# **LORD Fusor® 117 Plastic to Metal Cross Bonding** Adhesive (Slow)

LORD Fusor® 117 plastic to metal cross bonding adhesive is formulated to bond plastics such as SMC, carbon fiber, Metton®, fiberglass, ABS, polycarbonate, acrylic, etc., to bare metal. It can also be used for plastic-toplastic bonding and metal-to-metal bonding.

#### Usage

#### **Metal Preparation**

- 1. Grind the surface of all mating flanges (not greater than 1 inch [25.4 mm]) to which LORD Fusor cross bonding adhesive will be applied. Make sure to remove any adhesive, e-coating, corrosion protection or galvanized coating. If metal has a pewter appearance, then not all of the galvanized coating has been removed. The metal should be shiny in appearance. If sectioning, the seam will need a 10° bevel for a smooth transition into the existing panel (see Illustration A).
- 2. Pre-fit the new panel to ensure proper alignment.

#### Plastic Preparation

- 1. Clean the area to be bonded with plastic & rubber cleaner.
- 2. Sand the bond areas with 80-grit sandpaper.

#### **Product Preparation**

- 1. Remove the cap and nose plug from the LORD Fusor cross bonding adhesive.
- 2. Insert the LORD Fusor two-component adhesive cartridge into the dispensing gun.
- 3. Squeeze a small amount of LORD Fusor cross bonding adhesive from each side of the cartridge. This will level the plungers and ensure that adhesive is coming out of both sides of the cartridge.
- 4. Attach the mixing tip and dispense a small amount of material, which is about the width and length of the mixer, to verify that the adhesive is evenly mixed and that the color is consistent.

#### **Application**

- 1. Apply a 3/8 to 1/2 inch (9.5 to 12.7 mm) bead of LORD Fusor cross bonding adhesive to the prepared mating surfaces (see Illustration B).
- 2. Secure the panel using clamps. Apply screws or rivets in hard-to-clamp areas. After the panel has been positioned, do not pull it away from the vehicle. If repositioning is necessary, slide the panels against one another. This maintains contact between the two surfaces.

3. Allow adhesive to cure 1 to 1-1/2 hours before unclamping. Remove all excess adhesive from the sectioned area. It is critical to check the sectioned area for a smooth transition to prevent ghost-lines after painting. If necessary, additional grinding can be done to ensure a smooth seam. Skim-coat the section seam with fiber-filled body filler, rough sand, and blend with conventional body filler. Wait 8 hours before painting and baking.

- 4. The adhesive will be a little "tacky" on the surface after full cure. This is a normal property of the adhesive.
- 5. Remove the mixing tip after usage and reinstall the nose plug and cap to avoid adhesive cross contamination.

#### **Technical Data**

Work Time, minutes @ 70°F (21°C) 40-50 Full Cure Strength, hours @ 70°F (21°C) 8 Handling Strength, hours @ 70°F (21°C) 2-1/2 to 3 Part Paintability, hours @ 70°F (21°C) 8 Lap Shear Strength, psi (MPa)

**ASTM D 1002** 

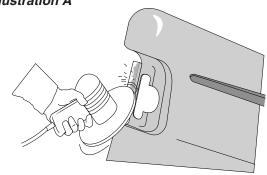
Cold Rolled Steel 2870 (19.8); cohesive failure SMC 622 (4.3); fiber tear

### **Cautionary Information**

Before using this or any LORD product, refer to the Material Safety Data Sheet (MSDS) and label for safe use and handling instructions.

For industrial/commercial use only. Must be applied by trained personnel only. Not to be used in household applications. Not for consumer use.





Metton is a trademark of Metton America, Inc.



## LORD USER INSTRUCTIONS

#### **LORD Fusor Repair Products Lifetime Guarantee\***

LORD Corporation guarantees to the original purchaser that LORD Fusor® Repair Products (adhesives, primers, seam sealers and foams only), when used in strict accordance with LORD Corporation's application and use instructions, will provide a durable bond for the life of the vehicle. This Guarantee covers actual costs incurred by the installer for labor, replacement parts and materials, and for the reasonable cost of loss of use of the vehicle during the period of replacement. THIS GUARANTEE IN NOT APPLICABLE TO APPLICATION EQUIPMENT, INCLUDING BUT NOT LIMITED TO DISPENSING EQUIPMENT, CARTRIDGE TIPS AND ACCESSORIES.

THIS EXPRESS WARRANTY IS MADE IN LIEU OF AND EXCLUDES ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, BY OPERATION OF LAW OR OTHERWISE, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

LORD Corporation shall not be liable under any circumstance for any loss, damage, or expense directly or indirectly arising from the application and use of LORD Fusor Products sold hereunder or from any other cause, and LORD Corporation shall not be liable under any circumstances for consequential or incidental damages. LORD CORPORATION'S LIABILITY FOR BREACH OF WARRANTY HEREUNDER IS IN ALL INSTANCES LIMITED SOLELY AND EXCLUSIVELY TO THE REASONABLE COSTS OF REPAIR AND/OR REPLACEMENT OF THE BONDED METAL COMPONENTS OF THE VEHICLE.

This Lifetime Guarantee shall only apply to the above listed LORD Fusor products sold by LORD Corporation on or after January 1, 2001.

LORD Fusor Metal Bonding Adhesives shall only be used for bonding metal to metal (steel or aluminum) in full or partial panel replacements of:

- door skins
- roof skins
- other outer body sheet metal

- quarter panels
- rear body panels

LORD Fusor products SHALL NOT be used for bonding structural components such as rails, pillars, rocker panels, core supports, etc. If in doubt as to what is a structural component, contact the vehicle manufacturer. If you have any questions

or need to receive proper use instructions, contact the LORD Customer Support Center at +1 877 ASK LORD (275 5673) or visit www.lord.com.

To comply with the requirements of the LORD Fusor Repair Products Lifetime Guarantee, attach a copy of this completed page to the repair record, and retain with your files:

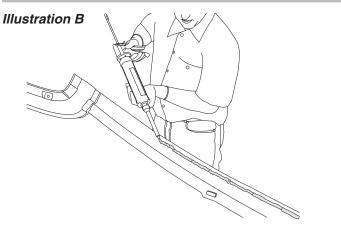
Vehicle Make/Model:

Vehicle Identification Number:

LORD Fusor Product(s) Used for Repair:

Lot Number(s) on Cartridge(s) Used for Repair:

\*This guarantee is void if adhesive is used after the date printed on the cartridge label







Instructions contained in this document need to be followed to qualify for the LORD Fusor Lifetime Guarantee. Values stated in these instructions represent typical values as not all tests are run on each lot of material produced. For formalized product specifications for specific product end uses, contact the Customer Support Center.

Information provided herein is based upon tests believed to be reliable. In as much as LORD Corporation has no control over the manner in which others may use this information, it does not guarantee the results to be obtained. In addition, LORD Corporation does not guarantee the performance of the product or the results obtained from the use of the product or this information where the product has been repackaged by any third party, including but not limited to any product end-user. Nor does the company make any express or implied warranty of merchantability or fitness for a particular purpose concerning the effects or results of such use.

Fusor and "Ask Us How" are trademarks of LORD Corporation or one of its subsidiaries. I-CAR and Industry Training Alliance are registered trademarks of Inter-Industry Conference on Auto Collision Repair. ASE is a registered trademark of the National Institute for Automotive Service Excellence.

LORD provides valuable expertise in adhesives and coatings, vibration and motion control, and magnetically responsive technologies. Our people work in collaboration with our customers to help them increase the value of their products. Innovative and responsive in an ever-changing marketplace, we are focused on providing solutions for our customers worldwide . . . Ask Us How.

LORD Corporation World Headquarters

111 Lord Drive Cary, NC 27511-7923

Customer Support Center (in United States & Canada)

+1 877 ASK LORD (275 5673)

www.lord.com

