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IMPACTFAULTFINDING:DESCRIPTION

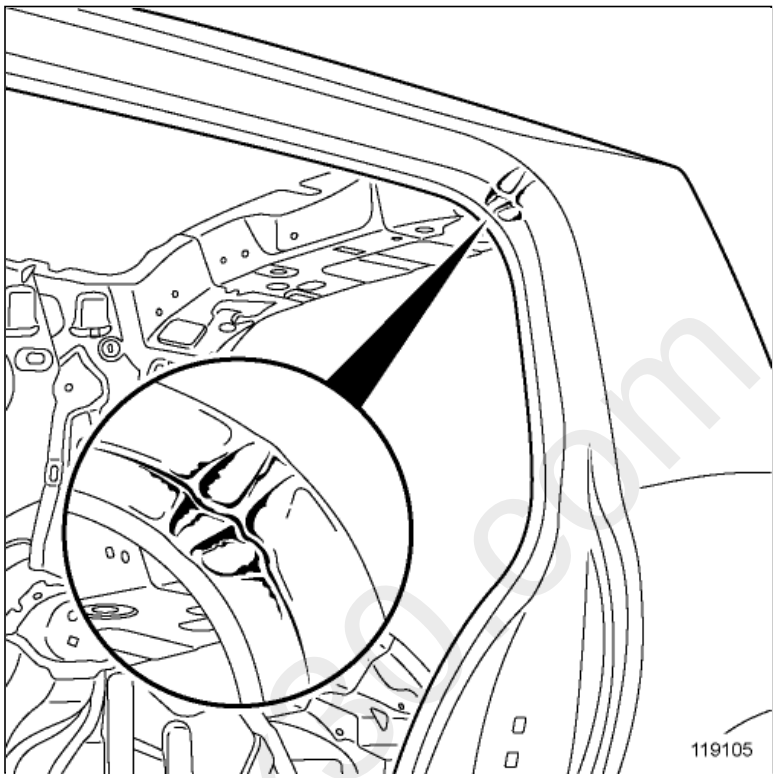
1.INTRODUCTION

Before undertaking bodywork repairs on a vehicle, carry out a series of checks in order to determine:

- firstly, whether the vehicle's road holding and behaviour has been affected by the impact,
- the type of equipment to use according to the deformity found on the subframe,
- the parts to order for the repairs.

The checks consist of examining the vehicle structure in order to detect any significant crumpling or blistering.

2. VISUAL INSPECTION OF THE UPPER STRUCTURE



With the vehicle on the ground, check the edge clearances of the opening elements and remove the door entry seals to check for any damage to the door frame angles.

3. VISUAL INSPECTION OF THE SUBFRAME

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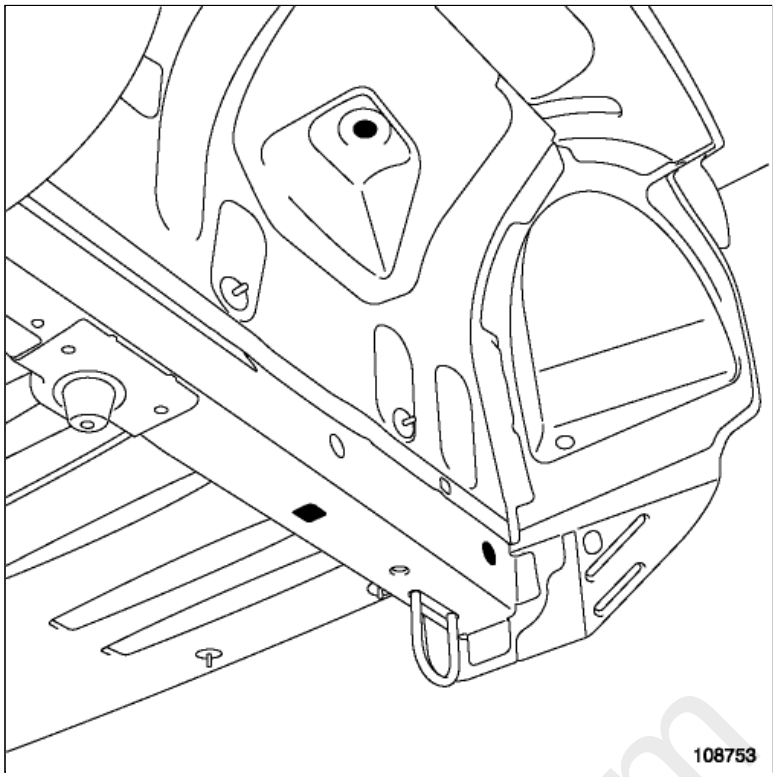

It is preferable to position the vehicle on a two-post lift and examine the side members around the original crumple zones, mechanical component mountings (engine, gearbox, subframe, shock absorber cups) and then the floors.

Note:

- For small impacts or "contentious" impacts, the subframe check may be supplemented by:
  - a comparison measurement using a mechanical gauge,
  - a three-dimensional measurement with an expert report (be sure to measure several points on the component being checked in order to reveal the tendency for deformation, to confirm the fault finding), followed by a check of the axle assemblies before any repairs, on a special 4-post lift.

For impacts to the wheels without any visible structural damage, begin fault finding by checking the axle geometry, after having replaced the damaged wheels.

4. CHECKING THE SUBFRAME USING A MEASURING TOOL

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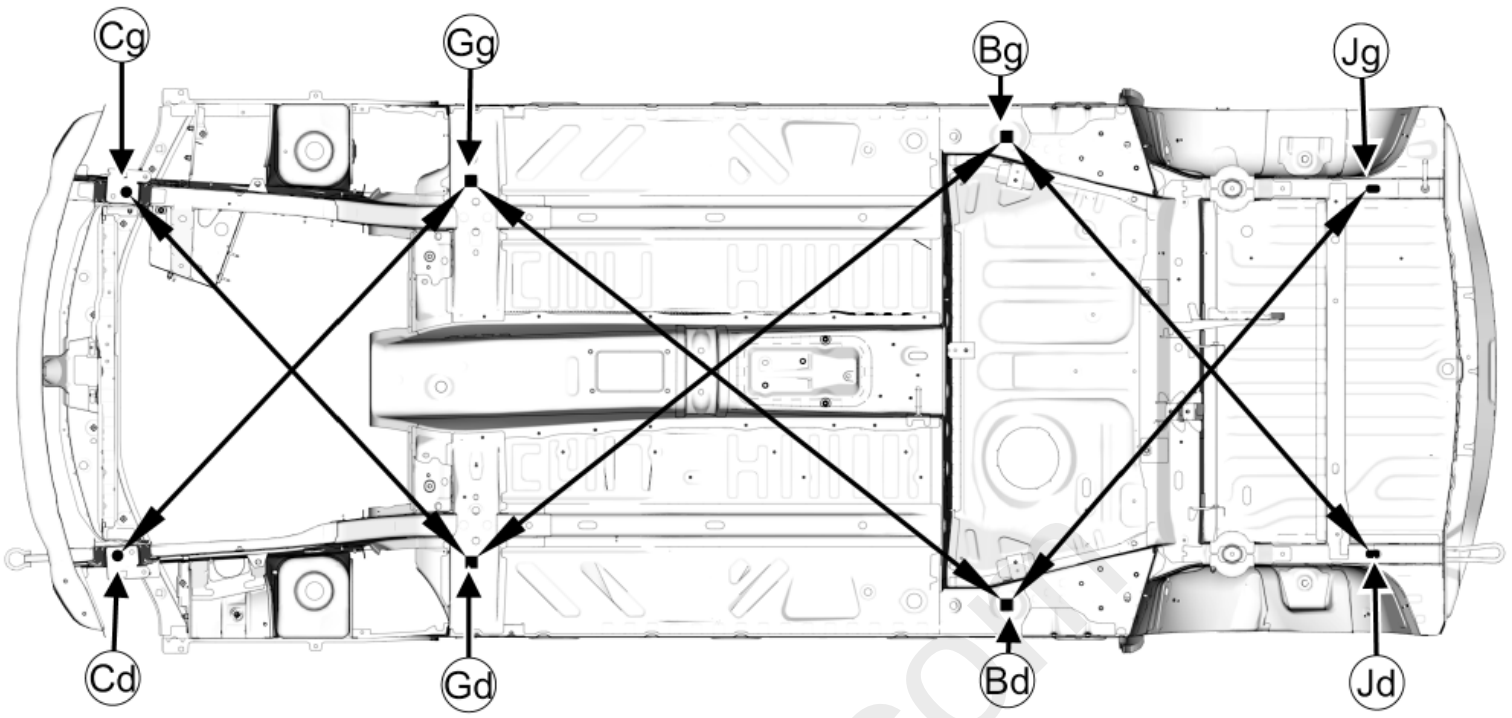

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Chronological order of checks:

Front impact

(Bg) - (Gd) = (Bd) - (Gg)

(Bg) - (Jd) = (Bd) - (Jg)

Rear impact

(Bg) - (Gd) = (Bd) - (Gg)

(Gg) - (Cd) = (Gd) - (Cg)

5. TYPE OF REPAIRS

Three main categories:

- cosmetic damage only: dent removal without the need for jacking,
- damage with slight deformation of the end of a side member requiring some jacking, without risk to the vehicle's road holding,
- damage with deformation of the subframe geometry likely to have affected the vehicle's road holding(see 40A, General information, Straightening a component: Description) .

Note:

The indications necessary for identifying the points on the subframe which affect the vehicle's road holding are given in the MR for each vehicleStructural components to be positioned on the repair bench: Description .

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