

mixing tip and dispense a mixing tip length of adhesive to make sure of a correct mix ratio.
Material: Metal Bonding Adhesive / TA-1, TA-1-B, 3M[®], 08115, LORD Fusor[®] 108B

11. **NOTE:** *Welding can be carried out anytime during the adhesive curing process, or after the adhesive is fully cured. Welder settings will vary when welding through wet adhesive versus welding through fully cured adhesive. Refer to welder manufacturer's recommended settings for welding through fully cured adhesive. It is recommended to place a shunt weld in an area with no adhesive to make sure of conductivity, particularly when welding through fully cured adhesive.*

NOTE: *Refer to the product label for handling and preparation instructions.*

Create a test sample.

12. Prepare the metal and adhesive as described. Apply a 6 mm (0.2362 in) - 9 mm (0.3543 in) bead of adhesive and weld the sample.
Use the General Equipment: Resistance Spotwelding Equipment
13. Place the welded sample in a vice and carry out destructive weld tests by peeling the scrap metal apart using large lock-type pliers. Measure the weld nugget to determine that the nugget meets Ford weld nugget requirements. If the weld nugget does not meet required size, adjust welder settings until the correct weld nugget size is achieved.
Refer to: Specifications (501-25 Body Repairs - General Information, Specifications).
14. Apply a 6 mm (0.2362 in) - 9 mm (0.3543 in) bead of adhesive to the vehicle prepared flange surface.
15. Place the service part(s) in the correct position on the vehicle.
16. When positioned, do not pull the component away from the vehicle. If repositioning is necessary, slide the service part(s). This will make sure of correct contact between the components and adhesive.
17. Clamp evenly and tightly. The adhesive contains glass beads which will prevent over-clamping the component.
18. **NOTE:** *Refer to the product label for cure times and handling instructions. Clamps may be removed immediately after the component is welded.*

Wipe excess adhesive from the panel before it cures.

19. **NOTE:** *The ends of welding clamps should be insulated on the ends using tape or similar material when welding is carried out.*

Complete the spot welding process following Ford recommendations and welder manufacturer procedures and settings.

Refer to: Specifications (501-25 Body Repairs - General Information, Specifications).

Use the General Equipment: Resistance Spotwelding Equipment

20. Finish any cosmetic section seams with fiber-filled body filler. Rough sand the filler, apply conventional body filler after the adhesive cures and block-sand the area.
21. Mix and apply primer surfacer per Ford-approved paint recommendations.
22. Seal wherever a cosmetic seam sealer is required.
Material: Seam Sealer / TA-2-B, 3M[®], 08308, LORD Fusor[®] 805DTM
23. Refinish using a Ford approved paint system.
24. Refer to: Corrosion Prevention (501-25 Body Repairs - General Information, General Procedures).
Material: ValuGard[®], Premium Undercoating / VG101, VG101A
Material: ValuGard[®], Rust Inhibitor / VG104, VG104A

Repair

NOTE: *Weld Bonding - Metal Inert Gas (MIG) Welding Method*

1. **WARNING:** Before beginning any service procedure in this section, REFER to Safety Warnings in section 100-00 General Information. Failure to follow this instruction may result in serious personal injury.

Refer to: Body Repair Health and Safety and General Precautions (100-00 General Information, Description and Operation).

2. Verify the vehicle is dimensionally correct on a frame machine. Straighten if necessary.
3. Remove damaged panels. Remove only large portions of the damaged panel. Avoid cutting into mating flanges or adjacent parts.
Use the General Equipment: Air Body Saw
Use the General Equipment: Plasma Cutter
4. Drill out the spot welds and remove the remaining portions of the panel to be replaced.