## $\operatorname{sem}$

# ロபAL-MIX 

## PRODUCT INFORMATION AND STANDARD OPERATING PROCEDURES



PARTS \& LABOR WARBANTY
FOR LIFE
SEE DETALLS ON BACK COVER

## ADHESIVES

Urethanes, acrylics and epoxies for large and small applications.

- Roof Skins
- Door Skins
- Applique Panels
- Quarter Panels



## 39757

## Structural Impact Resistant Adhesive (SIRA)

A two-component epoxy for bonding structural and non-structural components where specified by the vehicle manufacturer.

## 39747

## Multi-Purpose Panel Adhesive

A two-component epoxy for panel bonding any combination of steel, aluminum, SMC and fiberglass.

## 39337

## Door Skin \& SMC Adhesive

A two-component epoxy that quickly bonds any combination of steel, aluminum, fiberglass and SMC.

## 39537

## Weld-Bond Adhesive

A non-sag, two-component acrylic adhesive system formulated to bond metal surfaces without the use of an external primer.

## 39897

## Patch Panel Adhesive

A two-component, acrylic adhesive for quickly bonding metal panels without the use of an external primer.

- Superior impact and peel strength
- Excellent corrosion resistance
- Minimized down times with multiple heat cure options
- Spacer beads for consistent bond line thickness
- Long working time
- Exceptional impact and peel strength
- Excellent corrosion resistance
- Spacer beads for consistent bond line thickness
- Non-sag formula
- Non-sag formula
- Excellent corrosion protection
- Bonds multiple substrates
- Long shelf life
- Exceptional impact and peel strength
- Spacer beads for consistent bond line thickness
- Long working time

- Exceptional impact and peel strength
- Non-sag formula
- Quick cure time
- Excellent corrosion resistance

40207 (7 OZ.)
40202 (1.7 OZ.)

## Quick Set 20

A fast, two-component, opaque, urethane adhesive designed for automotive plastic repair and bonding most small plastic, metal and aluminum parts.

40507 (7 OZ.) 40502 (1.7 OZ.)

## Quick Set 50

A fast, two-component, black, urethane adhesive designed for automotive plastic repair and bonding most small plastic, metal and aluminum parts.

## 41807

## Quick Set 180

A general purpose, black adhesive designed for repairing and bonding most plastic, steel, aluminum, glass, SMC and fiberglass parts.

- High strength and sandable
- Bonds multiple substrates
- Non-sag formula fills gaps
- Colorless
- Super fast setting
- High strength and sandable
- Bonds multiple substrates
- Non-sag formula fills gaps
- High strength and sandable
- Bonds multiple substrates
- Non-sag formula fills gaps
- Extended 3 minute working time


Working Time: 15 Sec
Set Time: 20 Sec
Cure Time: 15 Min
Resin Base: Urethane

Working Time: 45 Sec
Set Time: 50 Sec
Cure Time: 15 Min
Resin Base: Urethane


Working Time: 3 Min
Set Time: 30 Min
Cure Time: 24 Hr
Resin Base: Urethane

## PLASTIC REPAIR

For repairing flexible, semi-rigid \& rigid plastics with ease.

- Bumper Covers
- Interior Plastics
- Molded Body Panels



## 39847

## Multi-Plastic <br> Repair Material

A two-component epoxy for fast repairs on virtually all plastic bumper covers.

- No adhesion promoter required
- Exceptional sanding and feather edging
- Remains flexible
- Does not shrink or pinhole
- Excellent leveling and sag resistance


## 39767

## Problem Plastic Repair Material

A two-component, epoxy-based filler for repairing olefin-based plastics and similar rigid and semi-rigid substrates.

- No adhesion promoter required
- Superior adhesion
- Excellent sanding and feather edging
- Does not shrink or pinhole
- Zero VOC


Working Time: 7 Min
Sand Time: 15 Min
Top Coat Time: 20 Min Cure Time: 1 Hr


Working Time: 5 Min
Sand Time: 15 Min
Top Coat Time: 20 Min Cure Time: 1 Hr

Flexible sealers that restore OEM appearance while preventing corrosion.

- Roof Skins
- Door Skins
- Strut Towers
- Floor Pans
- Fender Wells
- Body Pans / Trunk Areas


39377

## Seam Sealer

A two-component, gray, epoxy sealer for sealing interior or exterior seams, joints and voids.

39477
Beige Seam Sealer
A two-component epoxy for sealing interior or exterior seams, joints and voids.

## 40377

## Heavy Bodied Black Seam Sealer

A high viscosity, two-component epoxy for use on interior or exterior seams, joints and voids.

## 40477

Heavy Bodied White Seam Sealer
A high viscosity, two-component epoxy for use on interior or exterior seams, joints and voids.

- Direct to metal
- Paintable immediately*
- Excellent adhesion to bare metal or primed surfaces
- Will not shrink, harden or crack
- Duplicates OEM sealers
- Direct to metal
- Paintable immediately*
- Excellent adhesion to bare metal or primed surfaces
- Will not shrink, harden or crack
- Duplicates OEM sealers
- Direct to metal
- Paintable immediately*
- Holds tool marks during working time
- Non-sag formula
- Excellent adhesion
- Direct to metal
- Paintable immediately*
- Holds tool marks during working time
- Non-sag formula
- Excellent adhesion


## 39387

## Self Leveling Seam Sealer

A two-component, epoxy-based, flowable sealer for use on drip rails, roof and trunk seams.

## 39777

## High-Build Self Leveling Seam Sealer

A two-component, controlled flow epoxy ideal for use on roof seams, drip rails and trunk seams.

- Direct to metal on non-flexing roof skins
- Will not shrink, harden or crack
- Permanently flexible


Working Time: 10 Min
Set Time: 15 Min
Top Coat Time: 30 Min
Cure Time: 1 Hr

## SOUND DAMPENING

## Reduces noise and vibrations and matches OEM textures.

- Roof Bows
- Hoods
- Door Intrusion Beams
- Rocker Panels / Floor Pans
- Quarter Panels
- Body Pans / Trunk Areas
- Deck Lids
- Filler Necks



## 39977

## Panel Vibration Control Material

A two-component epoxy and urethane blend for reducing noise and vibration on roof, quarter and door skins.

## 39357

## Flexible Urethane Foam

A two-component, urethane, expanding flexible foam that stops vibration and dampens sound in most voids.

## 39997

## Rigid <br> Urethane Foam

A two-component, urethane, expanding rigid foam for filling pillars, posts, and box sections.

## 40977

## Sound \& Seal Sprayable Coating

A sprayable epoxy and urethane blend for replacing OEM coatings under rocker panels, in trunks, and on floor sections and frame rails.

- Excellent sag resistance
- Reduces noise and vibration
- Protects against corrosion
- Superior flexibility


Working Time: 1 Hr Set Time: 1 Hr Cure Time: 1 Hr

- Excellent sound dampening qualities
- Stops panel flutter
- 10x volume expansion
- Does not require moisture to cure
- Will not distort panels
- Resists shrinking
- Meets UL 94HB flammability tests
- Restores crash parts to OEM condition
- Superior expansion
- Reinforces weak panels
- Fast cure


Working Time: 15 Sec
Set Time: 2 Min
Top Coat Time: 15 Min

Working Time: 45 Sec
Set Time: 5 Min
Top Coat Time: 15 Min

- Will not shrink, harden or crack
- Remains flexible
- Excellent adhesion to properly prepped surfaces
- Paintable in 30 min


## PLASTIC REPAM STANDARD OPERATING PROGEDURE



Clean front and back with Scuff \& Clean and gray scuff pad. Rinse with water and dry with clean, lint-free cloth. Clean front and back with SEM Solve, Plastic \& Leather Prep or XXX Universal Surface Cleaner. Wipe clean in one direction with dry, lint-free cloth.

On front side, sand repair area with P80 grit. Dish out damage with P36 grit disc at a low RPM. On back side, grind repair area with P36 grit disc at a low RPM. Blow off surfaces. Re-clean if necessary.
(i) Paint does not need to be stripped from the repair if it has good adhesion.
(! Do not grind too fast and cause plastic to melt.
(i) (Optional) Apply XXX Adhesion Promoter to all prepped surfaces.

Mask front side of repair to prevent repair material from flowing through. Apply Plastic Repair Contouring Tape (mesh only) to back side. Apply Dual-Mix ${ }^{\text {TM }}$ Multi-Plastic Repair Material or DualMix Problem Plastic Repair Material and cover mesh tape. Spread material firmly. Allow to set.

Remove tape from front. Fill front with Dual-Mix Multi-Plastic Repair Material or Dual-Mix Problem Plastic Repair Material. Spread material firmly and build up higher than panel to allow for sanding.

Sand with P80 grit. Finish with P180 grit. If needed, use a skim coat of Bumper Bite ${ }^{T M}$ Flexible Glaze, then sand with P180 - P320 grit.
(i) Refer to Plastic Refinishing SOP for refinishing steps.

## PRODUCT LIST



REINFORCE AND FILL

| Part | Product | Size |
| :--- | :--- | :--- |
| 70007 | Plastic Repair Contouring Tape | 15' Roll |
| 39767 | Dual-Mix Problem Plastic | 7 0z. Cartridge |
|  | Repair Material |  |
| 39847 | Dual-Mix Multi-Plastic 7 oz. Cartridge <br>  Repair Material |  |



## SAND AND SKIM

| Part | Product | Size |
| :--- | :--- | :--- |
| 40482 | Bumper Bite Flexible Glaze | 16 oz . Tube |

## PLASTIG REFINISHING <br> Standard operating procedure



Apply Bumper Coater ${ }^{\text {TM }}$ or Factory Pack ${ }^{T M}$ as per instructions.
mage is present, refer to Plastic Repair Standard Operating Procedure first.
Clean with Scuff \& Clean and a gray scuff pad. Rinse with water and dry with clean, lint-free cloth. Clean with SEM Solve, Plastic \& Leather Prep or XXX Universal Surface Cleaner. Wipe clean in one direction with clean, lint-free cloth. Prime as per instructons.

Apply Guide Coat Black or Premium Powder Guide Coat to dried primer. Sand with P320 - P400 grit. Finish sanding with P600 grit.

Apply Texture Coating or Chip Guard as per instructions.

## PRODUGT LIST

## PREP

| Part | Product | Size |
| :--- | :--- | :--- |
| 38398 | Scuff \& Clean | $160 z$. Tube |
| 38373 | SEM Solve | 200 oz. Aerosol |



HIGH-BUILD PRIMER AEROSOLS

| Part | Color | Size |
| :--- | :--- | :--- |
| 42003 | Black | 20 oz. Aerosol |
| 42013 | Gray | 20 oz. Aerosol |
| 42023 | Beige | 20 oz . Aerosol |
| 42033 | Rose | 20 oz . Aerosol |
| 42043 | White | 20 oz . Aerosol |



GUIDE COAT

| Part | Product | Size |
| :--- | :--- | :--- |
| 38253 | Premium Powder Guide Coat | 16 oz. Aerosol |



## TEXTURE

| Part | Product | Size |
| :--- | :--- | :--- |
| 39853 | Texture Coating | 20 oz. Aerosol |
| 39793 | Heavy Texture Chip Guard | 20 oz. Aerosol |
| 39803 | Clear Chip Guard | 20 oz. Aerosol |
| 39813 | Satin Black Chip Guard | 20 oz. Aerosol |



## PAINT

| Part | Product | Size |
| :--- | :--- | :--- |
| 39101 | Bumper Coater - Black | Gallon |
| 39104 | Bumper Coater - Black | Quart |
| 39101-LV Low VOC Bumper Coater Black | Gallon |  |
| $39104-$ LV Low VOC Bumper Coater Black | Quart |  |
| Bumper Coater - 17 Colors |  |  |
|  | 16 oz. Aerosol |  |
|  | Factory Pack - 40 Colors | 16 oz. Aerosol |

[^0]
## PANEL \& RIVET BONDING Standario operating procedure



Apply $3 / 8^{\prime \prime}-1 / 2^{\prime \prime}$ bead of Dual-Mix ${ }^{\text {TM }}$ Multi-Purpose Panel Adhesive or Dual-Mix Weld-Bond Adhesive to both surfaces. Use enough material to completely fill the joint when parts are clamped. Tool with a spreader or acid brush. Cover all exposed bare metal.
(i) For smaller parts use Dual-Mix ${ }^{\text {TM }}$ Door Skin \& SMC Adhesive.

Clamp panel into place. Do not over clamp. Wipe away excess material.
(i) For maximum bond strength, surfaces must be mated during adhesive's working time.

Clamp panel in place. Install rivets per manufacturer's recommendations during adhesive's working time. Remove clamps after rivets have been installed. Wipe away excess material.
Remove spot welds with spot weld grinding. Remove damaged panel and straighten bent flanges with a hammer and dolly.

Dry fit all panels to ensure proper alignment. Drill holes for replacement rivets or mark locations of self-piercing rivets.

Clean with SEM Solve or XXX Universal
Surface Cleaner. Grind mating flanges with a P36 grit grinding disc at low speed for aggressive grind mark. Remove any adhesive or protective coatings.
(i) If rivet bonding, manufacturers may recommend leaving OEM e-coat on the surface of the new panel. If so, scuff with a red scuff pad.

## PRODUGT LIST



PREP

| Part | Product | Size |
| :--- | :--- | :--- |
| 38373 | SEM Solve | 20 oz. Aerosol |
| 77774 | XXX Universal Surface Cleaner | Quart |



ADHESIVE

| Part | Product | Size |
| :--- | :--- | :--- |
| 39337 |  <br> SMC Adhesive | 7 oz. Cartridge |
| 39537 | Dual-Mix Weld-Bond <br> Adhesive | 7 oz. Cartridge |
| 39747 | Dual-Mix Multi-Purpose <br> Panel Adhesive | 7 oz. Cartridge |

## 2K SEAM SEALING STANDARD OPERATING PROGEDURE



Bare Metal Surfaces: Sand with P80 grit. Blow off and tack clean to remove lint and dust. Re-clean with SEM Solve or XXX Universal Surface Cleaner.
Primed Surfaces: Sand primed surfaces with P400 grit or a gray scuff pad. Blow off and tack clean to remove lint and dust. Re-clean with SEM Solve or XXX Universal Surface Cleaner.

## Apply SEM 2K Seam Sealer.

Immediately smooth or tool Seam Sealer to match OEM texture.
(i) SEM 2K seam sealers can be applied direct-to-metal, over epoxy primer or 2 K urethane primer.
(i) Always apply over a primer when filling drip rails.

## Use Self Leveling Seam Sealer or

 High-Build Self Leveling Seam Sealer for applications where a flowable sealer is needed.(i) Keep tip submerged to minimize air bubbles.
(i) A heat gun can be used immediately after application to remove any air bubbles that become entrapped. With a steady motion, sweep the heat gun across surface at a distance of 2" - 6".
Use a Versa-Tip for applications where a wider bead is needed.
(i) Versa-Tips can be cut to the desired bead width and are compatable with both standard and self leveling SEM 2K Seam Sealers.

## PRODUGT LIST



PREP

| Part | Product | Size |
| :--- | :--- | :--- |
| 38373 | SEM Solve | 20 oz. Aerosol |
| 77774 | XXX Universal Surface Cleaner | Quart |



## APPLY

| Part | Product | Size |
| :--- | :--- | :--- |
| 39377 | Dual-Mix ${ }^{\text {TM }}$ Seam Sealer (Gray) 7 oz. Cartridge |  |
| 39477 | Dual-Mix Beige Seam Sealer | 7 oz. Cartridge |
| 40377 | Dual-Mix Heavy Bodied Black <br> Seam Sealer | 7 oz. Cartridge |
| 40477 | Dual-Mix Heavy Bodied White <br> Seam Sealer | 7 oz. Cartridge |
| 39387 | Dual-Mix Self Leveling <br> Seam Sealer (Gray) | 7 oz. Cartridge |
| 39777 | Dual-Mix High-Build Self <br> Leveling Seam Sealer (Gray) | 7 oz. Cartridge |
| 70070 | Versa-Tip | 6 Pack |

## SPRAYABLE SOUND DAMPENING STANDARD OPERATING PROGEDURE



Clean with SEM Solve or XXX Universal Surface Cleaner. Wipe clean in one direction with clean, lint-free cloth.

Sand primer with P180 grit. Sand bare metal with P80 grit. Blow off and tack clean. Re-clean with SEM Solve or XXX Universal Surface Cleaner. Wipe clean in one direction with clean, lint-free cloth.

## Place Dual-Mix ${ }^{\text {TM }}$ Sound \& Seal

 Sprayable Coating into Universal Pneumatic Applicator. Equalize cartridge until sides dispense equally. Attach Quick Spray System to cartridge.! Do not cut static mixer tip.

Apply to necessary areas, duplicating existing texture in one coat.
(!) Do not apply over self etching primer.
(i) To acheive various textures, modify the air pressure, spray distance and spray tip.

## ADDITIONAL 2K SOUND DAMPENING PRODUGTS



## DUAL-MIX CARTRIDGES

| Part | Product | Size |
| :--- | :--- | :--- |
| 39357 | Flexible Urethane Foam | 7 oz. Cartridge |
| 39977 | Panel Vibration Control Material | 7 oz. Cartridge |
| 39997 | Rigid Urethane Foam | 7 oz. Cartridge |

## PRODUGT LIST

APPLY

| Part | Product | Size |
| :--- | :--- | :--- |
| 40977 | Dual-Mix Sound \& Seal | 7 oz. Cartridge |
|  | Sprayable Coating |  |



## EQUIPMENT

Part Product
70039 Universal Pneumatic Applicator
70100 Quick Spray System Starter Kit

[^1]
## PLASTIC TAB REPAIR StaNdard operating procedure



Clean front and back with Scuff \& Clean and gray scuff pad. Rinse with water and dry with clean, lint-free cloth. Clean front and back with SEM Solve, Plastic \& Leather Prep or XXX Universal Surface Cleaner. Wipe clean in one direction with dry, lint-free cloth.

Grind repair on both sides at low RPM or by hand with P36 grit disc. Drill 1/8" holes in repair area to help "lock in" the repair material. Blow off surface.
(!) Do not grind too fast and cause plastic to melt.

## (i) For TPO, EPDM, PP and similar plastics, apply Adhesion Promoter as per instructions.

Cut enough Plastic Repair Contouring Tape to fold around both sides of the tab. Use permanent marker to trace a good tab for a template.

Apply Dual-Mix ${ }^{\text {TM }}$ Quick Set Adhesive to the mesh side of tape. While wet, fold the tape around torn or missing tab. After cool down, remove Plastic Repair Contouring Tape release film.

Grind the tab back to its original shape and size. Re-drill the bolt hole.

## PRODUGT LIST



## PREP

| Part | Product | Size |
| :--- | :--- | :--- |
| 38398 | Scuff \& Clean | 16 oz. Tube |
| 38373 | SEM Solve | 20 oz. Aerosol |
| 77723 | XXX Adhesion Promoter | 16 oz. Aerosol |



APPLICATION

| Part | Product | Size |
| :--- | :--- | :--- |
| 70007 | Plastic Repair Contouring Tape | 15' Roll |
| 40202 | Dual-Mix Quick Set 20 | 1.7 oz. Cartridge |
| 40207 | Dual-Mix Quick Set 20 | 7 oz. Cartridge |
| 40502 | Dual-Mix Quick Set 50 | 1.7 oz. Cartridge |
| 40507 | Dual-Mix Quick Set 50 | 7 oz. Cartridge |
| 41807 | Dual-Mix Quick Set 180 | 7 oz. Cartridge |

## QUIGK SPRAY SYSTEM (FOR DUPLICATING OEM TEXTURES)

Our Quick Spray System allows users to duplicate OEM seam sealer textures while utilizing the 2 K technology of SEM Seam Sealers.

## NOTE

70039 Universal Pneumatic Applicator is not included in the
70100 kit. Only use the Quick Spray System with specified SEM products.

USE ONLY WITH

- 39377 Seam Sealer
- 39477 Beige Seam Sealer
- 40377 Heavy Bodied Black Seam Sealer
- 40477 Heavy Bodied White Seam Sealer
- 40977 Sound \& Seal Sprayable Coating

USE FOR
Trunks, Doors, Wheel Wells, Etc.


### 1.7 OZ. AGGESSORIES (40202 QUICK SET 20 \& 40502 QUICK SET 50)

70019
1.7 oz Manual Applicator

This is an easy loading applicator for dispensing 1.7 oz. Dual-Mix cartridges. Material is dispensed quickly and consistently.

70020 (6 Pack) 70021 (50 Pack)
1.7 oz. Turbo

Mixers

These mixers ensure proper mix ratios for 1.7 oz . Dual-Mix cartridges.

## 7 0Z. APPLICATORS \& AGGESSORIES

71119
Universal
Manual
Applicator

A sturdy applicator for DIYers and pros alike. It dispenses material quickly and consistently and it's easy to use because of its ergonomic design. It accepts $2: 1$ and 1:1 cartridges.


70039
Universal Pneumatic Applicator

This applicator is a must-have in body shops. It delivers material quickly and consistently. The lightweight and balanced design means less fatigue for the technician. It accepts 2:1 and 1:1 cartridges.


70011 (6 Pack) 70012 (50 Pack) Integral Nut Square Static Mixers

The Integral Nut Square Static Mixers ensure proper mix ratios for the 7 oz. Dual-Mix ${ }^{\text {TM }}$ cartridges.

70070 (6 Pack)
Versa-Tip

Versa-Tips allow you to duplicate OEM sealers. Cut them to dispense product from $0.5^{\prime \prime}-1.5^{\prime \prime}$ wide.

70103 (6 Pack) Quick Spray System Static Mixers

Quick Spray System Static Mixers ensure proper mix ratios. Use with the Quick Spray System.


## PAGKEDBYLTEAS Ginn frutal

WE ARE AMERICAN MANUFACTURING
The employee owners of SEM engineer best in class products to reduce repair times, steps, and waste in the collision center. From intelligent product design to technical support, the "built better" promise is engrained in our DNA.

## OEM TESTED. OEM TRUSTED. OEM RECOMMENDED. FOREVER WARRANTED.


[^0]:    (i)

    CHECK LOCAL VOC REGULATIONS TO ENSURE COMPLIANCE OF ALL PRODUCTS IN YOUR AREA. ALWAYS WEAR OSHA REQUIRED (PPE) PERSONAL PROTECTION EQUIPMENT TO ENSURE YOUR SAFETY.

[^1]:    (i)

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