

EDUCATION PROGRAM

## Repairer to Repairer: Realities of Structural Repair and Tooling

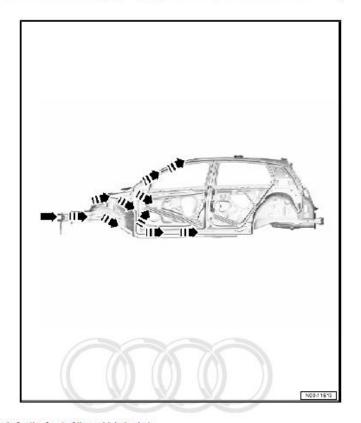
Presented by: K. Michael Bradshaw



# Why are proper structural repairs vital to occupant safety?

- The goal of modern vehicle design is to absorb and direct crash energy along load paths and away from the occupant cabin.
- Inadequate or improper repairs can effect how these load paths transfer energy in a subsequent collision.
- It is vital that the modern day collision repair center restores the vehicle in a manner that maintains the safety features engineered by the vehicle manufacturer.
- Modern day structural repair requires advanced tooling & equipment, training, research, and understanding of advanced repair materials and techniques.

General InformationBody Repair, Body Collision Repair - Edition 04.2018



The goal of the body design is for the front of the vehicle body to absorb as much of the energy as possible.

If there is heavy damage to the front of the vehicle structure, the A-pillar transition area to the roof frame or sill must also be closely inspected during the damage evaluation.

Due to the structure, the entire outer shell should also be inspective or commarcial purposes, in part or in whole, is not ted, since elastic deformations in the high-rigidity structure, may sometion in this document. Copyright by AUDI AG.

# Identifying structural components and operations

- Replacement or repair of any components that are attached using Welding, Weld-Bonding and/or Rivet-Bonding. Structural components can also include some bolt-on components and glass.
- Structural operations in both repair and replacement situations would require the use of a universal frame bench or dedicated bench in most all cases.
- The latest Motor Guide to Estimating lists the following components as structural parts or parts that add structural integrity to a vehicles body.
  - APRONS/STRUT TOWER CENTER PILLAR CORNER PILLAR FRONT RAIL HINGE PILLAR • LOCK PILLAR • RADIATOR CORE SUPPORT • REAR RAIL • REAR STRUT TOWER • ROCKER PANEL • SUSPENSION CROSSMEMBER • UPPER RAIL
  - COWL ASSEMBLIES DASH PANEL ENGINE CRADLE (bolt-on) FLOOR PANEL IMPACT BAR (bolt-on) • PERIMETER FRAME • QUARTER PANEL • RADIATOR CORE SUPPORT (bolt-on) • REAR BODY PANEL • ROOF PANEL • STATIONARY GLASS (urethane bonded)

# Equipment considerations for structural replacement operations

- Dedicated or universal frame bench (dependent on manufacturer requirements for that vehicle)
- Squeeze type resistance welders (Some may require specific software by the vehicle manufacturer)
- MAG (Metal Active Gas) or MIG (Metal Inert Gas) Welders Welder requirements dependent on vehicle manufacturer and processes required.
  - Type of wire (Aluminum, Silicon Bronze, Steel)
  - Type of shielding gas
  - Functionality/features required for process utilized and/or OEM
- Self piercing rivet guns (dependent on manufacturer requirements for that vehicle)
- OEM specific adhesive guns and corrosion material application devices

## Preparing for the repair blueprint

- Inspect and document vehicle condition
- Pre-Wash
- Pre-Scan
- Visually inspect
- Pre-measure structural dimensions
- Pre-check suspension alignments
- Research OEM Repair Information
- Visually map vehicle for disassembly
- Perform 100% disassembly of all components for repair process required
- Inspect vehicle and removed components, finalize OEM research

## Creating the repair blueprint



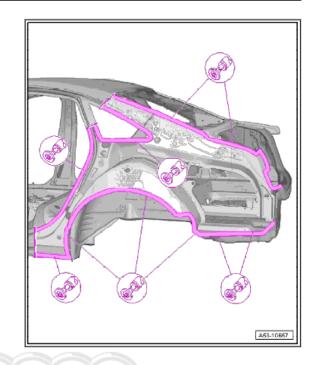
## Creating the repair blueprint



## Creating the repair blueprint

- How do we translate the required repair processes based on the damages and OEM replacement requirements to our estimating system? Tell the story using:
  - ► OEM Repair information
  - Estimating guides (Audatex, CCC or Mitchell)
  - Cheat sheets like the SCRS Guide to Complete Repair Planning or those offered by THE DEG (Database Enhancement Gateway)
    - ▶ <u>WWW.DEGWEB.ORG</u>
    - https://scrs.com/wp-content/uploads/2018/01/2016-scrs-guide-to-complete-repairplanning-revised-11-16.pdf
  - Training materials (I-CAR, OEM, Other)
  - Reference prior repair plans on identical or similar vehicles

### Audi A6 2011 ≻ , Audi A6 Avant 2011 ≻ , Audi A6 China 2012 ≻ Body Repairs - Edition 02.2018



#### **Replacement Parts**

- Side Panel
- Molded Foam Parts
- Cleaning Solution D 009 401 04-
- ♦ Two-Part Epoxy Adhesive DA 001 730 A2- , 1 cartridge set

#### New Part, Preparing

- Transfer the separation cut to the new part and cut the hatched area with a Body Saw.
- Drill holes for the gas-shielded arc plug weld seam using the Drill . Dread of the gas-shielded arc plug weld seam using the periltate unless automoted by AUDI AO, AUDI AO does not guarantee or accept any liability
   Clean the "adhesion" area "with Cleaning Solution = D'009'404"<sup>LUDI AO</sup>, 04- so it is free of dust and grease.
- Grind down bonding surface on body to bare metal.
- Clean the flanging area with Cleaning Solution D 009 401 04-so it is free of dust and grease.

#### **QUARTER PANEL WITHOUT CONVERTIBLE ROOF**

#### SPECIAL NOTATION:

Quarter panel R&R times are generally based upon replacement at the factory seams. On some vehicles, it is not practical to replace at the factory roof seam. If a sectioning operation is not listed, then the R&R time on the parts line represents the time to splice at the best area. GTE page includes Quarter panel sectioning.

#### INCLUDED:

- Adhesive application if required (all types)
- · Back glass & moldinas
- Bolt on extensions & fillers
- Carpet & insulation
- turn back
- Caulk/seam sealer
- Cutting & welding as necessary
- Door striker
- Fuel door
- Grind, fill & smooth
- welded
- seams (up to 150 grit sandpaper)
- Interior molding
- Quarter glass & reveal
- moldings (unless noted)
- Quarter interior trim
- Rear seat R&I
- Rear lamp assemblies R&I (std equip) Rear bumper assembly and/or
- cover R&I (if necessary)
- Rear package tray trim
- Sill plates
- Speakers
- Trunk compartment trim
- · Weatherstrips attached to guarter panel
- Wheelhouse liner (plastic)

#### DOES NOT INCLUDE:

- Antenna
- Body side moldings
- Carpet & insulation R&I
- Electrical wiring
- Emblems & nameplates
- Foam
- Fuel tank
- · Glass regulator assembly
- Headliner R&I
- Lamp R&I (optnl equip)
- Mud guard
- · Panels inward of guarter
- Road wheel
- Roof cover R&I or roll back
- Spoilers & flares (optnl equip)
- Stripe tape, decals or overlays
- Trunk lid, liftgate or tailgate R&I

- · Welded seam surface finishing finer than 150 grit sandpaper
- Welder set-up or preparation
- Wheel or hub cap locks R&I

OPERATION TIMES LISTED ARE BASED ON NEW UNDAM-AGED PARTS INSTALLED ON NEW UNDAMAGED VEHICLES AS INDIVIDUAL OPERATIONS. TIME HAS NOT BEEN CONSIDERED FOR ALIGNMENT PULLS, DAMAGE-RELATED ACCESS TIME. DAMAGED, USED, REMANUFACTURED OR AFTERMARKET PARTS, SOME OPERATION TIMES ARE APPLICABLE AFTER BOLTED, ATTACHED OR RELATED PARTS HAVE BEEN REMOVED. REFER TO SPECIFIC FOOTNOTES ATTACHED TO OPERATION TIME LISTING.

#### LABOR TIME DOES NOT INCLUDE:

#### SPECIAL NOTATION:

- The items listed below apply to all labor procedures.
- A/C System, Evacuate and Recharge
- · Access to repair information/subscription cost
- Aftermarket & OEM accessories
- · Alignment, straightening, or verifying the dimensional accuracy of related parts
- Alignment check of front or rear suspension/steering
- Anticorrosion material restoration/application
- Battery D&R/recharge
- · Brackets & braces transfer
- Broken glass removal or clean up
- Brakes, bleed and adjust
- · Caulk (non-OEM), sound insulate or paint inner areas
- · Clean up or detailing of vehicle prior to delivery
- Computer control module D&R/relearn
- · Conversion Vans (special components, equipment and
- trim)
- · Cutting, pulling or pushing collision damaged parts for access
- Damaged or defective replacement parts
- Drain & refill fuel tank
- · Drilling, modification or fabrication of mounting holes
- · Fabricate templates, reinforcing inserts, sleeves or flanges
- · Filling, plugging and finishing of unneeded holes in new parts
- Information label installation
- · Maintenance costs of building or equipment
- Material costs
- · Pinch weld clamp damage repair
- Refinishing
- Repair information retrieval/lookup
- · Reset electronic memory functions after battery disconnect
- Road test vehicle
- · Rusted, frozen, broken or corrosion damaged components or fasteners
- Scan tool clear/reset electronic module
- Scan tool diagnostics
- Steering Angle Sensor recalibration
- Straighten or align used, reconditioned or non-OEM parts
- · Structural damage diagnosis and vehicle set up time
- Structural foam removal or application
- · Test for water leaks (except Windshield, Back Glass, and Stationary Glass)
- Test panel/spray caulk
- · Trial-Fit of a component to verify dimensional accuracy of adioining parts
- Undercoating, tar or grease removal
- · Unprimed bumpers, removal of mold-release agents
- Waste disposal fees (all types) Weld through primer

388. D&R BATTERY	
389. RESET MEMORY FUNCTIONS	
390. PROTECT INTERIOR FROM REPAIR CONTAMINATION	
391. PRE-PULL QUARTER	
392. REMOVE CAULKING AND SEAM SEALER *RANGE	
393. REPLACE CAULKING AND SEAM SEALER (PER TUBE)	
394. UNDERCOAT AT WHEEL WELL	
395. CAVITY WAX	
396. EXPANSION FOAM (PER TUBE)	
397. SOUND DEADENER TEXT COAT WITH SPRAYBLE SEALER	
398. SECOND COLOR BACK-SIDE	
399. WELD-THRU PRIMER	
400. SOUND DEADENER PADS	
401. CLEAN & RE-TAPE GLUE ON MOLDINGS	
402. REPLACE QUARTER W/O MOLDING WITH AFTERMARKET	
403. FABRICATE QUARTER AND ROCKER PANEL SLEEVES	
404. REPAIR WHEEL HOUSE, FROM ADHESIVE DISTORTION DAMAGE	
405. TEST FIT ATTACHING PARTS ** TAILLAMPS, GLASSES ETC**	
406. PULL BACK WIRE HARNESS	
407. R&I BACK SEAT-S	
408. R&I SEAT BELTS	
409. PULL BACK CARPET & FLOOR INSTULATION	
410. FEATHER & FILL CONTOUR REPAIR AREAS, ROCKER & PILLAR	
411. DOOR OPEN FLANGE BACKSIDE, REPAIR/DRESS WELDS	

Body
 Paint
 Structural
 Mechanical
 Detail
 Other

412. WHEEL OPEN BACKSIDE WELDS, REPAIR/DRESS	
413. REPAIR DECK LID TROUGH	
414. ROCKER WELDS BACKSIDE, REPAIR/DRESS	
415. REAR BODY PANEL BACKSIDE AT WELD AREA, REPAIR/DRESS	
416. GLASS FLANGE BACKSIDE OF WELD AREA, REPAIR/DRESS	
417. TRUNK FLOOR POCKET WELD AREA REAR OF TIRE, REPAIR/DRESS	
418. GRAVEL GUARD (SPRAY-ON)	
419. STONE GUARD DECAL	
420. REPLACE FOAM ADHESIVE BETWEEN WHEEL HOUSE & OTR	
421. REPAIR GLASS OPEN FLANGE DAMAGE FROM CUT KNIFE	
422. INSTALL SHUNTING PLIERS	
423. INSTALL CUT LINE TAPE	
424. COLATERAL DAMAGE FROM THE REPAIR PROCESS (BUILD SEQUENCE)	
425. COBALT DRILL BIT (BORON-TRIP-UZI BOR)	
426. CLEAN FILE AND DEBUR WELD AREA	
427. CAUTIONARY MEASURES TO PREVENT GLASS MOLDING DAMAGE	
428. MASK WRAP WIRE HARNESS	
429. MASK/BAG INTERIOR FOR REFINISH	
430. MASK QUARTER JAMBS & OPENINGS	
431. MASK FOR PRIMER APPLICATION	
432. SPOT PAINT DOOR OPEN FLANGE, BACKSIDE	
433. SPOT PAINT WHEEL OPEN BACKSIDE WELD AREA	
434. SPOT PAINT ROCKER, BACK SIDE	
435. SPOT PAINT BACKSIDE OF BACK PANEL AT WELD AREA	
436. SPOT PAINT BACKSIDE OF GLASS FLANGE WELD AREA	
437. SPOT PAINT TRUNK FLOOR WELD AREA	
438. REFINISH WELD DAMAGE AREAS ** EACH DIRECTION***	
439. REFINISH TWO TONE BLACK-OUT	
440. PULL-BACK/MASK QUARTER GLASS	
441. PULL-BACK/MASK BACK GLASS	
442. PREP QUARTER PANEL CLADDING FOR "RAW" PROCESSING	
443. REPLACE QUARTER GLASS URETHANE INSTALLATION KIT	
444. REPLACE BACK GLASS URETHANE INSTALLATION KIT	

	co	с	Mitch	hell	Audat	Audatex		
	Included	Not Included	Included	Not Included	Included	Not included		
Removal of seam sealer	x		x		x			
Apply Seam Sealer (Water Tight Seal)	x		x			x		
Replicate Seam Sealer OEM Appearance		х		x		x		
Mask for seam sealer application		х		x		х		
Apply primer prior to seam sealer		x		x		х		
Remove undercoat/ tar/ grease/chip guards		x		x		х		
Structural adhesive removal	x		x			х		
Clean up glass adhesive		х	x			х		
Cavity Wax removal		x		x		х		
Cavity Wax install		х		x		х		
Weld Thru Primer Application		x		x	x			
Expanding Foam/ 2k Foam remove and install		x		x		x		
Ecoat removal on replacement panel install	x		x			х		
Feather Prime and Block Welded Panel								
Replacement		x		х	x			
Feather prime and block repaired panels		х		x		x		
Mask for Primer application		х		x		х		
Material Cost		x		х		х		

### Pre-measure

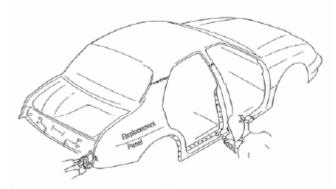
- Unibody or fixture setup (fixture rental cost)
- Cover/protect vehicle and removed components
- Structural realignment pulls or pre-pull for removal
- Removal of cavity wax, grease, seam sealer, tar or any materials that would affect repair processes
- Removal of adjacent components (Airbags, Bumpers (Reinforcement), Doors, Electronic Modules, Glass, Headliner, Hinges, Interior Trim, Lamps, Rocker Mldg, Seatbelts, Trunk lid, Wheels, Wiring)
- New Panel preparation (refinishing of underside, removal of ecoat, masking for weld-thru application, applying weld-thru, sound deadening and/or foam material duplication/application)
- Weld Zone/Adjacent Panel repair and refinish (repair/straighten flanges, removal of ecoat for weld-thru or adhesive, feather edge backside, epoxy primer application, refinish/spatter duplication of backside appearance)

### Weld Zone/Adjacent Panel areas

### WELD ZONE/ADJACENT PANEL

#### SPECIAL NOTATION:

Suggested refinish operation times do not include additional time for repair of damage to adjacent panels resulting from normal cutting, welding and grinding procedures. The amount of damage can vary considerably depending upon process and technique used by the servicing technician and, therefore, is impractical to anticipate in this publication. MOTOR recommends these factors be considered before finalizing any repair cost estimate. Typical areas to be considered are illustrated below.



### Weld Zone/Adjacent Panel areas

- C-pillar reinforcement
- Floor pan extension
- Lock pillar reinforcement
- Outer rocker panel
- Outer roof rail/sail panel
- Outer wheelhouse
- Quarter gutter/tough
- Rear body panel
- Rear rocker reinforcement

### Weld Zone/Adjacent Panel areas



- Test fit/alignment of structural components
- Test fit/alignment of adjacent panels (Bumper, Door, Glass, Lamps, Trunk)
- Setup/test of welders (Create coupons from old material to perform and destructively test welds. Could be as many as 3 welder setups depending on processes)
- Adhesive application
- Adhesive cleanup
- Adhesive bench cure time
- Repair any welding burn damage to adjacent panels previously outlined
- Wash/tack after repairs



#### Devices

Only the devices approved in the Workshop Equipment Catalog may be used.

#### Test Button Weld

- For the necessary button weld diameter, determine the panel pairing based on the manufacturer's specifications and check with test panels.
- Check all spot weld connections 100% with a chisel test.
- Qualitatively acceptable spot welds do not tear into the contact surface, but rather "unbutton".
- Calculate the button weld diameter with the following formula and check on test panels before beginning repair.

Square root of T1\*3,5\*1,15

### i Note

T1 is the thinnest panel in a panel combination, for example, panel combination of 1.5 mm and 0.8 mm. Example calculation: root of 0.8 x 3.5 x 1.15 = 3.6 mm button weld diameter. With the test, the small welded test strip is rolled or pulled from the second test strip with force perpendicular to the panel surface.

#### Devices

Only the devices approved in the Workshop Equipment Catalog may be used.

#### 

- Welding and sanding must always be carried out with ventilation.
- Never weld and sand in any area at the same time.
- Clean the work area regularly depending on the amount of dust.
- Accumulated dust must not be blown away with compressed air.
- The ventilation system must be cleaned regularly.
- Also, observe the corresponding regulations from the UVW and the BG.

#### 6.2 Gas-Shielded Plug Welding

Gas-shielded plug welding is mostly used when the standard implemented resistance spots cannot be recreated, for example due to limited accessibility.

Always refer to the vehicle-specific repair manuals for this.

Protected by copyright. Copying for private or commarcial purposes, in part or in whole, is not permitted unless authorised by AUDI AG. AUDI AG does not guarantee or accept any lisbility with respect to the correctness of information in this document. Copyright by AUDI AG.



N00-11615

- Cover car for primer application
- Feather, prime and block welded replacement seams
- Epoxy primer application to welded flanges
- Wash/tack after blocking
- Setup/test seam sealer to duplicate OEM appearance
- Cavity wax application
- Repair/refinish clamping or fixture locations





# How does this all this transfer to your repair blueprint?

### ESTIMATE TOTALS

Category	Basis		Rate
Parts			
Body Labor	66.8 hrs	0	\$ 55.00 /hr
Paint Labor	46.9 hrs	0	\$ 55.00 /hr
Mechanical Labor	7.6 hrs	0	\$ 110.00 /hr
Frame Labor	6,0 hrs	@	\$ 85.00 /hr
Structural Labor	25.5 hrs	0	\$ 85.00 /hr
Miscellaneous			
Other Charges			

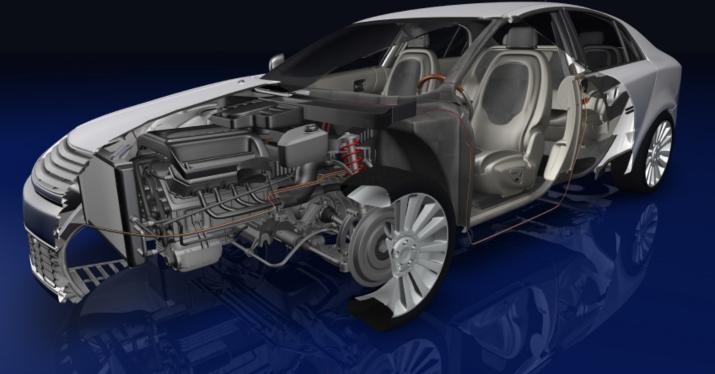
## Q&A:

- Questions
- Comments
- Concerns



### **Guide to Complete Repair Planning**

### **Operations Reference Handbook**



This guide is owned by and maintained by the Society of Collision Repair Specialists. If you have suggestions to update the guide in future editions, please submit your suggestions to info@scrs.com

The Society of Collision Repair Specialists (SCRS) recognizes that there are many legitimate operations and services our technicians provide that go unrecognized in the estimate development and final billing processes. The purpose of this document is to aid repair facility personnel in formulating <u>the most accurate repair plan</u> in the estimate preparation process, to minimize the need or expense of a supplement. This document is intended to be used as a guide to develop and maintain processes performed in your repair facility, and serves as a reminder of steps that may be performed during the repair process. This document does not suggest, or promote, that your shop can or should charge for each item listed; and is only intended to be a reminder for repair operations that are performed in your facility.

The document does not contain pricing, quantities, labor hours or any additional information as that should be determined based on your facility's individual requirements. All recipients of this document are herewith notified that the materials presented herein are not to be construed as information or direction to take concerted actions. Information can be utilized by individuals acting within their own judgment.

### Labor Category Legend – By Color:

• Body • Paint • Structural • Mechanical • Detail

• Other



Table of Contents:

01.	FRONT & REAR BUMPERS	05.	HOOD	10.	FENDER
15.	CORESUPPORT	20.	RADIATOR / AC & FLUIDS	25.	APRON & UPPER RAIL
30.	WHEELS, TIRES & ALIGNMENT	35.	SUSPENSION / MECHANICAL	40.	SRS/SEAT BELTS
45.	PILLARS	50.	ROCKERS	55.	DOOR SKIN / SHELL
60.	ROOF	65.	CAB CORNER, PICKUP	70.	CAB BACK PANEL, PICKUP
75.	QUARTER PANEL	80.	PICKUP BED SIDE PANEL	85.	VAN/SUV SIDE PANEL
90.	DECK LID	95.	REAR BODY PANEL	100.	FLOOR
105.	<b>PROTECTION &amp; SAFETY</b>	110.	PAINT PREP	115.	REFINISH PROCESS
120.	COLOR-SAND & POLISH	125.	STRIPES	130.	GLASS
135.	FRAME SET UP	140.	FRAME REPLACEMENT	145.	FRONT END DAMAGE
150.	SIDE DAMAGE	155.	REAR END DAMAGE	160.	FLOOR ANCHOR PULLING SYSTEM
165.	THEFT/VANDELISM	170.	DETAIL / CLEAN-UP	175.	TOW, STORAGE & ADMINISTRATION
180.	FINAL BILL / MISCELLANEOUS				

	MATERIAL	MINIMUM
	SUBLET PRICE	LABOR UNITS
DESCRIPTION		
01 - FRONT AND REAR BUMPERS:		
1. FEATHERFILL, SAND AND BLOCK REPAIR AREA		
2. REMOVE BUMPER MOLDING ADHESIVE		
3. DRILL FOR LICENSE PLATE		
4. R&I LICENSE PLATE		
5. LICENSE PLATE, REPAIR		
6. LOOSEN/PULL BACK BUMPER COVER		
7. CCC BUMPER PROMPT *ADD BACK OVERLAP + CLEAR*		
8. R&I FOG LAMPS		
9. R&I TRAILER HITCH (ON BUMPER)		
10. AIM FOG LAMPS		
11. R&I CAMERA AND WIRING		
12. TRIAL FIT BUMPER		
13. R&I TRAILER HITCH (FRAME BOLT-ON TYPE)		
14. R&I OR R&R SENSORS (SRS-AMBEINT TEMP- ETC)		
15. REPAIR BUMPER BRACKET AND/OR OTHER COMPONENTS		
16. REPAIR BUMPER BRACKET MOUNT AREA		
17. REPAIR ELECTRICAL WIRING TO LAMP LIGHTS		
18. REFINISH O.E.M "RAW" BUMPER		
19. REFINISH, SECOND COLOR ON BUMPER COVER		
20. REFINISH, BLACK-OUT ON BUMPER COVER		
21. PAINT PREP & CLEAN UP USED BUMPER		
22. MASK UNPAINTED AREAS ON BUMPER COVER		
23. MASK BUMPER COVER FOR PRIMER APPLICATION		
24. FLEXIBLE PARTS ADHESION PROMOTOR APPLICATION		
25. REPLACE MINI BULBS		
26. RAW BUMPER PREP KIT		
27. BUMPER FASTENERS/RETAINERS (KIT)		
28. URETHANE BUMPER REPAIR KIT (MATERIALS)		



	• •	•	•									
٠	Body	•	Paint	•	Structural	٠	Mechanical	•	Detail	•	Other	

29. FLEXIBLE PARTS ADDITIVE		
05 - HOOD:		
30. R&I WINDSHIELD WASHER NOSSELS (REPAIR SITUATION)		
31. R&I HOOD INSULATION		
32. WINDSHIELD WASHER HOSE RETAINERS (MORE THAN ONE DESIGN)		
33. REPAIR HOOD LATCH		
34. REPAIR HOOD HINGES AND/OR HINGE MOUNT AREA		
35. ACCESS TIME TO REVEAL DAMAGE		
36. FEATHEREDGE, FILL SAND AND BLOCK (REPAIRED HOOD)		
37. SEAM SEAL INNER EDGE OF NEW HOOD		
38. R&I OR R&R HOOD HINGE		
39. R&I COWL VENT PANEL (ACCESS TO HINGE)		
40. TEST FIT HOOD		
41. MIX PAINT FOR UNDERSIDE SECOND COLOR (ADD FOR 3 <sup>RD</sup> AND 4 <sup>TH</sup> COLOR)		
42. COLOR TINT & TEST FOR UNDER SIDE SECOND COLOR		
43. MASK HOOD INNER EDGES		
44. WINDSHIELD WASHER HOSE FASTENER-S (1 <sup>ST</sup> DESIGN)		
45. WINDSHIELD WASHER HOSE FASTENERS (2ND DESIGN)		
46. HOOD INSULATION RETAINER FASTENERS, REPLACE		
47. HOOD FRONT SEAL/ FASTENERS		
48. HOOD REAR SEAL/ FASTENERS		
49. ALUMINUM MATERIAL LABOR RATE		
50. HOOD LABELS ***HOW MANY?****		
10 - FENDER:		
51. R&I TIRE WHEEL		
52. R&I FENDER LINER		
53. R&I FENDER MOLDINGS, EMBLEMS AND FLARE		
54. R&I MUD FLAP		
55. R&I ROCKER COVER		
56. REPLACE ROCKER COVER FASTENERS (TWO DESIGNS?)		
57. REPLACE FENDER FLARE FASTENERS		
58. CLEAN AND RETAPE FENDER MOLDING-S AND EMBLEM		
59. REPLACE LINER FASTENERS		
60. FEATHEREDGE, FILL SAND AND BLOCK REPAIRED FENDER		
61. CAVITY WAX		
62. REMOVE FACTORY INSTALLED ADHESIVE FOR ACCESS		
63. ALIGN ADJACENT PANEL-S TO FENDER		
64. ANTENNA BASE CORROSION, REPAIR		
65. MASK FENDER JAMS AND OPENINGS		
66. FENDER MLDG CLADDING PREP FOR "RAW"		
67. GRAVEL GUARD		
68. REMOVE STRIPES **ERASER WHEEL***		
69. FENDER BLACK OUT SECOND COLOR		
15 - CORESUPPORT:		
70. ACCESS/PRE-PULLING		
71. PROTECT ENGINE COMPARMENT COMPONENTS		
72. REPAIR CUT WIRING		
73. AQUIRE RADIO CODE		
74. RESET MEMORY FUNCTIONS		

### Labor Category Legend – By Color:



Labor Category Legend – By Color:		
Body     Paint     Structural     Mechanical	• Other	
75. MEMORY "SAVER" COLLISION TOOL		
76. REMOVE CAULKING & SEAM SEALER		
77. TEST FIT PARTS ATTACHED TO CORESUPPORT		
78. PULL BACK WIRE HARNESS		
79. REPAIR WIRE HARNESS FASTENERS		
80. CLOSE/SECURE OPEN TUBES AND LINES		
81. FEATHER AND FILL WELDS AT WELD LOCATIONS		
82. R&I WHEELS		
83. R&I ROCKER COVERS AND/OR MUD FLAPS		
84. R&I FENDERS (ADD FOR SPLASH SHIELDS & FASTENERS)		
85. R&I ENGINE UNDERCOVER SHIELD		
86. R&I WINDSHIELD WASHER RESERVOIR		
87. R&I AC DRIER		
88. R&I AIR INTAKE DUCTING, AND/OR REPAIR		
89. R&I RADIATOR OVERFLOW TANK, AND/OR REPAIR		
90. R&I SECOND BATTERY		
91. R&I BATTERY TRAY		
92. R&I COMPONENTS ATTACHED BY WELDING/RIVETING		
93. REPAIR LEFT AND RIGHT APRON PANELS, AND PAINT		
94. REPAIR LEFT AND RIGHT UPPER RAILS, AND PAINT		
95. REPAIR LEFT AND RIGHT FRAME RAIL ATTACHMENT AREA		
96. AIM LIGHTS		
97. REMOVE SURFACE CORROSION/ROAD TAR/GREASE		
98. WRAP MASK WIRE HARNESS		
99. MASK BAG ENGINE		
100. MASK A/C LINES-HOSES-HARNESES & COMPONETS		
101. MIX PAINT FOR UNDERSIDE COLOR		
102. SECOND COLOR BLACK-OUT		
103. SPOT PAINT LEFT AND RIGHT FRAME AT WELDED AREAS		
104. SPOT PAINT/BLEND APRON PANEL DAMAGED BY WELDING		
105. REPLACE WIRE HARNESS FASTENERS		
106. REPLACE INFORMATION LABELS **HOW MANY?****		
107. REPLACE HOOD PROP GRUMMET		
108. REPLACE CAULKING AT SEAMS		
109. UNDERCOAT (SECOND COLOR)		
110. CAVITY WAX		
111. COBALT DRILL BIT (BORON-TRIP-UZI BOR)		
112. COLATERAL DAMAGE FROM THE REPAIR PROCESS (BUILD SEQUENCE)		
113. WELD-THROUGH PRIMER		
20 - RADIATOR, AC AND FLUIDS:		
114. REPAIR RADIATOR		
115. REPAIR FAN SHROUD(S)		
116. REPAIR AC CONDENSER/LINES		
117. FLUSH LKQ CONDENSER/LINES		
118. FLUSH LKQ RADIATOR/LINES		
119. REPAIR AC LINES & TUBES		
120. REPLACE RADIATOR "O"-RINGS **TRANS**		
121. REPAIR TRANS COOLER/LINES		
122. REPAIR WIRING/FASTENERS ATTACHED TO FAN SHROUDS		
123. PRESSURE TEST COOLING SYSTEM		



Labor Category Legend – By Color:

• Body	• Paint	• Structu	ral •	Mechanical	• De	tail • Oth	ler
124. BLEED COO	LING SYSTEM						

124. BLEED COOLING SYSTEM	
125. TEST AC SYSTEM/CONTIMANITES	
126. RECOVER AC FREON	
127. EVACUATE & RECHARGE AC SYSTEM	
128. TEST KIT REFRIGERANT RECOVERY	
129. COOLANT, OEM RECOMMENDED PER GALLON	
130. VACUUM FILL RADIATOR	
131. TRANMISSION FLUID (PINT)	
132. STEERING FLUID (PINT)	
133. WINDSHIELD WASHER FLUID	
134. R-134 FREON AND OIL (TWO POUNDS)	
135. O-RING SEAL KIT FOR AC LINES	
25 - APRON/UPPER RAIL:	
136. PRE-PULL/ACCESS	
137. REMOVE CAULKING & SEAM SEALER	
138. REPLACE CAULKING AND SEAM SEALER (NEW PART)	
139. TEXT COAT, SPRAYABLE SEALER	
140. UNDERCOAT, BLACK	
141. EXPANSION FOAM	
142. CAVITY WAX RUSTPROOFING	
143. WELD-THROUGH PRIMER	
144. TEST FIT ADJACENT PARTS	
145. R&I CRUISE CONTROL UNIT, AND/OR REPAIR	
146. R&I ELECTRONIC CONTROL MODULE, AND/OR REPAIR	
147. R&I AIR INTAKE DUCTING, AND/OR REPAIR	
148. R&I AC TUBING AND HOSE	
149. R&I SRS SENSOR	
150. R&I WINDSHIELD RESERVOIR, AND/OR REPAIR	
151. R&I BATTERY TRAY	
152. R&I FUSE BOX, AND/OR REPAIR	
153. R&I EMISSION CANISTOR AND HOSES, AND/OR REPAIR	
154. R&I CAB INTERIOR COMPONENTS (INNER TRIM, DASH, HEATER BOX / AC)	
155. PULL BACK WIRE HARNESS	
156. FEATHER AND FILL CONTOUR REPAIR AREAS	
157. FEATHER AND FILL WELDS	
158. COLATERAL DAMAGE FROM THE REPAIR PROCESS (BUILD SEQUENCE)	
159. COBALT DRILL BIT (BORON-TRIP-UZI BOR)	
160. CLEAN FILE AND DEBUR WELD AREA	
161. REPAIR ADJOINING PANELS DAMAGED BY WELDING	
162. WRAP MASK WIRE HARNESS AT APRON	
163. WRAP MASK ENGINE	
164. SECOND COLOR, ENGINE SIDE (CUSTOM COLOR MATCH)	
165. THIRD COLOR, FENDER SIDE (CUSTOM COLOR MATCH)	
166. BLACK-OUT ON APRON, SECOND OR THIRD COLOR	
167. UNDERSIDE SECOND COLORS, REFINISH	
<b>30 - WHEELS/TIRES/WHEEL ALIGNMENT:</b>	
168. REPLACE VALVE STEMS AND WEIGHTS	
169. MOUNT & BALANCE TIRE	
170. R&I WHEEL COVERS	
171. TIRE DISPOSAL FEE	

### Labor Category Legend – By Color:



Body     Paint     Structural     Mechanical     Detail     Other			-	Paint		Structural	٠	Mechanical	•	Detail	•	Other	
---	--	--	---	-------	--	------------	---	------------	---	--------	---	-------	--

172. REPAIR RIM EDGE, POLISH SKUFF MARKS	
173. ROTATE TIRES	
174. RESET TIRE PRESSURE SENSORS	
175. R&I WHEEL COVERS TO MOUNT ALIGNMENT HEADS	
176. FOUR WHEEL ALIGNMENT	
177. ECENTRIC ALIGNMENT KIT (PER SIDE)	
178. INSPECT SUSPENSION COMPONENTS FOR DAMAGE	
35 - SUSPENSION/MECHANICAL:	
179. BLEED BRAKES AND ADD FLUID (PINT)	
180. BLEED BRAKES (ABS)	
181. RESET ABS SYSTEM WITH SCANNER	
182. SHIFT CROSSMEMBER	
183. MEMORY "SAVER" COLLISION TOOL	
184. SHIFT ENGINE CRADLE	
185. ADJUST LINKAGE-S	
186. DRAIN & TRANSFER FUEL	
187. CHECK RUN-OUT ON WHEEL (NEEDED TO FOR BALANCE)	
40 - SRS/SEAT BELTS:	
188. CLEAN UP DEPLOYED AIR BAG RESIDUE	
189. REPAIR SEAT FRAME	
190. INSPECT SEAT BELTS	
191. CLEAR SRS FUNCTION CODE ON DASH	
191. CLEAK SKS FORCTION CODE ON DASH 192. INSPECT SRS WIRING	
45 - PILLARS:	
193. PRE-PULL PILLAR	
194. REMOVE CAULKING AND SEAM SEALER	
195. REPLACE CAULKING AND SEAM SEALER	
196. EXPANSION FOAM	
197. CAVITY WAX RUSTPROOFING	
198. WELD-THRU PRIMER	
199. FABRICATE PILLAR SLEEVE INSERTS	
200. TEST FIT PARTS ADJACENT TO PILLAR	
201. R&I SEAT TO ACCESS PILLAR REPAIRS/REPLACEMENT	
202. COLBALT BIT UHSS	
203. PULL BACK WIRE HARNESS	
204. FEATHER & FILL CONTOUR REPAIR AREA	
205. REPAIR/DRESS WELDS AT FLANGES	
206. CLEAN FILE AND DEBUR WELD AREA	
207. COLATERAL DAMAGE FROM THE REPAIR PROCESS (BUILD SEQUENCE)	
208. WRAP MASK WIRE HARNESS	
209. MASK TO PROTECT INTERIOR	
210. SPOT REFINISH INNER SIDE OF PILLAR	
211. REFINISH SECOND COLOR BLACK-OUT ON PILLAR	
50 - ROCKERS:	
212. PRE-PULL ROCKER	
213. REMOVE CAULKING & SEAM SEALER	
214. REPLACE CAULKING & SEAM SEALER	
215. EXPANSION FOAM	
216. TEXT COAT	



Labor Category Legend – By Color:	REPAIRER DRIVEN
Body     Paint     Structural     Mechanical     Deta	il • Other
217. CAVITY WAX	
218. WELD-THRU PRIMER	
219. FABRICATE ROCKER SLEEVE INSERTS	
220. TEST FIT PARTS ADJACENT TO ROCKER	
221. GRAVEL/STONE GUARD (**NOTE THE THICKNESS***) PER TUBE	
222. R&I SEAT	
223. R&I SEAT BELT-S	
224. PULL BACK CARPET AND PADDING	
225. STONE GUARD DECAL	
226. PULL BACK WIRE HARNESS	
227. REPAIR/DRESS WELDS AT FLANGES	
228. REPAIR INNER ROCKER	
229. REPAIR A-PILLAR AT WELD AREA	
230. REPAIR CENTER PILLAR AT WELD AREA	
231. REPAIR FLOOR AT WELD AREA	
232. REPAIR ¼ PANEL AT WELD AREA	
233. CLEAN FILE AND DEBUR WELD AREA	
234. COLATERAL DAMAGE FROM THE REPAIR PROCESS (BUILD SEQUENCE)	
235. COBALT DRILL BIT (BORON-TRIP-UZI BOR)	
236. FEATHER & FILL CONTOUR REPAIR AREAS	

237. WRAP MASK WIRE HARNESS 238. MASK TO PROTECT INTERIOR 239. MASK FOR PRIMER APPLICATION

241. REFINISH INNER ROCKER 242. REFINISH A-PILLAR 243. REFINISH CENTER PILLAR 244. REFINISH FLOOR AREA 245. REFINISH LOCK POST

246. REFINISH ¼ PANEL AT WELD AREA 247. REFINISH BLACK-OUT AT ROCKER

249. TEXT COAT ROCKER, BACK SIDE 55 - DOOR SKIN/SHELL:

**253. RESET MEMORY FUNCTIONS** 

256. WELD-THRU PRIMER

257. CAVITY WAX **258. FLUTTER BONDING 259. SOUND DEADENER PAD-S** 

255. REPLACE CAULKING & SEAM SEALER

263. REPLACE VAPOR BARRIER, (OEM) 264. REPLACE BELT MOLDING FASTENERS 265. TEST FIT DOOR BEFOR WELD-BONDING

250. DISCONNECT AND RECONNECT BATTERY **251. PROTECT INTERIOR FOR PROTECTION** 

240. PREP FOR ROCKER PANEL MLDG CLADDING "RAW"

248. TEXT COAT ROCKER, OUTER (MASKING REQUIRED)

252. ACQUIRE RADIO CODE & PLACE TO OFF POSITION

260. CLEAN & RETAPE ADHESIVE DOOR MOLDING 261. REPLACE DOOR EDGE GUARD MOLDING 262. REPAIR VAPOR BARRIER WEATHER SHIELD

254. REMOVE ADHESIVE AT INTRUSION BEAM, BELT REINF & DR EDGE



Labor Category Legend – By Color:	REPAIRER DRIVEN
Body     Paint     Structural     Mechanical     Detail	• Other
266. REPAIR EDGE OF DOOR SHELL, (REMOVAL DISTORTION)	
267. RE-BOND INTRUSION BEAM/BELT REINSTALL FLUTTER MATERIAL	
268. DOOR SKIN BONDING KIT	
269. ADJUST/RECALIBRATE POWER DOOR LOCK SYSTEM	
270. FEATHER & FILL CONTOUR REPAIR AREAS, (DOOR EDGE)	
271. DRESS WELDS	
272. STONE GUARD DECAL	
273. R&I RAIN SHIELD (VENT SHADE)	
274. R&I WELDED BELT REINFORCEMENT PANEL	
275. R&I SRS AIR BAG	
276. R&I DOOR MIRROR	
277. R&I DOOR GLASS	
278. R&I AIR-SEAL WEATHER STRIP AT PERIMETER (SOME MODELS ONLY)	
279. R&I DOOR CHECK (WHEN SKINNING DOOR)	
280. R&I DOOR LATCH, (WHEN SKINNING DOOR)	
281. R&I DOOR CHECK	
282. R&I DOOR LATCH	
283. R&I DOOR SPEAKER	
284. R&I DOOR GLASS RUN CHANNEL	
285. WRAP/MASK WIRE HARNESS	

286. PREP DOOR CLADDING FOR "RAW" PROCESSING

288. WINDOW BLACK OUT AT WINDOW FRAME, (SECOND COLOR)

293. RR&I LKQ DOORS-CHARGE TO DISASSEMBLE BOTH DOOR

296. R&I ALL INTERIOR AND EXTERIOR \*\*ATTACHMENTS \*\*\*\*

298. REPAIR ADJACENT PANELS DISTORTED IN REMOVAL PROCESS

300. REMOVE EXPANSION FOAM FROM ROOF REINFORCEMENTS 301. REMOVE URETHANE RESIDUE ON PINCH WELDS *(FULL CUT OUT)* 302. REPAIR DAMAGE TO PINCH WELD FROM GLASS REMOVAL KNIFE

294. R&I ANTENNA MAST THAT IMPEDES ACCESS

299. FEATHER & FILL CONTOUR REPAIR AREAS

306. REMOVE PANELS FOR INSTALLATION \* 307. REPAIR ADJACENT REINFORCEMENT PANEL-S

309. CLEAN FILE AND DEBUR WELD AREA 310. COVER AND PROTECT INTERIOR

314. REPLACE SOUND DEADENER PADS (EACH PACK)

287. MASK DOOR OPENINGS & JAMS

290. DOOR SKIN BONDING MATERIAL 291. RECODE DOOR LOCK CYLINDER 292. DOOR FASTENERS & RIVETS

295. MASK SUN ROOF OPENING/EDGES

297. PREPAIR FOR WELD BONDING

303. FEATHER & FILL WELDS 304. REMOVE EXPANSION FOAM 305. EXPANSION FOAM (PER CAN)

308. R&I SEAT-S

313. CAVITY WAX

311. R&I WIRE HARNESS 312. WELD-THRU PRIMER

289. GRAVEL GUARD

60 - ROOF:



Labor Category Legend – By Color:

315. FLUTTER FOAM (PER TUBE)	
316. COLATERAL DAMAGE FROM THE REPAIR PROCESS (BUILD SEQUENCE)	
317. BLEND RIGHT SIDE ROOF PILLARS	
318. BLEND LEFT SIDE ROOF PILLARS	
319. MASK FOR PRIMER APPLICATION	
320. PULLBACK/ROPE/MASK BACK GLASS MOLDING	
321. PULLBACK/ROPE/MASK WINDSHIELD MOLDING 322. PULLBACK/ROPE/MASK LEFT QUARTER GLASS	
323. PULLBACK/ROPE/MASK RIGHT QUARTER GLASS	
324. COBALT DRILL BIT (BORON-TRIP-UZI BOR)	
325. WINDSHIELD INSTALLATION KIT	
326. BACK GLASS INSTALLATION KIT	
327. QUARTER GLASS INSTALLATION KIT	
65 - CAB CORNER, PICKUP:	
328. PRE-PULL CAB CORNER AS NEEDED	
329. REMOVE CAULKING & SEAM SEALER	
330. REPLACE CAULKING & SEAM SEALER (REPAIR AND REPLACE)	
331. CAVITY WAX	
332. WELD-THRU PRIMER	
333. TEST FIT ADJACENT PARTS AS NEEDED	
334. FABRICATE CAB CORNER SLEEVES	
335. PULL BACK WIRE HARNESS	
336. SOUND DEADENER	
337. R&I SEAT	
338. R&I CARPET AND FLOOR INSULATION	
339. FEATHER & FILL CONTOUR REPAIR AREAS	
340. MASK FOR PRIMER APPLICATION	
341. FEATHER & FILL WELDS	
342. REPAIR ROCKER	
343. REPAIR REINFORCEMENT AND INNER PANEL	
344. MEASURE CAB FOR SQUARE	
345. REPAIR FLOOR	
346. REPAIR GLASS-OPEN FLANGES FROM CUT-OUT KNIFE DAMAGE	
347. COLATERAL DAMAGE FROM THE REPAIR PROCESS (BUILD SEQUENCE)	
348. PULL BACK /ROPE/MASK BACK GLASS	
349. PULL BACK/ROPE/MASK QUARTER GLASS	
350. REPLACE SOUND DEADENER PAD	
351. TRANSFER WELDED DOOR STRICKER PLATE	
352. REFINISH BACK SIDE OF CAB CORNER	
353. MASK WRAP WIRE HARNESS	
354. MASK/BAG INTERIOR FOR REFINISH	
355. MASK JAMS AND OPENINGS	
356. SPOT PAINT INNER SIDE OF WELDED FLANGES	
357. SPOT PAINT ROCKER	
358. SPOT PAINT BACK PANEL	
359. SPOT PAINT FLOOR	
360. GRAVEL GUARD CAB CORNER	
361. BACK GLASS INSTALLATION KIT	
362. QUARTER GLASS INSTALLATION KIT	
70 - CAB BACK PANEL, PICKUP:	



Labor Category Legend – By Color:

• Body	• Paint	• Structural	Mechanical	• Detail	• Other	
363 PRF-PUILL R						

363. PRE-PULL BACK PANEL	
364. REMOVE CAULKING & SEAM SEALER	
365. REPLACE CAULKING & SEAM SEALER	
366. CAVITY WAX COATING	
367. TEXT COAT, (SPRAY SEALER)	
368. WELD-THRU PRIMER	
369. SOUND DEADENER	
370. R&I TIRE REPLACMENT TOOLS	
371. REPAIR ADJACENT PANELS DAMAGED BY WELDING	
372. R&I SEAT	
373. R&I SEAT BELTS	
374. R&I CARPET AND INSULATION	
375. PULL BACK WIRE HARNESS	
376. FEATHER & FILL CONTOUR REPAIR AREA	
377. FEATHER & FILL WELDS	
378. CLEAN FILE AND DEBUR WELD AREA	
379. REPAIR GLASS OPEN FLANGE DAMAGE FROM CUT KNIFE	
380. WRAP MASK WIRE HARNESS	
381. MASK/BAG INTERIOR FOR REFINISH	
382. MASK FOR PRIMER APPLICATION	
383. REFINISH INNER SIDE	
384. SPOT PAINT INNER CAB CORNERS	
385. SPOT PAINT FLOOR	
386. BLACK OUT ON CAB BACK PANEL	
387. CAB CORNER GLASS INSTALLATION KIT	
75 - QUARTER PANEL:	
388. D&R BATTERY	
389. RESET MEMORY FUNCTIONS	
390. PROTECT INTERIOR FROM REPAIR CONTAMINATION	
391. PRE-PULL QUARTER	
392. REMOVE CAULKING AND SEAM SEALER *RANGE	
393. REPLACE CAULKING AND SEAM SEALER (PER TUBE)	
394. UNDERCOAT AT WHEEL WELL	
395. CAVITY WAX	
396. EXPANSION FOAM (PER TUBE)	
397. SOUND DEADENER TEXT COAT WITH SPRAYBLE SEALER	
398. SECOND COLOR BACK-SIDE	
399. WELD-THRU PRIMER	
400. SOUND DEADENER PADS	
401. CLEAN & RE-TAPE GLUE ON MOLDINGS	
402. REPLACE QUARTER W/O MOLDING WITH AFTERMARKET	
403. FABRICATE QUARTER AND ROCKER PANEL SLEEVES	
404. REPAIR WHEEL HOUSE, FROM ADHESIVE DISTORTION DAMAGE	
404. REPAIR WHEELHOUSE, FROM ADHESIVE DISTORTION DAMAGE 405. TEST FIT ATTACHING PARTS ** TAILLAMPS, GLASSES ETC**	
405. TEST FIT ATTACHING PARTS OF TAILLAIMPS, GLASSES ETC. 4	
400. POLL BACK WIRE HARNESS 407. R&I BACK SEAT-S	
408. R&I SEAT BELTS	
409. PULL BACK CARPET & FLOOR INSTULATION	
410. FEATHER & FILL CONTOUR REPAIR AREAS, ROCKER & PILLAR	
411. DOOR OPEN FLANGE BACKSIDE, REPAIR/DRESS WELDS	<u> </u>



• Body • Paint • Structural • Mechanical • D	etail • Oth	er
412. WHEEL OPEN BACKSIDE WELDS, REPAIR/DRESS		
412. WHELE OPEN BACKSIDE WEEDS, KEPAIN/DRESS		
414. ROCKER WELDS BACKSIDE, REPAIR/DRESS		
415. REAR BODY PANEL BACKSIDE, AT WELD AREA, REPAIR/DRESS		
415. REAR BODT FANLE BACKSIDE AT WELD AREA, REPAIR/DRESS 416. GLASS FLANGE BACKSIDE OF WELD AREA, REPAIR/DRESS		
410. GLASS FLANGE BACKSIDE OF WELD AREA, REPAIR/DRESS 417. TRUNK FLOOR POCKET WELD AREA REAR OF TIRE, REPAIR/DRESS		
417. TROINE FLOOR POCKET WELD AREA REAR OF TIRE, REPAIR/DRESS 418. GRAVEL GUARD (SPRAY-ON)		
418. SRAVEL GOARD (SPRAT-ON) 419. STONE GUARD DECAL		
420. REPLACE FOAM ADHESIVE BETWEEN WHEEL HOUSE & QTR		
421. REPAIR GLASS OPEN FLANGE DAMAGE FROM CUT KNIFE		
422. INSTALL SHUNTING PLIERS		
423. INSTALL CUT LINE TAPE		
424. COLATERAL DAMAGE FROM THE REPAIR PROCESS (BUILD SEQUENCE)		
425. COBALT DRILL BIT (BORON-TRIP-UZI BOR)		
426. CLEAN FILE AND DEBUR WELD AREA		
427. CAUTIONARY MEASURES TO PREVENT GLASS MOLDING DAMAGE		
428. MASK WRAP WIRE HARNESS		
429. MASK/BAG INTERIOR FOR REFINISH		
430. MASK QUARTER JAMBS & OPENINGS		
431. MASK FOR PRIMER APPLICATION		
432. SPOT PAINT DOOR OPEN FLANGE, BACKSIDE		
433. SPOT PAINT WHEEL OPEN BACKSIDE WELD AREA		
434. SPOT PAINT ROCKER, BACK SIDE		
435. SPOT PAINT BACKSIDE OF BACK PANEL AT WELD AREA		
436. SPOT PAINT BACKSIDE OF GLASS FLANGE WELD AREA		
437. SPOT PAINT TRUNK FLOOR WELD AREA		
438. REFINISH WELD DAMAGE AREAS ** EACH DIRECTION***		
439. REFINISH TWO TONE BLACK-OUT		
440. PULL-BACK/MASK QUARTER GLASS		
441. PULL-BACK/MASK BACK GLASS		
442. PREP QUARTER PANEL CLADDING FOR "RAW" PROCESSING		
443. REPLACE QUARTER GLASS URETHANE INSTALLATION KIT		
444. REPLACE BACK GLASS URETHANE INSTALLATION KIT		
80 - PICKUP BED SIDE PANEL:		
445. PREPULL BED SIDE PANEL		
446. PREPULL BED FLOOR PANEL		
447. STRIP SPRAY-ON BED LINER, COMPLETE		
448. REPLACE SPRAY-ON BED LINER, COMPLETE		
449. STRIP SPRAY-ON BED LINER, PARTIAL		
450. REPLACE SPRAY-ONBED LINER, PARTIAL		
451. R&I REAR BUMPER		
452. R&I BED ASSEMBLY		
453. REPLACE BED BOLTS, AS NEEDED		
454. R&I DROP-IN BED LINER		
455. R&I CAMPER SHELL		
456. R&I TONNEAU COVER		
457. REMOVE CAULKING AND SEAM SEALER		
458. REPLACE CAULKING AND SEAM SEALER		
459. REPLACE SELF LEVELING SEAM SEALER		
460. UNDERCOAT UNDERSIDE		



•	Body	• Paint	٠	Structural	٠	Mechanical	٠	Detail	•	Other	

461. CAVITY WAX	
462. SOUND DEADENER SPRAYABLE SEALER	
462. SOUND DEADLINER SPRATABLE SEALER	
464. TEST FIT PARTS ATTACHED TO BED SIDE	
465. REPLACE BONDING FOAM, UNDERSIDE OF BED RAIL	
466. REPLACE BONDING FOAM, WHEEL-WELL TO BED SIDE PNL	
467. REPLACE FLARE FASTENERS	
468. REPLACE FLARE ADHESIVE SEAL	
469. CLEAN & RETAPE ADHESIVE MOLDING-S	
470. PULL BACK WIRE HARNESS	
471. STONE GUARD DECAL	
472. FEATHER & FILL CONTOUR REPAIR AREA	
473. FEATHER & FILL WELDS	
474. COLATERAL DAMAGE FROM THE REPAIR PROCESS (BUILD SEQUENCE)	
475. LOOSEN AND FREE RUSTED/STUCK BOLTS	
476. REPAIR CAP-RAIL FLANGE, REMOVAL DISTORTION	
477. EXPANSION FOAM (PER TUBE)	
478. REPAIR FRONT BED PANEL	
479. REPAIR INNER BED PANEL	
480. REPAIR REAR SILL PANEL	
481. SPOT PAINT INNER BED PANEL	
482. MASK WRAP WIRE HARNESS	
483. MASK BED INTERIOR	
484. MASK FOR PRIMER APPLICATION	
485. SPOT PAINT FRONT BED PANEL	
486. SPOT PAINT REAR SILL PANEL	
486. SPOT PAINT REAR SILL PANEL487. REFINISH TWO TONE BLACK OUT	
487. REFINISH TWO TONE BLACK OUT         488. GRAVEL GUARD	
487. REFINISH TWO TONE BLACK OUT 488. GRAVEL GUARD 85 - VAN/SUV SIDE PANEL:	
487. REFINISH TWO TONE BLACK OUT         488. GRAVEL GUARD         85 - VAN/SUV SIDE PANEL:         489. PRE-PULL SIDE PANEL	
487. REFINISH TWO TONE BLACK OUT         488. GRAVEL GUARD         85 - VAN/SUV SIDE PANEL:         489. PRE-PULL SIDE PANEL         490. CAUTIONARY MEASURES TO PREVENT QUARTER GLASS DAMAGE	
487. REFINISH TWO TONE BLACK OUT         488. GRAVEL GUARD         85 - VAN/SUV SIDE PANEL:         489. PRE-PULL SIDE PANEL         490. CAUTIONARY MEASURES TO PREVENT QUARTER GLASS DAMAGE         491. GLASS OPEN FLANGE DAMAGE FROM CUT KNIFE, REPAIR	
487. REFINISH TWO TONE BLACK OUT         488. GRAVEL GUARD         85 - VAN/SUV SIDE PANEL:         489. PRE-PULL SIDE PANEL         490. CAUTIONARY MEASURES TO PREVENT QUARTER GLASS DAMAGE         491. GLASS OPEN FLANGE DAMAGE FROM CUT KNIFE, REPAIR         492. QUARTER GLASS INSTALLATION KIT	
487. REFINISH TWO TONE BLACK OUT         488. GRAVEL GUARD         85 - VAN/SUV SIDE PANEL:         489. PRE-PULL SIDE PANEL         490. CAUTIONARY MEASURES TO PREVENT QUARTER GLASS DAMAGE         491. GLASS OPEN FLANGE DAMAGE FROM CUT KNIFE, REPAIR         492. QUARTER GLASS INSTALLATION KIT         493. REMOVE CAULKING AND SEAM SEALER	
487. REFINISH TWO TONE BLACK OUT         488. GRAVEL GUARD         85 - VAN/SUV SIDE PANEL:         489. PRE-PULL SIDE PANEL         490. CAUTIONARY MEASURES TO PREVENT QUARTER GLASS DAMAGE         491. GLASS OPEN FLANGE DAMAGE FROM CUT KNIFE, REPAIR         492. QUARTER GLASS INSTALLATION KIT         493. REMOVE CAULKING AND SEAM SEALER         494. REPLACE CAULKING AND SEAM SEALER (PER TUBE)	
487. REFINISH TWO TONE BLACK OUT         488. GRAVEL GUARD         85 - VAN/SUV SIDE PANEL:         489. PRE-PULL SIDE PANEL         490. CAUTIONARY MEASURES TO PREVENT QUARTER GLASS DAMAGE         491. GLASS OPEN FLANGE DAMAGE FROM CUT KNIFE, REPAIR         492. QUARTER GLASS INSTALLATION KIT         493. REMOVE CAULKING AND SEAM SEALER         494. REPLACE CAULKING AND SEAM SEALER         495. UNDERCOAT SIDE PANEL	
487. REFINISH TWO TONE BLACK OUT         488. GRAVEL GUARD         85 - VAN/SUV SIDE PANEL:         489. PRE-PULL SIDE PANEL         490. CAUTIONARY MEASURES TO PREVENT QUARTER GLASS DAMAGE         491. GLASS OPEN FLANGE DAMAGE FROM CUT KNIFE, REPAIR         492. QUARTER GLASS INSTALLATION KIT         493. REMOVE CAULKING AND SEAM SEALER         494. REPLACE CAULKING AND SEAM SEALER (PER TUBE)         495. UNDERCOAT SIDE PANEL         496. CAVITY WAX	
487. REFINISH TWO TONE BLACK OUT         488. GRAVEL GUARD         85 - VAN/SUV SIDE PANEL:         489. PRE-PULL SIDE PANEL         490. CAUTIONARY MEASURES TO PREVENT QUARTER GLASS DAMAGE         491. GLASS OPEN FLANGE DAMAGE FROM CUT KNIFE, REPAIR         492. QUARTER GLASS INSTALLATION KIT         493. REMOVE CAULKING AND SEAM SEALER         494. REPLACE CAULKING AND SEAM SEALER (PER TUBE)         495. UNDERCOAT SIDE PANEL         496. CAVITY WAX         497. WELD-THRU PRIMER	
487. REFINISH TWO TONE BLACK OUT         488. GRAVEL GUARD         85 - VAN/SUV SIDE PANEL:         489. PRE-PULL SIDE PANEL         490. CAUTIONARY MEASURES TO PREVENT QUARTER GLASS DAMAGE         491. GLASS OPEN FLANGE DAMAGE FROM CUT KNIFE, REPAIR         492. QUARTER GLASS INSTALLATION KIT         493. REMOVE CAULKING AND SEAM SEALER         494. REPLACE CAULKING AND SEAM SEALER (PER TUBE)         495. UNDERCOAT SIDE PANEL         496. CAVITY WAX         497. WELD-THRU PRIMER         498. SOUND DEADENER SPRAYABLE SEALER	
487. REFINISH TWO TONE BLACK OUT         488. GRAVEL GUARD         85 - VAN/SUV SIDE PANEL:         489. PRE-PULL SIDE PANEL         490. CAUTIONARY MEASURES TO PREVENT QUARTER GLASS DAMAGE         491. GLASS OPEN FLANGE DAMAGE FROM CUT KNIFE, REPAIR         492. QUARTER GLASS INSTALLATION KIT         493. REMOVE CAULKING AND SEAM SEALER         494. REPLACE CAULKING AND SEAM SEALER (PER TUBE)         495. UNDERCOAT SIDE PANEL         496. CAVITY WAX         497. WELD-THRU PRIMER         498. SOUND DEADENER SPRAYABLE SEALER         499. EXPANSION FOAM (PER TUBE)	
487. REFINISH TWO TONE BLACK OUT         488. GRAVEL GUARD         85 - VAN/SUV SIDE PANEL:         489. PRE-PULL SIDE PANEL         490. CAUTIONARY MEASURES TO PREVENT QUARTER GLASS DAMAGE         491. GLASS OPEN FLANGE DAMAGE FROM CUT KNIFE, REPAIR         492. QUARTER GLASS INSTALLATION KIT         493. REMOVE CAULKING AND SEAM SEALER         494. REPLACE CAULKING AND SEAM SEALER (PER TUBE)         495. UNDERCOAT SIDE PANEL         496. CAVITY WAX         497. WELD-THRU PRIMER         498. SOUND DEADENER SPRAYABLE SEALER         499. EXPANSION FOAM (PER TUBE)         500. CLEAN & RETAPE ADHESIVE MOLDINGS	
487. REFINISH TWO TONE BLACK OUT         488. GRAVEL GUARD         85 - VAN/SUV SIDE PANEL:         489. PRE-PULL SIDE PANEL         490. CAUTIONARY MEASURES TO PREVENT QUARTER GLASS DAMAGE         491. GLASS OPEN FLANGE DAMAGE FROM CUT KNIFE, REPAIR         492. QUARTER GLASS INSTALLATION KIT         493. REMOVE CAULKING AND SEAM SEALER         494. REPLACE CAULKING AND SEAM SEALER         495. UNDERCOAT SIDE PANEL         496. CAVITY WAX         497. WELD-THRU PRIMER         498. SOUND DEADENER SPRAYABLE SEALER         499. EXPANSION FOAM (PER TUBE)         500. CLEAN & RETAPE ADHESIVE MOLDINGS         501. REPLACE WHEEL FLARE FASTENERS & ADHESIVE STRIP	
487. REFINISH TWO TONE BLACK OUT         488. GRAVEL GUARD         85 - VAN/SUV SIDE PANEL:         489. PRE-PULL SIDE PANEL         490. CAUTIONARY MEASURES TO PREVENT QUARTER GLASS DAMAGE         491. GLASS OPEN FLANGE DAMAGE FROM CUT KNIFE, REPAIR         492. QUARTER GLASS INSTALLATION KIT         493. REMOVE CAULKING AND SEAM SEALER         494. REPLACE CAULKING AND SEAM SEALER (PER TUBE)         495. UNDERCOAT SIDE PANEL         496. CAVITY WAX         497. WELD-THRU PRIMER         498. SOUND DEADENER SPRAYABLE SEALER         499. EXPANSION FOAM (PER TUBE)         500. CLEAN & RETAPE ADHESIVE MOLDINGS         501. REPLACE WHEEL FLARE FASTENERS & ADHESIVE STRIP         502. FABRICATE SIDE PANEL SLEEVES	
487. REFINISH TWO TONE BLACK OUT         488. GRAVEL GUARD         85 - VAN/SUV SIDE PANEL:         489. PRE-PULL SIDE PANEL         490. CAUTIONARY MEASURES TO PREVENT QUARTER GLASS DAMAGE         491. GLASS OPEN FLANGE DAMAGE FROM CUT KNIFE, REPAIR         492. QUARTER GLASS INSTALLATION KIT         493. REMOVE CAULKING AND SEAM SEALER         494. REPLACE CAULKING AND SEAM SEALER (PER TUBE)         495. UNDERCOAT SIDE PANEL         496. CAVITY WAX         497. WELD-THRU PRIMER         498. SOUND DEADENER SPRAYABLE SEALER         499. EXPANSION FOAM (PER TUBE)         500. CLEAN & RETAPE ADHESIVE MOLDINGS         501. REPLACE WHEEL FLARE FASTENERS & ADHESIVE STRIP         502. FABRICATE SIDE PANEL SLEEVES         503. TEST FIT PARTS ATTACHED/ADJACENT TO SIDE PANEL	
487. REFINISH TWO TONE BLACK OUT         488. GRAVEL GUARD         85 - VAN/SUV SIDE PANEL:         489. PRE-PULL SIDE PANEL         490. CAUTIONARY MEASURES TO PREVENT QUARTER GLASS DAMAGE         491. GLASS OPEN FLANGE DAMAGE FROM CUT KNIFE, REPAIR         492. QUARTER GLASS INSTALLATION KIT         493. REMOVE CAULKING AND SEAM SEALER         494. REPLACE CAULKING AND SEAM SEALER         495. UNDERCOAT SIDE PANEL         496. CAVITY WAX         497. WELD-THRU PRIMER         498. SOUND DEADENER SPRAYABLE SEALER         499. EXPANSION FOAM (PER TUBE)         500. CLEAN & RETAPE ADHESIVE MOLDINGS         501. REPLACE WHEEL FLARE FASTENERS & ADHESIVE STRIP         502. FABRICATE SIDE PANEL SLEEVES         503. TEST FIT PARTS ATTACHED/ADJACENT TO SIDE PANEL         504. R&I SPECIALITY INTERIOR	
487. REFINISH TWO TONE BLACK OUT         488. GRAVEL GUARD         85 - VAN/SUV SIDE PANEL:         489. PRE-PULL SIDE PANEL         490. CAUTIONARY MEASURES TO PREVENT QUARTER GLASS DAMAGE         491. GLASS OPEN FLANGE DAMAGE FROM CUT KNIFE, REPAIR         492. QUARTER GLASS INSTALLATION KIT         493. REMOVE CAULKING AND SEAM SEALER         494. REPLACE CAULKING AND SEAM SEALER         495. UNDERCOAT SIDE PANEL         496. CAVITY WAX         497. WELD-THRU PRIMER         498. SOUND DEADENER SPRAYABLE SEALER         499. EXPANSION FOAM (PER TUBE)         500. CLEAN & RETAPE ADHESIVE MOLDINGS         501. REPLACE WHEEL FLARE FASTENERS & ADHESIVE STRIP         502. FABRICATE SIDE PANEL SLEEVES         503. TEST FIT PARTS ATTACHED/ADJACENT TO SIDE PANEL         504. R&I SPECIALITY INTERIOR         505. PULL BACK WIRE HARNESS	
487. REFINISH TWO TONE BLACK OUT         488. GRAVEL GUARD         85 - VAN/SUV SIDE PANEL:         489. PRE-PULL SIDE PANEL         490. CAUTIONARY MEASURES TO PREVENT QUARTER GLASS DAMAGE         491. GLASS OPEN FLANGE DAMAGE FROM CUT KNIFE, REPAIR         492. QUARTER GLASS INSTALLATION KIT         493. REMOVE CAULKING AND SEAM SEALER         494. REPLACE CAULKING AND SEAM SEALER         495. UNDERCOAT SIDE PANEL         496. CAVITY WAX         497. WELD-THRU PRIMER         498. SOUND DEADENER SPRAYABLE SEALER         499. EXPANSION FOAM (PER TUBE)         500. CLEAN & RETAPE ADHESIVE MOLDINGS         501. REPLACE WHEEL FLARE FASTENERS & ADHESIVE STRIP         502. FABRICATE SIDE PANEL SLEEVES         503. TEST FIT PARTS ATTACHED/ADJACENT TO SIDE PANEL         504. R&I SPECIALITY INTERIOR         505. PULL BACK WIRE HARNESS         506. R&I SEAT-S	
487. REFINISH TWO TONE BLACK OUT         488. GRAVEL GUARD         85 - VAN/SUV SIDE PANEL:         489. PRE-PULL SIDE PANEL         490. CAUTIONARY MEASURES TO PREVENT QUARTER GLASS DAMAGE         491. GLASS OPEN FLANGE DAMAGE FROM CUT KNIFE, REPAIR         492. QUARTER GLASS INSTALLATION KIT         493. REMOVE CAULKING AND SEAM SEALER         494. REPLACE CAULKING AND SEAM SEALER         495. UNDERCOAT SIDE PANEL         496. CAVITY WAX         497. WELD-THRU PRIMER         498. SOUND DEADENER SPRAYABLE SEALER         499. EXPANSION FOAM (PER TUBE)         500. CLEAN & RETAPE ADHESIVE MOLDINGS         501. REPLACE WHEEL FLARE FASTENERS & ADHESIVE STRIP         502. FABRICATE SIDE PANEL SLEEVES         503. TEST FIT PARTS ATTACHED/ADJACENT TO SIDE PANEL         504. R&I SPECIALITY INTERIOR         505. PULL BACK WIRE HARNESS         506. R&I SEAT-S         507. R&I SEAT BELT-S	
487. REFINISH TWO TONE BLACK OUT         488. GRAVEL GUARD         85 - VAN/SUV SIDE PANEL:         489. PRE-PULL SIDE PANEL         490. CAUTIONARY MEASURES TO PREVENT QUARTER GLASS DAMAGE         491. GLASS OPEN FLANGE DAMAGE FROM CUT KNIFE, REPAIR         492. QUARTER GLASS INSTALLATION KIT         493. REMOVE CAULKING AND SEAM SEALER         494. REPLACE CAULKING AND SEAM SEALER         495. UNDERCOAT SIDE PANEL         496. CAVITY WAX         497. WELD-THRU PRIMER         498. SOUND DEADENER SPRAYABLE SEALER         499. EXPANSION FOAM (PER TUBE)         500. CLEAN & RETAPE ADHESIVE MOLDINGS         501. REPLACE WHEEL FLARE FASTENERS & ADHESIVE STRIP         502. FABRICATE SIDE PANEL SLEEVES         503. TEST FIT PARTS ATTACHED/ADJACENT TO SIDE PANEL         504. R&I SPECIALITY INTERIOR         505. PULL BACK WIRE HARNESS         506. R&I SEAT-S         507. R&I SEAT BELT-S         508. RECOVER FREON	
487. REFINISH TWO TONE BLACK OUT         488. GRAVEL GUARD         85 - VAN/SUV SIDE PANEL:         489. PRE-PULL SIDE PANEL         490. CAUTIONARY MEASURES TO PREVENT QUARTER GLASS DAMAGE         491. GLASS OPEN FLANGE DAMAGE FROM CUT KNIFE, REPAIR         492. QUARTER GLASS INSTALLATION KIT         493. REMOVE CAULKING AND SEAM SEALER         494. REPLACE CAULKING AND SEAM SEALER         495. UNDERCOAT SIDE PANEL         496. CAVITY WAX         497. WELD-THRU PRIMER         498. SOUND DEADENER SPRAYABLE SEALER         499. EXPANSION FOAM (PER TUBE)         500. CLEAN & RETAPE ADHESIVE MOLDINGS         501. REPLACE WHEEL FLARE FASTENERS & ADHESIVE STRIP         502. FABRICATE SIDE PANEL SLEEVES         503. TEST FIT PARTS ATTACHED/ADJACENT TO SIDE PANEL         504. R&I SPECIALITY INTERIOR         505. PULL BACK WIRE HARNESS         506. R&I SEAT-S         507. R&I SEAT BELT-S	



• Other

557. SELF LEAVELING SEAM SEALER

• Body

510. R&I REAR HEATER/AC COMPONENTS	
511. PULL-BACK CARPET AND FLOOR INSULATION	
512. REAR SILL AT WELD AREA, REPAIR	
513. FILL & FEATHER WELDS	
514. INNER PANEL DISTORTION DUE TO ADHESIVE, REPAIR	
515. WHEEL OPEN INNER STRUCTURE, REPAIR	
516. CLEAN FILE AND DEBUR WELD AREA	
517. FILL & FEATHER CONTOUR REPAIR AREAS	
518. COBALT DRILL BIT (BORON-TRIP-UZI BOR)	
519. STONE GUARD DECAL	
520. COLATERAL DAMAGE FROM THE REPAIR PROCESS (BUILD SEQUENCE)	
521. MASK WRAP WIRE HARNESS	
522. MASK/BAG INTERIOR FOR PROTECTION	
523. MASK JAMBS & OPENINGS	
524. MASK FOR PRIMER APPLICATION	
525. SPOT PAINT FLOOR AT WELDS	
526. SPOT PAINT BACK SIDE OF ROCKER	
527. SPOT PAINT REAL SILL	
528. ROOF DRIP WELDS, DRESS	
529. REFINISH ROOF	
530. REFINSH TWO TONE BLACK OUT	
531. PREP CLADDING FOR "RAW" PROCESSING	
532. GRAVEL GUARD	
533. PULL BACK/ROPE-MASK SIDE PANEL GLASS MOLDING	
90 - DECK LID:	
534. ACCESS PULLING & CUTTING, ACCESS TO COMPONENTS	
535. R&I LICENSE PLATE	
536. REPAIR LICENSE PLATE	
537. DRILL FOR LICENSE PLATE BRACKET	
538. REPAIR DECK LID HINGES	
539. REPAIR HINGE MOUNT AREA	
540. TRIAL FIT AND POSITION	
541. R&I AUTO LOCK	
542. REFINISH TWO TONE BLACK OUT	
543. RE-CODE DECK LID CYLINDER	
544. SEAM SEAL INNER EDGE	
545. CAVITY WAX	
546. MINI BULBS	
547. WIRE HARNESS REPAIR	
548. DRILL TEMPLATE FOR SPOILER	
549. LOCK LINKAGE REPAIR	
550. PREP DECK LID CLADDING FOR "RAW" PROCESSING	
95 - REAR BODY PANEL:	
551. PRE-PULL REAR BODY PANEL	
552. REMOVE CAULKING AND SEAM SEALER	
553. REPLACE CAULKING AND SEAM SEALER	
554. UNDERCOATING REAR BODY PANEL	
555. CAVITY WAX	
556. COBALT DRILL BIT (BORON-TRIP-UZI BOR)	

• Paint • Structural • Mechanical • Detail



•	Body	•	Paint	•	Structural	٠	Mechanical	٠	Detail	•	Other	
---	------	---	-------	---	------------	---	------------	---	--------	---	-------	--

		1
558. WELD-THRU PRIMER		
559. SOUND DEADENER, SPRAYABLE SEALER		
560. R&I LICENSE PLATE		
561. REPAIR LICENSE PLATE		
562. DRILL FOR LICENSE PLATE BRACKET		
563. MOVE TO PROTECT OR R&I EXHAUST		
564. R&I SPARE TIRE AND TOOLS		
565. TEST FITS PARTS ATTACHED/ADJACENT TO BODY PANEL		
566. FEATHER & FILL CONTOUR REPAIR AREA		
567. BRAZING, COPPER SILIUM MIG BRAZING		
568. FEATHER & FILL WELDS		
569. REPAIR INNER SIDE OF BODY PANEL AT WELD AREAS		
570. REPAIR LEFT QUARTER PANEL REPAIR AT WELD AREA		
571. REPAIR RIGHT QUARTER PANEL REPAIR AT WELD AREA		
572. REPAIR FLOOR WELD DAMAGE		
573. REPAIR FLOOR		
574. COLATERAL DAMAGE FROM THE REPAIR PROCESS (BUILD SEQUENCE)		
575. WIRE HARNESS, REPAIR		
576. CLEAN FILE AND DEBUR WELD AREA		
577. WIRE HARNESS FASTENERS, REPLACE		
578. RE-CODE LOCK CYLINDER		
579. PULL BACK WIRE HARNESS		
580. WRAP/MASK WIRE HARNESS		
581. MASK BAG INTERIOR FOR REFINISH		
582. MASK JAMS AND EDGES OF BODY PANEL		
583. SPOT PAINT INNER SIDE OF ADJACENT PANELS AT WELD AREAS		
584. REFINISH BACK SIDE OF BODY PANEL (SECOND COLOR?)		
585. SPOT PAINT TOP SIDE OF FLOOR PANEL		
586. SPOT PAINT UNDERSIDE OF FLOOR PANEL		
587. SPOT PAINT INNER SIDES OF QUARTER PANELS AT WELD AREA		
588. REFINISH TWO TONE BLACK OUT		
100 - FLOOR:		
589. PRE-PULL FLOOR PANEL		
590. REMOVE CAULKING AND SEAM SEALER		
591. REPLACE CAULKING AND SEAM SEALER **PER TUBE***		
592. UNDERCOAT		
593. CAVITY WAX		
594. WELD-THRU PRIMER		
595. COBALT DRILL BIT (BORON-TRIP-UZI BOR)		
596. SOUND DEADENER, SPRAYABLE SEALER (TWO TUBES)		
597. COLATERAL DAMAGE FROM THE REPAIR PROCESS (BUILD SEQUENCE)		
598. R&I EXHAUST		
599. R&I SPARE TIRE AND TOOLS		
600. TEST FIT PARTS ATTACHED/ADJACENT TO FLOOR PANEL		
601. R&I ELECTRONIC COMPONENTS AT FLOOR AREA (CD, AMP, SRS)		
602. R&I EMMISIONS COMPONENTS AT FLOOR AREA		
603. R&I TRUNK INTERIOR ***INDIVIDUAL COMPONENTS***		
604. PULL BACK WIRE HARNESS		
605. EXPANSION FOAM		
606. FEATHER & FILL AREAS ATTACHED BY WELDING	1	
	1	



• Other

### Labor Category Legend – By Color:

652. GRAVEL GUARD SECOND PANEL

Body
 Paint
 Structural
 Mechanical
 Detail

• Body • Faint • Structural • Mechanical • De	
607. R&I BOLTED SUSPENTION *ALL COMPONENTS******	
608. CROSSMEMBER AT WELD AREA, REPAIR/DRESS	
609. SIDE FLOOR EXTENSIONS, REPAIR	
610. FRAME RAIL FLANGE REPAIR AT WELD AREA	
611. WHEEL HOUSE(S) REPAIR AT WELD AREA	
612. CLEAN FILE AND DEBUR WELD AREA	
613. PULL BACK MASK LINES AND CABLES AT FLOOR AREA	
614. R&I FUEL TANK	
615. DRAIN FUEL FROM TANK	
616. WRAP MASK WIRE HARNESS	
617. MASK & PROTECT INTERIOR	
618. REFINISH TOP SIDE OF FLOOR	
619. REFINISH UNDERSIDE OF FLOOR	
620. SPOT PAINT UNDERSIDE ADJACENT PANELS AT WELD AREA	
621. CENTER FLOOR AT WELD AREA, REPAIR/DRESS	
622. SPOT PAINT CENTER FLOOR AREA	
623. SPOT PAINT CROSSMEMBER	
624. SPOT PAINT FLOOR EXTENSIONS	
625. SPOT PAINT RAILS AT WELD AREA, UNDERSIDE	
626. SPOT PAINT WHEEL HOUSE AT WELD AREA	
627. FLOOR TWO TONE AND/OR BLACK-OUT	
105 - PROTECTION & SAFETY:	
628. D&R HYBRID BATTERY	
629. HYBRID BATTERY PROTECTIVE STORAGE	
630. D&R BATTERY	
631. RESET ELECTRONIC MEMORY, RADIO	
632. RESET ELECTRONIC MEMORY, SEAT/STEERING WHEEL	
633. DIAGNOSE SRS DISPLAY	
634. DISABLE/ENABLE SRS	
635. DIAGNOSE ALARM CODES	
636. MASK ELECTRONIC CONNECTIONS	
637. R&I FUEL TANK	
638. DRAIN FUEL FROM TANK	
110 - PAINT PREP:	
639. REMOVE OIL , TAR & GREASE	
640. REMOVE CORROSION PROTECTION MATERIAL	
641. RESTORE CORROSION PROTECTION	
642. REMOVE MOLDING ADHESIVE	
115 - REFINISH PROCESS:	
643. DIFFICULT COLOR, TINTING & TESTING (INACCURATE VARIANCE)	
644. MASK FOR PRIMING	
645. SPOT PAINT CORESUPPORT AFTER INSTALLED (SECOND PAINT)	
646. SPRAY OUT TEST PANEL	
647. SPRAY OUT LET-DOWN PANEL FOR THREE STAGE	
648. SPRAY OUT LET-DOWN PANEL FOR TRANSPARENT COLOR	
649. COLOR TINT & TEST TO BLENDABLE MATCH	
650. COLOR TINT SECOND COLOR	
651. GRAVEL GUARD FIRST PANEL	



		SCRS
Labor Category Legend – By Color:		REPAIRER DRIVEN
• Body • Paint • Structural • Mechanical •	Detail • Oth	ner
·		
653. GRAVEL GUARD THIRD PANEL		
654. GRAVEL GUARD SPRAY-OUT TEST PANEL		
655. HAZARDOUS WASTE DISPOSAL		
656. UNDERSIDE COLOR TINTING & TESTING (CORESUPPORT & TRUNK AREAS)		
657. UNDERSIDE COLOR REFINISH		
658. COVER VEHICLE (FOR REFINISHING ONE TIME)		
659. REFINISHING JAMBS (SEPARATE COLOR THAN EXTERIOR-EACH COLOR*)		
660. MASKING JAMBS		
120 - COLOR-SAND & POLISH:		
661. COLOR SAND & POLISH, 1 <sup>ST</sup> PANEL (MATERIALS AND LABOR)		
662. COLOR SAND & POLISH, 2 <sup>ND</sup> PANEL ( <i>MATERIALS AND LABOR</i> )		
663. COLOR SAND & POLISH, 3 <sup>RD</sup> PANEL (MATERIALS AND LABOR)		
664. COLOR SAND & POLISH, 4 <sup>TH</sup> PANEL ( <i>MATERIALS AND LABOR</i> )		
665. COLOR SAND & POLISH, 5 <sup>TH</sup> PANEL ( <i>MATERIALS AND LABOR</i> )		
666. COLOR SAND & POLISH, 6 <sup>TH</sup> PANEL ( <i>MATERIALS AND LABOR</i> )		
667. COLOR SAND & POLISH, 7 <sup>TH</sup> PANEL ( <i>MATERIALS AND LABOR</i> )		
668. COLOR SAND & POLISH, 8 <sup>TH</sup> PANEL ( <i>MATERIALS AND LABOR</i> )		
669. FINAL WASH TO REMOVE COMPOUND RESIDUE		
670. POLISH RIM SKUFF		
671. SPOT REFINISH RIM		
125 - STRIPES:		
672. REMOVE OLD STRIPES WITH ERASER WHEEL USE		
673. RESTRIPE WITH FINE-LINE TAPE		
674. RESTRIPE PAINTED-ON		
675. FACTORY STRIPE INSTALLATION		
130 - GLASS:		
676. CAUTIONARY STEPS TO PREVENT DAMAGE		1
677. REPAIR FLANGE DAMAGE FROM CUT KNIFE		1
678. TEST FIT GLASS		
679. REMOVE URETHANE RESEDUE AT PINCHWELD, FULL CUT OUT		
680. BROKEN GLASS CLEAN-UP (SEATS & CARPET)		
681. BROKEN GLASS CLEAN-UP (VENTS) **R&I DASH NEEDED????***		
682. URETHANE ADHESIVE REMOVAL		
683. URETHANE GLASS KIT		
135 - FRAME SET UP:		
684. UNIBODY CLAMP SYSTEM		1
		+

685. FULL FRAME CLAMP SYSTEM 686. NON-DRIVE VEHICLE (NO START) 687. DISABLE VEHICLE (DOES NOT ROLL)

688. LIFTED/LOWERED VEHICLE

689. TRAM VEHICLE TO DETERMINE IF MOVEMENT EXISTS

690. INSTALL MECHANICAL MEASURING SYSTEM 691. ELECTRONIC MEASUREMENT DOCUMENT 692. R&I ROCKER MLDGS- ACCESS TO CLAMP AREA 693. ACCESS PULLING TO FACILITATE TEAR DOWN 694. R&I INTERFERING WIRES, TUBING/LINES, EXHAUST

696. REPAIR CLAMP SCARING ON ROCKER FLANGE 697. REPAIR ANCHOR DAMAGE AT LOCKING POINTS

695. R&I SUSPENSION/STEERING, PARTIAL



Body
 Paint
 Structural
 Mechanical
 Detail
 Other

698. REPAIR PROTECTIVE COATING AT ROCKER		
699. PAINT ROCKER FLANGE		
140 – FRAME REPLACEMENT		
700. MEASURE USED FRAME		
701. CLEAN USED FRAME		
702. DISPOSE OF VIN / REGISTER NEW FRAME VIN		
703. CUT UP DAMAGED FROM FOR DISPOSAL		
704. CUT UP AND DISPOSE OF CRATE		
704. COT OF AND DISPOSE OF CRATE		
705. DLEED BRAKES 706. DRAIN BRAKE FLUID		
707. DRAIN RADIATOR		
708. BLEED RADIATOR SYSTEM		
709. RADIATOR COOLANT		
710. R&I TRANS COOLER		
711. TRANSMISSION FLUID		
712. R&I HEATER HOSES		
713. SET OR ADJUST PARKING BRAKE		
714. EVACUATE AND RECHARGE A/C SYSTEM		
715. A/C OIL AND FREON		
716. A/C "O" RINGS		
717. REMOVE PRESSURE FROM AB AND RECHARGE ABS SYSTEM		
718. DIAGNOSE ABS (SCAN TOOL)		
719. R&I HEAT SHIELDS		
720. R&I SPARE TIRE CARRIER		
721. R&I BED SHELL (IF EQUIPPED)		
722. R&I BED LINER (IF EQUIPPED)		
723. 4 WHEEL ALIGNMENT		
724. REMOVE & STORE FUEL FROM GAS TANK		
725. R&I FUEL NECK ASSEMBLY		
726. R&I WHEELS		
727. R&I BOTTOM ENGINE SHIELDS AND SKID PLATES		
728. R&I ABS SENSORS		
729. R&I ABS WIRE LOOM		
730. R&I TRAILER HITCH AND WIRES		
731. R&I EXHAUST SYSTEM AS ASSEMBLY		
732. R&I EXHAUST SYSTEM AS COMPONENTS		
733. R&I 4 WHEEL DRIVE SHAFT		
734. R&I REAR DRIVE SHAFT ON 4 WHEEL DRIVE AS COMPONENTS		
735. R&I RIDE HEIGHT SENSORS		
736. CALIBRATE RIDE HEIGHT		
737. R&I RIDE HEIGHT WIRE LOOM		
738. O/H SUSPENSION PARTS THAT ARE DAMAGED		
739. R&I PARTS THAT CANNOT BE REMOVED AS ASSEMBLY		
740. R&I CARPETS FOR ACCESS		
740. REIGHT FOR FRAME		
742. D&R BATTERY		
742. Dar Barrent 743. RESET RADIO CODES		
744.R7I FAN		
744.R/TPAN 745. R&I FAN SHROUD		
745. R&I MOUNTING CLIPS AND BRACKETS		



783. R&I RADIATOR 784. R&I A/C CONDENSOR

786. CAP OFF A/C LINES 787. CAP OF EVAPORATOR

793. R&I BRAKE CALIPERS 794. R&I SPEED SENSORS 795. CALIBRATE ABS SYSTEM 796. R&I AUX FUEL TANK

785. R&I POWER STEERING COOLER

788. STRAIGHTEN / PULL DAMAGED FRAME FOR REMOVAL ACCESS

789. REPLACE DAMAGED MOUNTING HARDWARE 790. REPAIR MOUNTING LOCATIONS ON CAB / BED

792. CORROSION PROTECTION (AS PER OEM GUIDELINES)

791. R&I FUEL LINES ATTACHED TO FRAME

747. REPLACE BROKEN CLIPS	
748. R&I FENDER SHIELDS OR LINERS	
749. R&I (M) COMPONENTS ATTACHED TO FRAME	
750. D&R BRAKE LINE TO BRAKE BOOSTER	
751. DRAIN POWER STEERING FLUID	
752. REPLACE POWER STEERING FLUID	
753. REPLACE WASHER FLUIDS	
754. ROAD TEST	
755. PRE-SCAN VEHICLE	
756. POST-REPAIR SCAN	
757. RESET ALL TROUBLE CODES	
758. DISABLE AND ENABLE SRS SYSTEM	
759. R&I CENTER CONSOLE TO DISCONNECT SHIFTER	
760. DISCONNECT STEERING SHAFT	
761. R&I ELECTRICAL SUSPENISION COMPONENTS	
762. TOW TO DEALER TO RESET CODES	
763. SET BODY ON ROLLING BENCH (OR FRAME BENCH)	
764. RESET ELECTRICAL COMPONENTS	
765. REPLACE PAG OIL FOR RIDE HEIGHT COMPRESSOR	
766. RIDE HEIGHT COMPRESSOR TANK	
767. HAZ WASTE DISPOSAL	
768. ADDITIONAL WORK SPACE (2 <sup>ND</sup> STALL)	
769. R&I OIL COOLER	
770. R&I HYDRAULIC/ELECTRIC ANIT-SWAY BAR	
771. BLEED AND DRAIN HYDROLIC SWAY BAR	
772. CHECK FLUIDS (ENGINE, TRANS, TRANSFER CASE, FRONT AND/OR REAR DIFF.)	
773. R&I RUNNING BOARDS	
774. R&I WINCH	
775. R&I BRUSH BAR	
776. R&I EMISSIONS COMPONENTS	
777. INITIALIZATION OF WINDOWS, SUN ROOF, DOOR LOCKS, ETC.	
778. RESET STEERING ANGLE SENSOR	
779. R&I HEADLAMPS FOR ACCESS	
780. AIM HEADLAMPS	
781. R&I GRILLE	
782. R&I CORE SUPPORT FOR ACCESS (BOLT ON TYPE)	



•	Body	٠	Paint	•	Structural	٠	Mechanical	•	Detail	•	Other	
---	------	---	-------	---	------------	---	------------	---	--------	---	-------	--

798. R&I ABS LINES	
145 - FRONT END DAMAGE:	
799. PRE-PULL TO FACILITATE TEAR DOWN	
800. PULL & REPOSITION CORESUPPORT	
801. REPAIR FRONT BUMPER WELDED MOUNTING BRACKET (EACH)	
802. CORRECT UPPER RAIL/APRON SWAY, LEFT	
803. CORRECT UPPER RAIL/APRON SWAY, RIGHT	
804. CORRECT UPPER RAIL/APRON HEIGHT, LEFT	
805. CORRECT UPPER RAIL/APRON HEIGHT, RIGHT	
806. CORRECT UPPER RAIL APRON LENGTH/MASH, LEFT	
807. CORRECT UPPER RAIL APRON LENGTH/MASH, RIGHT	
808. REPAIR AND CORRECT DIAMOND CONDITION	
809. MEASURE SUSPENSION X-1 CAR-O-LINER	
810. POSITION AND ALIGN FRONT CROSSMEMBER	
811. POSITION AND ALIGN CENTER CROSSMEMBER	
812. POSITION AND ALIGN REAR CROSSMEMBER	
813. R&I COMPONENTS MOUNTED TO APRON-S	
814. LOOSEN BRACKETS FOR PULL AND REPAIR	
815. REPAIR LEFT LEAF SPRING BRACKET/SHACKLE	
816. REPAIR RIGHT LEAF SPRING BRACKET/SHACKLE	
817. PULL LEFT RAIL, SWAY	
818. PULL RIGHTRAIL, SWAY	
819. PULL LEFT RAIL LENGTH	
820. PULL RIGHT RAIL LENGTH	
821. REPAIR LEFT RAIL MASH (CUT OUT MASH TO REPAIR)	
822. REPAIR RIGHT RAIL MASH (CUT OUT MASH TO REPAIR)	
823. PULL LEFT RAIL HEIGHT	
824. PULL RIGHT RAIL HEIGHT	
825. CORRECT LEFT RAIL TWIST	
826. CORRECT RIGHT RAIL TWIST	
827. PULL ENGINE/SUSPENSION CROSSMEMBER	
828. PULL & POSITION APRON, LEFT	
829. PULL & POSITION APRON, RIGHT	
830. PULL & POSITION STRUT TOWER, LEFT	
831. PULL & POSITION STRUT TOWER, RIGHT	
832. VECTOR INWARD RAIL TWIST **(EACH RAIL) **	
833. R&I ENGINE (FOR ACCESS)	
834. R&I TRANSMISSION (FOR ACCESS)	
150 - SIDE DAMAGE:	
835. ACCESS PULLING TO FACILITATE TEAR DOWN	
836. PULL & POSITION COWL FOR REPAIR	
837. PULL & POSITION DASH REINFORCEMENT BAR	
838. PULL & POSITION PILLAR, OUTBOARD (EACH OF A, B & C PILLARS)	
839. PULL & POSITION PILLAR, REARWARD (EACH OF A, B & C PILLARS)	
840. PULL & POSITION PILLAR, FORWARD (EACH OF A, B & C PILLARS)	
841. PULL & POSITION PILLAR, TWIST (EACH OF A, B & C PILLARS)	
842. SQUARE DOOR OPENING (TRIAL FIT DOOR AS NEEDED)	
843. PULL & POSITION ROCKER	
844. PULL & POSITION CENTER FLOOR	
845. LOOSEN FULL FRAME BRACKETS	



Labor Catego	ry Legend – By Co	lor:			(	
• Body	• Paint	• Structural	• Mechanical	• Detail	• Other	
846. CORRECT PI	ILLAR INNER REINFO	DRCEMENT (EACH OF A	A,B & C PILLARS)			
		(				

846. CORRECT PILLAR INNER REINFORCEMENT (EACH OF A, B & C PILLARS)		
847. CORRECT PILLAR INNER PANEL (EACH OF A, B & C PILLARS)		
848. CORRECT ROCKER INNER REINFORCEMENT		
849. CORRECT ROCKER INNER PANEL		
850. PULL QUARTER PANEL POST		
851. PULL/CORRECT PACKAGE TRAY AREA		
155 - REAR END DAMAGE:		
852. ACCESS PULLING TO FACILITATE TEAR DOWN		
853. REPAIR REAR FRAME RAIL WELDED BRACKET (EACH SIDE)		
854. REPAIR REAR LEAF SPRING BRACKET/SHACKLE (EACH SIDE)		
855. PULL & POSITION REAR BODY PANEL		
856. PULL REAR FLOOR PAN, LENGTH		
857. PULL REAR FLOOR PAN, LEVEL		
858. PULL LEFT RAIL, LENGTH		
859. PULL RIGHT RAIL, LENGTH		
860. PULL LEFT RAIL, SWAY		
861. PULL RIGHT RAIL, SWAY		
862. PULL LEFT RAIL, HEIGHT		
863. PULL RIGHT RAIL, HEIGHT		
864. PULL LEFT RAIL, TWIST		
865. PULL RIGHT RAIL, TWIST		
866. PULL & POSITION REAR CROSSMEMBER		
867. PULL & POSITION LEFT QUARTER (FOR REPAIR)		
868. PULL & POSITION RIGHT QUARTER (FOR REPAIR)		
869. PULL & POSITION LEFT INNER QUARTER STRUCTURE		
870. PULL & POSITION RIGHT INNER QUARTER STRUCTURE		
871. PULL & POSITION SUSPENSION MOUTING POINTS		
872. CORRECT DIAMOND CONDITION		
873. CORRECT RAIL PERCH AT SPRING MOUNT AREA		
874. REMOVE TWIST IN CENTER SECTION OF FULL FRAME		
875. CORRECT BODY/CAB MOUNTS		
876. CORRECT BODY TO FRAME ISOLATOR MOUNTS		
877. MEASURE SUSPENSION CONTROL POINTS		
878. CORRECT BED MOUNTS		
879. PULL & POSITION BED X-MEMBER		
880. PULL & POSITION BED FLOOR		
881. PULL & POSITION BED SIDE PANEL, OUTER (FOR REPAIR)		
882. PULL & POSITION BED INNER PANEL		
883. PULL & POSITION BED FRONT PANEL		
884. CORRECT TAIL GATE OPENING, SQUARE		
885. CORRECT RAIL MASH		
886. CORRECT BUMPER BRACKET MOUNT AREA		
887. VECTOR REPAIR INWARD RAIL TWIST (EACH RAIL)		
160 - FLOOR ANCHOR PULLING SYSTEM:		
888. FLOOR ANCHOR CLAMP SYSTEM SET UP		
889. FLOOR PULL CORESUPPORT		
890. FLOOR PULL APRON		
890. FLOOR PULL UPPER RAIL		
891. FLOOR PULL QUARTER LOCK POST/DOG LEG		
893. FLOOR PULL QUARTER WHEEL HOUSE		
	1	



Body     Paint     Structural     Mechanical     Detail     Othe	r
--	---

894. FLOOR PULL BACK PANEL	
895. FLOOR PULL BUMPER MOUNT AREA	
165 - THEFT/VANDALISM:	
896. DETAIL/CLEANUP	
897. MECHANICAL CHECK	
898. ROAD TEST	
899. CHECK FLUIDS AND LAMPS	
900. TOP OFF FLUIDS	
901. COPY KEY FROM CYLINDER	
902. CODE IGNITION CYLINGER	
903. CODE DOOR CYLINDER	
170 - DETAIL/CLEAN-UP:	
904. DETAIL	
905. PAINT SEALANT (COMPLETE) LIFETIME WARANTY	
906. PAINT SEALANT (PER PANEL)	
907. CLEAN INTERIOR FROM SPILLS CAUSED BY LOSS	
908. CLEAN & DETAIL , POLISH AND SWIRL MARK REMOVAL	
909. CLEAN FOR DELIVERY	
910. CLEAN UP DEPLOYED AIR BAG RESIDUE	
175 - TOW, STORAGE & ADMINISTRATION:	
911. TEAR DOWN CHARGE	
912. RR&I ALL LKQ/USED COMPONETS	
913. INSIDE STORAGE	
914. OUTSIDE STORAGE	
915. ADMINISTRATIVE FEE - TYPICAL	
916. ADMINISTRATIVE FEE - EXTENSIVE	
917. REPLACE ALUMINUM SILICATE STONE	
918. REPLACE ALUMINUM PRIMER	
919. REPLACE CLEANING SOLUTION (ALL WELDED AND BONDED PANELS)	
920. REMOVE HOT WAX COATING	
921. INSTALL FLOWABLE HOT SEALER	
922. REPLACE FLOW FORM BOLT	
923. REPLACE PUNCH INSERT	
924. INSTALL PYROSIL COATING AND ADHESION	
925. REPLACE BELT SANDER BELT KIT	
926. REPLACE INJECTION ADHESION REMOVER	
927. PREP ALUMINUM COUPONS AND PREP TIME (PREP WELD)	
928. REPLACE ALUMINUM CUTTING WHEEL	
929. RECHARGE VEHICLE FOR DELIVERY	
930. REPLACE CUTTING TOOL LUBRICATION KIT	
931. REPLACE ALUMINUM CLEANING BRUSH	
932. REPLACE SPR'S ,FLOW FORM, CLINCH, HUCK PINS AND BLIND RIVETS	
933. REPLACE TWO PART STRUCTURAL ADHESIVE	
934. REPLACE BODY SAW BLADE	
935. LAZER WELD REMOVER TWIST	 
936. REPLACE HOS COBALT BIT	
937. ALUMINUM SUBSTRAIGHT LABOR RATE	
938. ALUMINUM SUBSTRAIGHT STRUCTURAL RATE	



Labor Category Legend – By Color:		REPAIRER DRIVEN
Body     Paint     Structural     Mechanical	• Detail	• Other
939. REPLACE FANTHEL COATING		
940. DYE PENETRANT CHECK COATING (WELD TEST)		
941. REPAIR FLANGE CLEAVES AFTER RIVET BOND APPLICATION		
942. ALUMINUM EPOXY PRIMER APPLICATION		
943. REPLACE ALUMINUM REPAIR CUPS		
944. REPLACE DACREMET PRIMER SEALER		
945. REPAIR ALUMINUM FLANGE		
946. SPR RIVET KIT		
947. SPR PUNCH RIVET PRESSURE RING		
948. EXPANSION FOAM		
949. FABRICATE SLEEVE INSERT		
950. FLOW FORM RIVET SET		
951. STRUCTURAL ADHESIVE		
952. SELF LEAVING SEAM SEALER		
953. REPLACE ALUMINUM WIRE FOR MAG WELDER		
954. ADHESIVE CLEAN UP (BENCH)		
955. ALUMINUM PULL PINS		
956. REPLACE NON-CONDUCTIVE STRUCTURAL URETHANE		
957. JIG BENCH SET UP (LOWER)		
958. JIG BENCH SET UP (UPPER)		
959. JIG RENTAL (PLUS SHIPPING BOTH WAYS)		
960. JIG BENCH (SIDE GANTREY)		
961. JIG BENCH DOWNTIME (WAITING ON APPROVAL, JIGS OR PARTS)		
962. DIAG REFERANCE CODES		
963. VOLTAGE TEST (PRIOR TO REPAIRS)		
964. BLEED COOLING SYSTEM		
965. A/C CHARGE		
966. COOLING FAN TEST		
967. RE-SET INSTRUMENT CLUSTER		
968. DISABLE BATTERY LOOP		
969. RE-SET AIR SUSPENSION		
970. RE-SET TPMS		
971. RIDE HEIGHT TEST (MAY REQUIRE MULTIPLE TESTS)		
972. DE-GAS AIR SUSPENSION		
973. INSPECT AND CHECK WATER PUMPS (EACH PUMP)		
974. R&I CABIN FILTER BEFORE REFINISH		
975. RECALIBRATE WINDOW SYSTEMS		
976. SEAM SEAL DOOR		
977. SEAM SEAL LIFTGATE	<u> </u>	
978. SEAM SEAL HINGE		
979. R&I REAR SUSPENSION WITH (BATTERY R&I ACCESS)		

980. CAMERA AND RADAR RECALIBRATION TEST



•	Body	•	Paint	•	Structural	٠	Mechanical	•	Detail	٠	Other

981. YF 1234 REFRIGERANT (PER POUND)	
982. ALUMINUM WIRE KIT PER PANEL	
983. WELDING WIRE	
984. COBALT BIT PACK	
985. MIG BRAZING KIT	
986. CAVITY WAX INSTALLATION PER PANEL	
987. RESET ELECTRONICS	
988. MASKING FOR APPLYING DYE PENENTRANT (EACH PANEL)	
989. CHECK FOR CRACKS USING DYE PENENTRANT	
990. APPLY EPOXY PRIMER COAT	
991. SECONDARY CLEANING FOR OXIDE REMOVAL (PER PANEL)	
992. HEATING/BAKING HARDENED ALUMINUM TO LOOSEN ADHESIVE	
993. CLEANING PREP AREA OF ADHESIVE (PRIOR TO DRYING)	
994. REMOVAL OF ELECTRONICS WITH 300 MM OF WELDING ZONE	
995. RESETTING AND DIAGNOSIS OF ELECTRONICS	
996. COUNTER SINK ALUMINUM FOR RIVET APPLICATION (PER RIVET)	
997. REMOVE STRUCTURAL ADHESIVE ADJACENT PANELS (PER PANEL)	
998. CALIBRATE AND MEASURE METAL THICKNESS FOR CORRECT DIAMETER	
999. FABRICATE AND PUNCH HOLE FOR FREE FLOW RIVET (PER HOLE)	
1000. ADHESIVE "WET TIME" ON FIXTURE BENCH (CELETTE-CAR-BENCH-CAROLINER)	
1001. APPLY NON-DIELECTRIC ADHESIVE TO GLASS AREAS	
1002. CLEANING AND DEGREASING PANEL(S) PRIOR TO ADHESIVE INSTALLATION	
1003. BUILD SEQUENCE ON ADJACENT ALUMINUM PANELS (PER PANEL)	
1004. APPLYING HEATING SOURCE AND MONITORING PANEL(S) DURING REPAIR PROCESS	
1005. TEST FITTING PRIOR TO INSTALLING PART (PER PANEL)	
1006. SECONDARY MEASUREMENT PRIOR TO BONDING ADHESIVE APPLICATION	
1007. CONSTRUCTING SLEEVE OR BACKER PLATE FOR PANEL REPLACEMENT	
1008. REMOVE DAMAGED PARTS FOR REPAIR/REPLACEMENT ACCESS	
1009. ADVANCED CHARGES	
1010. TOW FEE TO DEALER	
1011. TOW FEE BACK FROM DEALER, RETURN	
1012. IMMOBILE VEHICLE OR PART, YARD SERVICE FEE (FORK LIFT USE)	
1013. INOPERATIVE VEHICLE ( <i>NO START/NO KEYS</i> )	
1014. RELOCATION FEE	
1015. VEHICLE PICKUP SERVICE FEE	
1016. FLUID SPILL CLEAN UP FEE (ADD FOR ABSORBENT MATERIAL)	
1017. VEHICLE DISPOSAL FEE	
1018. RESTOCKING FEE'S	
1019. PROTECT INTERIOR (ADD FOR PLASTIC WRAP MATERIAL)	
1013: FROTECT INTERIOR (ADD FOR FLASTIC WRAF MATERIAL)	
1020. COSTONIER ASSISTANCE FEE	
1021. VEHICLE PROCESSING FEE (DMV)	
180 - FINAL BILL/MISCELLANEOUS:	
1023. SHIPPING/TRANSPORTATION CHARGES	
1024. TIRE DISPOSAL FEE	
1025. RECHARGING FEE	
1026. BATTERY DISPOSAL FEE	
1027. OIL DISPOSAL FEE	
1028. SOLID WASTE DISPOSAL FEES	
1029. VISUAL DAMAGE ESTIMATE (NO-REPAIR/O.R.CUSTOMER)	



• Body	• Paint	• Structural	• Mechanical	• Det	ail • Other
1030. FINAL BILI	L, AUTHORIZATION	TO PAY SECURED			
1031. MINIMUN	A DISASSEMBLE FEE				
1032. NEED TEA	R DOWN FOR COM	PLETE ESTIMATE			
1033. TOTAL LO	SS ADMINISTRATIO	N FEE			

2013 AUDI A6 QUATTRO PRESTIGE 4D SED 6-3.0L-SC

Rpr IATOR SUPPOR R&I R&I CTRICAL	Pre-measure suspension Pre-measure unibody Unibody setup Pre-pull panel for removal Mounting locations <b>T</b> Front deflector Rear deflector		1 1 1			1.0 1.0 4.0 1.0 1.0	F F	
IATOR SUPPOR R&I R&I	Unibody setup Pre-pull panel for removal Mounting locations T Front deflector		1			4.0 1.0	F	
IATOR SUPPOR R&I R&I	Pre-pull panel for removal Mounting locations T Front deflector					1.0		
IATOR SUPPOR R&I R&I	Pre-pull panel for removal Mounting locations T Front deflector		1				F	
IATOR SUPPOR R&I R&I	<b>T</b> Front deflector					1.0		
R&I R&I	Front deflector							1.0
R&I								
	Rear deflector					0.3		
CTRICAL						0.3		
	CDS Astech pre-repair scan		1	159.53	т	0.5	М	
	D&R battery		1			0.3	М	
	R&I Wiring		1			1.0	М	
	R&I Electronics		1			0.5	М	
R&I	RT Blind spot radar				m	0.3	М	
R&I	LT Blind spot radar				m	0.3	М	
R&I	Mount panel					<u>0.8</u>	М	
	Reset electronic memory functions		1			0.5	Μ	
	Test drive and normalize functions		1			0.5	Μ	
Sub	Harmony Audi +33%		1	538.64	х			
ELS								
R&I	RT/Front R&I wheel				m	<u>0.2</u>	М	
R&I	LT/Front R&I wheel				m	<u>0.2</u>	М	
R&I	RT/Rear R&I wheel				m	<u>0.2</u>	М	
R&I	LT/Rear R&I wheel				m	<u>0.2</u>	М	
IDSHIELD								
Repl	Windshield Audi, w/o head up display w/driver assist pkg	4G0845099GNVB	1	811.00		2.8		
	Clean old adhesive from body (large)		1			0.5		
Repl	2K Window adhesive D004660M2		1	81.32				
Repl	Window primer D00920002		1	9.80				
TRAINT SYSTEM	IS							
R&I	RT Head air bag to 5/25/14				m	0.5	М	
R&I	RT Outer belt assy beige from 12/12					0.6	М	
Repl	Air Bag Attachment Kit	4G8898803	1	53.00		0.5		
	Air Bag Attachment retainer clip	4G0880127	2	4.00				
Repl								
Repl <b>FS &amp; TRACKS</b>	RT Seat frame grommet	4L0886373	1	3.00				
TS & TRACKS	LT Seat frame grommet	4L0886373	1	3.00				
TS & TRACKS Repl								
	•	& TRACKS Repl RT Seat frame grommet Repl LT Seat frame grommet	& TRACKSReplRT Seat frame grommet4L0886373ReplLT Seat frame grommet4L0886373	& TRACKSReplRT Seat frame grommet4L08863731ReplLT Seat frame grommet4L08863731	& TRACKS         Repl         RT Seat frame grommet         4L0886373         1         3.00           Repl         LT Seat frame grommet         4L0886373         1         3.00	& TRACKS         Repl         RT Seat frame grommet         4L0886373         1         3.00           Repl         LT Seat frame grommet         4L0886373         1         3.00	& TRACKSReplRT Seat frame grommet4L088637313.00ReplLT Seat frame grommet4L088637313.00	& TRACKS         Repl       RT Seat frame grommet         4L0886373       1         3.00

2013 AUDI A6 QUATTRO PRESTIGE 4D SED 6-3.0L-SC

40		R&I	RT Roof molding				0.5	
41		R&I	LT Roof molding				0.5	
42		Rep	RT Roof molding dip	8K0853585C	12	20.40		
43		Rep	LT Roof molding clip	8K0853585C	12	20.40		
44		Rep	RT Roof molding retainer clip	8K0853929B	3	21.00		
45		Repl	LT Roof molding retainer clip	8K0853929B	3	21.00		
46		Repl	RT Roof molding rivet from 2/13	N91201401	2	2.00		
47		Repl	LT Roof molding rivet from 2/13	N91201401	2	2.00		
48		R&I	R&I sunroof assy				1.6	
49		R&I	R&I headliner				4.2	
50		Rep	Headliner dip	8D0867549C	15	39.00		
51		R&I	RT Sunvisor beige				0.3	
52		R&I	LT Sunvisor beige				0.3	
53	*	R&I	LT Grip handle front beige				<u>0.2</u>	
54		Rep	LT Sunvisor cap silver	4G0857621EP5	1	7.60		
55		Rep	LT Visor bracket cap silver	4G0857563EP5	1	7.80		
56	*	Rep	RT Grip handle front silver	8R0857607BEP5	1	<u>85.00</u>	0.2	
57	*	Repl	RT Grip handle rear silver	8R0857608AEP5	1	<u>93.50</u>	0.2	
58		Repl	LT Grip handle rear silver	8K0857607CEP5	1	85.00	0.2	
59	PILLARS	S, ROCKER &	FLOOR					
60		Bind	LT Uniside assy					3.3
61	*	Rpr	RT Aperture panel			S	<u>2.0</u>	4.0
62			Add for Clear Coat					1.6
63		R&I	RT Rocker molding A6 w/S-line pkg				1.4	
64		R&I	LT Rocker molding A6 w/o S-line pk				1.4	
65		Repl	RT Rocker molding mount kit	4G0898909	1	53.00		
66		Repl	LT Rocker molding mount kit	4G0898909	1	53.00		
67		R&I	RT Wndshld plr trim beige				Incl.	
68		R&I	LT Wndshld plr trim beige				Incl.	
69		R&I	RT Cowl trim beige				0.3	
70		R&I	LT Cowl trim beige				0.3	
71		R&I	RT Pillar cover beige				0.3	
72		R&I	LT Pillar cover beige				0.3	
73		R&I	RT Upr ctr plr trim w/comfort AC beige				0.3	
74		R&I	LT Upr ctr plr trim w/comfort AC beige				0.3	
75		R&I	RT Lwr ctr plr trim beige				0.5	
76		R&I	LT Lwr ctr plr trim beige				0.5	
77		R&I	RT Rear sill plate beige				0.3	
78		R&I	LT Rear sill plate beige				0.3	
79	*	Repl	RT Scuff plate A6, front, w/o lighting pkg w/o S-line pkg	4G0947406G	1	<u>284.00</u>	Incl.	
80	#		Adhesive residue removal		1	1.00 X	0.2	

2013 AUDI A6 QUATTRO PRESTIGE 4D SED 6-3,0L-SC

81	*	Repl	RT Scuff plate A6, rear, w/o	4G0947424G	1	<u>267,85</u>	Incl.	
			lighting pkg w/o S-line pkg					
82	#		Adhesive residue removal		1	1.00 X	0.2	
83		R&I	RT Front shield				0.2	
84		R&I	LT Front shield				0.2	
85		R&I	RT Center shield				0.3	
86		R&I	LT Center shield				0.3	
87		R&I	RT Rear shield				0.2	
88		R&I	LT Rear shield				0.2	
89	FRONT DOOR							
90		R&I	RT R&I door assy				1.2	
91		R&I	RT W'strip on body				0.4	
92		R&I	LT W'strip on body				0.4	
93	REAR DOOR							
94		R&I	RT R&I door assy				1.2	
95		Bind	RT Door shell					1.1
96		R&I	RT W'strip on body from 11/14/11				0.4	
97		R&I	LT W'strip on body from 11/14/11				0.4	
98		R&I	RT Lower w'strip to 10/19/13				0.4	
99		R&I	RT Belt molding				0.2	
100		R&I	RT Handle, outside w/o chrome				0.5	
101		R&I	RT Striker				Incl.	
102		R&I	RT R&I trim panel				0.5	
103	BACK GLASS							
104		R&I	Back glass Audi				Incl.	
105	#		Clean old adhesive from glass & body (large)		1		1.0	
106	#	Repl	2K Window adhesive D004660M2		1	81.32		
107	#	Repl	Window primer D00920002		1	9.80		
108		Rep	Back glass packing	8A5845515	4	9.60		
109		Rep	Back glass spacer	8D0845237	5	12.00		
110		Repl	Reveal molding	4G5853305	1	255.00	Incl.	
111	QUARTER PAN	EL						
112		Repl	RT Quarter pnl assy	4G5809838	1	970.00	22.5 S	3.0
113			Overlap Major Non-Adj. Panel					-0.2
114			Add for Clear Coat					0.6
115	#		Add for Inside		1			1.0
116	#		Add for Sound Deadening		1	25.00 X	0.5	
117	*	Rpr	RT Outer wheelhouse				<u>3.0</u>	1.0
118			Add for Clear Coat					0.2
119	#		Protect & wrap removed components		1	20.00 X	0.5	
120	#		3M weld wrap		1	20.00 X	0.5	
121	#		Remove factory seam sealer		1		0.5	
122	#		Remove factory cavity wax		1		0.5	
			· ·					

2013 AUDI A6 QUATTRO PRESTIGE 4D SED 6-3,0L-SC

123	#		Remove structural foam		1		1.0	
124	#		Remove e-coat from new flanges		1		1.0	
125	#		Repair, prep and clean old flanges		1		1.5	
126	#		Mask for weld-thru		1			0.6
127	#		Weld-thru primer application		1	12.00 X	0.5	
128	#		Test fit welded panel		1		1.5 S	
129	#		Test fit adjacent panels		1		2.5	
130	#		Setup and test STRS welder		1		0.5 S	
131	#		Setup and test MAG welder		1		0.5 S	
132	#		HSS spot weld bit		1	50.00 X		
133	#	Repl	Cleaning solution D00940104		1	30.30		
134	#	Repl	2K Audi metal adhesive DA001730A2		1	86.00		
135	#	Repl	Foam D506KD1A3		1	93.00	1.0	
136	#		Adhesive cleanup		1		0.5 S	
137	#		Epoxy primer application		1	20.00 X	1.0	
138	#		Setup and test seam sealer to duplicate OE		1		0.5	
139	#	Repl	Sealant Gray D 476 KD1 M2		1	40.90		
140	#	Repl	Preservation Wax AKR321M154		1	25.20	0.3	
141		R&I	RT Wheelhouse liner				Incl.	
142		R&I	LT Wheelhouse liner				0.5	
143		Repl	RT Wheelhouse liner grommet	4F0825429A	4	8.40		
144		Refn	Fuel door					0.3
145			Add for Clear Coat					0.1
146		R&I	Fuel door				Incl.	
147		Repl	Hinge	4G0809906C	1	70.00	0.6	
148		R&I	RT Window molding				0.4	
149		R&I	LT Window molding				0.4	
150		Repl	RT Window molding clip	8K0853929B	3	21.00		
151		Repl	LT Window molding dip	8K0853929B	3	21.00		
152		Repl	RT Window molding rivet	N91019701	3	2.70		
153		Repl	LT Window molding rivet	N91019701	3	2.70		
154		R&I	RT Qtr glass Audi				Incl.	
155		R&I	LT Qtr glass Audi				2.0	
156	*	Rpr	RT Inner panel (HSS)			S	<u>1.0</u>	1.0
157			Add for Clear Coat					0.2
158	*	Rpr	RT Lock plr reinf				<u>1.0</u>	<u>1.0</u>
159	*		Add for Clear Coat					0.2
160	*	Rpr	RT Inner wheelhouse			S	<u>1.5</u>	0.7
161			Overlap Minor Panel					-0.2
162			Add for Clear Coat					0.1
163		R&I	RT Qtr glass trim beige from 11/14/11				Incl.	
164		R&I	LT Qtr glass trim beige from				0.2	

2013 AUDI A6 QUATTRO PRESTIGE 4D SED 6-3,0L-SC

			11/14/11					
165		R&I	RT Upper qtr trim beige				Incl.	
166		R&I	LT Upper qtr trim beige				0.3	
167	REAR BODY & F							
168	*	Rpr	Rear body panel				<u>1.0</u>	1.5
169			Overlap Major Adj. Panel					-0.4
170	*		Add for Clear Coat					0.2
171	*	Rpr	Package tray				<u>1.0</u>	<u>1.0</u>
172	*		Add for Clear Coat					0.2
173	*	Rpr	RT Floor extn				<u>0.5</u>	0.5
174			Overlap Minor Panel					-0.2
175			Add for Clear Coat					0.1
176		R&I	Scuff plate				0.3	
177		R&I	Trunk lining				Incl.	
178		R&I	RT Trunk side trim				Incl.	
179		R&I	LT Trunk side trim				0.3	
180		Repl	RT Trunk side trim retainer	4B0863907A01C	2	4.40		
181		R&I	RT Compartment				0.3	
182	TRUNK LID							
183		R&I	R&I trunk lid				1.2	
184		Bind	Trunk lid (ALU)					1.2
185		Repl	RT Hinge cover	4G59718229B9	1	27.00		
186		Repl	LT Hinge cover	4G59718219B9	1	27.00		
187	#	Repl	Hinge Cover rivet	4H0827310	2	4.40		
188		R&I	Weatherstrip				Incl.	
189		Rep	Emblem	4G58537422ZZ	1	75.00	0.2	
190		Repl	Nameplate "A6"	4F08537412ZZ	1	57.00	0.2	
191		Repl	Nameplate "3.0T"	4F0853743P2ZZ	1	57.00	0.2	
192		Repl	Nameplate "QUATTRO"	8H08537372ZZ	1	57.00	0.2	
193	#		Adhesive residue removal		1	3.00 X	0.4	
194	#		Measure and mfg templates		1		1.0	
195		R&I	Release handle w/camera w/front camera				0.3	
196		R&I	Trunk lid trim				0.3	
197		Repl	License bracket	4G58271139B9	1	130.00		
198	REAR LAMPS							
199		R&I	RT Tail lamp assy				Incl.	
200		R&I	LT Tail lamp assy				0.5	
201		R&I	RT Tail lamp assy				Incl.	
202		R&I	LT Tail lamp assy				Incl.	
203		R&I	RT License lamp				0.1	
204		R&I	LT License lamp				0.1	
205	REAR BUMPER							
206			O/H rear bumper				2.6	
207		Repl	Bumper cover w/reverse sensor	4G5807067DGRU	1	880.00	Incl.	3.0

2013 AUDI A6 QUATTRO PRESTIGE 4D SED 6-3.0L-SC

				SUBTOTALS		7,991.17	105.9	46.9
243	#			Towing	1	415.85		
242				OTHER CHARGES				
241	#		Clean repair debris from vehicle/final wash		1	10.00 X	1.5	
240	#		Paint & body materials per Mitchell RMC		1	1,473.76 X		
239	#		Remove paint process intrusion		1			6.4
238	#		Cover car for buffing/polishing		1	5.00 X	0.2	
237	#		Mask Back glass opening		1			0.4
236	#		Mask Sunroof opening		1			0.4
235	#		Mask W/S opening		1			0.4
234	#		Mask trunk compartment/liftgate		1			0.4
233	#		Mask R quarter opening/jamb		1			0.4
232	#		Mask L quarter opening/jamb		1			0.4
231	#		Mask R rear door jamb		1			0.4
230	#		Mask L rear door jamb		1			0.4
229	#		Mask R front door jamb		1			0.4
228	#		Mask L front door jamb		1			0.4
227	#		Additional clear coat mix (each)		1			0.2
226	#		Match and tint interior color		1			0.5
225	#		Spray out card for variant/tint		1			0.3
224	#		Match and tint exterior color		1			1.0
223	#		Cover car for refinish		1	5.00 X	0.2	
222	#		Wash & tack after blocking		1	5.00 X	0.3	
221	#		Feather edge, prime and block welded seams		1			4.0
220	#		Cover car for primer		1	5.00 X	0.2	
219	#		Wash & tack after repairs		1	5.00 X	0.3	
218	#		Cover car for interior		1	5.00 X	0.2	
217	#		Cover car for repairs		1	5.00 X	0.2	
216	#		Pre-wash and degrease vehicle		1	10.00 X	0.5	
215	#		Cover steering wheel, seats and floor		1	5.00 X		
214	MISCELLANE	OUS OP	PERATIONS					
213		Rep	RT Lower guide	4G5807454B	1	30.00	0.2	
212	*	Rep	LT Upper guide	4G5807393A	1	<u>38.00</u>	0.2	
211	*	Rep	RT Upper guide	4G5807394	1	<u>38.00</u>	0.2	
210		Repl	Add for reverse sens		1		0.6	
209			Deduct for Rear Bumper R&I				-1.6	

2013 AUDI A6 QUATTRO PRESTIGE 4D SED 6-3.0L-SC

#### ESTIMATE TOTALS

Category	Basis		Rate	Cost \$
Parts				5,191.39
Body Labor	66.8 hrs	@	\$ 55.00 /hr	3,674.00
Paint Labor	46.9 hrs	@	\$ 55.00 /hr	2,579.50
Mechanical Labor	7.6 hrs	@	\$ 110.00 /hr	836.00
Frame Labor	6.0 hrs	@	\$ 85.00 /hr	510.00
Structural Labor	25.5 hrs	@	\$ 85.00 /hr	2,167.50
Miscellaneous				2,383.93
Other Charges				415.85
Subtotal				17,758.17
Sales Tax	\$ 5,350.92	@	7.0000 %	374.56
Grand Total				18,132.73
Deductible				0.00
CUSTOMER PAY				0.00
INSURANCE PAY				18,132.73

#### VEHICLE

2019 VW Jetta SE Automatic SULEV 4D SED 4-1.4L Turbocharged Gasoline Gasoline Direct Injection Orange

VIN:	Interior Color:	Mileage In:	Vehicle Out:
License:	Exterior Color:	Mileage Out:	
State:	Production Date:	Condition:	Job #:
TRANSMISSION	CONVENIENCE	FM Radio	Electric Glass Suproof
Automatic Transmission	Air Conditioning	Stereo	SEATS
POWER	Intermittent Wipers	Search/Seek	Bucket Seats
Power Steering	Tilt Wheel	Auxiliary Audio Connection	Leather Seats
Power Brakes	Cruise Control	SAFETY	Heated Seats
Power Windows	Rear Defogger	Drivers Side Air Bag	WHEELS
Power Locks	Keyless Entry	Passenger Air Bag	Aluminum/Alloy Wheels
Power Mirrors	Message Center	Anti-Lock Brakes (4)	PAINT
Heated Mirrors	Steering Wheel Touch Controls	4 Wheel Disc Brakes	Clear Coat Paint
DECOR	Telescopic Wheel	Front Side Impact Air Bags	OTHER
Dual Mirrors	Climate Control	Head/Curtain Air Bags	Traction Control
Tinted Glass	Backup Camera	Hands Free Device	Stability Control
Console/Storage	RADIO	Blind Spot Detection	Xenon Headlamps
Overhead Console	AM Radio	ROOF	Power Trunk/Gate Release

Get live updates at <a href="http://www.carwise.com/e/3DKJzW">www.carwise.com/e/3DKJzW</a>

2019 VW Jetta SE Automatic SULEV 4D SED 4-1.4L Turbocharged Gasoline Gasoline Direct Injection Orange

Line	Ор	er	Description	Part Number	Qty	Extended Price \$	Labor		Paint
open	#	C	EM information research		1	10.00	Т 1.0	М	
		L	lote: >>>Non included operation, ABOR TIME DOES NOT INCLUDE: PECIAL NOTATION:	per Motors GTE G9:					
			he items listed below apply to all la	abor procedures.					
			Access to repair information/subso						
		•	Repair information retrieval/looku	0					
open	#	Р	re-measure suspension		1		1.0	М	
		Ν	lote: >>>Req'd to determine whic	h calibration method will b	e req'd fo	or distance sen	sor. Report pro	vided.	
3	FRONT BUMPER &	k GRI	LLE						
4		C	)/H front bumper				2.6		
5	* Re	epl B	Sumper cover	17A807217GRU	1	535.50	Incl.		<u>2.8</u>
6		А	dd for Clear Coat						0.6
open	* Re	fn T	ow eye cap						<u>0.2</u>
open		A	dd for Clear Coat						0.1
9	Re	epl B	sumper cover rivet	N90528204	2	2.60			
open	Re	epl G	Frille grille code 6KC,6KF	17A853651RIDJ	1	388.33	Incl.		
		Ν	lote: >>>Gouged/scratched from a	animal, invoice provided.					
open	Re	epl E	mblem w/auto brake	3G0853601AJZA	1	70.00	Incl.		
		Ν	lote: >>>Gouged/scratched from a	animal, invoice provided.					
open	R8	AI C	Distance sensor				m 0.3	М	
open	Re	epl A	im distance sensor		1		1.0	М	
		N	lote: >>>Distance sensor must be	aimed using digital protra	ctor prior	to bumper/gr	ille installation.		
open	Re	epl L	T Outer grille w/o fog lamps	17A8536659B9	1	88.33	Incl.		
		Ν	lote: >>>Gouged/scratched from a	animal, invoice provided.					
open	Re		T Outer grille w/o fog lamps	17A8536669B9	1	88.33	Incl.		
		N	lote: >>>Gouged/scratched from	animal, invoice provided.					
16	FRONT LAMPS								
17	Re	•	T Headlamp assy w/o projector ens	17A941036A	1	860.00	0.4		
18		Д	im headlamps				0.5		
19	Re	· .	T Headlamp assy w/o projector ens	17A941035A	1	860.00	0.4		
20	RADIATOR SUPPO	ORT							
open	R8	&I R	T Cross bar				0.3		
		Ν	lote: >>>R&I req'd to R&R headla	mps.					
open	R8	&I L	T Cross bar				0.3		
		Ν	lote: >>>R&I req'd to R&R headla	mps					
23	HOOD								
24	R8	&I R	&I hood assy				0.8		
open	* Rp	pr ⊦	lood				<u>1.5</u>		2.6
		Ν	lote: >>>Hood gouged/scratched	at edge in area of headlan	np damag	je.			
26			dd for Clear Coat	-					1.0

2019 VW Jetta SE Automatic SULEV 4D SED 4-1.4L Turbocharged Gasoline Gasoline Direct Injection Orange

			repair area					
			Note: >>>Non included operation, per Moto PRIME & BLOCK	ors GTE G33:				
			Prime & block (high build/primer-filler) is a r	equired procedure th	nat restore	s a repaired panel s	urface, including	
			the joined areas of replaced welded panels, position that prime and block is a refinishing	from 150-grit finish t	to NEW UN	IDAMAGED condition	n. It is MOTOR's	
			following a thorough on-the-spot evaluation					
28	FENDER							
29		Repl	RT Fender	17A821106A	1	208.33	2.1	2.0
30			Overlap Major Adj. Panel					-0.4
31			Add for Clear Coat					0.3
32			Add for Edging					0.5
33			Add for Clear Coat					0.1
open	#		Add for Underside		1			1.0
			Note: >>>Non included operation, per Moto UNDERSIDE COLORS Refinish times presented in this guide are de					
			premise that the underside and jamb color is use a different color for the engine compartr required if the underside and/or jamb color i matte) will be required for base color coat a refinished; however, the OE replacement con damaged vehicle. These factors should be co	the same as the ex nent, trunk comparts s a different color th oplications. Some co mponent may be sup	ment and/ an the ext mponent b oplied in a	or jambs. An additio erior body color. Cle packsides of vehicles different E-coat colo	nal paint mix is ar coat (gloss or may not be	
35		Repl	LT Fender	17A821105A	1	208.33	2.1	2.0
36			Overlap Major Adj. Panel					-0.4
37			Add for Clear Coat					0.3
38			Add for Edging					0.5
39			Add for Clear Coat					0.1
open	#		Add for Underside		1			1.0
			Note: >>>Non included operation, per Moto UNDERSIDE COLORS Refinish times presented in this guide are de premise that the underside and jamb color is use a different color for the engine compartr required if the underside and/or jamb color i matte) will be required for base color coat ap refinished; however, the OE replacement con damaged vehicle. These factors should be co	eveloped under the s the same as the eximent, trunk comparts s a different color th oplications. Some com mponent may be sup	ment and/ an the ext mponent b pplied in a	or jambs. An additio erior body color. Cle vacksides of vehicles different E-coat colo	nal paint mix is ar coat (gloss or may not be	
open		Repl	RT Fender nut	N90817302	2	2.60		
			Note: >>>Invoice provided.					
open		Repl	LT Fender nut	N90817302	2	2.60		
			Note: >>>Invoice provided.					
43		Repl	RT Fender liner w/o fog lamps	17A805912E	1	85.00	Incl.	
44		Repl	LT Fender liner w/o fog lamps	17A805911C	1	85.00	Incl.	
45		R&I	Splash guard kit				0.4	
46	ELECTRICAL							
open	#		Install battery support device		1		0.3 M	
			Note: >>>Req'd to maintain constant voltag Per Motors GTE G9: Many OEMs recommend a pre- and post-rep			les involved in a coll	ision that could	

2019 VW Jetta SE Automatic SULEV 4D SED 4-1.4L Turbocharged Gasoline Gasoline Direct Injection Orange

		reveal pre-accident or accident-rela more information. Due to the varied of scan tools used, both OEM and a repair, MOTOR is unable to develop recommends an on-the-spot evalua scans for each repair.	ty aftermarket, as well as the varia a time that accounts for these	tion from different	vehicle to vehicle ar scenarios. Therefore	d rep , MO	air to TOR
open	#	CDS Astech pre-repair scan		1	159.53 T	0.5	М
opon		Note: >>>AsTech invoice provided	L	-		0.0	
open	#	D&R Battery		1		0.3	М
		Note: >>>Req'd when removing el	ectrical components to prevent		o components or ele		
		Non included operation, per Motors LABOR TIME DOES NOT INCLUDE: SPECIAL NOTATION: The items listed below apply to all l • Battery D&R/recharge	GTE G9:				.,
open	#	R&I Wiring		1		0.5	Μ
		Note: >>>Wiring attached to bump within any of those operations cont				ed op	eration
open	#	Reset electronic memory functions		1		0.5	М
		Note: >>>Non included operation, LABOR TIME DOES NOT INCLUDE: SPECIAL NOTATION: The items listed below apply to all I • Reset electronic memory function	abor procedures.				
open	#	Reprogram & initialize power windows		1		1.0	Μ
		Note: >>>Req'd after battery D&R	to relearn auto up/down and pi	nch prote	ection functionality.		
		Non included operation, per Motors LABOR TIME DOES NOT INCLUDE: SPECIAL NOTATION: The items listed below apply to all l • Computer control module D&R/re	abor procedures.				
open	#	Bring vehicle to operation temperture		1		0.3	М
		Note: >>>Req'd to allow system fu engine and transmission. See scan		-scan. Sy	stems include: coolii	ng, er	nission,
open	#	Install battery support device		1		0.3	М
		Note: >>>See scan line note on lin	ne #46				
open	#	CDS Astech post-repair scan		1	159.53 T	0.5	Μ
		Note: >>>AsTech invoice provided					
open	#	Provide support assist functions for resets		1		0.5	Μ
		Note: >>>See scan line note on lin	ne #46				
open	#	Test drive, normalize functions & re-torque wheels		1		0.7	Μ
		Note: >>>Non included operation, LABOR TIME DOES NOT INCLUDE: SPECIAL NOTATION: The items listed below apply to all I • Road test vehicle					

# **Preliminary Estimate**

2019 VW	Jetta SE Automa	1: - CI II							
		tic SUL	EV 4D SED 4-1.4L Turbocharged Gasoline	e Gasoline Direct Inject	ion Orang	е			
open	#	Subl	Transport from Harmony VW		1	495.60	т		
	#	Subl	Transport to Harmony VW		1	495.60	т		
	#	Subl	Harmony VW Recalibrate front		1	465.43	т		
•			radar						
			Note: >>>Req'd per VW repair manual	when distance sensor c	or attachin	g componer	nts are re	emoved from	the
<u>(1</u>			vehicle.						
	WHEELS *	D 0. T	DT/Front D&I whool				-	0.2 M	
open		R&I	RT/Front R&I wheel	untinger DDA antimate a		nto for singl	m - Det of	<u>0.2</u> M	
	*	БОТ	Note: >>>Both wheels req'd 2 R&I ope	rations; PDA estimate o	oniy accou	nts for single			
open		R&I	LT/Front R&I wheel				m	<u>0.2</u> M	
	WINDSHIELD	D 0. T	DT W/shield molding					0.2	
open		R&I	RT W'shield molding	access would be DOD for	dava			0.3	
		DOT	Note: >>>RT & LT mldgs removed for a	access regio to R&R ten	ders.			0.2	
open		R&I	LT W'shield molding	700000104		4 70		0.3	
open		Repl	RT Retaining strip clamp	7P6853910A	1	4.76			
open		Repl	LT Retaining strip clamp	7P6853910A	1	4.76			
	FRONT DOOR	DOT						1.0	
open		R&I	RT R&I door assy					1.0	
			Note: >>>RT & LT doors R&I'd to back removed from vehicle.	mask for overspray pre	evention. S	see file phot	os that c	locument doc	ors
open		R&I	LT R&I door assy					1.0	
open		Blnd	RT Door shell to 09/30/2018						1.1
			Note: >>>Blend operation for RT door	not listed on PDA estim	ate.				
73		Blnd	LT Door shell to 09/30/2018						1.1
74		Repl	RT Belt molding chrome	17A8374762ZZ	1	140.00		0.3	
75		Repl	LT Belt molding chrome	17A8374752ZZ	1	140.00		0.3	
open		R&I	RT R&I mirror					0.3	
			Note: >>>Not listed on PDA estimate, r	eq'd for blend operation	n.				
77		R&I	LT R&I mirror					0.3	
open		R&I	RT Handle, outside w/keyless entry					0.5	
			Note: >>>Not listed on PDA estimate, r	eq'd for blend operation	n.				
79		R&I	LT Handle, outside w/keyless entry					0.5	
open		R&I	RT Door check to 10/31/2018					0.2	
			Note: >>>Req'd to R&I door.						
open		R&I	LT Door check to 10/31/2018					0.2	
			Note: >>>Req'd to R&I door.						
open		R&I	RT R&I trim panel					0.6	
			Note: >>>Req'd to R&I door mirror.						
83		R&I	LT R&I trim panel					0.6	
open		Repl	RT Door trim panel clip upper half	510868246	2	3.48			
			Note: >>>Invoice provided for clips liste						
open		Repl	LT Door trim panel clip upper half	510868246	2	3.48			
open		Repl	RT Door trim panel clip lower half	5G0868563	2	2.60			
open									

# **Preliminary Estimate**

	u <b>mber:</b> V Jetta SE Automati	ic SUL	EV 4D SED 4-1.4L Turbocharged Gasoline Gas	oline Direct Injecti	on Orange	2	
open		•	RT Door trim panel retainer	3AA868243A	1	2.60	
open			LT Door trim panel retainer	3AA868243A	1	2.60	
open			RT Door trim panel retainer clip	7L6868243	3	3.90	
open			LT Door trim panel retainer clip	7L6868243	3	3.90	
open	I	Repl	RT Handle plate to 07/2018	17A837812E	1	32.80	0.3
			Note: >>>Plastic tabs broke during R&I, invo	bice provided.			
93	MISCELLANEOU	IS OP				F 00 T	0.1
open	#		Cover steering wheel, seats and floor		1	5.00 T	0.1
open	#		Pre-wash and degrease vehicle		1	10.00 T	0.5
			Note: >>>Req'd to remove silicone based co	ntaminants from v	ehicle prio	r to repair process	
			<ul> <li>&gt;&gt;Non included operation, per Motors GTE LABOR TIME DOES NOT INCLUDE:</li> <li>SPECIAL NOTATION:</li> <li>The items listed below apply to all labor proc</li> <li>Undercoating, tar or grease removal</li> </ul>				
open	#		Cover car for primer		1	6.00 T	0.2
			Note: >>>The following applies to lines 94-9	8 and 99-102			
			Non included operations, per Motors GTE G3	5:			
			DOES NOT INCLUDE: • Adhesion promoter (unprimed flexible comp • Backside refinishing • Blending into adjacent panels • Cover mask engine/compartment to prevent • Color matching to adjacent panels • Cover/mask for prime and block • Cover/mask for cut-in • Cover/mask for cut-in • Cover/mask recessed edges/jambs/weather • Cover/mask recessed edges/jambs/weather • Cover/mask recessed edges/jambs/weather • Cover/mask trunk/compartment to prevent • Cover/mask entire exterior of vehicle to prevent • Cover/mask interior of vehicle to prevent or • Edge refinishing • Grind, fill, & smooth welded seams (up to 1 • Paint or material costs • Prime & block (high build/primer-filler) • Test spray-out panel • Tinting Primer-Sealer • Tinting to achieve color match • Underside refinishing • Weld, grind or sanding damage to adjacent	nt overspray rstrips overspray event overspray verspray damage 50 grit sandpaper	)		
onen	#		<ul> <li>Wet sanding</li> <li>Wash &amp; tack after blocking</li> </ul>		1	5.00 T	0.3
open	#		Prep plastic bumper cover (each)		1	5.00 1	0.5
open	#		Match and tint exterior color		1		
open							
open	#		Spray out card for variant/tint		1		

open # open #

Additional clear coat mix (each) Note: >>>Additional mix req'd for bumper cover that requires flex additive.

1

Non included operations, per Motors GTE G35:

1.0 1.0

0.3

0.2

2019 VW Jetta SE Automatic SULEV 4D SED 4-1.4L Turbocharged Gasoline Gasoline Direct Injection Orange

		SUBTOTALS		6,730.91	29.5	26.4
		Note: >>>Non included operation, per Motors GTE G9: LABOR TIME DOES NOT INCLUDE: SPECIAL NOTATION: The items listed below apply to all labor procedures. • Clean up or detailing of vehicle prior to delivery				
open	#	Clean repair debris from vehicle/final wash	1	10.00 T	1.0	
0000	#	Note: >>>Mix report provided documenting the actual mat		•	1.0	
open	#	Paint & Body Materials	1	1,070.79 T		
open	#	Remove paint process intrusion (30% base refinish)	1			4.2
open open open open	# # #	<ul> <li>compartment/underhood</li> <li>Mask L front door jamb</li> <li>Mask R front door jamb</li> <li>Trim fender attachment bolts</li> <li>Note: &gt;&gt;&gt;Req'd to restore factory appearance of underood</li> <li>Trim hood attachment bolts</li> <li>Cover car for buffing/polishing</li> <li>Note: Non included operations, per Motors GTE G39:</li> <li>WET/DRY SAND, RUB-OUT &amp; BUFF</li> <li>Refinished panels may or may not require a varying amoun wet sanding, compound rub-out or buffing operations. In the this type of operation will be performed, MOTOR suggests the formula be considered.</li> <li>Each panel requiring wet sand, rub-out and/or buff (refinition or blend)</li> <li>Add 30% of full base refinish time</li> <li>DOES NOT INCLUDE:</li> <li>Acid rain damage</li> <li>Overspray removal</li> <li>Removal of residual material from recessed edges and jambs if required</li> <li>Wash, clean, wax or detail entire vehicle prior to delivery required</li> </ul>	1 1 t of the event the following	6.00 T	ostalled. 0.2	0.4 0.4 1.0 0.5
open	#	CLEAR COAT FINISHES (Base Coat/Clear Coat) INCLUDED: • Clean sprayer (one time) • Mix clear coat (one time) Mask engine	1			0.4

2019 VW Jetta SE Automatic SULEV 4D SED 4-1.4L Turbocharged Gasoline Gasoline Direct Injection Orange

Category	Basis		Rate	Cost \$
Parts				3,832.43
Body Labor	20.4 hrs	@	\$ 57.00 /hr	1,162.80
Paint Labor	26.4 hrs	@	\$ 57.00 /hr	1,504.80
Mechanical Labor	9.1 hrs	@	\$ 110.00 /hr	1,001.00
Miscellaneous				2,898.48
Subtotal				10,399.51
Sales Tax	\$ 10,399.51	@	7.0000 %	727.97
Grand Total				11,127.48
Deductible				0.00
CUSTOMER PAY				0.00
INSURANCE PAY				11,127.48

2019 VW Jetta SE Automatic SULEV 4D SED 4-1.4L Turbocharged Gasoline Gasoline Direct Injection Orange

Estimate based on MOTOR CRASH ESTIMATING GUIDE and potentially other third party sources of data. Unless otherwise noted, (a) all items are derived from the Guide ERA9284, CCC Data Date 10/01/2019, and potentially other third party sources of data; and (b) the parts presented are OEM-parts. OEM parts are manufactured by or for the vehicle's Original Equipment Manufacturer (OEM) according to OEM's specifications for U.S. distribution. OEM parts are available at OE/Vehicle dealerships or the specified supplier. OPT OEM (Optional OEM) or ALT OEM (Alternative OEM) parts are OEM parts that may be provided by or through alternate sources other than the OEM vehicle dealerships with discounted pricing. Asterisk (\*) or Double Asterisk (\*\*) indicates that the parts and/or labor data provided by third party sources of data may have been modified or may have come from an alternate data source. Tilde sign (~) items indicate MOTOR Not-Included Labor operations. The symbol (<>) indicates the refinish operation WILL NOT be performed as a separate procedure from the other panels in the estimate. Non-Original Equipment Manufacturer aftermarket parts are described as Non OEM, A/M or NAGS. Used parts are described as LKQ, RCY, or USED. Reconditioned parts are described as Recond. Recored parts are described as Recore. NAGS Part Numbers and Benchmark Prices are provided by National Auto Glass Specifications. Labor operation times listed on the line with the NAGS information are MOTOR suggested labor operation times. NAGS labor operation times are not included. Pound sign (#) items indicate manual entries.

Some 2020 vehicles contain minor changes from the previous year. For those vehicles, prior to receiving updated data from the vehicle manufacturer, labor and parts data from the previous year may be used. The CCC ONE estimator has a list of applicable vehicles. Parts numbers and prices should be confirmed with the local dealership.

The following is a list of additional abbreviations or symbols that may be used to describe work to be done or parts to be repaired or replaced:

#### SYMBOLS FOLLOWING PART PRICE:

m=MOTOR Mechanical component. s=MOTOR Structural component. T=Miscellaneous Taxed charge category. X=Miscellaneous Non-Taxed charge category.

#### SYMBOLS FOLLOWING LABOR:

D=Diagnostic labor category. E=Electrical labor category. F=Frame labor category. G=Glass labor category. M=Mechanical labor category. S=Structural labor category. (numbers) 1 through 4=User Defined Labor Categories.

#### OTHER SYMBOLS AND ABBREVIATIONS:

Adj.=Adjacent. Algn.=Align. ALU=Aluminum. A/M=Aftermarket part. Blnd=Blend. BOR=Boron steel. CAPA=Certified Automotive Parts Association. D&R=Disconnect and Reconnect. HSS=High Strength Steel. HYD=Hydroformed Steel. Incl.=Included. LKQ=Like Kind and Quality. LT=Left. MAG=Magnesium. Non-Adj.=Non Adjacent. NSF=NSF International Certified Part. O/H=Overhaul. Qty=Quantity. Refn=Refinish. Repl=Replace. R&I=Remove and Install. R&R=Remove and Replace. Rpr=Repair. RT=Right. SAS=Sandwiched Steel. Sect=Section. Subl=Sublet. UHS=Ultra High Strength Steel. N=Note(s) associated with the estimate line.

CCC ONE Estimating - A product of CCC Information Services Inc.

The following is a list of abbreviations that may be used in CCC ONE Estimating that are not part of the MOTOR CRASH ESTIMATING GUIDE:

BAR=Bureau of Automotive Repair. EPA=Environmental Protection Agency. NHTSA= National Highway Transportation and Safety Administration. PDR=Paintless Dent Repair. VIN=Vehicle Identification Number.

2019 VW Jetta SE Automatic SULEV 4D SED 4-1.4L Turbocharged Gasoline Gasoline Direct Injection Orange

#### **RECALL INFO**

2019 VW Jetta SE Automatic SULEV 4D SED 4-1.4L Turbocharged Gasoline Gasoline Direct Injection Orange

VIN:	3VWC57BU2KM082396	Interior Color:		Mileage In:	Vehicle Out:	9/16/2019
License:		Exterior Color:	Orange	Mileage Out:		
State:		Production Date:		Condition:	Job #:	

The National Highway Transportation and Safety Administration (NHTSA) has issued 2 safety-related recall notice(s) that may apply to the selected vehicle.

NHTSA ID:	18V824000	Issued: Nov 11, 18	Number of Vehicles:	00073545
-----------	-----------	--------------------	---------------------	----------

ELECTRICAL SYSTEM: INSTRUMENT PANEL Volkswagen Group of America, Inc. (Volkswagen) is recalling certain 2018-2019 Volkswagen Atlas and Tiguan and 2019 Volkswagen Jetta vehicles that do not have keyless entry. The instrument cluster may not provide an audible warning to let the driver know that the key is still in the ignition when the door is open. As such, these vehicles fail to comply with the requirements of Federal Motor Vehicle Safety Standard (FMVSS) number 114, "Theft Protection." If the driver is not notified by an audible noise that the key is left in the ignition, it can increase the risk of vehicle theft or crash. Volkswagen will notify owners, and dealers will reprogram the instrument cluster, free of charge. The recall is expected to begin January 18, 2019. Owners may contact Volkswagen customer service at 1-800-893-5298. Volkswagen's numbers for this recall are 90L3 and 90L4.

 NHTSA ID:
 18V671000
 Issued:
 Sep 9, 18
 Number of Vehicles:
 0000028

EXTERIOR LIGHTING:HEADLIGHTS Volkswagen Group of America, Inc. (Volkswagen) is recalling certain 2019 Volkswagen Jetta vehicles equipped with LED headlights. The passenger side headlight may be incorrectly positioned, reducing the driver's visibility when it is dark. As such, these vehicles fail to comply with the requirements of Federal Motor Vehicle Safety Standard (FMVSS) number 108, "Lamps, Reflective Devices, and Associated Equipment." A reduction in the driver's visibility can increase the risk of a crash. Volkswagen will notify owners, and dealers will replace the passenger side headlight, free of charge. The recall began November 2, 2018. Owners may contact Volkswagen customer service at 1-800-893-5298. Volkswagen's number for this recall is 94L1.

https://ncdoi.com/ Publications/Consumer%20Guide%20to%20Automobile%20Insurance CAU1.pdf

Page 27

http://reports.oah.state.nc.us/ncac/title%2011%20-%20insurance/chapter%2004%20-%20consumer%20services%20division/11%20ncac%2004%20.0419.pdf

Steering memo

https://degweb.org/

estimating tips, access to all estimating guides, dispute labor times

https://scrs.com/technical-resources/

https://scrs.com/wp-content/uploads/2018/01/2016-scrs-guide-to-complete-repair-planning-revised-11-16.pdf

http://collisionadvice.com/auto-body-consulting-forms/