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Introduction

In response to numerous requests from valued Collision Advice customers across the US, we have created this tool to help explain, justify and substantiate time with factual documentation. The collected information and documentation are intended to help clarify whether or not specific repair processes are considered to be required repair operations and if they are included or not-included within any other labor operation. Our objective is to help our customers build a complete repair plan and to get paid for the work they do.

To do so, we utilize four negotiation questions and supporting documentation as described below:

1. Is it required to put the vehicle back to pre-accident condition?
   - OEM Position Statements
   - ALLDATA®, TechAdvisor or other similar systems
   - Paint Manufacture Bulletins
   - Material Manufacturer Bulletins (ex. 3M, Wurth, Kent)
   - Equipment Manufacturers
   - Internet (www.YouTube.com)
   - Estimating Systems
   - Scan Tools (Ex. ASTech)
   - The Vehicle

2. Is it included in any other labor operations?
   - Estimating Systems
   - ASA Not-Included Charts
   - www.Degweb.org
   - www.Estimatescrubber.com
   - SCRS Guide to Estimating

3. Is there a pre-determined time in the database?
   - Estimating Systems
   - www.Degweb.org

4. What is it worth?
   - Do a Time Study
   - Print an Invoice
   - OEM Warranty Times
   - Equipment Manufacture Times
   - ALLDATA®, TechAdvisor or other similar systems mechanical times
   - Internet
Definition
**Definition**

**MIG Welders:** The acronym MIG stands for "metal inert gas" which basically describes the cloud of gas that your welding torch puts out so that you can keep impurities from invading the weld and compromising it, leading to shortened life or immediate failure. MIG welders use a wire feed to supply the weld material. There is a spool of wire that is fed through a long cable and out of the welding "torch," basically a wand with a trigger on it to control the feed of the wire. When the wire hits the metal you're working on, the arc is created and you're welding. The MIG is the go-to setup for doing sheet metal work, everything from repairing a fender to replacing an O2 sensor. Some welders don't like MIG for thicker metal.

**TIG Welders:** TIG stands for Tungsten Inert Gas, and the arc is very tightly controlled heat-wise. A TIG welder is a very high end machine and is needed to do very high end and very clean, work. TIG also works really well on aluminum.

Since these welders operate at such high heat levels, they can burn the adjacent panels around the repair. This damage is referred to as Weld burn damage and is often overlooked by even the most experienced damage analysis experts.
Question 1. Is it required?
Four Negotiation Questions

1. Is it required to refinish weld burn damage in order to return the vehicle to pre-accident condition?

Answer: Yes, it is based on the following:

Answer Documentation:

Two Information Providers mention weld burn damage in their database references or estimating guides.

- CCC/MOTOR
- Mitchell

In addition, weld burn damage is mentioned in several trade magazine articles, including:

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.

Source: CCC/Motor Guide to Estimating, Rev. 9-14, Page G39
GUIDE TO ESTIMATING

WELD ZONE/ADJACENT PANEL

SPECIAL NOTATION:
Suggested refinishing or repainting times do not include additional time for repair of damage to adjacent panels resulting from normal cutting, welding and grinding procedures. The amount and technique used by the servicing technician and, therefore, is impractical to anticipate in this publication. MOTOR recommends those factors be considered before finalizing any repair cost estimate. Guidelines are illustrated below.

WET/DRY SAND, RUB-OUT & BUFF

SPECIAL NOTATION:
Refinished panels may or may not require a varying amount of wet sanding, compound rub-out or buffing operations in order to match original finish texture. The clear coat contains ultraviolet screeners and reducing the clear coat thickness (mil) may result in early paint failure. Follow manufacturer's recommendations when performing this type of repair. Calculations should be based upon the outer surface only and should not include additions for clear coat, underside, inside or edges. Base refinish time does not include deduction for refinash overlap. In the event that this type of operation will be performed, MOTOR suggests the following formulas be considered:

- Each panel requiring wet sand, rub-out and/or buff (refinish or blend)
  - Add 30% of full base refinishing time

INCLUDED:
- Panel outer surface only
- Wet sand full panel as required
- Compound, buff and/or polish as required

DOES NOT INCLUDE:
- Acid rain damage
- Overspray removal
- Removal of residual material from recessed edges and jams if required
- Wash, clean, wax or detail entire vehicle prior to delivery if required

UNPRIMED FLEXIBLE COMPONENT PREPARATION

- 25% of the component's base refinishing time
- Maximum time allocation: 1.0 hours

INCLUDED:
- Removal of mold-release agents as outlined by manufacturer
- Masking (if required)
- Application of adhesion promoter

DOES NOT INCLUDE:
- Correction of pre-existing surface imperfections
- Material costs

DE-NIB & POLISH

SPECIAL NOTATION:
Refinished panels may or may not require a varying amount of de-nibbing, a process used to remove small particles in final finish surface. The clear coat contains ultraviolet screeners and reducing the clear coat thickness (mil) may result in early paint failure. Follow vehicle manufacturer's recommendations when performing this type of repair. Calculations should be based upon the base refinishing time outer surface only and should not include additions for clear coat, underside, inside or edges. In the event that this type of operation will be performed, MOTOR suggests the following formula be considered:

- Each panel requiring de-nibbing (refinish or blend)
  - Hood, roof, trunk lid, spoiler
    - First panel add up to 25% of full base refinishing time, each additional panel add up to 10%
  - Fender, door, quarter panel, bumper cover
    - First panel add up to 30% of full base refinishing time, each additional panel add up to 5%

INCLUDED:
- Panel outer surface only
- Paint nib removal as required (spot only)
- Spot polish only

DOES NOT INCLUDE:
- Acid rain damage
- Full panel polish
- Overspray removal
- Removal of residual material from recessed edges and jams if required
- Scratch damage
- Wash, clean, wax or detail entire vehicle prior to delivery if required
- Wet sand full panel

Footnotes found in a chapter contain vehicle-specific information. The content of footnotes is in addition to, and takes precedence over, information in the Guide to Estimating pages for the operation indicated.
Mitchell

- Feather, Prime & Block paint damage to adjacent panel and/or panels joined by welding due to burn damage (See Definition on P-42)

Source: Portions Copyright 2012, Mitchell International, Inc. – Mitchell P-Pages, Page 16
Procedure Explanation

Bumper Assembly O/H
Included Operations:
- Remove and install assembly
- Disassemble and replace damaged parts
- Replace or transfer parts attached except those listed in Not Included Section
- Remove and install or replace: License plate/bracket
- Assembly and install
- Adjust alignment to vehicle

Not Included Operations:
- Refinish bumper
- Remove and replace impact absorbers or mounting arms
- Remove and install or replace optional accessories (example: trailer hitch, trailer connector)
- Remove and install adhesive exterior trim; add to clean and retape
- Replace new adhesive exterior trim; deduct one-half of R&R time
- Install stripes, decals, transfers or overlays

Procedure 28—Refinish Procedure

Refinish General Information

Complete Refinish
Refinish times in this Guide pertain to NEW, UNDAMAGED PARTS and are not intended for calculating complete vehicle refinish—single- or multi-stage. An estimate of this nature would suggest all new panels have been fitted to the vehicle.

Lifetime Refinish Warranty/Clear Coat
The major paint manufacturers listed below have provided the following information: "Major refinish paint manufacturers recommend that when performing refinish warranty repairs on an OEM multi-stage or basecoat/clearcoat finish, you must extend the application of clear to the nearest panel edge or breakpoint to qualify for lifetime warranty." AKZO — DuPont — Sherwin Williams — BASF — PPG

Repaired/Used Panels
Labor time related to repaired and/or used panels—example: Remove and install or masking of glass, outside handles or exterior trim, feather prime & block, masking for primer surfacer application—are not included in refinish time. The steps required for refinish a repaired and/or used panel may vary from those required for a new panel depending on the condition of the repaired and/or used panel.

Feather, Prime & Block
Is the Not-Included refinish operation that completes bodywork repair from 150 grit smoothness to the condition of a new undamaged panel, and the point at which refinish labor time begins. The labor and materials associated with feather, prime and block may vary depending upon the size of the repair area, and should be evaluated when determining the work to be performed. See Welded Panels under Estimating Information.

SPOT REPAIR/BLEND ADJACENT PANEL

Spot Repair
Spot repair is defined as applying color to the repaired area of a damaged panel to obtain full coverage of underecoat, and blending that color into the original panel finish so that no transition can be detected. The goal is to keep the actual repair as small as possible to avoid having newly applied color directly next to an undamaged adjacent panel(s). Clear coat is then applied to the entire panel. This refinish process minimizes color mismatch.

Blend for Color Match
Blending is defined as applying color, without necessity to cover underecoat, to less than the full surface area of an adjacent undamaged panel. Paint manufacturers recommend blending adjacent panels when a panel is replaced, or repaired and color applied to the full surface areas, or to the area that borders the adjacent undamaged panel(s). Clear coat is then applied to the entire blended panel.

Major Panels
Major panels are those listed: FRONT HEADER, FENDER, HOOD, COWL, TOP, DOOR, ROCKER, ROOF, PICKUP CAB CORNER, PICKUP CAB BACK, QUARTER, PICKUP BED FRONT, PICKUP BED SIDE, VAN SIDE, VAN REAR CORNER, ENGINE LID, LUGGAGE LID, LIFT GATE, REAR RATE, TAIL GATE, REAR BODY

Overlap
Deduct .4 hour from refinish time for each ADJACENT MAJOR PANEL and deduct .2 hour from time for each NON-ADJACENT MAJOR PANEL. There is no overlap deduction taken for the first major panel

Adjective major panel example: Right front fender 2.5 hours (full time) and right front door 2.5 hours minus .4 hour overlap for a total of 4.6 hours.
Non-adjective major panel example: Right front fender 2.5 hours (full time) and left front fender 2.5 hours minus .2 hour overlap for a total of 4.8 hours.

No overlap deductions for valence panel, pillars, door jambs, underside of hood, underside of luggage lid or underside of gate, inner panels, filler panels, soft bumper covers or bolt-on finish panels.

NOTE: Refinish times are for outside surfaces only unless stated otherwise in text (example: add for underside, add to edge).

Included Operations:
- Solvent wash
- Scruff panel and clean
- Mask adjacent panels up to 30 inches or substitute with cover vehicle (bag) complete
- Prime or seal as required
- Final sanding and clean
- Mix materials
- Adjust spray equipment
- Apply color
- Clean equipment

Not Included Operations:
- Blending into adjacent panel and/or panels, or nearest breaking point
- Color match or tinting
- Applying anti-corrosion rust resistant materials
- Additional application of soft chip primers or anti-chip undercoats
- Finish sand and buff
- Subsequent vehicle bagging when required: add 2 hour for each application & removal
- Mask interior to prevent overspray damage
- Removal of protective coatings
- Removal of release agent from OEM raw plastic components (example: non-prime bumper covers) see formula under Raw Substrate Prep
- Feather, Prime & Block paint damage to adjacent panel and/or panels joined by welding due to burn damage (see Feather, Prime & Block definition under Refinish General Information)

NOTE: Feather, Prime & Block refinish times for undamaged major panel and .2 hour for each additional panel.

NOTE: The included operation of mask adjacent panels is inclusive of any necessary back tape masking to prevent overspray.

IMPORTANT REMINDER: Refinish times are for NEW, UNDAMAGED PARTS without exterior or interior trim or attached components. Refinish times may vary depending on individual procedures, product, and/or weather conditions.

A small percentage of colors are identified by the paint manufacturers as highly transparent. These colors may require additional application coats to achieve visual hiding. In instances where four or more color coats are necessary to achieve adequate hiding, some adjustment in refinish times may be appropriate.

IMPORTANT REMINDER: The cost of paint and materials is not included in refinish time.

NOTE: Gravel Guard application and appropriate refinish may be necessary beyond the actual replacement area to achieve a "texture" match.

It may be necessary to tint or otherwise modify non-exterior colors applied to undersides, edges and/or jamb for which there is no paint color formula to achieve a color match. When necessary, reference "color match or tinting" listed above in Not Included Operations.

Raw Substrate Prep
Allow .2 per refinish hour (20%) for plastic components that come from the manufacturer/supplier in a raw/un-colored state.

Source: Portions Copyright 2012, Mitchell International, Inc. – Mitchell P-Pages, Page 16
Estimating Essentials: Weld Burn Damage

Mike Anderson

As I travel the country conducting seminars and working with shops, I find it disheartening that many are unaware of the items that require refinishing due to weld burn damage.

Weld burn damage is a commonly overlooked item by even the most experienced damage analysis experts. Most estimators in the industry today have never repaired a vehicle before and therefore aren’t aware of what’s required to restore a vehicle back to pre-accident condition.

Education Is Key

One of the activities I make shops do to improve the accuracy of their estimates as well as their profitability is to build a simple checklist, assemble pictures or videos, and put it all in a PowerPoint presentation. Then, I ask them to show this to their staff as well as insurers as a way to educate them on what’s required to restore vehicles back to pre-accident condition.

Let’s look at some examples of items you might put in such an educational PowerPoint.

When welding in a new, undamaged core support, you must:
• Refinish the left and right outer aprons from weld burn damage.
• Refinish the left and right inner aprons from weld burn damage.
• Refinish the left and right frame rails from weld burn damage.
• Refinish the left and right upper apron reinforcements from weld burn damage.
• Determine if blackout or two-tone time is required.
• Determine if an etch or epoxy primer is required due to the core support being galvanized.

When welding a new, undamaged rear body panel, you must:
• Refinish the left and right outer quarter panels from weld burn damage.
• Refinish the left and right inner quarter panels from weld burn damage.
• Refinish the top and bottom of the floor pan from weld burn damage.
• Refinish the left and right frame rails from weld burn damage.

I hope you’re starting to see a pattern.

One Side Only

Looking at the above list, many shops will ask me, “Why do you say ‘top’ and ‘bottom’ or ‘inner’ and ‘outer’?” Well, when you replace a new hood, do you have to add refinishing labor for the underside? When you replace a new fender, do you have to add to ‘jam the part’? How about a new decklid? Do you add for the underside? And what about a door? Do you add to edge it?
In today's estimating guides, refinish times are for one side only. Therefore, we need to consider the inner and outer top and bottom of items that require refinishing due to weld burn damage.

Too often, collision repair facilities use the excuse, "An insurance company won't pay for that," when the insurer isn't even aware of what items require refinishing from weld burn damage to begin with.

My response when someone gives me the "they won't pay for that" excuse is to ask them, "How do you know they won't pay you for it when you don't even know to itemize it or ask for it?"

Quarter Panel

Let's review all the necessary steps for welding a new, undamaged quarter panel in a vehicle.

When installing a new quarter panel, are you required to perform the following refinish operations?

Paint Operations:
1. Blending the outer and inner rocker panel due to weld burn damage. (Remember: Refinish times are for one side and one side only)
2. Blending the inner roof (sail panel) due to weld burn damage.
3. Blending the inner quarter panel wheelhouse due to weld burn damage.
4. Blending or refinishing the inner quarter panel assembly due to weld burn damage.
5. Blending or refinishing the entire outer wheelhouse due to weld burn damage.
6. Blending the top and bottom of the package tray due to weld burn damage.
7. Blending the outer and inner rear body panel due to weld burn damage.
8. When blending in the trunk area, is two-tone required? Does this color have to be made from scratch?
9. Blending the upper rear body panel top and bottom due to weld burn damage.
10. Blending the floor or floor extension (both top and bottom) due to weld burn damage.
11. Blending the roof aperture and clearcoating entirely up to the windshield pillar.
12. Prep repairs for refinish, i.e. fill, sand and feather beyond 150 grit.
13. Corrosion protection: applying etch or epoxy primer due to galvanized metal or aluminum metal.
14. Finish, sand and buff (30 percent of basecoat labor) or dentit (20 percent of basecoat labor).
15. Mask during priming process.
16. Mask any items not R&I'd on interior.
17. Mask during painting of interior areas or during the cut-in process.
18. Mask jambs such as door, trunk openings, etc.
20. Rough coating (or gravel guard or schutz).
21. Two-tone rocker panel.
22. Is vehicle two- or three-stage?
23. Was it necessary to remove old stripes or molding residue on adjacent blend panels?
24. Pinstripe painted or tape labor and materials.
25. Touch up any bolts that required removing (scarred from wrench damage).

Note that the above list can vary depending on the vehicle model.
Photo Documentation
Photo Documentation
Photo Documentation
Photo Documentation
Photo Documentation
Question 2.
Is it included?
2. Is refinishing weld burn damage included in any other labor operations?

Answer: No, based on the following:

Answer Documentation:

According to the leading Information Providers, refinish times are for one side only.

- AudaExplore
- CCC/MOTOR
- Mitchell

All the leading Information Providers have statements saying weld burn damage is not included in any other operation.

- AudaExplore
- CCC/MOTOR
- Mitchell

The original source documents from the leading Information Providers follow.
AudaExplore

Rerinish Operations

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


AudaExplore

Labor Exclusions

- Replace labor does not include additional labor to repair the replaced panel and or adjacent panels which may become distorted, burned or damaged by welding, drilling and straightening.


AudaExplore

Welded-on Panels

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

Section 4-5 Refinish Operations

Refinish Operations

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

Two-stage

Included Operations:
- Move car
- Review estimate/work order
- Get paint code
- Order paint
- Get paint
- Gather materials, equipment and tools**
- Clean equipment and materials
- De-wax and degrease
- Prepare to sand
- Dual action sand*
- Hand/wet sand
- Mix, apply, and flash primer (for adhesion and sealing)
- Application of guide coat*
- Block sand*
- Water wash and clean panel with solvent
- Blow dry clean panels
- Prepare to spray
- Clean booth
- Booth operations
- Protect exterior of vehicle from overspray utilizing all acceptable methods of bagging, masking, masking up to 36 inches surrounding the panel and masking of glass within a panel. This includes using backtaping and/or foam tape to close out the gap between panels. If backtaping and/or foam tape does not adequately prevent overspray from entering the jambs areas, any additional masking to protect the interior and jambs is a not included operation (labor only). See Not Included "masking" operation

Basic corrosion protection provided by primer/sealer and paint application
- Mix and apply flash; additives
- Tack wipe
- Mix color, spray test panel, compare to vehicle
- Initial tint, spray test panel, let down, compare to vehicle (included in refinish time, not setup)
- Apply and flash; color
- Inspect job and paint
- Clean gun; color
- Add flex additive** (when required, labor only)
- Tack wipe (between color and clear when required)
- Apply flash clear coat
- Mix clear coat**
- Clear; Clean gun**

*Welded panel operations
**Included in setup

NOT Included:
- Body work
- Spot putty
- Panel stripping (see Panel Stripping section, page 151)
- Additional preparation or cleaning of new, unprimed panels (i.e., bumper covers)
- Removal of release agents from raw, unprimed plastic components (i.e., bumper covers)
- Moulding R&I
- Stripe R&I
- Parts R&I
- Painting of stripes
- Adhesive removal
- Masking of interior surfaces/entryways, engine compartment and trunk openings. Interior masking may be performed when necessary to ensure prevention of overspray damage that may not be prevented by adjacent panel perimeter masking (including backtaping or application of foam tape). Interior masking may be considered when exterior panels (doors, hoods, etc.) are removed and refinished. See Included "protect interior" operation
- Tint primer or clear coat
- Application of e-coat equivalent
- Application of "high build" primer
- Undercoating
- Metal preparation and corrosion protection beyond those listed in Included Operations (i.e. cavity wax)
- Final wash
- Hazardous waste removal
- Any special coatings applied to luggage compartment
- Second or third bagging or masking of vehicle
- Paint and materials

*Any printed copy of this document may not contain the most current information. For the latest version, please refer to the Database Reference Manual accessed through the Help Menu in the current release of Audatex Estimating, PenPro or Shoplink. The current version of the Database Reference Manual may also be found at www.training.audatex.us**


Section 4-2 Labor Exclusions

**Note:** R&I labor for mouldings and ornamentation can be obtained by selecting R&I or by selecting replacement of the part and overriding the pre-stored part price to zero.

- Refrigerant recovery ('Additional Labor').
- Removal of debris, grease, corrosion, protective coatings, or other materials impeding replacement, R&I, or refinishing of parts.
- Removal of moulding(s), decal(s), tape, or overlay adhesive.
- Removal of part number labels.
- Removal of protective coatings from replacement parts.
- Repair, fitting, or modification of new replacement parts (unless part is being sectioned).
- Repair, fitting, trimming, or modification of recycled parts.

> Replace labor does not include additional labor to repair the replaced panel and or adjacent panels which may become distorted, burned or damaged by welding, drilling, grinding and straightening.

- Reset of electronic components (e.g., airbags, computers, modules, clock, radio, tire pressure monitors, adaptive cruise control, etc.). (Standard Manual Entry M67 is available).
- Restoration of corrosion-protective coatings (e.g., galvanizing, zinc coatings, E-coat 'equivalent,' and other like materials). (Standard Manual Entry M14 is available). For more detailed information, see Refinish section.
- Setup of a vehicle on a frame machine, dedicated bench, or other measuring / straightening devices. Pulling time is not included (Standard Manual Entry M31 is available).
- Steam cleaning of or rust removal from fuel tanks.
- Test drive to relearn system.
- Transfer of attached items from original parts to recycled parts.
- Wheel balancing (Standard Manual Entries M22 through M25 are available).

"Any printed copy of this document may not contain the most current information. For the latest version, please refer to the Database Reference Manual accessed through the Help Menu in the current release of Audatex Estimating, PenPro or ShopLink. The current version of the Database Reference Manual may also be found at www.training.audatex.us."

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Section 4-4 Refinish Guidelines

Two-Sided Refinish Panels

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

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

Welded-on Panels

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

Highly Contoured Parts

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

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

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

Part Composition

Metal is the standard for all refinish labor.

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

Raw, Unprimed Bumper Covers and Plastic Parts

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

*Any printed copy of this document may not contain the most current information. For the latest version, please refer to the Database Reference Manual accessed through the Help Menu in the current release of Audatex Estimating, PenPro or Shoplink. The current version of the Database Reference Manual may also be found at www.informed.audatex.us.*

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CCC/MOTOR

QUARTER PANELS AND OTHER MAJOR WELDED PANELS

Refinish times listed on the parts detail line for these new panels include exterior side, recessed edges, gutters and pockets, unless otherwise noted in text.

Refinish times listed under the “Refinishing Notes” heading for quarter panels or other welded panels “exterior surface only” operations do not include time for refinishing recessed edges, gutters and pockets. Where possible, MOTOR will publish time for these areas under the “Refinishing Notes” heading within that group.

Source: CCC/Motor Guide to Estimating, Rev. 9-14, Page G34

CCC/MOTOR

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.

Source: CCC/Motor Guide to Estimating, Rev.9-14, Page G39
GUIDE TO ESTIMATING

REFINISH TIME LISTINGS

All refinishing times are listed in hours and tenths of an hour. A time in parentheses adjacent to the part name, such as (0.5), indicates three and one-half hours. Replacement operation time does not include time necessary to refinish the component.

Operation times for the application of painted-on stripes or are not covered in this publication. The time necessary to perform this type of operation should be estimated after an on-the-spot evaluation of required procedure.

REFINISH TIME PREMISE

Published refinishing times are for one color applied to new undamaged replacement components, without exterior trim, interior trim or other attached components and applied in one continuous process. For damaged panel(s), published refinishing times may be applied after the damaged panel has been returned to a NEW UNDAMAGED condition.

Refinishing times do not include time which may be required to match color tints or defective finish textures on interior or exterior surfaces. Nor do they include time which may be required to correct finish imperfections caused by improper weather conditions, application, or environmental contamination such as dust, dirt, grease, etc. MOTOR advises all parties consider these factors beforehand to determine mutually acceptable provisions in the event such conditions exist or occur.

ANTI-Theft Labels (R Dot)

Replacement part labels are coded with the letter “R” to show that it is a replacement part. R Dot labels should not be removed from the part. Use caution when refinishing, rustproofing or undercoating replacement components to avoid damaging the label.

Bumper Covers and Other Flexible Components

Refinishing times listed on the parts detail lines for these components are based on the items being refinishing prior to installation. Refinishing time listed on the parts detail line for an OEM bumper cover that has both body color and unpainted grained portion allows for the refinishing of the body color only, Masking the grained, textured, or non-body color portions in preparation for body color application is an included operation. It includes exterior surface and edges refinishing during one continuous process. If a separate edging procedure is utilized then the appropriate time should be estimated after an on-the-spot evaluation. Refinishing times do not include removal of mold release agent from new unpainted molded components. Parts received from the OEM manufacturer without primer and some non-OEM parts with or without primer should be tested for the presence of release agents that would cause paint adhesion problem and treated accordingly. For unpainted bumper preparation time, see “Add If Required” operation(s). Preparation time for all other unpainted components should be estimated after an on-the-spot evaluation. For unpainted component preparation time, see Unpainted Flexible Component Preparation on page 339.

Door Outer Repair Panels

Refinishing times listed on the parts detail line for new repair panels (i.e. door outer repair panel, tailgate and liftgate repair panels) include panel lip and immediate area. It does not include time for refinishing the entire door frame edge or interior side. Where possible, MOTOR will publish time for those areas under a “Refinishing Notes” heading within that group.

Door Shells, Liftgates and Tailgates

Refinishing times listed on the parts detail line for new components include exterior surface, edges and interior sides, unless otherwise noted in text.

WELDED PANELS - Continued

Quarter Panels and Other Major Welded Panels

Refinishing times listed on the parts detail line for these new panels do not include time for refinishing the edge or undersides. Where possible, MOTOR will publish time for these areas under a “Refinishing Notes” heading within that group.

New Undamaged Panel

A component manufactured to the same exacting standards as the parts installed on new vehicles when the car was built. Exterior body panels are supplied with a smooth painted surface (e-coat).

Underside Colors

Refinishing times presented in this guide are developed under the premise that the underside and jamb color is the same as the exterior body color. Some vehicle manufacturers use a different color for the engine compartment, trunk compartment and/or jambs. An additional paint mix is required if the underside and/or jamb color is different than the exterior body color. Clear coat (gloss or matte) will be required for base color coat applications. This should be considered when developing the estimate.

Prime & Block

Prime & Block (high build/primer/filler) is a required procedure that restores a repaired panel surface, including the joined areas of replaced welded panels, from 150-grit finish to NEW UDAMAGED condition. It is MOTOR’s position that prime and block is a process best reserved for the judgment of an estimator/appraiser following a thorough on-the-spot evaluation of the specific vehicle and damage in question.

Repaired Panel Refinishing

MOTOR suggests using component(s) base refinish time for this type of procedure after the damaged panel is repaired to new undamaged condition. Repaired surface preparation requires an on-the-spot evaluation for additional procedural steps such as featheredge and/or prime and block not required for new undamaged panels.

Partial Panel Refinishing

This is NOT a BLEND-WITHIN procedure; partial panel refinishing is NOT a BLEND operation. MOTOR defines partial panel refinishing as refinishing a body panel with damage that is contained within a defined border or underneath body cladding after the panel has been repaired to that of a “NEW UNDAMAGED PANEL.” It is MOTOR’s position that partial panel refinishing is a process best reserved for the judgment of an estimator/appraiser following a thorough on-the-spot evaluation of the specific vehicle and refinishing requirements in question. For G.T.E. “BASIC COLOR COAT APPLICATION.”

Footnotes found in a chapter contain vehicle-specific information. The content of footnotes is in addition to, and takes precedence over, information in the Guide to Estimating pages for the operation indicated.

Source: CCC/Motor Guide to Estimating, Rev. 9-14, Page G34
**GUIDE TO ESTIMATING**

**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.

**DE-NIB & POLISH**

**SPECIAL NOTATION:**
Refinished panels may or may not require a varying amount of de-nibbing, a process used to remove small particles in final finish surface. The clear coat contains ultraviolet screeners and reducing the clear coat thickness (mils) may result in early paint failure. Follow vehicle manufacturer’s recommendations when performing this type of repair. Calculations should be based upon the base refinish time outer surface only and should not include additions for clear coat, underside, inside or edges. In the event that this type of operation will be performed, MOTOR suggests the following formula be considered:

Each panel requiring de-nibbing (refinish or blend)
HOOD, ROOF, TRUNK LID, SPOILER
First panel add up to 20% of full base refinish time,
each additional panel add up to 10%
FENDER, DOOR, QUARTER PANEL, BUMPER COVER
First panel add up to 10% of full base refinish time,
each additional panel add up to 5%

**INCLUDED:**
- Panel outer surface only
- Paint rib removal as required (spot only)
- Spot polish only

**DOES NOT INCLUDE:**
- Acid rain damage
- Full panel polish
- Overspray removal
- Removal of residual material from recessed edges and jambs if required
- Scratch damage
- Wash, clean, wax or detail entire vehicle prior to delivery if required
- Wet sand full panel

**WET/DRY SAND, RUB-OUT & BUFF**

**SPECIAL NOTATION:**
Refinished panels may or may not require a varying amount of wet sanding, compound rub-out or buffing operations. In the event this type of operation will be performed, MOTOR suggests the following formula be considered:

- Each panel requiring wet sand, rub-out and/or buff (refinish or blend)
  - Add 30% of full base refinish time

**INCLUDED:**
- Panel outer surface only
- Wet sand full panel as required
- Compound, buff and/or polish as required

**DOES NOT INCLUDE:**
- Acid rain damage
- Overspray removal
- Removal of residual material from recessed edges and jambs if required
- Wash, clean, wax or detail entire vehicle prior to delivery if required

**UNPRIMED FLEXIBLE COMPONENT PREPARATION**

- 25% of the component’s base refinish time
- Maximum time allocation: 1.5 hours

**INCLUDED:**
- Removal of mold-release agents as outlined by manufacturer
- Masking (if required)
- Application of adhesion promoter

**DOES NOT INCLUDE:**
- Correction of pre-existent surface imperfections
- Material Costs

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Source: CCC/Motor Guide to Estimating, Rev. 9-14, Page G39
Mitchell

NOTE: Refinish times are for outside surfaces only unless stated otherwise in text (example: add for underside, add to edge).

Source: Portions Copyright 2012, Mitchell International, Inc. – Mitchell P-Pages, Page 16

Mitchell

Welded Panels

Replacement labor times for new panels that are joined by welding include the necessary use of inserts and accepted sectioning guidelines developed by OEMs, I-CAR, and TECH-COR. The labor times for welded panels include grinding, filling and final sanding with up to 150 grit sandpaper to match the original panel contour. Labor times do Not-Include the Feather, Prime and Block refinish operation. See Procedure 28 in Procedure Explanation section, for information on Feather, Prime and Block.

Source: Portions Copyright 2012, Mitchell International, Inc. – Mitchell P-Pages, Page 3

Mitchell

- Feather, Prime & Block paint damage to adjacent panel and/or panels joined by welding due to burn damage (See Definition on P-42)

Source: Portions Copyright 2012, Mitchell International, Inc. – Mitchell P-Pages, Page 16
Procedure 28—Refinish Procedure

Refinish General Information
Complete Refinish
Refinish times in this Guide pertain to NEW, UNDAMAGED PARTS and are not intended for calculating complete vehicle refinish—single- or multi-stage. An estimate of this nature would suggest all new panels have been fitted to the vehicle.

Lifetime Refinish Warranty/Clear Coat
The major paint manufacturers listed below have provided the following information. “Major refinish paint manufacturers recommend that when performing refinish warranty repairs on an OEM multi-stage or basecoat/clearcoat finish, you must extend the application of clear to the nearest panel edge or breakpoint to qualify for lifetime warranty.”

AKZO — DuPont — Sherwin Williams — BASF — PPG

Repaired/Used Panels
Labor times related to repaired and/or used panels—example: Remove and install or masking of glass, outside handles or exterior trim, feather prime & block, masking for primer surfacer application—are not included in refinish time. The steps required for refinishing a repaired and/or used panel may vary from those required for a new panel depending on the condition of the repaired and/or used panel.

Feather, Prime & Block
Is the Not-included refinish operation that completes bodywork repair from 150 grit smoothness to the condition of a new, undamaged panel, and the point at which refinish labor time begins. The labor and materials associated with feather, prime and block may vary depending upon the size of the repair area, and should be evaluated when determining the work to be performed. See Welded Panels under Estimating Information.

SPOT REPAIR/BLEND ADJACENT PANEL
Spot Repair
Spot repair is defined as applying color to the repaired area of a damaged panel to obtain full coverage of undercoats, and blending that color into the original panel finish so that no transition can be detected. The goal is to keep the actual repair as small as possible to avoid having newly applied color directly next to an undamaged adjacent panel(s). Clear coat is then applied to the entire repaired area.

Blend for Color Match
Blending is defined as applying color, without necessity to cover undercoats, to less than the full surface area of an adjacent undamaged panel. Paint manufacturers recommend blending adjacent, panels when a panel is replaced, or repaired and color applied to the full surface area, or to the area that borders the adjacent undamaged panel(s). Clear coat is then applied to the entire blended panel.

Major Panels
Major panels are those listed: FRONT HEADER, FENDER, HOOD, COOL TOP, DOOR, ROCKER, ROOF, PICKUP CAB CORNER, PICKUP CAB BACK, QUARTER, PICKUP BED FRONT, PICKUP BED SIDE, VAN SIDE, VAN REAR CORNER, ENGINE LID, LUGGAGE LID, LiST GATE, REAR RATE, TAIL GATE, REAR BODY

Overlap
Deduct 1 hour from refinish time for each ADJACENT MAJOR PANEL and deduct 2 hour from time for each NON-ADJACENT MAJOR PANEL. There is no overlap deduction taken for the first major panel.

Adjacent major panel example: Front right fender 2.5 hours (full time) and front right door 2.5 hours minus .4 hour overlap for a total of 4.6 hours.

Non-adjacent major panel example: Front right fender 2.5 hours (full time) and left front fender 2.5 hours minus .2 hour overlap for a total of 4.4 hours.

No overlap deductions for valance panel, pillars, door jams, underside of hood, underside of luggage lid or underside of inner, fender panels, soft bumper covers or bolt-on finish panels.

NOTE: Refinish times are for outside surfaces only unless stated otherwise in text. (example: add for underside, add to edge).

Included Operations:
- Solvent wash
- Scruff panel and clean
- Mask adjacent panels up to 6 inches or substitute with cover vehicle (bag) complete
- Prime or seal as required
- Final sanding and clean
- Mix materials
- Adjust spray equipment
- Apply color
- Clean equipment

Not Included Operations:
- Blending into adjacent panel and/or panels, or nearest breaking point
- Color match or tinting
- Applying anti-corrosion rust resistant materials
- Additional application of soft chip primers or anti-chip undercoats
- Finish sand and buff
- Subsequent vehicle bagging when required: add .2 hour for each application & removal
- Mask interior to prevent overspray damage
- Removal of protective coatings
- Removal of release agent from OEM raw plastic components (example: non-primed bumper covers). See formula under Raw Substrate Prep
- Feather, Prime & Block paint damage to adjacent panel and/or panels joined by welding due to burn damage (see Feather, Prime & Block definition under Refinish General Information)
- Gravel guard refinish; add .5 hours for the first major panel and .3 hour for each additional panel.

NOTE: The included operation of mask adjacent panels is inclusive of any necessary back tape masking to prevent overspray.

IMPORTANT REMINDER: Refinish times are for NEW, UNDAMAGED PARTS with no exterior or interior trim or attached components. Refinish times may vary depending on individual procedures, product and/or weather conditions.

A small percentage of colors are identified by the paint manufacturers as highly transparent. These colors may require additional application costs to achieve visual hiding. In instances where four or more color coats are necessary to achieve adequate hiding, some adjustment in refinish times may be appropriate.

IMPORTANT REMINDER: The cost of paint and materials is not included in refinish time.

NOTE: Gravel Guard application and appropriate refinish may be necessary beyond the actual replacement area to achieve a “texture” match. It may be necessary to tint or otherwise modify non-exterior colors applied to undersides, edges and/or jamb for which there is no paint color formula to achieve a color match. When necessary, reference “color match or tinting” listed above in Not Included Operations.

Raw Substrate Prep
Allow .2 per refinish hour (20%) for plastic components that come from the manufacturer supplier in a raw/un-prime state.
Estimating Information

Labor Categories

The labor times shown in the Guide fall into various categories (for example, body, frame, and/ or mechanical as determined by the repair facility's operating procedures. As a guide, components for which R1 or R2 are commonly considered to be a mechanical operation when performed in a collision repair environment are designated with the letter "M" in the text. These designations are only a guide. They are not necessarily all inclusive, nor do they suggest the application of a labor rate.

Welded Panels

Replacement labor times for new panels that are joined by welding include the necessary use of inserts and accepted sectioning guidelines developed by OEMs, I-CAR and TECH-COR. The labor times for welded panels include grinding, filing and final sanding with up to 150 grit sandpaper to match the original panel contour. Labor times do not include the feather, plane and block refinish operation. See Operation 28 in Procedure Evaluation section, for information on Feather, Plane and Block.

Adhesive Bonding

Replacement labor times for bonded panel bonding all necessary weld applications identified by adhesive material manufacturers and OEM guidelines. Users should reference best practices procedures from bonding material manufacturers and/or OEM guidelines before selecting this replacement method option.

Shop Material

The labor times shown in the Guide do not take into account the cost of any materials, or the cost of hazardous materials recycling or disposal.

Disable and Enable Air Bag System

The labor times shown in the Guide represent the procedures necessary to disable and enable the air bag system in order to replace air bag system components, air bag system repairs, or repair work related to the air bag system, e.g., welding. This procedure includes visually monitoring the air bag warning light to verify proper system functionality. The allowance does not include troubleshooting of the system if proper system functionality is not present.

Diagnose Air Bag System

The labor times shown in the Guide to diagnose air bag systems include system disable and enable, removal and installation of air bag module(s) (where required), installation of appropriate simulators, and retrieving and clearing of trouble codes. Time for specific troubleshooting of Diagnostic Trouble Codes (DTCs) is not included.

Glass Labor Times

The labor times shown in the Guide for glass listed with the NAGS part numbers are Mitchell times, not times from NAGS. Glass labor times are for remove and replace (RR), i.e., removal of the existing glass and its replacement with new glass. Some glass labor times are also shown for removal and the later installation (R&I) of the same glass.

Stripes, Decals and Overlays

The labor times shown in the Guide for these items refer to installation only.

TECH-COR Repair Information

The labor times shown in the Guide for TECH-COR repair procedures are supplied by Mitchell. TECH-COR does not endorse, sanction or otherwise approve such times. TECH-COR publications are copyrighted material. However, reproduction of TECH-COR bulletins is permitted as long as the bulletin is reproduced in its entirety, including source attribution. TECH-COR bulletins may be obtained by contacting TECH-COR, Inc., Technical Communications Dept., 100 East Palatine Road, Wheeling, IL 60090; Phone: 847-667-2541.

Base Model Vehicle

Vehicle with the minimal level of equipment available from the manufacturer.

Types of Vehicles

The types of vehicles covered are regular production models only.

Comprehensive Labor Time

While completeness is striving for in each Guide, there will be instances, however, in which a labor time has not been established for an operation at the time of publication. If an item requires replacement and can be replaced as an individual item but shows no time, a time should be agreed upon among all parties and recorded on the damage report. It also should not be inferred that a component with no established Mitchell labor time has been included in another component’s replacement allowance.

Procedure Reference

Throughout each vehicle “service” there are Procedure Explanation refer- ence notes located immediately following the main section headings. Example: BUMPER/FRT PANEL is followed by “Use Procedure Explanations 18 and 28 with the following text.” This indicates that the text portion and the Procedure Explanations for Front Bumper, Front Panel and Refinish should be used in conjunction with one another when writing a damage report. LABOR RELATED NOTES IN THE TEXT PORTION OVERRIDE THE PROCEDURE EXPLANATION PAGES.

Procedures

The Procedure Explanations on the following pages outline the operations which are or are not included in the labor time listed in each vehicle “ser- vice.” You are encouraged to become familiar with these procedure pages to be sure you have a thorough understanding of the Mitchell approach to collision estimating.

The left Included Operations column means that the labor time shown in the Mitchell Collision Estimating Guide text includes that particular operation or operations.

The right Not Included Operations column means that the labor time in the text does not include that particular operation or operations. Performance of one or more of these operations may or may not be necessary as determined by the individual job requirements. If the add-on time has been estab- lished for any of these operations it will be shown in the text. If a time has not been established or if the add-on time is dependent on conditions that vary due to collision damage (example: access time, free up parts), the additional time should be recorded on the damage report. Labor times relat- ing to the repair of a damaged panel or the use of used parts would come under this category.

Additions to Labor Times

Due to the wide range of collision damage and vehicle conditions, labor times for the following operations are not included in the Guide.

Access Time

Remove extensively damaged parts by cutting, pushing, pulling, etc.

Anti-Corrosion Rust Resistant Material

Remove and/or apply weldable zinc primers, wax, petroleum based coat- ings, undercoating or any type of added conditioning.

Broken Glass Clean Up

Clean vehicle of all broken glass.

Detail

Clean vehicle to pre-accident condition.

Drain & Refill

Fuel (see fuel tank)

Electronic Components

- Time to remove and install as necessary; includes wiring and/or wiring harness and computer module.
- Time to reset memory code function (example: seat position, radio presets) when battery has been disconnected to perform repairs.
- Time to complete computer retrain procedures for proper operation of vehicle systems (example: power sunroof, power window) when battery has been disconnected to perform repairs.

Source: Portions Copyright 2012, Mitchell International, Inc. – Mitchell P-Pages, Page 3
Procedure 28—Refinish Procedure

Refinish General Information

Complete Refinish

Refinish times in this Guide pertain to NEW, UNDAMAGED PARTS and are not intended for calculating complete vehicle refinish—single- or multi-stage. An estimate of this nature would suggest all new panels have been fitted to the vehicle.

Lifetime Refinish Warranty/Clear Coat

The major paint manufacturer's listed below have provided the following information: “Major refinish paint manufacturers recommend that when performing refinish warranty repairs on an OEM multi-stage or basecoat/clearcoat finish, you must extend the application of clear to the nearest panel edge or breakpoint to qualify for lifetime warranty.” AKZO — DuPont — Sherwin Williams — BASF — PPG

Repaired/Used Panels

Labor times related to repaired and/or used panels—example. Remove and install or masking of glass, outside handles or exterior trim, leather prime & block, masking for primer surfacer application—are not included in refinish time. The steps required for refinishing a repaired and/or used panel may vary from those required for a new panel depending on the condition of the repaired and/or used panel.

Feather, Prime & Block

is the Not-Included refinish operation that completes bodywork repair from 150 grit smoothness to the condition of a new undamaged panel, and the point at which refinish labor time begins. The labor and materials associated with feather, prime and block may vary depending upon the size of the repair area, and should be evaluated when determining the work to be performed. See Welded Panels under Estimating Information.

SPOT REPAIR/BLEND ADJACENT PANEL

Spot Repair

Spot repair is defined as applying color to the repaired area of a damaged panel to obtain full coverage of undercoats, and blending that color into the original panel finish so that no transition can be detected. The goal is to keep the actual repair as small as possible to avoid having newly applied color directly next to an undamaged adjacent panel(s). Clear coat is then applied to the entire panel. This refinish process minimizes color mismatch.

Blend for Color Match

Blending is defined as applying color, without necessity to cover undercoats, to less than the full surface area of an adjacent undamaged panel(s). Paint manufacturers recommend blending adjacent panels when a panel is replaced, or repaired and color applied to the full surface areas, or to the area that borders the adjacent undamaged panel(s). Clear coat is then applied to the entire blended panel.

Major Panels

Major panels are those listed: FRONT HEADER, FENDER, HOOD, COWL, TOP, DOOR, ROCKER, ROOF, PICKUP CAB CORNER, PICKUP CAB BACK, QUARTER, PICKUP BED FRONT, PICKUP BED SIDE, VAN SIDE, VAN REAR CORNER, ENGINE LID, LUGGAGE LID, LIFT GATE, REAR RATE, TAIL GATE, REAR BODY

Overlap

Deduct .4 hour from refinish time for each ADJACENT MAJOR PANEL and deduct .2 hour from time for each NON-ADJACENT MAJOR PANEL. There is no overlap deduction taken for the first major panel.

Adjacent major panel example: Right front fender 2.5 hours (full time) and right front door 2.5 hours minus .4 hour overlap for a total of 4.6 hours.

Non-adjacent major panel example: Right front fender 2.5 hours (full time) and left front fender 2.5 hours minus .2 hour overlap for a total of 4.8 hours.

No overlap deductions for valance panel, pillars, door jams, underside of hood, underside of luggage lid or underside of gate, inner panels, filler panels, soft bumper covers or bolt-on finish panels.

NOTE: Refinish times are for outside surfaces only unless stated otherwise in text (example: add for underside, add to edge).

Included Operations

• Solvent wash
• Scuff panel and clean
• Mask adjacent panels up to 30 inches or substitute with cover vehicle (bag) complete
• Prime or seal as required
• Film sanding and clean
• Mix materials
• Adjust spray equipment
• Apply color
• Clean equipment

Not Included Operations

• Blending into adjacent panel and/or panels, or nearest breaking point
• Color match or tinting
• Applying anti-corrosion rust resistant materials
• Additional application of soft chip primers or anti-chip undercoats
• Finish sand and buff
• Subsequent vehicle bagging when required: add .2 hour for each application & removal
• Mask interior to prevent overspray damage
• Removal of protective coatings
• Removal of release agent from OEM raw plastic components (example: non-primed bumper covers) (see formula under Raw Substrate Prep)
• Feather, Prime & Block paint damage to adjacent panel and/or panel(s) by welding due to burn damage (see Feather, Prime & Block definition under Refinish General Information)

NOTE: Feather, Prime & Block may extend to adjacent major panel and .2 hours for each additional panel.

NOTE: The included operation of mask adjacent panels is inclusive of any necessary back tape masking to prevent overspray.

IMPORTANT REMINDER: Refinish times are for NEW, UNDAMAGED PARTS without exterior or interior trim or attached components. Refinish times may vary depending on individual procedures, product and/or weather conditions.

A small percentage of colors are identified by the paint manufacturers as highly transparent. These colors may require additional application coats to achieve visual hiding. In instances where four or more color coats are necessary to achieve adequate hiding, some adjustment in refinish times may be appropriate.

IMPORTANT REMINDER: The cost of paint and materials is not included in refinish time.

NOTE: Gravel Guard application and appropriate refinish may be necessary beyond the actual replacement area to achieve a “texture” match. It may be necessary to tint or otherwise modify non-exterior colors applied to undersides, edges and/or jambs for which there is no paint color formula to achieve a color match. When necessary, reference “color match or tinting” listed above in Not Included Operations.

Raw Substrate Prep

Allow .2 per refinish hour (30%) for plastic components that come from the manufacturer/supplier in a raw/un-primed state.
DEG Inquiry #1228

Inquiry #1228

Inquiry Description

Adjacent Panel Damage

Area Vehicle/FLOOR AND RAILS AND ADJACENT DAMAGE

Issue Summary//AS A FORMER APPRAISER WHO USED ADP I AM SOMEWHAT FAMILIAR WITH THE P PAGES AND THOSE OPERATIONS THAT NEED TO BE ADDED AND ADDRESSED IN A REPAIR. I CONSTANTLY REFER TO THE P PAGES THAT I HAVE ON MY COMPUTER EVEN THOUGH I AM NOT A SUBSCRIBER TO AUDEXPLORE. IN THIS SITUATION IT IS A MAJOR HIT ON A NEW CAR WITH 21 MILES. THE BODY PANEL, THE FLOOR AND THE LEFT RAIL NEEDED REPLACEMENT. CONTRARY TO THE P PAGES THE INSURER REFUSES TO ALLOW FOR ADJACENT PANEL DAMAGE WHICH IS OCCURING AS A RESULT OF THE REPLACEMENT PARTS. E.G. THE WHEEL HOUSES ARE BEING DRILLED THROUGH AND CLEARLY NEED TO BE FILLED AND REPAIRED AND PREPARED FOR PAINT ON "BOTH SIDES" NO ALLOWANCE FOR REPAIR OR PAINT TIME INSIDE AND OUT. THE TIME TO REPAIR THE MID SECTION FLOOR PAN IS OMITTED AND NOT CONSIDERED. THE RIGHT RAIL TO ACCOMODATE THE FLOOR REPLACEMENT AS WELL AS THE WHEEL HOUSE AND OTHER INNER PANELS IS ALSO OMITTED.

I HAVE APPROXIMATELY 30 PHOTOS IN ADDITION TO THOSE PROVIDED.


Number Welds/200 PLUS

Suggested Action//PLEASE CLARIFY IF THE ADDITIONAL REPAIR AND REFINISH NECESSARY TO FIX ADJACENT PANEL AND INNER PANEL WELD DAMAGE IS INCLUDED IN THE STANDARD REFINISH TIMES AND/OR REPLACEMENT TIMES.

Resolution Description

We have reviewed the inquiry on the 2009 VW Jetta and I have attached a copy of the clarification for the Welded Seam Area which will be added to the AudaExplore Database
Reference Manual’s next update. As an example in this case the rear floor R&R, our time
(replace/refinish), includes time to detach and weld at the siderails, inner qtr’s, and other
necessary panels. This can be found in the DBRM section 4-3 Replacement & Recycled
Operations. Also in this case the underside of the floor for refinish is not included, making
this operation a manual entry.

Welded Seamed Area

Thank you for your inquiry on the AudaExplore definition of “immediate seam area”. While
there are many different types of welded seams, and they vary depending on the
manufacturer, AudaExplore findings show that, with proper use of modern technology when
replacing a panel, damage to an adjacent panel would not usually extend more than six (6)
inches past either side of the immediate welded seam area. Per the AudaExplore Database
Reference Manual, Section 4-3 Replacement & Recycled Operations, the labor to return this
immediate seamed area is included in the AudaExplore labor allowances. The AudaExplore
Database Reference Manual, Section 4-2 Labor Exclusions states that “Replace labor does
not include additional labor to repair the replaced panel and/or adjacent panels which may
become distorted, burned or damaged by welding, drilling, grinding and straightening.”
Therefore, any damage to the adjacent panel past this defined area would not be included in
the AudaExplore labor allowance.
### Inquiry Description

**Adjacent Panel Damage**
- Area: Vehicle/FLOOR AND RAILS AND ADJACENT DAMAGE
- Issue Summary: AS A FORMER APPRAISER WHO USED ADP I AM SOMEWHAT FAMILIAR WITH THE P PAGES AND THOSE OPERATIONS THAT NEED TO BE ADDED AND ADDRESSED IN A REPAIR. I CONSTANTLY REFER TO THE P PAGES THAT I HAVE ON MY COMPUTER EVEN THOUGH I AM NOT A SUBSCRIBER TO AUDATEX. IN THIS SITUATION IT IS A MAJOR HIT ON A NEW CAR WITH 21 MILES, THE BODY PANEL, THE FLOOR AND THE LEFT RAIL NEEDED REPLACEMENT. CONTRARY TO THE P PAGES THE INSURER REFUSES TO ALLOW FOR ADJACENT PANEL DAMAGE WHICH IS OCCURRING AS A RESULT OF THE REPLACEMENT PARTS, E.G., THE WHEEL HOUSES ARE BEING DRILLED THROUGH AND CLEARLY NEED TO BE FILLED AND REPAIRED AND PREPARED FOR PAINT ON "BOTH SIDES." NO ALLOWANCE FOR REPAIR OR PAINT TIME INSIDE AND OUT, THE TIME TO REPAIR THE NULL SECTION FLOOR PAN IS OMITTED AND NOT CONSIDERED, THE RIGHT RAIL TO ACCOMMODATE THE FLOOR REPLACEMENT AS WELL AS THE WHEEL HOUSE AND OTHER INNER.

**Resolution Description**
- IP Explanation: We have reviewed the inquiry on the 2009 VW Jetta and I have attached a copy of the clarification for the Welded Seam Area which will be added to the Audatex Database Reference Manual's next update. As an example in this case the rear floor P & R, our time (replace/refinish), includes time to detach and yield at the siderails inner qtr’s, and other necessary panels. This can be found in the DERM section 4-3 Replacement & Recycled Operations. Also in this case the underside of the floor for refinish is not included, making this operation a manual entry.

**Welded Seamed Area**
- Thank you for your inquiry on the Audatex definition of "Immediate seam area". While there are many different types of welded seams, and they vary depending on the manufacturer, Audatex findings show that, with proper use of modern technology when replacing a panel, damage to an adjacent panel would not usually extend more than six (6) inches past either side of the immediate welded seam area. Per the Audatex Database Reference Manual, Section 4-3 Replacement & Recycled Operations, the labor to remove this immediate seamed area is included in the Audatex labor allowance. The Audatex Database Reference Manual, Section 4-2 Labor Exclusions states that "Replaces labor does not include additional labor to repair the replaced panel and/or adjacent panels which may become distorted, burned or damaged by welding, drilling, grinding and straightening." Therefore, any damage to the adjacent panel past this defined area would not be included in the Audatex labor allowance.
DEG Inquiry #1555

Inquiry #1555

Inquiry Description

Rfinsh Labor - Burn Panel

IssueSummary://WE HAVE A LOCAL INSURANCE FIELD APPRAISER THAT IS OF THE OPINION AUDAEXPLORE REFINISH TIMES INCLUDE THE TIME NECESSARY TO REPAIR ADJACENT PANEL "BURN PANEL" DAMAGE. THE AUDAEXPLORE DRM LABOR EXCLUSION STATES "REPLACE LABOR DOES NOT INCLUDE ADDITIONAL LABOR TO REPAIR THE REPLACED PANEL AND OR ADJACENT PANELS WHICH MAY BECOME DISTORTED, BURNED, OR DAMAGED BY WELDING, DRILLING, GRINDING, AND STRAIGHTENING."

SuggestedAction://WOULD YOU PLEASE CLARIFY WHETHER THE REFINISH LABOR ALLOWANCE FOR THE PANEL BEING REPLACED DOES OR DOES NOT INCLUDE THE REPAIR ADJACENT "BURN" PANEL DAMAGE?

Resolution Description

As stated in Section 4-5 Refinish Guidelines page 160 of the 2008-2009 Database Reference Manual states "AudaExplore refinish times are for single panels unless otherwise noted". The AudaExplore refinish labor for a welded replacement panel only includes time to refinish the replaced panel up to and including the immediate welded seam area only. The refinish for the adjacent panel would need to be selected for that panel. No changes warranted at this time.
# DEG Inquiry #1555

Inquiry #1555

## DEG Database Inquiry

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<th>Total Time to Resolve</th>
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### Inquiry Description

**Refinish Labor ~ Burn Panel**

- **Issue Summary:** WE HAVE A LOCAL INSURANCE FIELD APPRAISER THAT IS OF THE OPINION AUDATEX REFINISH TIMES INCLUDE THE TIME NECESSARY TO REPAIR ADJACENT PANEL "BURN PANEL" DAMAGE. THE AUDATEX DRM LABOR EXCLUSION STATES "REPLACE LABOR DOES NOT INCLUDE ADDITIONAL LABOR TO REPAIR THE REPLACED PANEL AND OR ADJACENT PANELS WHICH MAY BECOME DISTORTED, BURIED, OR DAMAGED BY WELDING, DRILLING, GRINDING, AND STRAIGHTENING."

- **Suggested Action:** WOULD YOU PLEASE CLARIFY WHETHER THE REFINISH LABOR ALLOWANCE FOR THE PANEL BEING REPLACED DOES OR DOES NOT INCLUDE THE REPAIR ADJACENT "BURN" PANEL DAMAGE?

### Resolution Description

**IP Explanation**

As stated in Section 4-5 Refinish Guidelines page 150 of the 2009-2009 Database Reference Manual states "Audatex refinish times are for single panels unless otherwise noted". The Audatex refinish labor for a voided replacement panel only includes time to refinish the replaced panel up to and including the immediate welded seam area only. The refinish for the adjacent panel would need to be selected for that panel. No changes warranted at this time.
DEG Inquiry #2266

Inquiry #2266

Inquiry Description

Quarter Panel

Issue Summary//When Replacing a Quarter panel is Separating the Rear Body panel & rear package tray with multi layer panels included? (to slide new quarter between exiting panels?)
To me it looks like the same reason why no one ever puts on a full quarter due to the Quarter goes under the roof panel so if the new Quarter goes on between multiple panels there should be add time allowed to repair existing panels (weld zone damage) that are damaged to install new quarter panel.

Suggested Action//I don't see anywhere in the CEG that discusses this type of repair or stating this would be included in the base Mitchell repair times. Please clarify.

Resolution Description

Proposed Response Text:

THANK YOU FOR YOUR INQUIRY. PLEASE REFER TO PROCEDURE 28. UNDER INCLUDED/NOT INCLUDED OPERATIONS IT STATES THE FOLLOWING AS NOTINCLUDED:

FEATHER, PRIME & BLOCK PAINT DAMAGE TO ADJACENT PANEL AND/OR PANELS JOINED BY WELDING DUE TO BURN DAMAGE (SEE FEATHER, PRIME & BLOCK DEFINITION UNDER REFINISH GENERAL INFORMATION)
## DEG Inquiry #2266

### Inquiry #2266

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### Inquiry Description

**Quarter Panel**

Issue Summary: When replacing a quarter panel it is separating the rear body panel & rear package tray with multiple layers included? (to slide new quarter between existing panels?)

To me it looks like the same reason why no one ever puts on a full quarter due to the quarter goes under the roof panel so if the new quarter goes on between multiple panels there should be some time allowed to repair existing panels (vend zone damage) that are damaged to install new quarter panel.

Suggested Action: I don’t see anywhere in the CES that discusses this type of repair or stating this would be included in the base Mitchell repair times. Please clarify.

### Resolution Description

**IP Explanation**

Proposed Response Text:

THANK YOU FOR YOUR INQUIRY. PLEASE REFER TO PROCEDURE 26. UNDER INCLUDED/NOT INCLUDED OPERATIONS IT STATES THE FOLLOWING AS NOT INCLUDED:

- FEATHER, PRIME & BLOCK PAINT DAMAGE TO ADJACENT PANEL AND/OR PANELS JOINED BY WELDING DUE TO BURN DAMAGE (SEE FEATHER, PRIME & BLOCK DEFINITION UNDER REFINISH GENERAL INFORMATION)

DEG Inquiry #2750

Inquiry #2750

Inquiry Description

Rear Floor - Frame Rail

Issue Summary//The current data base does not, in our opinion, provide enough time to R&R this frame rail assy.

Suggested Action//Please review and consider increasing the book time to 10.0 FRH\'s. Also, foot notes should be added regarding R&I bolted parts, HSLA steel warnings with regard to sectioning (Honda Possition Statement) and refinishing notes regarding refinishing inside and out.

Issue Summary//the frame rail operation took this tech 8.0 hours (actual punch time) his YTD average tech efficiency is 147% so he could have turned 11.76 hours. after deducting (additional items) the exhaust R&I and corrosion protection - 1.5 hours leaves approximately 10.25 hours to perform this operation.

Procedure Steps//we removed the spare tire, jack and tire tools from spare tire well. after gathering tools and equipment we started with an inductor to remove thick Honda caulking on the bottom of the truck floor. all of these items appear to be inc. ops in all 3 systems. we then removed muffler and heat shield, drilled out 48 spot welds, dressed the surface of all the spot weld areas on the trunk floor including rust thru primer. we positioned the frame rail assy on the trunk floor and replaced all 48 spot welds. dressed all 48 weld areas top and bottom of floor, applied corrosion protection and caulking as required.

Suggested Action//Please reviews and consider increasing book time to 10.0 hours after bolts parts are removed. of course items like feather edge, prime and block, and corrosion protection still need to remain as additional items

Issue Summary//To perform this refinish operation the entire trunk floor inside and out needs to be refinished because the spot welds burn both side of the trunk floor. so it wopuld be impossible to spot refinish the floor top or bottom

Special//sprayable seam sealer has to be sprayed to replicate the Honda coating that of course is an additional operation as well as the additional material.

Suggested Action//refinish time that is suitable for refinishing the top and bottom of the rear floor area, in my opinion, is 2.5 for the top and an additional hour for the underside. refinishing total 3.5
Resolution Description

Research Response: MOTOR stated:
After review of current OEM service information, the following has been determined:
1. The estimated work time of 6.0 hours applied to the Center Rail is appropriate. Please refer to the footnote applied to the Center Rail that states: “LABOR: Time is after all necessary bolted on parts are removed.”
2. The estimate refinish time of 1.4 hours applied to the Center Rail is appropriate.
3. The estimated refinish time applied to the Rear Floor is appropriate. Please note that the refinish time of 1.8 hours is for the Rear Floor only.

For weld damage, please note the following:
According to page 39 of the Guide To Estimating: “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.”

Because refinishing the vehicle represents the final major stage of the repair process, MOTOR’s statement regarding weld zones is specific to refinish operations. Therefore, adjacent components/panels damaged by adjacent panel welding will need to be repaired and refinished to either satisfy aesthetic or corrosion-resistant requirements. This is not included and should be added to the estimate whenever applicable.

Please note that MOTOR work times are based on undamaged parts placed on undamaged vehicles. Any repair operations have not been considered in MOTOR Estimated Work Times. Additionally, anti-corrosion material restoration/application, fabrication of templates, inserts, sleeves, flanges, structural foam removal/application, exhaust system components, and wiring R&I are not included items. Work times for these operations should be added to the estimate whenever applicable, after a thorough “on the spot” evaluation.

For refinish considerations for the floor underside, please note the following:
According to the OEM, paint found on the underside of the Floor is an artifact of the factory refinish process (overspray). This may be caused by uneven paint application, bare E-coat spots, etc.

MOTOR does not take the position that the underside of the Floor should not be returned to pre-accident condition. However, determining the estimated work time to refinish the underside of the Floor in various stages of completeness and quality, if refinished at all, is best left up to the judgment of estimators using an “on the spot” evaluation.

No changes required.
**DEG Inquiry #2750**

Inquiry #2750

### DEG DATABASE INQUIRY

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<th>Total Time to Resolve</th>
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### Inquiry Description

**Rear Floor - Frame Rail**

- *IssueSummary*: The current database does not, in our opinion, provide enough time to R&R this frame rail assy.
- *SuggestedAction*: Please review and consider increasing the book time to 10.0 FRHVs. Also, footnotes should be added regarding R&R bolted parts, HSLA steel warnings with regard to sectioning (Honda Position Statement) and refinishing notes regarding refinishing inside and out.
- *IssueSummary*: The frame rail operation took this tech 8.0 hours (actual punch time) his YTD average tech efficiency is 147% so he could have turned 11.76 hours, after deducting (additional items) the exhaust R&R and corrosion protection - 1.5 hours leaves approximately 10.25 hours to perform this operation.

### Resolution Description

**No Change**

- *Research Response*: MOTOR stated: After review of current OEM service information, the following has been determined:
  1. The estimated work time of 6.0 hours applied to the Center Rail is appropriate. Please refer to the footnote applied to the Center Rail that states: "LABOR: Time is after all necessary bolted on parts are removed."
  2. The estimate refinish time of 1.4 hours applied to the Center Rail is appropriate.
  3. The estimated refinish time applied to the Rear Floor is appropriate. Please note that the refinish time of 1.4 hours is for the Rear Floor only.

For weld damage, please note the following:

According to page 39 of the Guide To Estimating: "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."

DEG Inquiry #3223

Inquiry #3223

Inquiry Description

Prime Or Seal

Issue Summary: Included procedures for refinishing lists "prime or seal as required". The premise is for new undamaged parts. Shops do not need to "prime" a new part. Insurance adjusters are telling me priming is included in refinish time.

Suggested Action: Take the word prime out of the statement

Resolution Description

THANK YOU FOR YOUR INQUIRY.
PUBLISHED REFINISH TIMES ARE FOR NEW, UNDAMAGED PARTS.
PLEASE REFERENCE THE FOLLOWING PROCEDURE PAGE 28 INFORMATION PERTAINING TO REPAIRED PANELS:

*REPAIRED/USED PANELS*
LABOR TIMES RELATED TO REPAIRED AND/OR USED PANELS-EXAMPLE: REMOVE AND INSTALL OR MASKING OF GLASS, OUTSIDE HANDLES OR EXTERIOR TRIM, FEATHER PRIME & BLOCK, MASKING FOR PRIMER SURFACER APPLICATION-ARE NOT INCLUDED IN REFINISH TIME. THE STEPS REQUIRED FOR REFINISHING A REPAIRED AND/OR USED PANEL MAY VARY FROM THOSE REQUIRED FOR A NEW PANEL DEPENDING ON THE CONDITION OF THE REPAIRED AND/OR USED PANEL.

ALSO PLEASE REFERENCE THE FOLLOWING FROM THE LIST OF NON-INCLUDED OPERATIONS AS FOLLOWS:

FEATHER, PRIME & BLOCK PAINT DAMAGE TO ADJACENT PANEL AND/OR PANELS JOINED BY WELDING DUE TO BURN DAMAGE (SEE FEATHER, PRIME & BLOCK DEFINITION UNDER REFINISH GENERAL INFORMATION)

ALSO PLEASE REFERECE THE FOLLOWING FROM PROCEDURE 28 PERTAINING TO FEATHER, PRIME & BLOCK:

*FEATHER, PRIME & BLOCK* IS THE NOT-INCLUDED REFINISH OPERATION THAT COMPLETES BODYWORK REPAIR FROM 150 GRIT SMOOTHNESS TO THE CONDITION OF A NEW UNDAMAGED PANEL, AND THE POINT AT WHICH REFINISH LABOR TIME BEGINS. THE LABOR AND MATERIALS ASSOCIATED WITH FEATHER, PRIME AND BLOCK MAY VARY DEPENDING UPON THE SIZE OF THE REPAIR AREA, AND SHOULD BE EVALUATED WHEN DETERMINING THE WORK TO BE PERFORMED. SEE WELDED PANELS UNDER ESTIMATING INFORMATION.
**DEG Inquiry #3223**

Inquiry #3223

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**Prime Or Seal**

- Issue: Summary: Included procedures for refinishing lots' prime or seal as required. The premise is for new undamaged parts. Shoppers do not need to “prime” a new part. Insurance adjusters are telling me priming is included in refinishing.

- Suggested Action: Take the word prime out of the statement.

**Resolution Description**

- No Change:

  - THANK YOU FOR YOUR INQUIRY
  - PUBLISHED REFINISH TIMES ARE FOR NEW, UNDAMAGED PARTS.
  - PLEASE REFERENCE THE FOLLOWING PROCEDURE PAGE 28 INFORMATION PERTAINING TO REPAIRED PANELS:

  - **REPAIRED/USED PANELS**
    - LABOR TIMES RELATED TO REPAIRED AND/OR USED PANELS: EXAMPLE: REMOVE AND INSTALL OR MASKING OF GLASS, OUTSIDE HANDLES OR EXTERIOR TRIM, FEATHER PRIME & BLOCK, MASKING FOR PRIMER SURFACER APPLICATION ARE NOT INCLUDED IN REFINISH TIME. THE STEPS REQUIRED FOR REFINISHING A REPAIRED AND/OR USED PANEL MAY VARY FROM THOSE REQUIRED FOR A NEW PANEL DEPENDING ON THE CONDITION OF THE REPAIRED AND/OR USED PANEL.

  - ALSO PLEASE REFERENCE THE FOLLOWING FROM THE LIST OF NON-INCLUDED OPERATIONS AS FOLLOWS:

    - FEATHER, PRIME & BLOCK PAINT DAMAGE TO ADJACENT PANEL AND/OR PANELS JOINED BY WELDING DUE TO BURN DAMAGE (SEE FEATHER, PRIME & BLOCK: DEFINITION UNDER REFINISH GENERAL INFORMATION)

    - ALSO PLEASE REFERENCE THE FOLLOWING FROM PROCEDURE 28 PERTAINING TO FEATHER, PRIME & BLOCK:

      - **FEATHER, PRIME & BLOCK**

        - IS THE NOT-INCLUDED REFINISH OPERATION THAT COMPLETES BODYWORK REPAIR FROM 150 GRIT SMOOTHNESS TO THE CONDITION OF A NEW UNDAMAGED PANEL, AND THE POINT AT WHICH REFINISH LABOR TIME BEGINS. THE LABOR AND MATERIALS ASSOCIATED WITH FEATHER, PRIME AND BLOCK MAY VARY DEPENDING UPON THE SIZE OF THE REPAIR AREA, AND SHOULD BE EVALUATED WHEN DETERMINING THE WORK TO BE PERFORMED. SEE WELDED PANELS UNDER ESTIMATING INFORMATION.

DEG Inquiry #3331

Inquiry #3331

Inquiry Description

IssueSummary: Shop denied repair time to adjacent panels damaged by drilling, cutting and welding new rear body panel. Shop advised that such repair time is included w/Mitchells replacement time for part.

SuggestedAction: Additional refinsh time was granted but additional repair time was not. Carrier advised shop that feather, sand and block is for paint dept and is considered a paint operation. Shop believes and has been advised by peers in industry that damage that creates distortion to adjacent panels that requires repair time to eliminate the distortion and bring back to a paintable condition is not included in Mitchells listed replacement time.

Resolution Description

REPAIR TIME TO ADJACENT PANELS DAMAGED BY DRILLING, CUTTING AND REMOVING THE REAR BODY PANEL HAS BEEN INCLUDED TO THE EXTENT THAT ROUTINE ALIGNMENT OR DOLLYING OF A PANEL IS SUFFICIENT TO STRAIGHTEN AND ALLIGN THE AREA OF THE ADJACENT PANEL BEING JOINED WITH THE REPLACED PANEL.

NOT INCLUDED WOULD BE ANY REPAIR TIME TO ADJACENT PANELS DAMAGED BY AGGRESSIVE REMOVAL OF A DAMAGED PANEL.

PLEASE REFERENCE THE FOLLOWING FROM THE PROCEDURE PAGES P-28 NOT INCLUDED OPERATIONS:
FEATHER, PRIME & BLOCK PAINT DAMAGE TO ADJACENT PANEL AND/OR PANELS JOINED BY WELDING DUE TO BURN DAMAGE (SEE FEATHER, PRIME & BLOCK DEFINITION UNDER REFINISH GENERAL INFORMATION)

ALSO THE FOLLOWING FROM PROCEDURE REFINISH PROCEDURE 28 -FEATHER, PRIME & BLOCK : IS THE NOT INCLUDED REFINISH OPERATION THAT COMPLETES BODYWORK REPAIR FROM 150 GRIT SMOOTHNESS TO THE CONDITION OF A NEW UNDAMAGED PANEL, AND THE POINT AT WHICH REFINISH LABOR TIME BEGINS. THE LABOR AND MATERIALS ASSOCIATED WITH FEATHER, PRIME AND BLOCK MAY VARY DEPENDING UPON THE SIZE OF THE REPAIR AREA, AND SHOULD BE EVALUATED WHEN DETERMINING THE WORK TO BE PERFORMED. SEE WELDED PANELS UNDER ESTIMATING INFORMATION

### DEG DATABASE INQUIRY

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### Inquiry Description

**Weld Damage**

IssueSummary

Shop denied repair time to adjacent panels damaged by drilling, cutting and welding new rear body panel. Shop advised that such repair time is included w/Mitchell's replacement time for part.

SuggestedAction

Additional refinish time was granted but additional repair time was not. Carrier advised shop that feather, sand and block is for paint dept and is considered a paint operation. Shop believes and has been advised by peers in industry that damage that creates distortion to adjacent panels that requires repair time to eliminate the distortion and bring back to a paintable condition is not included in Mitchell's listed replacement time.

### Resolution Description

**IP Explanation**

REPAIR TIME TO ADJACENT PANELS DAMAGED BY DRILLING, CUTTING AND REMOVING THE REAR BODY PANEL HAS BEEN INCLUDED TO THE EXTENT THAT ROUTINE ALIGNMENT OR DOLLYING OF A PANEL IS SUFFICIENT TO STRAIGHTEN AND ALIGN THE AREA OF THE ADJACENT PANEL BEING JOINED WITH THE REPLACED PANEL.

NOT INCLUDED WOULD BE ANY REPAIR TIME TO ADJACENT PANELS DAMAGED BY AGGRESSIVE REMOVAL OF A DAMAGED PANEL.

PLEASE REFERENCE THE FOLLOWING FROM THE PROCEDURE PAGES P-28 NOT INCLUDED OPERATIONS:

FEATHER, PRIME & BLOCK PAINT DAMAGE TO ADJACENT PANEL AND/OR PANELS JOINED BY WELDING DUE TO BURN DAMAGE (SEE FEATHER, PRIME & BLOCK DEFINITION UNDER REFINISH GENERAL INFORMATION)

ALSO THE FOLLOWING FROM PROCEDURE REFII SH PROCEDURE 28 -FEATHER, PRIME & BLOCK : IS THE NOT INCLUDED REFINISH OPERATION THAT COMPLETES BODYWORK REPAIR FROM 150 GRT SMOOTHNESS TO THE CONDITION OF A NEW UNDAMAGED PANEL, AND THE POINT AT WHICH REFINISH LABOR TIME BEGINS. THE LABOR AND MATERIALS ASSOCIATED WITH FEATHER, PRIME AND BLOCK MAY VARY DEPENDING UPON THE SIZE OF THE REPAIR AREA, AND SHOULD BE EVALUATED WHEN DETERMINING THE WORK TO BE PERFORMED. SEE WELDED PANELS UNDER ESTIMATING INFORMATION
DEG Inquiry #4684

Inquiry #4684

Inquiry Description
Section4_AreaVehicle
Roof/LT Quarter

Section4_PartName
Roof/LT Quarter

Section4_IssueSummary
When replacing LT quarter panel it is necessary to lift left rear corner of roof. Does LT quarter panel labor hours include repair to damaged roof caused by installing quarter panel?

Section4_NumberWelds
6

Section4_TypeMaterials
Mild Steele

Section4_TechnicianSkill
High

Section4_ActualTime
20.0 as per CCC

Section4_SuggestedAction
Add repair hours to roof if not an included operation

Resolution Description
Estimated Release Date: Closed
Proposed Resolution: MOTOR stated:
Damage to adjacent panels from welding is not included in MOTOR labor times. According to the Guide To Estimating, "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."
No changes required.

### DEG DATABASE INQUIRY

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<td>CCC</td>
<td>- Welded Panel Operations</td>
<td>2008 Dodge Challenger</td>
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### Inquiry Description

**Quarter Panel Weld Damage**

- **Section 4. Part Name:** Roof/LT Quarter
- **Section 4. Issue Summary:** When replacing LT quarter panel it is necessary to lift left rear corner of roof. Does LT quarter panel labor hours include repair to damaged roof caused by installing quarter panel?
- **Section 4. Number Welds:** 6
- **Section 4. Type Materials:** Mild Steel
- **Section 4. Technician Skill:** High
- **Section 4. Actual Time:** 20.0 as per CCC
- **Section 4. Suggested Action:** Add repair hours to roof if not an included operation

### Resolution Description

**IP Explanation**

Estimated Release Date: Closed

Proposed Resolution: MOTOR stated; Damage to adjacent panels from welding is not included in MOTOR labor times. According to the Guide To Estimating, "Suggested refinishing 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."

No changes required.
DEG Inquiry #4999

Inquiry #4999

Inquiry Description

Weld Damage

Section4_AreaVehicle
Rear body and floor

Section4_PartName
Rear body panel

Section4_PartNumber
ag125440320a

Section4_IssueSummary
Is the burn damage to the adjacent panel part of the operation, rear floor, quarter panels, and tail lamp pockets, all gave drill and burn damage from mig welding

Section4_NumberWelds
@50

Section4_TypeMaterials
Sheet metal

Section4_ProcedureSteps
Repair and refinish rear floor pan, refinish bottom side of floor pan, repair and refinish left and right quarter panels mig weld damage, refinish inside of rear quarter panels both sides, repair and refinish tail lamp pockets left and right mig weld burn damage, repair and refinish inside of rear tail lamp pockets

Section4_TechnicianSkill
high

Section4_ActualTime
2.5

Section4_SuggestedAction
Would like to see a item list of operations on the estimate weather they may be included or not
Resolution Description

Please review DEG inquiry number 4684
Estimated Release Date: Closed
Proposed Resolution: MOTOR stated:
Damage to adjacent panels from welding is not included in MOTOR labor times. According

to the Guide To Estimating, "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."

No changes required.

Source: "DEGWEB.ORG ~ Print Database Inquiry." DEGWEB.ORG ~ Print Database Inquiry. N.p., 5
**DEG Inquiry #4999**

**Inquiry #4999**

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<td>- Welded Panel Operations</td>
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**DEG Response**

Please review DEG inquiry number 4684. Estimated Release Date: Closed.

Proposed Resolution: MOTOR stated: Damage to adjacent panels from welding is not included in MOTOR labor times. According to the Guide To Estimating, "Suggested refinsh 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."

No changes required.

DEG Inquiry #5774

Inquiry #5774

Inquiry Description

Section4_AreaVehicle
1/4, frt door skin, sliding door skin rh side

Section4_IssueSummary
Insurance company claims no repair or ref time for interior spot welds/burns

Section6_AreaVehicle
same as above

Section6_IssueSummary
same as above

Resolution Description

Please review DEG inquiry number 4684
Estimated Release Date: Closed
Proposed Resolution: MOTOR stated:
Damage to adjacent panels from welding is not included in MOTOR labor times. According to the Guide To Estimating, “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.”

No changes required

# DEG Database Inquiry

**Track #** | Estimating Platform | Inquiry Category | Year Make Model | Resolution Status | Origination Date | Submission Date | Resolution Date | Total Time to Resolve
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5774 | CCC | - Welded Panel Operations - Refinish Operations | 2011 VW Routen | Resolved | 5/3/2013 3:30:33 PM | 5/3/2013 6:00:00 PM | 5/3/2013 6:00:00 PM | 00 Days

## Inquiry Description
- **Weld Damage**
  - Section4.AREA.Vehicle
  - 1/4, frt door skin, sliding door skin rh side
  - Section4.IssueSummary
  - Insurance company claims no repair or ref time for interior spot welds/burns
  - Section6.AREA.Vehicle
  - same as above
  - Section6.IssueSummary
  - same as above

## Resolution Description
- **DEG Response**
  - Please review DEG inquiry number 4684
  - Estimated Release Date: Closed
  - Proposed Resolution: MOTOR stated:
    - Damage to adjacent panels from welding is not included in MOTOR labor times. According to the Guide To Estimating, “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.”
  
  No changes required.
Question 3. Are there pre-determined times?
3. Are there pre-determined times for refinishing weld burn damage?

Answer:

In some instances, there are times supplied by the Information Providers.

However, if there is not a time, it does not mean that it is included. If there is not a time you may need to do a manual entry.
Question 4. What is it worth?
4. What is it worth?

Answer: The Estimator will have to use judgment times on these items since no database times are given by the Information Providers.

Answer Documentation:

The following items can be used as justification:

- Submit an inquiry to DEG (www.DEGweb.org) to prove it is not included only
- Pick a compatible component on a vehicle that has weld burn damage times
Additional Thoughts
**Additional Thoughts**

- When thinking about weld burn damage, ask yourself: “Am I going to have to paint the top and bottom or inner and outer?”
- Paint times are for 1 side and 1 side only
- An additional operation that may be required is second color-setup
- TIP: If you save the P-pages as a PDF and search for terms in the document by going to Edit, then Find or by hitting Ctrl+F