop rod R&I (when required)                           |
| ✓   |                         | Fender R&I  |
| ✓   |                         | Battery and tray R&I (when required)                        |

|   |   |   |
|---|---|---|
| ✓ |   | Washer and coolant reservoir tank R&I (when required)   |
| ✓ |   | Sill plate R&I  |
| ✓ |   | Cowl trim R&I   |
| ✓ |   | Carpet / insulation rollback  |
| ✓ |   | Disconnect and connect shock/strut at inner fender  |
| ✓ |   | Raise and support vehicle   |
| ✓ |   | Front wheel R&I   |
| ✓ |   | Air inlet system R&I (when required)  |
| ✓ |   | Disconnect / connect engine mount (rear wheel drive)  |
| ✓ |   | Disconnect / connect battery  |
| ✓ |   | Disconnect / connect wiring harness for access  |
| ✓ |   | Detach and weld at floor pan, radiator support panel, hinge pillar, and cowl panel                    |
| ✓ |   | Transfer of welded brackets and reinforcements  |
| ✓ |   | Application of weld-through primer (Welded Areas)   |
| ✓ |   | Seam sealing  |
| ✓ |   | Reasonable alignment  |
|   | ✓ | Hood release cable R&I  |
|   | ✓ | Electronic components R&I   |
|   | ✓ | Fuse box R&I  |
|   | ✓ | Horns R&I   |
|   | ✓ | Vacuum booster R&I  |
|   | ✓ | Exhaust system R&I for access   |
|   | ✓ | Parking brake assembly R&I  |
|   | ✓ | Master cylinder R&I   |
|   | ✓ | Brake line R&I  |
|   | ✓ | Bleed brakes (Additional Labor)   |
|   | ✓ | Wheel alignment (Additional Labor)  |
|   | ✓ | Suspension assembly R&I (Additional Labor)  |
|   | ✓ | Engine R&I (Additional Labor)   |
|   | ✓ | R&I engine and transaxle, suspension and steering assemblies, and cradle as a unit (Additional Labor) |
|   | ✓ | Wiring harness R&I  |
|   | ✓ | Dash R&I  |
|   | ✓ | Corrosion protection  |
|   | ✓ | Steering components R&I (rear wheel drive)  |
|   | ✓ | Raise and support engine  |
|   | ✓ | Trimming, repair, or modification of part   |

|  |   |   |
|--|---|---|
|  | ✓ | R&I of non-standard equipment not identified as options |
|--|---|---|

**Front Side Rails Replacement**



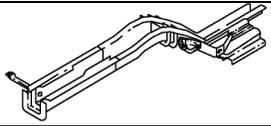
**Important Reminder:** *This is considered a structural part of the vehicle. Replacing structural panels requires:*

- ✓ following specific OEM replacement procedures
- ✓ using specified installation materials
- ✓ returning the vehicle to OEM structural integrity for occupant safety

| Included Operations | Not Included Operations | New Part Replacement (OEM and non-OEM new parts) Operations   |
|---------------------|-------------------------|---|
| ✓                   |                         | Bumper R&I  |
| ✓                   |                         | Energy absorber R&I (when required)   |
| ✓                   |                         | Fender R&I  |
| ✓                   |                         | Sill plate R&I  |
| ✓                   |                         | Cowl trim R&I   |
| ✓                   |                         | Carpet / insulation rollback  |
| ✓                   |                         | Disconnect / connect engine mounts  |
| ✓                   |                         | Steering components R&I (when required)   |
| ✓                   |                         | Disconnect / connect battery  |
| ✓                   |                         | Disconnect / connect wiring harness for access  |
| ✓                   |                         | Detach and weld (as needed)   |
| ✓                   |                         | Fabrication of sleeves(when required)   |
| ✓                   |                         | Transfer of welded brackets and reinforcements  |
| ✓                   |                         | Application of weld-through primer (Welded areas)   |
| ✓                   |                         | Seam sealing  |
| ✓                   |                         | Reasonable alignment  |
| ✓                   |                         | Raise and support vehicle   |
| ✓                   |                         | Exhaust system R&I for access   |
|                     | ✓                       | Parking brake assembly R&I  |
|                     | ✓                       | Brake line R&I  |
|                     | ✓                       | Bleed brakes (Additional Labor)   |
|                     | ✓                       | Wheel alignment (Additional Labor)  |
|                     | ✓                       | Front suspension R&I (Additional Labor)   |
|                     | ✓                       | Engine R&I (Additional Labor)   |
|                     | ✓                       | R&I engine and transaxle, suspension and steering assemblies, and cradle as a unit (Additional Labor) |
|                     | ✓                       | Corrosion protection  |

|  |   |   |
|--|---|---|
|  | ✓ | Raise and support engine                                |
|  | ✓ | Trimming, repair, or modification of part               |
|  | ✓ | R&I of non-standard equipment not identified as options |

### Section 4-3 Replacement & Recycled Operations

| Rear Side Rails Replacement and Recycled   |                         |                                      |   |   |
|--|-------------------------|--------------------------------------|---|---|
| Recycled panel replacement may or may not be recommended by the vehicle manufacturer.  |                         |                                      |  |   |
| <b>Important Reminder:</b> This is considered a structural part of the vehicle. Replacing structural panels requires:  |                         |                                      |   |   |
| <ul style="list-style-type: none"> <li>• following specific OEM replacement procedures</li> <li>• using specified installation materials</li> <li>• returning the vehicle to OEM structural integrity for occupant safety</li> </ul> |                         |                                      |   |   |
| New Part Replacement (OEM and non-OEM new parts) Operations  |                         | Recycled Part Replacement Operations |   | Operations  |
| Included Operations  | Not Included Operations | Included Operations                  | Not Included Operations   |   |
| ✓  |                         | ✓                                    |   | Rear bumper R&I                                   |
| ✓  |                         | ✓                                    |   | Rear energy absorber R&I (when required)          |
| ✓  |                         | ✓                                    |   | Fuel tank R&I (when required)                     |
| ✓  |                         | ✓                                    |   | Rear seat R&I                                     |
| ✓  |                         | ✓                                    |   | Trunk / cargo area trim panel(s) R&I              |
| ✓  |                         | ✓                                    |   | Carpet / insulation rollback                      |
| ✓  |                         | ✓                                    |   | Disconnect / connect battery                      |
| ✓  |                         | ✓                                    |   | Disconnect / connect wiring harness for access    |
| ✓  |                         | ✓                                    |   | Detach and weld (as needed)                       |
| ✓  |                         | ✓                                    |   | Fabrication of sleeves (when required)            |
| ✓  |                         | ✓                                    |   | Transfer welded brackets and reinforcements       |
| ✓  |                         | ✓                                    |   | Application of weld-through primer (Welded areas) |
| ✓  |                         | ✓                                    |   | Seam sealing                                      |
| ✓  |                         | ✓                                    |   | Raise and support vehicle                         |
| ✓  |                         | ✓                                    |   | Reasonable alignment                              |
|  | ✓                       |                                      | ✓   | Exhaust system R&I for access                     |
|  | ✓                       |                                      | ✓   | Bleed brakes (Additional Labor)                   |
|  | ✓                       |                                      | ✓   | Brake lines R&I                                   |
|  | ✓                       |                                      | ✓   | Rear suspension R&I (Additional Labor)            |
|  | ✓                       |                                      | ✓   | Wheel alignment (Additional Labor)                |
|  | ✓                       |                                      | ✓   | Wiring harness R&I                                |

|     |     |  |   |   |
|-----|-----|--|---|---|
|     | ✓   |  | ✓ | Corrosion protection                                    |
|     | ✓   |  | ✓ | Trimming, repair, or modification of part               |
|     | ✓   |  | ✓ | R&I of non-standard equipment not identified as options |
| n/a | n/a |  | ✓ | Disassembly, cleaning, and reassembly of assemblies     |

**Section 4-3 Replacement & Recycled Operations**

| <b>Suspension Assembly R&amp;I</b> |                                |  |
|------------------------------------|--------------------------------|--|
| <b>Included Operations</b>         | <b>Not Included Operations</b> | <b>Operations</b>  |
| ✓                                  |                                | Raise and support vehicle  |
| ✓                                  |                                | Wheel R&I  |
| ✓                                  |                                | Disconnect / connect suspension parts at frame/body and outer tie rod    |
| ✓                                  |                                | Disconnect / connect caliper at suspension part and pull back for access |
| ✓                                  |                                | Disconnect / connect at drive axle (when required)                       |
|                                    | ✓                              | Replacement of component parts   |
|                                    | ✓                              | Bleeding brakes (Additional Labor)                                       |
|                                    | ✓                              | Wheel alignment (Additional Labor)                                       |
|                                    | ✓                              | Disconnect / connect parking brake                                       |
|                                    | ✓                              | Trimming, repair, or modification of part                                |

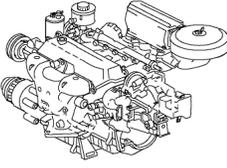


| <b>Front Suspension Overhaul</b> |                                |   |
|----------------------------------|--------------------------------|---|
| <b>Included Operations</b>       | <b>Not Included Operations</b> | <b>Operations</b>                         |
| ✓                                |                                | Suspension R&I                            |
| ✓                                |                                | Disassemble and clean all component parts |
| ✓                                |                                | Visually inspect                          |
| ✓                                |                                | Replace needed parts                      |
| ✓                                |                                | Reassemble all component parts            |
|                                  | ✓                              | Stabilizer bar replacement                |
|                                  | ✓                              | Drive axle replacement                    |
|                                  | ✓                              | Bleed brakes (Additional Labor)           |



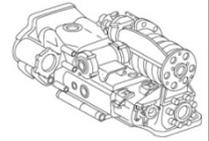
|  |   |   |
|--|---|---|
|  | ✓ | Wheel alignment (Additional Labor)        |
|  | ✓ | Trimming, repair, or modification of part |

### Section 4-3 Replacement & Recycled Operations

| Engine Assembly R&I and Recycled R&I  |                         |                                      |                         |  |
|---|-------------------------|--------------------------------------|-------------------------|--|
| Recycled replacement may or may not be recommended by the vehicle manufacturer.     |                         |                                      |                         |  |
|  |                         |                                      |                         |  |
| New Part Replacement (OEM and non-OEM new parts) Operations                         |                         | Recycled Part Replacement Operations |                         | Operations   |
| Included Operations   | Not Included Operations | Included Operations                  | Not Included Operations |  |
| ✓   |                         | ✓                                    |                         | Hood R&I (when required)   |
| ✓   |                         | ✓                                    |                         | Radiator R&I (when required)   |
| ✓   |                         | ✓                                    |                         | Splash shields R&I (when required)   |
| ✓   |                         | ✓                                    |                         | Air cleaner R&I  |
| ✓   |                         | ✓                                    |                         | Disconnect/connect air conditioning compressor and move for access   |
| ✓   |                         | ✓                                    |                         | Disconnect/connect power steering pump/reservoir and move for access (when required)   |
| ✓   |                         | ✓                                    |                         | Disconnect/connect at engine mounts, linkage, exhaust pipe, transmission / transaxle, fuel line(s), vacuum lines, and wiring |
| ✓   |                         | ✓                                    |                         | Remove engine (raise or lower out of engine compartment)   |
| ✓   |                         | ✓                                    |                         | Install engine (lower or raise into engine compartment)  |
|   | ✓                       |                                      | ✓                       | Evacuate and recharge A/C system (Additional Labor)  |
|   | ✓                       |                                      | ✓                       | Refrigerant recovery (Additional Labor)  |
|   | ✓                       |                                      | ✓                       | Drain and replace oil and fluids   |
|   | ✓                       |                                      | ✓                       | Adjust linkage   |
|   | ✓                       |                                      | ✓                       | Test drive   |
|   | ✓                       |                                      | ✓                       | Replacement or transfer of engine components (spark plugs, distributors, etc)  |
|   | ✓                       |                                      | ✓                       | Trimming, repair or modification of part   |
|   | ✓                       |                                      | ✓                       | R&I of non-standard equipment not identified as options  |
|   | ✓                       |                                      | ✓                       | Disassembly, cleaning, and reassembly of assemblies  |

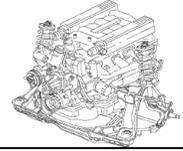
### Section 4-3 Replacement & Recycled Operations

| Transmission / Transaxle R&I and Recycled R&I                                   |                         |                                      |                         |   |
|---|-------------------------|--------------------------------------|-------------------------|---|
| Recycled replacement may or may not be Recommended by the vehicle manufacturer. |                         |                                      |                         |   |
| New Part Replacement (OEM and non-OEM new parts) Operations                     |                         | Recycled Part Replacement Operations |                         | Operations  |
| Included Operations   | Not Included Operations | Included Operations                  | Not Included Operations |   |
| ✓   |                         | ✓                                    |                         | Hood R&I (when required)  |
| ✓   |                         | ✓                                    |                         | Radiator R&I (when required)  |
| ✓   |                         | ✓                                    |                         | Disconnect/connect air conditioning compressor and move for access (when required)  |
| ✓   |                         | ✓                                    |                         | Disconnect/connect power steering pump/reservoir and move for access (when required)  |
| ✓   |                         | ✓                                    |                         | Splash shields R&I (when required)  |
| ✓   |                         | ✓                                    |                         | Disconnect and connect at transmission/transaxle mounts, engine mounts (when required), exhaust pipe, transmission/transaxle, fuel line(s), vacuum lines & wiring |
| ✓   |                         | ✓                                    |                         | Remove transmission/transaxle (raise/lower out of engine compartment)   |
| ✓   |                         | ✓                                    |                         | Install transmission/transaxle (lower/raise into engine compartment)  |
|   | ✓                       |                                      | ✓                       | Evacuate and recharge A/C system (Additional Labor)   |
|   | ✓                       |                                      | ✓                       | Refrigerant recovery (Additional Labor)   |
|   | ✓                       |                                      | ✓                       | Drain and replace oil and fluids  |
|   | ✓                       |                                      | ✓                       | Adjust linkage  |
|   | ✓                       |                                      | ✓                       | Test drive  |
|   | ✓                       |                                      | ✓                       | Replacement or transfer of transmission / transaxle components (torque converter, seals, etc)   |
|   | ✓                       |                                      |                         | Trimming, repair or modification of part  |
|   | ✓                       |                                      |                         | R&I of non-standard equipment not identified as options   |
|   | ✓                       |                                      |                         | Disassembly, cleaning, and reassembly of assemblies   |

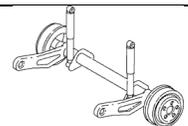


### Section 4-3 Replacement & Recycled Operations

| Engine / Cradle / Suspension / Steering R&I |                         |  |
|---|-------------------------|--|
| Included Operations                         | Not Included Operations | Operations   |
| ✓   |                         | Radiator R&I (when required)   |
| ✓   |                         | Splash shields R&I   |
| ✓   |                         | Air cleaner R&I  |
| ✓   |                         | Raise and support vehicle  |
| ✓   |                         | Starter R&I (when required)  |
| ✓   |                         | Engine covers R&I  |
| ✓   |                         | Disconnect/connect steering (i.e., steering column to steering gear)                             |
| ✓   |                         | Disconnect/connect inner fender panel to strut assembly  |
| ✓   |                         | Disconnect/connect air conditioning compressor and move for access                               |
| ✓   |                         | Disconnect/connect power steering pump/reservoir and move for access (when required)             |
| ✓   |                         | Disconnect/connect at engine mounts, linkage, exhaust pipe, fuel lines, vacuum lines, and wiring |
| ✓   |                         | Remove engine/cradle/suspension/steering (lower out of engine compartment)                       |
| ✓   |                         | Install engine/cradle/suspension/steering (raise into engine compartment)                        |
|   | ✓                       | Evacuate and recharge A/C system (Additional Labor)  |
|   | ✓                       | Refrigerant recovery (Additional Labor)  |
|   | ✓                       | Drain and replace oil and fluids   |
|   | ✓                       | Adjust linkage   |
|   | ✓                       | Test drive   |
|   | ✓                       | Trimming, repair, or modification of part  |
|   | ✓                       | R&I of non-standard equipment not identified as options  |



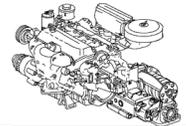
| Rear Suspension Overhaul |                         |   |
|--------------------------|-------------------------|---|
| Included Operations      | Not Included Operations | Operations                                |
| ✓                        |                         | Suspension R&I                            |
| ✓                        |                         | Disassemble and clean all component parts |
| ✓                        |                         | Visually inspect                          |



|   |   |   |
|---|---|---|
| ✓ |   | Replace needed parts                      |
| ✓ |   | Reassemble all component parts            |
|   | ✓ | Stabilizer bar replacement                |
|   | ✓ | Rear axle replacement                     |
|   | ✓ | Bleed brakes (Additional Labor)           |
|   | ✓ | Wheel alignment (Additional Labor)        |
|   | ✓ | Trimming, repair, or modification of part |

**Engine and Transmission/ Transaxle Assembly R&I and Recycled R&I**

Recycled replacement may or may not be recommended by the vehicle manufacturer.

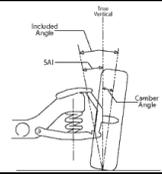


| New Part Replacement<br>(OEM and non-OEM new parts) Operations |                         | Recycled Part Replacement Operations |                         | Operations   |
|--|-------------------------|--------------------------------------|-------------------------|--|
| Included Operations  | Not Included Operations | Included Operations                  | Not Included Operations |  |
| ✓  |                         | ✓                                    |                         | Hood R&I at hinges (when required)   |
| ✓  |                         | ✓                                    |                         | Radiator R&I (when required)   |
| ✓  |                         | ✓                                    |                         | Splash shields R&I (when required)   |
| ✓  |                         | ✓                                    |                         | Air cleaner R&I  |
| ✓  |                         | ✓                                    |                         | Disconnect/connect air conditioning compressor and move for access   |
| ✓  |                         | ✓                                    |                         | Disconnect/connect power steering pump/reservoir and move for access (when required)   |
| ✓  |                         | ✓                                    |                         | Disconnect and connect at engine mounts, linkage, exhaust pipe, fuel line(s), vacuum lines, and wiring from axle / drive shafts, transmission mounts |
| ✓  |                         | ✓                                    |                         | Remove engine and transmission/transaxle (lower out of engine compartment)   |
| ✓  |                         | ✓                                    |                         | Install engine and transmission/transaxle (raise into engine compartment)  |
|  | ✓                       |                                      | ✓                       | Evacuate and recharge A/C system (Additional Labor)  |
|  | ✓                       |                                      | ✓                       | Refrigerant recovery (Additional Labor)  |
|  | ✓                       |                                      | ✓                       | Drain and replace oil and fluids   |
|  | ✓                       |                                      | ✓                       | Adjust linkage   |
|  | ✓                       |                                      | ✓                       | Test drive   |
|  | ✓                       |                                      | ✓                       | Replacement or transfer of engine components (spark plugs, distributors, etc)  |
|  | ✓                       |                                      | ✓                       | Trimming, repair or modification of part   |

|  |   |  |   |   |
|--|---|--|---|---|
|  | ✓ |  | ✓ | R&I of non-standard equipment not identified as options |
|  | ✓ |  | ✓ | Disassembly, cleaning, and reassembly of assemblies     |

**Section 4-3 Replacement & Recycled Operations**

| Front Wheel / Rear Wheel / Four Wheel Alignment |                         |   |
|---|-------------------------|---|
| Included Operations                             | Not Included Operations | Operations  |
| ✓   |                         | Gather and enter vehicle information into alignment rack to obtain alignment specifications                                       |
| ✓   |                         | Check thrust angle, steering angle inclination (SAI)  |
| ✓   |                         | Check vehicle ride height and adjust if necessary   |
| ✓   |                         | Check and adjust tire pressure on all four wheels   |
| ✓   |                         | Add weights or fill fuel tank per manufacturer specifications (when required)   |
| ✓   |                         | Drive vehicle onto alignment rack; raise and support  |
| ✓   |                         | Visually inspect for damage to suspension components  |
| ✓   |                         | Wheel cover R&I (when required)   |
| ✓   |                         | Attach wheel alignment sensors and compensate for runout on all four wheels   |
| ✓   |                         | Establish vehicle tracking by checking vehicle thrust angle to center of vehicle  |
| ✓   |                         | Center steering wheel   |
| ✓   |                         | Adjust caster and camber; perform manufacturer recommended shimming procedures (when required) (front / rear wheel alignment)     |
| ✓   |                         | Adjust toe-in where applicable (front/rear wheel alignment)   |
| ✓   |                         | Adjust front and rear caster and camber; perform manufacturer recommended shimming procedures (when required) (4-wheel alignment) |
| ✓   |                         | Adjust front and rear toe-in where applicable (4-wheel alignment)   |
| ✓   |                         | Recheck alignment specifications and print final copy   |
| ✓   |                         | Remove wheel alignment sensors from all four wheels and lower vehicle   |
| ✓   |                         | Remove vehicle from alignment rack and road test  |
|   | ✓                       | Non-OEM shimming  |
|   | ✓                       | Modifications or alignment of suspension, axle, frame, or engine components   |
|   | ✓                       | Re-inspection or realignment  |
|   | ✓                       | Pre-diagnostic road test  |
|   | ✓                       | Replacement of suspension or structural components (e.g., wheel bearings, ball joints, tie rods)                                  |
|   | ✓                       | R&I steering wheel  |



|  |   |  |
|--|---|--|
|  | ✓ | Realigning the rear suspension axle assembly     |
|  | ✓ | Rotate tires and compensate for radial tire pull |
|  | ✓ | Trimming, repair, or modification of part        |

**Section 4-3 Replacement & Recycled Operations**

|   |  |  |
|---|--|--|
| <b>Windshield and Back Glass Replacement and Recycled</b>                             |  |  |
| Recycled panel replacement may or may not be recommended by the vehicle manufacturer. |  |  |

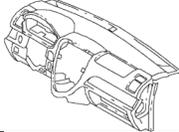
**Important Reminder:**

- ✓ Reveal moulding that are mounted flush to the stationary glass (e.g., Windshield, Back Glass, or Quarter Glass) are at risk of breakage when being removed.
- ✓ Stationary glass that is urethane bonded is considered a structural part of the vehicle. Replacing stationary glass requires:
  - ✓ following specific OEM replacement procedures
  - ✓ using specified installation materials
  - ✓ returning the vehicle to OEM structural integrity for occupant safety

| New Part Replacement (OEM and non-OEM new parts) Operations |   | Recycled Part Replacement Operations |                         | Operations  |
|---|---|--------------------------------------|-------------------------|---|
|   |   | Included Operations                  | Not Included Operations |   |
| ✓   |   | ✓                                    |                         | Wiper arms R&I  |
| ✓   |   | ✓                                    |                         | Reveal moulding R&I                                     |
| ✓   |   | ✓                                    |                         | Inside rear view mirror R&I                             |
| ✓   |   | ✓                                    |                         | Garnish moulding R&I                                    |
| ✓   |   | ✓                                    |                         | Detach and re-attach windshield antenna                 |
| ✓   |   | ✓                                    |                         | Detach and re-attach heated back glass connectors       |
| ✓   |   | ✓                                    |                         | Weatherstrip R&I  |
| ✓   |   | ✓                                    |                         | Remove existing glass                                   |
| ✓   |   | ✓                                    |                         | Install new or recycled glass                           |
| ✓   |   | ✓                                    |                         | Clean glass after installation                          |
| ✓   |   | ✓                                    |                         | Headliner R&I or loosen (when required)                 |
|   | ✓ |                                      | ✓                       | Glass installation kit (Manual Entry M29 available)     |
|   | ✓ |                                      | ✓                       | Broken glass cleanup (Manual Entry M69 available)       |
|   | ✓ |                                      | ✓                       | Adhesive cleanup  |
|   | ✓ |                                      | ✓                       | Sealant cleanup   |
|   | ✓ |                                      | ✓                       | Trimming, repair or modification of part                |
|   | ✓ |                                      | ✓                       | R&I of non-standard equipment not identified as options |

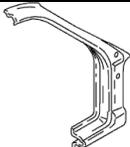
|     |     |  |   |   |
|-----|-----|--|---|---|
|     | ✓   |  | ✓ | Recalibration of cameras and/or sensors when applicable |
| n/a | n/a |  | ✓ | Disassembly, cleaning, and reassembly of assemblies     |

**Section 4-3 Replacement & Recycled Operations**

| <b>Instrument Panel Replacement and Recycled</b>   |              |                                      |                         |  |
|--|--------------|--------------------------------------|-------------------------|---|
| Recycled panel replacement may or may not be recommended by the vehicle manufacturer.            |              |                                      |                         |   |
| <b>Important Reminder:</b> Manufacturers recommend replacement of SRS components with OEM parts. |              |                                      |                         |   |
| New Part Replacement (OEM and non-OEM new parts) Operations                                      |              | Recycled Part Replacement Operations |                         | Operations  |
| Included Operations  | Not Included | Operations Included Operations       | Not Included Operations |   |
| ✓  |              | ✓                                    |                         | Steering wheel R&I (when required)  |
| ✓  |              | ✓                                    |                         | Steering column switch assembly R&I (when required)                                 |
| ✓  |              | ✓                                    |                         | Steering column R&I (when required)   |
| ✓  |              | ✓                                    |                         | Steering column covers R&I (when required)  |
| ✓  |              | ✓                                    |                         | Steering column covers panel R&I  |
| ✓  |              | ✓                                    |                         | Knee bolster R&I  |
| ✓  |              |                                      | ✓                       | Instrument panel cover(s) R&I   |
| ✓  |              |                                      | ✓                       | Instrument panel bezel(s) R&I   |
| ✓  |              |                                      | ✓                       | Radio housing R&I   |
| ✓  |              |                                      | ✓                       | Heater and A/C control unit R&I   |
| ✓  |              | ✓                                    |                         | Windshield garnish moulding R&I   |
| ✓  |              |                                      | ✓                       | Air duct outlet(s) R&I  |
| ✓  |              |                                      | ✓                       | Switch(s) R&I   |
| ✓  |              | ✓                                    |                         | Instrument panel mounted ignition cylinder R&I                                      |
| ✓  |              |                                      | ✓                       | Instrument panel speaker grille(s) R&I (bolted only)                                |
| ✓  |              |                                      | ✓                       | Glove compartment door R&I  |
| ✓  |              |                                      | ✓                       | Glove compartment R&I   |
| ✓  |              |                                      | ✓                       | Glove compartment housing R&I   |
| ✓  |              |                                      | ✓                       | Glove compartment rod/hinge R&I (when required)                                     |
| ✓  |              |                                      | ✓                       | Glove compartment striker(s) R&I  |
| ✓  |              |                                      | ✓                       | Switch cover(s) R&I   |
| ✓  |              |                                      | ✓                       | Ash tray and/or ash tray housing R&I (when required)                                |

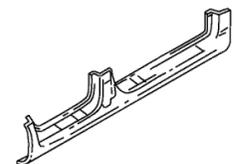
|     |     |   |   |   |
|-----|-----|---|---|---|
| ✓   |     |   | ✓ | Instrument panel cluster or cluster housing R&I         |
| ✓   |     |   | ✓ | Instrument panel pad R&I                                |
| ✓   |     | ✓ |   | Instrument panel airbag module R&I                      |
| ✓   |     | ✓ |   | Airbag R&I  |
| ✓   |     | ✓ |   | Center console R&I (when required)                      |
| ✓   |     |   | ✓ | Instrument panel lens R&I                               |
| ✓   |     |   | ✓ | Instrument panel gauges R&I (when required)             |
| ✓   |     | ✓ |   | Front seats (when required)                             |
| ✓   |     |   | ✓ | Instrument panel clock R&I                              |
| ✓   |     |   | ✓ | Rheostat R&I  |
| ✓   |     | ✓ |   | SRS modules R&I (when required)                         |
| ✓   |     | ✓ |   | Inner cowl trim panel R&I (when required)               |
| ✓   |     |   | ✓ | Hood release cable handle R&I                           |
| ✓   |     | ✓ |   | Instrument panel housing(s) R&I (when required)         |
| ✓   |     | ✓ |   | Instrument panel R&I                                    |
| ✓   |     | ✓ |   | Disconnect / connect wiring harness for access          |
| ✓   |     | ✓ |   | Duct R&I (when required)                                |
|     | ✓   |   | ✓ | Wiring R&I  |
|     | ✓   |   | ✓ | Radio / amplifier / cassette player / CD player R&I     |
|     | ✓   |   | ✓ | Instrument panel sound insulator R&I                    |
|     |     |   | ✓ | Disable / rearm SRS system                              |
|     |     |   | ✓ | Reset clock and sound system settings                   |
|     |     |   | ✓ | Parking brake assembly R&I                              |
|     |     |   | ✓ | Instrument panel support R&I                            |
|     |     |   | ✓ | Specification labels R&I or replacement                 |
|     |     |   | ✓ | Snap-on instrument panel speakers R&I                   |
|     |     |   | ✓ | Fuse box R&I  |
|     |     |   | ✓ | Trimming, repair or modification of part                |
|     |     |   | ✓ | R&I of mouldings, emblems, nameplates and ornaments     |
|     |     |   | ✓ | R&I of non-standard equipment not identified as options |
| n/a | n/a |   | ✓ | Disassembly, cleaning, and reassembly of assemblies     |

## Section 4-3 Replacement & Recycled Operations

| Hinge Pillar / Front Bodyside Replacement  |                         |    |
|--|-------------------------|---|
| <p><b>Important Reminder:</b></p> <ul style="list-style-type: none"> <li>• Reveal mouldings that are mounted flush to the stationary glass (e.g., Windshield, Back Glass, or Quarter Glass) are at risk of breakage when being removed.</li> <li>• Stationary glass that is urethane bonded is considered a structural part of the vehicle. Replacing stationary glass requires:                             <ul style="list-style-type: none"> <li>○ following specific OEM replacement procedures</li> <li>○ using specified installation materials</li> <li>○ returning the vehicle to OEM structural integrity for occupant safety</li> </ul> </li> <li>• The hinge pillar is considered a structural part of the vehicle. Replacing structural panels requires:                             <ul style="list-style-type: none"> <li>○ following specific replacement procedures</li> <li>○ using specified installation materials</li> </ul> </li> </ul> |                         |   |
| Included Operations  | Not Included Operations | New Part Replacement (OEM and non-OEM new parts) Operations                           |
| ✓  |                         | Fender R&I  |
| ✓  |                         | Door R&I  |
| ✓  |                         | Windshield R&I (when required)  |
| ✓  |                         | Hinge R&I   |
| ✓  |                         | Sill plate R&I  |
| ✓  |                         | Cowl trim R&I   |
| ✓  |                         | Carpet / insulation rollback  |
| ✓  |                         | Rocker panel moulding R&I (when required)   |
| ✓  |                         | Body weatherstrip pullback  |
| ✓  |                         | Instrument panel / pad R&I  |
| ✓  |                         | Airbag R&I (when required)  |
| ✓  |                         | Loosen headliner (when required)  |
| ✓  |                         | Body fill labor (Welded areas)  |
| ✓  |                         | Disconnect / connect battery  |
| ✓  |                         | Disconnect / connect wiring harness for access  |
| ✓  |                         | Cover to protect interior during repair   |
| ✓  |                         | Detach and weld at rocker panel, roof panel, cowl side panel, floor pan, and cowl top |
| ✓  |                         | Fabrication of sleeves (when required)  |
| ✓  |                         | Application of weld-through primer (Welded areas)                                     |
| ✓  |                         | Block sand (Welded areas)   |
| ✓  |                         | Application of guide coat (Welded areas)  |
| ✓  |                         | Dual action sand (Welded areas)   |

|   |   |   |
|---|---|---|
| ✓ |   | Seam sealing  |
| ✓ |   | Reasonable alignment                                    |
|   | ✓ | Body weatherstrip R&I                                   |
|   | ✓ | Dome light R&I  |
|   | ✓ | Headliner R&I (Additional Labor)                        |
|   | ✓ | Roof drip moulding R&I                                  |
|   | ✓ | Antenna assembly R&I                                    |
|   | ✓ | Speaker wiring R&I                                      |
|   | ✓ | Door check rod R&I                                      |
|   | ✓ | Electronic and vacuum components R&I                    |
|   | ✓ | Parking brake assembly R&I                              |
|   | ✓ | Wiring harness R&I                                      |
|   | ✓ | Corrosion protection                                    |
|   | ✓ | Body insulation (e.g., foams, pads)                     |
|   | ✓ | Trimming, repair, or modification of part               |
|   | ✓ | R&I of non-standard equipment not identified as options |

**Outer Rocker Panel Replacement**



| Included Operations | Not Included Operations | New Part Replacement (OEM and non-OEM new parts) Operations |
|---------------------|-------------------------|---|
| ✓                   |                         | Fender R&I (when required)                                  |
| ✓                   |                         | Front and rear door R&I (when required)                     |
| ✓                   |                         | Sill plate(s) R&I   |
| ✓                   |                         | Rocker panel moulding (when required)                       |
| ✓                   |                         | Front seat R&I (when required)                              |
| ✓                   |                         | Rear seat R&I (when required)                               |
| ✓                   |                         | Quarter trim, center pillar trim, and cowl trim R&I         |
| ✓                   |                         | Carpet / insulation rollback                                |
| ✓                   |                         | Airbag sensor R&I (when required)                           |
| ✓                   |                         | Body weatherstrip pullback                                  |
| ✓                   |                         | Disconnect / connect battery                                |
| ✓                   |                         | Disconnect / connect wiring harness for access              |
| ✓                   |                         | Body fill labor (Welded areas)                              |

|   |   |   |
|---|---|---|
| ✓ |   | Detach and weld at quarter panel, floor pan, lock pillar, center pillar, and hinge pillar |
| ✓ |   | Fabrication of sleeves (when required)  |
| ✓ |   | Application of weld-through primer (Welded areas)   |
| ✓ |   | Block sand (Welded areas)   |
| ✓ |   | Application of guide coat (Welded areas)  |
| ✓ |   | Dual action sand (Welded areas)   |
| ✓ |   | Seam sealing  |
| ✓ |   | Reasonable alignment  |
|   | ✓ | Body weatherstrip R&I   |
|   | ✓ | Fuel door release cable R&I   |
|   | ✓ | Deck lid / tailgate release cable R&I   |
|   | ✓ | Electronic and vacuum components R&I  |
|   | ✓ | Wiring harness R&I  |
|   | ✓ | Corrosion protection  |
|   | ✓ | Body insulation (e.g., foam, pads)  |
|   | ✓ | Trimming, repair, or modification of part   |
|   | ✓ | R&I of mouldings, emblems, nameplates and ornaments                                       |
|   | ✓ | R&I of non-standard equipment not identified as options                                   |

### Section 4-3 Replacement & Recycled Operations

| Center Pillar Replacement   |                         |  |
|---|-------------------------|--|
|    |                         |  |
| <b>Important Reminder:</b> <ul style="list-style-type: none"> <li>This is considered a structural part of the vehicle. Replacing structural panels requires:                             <ul style="list-style-type: none"> <li>following specific OEM replacement procedures</li> <li>using specified installation materials</li> <li>returning the vehicle to OEM structural integrity for occupant safety</li> </ul> </li> </ul> |                         |  |
| Included Operations   | Not Included Operations | New Part Replacement (OEM and non-OEM new parts) Operations      |
| ✓   |                         | Rear door R&I  |
| ✓   |                         | Hinge R&I  |
| ✓   |                         | Door lock striker R&I  |
| ✓   |                         | Sill plate(s) R&I  |
| ✓   |                         | Cowl trim R&I (when required)                                    |
| ✓   |                         | Seat belt anchor R&I   |
| ✓   |                         | Rocker panel moulding R&I (when required)                        |
| ✓   |                         | Front seat R&I (when required)                                   |
| ✓   |                         | Center pillar trim R&I   |
| ✓   |                         | Body fill labor (Welded areas)                                   |
| ✓   |                         | Rear seat R&I (when required)                                    |
| ✓   |                         | Quarter trim R&I (when required)                                 |
| ✓   |                         | Carpet / insulation rollback                                     |
| ✓   |                         | Body weatherstrip pullback                                       |
| ✓   |                         | Loosen headliner (when required)                                 |
| ✓   |                         | Airbag R&I (when required)                                       |
| ✓   |                         | Airbag sensor R&I (when required)                                |
| ✓   |                         | Disconnect / connect battery                                     |
| ✓   |                         | Disconnect / connect wiring harness for access                   |
| ✓   |                         | Detach & weld at roof panel, rocker panel, & inner center pillar |
| ✓   |                         | Fabrication of sleeves (when required)                           |
| ✓   |                         | Application of weld-through primer (Welded areas)                |
| ✓   |                         | Block sand (Welded areas)  |
| ✓   |                         | Application of guide coat (Welded areas)                         |
| ✓   |                         | Dual action sand (Welded areas)                                  |
| ✓   |                         | Seam sealing   |
| ✓   |                         | Reasonable alignment   |

|   |   |
|---|---|
| ✓ | Body weatherstrip R&I                                   |
| ✓ | Fuel door release cable R&I                             |
| ✓ | Deck lid / tailgate release cable R&I                   |
| ✓ | Electronic and vacuum components R&I                    |
| ✓ | Headliner R&I (Additional Labor)                        |
| ✓ | Wiring harness R&I                                      |
| ✓ | Corrosion protection                                    |
| ✓ | Body insulation (e.g., foams, pads)                     |
| ✓ | Trimming, repair, or modification of part               |
| ✓ | R&I of mouldings, emblems, nameplates and ornaments     |
| ✓ | R&I of non-standard equipment not identified as options |

**Rocker Panel and Center Pillar Replacement and Recycled**

Recycled panel replacement may or may not be recommended by the vehicle manufacturer.



**Important Reminder:**

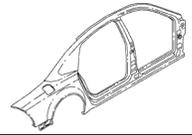
- This is considered a structural part of the vehicle. Replacing structural panels requires:
  - following specific OEM replacement procedures
  - using specified installation materials
  - returning the vehicle to OEM structural integrity for occupant safety

| New Part Replacement<br>(OEM and non-OEM new parts) Operations |                         | Recycled Part Replacement Operations |                         | Operations   |
|--|-------------------------|--------------------------------------|-------------------------|--|
| Included Operations  | Not Included Operations | Included Operations                  | Not Included Operations |  |
| ✓  |                         | ✓                                    |                         | Fender R&I (when required)                         |
| ✓  |                         | ✓                                    |                         | Front and rear door R&I                            |
| ✓  |                         | ✓                                    |                         | Sill plate(s) R&I                                  |
| ✓  |                         | ✓                                    |                         | Rocker panel moulding (when required)              |
| ✓  |                         | ✓                                    |                         | Front seat R&I (when required)                     |
| ✓  |                         | ✓                                    |                         | Rear seat R&I (when required)                      |
| ✓  |                         | ✓                                    |                         | Quarter trim, center pillar trim and cowl trim R&I |
| ✓  |                         | ✓                                    |                         | Seat belt anchor R&I                               |
| ✓  |                         | ✓                                    |                         | Seat belt R&I                                      |
|  | ✓                       | ✓                                    |                         | Inner rocker panel                                 |
|  | ✓                       | ✓                                    |                         | Inner center pillar                                |
| ✓  |                         | ✓                                    |                         | Carpet / insulation rollback                       |
| ✓  |                         | ✓                                    |                         | Body weatherstrip pullback                         |

|     |     |   |   |  |
|-----|-----|---|---|--|
| ✓   |     | ✓ |   | Loosen headliner (when required)   |
| ✓   |     | ✓ |   | Disconnect / connect battery   |
| ✓   |     | ✓ |   | Disconnect / connect wiring harness for access   |
| ✓   |     |   | ✓ | Detach and weld at quarter panel, inner rocker panel, floor pan, lock pillar, hinge pillar, roof and inner center pillar (New Part Replacement)      |
| ✓   |     | ✓ |   | Fabrication of sleeves (when required)   |
| ✓   |     | ✓ |   | Application of weld-through primer (Welded areas)  |
| ✓   |     | ✓ |   | Block sand (Welded areas)  |
| ✓   |     | ✓ |   | Application of guide coat (Welded areas)   |
| ✓   |     | ✓ |   | Dual action sand (Welded areas)  |
| ✓   |     | ✓ |   | Seam Sealing   |
| ✓   |     | ✓ |   | Body fill labor (Welded areas)   |
| ✓   |     | ✓ |   | Reasonable alignment   |
| ✓   |     | ✓ |   | Door lock striker and hinge R&I  |
| ✓   |     | ✓ |   | Airbag R&I (when required)   |
| ✓   |     | ✓ |   | Airbag sensor R&I (when required)  |
|     | ✓   |   | ✓ | Body weatherstrip R&I  |
|     | ✓   |   | ✓ | Fuel door release cable R&I  |
|     | ✓   |   | ✓ | Deck lid / tailgate release cable R&I  |
|     | ✓   |   | ✓ | Electronic and vacuum components R&I   |
|     | ✓   |   | ✓ | Wiring harness R&I   |
|     | ✓   |   | ✓ | Headliner R&I (Additional Labor)   |
|     | ✓   |   | ✓ | Corrosion protection   |
|     | ✓   |   | ✓ | Body structure foam  |
|     | ✓   |   | ✓ | Trimming, repair, or modification of part  |
|     | ✓   |   | ✓ | R&I of mouldings, emblems, nameplates and ornaments  |
|     | ✓   |   | ✓ | R&I of non-standard equipment not identified as options  |
|     | ✓   | ✓ |   | Detach and weld at hinge pillar, lock pillar, quarter panel, floor pan, and roof (includes attaching inner sheet metal). (Recycled Part Replacement) |
| n/a | n/a |   | ✓ | Disassembly, cleaning, and reassembly of assemblies  |

## Section 4-3 Replacement &amp; Recycled Operations

| Uni-Side Replacement |                         |  |
|----------------------|-------------------------|--|
| Included Operations  | Not Included Operations | Operations   |
| ✓                    |                         | Fender R&I (when required)   |
| ✓                    |                         | Front and Rear Door R&I  |
| ✓                    |                         | Windshield R&I (when required)   |
| ✓                    |                         | Hinge R&I  |
| ✓                    |                         | Sill plate R&I   |
| ✓                    |                         | Cowl trim R&I  |
| ✓                    |                         | Carpet / insulation rollback   |
| ✓                    |                         | Rocker panel moulding R&I (when required)  |
| ✓                    |                         | Body weatherstrip pullback   |
| ✓                    |                         | Instrument panel / pad R&I   |
| ✓                    |                         | Airbag R&I (when required)   |
| ✓                    |                         | Loosen headliner (when required)   |
| ✓                    |                         | Body fill labor (Welded areas)   |
| ✓                    |                         | Disconnect / connect battery   |
| ✓                    |                         | Disconnect / connect wiring harness for access                                     |
| ✓                    |                         | Cover to protect interior during repair  |
| ✓                    |                         | Detach and weld at roof panel, cowl side panel, cowl top, floor pan, and rear body |
| ✓                    |                         | Fabrication of sleeves (when required)   |
| ✓                    |                         | Application of weld-through primer (Welded areas)                                  |
| ✓                    |                         | Block sand (Welded areas)  |
| ✓                    |                         | Application of guide coat (Welded areas)   |
| ✓                    |                         | Dual action sand (Welded areas)  |
| ✓                    |                         | Seam sealing   |
| ✓                    |                         | Front seat R&I (when required)   |
| ✓                    |                         | Rear seat R&I (when required)  |
| ✓                    |                         | Quarter trim, center pillar trim, and cowl trim R&I                                |
| ✓                    |                         | Seat belt anchor R&I   |
| ✓                    |                         | Seat belt R&I  |
| ✓                    |                         | Door lock striker and hinge R&I  |



|   |   |   |
|---|---|---|
| ✓ |   | Airbag sensor R&I (when required)   |
| ✓ |   | Front and rear bumper R&I (when required)   |
| ✓ |   | Rear bumper filler R&I (when required)  |
| ✓ |   | Back glass R&I  |
| ✓ |   | Tailgate R&I (when required)  |
| ✓ |   | Quarter trims R&I   |
| ✓ |   | Quarter glass R&I (stationary or flip out)  |
| ✓ |   | Bolt-on extension R&I   |
| ✓ |   | Fuel door R&I (when required)   |
| ✓ |   | Disconnect / connect convertible top assembly at quarter  |
| ✓ |   | Mud guard R&I (when required)   |
| ✓ |   | Spoiler and flare R&I (OEM only)  |
| ✓ |   | Rear body trim R&I (when required)  |
| ✓ |   | Rear lamps R&I (when required)  |
| ✓ |   | Package tray trim R&I   |
| ✓ |   | Vinyl roof peel back  |
| ✓ |   | Raise and support vehicle   |
| ✓ |   | Front and rear wheel R&I  |
| ✓ |   | Deck lid hinge R&I (when required)  |
| ✓ |   | Deck lid R&I (when required)  |
| ✓ |   | Deck lid or tailgate hydraulic rod R&I (when required)  |
| ✓ |   | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware) |
|   | ✓ | Body weatherstrip R&I   |
|   | ✓ | Dome light R&I  |
|   | ✓ | Headliner R&I (Additional Labor)  |
|   | ✓ | Roof drip moulding R&I  |
|   | ✓ | Antenna assembly R&I  |
|   | ✓ | Speaker wiring R&I  |
|   | ✓ | Door check rod R&I  |
|   | ✓ | Electronic and vacuum components R&I  |
|   | ✓ | Parking brake assembly R&I  |
|   | ✓ | Wiring harness R&I  |
|   | ✓ | Corrosion protection  |
|   | ✓ | Body insulation (e.g., foams, pads)   |
|   | ✓ | Fuel door release cable R&I   |
|   | ✓ | Deck lid / tailgate release cable R&I   |

|  |   |   |
|--|---|---|
|  | ✓ | Body structure foam                                     |
|  | ✓ | Rear compartment gutters                                |
|  | ✓ | Roll down quarter glass R&I                             |
|  | ✓ | Fuel tank R&I (Additional Labor)                        |
|  | ✓ | Trimming, repair, or modification of part               |
|  | ✓ | R&I of non-standard equipment not identified as options |
|  | ✓ | R&I of mouldings, emblems, nameplates and ornaments     |

### Section 4-3 Replacement & Recycled Operations

| Door Outer Repair Panel Replacement  |                         |  |
|--|-------------------------|--|
|  |                         |       |
| <b>Special Note for Replacement Operation:</b>   |                         |  |
| <ul style="list-style-type: none"> <li>Due to extensive variations, bodyside trim R&amp;I are not included for side sliding doors, side cargo doors, and rear cargo doors on vans. Select appropriate part R&amp;I operations as needed.</li> <li>Manufacturers recommend replacement of SRS components with OEM parts.</li> </ul> |                         |  |
| Included Operations  | Not Included Operations | New Part Replacement (OEM and non-OEM new parts) Operations                              |
| ✓  |                         | Door R&I   |
| ✓  |                         | Trim panel R&I   |
| ✓  |                         | Lock cylinder R&I  |
| ✓  |                         | Outer door handle R&I  |
| ✓  |                         | Keyless entry pad R&I  |
| ✓  |                         | Vent glass R&I (when required)   |
| ✓  |                         | Door glass R&I   |
| ✓  |                         | Airbag and components R&I  |
| ✓  |                         | Weatherstrip on door R&I   |
| ✓  |                         | Detach and weld outer panel  |
| ✓  |                         | Seam sealing   |
| ✓  |                         | Reasonable alignment   |
| ✓  |                         | Inner reinforcement bar (if included)  |
| ✓  |                         | Mirror R&I (included in estimates that contain vehicle coverage for 1985 and later only) |
| ✓  |                         | Vapor Barrier R&I (when required)  |
|  | ✓                       | Lock cylinder coding (Manual Entry M73 is available)                                     |
|  | ✓                       | Power door lock R&I  |
|  | ✓                       | Shoulder harness/Belt R&I  |
|  | ✓                       | Door-mounted speakers R&I  |

|  |   |   |
|--|---|---|
|  | ✓ | Repair of door shell                                    |
|  | ✓ | Corrosion protection                                    |
|  | ✓ | Trimming, repair, or modification of part               |
|  | ✓ | R&I of mouldings, emblems, nameplates and ornaments     |
|  | ✓ | R&I of non-standard equipment not identified as options |

### Section 4-3 Replacement & Recycled Operations

**Door Shell Replacement and Recycled**  
 Recycled panel replacement may or may not be recommended by the vehicle manufacturer.



**Special Note for Replacement Operation:**

- Due to extensive variations, bodyside trim R&I are not included for side sliding doors, side cargo doors, and rear cargo doors on vans. Select appropriate part R&I operations as needed.
- Manufacturers recommend replacement of SRS components with OEM parts.
- \*\*\*Included in estimates that contain vehicle coverage for 1985 and later only.

| New Part Replacement<br>(OEM and non-OEM new parts) Operations |                         | Recycled Part Replacement Operations |                         | Operations   |
|--|-------------------------|--------------------------------------|-------------------------|--|
| Included Operations  | Not Included Operations | Included Operations                  | Not Included Operations |  |
| ✓  |                         | ✓                                    |                         | Door R&I   |
| ✓  |                         | ✓                                    |                         | Trim panel R&I (Recycled Door includes R,R&I)                              |
| ✓  |                         | ✓                                    |                         | Lock cylinder R&I (Recycled Door includes R,R&I)                           |
| ✓  |                         |                                      | ✓                       | Door lock R&I (power or manual)***   |
| ✓  |                         | ✓                                    |                         | Keyless entry pad R&I ***  |
| ✓  |                         | ✓                                    |                         | Mirror R&I   |
| ✓  |                         |                                      | ✓                       | Door latch R&I   |
| ✓  |                         |                                      | ✓                       | Door linkage R&I   |
| ✓  |                         |                                      | ✓                       | Inner door handle R&I (on Door)  |
| ✓  |                         | ✓                                    |                         | R,R&I Outer door handle R&I (on Door Recycled Door includes when required) |
| ✓  |                         |                                      | ✓                       | Division channel R&I   |
| ✓  |                         |                                      | ✓                       | Glass R&I d  |
| ✓  |                         | ✓                                    |                         | Airbag and components R&I  |
| ✓  |                         |                                      | ✓                       | Window regulator R&I (power or manual)                                     |
| ✓  |                         |                                      | ✓                       | Window lift and run channel R&I  |
| ✓  |                         |                                      | ✓                       | Vapor barrier R&I (when required)  |
| ✓  |                         |                                      | ✓                       | Door check rod R&I   |
| ✓  |                         | ✓                                    |                         | Weatherstrip on door R&I   |
| ✓  |                         | ✓                                    |                         | Outer belt moulding or weatherstrip R&I                                    |

|     |     |   |   |  |
|-----|-----|---|---|--|
| ✓   |     |   | ✓ | Inner belt weatherstrip R&I  |
| ✓   |     |   | ✓ | Transfer weld-on hinges  |
| ✓   |     |   | ✓ | Wiring R&I   |
| ✓   |     | ✓ |   | Seam sealing (when required)   |
| ✓   |     | ✓ |   | Reasonable adjustment & alignment (as defined by the manufacturer using conventional fasteners & hardware) |
| n/a | n/a | ✓ |   | Remove trim panel from recycled door   |
| n/a | n/a | ✓ |   | Remove lock cylinder from recycled door  |
|     | ✓   |   | ✓ | Lock cylinder coding (Manual Entry M73 available)  |
|     | ✓   |   | ✓ | Door striker R&I   |
|     | ✓   |   | ✓ | Shoulder harness/Belt R&I  |
|     | ✓   |   | ✓ | Sound deadener R&I   |
|     | ✓   |   | ✓ | Door-mounted speakers R&I  |
|     | ✓   |   | ✓ | Corrosion protection   |
|     | ✓   |   | ✓ | Trimming, repair, or modification of part  |
|     | ✓   |   | ✓ | R&I of mouldings, emblems, nameplates and ornaments  |
|     | ✓   |   | ✓ | R&I of non-standard equipment not identified as options  |
|     | ✓   |   | ✓ | Transfer hinges  |
|     | ✓   |   | ✓ | Excessive alignment required by the prior condition of the door opening or recycled part                   |
|     | ✓   |   | ✓ | Stripe, woodgrain, or decal removal  |
|     | ✓   |   | ✓ | Specification labels R&I or replacement  |
| n/a | n/a |   | ✓ | Disassembly, cleaning, and reassembly of assemblies  |

## Section 4-3 Replacement & Recycled Operations

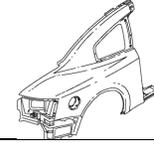
| Roof Replacement   |                         |   |
|---|-------------------------|---|
| <p><b>Important Reminder:</b></p> <ul style="list-style-type: none"> <li>Reveal mouldings that are mounted flush to stationary glass (e.g., Windshield, Back Glass, or Quarter Glass) are at risk of breakage when being removed.</li> <li>Stationary glass that is urethane bonded is considered a structural part of the vehicle. Replacing stationary glass requires:                             <ul style="list-style-type: none"> <li>following specific OEM replacement procedures</li> <li>using specified installation materials</li> <li>returning the vehicle to OEM structural integrity for occupant safety</li> </ul> </li> <li>The roof is considered a structural part of the vehicle. Replacing structural panels requires:                             <ul style="list-style-type: none"> <li>following specific OEM replacement procedures</li> <li>using specified installation materials</li> <li>returning the vehicle to OEM structural integrity for occupant safety</li> </ul> </li> <li>Due to extensive trim variations, the following operations are not included for vans:                             <ul style="list-style-type: none"> <li>bodyside trim R&amp;I</li> <li>rear seat R&amp;I</li> </ul> </li> <li>For non-assembled parts select "Replace" operation and zero out price to obtain R&amp;I labor. For assembled parts select "Replace Recycled" operation to obtain R&amp;I labor. For others, estimate on site.</li> </ul> |                         |   |
| Included Operations   | Not Included Operations | New Part Replacement (OEM and non-OEM new parts) Operations |
| ✓   |                         | Windshield R&I  |
| ✓   |                         | Back glass R&I  |
| ✓   |                         | Tailgate R&I (when attached)                                |
| ✓   |                         | Tailgate hinge R&I (when attached)                          |
| ✓   |                         | Front seat R&I (when required)                              |
| ✓   |                         | Rear seat R&I (when required)                               |
| ✓   |                         | Quarter trim R&I  |
| ✓   |                         | Quarter glass R&I (stationary and flip out when required)   |
| ✓   |                         | Sun roof assembly R&I                                       |
| ✓   |                         | Moon roof assembly R&I                                      |
| ✓   |                         | Visors R&I  |
| ✓   |                         | Coat hooks R&I  |
| ✓   |                         | Inside lamps R&I  |
| ✓   |                         | Headliner R&I   |
| ✓   |                         | Body fill labor (Welded areas)                              |
| ✓   |                         | Airbag R&I (when required)                                  |
|   | ✓                       | Antenna assembly R&I  |
| ✓   |                         | High mounted stop lamp R&I                                  |
| ✓   |                         | Package tray trim R&I                                       |
| ✓   |                         | Center pillar trim R&I                                      |

|   |   |   |
|---|---|---|
| ✓ |   | Cab side trim panels R&I  |
| ✓ |   | Sill plate R&I  |
| ✓ |   | Luggage rack R&I (when required)  |
| ✓ |   | Carpet / insulation rollback  |
| ✓ |   | Seat belt anchors R&I   |
| ✓ |   | Body weatherstrip pullback  |
| ✓ |   | Cover dash and interior to protect during repair  |
| ✓ |   | Disconnect / connect battery  |
| ✓ |   | Disconnect / connect wiring harness for access  |
| ✓ |   | Detach and weld at center pillar, quarter panels, hinge pillar, rails, and reinforcements |
| ✓ |   | Mouldings R&I   |
| ✓ |   | Application of weld-through primer (Welded areas)   |
| ✓ |   | Block sand (Welded areas)   |
| ✓ |   | Application of guide coat (Welded areas)  |
| ✓ |   | Dual action sand (Welded areas)   |
| ✓ |   | Seam sealing  |
| ✓ |   | Reasonable alignment  |
|   | ✓ | Roof rail replacement   |
|   | ✓ | Windshield header panel replace   |
|   | ✓ | Sound deadener  |
|   | ✓ | Washer nozzles R&I  |
|   | ✓ | Vinyl roof install  |
|   | ✓ | Body weatherstrip R&I   |
|   | ✓ | Roll down quarter glass R&I   |
|   | ✓ | Wiring harness R&I  |
|   | ✓ | Ornamentation R&I   |
|   | ✓ | Corrosion protection  |
|   | ✓ | Body insulation (e.g., foams, pads)   |
|   | ✓ | Trimming, repair, or modification of part   |
|   | ✓ | R&I of non-standard equipment not identified as options                                   |
|   | ✓ | Transfer of misc. welded braces, brackets and clips                                       |

### Section 4-3 Replacement & Recycled Operations

#### Quarter Panel Replacement and Recycled

Recycled panel replacement may or may not be recommended by the vehicle manufacturer.



#### Important Reminder:

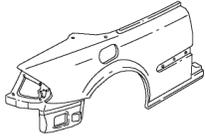
- Reveal mouldings that are mounted flush to stationary glass (e.g., Windshield, Back Glass, or Quarter Glass) are at risk of breakage when being removed.
- Stationary glass that is urethane bonded is considered a structural part of the vehicle. Replacing stationary glass requires:
  - following specific OEM replacement procedures
  - using specified installation materials
  - returning the vehicle to OEM structural integrity for occupant safety
- When selecting Glass Kit in conjunction with the quarter panel, remember that the labor is automatically included in the quarter panel. To ensure full labor value, do not "zero out" the glass kit labor.
- Due to extensive trim variations, the following operations are not included for vans:
  - bodyside trim R&I
  - middle/rear seat R&I
- For non-assembled parts select "Replace" operation and zero out price to obtain R&I labor. For assembled parts select "Replace Recycled" operation to obtain R&I labor. For others, estimate on site.

| New Part Replacement<br>(OEM and non-OEM new parts) Operations |                         | Recycled Part Replacement Operations |                         | Operations   |
|--|-------------------------|--------------------------------------|-------------------------|--|
| Included Operations  | Not Included Operations | Included Operations                  | Not Included Operations |  |
| ✓  |                         | ✓                                    |                         | Rear bumper R&I (if required)  |
| ✓  |                         | ✓                                    |                         | Rear bumper filler R&I (if required)   |
| ✓  |                         | ✓                                    |                         | Back glass R&I   |
| ✓  |                         | ✓                                    |                         | Tailgate R&I (if required)   |
| ✓  |                         | ✓                                    |                         | Middle/Rear seat R&I (if required)   |
| ✓  |                         | ✓                                    |                         | Quarter trims R&I  |
| ✓  |                         | ✓                                    |                         | Quarter glass R&I (stationary or flip out)   |
| ✓  |                         |                                      | ✓                       | Bolt-on extension R&I  |
| ✓  |                         |                                      | ✓                       | Fuel door R&I (if required)  |
| ✓  |                         |                                      | ✓                       | Mud guard R&I (if required)  |
| ✓  |                         | ✓                                    |                         | Disconnect/connect convertible top assembly at quarter   |
| ✓  |                         | ✓                                    |                         | Spoiler and flare R&I (OEM only)   |
| ✓  |                         | ✓                                    |                         | Detach and weld at roof panel, rocker panel, lock pillar, inner quarter, rear body and floor pan |
| ✓  |                         | ✓                                    |                         | Application of weld-through primer (Welded areas)  |
| ✓  |                         | ✓                                    |                         | Block sand (Welded areas)  |
| ✓  |                         | ✓                                    |                         | Application of guide coat (Welded areas)   |
| ✓  |                         | ✓                                    |                         | Dual action sand (Welded areas)  |

|   |   |   |   |   |
|---|---|---|---|---|
| ✓ |   | ✓ |   | Seat belt anchor R&I  |
| ✓ |   | ✓ |   | Back glass adhesive kit (labor)   |
| ✓ |   | ✓ |   | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware) |
| ✓ |   | ✓ |   | Rear body trim R&I (if required)  |
| ✓ |   | ✓ |   | Rear lamps R&I (if required)  |
| ✓ |   | ✓ |   | Sill plate R&I  |
| ✓ |   | ✓ |   | Carpet / insulation rollback  |
| ✓ |   | ✓ |   | Body weatherstrip pullback  |
| ✓ |   | ✓ |   | Door striker R&I  |
| ✓ |   | ✓ |   | Package tray trim R&I   |
| ✓ |   | ✓ |   | Loosen headliner (if required)  |
| ✓ |   | ✓ |   | Vinyl roof peel back  |
| ✓ |   | ✓ |   | Rocker panel moulding R&I (if required)   |
| ✓ |   | ✓ |   | Raise and support vehicle   |
| ✓ |   | ✓ |   | Rear wheel R&I  |
| ✓ |   | ✓ |   | Cover to protect interior during repair   |
| ✓ |   | ✓ |   | Seam sealing  |
| ✓ |   | ✓ |   | Body fill labor (Welded areas)  |
| ✓ |   | ✓ |   | Disconnect / connect battery  |
| ✓ |   | ✓ |   | Disconnect / connect wiring harness for access  |
| ✓ |   | ✓ |   | Fabrication of sleeves (if required)  |
| ✓ |   | ✓ |   | Airbag R&I (if required)  |
| ✓ |   | ✓ |   | Airbag sensor R&I (if required)   |
| ✓ |   | ✓ |   | Deck lid hinge R&I  |
| ✓ |   | ✓ |   | Deck lid R&I (if required)  |
| ✓ |   | ✓ |   | Deck lid hinge R&I (if required)  |
| ✓ |   | ✓ |   | Deck lid or tailgate hydraulic rod R&I (if required)  |
| ✓ |   | ✓ |   | Convertible top R&I (when applicable)   |
|   | ✓ | ✓ |   | Rear compartment gutters  |
|   | ✓ |   | ✓ | Body weatherstrip R&I   |
|   | ✓ |   | ✓ | Roll down quarter glass R&I   |
|   | ✓ |   | ✓ | Headliner R&I (Additional Labor)  |
|   | ✓ |   | ✓ | Fuel tank R&I (Additional Labor)  |
|   | ✓ |   | ✓ | Sunroof drain   |
|   | ✓ |   | ✓ | Antenna assembly R&I  |

|     |     |   |   |   |
|-----|-----|---|---|---|
|     | ✓   |   | ✓ | Wiring harness R&I                                      |
|     | ✓   |   | ✓ | Corrosion protection                                    |
|     | ✓   |   | ✓ | Body insulation (e.g., foams, pads)                     |
|     | ✓   |   | ✓ | Trimming, repair, or modification of part               |
|     | ✓   |   | ✓ | R&I of mouldings, emblems, nameplates and ornaments     |
|     | ✓   |   | ✓ | R&I of non-standard equipment not identified as options |
|     | ✓   | ✓ |   | Inner quarter panel                                     |
| n/a | n/a |   | ✓ | Disassembly, cleaning, and reassembly of assemblies     |

**Section 4-3 Replacement & Recycled Operations**

|  |                                |   |                                |   |
|--|--------------------------------|---|--------------------------------|---|
| <b>Partial Quarter Panel</b>   |                                |   |                                |  |
| <b>Replacement and Recycled</b>  |                                |   |                                |   |
| Recycled panel replacement may or may not be recommended by the vehicle manufacturer.  |                                |   |                                |   |
| <b>Important Reminder:</b>   |                                |   |                                |   |
| <ul style="list-style-type: none"> <li>• Cut at belt line and below back glass or in quarter window opening.</li> <li>• Partial panel replacement may or may not be recommended by the vehicle manufacturer. When performing any partial replacement operation, refer to procedures provided by the vehicle manufacturer.</li> </ul> |                                |   |                                |   |
| <b>New Part Replacement (OEM and non-OEM new parts) Operations</b>   |                                | <b>Recycled Part Replacement Operations</b> |                                | <b>Operations</b>   |
| <b>Included Operations</b>   | <b>Not Included Operations</b> | <b>Included Operations</b>                  | <b>Not Included Operations</b> |   |
| ✓  |                                | ✓   |                                | Includes same as full quarter except back glass R&I and vinyl roof peel back        |
| ✓  |                                | ✓   |                                | Trimming of complete panel for partial replacement                                  |
| ✓  |                                | ✓   |                                | Application of weld-through primer (Welded areas)                                   |
| ✓  |                                | ✓   |                                | Block sand (Welded areas)   |
| ✓  |                                | ✓   |                                | Application of guide coat (Welded areas)  |
| ✓  |                                | ✓   |                                | Dual action sand (Welded areas)   |
| ✓  |                                | ✓   |                                | Seam sealing  |
| ✓  |                                | ✓   |                                | Package tray trim R&I (if required)   |
| ✓  |                                | ✓   |                                | Fabrication of sleeves (if required)  |
| ✓  |                                | ✓   |                                | Reasonable alignment  |
| ✓  |                                | ✓   |                                | Airbag R&I (if required)  |
| ✓  |                                | ✓   |                                | Airbag sensor R&I (if required)   |
| ✓  |                                | ✓   |                                | Body fill labor (Welded areas)  |
|  | ✓                              |   | ✓                              | Deck lid R&I (Additional Labor)   |
|  | ✓                              |   | ✓                              | Rear compartment gutters  |

|     |     |  |   |   |
|-----|-----|--|---|---|
|     | ✓   |  | ✓ | Body weatherstrip R&I                                   |
|     | ✓   |  | ✓ | Roll down quarter glass R&I                             |
|     | ✓   |  | ✓ | Headliner R&I (Additional Labor)                        |
|     | ✓   |  | ✓ | Fuel tank R&I (Additional Labor)                        |
|     | ✓   |  | ✓ | Sunroof drain   |
|     | ✓   |  | ✓ | Antenna assembly R&I                                    |
|     | ✓   |  | ✓ | Wiring harness R&I                                      |
|     | ✓   |  | ✓ | Corrosion protection                                    |
|     | ✓   |  | ✓ | Body insulation (e.g., foams, pads)                     |
|     | ✓   |  | ✓ | Back glass R&I  |
|     | ✓   |  | ✓ | Vinyl roof peel back                                    |
|     | ✓   |  | ✓ | Vinyl roof caps   |
|     | ✓   |  | ✓ | R&I of mouldings, emblems, nameplates and ornaments     |
|     | ✓   |  | ✓ | R&I of non-standard equipment not identified as options |
| n/a | n/a |  | ✓ | Disassembly, cleaning, and reassembly of assemblies     |

### Section 4-3 Replacement & Recycled Operations

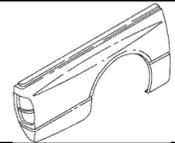
| <b>SUV / Van Bodyside Panel</b><br><b>Replacement and Recycled</b><br>Recycled panel replacement may or may not be recommended by the vehicle manufacturer.  |                         |                                      |                         |    |
|--|-------------------------|--------------------------------------|-------------------------|---|
| <b>Important Reminder:</b> <ul style="list-style-type: none"> <li>Reveal mouldings that are mounted flush to stationary glass (e.g., Windshield, Back Glass, or Quarter Glass) are at risk of breakage when being removed.</li> <li>Stationary glass that is urethane bonded is considered a structural part of the vehicle. Replacing stationary glass requires:                         <ul style="list-style-type: none"> <li>following specific OEM replacement procedures</li> <li>using specified installation materials</li> <li>returning the vehicle to OEM structural integrity for occupant safety</li> </ul> </li> <li>When selecting Glass Kit in conjunction with the quarter panel, remember that the labor is automatically included in the quarter panel. To ensure full labor value, do not "zero out" the glass kit labor.</li> <li>Due to extensive trim variations, the following operations are not included for full size vans:                         <ul style="list-style-type: none"> <li>bodyside trim R&amp;I</li> <li>middle/rear seat R&amp;I</li> </ul> </li> <li>Select appropriate part R&amp;I operations as needed</li> </ul> |                         |                                      |                         |   |
| New Part Replacement (OEM and non-OEM new parts) Operations  |                         | Recycled Part Replacement Operations |                         | Operations  |
| Included Operations  | Not Included Operations | Included Operations                  | Not Included Operations |   |
| ✓  |                         | ✓                                    |                         | Back door assembly R&I or Tailgate hydraulic rod R&I (if required)  |
| ✓  |                         | ✓                                    |                         | Body weatherstrip pullback  |
| ✓  |                         | ✓                                    |                         | Bodyside glass R&I  |
| ✓  |                         | ✓                                    |                         | Bodyside trim panel (except full size van)  |
| ✓  |                         | ✓                                    |                         | Carpet / insulation rollback (SUV /Mini Van only)   |
| ✓  |                         | ✓                                    |                         | Cover to protect interior during repair   |
| ✓  |                         |                                      | ✓                       | Detach and weld at roof panel, rear door pillar, rocker panel, inner bodyside panels, outer wheel house panel, door opening frame, and lock pillar (New Part Replacement) |
| ✓  |                         | ✓                                    |                         | Disconnect / connect battery  |
| ✓  |                         | ✓                                    |                         | Disconnect / connect wiring harness for access  |
| ✓  |                         |                                      | ✓                       | Door striker R&I  |
| ✓  |                         | ✓                                    |                         | Driver seat assembly R&I (without sliding door)   |
| ✓  |                         | ✓                                    |                         | Front sill plate R&I (without sliding door)   |
| ✓  |                         |                                      | ✓                       | Fuel filler door R&I  |
| ✓  |                         |                                      | ✓                       | Fuel filler pocket R&I  |
| ✓  |                         |                                      | ✓                       | Mud guard R&I (if required)   |
| ✓  |                         | ✓                                    |                         | Rocker panel moulding R&I (if required)   |

|   |   |   |   |  |
|---|---|---|---|--|
| ✓ |   | ✓ |   | Raise and support vehicle  |
| ✓ |   | ✓ |   | Rear bumper R&I (if required)  |
| ✓ |   | ✓ |   | Rear sill plate R&I (with sliding door)  |
| ✓ |   | ✓ |   | Rear wheel R&I   |
| ✓ |   | ✓ |   | Running board panel R&I (OEM only)   |
| ✓ |   | ✓ |   | Seam sealing   |
| ✓ |   | ✓ |   | Seat belt anchor R&I   |
| ✓ |   | ✓ |   | Side door R&I  |
| ✓ |   |   | ✓ | Sliding door striker R&I   |
| ✓ |   |   | ✓ | Sliding door track shield R&I  |
| ✓ |   | ✓ |   | Taillamp assembly R&I (if required)  |
| ✓ |   | ✓ |   | Application of weld-through primer (Welded areas)  |
| ✓ |   | ✓ |   | Body fill labor (Welded areas)   |
| ✓ |   | ✓ |   | Block sand (Welded areas)  |
| ✓ |   | ✓ |   | Application of guide coat (Welded areas)   |
| ✓ |   | ✓ |   | Dual action sand (Welded areas)  |
| ✓ |   | ✓ |   | Spare tire and jack R&I  |
| ✓ |   | ✓ |   | Reasonable alignment   |
| ✓ |   | ✓ |   | Airbag R&I (if required)   |
| ✓ |   | ✓ |   | Airbag sensor R&I (if required)  |
| ✓ |   | ✓ |   | Fabrication of sleeves (if required)   |
| ✓ |   | ✓ |   | Middle/Rear seat R&I (if required except full size vans)   |
|   | ✓ | ✓ |   | Detach and weld at roof panel, rear door pillar, rocker panel, outer wheel house panel, door opening frame, and lock pillar<br>(Recycled Part Replacement) |
|   | ✓ |   | ✓ | Body weatherstrip R&I  |
|   | ✓ |   | ✓ | Corrosion protection   |
|   | ✓ |   | ✓ | Fuel tank R&I  |
|   | ✓ |   | ✓ | Headliner R&I  |
|   | ✓ |   | ✓ | Running board panel R&I (non-OEM)  |
|   | ✓ |   | ✓ | A/C evacuation / recharge (Additional Labor)   |
|   | ✓ |   | ✓ | Trimming, repair or modification of part   |
|   | ✓ |   | ✓ | R&I of mouldings, emblems, nameplates and ornaments  |
|   | ✓ |   | ✓ | R&I of non-standard equipment not identified as options  |

|     |     |  |   |   |
|-----|-----|--|---|---|
| n/a | n/a |  | ✓ | Disassembly, cleaning, and reassembly of assemblies |
|-----|-----|--|---|---|

**Section 4-3 Replacement & Recycled Operations**

| Truck Bedside Panel   |                         |                                      |                         |  |
|---|-------------------------|--------------------------------------|-------------------------|--|
| Replacement and Recycled  |                         |                                      |                         |  |
| Recycled panel replacement may or may not be recommended by the vehicle manufacturer. |                         |                                      |                         |  |
| New Part Replacement (OEM and non-OEM new parts) Operations                           |                         | Recycled Part Replacement Operations |                         | Operations   |
| Included Operations   | Not Included Operations | Included Operations                  | Not Included Operations |  |
| ✓   |                         | ✓                                    |                         | Bed setback  |
| ✓   |                         |                                      | ✓                       | Rear lamps R&I   |
| ✓   |                         | ✓                                    |                         | Tailgate R&I   |
| ✓   |                         | ✓                                    |                         | Rear bumper R&I (when required)  |
| ✓   |                         |                                      | ✓                       | Fuel door R&I  |
| ✓   |                         |                                      | ✓                       | Mud guard R&I (when required)  |
| ✓   |                         | ✓                                    |                         | Running boards / step panel R&I (when required)  |
| ✓   |                         |                                      | ✓                       | Rear fender assembly R&I   |
| ✓   |                         | ✓                                    |                         | Disconnect / connect battery   |
| ✓   |                         | ✓                                    |                         | Disconnect / connect wiring harness for access   |
| ✓   |                         | ✓                                    |                         | Raise and support vehicle (when required)  |
| ✓   |                         | ✓                                    |                         | Application of weld-through primer (Welded areas)                                      |
| ✓   |                         | ✓                                    |                         | Block sand (Welded areas)  |
| ✓   |                         | ✓                                    |                         | Application of guide coat (Welded areas)   |
| ✓   |                         | ✓                                    |                         | Dual action sand (Welded areas)  |
| ✓   |                         | ✓                                    |                         | Rear wheel R&I (when required)   |
| ✓   |                         | ✓                                    |                         | Detach and weld at inner bedside panel, floor, front panel, and other necessary panels |
| ✓   |                         | ✓                                    |                         | Body fill labor (Welded areas)   |
| ✓   |                         | ✓                                    |                         | Seam sealing   |
| ✓   |                         | ✓                                    |                         | Fabrication of sleeves (when required)   |
| ✓   |                         | ✓                                    |                         | Reasonable alignment   |
|   | ✓                       |                                      | ✓                       | Hand rail R&I  |
|   | ✓                       |                                      | ✓                       | Bed liner R&I  |
|   | ✓                       |                                      | ✓                       | Fuel tank R&I (Additional Labor)   |
|   | ✓                       |                                      | ✓                       | Wiring harness R&I   |
|   | ✓                       |                                      | ✓                       | Corrosion protection   |



|     |     |  |   |   |
|-----|-----|--|---|---|
|     | ✓   |  | ✓ | Body insulation (e.g., foams, pads)                     |
|     | ✓   |  | ✓ | Trimming, repair or modification of part                |
|     | ✓   |  | ✓ | R&I of mouldings, emblems, nameplates and ornaments     |
|     | ✓   |  | ✓ | R&I of non-standard equipment not identified as options |
| n/a | n/a |  | ✓ | Disassembly, cleaning, and reassembly of assemblies     |

**Section 4-3 Replacement & Recycled Operations**

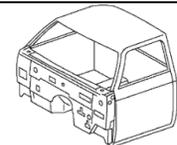
|   |                                |   |                                |   |
|---|--------------------------------|---|--------------------------------|---|
| <b>Cab Side Panel</b>   |                                |   |                                |  |
| <b>Replacement and Recycled</b>   |                                |   |                                |   |
| Recycled panel replacement may or may not be recommended by the vehicle manufacturer.   |                                |   |                                |   |
| <b>Important Reminder:</b>  |                                |   |                                |   |
| <ul style="list-style-type: none"> <li>• Reveal mouldings that are mounted flush to stationary glass (e.g., Windshield, Back Glass, or Quarter Glass) are at risk of breakage when being removed.</li> <li>• Stationary glass that is urethane bonded is considered a structural part of the vehicle. Replacing stationary glass requires:             <ul style="list-style-type: none"> <li>○ following specific OEM replacement procedures</li> <li>○ using specified installation materials</li> <li>○ returning the vehicle to OEM structural integrity for occupant safety</li> </ul> </li> </ul> |                                |   |                                |   |
| <b>New Part Replacement (OEM and non-OEM new parts) Operations</b>  |                                | <b>Recycled Part Replacement Operations</b> |                                | <b>Operations</b>   |
| <b>Included Operations</b>  | <b>Not Included Operations</b> | <b>Included Operations</b>                  | <b>Not Included Operations</b> |   |
| ✓   |                                | ✓   |                                | Bed setback   |
| ✓   |                                | ✓   |                                | Sill plate R&I  |
| ✓   |                                | ✓   |                                | Front seat R&I (when required)  |
| ✓   |                                | ✓   |                                | Rear seat R&I (when required)   |
| ✓   |                                | ✓   |                                | Rocker panel moulding R&I (when required)   |
| ✓   |                                | ✓   |                                | Running boards / step panel R&I (when required)                                     |
| ✓   |                                | ✓   |                                | Coat hook R&I   |
| ✓   |                                | ✓   |                                | Inner trim panel(s) R&I   |
| ✓   |                                | ✓   |                                | Cab side glass R&I  |
| ✓   |                                | ✓   |                                | Headliner R&I   |
| ✓   |                                | ✓   |                                | Inside lamp R&I   |
| ✓   |                                | ✓   |                                | Door lock striker R&I (when required)   |
| ✓   |                                | ✓   |                                | Body weatherstrip pullback  |
| ✓   |                                | ✓   |                                | Wiring pullback for access  |
| ✓   |                                | ✓   |                                | Detach and weld at roof panel, rocker panel, rear cab panel, and inner panels       |

|     |     |   |   |   |
|-----|-----|---|---|---|
| ✓   |     | ✓ |   | Fabrication of sleeves (when required)                  |
| ✓   |     | ✓ |   | Body fill labor (Welded areas)                          |
| ✓   |     | ✓ |   | Airbag R&I (when required)                              |
| ✓   |     | ✓ |   | Application of weld-through primer (Welded areas)       |
| ✓   |     | ✓ |   | Block sand (Welded areas)                               |
| ✓   |     | ✓ |   | Application of guide coat (Welded areas)                |
| ✓   |     | ✓ |   | Dual action sand (Welded areas)                         |
| ✓   |     | ✓ |   | Seam sealing  |
| ✓   |     | ✓ |   | Seat belt anchor R&I                                    |
| ✓   |     | ✓ |   | Reasonable alignment                                    |
|     | ✓   |   | ✓ | Electronic and vacuum components R&I                    |
|     | ✓   |   | ✓ | Seat belt assembly R&I                                  |
|     | ✓   |   | ✓ | Wiring harness R&I                                      |
|     | ✓   |   | ✓ | Corrosion protection                                    |
|     | ✓   |   | ✓ | Body insulation (e.g., foams, pads)                     |
|     | ✓   |   | ✓ | Trimming, repair, or modification of part               |
|     | ✓   |   | ✓ | R&I of mouldings, emblems, nameplates and ornaments     |
|     | ✓   |   | ✓ | R&I of non-standard equipment not identified as options |
| n/a | n/a |   | ✓ | Disassembly, cleaning, and reassembly of assemblies     |

**Cab Assembly**

**Replacement and Recycled**

Recycled panel replacement may or may not be recommended by the vehicle manufacturer.



**Important Reminder:**

- Reveal mouldings that are mounted flush to stationary glass (e.g., Windshield, Back Glass, or Quarter Glass) are at risk of breakage when being removed.
- Stationary glass that is urethane bonded is considered a structural part of the vehicle. Replacing stationary glass requires:
  - following specific OEM replacement procedures
  - using specified installation materials
  - returning the vehicle to OEM structural integrity for occupant safety

**Special Note for Recycled Operation:**

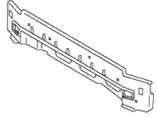
- Serviced with all attached parts
- This is considered a structural part of the vehicle. Replacing structural panels requires:
  - following specific replacement procedures
  - using specified installation materials
  - returning the vehicle to OEM structural integrity for occupant safety

|  |   |                   |
|--|---|-------------------|
| <b>New Part Replacement (OEM and non-OEM new parts) Operations</b> | <b>Recycled Part Replacement Operations</b> | <b>Operations</b> |
|--|---|-------------------|

| Included Operations | Not Included Operations | Included Operations | Not Included Operations |  |
|---------------------|-------------------------|---------------------|-------------------------|--|
| ✓                   |                         | ✓                   |                         | Front bumper R&I (when required)                 |
| ✓                   |                         |                     | ✓                       | Grille R&I (when required)                       |
| ✓                   |                         |                     | ✓                       | Hood R&I   |
| ✓                   |                         | ✓                   |                         | Cowl vent panel R&I (when required)              |
| ✓                   |                         | ✓                   |                         | Windshield R&I                                   |
| ✓                   |                         | ✓                   |                         | Front fenders R&I                                |
| ✓                   |                         | ✓                   |                         | Seats R&I (when required)                        |
| ✓                   |                         | ✓                   |                         | Sill plates R&I                                  |
| ✓                   |                         | ✓                   |                         | Seat belt anchor R&I                             |
| ✓                   |                         | ✓                   |                         | Cowl trim R&I                                    |
| ✓                   |                         | ✓                   |                         | Carpet or mats and insulation R&I                |
| ✓                   |                         | ✓                   |                         | Cab and body side trim R&I                       |
| ✓                   |                         | ✓                   |                         | Instrument panel / pad R&I                       |
| ✓                   |                         | ✓                   |                         | Airbag R&I (when required)                       |
| ✓                   |                         | ✓                   |                         | Headliner R&I                                    |
| ✓                   |                         | ✓                   |                         | Door R&I   |
| ✓                   |                         | ✓                   |                         | Rocker panel moulding R&I (when required)        |
| ✓                   |                         | ✓                   |                         | Back glass R&I                                   |
| ✓                   |                         | ✓                   |                         | Cab side glass R&I (when required)               |
| ✓                   |                         | ✓                   |                         | Bed setback                                      |
| ✓                   |                         | ✓                   |                         | Disconnect / connect battery                     |
| ✓                   |                         | ✓                   |                         | Disconnect / connect wiring harness for access   |
| ✓                   |                         | ✓                   |                         | Reasonable alignment                             |
| ✓                   |                         | ✓                   |                         | Door trim panel R&I (when required for OEM part) |
| ✓                   |                         | ✓                   |                         | Lock cylinder R&I (when required for OEM part)   |
| n/a                 | n/a                     | ✓                   |                         | Remove trim panel from recycled door             |
| n/a                 | n/a                     | ✓                   |                         | Remove lock cylinder from recycled door          |
|                     | ✓                       |                     | ✓                       | Electronic and vacuum components R&I             |
|                     | ✓                       |                     | ✓                       | Engine and transmission R&I (Additional Labor)   |
|                     | ✓                       |                     | ✓                       | Seat belt assembly R&I                           |
|                     | ✓                       |                     | ✓                       | Seam sealing                                     |
|                     | ✓                       |                     | ✓                       | Wiring harness R&I                               |
|                     | ✓                       |                     | ✓                       | Corrosion protection                             |
|                     | ✓                       |                     | ✓                       | Body insulation (e.g., foams, pads)              |

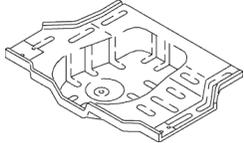
|     |     |  |   |   |
|-----|-----|--|---|---|
|     | ✓   |  | ✓ | Trimming, repair, or modification of part               |
|     | ✓   |  | ✓ | R&I of mouldings, emblems, nameplates and ornaments     |
|     | ✓   |  | ✓ | R&I of non-standard equipment not identified as options |
| n/a | n/a |  | ✓ | Disassembly, cleaning, and reassembly of assemblies     |

### Section 4-3 Replacement & Recycled Operations

|  |                                |   |                                |   |
|--|--------------------------------|---|--------------------------------|---|
| <b>Lower Rear Body Panel</b>   |                                |   |                                |  |
| <b>Replacement and Recycled</b>  |                                |   |                                |   |
| Recycled panel replacement may or may not be recommended by the vehicle manufacturer.  |                                |   |                                |   |
| <b>Important Reminder:</b>   |                                |   |                                |   |
| <ul style="list-style-type: none"> <li>• This is considered a structural part of the vehicle. Replacing structural panels requires:             <ul style="list-style-type: none"> <li>○ following specific OEM replacement procedures</li> <li>○ using specified installation materials</li> <li>○ returning the vehicle to OEM structural integrity for occupant safety</li> </ul> </li> </ul> |                                |   |                                |   |
| <b>New Part Replacement (OEM and non-OEM new parts) Operations</b>   |                                | <b>Recycled Part Replacement Operations</b> |                                | <b>Operations</b>   |
| <b>Included Operations</b>   | <b>Not Included Operations</b> | <b>Included Operations</b>                  | <b>Not Included Operations</b> |   |
| ✓  |                                | ✓   |                                | Bumper R&I  |
| ✓  |                                | ✓   |                                | Energy absorber R&I (when required)   |
| ✓  |                                | ✓   |                                | Valance panel R&I (when required)   |
| ✓  |                                | ✓   |                                | Rear Lamps R&I  |
| ✓  |                                | ✓   |                                | Rear body trim R&I  |
| ✓  |                                | ✓   |                                | Rear seat R&I (when required)   |
| ✓  |                                | ✓   |                                | Quarter trim R&I  |
| ✓  |                                | ✓   |                                | Finish panels R&I (when required)   |
| ✓  |                                | ✓   |                                | Lock cylinder R&I (when required)   |
| ✓  |                                | ✓   |                                | Lock / striker R&I  |
| ✓  |                                | ✓   |                                | License plate bracket R&I (when required)   |
| ✓  |                                | ✓   |                                | Quarter extension R&I (when required)   |
| ✓  |                                | ✓   |                                | Body weatherstrip pullback  |
| ✓  |                                | ✓   |                                | Cover to protect interior during repair   |
| ✓  |                                | ✓   |                                | Disconnect / connect battery  |
| ✓  |                                | ✓   |                                | Disconnect / connect wiring harness for access                                      |
| ✓  |                                | ✓   |                                | Detach and weld at quarter panel, floor pan, and side member                        |
| ✓  |                                | ✓   |                                | Body fill labor (Welded areas)  |

|     |     |   |   |   |
|-----|-----|---|---|---|
| ✓   |     | ✓ |   | Application of weld-through primer (Welded areas)       |
| ✓   |     | ✓ |   | Block sand (Welded areas)                               |
| ✓   |     | ✓ |   | Application of guide coat (Welded areas)                |
| ✓   |     | ✓ |   | Dual action sand (Welded areas)                         |
| ✓   |     | ✓ |   | Seam sealing  |
|     | ✓   | ✓ |   | Reasonable alignment                                    |
|     | ✓   |   | ✓ | Lock cylinder coding (Manual Entry M73 is available)    |
|     | ✓   |   | ✓ | Power lock actuator R&I                                 |
|     | ✓   |   | ✓ | Specification labels R&I or replacement                 |
|     | ✓   |   | ✓ | Fuel tank R&I (Additional Labor)                        |
|     | ✓   |   | ✓ | Exhaust system R&I for access                           |
|     | ✓   |   | ✓ | Body weatherstrip R&I                                   |
|     | ✓   |   | ✓ | Wiring harness R&I                                      |
|     | ✓   |   | ✓ | Corrosion protection                                    |
|     | ✓   |   | ✓ | Body insulation (e.g., foams, pads)                     |
|     | ✓   |   | ✓ | Trimming, repair, or modification of part               |
|     | ✓   |   | ✓ | R&I of mouldings, emblems, nameplates and ornaments     |
|     | ✓   |   | ✓ | R&I of non-standard equipment not identified as options |
| n/a | n/a |   | ✓ | Disassembly, cleaning, and reassembly of assemblies     |

## Section 4-3 Replacement & Recycled Operations

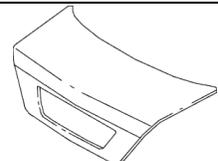
| Rear Floor Pan   |                         |                                      |                         |                                  |
|--|-------------------------|--------------------------------------|-------------------------|---|
| Replacement and Recycled   |                         |                                      |                         |   |
| Recycled panel replacement may or may not be recommended by the vehicle manufacturer.  |                         |                                      |                         |   |
| <b>Important Reminder:</b>   |                         |                                      |                         |   |
| <ul style="list-style-type: none"> <li>• This is considered a structural part of the vehicle. Replacing structural panels requires:                             <ul style="list-style-type: none"> <li>○ following specific OEM replacement procedures</li> <li>○ using specified installation materials</li> <li>○ returning the vehicle to OEM structural integrity for occupant safety</li> </ul> </li> </ul> |                         |                                      |                         |   |
| New Part Replacement (OEM and non-OEM new parts) Operations  |                         | Recycled Part Replacement Operations |                         | Operations  |
| Included Operations  | Not Included Operations | Included Operations                  | Not Included Operations |   |
| ✓  |                         | ✓                                    |                         | Remove and replace lower rear body panel (when required for included operations, see lower rear body panel section) |
| ✓  |                         | ✓                                    |                         | Rear seat R&I (when required)   |
| ✓  |                         | ✓                                    |                         | Sill plate R&I  |
| ✓  |                         | ✓                                    |                         | Carpet / insulation rollback  |
| ✓  |                         | ✓                                    |                         | Fuel tank R&I (when required)   |
| ✓  |                         | ✓                                    |                         | Battery R&I (when required)   |
| ✓  |                         | ✓                                    |                         | Raise and support vehicle   |
| ✓  |                         | ✓                                    |                         | Disconnect / connect battery  |
| ✓  |                         | ✓                                    |                         | Disconnect / connect wiring harness for access  |
| ✓  |                         | ✓                                    |                         | Body weatherstrip pullback  |
| ✓  |                         | ✓                                    |                         | Cover to protect interior during repair   |
| ✓  |                         | ✓                                    |                         | Detach and weld at side rails, inner quarter panel, and other necessary panels                                      |
| ✓  |                         | ✓                                    |                         | Detach and weld from adjacent floor pan   |
| ✓  |                         | ✓                                    |                         | Application of weld-through primer (Welded areas)   |
| ✓  |                         | ✓                                    |                         | Seam sealing  |
| ✓  |                         | ✓                                    |                         | Reasonable alignment  |
|  | ✓                       |                                      | ✓                       | Deck lid / tailgate R&I (Additional Labor)  |
|  | ✓                       |                                      | ✓                       | Rear bumper overhaul  |
|  | ✓                       |                                      | ✓                       | Wheel alignment (Additional Labor)  |
|  | ✓                       |                                      | ✓                       | Suspension overhaul   |
|  | ✓                       |                                      | ✓                       | Suspension R&I (Additional Labor)   |

|     |     |  |   |   |
|-----|-----|--|---|---|
|     | ✓   |  | ✓ | Removal of spare tires, tools, and jack                 |
|     | ✓   |  | ✓ | Exhaust system R&I for access                           |
|     | ✓   |  | ✓ | Brake lines R&I   |
|     | ✓   |  | ✓ | Bleed brakes  |
|     | ✓   |  | ✓ | Fuel lines R&I  |
|     | ✓   |  | ✓ | Wiring harness R&I                                      |
|     | ✓   |  | ✓ | Corrosion protection                                    |
|     | ✓   |  | ✓ | Body insulation (e.g., foams, pads)                     |
|     | ✓   |  | ✓ | Trimming, repair, or modification of part               |
|     | ✓   |  | ✓ | R&I of non-standard equipment not identified as options |
| n/a | n/a |  | ✓ | Disassembly, cleaning, and reassembly of assemblies     |

**Deck Lid**

**Replacement and Recycled**

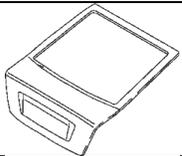
Recycled panel replacement may or may not be recommended by the vehicle manufacturer.



| New Part Replacement (OEM and non-OEM new parts) Operations |                         | Recycled Part Replacement Operations |                         | Operations  |
|---|-------------------------|--------------------------------------|-------------------------|---|
| Included Operations   | Not Included Operations | Included Operations                  | Not Included Operations |   |
| ✓   |                         | ✓                                    |                         | Lid R&I at hinge  |
| ✓   |                         | ✓                                    |                         | Trim panel R&I  |
| ✓   |                         | ✓                                    |                         | Lock cylinder R&I (Recycled Decklid includes R,R&I when required)   |
| ✓   |                         |                                      | ✓                       | Lock striker R&I (on Deck Lid)  |
| ✓   |                         |                                      | ✓                       | Power lock actuator R&I (when required)   |
| ✓   |                         |                                      | ✓                       | Rear lamps R&I (when required)  |
| ✓   |                         |                                      | ✓                       | High mounted stop light R&I (when required)   |
| ✓   |                         |                                      | ✓                       | License plate bracket R&I (when required)   |
| ✓   |                         | ✓                                    |                         | Weatherstrip on lid R&I   |
| ✓   |                         |                                      | ✓                       | Spoiler R&I (OEM only)  |
| ✓   |                         |                                      | ✓                       | Luggage rack R&I (when required)  |
| ✓   |                         | ✓                                    |                         | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware) |
| ✓   |                         | ✓                                    |                         | Seam sealing (when required)  |

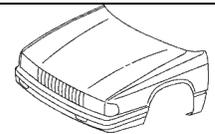
|     |     |   |   |  |
|-----|-----|---|---|--|
| ✓   |     |   | ✓ | Lamps R&I  |
| n/a | n/a | ✓ |   | Remove lock cylinder from recycled lid (Recycled Decklid includes R,R&I when required) |
|     | ✓   |   | ✓ | Lock cylinder coding (Manual Entry M73 available)                                      |
|     | ✓   |   | ✓ | Hinge R&I from vehicle   |
|     | ✓   |   | ✓ | Specification labels R&I or replacement  |
|     | ✓   |   | ✓ | Stripe removal   |
|     | ✓   |   | ✓ | Wiring R&I   |
|     | ✓   |   | ✓ | Trimming, repair, or modification of part  |
|     | ✓   |   | ✓ | R&I of mouldings, emblems, nameplates and ornaments                                    |
|     | ✓   |   | ✓ | R&I of non-standard equipment not identified as options                                |
| n/a | n/a |   | ✓ | Disassembly, cleaning, and reassembly of assemblies                                    |

**Section 4-3 Replacement & Recycled Operations**

| <b>Tailgate / Hatchback</b>   |                         |                                      |                         |  |
|---|-------------------------|--------------------------------------|-------------------------|--|
| <b>Replacement and Recycled</b>   |                         |                                      |                         |  |
| Recycled panel replacement may or may not be recommended by the vehicle manufacturer. |                         |                                      |                         |  |
|   |                         |                                      |                         |  |
| New Part Replacement (OEM and non-OEM new parts) Operations                           |                         | Recycled Part Replacement Operations |                         | Operations   |
| Included Operations   | Not Included Operations | Included Operations                  | Not Included Operations |  |
| ✓   |                         | ✓                                    |                         | R&I gate at hinge / hydraulic rod  |
| ✓   |                         | ✓                                    |                         | Trim panel R&I (Recycled Tailgate/Hatchback includes R,R&I when required)    |
| ✓   |                         | ✓                                    |                         | Handle R&I   |
| ✓   |                         | ✓                                    |                         | Lock cylinder R&I (Recycled Tailgate/Hatchback includes R,R&I when required) |
| ✓   |                         |                                      | ✓                       | Lock striker R&I (on Tailgate)   |
| ✓   |                         |                                      | ✓                       | Power lock actuator R&I (when required)                                      |
| ✓   |                         |                                      | ✓                       | License plate bracket R&I (when required)                                    |
| ✓   |                         |                                      | ✓                       | Wiper and components R&I   |
| ✓   |                         |                                      | ✓                       | Rear lamps R&I (when required)   |
| ✓   |                         |                                      | ✓                       | High mounted stop lamp R&I   |
| ✓   |                         |                                      | ✓                       | Glass R&I  |
| ✓   |                         | ✓                                    |                         | Weatherstrip on gate R&I   |

|     |     |   |   |   |
|-----|-----|---|---|---|
| ✓   |     |   | ✓ | Spoiler R&I (OEM only)  |
| ✓   |     |   | ✓ | Louver R&I (OEM only)   |
| ✓   |     | ✓ |   | Seam sealing (when required)  |
| ✓   |     | ✓ |   | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware) |
| n/a | n/a | ✓ |   | Remove lock cylinder from recycled gate   |
| n/a | n/a | ✓ |   | Remove trim panel from recycled gate  |
| ✓   |     | ✓ |   | Spare tire carrier R&I (when required)  |
|     | ✓   |   | ✓ | Lock cylinder coding (Manual Entry M73 is available)  |
|     | ✓   |   | ✓ | Hinge R&I from vehicle  |
|     | ✓   |   | ✓ | Specification labels R&I or replacement   |
|     | ✓   |   | ✓ | R&I of mouldings, emblems, nameplates and ornaments   |
|     | ✓   |   | ✓ | R&I of non-standard equipment not identified as options   |
| n/a | n/a |   | ✓ | Stripe removal  |
|     | ✓   |   | ✓ | Wiring R&I  |
|     | ✓   |   | ✓ | Trimming, repair, or modification of part   |
| n/a | n/a |   | ✓ | Disassembly, cleaning, and reassembly of assemblies   |

| <b>Front Body Recycled Section</b>  |                                |  |
|---|--------------------------------|--|
| <b>Frame Vehicles</b>   |                                |  |
| <b>Bolt-on Inner / Outer Sheet Metal</b>  |                                |  |
| Recycled panel replacement may or may not be recommended by the vehicle manufacturer. |                                |  |
| <b>Included Operations</b>  | <b>Not Included Operations</b> | <b>Recycled Part Replacement Operations</b>  |
| ✓   |                                | Grille R&I (when required)   |
| ✓   |                                | Front end panel R&I (when required)  |
| ✓   |                                | Hood R&I   |
| ✓   |                                | Cowl vent panel R&I (when required)  |
| ✓   |                                | Fenders R&I  |
| ✓   |                                | Front bumper R&I (when required for fender R&I)  |
| ✓   |                                | Radiator R&I (when required)   |
| ✓   |                                | A/C condenser R&I, including A/C line disconnect / connect (if required), Line Cap Off (when required) |
| ✓   |                                | Disconnect / connect inner skirts from attaching points  |
| ✓   |                                | Disconnect / connect radiator support from attaching points  |



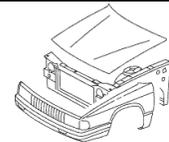
|   |   |   |
|---|---|---|
| ✓ |   | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware) |
|   | ✓ | Bumper overhaul   |
|   | ✓ | Aim headlamps (Additional Labor)  |
|   | ✓ | Evacuate and recharge A/C system (Additional Labor)   |
|   | ✓ | Refrigerant recovery (Additional Labor)   |
|   | ✓ | Hood release cable R&I  |
|   | ✓ | Specification labels R&I or replacement   |
|   | ✓ | Corrosion protection  |
|   | ✓ | Trimming, repair, or modification of part   |
|   | ✓ | R&I of mouldings, emblems, nameplates and ornaments   |
|   | ✓ | R&I of non-standard equipment not identified as options   |
|   | ✓ | Disassembly, cleaning, and reassembly of assemblies   |

**3/4 Front Body Recycled Section**

**Frame Vehicles**

**Bolt-on Inner / Outer Sheet Metal**

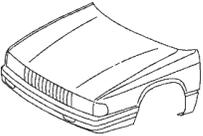
Recycled panel replacement may or may not be recommended by the vehicle manufacturer.



| Included Operations | Not Included Operations | Recycled Part Replacement Operations  |
|---------------------|-------------------------|---|
| ✓                   |                         | Grille R&I (when required)  |
| ✓                   |                         | Front end panel R&I (when required)   |
| ✓                   |                         | Hood R&I  |
| ✓                   |                         | Cowl vent panel R&I (when required)   |
| ✓                   |                         | One fender R&I  |
| ✓                   |                         | Front bumper R&I (when required for fender R&I)   |
| ✓                   |                         | Radiator R&I (when required)  |
| ✓                   |                         | A/C condenser R&I, including A/C line disconnect / connect, Line Cap Off (when required)                          |
| ✓                   |                         | Disconnect / connect opposite fender from radiator support  |
| ✓                   |                         | Disconnect / connect inner skirts from attaching points   |
| ✓                   |                         | Disconnect / connect radiator support from attaching points   |
| ✓                   |                         | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware) |
|                     | ✓                       | Bumper overhaul   |
|                     | ✓                       | Aim headlamps (Additional Labor)  |
|                     | ✓                       | Evacuate and recharge A/C system (Additional Labor)   |
|                     | ✓                       | Refrigerant recovery (Additional Labor)   |
|                     | ✓                       | Hood release cable R&I  |

|  |   |   |
|--|---|---|
|  | ✓ | Specification labels R&I or replacement                 |
|  | ✓ | Corrosion protection                                    |
|  | ✓ | Trimming, repair, or modification of part               |
|  | ✓ | R&I of mouldings, emblems, nameplates and ornaments     |
|  | ✓ | R&I of non-standard equipment not identified as options |
|  | ✓ | Disassembly, cleaning, and reassembly of assemblies     |

**Section 4-3 Replacement & Recycled Operations**

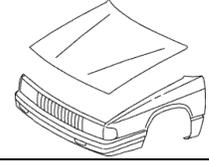
| <b>Front Body Outer<br/>Recycled Section<br/>Unibody Vehicles<br/>Bolt-on Outer Sheet Metal Only</b> |                         |                                |
|--|-------------------------|---|
| Recycled panel replacement may or may not be recommended by the vehicle manufacturer.                |                         |   |
| Included Operations  | Not Included Operations | Recycled Part Replacement Operations  |
| ✓  |                         | Grille R&I (when required)  |
| ✓  |                         | Front end panel R&I   |
| ✓  |                         | Hood R&I  |
| ✓  |                         | Cowl vent panel R&I (when required)   |
| ✓  |                         | Fenders R&I   |
| ✓  |                         | Front bumper R&I (when required for fender R&I)   |
| ✓  |                         | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware) |
|  | ✓                       | Bumper overhaul   |
|  | ✓                       | Aim headlamps (Additional Labor)  |
|  | ✓                       | Radiator R&I  |
|  | ✓                       | Evacuate and recharge A/C system (Additional Labor)   |
|  | ✓                       | Refrigerant recovery (Additional Labor)   |
|  | ✓                       | A/C condenser R&I, including A/C line disconnect / connect (if required), Line Cap Off (when required)            |
|  | ✓                       | Hood release cable R&I  |
|  | ✓                       | Specification labels R&I or replacement   |
|  | ✓                       | Corrosion protection  |
|  | ✓                       | Trimming, repair, or modification of part   |
|  | ✓                       | R&I of mouldings, emblems, nameplates and ornaments   |
|  | ✓                       | R&I of non-standard equipment not identified as options   |
|  | ✓                       | Disassembly, cleaning, and reassembly of assemblies   |

**3/4 Front Body Recycled Section**

**All Generations**

**Bolt-on Outer Sheet Metal Only**

Recycled panel replacement may or may not be recommended by the vehicle manufacturer.

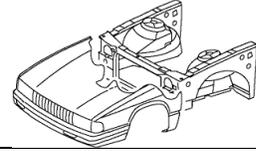


| Included Operations | Not Included Operations | Recycled Part Replacement Operations  |
|---------------------|-------------------------|---|
| ✓                   |                         | Front bumper R&I (when required)  |
| ✓                   |                         | Grill R&I (when required)   |
| ✓                   |                         | Front end panel / header panel R&I (when required)  |
| ✓                   |                         | Hood panel R&I  |
| ✓                   |                         | Cowl vent panel R&I (when required)   |
| ✓                   |                         | One fender R&I  |
| ✓                   |                         | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware) |
|                     | ✓                       | Bumper overhaul   |
|                     | ✓                       | Aim headlamps (Additional Labor)  |
|                     | ✓                       | Radiator R&I  |
|                     | ✓                       | Evacuate and recharge A/C system (Additional Labor)   |
|                     | ✓                       | Refrigerant recovery (Additional Labor)   |
|                     | ✓                       | A/C condenser R&I, including A/C line disconnect / connect (if required), Line Cap Off (when required)            |
|                     | ✓                       | Hood release cable R&I  |
|                     | ✓                       | Specification labels R&I or replacement   |
|                     | ✓                       | Corrosion protection  |
|                     | ✓                       | Trimming, repair, or modification of part   |
|                     | ✓                       | R&I of mouldings, emblems, nameplates and ornaments   |
|                     | ✓                       | R&I of non-standard equipment not identified as options   |
|                     | ✓                       | Disassembly, cleaning, and reassembly of assemblies   |

## Section 4-3 Replacement & Recycled Operations

**Front Body Complete  
Recycled Section  
Unibody Vehicles  
Inner Structure**

Recycled panel replacement may or may not be recommended by the vehicle manufacturer.



**Important Reminder:**

- Cut at the firewall through side rails (includes all inner structures as well as outer sheet metal).
- Cut at factory seams.
- Manufacturer may require full replacement of side rail.
- Additional labor may be required.
- Manufacturers recommend replacement of SRS components with OEM parts.
- This is considered a structural part of the vehicle. Replacing structural panels requires:
  - following specific OEM replacement procedures
  - using specified installation materials
  - returning the vehicle to OEM structural integrity for occupant safety

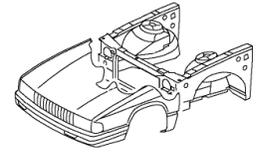
| Included Operations | Not Included Operations | Recycled Part Replacement Operations   |
|---------------------|-------------------------|--|
| ✓                   |                         | Front bumper R&I   |
| ✓                   |                         | Energy absorbers R&I   |
| ✓                   |                         | Valance panel R&I (when required)  |
| ✓                   |                         | Grille R&I (when required)   |
| ✓                   |                         | Headlamp assemblies R&I (when required)  |
| ✓                   |                         | Front end panel R&I  |
| ✓                   |                         | Side marker lamps R&I (when required)  |
| ✓                   |                         | Parklamp assemblies R&I (when required)  |
| ✓                   |                         | Hood R&I   |
| ✓                   |                         | Battery and tray R&I (when required)   |
| ✓                   |                         | Cowl vent panel R&I (when required)  |
| ✓                   |                         | Fenders R&I  |
| ✓                   |                         | Attached bolted parts R&I  |
| ✓                   |                         | Sill plates R&I  |
| ✓                   |                         | Cowl trim panels R&I   |
| ✓                   |                         | Radiator R&I   |
| ✓                   |                         | A/C condenser R&I, including A/C line disconnect / connect (if required), Line Cap (when required) |
| ✓                   |                         | Airbag sensor R&I (when required)  |
| ✓                   |                         | Air inlet system (when required)   |
| ✓                   |                         | Raise and support vehicle  |
| ✓                   |                         | Front suspensions R&I  |
| ✓                   |                         | Steering components R&I (rear wheel drive) (when required)   |

|   |   |   |
|---|---|---|
| ✓ |   | Engine assembly R&I (rear wheel drive)  |
| ✓ |   | R&I engine and transaxle, suspension and steering assemblies, and cradle as a unit (front wheel drive)            |
| ✓ |   | Carpet / insulation rollback  |
| ✓ |   | Disconnect / connect wiring battery   |
| ✓ |   | Disconnect / connect wiring harness for access  |
| ✓ |   | Detach and weld at hinge pillar, floor pan, cowl panel and fire wall  |
| ✓ |   | Fabrication of sleeves for front side rails (when required)   |
| ✓ |   | Application of weld-through primer (Welded areas)   |
| ✓ |   | Seam sealing  |
| ✓ |   | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware) |
|   | ✓ | Bumper overhaul   |
|   | ✓ | Aim headlamps (Additional Labor)  |
|   | ✓ | A/C receiver / dehydrator R&I (when required)   |
|   | ✓ | Evacuate and recharge A/C system (Additional Labor)   |
|   | ✓ | Refrigerant recovery (Additional Labor)   |
|   | ✓ | Hood release cable R&I  |
|   | ✓ | Specification labels R&I or replacement   |
|   | ✓ | Fuel vapor canister R&I   |
|   | ✓ | Antenna assembly R&I  |
|   | ✓ | Dash R&I  |
|   | ✓ | Horns R&I   |
|   | ✓ | Electronic and vacuum components R&I  |
|   | ✓ | Exhaust system R&I for access   |
|   | ✓ | Parking brake assembly R&I  |
|   | ✓ | Master cylinder R&I   |
|   | ✓ | Suspension overhaul   |
|   | ✓ | Bleeding brakes (Additional Labor)  |
|   | ✓ | Wheel alignment (Additional Labor)  |
|   | ✓ | Drain and replace oil and fluids  |
|   | ✓ | Vacuum booster R&I  |
|   | ✓ | Wiring R&I  |
|   | ✓ | Trimming, repair, or modification of part   |
|   | ✓ | Corrosion protection  |
|   | ✓ | R&I of mouldings, emblems, nameplates and ornaments   |
|   | ✓ | R&I of non-standard equipment not identified as options   |

|  |   |   |
|--|---|---|
|  | ✓ | Disassembly, cleaning, and reassembly of assemblies |
|--|---|---|

### Section 4-3 Replacement & Recycled Operations

**Front Body Complete Recycled**  
**Section Second Generation**  
**Unibody / Frame Vehicles**  
**Inner Structure Second Generation**



Recycled panel replacement may or may not be recommended by the vehicle manufacturer.

**Important Reminder:**

- Cut at the firewall through upper side rails (when necessary includes all inner structures as well as outer sheet metal).
- Cut at factory seams.
- Manufacturer may require full replacement of upper side rail.
- Additional labor may be required.
- Manufacturers recommend replacement of SRS components with OEM parts.
- This is considered a structural part of the vehicle. Replacing structural panels requires:
  - following specific OEM replacement procedures
  - using specified installation materials
  - returning the vehicle to OEM structural integrity for occupant safety

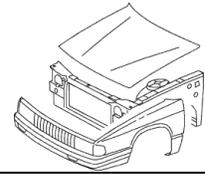
| Included Operations | Not Included Operations | Recycled Part Replacement Operations   |
|---------------------|-------------------------|--|
| ✓                   |                         | Front bumper R&I   |
| ✓                   |                         | Energy absorbers R&I   |
| ✓                   |                         | Valance panel R&I (when required)  |
| ✓                   |                         | Grille R&I (when required)   |
| ✓                   |                         | Headlamp assemblies R&I (when required)  |
| ✓                   |                         | Front end panel R&I  |
| ✓                   |                         | Side marker lamps R&I (when required)  |
| ✓                   |                         | Parklamp assemblies R&I (when required)  |
| ✓                   |                         | Hood R&I   |
| ✓                   |                         | Battery and tray R&I   |
| ✓                   |                         | Cowl vent panel R&I (when required)  |
| ✓                   |                         | Fenders R&I  |
| ✓                   |                         | Attached bolted parts R&I  |
| ✓                   |                         | Sill plates R&I  |
| ✓                   |                         | Cowl trim panels R&I   |
| ✓                   |                         | Radiator R&I   |
| ✓                   |                         | A/C condenser R&I, including A/C line disconnect / connect (if required), Line Cap (when required) |
| ✓                   |                         | Airbag sensor R&I (when required)  |
| ✓                   |                         | Air inlet system (when required)   |
| ✓                   |                         | Raise and support vehicle  |
| ✓                   |                         | Carpet / insulation rollback   |

|   |   |   |
|---|---|---|
| ✓ |   | Disconnect / connect battery  |
| ✓ |   | Disconnect / connect wiring harness for access  |
| ✓ |   | Detach and weld at hinge pillar, floor pan, cowl panel and firewall   |
| ✓ |   | Fabrication of sleeves (when required)  |
| ✓ |   | Application of weld-through primer (Welded areas)   |
| ✓ |   | Seam sealing  |
| ✓ |   | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware) |
|   | ✓ | Bumper overhaul   |
|   | ✓ | Aim headlamps (Additional Labor)  |
|   | ✓ | A/C receiver / dehydrator R&I (when required)   |
|   | ✓ | Evacuate and recharge A/C system (Additional Labor)   |
|   | ✓ | Refrigerant recovery (Additional Labor)   |
|   | ✓ | Hood release cable R&I  |
|   | ✓ | Specification labels R&I or replacement   |
|   | ✓ | Fuel vapor canister R&I   |
|   | ✓ | Antenna assembly R&I  |
|   | ✓ | Dash R&I  |
|   | ✓ | Horns R&I   |
|   | ✓ | Electronic, hydraulic and vacuum components R&I   |
|   | ✓ | Engine assembly R&I (Additional Labor)  |
|   | ✓ | Suspension R&I (Additional Labor)   |
|   | ✓ | Instrument panel R&I  |
|   | ✓ | Steering column R&I   |
|   | ✓ | Exhaust system R&I for access   |
|   | ✓ | Parking brake assembly R&I  |
|   | ✓ | Master cylinder R&I   |
|   | ✓ | Suspension overhaul   |
|   | ✓ | Bleeding brakes (Additional Labor)  |
|   | ✓ | Wheel alignment (Additional Labor)  |
|   | ✓ | Drain and replace oil and fluids  |
|   | ✓ | Vacuum booster R&I  |
|   | ✓ | Wiring R&I  |
|   | ✓ | Trimming, repair, or modification of part   |
|   | ✓ | Corrosion protection  |
|   | ✓ | R&I of mouldings, emblems, nameplates and ornaments   |
|   | ✓ | R&I of non-standard equipment not identified as options   |

|  |   |   |
|--|---|---|
|  | ✓ | Disassembly, cleaning, and reassembly of assemblies |
|--|---|---|

### Section 4-3 Replacement & Recycled Operations

**3/4 Front Unitized  
Recycled Section  
Unibody / Frame Vehicles  
Inner Structure Second Generation**



Recycled panel replacement may or may not be recommended by the vehicle manufacturer.

**Important Reminder:**

- Cut at one side of firewall through upper side rail (when necessary includes radiator support panel, one inner fender assembly, and outer sheet metal).
- Cut at factory seams.
- Manufacturer may require full replacement of upper side rail.
- Additional labor may be required.
- Manufacturers recommend replacement of SRS components with OEM parts.
- This is considered a structural part of the vehicle. Replacing structural panels requires:
  - following specific OEM replacement procedures
  - using specified installation materials
  - returning the vehicle to OEM structural integrity for occupant safety

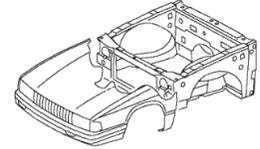
| Included Operations | Not Included Operations | Recycled Part Replacement Operations   |
|---------------------|-------------------------|--|
| ✓                   |                         | Front bumper R&I   |
| ✓                   |                         | Energy absorbers R&I   |
| ✓                   |                         | Valance panel R&I (when required)  |
| ✓                   |                         | Grille R&I (when required)   |
| ✓                   |                         | Headlamp assemblies R&I (when required)  |
| ✓                   |                         | Front end panel R&I  |
| ✓                   |                         | Side marker lamps R&I (when required)  |
| ✓                   |                         | Parklamp assemblies R&I (when required)  |
| ✓                   |                         | Hood R&I   |
| ✓                   |                         | Battery and tray R&I (when required)   |
| ✓                   |                         | Cowl vent panel R&I (when required)  |
| ✓                   |                         | Fenders R&I  |
| ✓                   |                         | Attached bolted parts R&I  |
| ✓                   |                         | Sill plates R&I  |
| ✓                   |                         | Cowl trim panels R&I   |
| ✓                   |                         | Radiator R&I   |
| ✓                   |                         | A/C condenser R&I, including A/C line disconnect / connect (if required), Line Cap (when required) |
| ✓                   |                         | Airbag sensor R&I (when required)  |
| ✓                   |                         | Air inlet system (when required)   |
| ✓                   |                         | Raise and support vehicle  |
| ✓                   |                         | Carpet / insulation rollback   |

|   |   |   |
|---|---|---|
| ✓ |   | Steering components R&I (when required)   |
| ✓ |   | Front suspension R&I  |
| ✓ |   | Engine assembly R&I (rear wheel drive)  |
| ✓ |   | R&I engine and transaxle, suspension, steering assemblies, and cradles as a unit (front wheel drive)              |
| ✓ |   | Disconnect / connect battery  |
| ✓ |   | Disconnect / connect wiring harness for access  |
| ✓ |   | Detach and weld at hinge pillar, floor pan, cowl panel, inner fender, and firewall                                |
| ✓ |   | Fabrication of sleeves (when required)  |
| ✓ |   | Application of weld-through primer (Welded areas)   |
| ✓ |   | Seam sealing  |
| ✓ |   | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware) |
|   | ✓ | Bumper overhaul   |
|   | ✓ | Aim headlamps (Additional Labor)  |
|   | ✓ | A/C receiver / dehydrator R&I (when required)   |
|   | ✓ | Evacuate and recharge A/C system (Additional Labor)   |
|   | ✓ | Refrigerant recovery (Additional Labor)   |
|   | ✓ | Hood release cable R&I  |
|   | ✓ | Specification labels R&I or replacement   |
|   | ✓ | Fuel vapor canister R&I   |
|   | ✓ | Antenna assembly R&I  |
|   | ✓ | Dash R&I  |
|   | ✓ | Horns R&I   |
|   | ✓ | Electronic and vacuum components R&I  |
|   | ✓ | Exhaust system R&I for access   |
|   | ✓ | Parking brake assembly R&I  |
|   | ✓ | Master cylinder R&I   |
|   | ✓ | Suspension overhaul   |
|   | ✓ | Bleeding brakes (Additional Labor)  |
|   | ✓ | Wheel alignment (Additional Labor)  |
|   | ✓ | Drain and replace oil and fluids  |
|   | ✓ | Vacuum booster R&I  |
|   | ✓ | Wiring R&I  |
|   | ✓ | Trimming, repair, or modification of part   |
|   | ✓ | Corrosion protection  |

|  |   |   |
|--|---|---|
|  | ✓ | R&I of mouldings, emblems, nameplates and ornaments     |
|  | ✓ | R&I of non-standard equipment not identified as options |
|  | ✓ | Disassembly, cleaning, and reassembly of assemblies     |

**Section 4-3 Replacement & Recycled Operations**

**Front Inner Complete  
Recycled Section  
Front Inner / Outer Section  
Inner Structure Second Generation  
Unibody / Frame Vehicles, and Inner Structure Second Generation Trucks**



Recycled panel replacement may or may not be recommended by the vehicle manufacturer.

**Important Reminder:**

- Cut in the windshield opening, door frame opening, and across the floor; includes all inner structures.
- Cut at factory seams.
- Performing this procedure may invalidate vehicle ID and mileage / powertrain warranties. Depending on your area, special titling procedures may also be required.
- Manufacturers recommend replacement of SRS components with OEM parts.
- Reveal mouldings that are mounted flush to stationary glass (e.g., Windshield, Back Glass, or Quarter Glass) are at risk of breakage when being removed.
- Stationary glass that urethane bonded is considered a structural part of the vehicle. Replacing stationary glass requires:
  - following specific OEM replacement procedures
  - using specified installation materials
  - returning the vehicle to OEM structural integrity for occupant safety
- Manufacturer may require full replacement of side rail.
- Additional labor may be required.

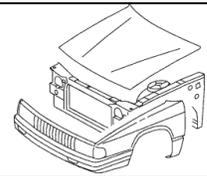
| Included Operations | Not Included Operations | Recycled Part Replacement Operations         |
|---------------------|-------------------------|--|
| ✓                   |                         | Front bumper R&I                             |
| ✓                   |                         | Energy absorbers R&I                         |
| ✓                   |                         | Valance panel R&I (when required)            |
| ✓                   |                         | Grille R&I (when required)                   |
| ✓                   |                         | Headlamp assemblies R&I (when required)      |
| ✓                   |                         | Front end panel R&I                          |
| ✓                   |                         | Side marker and parklamp R&I (when required) |
| ✓                   |                         | Hood R&I                                     |
| ✓                   |                         | Battery and tray R&I (when required)         |
| ✓                   |                         | Cowl vent panel R&I (when required)          |
| ✓                   |                         | Fenders R&I                                  |
| ✓                   |                         | Windshield R&I                               |
| ✓                   |                         | Instrument panel R&I                         |
| ✓                   |                         | Attached bolted parts R&I                    |
| ✓                   |                         | Sill plates R&I                              |
| ✓                   |                         | Cowl trim panels R&I                         |
| ✓                   |                         | Front seat R&I (when required)               |

|   |   |   |
|---|---|---|
| ✓ |   | Front doors R&I   |
| ✓ |   | Radiator R&I  |
| ✓ |   | A/C condenser R&I, including A/C line disconnect / connect (if required), Line Cap (when required)                |
| ✓ |   | Airbag sensors R&I (when required)  |
| ✓ |   | Air inlet system (when required)  |
| ✓ |   | Raise and support vehicle   |
| ✓ |   | Steering column R&I   |
| ✓ |   | Carpet / insulation rollback  |
| ✓ |   | Front suspension R&I (rear wheel drive)   |
| ✓ |   | Suspension R&I  |
| ✓ |   | Engine assembly R&I (rear wheel drive)  |
| ✓ |   | Fabrication of sleeves (when required)  |
| ✓ |   | R&I engine and transaxle, suspension, steering assemblies, and cradles as a unit (front wheel drive)              |
| ✓ |   | Disconnect / connect battery  |
| ✓ |   | Disconnect / connect wiring harness for access  |
| ✓ |   | Detach and weld in windshield opening, door frame opening and across the floor                                    |
| ✓ |   | Application of weld-through primer (Welded areas)   |
| ✓ |   | Seam sealing  |
| ✓ |   | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware) |
|   | ✓ | Bumper overhaul   |
|   | ✓ | Aim headlamps (Additional Labor)  |
|   | ✓ | A/C receiver / dehydrator R&I (when required)   |
|   | ✓ | Evacuate and recharge A/C system (Additional Labor)   |
|   | ✓ | Refrigerant recovery (Additional Labor)   |
|   | ✓ | Hood release cable R&I  |
|   | ✓ | Specification labels R&I or replacement   |
|   | ✓ | Fuel vapor canister R&I   |
|   | ✓ | Antenna assembly R&I  |
|   | ✓ | Horns R&I   |
|   | ✓ | Electronic and vacuum components R&I  |
|   | ✓ | Exhaust system R&I for access   |
|   | ✓ | Parking brake assembly R&I  |
|   | ✓ | Master cylinder R&I   |
|   | ✓ | Suspension overhaul   |

|  |   |   |
|--|---|---|
|  | ✓ | Bleeding brakes (Additional Labor)                      |
|  | ✓ | Wheel alignment (Additional Labor)                      |
|  | ✓ | Drain and replace oil and fluids                        |
|  | ✓ | Vacuum booster R&I                                      |
|  | ✓ | Wiring R&I  |
|  | ✓ | Corrosion protection                                    |
|  | ✓ | Trimming, repair or modification of part                |
|  | ✓ | R&I of mouldings, emblems, nameplates and ornaments     |
|  | ✓ | R&I of non-standard equipment not identified as options |
|  | ✓ | Disassembly, cleaning, and reassembly of assemblies     |

**3/4 Front Inner Complete  
Recycled Section  
Inner Structure Second Generation  
Unibody / Frame Vehicles**

Recycled panel replacement may or may not be recommended by the vehicle manufacturer.



**Important Reminder:**

- Cut at one side of radiator support panel and at firewall; includes one side inner structure, radiator and outer sheet metal.
- Cut at factory seams. Manufacturers recommend replacement of SRS components with OEM parts.
- This is considered a structural part of the vehicle. Replacing structural panels requires:
  - following specific OEM replacement procedures
  - using specified installation materials
  - returning the vehicle to OEM structural integrity for occupant safety

| Included Operations | Not Included Operations | Recycled Part Replacement Operations          |
|---------------------|-------------------------|---|
| ✓                   |                         | Front bumper R&I                              |
| ✓                   |                         | Energy absorbers R&I                          |
| ✓                   |                         | Valance panel R&I (when required)             |
| ✓                   |                         | Grille R&I (when required)                    |
| ✓                   |                         | Headlamp assemblies R&I (when required)       |
| ✓                   |                         | Front end panel R&I                           |
| ✓                   |                         | Side marker and parklamps R&I (when required) |
| ✓                   |                         | Hood R&I                                      |
| ✓                   |                         | Battery and tray R&I (when required)          |
| ✓                   |                         | Cowl vent panel R&I (when required)           |
| ✓                   |                         | Fenders R&I                                   |
| ✓                   |                         | Attached bolted parts R&I                     |
| ✓                   |                         | Sill plates R&I                               |
| ✓                   |                         | Cowl trim panels R&I                          |
| ✓                   |                         | Radiator R&I                                  |

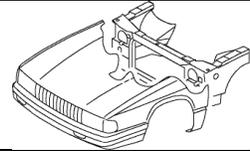
|   |   |   |
|---|---|---|
| ✓ |   | A/C condenser R&I, including A/C line disconnect / connect (if required), Line Cap (when required)                |
| ✓ |   | Airbag sensor R&I (when required)   |
| ✓ |   | Air inlet system (when required)  |
| ✓ |   | Raise and support vehicle   |
| ✓ |   | Steering components R&I (when required)   |
| ✓ |   | Carpet / insulation rollback  |
| ✓ |   | Front suspension R&I  |
| ✓ |   | Engine assembly R&I (rear wheel drive)  |
| ✓ |   | R&I engine and transaxle, suspension, steering assemblies, and cradles as a unit (front wheel drive)              |
| ✓ |   | Disconnect / connect battery  |
| ✓ |   | Disconnect / connect wiring harness for access  |
| ✓ |   | Detach and weld at hinge pillar, floor pan, cowl panel, inner fender, and firewall                                |
| ✓ |   | Fabrication of sleeves (when required)  |
| ✓ |   | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware) |
| ✓ |   | Application of weld-through primer (Welded areas)   |
| ✓ |   | Seam sealing  |
|   | ✓ | Bumper overhaul   |
|   | ✓ | Aim headlamps (Additional Labor)  |
|   | ✓ | A/C receiver / dehydrator R&I (when required)   |
|   | ✓ | Evacuate and recharge A/C system (Additional Labor)   |
|   | ✓ | Refrigerant recovery (Additional Labor)   |
|   | ✓ | Hood release cable R&I  |
|   | ✓ | Specification labels R&I or replacement   |
|   | ✓ | Fuel vapor canister R&I   |
|   | ✓ | Antenna assembly R&I  |
|   | ✓ | Dash R&I  |
|   | ✓ | Horns R&I   |
|   | ✓ | Electronic and vacuum components R&I  |
|   | ✓ | Exhaust system R&I for access   |
|   | ✓ | Parking brake assembly R&I  |
|   | ✓ | Master cylinder R&I   |
|   | ✓ | Suspension overhaul   |
|   | ✓ | Bleeding brakes (Additional Labor)  |
|   | ✓ | Wheel alignment (Additional Labor)  |

|  |   |   |
|--|---|---|
|  | ✓ | Drain and replace oil and fluids                        |
|  | ✓ | Vacuum booster R&I                                      |
|  | ✓ | Wiring R&I  |
|  | ✓ | Trimming, repair, or modification of part               |
|  | ✓ | Corrosion protection                                    |
|  | ✓ | R&I of mouldings, emblems, nameplates and ornaments     |
|  | ✓ | R&I of non-standard equipment not identified as options |
|  | ✓ | Disassembly, cleaning, and reassembly of assemblies     |

**Section 4-3 Replacement & Recycled Operations**

**1/2 Front Body Recycled Section  
Inner Structure Unibody Vehicles**

Recycled panel replacement may or may not be recommended by the vehicle manufacturer.



**Important Reminder:**

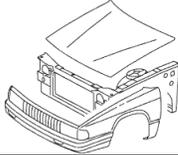
- Cut forward of strut tower; includes all inner structures as well as outer sheet metal.
- Cut at factory seams.
- Manufacturers recommend replacement of SRS components with OEM parts.
- This is considered a structural part of the vehicle. Replacing structural panels requires:
  - following specific OEM replacement procedures
  - using specified installation materials
  - returning the vehicle to OEM structural integrity for occupant safety

| Included Operations | Not Included Operations | Recycled Part Replacement Operations   |
|---------------------|-------------------------|--|
| ✓                   |                         | Front bumper R&I   |
| ✓                   |                         | Energy absorbers R&I   |
| ✓                   |                         | Valance panel R&I (when required)  |
| ✓                   |                         | Grille R&I (when required)   |
| ✓                   |                         | Headlamp assemblies R&I (when required)  |
| ✓                   |                         | Front end panel R&I  |
| ✓                   |                         | Side marker and parklamp R&I (when required)   |
| ✓                   |                         | Hood R&I   |
| ✓                   |                         | Battery and tray R&I (when required)   |
| ✓                   |                         | Cowl vent panel R&I (when required)  |
| ✓                   |                         | Fenders R&I  |
| ✓                   |                         | Attached bolted parts R&I  |
| ✓                   |                         | Radiator R&I   |
| ✓                   |                         | A/C condenser R&I, including A/C line disconnect / connect (if required), Line Cap (when required) |
| ✓                   |                         | Air inlet system (when required)   |
| ✓                   |                         | Raise and support vehicle  |

|   |   |   |
|---|---|---|
| ✓ |   | Front wheel R&I   |
| ✓ |   | Steering components R&I (when required)   |
| ✓ |   | Engine assembly R&I (rear wheel drive)  |
| ✓ |   | R&I engine and transaxle, suspension and steering assemblies, and cradle as a unit (front wheel drive)            |
| ✓ |   | Disconnect / connect battery  |
| ✓ |   | Disconnect / connect wiring harness for access  |
| ✓ |   | Detach and weld at manufacturer joint or seam in front of strut towers  |
| ✓ |   | Fabrication of sleeves (when required)  |
| ✓ |   | Application of weld-through primer (Welded areas)   |
| ✓ |   | Seam sealing  |
| ✓ |   | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware) |
|   | ✓ | Bumper overhaul   |
|   | ✓ | Aim headlamps (Additional Labor)  |
|   | ✓ | A/C receiver / dehydrator R&I (when required)   |
|   | ✓ | Evacuate and recharge A/C system (Additional Labor)   |
|   | ✓ | Refrigerant recovery (Additional Labor)   |
|   | ✓ | Hood release cable R&I  |
|   | ✓ | Specification labels R&I or replacement   |
|   | ✓ | Fuel vapor canister R&I   |
|   | ✓ | Antenna assembly R&I  |
|   | ✓ | Dash R&I  |
|   | ✓ | Horns R&I   |
|   | ✓ | Electronic and vacuum components R&I  |
|   | ✓ | Exhaust system R&I for access   |
|   | ✓ | Parking brake assembly R&I  |
|   | ✓ | Master cylinder R&I   |
|   | ✓ | Suspension R&I  |
|   | ✓ | Bleeding brakes (Additional Labor)  |
|   | ✓ | Wheel alignment (Additional Labor)  |
|   | ✓ | Drain and replace oil and fluids  |
|   | ✓ | Vacuum booster R&I  |
|   | ✓ | Wiring R&I  |
|   | ✓ | Trimming, repair, or modification of part   |
|   | ✓ | Corrosion protection  |
|   | ✓ | R&I of mouldings, emblems, nameplates and ornaments   |

|  |   |   |
|--|---|---|
|  | ✓ | R&I of non-standard equipment not identified as options |
|  | ✓ | Disassembly, cleaning, and reassembly of assemblies     |

### Section 4-3 Replacement & Recycled Operations

|  |   |
|--|---|
| <p><b>Front Body Recycled Section</b><br/> <b>Left / Right</b><br/> <b>Inner Structure Unibody Vehicles</b><br/>                 Recycled panel replacement may or may not be recommended by the vehicle manufacturer.</p> |  |
|--|---|

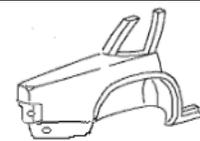
- Important Reminder:**
- Cut forward of one strut tower; includes inner and outer sheet metal.
  - Cut at factory seams.

| Included Operations | Not Included Operations | Recycled Part Replacement Operations  |
|---------------------|-------------------------|---|
| ✓                   |                         | Front bumper R&I  |
| ✓                   |                         | Energy absorbers R&I  |
| ✓                   |                         | Valance panel R&I (when required)   |
| ✓                   |                         | Grille R&I (when required)  |
| ✓                   |                         | Headlamp assemblies R&I (when required)   |
| ✓                   |                         | Front end panel R&I   |
| ✓                   |                         | Side marker lamps R&I (when required)   |
| ✓                   |                         | Parklamp assemblies R&I (when required)   |
| ✓                   |                         | Hood panel R&I  |
| ✓                   |                         | Battery and tray R&I (when required)  |
| ✓                   |                         | Cowl vent panel R&I (when required)   |
| ✓                   |                         | Fenders R&I   |
| ✓                   |                         | Attached bolted parts R&I   |
| ✓                   |                         | Radiator R&I  |
| ✓                   |                         | A/C condenser R&I, including A/C line disconnect / connect (if required), Line Cap (when required)  |
| ✓                   |                         | Air inlet system (when required)  |
| ✓                   |                         | Raise and support vehicle   |
| ✓                   |                         | Steering components R&I (when required)   |
| ✓                   |                         | Front wheel R&I   |
| ✓                   |                         | Engine assembly R&I (rear wheel drive)  |
| ✓                   |                         | R&I engine and transaxle, suspension, steering assemblies, and cradle as a unit (front wheel drive) |
| ✓                   |                         | Disconnect / connect battery  |
| ✓                   |                         | Disconnect / connect wiring harness for access  |
| ✓                   |                         | Detach and weld at manufacturer joint or seam in front of one strut tower                           |
| ✓                   |                         | Fabrication of sleeves (when required)  |

|   |   |   |
|---|---|---|
| ✓ |   | Application of weld-through primer (Welded areas)   |
| ✓ |   | Seam sealing  |
| ✓ |   | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware) |
|   | ✓ | Bumper overhaul   |
|   | ✓ | Aim headlamps (Additional Labor)  |
|   | ✓ | A/C receiver / dehydrator R&I (when required)   |
|   | ✓ | Evacuate and recharge A/C system (Additional Labor)   |
|   | ✓ | Refrigerant recovery (Additional Labor)   |
|   | ✓ | Hood release cable R&I  |
|   | ✓ | Dash R&I  |
|   | ✓ | Horns R&I   |
|   | ✓ | Electronic and vacuum components R&I  |
|   | ✓ | Exhaust system R&I for access   |
|   | ✓ | Parking brake assembly R&I  |
|   | ✓ | Master cylinder R&I   |
|   | ✓ | Suspension R&I  |
|   | ✓ | Bleeding brakes (Additional Labor)  |
|   | ✓ | Wheel alignment (Additional Labor)  |
|   | ✓ | Drain and replace oil and fluids  |
|   | ✓ | Vacuum booster R&I  |
|   | ✓ | Wiring R&I  |
|   | ✓ | Trimming, repair, or modification of part   |
|   | ✓ | Corrosion protection  |
|   | ✓ | R&I of mouldings, emblems, nameplates and ornaments   |
|   | ✓ | R&I of non-standard equipment not identified as options   |
|   | ✓ | Disassembly, cleaning, and reassembly of assemblies   |

**Quarter Panel Assembly  
Recycled Section**

Recycled panel replacement may or may not be recommended by the vehicle manufacturer.



**Important Reminder:**

- Cut at rocker panel through window opening and Rear Body panel (includes inner and outer sheet metal).
- Reveal mouldings that are mounted flush to stationary glass (e.g., Windshield, Back Glass, or Quarter Glass) are at risk of breakage when being removed.
- Stationary glass that is urethane bonded is considered a structural part of the vehicle. Replacing stationary glass requires:
  - following specific OEM replacement procedures
  - using specified installation materials

| <ul style="list-style-type: none"> <li>○ returning the vehicle to OEM structural integrity for occupant safety</li> <li>● This is considered a structural part of the vehicle. Replacing structural panels requires:             <ul style="list-style-type: none"> <li>○ following specific replacement procedures</li> <li>○ using specified installation materials</li> <li>○ returning the vehicle to OEM structural integrity for occupant safety</li> </ul> </li> </ul> |                         |   |
|---|-------------------------|---|
| Included Operations   | Not Included Operations | Recycled Part Replacement Operations  |
| ✓   |                         | Rear bumper R&I (when required)   |
| ✓   |                         | Rear bumper fillers R&I (when required)   |
| ✓   |                         | Rear lamps R&I  |
| ✓   |                         | All necessary trim panels R&I   |
| ✓   |                         | Sill plate R&I  |
| ✓   |                         | Middle/Rear seat R&I (when required)  |
| ✓   |                         | Loosen headliner (when required)  |
| ✓   |                         | Body fill labor (Welded areas)  |
| ✓   |                         | Airbag R&I (when required)  |
| ✓   |                         | Airbag sensor R&I (when required)   |
| ✓   |                         | Quarter glass R&I (stationary or flip out)  |
| ✓   |                         | Vinyl roof peel back  |
| ✓   |                         | Tailgate R&I (if attached to roof)  |
| ✓   |                         | Package tray trim R&I   |
| ✓   |                         | Deck lid R&I (when required)  |
| ✓   |                         | Back glass R&I  |
| ✓   |                         | Convertible top R&I   |
| ✓   |                         | Body weatherstrip pullback  |
| ✓   |                         | Carpet / insulation rollback  |
| ✓   |                         | Spoiler and flare R&I (OEM only)  |
| ✓   |                         | Raise and support vehicle   |
| ✓   |                         | Rear wheel R&I  |
| ✓   |                         | Deck lid or tailgate hydraulic rod R&I  |
| ✓   |                         | Cover interior to protect it during repair  |
| ✓   |                         | Disconnect / connect battery  |
| ✓   |                         | Disconnect / connect wiring harness for access  |
| ✓   |                         | Fabrication of sleeves (when required)  |
| ✓   |                         | Detach and weld at rocker panel, rear body panel,   |
| ✓   |                         | passenger compartment floor, and in quarter window opening (includes attached inner quarter sheet metal and wheelhouse) |
| ✓   |                         | Inner quarter and rear body panel   |
| ✓   |                         | Application of weld-through primer (Welded areas)   |

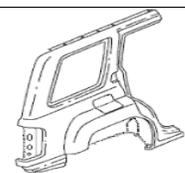
|   |   |   |
|---|---|---|
| ✓ |   | Dual action sand (Welded areas)   |
| ✓ |   | Application of guide coat (Welded areas)  |
| ✓ |   | Block sand (Welded areas)   |
| ✓ |   | Seam sealing  |
| ✓ |   | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware) |
| ✓ |   | Rocker panel moulding R&I (when required)   |
|   | ✓ | Body weatherstrip R&I   |
|   | ✓ | Roll down quarter glass R&I   |
|   | ✓ | Headliner R&I (Additional Labor)  |
|   | ✓ | Fuel tank R&I (Additional Labor)  |
|   | ✓ | Exhaust systems R&I for access  |
|   | ✓ | Bleed brakes (Additional Labor)   |
|   | ✓ | Brake lines R&I   |
|   | ✓ | Rear suspension R&I (Additional Labor)  |
|   | ✓ | Wheel alignment (Additional Labor)  |
|   | ✓ | Fuel door release cable R&I   |
|   | ✓ | Deck lid / tailgate release cable R&I   |
|   | ✓ | Deck lid hinges R&I   |
|   | ✓ | Rear compartment gutters  |
|   | ✓ | Antenna assembly R&I  |
|   | ✓ | Sunroof drain   |
|   | ✓ | Wiring harness R&I  |
|   | ✓ | Body insulation (e.g., foams, pads)   |
|   | ✓ | Corrosion protection  |
|   | ✓ | Trimming, repair, or modification of part   |
|   | ✓ | R&I of mouldings, emblems, nameplates and ornaments   |

### Section 4-3 Replacement & Recycled Operations

#### SUV / Van Bodyside Panel Assembly

##### Recycled Section

Recycled panel replacement may or may not be recommended by the vehicle manufacturer.



##### Important Reminder:

- Cut at rocker panel through window opening and Rear Body panel (includes inner and outer sheet metal)
- Reveal mouldings that are mounted flush to stationary glass (e.g., Windshield, Back Glass, or Quarter Glass) are at risk of breakage when being removed.
- Stationary glass that is urethane bonded is considered a structural part of the vehicle. Replacing stationary glass requires:
  - following specific OEM replacement procedures

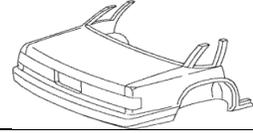
| <ul style="list-style-type: none"> <li>○ using specified installation materials</li> <li>○ returning the vehicle to OEM structural integrity for occupant safety</li> <li>● This is considered a structural part of the vehicle. Replacing structural panels requires:             <ul style="list-style-type: none"> <li>○ following specific replacement procedures</li> <li>○ using specified installation materials</li> <li>○ returning the vehicle to OEM structural integrity for occupant safety</li> </ul> </li> </ul> |                         |  |
|---|-------------------------|--|
| Included Operations   | Not Included Operations | Recycled Part Replacement Operations                                 |
| ✓   |                         | Back door assembly R&I or Tailgate hydraulic rod R&I (when required) |
| ✓   |                         | Body weatherstrip pullback   |
| ✓   |                         | Bodyside glass R&I   |
| ✓   |                         | Bodyside trim panel (except full size van)                           |
| ✓   |                         | Carpet / insulation rollback (SUV /Mini Van only)                    |
| ✓   |                         | Cover to protect interior during repair                              |
| ✓   |                         | Disconnect / connect battery   |
| ✓   |                         | Disconnect / connect wiring harness for access                       |
|   | ✓                       | Door striker R&I   |
| ✓   |                         | Driver seat assembly R&I (without sliding door)                      |
| ✓   |                         | Front sill plate R&I (without sliding door)                          |
|   | ✓                       | Fuel filler door R&I   |
|   | ✓                       | Fuel filler pocket R&I   |
|   | ✓                       | Mud guard R&I (when required)  |
| ✓   |                         | Rocker panel moulding R&I (when required)                            |
| ✓   |                         | Raise and support vehicle  |
| ✓   |                         | Rear bumper R&I (when required)                                      |
| ✓   |                         | Rear sill plate R&I (with sliding door)                              |
| ✓   |                         | Rear wheel R&I   |
| ✓   |                         | Running board panel R&I (OEM only)                                   |
| ✓   |                         | Seam sealing   |
| ✓   |                         | Seat belt anchor R&I   |
| ✓   |                         | Side door R&I  |
|   | ✓                       | Sliding door striker R&I   |
|   | ✓                       | Sliding door track shield R&I  |
| ✓   |                         | Taillamp assembly R&I (when required)                                |
| ✓   |                         | Application of weld-through primer (Welded areas)                    |
| ✓   |                         | Body fill labor (Welded areas)                                       |
| ✓   |                         | Block sand (Welded areas)  |
| ✓   |                         | Application of guide coat (Welded areas)                             |
| ✓   |                         | Dual action sand (Welded areas)                                      |

|   |   |   |
|---|---|---|
| ✓ |   | Spare tire and jack R&I   |
| ✓ |   | Reasonable alignment  |
| ✓ |   | Airbag R&I (when required)  |
| ✓ |   | Airbag sensor R&I (when required)   |
| ✓ |   | Fabrication of sleeves (when required)  |
| ✓ |   | Middle/Rear seat R&I (when required except full size vans)  |
| ✓ |   | Detach and weld at roof panel, rear door pillar, rocker panel, outer wheel house panel, door opening frame, and lock pillar |
|   | ✓ | Body weatherstrip R&I   |
|   | ✓ | Corrosion protection  |
|   | ✓ | Fuel tank R&I   |
|   | ✓ | Headliner R&I   |
|   | ✓ | Running board panel R&I (non-OEM)   |
|   | ✓ | A/C evacuation / recharge (Additional Labor)  |
|   | ✓ | Trimming, repair or modification of part  |
|   | ✓ | R&I of mouldings, emblems, nameplates and ornaments   |
|   | ✓ | R&I of non-standard equipment not identified as options   |
|   | ✓ | Disassembly, cleaning, and reassembly of assemblies   |

## Section 4-3 Replacement & Recycled Operations

### Rear Body Recycled Section

Recycled panel replacement may or may not be recommended by the vehicle manufacturer.



#### Important Reminder:

- Cut at rocker panel section, across floor, and under rear seat in quarter window opening (includes inner and outer sheet metal as well as floor pan).
- Reveal mouldings that are mounted flush to stationary glass (e.g., Windshield, Back Glass, or Quarter Glass) are at risk of breakage when being removed.
- Stationary glass that is urethane bonded is considered a structural part of the vehicle. Replacing stationary glass requires:
  - following specific OEM replacement procedures
  - using specified installation materials
  - returning the vehicle to OEM structural integrity for occupant safety
- This is considered a structural part of the vehicle. Replacing structural panels requires:
  - following specific OEM replacement procedures
  - using specified installation materials
  - returning the vehicle to OEM structural integrity for occupant safety

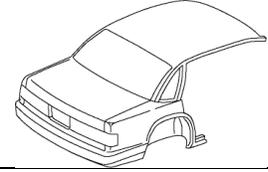
| Included Operations | Not Included Operations | Recycled Part Replacement Operations  |
|---------------------|-------------------------|---|
| ✓                   |                         | All necessary trim panels R&I   |
| ✓                   |                         | Lock cylinder R&I (when required)   |
| ✓                   |                         | Sill plate R&I  |
| ✓                   |                         | Front seat R&I (when required)  |
| ✓                   |                         | Rear seat R&I (when required)   |
| ✓                   |                         | Rocker panel moulding R&I (when required)   |
| ✓                   |                         | Loosen headliner (when required)  |
| ✓                   |                         | Airbag R&I (when required)  |
| ✓                   |                         | Airbag sensor R&I (when required)   |
| ✓                   |                         | Convertible top cover R&I   |
| ✓                   |                         | Vinyl roof peel back  |
| ✓                   |                         | Back glass R&I  |
| ✓                   |                         | Stationary and flip-out quarter glass R&I   |
| ✓                   |                         | Tailgate R&I (if attached to roof)  |
| ✓                   |                         | Carpet / insulation rollback  |
| ✓                   |                         | Body weatherstrip pullback  |
| ✓                   |                         | Raise and support vehicle   |
| ✓                   |                         | Rear wheel R&I  |
| ✓                   |                         | Disconnect / connect battery  |
| ✓                   |                         | Disconnect / connect wiring harness for access  |
| ✓                   |                         | Detach and weld at roof panel, rocker panels, across floor pan, and through rear side rails |

|   |   |   |
|---|---|---|
| ✓ |   | Fabrication of sleeves (when required)  |
| ✓ |   | Body fill labor (Welded areas)  |
| ✓ |   | Application of weld-through primer (Welded areas)   |
| ✓ |   | Dual action sand (Welded areas)   |
| ✓ |   | Application of guide coat (Welded areas)  |
| ✓ |   | Block sand (Welded areas)   |
| ✓ |   | Seam sealing  |
| ✓ |   | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware) |
|   | ✓ | Rear bumper R&I   |
|   | ✓ | Lock cylinder coding (Manual Entry M73 is available)  |
|   | ✓ | Specification labels R&I or replacement   |
|   | ✓ | Body weatherstrip R&I   |
|   | ✓ | Roll down quarter glass R&I   |
|   | ✓ | Headliner R&I (Additional Labor)  |
|   | ✓ | Fuel door release cable R&I   |
|   | ✓ | Deck lid / tailgate release cable R&I   |
|   | ✓ | Fuel lines R&I  |
|   | ✓ | Fuel tank R&I (Additional Labor)  |
|   | ✓ | Exhaust systems R&I for access  |
|   | ✓ | Bleed brakes (Additional Labor)   |
|   | ✓ | Brake lines R&I   |
|   | ✓ | Rear suspension R&I (Additional Labor)  |
|   | ✓ | Wheel alignment (Additional Labor)  |
|   | ✓ | Antenna assembly R&I  |
|   | ✓ | Rocker panel mouldings  |
|   | ✓ | Trimming, repair, or modification of part   |
|   | ✓ | Wiring harness R&I  |
|   | ✓ | Body insulation (e.g., foams, pads)   |
|   | ✓ | Corrosion protection  |
|   | ✓ | Seat belt R&I   |
|   | ✓ | R&I of mouldings, emblems, nameplates and ornaments   |
|   | ✓ | R&I of non-standard equipment not identified as options   |
|   | ✓ | Disassembly, cleaning, and reassembly of assemblies   |

### Section 4-3 Replacement & Recycled Operations

#### Rear Body with Roof Recycled Section

Recycled panel replacement may or may not be recommended by the vehicle manufacturer.



#### Important Reminder:

- Cut at windshield opening, rocker panel, and across floor under rear seat.
- Section includes all inner and outer sheet metal.
- Reveal mouldings that are mounted flush to stationary glass (e.g., Windshield, Back Glass, or Quarter Glass) are at risk of breakage when being removed.
- Stationary glass that is urethane bonded is considered a structural part of the vehicle. Replacing stationary glass requires:
  - following specific OEM replacement procedures
  - using specified installation materials
  - returning the vehicle to OEM structural integrity for occupant safety
- This is considered a structural part of the vehicle. Replacing structural panels requires:
  - following specific OEM replacement procedures
  - using specified installation materials
  - returning the vehicle to OEM structural integrity for occupant safety

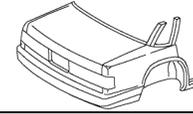
| Included Operations | Not Included Operations | Recycled Part Replacement Operations  |
|---------------------|-------------------------|---|
| ✓                   |                         | Windshield R&I  |
| ✓                   |                         | Lock cylinder R&I (when required)   |
| ✓                   |                         | All necessary trim panels R&I   |
| ✓                   |                         | Sill plate R&I  |
| ✓                   |                         | Front seat R&I  |
| ✓                   |                         | Rear seat R&I   |
| ✓                   |                         | Urethane quarter glass R&I  |
| ✓                   |                         | Rocker panel moulding R&I (when required)   |
| ✓                   |                         | Airbag R&I (when required)  |
| ✓                   |                         | Airbag sensor R&I (when required)   |
| ✓                   |                         | Carpet / insulation rollback  |
| ✓                   |                         | Body weatherstrip pullback  |
| ✓                   |                         | Raise and support vehicle   |
| ✓                   |                         | Rear wheel R&I  |
| ✓                   |                         | Disconnect / connect battery  |
| ✓                   |                         | Disconnect / connect wiring harness for access  |
| ✓                   |                         | Detach and weld at rocker panel, center pillar, hinge pillar, across floor pan, and through rear side rails |
| ✓                   |                         | Fabrication of sleeves (when required)  |
| ✓                   |                         | Body fill labor (Welded areas)  |
| ✓                   |                         | Application of weld-through primer (Welded areas)   |

|   |   |   |
|---|---|---|
| ✓ |   | Dual action sand (Welded areas)   |
| ✓ |   | Application of guide coat (Welded areas)  |
| ✓ |   | Block sand (Welded areas)   |
| ✓ |   | Seam sealing  |
| ✓ |   | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware) |
|   | ✓ | Rear bumper R&I   |
|   | ✓ | Lock cylinder coding (Manual Entry M73 is available)  |
|   | ✓ | Specification labels R&I or replacement   |
|   | ✓ | Body weatherstrip R&I   |
|   | ✓ | Stationary quarter glass (weatherstrip mounted) R&I   |
|   | ✓ | Flip out quarter glass R&I  |
|   | ✓ | Headliner R&I   |
|   | ✓ | Back glass R&I  |
|   | ✓ | Fuel door release cable R&I   |
|   | ✓ | Deck lid / tailgate release cable R&I   |
|   | ✓ | Fuel lines R&I  |
|   | ✓ | Fuel tank R&I (Additional Labor)  |
|   | ✓ | Exhaust systems R&I for access  |
|   | ✓ | Bleed brakes (Additional Labor)   |
|   | ✓ | Brake lines R&I   |
|   | ✓ | Wheel alignment (Additional Labor)  |
|   | ✓ | Antenna assembly R&I  |
|   | ✓ | Transfer moon / sun roof parts  |
|   | ✓ | Vinyl roof install  |
|   | ✓ | Rear suspension R&I (Additional Labor)  |
|   | ✓ | Trimming, repair, or modification of part   |
|   | ✓ | Wiring harness R&I  |
|   | ✓ | Body insulation (e.g., foams, pads)   |
|   | ✓ | Corrosion protection  |
|   | ✓ | Seat belt R&I   |
|   | ✓ | Energy absorbers R&I  |
|   | ✓ | R&I of mouldings, emblems, nameplates and ornaments   |
|   | ✓ | R&I of non-standard equipment not identified as options   |
|   | ✓ | Disassembly, cleaning, and reassembly of assemblies   |

## Section 4-3 Replacement & Recycled Operations

### 3/4 Rear Body Recycled Section

Recycled panel replacement may or may not be recommended by the vehicle manufacturer.



#### Important Reminder:

- Cut at rocker panel and where opposite quarter meets Rear Body panel (includes inner and outer sheet metal).
- **Note:** *Does not include floor.*
- Reveal mouldings that are mounted flush to stationary glass (e.g., Windshield, Back Glass, or Quarter Glass) are at risk of breakage when being removed.
- Stationary glass that is urethane bonded is considered a structural part of the vehicle. Replacing stationary glass requires:
  - following specific replacement procedures
  - using specified installation materials
  - returning the vehicle to OEM structural integrity for occupant safety
- This is considered a structural part of the vehicle. Replacing structural panels requires:
  - following specific replacement procedures
  - using specified installation materials
  - returning the vehicle to OEM structural integrity for occupant safety

| Included Operations | Not Included Operations | Recycled Part Replacement Operations       |
|---------------------|-------------------------|--|
| ✓                   |                         | Rear bumper fillers R&I (when required)    |
| ✓                   |                         | Rear lamps R&I                             |
| ✓                   |                         | All necessary trim panels R&I              |
| ✓                   |                         | Sill plate R&I                             |
| ✓                   |                         | Rear seat R&I                              |
| ✓                   |                         | Loosen headliner (when required)           |
| ✓                   |                         | Body fill labor (Welded areas)             |
| ✓                   |                         | Airbag R&I (when required)                 |
| ✓                   |                         | Airbag sensor R&I (when required)          |
| ✓                   |                         | Quarter glass R&I (stationary or flip out) |
| ✓                   |                         | Vinyl roof peel back                       |
| ✓                   |                         | Tailgate R&I (if attached to roof)         |
| ✓                   |                         | Package tray trim R&I                      |
| ✓                   |                         | Deck lid R&I                               |
| ✓                   |                         | Back glass R&I                             |
| ✓                   |                         | Convertible top R&I                        |
| ✓                   |                         | Body weatherstrip pullback                 |
| ✓                   |                         | Carpet / insulation rollback               |
| ✓                   |                         | Spoiler and flare R&I (OEM only)           |
| ✓                   |                         | Raise and support vehicle                  |
| ✓                   |                         | Rear wheel R&I                             |
| ✓                   |                         | Lock cylinder R&I (when required)          |

|   |   |  |
|---|---|--|
| ✓ |   | Cover interior to protect it during repair   |
| ✓ |   | Disconnect / connect battery   |
| ✓ |   | Disconnect / connect wiring harness for access   |
| ✓ |   | Fabrication of sleeves (when required)   |
| ✓ |   | Detach and weld at roof panel, rocker panels, floor pan, rear side rails, and where rear body meets opposite quarter |
| ✓ |   | Inner quarter and rear body panel  |
| ✓ |   | Application of weld-through primer (Welded areas)  |
| ✓ |   | Dual action sand (Welded areas)  |
| ✓ |   | Application of guide coat (Welded areas)   |
| ✓ |   | Block sand (Welded areas)  |
| ✓ |   | Seam sealing   |
| ✓ |   | Reasonable adjustment and alignment (as defined by the manufacturer using conventional fasteners and/or hardware)    |
| ✓ |   | Rear bumper R&I (when required)  |
| ✓ |   | Rocker panel moulding R&I (when required)  |
|   | ✓ | Lock cylinder coding (Manual Entry M73 is available)   |
|   | ✓ | Specification labels R&I or replacement  |
|   | ✓ | Body weatherstrip R&I  |
|   | ✓ | Roll down quarter glass R&I  |
|   | ✓ | Headliner R&I (Additional Labor)   |
|   | ✓ | Fuel tank R&I (Additional Labor)   |
|   | ✓ | Exhaust systems R&I for access   |
|   | ✓ | Bleed brakes (Additional Labor)  |
|   | ✓ | Brake lines R&I  |
|   | ✓ | Rear suspension R&I (Additional Labor)   |
|   | ✓ | Wheel alignment (Additional Labor)   |
|   | ✓ | Fuel door release cable R&I  |
|   | ✓ | Deck lid / tailgate release cable R&I  |
|   | ✓ | Deck lid hinges R&I  |
|   | ✓ | Deck lid or tailgate hydraulic rod R&I   |
|   | ✓ | Sunroof drain  |
|   | ✓ | Wiring harness R&I   |
|   | ✓ | Body insulation (e.g., foams, pads)  |
|   | ✓ | Corrosion protection   |
|   | ✓ | Trimming, repair, or modification of part  |
|   | ✓ | R&I of mouldings, emblems, nameplates and ornaments  |

|  |   |   |
|--|---|---|
|  | ✓ | R&I of non-standard equipment not identified as options |
|  | ✓ | Disassembly, cleaning, and reassembly of assemblies     |

**Section 4-3 Replacement & Recycled Operations**

| <b>Mouldings / Nameplates</b>   |                         |  |
|---|-------------------------|--|
| <b>Important Reminder:</b><br>Adhesive mouldings may not be reusable. |                         |  |
| Included Operations   | Not Included Operations | Operations                                 |
| ✓   |                         | R&I of mouldings / nameplates              |
|   | ✓                       | Drill time (Manual Entry M61 is available) |
|   | ✓                       | Cleanup of moulding and panel              |
|   | ✓                       | Replacement of adhesive                    |
|   | ✓                       | Trimming, repair, or modification of part  |

| <b>OEM Stripes, Overlays, Decals and Tape</b> |                         |   |
|---|-------------------------|---|
| Included Operations                           | Not Included Operations | Operations  |
| ✓   |                         | Remove (if attaching panel is replaced, labor is to install only) |
| ✓   |                         | Install   |
|   | ✓                       | R&I of mouldings, emblems, nameplates and ornaments               |
|   | ✓                       | Adhesive cleanup  |
|   | ✓                       | Trimming, repair, or modification of part                         |

## Section 4-4 Refinish Guidelines Index

## Refinish Guidelines Index

## Guidelines

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### Refinish Guidelines

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This section reflects the up-to-date findings of our data collection from a cross section of repair facilities across North America, as well as our conclusions and recommendations on the most significant areas in the refinish process. It is not our intention to suggest that the observations, conclusions, or recommendations apply with 100% accuracy to every refinish situation, but rather that Audatex reflects the findings of our comprehensive study coupled with our ongoing efforts.

#### Productivity

Audatex has found that normal non-productive tasks in the refinish process represent 17% of the total refinish time. This is within the standard for most industries and is a result of the following examples; break times, time devoted to human needs such as rest room breaks, getting coffee, or water, and normal work interruptions such as taking telephone calls, etc.

#### Refinish

Based upon our observations, and the input of our Inter-Industry Client Council, we have identified several discrete application processes, conditions, and operations that are very important to the refinish process. To return the vehicle to pre-accident function and appearance, each of these areas should be understood, considered, and evaluated for potential inclusion in the estimating process.

The following factors have been found not to significantly affect refinish labor:

- Paint Type (Enamel and Urethane): Our studies showed that even though there are specific differences attributed to various steps within each paint type, there were no significant differences displayed in overall refinish labor that could be attributed to paint type.
- Paint Manufacturers: Our study data reflected no significant differences in overall refinish labor that could be attributed to paint material manufacturers.

## Section 4-4 Refinish Guidelines

**Automated Refinish Formulas:** Based on the results of our Refinish Study, Audatex has automated our formulas for two-stage refinish, three-stage refinish, two-tone refinish, blend refinish and chipguard. The calculations are explained below. The remainder of these topics is important to the refinish process and can either be assigned a supportable average time or considered in the estimating process by some other means.

**Paint Materials:** Calculation of paint materials cost (Rate Code 5) is by multiplying a user-provided hourly rate by refinish hours after overlap. The user should bear in mind that this formula is used in all refinish situations including two-stage, two-tone, three-stage, chipguard and blend refinish. Additionally it is used when any threshold values are reached and can be adjusted if necessary.

**Paint Material and Costs:** Audatex does not define paint material within the estimating system. Included paint material and associated costs are calculated automatically based on total net refinish labor multiplied by a user-defined paint material rate supplied by the estimate preparers. Materials (i.e. flex additives, sand paper, tape, bag, etc.) need to be defined by the estimate preparer during the estimate preparation process.

### Quick Reference for Audatex's' Two-stage Refinish Option

| Features   | Two-Stage Exterior      | Two-Stage Exterior, User-defined | Two-Stage Interior  |
|--|-------------------------|----------------------------------|---|
| Can be used with other paint options                         | Yes: two-stage interior | Yes: two-stage interior          | Yes: two-stage exterior or two-stage exterior, user-defined |
| Can be used alone (without other paint options)              | Yes                     | Yes                              | No  |
| Includes 0.6 hour for setup                                  | Yes                     | Yes                              | No  |
| Adds 20% of Audatex refinish labor                           | Yes                     | Yes                              | Yes   |
| Includes exterior surfaces only                              | Yes                     | Yes                              | No: edges, jambs, interior panels, & undersides only        |
| Calculates with pre-stored Audatex refinish hours only       | Yes                     | Yes                              | Yes   |
| Calculates with user (manually) entered hours                | Yes                     | Yes                              | Yes   |
| Calculates two-stage after overlap                           | Yes                     | Yes                              | Yes   |
| Includes two-stage time with panel refinish time on estimate | Yes                     | Yes                              | Yes   |
| Includes a threshold of 2.5 hours, exterior panels only      | Yes                     | No                               | No  |
| Threshold applies to flexible panels                         | No                      | No                               | No  |
| Threshold applies to edges, jambs and undersides             | No                      | No                               | No  |
| Threshold applies to recycled assemblies                     | No                      | No                               | No  |
| Threshold applies to all group refinish operations           | Yes                     | Yes                              | No  |
| User-defined threshold                                       | No                      | Yes: when defined                | No  |
| Produces a message at the bottom of the estimate             | Yes                     | Yes                              | Yes   |

|   |     |     |     |
|---|-----|-----|-----|
| Displays with other options on estimate | Yes | Yes | Yes |
|---|-----|-----|-----|

## Section 4-4 Refinish Guidelines

**Single-stage:** Audatex single-stage refinish labor is currently developed so that it is unique to each panel. The study data confirms this as the most accurate and reliable method of refinish labor determination, consistent with current industry standards.

**Two-stage:** Two-stage is the application of a basecoat or color coat followed by the application of a clear coat as recommended by the paint manufacturer.

Because 95% of all refinish operations in the United States are performed using a two-stage process, Audatex defaults to two-stage refinish for all vehicles. This applies to both exterior and interior surfaces. The user may change these options to reflect the appropriate repair process.

Audatex's single-stage refinish times provide a consistent, reliable, and accurate base upon which to calculate time for the two-stage process.

### Audatex's two-stage formula is:

- Set-up time of 0.6 hours with the selection of the first refinished panel, plus 20% of Audatex estimate refinish labor.

Audatex provides two options for calculations of two-stage exterior refinish and one for interior surfaces:

- Two-stage exterior
- Two-stage exterior user-defined
- Two-stage interior

**Note:** Due to paint manufacturers' recommendations, user-entered refinish time will have two-stage calculated based on the full Audatex panel refinish time when two-stage is selected as an option.

**Two-stage Exterior:** (Exterior surface time for all panels; 2.5-hour threshold on rigid panels only. See [Exclusions to Threshold](#)).

Two-stage exterior provides two-stage time for all exterior surfaces including flexible panels (see [Exclusions to Threshold](#), Two-stage Exterior). This option does not provide time for edges, jambs, undersides, or interior panels.

- Adds 0.6 for setup to the first major panel selected
- Adds 20% to each panel for two-stage
- Calculates two-stage after overlap consideration
- Includes two-stage time with panel refinish time
- Displays with other options on the estimate
- Includes a threshold of 2.5 hours for rigid, exterior panel surface refinish time only. This threshold does not apply to flexible panels, interior surfaces or recycled assemblies operations (see [Exclusions to Threshold](#), Two-stage Exterior). It does apply to all group refinish operations.

**Note:** When the threshold has been reached, the remaining damage entries for rigid, exterior panels will receive no additional time for two-stage with this option. If the threshold is reached in the middle of a damage entry, that panel time will be increased by the remaining amount needed to achieve the 2.5 hours. When the 2.5-hour threshold is reached, the following message appears at the bottom of the estimate:

"Estimate calculated using the 2.5 hour exterior threshold for two-stage refinish of non-flex, exterior surfaces"

### Exclusions to Threshold, Two-stage Exterior

The threshold for two-stage exterior does not apply to flexible panels (for example, bumper covers), or panels that include a combination of exterior and interior surfaces (for example, bodyside assemblies) or recycled group assemblies (assemblies that contain multiple part types e.g. front sections). It also does

not apply to interior surfaces. It does apply to group refinish operations. Therefore, when two-stage exterior is selected, the two-stage exterior times provided may exceed the threshold.

## Section 4-4 Refinish Guidelines

User-overridden values: Calculates two-stage based on the Audatex panel time for all user-entered values. When the user overrides a refinish time, the user supplies the value for the color coat. Audatex will provide time to clear coat the entire panel based on the pre-stored surface refinish time.

### **Continuous Clear**

***Continuous Clear is defined as the application of clear coat to an undamaged adjacent panel when no breaking point exists between panels.***

***As a user defined entry, a Continuous Clear labor allowance is based on the estimate preparer's judgment, expertise, and consideration of the unique requirements of each repair. Entered in the Blend Refinish Labor Field, the adjusted time includes all necessary operations such as prep sanding, pre-cleaning and masking, along with mixing of materials, application of clear, flash, and final steps/cleanup.***

***When continuous clear is applied, the labor allowance includes the application of clear coat to the entire adjacent panel.***

### **Two-stage Exterior, User-defined**

Provides two-stage time for exterior surfaces only, including flexible panels. This option does not provide time for edges, jambs, undersides, or interior panels.

- Calculates two-stage after overlap consideration
- Adds 0.6 for setup to the first major panel selected
- Adds 20% to each panel for two-stage
- Displays two-stage time with panel refinish time
- Provides the capability to establish a user-defined threshold that applies to rigid exterior panels

**Note:** *Current software versions provide exterior surface panel time for all panels. User-defined threshold applies to rigid panels only. When the threshold has been reached, the following message appears at the bottom of the estimate:*

- "User-defined two-stage exterior threshold of 'x.x' hours was calculated in this estimate."

### **Exclusions to Threshold, Two-stage Exterior, User-defined**

The threshold for two-stage exterior user-defined does not apply to flexible panels (for example, bumper covers); panels that include a combination of exterior and interior surfaces (for example, bodyside assemblies), or recycled group assemblies. It also does not apply to interior surfaces. It does apply to group refinish operations. Therefore, when two-stage exterior, user-defined is selected, the two-stage exterior times provided may exceed the threshold.

**Note:** *When the threshold has been reached, the remaining damage entries will receive no additional time for two-stage exterior, user-defined. If the threshold is reached in the middle of a damage entry, that panel time will be increased by the remaining amount needed to achieve the user-defined threshold.*

User-overridden values: Calculates two-stage based on the Audatex panel time for all user-entered values. When the user overrides a refinish time, the user supplies the value for the color coat. Audatex will provide time to clear coat the entire panel based on the pre-stored surface refinish time.

**Two-stage Interior**

- Provides 20% additional refinish time for two-stage of edges, jambs, undersides and interior panels (not including trim) when selected
- Does not include additional time for setup
- Does not contain a threshold time allotment
- Does not apply to the 2.5 hour threshold for two-stage exterior
- User-defined threshold will not apply when used in conjunction with two-stage exterior, user-defined
- Produces a message at the bottom of the estimate explaining the two-stage calculation on the estimate
- Prints with other options on the estimate.

**Exterior and Interior Surfaces**

Two-stage provides time both for exterior and interior surfaces including edges, jambs, and undersides. Two-stage interior must be selected in conjunction with two-stage exterior or two-stage exterior, user-defined.

The Audatex two-stage formula includes time to perform the following operations:

- Cover the car
- Tack wipe
- Gather materials
- Mix and apply clear coat

**Section 4-4 Refinish Guidelines**

- Clean-up

**Three-stage**

Three-stage is the application of a base or color coat, a pearlescent or mica coat, and a clear coat as recommended by the paint manufacturer.

Audatex's single-stage refinish times provide a consistent, reliable, and accurate base upon which to add time for the three-stage process.

Audatex's Three-stage formula is:

- Setup time of 1.0 hour upon selection of the first major panel, plus 35% of Audatex estimate refinish labor.

Provides three-stage time for all exterior surfaces only, including flexible panels. This option does not provide time for edges, jambs, undersides, or interior panels.

- Calculates three-stage after overlap consideration
- Adds 1.0 for setup to the first major panel selected
- Adds 35% to each panel for three-stage
- Displays three-stage time with panel refinish time
- Provides the capability to establish a user-defined threshold that applies to rigid exterior panels only
- In addition to all selected refinish times, the user-defined threshold applies to individual recycled operations, all recycled assemblies and all group refinish operations

**Exclusions to Threshold, Three-stage Exterior, User-defined**

The threshold for three-stage exterior, user-defined does not apply to flexible panels (i.e., bumper covers), or panels that include a combination of exterior and interior surfaces (for example, bodyside assemblies) or recycled group assemblies. It also does not apply to three-stage interior surfaces. It does apply to group refinish operations. Therefore, when three-stage exterior is selected, the two-stage exterior times provided may exceed the threshold.

**Note:** *When the threshold has been reached, the remaining damage entries will receive no additional time for three-stage. If the threshold is reached in the middle of damage entry, that panel time will be increased by the remaining amount needed to achieve the user-defined threshold. When the threshold is reached, the following message appears at the bottom of the estimate.*

- User-defined three-stage exterior threshold of 'x.x' hours was calculated in this estimate.
- For user-entered refinish values, Audatex will provide an additional 20% to clear coat the entire panel. The user supplies the value for the color coat and the mica coat.

### **Three-stage Interior Surfaces**

Provides 35% additional refinish time to three-stage edges, jambs, undersides and interior panels (not including trim) when selected.

- Does not include additional time for setup
- Does not contain a threshold time allotment
- User-defined threshold will not apply when used in conjunction with three-stage exterior surfaces
- Prints with other options on the estimate

## Section 4-4 Refinish Guidelines

### Exterior and Interior Surfaces

Three-stage provides time both for exterior and interior surfaces including edges, jambs, and undersides. Three-stage interior surfaces must be selected in conjunction with three-stage exterior. To provide time for three-stage of exterior surfaces and two-stage of interior surfaces, both options must be selected.

User-overridden values: For user-entered refinish values, Audatex will provide an additional 20% to clear coat the entire panel. The user supplies the value for the color coat and the mica coat.

### Four-stage

Some vehicle manufacturers occasionally use a four-stage refinish process. At the manufacturer level, four-stage refinish is the same process as three-stage with an additional clear coat between the base and mica coat. This does not need to be duplicated in the repair process. When these vehicles are being repaired, the three-stage process applies.

### Two-Tone

Audatex's single-stage refinish times provide a consistent, reliable, and accurate base upon which to add time for the two-tone process

Audatex's two-tone formula is:

- Setup time of 0.4 estimate hours upon selection of the first two-tone panel, plus 30% of Audatex estimate refinish labor per panel selected. Two-tone is automated in the Audatex system and can be selected as an operation on a panel-by-panel basis.

### Chipguard

The application of chipguard material to the lower portions of panels (up to 8" of protection) is automated in the Audatex system and can be selected on a panel-by-panel basis.

Audatex's chipguard formula is:

- 0.3 for the first panel and 0.2 per each additional panel.

**Note:** *This formula can be used to determine time to apply chipguard material only, and does not account for texturing or finish matching of any kind. Today's vehicles often require exact-match texturing in the chipguard process. These cases are not addressed by this calculation and must be considered individually at time of inspection.*

### Blending

Blending is defined as the application of color to a portion of an undamaged adjacent panel for the sole purpose of facilitating the appearance of color match into the area. When blending is performed in a two- or three-stage refinish system, the same definition applies to the process and includes the application of clear coat to the entire blended panel.

**Note:** *I-CAR recommends preparing and planning to blend before the work begins. This means that blending should be planned for in all phases of refinish, from tinting to preparation of surfaces. Following this recommendation will ensure that when the decision is made to blend, the preparation work is already complete. (For additional information, see I-CAR Finish Matching, Module 2, and Topic 3.) Blending into an undamaged/unreplaced adjacent panel to facilitate color match is automated in the Audatex system and can be selected on a panel-by-panel basis.*

Audatex's blend formula is:

- 50% of Audatex estimate refinish labor after overlap consideration, including two-stage or three-stage allowances, if applicable for the panel to be blended. This provides time to apply clear coat to the entire panel. Remember that all overlap is still considered when refinish labor is overridden.

- This excludes R&I stripes, mouldings and special masking for two-tone, when required, unless two-tone is also selected.

### Refinish within Panel Boundaries

Refinish within panel boundaries is defined as the process of applying paint and clear coat to the surface of a repaired panel for the sole purpose of facilitating the appearance of color match within the confines of the panel.

**Note:** *The Audatex blend formula does not apply to this operation.*

**When the estimator enters a judgment time for refinish labor, the estimator also determines the included operations. Operations that might be considered in the repair refinish time include any steps required to bring the panel to the condition of a new, undamaged panel. This may include feather edge, blow off and clean, mask to prime, tack off, mix etch primer, prime bare metal, mix and apply primer filler, guide coat application, unmask as required and block sand. Panel scuff to facilitate application of clear may also be considered for two- or three-stage refinish.**

In the Audatex system, there are two ways to include the time to perform this refinish operation in an estimate:

1. The preferred method provided by Audatex is a Manual Entry. Using this method will not remove adjacent panel/non-adjacent panel overlap. This labor will also be used in paint materials calculations. A manual entry for this operation may be entered along with the desired value, or the Standard Manual Entry "M10 Paint As Required" may be used.
2. The second method is to override the prestored labor to the desired time.  
It is important to keep in mind when using the method that all adjacent panel and nonadjacent panel overlap will still be considered in an estimate when the panel being painted is on a lower guide number. If this method is used, and overlap is not applicable, any overlap deducted by the system should be manually included in the estimated time for the spot painting. Non-adjacent panel overlap time is 0.2 and adjacent panel overlap time is 0.4.

Therefore, when using the override method and non-adjacent panel overlap applies, add 0.2 to the spot paint time. When using the override method and adjacent panel overlap applies, add 0.4 to the refinish operation.

### Color Tint

Audatex's two stage setup refinish labor includes time for standard tint. Standard tint is defined as the initial mix, check, one tint cycle, and check.

Audatex's studies revealed instances where additional time was required for the tinting process. The range of this additional time was commonly between 0.1 and 1.0 hours with an average of 0.5 hours per estimate per color.

The appearance of color match can be difficult enough to require both color tint (tinting to adjust the color) and blending. I-CAR Finish Matching (Module 2, Topic 3) recommends planning and preparing for blending before the work begins. Per I-CAR, tinting should be done only to achieve a blendable match.

### Color Sand and Buff

This process, which may or may not be required, is defined as wet sanding the entire panel by compound buffing and mechanical or hand polishing. Color sand and buff is further defined as all of the above steps performed to the finished surface for any reason, plus cleanup.

Color sand and buff can be estimated at:

- 30% of Audatex single-stage refinish labor (not including final wash).

### Replaced Panel Refinish

Current Audatex refinish labor is based on the use of new and undamaged panels. Additional steps or processes that may be required should be considered during estimate preparation.

## Section 4-4 Refinish Guidelines

### Repaired Panel Refinish

When a repaired panel is being refinished, the estimator provides time for the repair of the panel. The estimator also determines included operations.

When Audatex refinish labor is used for repaired panels, Audatex refinish times assume that the panel has been returned to the condition of a new, undamaged OEM panel or equivalent.

When the estimator enters a judgment time for refinish labor, the estimator also determines the included operations. Operations that might be considered in the repair refinish time include any steps required to bring the panel to the condition of a new, undamaged panel. This may include feather edge, blow off and clean, mask to prime, tack off, mix etch primer, prime bare metal, mix and apply primer filler, guide coat application, unmask as required, and block sand. Panel scuff to facilitate application of clear may also be considered for two- or three-stage refinish.

### Feather / Prime / Block

Audatex recognizes that Feather/Prime/Block are required operations when replacing welded-on panels. Time to perform this operation is included in the Audatex time for welded panel replacement in the seamed areas, to bring the panels to the condition of a new, undamaged panel for the purpose of refinish. Although the time is included, Audatex does not provide a material allowance for the Feather/Prime/Block process. If necessary, the determination and assessment for materials is best provided by the estimate preparer for consideration and allowance during the estimate preparation process.

Feather, Prime & Block are required operations in the panel repair process.

Audatex Estimating does not provide a labor time allowance for repaired panels, as the amount of time is subjective.

Audatex Estimating

- Is able to allocate a portion of the repair judgment time to Feather Prime & Block for any part with a refinish record attached.
- Displays Feather Prime & Block under refinish labor.
- Calculates Feather Prime & Block materials.
- Identifies Feather Prime & Block labor and materials on the estimate.

When the Feather, Prime & Block feature is enabled, and both Repair and Refinish operations are selected on the Part Edit window, the Repair operation expands to show the breakout of how much of the Repair operation is allocated to the Repair time, and how much is being allocated to FPB (Refinish).

Allocating Feather, Prime & Block on the Damage Page:

1. Verify that the Rates page has a labor rate for the Feather, Paint & Block Materials Rate.
2. Click Damage on the left side navigation.
3. Click a part to open the Part Edit window.
4. Select the Repair and Refinish operations and provide a Repair time.
5. The Repair operation expands to show the breakout of Repair time and FPB time.
6. Provide how much of the Repair time needs to be allocated to FPB
  1. When FPB time is allocated, it will be automatically deducted from the Repair time.
  2. The FPB time cannot exceed the total Repair time provided in Step 4.
  3. See Additional Information for other calculation factors / limitations

When FPB is allocated for a Repair operation, the time is added on the Estimate Report in the refinish breakout under the Refinish operation for the same part.

### Nib Sanding/De-nib

Nib sanding (or de-nib) is defined as the removal of isolated dirt and dust particles in the affected area(s).

- Audatex's formula for Color Sand and Buff does not apply to this operation. Additional steps or processes that may be required should be considered during estimate preparation.

## Section 4-4 Refinish Guidelines

### Panel Stripping

Audatex's studies show that, when performed, complete panel stripping can be estimated at:

- 75% of Audatex single-stage estimate refinish labor for each panel being stripped.

### Flash Time

Flash times are included in the Audatex system in the following manner:

- Less than 6 minutes: These are included in the assigned panel time
- More than 6 minutes: Our observations indicate that when flash times are more than 6 minutes, the technician will remain productive by working on another job or a different part of the same job. Therefore, these times are included by reflecting that productive time in the specific panel that it applies to.

### Overlap / Setup / Minimum

When two or more panels are refinished at the same time, economies are realized. These economies are considered to be overlapping functions and result in a decrease of labor required per incremental panel. When a number of single panels are considered for the same estimate, duplicate tasks should be removed since they are performed only once.

One alternative is to deduct an amount of labor, which represents the amount of overlapping operations. In most instances, the general rule within Audatex is to:

- Deduct 0.4 Audatex estimate refinish labor for adjacent major panels and
- Deduct 0.2 Audatex estimate refinish labor for non-adjacent major panels.

However, some exceptions are incorporated into our system due to the panel configuration, the size of the job, and or both. These exceptions are discussed on the next few pages.

### Exceptions

**Note:** *On the following examples an asterisk (\*) indicates the panel in which the overlap is considered.*

The panels in the following examples, when selected together, will eliminate 0.5 of adjacent and non-adjacent panel overlap.

#### Front End of Vehicle

|   |                |                     |
|---|----------------|---------------------|
| FRONT END PANEL/ HEADER PANEL (GDE 030) | HOOD (GDE 083) | FENDER* (GDE 103/4) |
|---|----------------|---------------------|

The asterisk (\*) indicates the panel in which overlap is considered.

#### Rear End of Vehicle

|                            |                             |   |
|----------------------------|-----------------------------|---|
| QUARTER PANEL (GDE 389/90) | DECK LID/TAILGATE (GDE 479) | REAR BODY PANEL* (when exposed) (GDE 509) |
|----------------------------|-----------------------------|---|

#### Side of Vehicle

|                    |                    |                   |                      |
|--------------------|--------------------|-------------------|----------------------|
| FENDER (GDE 103/4) | ROCKER (GDE 187/8) | DOOR* (GDE 207/8) | QUARTER (GDE 389/90) |
|--------------------|--------------------|-------------------|----------------------|

The asterisk (\*) indicates the panel in which overlap is considered.

When these combinations of panels are to be refinished, Audatex provides the capability to select complete sectional refinish. These combinations provide exterior surface only and can be selected unless edge, inside, and underside time is required.

When you select by guide number (GDE) in the above combination, one panel will have 0.5 hour of adjacent panel overlap. In most cases, the panel with the highest guide number in the group will have the additional 0.1 hour removed, but this is dependent upon the configuration of the panels.

Not all major panels contain 0.6 hour worth of refinish overlaps (adjacent 0.4 hour, non-adjacent 0.2 hour). The manner in which the panels relate to each other and the size of the overlapping distance have

been considered. For the rocker panel, the upper above lid panel, and the cowl top panel, no more than 0.4 hour will be deducted.

The following combination of panels will result in a 0.3-hour adjacent panel overlap:

|                            |                             |
|----------------------------|-----------------------------|
| FRONT FENDER (GDE 103/4)   | ROCKER PANEL* (GDE 187/8)   |
| ROCKER PANEL (GDE 187/8)   | FRONT DOOR* (GDE 207/8)     |
| ROCKER PANEL (GDE 187/8)   | REAR DOOR* (GDE 287/8)      |
| ROCKER PANEL (GDE 187/8)   | QUARTER PANEL* (GDE 389/90) |
| FRONT FENDER (GDE 103/4)   | COWL TOP PANEL*             |
| QUARTER PANEL (GDE 389/90) | UPPER ABOVE LID PANEL       |

The asterisk (\*) indicates the panel in which overlap is considered.

Remember: When more than three panels are selected in one area of a vehicle, the complete refinish available for that section can also be selected. Again, this will provide surface time only. If edge, jamb, inside, or underside time is required, select the appropriate panels.

For adjacent panel overlap, there are two instances when 0.6 hour will be deducted.

First instance of 0.6-hour overlap:

|                              |                               |                     |   |
|------------------------------|-------------------------------|---------------------|---|
| LEFT QUARTER PANEL (GDE 389) | RIGHT QUARTER PANEL (GDE 390) | DECK LID* (GDE 479) | REAR BODY PANEL* (when exposed) (GDE 509) |
|------------------------------|-------------------------------|---------------------|---|

The asterisk (\*) indicates the panel in which overlap is considered.

In this example, both the deck lid and the rear body panel will have 0.6 hour removed in adjacent panel overlap. When these panels are to be refinished only, Audatex also provides the capability to select the complete rear refinish. This provides exterior surface time and can be selected unless edge, jamb, or inside time is required.

The second instance of 0.6-hour overlap is when the partials have been selected:

|                             |   |                     |  |  |
|-----------------------------|---|---------------------|--|--|
| LEFT ROCKER PANEL (GDE 187) | LEFT REAR DOOR OUTER REPAIR PANEL (GDE 289) | DECK LID* (GDE 479) | REAR BODY PANEL (when exposed) (GDE 509) | LEFT QUARTER PANEL BELT CUT* (GDE 631) |
|-----------------------------|---|---------------------|--|--|

The asterisk (\*) indicates the panel in which overlap is considered.

In this case, the guide numbers, location, and type of replacements need to be considered. Another important consideration is the occurrences of refinish overrides to facilitate spot painting/blending within a panel. Remember: When you override refinish labor, all overlap is still considered.

**Masking:** Audatex refinish labor provides for masking within panel boundaries (e.g., openings, blackout effect, grilles, molded impact strips, indentations, textured/paint to match areas, etc.).

**Order-By-Color Parts:** Audatex provides refinish labor for parts supplied painted by the manufacturer. This labor allowance is provided for when the part is repaired.

**Second Color Setup:** Second Color Setup .4 (not two-tone) may be necessary for underhood colors, mouldings and trim where a second color is used. This is a manual entry that may be used when required.

**Second Clear Setup:** Second Clear Setup .4 may be necessary in certain circumstances to match the OEM finish (e.g. underhood, aprons, and rails needing “matte” clears). This is a manual entry that may be used when required.

## Section 4-4 Refinish Guidelines

### Edges / Jambs / Undersides

Some parts require refinishing undersides or other interior surface edges. Edging is performed prior to surface refinish as a preparation step to refinishing the entire surface of the job at the same time. Edging is generally done with the parts off the vehicle prior to installation.

Audatex's study shows significantly less refinish labor per area for edges, jambs, or undersides than for the surface refinishing. To receive the labor for edges, jambs, or undersides, the panel must be replaced and refinish must be selected for that panel. When a repair is being performed, labor for edges, jambs, or undersides needs to be a separate consideration.

### Rework

In 15% of our studies, Audatex observed the need to redo either the entire refinish job, or a portion of it. The need for this rework can be attributed to a variety of circumstances ranging from technician error to environmental conditions. Audatex's refinish does not provide additional allowances for rework.

### Not Subject to Color Match

Some parts do not always require color match:

- black bumpers and covers
- black radiator support components
- ladder frame components
- black door handles
- black mirrors

### Interior Parts – Plastic

Plastic interior trim parts do not generally require the same degree of surface preparation, number of coats of paint, priming, wet sanding, or degree of color match. Our refinish research shows that interior trim panels required less time than exterior parts of similar size and composition. In addition, they were generally painted before installation on the vehicle eliminating the need for interior masking. Although these parts are sometimes painted, on newer vehicles they can often be ordered by color. They are rarely repaired. As the vehicle ages, fewer by color parts are stocked, until the part comes in only one color and requires refinishing when replaced.

### Interior/Exterior Metal

Refinishing interior surfaces of exterior parts (e.g., inner quarter, rear body panel, windshield pillars, etc.) requires more masking for interior protection than similar sized/construction exterior parts. Although preparation, application and color match were similar on both exterior and interior parts, interior parts required less time than exterior.

However, overall time required for interior versus exterior tended to be comparable, due to additional time required to protect the interior, combined with difficulty of access. Some of the same processes that apply to exterior parts were occasionally observed in refinish of interior parts, although not with the same care and attention given to exterior panels.

Most interior parts requiring refinish are covered with finish panels, carpets, and trims and, as such, are not usually seen.

**Note:** Audatex does not include refinish labor for roof or bed underside. Under hood, interior parts (core support, frame, inner fender, etc.) tend to have less effort invested for color match or attention to detail in surface preparation than exterior parts do. In some instances, these panels are painted prior to installation (e.g., bolt-on radiator support panel). The masking effort on these components was not as extensive as interior passenger compartment parts. Generally, these non-passenger compartment interior parts take less time to refinish than comparable exterior parts.

### Two-Sided Refinish Panels

Some body panels (e.g., hoods, deck lids, single-walled bedsides, and tailgates) are painted both inside and outside. Currently, when these panels are:

## Section 4-4 Refinish Guidelines

- replaced, Audatex automatically calculates two-sided refinish
- repaired, Audatex does not automatically calculate two-sided refinish

### Welded-on Panels

Audatex base refinish labor does not include additional time to refinish adjacent panels that may be damaged by welding.

### Highly Contoured Parts

Pickup beds and large roofs (station wagons and vans) often have corrugated panels for extra strength. Their highly contoured construction makes them more difficult to sand.

Most large, flexible front and rear panels (front bumper covers, and rear bumper covers), and cowl vent panels present some additional contours (beyond the usual metal and fiberglass panels). However, these did not appear to be noticeably more difficult.

Audatex refinish labor is determined on a per-panel basis considering contours.

### Part Composition

Metal is the standard for all refinish labor.

Plastic, fiberglass, and SMC refinish processes are similar to metal. Audatex recognizes that flexible panels are usually the same part types (e.g., bumper covers, and fillers). For flexible panels, Audatex refinish labor is part type specific.

### Raw, Unprimed Bumper Covers and Other Plastic Parts (i.e. Mouldings, Mirrors, grilles, etc.)

Audatex refinish allowances start with priming a part. Due to the differences in the paint manufacturers' procedures, OEM recommendations, and the unpredictable nature of the parts, any preparation required for raw, unprimed bumper covers or other plastic parts is Not Included in Audatex labor allowances. This operation may be added manually, if required.

The Audatex formula for preparation of a raw, unprimed Bumper Cover or Plastic Part is:

- 20% of the base refinish labor.

**Note:** Audatex will begin to add a "Prep Raw Bumper Cover" operation to the Bumper Cover part choice box for new and update vehicles, beginning with Q1 2011. This operation only applies to the front and rear bumper covers. The Audatex formula for Prep Raw, Unprimed Bumper Cover is 20% of the base refinish allowance, with a .3 minimum time.

The Audatex formula includes the following:

1. Wash cover with soap and water, rinse & dry
2. Degrease the surface with a wax, grease, and silicone remover.
3. Sand cover with a sanding paste and grey scuff pad
4. Wash cover with soap and water, rinse & dry
5. Degrease the surface with a wax, grease, and silicone remover.

If the paint manufacturer or OEM requires any other or additional steps to prepare a raw, unprimed bumper cover, these steps are Not Included in Audatex labor times. They may be accounted for manually, if required.

### Corrosion Protection

Corrosion protection is the process and materials used to prevent corrosion. The primer included in any specific paint system is one type of corrosion protection. Only one paint system and accompanying products should be used throughout the repair.

Audatex does not include allowances for the restoration of bare metal or application of an "e-coat" equivalent or a "high build primer" either in refinish or in replacement labor.

## Section 4-4 Refinish Guidelines

Any considerations in this area will need to be determined during the estimate preparation.

Audatex's refinish labor:

- includes mixing, application, and flashing of the paint system primers

Anti-corrosion compounds are the second type of corrosion protection.

These compounds are:

- categorized as either wax-based coatings or petroleum-based coatings
- applied inside closed sections of structural members

Audatex labor does not include allowances for anti-corrosion compounds in either refinish or replacement labor. Any considerations in this area will need to be determined during estimate preparation.

### Ancillary Items

**Stripes:** The removal and installation of tape stripes or decals, as well as the painting of stripes, is a consideration in the estimating process. Appropriately, these items are considered as parts on the Audatex estimate and not a part of the refinish operations for any panel. The labor involved in replacing stripes is as widely varied as the color and the width of the stripes themselves. Some stripes take a few minutes, while others can take much longer. The decision to tape stripes or paint stripes is frequently made at the last minute by the refinish technician. Based upon the method used, the time required may or may not be consistent with the estimate labor to remove and install.

### Mouldings, Ornamentation, and Antennas

Our studies show little consistency in mouldings, ornamentation, and antennas on any vehicle, or in whether the body person removed the parts and/or did not install them prior to the vehicle going to the paint department. The decision to remove mouldings and ornamentation or to mask them is frequently one that the refinish technician makes as the job progresses. The current Audatex estimate does not include R&I labor or masking of these parts in refinish. However, Audatex does facilitate moulding, ornamentation and antenna R&I through standard coding for the parts.

### Fuel Door / Pocket

Some additional precautions and considerations to panels that contain the fuel door:

- masking to protect the filler neck
- painting the inside of the pocket must be performed when the panel is refinished

(Refinish of the fuel filler door itself generally must be performed when the panel is refinished. This separate operation can be added to the estimate).

Based on the additional considerations presented by masking and refinishing of the fuel filler pocket, 0.1 hour is included in the panel with the filler door to provide necessary time to perform these operations. This enhancement began with model year 1993 vehicle development.

### Transparent Colors

Some colors have been identified by the paint makers as very transparent. These colors may require tinting the primer/sealer or additional coats of base materials to achieve a correct match (hiding). If this is necessary to achieve a visual color match (hiding), any application of base color beyond the third base coat may require an adjustment of the refinish labor and material allowance.

### Complete Group Refinish

The refinish labor in the Audatex system is for individual panel refinish and is not intended to provide complete group or vehicle refinishes. The Audatex applications provide complete and group refinishes separately. These groupings include complete exterior, complete front end, complete sides and complete rear refinish.

Labor assigned to these unique groups is not based on individual panels, but the specific group as a whole. These refinish groups are for exterior panels only and do not include edge, jamb, underside or

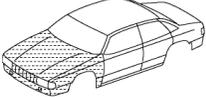
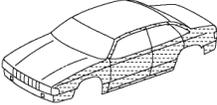
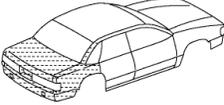
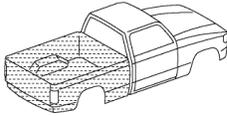
## Section 4-4 Refinish Guidelines

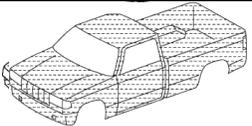
interior refinish labor allowances (see [Edges / Jambs / Undersides](#)). In addition, refinish labor allowances for mirrors, mouldings, handles, finish panels and parts ordered by color are not included in the complete group refinish.

**Note:** *Due to the numerous variations in bumpers and bumper covers, refinish labor for bumpers or bumper covers is not included in any of the group refinishes. If the bumper or bumper cover needs to be refinished, select the individual refinish record in conjunction with the group. The system will calculate the appropriate refinish labor.*

When you need to do a complete exterior refinish in a collision/comprehensive estimate, color change generally is not encountered, therefore, is not considered in the system. Economies of scale are realized in a complete refinish that impact the labor required to perform this type of job. Some operations commonly performed in refinish, (e.g., edging, masking of adjacent panels, etc.), are not usually performed in complete refinish.

For complete exterior refinish and panels included in each group, refer to the following pages.

|  |  |
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| <p><b>Complete Front refinish includes:</b></p> <ul style="list-style-type: none"> <li>• Header panel</li> <li>• Fenders</li> <li>• Hood panel</li> <li>• Cowl vent panel</li> </ul>   | <ul style="list-style-type: none"> <li>• Front end cover (one-piece cover that takes the place of the bumper and front end panel and surrounds the headlamps Example: 2008 Dodge Charger)</li> </ul>    |
| <p><b>Complete Side refinish includes:</b></p> <ul style="list-style-type: none"> <li>• Fender</li> <li>• Front door</li> <li>• Rocker panel</li> <li>• Quarter panel</li> <li>• Rear door</li> <li>• Fuel filler pocket</li> </ul>  | <ul style="list-style-type: none"> <li>• Bodyside outer upper or roof side panel</li> <li>• Bodyside panel (vans)</li> <li>• Rear cab side (trucks)</li> <li>• Rear fender (trucks)</li> <li>• Bedside panel (trucks)</li> </ul>    |
| <p><b>Complete Rear refinish includes:</b></p> <ul style="list-style-type: none"> <li>• Left / right quarter panels</li> <li>• Left / right quarter extensions</li> <li>• Fuel filler pocket</li> <li>• Fillers to bumper / quarter</li> <li>• Deck lid / Hatchback lid</li> <li>• Tailgate</li> </ul> | <ul style="list-style-type: none"> <li>• Upper rear body panel</li> <li>• Exposed rear body panel</li> <li>• Upper above lid panel</li> <li>• <b>Rear Bumper Cover (is only included if the cover is of one-piece construction, surrounds the taillamps and takes the place of the rear body panel Ex: 2008 Chevrolet Corvette)</b></li> </ul>  |
| <p><b>Complete Bed refinish includes:</b></p> <ul style="list-style-type: none"> <li>• Outer bedside panels</li> <li>• Inner bedside panels</li> <li>• Rear fenders (when applicable)</li> <li>• Front bed panel</li> </ul>  | <ul style="list-style-type: none"> <li>• Tailgate</li> <li>• Fuel filler pocket</li> <li>• Exposed surface of bed floor</li> </ul>    |
| <p><b>Complete Exterior refinish includes:</b></p> <ul style="list-style-type: none"> <li>• Front end cover (one-piece cover that takes the place of the</li> </ul>  | <ul style="list-style-type: none"> <li>• Quarter panels</li> <li>• Bed Assembly</li> </ul>   |

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| <p>bumper and front end panel and surrounds the headlamps<br/>Example: 2008 Dodge Charger)</p> <ul style="list-style-type: none"> <li>• Header panel</li> <li>• Hood panel</li> <li>• Fenders</li> <li>• Cowl top panel (rigid)</li> <li>• Front doors</li> <li>• Rocker panels</li> <li>• Rear doors</li> <li>• Roof panel</li> <li>• Fuel filler pocket</li> </ul> | <ul style="list-style-type: none"> <li>• Tailgate</li> <li>• Deck lid / Hatchback lid</li> <li>• Upper rear body panel</li> <li>• Exposed rear body panel</li> <li>• Bodyside panels (van)</li> <li>• Cab rear panel</li> <li>• Cab side panels (trucks)</li> <li>• Rear fenders (trucks)</li> <li>• Rear end cover (one-piece cover that takes the place of the rear body panel and bumper cover and surrounds the taillamps<br/>Example: 2008 Chevrolet Corvette)</li> </ul>  |
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### Section 4-4 Refinish Guidelines

#### Recycled Sectional Refinish

The Audatex system has two refinish labor considerations; one for labor for individual parts, the other for recycled sectional refinishes.

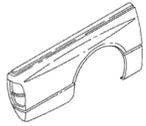
Labor assigned to the sections is based on the section as a whole, not on individual panels. These refinish sections are for:

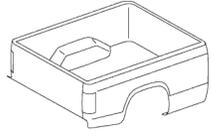
- exterior surfaces
- any included inner structures
- all appropriate edges, jambs, and undersides.

**Note:** Due to numerous variations to bumpers and bumper covers, refinish labor for bumper covers is not included in any of the sectional refinishes. If a bumper or bumper cover needs refinishing, select the individual refinish record in conjunction with the section. The system will calculate the appropriate refinish labor.

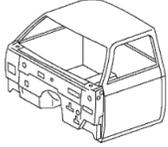
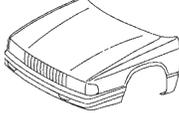
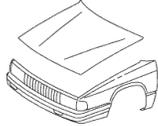
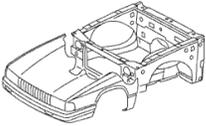
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| <p><b>Rocker Panel and Center Pillar</b><br/>Section refinish includes:</p> <ul style="list-style-type: none"> <li>• Outer center pillar</li> <li>• Inner center pillar</li> </ul> | <ul style="list-style-type: none"> <li>• Inner rocker panel</li> <li>• Outer rocker panel</li> <li>• Misc. braces, supports, and brackets</li> <li>• All appropriate edges</li> </ul>  |
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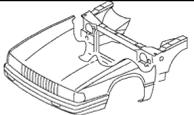
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| <p><b>Quarter Panel Section</b><br/>refinish includes:</p> <ul style="list-style-type: none"> <li>• Outer quarter panel</li> <li>• Inner quarter panel</li> <li>• Fuel filler pocket</li> </ul> | <ul style="list-style-type: none"> <li>• Misc. braces, supports, and brackets</li> <li>• All appropriate edges and jambs</li> </ul>  |
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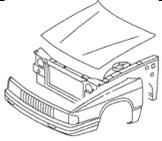
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| <p><b>Bedside Panel Section</b> refinish includes:</p> <ul style="list-style-type: none"> <li>• Outer bedside panels</li> <li>• Inner bedside panels</li> </ul> | <ul style="list-style-type: none"> <li>• Fuel filler pocket</li> <li>• All necessary brackets</li> </ul>  |
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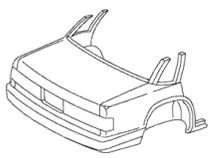
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| <p><b>Bed Assembly</b> refinish includes:</p> <ul style="list-style-type: none"> <li>• Outer bedside panels</li> <li>• Inner bedside panels</li> <li>• Rear fenders (when applicable)</li> <li>• Exposed surface of bed floor</li> </ul> | <ul style="list-style-type: none"> <li>• Tailgate</li> <li>• Front bed panel</li> <li>• All appropriate edges, jambs, and insides</li> </ul>  |
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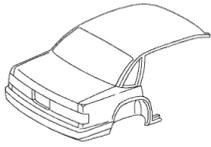
### Section 4-4 Refinish Guidelines

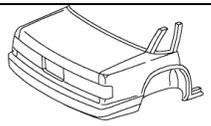
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| <p><b>Cab Section refinish includes:</b></p> <ul style="list-style-type: none"> <li>• Firewall</li> <li>• Cowl Top Panel (rigid)</li> <li>• Hinge Pillars</li> <li>• Doors</li> <li>• Roof panels</li> </ul>   | <ul style="list-style-type: none"> <li>• Inner &amp; Outer Cab Rear Panel</li> <li>• Floor (interior only)</li> <li>• Panel Cab Rear Left/Right</li> <li>• Rocker Panels</li> <li>• Exposed Inner Panels</li> </ul>   |
| <p><b>Rear Cab with Roof Section refinish includes:</b></p> <ul style="list-style-type: none"> <li>• Inner and outer cab rear panel</li> <li>• Outer roof panel</li> </ul>   | <ul style="list-style-type: none"> <li>• Panel, cab rear left / right</li> </ul>    |
| <p><b>Rear Cab Section refinish includes:</b></p> <ul style="list-style-type: none"> <li>• Inner and outer cab rear panel</li> <li>• Panel, cab rear left / right</li> </ul>   |   |
| <p><b>Front Body Outer Sheet Metal Section refinish includes:</b></p> <ul style="list-style-type: none"> <li>• Header panel</li> <li>• Fenders</li> <li>• Cowl top panel (rigid) (included only if sheet metal is used)</li> <li>• Hood panel</li> </ul>   | <ul style="list-style-type: none"> <li>• All appropriate edges, jambs and undersides</li> <li>• Front end cover (one-piece cover that takes the place of the bumper and front end panel and surrounds the headlamps<br/>Example: 2008 Dodge Charger)</li> </ul>   |
| <p><b>3/4 Front Body Outer Section refinish includes:</b></p> <ul style="list-style-type: none"> <li>• Header panel</li> <li>• One fender</li> <li>• Cowl top panel (rigid)</li> <li>• Hood panel</li> </ul>   | <ul style="list-style-type: none"> <li>• All appropriate edges, jambs and undersides</li> <li>• Front end cover (one-piece cover that takes the place of the bumper and front end panel and surrounds the headlamps<br/>Example: 2008 Dodge Charger)</li> </ul>   |
| <p><b>Front Unitized Section / Front Inner Complete refinish includes:</b></p> <ul style="list-style-type: none"> <li>• Header panel</li> <li>• Fenders</li> <li>• Hood panel</li> <li>• Firewall</li> <li>• Cowl side panels</li> <li>• Cowl top panel (rigid)</li> <li>• Front side rails</li> </ul> | <ul style="list-style-type: none"> <li>• Radiator support panel</li> <li>• Inner fender panels</li> <li>• Misc. braces, supports, and brackets</li> <li>• All appropriate edges, jambs and undersides</li> <li>• Front end cover (one-piece cover that takes the place of the bumper and front end panel and surrounds the headlamps<br/>Example: 2008 Dodge Charger)</li> </ul>  |
| <p><b>1/2 Front Body Section refinish includes:</b></p> <ul style="list-style-type: none"> <li>• Header panel</li> </ul>   |  |

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| <ul style="list-style-type: none"> <li>• Fenders</li> <li>• Hood panel</li> <li>• Radiator support panel</li> <li>• Inner fender panel</li> <li>• Front side rails</li> </ul> | <ul style="list-style-type: none"> <li>• Misc. braces, supports, and brackets</li> <li>• All appropriate edges, jambs and undersides</li> <li>• Front end cover (one-piece cover that takes the place of the bumper and front end panel and surrounds the headlamps Example: 2008 Dodge Charger)</li> </ul>  |
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| <p><b>Front Body Section Left / Right refinish includes:</b></p> <ul style="list-style-type: none"> <li>• Radiator support panel</li> <li>• One inner fender panel</li> <li>• One front side panel</li> <li>• Header panel</li> <li>• One fender</li> <li>• One fender extension</li> <li>• Hood panel</li> </ul> | <ul style="list-style-type: none"> <li>• Cowl top panel (rigid)</li> <li>• One cowl side panel</li> <li>• Misc. braces, supports, and brackets</li> <li>• All appropriate edges, jambs and undersides</li> <li>• Front end cover (one-piece cover that takes the place of the bumper and front end panel and surrounds the headlamps Example: 2008 Dodge Charger)</li> </ul>  |
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| <p><b>Rear Body Section refinish includes:</b></p> <ul style="list-style-type: none"> <li>• Quarter panels</li> <li>• Quarter extensions</li> <li>• Inner quarter panels</li> <li>• Inner wheel houses</li> <li>• Outer wheel houses</li> <li>• Fuel filler pocket</li> <li>• Deck lid / Hatchback lid</li> <li>• Upper rear body panel</li> <li>• Exposed rear body panel</li> </ul> | <ul style="list-style-type: none"> <li>• Inner rear body panels</li> <li>• Tailgate</li> <li>• Rear frame rails</li> <li>• Floor pan</li> <li>• Misc. braces, supports, and brackets</li> <li>• All appropriate edges, jambs and undersides</li> <li>• Rear end cover (one-piece cover that takes the place of the rear body panel and bumper cover and surrounds the taillamps Example: 2008 Chevrolet Corvette)</li> </ul>  |
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| <p><b>Rear Body with Roof Section refinish includes:</b></p> <ul style="list-style-type: none"> <li>• Roof panels</li> <li>• Quarter panels</li> <li>• Quarter extensions</li> <li>• Inner quarter panels</li> <li>• Inner wheel houses</li> <li>• Outer wheel houses</li> <li>• Fuel filler pocket</li> <li>• Deck lid / Hatchback lid</li> <li>• Upper rear body panel</li> </ul> | <ul style="list-style-type: none"> <li>• Exposed rear body panel</li> <li>• Inner rear body panels</li> <li>• Tailgate</li> <li>• Rear frame rails</li> <li>• Floor pan</li> <li>• Misc. braces, supports, and brackets</li> <li>• All appropriate edges, jambs and undersides</li> <li>• Rear end cover (one-piece cover that takes the place of the rear body panel and bumper cover and surrounds the taillamps Example: 2008 Chevrolet Corvette)</li> </ul>  |
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| <p><b>3/4 Rear Body Section refinish includes:</b></p> <ul style="list-style-type: none"> <li>• One quarter panel</li> <li>• One quarter extension</li> <li>• One inner quarter panel</li> <li>• One inner wheel house</li> <li>• One outer wheel house</li> <li>• One rear frame rail</li> <li>• Fuel filler pocket</li> </ul> | <ul style="list-style-type: none"> <li>• Deck lid / Hatchback lid</li> <li>• Exposed rear body panel</li> <li>• Upper rear body panel</li> <li>• Tailgate</li> <li>• Misc. braces, supports, and brackets</li> <li>• All appropriate edges, jambs and undersides</li> </ul>  |
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|  |  |
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| <ul style="list-style-type: none"> <li>Inner rear body panels</li> </ul> | <ul style="list-style-type: none"> <li>Rear end cover (one-piece cover that takes the place of the rear body panel and bumper cover and surrounds the taillamps<br/>Example: 2008 Chevrolet Corvette)</li> </ul> |
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## Section 4-5 Refinish Operations

### Refinish Operations

#### Refinish Operations

Audatex refinish labor generally includes time to perform all operations necessary to accomplish refinish for new and undamaged OEM or equivalent panels. Audatex refinish labor begins at 320 - 400 grit (dry) or 500 - 600 grit (wet) as this is the starting point for refinish of a new, undamaged panel. Audatex refinish times are for single panels unless otherwise noted.

| <b>Two-stage</b>   |  |
|--|--|
| <b>Included Operations:</b>  | <b>Not Included:</b>   |
| Add flex additive** (when required, labor only)                            | Additional preparation or cleaning of new, <b>unprimed panels (i.e., bumper covers)</b>  |
| Clear; Clean gun**   | Additional time for three-stage (see <a href="#">Three-Stage</a> )   |
| Gather materials, equipment and tools**                                    | Additional time for two-tone (see <a href="#">Two-Tone</a> )   |
| Initial tint, spray test panel, let down, compare to vehicle**             | Adhesive removal   |
| Mix clear coat**   | Any special coatings applied to luggage compartment  |
| Application of guide coat*   | Application of "high build" primer   |
| Block sand*  | Application of e-coat equivalent   |
| Dual action sand*  | Blending into adjacent panels (see <a href="#">Blending</a> )  |
| Apply and flash; color   | Body work  |
| Apply and flash clear coat   | Chipguard application (see <a href="#">Chipguard</a> )   |
| Basic corrosion protection provided by primer/sealer and paint application | Color Sand and Buff (see <a href="#">Color Sand and Buff</a> )   |
| Blow dry clean panels  | Custom finishes  |
| Booth operations   | De-Nib   |
| Clean booth  | Final wash   |
| Clean equipment and materials  | Gravel guard (see <a href="#">Chipguard</a> )  |
| Clean gun; color   | Hazardous waste removal  |
| De-wax and degrease  | Mask mouldings   |
| Get paint  | Masking of interior surfaces/entryways, engine compartment and trunk openings. Interior masking may be performed when necessary to ensure prevention of overspray damage that may not be prevented by adjacent panel perimeter masking (including backtaping or application of foam tape). Interior masking may be considered when exterior panels (doors, hoods, etc.) are removed and refinished See Included "protect interior" operation |

|  |   |
|--|---|
| Get paint code   | Metal preparation and corrosion protection beyond those listed in Included Operations (i.e. cavity wax) |
| Hand/wet sand  | Moulding R&I  |
| Inspect job and paint  | Paint and materials   |
| Mix and apply flash; additives   | Painting of stripes   |
| Mix color, spray test panel, compare to vehicle  | Panel stripping (see <a href="#">Panel Stripping</a> )  |
| Mix, apply, and flash primer (for adhesion and sealing)  | Parts R&I   |
| Move car   | Plastic components (i.e., bumper covers)  |
| Order paint  | Removal of release agents from raw, unprimed plastic components (i.e., bumper covers)                   |
| Prepare to sand  | Second or third bagging or masking of vehicle   |
| Prepare to spray   | Spot putty  |
| Protect exterior of vehicle from overspray utilizing all acceptable methods of bagging, masking, masking up to 36 inches surrounding the panel and masking of glass within a panel. This includes using backtaping and/or foam tape to close out the gap between panels. If backtaping and/or foam tape does not adequately prevent overspray from entering the jamb areas, any additional masking to protect the interior and jambs is a not included operation (labor only) See Not Included "masking" operation | Spray additional test panel   |
| Review estimate/work order   | Stripe R&I  |
| Tack wipe  | Tint primer or clear coat   |
| Tack wipe (between color and apply clear when required)  | Undercoating  |
| Water wash and clean panel with solvent  | Unprimed panels (i.e., bumper covers)   |
| <b>**Included in setup</b>   |   |
| <b>*Welded panel operations</b>  |   |

### Single-stage

Audatex's single-stage refinish formula includes all two-stage refinish operations except:

- Gather additional materials to apply clear coat
- Spray test panel/let down panel (Clear Coat)
- Add flex additive (when required)
- Tack wipe for clear coat
- Mix, apply, and flash clear coat

### Three-stage

Audatex three-stage refinish formula includes all two-stage refinish operations, plus:

- Gather additional materials
- Spray test panel/let down panel (mid coat)
- Tack wipe (between color and pearlescent / mica coat, when required)

- Mix, apply and flash pearlescent / mica coat
- Clean gun
- Tack wipe (between pearlescent/mica coat and clear coat, when required)
- Mix, apply and flash clear coat
- Clean gun

## Section 4-5 Refinish Operations

### Two-Tone

Audatex's two-tone refinish formula includes the following operations:

- Tack wipe (between colors)
- Additional masking
- Mix second color
- Color tint and check second color
- Apply and flash second color
- Clean gun

### Blending

Audatex's blending refinish formula includes the following operations:

- Complete preparation of blended panel
- Scuff or buff
- Application of color to blended panel
- Application of clear coat to entire blended panel in two-stage and three-stage systems

### Chipguard

Audatex's chipguard refinish formula includes the following operations:

- Gather chipguard materials
- Masking
- Application of chipguard
- Cleanup

## Section 5-1 Standard Manual Entries

## Frequently Asked Questions / Glossaries

This is a listing of Standard Manual Entries sorted by M Code. Click here for an explanation of [Audatex's Manual Entries](#).

| MCODE | DESCRIPTION                |   | MCODE | DESCRIPTION                 |   |
|-------|----------------------------|---|-------|-----------------------------|---|
| M00   | UNIBODY-FRAME INCL. SETUP  | 3 | M38   | PULL LEFT STRUT TOWER       | 3 |
| M01   | CLEAR COAT                 | 4 | M39   | PULL RIGHT STRUT TOWER      | 3 |
| M02   | TWO TONE PAINT             | 4 | M40   | FRAME SIDE SWAY, FRONT      | 3 |
| M03   | FLEX ADDITIVE              | 4 | M41   | FRAME SAG, FRONT            | 3 |
| M04   | UNDERCOATING               | 4 | M42   | FRAME BUCKLE, FRONT         | 3 |
| M05   | RUSTPROOFING               | 4 | M43   | FRAME MASH, FRONT           | 3 |
| M06   | PINSTRIPES – PAINTED       | 4 | M44   | FRAME TWIST                 | 3 |
| M07   | PINSTRIPES – TAPE          | 1 | M45   | FRAME DIAMOND               | 3 |
| M08   | STONEGUARD                 | 4 | M46   | FRAME SIDE SWAY, REAR       | 3 |
| M10   | PAINT AS REQUIRED          | 4 | M47   | FRAME SAG, REAR             | 3 |
| M11   | REPAIR SCRATCHES           | 4 | M48   | FRAME BUCKLE, REAR          | 3 |
| M12   | POLISH PAINT               | 4 | M49   | FRAME MASH, REAR            | 3 |
| M13   | WHEEL BALANCE              | 1 | M50   | CLEAN INTERIOR              | 1 |
| M14   | CORROSION PROTECTION       | 4 | M51   | REFINISH, BELTLINE UP       | 4 |
| M15   | COLOR TINT                 | 4 | M52   | FLUSH AND FILL CRANKCASE    | 1 |
| M16   | COLOR BLEND                | 4 | M53   | FLUSH AND FILL TRANSMISSION | 1 |
| M17   | COVER CAR EXTERIOR         | 4 | M54   | FLUSH AND FILL DIFFERENTIAL | 1 |
| M18   | SET UP AND MEASURE         | 3 | M55   | STEAM CLEAN ENGINE          | 1 |
| M19   | REALIGN CONTROL POINTS     | 3 | M56   | WASH AND DRY CARPETING      | 1 |
| M20   | ANTIFREEZE / COOLANT       | 1 | M57   | CLEAN UPHOLSTERY            | 1 |
| M21   | REFRIGERANT                | 1 | M58   | CLEAN FOR DELIVERY          | 1 |
| M22   | TIRE-RIGHT FRONT, BALANCED | 1 | M59   | URETHANE ADHESIVE REMOVAL   | 1 |
| M23   | TIRE-LEFT FRONT, BALANCED  | 1 | M60   | HAZARDOUS WASTE REMOVAL     | 1 |
| M24   | TIRE-RIGHT REAR, BALANCED  | 1 | M61   | DRILL TIME                  | 1 |
| M25   | TIRE-LEFT REAR, BALANCED   | 1 | M62   | COLLISION ACCESS TIME       | 1 |
| M26   | TIRE, SPARE                | 1 | M63   | FACTORY HARDWARE            | 1 |
| M27   | VALVE STEM                 | 1 | M64   | UNIBODY-FRAME ALIGNMENT     | 3 |
| M28   | BATTERY                    | 1 | M65   | DISABLE AIRBAG              | 1 |
| M29   | GLASS INSTALLATION KIT     | 1 | M66   | COLOR SAND AND BUFF         | 4 |
| M30   | COLLISION REPAIR MATERIAL  | 1 | M67   | RESET ELECT. COMPONENTS     | 1 |
| M31   | SET UP FOR REALIGNMENT     | 3 | M68   | CAULK                       | 1 |
| M32   | UNIBODY REALIGNMENT-LT FRT | 3 | M69   | GLASS CLEANUP               | 1 |
| M33   | UNIBODY REALIGNMENT-RT FRT | 3 | M70   | COVER CAR INTERIOR          | 4 |
| M34   | UNIBODY REALIGNMENT-LT RR  | 3 | M71   | WHEEL OPENING MOULDING KIT  | 1 |
| M35   | UNIBODY REALIGNMENT-RT RR  | 3 | M72   | DOOR EDGE MOULDING          | 1 |
| M36   | UNIBODY REALIGNMENT-LT CTR | 3 | M73   | CODE LOCK CYLINDER          | 1 |

|     |                            |   |     |                |   |
|-----|----------------------------|---|-----|----------------|---|
| M37 | UNIBODY REALIGNMENT-RT CTR | 3 | M99 | REFINISH SETUP | 4 |
|-----|----------------------------|---|-----|----------------|---|

## Section 5-1 Standard Manual Entries

This is a listing of Standard Manual Entries sorted by Description. Click here for an explanation of [Audatex's Manual Entries](#).

| DESCRIPTION                 | M CODE |   | DESCRIPTION                | M CODE |   |
|-----------------------------|--------|---|----------------------------|--------|---|
| ANTIFREEZE / COOLANT        | M20    | 1 | PAINT AS REQUIRED          | M10    | 4 |
| BATTERY                     | M28    | 1 | PINSTripES – PAINTED       | M06    | 4 |
| CAULK                       | M68    | 1 | PINSTripES - TAPE          | M07    | 1 |
| CLEAN FOR DELIVERY          | M58    | 1 | POLISH PAINT               | M12    | 4 |
| CLEAN INTERIOR              | M50    | 1 | PULL LEFT STRUT TOWER      | M38    | 3 |
| CLEAN UPHOLSTERY            | M57    | 1 | PULL RIGHT STRUT TOWER     | M39    | 3 |
| CLEAR COAT                  | M01    | 1 | REALIGN CONTROL POINTS     | M19    | 3 |
| CODE LOCK CYLINDER          | M73    | 1 | REFINISH, BELTLINE UP      | M51    | 4 |
| COLLISION ACCESS TIME       | M62    | 1 | REFINISH SETUP             | M99    | 4 |
| COLLISION REPAIR MATERIAL   | M30    | 1 | REFRIGERANT                | M21    | 1 |
| COLOR BLEND                 | M16    | 4 | REPAIR SCRATCHES           | M11    | 4 |
| COLOR SAND AND BUFF         | M66    | 4 | RESET ELECT. COMPONENTS    | M67    | 1 |
| COLOR TINT                  | M15    | 4 | RUSTPROOFING               | M05    | 4 |
| CORROSION PROTECTION        | M14    | 4 | SET UP AND MEASURE         | M18    | 3 |
| COVER CAR EXTERIOR          | M17    | 4 | SET UP FOR REALIGNMENT     | M31    | 3 |
| COVER CAR INTERIOR          | M70    | 4 | STEAM CLEAN ENGINE         | M55    | 1 |
| DISABLE AIRBAG              | M65    | 1 | STONEGUARD                 | M08    | 4 |
| DOOR EDGE MOULDING          | M72    | 1 | TIRE-LEFT FRONT, BALANCED  | M23    | 1 |
| DRILL TIME                  | M61    | 1 | TIRE-RIGHT FRONT, BALANCED | M22    | 1 |
| FACTORY HARDWARE            | M63    | 1 | TIRE-LEFT REAR, BALANCED   | M25    | 1 |
| FLEX ADDITIVE               | M03    | 4 | TIRE-RIGHT REAR, BALANCED  | M24    | 1 |
| FLUSH AND FILL CRANKCASE    | M52    | 1 | TIRE, SPARE                | M26    | 1 |
| FLUSH AND FILL DIFFERENTIAL | M54    | 1 | TWO TONE PAINT             | M02    | 4 |
| FLUSH AND FILL TRANSMISSION | M53    | 1 | UNDERCOATING               | M04    | 4 |
| FRAME BUCKLE, FRONT         | M42    | 3 | UNIBODY-FRAME INCL. SETUP  | M00    | 3 |
| FRAME BUCKLE, REAR          | M48    | 3 | UNIBODY-FRAME ALIGNMENT    | M64    | 3 |
| FRAME DIAMOND               | M45    | 3 | UNIBODY REALIGNMENT-LT CTR | M36    | 3 |
| FRAME MASH, FRONT           | M43    | 3 | UNIBODY REALIGNMENT-RT CTR | M37    | 3 |
| FRAME MASH, REAR            | M49    | 3 | UNIBODY REALIGNMENT-LT FRT | M32    | 3 |
| FRAME SAG, FRONT            | M41    | 3 | UNIBODY REALIGNMENT-RT FRT | M33    | 3 |
| FRAME SAG, REAR             | M47    | 3 | UNIBODY REALIGNMENT-LT RR  | M34    | 3 |
| FRAME SIDE SWAY, FRONT      | M40    | 3 | UNIBODY REALIGNMENT-RT RR  | M35    | 3 |
| FRAME SIDE SWAY, REAR       | M46    | 3 | URETHANE ADHESIVE REMOVAL  | M59    | 1 |
| FRAME TWIST                 | M44    | 3 | VALVE STEM                 | M27    | 1 |
| GLASS CLEANUP               | M69    | 1 | WASH AND DRY CARPETING     | M56    | 1 |
| GLASS INSTALLATION KIT      | M29    | 1 | WHEEL BALANCE              | M13    | 1 |

|                         |     |   |                            |     |   |
|-------------------------|-----|---|----------------------------|-----|---|
| HAZARDOUS WASTE REMOVAL | M60 | 1 | WHEEL OPENING MOULDING KIT | M71 | 1 |
|-------------------------|-----|---|----------------------------|-----|---|

## Section 5-2 Standard Manual Entries

### Frequently Asked Questions

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While using the Audatex system, questions may arise. Below you will find some of the most frequently asked questions and answers.

**Question:** What is included with refinish times for frame components?

**Answer:** Full Frame Components are typically serviced as E-Coated parts that do not require refinishing when replaced. The Audatex refinish allowance for these parts is to restore the corrosion protection that may become damaged during the installation process. Any additional refinish of the frame or frame components would be a manual entry.

**Question:** What factors are considered when developing labor times?

**Answer:** Audatex's labor methodology considers many factors including, but not limited to, part type, substrates, construction/attachement methods, ease of access and OEM procedures.

**Question:** What does the term Overlap mean?

**Answer:** An operation that is common to the replacement of more than one part or operation.

**Question:** What is meant by Labor Exclusions?

**Answer:** Items that are never automatically included in Audatex labor times.

**Question:** What is the Audatex Two-Tone formula?

**Answer:** Setup time of 0.4 estimate hours upon selection of the first two-tone panel, plus 30% of Audatex estimate refinish labor per panel selected. Two-tone is automated in the Audatex system and can be selected as an operation on a panel-by-panel basis.

**Question:** What does R&I mean?

**Answer:** Remove and Install, which is an operation or group of operations that are required to remove and install the part or assembly.

**Question:** On the fender, is edging a not-included operation or an included operation?

**Answer:** When replace and refinish are selected, Audatex automatically includes edge time.

**Question:** On the door shell, are you including refinish times on the interior jambs?

**Answer:** When replacing door shells, Audatex's refinish labor includes the jambs and inside.

**Question:** On the door panel, is refinish on the jambs included?

**Answer:** When replacing the outer door panels, Audatex's refinish labor includes the jambs.

**Question:** On the quarter panel, is refinish included on the lock pillar?

**Answer:** When replacing the quarter panel, Audatex's refinish labor includes the lock pillar and edges.

**Question:** On the deck lid and liftgate, is refinish included for the interior or the exterior and edges only?

**Answer:** When deck lid and liftgates are replaced, Audatex's refinish labor includes the jambs and inside.

**Question:** On the rear body panel, does refinish include both sides- exterior and interior?

**Answer:** When replacing rear body panels, Audatex's refinish labor includes both exterior and interior surfaces.

**Question:** When you replace a floor pan with Audatex, does the paint labor allowance include both sides of the pan, or just the part inside the trunk?

**Answer:** Audatex provides time for the interior surface, and not the underside of the floor pan. This would also apply to pickup bed floors.

**Question:** When you are refinishing an exterior sheetmetal panel, is the time to mask the gap opening between the adjacent panels included in the Audatex refinish time?

**Answer:** Yes, Audatex's refinish time includes the time to mask, (e.g., backtaping or use foam tape), in the gap opening between the adjacent panels, however the time to mask the interior surface and/or jambs is not included. Refer to section [4-5 Refinish Operations](#) – Included and Not Included Operations list – Protect interior surface and jambs.

## Section 5-2 Frequently Asked Questions (FAQ's)

**Question:** Where are the Sport Bumper, Dual Hinged Cargo Doors, Rear Doors, etc.?

**Answer:** Audatex's system is completely option-driven. Whether you have decoded a VIN or manually selected your vehicle, you will need to review and select the options available from the Option Menu located in the Vehicle ID section.

**Question:** How do I get the labor for the partial I selected?

**Answer:** When selecting a partial, you need to select the partial noted "PARTL REPL TIME".

**Question:** Why is my VIN not decoding?

**Answer:** Try the following:

1. Re-check the VIN against the vehicle. Are there 17 characters?
2. This may be a vehicle not yet available on the Audatex system. Are you able to manually select the vehicle?

If you are unable to decode the VIN, please contact Client Services for further assistance.

**Question:** Why is the price on my estimate different from the price from the dealer?

**Answer:** The estimate price may differ from the dealer price for one of these reasons:

1. Audatex's procedures state that any part that has multiple part numbers (due to various colors or applications that cannot be controlled) is to be supplied with the lowest priced part number. Message Code 01 alerts the estimator to call the dealer for an exact part number and price. Message Code 01 will appear on the estimate to the left of the part description.
2. Review the options selected. Are there options that were not selected that would affect the part number and price?
3. There may have been OEM part increases/decreases. Audatex cannot control when the OEM increases or decreases a part price. We receive most but not all manufacturers' prices on a monthly basis. Any changes in pricing per the manufacturer will be reflected on the following monthly update.
4. Dealer markup. This is set by each dealer and is not controlled by Audatex or the manufacturer.

Use Audatex's feature Electronic Price Updates to download the most current manufacturers pricing information to your system. For additional information, refer to section 3-2 Pricing in the Audatex System.

**Question:** Why are some parts or labor information not available for Cutaway or Conversion Vans?

**Answer:** Audatex does not support some parts for Cutaway or Conversion Vans because these parts are NOT installed by the factory. Estimates can be completed using the appropriate OEM Cargo Van for the factory built parts and creating a manual/standard entry for the conversion parts.

Before completing the estimate, you need to:

- confirm all conversion parts and pricing information with the dealer/supplier and adjust as needed
- review labor and adjust as required to handle the modifications, based upon the estimate preparer's judgment and expertise.

**Question:** Why doesn't the system allow Blend on repaired panels?

**Answer:** Audatex's Blend Refinish is to blend into an undamaged adjacent panel. Blend Refinish must be selected with a full refinish adjacent panel. Blend Refinish is for the purpose of facilitating Color Match into the area. Spot Refinish must be entered as a manual entry.

**Question:** Why is the system adding time to overridden refinish times?

**Answer:** When two-stage refinish options are selected, two-stage will automatically be added to the refinish. In this case, you have three options:

1. Create a manual entry to provide the refinish time you require.
2. To lessen the time entered, calculation of the two-stage will be added to that time.
3. De-select the two-stage refinish, use Audatex's refinish, and add one manual entry for all two-stage required.

**Question:** Why is the system going over the 2.5 Two-Stage Threshold?

**Answer:** Two-Stage threshold is calculated on rigid, exterior panels' surfaced refinish only. This threshold does not apply to flexible panels, interior surfaces, or recycled assemblies operations. The Two-Stage Threshold also applies to all group refinish operations.

## Section 5-2 Frequently Asked Questions (FAQ's)

**Question:** Does the system include Jamb and Edges?

**Answer:** Yes, you will receive Jamb/Edge and/or Underside time when the panel is Replaced and Refinished.

**Question:** How do I select Jamb and Edges on repaired panels?

**Answer:** As of November 2009, Audatex has started to add Jamb and Edges as a selection for repaired panels on new and updated models. If these choices are available, they may be used for refinishing on repaired panels. If the vehicle does not fall into this category refinishing jamb and edges requires a manual entry.

**Question:** Is tinting included in the Audatex system?

**Answer:** The Audatex system includes time for the initial mix, check, one tint cycle, and check.

**Question:** Why do I get less time when I select a Group Refinish instead of refinish on each individual panel?

**Answer:** The labor assigned to this unique group is based on the group as a whole, not individual panel. Edges, Jamb, and Undersides are not included in a Group Refinish.

**Question:** How much of the panel is masked?

**Answer:** Audatex's labor provides time to mask up to 36" surrounding the panel. From that point, it's covered by bagging the entire vehicle.

**Question:** Does bagging and masking include the cost of the bag?

**Answer:** Audatex includes the time in the labor. However, the estimate preparer decides what is, or is not included in the Paint Materials.

**Question:** Does Flex Additive listed in the "Included Operations" include the cost of the flex additive?

**Answer:** Audatex includes the time in the labor. However, the estimate preparer decides what is, or is not included in the Paint Materials. For additional information, refer to section [4-4 Refinish Guidelines – Paint Materials and Paint Materials and Costs](#).

**Question:** I only wanted to R&I the headlamp assembly. However, the estimate shows that the component parts of the assembly are included. Why?

**Answer:** When you select a main assembly to obtain R&I labor, you cannot select a component part of that assembly on the same estimate. The process of the main assembly canceling the price and labor of component parts is still in effect.

**Question:** Why do I not have selections for Three-Stage refinish, Two-Tone, and/or Chipguard?

**Answer:** These options are controlled by Profiles. Please contact Technical Support for assistance.

**Question:** I tried to get door R&I labor by replacing the door and entering zero (00) in the price field. Why is the R&I labor so high?

**Answer:** The function of overriding the price to obtain R&I labor is to be used on items that contain only R&I labor. This includes items such as mouldings, nameplates, interior trim panels, etc. If functions used on items that contain full replacement or overhaul labor, you will receive full labor. For major bolted panels, Audatex provides Additional Labor/N operations. These operations furnish R&I labor for the estimate preparer's use when needed. They are available as R&I operations in Audatex EstimatingTM.

**Question:** I selected "Replace Salvage" to get R&I labor, but got full replacement labor instead. Why?

**Answer:** Salvage replacement operations may be entered for any part that can be replaced "new".

- If the salvage operation is listed, you will receive R&I labor.
- If the salvage operation is not listed, the labor will be the same as the corresponding replace "new" time. If the replace "new" time includes full replacement or overhaul labor, you will receive full replacement or overhaul labor on the salvage operation. You will not receive R&I labor.

**Question:** The refinish labor for the hood panel seems low. Do you include labor to refinish the underside?

**Answer:** You will receive underside, jamb, edge, or inside refinish labor only when a panel is being replaced, not repaired. To receive this additional labor, you must select either, "replace new," "aftermarket," "recycled," and or "partial replace" with the refinish operations for the same part.

## Section 5-2 Frequently Asked Questions (FAQ's)

**Question:** Why is the replacement labor for a recycled front door so low when I'm also replacing the rocker panel?

**Answer:** When replacing a rocker panel and a recycled door, the time to R&I the door is included in the rocker panel. The standard guide numbers for the rocker panel are 187/188 and the front doors are on 207/208. Because the rocker panel has the lower guide number, you will receive door R&I on the rocker

panel replace. Therefore, the labor for door R&I will be deducted from the door itself. The labor remaining on the door is to:

- R&I the lock cylinder, mirror, outer belt Weatherstrip or moulding, door handle, and Weatherstrip (when on the door)
- Remove the trim panel and lock cylinder from the recycled door (when power options are selected, the labor to R&I the trim panel is included in door R&I).

**Question:** The aftermarket bumper I received did not include the mounting brackets. Why does my estimate show that the mounting brackets are included?

**Answer:** Aftermarket parts are not always supplied in the same manner as the vehicle manufacturer supplies them. Sometimes the OEM bumpers include the mounting brackets, impact strip, etc. Assembly information shown on the graphics is representative of the OEM part. If you select component parts of the OEM assembly in conjunction with an aftermarket bumper, prices for the component parts will be eliminated. Therefore, prices for the component parts will have to be manually added to your estimate.

**Question:** Why was I able to enter repair time on a part that is not typically repairable for my vehicle?

**Answer:** The Audatex system automatically generates the "repair" operation codes. The program that creates these codes produces them for all years and all models. This allows repair to be performed on all parts regardless of model, year, or option application. Keep this in mind when selecting repair or refinish for parts not applicable to your specific estimate. The repair operation would be accepted while the refinish operation would be rejected.

**Question:** I selected the refinish operation and entered my own time to paint the door shell. I am also replacing and refinishing the door outer repair panel. Why did I receive 0.5 hour to paint the door outer panel?

**Answer:** The labor to refinish the door shell and outer repair panel is the same. Even though the pre-stored labor was overridden to spot paint the door shell, the system still thinks that you are trying to refinish the same panel twice. This is why you only received time to refinish the jambs on the door outer repair panel. The additional time for spot painting should be added by using the standard manual entry code M10 rather than by overriding the pre-stored labor on the door shell.

**Question:** Why was adjacent panel overlap deducted when I only wanted to blend the first panel and not completely refinish it?

**Answer:** "Blend Refinish" is automated. All overlap still applies for "blend" and manually entered refinish times.

**Question:** Why is the replacement labor for the radiator support panel so high?

**Answer:** Audatex replacement labor for radiator support panels includes all bolted parts that must be removed to gain access to the panel. On your estimate, check the labor on the front end bolted parts. You will see that there is either no labor or only a portion of the full replacement labor is shown. The following labor analysis is an example of the included operations in a typical radiator support replacement.

### Analysis of Operations Included in the Radiator Support Panel

| Operation   | Labor |
|---|-------|
| R&I HEADLAMP DOOR LT                                  | 0.2*  |
| R&I HEADLAMP DOOR RT                                  | 0.2*  |
| DISCONNECT/RECONNECT FENDER FRONT AT SUPPORT PANEL LT | 0.3*  |
| DISCONNECT/RECONNECT FENDER FRONT AT SUPPORT PANEL RT | 0.3*  |

|  |                       |
|--|-----------------------|
| R&I FRONT BUMPER   | 1.0*                  |
| R&I FRONT BUMPER ENERGY ABSORBER LT  | 0.3*                  |
| R&I FRONT BUMPER ENERGY ABSORBER RT  | 0.4*                  |
| R&I HEADLAMP ASSY LT   | 0.4*                  |
| R&I HEADLAMP ASSY RT   | 1.7*                  |
| R&I RADIATOR   | 1.0                   |
| CUT AND REWELD RADIATOR SUPPORT AT INR FENDER PANEL LT                                     | 1.0                   |
| CUT AND REWELD RADIATOR SUPPORT AT INR FENDER PANEL RT                                     | 1.0                   |
| CUT AND REWELD RADIATOR SUPPORT AT LOWER CROSS MEMBER                                      | 2.0                   |
| PULLBACK WIRING FOR ACCESS   | 0.5                   |
| R&I A/C CONDENSER  | 1.7*                  |
| TRANSFER BRACKETS  | 0.5                   |
| SEAM SEALING   | 0.4                   |
| TOTAL  | 12.2<br>*BOLTED PARTS |
| FOR THE RADIATOR SUPPORT PANEL, REPLACEMENT LABOR IS 15.4 HOURS WITH BOLTED PARTS REMOVED. |                       |

**Question:** Why does the labor report only show minimal labor related to the engine and mounts (Combination Engine) when the engine must be suspended using a special tool?

**Answer:** There are a number of different tools and methods that could be used to support a drivetrain. Each may require different levels of preparation. The Audatex labor allowances do not take into account any special equipment or procedures necessary to prepare the drivetrain to support and only allows the labor to raise and support (Combination Engine) after the engine is prepared for the support tool and any special tools are mounted.

**Question:** What is the current model year when selecting PXN or PXS searches?

**Answer:** The current model year for PXN and PXS searches is determined by the most recent year selected and the vehicle models available under that year selection. The current model year information continually changes as vehicles are added and updated.

## Section 5-3 Submitting a Request for Review (RFR)

### Submitting a Request for Review (RFR)

#### Questions Concerning Estimates

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Audatex provides a process to answer or clarify any inquiries you may have on a particular estimate. This process is known as Request for Review (RFR).

The RFR's are routed to our group of specialists who review, research, and answer each inquiry. During their research, they refer to:

- Audatex field operation studies
- Manufacturers price books and tapes
- Manufacturers service manuals
- Manufacturers engineering drawings
- Manufacturers production information pertinent to the specific vehicle and model of the estimate in question
- Input from manufacturers and repair facilities
- Bulletins from independent technical sources, paint manufacturers and research groups
- Vehicle dealers for inspection purposes

If a change is required:

- In most cases, changes made will be available to Audatex clients on the next update/release.
- An e-mail to the client will follow to explain what change will be made and when it will be available to the client.

If no change is required:

An email will follow to explain:

- what research has been performed
- why a requested change is not being made

For a disputed labor time, a detailed labor report identifying all operations and their values may be included. This labor report will also show where any overlap has occurred in the specific estimate being reviewed.

#### How to submit an RFR (Request for Review)

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~~An RFR form is included at the end of this manual. You can also get this form by calling, faxing, e-mailing, or writing us. Send the RFR form to us by mail, fax, or e-mail. You can also discuss your request with us by telephone.~~ **Submit your RFR inquiry to us by calling or emailing.**

RFR contact info:

**Phone:** (866) 420-2048  
**E-mail:** RFRGroup@audatex.com  
**Address:** Audatex Global Data & Content  
 \_\_\_\_\_ Attn: RFR  
 \_\_\_\_\_ 1301 Solana Blvd.  
 \_\_\_\_\_ Suite 20100  
 \_\_\_\_\_ Westlake, TX 76262

~~For all other Technical Support inquiries unrelated to database inquiries, please call (866) 420-2048 and follow the prompts.~~

## Section 5-4 Audatex System Abbreviations

### Audatex System Abbreviations

For all other Technical Support inquiries unrelated to database inquiries, please call (866) 420-2048 and follow the prompts.

|   |             |                                      |   |         |                  |
|---|-------------|--------------------------------------|---|---------|------------------|
|   | 2WD         | 2-wheel drive                        | L | L/F     | Left front       |
|   | 4WD         | 4-wheel drive                        |   | L/GATE  | Liftgate         |
|   | 4WS         | 4-wheel steering                     |   | LIC     | License          |
|   | &           | And                                  |   | LK      | Lock             |
| A | AAS         | Automatic Adjustable Suspension      |   | LKG     | Locking          |
|   | ABS         | Absorber                             |   | LMP     | Lamp             |
|   | A.B.S.      | Anti-lock brake system               |   | LN      | Line/Lane        |
|   | A/C         | Air condition(er) (ing)              |   | LNKG    | Linkage          |
|   | ACC         | Accessory                            |   | LOUV    | Louver           |
|   | ACS         | Active Cornering Suspension          |   | L/R     | Left rear        |
|   | A/CLNR      | Air Cleaner                          |   | LT      | Left             |
|   | ACT         | Actuat(e) (or) (ing)                 |   | LTD     | Limited          |
|   | ACTV        | Active                               |   | LTHR    | Leather          |
|   | ADDNL       | Additional                           |   | LUGG    | Luggage          |
|   | ADH         | Adhesive                             |   | LUX     | Luxury           |
|   | ADJ         | Adjust(er) (ing) (or) (ment)         |   | LVR     | Lever            |
|   | AEROPKG     | Aero Package                         |   | LWR     | Lower            |
|   | AHSS        | Advanced High Strength Steel         | M | MAG     | Magnesium        |
|   | AIR INJ PMP | Air injection pump                   |   | MAN     | Manual           |
|   | ALT         | Alternator                           |   | MBR     | Member           |
|   | ALUM        | Aluminum                             |   | MDL     | Model            |
|   | ANT         | Antenna                              |   | MECH    | Mechanical       |
|   | APPLQ       | Appliqué                             |   | MFG     | Manufacturing    |
|   | AQRP        | Aftermarket Quality Replacement Part |   | MFLR    | Muffler          |
|   | A.R.        | Alternate Replace Method             |   | MFR     | Manufacturer     |
|   | ASSY        | Assembly                             |   | MID     | Middle           |
|   | A/T         | Automatic transmission               |   | MIR     | Mirror           |
|   | A/TW/MS     | Automatic with Manual Select         |   | MISC    | Miscellaneous    |
|   | AUTO        | Automatic                            |   | MIX SUB | Mixed substrates |
|   | AUX         | Auxiliary                            |   | MKR     | Marker           |
|   | AVAIL       | Available                            |   | MLDG    | Moulding         |
|   | AWD         | All wheel drive                      |   | MNFLD   | Manifold         |
| B | BAT         | Battery                              |   | MNRF    | Moonroof         |
|   | BCAM        | Backup Camera                        |   | MNTR    | Monitor          |
|   | BDSD        | Bedside                              |   | MOD     | Module           |
|   | BDY         | Body                                 |   | MPH     | Miles per hour   |

|   |                 |   |   |                |                                    |
|---|-----------------|---|---|----------------|------------------------------------|
|   | BDYSD           | Bodyside                                |   | MPI            | Multi-port fuel injection          |
|   | BK              | Back                                    |   | MT             | Mount                              |
|   | BKT             | Bucket                                  |   | MTD            | Mounted                            |
|   | BLK             | Black                                   |   | MTG            | Mounting                           |
|   | BLW             | Below                                   |   | MTR            | Motor                              |
|   | BLWR            | Blower                                  |   | MVBL           | Movable                            |
|   | BMPR            | Bumper                                  |   | M/T            | Manual transmission                |
|   | BNCH            | Bench                                   | N | N/A            | Not available                      |
|   | BND             | Bond                                    |   | na             | Not Applicable                     |
|   | BRG             | Bearing                                 |   | NAV            | Navigation                         |
|   | BRGHM           | Brougham                                |   | N/B            | Notchback                          |
|   | BRK             | Brake                                   |   | NO. or #       | Number                             |
|   | BRKT            | Bracket                                 |   | N/PLATE or N/P | Nameplate                          |
|   | BRL             | Barrel                                  | O | O/B            | On-board                           |
|   | BRT             | Bright                                  |   | OBC            | Order by color                     |
|   | BSHG            | Bushing                                 |   | OBNS           | On Board Navigation System         |
| C | C               | Clear                                   |   | OBSNSR         | Obstacle sensor                    |
|   | CA              | California                              |   | OCC            | Occupant                           |
|   | CAM             | Camshaft                                |   | O/H            | Overhaul                           |
|   | CANN            | Cannister                               |   | O/LAP          | Overlap                            |
|   | CAPA            | Certified Aftermarket Parts Association |   | O/LAY          | Overlay                            |
|   | CATA            | Catalytic                               |   | OPDS           | Occupant position detection system |
|   | CC              | Cubic centimeter, Cruise Control        |   | OPNG           | Opening                            |
|   | CFI             | Cross fire injection                    |   | ORD            | Order                              |
|   | CHNL            | Channel                                 |   | ORN            | Ornament                           |
|   | CHR             | Chrome                                  |   | OTR            | Outer                              |
|   | CID             | Cubic inch displacement                 |   | OWS            | Obstacle Warning System            |
|   | CLNG            | Cooling                                 | P | P              | Privacy                            |
|   | CLNR            | Cleaner                                 |   | PARTL          | Partial                            |
|   | CLNT            | Coolant                                 |   | PASS           | Passenger                          |
|   | CLNT RCVRV TANK | Coolant recovery tank                   |   | PC             | Piece                              |
|   | CLR             | Color, Cooler                           |   | PDL            | Power Door Locks                   |
|   | CMBR            | Camber                                  |   | PERF           | Performance                        |
|   | CMPR            | Camper                                  |   | PKG            | Package                            |
|   | CMRA            | Camera                                  |   | PKLMP          | Parklamp                           |
|   | CMT             | Clutchless Manual Transmission          |   | PLNM           | Plenum                             |
|   | CNDSR           | Condenser                               |   | PLR            | Pillar                             |
|   | CNR             | Corner                                  |   | PLT            | Plate                              |
|   | CNRG            | Cornering                               |   | PNL            | Panel                              |
|   | CNRG LMP        | Cornering lamp                          |   | PRE-PTD        | Pre-painted                        |

|   |          |                                  |   |               |                                  |
|---|----------|----------------------------------|---|---------------|----------------------------------|
|   | CNSL     | Console                          |   | PROX          | Proximity Sensing Cruise Control |
|   | CNTL     | Control                          |   | PRSR          | Pressure                         |
|   | CNVRT    | Convertible                      |   | PRTNSR        | Pretensioner                     |
|   | COL      | Column                           |   | P/S PUMP      | Power steering pump              |
|   | COLL     | Collision                        |   | P/S RESVR     | Power steering reservoir         |
|   | COMB     | Combination                      |   | P/S, PWR STRG | Power steering                   |
|   | COMP     | Computer                         |   | PTD           | Painted                          |
|   | COMPL    | Complete                         |   | PTM           | Paint to match                   |
|   | COMPR    | Compressor                       |   | P/U           | Pickup                           |
|   | COMPT    | Compartment                      |   | P/W           | Power Windows                    |
|   | COMM     | Communication                    |   | PWR           | Power                            |
|   | CONN     | Connect(ing)                     | Q | QTR           | Quarter                          |
|   | CONV     | Converter                        | R | RAD           | Radiator                         |
|   | CPE      | Coupe                            |   | R,R & I       | Remove, Remove & Install         |
|   | CPLG     | Coupling                         |   | R,R & R       | Remove, Remove & Replace         |
|   | CRBN FBR | Carbon Fiber                     |   | RBRD          | Running Board                    |
|   | CRS      | Cross                            |   | R/C           | Remote control                   |
|   | CRMC     | Ceramic                          |   | RCKR          | Rocker                           |
|   | CRSMBR   | Crossmember                      |   | RCVR-DHYDR    | Receiver dehydrator              |
|   | CSTR     | Caster                           |   | RCVRY         | Recovery                         |
|   | CTR      | Center                           |   | RECHRG        | Recharge                         |
|   | CUSH     | Cushion                          |   | REFL          | Reflector                        |
|   | CVJT     | Constant velocity joint          |   | REG           | Regulator                        |
|   | CVR      | Cover                            |   | REINF         | Reinforcement                    |
|   | CVT      | Constant Velocity Transmission   |   | REL           | Release                          |
|   | CYL      | Cylinder                         |   | REMAN         | Remanufactured                   |
| D | D/B      | Disc brake                       |   | REP           | Represents                       |
|   | DBL      | Double                           |   | REPL          | Replace(d)                       |
|   | D&C      | Disassemble and clean            |   | REPR          | Repair                           |
|   | DCL      | Decal                            |   | REQD          | Required                         |
|   | DEFG     | Defogg(er) (ing)                 |   | RES           | Resonator                        |
|   | DEFL     | Deflector                        |   | RESRV         | Reserve                          |
|   | DEHYDR   | Dehydrator                       |   | REST          | Restraint                        |
|   | DERM     | Diagnostic energy reserve module |   | RESVR         | Reservoir                        |
|   | DIAG     | Diagnostic                       |   | RET           | Retainer                         |
|   | DIFF     | Differential                     |   | RF            | Roof                             |
|   | DISCRIM  | Discriminating                   |   | R/F           | Right front                      |
|   | DISP     | Display                          |   | RFNSH         | Refinish                         |
|   | DISTR    | Distributor                      |   | RMT           | Remote                           |
|   | DIV      | Division                         |   | R&I           | Remove and install               |
|   | DLX      | Deluxe                           |   | RR            | Rear                             |

|   |               |                             |   |             |                                   |
|---|---------------|-----------------------------|---|-------------|-----------------------------------|
|   | DMPR          | Damper                      |   | R/R         | Right rear                        |
|   | DPD           | Diesel Particulate Diffuser |   | R&R         | Remove and replace                |
|   | DPF           | Diesel Particulate Filter   |   | RT          | Right                             |
|   | DPS           | Dual phase steel            |   | RVL         | Reveal                            |
|   | DR            | Door                        |   | RVT         | Rivet                             |
|   | DRV           | Drive                       | S | S           | Shaded                            |
|   | DRV LMPS      | Driving Lamps               |   | S/B         | Seatbelt                          |
|   | DRVR          | Driver                      |   | S/BNCH      | Split bench                       |
|   | DSGN          | Design                      |   | SCKT        | Socket                            |
|   | DSL           | Diesel                      |   | SD          | Side                              |
|   | DYTM RNG LMPS | Daytime Running Lamps       |   | SDM         | Sensing & diagnostic module       |
| E | EA            | Each                        |   | SECT        | Section                           |
|   | EDN           | Edition                     |   | SED         | Sedan                             |
|   | EFI           | Electronic fuel injection   |   | SFTY        | Safety                            |
|   | EHSS          | Extra high strength steel   |   | SHLD        | Shield                            |
|   | <i>ELEC</i>   | <i>Electric/Electronic</i>  |   | SIG         | Signal                            |
|   | EMB           | Emblem                      |   | SIPS        | Side impact protection system     |
|   | ENG           | Engine                      |   | SIR         | Supplemental inflatable restraint |
|   | ENT           | Entertainment               |   | SIS         | Side impact sensor                |
|   | EQUIP         | Equipment                   |   | SLDG        | Sliding                           |
|   | ESCUT         | Escutcheon                  |   | SLNT        | Sealant                           |
|   | EST           | Estimate(d)                 |   | SLS         | Self Leveling Suspension          |
|   | EVAC          | Evacuate                    |   | SMC         | Sheet Molded Compound             |
|   | EVAP          | Evaporator                  |   | SMKR        | Side Marker                       |
|   | EXC           | Except                      |   | SNGL        | Single                            |
|   | EXH           | Exhaust                     |   | SNR         | Sensor                            |
|   | EXPN          | Expansion                   |   | SNRF        | Sunroof                           |
|   | EXTD          | Extended                    |   | SOL         | Solenoid                          |
|   | EXTN          | Extension                   |   | SPCHG       | Supercharger                      |
|   | EXTR          | Exterior                    |   | SPD         | Speed                             |
| F | FI            | Fuel injection              |   | SPK         | Spoke                             |
|   | FIL           | Filler                      |   | SPKR        | Speaker                           |
|   | FIN           | Finish                      |   | SPLR        | Spoiler                           |
|   | FLDG          | Folding                     |   | SPP         | Supplied pre-painted              |
|   | FLAMPS        | Fog Lamps                   |   | SPR         | Spring                            |
|   | FLNG          | Flange(d)                   |   | SPT         | Sport                             |
|   | FLR           | Floor                       |   | SRND        | Surround                          |
|   | FNDR          | Fender                      |   | SRS, S.R.S. | Supplemental restraint system     |
|   | FRM           | Frame                       |   | STAB        | Stabilizer                        |
|   | FRT           | Front                       |   | STD         | Standard                          |
|   | FRWD          | Forward                     |   | STKR        | Striker                           |

|   |        |                               |   |                     |  |
|---|--------|-------------------------------|---|---------------------|--|
|   | FT     | Foot (feet)                   |   | ST                  | Seat                                   |
|   | FWD    | Front wheel drive             |   | STL                 | Steel                                  |
| G | GARN   | Garnish                       |   | STNY                | Stationary                             |
|   | GDE    | Guide                         |   | STOR                | Storage                                |
|   | GEN    | Generator                     |   | STRG                | Steering                               |
|   | GLS    | Glass                         |   | STRG WHL TRANS CTRL | Steering Wheel Transmission Control    |
|   | G/N    | Guide Number                  |   | SUPP                | Supplied                               |
|   | GRD    | Guard                         |   | SUPT                | Support                                |
|   | GRVE   | Groove                        |   | SUSP                | Suspension                             |
|   | GSKT   | Gasket                        |   | SUV                 | Sport utility vehicle                  |
|   | GTR    | Gutter                        |   | SW                  | Switch                                 |
| H | H/B    | Hatchback                     |   | S/W                 | Station wagon                          |
|   | H/D    | Heavy duty                    |   | SYS                 | System                                 |
|   | HDLMP  | Headlamp                      | T | T                   | Tinted                                 |
|   | HDLNR  | Headliner                     |   | T/G or T/GATE       | Tailgate                               |
|   | HDR    | Header                        |   | TELE                | Telescopic                             |
|   | HEI    | High energy ignition          |   | TEM                 | Tempered                               |
|   | HID    | High Intensity Discharge      |   | TEMP                | Temperature                            |
|   | HLGN   | Halogen                       |   | THERM               | Thermometer                            |
|   | HNDL   | Handle                        |   | THRT                | Throttle                               |
|   | HNG    | Hinge                         |   | TMG                 | Timing                                 |
|   | HNGD   | Hinged                        |   | TLLMP               | Taillamp                               |
|   | HNGR   | Hanger                        |   | TNK                 | Tank                                   |
|   | HNYCMB | Honeycomb                     |   | TNSNR               | Tensioner                              |
|   | HRNSS  | Harness                       |   | TORQ                | Torque                                 |
|   | HSG    | Housing                       |   | TORS                | Torsion                                |
|   | HSLA   | High strength low alloy steel |   | TPMS                | Tire Pressure Monitoring System/Sensor |
|   | HSS    | High strength steel           |   | TRAC                | Traction                               |
|   | H/T    | Hardtop                       |   | TRANFR              | Transfer                               |
|   | HTD    | Heated                        |   | TRANS               | Transmission                           |
|   | HTR    | Heater                        |   | TRNSVS              | Transverse                             |
|   | HUD    | Heads Up Display              |   | TTL                 | Total                                  |
|   | HVY    | Heavy                         |   | TURBO               | Turbocharge                            |
|   | HYD    | Hydraulic                     | U | U/JT                | Universal joint                        |
| I | IGN    | Ignition                      |   | UHSS                | Ultra high strength steel              |
|   | IN     | Inch(es)                      |   | UPR                 | Upper                                  |
|   | INCL   | Includ(e) (ed) (s) (ing)      |   | URTH                | Urethane                               |
|   | IND    | Indicator                     | V | VAC                 | Vacuum                                 |
|   | INDV   | Individual                    |   | VAL                 | Valance                                |
|   | INFLAT | Inflatable                    |   | VEH                 | Vehicle                                |
|   | INFO   | Information                   |   | VERT                | Vertical                               |

|   |        |                        |   |                 |                             |
|---|--------|------------------------|---|-----------------|-----------------------------|
|   | INJ    | Injection              |   | VENT            | Ventilated                  |
|   | INJR   | Injector               |   | VLV             | Valve                       |
|   | INL    | Inlet                  |   | VNL             | Vinyl                       |
|   | INR    | Inner                  |   | VOL             | Volume                      |
|   | INS    | Insert                 |   | VPR             | Vapor                       |
|   | INST   | Instrument             |   | VPR CANN        | Vapor canister              |
|   | INSUL  | Insulation             | W | W/              | With                        |
|   | INT    | Intake, internal       |   | WARN            | Warning                     |
|   | INTCLR | Intercooler            |   | W/G or W/GRAIN  | Woodgrain                   |
|   | INTER  | Intermediate           |   | WGN             | Wagon                       |
|   | INTR   | Interior               |   | WHL             | Wheel                       |
|   | I/P    | Instrument panel       |   | WHLHS           | Wheel house                 |
|   | I/S    | Inside                 |   | WHL OPNG        | Wheel opening               |
|   | ISLTR  | Isolator               |   | WLD             | Weld(ed)                    |
| J | JKT    | Jacket                 |   | WNDW            | Window                      |
|   | JT     | Joint                  |   | W/O             | Without                     |
| K | K/B    | Kammback               |   | WPR             | Wiper                       |
| L | L      | Liter                  |   | W/S or W/SHIELD | Windshield                  |
|   | LAM    | Laminated              |   | W/S WSHR RESVR  | Windshield washer reservoir |
|   | LAT    | Latch                  |   | WSHR            | Washer                      |
|   | L/B    | Liftback               |   | W/STRIP         | Weatherstrip                |
|   | LDW    | Lane Departure Warning | Y | YR              | Year                        |
|   | LED    | Light emitting diode   |   |                 |                             |

## Section 5-5 Glossary of Audatex Terms

### Glossary of Audatex Terms

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This glossary is intended to aid in the use and understanding of Audatex applications. The definitions provided in this glossary are pertinent only to the Audatex system. Therefore, no implication or recommendation is made to use this glossary in any other manner.

- **Access Time:** Labor required for the removal of all necessary parts to gain access to the innermost part being repaired and/or replaced.
- **Additional Operation:** An additional process that may be required in conjunction with the repair or replacement of a specific vehicle part (e.g., aim headlights).
- **Adjustor:** An insurance company representative responsible for the verification of coverage and/or settlement of claims.
- **Aftermarket:** Any part or accessory that is purchased from a source other than the OEM parts distribution network or automotive recycler.
- **Align:** To bring all appropriate edges of a part or assembly flush or square with adjacent or related parts or assemblies during a repair or replacement operation.
- **Alternate Replace Method (A.R.):** An alternate replace method refers to an industry accepted repair methodology that is based upon sources and practices other than OEM.
- **Appearance Allowance:** A specific dollar amount determined by the estimator, paid, or credited to a vehicle owner in lieu of a part repair or replacement.
- **Application:** Another word for computer software program.
- **Appraiser:** A person who inspects a damaged vehicle and determines what repairs or part replacements are required to restore the vehicle to the condition it was in immediately prior to loss. Also known as an Estimator.
- **Assembly:** Two or more related parts of a vehicle that are preassembled by the manufacturer and sold under one part number.
- **Audit Trail:** Information provided on the very last line of an estimate to indicate the potential availability (as well as the quantity included in the Estimate) of both Parts Exchange New and Parts Exchange Salvage items.
- **Backup:** A copy of the contents of your disc. Because discs can be lost or damaged, it is important to backup your files often to prevent the loss of valuable information and time.
- **Betterment:** A specific percentage determined by the estimator, deducted from the cost to repair or replace a particular part in the event it is repaired or replaced with a part that is higher quality and will increase the value or condition of the vehicle (e.g., tires and batteries). Betterment may also be applied to paint that is faded, cracked, etc. Also known as depreciation.
- **Boot:** Booting refers to turning on a computer, or the process of loading the system software into the computer at startup time. When you reset your computer, you are giving it a 'warm boot' because your system has not been fully shut down.
- **Bright:** The shiny, reflective decorative trim or moulding around the windows, door lock cylinders, etc., on some vehicles.
- **Buffer:** A storage device used to compensate for a difference in rate of data flow, or time of occurrence of events, when transmitting data from one device to another (or a device separating other devices in a system).
- **Byte:** One unit of information inside a computer. Bytes are also used as a measure of capacity; Kilobyte = 1,000 bytes, Megabyte = 1,000,000 bytes.
- **Caddy:** The case that holds your DVD inside the drive mechanism. Not all drives require a caddy, those that do usually come with one DVD caddy.
- **CD-ROM:** An acronym for Compact Disc, Read Only Memory. A special optical storage device that can contain millions of bytes of information. You cannot save (or write) to a Read Only CD.
- **Certification Code (CRT):** Appearing on the Parts Exchange New Locate Report, this code indicates a part is certified by CAPA® (Certified Aftermarket Parts Association).
- **Claimant:** One who makes a claim against another's insurance company. In the Audatex system, a Claimant is considered an individual other than the insured.
- **Classification Code (CLS):** Appearing on the Parts Exchange Locate Report, this code indicates whether a part is a Non-OEM part or an OEM part.

## Section 5-5 Glossary of Audatex Terms

- **Clear Coat:** A clear, UV resistant coat of paint (e.g., urethane or acrylic enamel) applied over the base or color coat of paint on a vehicle.
- **Clip:** A group of related vehicle parts purchased from an automotive recycler as an assembly (usually the complete front rear section of a vehicle). It is also known as a Salvage Clip.
- **Collision:** In the Audatex system, Collision is the appropriate type of loss if damage to an insured vehicle results from impact with another vehicle or object. Abbreviated as COLL or COL.
- **Combination Suspension:** The Audatex term for raising and supporting a vehicle.
- **Comprehensive:** In the Audatex system, comprehensive is the appropriate type of loss if damage to an insured vehicle results from something other than collision (e.g., fire, hailstorm or vandalism).
- **Computer Graphics:** Pictorial representations such as diagrams, drawings, or charts generated on a computer.
- **Configuration:** The specific combination of hardware and software being utilized in a personal computer application, or the selected parameters that determine the operation of a device.
- **Control Entry:** Any damage entry in an Audatex estimate that contains a guide number.
- **Control Log Number:** In the Audatex system, the log number assigned to the estimate used to initiate the original estimate (or schedule) is the control log number.
- **Correction / Update:** In the Audatex system, a correction is a supplement used to correct an estimate that contains an error or omission.
- **CPU:** An acronym for Central Processing Unit. Another term for a computer's microprocessor (the control center of the computer where all calculations take place).
- **Cursor:** A symbol indicating where the next keyboard input or mouse click will be placed.
- **Customer ID:** The identification number(s) assigned to each Audatex client. A customer ID is required to process all Audatex estimates. Also known as estimator ID.
- **Customer Master File (CUSTMST):** Stored on the Audatex's host system, the customer master file contains special processing specifications and Customer ID numbers unique to each Audatex client. (CustMST is also referred to as Host Settings).
- **Damage Entry:** An entry made consisting of an operation code and the corresponding guide number to indicate repair or replacement relative to damage on a vehicle. In a damage entry, the estimator can also include price, labor hours, percentage of an adjustment (discount, markup, or betterment), and/or one of four shop labor rates. The damage entries are then entered into the Audatex system to create an estimate.
- **Database:** Integrated file of information organized for access and retrieval.
- **Data Transmission:** A communications event where data is transmitted from one device to another.
- **Dedicated Line:** A telephone line used for the sole purpose of data transmission via a computer.
- **Deductible:** A dollar amount, specified in most insurance policies, beyond which insurance protection begins. The insured assumes the loss up to the limit of the Deductible amount. Then the insurance company pays any amount over the Deductible up to the policy limit.
- **Default:** The standard choice, option, or selection automatically used by a computer program unless changed by the user.
- **Disc:** The magnetic medium on which the computer stores information.
- **Disconnect & Re/connect:** Detach and reattach items necessary to perform an operation (e.g. wiring, hoses, etc).
- **Diagnostics:** A specific software or hardware procedure designed to verify a computer's operation and identify reasons for failure.
- **Disc Drive:** The mechanism that rotates a disc past the read/write device (or 'head') inside a CPU.
- **Download:** A method of data transmission whereby a computer receives data from another device (e.g., a web server, host, or personal computer).
- **Driver:** Specific software that enables and controls the interaction of a device (e.g., a printer) with a computer program.

## Section 5-5 Glossary of Audatex Terms

- **Drive-in Inspection:** An inspection of a damaged vehicle which is still operable and which is brought to wherever the appraiser/estimator conducts business.
- **DVD:** An acronym for Digital Versatile Disc, the latest generation of disc storage technology.
- **Economy Part:** Any new vehicle part or accessory that is purchased from a source other than the OEM parts distribution network.
- **Electronic Price Update:** A feature that lets you download the most current OEM parts price information directly from Audatex.
- **Estimate:** The written determination made by an appraiser or estimator, upon inspection of a damaged vehicle, regarding the cost required to restore the vehicle to the condition it was in immediately before the loss.
- **Estimator:** An appraiser or insurance company representative who inspects a damaged vehicle and determines the cost required to restore the vehicle to its condition immediately before the loss.
- **Estimator ID:** The identification number(s) assigned to each Audatex client. An estimator ID is required to process all Audatex estimates. Also known as Customer ID.
- **Factory Provided:** All standard and optional vehicle parts installed at the factory by the original manufacturer of the vehicle.
- **Fast Start:** Audatex's Fast Start vehicle files provide clients with the ability to complete damage estimates on "Mirror Image" current Model Year vehicles using existing previous model year, part numbers and prices. Extensive research of manufacturers' information and industry publications results in the listing of all Fast Start carryover vehicles that have no major changes or restyling and only minor cosmetic changes.
- **Field Inspection:** An inspection where the appraiser/estimator goes to the location of a damaged vehicle to write an estimate.
- **File:** A collection of information stored on a disc (e.g., a document, a system file, or an application).
- **Flat Rate Labor:** A suggested set time to remove and replace a part, or to complete any labor operation.
- **Frame Time:** To include total labor costs for frame straightening and setup operations on an Audatex estimate printout. Entries consisting of an operation code I (or N) and guide number 000, along with any applicable price and/or hours, is written on the Audatex estimate (also see [Unibody-Frame Including Setup](#)).
- **Group Refinish Operation:** A refinish operation that indicates the surface refinish of a group of adjacent panels as a single operation. Group Refinish Operations do not include labor for refinishing the edges or undersides of the panels.
- **Guide Number:** A three- or four-digit reference number used by Audatex to identify a part and its corresponding pre-stored data (description, price, labor, and rate code). Guide Numbers are assigned to every part illustrated in the Audatex system.
- **Hardware:** The physical components of a system (e.g., mechanical or electrical).
- **Host:** The Audatex mainframe computer.
- **Included Operation:** Any operation (e.g., removal and replacement of a part) completed in its entirety while performing another separate operation, which is calculated into Audatex Labor.
- **Insured:** The person purchasing the insurance policy from the insurance company.
- **Interface:** Boundary where two or more devices interact or a program enabling separate elements to work together.
- **K:** An acronym for kilobyte (in relation to computers); represents 1,000 bytes.
- **Labor Rate:** The dollar amount applied to flat rate labor (time) specifically quoted in dollars per hour by labor category (frame, mechanical/electrical, refinish, or sheet metal).
- **Liability:** In the Audatex system, Liability is the appropriate Type of Loss resulting from damage or injury one individual causes to another for which the first individual is legally liable. Abbreviated as LIAB.
- **Log Number:** A unique file number that appears on each Audatex estimate printout. This number allows retrieval of a specific estimate for subsequent Corrections, Supplements, Prints, etc.

## Section 5-5 Glossary of Audatex Terms

- **Login ID:** A user-specific identification code for logging into Audatex Estimating™ or other web products.
- **Logon, Logoff:** Typing a password or designated word before starting to use an application and typing another to indicate when you are finished.
- **Loss:** In the Audatex system, an occurrence of damage of any type to vehicle.
- **Manual Entry:** A damage entry made in the Audatex system for a part or operation that is not assigned a guide number.
- **Memory:** The place in the computer that (temporarily) stores information while you are working with it.
- **Menu:** A list of options or commands in a computer program visible on the screen.
- **Menu Bar:** The horizontal strip at the top of the screen that contains menu titles.
- **Microcomputer:** Personal computer containing processor, input and display devices, and memory.
- **Microprocessor:** The computer's main brain, the control center for the computer.
- **Modem:** A device that takes electronic information from a computer and converts it into sounds that can be transmitted over telephone lines. This lets computers communicate via existing phone lines.
- **Multi-level Assembly:** The combination of two or more assemblies, plus related component parts, sold by the manufacturer under one part number.
- **NAGS:** An acronym for National Auto Glass Specifications. An organization that specifies, certifies, and publishes pricing for automotive glass. In the Audatex system, the use of operation code NG or EC automatically supplies the NAGS price when available. If a NAGS price is not available, there will not be a NG or EC code accessible for the glass part.
- **Non-OEM:** All parts that are considered Aftermarket, Economy, or Salvage.
- **OEM:** An acronym for Original Equipment Manufacturer. A new replacement part or accessory that is manufactured by and available through the vehicle manufacturer's parts distribution network.
- **Online:** To be on and ready to go. For example, when a printer is online, it is turned on, contains paper, and is all ready to print.
- **Operation Code:** An alpha code indicating the type of repair or replacement operation selected on the Audatex system.
- **Original Price:** The part price effective on the date that an estimate was originally processed.
- **Overhaul:** A type of flat rate labor that contains R&I and R&R labor plus time to completely disassemble and reassemble an assembly (e.g., bumpers, suspension, drive axles, and steering).
- **Overlap:** The labor associated with an operation that is common to the replacement of two or more parts.
- **Paint Material:** The cost for paint and materials is calculated by multiplying the value entered in Rate 5 of the Audatex Rates/Calculations screen by the total net refinish labor in Rate 4.
- **Partial Replace Operation:** The partial replacement of a service part (e.g., quarter panel belt cut, moulding kit, etc.).
- **PXN:** An acronym for Parts Exchange New. An Audatex feature that provides pricing and available information regarding new replacement parts and assemblies.
- **Password:** Required code permitting a user to access protected parts of a program.
- **Peripherals:** Any item attached to the outside of the computer such as a printer, modem, monitor, or keyboard.
- **Port:** An outlet on the back of a computer to which various peripherals are connected. The two primary ports are the serial port and the printer port, although the keyboard and monitor connections can also be called ports.
- **Preload:** A feature of the Audatex application that allows the estimate preparer to create reusable files with data common to many estimates (e.g., remarks, labor rates, etc.).
- **Primary Impact:** In Audatex, primary impact indicates the area of the loss vehicle that sustained the most severe damage.
- **Printout:** Printed output from a computer. A printout of all applicable Audatex estimates can be produced (e.g., Estimate, Supplement, etc.).

## Section 5-5 Glossary of Audatex Terms

- **Program:** A special file on disc that contains instructions for the computer.
- **Pullback/Rollback:** Partially loosen or remove items to gain access, or move out of the area of immediate work (e.g. carpet, wiring, insulation, weatherstrip etc).
- **R & I (Remove & Install):** An operation or group of operations that are required to remove and install the part or assembly. Audatex time includes normal adjustment and alignment for correct fit, and does not include any duplicated effort. The installation is for the originally attached part.
- **Rag Rule:** The Radiator, Air conditioning condenser, and Gas tank usually require removal from a vehicle when they are repaired. When operation code I is selected for any one of these three parts, Audatex automatically adds the necessary R&I labor.
  - This rule no longer applies to new vehicles models released after January 2018.
- **RAM:** An acronym for Random Access Memory is the primary type of memory storage in a PC that stores information temporarily while you are working on it. Information stored in RAM is temporary. If you turn the power off without saving first, the information is gone forever.
- **Rates:** The percentage or dollar amounts applied to labor, labor tax, and parts tax.
- **Related Prior Damage:** Damage to the vehicle that occurred before the current loss. When prior damage exists, the estimator determines an amount to be deducted from the cost to repair or replace the damaged part because the part was not in original condition when the current loss occurred.
- **Remarks:** In the Audatex system, the user is able to preload commonly used remarks for printing on the final estimate. For example, this might include "Tow bill to be handled separately."
- **Replace (Replacement):** Is an operation or group of operations that are required to remove the damaged part and replace with the new OEM or new alternative part. The Remove and Replace (R&R) time includes normal adjustment and alignment for correct fit and does not include any duplicated effort. Replace includes any operations over and above the R&I operations.
- **ROM:** An acronym for Read-Only Memory, the part of memory that contains information or instructions. Information in ROM cannot be changed, as it is Read-Only.
- **Schedule:** An estimate used to store available administrative data for an Audatex estimate in the Audatex host before vehicle inspection. Upon vehicle inspection, the data can be retrieved, edited, and a final estimate printed.
 

**Note:** *Schedules saved in the host can be obtained with PCOPY.*
- **Scroll:** To move what is displayed on a computer's screen (e.g., a list, a document) so that a different part of it is visible. This can be done by using the Page Up and Page Down keys.
- **SDI:** An acronym for Standard Data Interface, a type of file format used when data files are transferred between an Audatex computer and a data management system (using the Transfer Estimate function).
- **Software:** Computer programs (or applications) containing instructions that control computer hardware.
- **Standard Manual Entry:** A special series of Audatex codes that contain the prefix M followed by a two-digit number. Standard manual entries represent damage entry descriptions that are commonly made in the Audatex system.
- **Sub Assembly:** An assembly within a multi-level assembly that is available individually from the vehicle manufacturer.
- **Sublet Repairs:** Repairs to be performed for a negotiated or contract price, or by a subcontractor. When a Sublet Repair is indicated, all applicable materials, labor, markup, and taxes should be included.
- **Supplement:** A Supplement is created if a change or addition must be made to an estimate after a final print has been produced.
- **Supplier Code (SPL Code):** A numeric code (e.g., 01, 02, 03, etc.) that appears on the Parts Exchange New Locate Report to identify the supplier(s) of each individual part. The supplier code is helpful when multiple suppliers are listed on the report.
- **Transmit:** To send an Audatex estimate to the host by way of a modem.
- **Unibody-Frame - Including Setup:** To include total labor costs for frame straightening and setup operations on an Audatex estimate printout. Entries consisting of an operation code I (or N)

and guide number 000, along with any applicable price and/or hours, is written on the Audatex estimate.

### **Section 5-5 Glossary of Audatex Terms**

- **Unrelated Prior Damage:** Damage to the loss vehicle that is not related to the current loss damages.
- **Upload:** A method of data transmission whereby a computer sends data to another device (e.g., a host or personal computer).
- **VIN:** An acronym for Vehicle Identification Number, which is a unique 17-character assigned to each vehicle by its manufacturer to identify the model, year, production sequence, and other vehicle-specific information.
- **Write-Protect:** The tab setting on a diskette that makes it impossible to alter data. A 3.5" diskette is write-protected when you can see through the little hole in the upper right corner.

## Section 5-6 Glossary of Audatex Refinish Operations

### Glossary of Audatex Refinish Operations

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- **Application of guide coat:** Application of a light coat of paint before sanding to expose high and low points on the panel.
- **Apply and flash color:** Apply basecoat to the surface and allow to flash.
- **Basic corrosion protection provided by paint system /primer applied:** Basic protection provided by primer/paint manufacturer.
- **Block sand:** Process of using sandpaper mounted to a block to ensure the area is smooth.
- **Blending:** The application of color to a portion of an undamaged adjacent panel for the sole purpose of facilitating the appearance of color match into the area. When blending two- or three-stage refinish systems, blending includes the application of clear coat to the entire blended panel.
- **Blow dry clean panels:** Blow the panel with a high-pressure air hose to remove dust / grit / lint / water.
- **Booth operations:** Open booth doors; turn on booth ventilation and lights.
- **Clean booth:** Wet down the paint booth; remove discarded materials from previous job.
- **Clean equipment and material:** Clean paint mixing stirrs and measuring containers.
- **Clean gun:** Place paint gun in the gun washer.
- **Color tint and check:** Tint and check the color after it is mixed to specifications.
- **De-wax and degrease:** Remove wax and grease from a panel with degreaser.
- **Dual action sanding:** Sand body filler in the area where the welded panel was attached.
- **Gather materials, equipment, and tools:** Bring masking paper, paint gun, sander, masking cart, etc., to the refinish area.
- **Get paint codes:** Obtain paint codes from the vehicle or paint reference book.
- **Hand/wet sand:** Sanding by hand with either wet or dry sandpaper.
- **Inspect job and paint:** Inspect surface and refinish.
- **Mix color:** Mix the paint to formula specifications.
- **Mix, apply, and flash additives:** Mix sealers, promoters and apply one coat.
- **Mix, apply, flash, or prime welded area:** Mix primer, apply to the surface, and allow to flash.
- **Move vehicle:** Move vehicle in and out of the booth or refinish area.
- **Order paint:** Order paint from a jobber or paint manufacturer.
- **Prepare to sand:** Get gloves, dust mask, and face shield. Connect air hose. Cut and fold sandpaper.
- **Prepare to spray:** Get gloves, respirator, and lint suit. Connect air hose and test paint gun.
- **Protect exterior of vehicle from overspray utilizing all acceptable methods of bagging, masking, masking up to 36 inches surrounding the panel and masking of glass within a panel. This includes using backtaping and/or foam tape to close out the gap between panels. If backtaping and/or foam tape does not adequately prevent overspray from entering the jamb areas any additional masking to protect the interior and jambs is a not included operation.**
  - Masking and Bagging to avoid overspray on other panels of the vehicle. Backtaping and foam tape is used to help prevent overspray from entering the jamb area.
  - Bagging the vehicle includes placing a bag over the vehicle and taping it down.
  - Masking includes the use of masking paper on the vehicle.
  - Masking off the vehicle and bagging the remaining portion of the vehicle is the most common method.
- **Refinish within panel boundaries (Refinish Within a Panel):** The process of applying paint and clear coat to the surface of a repaired panel for the sole purpose of facilitating the appearance of color match within the confines of the panel.
- **Review estimate:** Check refinish times.
- **Second Color:** Any surface or component of the vehicle that requires paint application that is a different color than the primary or secondary colors of the vehicle.
- **Spray test panel:** Spraying a test panel with basecoat. When two-stage refinish option is being used, spray again with clear.

## Section 5-6 Glossary of Audatex Refinish Operations

- **Tack Wipe:** Wipe the panel with a tack cloth to remove dust and lint.
- **Two-Tone:** A paint scheme where two different colors or two shades of the same color are used on a panel.
- **Water wash and clean panel with solvent:** Wash and dry the panel then wipe down with a solvent.

Printed copies of this document may not contain the most current information. For the latest version, please refer to the Database Reference Manual accessed through the Help Menu in the current release of Audatex Estimating. The current version of the Database Reference Manual may also be found at [MySupportGarage.com](https://www.audatex.com/MySupportGarage.com).