

- the new coolant pump seal,
- the coolant pump with its pulley,
- the coolant pump bolts.

Torque tighten in order the coolant pump bolts [Cylinder block assembly: Exploded view](#) .

### 3. FINAL OPERATION

Fit the water pump pulley.

Refit the water pump pulley bolts [Cylinder block assembly: Exploded view](#) .

Torque tighten the bolts of the coolant pump pulley, locking the coolant pump pulley using a screwdriver [Cylinder block assembly: Exploded view](#) .

Proceed in the reverse order to removal.



Repair-10x06x01x04-01x37-1-134-1.xml



XSL version : 3.02 du 22/07/11

# COOLANT PUMP: REMOVAL - REFITTING



Note, one or more warnings are present in this procedure



parts always to be replaced:



coolant pump seal

## 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  $-25^{\circ}\text{C} \pm 2$  for cold and temperate countries,



■ protection down to  $-40^{\circ}\text{C} \pm 2$  for "extreme cold" countries.



## CAUTION

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

Locations and specifications (tightening torques, parts always to be replaced, etc.) ([see 10A, Engine and cylinder block assembly, Cylinder block 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.



Remove:



the front right-hand wheel [Front hub carrier assembly: Exploded view](#) ,

the front section of the front wheel arch liners [Exterior body front trim assembly: Exploded view](#) .

Remove the front bumper [Front bumper assembly: Exploded view](#) .

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

Remove the accessories belt [\(see 11A, Top and front of engine, Engine accessories assembly: Exploded view\)](#) .

Loosen the bolts of the coolant pump pulley, locking the coolant pump pulley using a screwdriver [\(see 10A, Engine and cylinder block assembly, Cylinder block assembly: Exploded view\)](#) .

Remove the water pump pulley bolts [\(see 10A, Engine and cylinder block assembly, Cylinder block assembly: Exploded view\)](#) .

Move the water pump pulley.

## 2. REMOVAL OPERATION

Remove [\(see 10A, Engine and cylinder block assembly, Cylinder block assembly: Exploded view\)](#) :

- 
- the coolant pump bolts,
- the coolant pump with its pulley,
- the coolant pump seal.

## REFITTING

### 1. REFITTING PREPARATION OPERATION



parts always to be replaced:

coolant pump seal



### 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).



### WARNING

Wear goggles with side protectors for this operation.



### WARNING

Wear leaktight gloves (Nitrile type) for this operation.

Use surface cleaner Vehicle: Parts and consumables for the repair to clean and degrease:

- 
- the coolant pump sealing face if it is to be reused,
- the cylinder block gasket face.

## 2. REFITTING OPERATION

Refit (see 10A, Engine and cylinder block assembly, Cylinder block assembly: Exploded view) :

■