

Corrosion Prevention

Special Tool(s) / General Equipment

 ST3277-A	300-SAT12740 UBE Gun
 ST3278-A	300-SAT9795 HRS Rust Gun

Materials

Name	Specification
Motorcraft® Metal Surface Prep ZC-31-A	-
ValuGard™ Premium Undercoating VG101, VG101A	-
ValuGard™ Rust Inhibitor VG104, VG104A	-

Repair

NOTE: *Undercoating*

NOTE: *The following illustrations are not vehicle specific and are intended for reference only.*

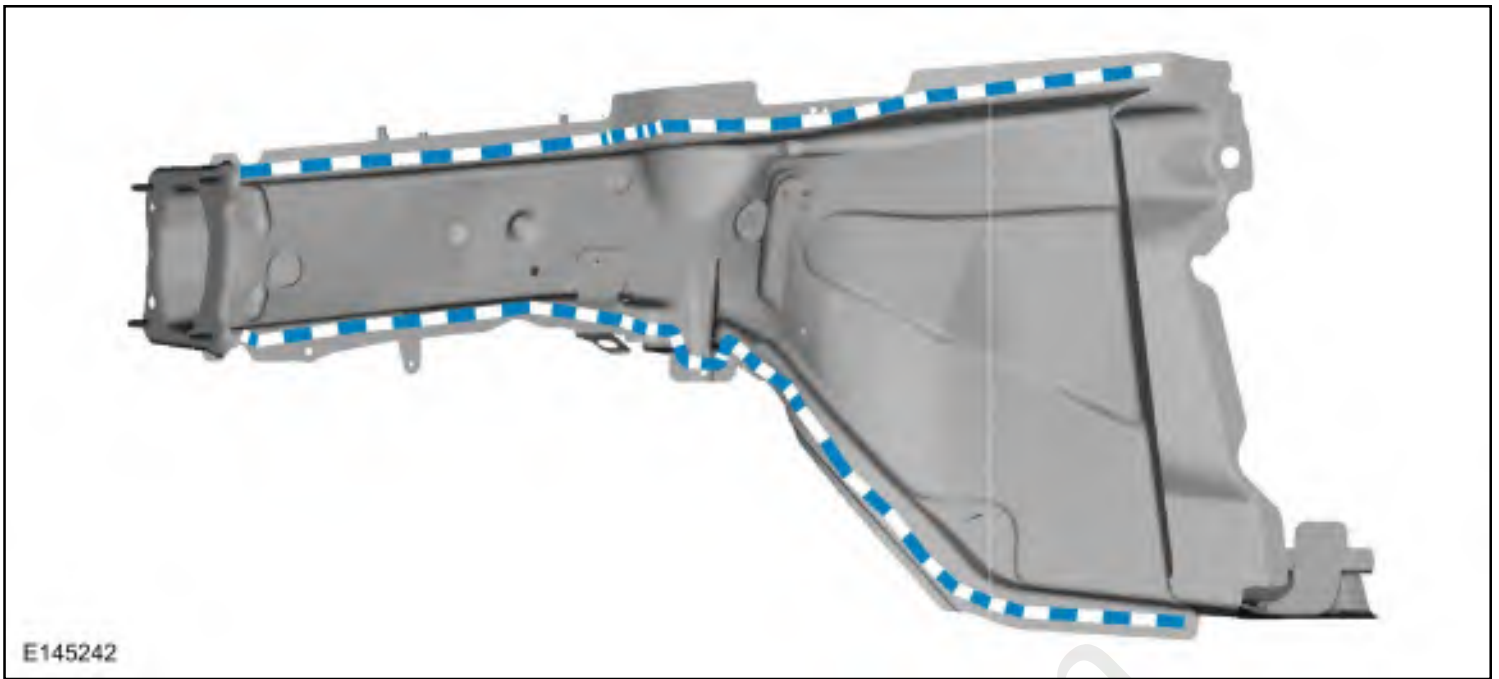
1.  **WARNING:** Before beginning any service procedure in this section, REFER to Safety

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).

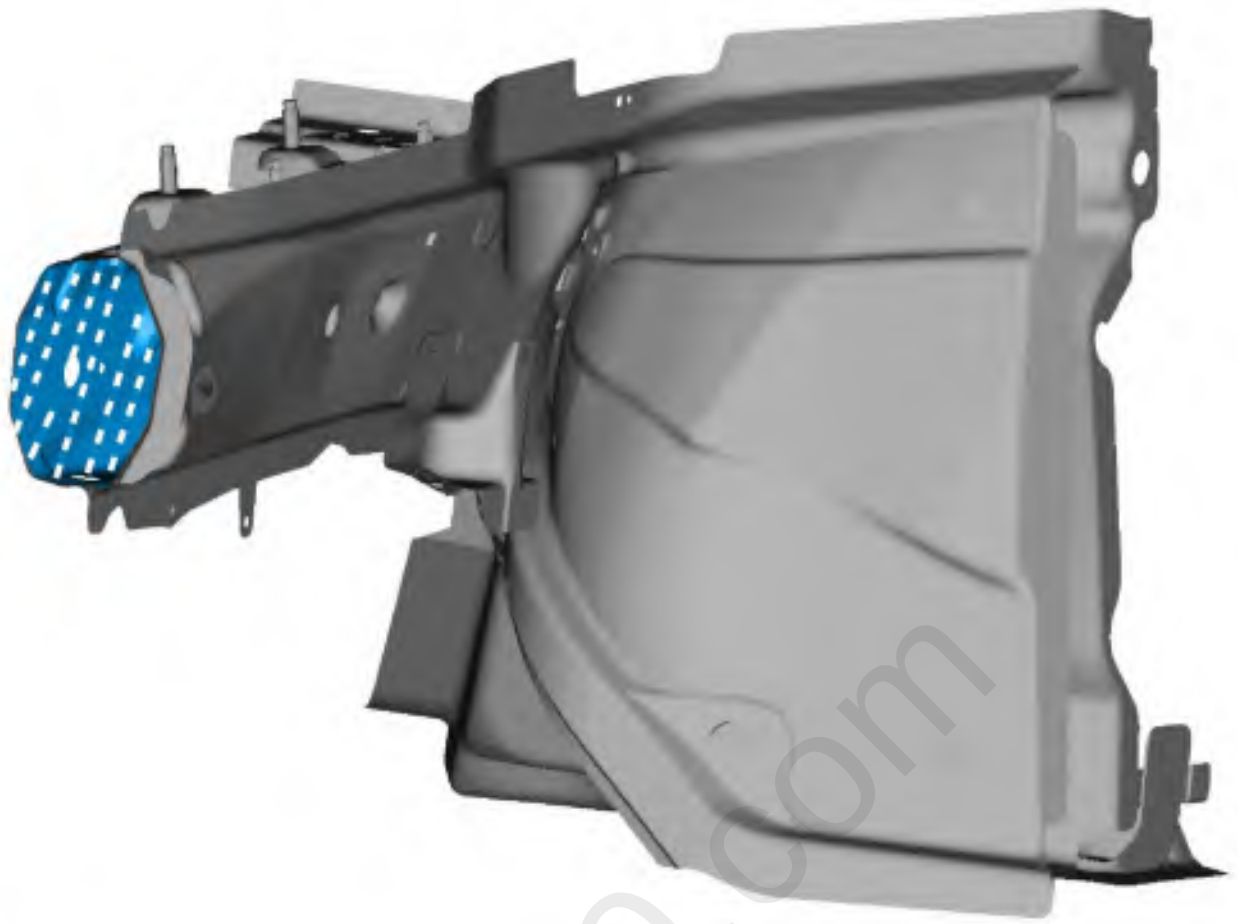
2. Wire brush the area and make sure the surfaces are free of oil, dirt and other foreign material. Carry out the undercoating process in the following sequence.
3. Thoroughly clean and degrease metal surfaces to remove wax and grease.
Material: Motorcraft® Metal Surface Prep / ZC-31-A
4. For best results, the vehicle should be at room temperature.
5. Canister attaches directly to the dispensing gun. Attach the undercoating canister to the special tool .
Use Special Service Tool: 300-SAT12740 UBE Gun.
Material: ValuGard™ Premium Undercoating / VG101, VG101A
6. Undercoating should be applied after the welding and refinishing process. Product cannot be welded through.
7. Air pressure setting for applicator gun is 552 kPa (80.06 psi) – 621 kPa (90.07 psi).
8. Apply light mist coats, applicator sprays in fogging pattern. Material displaces moisture.
9. Clean up any overspray with a mild solvent such as mineral spirits or bug and tar remover.
10. **NOTE:** *Frame rail exterior spot-weld flange view.*

Apply Premium Undercoating material to the exterior exposed edges after carrying out the welding and refinishing process.



11. **NOTE:** *Cross section view of typical unibody frame rail shown.*

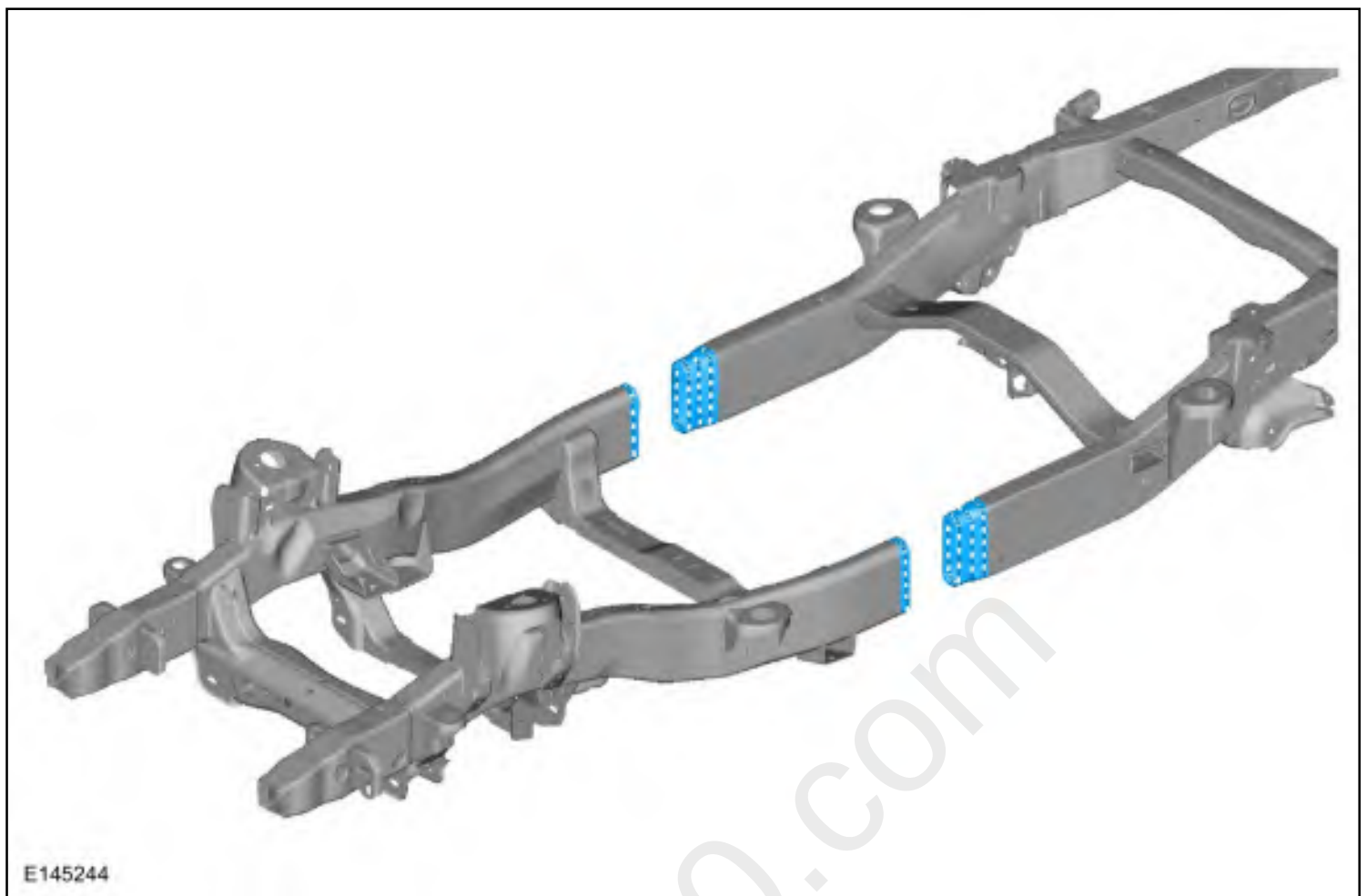
Apply Rust Inhibitor to the inner surfaces of the rail after carrying out welding process. Depress trigger and wait 2-3 seconds and slowly pull the wand to make sure the area is completely fogged.



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12. **NOTE:** *Full frame vehicle, front rail-to-mid rail section repair shown.*

Apply Premium Undercoating to the exposed surfaces after carrying out the welding process. Make sure to completely cover any bare metal areas.



Repair

NOTE: Rust Inhibitor

1. The surfaces must be free of oil, dirt and other foreign material. Carry out the process in the following sequence.
2. Thoroughly clean and degrease metal surfaces to remove wax and grease.
Material: Motorcraft® Metal Surface Prep / ZC-31-A
3. For best results, the vehicle should be at room temperature. Attach the rust inhibitor canister to the special tool .
Use Special Service Tool: 300-SAT9795 HRS Rust Gun.
Material: ValuGard™ Rust Inhibitor / VG104, VG104A
4. Rust inhibitor should be applied after the welding and refinishing process. Product cannot be welded through.
5. Air pressure setting for applicator gun is 448 kPa (64.97 psi) - 517 kPa (74.98 psi).

6. Use the appropriate length wand when spraying enclosed areas. Insert the wand as far as possible into the access hole, pull the trigger and wait 2-3 seconds and slowly pull the wand out of the access hole. Apply the material in light mist coats. Material displaces moisture.
7. Clean up any overspray with a mild solvent such as mineral spirits or bug and tar remover.
8. **NOTE:** *Door assembly lower view.*

Apply as shown to the inside of the door shell on all the interior metal surfaces using the most suitable applicator wand. Apply material to the exposed edges after carrying out the welding process. Make sure horizontal surfaces are well protected as they are more susceptible to corrosion. Keep door drain holes clear to prevent moisture buildup.

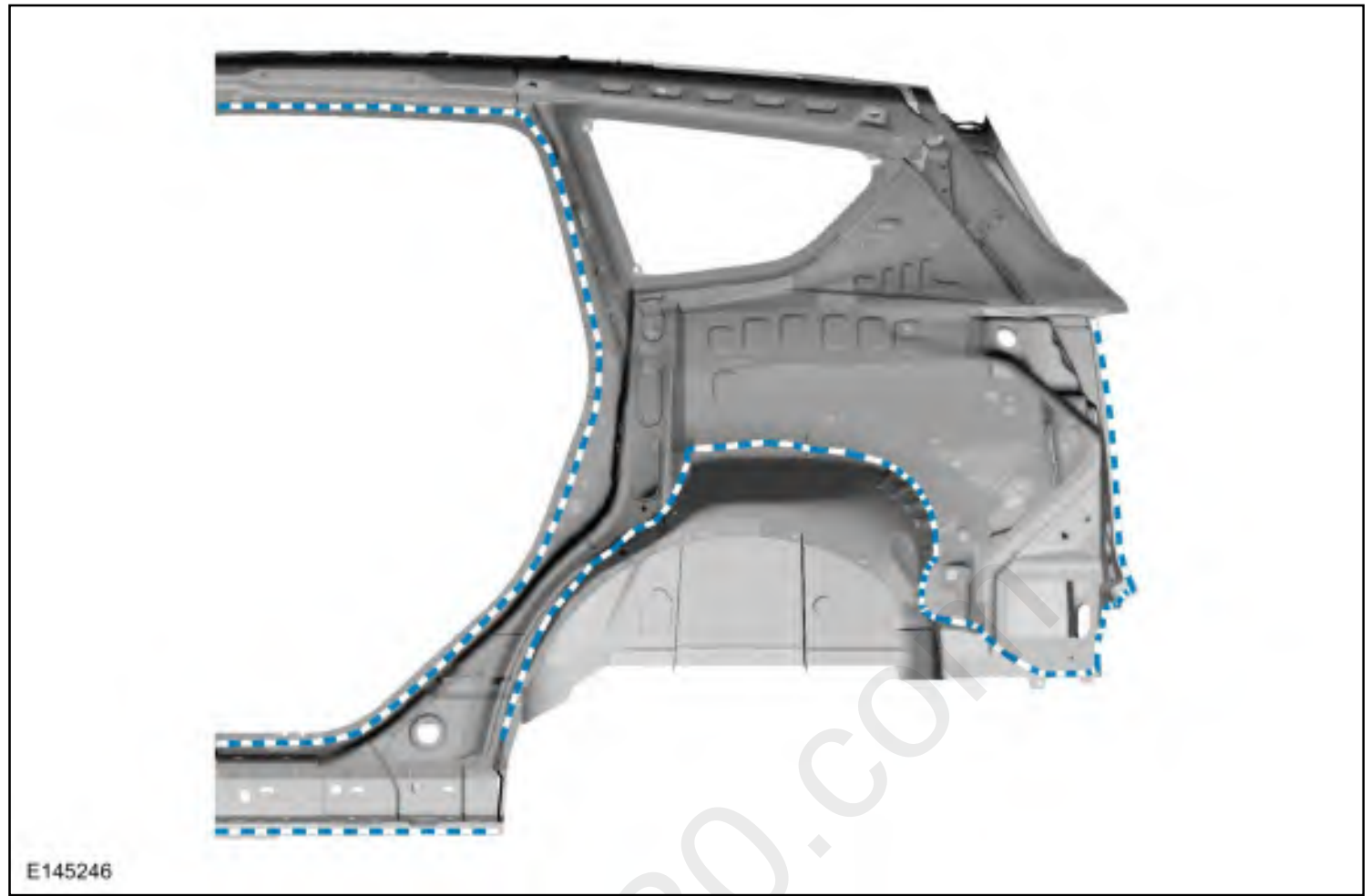
Material: ValuGard™ Rust Inhibitor / VG104, VG104A



9. **NOTE:** *Quarter panel inner view.*

Apply to the closed channel portion of the spot weld flange areas. Apply to the exposed edges after carrying out the welding process. Make sure horizontal surfaces are well protected as they are more susceptible to corrosion.

Material: ValuGard™ Rust Inhibitor / VG104, VG104A



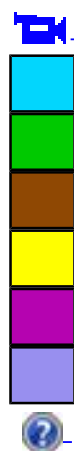
10. **NOTE:** *Door frame opening view.*

Apply to the closed channel portion of the spot weld flange areas. Make sure horizontal surfaces are well protected as they are more susceptible to corrosion.

Material: ValuGard™ Rust Inhibitor / VG104, VG104A



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