



# SERVICE BULLETIN

Classification:

BT98-016

Reference:

NTB98-060

Date:

July 15, 1998

## GENERAL BODY REPAIR GUIDELINES FOR PROPER SEALANT APPLICATION ON RUST AND CORROSION RELATED REPAIRS

**APPLIED VEHICLES:** All Nissan

### SERVICE INFORMATION

While performing corrosion-related or collision-related repairs, proper preparation and treatment of the metal is required to help prevent future corrosion related incidents. This bulletin describes the OEM material used and the metal treatments available.

For specific body panel composition (e.g. cold-rolled, DURASTEEL®, etc.) and proper detail repair procedures, please reference the specific Nissan Body Repair Manual (available through Dymet Distribution Services at 1-216-572-0725).

Following are the types of metal being used and the anti-corrosive treatments available.

### Types of OEM Steel Materials and Coatings Used

#### DURASTEEL®

DURASTEEL® is an electroplated, zinc-nickel alloy under an organic film which provides excellent corrosion resistance (see Figure 1, next page). This coating insulates the metal against air and moisture to help prevent rust formation.

**NOTE:** Nissan genuine Service Parts are fabricated from DURASTEEL® sheets. Therefore, we recommend you use GENUINE NISSAN PARTS for panel replacement to maintain the anti-corrosive performance built into the vehicle at the factory.

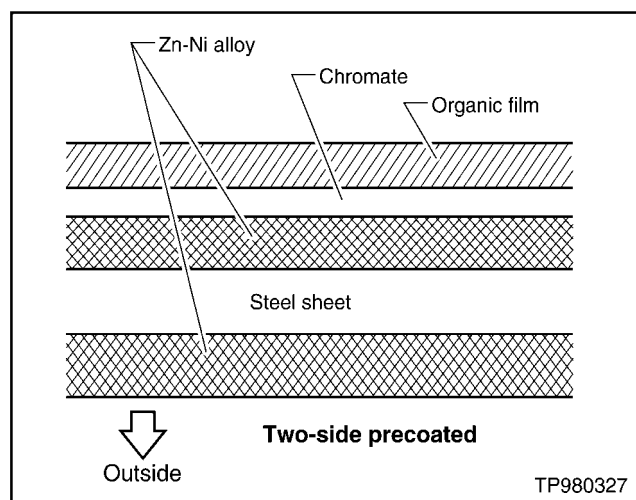


Figure 1  
1/7

## Phosphate Coating Treatment and E-coat

In addition, a phosphate coating treatment and a cationic electro-deposition primer (E-coat), which provide an excellent anti-corrosion effect, is used on all body components (see Figure 2).

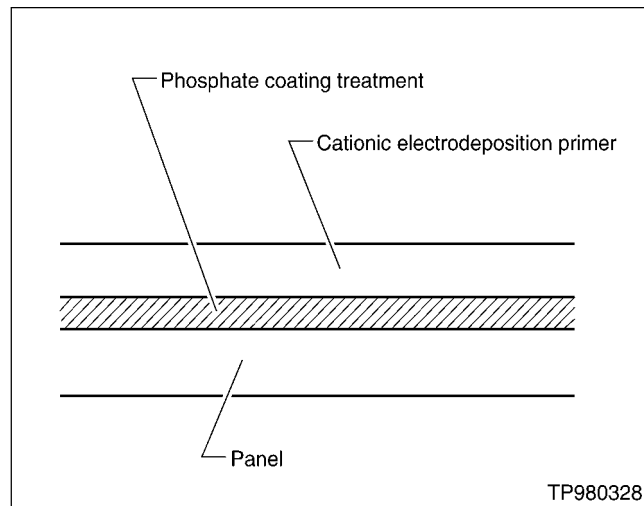


Figure 2

**NOTE:** Nissan genuine Service Parts are also treated in the same manner. Therefore, we recommend you use GENUINE NISSAN PARTS for panel replacement to maintain the anti-corrosive performance built into the vehicle at the factory.

## **Anti-Corrosive Treatments**

Anti-corrosive treatments can be performed:

- Before welding (e.g.: weld-through primers and spot sealers),
- Before painting (e.g.: metal conditioners),
- During painting (e.g.: epoxy primers and seam sealers), and
- After painting (e.g.: anti-corrosive wax).

Following are general steps involved for a corrosion resistant panel repair and a general overview of each type of treatment:

1. Proper cleaning of all surfaces.
2. Use of a metal conditioner on bare steel to produce a rust preventative coating.
3. Use of weld through primer to eliminate the possibility of bare metal exposure.
4. Use of epoxy primer on all bare metal areas.
5. Proper application of seam sealer to all required panel joints.
6. Use of undercoating on wheelhouse and underbody areas.
7. Use of anti-corrosive wax to non-exposed welded parts (e.g. inside of pillar area).

## 1. Surface Cleaning

Use a general cleaning solvent on painted surfaces (such as PPG DX330 or equivalent - check with local VOC regulations).

## 2. Metal Conditioner

For panels that do not require welding, treat the bare metal in and around the area with metal conditioner (such as PPG DX 520SG or equivalent - check with local VOC regulations). For proper application, do not allow the metal conditioner to dry. You also need to wipe it off immediately with a clean cloth. This is very important if any rust-out repair is to last more than a few months.

## 3. Weld-Through Primers

For panels that require welding, different types of anti-corrosive treatments (primers) are available depending on the type of repair. For example:

- Spot sealer is required for spot welding (see Figure 3)
- A weld-through primer (such as 3M Weld-Thru Coating #05913 or equivalent - check with local VOC regulations) is required for MIG-welded panels.

You must apply these primers to the mating surfaces to prevent rust formation. Elimination of this step will result in future rust/perforation incidents.

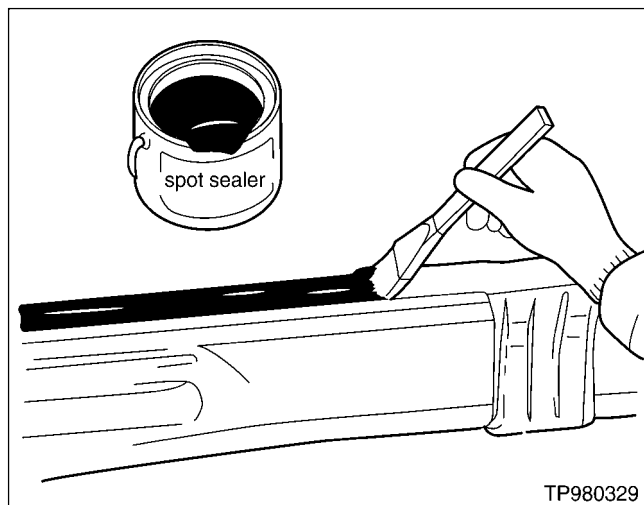


Figure 3

## 4. Corrosion-Resistant Primers

After all repair work has been performed, you need to apply a corrosion resistant primer for proper corrosion protection. For example, you should apply PPG DP Epoxy primer (or equivalent - check with local VOC regulations) prior to seam sealer application.

## 5. Seam Sealer

Use of body (seam) sealer (such as Fusor #800 Seam Sealer or equivalent - check with local VOC regulations) prior to base coat application aids in the appearance of the repair. It is also important for proper corrosion protection (see Figures 4, 5 & 6). Seam sealer helps prevent water or mud from entering between panel joints and it also helps prevent the formation of corrosion. Please refer to the proper Nissan Body Repair Manual for seam sealer application points.

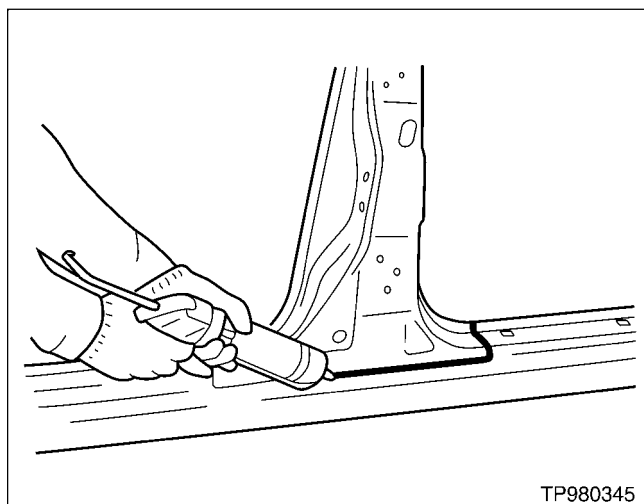


Figure 4

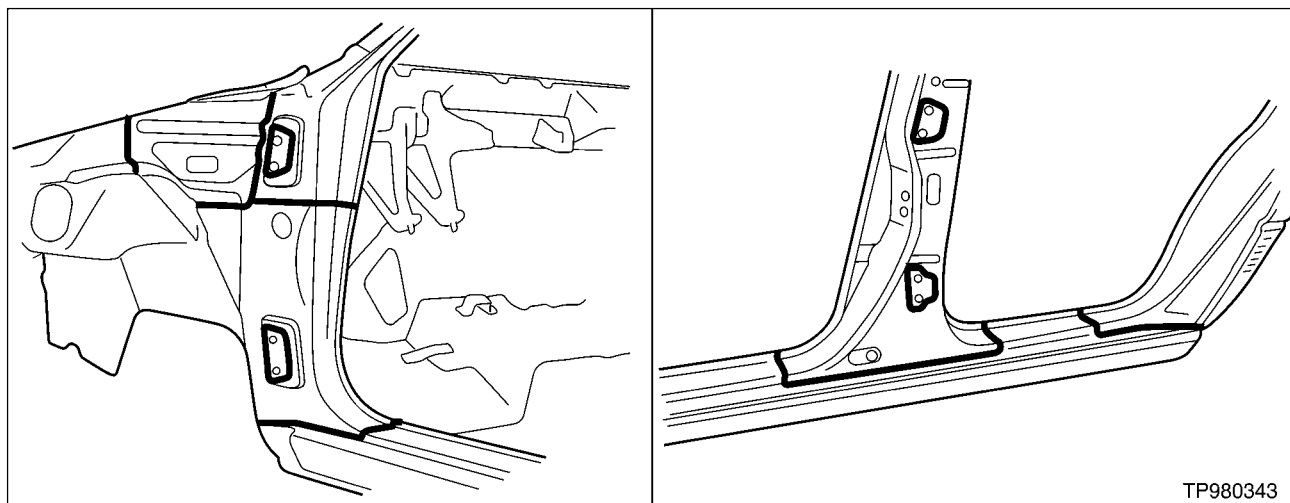
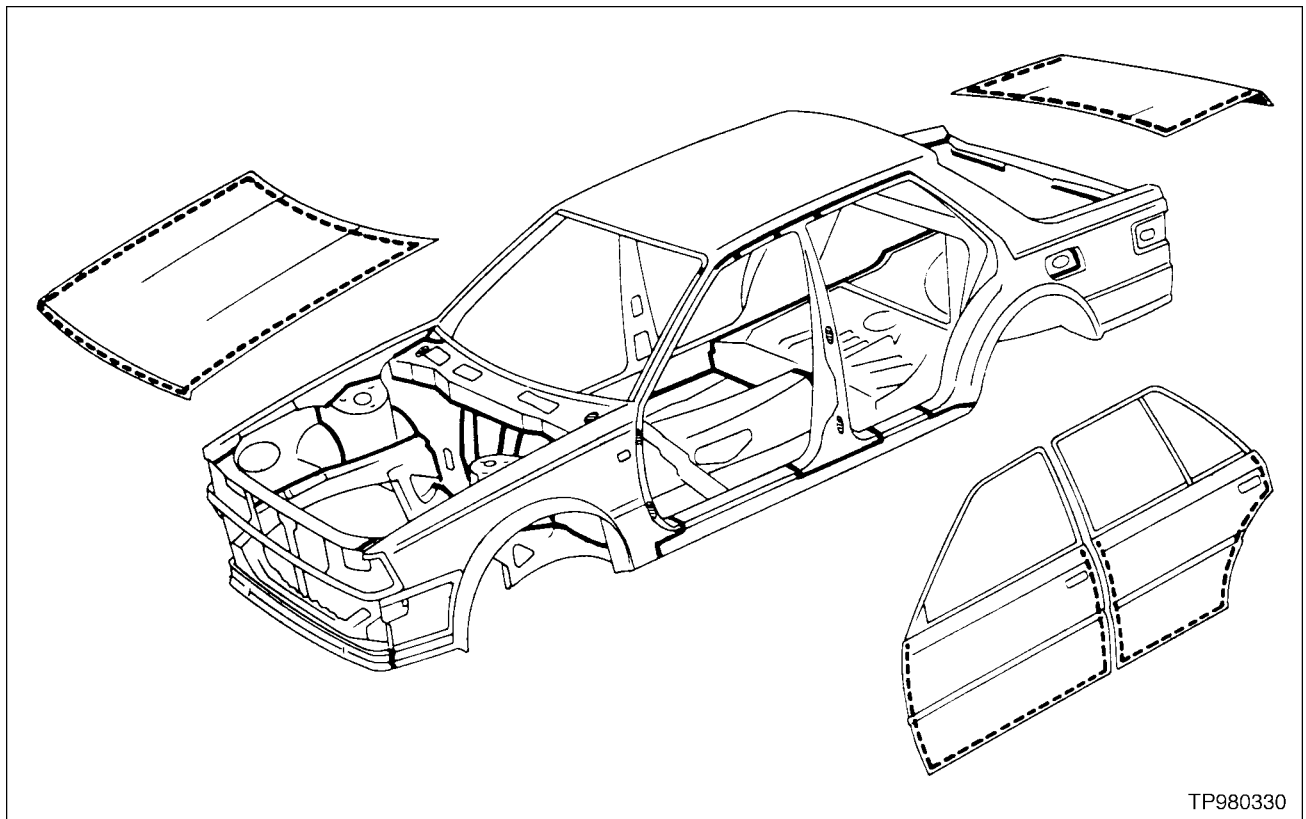


Figure 5

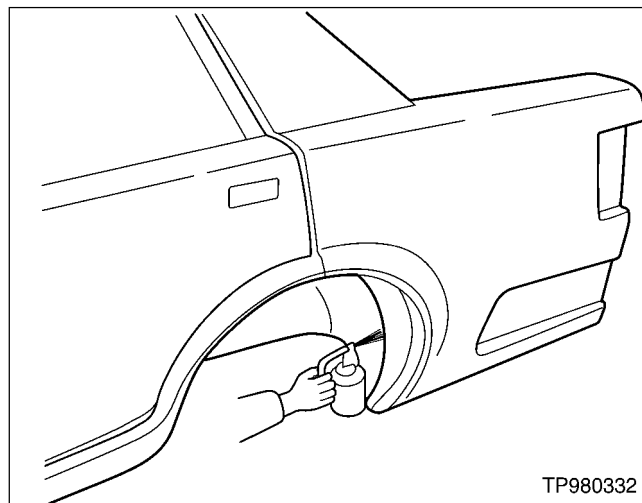


TP980330

Figure 6

## 6. Undercoating

Undercoating (such as 3M Rubberized Undercoating #08883 or equivalent - check with local VOC regulations) is an elastic coating applied to the underbody (see Figures 7 & 8). This undercoating helps prevent rust, and it also reduces body vibration and noise. If the undercoating is removed during body repair, it must be reapplied to the same areas. Pay attention to critical areas such as body seams and panel joints.



TP980332

Figure 7

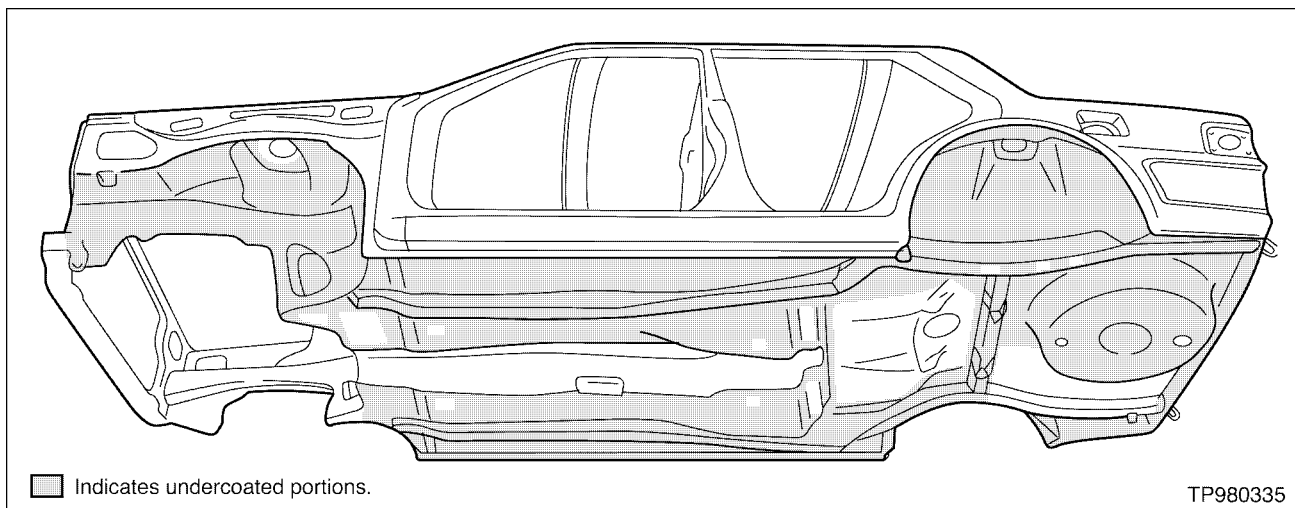


Figure 8

## 7. Anti-Corrosive Wax

The recessed portions of the body which cannot be painted easily must be coated with anti-corrosive wax (such as Tectyl 517 Bitumen Wax or equivalent - check with local VOC regulations). This is to ensure that there will not be any bare metal exposed (see Figure 9).

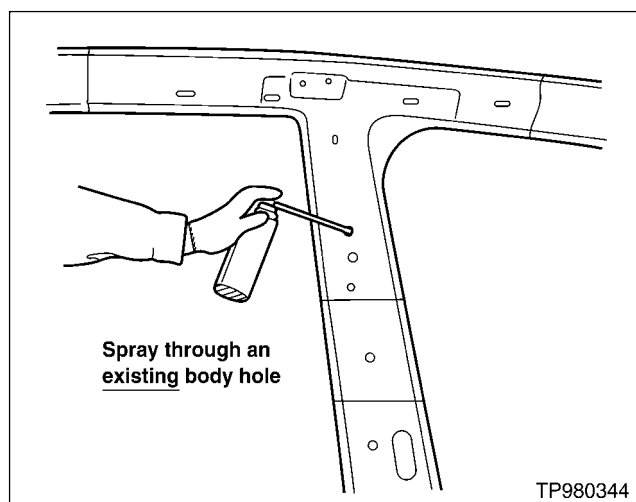


Figure 9

The factory applies wax to various areas of the vehicle to prevent corrosion/perforation. Below is an example of the different body locations where wax is applied (see Figure 10).

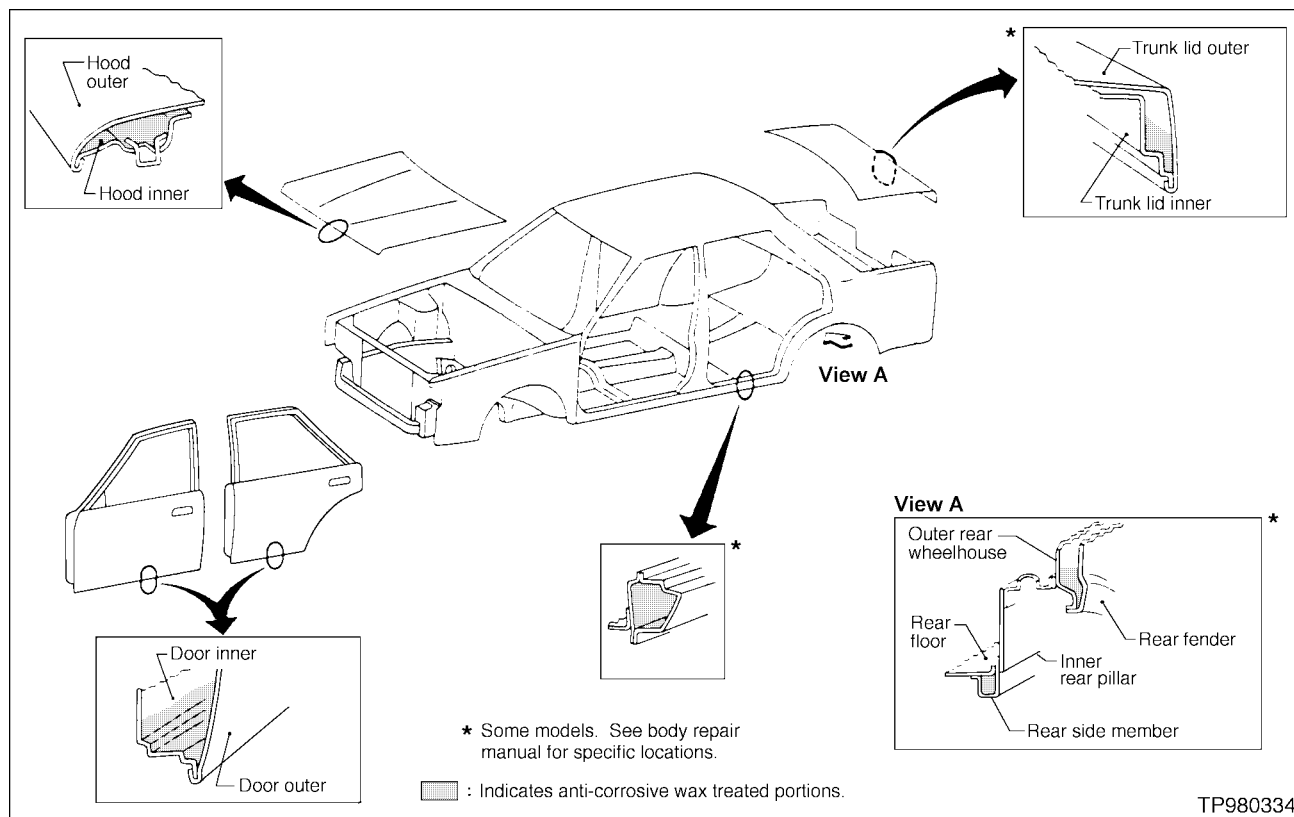


Figure 10