

Technical Data Sheet

#1738 Panel Bond Adhesive is a 90 minute, multi-use glass sphere filled epoxy adhesive that provides a superior bond and seals that panel being bonded. The glass spheres in the product assist in obtaining the proper bond line thickness. #1738 is suitable for all non-structural bonding applications of metal, aluminum, fiberglass and SMC, including door skins, roof skins, fenders, quarter panels, cab corners, and medium and large sized panels.

SUITABLE SUBSTRATES

Substrate		Substrate		Substrate	
Bare Steel	✓	Raw Plastic - Rigid (SMC, BMC) +	✓	Primer - Self-Etching	
Bare Galvanized	✓	Raw Plastic - Flexible (ABD, PPO) +	✓	Primer - 1K	
Bare Aluminum	✓	Raw Plastic - Soft (PUR) +	✓	Primer - 2K	
OEM E-Coat**		Plastic Part - Primed ++		OEM Finish & Old Paint Work - Reversible	
Fiberglass/SMC Gel Coat	✓	Body Filler		OEM Finish & Old Paint Work - Non-Reversible	

** Aftermarket E-coat must be solvent tested with Transtar Urethane Grade Reducers 6700 or 6700-F Series in an inconspicuous spot before application of new coating.

+ Due to the diverse nature of plastics, always test plastic substrate for acceptable adhesion. Adhesion promoter maybe required for proper adhesion.

++ Test pre-primed panels with acetone or paint thinner. If coating fails, strip panel to bare plastic & follow SOP 251 for Raw Plastic.

MIXING



By Volume: 2:1

FLASH TIMES/DRY TIMES



Work time: 85-90 minutes

Paint time: 1 hour

Declamp time: 4.5-5 hours

Sand time: 4.5-5 hours

Full cure time: 36-48 hours

SURFACE PREPARATION



Clean with SCAT 6311, Speedi SCAT 6321 or Aqua SCAT 2 1391/1394. Sand with 80 grit.

* For more information on surface prep and application refer to next page.

LIMITATIONS & PRECAUTIONS

- For use only by professional, trained painters. Not for sale to or use by the general public.
- Before use, read and follow all TDS, label and SDS precautions.
- See next page and Addendum B for more detailed production application.

Visit www.tat-co.com to assure you are using most updated TDS, to view in other languages and for links to Standard Operating Procedures (SOPs).

TRANSTAR AUTOBODY TECHNOLOGIES • 2040 HEISERMAN DRIVE, BRIGHTON, MI 48114 • (800) 824-2843

FAX (800) 477-7923 • EMAIL: info@tat-co.com

Technical Data Sheet

SURFACE PREPARATION

Cleaning & Sanding: Remove paint and rust from surface with 36 - 80 grit sand paper. Straighten all metal and “pre-fit” the replacement part. Wash area with soap and water and wipe dry. Clean repair area with SCAT 6311, Speedi SCAT 6321 or Aqua SCAT 2 1391/1394 and wipe dry.

CARTRIDGE PREPARATION & APPLICATION

Cartridge Preparation: Place cartridge in dispensing gun, purge cartridge, attach mixer and purge cartridge to ensure product mixed properly (minimum of 1 mixer length).

Application: Apply 3/16 - 1/4” bead of adhesive to the area to be bonded. On metal and aluminum spread the adhesive over the entire bare metal bond line area on both the car and replacement part to ensure proper corrosion protection. Clamp the panel into position and tool any extra adhesive to provide a seal along outside edge of bonded panel. If bonding metal, weld appropriate areas while the adhesive is still wet. Wipe off any additional squeezed out material from plug holes and weld areas before welding. Let panel cure. Cure time can be accelerated with heat, cure for 1 hour @ 150°F (66°C) or for 45 minutes @ 200°F (93°C)*. While curing, reapply anti-corrosion material. (Clamps may be removed from the panel in 4.5 - 5 hours at 72°F (22°C). If the temperature is lower or there is tension on the part, additional cure time is required. Note: For detailed directions with photos, please see Addendum B.

Removal of Part: To break the bond, the adhesive can be heated to 250 - 300°F (120 - 150°C) but don’t exceed 325°F (165°C). The adhesive will not reflow but will soften enough to break the bond.

*NOTE: Do not exceed 230°F (110°C) while curing.

PRODUCT SPECIFICATIONS

Color: White/Gray	Shelf Life: 1 year
RTU Solids: 100%	Lap Sheer Strength: Steel: 2902 psi
Size: 7 fl oz (207 ml)	Shore D Hardness: 77
Meets OEM Specifications: GM = 1886 psi Ford = 1800 psi Chrysler Corp = 2000psi	

REGULATORY

Category: Adhesive			
VOC Actual	<.46#/gal (<55 g/l)	Weight % of Exempt Compounds	0
VOC Regulatory	<.46#/gal (<55 g/l)	Volume % of Exempt Compounds	0
Weight % of Volatiles	<3.75%	Density of Material #/gal	Part A - 11.3-12.1#/gal Part B - 12.5-13.4#/gal
Weight % of Water	0		

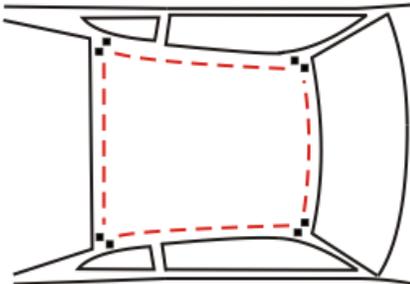
Technical Data Sheet

ADDITIONAL APPLICATION INFORMATION

Panel Bonding Adhesives may be used to bond metal, aluminum, fiberglass and SMC, including door skins, roof skins, fenders, quarter panels, cab corners, and small & medium & large sized panels. Choose the appropriate adhesive depending on the amount or work time needed. Do not use on structural components such as frame rails, pillars, core supports or rocker panels.

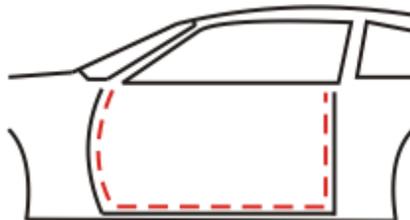
1. Remove all paint, primer, corrosion and rust from the surface to be bonded using 36 - 50 grit abrasive disc. When preparing aluminum surfaces use 80 grit abrasive disc.
2. Straighten all metal and clamp equipment panels for proper alignment and fit. There should be no tension on the replacement panels.
3. Remove panels from vehicle.
4. Clean areas to be bonded with SCAT 6311, Speedi SCAT 6321 or Aqua SCAT 1391/1394. Other cleaner may leave a film and prevent optimum bonding.
5. Place cartridge in dispensing gun, purge cartridge, attach mixer and purge cartridge to ensure product mixed properly (minimum of 1 mixer length).
6. Apply 3/16 - 1/4" bead of adhesive to the area to be bonded. On metal and aluminum spread the adhesive over the entire bare metal bond line area on both the car and replacement part to ensure proper corrosion protection
7. Clamp the panel into position and tool any extra adhesive to provide a seal along outside edge of bonded panel. Do not over-tighten.
8. If bonding metal, weld appropriate areas while the adhesive is still wet. Apply Weld Through Primer 4353 per the product instructions to the weld area only. Clean 4353 overspray areas with Acry Solvent 9783/9784 or 6700-F Series Zero VOC Urethane Grade Reducer where panel bonding adhesive will be used. Note: Do not apply panel bonding adhesive material where Weld Through Primer exists.
9. Let panel cure. Cure time can be accelerated with heat. While curing reapply anti-corrosion material. (Clamps may be removed from the panel per times on the technical datasheet 72°F (22°C). If the temperature is lower or there is tension on the part, additional cure time is required.

ROOF PANELS



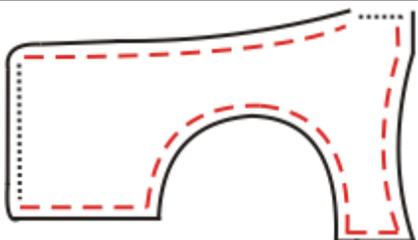
Follow vehicle manufacturer's replacement procedures to prepare the service panel for replacement. Leave a space of two inches at each of the four corners to allow for two plug welds or a two inch lap weld. Use adhesive around entire perimeter of the roof and on the roof bows if applicable. Follow directions for surface preparation and applying adhesive. NOTE: On extended length van roof panels, 2 - 3 extra plug welds should be placed evenly in each side of the roof panel.

DOOR SKINS



Follow vehicle manufacturer's replacement procedures to prepare the door frame and service panel for replacement. Adhesive may be used on the entire replacement panel. Follow directions for surface preparation and applying adhesive.

QUARTER PANELS



Follow vehicle manufacturer's replacement procedures to prepare the service panel for replacement. Follow vehicle manufacturer's replacement procedures for welding the joint between the rear body and the quarter panel, as well as the sail panel. Adhesive can be used on all other areas, lower panel, wheel opening, door jamb, and trunk drip rail. Follow directions for surface preparation and applying adhesive.

Adhesive Area - - - - -
 Welding Area • • • • •