GENERAL REPAIR PROCEDURE

GENERAL

The products referenced herein may not be sold in your market. Please consult your distributor for product availability.

- Keep work bays clean and free of any damaged parts. Follow all shop safety rules.
- Compare any new parts with the damaged ones. Check parts carefully.
- Power wash vehicle before placing in work bays.
- Match all parts to the repair order. Check for any missing parts. Check for part correctness.
- During the tear-down process, look for any additional damage.
- Notify shop foreman or manager if any additional damage has been found.
- Straighten, weld or repair any damage to adjacent panels, per I-CAR specifications.
- Take care to protect the vehicle from additional damage due to carelessness. Cover undamaged areas of the vehicle.
- Check the “fit” of parts carefully.
- Send any cut-in parts to the paint shop for refinishing.
- Fit cut-in parts and finish repair.
- Send vehicle to the paint shop for refinishing.
- Cleanup work area and notify shop that vehicle is in the paint shop.
- Check and compare any new parts with the damaged ones on the next repair order.

PREPARING SURFACES FOR BODY FILLER AND REFINISHING

- Damaged vehicles should be washed with hot soapy water to remove contaminate from the surface of the repair.
- Clean the area of the repair with surface cleaner. Remove any stripes, decals or residual glue from the repair area.
- Repair damaged area per manufacturer, industry and I-CAR standards.
- Procedure for a body filler repair: Sand the repair area to metal with an 80-grit disc on a dual action, or random action sander. Be sure to remove the OEM paint at least 3" beyond repair.
- Feather edge the OEM paint edge with 120 grit DA followed by 180 grit DA.
- Mix and apply body filler according to manufacturers’ specifications.
- Once body filler is blocked, apply a skim coat of polyester 2K putty, finish sand with 180 grit.
- Re-feather edge the OEM paint edge with 180 grit to eliminate any blocking marks, and check the repair for straightness.
- NOTE: Failure to apply body filler ONLY to a metal substrate will result in a paint failure. Although many body filler manufacturers recommend their products direct to a painted surface, this recommendation only is relevant to adhesion. A failure will occur within the paint process along the edge where the body filler meets the OEM substrate. This failure may occur weeks after the car has been delivered.

SURFACE PREPARATION

- For all warranted refinish systems:
- Inspect the repair. Be sure that it has been executed properly by blowing off the work with a blowgun carefully. Check to see if the body work is straight, that the body filler is finished in grit sandpaper, and that there are no pinholes in the body filler. If pinholes are present, fill them with a 2K polyester putty. Also make sure that the body filler is not lapped up over the OEM finish. If the body filler is lapped up onto the OEM finish, send the repair back to the metal shop to correct it. Body filler must be leveled to the metal substrate, NOT to the OEM finish.
- Featheredge the OEM paint edge by stepping through 180 grit and 240 grit, sand surrounding area with 400 grit on a DA sander. Be sure to remove any coarse scratches. Keep the sander flat. Sand 6-8 inches beyond the area you intend to prime with the 400 grit paper.
Remove remaining sanding dust with an air gun.

NOTE: Applying body filler to existing coating can lead to body filler ringing. Failure will occur though body filler an adhere to a painted surface along the edge where the body filler meets the OEM substrate. This failure may occur weeks after the car has been delivered.

Sand according to the following minimum grit recommendations:

<table>
<thead>
<tr>
<th>Surface Type</th>
<th>Grit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel</td>
<td>P180 grit</td>
</tr>
<tr>
<td>Aluminum</td>
<td>P240 grit, then pretreat</td>
</tr>
<tr>
<td>Galvanized</td>
<td>P240 grit</td>
</tr>
<tr>
<td>E-coat</td>
<td>P320 grit</td>
</tr>
<tr>
<td>Cured paint</td>
<td>P320 grit</td>
</tr>
<tr>
<td>Plastics</td>
<td>Refer to the plastics repair recommendations in the ChromaSystem™ Technical Manual.</td>
</tr>
<tr>
<td>Gel Coated Fiberglass</td>
<td>P320 grit</td>
</tr>
<tr>
<td>SMC</td>
<td>P320 grit</td>
</tr>
</tbody>
</table>

NOTE: Aluminum must be pretreated with 225S™ Aluminum Metal Cleaner and 226S™ Aluminum Conversion Coating, or 22880S™ Etch Primer for maximum corrosion protection. Large areas of bare steel must be pretreated with Variprime® 616S™ Self Etching Primer or 22880S™ Low VOC Etch Primer for maximum corrosion protection.

CLEANING THE SURFACE PRIOR TO PRIMER APPLICATION:
- For all solvent wiping operations use Sontara® E-4142™ Surface Preparation System Solvent Wipes.
- Wipe the surface with surface cleaner (never allow any surface cleaner to touch the body filler)
- When refinishing plastic or gel coated fiberglass parts, wipe with Plas-Stick® 2320S™ Flexible Parts Cleaner or 2319S™ Plastic Surface Cleaner or V-3921S™ Cleaner, then carefully follow the plastics repair recommendations in the ChromaSystem™ Technical Manual.

MASKING THE AREA FOR REFINISHING
- Carefully mask around the area being repaired. Be careful not to mask too close to the repair, allow room to taper the primer properly.
- Avoid spot priming to the edge of masking tape.
- Tack the surface with a Sontara® Final Tack™ tack rag (E-4587)
- Proceed with the appropriate warranted refinish procedure.

PLASTIC PREPARATION
Refer to the ChromaSystem Technical Manual for procedures to prepare plastic or fiberglass parts for topcoat.

SANDING / COMPOUNDING / POLISHING

POLISHING
- Nib sand finish with P1500 grit or finer dry or wet. For runs or sags, carefully use a razor block. Use plenty of clean water. Take care not to scratch surface. Squeegee water away frequently to check surface.
- Use a finishing polish suited for P1500 DA and 1500grit dry or wet scratches. Heavy-duty compounds can cause excessive heat. For old oxidized surfaces, use a finishing polish.
- Apply a thin ribbon of polish to work a 2 – 3 foot square area. Do not leave polish on surface. Buff immediately.
- Using a foam pad, maintain a variable speed buffer at 1200-1800 rpm. Keep the pad flat to the surface. Keep the buffer moving at all times, with a 50% overlap on each pass.
- Remove excess polish with a soft clean cloth.
- Use a finishing glaze with a foam pad on an orbital buffer to remove swirls and minor scratches.
- Remove any excess glaze with a clean soft cloth.
- Finish the detailing process.
DETAILING

• After refinishing, remove masking and place all trash in containers.
• Move vehicle into drying area.
• Check for imperfections. If possible, correct immediately. Nib sand and buff if necessary.
• Refinish accent colors and undercoating.
• Check for overspray on moldings, windows, etc., and correct.
• Notify shop foreman if reassembly is needed.
• Reapply any stripes and molding.
• After the shop foreman has inspected the vehicle, go over the detail process with him to determine the course of action such as buffing, shampooing the carpeting, etc.
• Wash with soap. Wipe down with a chamois. Take care with refinised areas.
• Clean the engine compartment and undercarriage. Clean the tires and wheels.
• Check the air conditioning.
• Remove dust from the vents. Clean the windows inside and out. Empty the ashtrays and wipe off the dash.
• Check the radio, tune it to a preset station and turn it off. Do not reset the station selections.
• Check all lights and top off fluid levels. Notify a technician if any defects are found.
• Remove all items from the trunk. Clean and vacuum the trunk. Place any customer belongings in a large bag.

FINAL DETAILING

• Go over the vehicle as if it were your own! As a final inspection, check the jambs for overspray.
• Re-check all seams, moldings and emblems for excess compound or polish.
• Roll down the window and check the top edges.
• Re-check in the wheel wells for overspray. Undercoat if necessary.
• Re-check vents, dash, ashtrays, and visor mirrors.
• Notify manager; the vehicle is ready for delivery. Check vehicle over with the manager.
• Park in the delivery area. Lock the doors and take the keys to the office.

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