

## ALUMINUM CORROSION - SERVICE TIP

### TECHNICAL SERVICE BULLETIN

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FORD: 2000-2004 Crown Victoria, Taurus, Expedition, F-150, Ranger; 2000-2005 Explorer

LINCOLN: 2000-2004 LS, Town Car, Navigator

MERCURY: 2000-2004 Grand Marquis, Sable; 2000-2005 Mountaineer

## DESCRIPTION

### ALUMINUM CORROSION - SERVICE TIP

## ISSUE

Some vehicles may exhibit a bubbling or blistering under the paint on aluminum body parts. This is due to iron contamination of the aluminum panel.

## ACTION

This TSB provides service tips and procedures, outlining methods to properly prepare and protect aluminum body parts from cross contamination.

## BACKGROUND

Ford's Scientific Research Laboratory has performed a number of tests on vehicle body parts returned for corrosion related concerns. Testing has revealed that the aluminum corrosion was caused by iron particles working their way into the aluminum body part, prior to it being painted.

## SERVICE TIPS AND PROCEDURE

When repairing a vehicle for corrosion or collision damage, it is essential that extreme care be taken to cover and protect all aluminum parts to prevent cross metal contamination. Areas in a shop where metal work is performed should be sectioned off, using at the very least curtain walls, to prevent metal dust migration. Cross contamination can also occur through the use of metal working tools (hammers, dolly's, picks, grinding wheels, etc.). Tools used for aluminum repairs should be kept separate, and not used to repair other metals. Wire brushes used on aluminum should be made of stainless steel.

**NOTE: THIS PROCEDURE SHOULD ONLY BE USED ON NON-PERFORATED METAL. REVIEW WARRANTY AND POLICY MANUAL FOR VEHICLE WITH PERFORATED METAL.**

**NOTE: READ THIS PROCEDURE COMPLETELY BEFORE PERFORMING ANY SERVICE.**

1. Corrosion should be removed by blasting. Use an aggressive blasting material, such as acrylic (salt grain size).
2. Use a DA sander with 180 grit paper backed abrasive. Only sand and featheredge the damaged area.
3. Mix and apply Ford approved epoxy primer, per the manufacturer's label instructions. Bake at 140° F (60° C), or use an infrared lamp for curing.
4. If necessary, mix and apply two-part polyester filler to a slight over crown. Allow polyester filler to cure 20-30 minutes, or mix and apply spray polyester filler two-three (2-3) coats as necessary. Allow to cure per manufacturer's label instructions.
5. Hand-sand the repair area with 80 grit sand paper to remove excess filler.
6. Finish-sand the repair area with 400 grit sand paper.
7. Mix and apply Ford approved primer/surfacer per manufacturer's label instructions. Bake at 140° F (60° C) or use infrared lamp for curing.
8. Sand the primer/surfacer with 400-600 grit to level the surface.
9. The next two steps are wet-on-wet. Mix and apply to hiding Ford recommended basecoat material per manufacturer's label instructions. Allow to flash.
10. Mix and apply two (2) coats (2 mils minimum) of Ford approved clearcoat per manufacturer's label instructions. Allow flash time. Finish bake at 140° F (60° C).

## **WARRANTY INFORMATION**

**WARRANTY STATUS:** Information Only.