

CAUTION



To avoid damaging the vehicles electric and electronic components, the earths of any wiring harness near the weld area must be disconnected.

Position the earth of the welding machine as close as possible to the weld area [Earth screw connection: Description](#) (MR 400, 40H, Bolted connections).

Locate the earths located near to the weld area [Earths on body: List and location of components](#) .

3)IRREMOVABLE BODYWORK COMPONENTS - STRUCTURAL COMPONENTS TO BE REMOVED IN ORDER TO CARRY OUT THE REPLACEMENT OPERATION

Remove the roof [Roof: Replacement](#) .

4)SPECIAL NOTES ON MATING

CAUTION



If the mating faces of the parts to be welded are not accessible, use a GMAW plug weld in place of the original electrical resistance weld [Connections by arc welding under shielding gas: Description](#) [Connections by arc welding under shielding gas: Description](#) (MR 400, 40C, Gas metal arc welded connections (GMAW)).



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BODYWORK: PRECAUTIONS FOR THE REPAIR



Note, one or more warnings are present in this procedure



1. INTRODUCTION

All the operations described in the repair methods guarantee conformity of the mechanical contents and release the repairer from his responsibilities.

The timings necessary to calculate time for coded operations are carried out according to these methods and with the tools contained in the ranges.

2. GENERAL RULES

As far as possible, reproduce the vehicle's original quality features: regarding impact, endurance, corrosion, acoustics and appearance.

If for feasibility reasons in the repair, the original connection or appearance cannot be reproduced, replacement solutions validated by the "Repair Method Engineering" department are indicated either in the MR of the vehicle concerned, or in the general and fundamental methods([see 40A, General information, Structural bodywork documentation: Description](#)) .

For all operations that necessitate beating the bodywork of the vehicle (e.g.: hammer or "nail puller"): lock the airbag computer and disconnect the battery.

For all welding operations (e.g.: Resistance welding, Electric welding with shielding gas or "nail welding"): lock the airbag computer, disconnect the battery and the vehicle's electrical circuit earths located near the area to be welded([see General information](#)) .

WARNING

DANGER: HIGH VOLTAGE VEHICLE.



Risks of serious burns or electric shock that may prove fatal.

Before carrying out any work on the vehicle, it is essential that you adhere to the instructions regarding vehicle voltage cut-off. This work must be carried out by an employee who is qualified and authorized to work on a high-voltage onboard network

[Vehicle: Precautions for the repair](#) .

Before carrying out bodywork operations on an electric vehicle, disconnect the vehicle [Vehicle: Lockout - Removal of lockout](#) .

3. REPAIRING THE VEHICLE

Fault finding: [\(see 40A, General information, Impact fault finding: Description\)](#) .

Straightening: [\(see 40A, General information, Straightening a component: Description\)](#) .

Replacing components: [\(see 40A, General information, Replacing a non-removable component: Description\)](#) .

For a significant impact, it can be necessary to carry out preliminary jacking to release the electric wiring harnesses, certain mechanical components or simply to access detaching of strategic connections. In some cases, it will be necessary to carry out preliminary cutting on the part damaged by the impact.

4. SAFETY INSTRUCTIONS FOR REPAIRING BODYWORK STRUCTURES

SYMBOL KEY :



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(1) Obligatory ears protection

(2) Obligatory eye protection

(3) Obligatory respiratory protection

(4) Obligatory eye and face protection

(5) Fire risk danger

(6) Obligatory hand protection

(7) Use extra ventilation source

(8) Protection of interior fittings