

Engine cooling fan assembly: Removal - Refitting

K9K

REFITTING

I - REFITTING PREPARATION OPERATION

In the event of replacement

- ☐ Refit on the fan assembly:
 - the power-assisted steering hose clips,
 - the wiring clip,
 - the support of the intercooler duct and coolant hose on the fan assembly.

II - REFITTING OPERATION

- ☐ Proceed in the reverse order to removal.
- ☐ Connect the battery (see **Battery: Removal - Refitting**) (80A, Battery).

III - CHECKING THE OPERATION OF THE FAN UNIT

- ☐ Start the engine.
- ☐ Disconnect the coolant temperature sensor connector.
- ☐ Check the operation of the fan assembly.
- ☐ Connect the coolant temperature sensor connector.
- ☐ Switch off the engine.

Coolant pump inlet pipe: Removal - Refitting

K9K, and 796

Tightening torques 	
coolant pump inlet pipe bolt	22 N.m
accelerometer	20 N.m

IMPORTANT

Wear leaktight gloves (Nitrile type) for this operation.

IMPORTANT

Wear heat protective gloves during the operation.

IMPORTANT

The circuits are designed to be pressurised, so be careful at high temperatures (risk of serious burns).

Do not remove the cap from the expansion bottle while the engine is hot.

Take care when carrying out a repair under the bonnet, as the radiator fan(s) may start to operate without warning.

Do not open the bleed screw(s) with the engine running.

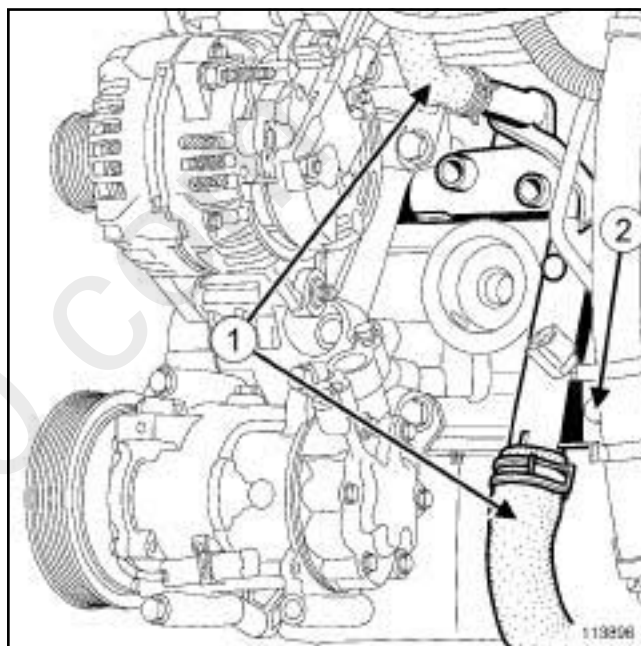
WARNING

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

REMOVAL**I - REMOVAL PREPARATION OPERATION**

- ☐ Position the vehicle on a two-post lift (see **Vehicle: Towing and lifting**) (02A, Lifting equipment).
- ☐ Disconnect the battery (see **Battery: Removal - Refitting**) (80A, Battery).
- ☐ Remove:
 - the engine cover,
 - the engine undertray bolts,
 - the engine undertray.

- ☐ Remove the front bumper (see **Front bumper: Removal - Refitting**) (55A, Exterior protection).
- ☐ Drain the engine cooling system (see **19A, Cooling, Cooling system: Draining - Refilling**, page 19A-6).
- ☐ Remove the oil-water heat exchanger (see **10A, Engine and cylinder block assembly, Oil-coolant heat exchanger: Removal - Refitting**, page 10A-37).

II - REMOVAL OPERATION

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- ☐ Disconnect:
 - the coolant hoses (1) from the coolant pump inlet pipe,
 - the accelerometer connector.
- ☐ Remove the accelerometer using.
- ☐ Remove:
 - the water pump inlet pipe bolt (2),
 - the coolant pump inlet pipe.
 - the coolant pump inlet pipe seal.

REFITTING**I - REFITTING PREPARATION OPERATION**

- ☐ parts always to be replaced: seal between coolant pump inlet pipe and coolant pump

Coolant pump inlet pipe: Removal - Refitting

K9K, and 796

- ☐ Use **SURFACE CLEANER** (see) (04B, Consumables - Products) to clean and degrease:

- the coolant pump inlet pipe seal housing if it is being reused,
- the seal housing in the cylinder block.

WARNING

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

WARNING

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

- ☐ Replace the removed clips.

II - REFITTING OPERATION

- ☐ Refit the coolant pump inlet pipe to the cylinder block.
- ☐ Torque tighten the **coolant pump inlet pipe bolt (22 N.m)**.
- ☐ Refit the accelerometer using the tool.
- ☐ Tighten to torque the **accelerometer (20 N.m)**.
- ☐ Connect:
 - the accelerometer connector,
 - the coolant hoses onto the coolant pump inlet pipe.

III - FINAL OPERATION

- ☐ Refit the oil-water heat exchanger (see **10A, Engine and cylinder block assembly, Oil-coolant heat exchanger: Removal - Refitting**, page 10A-37) .
- ☐ Fill the cooling system (see **19A, Cooling, Cooling system: Draining - Refilling**, page 19A-6) .
- ☐ Refit the front bumper (see **Front bumper: Removal - Refitting**) (55A, Exterior protection).
- ☐ Refit:
 - the engine undertray,
 - the engine undertray bolts,
 - the engine cover.
- ☐ Connect the battery (see **Battery: Removal - Refitting**) (80A, Battery).
- ☐ Bleed the cooling system (see **19A, Cooling, Cooling system: Draining - Refilling**, page 19A-6) .

Coolant pump inlet pipe: Removal - Refitting

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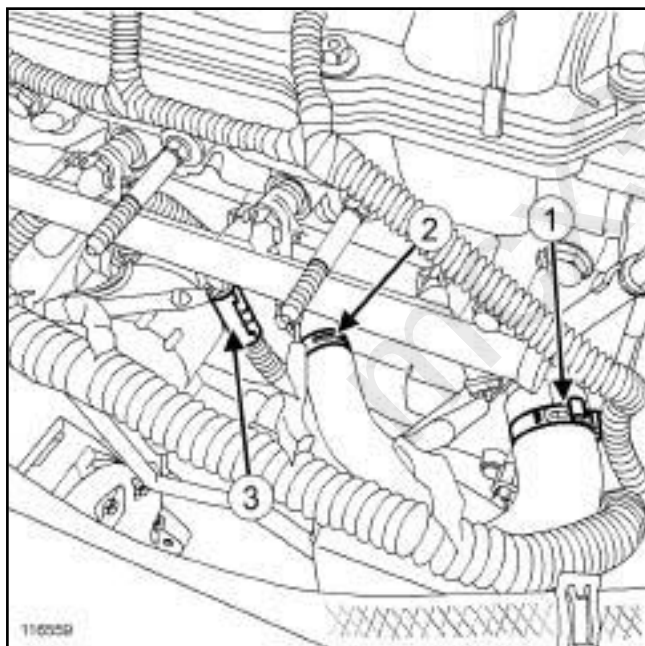
Tightening torques

coolant pump inlet pipe bolt	22 N.m
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REMOVAL

I - REMOVAL PREPARATION OPERATION

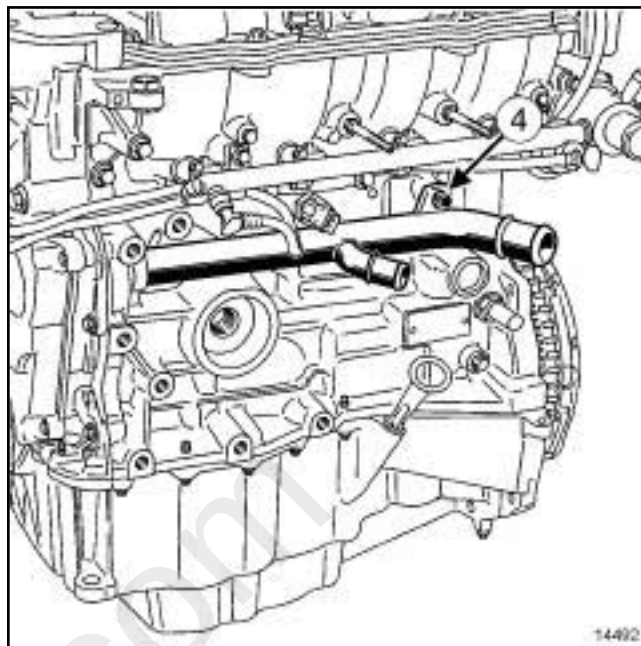
- ☐ Position the vehicle on a two-post lift (see **Vehicle: Towing and lifting**) (02A, Lifting equipment).
- ☐ Disconnect the battery (see **Battery: Removal - Refitting**) (80A, Battery).
- ☐ Remove the injector rail protector.
- ☐ Drain the cooling system (see **19A, Cooling, Cooling system: Draining - Refilling**, page 19A-6) .



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- ☐ Disconnect:
 - the cooling radiator bottom hose (1) ,
 - the heater hose (2) .
- ☐ Unclip the wiring on the coolant pump inlet pipe at (3) .
- ☐ Disconnect the connector from cylinder injector no. 3.

II - OPERATION FOR REMOVAL OF PART CONCERNED



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- ☐ Remove:
 - the bolt (4) from the coolant pump inlet pipe,
 - the coolant pump inlet pipe,
 - the coolant pump inlet pipe seal.

REFITTING

I - REFITTING PREPARATION OPERATION

- ☐ parts always to be replaced: seal between coolant pump inlet pipe and coolant pump
- ☐ Always replace the cooling hose clips.

II - REFITTING OPERATION FOR PART CONCERNED

- ☐ Refit the coolant pump inlet pipe fitted with a new seal.
- ☐ Torque tighten the **coolant pump inlet pipe bolt (22 N.m)**.

III - FINAL OPERATION

- ☐ Connect:
 - the connector to cylinder injector no. 3.
 - the heater hose on the coolant pump inlet pipe,
 - the cooling radiator bottom hose.
- ☐ Clip the wiring onto the coolant pump inlet pipe.