



SERVICE BULLETIN

Classification:

BT98-027

Reference:

NTB98-115

Date:

February 1, 1999

1987-95 PATHFINDER DRIVER'S SIDE FLOOR PAN CORROSION/PERFORATION REPAIR PROCEDURE

APPLIED VEHICLE: V6 4WD Pathfinder (WD21)
APPLIED VIN(S): ALL
APPLIED DATE(S): 1987-95

SERVICE INFORMATION

Some 1987-95 V6 4WD Pathfinders may develop a rust perforation in the floor near the gas pedal area.

The repair procedure for this incident involves replacement of the perforated floor sheet metal and the installation of a different front exhaust tube.

SERVICE PROCEDURE

CAUTION: Be sure to wear appropriate safety equipment such as safety glasses, earplugs, respirator, gloves appropriate for the work to be performed.

1. Measure and record the vehicle front ride height, using the procedure from the FA section of the appropriate Service Manual. This is for future reference when reinstalling the torsion bar.
2. With the vehicle on a hoist, remove the left side torsion bar, catalytic converter and front propeller shaft. Release the pressure on the right side torsion bar.

NOTE: These pieces need to be removed for the installation of the new front exhaust tube. Removing them now will give added clearance for the floor repair as well.

NOTE: If the vehicle being repaired has an automatic transmission, remove the right torsion bar as well.

3. While supporting the transmission assembly with an appropriate jack, temporarily remove the transmission crossmember. Remove the O2 sensor. Now remove the right & front exhaust tubes (right exhaust manifold flange to catalytic converter flange) as an assembly. The left front exhaust tube can remain bolted to the manifold. Then reinstall the transmission crossmember so the transmission is supported during the following steps.

CAUTION: Do not allow the weight of the transmission to be supported by the driveshaft resting on the torsion bar crossmember. This can bend the driveshaft.

4. Remove the driver's side front seat assembly and the center console.

5. Remove the following:

- The negative battery cable from the negative battery terminal, disconnecting it.
- Kick plate.
- Remote gas door/rear hatch lever.
- Door weatherstrip.
- Dash side trim.
- Front floor carpet assembly.
- Rear floor heater duct (if applicable).
- Body mount flange cover and bolt.

6. Move the wiring harness away from the repair area.

7. Inspect the area of corrosion. Clean all dirt, floor insulation and debris away from the area to be cut. This is necessary in order to see all the original spot welds holding the corroded section. Draw a chalk outline around the area to be removed (see Figure 1).

NOTE: Leave as much of the original body as possible while still removing all the rust.

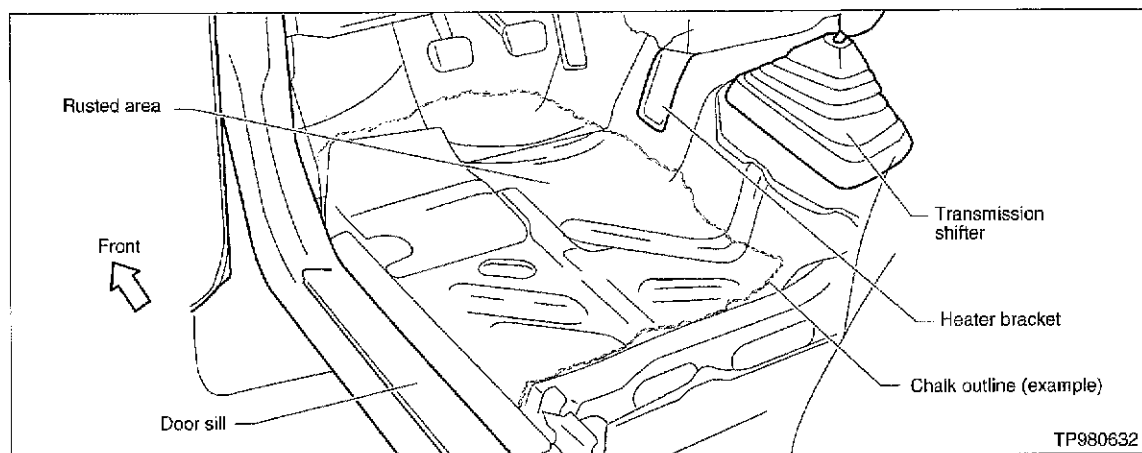


Figure 1

8. Cover all interior panels, door panel and wiring harness to prevent damage from sparks.
9. Drill out any spot welds attached to the area to be replaced. Then cut out the corroded area (see Figure 2), using the appropriate body tools.

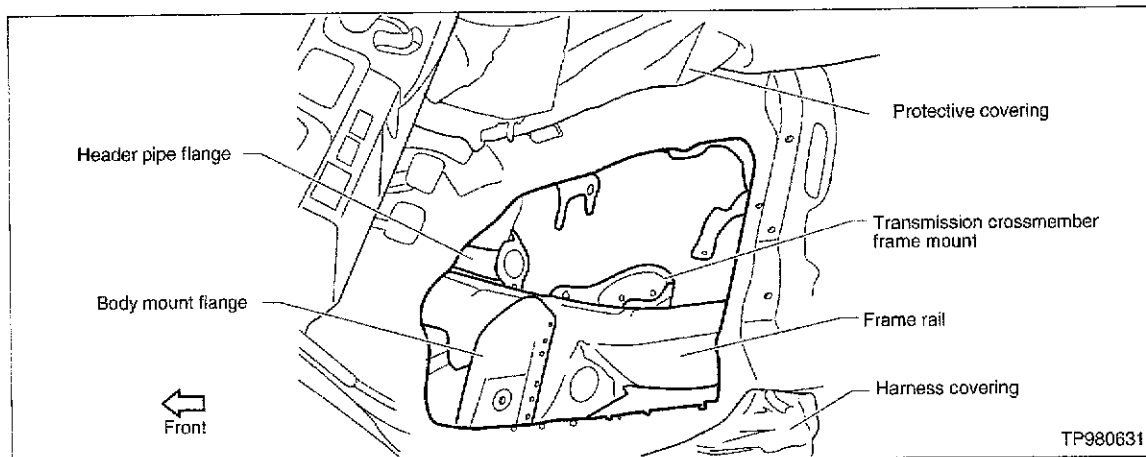


Figure 2

10. From the new body pieces (see Figure 3a) cut out a panel to patch the opening (see Figure 3b). Cut the panel 3/4 in. (20mm) wider than the cut portion of the floor. Flange the edges and stamp or drill "weld holes" in the new panel at 15 mm intervals for MIG welding.

NOTE: Replacement of a section in the dash lower panel is called for **only** if the corrosion has reached into that area.

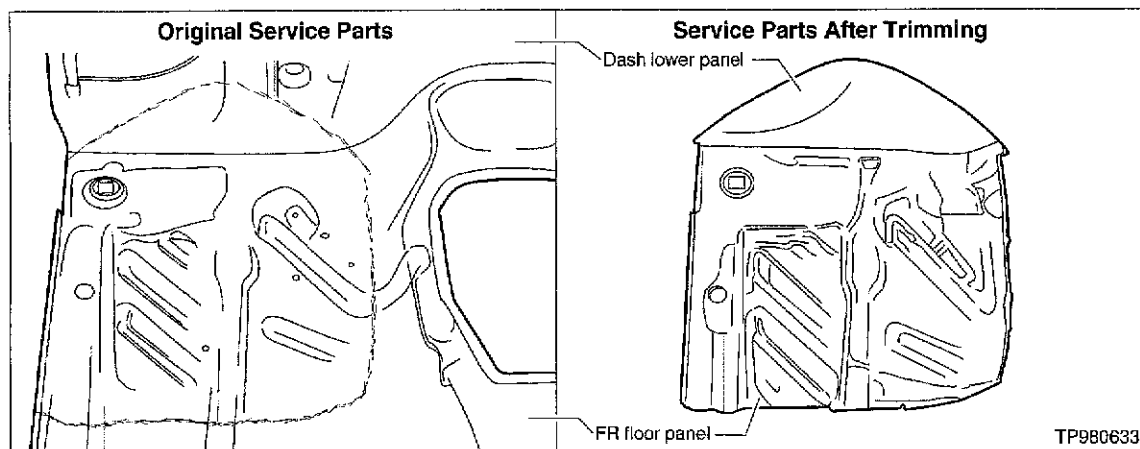


Figure 3a

Figure 3b

11. Remove all paint, "E-coat" and undercoating along the edges of the opening you have just made in the floor and the replacement panel. Use a nylon abrasive pad, wire brush or similar tool. Clean both sides of both panels, all around the cuts, 2" or more back from the edge.
12. Straighten all mating edges with a hammer and dolly or other suitable tools.
13. Apply a conductive, anti-corrosive (weld-through) primer* to the floor and new body panel(s).

***NOTE:** Check local VOC regulations for applicable products in your area.

14. Check the fit of the new part carefully inside the vehicle (see Figure 4). Make sure the edges of the new panel mate to the metal of the original body panels with a tight, solid fit and the frame bolt hole aligns with the hole in the body mount flange.

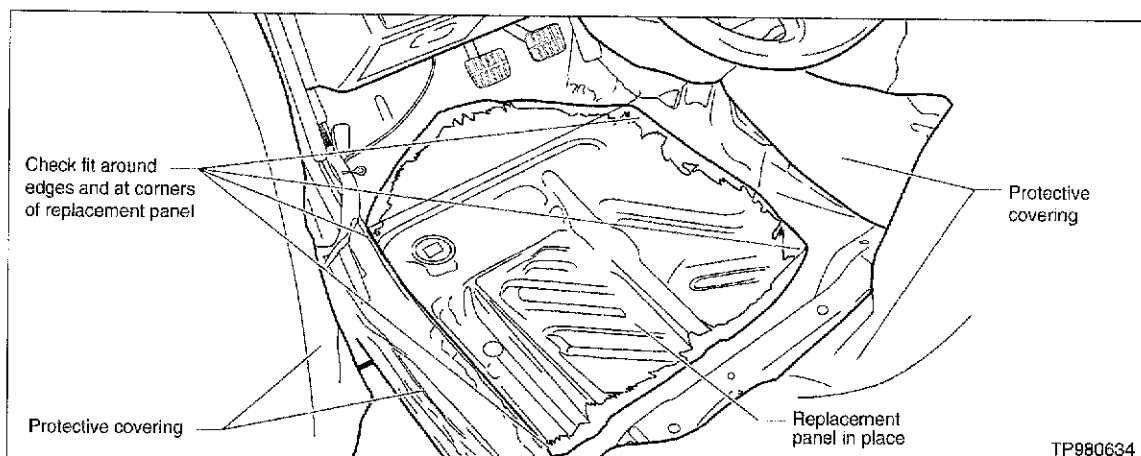


Figure 4

15. Use a MIG welder to plug weld the replacement panel(s) to the floor (see Figure 5).

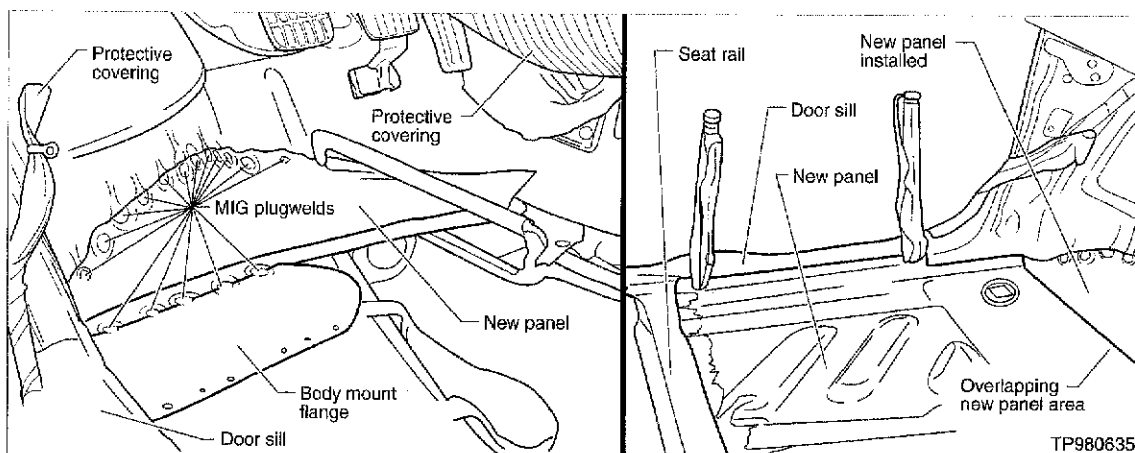


Figure 5

NOTE: If a section of the lower dash panel is being replaced, include the following steps.

- Remove the left front tire.
 - Remove the inner fender liner.
 - MIG weld the panel from the inside of the wheel housing. This will give better structural strength.
 - Replace removed components after step 23 (priming and undercoating).
16. Drill two 1/4 in. (7mm) diameter holes in the floor using Figure 6 as a guide for installing the heat insulator stud bolts.

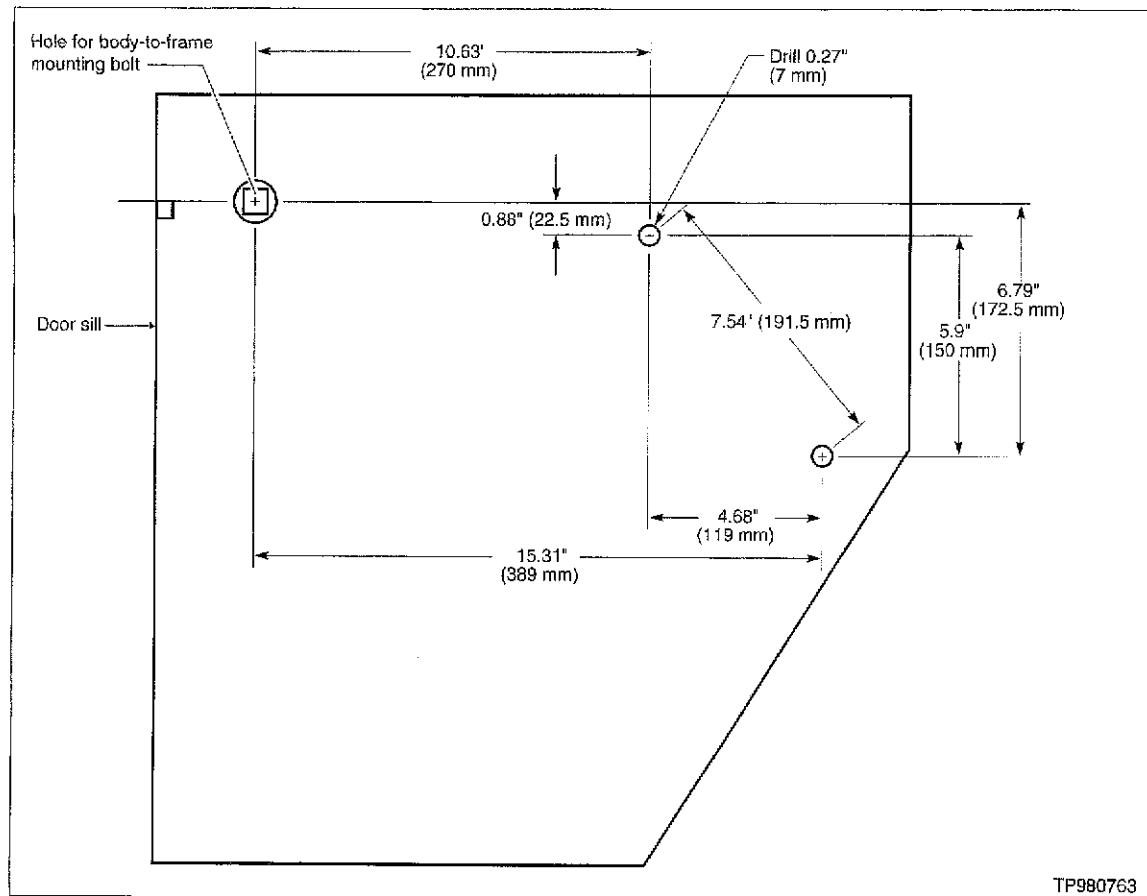


Figure 6

17. From the interior side, install the two stud bolts through the two drilled holes. Weld the stud bolts to the floor pan (at two locations per bolt) using a seam weld method.
18. Remove any excess weld metal or slag with a grinder. Install body mount flange bolt.
19. Mask off both the inside and outside of the vehicle in preparation for painting. The stud bolts should also be masked off.
20. Apply primer surfacer (DuPont P/N 215S or equivalent)* to the repaired area, inside and out. Also apply to the stud bolt holes. Install body mount flange bolt plastic cover.

***NOTE:** Check local VOC regulations for applicable products in your area.

21. Once the primer is dry, apply sealer (Lord® Chemicals Fusor® Urethane sealant P/N 800 or equivalent)* to all edges of the repair, both top and bottom (see Figure 7).

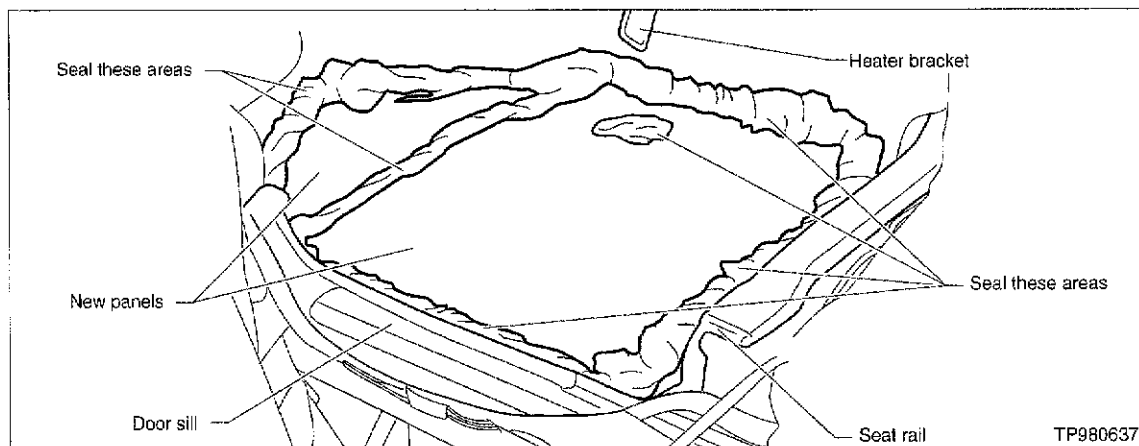


Figure 7

22. Once the sealer is dry, apply undercoating (3M Rubberized Undercoating No. 051135-08883 or equivalent)* to the repaired areas of the vehicle.

23. Once the undercoat is dry, apply bitumen wax to the repaired underbody areas.

CAUTION: Only use Tectyl 517 Bitumen Wax, NMC P/N 999MP-9G001, for this step.

24. Install the new underbody heat shield to the floor (see Figure 8).

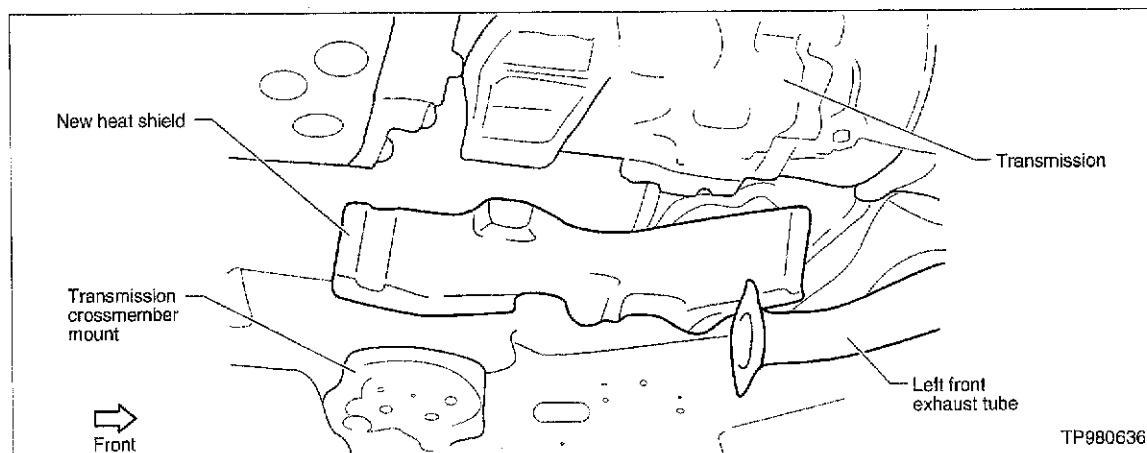


Figure 8

***NOTE:** Check local VOC regulations for applicable products in your area.

25. Apply a sound deadening material (such as Q-pad™ or 3M silencer strips P/N 051135-08585) to area of the repair (see Figure 9).

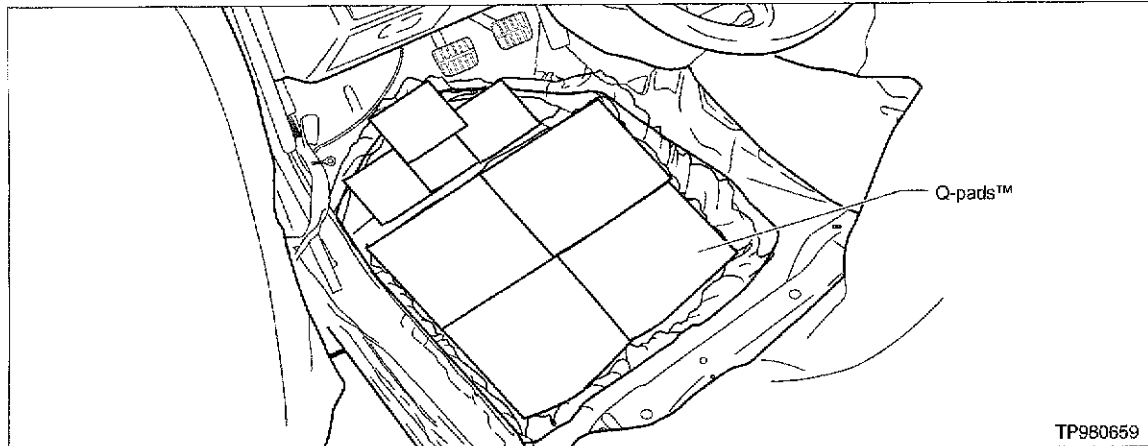


Figure 9

26. Reinstall the vehicle harness into its original placement. Reinstall carpeting or replace carpeting if it is torn or discolored from the incident.
27. Reinstall the driver's seat, center console and all other trim that had been removed.
28. Support the transmission on an appropriate jack and remove the transmission crossmember. Using the appropriate part number from the Parts Information below, install the new front exhaust tube/ heat shield assembly and existing catalytic converter.
29. Install the front propeller shaft, then install the transmission crossmember.
30. Install the O2 sensor.
31. Install the torsion bar assembly and torsion bar member. Adjust the ride height using the procedure and specifications from the FA section of the appropriate Service Manual.
- CAUTION:** Failure to correctly set the ride height can result in accelerated tire wear.
32. Reconnect the negative battery cable to the negative battery terminal.
33. Check the exhaust system for leaks.

PARTS INFORMATION

DESCRIPTION	MODEL YEAR	PART NUMBER	QUANTITY
Insul Heat, FR floor	ALL	74753-2S610	1
FR Floor Panel	ALL	74312-83P31	1
Dash Lower Panel	ALL	67300-85P30	1
Tube Assy, FR	87-89	20015-42G20	1
Tube Assy, FR	90-93	20011-88G78	1
Tube Assy, FR	94	20015-83P20	1
Tube Assy, FR	95	20015-83P22	1

CLAIMS INFORMATION

Submit a Primary Failed Part (PP) line using the following claims coding:

OPERATION	PFP	OP CODE	SYM	DIA	FRT
Replace Floor Panel	74312-83P05	ZL890A	ZD	91	9.8 hrs.