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Automotive Specialty Chemicals

PANEL BONDER 3500 --Stock No. CE-PB

Panel Bonding Guide General Repair Procedures

Introduction: Panel Bonder 3500 is a two-component structural epoxy cartridge system intended for use in panel bonding. Use on steel, aluminum, SMC and FRP. This document is intended as a general guide to making a successful repair. For detailed guidelines, refer to the specific OEM repair procedure. NOT to be used for bonding structural components.

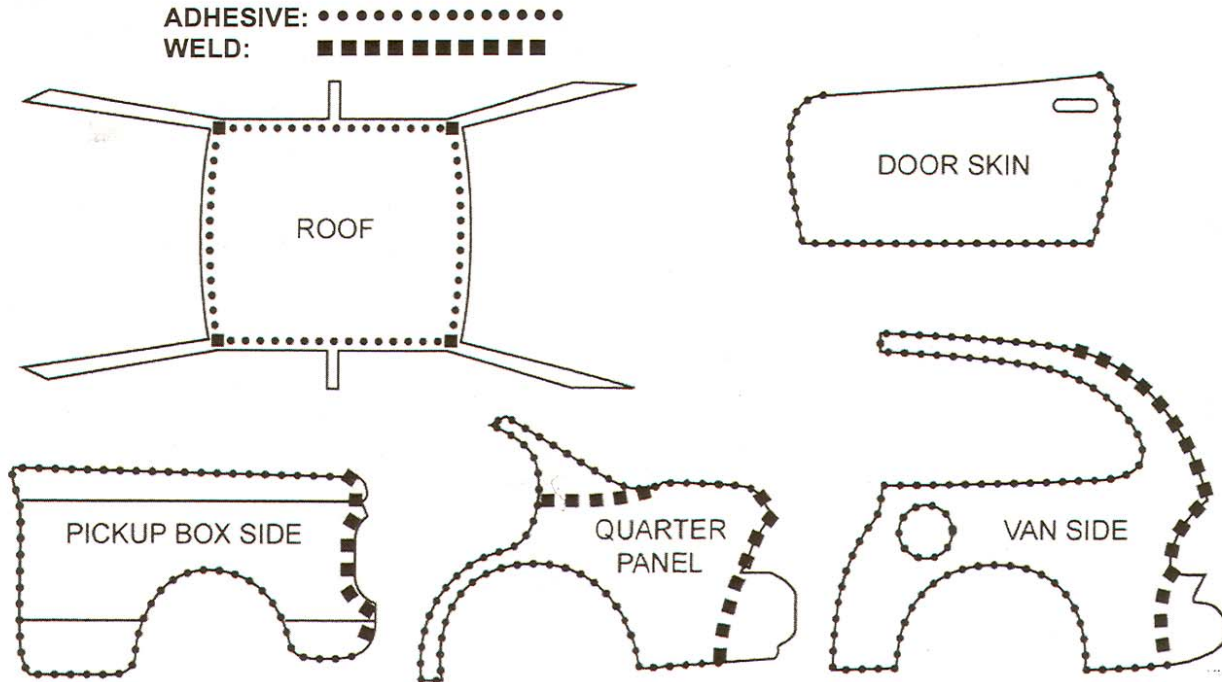
General Information: These 2:1 cartridges are available in a convenient side by side delivery system in a 220 ml size. The larger chamber contains a black epoxy based resin; the smaller side contains a beige catalyst system. Refer to the MSDS documents for additional information on safety and handling before use.

Crest's Epoxy Cartridge System is sold as a kit and performance has been verified using the kit contents. Do not attempt to use other mixers, for example, in the application of this product. Additional mixers (Stock No. GPMN) are available.

Procedures:

1. Remove damaged panel and grind all paint, rust, E-coat and galvanized from the surfaces to be bonded (including replacement panel), using either a 36 or 50 grit abrasive disc, making sure to grind all areas to be bonded to the bare metal. When sectioning, the seam will need to be adequately beveled to assure a smooth transition to the existing panel so as to prevent ghost lines when painted.
2. Blow off all surfaces to be bonded with clean, dry air.
3. Straighten all metal, align replacement panel and dry clamp in place to insure proper fit.
4. Remove the part from the vehicle, clean surfaces with Crest Acry-Solv (AAS or BSA) and allow to dry.
5. Remove protective cover from nozzle end of Panel Bonder 3500. Insert flat screwdriver in top slot of plug and pry off to expose openings.
6. Load cartridge into Stock No. GP-B Applicator Gun. Prior to attaching static mixer nozzle, dispense a small amount of adhesive to be sure that both sides flow evenly.
7. Install static mixer, Stock No. GP-MN. There is no need to cut the tip, due to excellent flow characteristics of this product. Dispense 1-2" of material and dispose, observing for desired mix and delivery.
8. Apply a 3/8" - 1/2" bead of adhesive to all areas to be bonded, then tool the adhesive evenly, making sure to cover all surfaces of bare metal.
9. Align the parts to be bonded and apply even pressure. After the panel has been positioned, do not pull it from the vehicle. Instead, if repositioning is required, slide the panels against one another insuring no air is trapped in the bond line.
10. Clamp firmly in place. NOTE: Panel Bonder 3500 incorporates glass bead technology to assure proper adhesive gap, reducing problems encountered by overclamping.
11. Install screws or rivets in "hard to clamp" areas.
12. For future use of the adhesive, after removing from the gun, either leave the mixing tip on or replace the original plug, removed in Step 5. Store the partially used cartridge on its side for future uses.
13. Tool the adhesive squeeze-out into the seam as you would with any traditional seam sealer.
14. Proceed with welding where required and in accordance with OEM recommendations. Exercise caution when welding as the adhesive can be combustible; we suggest welds to be at least 2 inches from the adhesive. Crest Weld Thru Primer (ASW, BPW) is recommended for corrosion protection for welded areas only.
15. Clamp a minimum of 4 hours at 74°F. Longer clamp times may be necessary if lower temperatures are experienced. Clamp times may be accelerated by use of a heat gun or lamp.
16. Remove any excess adhesive from the sectioned area (if applicable). Additional grinding may be needed to assure a smooth seam. Finish seam with Crest Rigid Red Epoxy (TER) or Shark Bite body filler (BSB) followed by Skim Coat Body Glaze (BSC). Allow proper dry time.
17. Sand, finish, and paint vehicle as needed.
18. Vehicle may be returned to service after 24 hours.

AREAS OF APPLICATION / GENERAL GUIDELINES



Warranty

Crest Industries, Inc. ("Crest") warrants to the original purchaser ("Purchaser") that its Panel Bonder 3500, Stock No. CE-PB ("Product"), will, when applied in accordance with the Crest Panel Bonding Guide (on the backside of this warranty statement), provide a bond for the life of the vehicle. The foregoing is Crest's sole and exclusive warranty, and all other warranties, express or implied, including the implied warranties of merchantability and fitness for a particular purpose, are excluded and disclaimed by Crest.

If this warranty is breached and the other conditions set forth herein have been met, Crest shall, as its sole and exclusive liability and Purchaser's sole and exclusive remedy, reimburse Purchaser for the reasonable costs of repair and/or replacement of the bonded components of the vehicle and loss of use of the vehicle. Except as provided above, Crest shall not be liable under any circumstance for any loss, damage, or expense directly or indirectly arising from the application and use of Products, and Crest shall not be liable for consequential or incidental damages.

The Product should only be used for bonding steel, aluminum, SMC or FRP in full or partial panel replacements as described on the Panel Bonding Guide on the backside of this warranty statement. The Products must not be used for bonding structural components.

This warranty is only valid if claim has been filed within 20 days of the discovery of the purported breach and the Warranty registration form set forth below has been filed with Crest within 60 days of application of the Products. Warranty registration forms should be sent to:

Crest Industries, Inc.
 1337 King Road
 Trenton, MI 48183
 Attention: Warranty Claims Manager

WARRANTY REGISTRATION FORM

Repair Order # _____ Make/Model/Year _____ Repair Technician _____ Name of Shop _____ Type of Repair _____	Date _____ VIN# _____ Crest Product Used _____ Cartridge Lot No. _____ Date Performed _____
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