

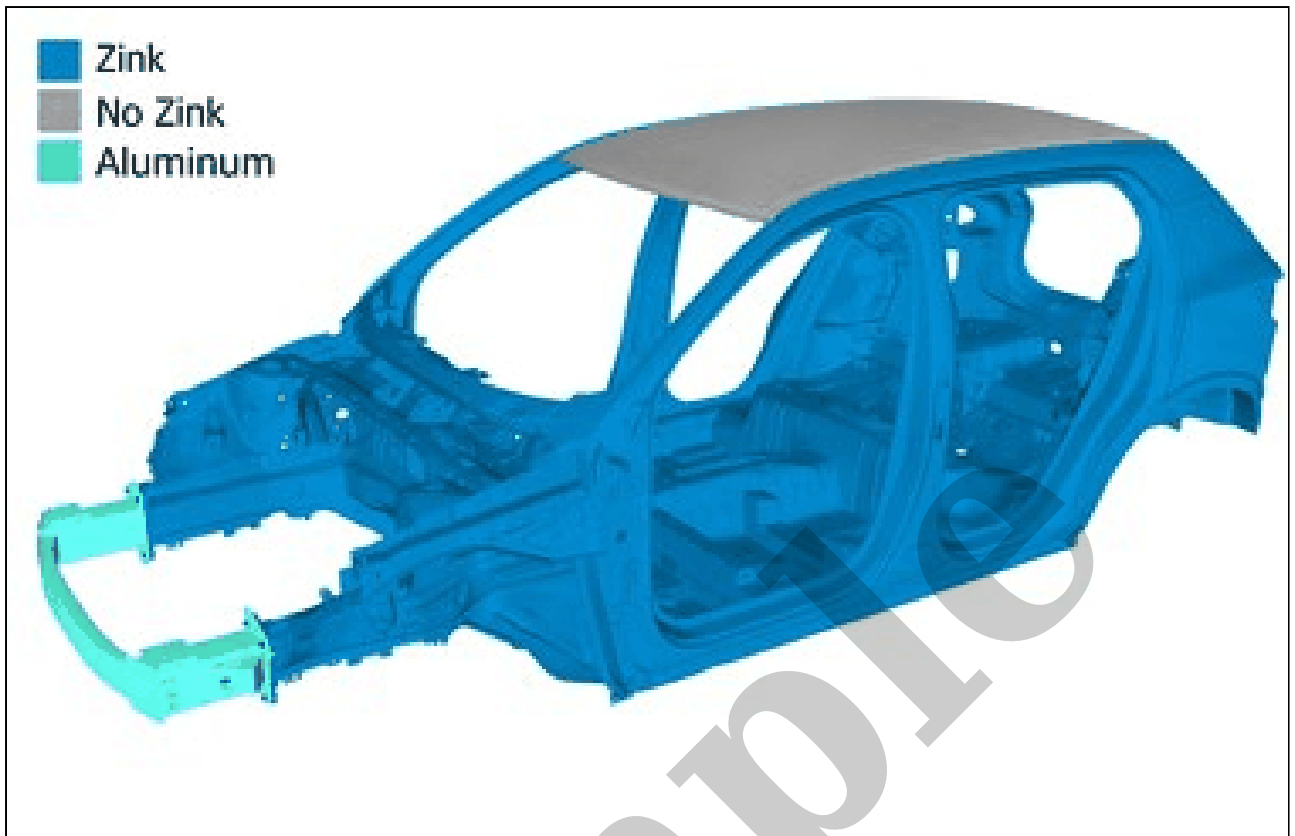
# Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

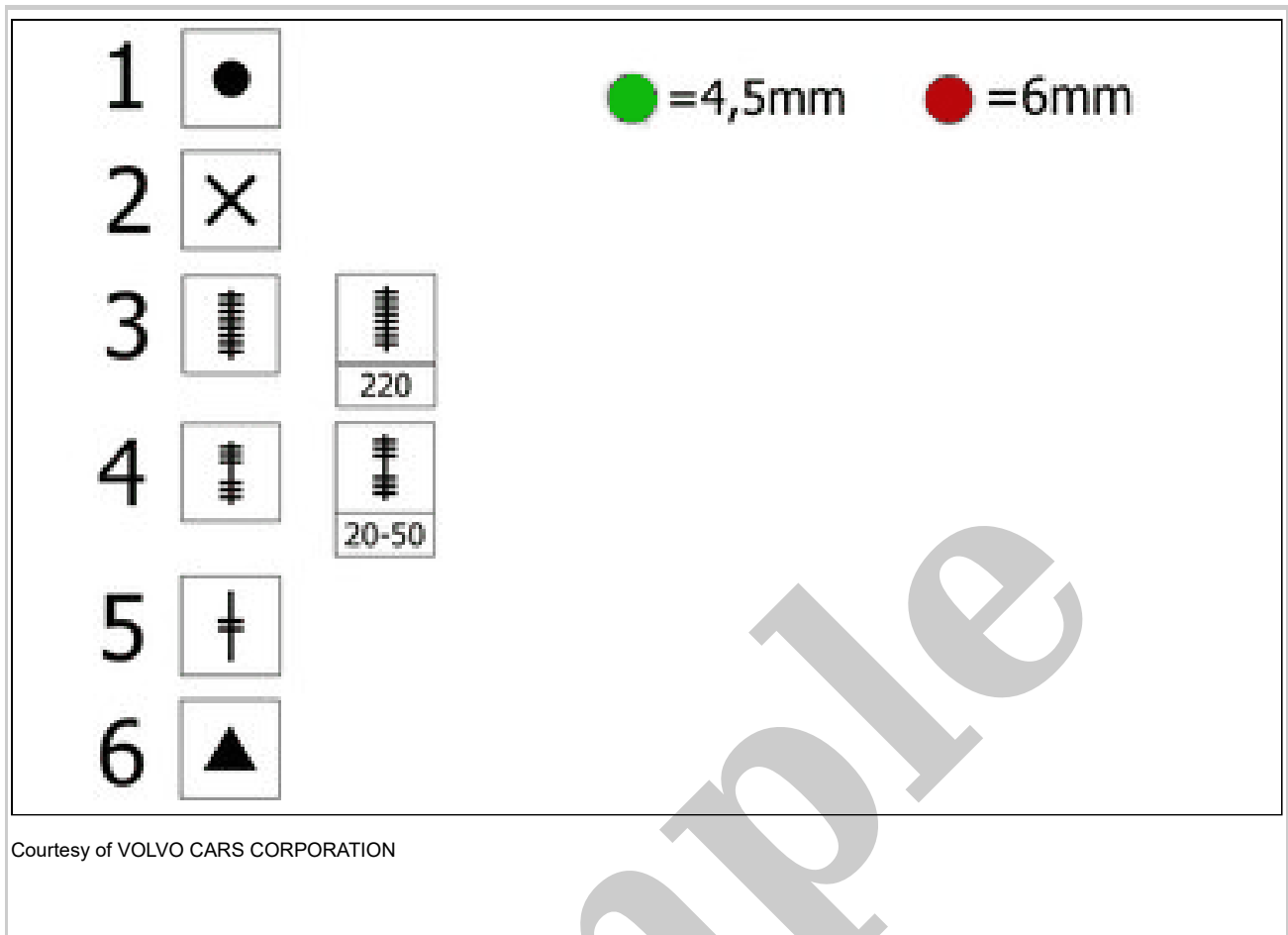
## 2024 Volvo S90 Service and Repair Manual

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Fig 4: Body Structure Identification Materials (4 Of 5)



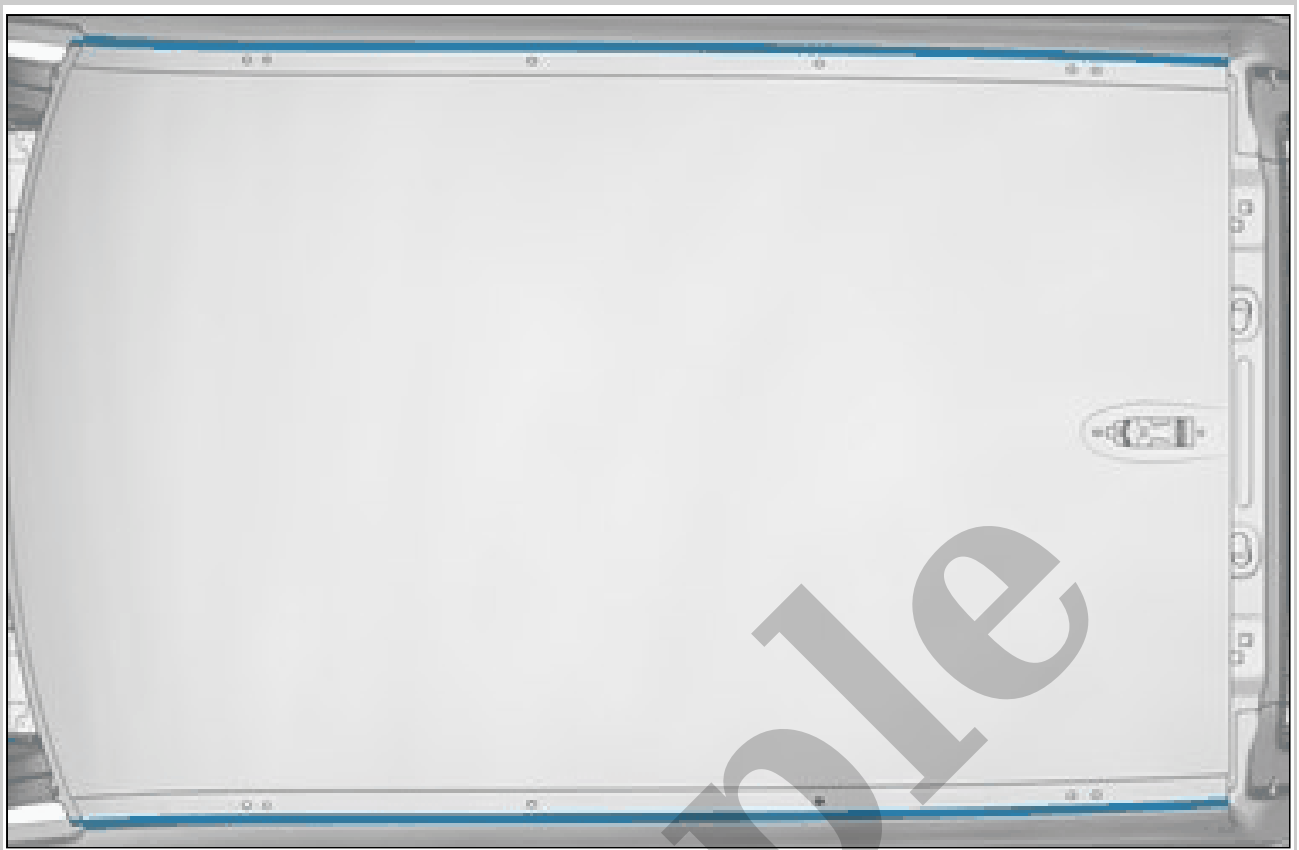
Courtesy of VOLVO CARS CORPORATION



1. Spot weld/spot weld with the location of the weld and lens diameter specified with color (may be replaced with 2)
2. Plug weld (may be replaced with 1)
3. Seam weld/Seam weld with weld length specified in millimeters.
4. Step weld/Step weld with weld length followed by length between welds specified in millimeters. Always start and finish with the weld.
5. Tack weld
6. Glue

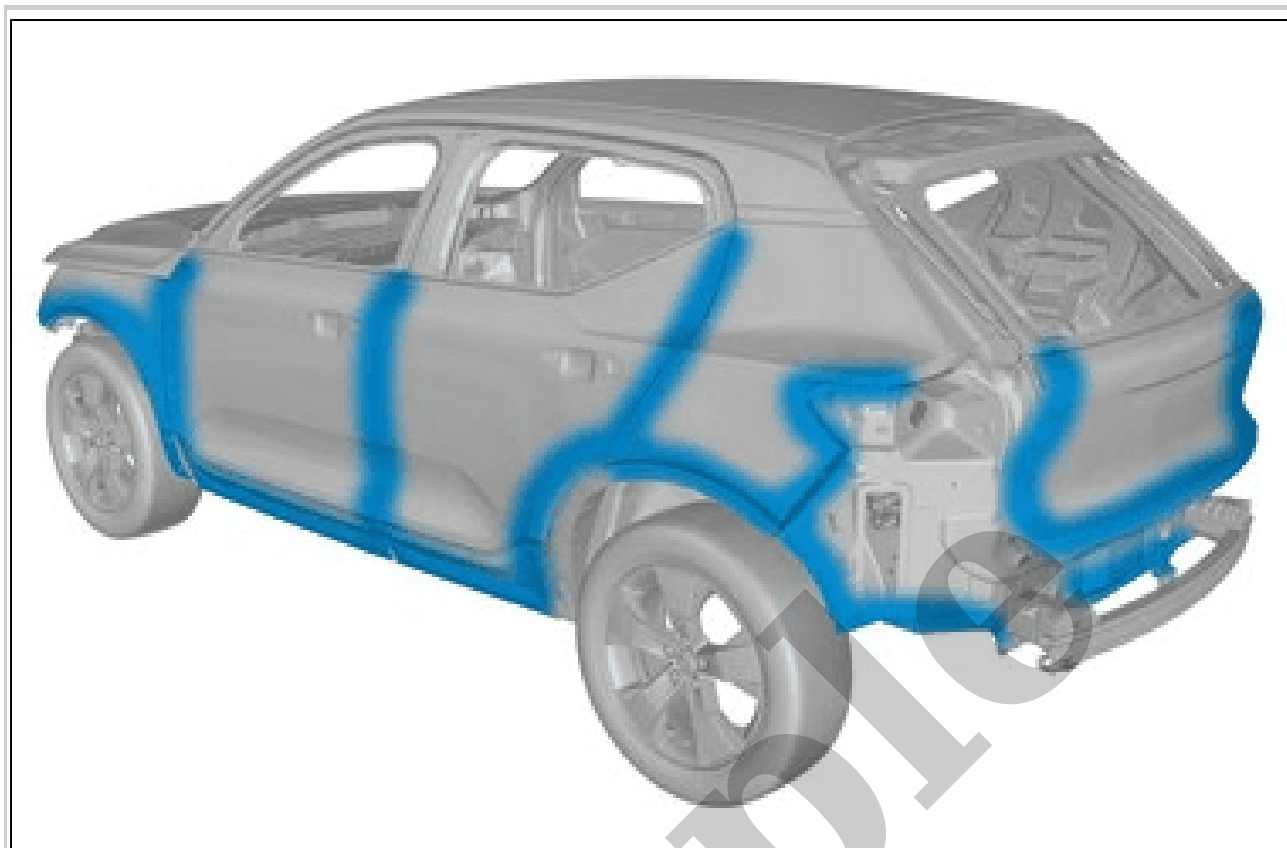
## **BODY CONSTRUCTION > [BODY REPAIR GENERAL WELDING] > GENERAL WELDING [2018, 2019, 2020, 2021, 2022] > RESISTANCE SPOT WELDING**

Resistance spot welding must primarily be used if the capacity of the welding equipment is matched to panel thickness. When carrying out resistance spot welding, grind down to bare metal. Clean the surfaces with Scotch-Brite or similar to minimize zinc and phosphating damage. Apply welding primer between the panels. Always test weld according to the method below. Adjust the welding equipment for steel quality.



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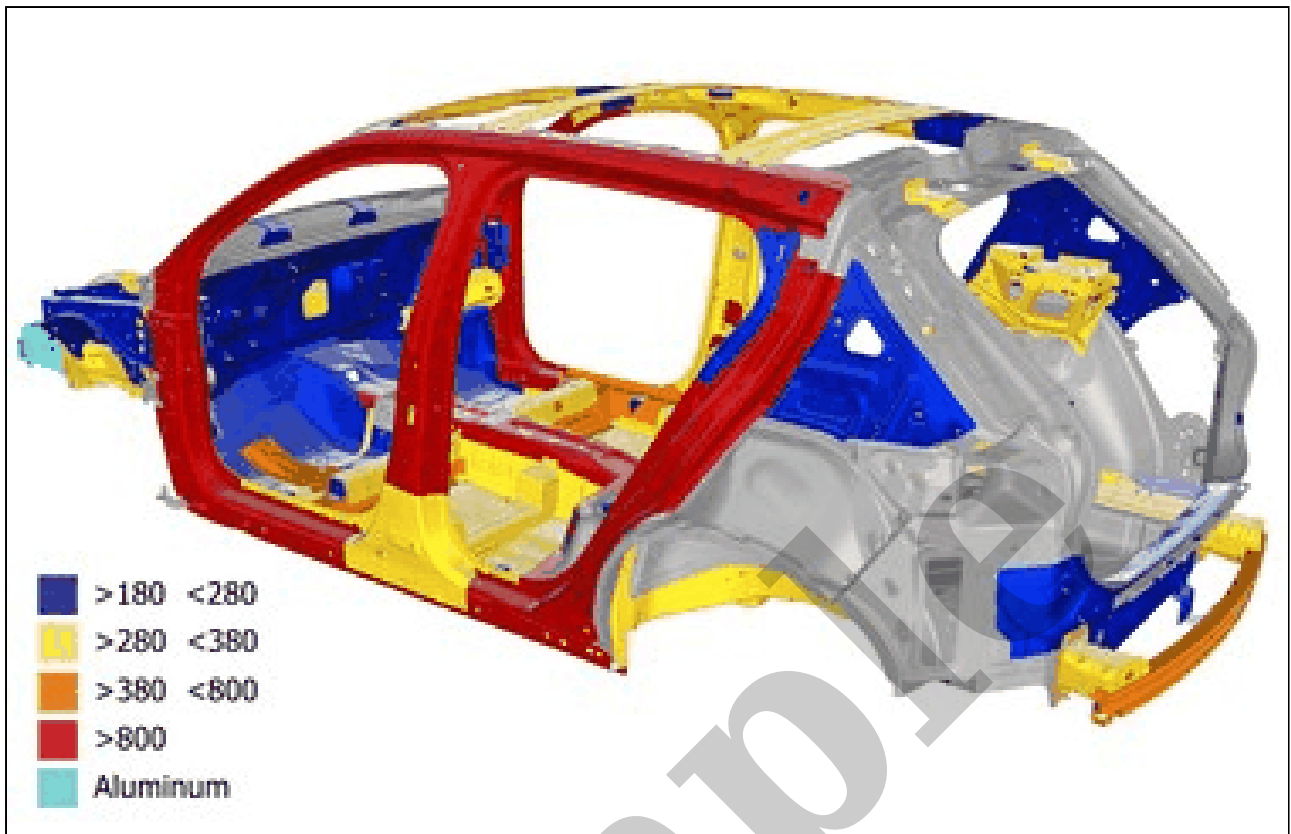
**Use:** Seal, 3M 07333



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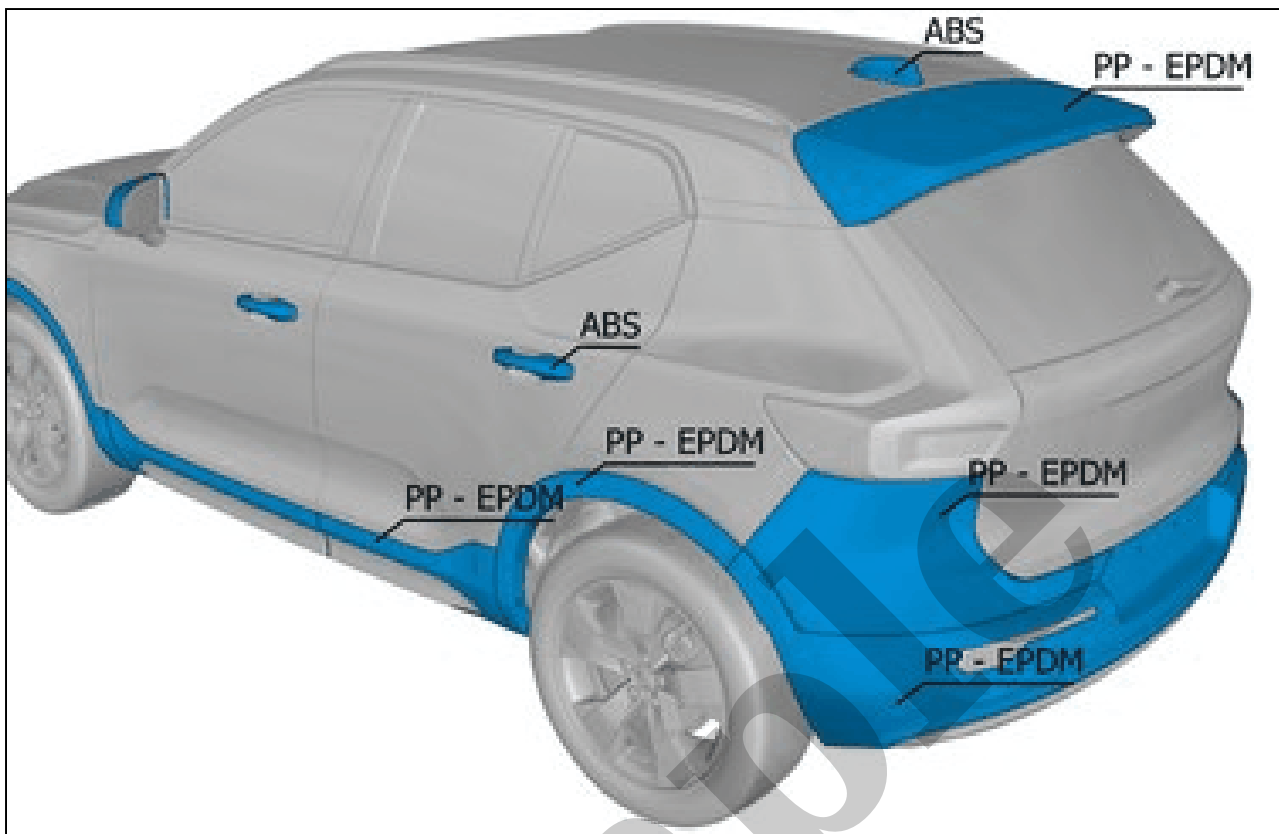
**Use:** Cavity protection, 1161682  
RUSTPROOFING SPECIAL TOOLS

Fig 2: Body Structure Identification Materials (2 Of 5)



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Fig 7: Exterior Plastic Parts Identification Materials And Component Locations (2 Of 2)



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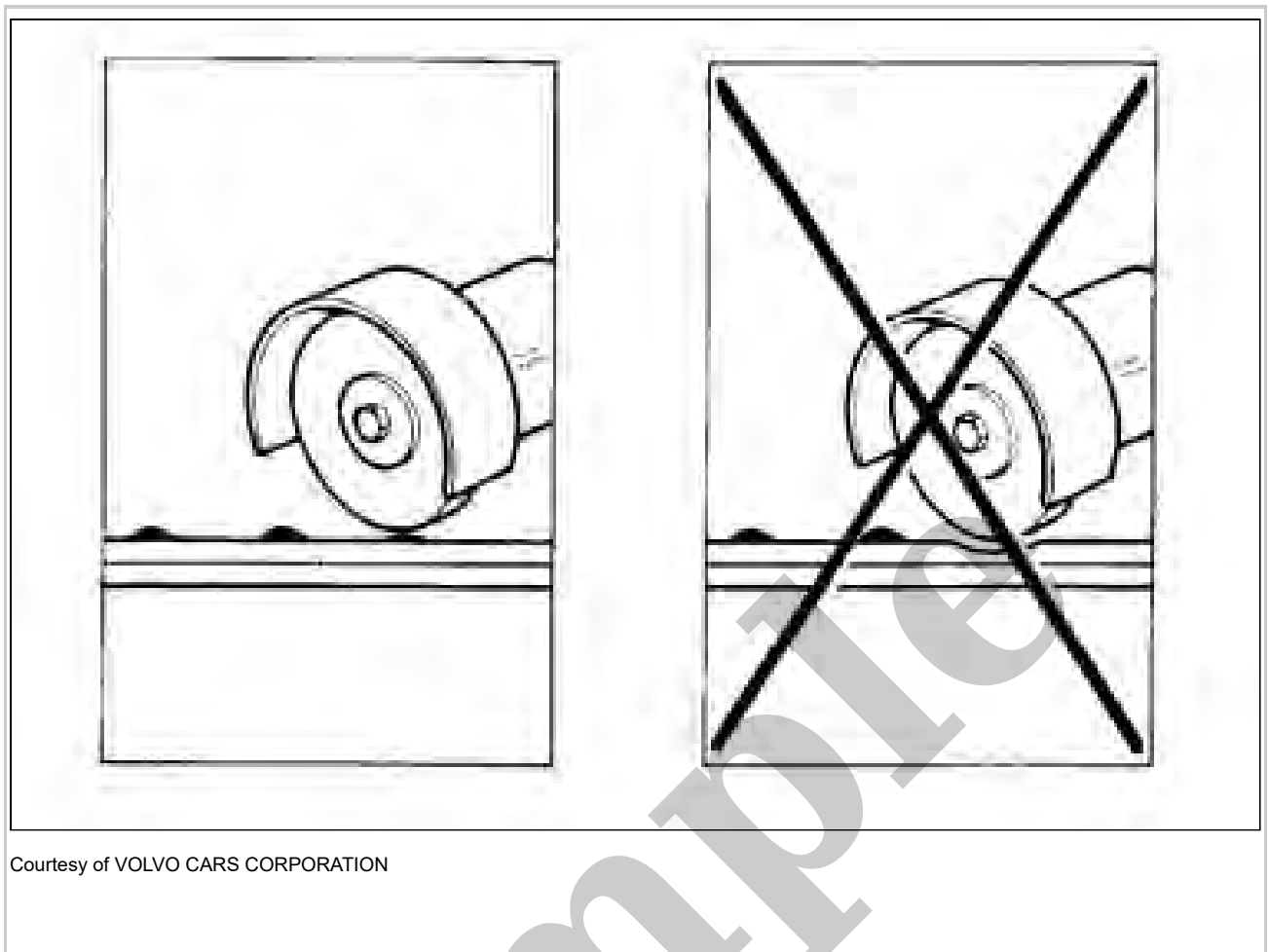
## BODY CONSTRUCTION > [BODY REPAIR GENERAL WELDING] > GENERAL WELDING [2018, 2019, 2020, 2021, 2022] > GENERAL INFORMATION

Volvo bodies are manufactured to the highest quality. All bodywork repairs must therefore take place following the same principles. Use light tools. Take care of the original surface coating, electro dip (ED) and phosphating.

**NOTE:** Always use welding primer between welded panel flanges.

## BODY CONSTRUCTION > [BODY REPAIR GENERAL WELDING] > GENERAL WELDING [2018, 2019, 2020, 2021, 2022] > BEFORE WELDING

**CAUTION:** Always remove the battery leads prior to welding according to: Battery disconnection and connection.

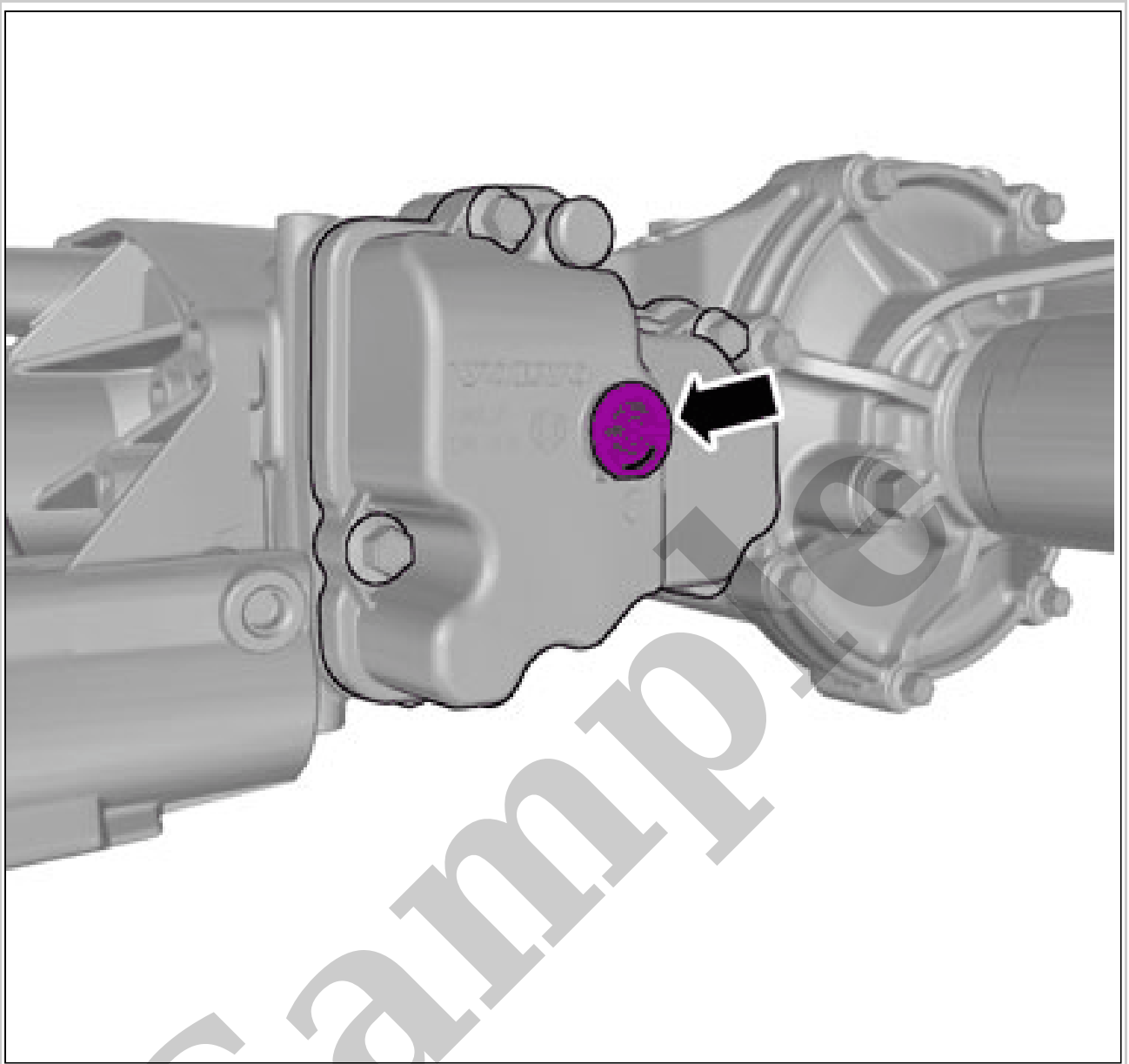


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**CAUTION:** *Only grind the weld. Make sure not to grind below the panel's thickness.*

Add filling primer if there is grinding damage.





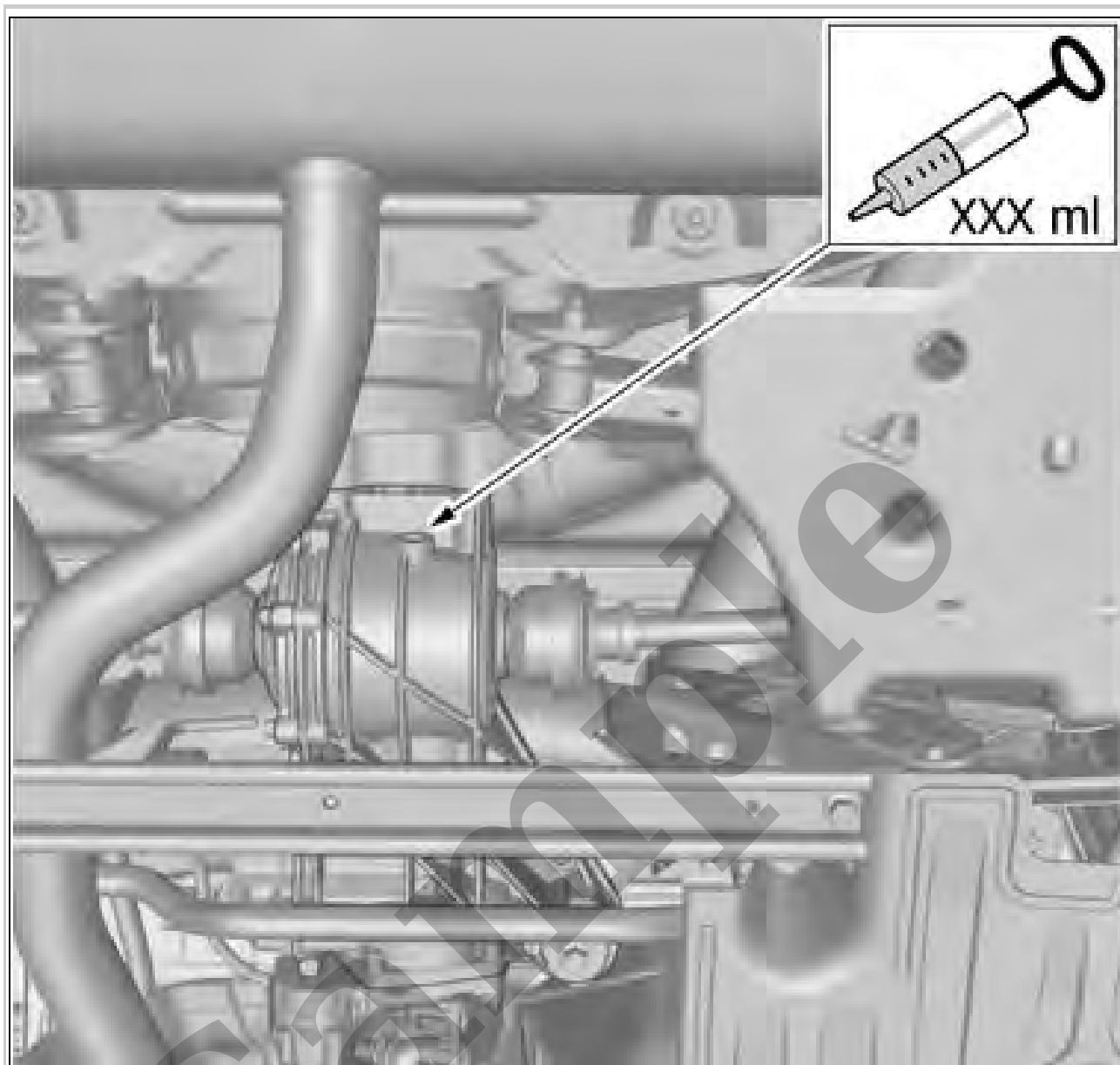
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**WARNING:** *Be prepared to collect escaping fluid.*

**WARNING:** *Hot fluid.*

Remove the screw.

**FILLING**



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**CAUTION:** *The fluid must be allowed to escape until a continuous flow changes into single drops.*

Follow the instructions regarding transmission lubricant. Refer to: LUBRICANT TRANSMISSION  
Wipe off

**DIFFERENTIAL FLUID LEVEL CHECK > DIFFERENTIAL FLUID LEVEL CHECK [2018-2022, TG-81SC AWD] > INSTALLATION**