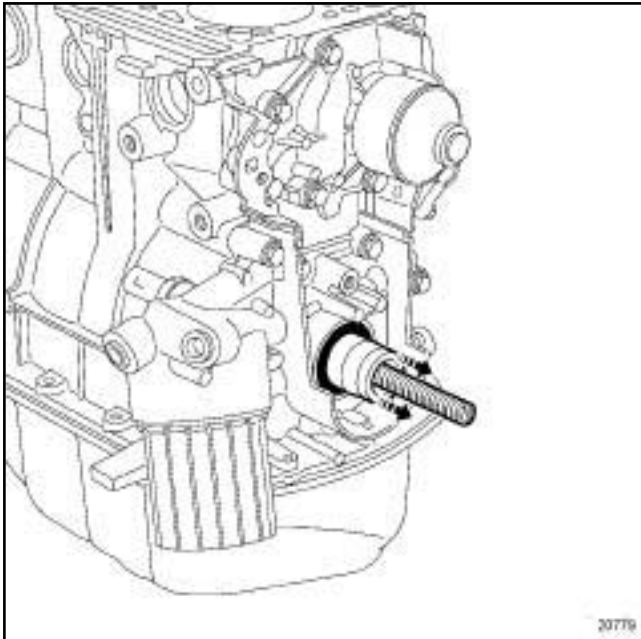


D4F, and 784



20779

☐ Remove:

- the nut,
- the cap,
- the guard,
- the threaded rod.

☐ Connect the oil pressure sensor connector.

☐ Refit:

- the sump (see **10A, Engine and cylinder block assembly, Lower cover: Removal - Refitting**, page **10A-53**),
- the timing belt (see **11A, Top and front of engine, Timing belt: Removal - Refitting**, page **11A-48**),
- the right-hand suspended engine mounting (see **19D, Engine mounting, Right-hand suspended engine mounting: Removal - Refitting**, page **19D-22**),
- the crankshaft accessories pulley (see **11A, Top and front of engine, Crankshaft accessories pulley: Removal - Refitting**, page **11A-31**),
- the accessories belt (see **11A, Top and front of engine, Accessories belt: Removal - Refitting**, page **11A-5**).

☐ Remove the engine support tool (**Mot. 1672**).

☐ Connect the oil-coolant heat exchanger hoses.

☐ Refit the clips using the (**Mot. 1448**).

☐ Remove the hose clamps (**Ms. 583**).

☐ Refit:

- the front section of the front right-hand wheel arch liner (see **Front wheel arch liner: Removal - Refitting**) (MR 393, 55A, Exterior protection),
- the front right-hand wheel (see **Wheel: Removal - Refitting**) (MR 392, 35A, Wheels and tyres),
- the dipstick.

☐ Fill and bleed the cooling system (see **19A, Cooling, Cooling system: Draining - Refilling**, page **19A-16**).

☐ Refit the engine undertray.

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

D4F, and 740 or 742 or 764

Tightening torques

multifunction support mounting bolts	50 N.m
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REMOVAL

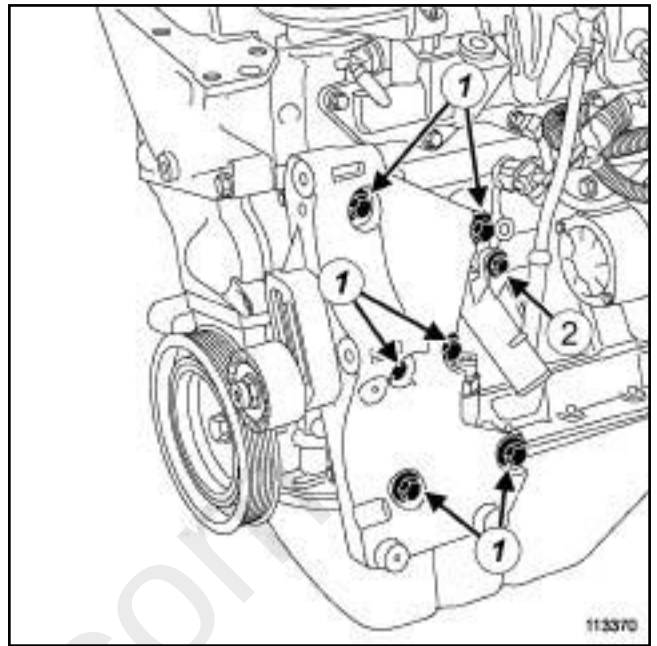
I - REMOVAL PREPARATION OPERATION

- ☐ 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 front right-hand wheel (see **Wheel: Removal - Refitting**) (MR 392, 35A, Wheels and tyres),
 - the front right-hand wheel arch liner (see **Front wheel arch liner: Removal - Refitting**) (MR 393, 55A, Exterior protection),
 - the accessories belt (see **11A, Top and front of engine, Accessories belt: Removal - Refitting**, page **11A-5**),
 - the alternator (see **16A, Starting - Charging, Alternator: Removal - Refitting**, page **16A-5**).

AIR CONDITIONING

- ☐ Remove the air conditioning compressor (see **Compressor: Removal - Refitting**) (MR 392, 62A, Air conditioning).

II - OPERATION FOR REMOVAL OF PART CONCERNED



113370

- ☐ Remove:

- the multifunction support mounting bolts (1),
- the coolant pump inlet pipe mounting bolt (2),
- the multifunction support.

REFITTING

I - REFITTING OPERATION FOR PART CONCERNED

- ☐ Position the multifunction support.
- ☐ Tighten to torque the **multifunction support mounting bolts (50 N.m)**.
- ☐ Refit the water pump inlet pipe mounting bolt.

II - FINAL OPERATION.

AIR CONDITIONING

- ☐ Refit the air conditioning compressor (see **Compressor: Removal - Refitting**) (MR 392, 62A, Air conditioning).

- ☐ Refit:

- the alternator (see **16A, Starting - Charging, Alternator: Removal - Refitting**, page **16A-5**),

D4F, and 740 or 742 or 764

- the accessories belt (see **11A, Top and front of engine, Accessories belt: Removal - Refitting**, page **11A-5**),
 - the front right-hand wheel arch liner (see **Front wheel arch liner: Removal - Refitting**) (MR 393, 55A, Exterior protection),
 - the front right-hand wheel (see **Wheel: Removal - Refitting**) (MR 392, 35A, Wheels and tyres).
- ☐ Connect the battery (see **Battery: Removal - Refitting**) (MR 392, 80A, Battery).

ENGINE AND CYLINDER BLOCK ASSEMBLY

Multifunction support: Removal - Refitting

10A

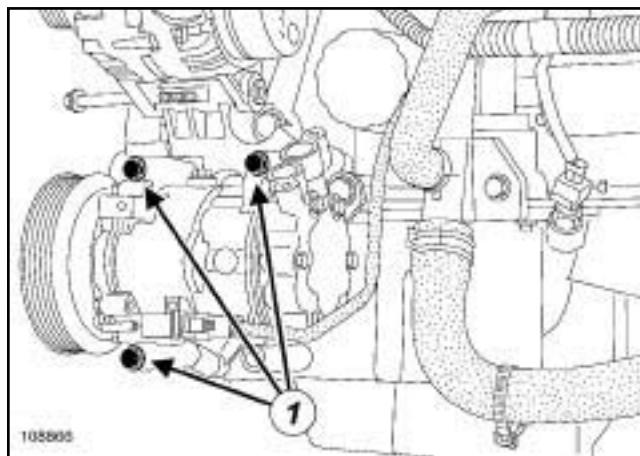
K4J or K4M, and AIR CONDITIONING

Tightening torques 	
multifunction support mounting bolts	44 Nm
bolt mounting the multifunction support on the sump	21 Nm
air conditioning compressor bolts	25 Nm

REMOVAL

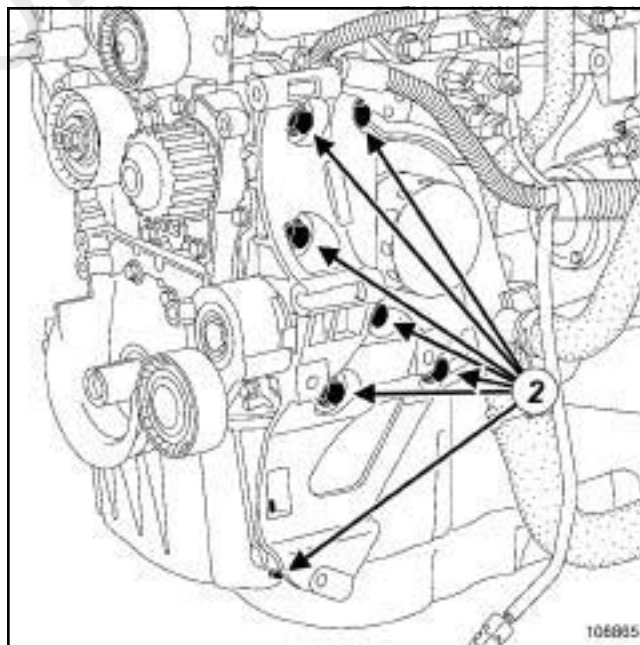
I - REMOVAL PREPARATION OPERATION

- ☐ 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 front right-hand wheel (see **Wheel: Removal - Refitting**) (MR 392, 35A, Wheels and tyres),
 - the front right-hand wheel arch liner (see **Front wheel arch liner: Removal - Refitting**) (MR 393, 55A, Exterior protection),
 - the accessories belt (see **11A, Top and front of engine, Accessories belt: Removal - Refitting**, page 11A-5) ,
 - the alternator (see **16A, Starting - Charging, Alternator: Removal - Refitting**, page 16A-5) .



- ☐ Remove the mounting bolts (1) from the air conditioning compressor.
- ☐ Attach the air conditioning compressor to the cooling radiator cross member.
- ☐ Unclip the alternator wiring harness from the multifunction support.

II - REMOVAL OF PART CONCERNED

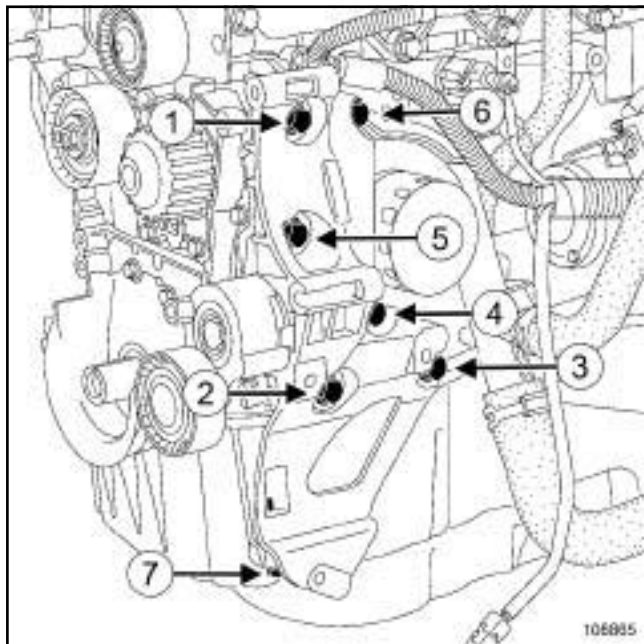


- ☐ Remove:
 - the multifunction support mounting bolts (2) ,
 - the multifunction support.

K4J or K4M, and AIR CONDITIONING

REFITTING

I - REFITTING PART CONCERNED



108865

☐ Torque tighten and in order:

- the **multifunction support mounting bolts (44 Nm)**,
- the **bolt mounting the multifunction support on the sump (21 Nm)**.

II - FINAL OPERATION.

- ☐ Clip the alternator wiring harness onto the multifunction support.
- ☐ Detach the air conditioning compressor from the cooling radiator cross member.
- ☐ Refit the air conditioning compressor mounting bolts.
- ☐ Torque tighten the **air conditioning compressor bolts (25 Nm)**.
- ☐ Refit:
 - the alternator (see **16A, Starting - Charging, Alternator: Removal - Refitting**, page 16A-5) ,
 - the accessories belt (see **11A, Top and front of engine, Accessories belt: Removal - Refitting**, page 11A-5) ,
 - the front right-hand wheel arch liner (see **Front wheel arch liner: Removal - Refitting**) (MR 393, 55A, Exterior protection),
 - the front right-hand wheel (see **Wheel: Removal - Refitting**) (MR 392, 35A, Wheels and tyres).

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

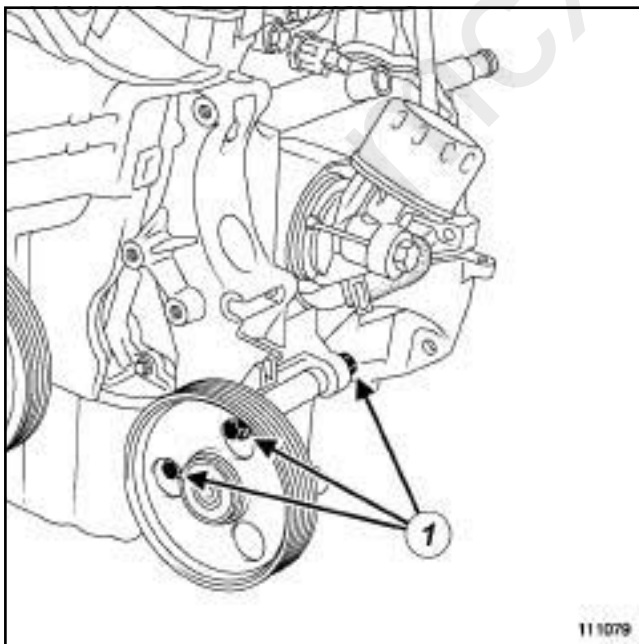
K4J or K4M, and STANDARD HEATING

Tightening torques 	
multifunction support mounting bolts	44 Nm

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 front right-hand wheel (see **Wheel: Removal - Refitting**) (MR 392, 35A, Wheels and tyres),
 - the front right-hand wheel arch liner (see **Front wheel arch liner: Removal - Refitting**) (MR 393, 55A, Exterior protection),
 - the accessories belt (see **11A, Top and front of engine, Accessories belt: Removal - Refitting**, page 11A-5) ,
 - the alternator (see **16A, Starting - Charging, Alternator: Removal - Refitting**, page 16A-5) .

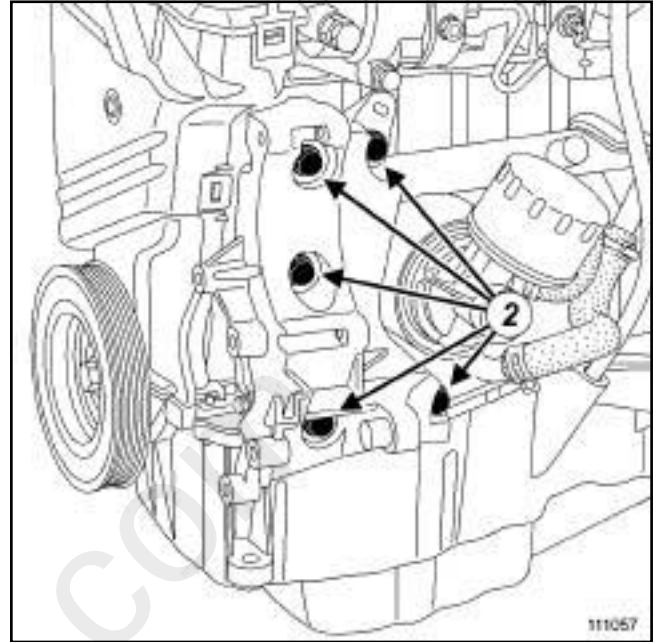


111079

- ☐ Remove:
 - the idler pulley support mounting bolts (1) ,
 - the idler pulley support.

- ☐ Unclip the alternator wiring harness from the multifunction support.

II - REMOVAL OF PART CONCERNED



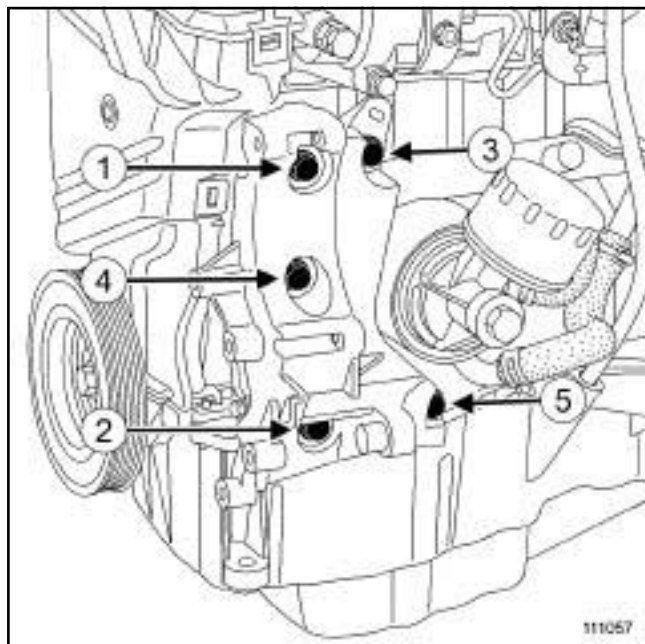
111057

- ☐ Remove:
 - the multifunction support mounting bolts (2) ,
 - the multifunction support.

K4J or K4M, and STANDARD HEATING

REFITTING

I - REFITTING PART CONCERNED



111057

☐ Refit:

- the multifunction support,
- the multifunction support mounting bolts.

☐ Tighten to torque and in order the **multifunction support mounting bolts (44 Nm)**.

II - FINAL OPERATION.

☐ Clip the alternator wiring harness onto the multifunction support.

☐ Refit:

- the free pulley support,
- the free pulley support mounting bolts,
- the alternator (see **16A, Starting - Charging, Alternator: Removal - Refitting**, page 16A-5) ,
- the accessories belt (see **11A, Top and front of engine, Accessories belt: Removal - Refitting**, page 11A-5) ,
- the front right-hand wheel arch liner (see **Front wheel arch liner: Removal - Refitting**) (MR 393, 55A, Exterior protection),
- the front right-hand wheel (see **Wheel: Removal - Refitting**) (MR 392, 35A, Wheels and tyres).

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

ENGINE AND CYLINDER BLOCK ASSEMBLY

Multifunction support: Removal - Refitting

10A

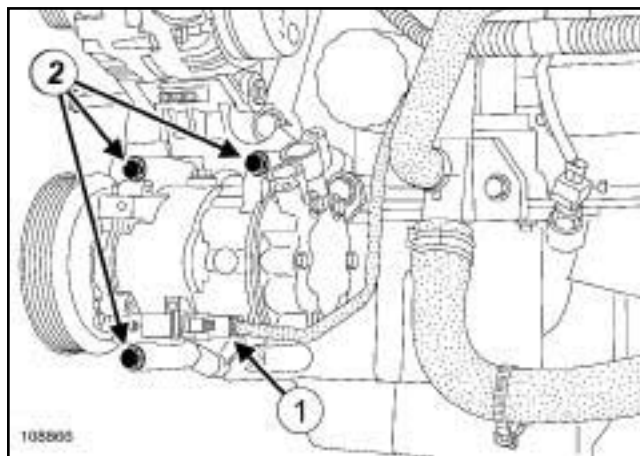
K9K, and AIR CONDITIONING

Tightening torques 	
bolts mounting the multifunction support on the cylinder block	44 Nm
bolt mounting the multifunction support on the sump	25 Nm
air conditioning compressor bolts	21 Nm

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 cover,
 - the engine undertray,
 - the front wheels (see **Wheel: Removal - Refitting**) (MR 392, 35A, Wheels and tyres),
 - the front section of the front wheel arch liners (see **Front wheel arch liner: Removal - Refitting**) (MR 393, 55A, Exterior protection),
 - the bumper (see **Front bumper: Removal - Refitting**) (MR 393, 55A, Exterior protection),
 - the intercooler (see **12B, Turbocharging, Intercooler: Removal - Refitting**, page 12B-21) ,
 - the accessories belt (see **11A, Top and front of engine, Accessories belt: Removal - Refitting**, page 11A-5) ,
 - the alternator (see **16A, Starting - Charging, Alternator: Removal - Refitting**, page 16A-5) .



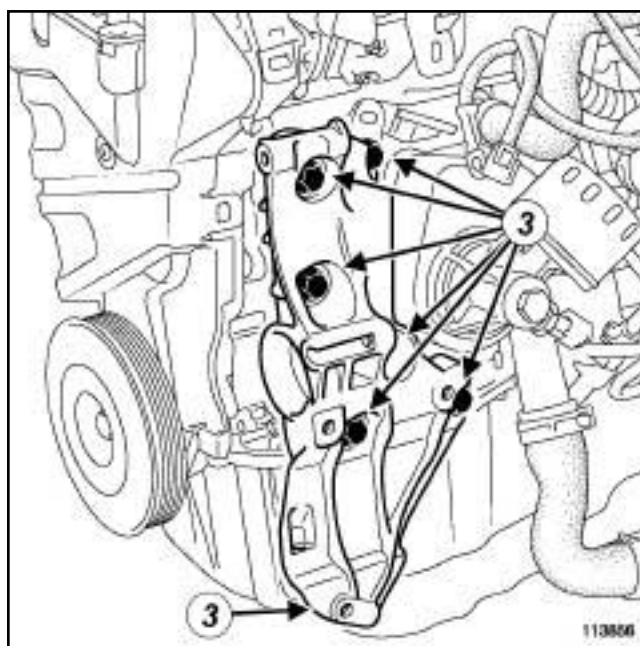
108866

- ☐ Disconnect the clutch connector (1) from the air conditioning compressor.
- ☐ Remove the air conditioning compressor bolts (2) .
- ☐ Move the air conditioning compressor aside.

Note:

This operation does not require the AC system to be drained.

II - OPERATION FOR REMOVAL OF PART CONCERNED



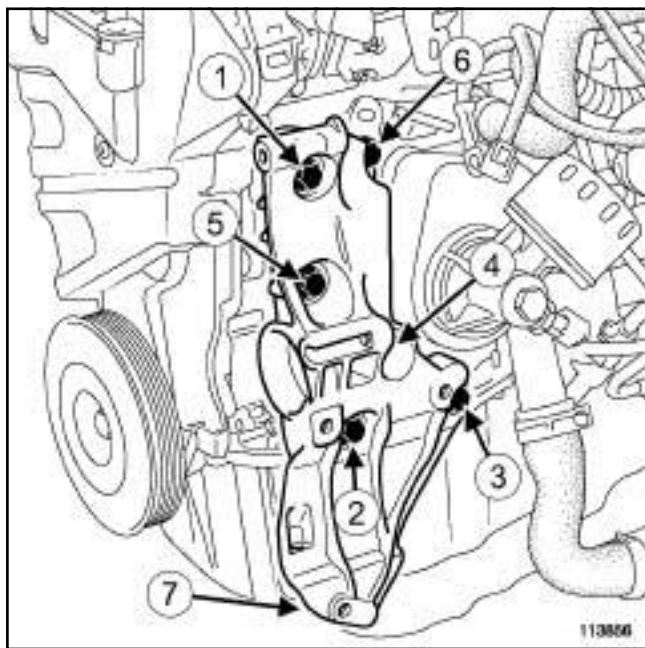
113856

- ☐ Remove:
 - the multifunction support bolts (3) ,
 - the multifunction support.

K9K, and AIR CONDITIONING

REFITTING

I - REFITTING OPERATION FOR PART CONCERNED



113856

- ☐ Refit the multifunction support.
- ☐ Fit the multifunction support bolts on the cylinder block without tightening.
- ☐ Torque tighten and in order:
 - the **bolts mounting the multifunction support on the cylinder block (44 Nm)**,
 - the **bolt mounting the multifunction support on the sump (25 Nm)**.

II - FINAL OPERATION.

- ☐ Refit the air conditioning compressor bolts.
- ☐ Torque tighten the **air conditioning compressor bolts (21 Nm)**.
- ☐ Connect the air conditioning compressor clutch connector.
- ☐ Refit:
 - the alternator (see **16A, Starting - Charging, Alternator: Removal - Refitting**, page 16A-5) .
 - the accessories belt (see **11A, Top and front of engine, Accessories belt: Removal - Refitting**, page 11A-5) ,
 - the intercooler (see **12B, Turbocharging, Intercooler: Removal - Refitting**, page 12B-21) ,

- the bumper (see **Front bumper: Removal - Refitting**) (MR 393, 55A, Exterior protection),
- the front section of the front wheel arch liners (see **Front wheel arch liner: Removal - Refitting**) (MR 393, 55A, Exterior protection),
- the front wheels (see **Wheel: Removal - Refitting**) (MR 392, 35A, Wheels and tyres),
- the engine undertray,
- the engine cover,
- ☐ Connect the battery (see **Battery: Removal - Refitting**) (MR 392, 80A, Battery).

ENGINE AND CYLINDER BLOCK ASSEMBLY

Multifunction support: Removal - Refitting

10A

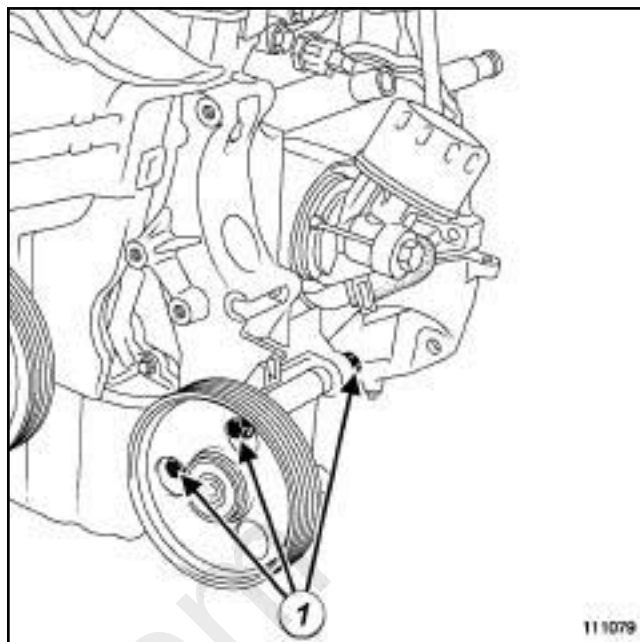
K9K, and STANDARD HEATING

Tightening torques 	
multifunction support mounting bolts	44 Nm
free pulley support mounting bolts	21 Nm

REMOVAL

I - REMOVAL PREPARATION OPERATION

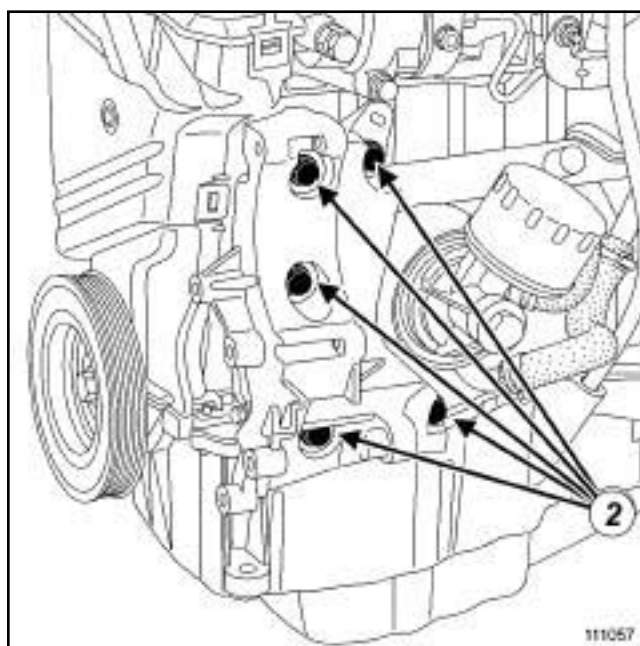
- ☐ Position the vehicle on a two-post lift (see **Vehicle: Towing and lifting**) (MR 392, 02A, Lifting equipment).
- ☐ Disconnect the battery (see **Battery: Removal - Refitting**) (MR 392, 80A, Battery).
- ☐ Remove:
 - the engine undertray,
 - the front right-hand wheel (see **Wheel: Removal - Refitting**) (MR 392, 35A, Wheels and tyres),
 - the front right-hand wheel arch liner (see **Front wheel arch liner: Removal - Refitting**) (MR 393, 55A, Exterior protection),
 - the front bumper (see **Front bumper: Removal - Refitting**) (MR 393, 55A, Exterior protection),
 - the intercooler (see **12B, Turbocharging, Intercooler: Removal - Refitting**, page 12B-21) ,
 - the accessories belt (see **11A, Top and front of engine, Accessories belt: Removal - Refitting**, page 11A-5) ,
 - the alternator (see **16A, Starting - Charging, Alternator: Removal - Refitting**, page 16A-5) .



111079

- ☐ Remove:
 - the idler pulley support mounting bolts (1) ,
 - the idler pulley support.

II - OPERATION FOR REMOVAL OF PART CONCERNED



111057

- ☐ Remove:
 - the multifunction support mounting bolts (2) ,
 - the multifunction support.

ENGINE AND CYLINDER BLOCK ASSEMBLY

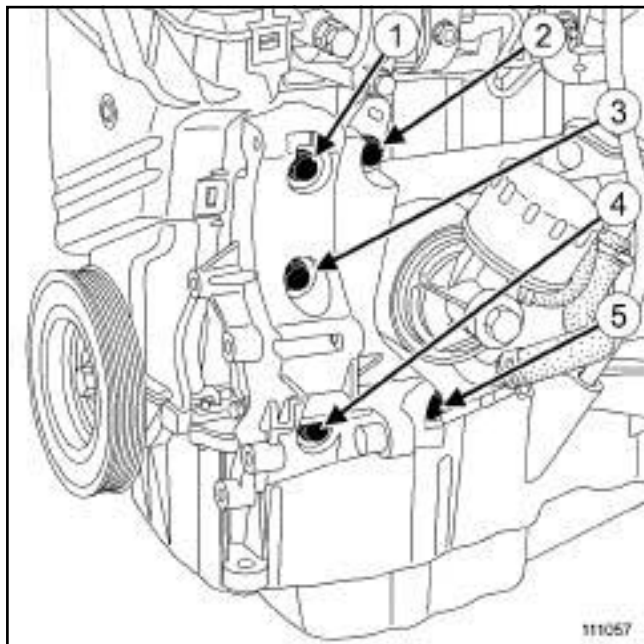
Multifunction support: Removal - Refitting

10A

K9K, and STANDARD HEATING

REFITTING

I - REFITTING OPERATION FOR PART CONCERNED

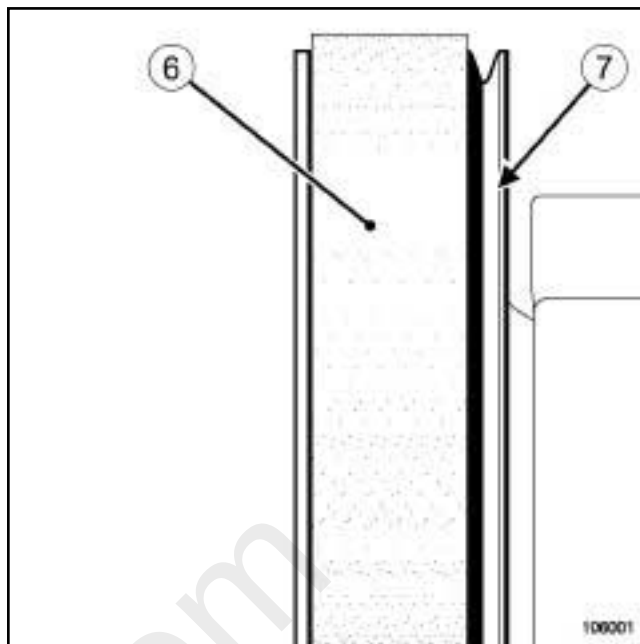


111057

- ☐ Refit the multifunction support, finger tightening the bolts.
- ☐ Tighten to torque and in order the **multifunction support mounting bolts (44 Nm)**.

II - FINAL OPERATION.

- ☐ Refit:
 - the alternator (see **16A, Starting - Charging, Alternator: Removal - Refitting**, page 16A-5) ,
 - the free pulley support,
 - the free pulley support mounting bolts.
- ☐ Torque tighten the **free pulley support mounting bolts (21 Nm)**.



106001

- (6) accessories belt
- (7) free wheel pulley

☐

Note:

The accessories belt (6) must be fitted on the free wheel pulley (7) as shown in the diagram above.

☐ Refit:

- the accessories belt (see **11A, Top and front of engine, Accessories belt: Removal - Refitting**, page 11A-5) ,
- the intercooler (see **12B, Turbocharging, Inter-cooler: Removal - Refitting**, page 12B-21) ,
- the front bumper (see **Front bumper: Removal - Refitting**) (MR 393, 55A, Exterior protection),
- the front right-hand wheel arch liner (see **Front wheel arch liner: Removal - Refitting**) (MR 393, 55A, Exterior protection),
- the front right-hand wheel (see **Wheel: Removal - Refitting**) (MR 392, 35A, Wheels and tyres),
- the engine undertray.

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

ENGINE AND CYLINDER BLOCK ASSEMBLY

Multifunction support: Removal - Refitting

10A

M4R

Special tooling required

Mot. 1448 Remote operation pliers for hose clips.

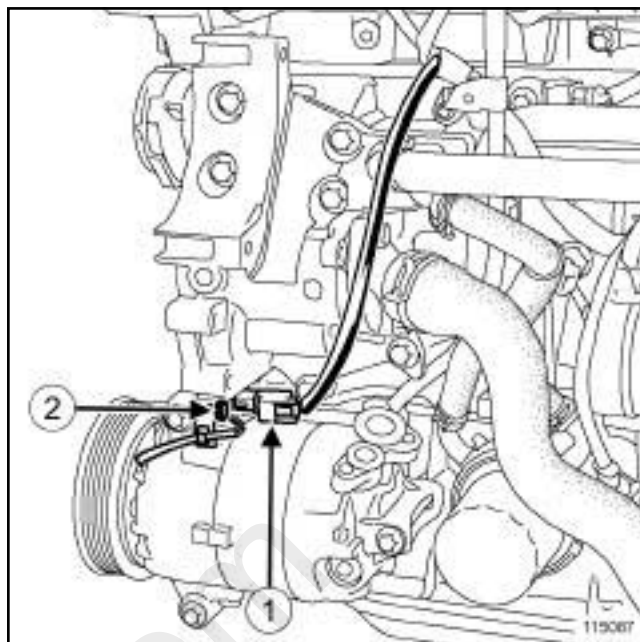
Tightening torques

multifunction support mounting bolts **50 Nm**

REMOVAL

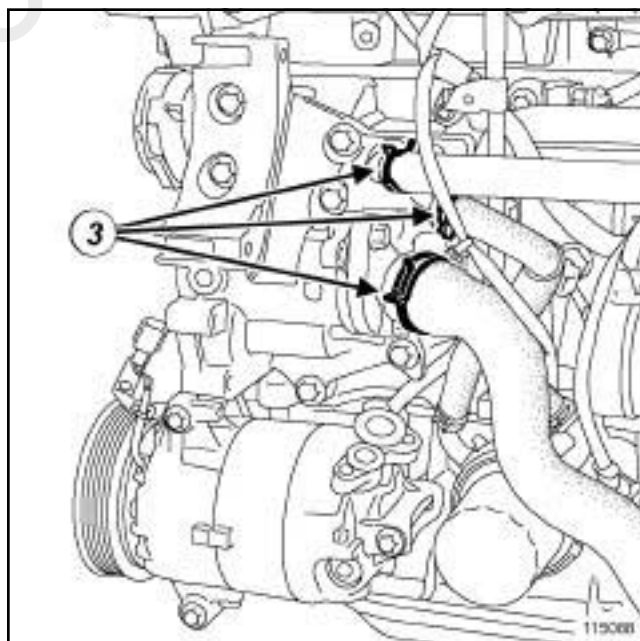
I - REMOVAL PREPARATION OPERATION

- ☐ 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).
- ☐ Drain the cooling system (see **19A, Cooling, Cooling system: Draining - Refilling**, page 19A-16) .
- ☐ Remove:
 - the engine undertray,
 - the front bumper (see **Front bumper: Removal - Refitting**) (MR 393, 55A, Exterior protection),
 - the frontal impact cross member (see **Front impact cross member: Removal - Refitting**) (MR 393, 41A, Front lower structure),
 - the front end panel air resonator (see **12A, Fuel mixture, Air resonator: Removal - Refitting**, page 12A-10) ,
 - the accessories belt (see **11A, Top and front of engine, Accessories belt: Removal - Refitting**, page 11A-5) ,
 - the alternator (see **16A, Starting - Charging, Alternator: Removal - Refitting**, page 16A-5) ,
 - the coolant pump (see **19A, Cooling, Coolant pump: Removal - Refitting**, page 19A-41) .



115087

- ☐ Disconnect the connector (1) from the air conditioning compressor.
- ☐ Remove the bolt (2) mounting the air conditioning connector mounting.

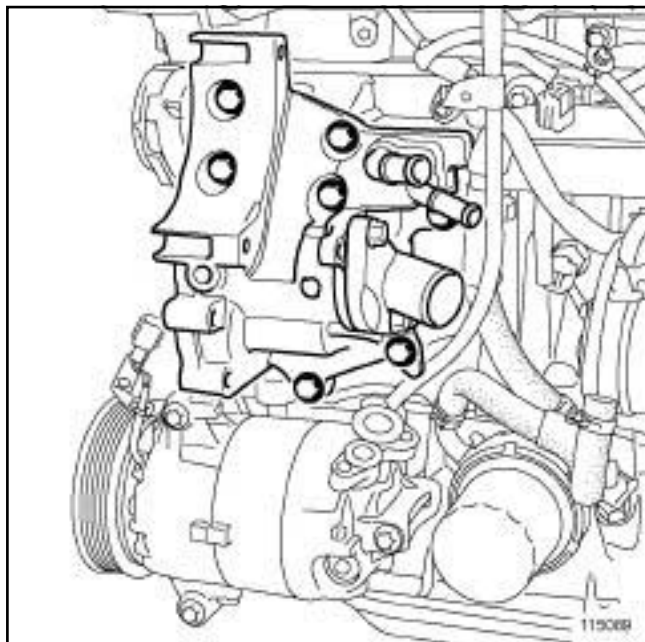


115088

- ☐ Disconnect the cooling hoses (3) using the (**Mot. 1448**).

M4R

II - REMOVAL OF PART CONCERNED



☐ Remove:

- the multifunction support mounting bolts,
- the multifunction support,
- the multifunction support seal.

REFITTING

I - REFITTING PREPARATION OPERATION

- ☐ The multifunction support seal must be replaced.

II - REFITTING PART CONCERNED

- ☐ Refit the multifunction support.
- ☐ Finger tighten the multifunction support mounting bolts until contact.
- ☐ Tighten to torque the **multifunction support mounting bolts (50 Nm)**.

III - FINAL OPERATION.

- ☐ Connect the cooling hoses using the **(Mot. 1448)**.
- ☐ Refit the bolt securing the air conditioning connector mounting.
- ☐ Connect the air conditioning compressor connector.
- ☐ Refit:
 - the coolant pump (see **19A, Cooling, Coolant pump: Removal - Refitting**, page **19A-41**),

- the alternator (see **16A, Starting - Charging, Alternator: Removal - Refitting**, page **16A-5**),
 - the accessories belt (see **11A, Top and front of engine, Accessories belt: Removal - Refitting**, page **11A-5**),
 - the front end panel air resonator (see **12A, Fuel mixture, Air resonator: Removal - Refitting**, page **12A-10**),
 - the frontal impact cross member (see **Front impact cross member: Removal - Refitting**) (MR 393, 41A, Front lower structure),
 - the front bumper (see **Front bumper: Removal - Refitting**) (MR 393, 55A, Exterior protection),
 - the engine undertray.
- ☐ Connect the battery (see **Battery: Removal - Refitting**).
 - ☐ Fill the cooling system (see **19A, Cooling, Cooling system: Draining - Refilling**, page **19A-16**) (MR 392, 80A, Battery).

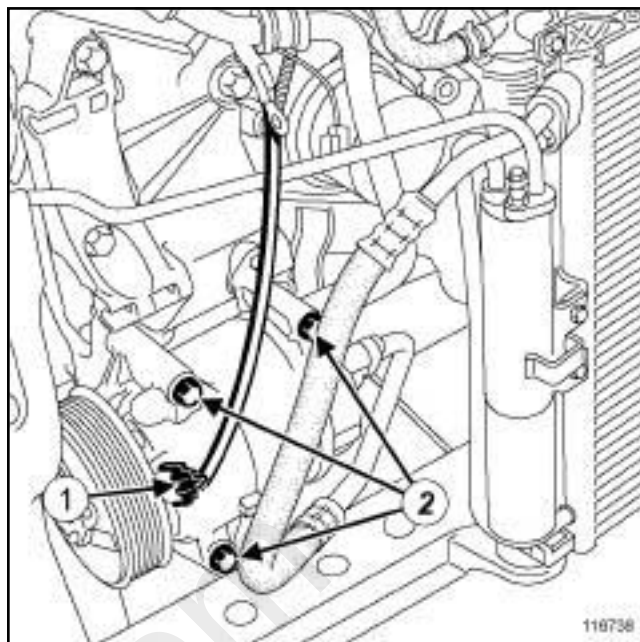
F4R

Tightening torques 	
multifunction support mounting bolts	44 N.m
air conditioning compressor mounting bolts	25 N.m

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 front bumper (see **Front bumper: Removal - Refitting**) (MR 393, 55A, Exterior protection),
 - the front end panel (see **Front end panel: Removal - Refitting**) (MR 393, 42A, Upper front structure),
 - the accessories belt (see **11A, Top and front of engine, Accessories belt: Removal - Refitting**, page **11A-5**),
 - the alternator (see **16A, Starting - Charging, Alternator: Removal - Refitting**, page **16A-5**).

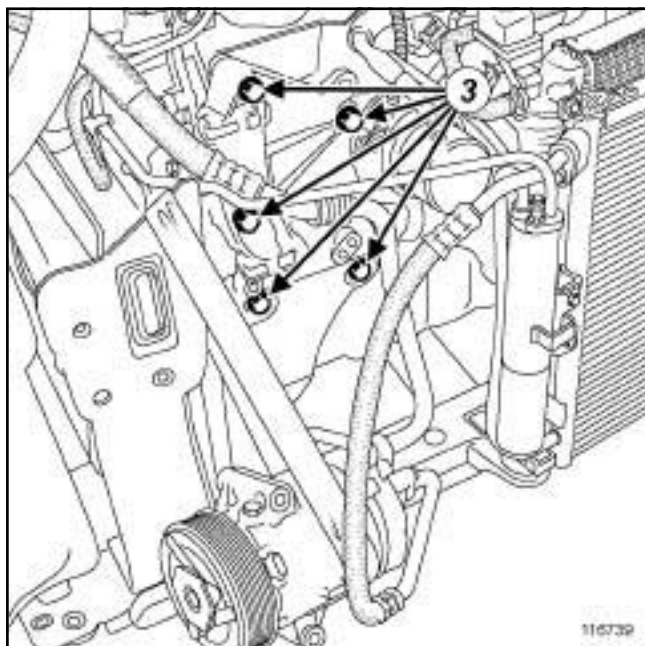


116738

- ☐ Disconnect the connector (1) from the air conditioning compressor.
- ☐ Remove the mounting bolts (2) from the air conditioning compressor.
- ☐ Attach the air conditioning compressor to prevent the air conditioning ducts from being disturbed in any way.

F4R

II - OPERATION FOR PREPARATION OF PART CONCERNED



❑ Remove:

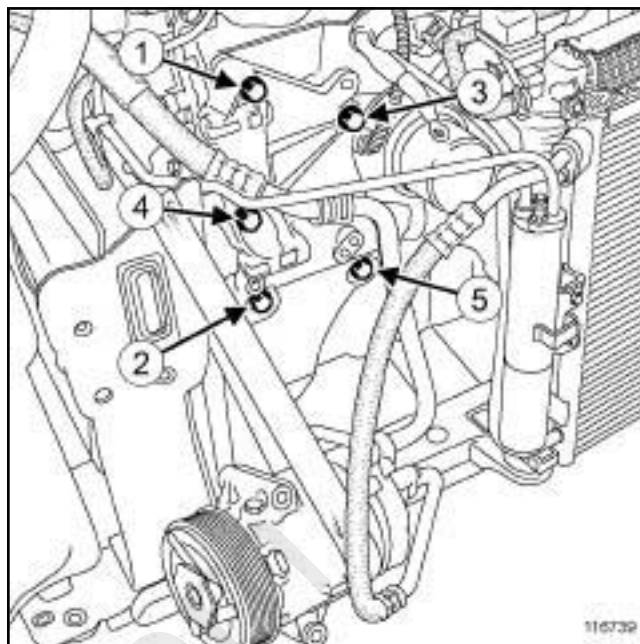
- the multifunction support mounting bolts (3) ,
- the multifunction support.

REFITTING

I - REFITTING OPERATION FOR PART CONCERNED

❑ Refit:

- the multifunction support,
- the multifunction support bolts.



- ❑ Tighten to torque and in order the **multifunction support mounting bolts (44 N.m)**.

II - FINAL OPERATION

- ❑ Fit the air conditioning compressor.
- ❑ Refit the air conditioning compressor mounting bolts.
- ❑ Tighten to torque the **air conditioning compressor mounting bolts (25 N.m)**.
- ❑ Refit:
 - the alternator (see **16A, Starting - Charging, Alternator: Removal - Refitting**, page 16A-5) ,
 - the accessories belt (see **11A, Top and front of engine, Accessories belt: Removal - Refitting**, page 11A-5) ,
 - the front end panel (see **Front end panel: Removal - Refitting**) (MR 393, 42A, Upper front structure),
 - the front bumper (see **Front bumper: Removal - Refitting**) (MR 393, 55A, Exterior protection).
- ❑ Connect the battery (see **Battery: Removal - Refitting**) (MR 392, 80A, Battery).

D4F, and 784

Tightening torques 	
multifunction support bolts	50 Nm
coolant pump inlet pipe bolts	10 Nm
air conditioning compressor bolts	25 Nm

REMOVAL

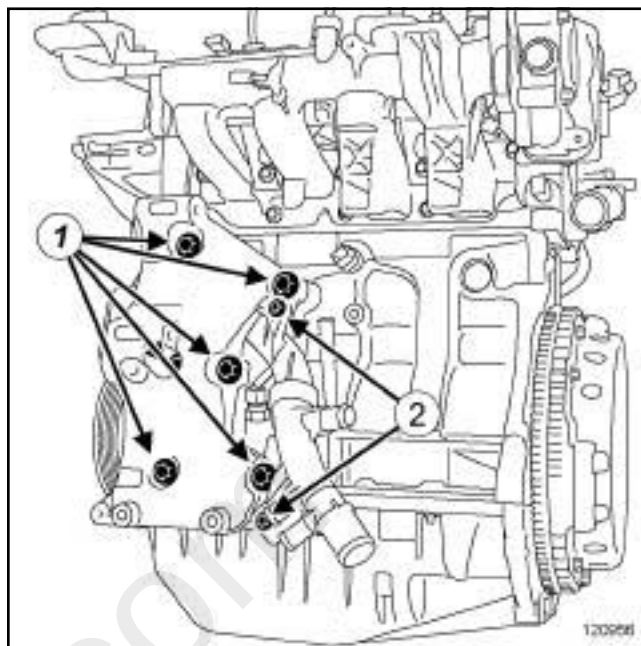
I - REMOVAL PREPARATION OPERATION

- ☐ 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 front wheels (see **Wheel: Removal - Refitting**) (MR 392, 35A, Wheels and tyres),
 - the front section of the front wheel arch liners (see **Front wheel arch liner: Removal - Refitting**) (MR 393, 55A, Exterior protection),
 - the front bumper (see **Front bumper: Removal - Refitting**) (MR 393, 55A, Exterior protection),
 - the intercooler (see **12B, Turbocharging, Intercooler: Removal - Refitting**, page 12B-21) ,
 - the accessories belt (see **11A, Top and front of engine, Accessories belt: Removal - Refitting**, page 11A-5) ,
 - the alternator (see **16A, Starting - Charging, Alternator: Removal - Refitting**, page 16A-5) .

AIR CONDITIONING

- ☐ Disconnect the air conditioning compressor clutch connector.
- ☐ Remove the air conditioning compressor bolts.
- ☐ Detach the air conditioning pipe from the body between the compressor and the expansion valve.
- ☐ Position the air conditioning compressor on the radiator mounting cross member.

II - OPERATION FOR REMOVAL OF PART CONCERNED



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- ☐ Remove:
 - the bolts (1) from the coolant pump inlet pipe,
 - the multifunction support bolts (2) ,
 - the multifunction support.

REFITTING

I - REFITTING OPERATION FOR PART CONCERNED

- ☐ Refit:
 - the multifunction support,
 - the multifunction support bolts,
 - the coolant pump inlet pipe bolts.
- ☐ Torque tighten:
 - the **multifunction support bolts (50 Nm)**,
 - the **coolant pump inlet pipe bolts (10 Nm)**.