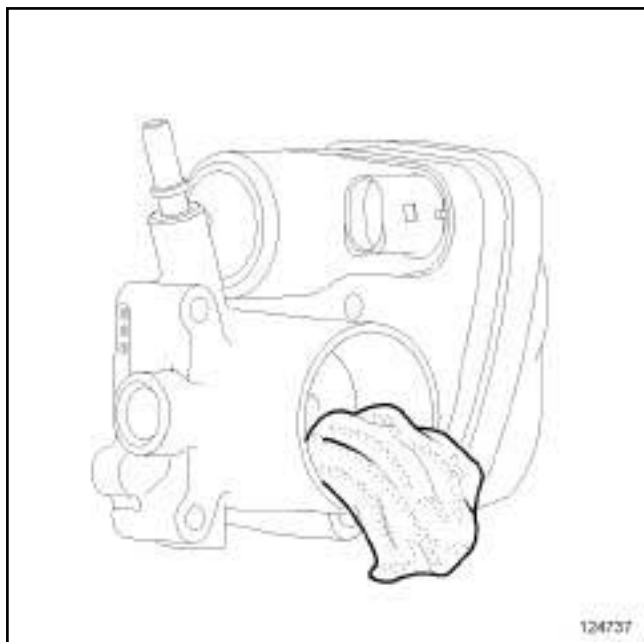


FUEL MIXTURE

Throttle valve: Cleaning

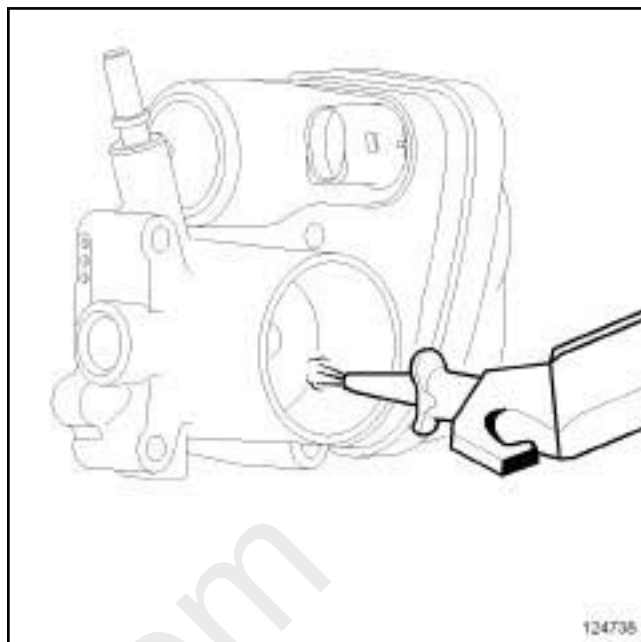
12A

D4F or F4R or K4J or K4M or M4R



124737

- ❑ Remove the residues of **CARBURETTOR CLEANER** and the residual dirt using a **LINT-FREE CLOTH** (see **Vehicle: Parts and consumables for the repair**) (04B, Consumables - Products).



124738

- ❑ Use a **compressed air nozzle** to blast the throttle valve edges and the air vent.

parts always to be replaced: Throttle valve seal (11,04,06,25)

Note:

If the throttle valve is dropped or receives any other impact, it will need to be replaced.

III - FINAL OPERATION

- ❑ Refit the throttle valve (see **12A, Fuel mixture, Throttle valve: Removal - Refitting**, page **12A-33**)

D4F, and 740 or 742 or 764

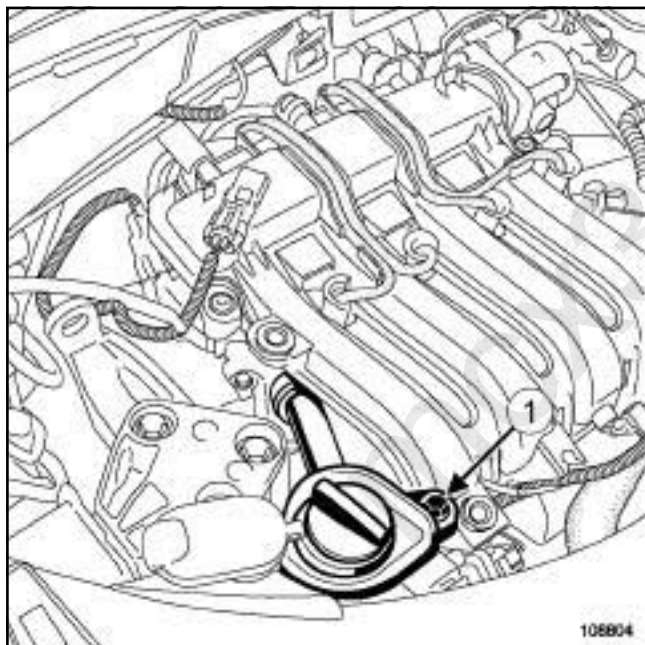
Tightening torques

intake distributor mounting bolts on the cylinder head	10 N.m
intake distributor mounting bolts on the rocker cover	10 N.m

REMOVAL

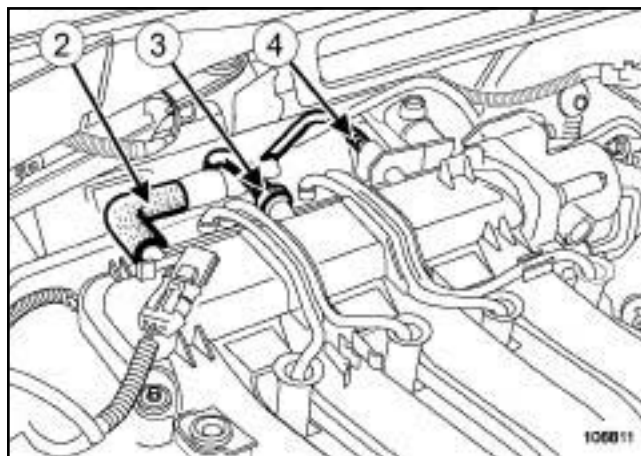
I - REMOVAL PREPARATION OPERATION

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



108804

- ☐ Remove:
 - the oil filler neck mounting bolt (1) ,
 - the oil filler neck.

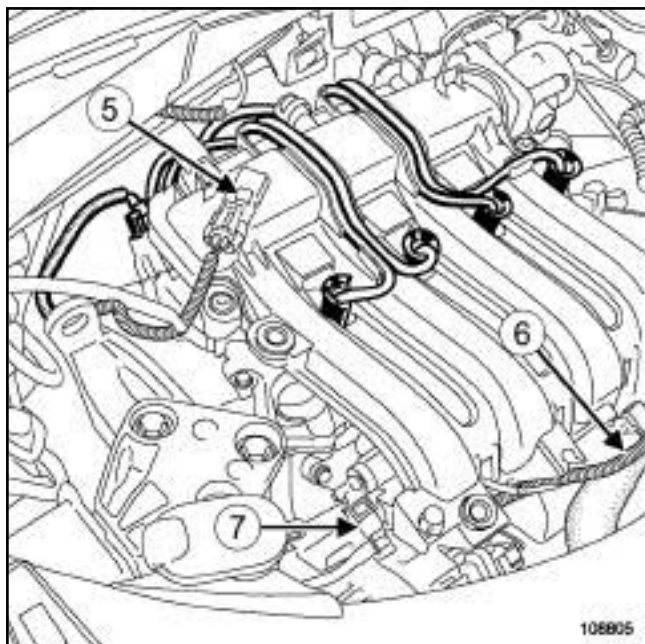


108811

- ☐ Disconnect:
 - the oil vapour rebreathing pipe (2) ,
 - the brake servo pipe (3) ,
 - the petrol vapour rebreather pipe (4) .

Inlet distributor: Removal - Refitting

D4F, and 740 or 742 or 764



108805

- ☐ Disconnect:
 - the inlet air vacuum sensor connector (5) ,
 - the air temperature sensor connector (6) ,
 - the injector connector,
 - the motorised throttle valve connector.
- ☐ Disconnect the petrol supply pipe from the injector rail (7) .

IMPORTANT

During this operation, it is essential to:

- refrain from smoking or bringing red hot objects close to the working area,
- beware of fuel splashes when disconnecting the union,
- protect sensitive areas from fuel outflow.

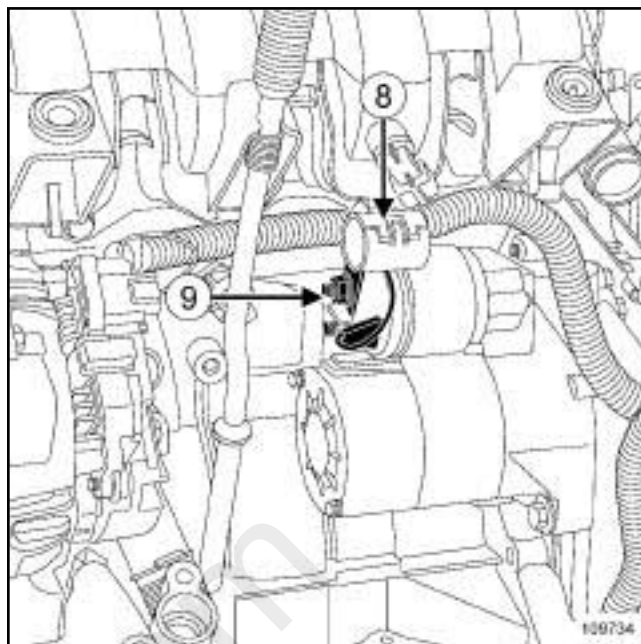
IMPORTANT

Wear gloves during the operation.

- ☐ Disconnect the spark plug leads.

WARNING

Pull on the connectors and not the leads to disconnect the spark plug leads.



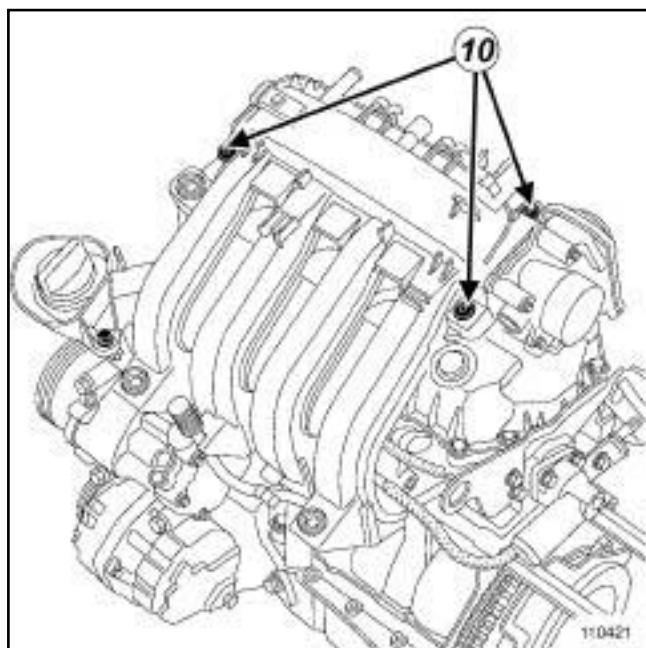
109734

- ☐ Unclip the following from the inlet manifold:
 - the spark plug leads,
 - the wiring harness (8) ,
 - the oil level dipstick.
- ☐ Remove the starter supply terminal (9) ,

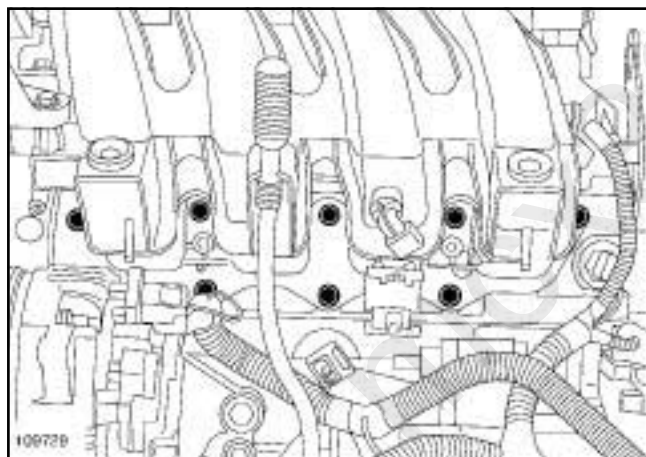
Inlet distributor: Removal - Refitting

D4F, and 740 or 742 or 764

II - OPERATION FOR REMOVAL OF PART CONCERNED



110421



109729

Remove:

- the inlet manifold mounting bolts from the rocker cover (10) ,
- the inlet manifold mounting bolts on the cylinder head,
- the plenum chamber - motorised throttle valve assembly,
- the inlet manifold gasket.

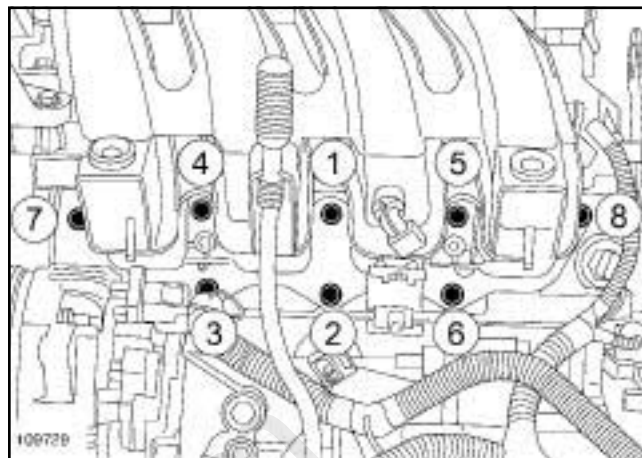
REFITTING

I - REFITTING PREPARATION OPERATION

- It is essential to replace the sealing rings.

II - REFITTING STAGE FOR THE PART IN QUESTION

- Refitting the plenum chamber gasket



109729

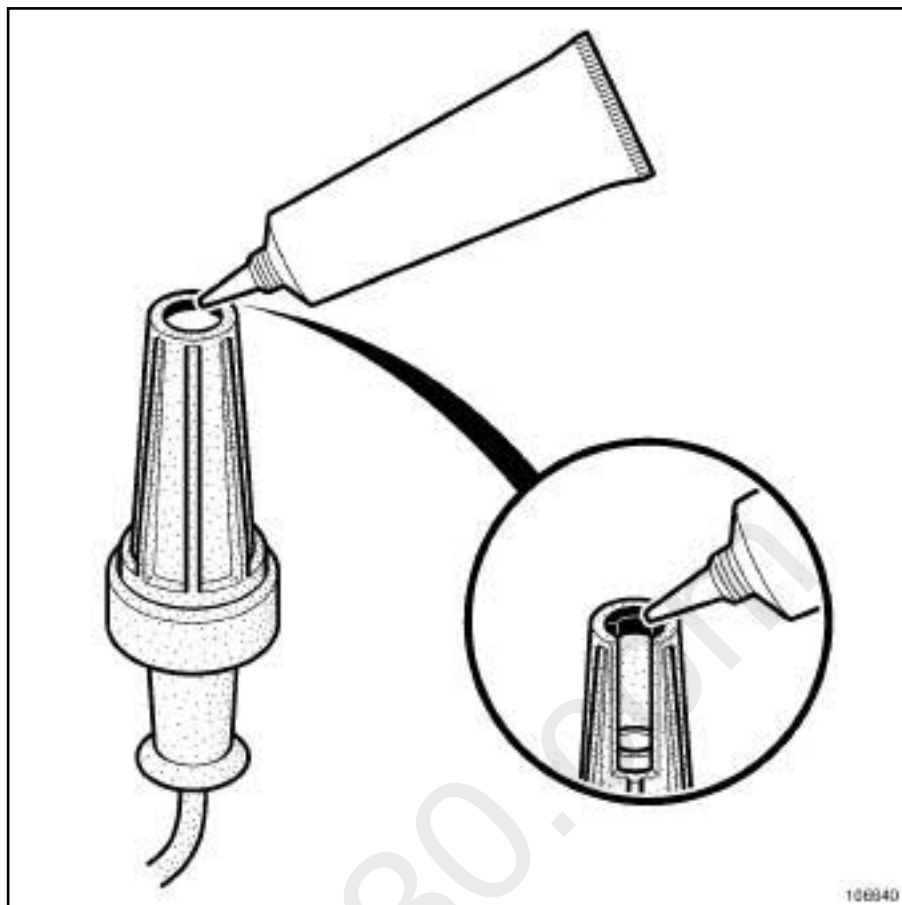
- Apply **LOCTITE FRENETANCH** to the intake distributor mounting bolts on the cylinder head.
- Pretighten all the **intake distributor mounting bolts (6 N.m)**.
- Tighten to torque and in order:
 - the **intake distributor mounting bolts on the cylinder head (10 N.m)**,
 - the **intake distributor mounting bolts on the rocker cover (10 N.m)**.

III - FINAL OPERATION.

- Clip the dipstick onto the plenum chamber

Inlet distributor: Removal - Refitting

D4F, and 740 or 742 or 764



106640

- ☐ When refitting the spark plug feed wires a bead of **FLUORINATED GREASE (PART NO. 82 00 168 855)** with a diameter of **2 mm** must be applied to the inner edge of the high-tension caps.
- ☐ Refit:
 - the spark plug leads,
 - the wiring harness,
 - the starter supply terminal,
 - the oil filler neck.
- ☐ Reconnect:
 - the injector rail petrol supply pipe,
 - the motorised throttle valve connector,
 - the injector connector,
 - the air temperature sensor connector,
 - the inlet air depression sensor connector,
 - the oil vapour rebreathing pipe.
 - the brake servo pipe ,
 - the petrol vapour rebreather pipe.
- ☐ Refit the air filter box (see **12A, Fuel mixture, Air filter unit: Removal - Refitting**, page 12A-17) .
- ☐ Connect the battery (see **Battery: Removal - Refitting**) .

FUEL MIXTURE

Inlet distributor: Removal - Refitting

12A

K4J or K4M

Tightening torques

bolts of the inlet distributor on the injector holder shim	10 N.m
inlet distributor bolts on the oil separator	12 N.m

WARNING

To avoid any corrosion or damage, protect the areas on which fuel is likely to run.

WARNING

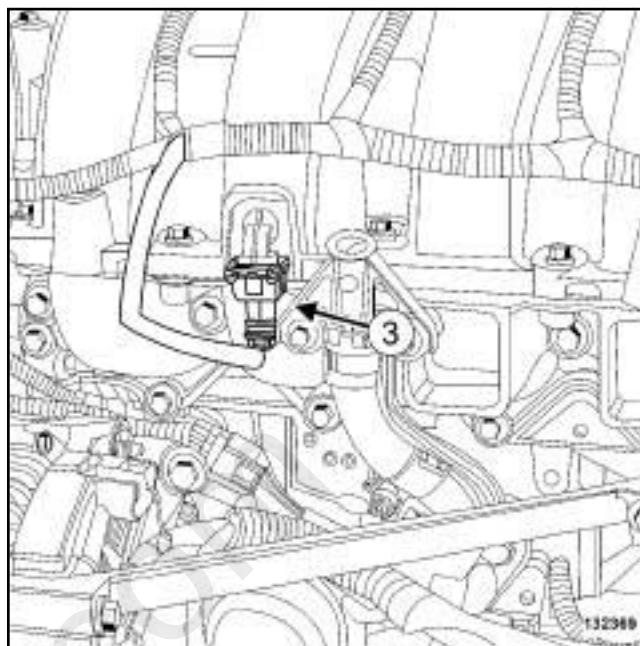
To prevent impurities from entering the circuit, place protective plugs on all fuel circuit components exposed to the open air.

REMOVAL

I - REMOVAL PREPARATION OPERATION

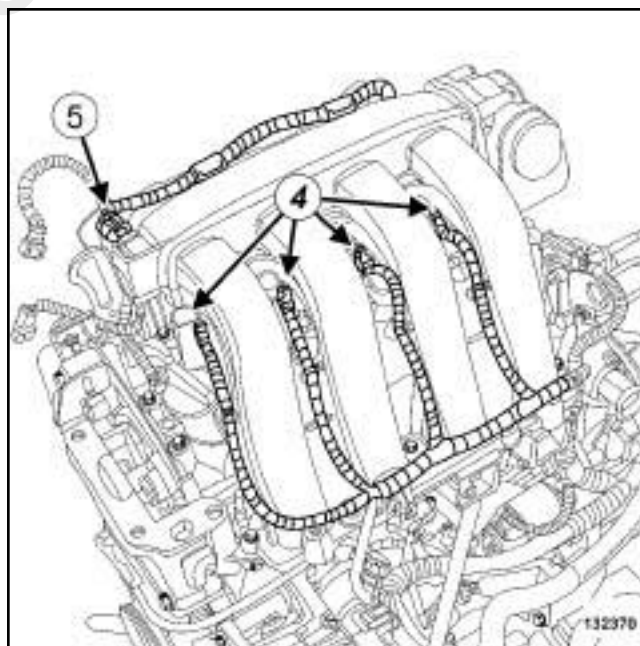
- ☐ Remove the front engine cover.
- ☐ Disconnect the battery (see **Battery: Removal - Refitting**) (80A, Battery).
- ☐ Remove:
 - the air inlet duct clips on the throttle valve side and the air filter unit clips,
 - the air inlet duct,
 - the throttle valve (see **12A, Fuel mixture, Throttle valve: Removal - Refitting**, page 12A-33) .

K4M, and 862



132369

- ☐ Disconnect the air temperature sensor connector (3).



132370

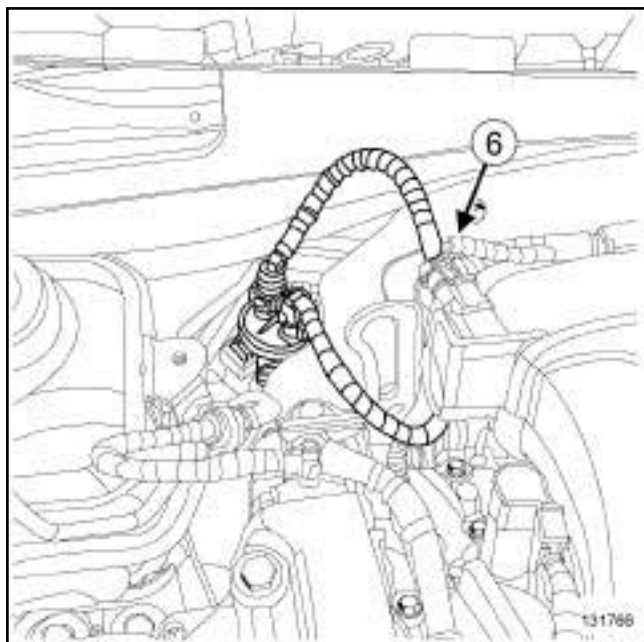
- ☐ Disconnect:
 - the connectors (4) from the coils,
 - the connector (5) of the inlet air pressure sensor.
- ☐ Unclip the electrical wiring.
- ☐ Move the electrical wiring to one side.

FUEL MIXTURE

Inlet distributor: Removal - Refitting

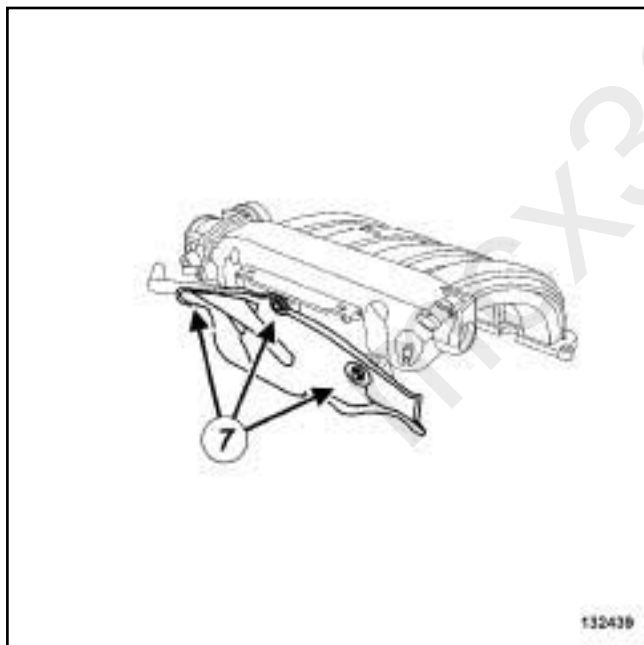
12A

K4J or K4M



131766

- ❑ Disconnect the petrol vapour recirculation pipe (6) .



132439

❑

WARNING

To prevent the surrounding components from overheating, do not damage (tear, pierce, bend, etc.) a heat shield.

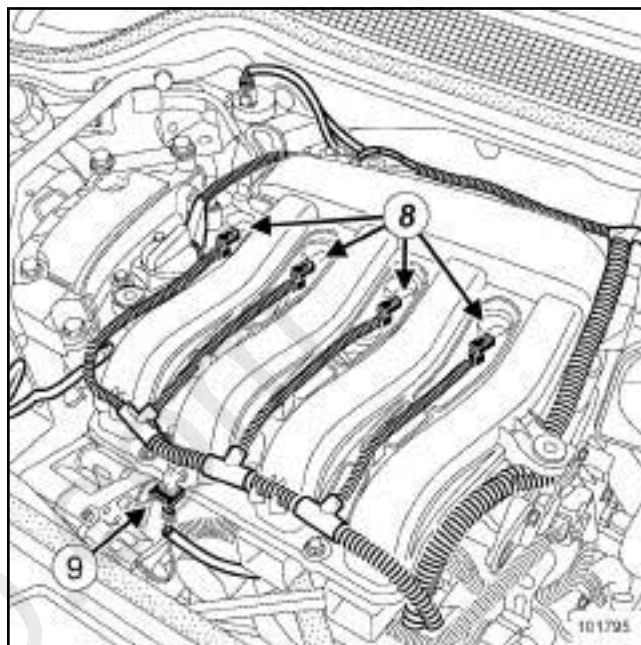
Any damaged heat shields must be replaced.

- ❑ Remove:

- the bolts (7) from the heat shield,

- the heat shield.

K4J



101795

- ❑ Disconnect:

- the connectors (8) from the coils,
- the connector (9) from the air temperature sensor,
- the inlet air pressure sensor.

- ❑ Unclip the electrical wiring.

- ❑ Move the electrical wiring to one side.

- ❑ Disconnect the fuel supply pipe from the injection rail.

IMPORTANT

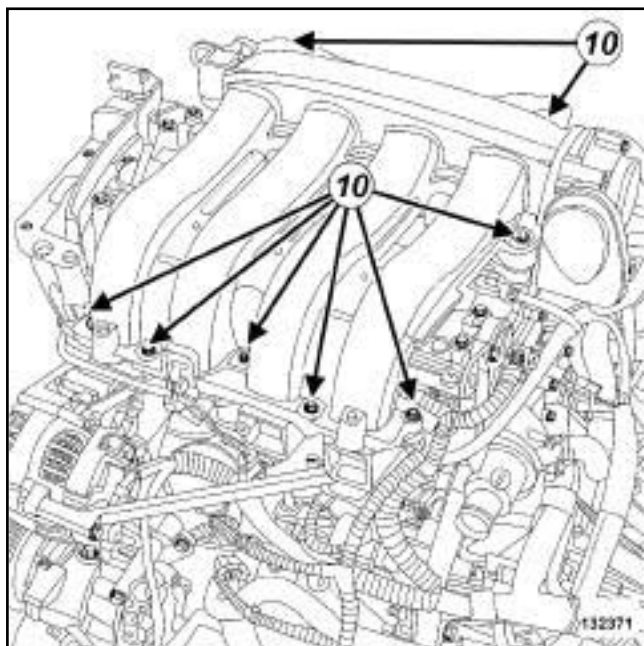
During this operation, be sure to:

- refrain from smoking or bringing red hot objects close to the working area,
- be careful of fuel splashes when disconnecting the union.

- ❑ Unclip the fuel vapour recirculation pipe from the inlet distributor.

K4J or K4M

II - OPERATION FOR REMOVAL OF PART CONCERNED



❑ Remove:

- the inlet distributor bolts (10) ,
- the inlet distributor,
- the inlet distributor seal.

❑ When replacing the inlet distributor, remove:

- the air temperature sensor,
- the inlet air pressure sensor.

REFITTING

I - REFITTING PREPARATION OPERATION

- ❑ parts always to be replaced: inlet distributor seal (10,07,01,07)



WARNING

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

Use **SURFACE CLEANER** (see **Vehicle: Parts and consumables for the repair**) (04B, Consumables - Products) to clean and degrease:

- the inlet distributor joint face,
- the joint face of the injector holder shim.

WARNING

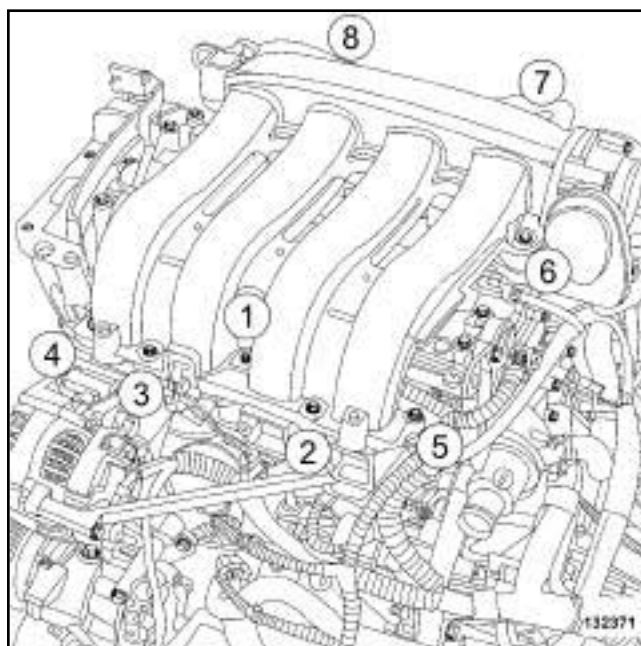
To ensure proper sealing, the gasket surfaces must be clean, dry and not greasy (avoid any finger marks).

❑ When replacing the inlet distributor, refit:

- the air temperature sensor,
- the inlet air pressure sensor.

II - REFITTING OPERATION FOR PART CONCERNED

- ❑ Refit the inlet distributor, with a new seal.



- ❑ Tighten in order (1) , (2) , (3) , (4) , (5) , (1) , (6) , (7) and (8) .

❑ Tighten to torque:

- the **bolts of the inlet distributor on the injector holder shim (10 N.m)**,

Inlet distributor: Removal - Refitting

K4J or K4M

- the inlet distributor bolts on the oil separator (12 N.m).

III - FINAL OPERATION

- ☐ Clip the fuel vapour recirculation pipe onto the inlet distributor.
- ☐ Connect the petrol supply pipe to the injector rail.
- ☐ Clip on the electrical wiring.
- ☐ Connect:
 - the inlet air pressure sensor.
 - the air temperature sensor connector,
 - the coil connectors.
- ☐ Refit:
 - the throttle valve (see **12A, Fuel mixture, Throttle valve: Removal - Refitting**, page **12A-33**) ,
 - the engine cover.

M4R

Special tooling required

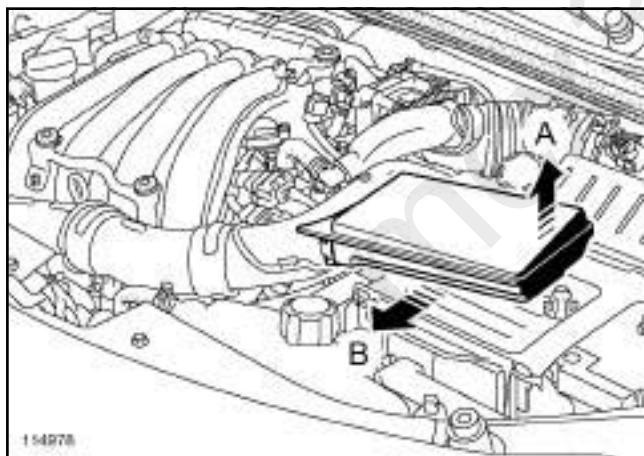
Mot. 1448 Remote operation pliers for hose clips.

Tightening torques

inlet manifold mounting bolts	27 Nm
inlet manifold upper mounting bolts	20 Nm
motorised throttle valve mounting bolts	10 Nm
air inlet duct clips	6 Nm

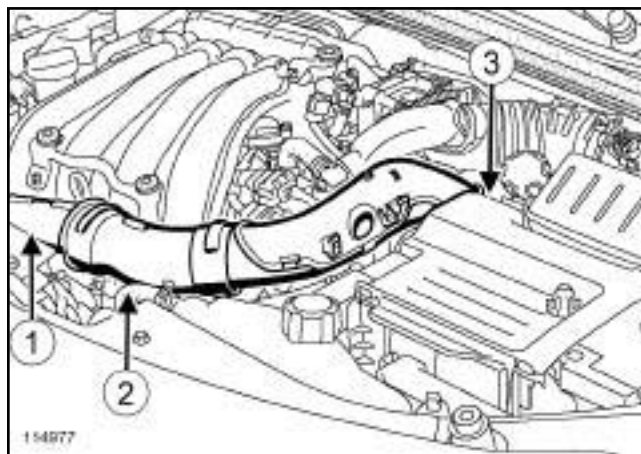
REMOVAL**I - REMOVAL PREPARATION OPERATION**

- ☐ Remove the engine cover.
- ☐ Disconnect the battery (see **Battery: Removal - Refitting**) .



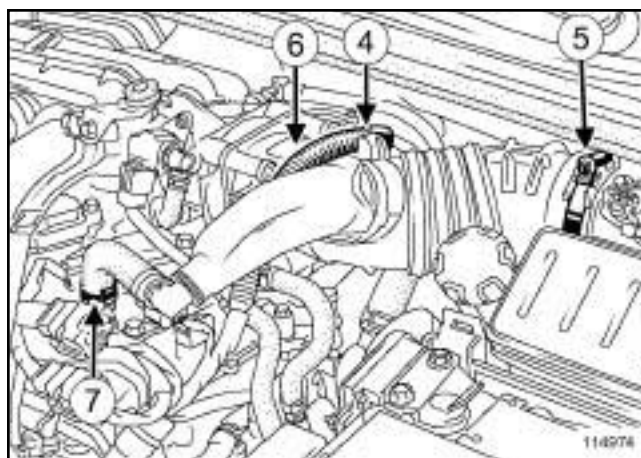
114978

- ☐ Lift the air resonator to remove it from the battery cover (A) .
- ☐ Pull the air resonator towards the front of the vehicle (B) to remove it.



114977

- ☐ Detach the air intake sleeve:
 - from the front end panel at (1) ,
 - from the air resonator on the front end panel at (2) ,
 - from the air filter unit at (3) .
- ☐ Remove:
 - the air intake sleeve,
 - the dipstick.



114974

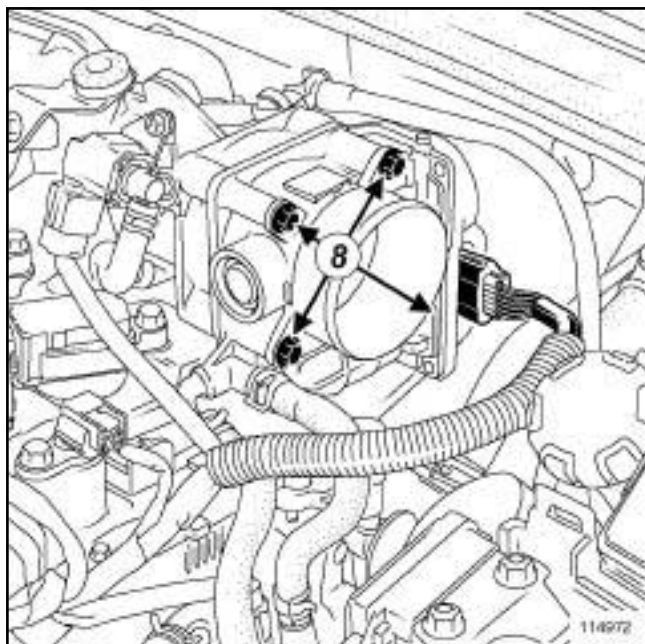
- ☐ Detach the wiring harness from the air inlet duct at (4) .
- ☐ Undo the air duct mounting clips:
 - on the air flow sensor (5) ,
 - on the motorised throttle valve (6) .
- ☐ Disconnect the oil vapour rebreather duct (7) from the rocker cover using the (Mot. 1448).
- ☐ Remove the air inlet duct.

FUEL MIXTURE

Inlet distributor: Removal - Refitting

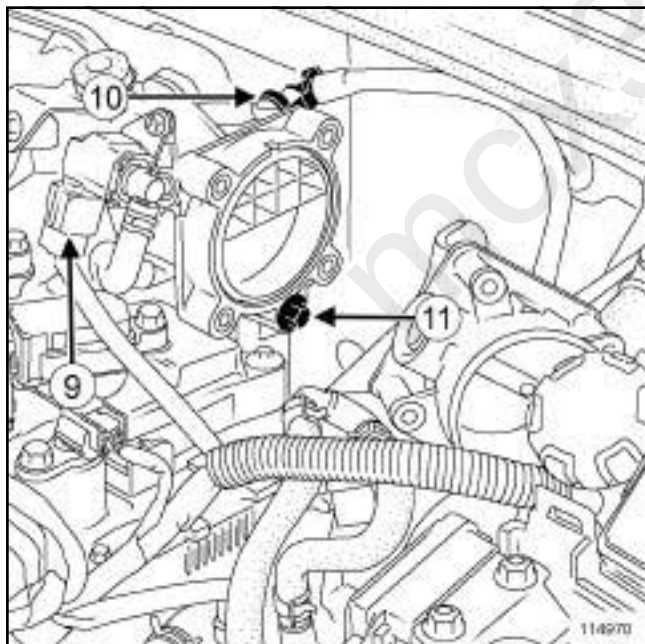
12A

M4R



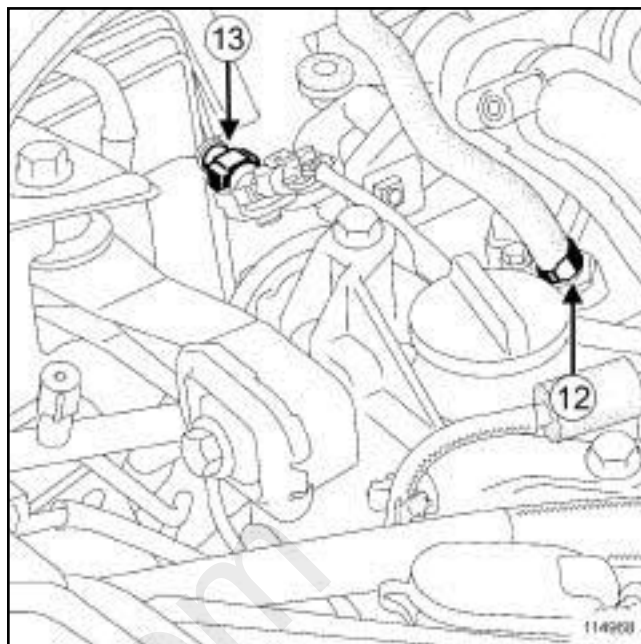
114972

- ☐ Remove the motorised throttle valve mounting bolts (8) .
- ☐ Move the motorised throttle valve aside.



114970

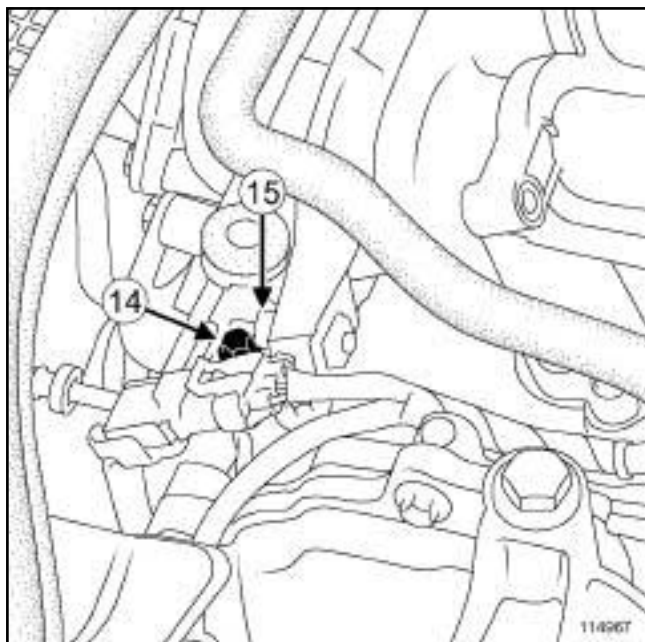
- ☐ Disconnect:
 - the petrol vapour rebreathing solenoid valve connector (9) ,
 - the brake servo pipe (10) from the inlet manifold.
- ☐ Remove the inlet manifold upper mounting bolt (11) .



114968

- ☐ Disconnect:
 - the oil vapour rebreather duct (12) from the rocker cover,
 - the petrol vapour rebreather pipe (13) .

M4R



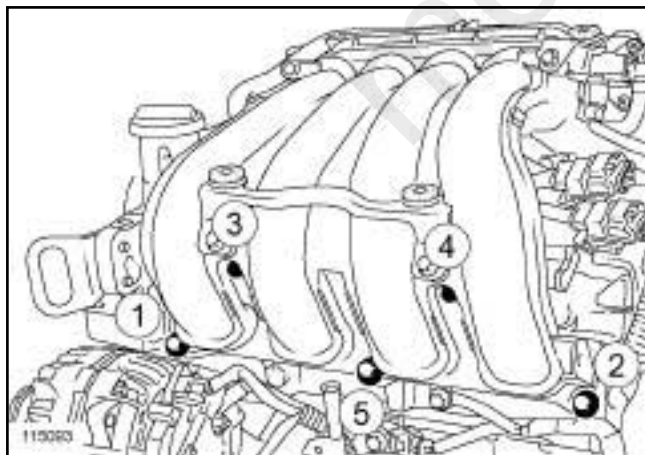
114967

- ❑ Remove the inlet manifold upper mounting bolt (14) .

Note:

Do not remove the mounting bolt (15) from the manifold rear mounting bracket; removing this bolt may lead to destruction of the injector connections when the manifold is removed.

II - REMOVAL OF PART CONCERNED



115093

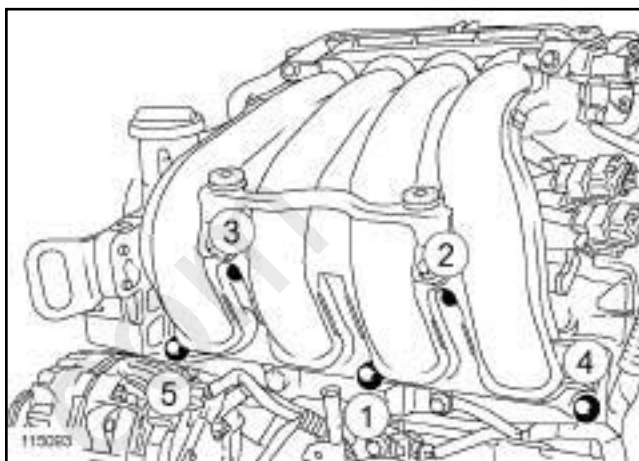
- ❑ Remove the inlet manifold mounting bolts in order.

REFITTING

I - REFITTING PREPARATION OPERATION

- ❑ Always replace:
 - the inlet manifold gasket,
 - the motorised throttle valve seal.

II - REFITTING THE PART CONCERNED

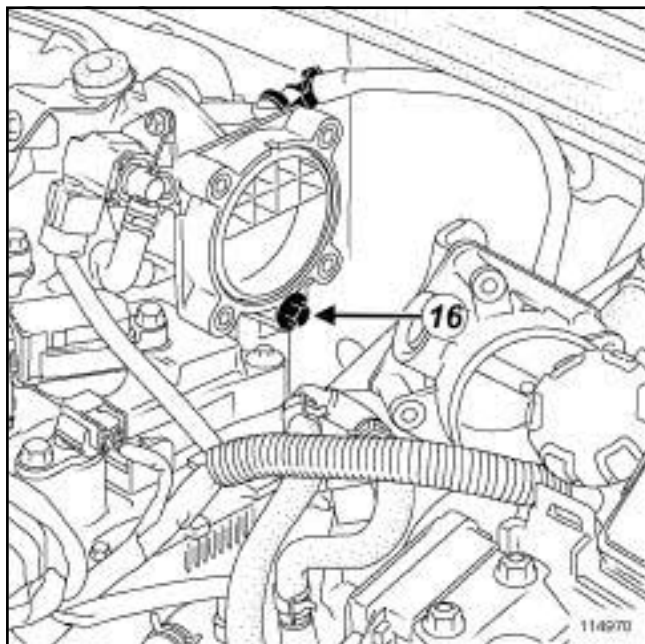


115093

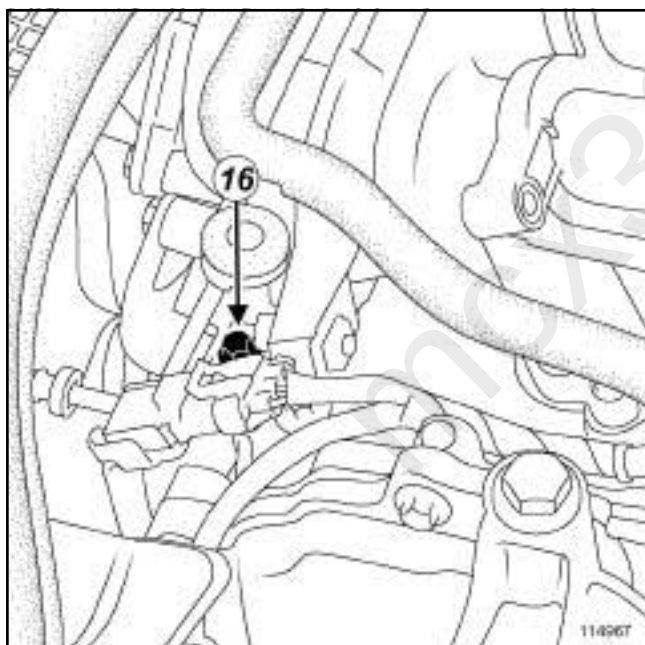
- ❑ Finger tighten the inlet manifold mounting bolts.
- ❑ Tighten to torque and in order the **inlet manifold mounting bolts (27 Nm)**.

M4R

III - FINAL OPERATION



114970



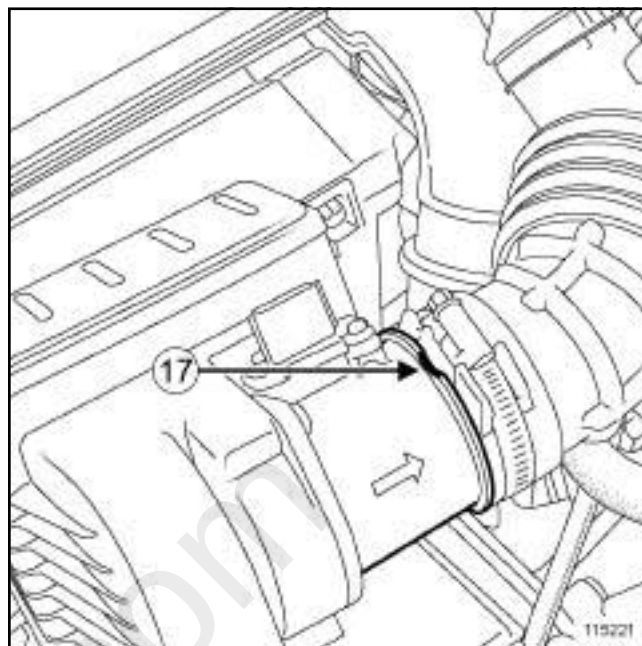
114967

- ❑ Tighten to torque the **inlet manifold upper mounting bolts (20 Nm)** at (16) .

❑ Connect:

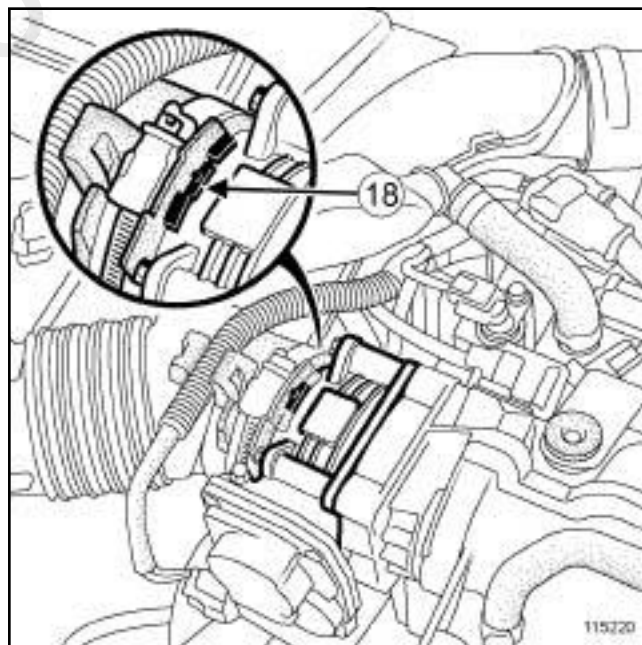
- the oil vapour rebreather duct on the rocker cover using the (**Mot. 1448**),
- the petrol vapour rebreather pipe,
- the brake servo pipe on the inlet manifold,
- the petrol vapour rebreathing solenoid valve connector.

- ❑ Tighten to torque the **motorised throttle valve mounting bolts (10 Nm)**.



115221

- ❑ Fit the air inlet duct on the air flow sensor, paying attention to the fitting mark (17) .



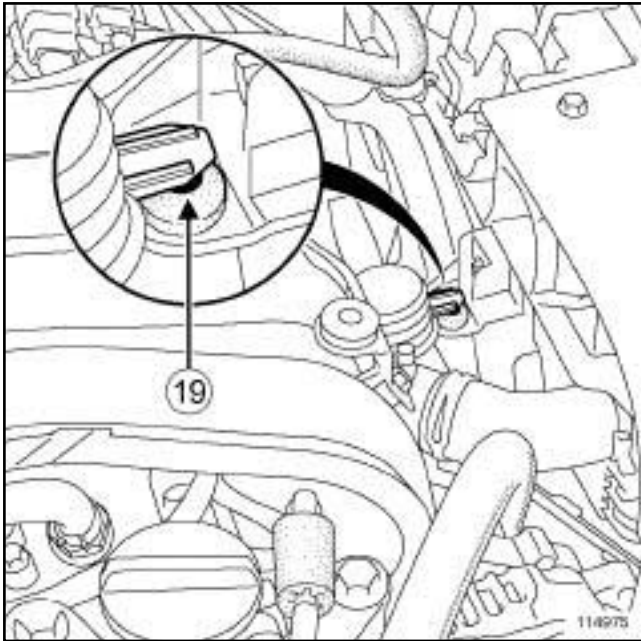
115220

- ❑ Fit the air inlet duct on the motorised throttle valve, paying attention to the fitting mark (18) .

- ❑ Tighten to torque the **air inlet duct clips (6 Nm)**.

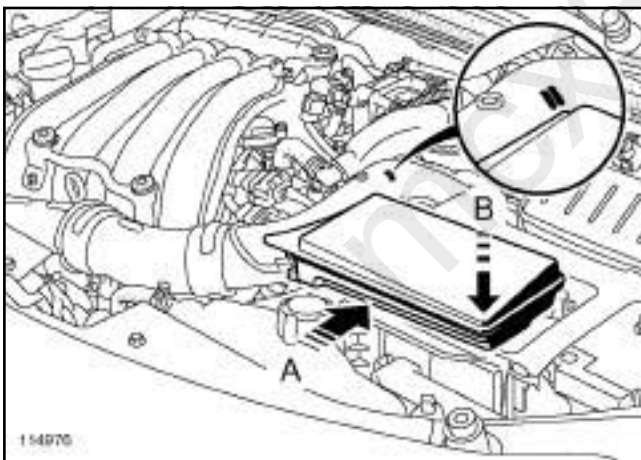
- ❑ Clip the wiring harness on the air inlet duct.

M4R



114975

- ☐ Before refitting the air intake sleeve, check that the front end panel air resonator's upper mounting is correctly clipped at (19) .
- ☐ Refit the air intake sleeve.



114976

- ☐ Push the air resonator towards the rear of the vehicle (A) until the air resonator's rear face is located between the two marks on the air intake sleeve.
- ☐ Push the air resonator (B) to fit it onto the battery cover.
- ☐ Refit the dipstick.
- ☐ Connect the battery (see **Battery: Removal - Refitting**) .
- ☐ Refit the engine cover.

F4R

Equipment required

Diagnostic tool

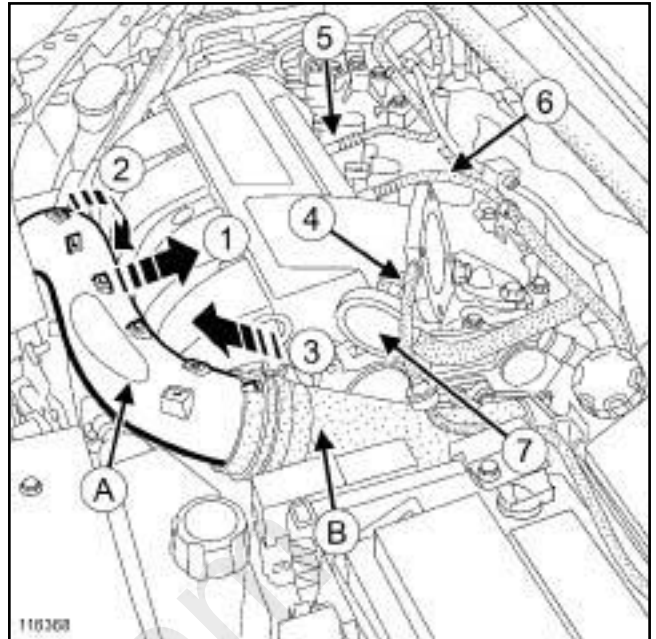
Tightening torques

inlet manifold mounting bolts	15 Nm
-------------------------------	-------

inlet manifold retaining bracket mounting bolts	10 Nm
---	-------

REMOVAL**I - REMOVAL PREPARATION OPERATION**

- ☐ Disconnect the battery (see **Battery: Removal - Refitting**) (MR 392, 80A, Battery).
- ☐ Remove the throttle valve (see **12A, Fuel mixture, Throttle valve: Removal - Refitting**, page 12A-33)



116368

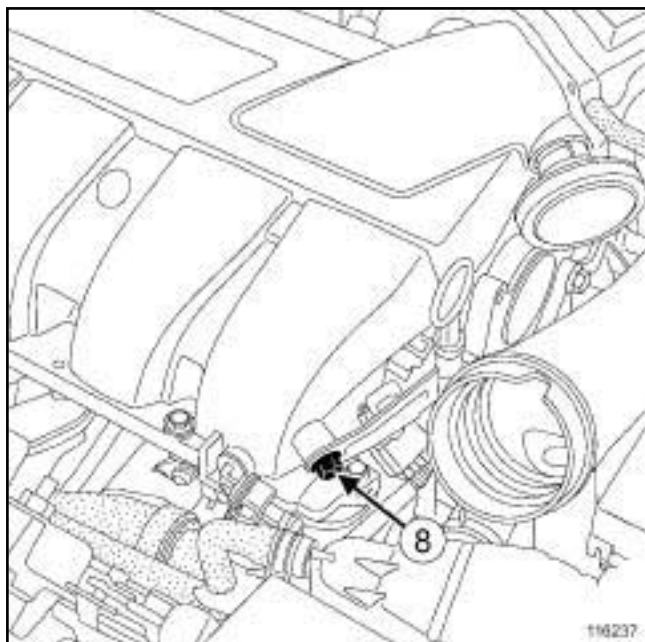
- ☐ Remove:
 - the air inlet pipe (A) :
 - unclip it from the front end panel (1) ,
 - turn it (2) and disconnect it (3) .
 - the air inlet pipe (B) :
 - air resonator side,
 - air filter unit side.
- ☐ Disconnect:
 - the soundproofing unit control solenoid valve pipe (4) on the inlet manifold side,
 - the fuel vapour rebreather pipe (5) on the inlet manifold side,
 - the brake servo pipe (6) on the inlet manifold side.
- ☐ Remove:
 - the oil vapour rebreather unit (7) on the inlet manifold, moving the mounting clips slightly to one side,
 - the dipstick.

FUEL MIXTURE

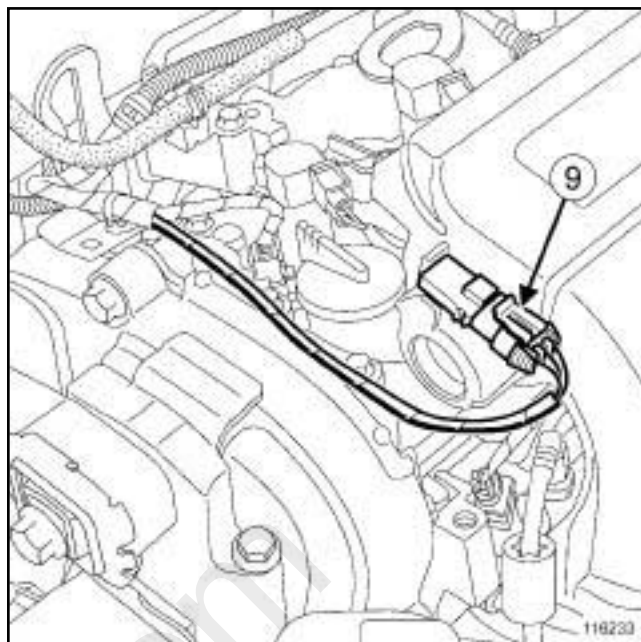
Inlet distributor: Removal - Refitting

12A

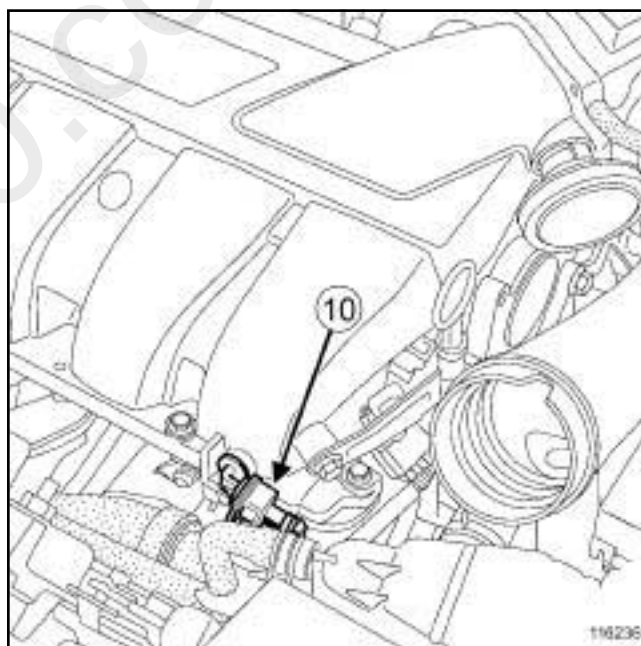
F4R



- Remove the dipstick tube mounting bolt (8) .



116233

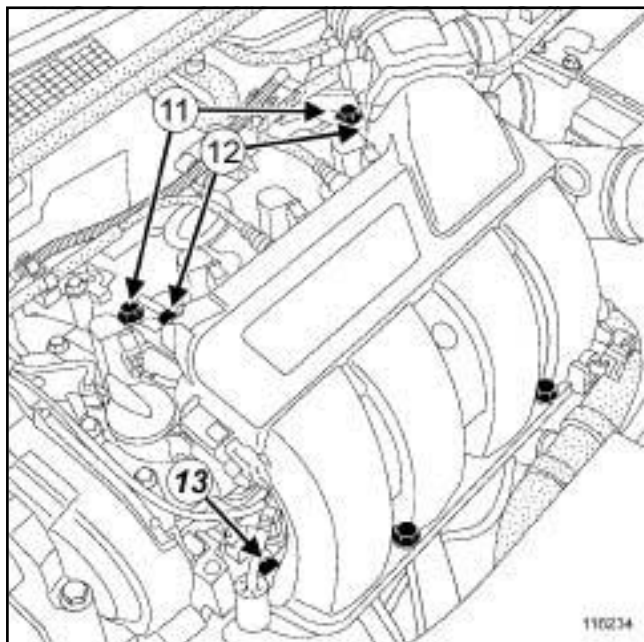


116236

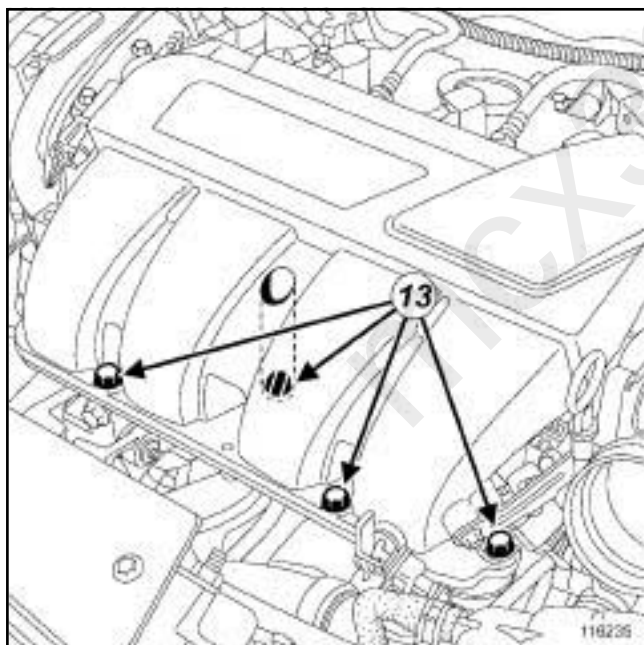
- Disconnect:
 - the inlet air pressure sensor connector (9) ,
 - the inlet air temperature sensor connector (10) .

F4R

II - OPERATION FOR REMOVAL OF PART CONCERNED



116234



116235

- ☐ Unscrew by several turns the inlet manifold retaining bracket mounting bolts (11) on the oil decanter.
- ☐ Remove:
 - the inlet manifold retaining bracket mounting bolts (12) ,
 - the inlet manifold mounting bolts (13) ,
 - the intake distributor.

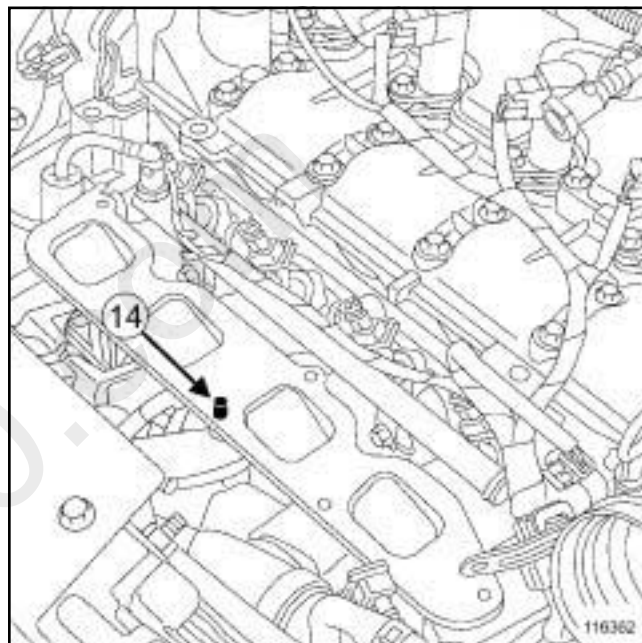
When replacing the inlet manifold

- ☐ Remove:
 - the inlet air pressure sensor.
 - the inlet air temperature sensor.

REFITTING

I - REFITTING PREPARATION OPERATION

- ☐ Carefully clean the joint faces.



116362

- ☐ Always check that the centring device (14) is fitted onto the injector holder plate or the inlet manifold. It can be ordered from the Parts Department if not.

Note:

If there is no centring device fitted this can cause the throttle valve to wear prematurely.

- ☐ Always replace all of the seals with new ones.

When replacing the inlet manifold

- ☐ Refit:
 - the inlet air temperature sensor,
 - the new inlet air pressure sensor.

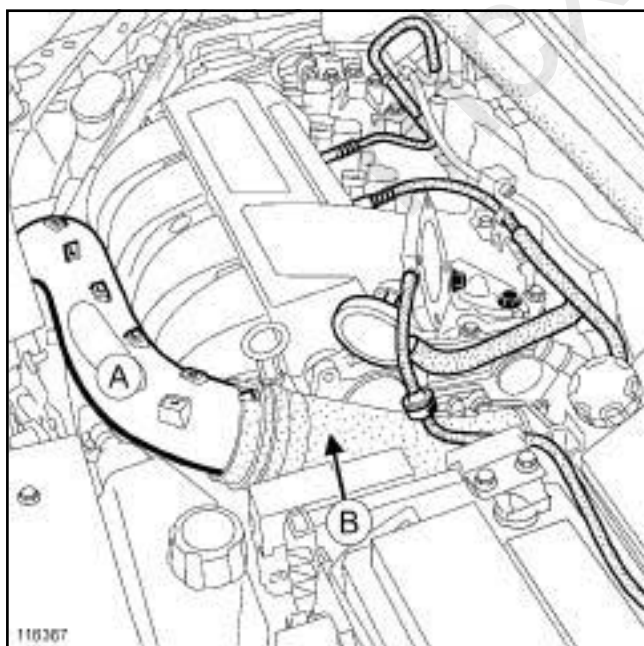
II - REFITTING OPERATION FOR PART CONCERNED

- ☐ Refit:
 - the inlet manifold fitted with a new seal,

F4R

- the inlet manifold mounting bolts,
- the inlet manifold retaining bracket mounting bolts.
- ☐ Torque tighten and in order:
 - the **inlet manifold mounting bolts (15 Nm)**,
 - the **inlet manifold retaining bracket mounting bolts (10 Nm)**.
- ☐ Refit:
 - the dipstick guide tube mounting bolt,
 - the dipstick,
 - the oil vapour rebreather unit on the inlet manifold fitted with a new seal.
- ☐ Connect:
 - the soundproofing unit control solenoid valve pipe on the inlet manifold side,
 - the inlet air temperature sensor connector.
 - the air inlet pressure sensor connector,
 - the fuel vapour rebreathing pipe onto the inlet manifold,
 - the brake servo pipe on the inlet manifold side.

III - FINAL OPERATION.



- ☐ Refit:
 - the air inlet pipe (B) ,
 - the air inlet pipe (A) .

- ☐ Refit the throttle valve (see **12A, Fuel mixture, Throttle valve: Removal - Refitting**, page **12A-33**) .
- ☐ Connect the battery (see **Battery: Removal - Refitting**) (MR 392, 80A, Battery).
- ☐ Using the **Diagnostic tool**, check that there are no faults stored by the computer, and clear them if necessary.

D4F, and 784

Special tooling required

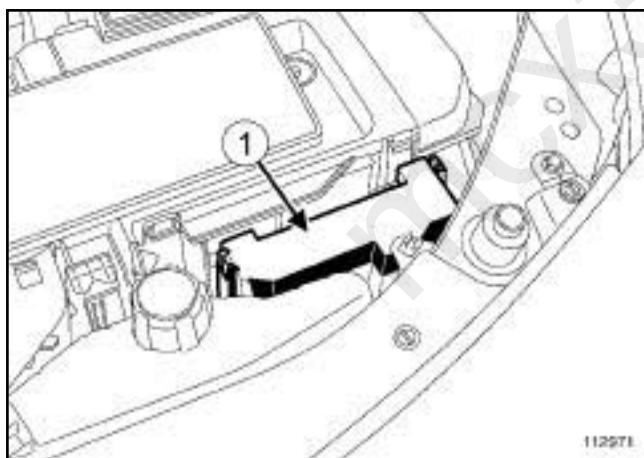
Ms. 583	Pipe clamps.
Mot. 1448	Remote operation pliers for hose clips.

Tightening torques

throttle valve bolts	10 N.m
injector rail - injector bolts	5 N.m
inlet distributor bolts (initial torque)	4 N.m
inlet distributor bolts	12 N.m

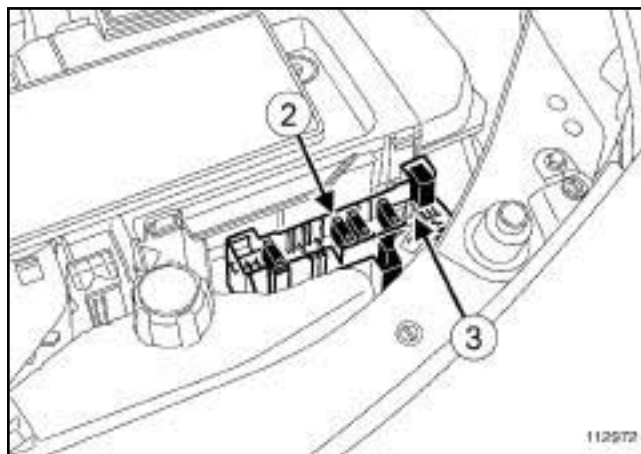
REMOVAL**I - REMOVAL PREPARATION OPERATION**

- ☐ Remove the battery (see **Battery: Removal - Refitting**) (80A, Battery).
- ☐ Remove the front engine cover.



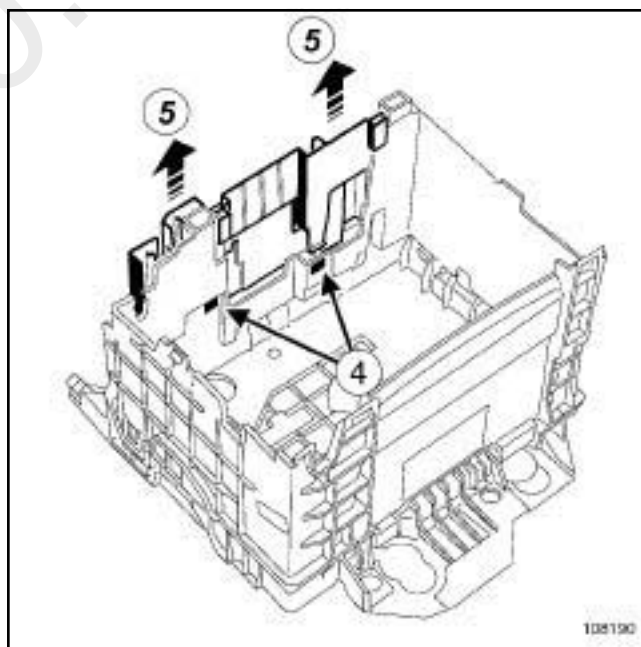
112971

- ☐ Remove the cover (1) from the power feed fuse board mounting.



112972

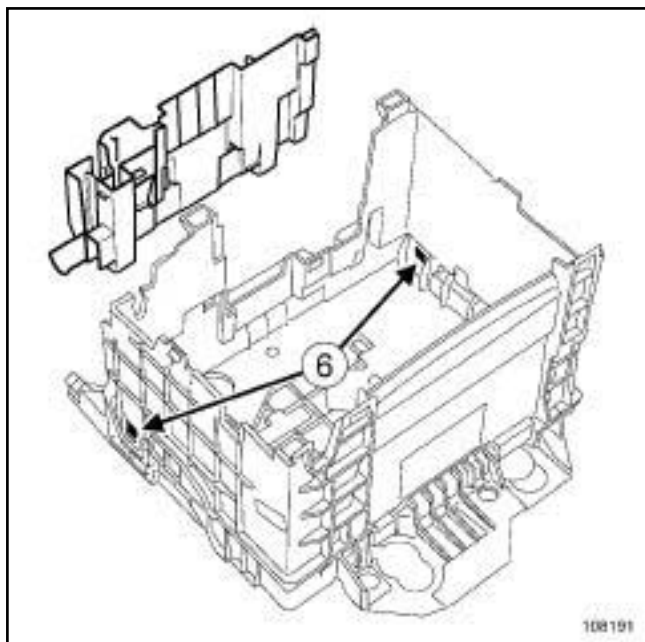
- ☐ Remove the green fuse (2) (**30 A**).
- ☐ Detach the fuse connector from the fuse mounting.
- ☐ Remove the power wiring nut on the fuse mounting (3).
- ☐ Move the power wiring away from the fuse mounting.
- ☐ Detach the fuse board.



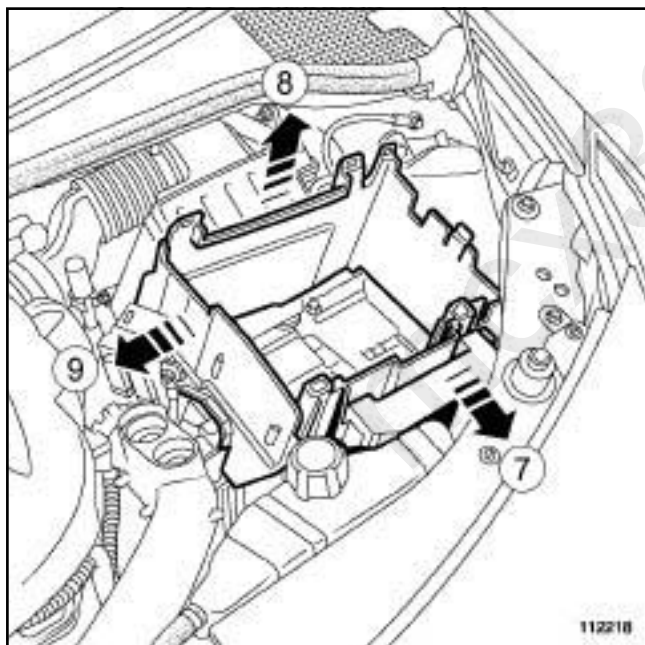
108190

- ☐ Unclip the power feed fuse board support at (4).
- ☐ Move aside the power feed fuse board support at (5).

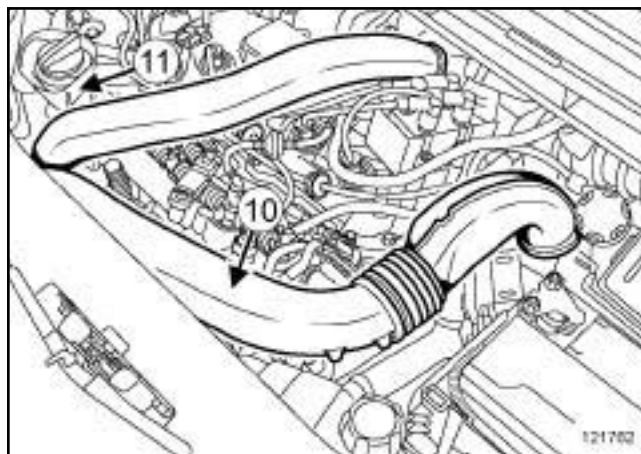
D4F, and 784



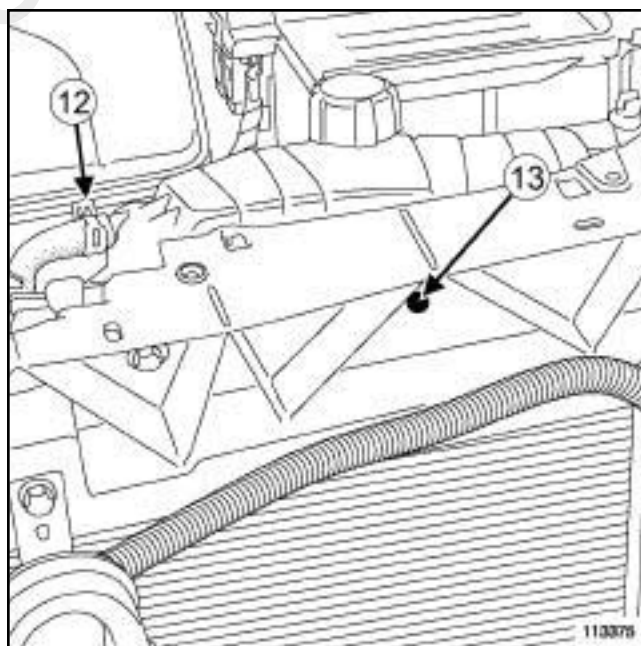
- ❑ Unclip the thermal protection shield at (6) .



- ❑ Hold the power feed fuse board mounting aside at (7) .
- ❑ Remove the thermal protection tray at (8) and (9) .

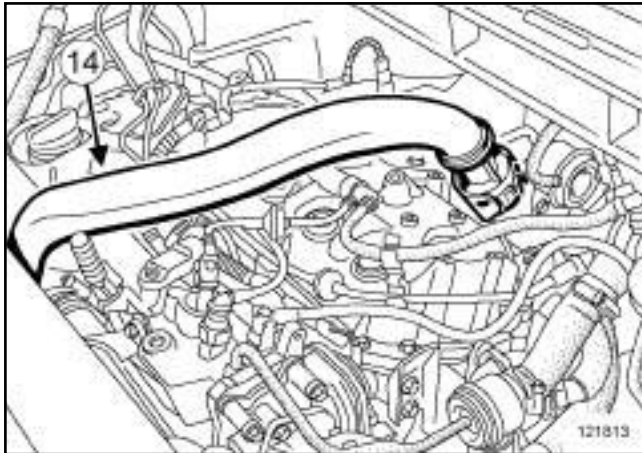


- ❑ Disconnect the air inlet pipe (10) from the air filter box.
- ❑ Remove:
 - the bolt (11) from the engine oil filler neck,
 - the engine oil filler neck,
 - the dipstick,
 - the front bumper (see **Front bumper: Removal - Refitting**) (55A, Exterior protection).



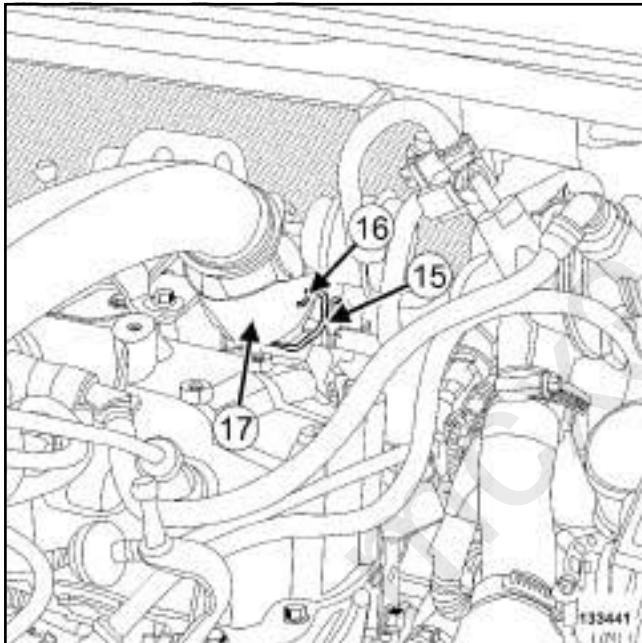
- ❑ Fit a hose clamp (**Ms. 583**) on the hose (12) .
- ❑ Separate the clip on the hose using the tool (**Mot. 1448**).
- ❑ Disconnect the hose.
- ❑ Remove clip (13) .
- ❑ Remove the expansion bottle.

D4F, and 784



121813

- ❑ Remove the bolt (14) from the turbocharger air outlet pipe on the inlet distributor.



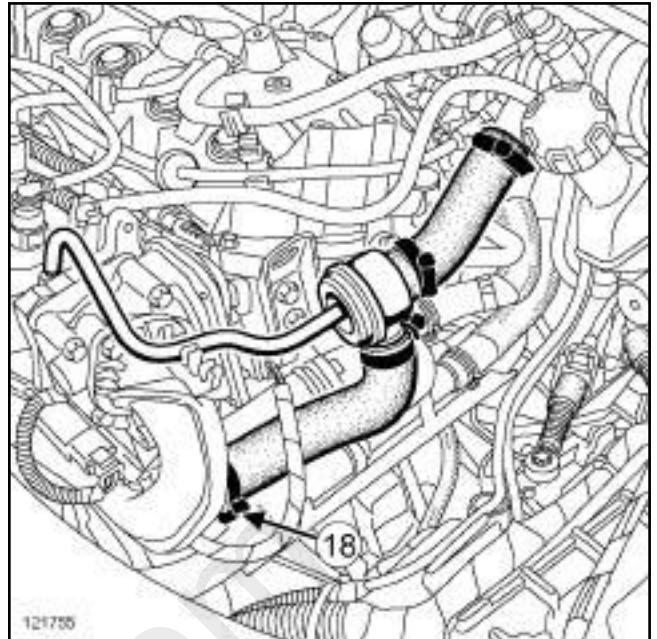
133441

- ❑ Separate the clip (15) on the turbocharger air outlet pipe.

Note:

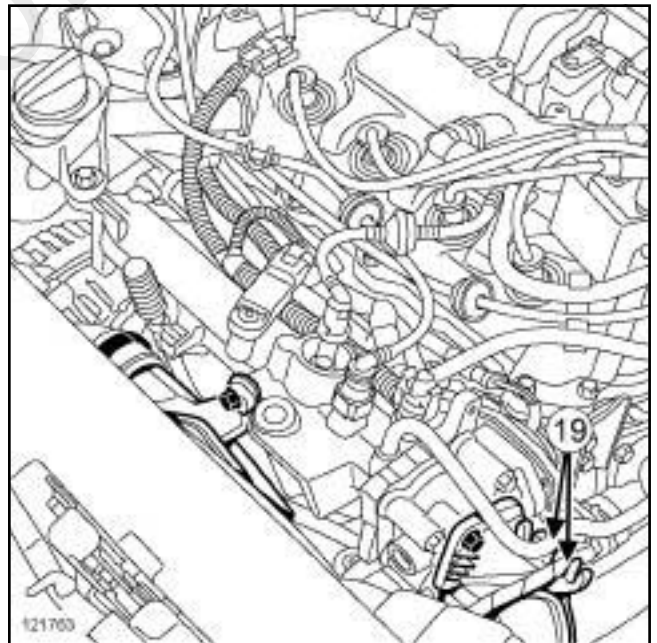
If the clip (16) is removed from the flexible heat shield (17), the latter must be replaced.

- ❑ Move aside the turbocharger air outlet pipe.



121755

- ❑ Undo the compressor discharge valve air pipe clip (18).
- ❑ Disconnect the compressor discharge valve air pipe.



121763

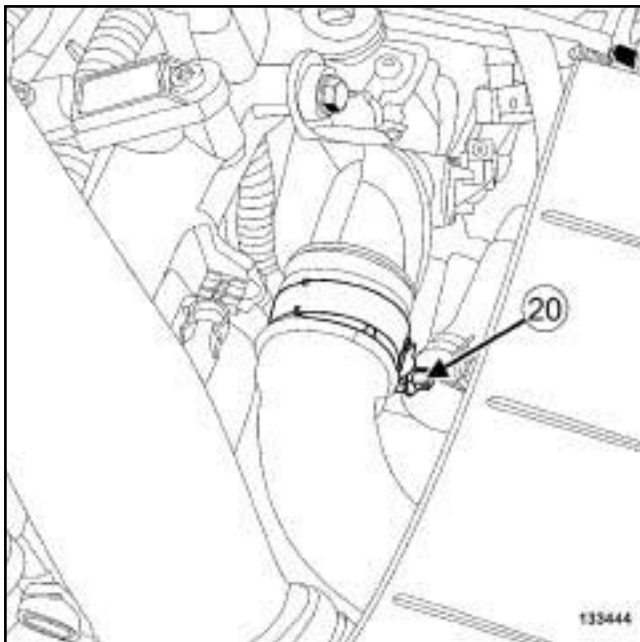
- ❑ Detach at (19) :
 - the vacuum pipe,
 - the throttle valve electrical wiring.
- ❑ Disconnect the throttle valve connector.

FUEL MIXTURE

Inlet distributor: Removal - Refitting

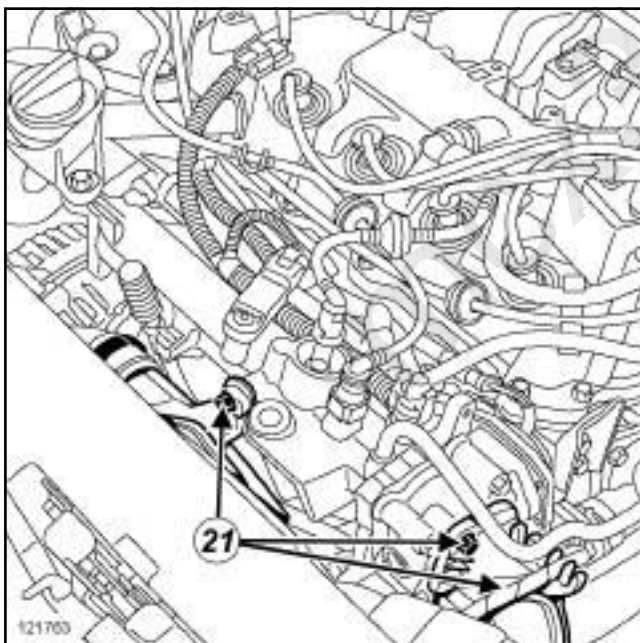
12A

D4F, and 784



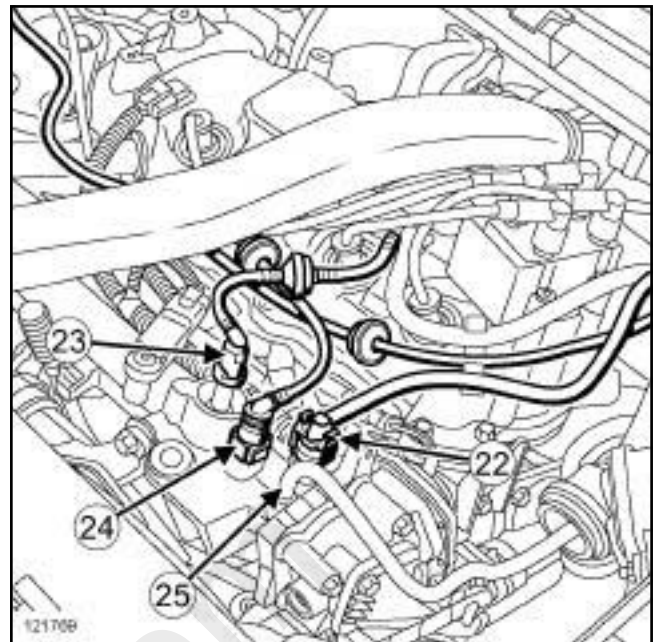
133444

- ☐ Loosen the clip (20) on the intercooler intermediate pipe.
- ☐ Disconnect the intercooler intermediate pipe.



121763

- ☐ Remove:
 - the bolts (21) of the intermediate pipe at the inlet of the inlet distributor,
 - the intermediate pipe at the intercooler outlet.



121769

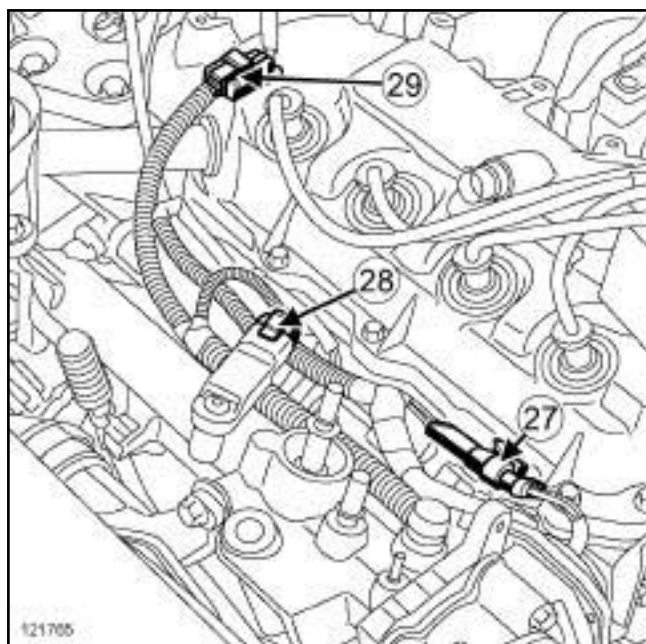
- ☐ Disconnect:
 - the brake servo non-return valve (22) ,
 - the oil vapour rebreathing pipe (23) ,
 - the petrol vapour rebreathing pipe (24) ,
 - the compressor discharge valve vacuum pipe (25) .



133356

- ☐ Disconnect the connector (26) from the fuel heater (if equipped).

D4F, and 784



121765

☐ Disconnect:

- the injector rail connector (27) ,
- the pressure sensor connector (28) ,
- the catalytic pre-converter upstream oxygen sensor connector (29) ,
- the petrol vapour recirculation solenoid valve connector.

IMPORTANT

During this operation, be sure to:

- refrain from smoking or bringing red hot objects close to the working area,
- be careful of fuel splashes when disconnecting the union.

IMPORTANT

Wear leaktight gloves (Nitrile type) for this operation.

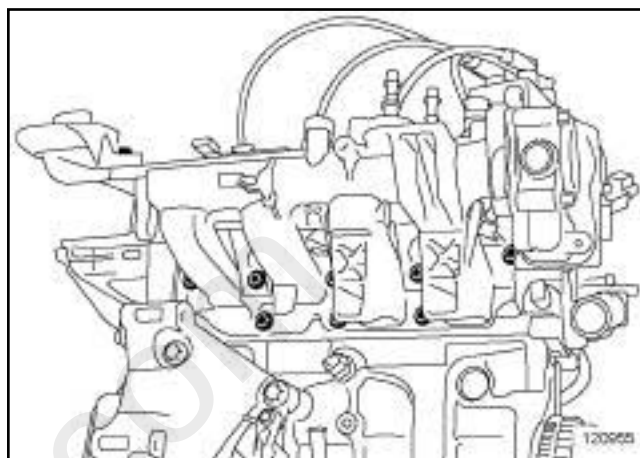
IMPORTANT

Wear goggles with side protectors for this operation.

WARNING

To avoid any corrosion or damage, protect the areas on which fuel is likely to run.

- ☐ Disconnect the fuel inlet pipe on the injector rail.
- ☐ Fit blanking plugs.
- ☐ Unclip the electrical wiring.
- ☐ Move the electrical wiring to one side.

II - OPERATION FOR REMOVAL OF PART CONCERNED

120955

☐ Remove:

- the inlet distributor bolts,
- the inlet distributor,
- the inlet distributor seal.

When replacing the inlet distributor

☐ Remove:

- the « injection rail - injector » bolts,
- the « injection rail - injector » by pulling it gently,
- the throttle valve bolts,
- the throttle valve,
- the pressure sensor,
- the electric heater (if fitted).

REFITTING**I - REFITTING PREPARATION OPERATION**

- ☐ **parts always to be replaced: inlet distributor seal (10,07,01,07).**
- ☐ Use a **GREY ABRASIVE PAD** (see **Vehicle: Parts and consumables for the repair**) (04B, Consumables - Products) to clean the bearing faces on:
 - the inlet distributor,
 - the cylinder head.

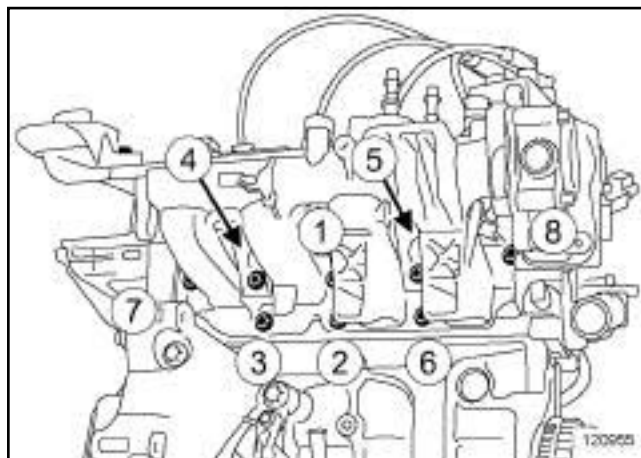
Inlet distributor: Removal - Refitting

D4F, and 784

- ☐ Use **SURFACE CLEANER** (see **Vehicle: Parts and consumables for the repair**) (04B, Consumables - Products) and clean cloths to degrease the mating faces on:
 - the inlet distributor,
 - the cylinder head.
- ☐ Lubricate the injector seals with **SILICONE FREE LUBRICANT** (see **Vehicle: Parts and consumables for the repair**) (04B, Consumables - Products).

When replacing the inlet distributor

- ☐ **parts always to be replaced: injector seal (11,11,02,02).**
- ☐ **parts always to be replaced: Throttle valve seal (11,04,06,25).**
- ☐ Always replace the heater seal.
- ☐ Refit:
 - the throttle valve,
 - the throttle valve bolts,
 - the « injector rail - injectors » carefully,
 - the « injection rail - injector » bolts.
- ☐ Tighten to torque:
 - the **throttle valve bolts (10 N.m)**,
 - the **injector rail - injector bolts (5 N.m)**.

II - REFITTING OPERATION FOR PART CONCERNED

120955

- ☐ Apply a drop of **FRENETANCHE** (see **Vehicle: Parts and consumables for the repair**) (04B, Consumables - Products) to the inlet distributor bolts.
- ☐ Refit:
 - the inlet distributor fitted with a new seal,
 - the inlet distributor bolts.
- ☐ Pretighten to torque and in order the **inlet distributor bolts (initial torque) (4 N.m)**.
- ☐ Tighten to torque and in order the **inlet distributor bolts (12 N.m)**.

III - FINAL OPERATION

- ☐ Clip on the electric wiring.
- ☐ Remove the blanking plugs.
- ☐ Connect:
 - the fuel supply pipe on the injector rail,
 - the petrol vapour recirculation solenoid valve connector.
 - the catalytic pre-converter upstream oxygen sensor connector,
 - the pressure sensor connector,
 - the injector rail connector,
 - the fuel heater connector,
 - the compressor discharge valve vacuum pipe,
 - the petrol vapour rebreathing pipe,
 - the oil vapour rebreathing pipe,
 - the brake servo non-return valve.