

# METAL PANEL BOND AND WELD BOND

#### **BEST PRACTICE**

#### **Panel Removal**

Remove the old panel and straighten the substrate to be bonded. **Objective:** Ensure a good fit for structural integrity and appearance.



#### **Surface Cleaning**

Clean the bond line on both panels with Panel and Adhesive Cleaner, dry bond lines with a clean wipe.

**Objective:** Eliminate contaminates from the bonding area.



PRODUCT	PART #
Panel and Adhesive Cleaner	076607- <b>82780</b>

#### **RECOMMENDED PRODUCTS**

## Grinding

Grind the bond line on the vehicle and new panel with a 60 or 80 grit disc.

**Objective:** To remove paint and corrosion and to establish a "tooth" for the adhesive.

If welding will not be done with a resistance welder or if using epoxy, then spray Zinc Rich Weld-Through Primer where the panel will be welded. Do not apply adhesive over the weld-through primer. Remove any excess primer where a top coat will be applied.

**Objective:** Corrosion protection for areas to be welded.



PRODUCT	PART #
3" Blaze Speed-Lok TR 36 grit	662611- <b>62328</b>
3" TR Back-up Pad	662610- <b>55105</b>
Zinc Rich Weld-Through Primer	076607- <b>82781</b>

**Dry Fit** Dry fit new skin or panel. **Objective:** To ensure proper fit.



#### **Adhesive Application**

Apply adhesive along the entire bond line on the vehicle and panel, brush out adhesive where necessary to cover all bare metal.

#### *Note:* Do not apply adhesive where the Zinc Rich Weld-Through has been applied.

**Objective:** Ensure 100% coverage for strength and corrosion protection.



SPEEDGRIP PANEL BONDING	PART #
Acrylic Adhesive – 45 min	636425- <b>06419</b>
Acrylic Adhesive – 75 min	636425- <b>06420</b>
Epoxy Adhesive - 30 min	636425- <b>06418</b>
Epoxy Adhesive - 90 min	636425- <b>06421</b>
Manual Applicator Gun	636425- <b>41400</b>
Mixing Tips – 24 element (green)	636425- <b>04628</b>

### **Re-apply Adhesive**

Re-apply a bead that is one-half the width of the bond line on the panel where material has already been brushed out then fit the panel into place.

*Note:* Once the panels are glued together, they should not be pulled apart as this



will break the bond strength. However, they can be moved in a sliding action as long as they maintain contact with one another.

**Objective:** To guarantee 100% contact between panels and adhesive.

## Clamping

Clamp or screw panel in place for a traditional bond. All products listed have glass beads in them to prevent over clamping. You can use a resistance welder to weld through the Acrylic Metal Bonders while they are in a wet or cured state. You can also use a resistance welder with the Epoxy Panel Bonder, but only while it is in a wet state.

If you are using any other type of welder, do NOT weld through any adhesive. Also do NOT weld within 2" of the adhesive.

After the recommended clamp time has passed, remove the clamps. Any excess that needs to be removed can be done with a Rapid Strip discs.

**Note:** The full cure time (which is different than the clamp time) for the Acrylic Metal Bonders is 8 hours. The full cure time for the Epoxy Panel Bonder is 24 hours. **Objective:** Allow adhesive to build appropriate tensile strength for the bond between the vehicle and the panel.

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BLAZE RAPID STRIP	PART #
4" TR+ Disc	666233- <b>31054</b>
3" Speed-Lok TR Disc	666233- <b>31053</b>
2" Speed-Lok TR Disc	666233- <b>31051</b>
4" TR+ Back-Up Pad	636425- <b>55106</b>
3" Speed-Lok TR Back-Up Pad	666233- <b>55105</b>
2" Speed-Lok TR Back-Up Pad	666233- <b>55103</b>





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BONDLINE

WELDING LINE

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