

Water chamber: Removal - Refitting

D4F, and 764

- the air filter unit (see **12A, Fuel mixture, Air filter unit: Removal - Refitting**, page **12A-17**) ,
 - the battery tray (see **Battery tray: Removal - Refitting**) (MR 392, 80A, Battery),
 - the battery (see **Battery: Removal - Refitting**) (MR 392, 80A, Battery).
- ☐ Bleed the cooling system (see **19A, Cooling, Cooling system: Draining - Refilling**, page **19A-16**) (MR 392, 19A, Cooling).

Coolant temperature sensor: Removal - Refitting

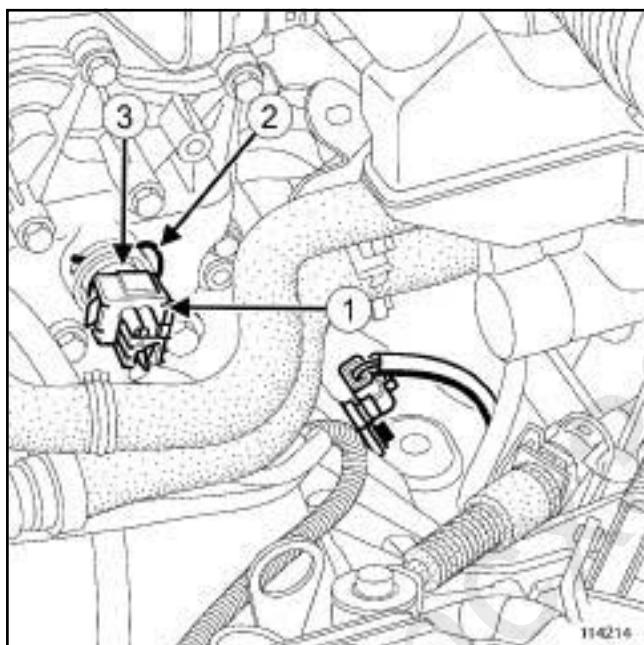
K4J or K4M

REMOVAL

I - REMOVAL PREPARATION OPERATION

- ☐ Disconnect the battery (see **Battery: Removal - Refitting**) (80A, Battery).
- ☐ Remove:
 - the engine cover,
 - the air intake sleeve.

II - OPERATION FOR REMOVAL OF PART CONCERNED



114214

- ☐ Disconnect the coolant temperature sensor connector (1).
- ☐ Unclip the retaining clip (2) on the coolant temperature sensor.
- ☐ Remove the coolant temperature sensor (3).

REFITTING

I - REFITTING PREPARATION OPERATION

- ☐ Always replace the coolant temperature sensor O-ring.

II - REFITTING OPERATION FOR PART CONCERNED

- ☐ Refit the coolant temperature sensor.
- ☐ Secure the coolant temperature sensor with the retaining clip.

- ☐ Connect the coolant temperature sensor connector.

III - FINAL OPERATION

- ☐ Fill the cooling system (see **19A, Cooling, Cooling system: Draining - Refilling**, page **19A-16**) (MR 392, 19A, Cooling).
- ☐ Connect the battery (see **Battery: Removal - Refitting**) (MR 392, 80A, Battery).
- ☐ Bleed the cooling system (see **19A, Cooling, Cooling system: Draining - Refilling**, page **19A-16**) (MR 392, 19A, Cooling).
- ☐

Refit:

- the air intake sleeve,
- the engine cover.

Coolant temperature sensor: Removal - Refitting

K9K

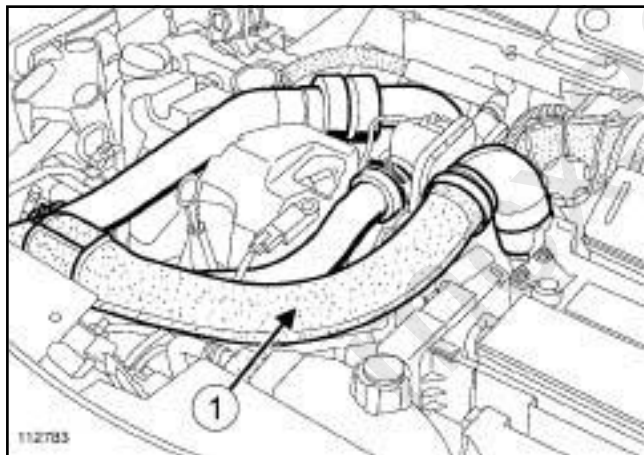
Special tooling required

Mot. 1448	Remote operation pliers for hose clips.
Mot. 1202-01	Clip pliers for hose clips (large size).
Mot. 1202-02	Clip pliers for hose clips (small size)

REMOVAL

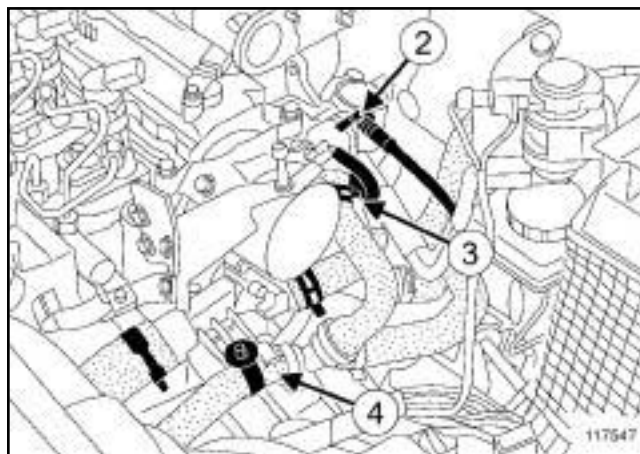
I - REMOVAL PREPARATION OPERATION

- ☐ Position the vehicle on a two-post lift (see **Vehicle: Towing and lifting**) (MR 392, 02A, Lifting equipment).
- ☐ Remove:
 - the battery (see **Battery: Removal - Refitting**) (MR 392, 80A, Battery),
 - the engine cover.



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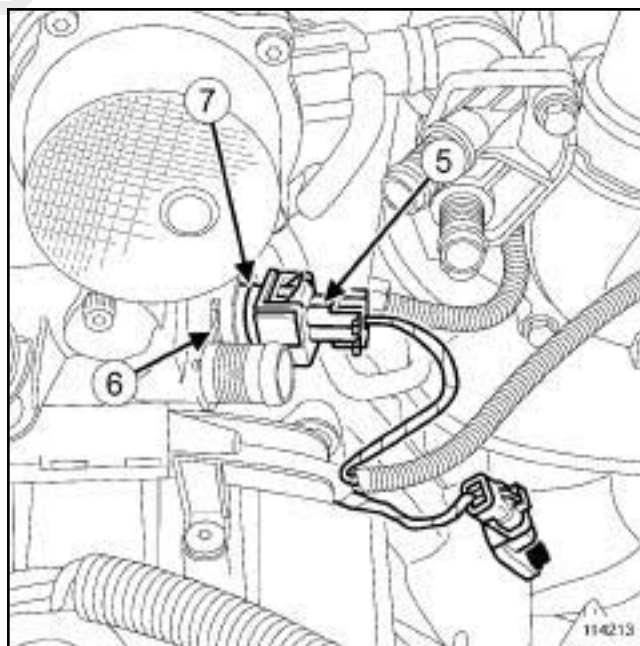
- ☐ Remove:
 - the air filter inlet air pipe (1) ,
 - the battery tray (see **Battery tray: Removal - Refitting**) (MR 392, 80A, Battery),
 - the air filter unit (see **12A, Fuel mixture, Air filter unit: Removal - Refitting**, page 12A-17) ,
 - the engine undertray.
- ☐ Drain the cooling system (see **19A, Cooling, Cooling system: Draining - Refilling**, page 19A-16) (MR 392, 19A, Cooling).
- ☐ Clean the cooling system (see **19A, Cooling, Cooling system: Draining - Refilling**, page 19A-16) (MR 392, 19A, Cooling).



117547

- ☐ Disconnect the vacuum pipe (2) from the vacuum pump.
- ☐ Remove the clip (3) from the coolant hose using the **(Mot. 1448)** or **(Mot. 1202-01)** or **(Mot. 1202-02)**.
- ☐ Disconnect the coolant hose.
- ☐ Unclip the coolant hose (4) .

II - OPERATION FOR REMOVAL OF PART CONCERNED



114213

- ☐ Disconnect the coolant temperature sensor connector (5) .
- ☐ Remove:
 - the coolant temperature sensor retaining clip (6) ,
 - the coolant temperature sensor (7) ,
 - the coolant temperature sensor O-ring.

Coolant temperature sensor: Removal - Refitting

K9K

REFITTING

I - REFITTING PREPARATION OPERATION

- ☐ The coolant temperature sensor O-ring must always be replaced.
- ☐ Connect the coolant temperature sensor connector.

II - REFITTING OPERATION FOR PART CONCERNED

- ☐ Refit:
 - the coolant temperature sensor,
 - the coolant temperature sensor retaining clip.

III - FINAL OPERATION

- ☐ Connect the coolant hose.
- ☐ Fit the coolant hose clip using the **(Mot. 1448)** or **(Mot. 1202-01)** or **(Mot. 1202-02)**.
- ☐ Clip the coolant hose.
- ☐ Connect the vacuum pipe to the vacuum pump.
- ☐ Refit:
 - the engine undertray,
 - the air filter unit (see **12A, Fuel mixture, Air filter unit: Removal - Refitting**, page **12A-17**),
 - the battery tray (see **Battery tray: Removal - Refitting**) (MR 392, 80A, Battery),
 - the air filter inlet air pipe,
 - the battery (see **Battery: Removal - Refitting**) (MR 392, 80A, Battery),
- ☐ Perform the following operations:
 - fill the engine cooling system (see **19A, Cooling, Cooling system: Draining - Refilling**, page **19A-16**) (MR 392, 19A, Cooling),
 - bleed the cooling system (see **19A, Cooling, Cooling system: Draining - Refilling**, page **19A-16**) (MR 392, 19A, Cooling).
- ☐ Refit the engine cover.

Coolant temperature sensor: Removal - Refitting

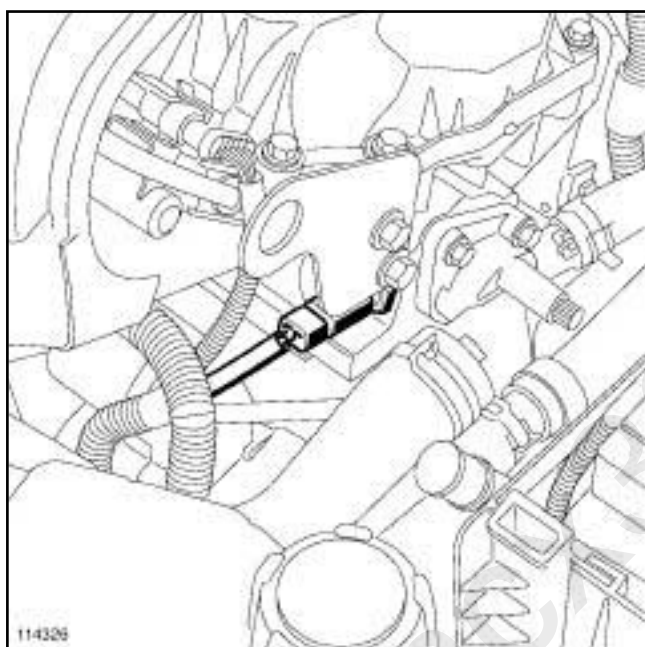
D4F, and 740 or 742 or 764

REMOVAL

I - REMOVAL PREPARATION OPERATION

- ☐ Disconnect the battery (see **Battery: Removal - Refitting**).
- ☐ Remove the air filter unit (see **12A, Fuel mixture, Air filter unit: Removal - Refitting**, page 12A-17) (80A, Battery).

II - OPERATION FOR REMOVAL OF PART CONCERNED



114326

- ☐ Disconnect the coolant temperature sensor connector.
- ☐ Remove the coolant temperature sensor.

REFITTING

I - REFITTING PREPARATION OPERATION

- ☐ Always replace the coolant temperature sensor O-ring.

II - REFITTING OPERATION FOR PART CONCERNED

- ☐ Refit:
 - the coolant temperature sensor O-ring,
 - the coolant temperature sensor.
- ☐ Connect the coolant temperature sensor connector.

III - FINAL OPERATION

- ☐ Refit the air filter unit (see **12A, Fuel mixture, Air filter unit: Removal - Refitting**, page 12A-17).
- ☐ Fill the cooling system (see **19A, Cooling, Cooling system: Draining - Refilling**, page 19A-16) (MR 392, 19A, Cooling).
- ☐ Connect the battery (see **Battery: Removal - Refitting**) (80A, Battery).
- ☐ Bleed the cooling system (see **19A, Cooling, Cooling system: Draining - Refilling**, page 19A-16) (MR 392, 19A, Cooling).

Coolant temperature sensor: Removal - Refitting

F4R

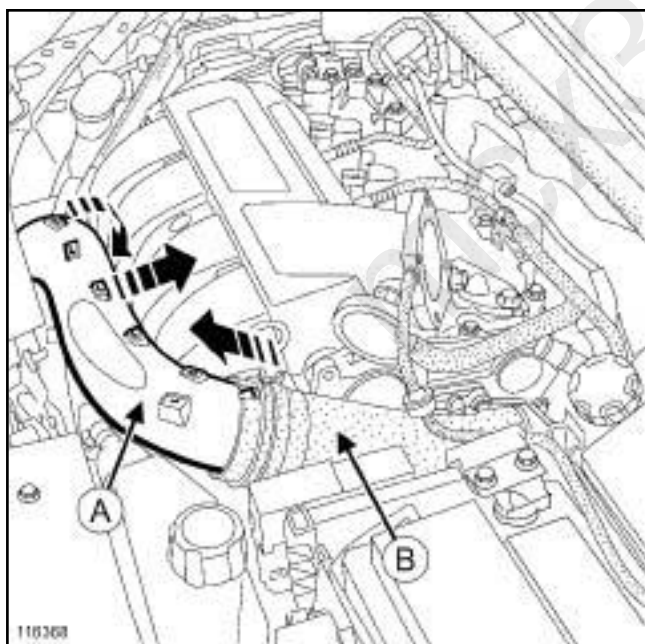
Tightening torques

coolant temperature sensor	33 N.m
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REMOVAL

I - REMOVAL PREPARATION OPERATION

- ☐ Position the vehicle on a two-post lift (see **Vehicle: Towing and lifting**) (MR 392, 02A, Lifting equipment).
- ☐ Disconnect the battery (see **Battery: Removal - Refitting**) (MR 392, 80A, Battery).
- ☐ Remove the engine undertray.
- ☐ Perform the following operations:
 - drain the cooling system (see **19A, Cooling, Cooling system: Draining - Refilling**, page 19A-16),
 - flush out the cooling system (see **19A, Cooling, Cooling system: Draining - Refilling**, page 19A-16).



116368

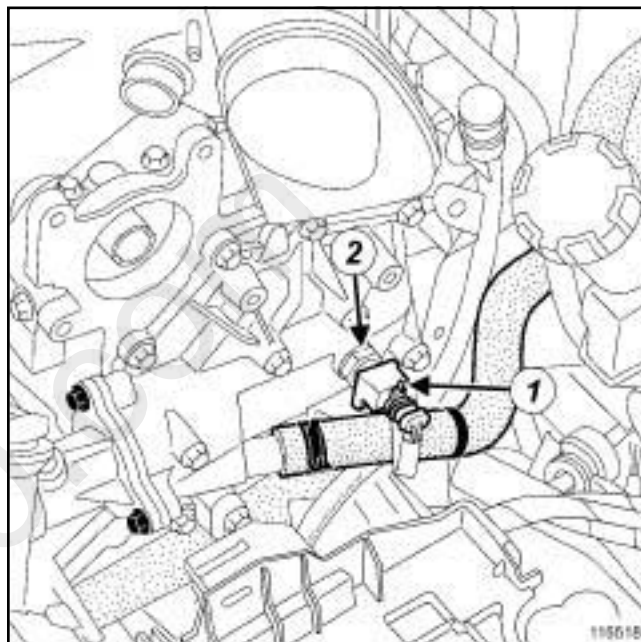
- ☐ Remove the air inlet duct (A) :
 - unclip it from the front end panel,
 - turn it and disconnect it.
- ☐ Disconnect the duct (B) :
 - air resonator side,
 - air filter unit side.

☐ Remove:

- the battery (see **Battery: Removal - Refitting**) (MR 392, 80A, Battery),
- the battery tray (see **Battery tray: Removal - Refitting**) (MR 392, 80A, Battery).

- ☐ Unclip the breather pipe from the gearbox.

II - OPERATION FOR REMOVAL OF PART CONCERNED



116518

- ☐ Disconnect the coolant temperature sensor connector (1).
- ☐ Remove the coolant temperature sensor (2).

REFITTING

I - REFITTING OPERATION FOR PART CONCERNED

- ☐ Refit the coolant temperature sensor fitted with a new seal.
- ☐ Tighten to torque the **coolant temperature sensor (33 N.m)**.
- ☐ Connect the coolant temperature sensor connector.

Coolant temperature sensor: Removal - Refitting

F4R

II - FINAL OPERATION

- ☐ Clip the breather pipe to the gearbox.
- ☐ Connect the duct **(B)** :
 - to air filter unit,
 - to the air resonator.
- ☐ Refit:
 - the air inlet duct **(A)** ,
 - the battery tray (see **Battery tray: Removal - Refitting**) (MR 392, 80A, Battery),
 - the battery (see **Battery: Removal - Refitting**) (MR 392, 80A, Battery).
- ☐ Connect the battery ((see **Battery: Removal - Refitting**) (MR 392, 80A, Battery).
- ☐ Perform the following operations:
 - fill the cooling system (see **19A, Cooling, Cooling system: Draining - Refilling**, page **19A-16**) (MR 392, 19A, Cooling),
 - bleed the cooling system (see **19A, Cooling, Cooling system: Draining - Refilling**, page **19A-16**) (MR 392, 19A, Cooling).
- ☐ Check that there are no leaks.
- ☐ Refit the engine undertray.

Coolant temperature sensor: Removal - Refitting

D4F, and 784

Tightening torques

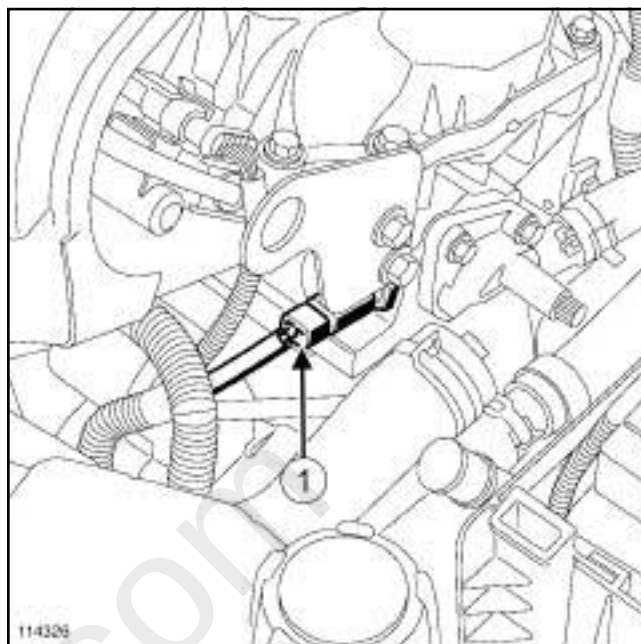
coolant temperature sensor	23 N.m
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REMOVAL

I - REMOVAL PREPARATION OPERATION

- ☐ Position the vehicle on a two-post lift (see **Vehicle: Towing and lifting**) (MR 392, 02A, Lifting equipment).
- ☐ Disconnect the battery (see **Battery: Removal - Refitting**) (MR 392, 80A, Battery).
- ☐ Remove:
 - the engine undertray,
 - the engine cover,
 - the throttle valve (see **12A, Fuel mixture, Throttle valve: Removal - Refitting**, page 12A-33) .
- ☐ Drain the cooling system (see **19A, Cooling, Cooling system: Draining - Refilling**, page 19A-16) (MR 392, 19A, Cooling).

II - OPERATION FOR REMOVAL OF PART CONCERNED



114326

- ☐ Disconnect the coolant temperature sensor connector (1) .
- ☐ Remove the coolant temperature sensor.

Remove:

- the coolant temperature sensor,
- the coolant temperature sensor O-ring.

REFITTING

I - REFITTING PREPARATION OPERATION

- ☐ Always replace the coolant temperature sensor O-ring.

II - REFITTING OPERATION FOR PART CONCERNED

- ☐ Refit:
 - the coolant temperature sensor O-ring,
 - the coolant temperature sensor.
- ☐ Torque tighten the **coolant temperature sensor (23 N.m)**.
- ☐ Connect the coolant temperature sensor connector.