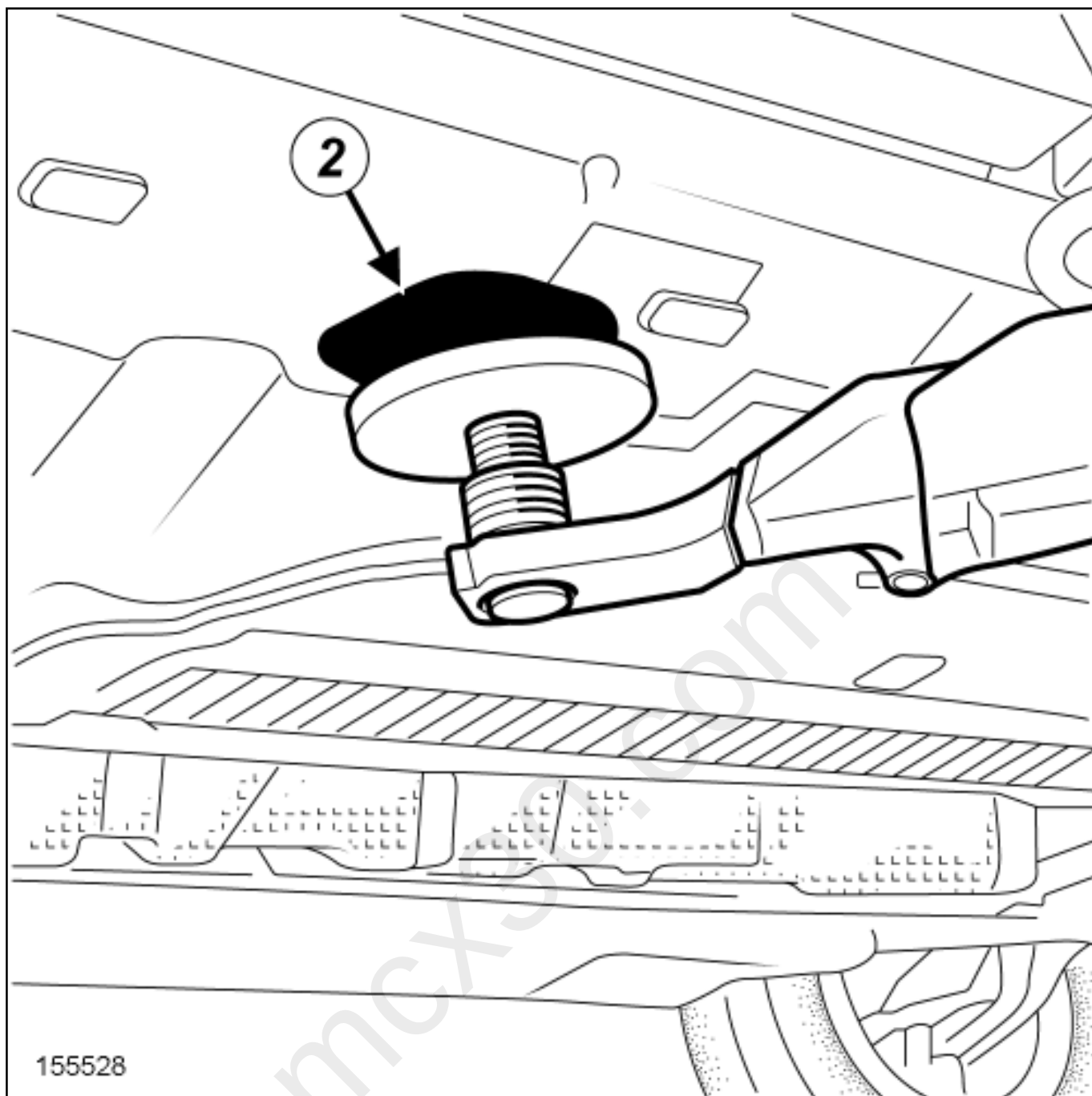




WARNING

In this instance, the risk of the vehicle tilting towards the rear is high. It is forbidden to remove components from the front section of the vehicle.



WATER CHAMBER: REMOVAL - REFITTING



Note, one or more warnings are present in this procedure



Special tooling required

Remote operation pliers for hose clips.

Mot. 1448

WARNING

When working in the engine compartment, take care as the radiator fan(s) may start up unexpectedly (risk of being cut).



- To avoid any risk of serious burns when the engine is hot:
 - do not open the expansion bottle cap,
 - do not drain the cooling system,
 - do not open the bleed screw(s).

CAUTION

When carrying out a repair that requires a complete change, it is essential to flush the circuit with clean water, blast compressed air through the circuit to drive out the water, fill and bleed the circuit and then measure the effective protection.



The criteria to be met are:



■ protection down to -25°C 2 for cold and temperate countries,



■ protection down to -40°C 2 for very cold countries.



CAUTION

Prepare for the flow of fluid, and protect the surrounding components.

Location and specifications (tightening torques, parts always to be replaced, etc.)[\(see 19A, Cooling, Coolant circuit assembly: Exploded view\)](#) .

REMOVAL

1. REMOVAL PREPARATION OPERATION



Position the vehicle on a two-post lift[Vehicle: Towing and lifting](#) .



Disconnect the battery[Battery: Removal - Refitting](#) .



Remove:



the engine undertray bolts,



the engine undertray,



the intercooler air inlet pipe[Air inlet assembly: Exploded view](#) ,



the intercooler air outlet pipe[Air inlet assembly: Exploded view](#) ,



the throttle valve[Air inlet assembly: Exploded view](#) ,

the inlet distributor[Air inlet assembly: Exploded view](#) .



Drain the cooling system[\(see 19A, Cooling, Cooling system: Draining - Refilling\)](#) .

2. REMOVAL OPERATION



Move aside the clip from the cooling hose between expansion bottle and the water inlet housing using the tool Remote operation pliers for hose clips.([Mot. 1448](#)) [\(see 19A, Cooling, Coolant circuit assembly: Exploded view\)](#) .



Disconnect the cooling hose between expansion bottle and the water inlet housing([see 19A, Cooling, Coolant circuit assembly: Exploded view](#)) .



Unclip the cooling hose between expansion bottle and the water inlet housing.



Move aside the clip from the cooling hoses between the oil-coolant heat exchanger and the water inlet housing using the toolRemote operation pliers for hose clips.(Mot. 1448) ([see 19A, Cooling, Coolant circuit assembly: Exploded view](#)) .



Disconnect the cooling hoses between the oil-coolant heat exchanger and the water inlet housing([see 19A, Cooling, Coolant circuit assembly: Exploded view](#)) .



Move aside the clip from the cooling hose between the water chamber and the water inlet housing using the toolRemote operation pliers for hose clips.(Mot. 1448) ([see 19A, Cooling, Coolant circuit assembly: Exploded view](#)) .



Disconnect the cooling hose between the water chamber and the water inlet housing([see 19A, Cooling, Coolant circuit assembly: Exploded view](#)) .



Move aside the clips from the bottom coolant hose using the toolRemote operation pliers for hose clips. (Mot. 1448) ([see 19A, Cooling, Coolant circuit assembly: Exploded view](#)) .



Disconnect the bottom coolant hose([see 19A, Cooling, Coolant circuit assembly: Exploded view](#)) .



Unclip from the water inlet housing:



the water inlet housing connector wiring,



the wiring of the air conditioning compressor.



Disconnect the water inlet housing connector.

Remove [\(see 19A, Cooling, Coolant circuit assembly: Exploded view\)](#) :

-
- the water inlet housing bolts,
- the water inlet housing,
- the water inlet housing seal.

REFITTING

1. REFITTING PREPARATION OPERATION

Parts always to be replaced:

- the water inlet housing seal.

Use **SURFACE CLEANER** [Vehicle: Parts and consumables for the repair](#) to clean and degrease:

- the cylinder block joint face.



CAUTION

Do not scrape the joint faces of the aluminium, any damage caused to the joint face will result in a risk of leaks.



CAUTION

To ensure proper sealing, the gasket surfaces must be clean, dry and not greasy (avoid any finger marks).

2. REFITTING OPERATION