

DIESEL INJECTION

Venturi: Removal - Refitting

13B

K9K, and 750 or 752 or 766 or 768

- ☐ Fit blanking plugs into the openings.

REFITTING

I - REFITTING PREPARATION OPERATION

- ☐

WARNING

Do not remove the blanking plugs from each component until the last moment.

- ☐ Lubricate the O-ring with lubricant from the applicator supplied with the new part.

Note:

Do not lubricate the Venturi seals with grease or used diesel fuel.

Use the applicator supplied with the kit.

II - REFITTING PART CONCERNED

- ☐ Fit the Venturi.

WARNING

Do not damage the O-ring when fitting the Venturi.

- ☐ Tighten to torque the **Venturi bolt (5.5 N.m)** using a **torque wrench**.

III - FINAL OPERATION

- ☐ Connect the return pipe connecting the injectors to the high pressure pump.
- ☐ Refit the high pressure pump protection.
- ☐ Refit the inlet air duct.
- ☐ Connect the inlet air pressure sensor.

K9K, and 750 or 766 or 768

- ☐ Loosen the intercooler inlet air pipe nut on the alternator.
- ☐ Fit the air duct between the turbocharger and the intercooler air inlet pipe.
- ☐ Lock the air duct onto the turbocharger and the intercooler inlet air pipe.
- ☐ Torque tighten the **nut mounting the intercooler inlet air pipe on the alternator (8 N.m)**.

- ☐ Refit the engine cover.
- ☐ Connect the battery (see **Battery: Removal - Refitting**) (MR 392, 80A, Battery).
- ☐ Check that there are no diesel leaks:
 - check the sealing after repair (see **13B, Diesel injection, High pressure pipe: Check**, page **13B-99**),
 - let the engine run at idle speed until the engine cooling fan starts to operate,
 - accelerate several times at no load,
 - switch off the ignition,
 - check that there is no diesel fuel escaping.

DIESEL INJECTION

Diesel return pipe: Removal - Refitting

13B

K9K, and 764 or 772

Equipment required

Diagnostic tool

Tightening torques

intercooler inlet air pipe nut on the alternator	8 Nm.
---	--------------

IMPORTANT

Consult the safety instructions and cleanliness advice and the operation recommendations before carrying out any repairs (see **Diesel injection: Repair precautions**).

IMPORTANT

Before carrying out any work on the injection system, check using the **Diagnostic tool** :

- that the rail is not under pressure,
- that the fuel temperature is not too high.

Working on the circuit with the engine running is strictly forbidden.

IMPORTANT

Be careful when removing the injectors or the injection rail as there will be a quantity of fuel in the rail and the union.

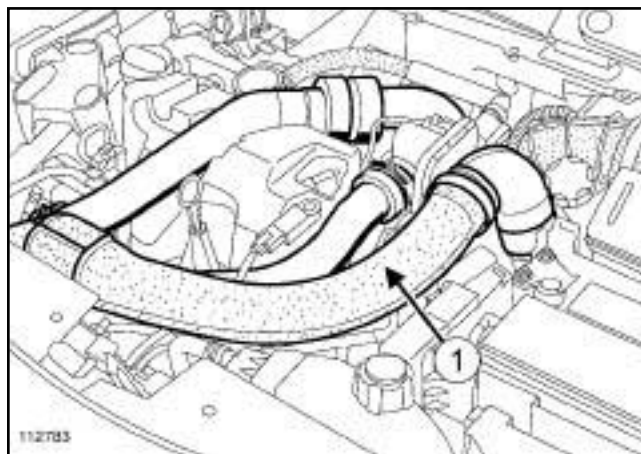
IMPORTANT

Loosening a high pressure pipe union when the engine is running is strictly prohibited.

REMOVAL

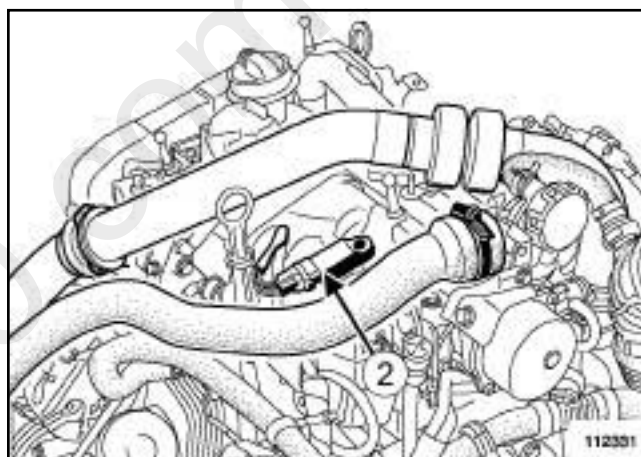
I - REMOVAL PREPARATION OPERATION

- ☐ Position the vehicle on a two-post lift (see **Vehicle: Towing and lifting**) (02A, Lifting equipment).
- ☐ Switch off the ignition and wait **30 seconds** before starting work on the injection system.
- ☐ Disconnect the battery (see **Battery: Removal - Refitting**) (80A, Battery).
- ☐ Remove the engine undertray.



112783

- ☐ Remove the air inlet sleeve (1) .



112331

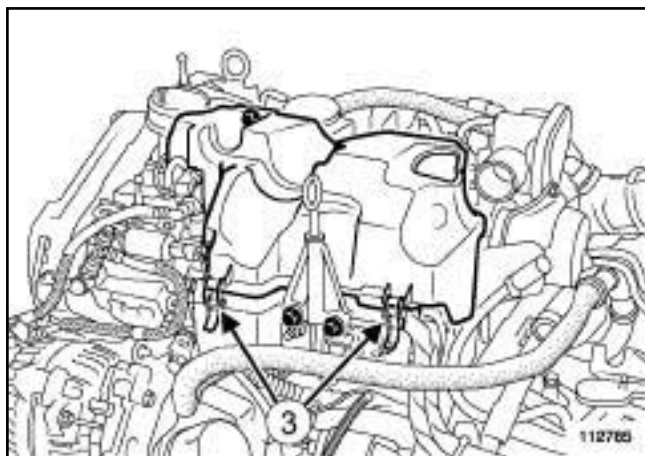
- ☐ Disconnect the inlet pressure sensor connector (2) .
- ☐ Remove:
 - the intercooler air outlet pipe,
 - the air pipe at the intercooler inlet,
 - the turbocharger outlet air pipe.

DIESEL INJECTION

Diesel return pipe: Removal - Refitting

13B

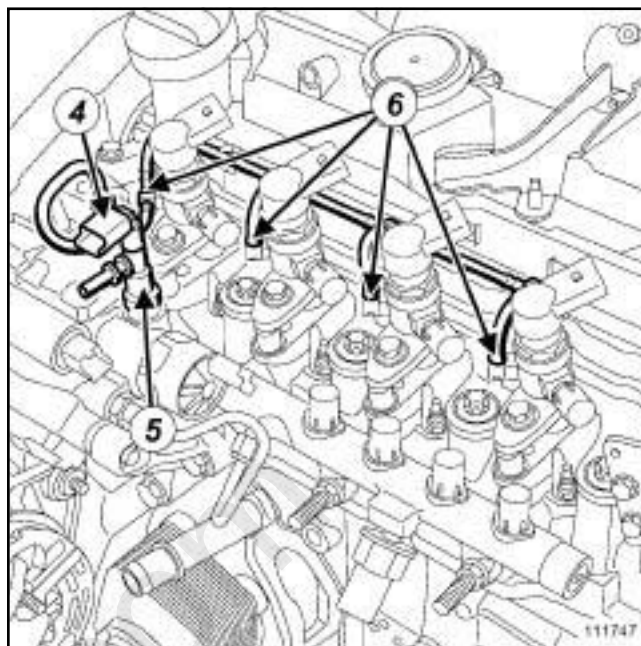
K9K, and 764 or 772



112785

- ☐ Unclip the rail protector cover at (3) .
- ☐ Remove:
 - the rail protector cover bolts,
 - the rail protector cover.
- ☐ Protect the alternator from fuel outflow.

II - OPERATION FOR REMOVAL OF PART CONCERNED



111747

- ☐ Disconnect the diesel temperature sensor connector (4) .
- ☐ Clean the diesel return union (5) on the high pressure pump (see **13B, Diesel injection, Diesel injection: Precautions for the repair, page 13B-1**) .
- ☐ Disconnect the diesel return union (5) from the high pressure pump.

Note:

Make preparations for the fuel outflow.

- ☐ Fit blanking plugs to:
 - the diesel return pipe,
 - the high pressure pump.
- ☐ Clean the diesel return unions (6) on the injectors (see **13B, Diesel injection, Diesel injection: Precautions for the repair, page 13B-1**) .

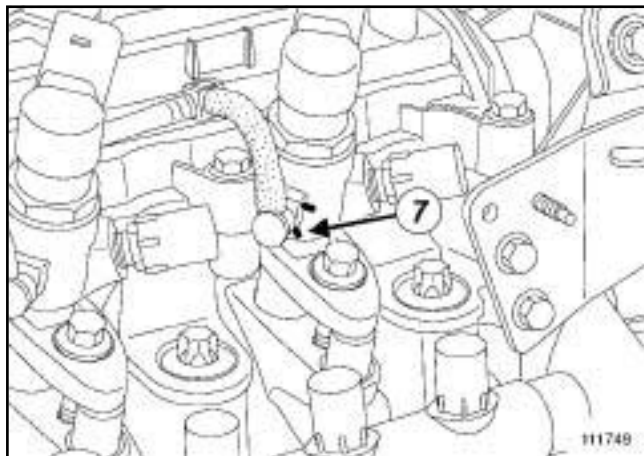
DIESEL INJECTION

Diesel return pipe: Removal - Refitting

13B

K9K, and 764 or 772

First stage in removing the injector fuel return unions



111749

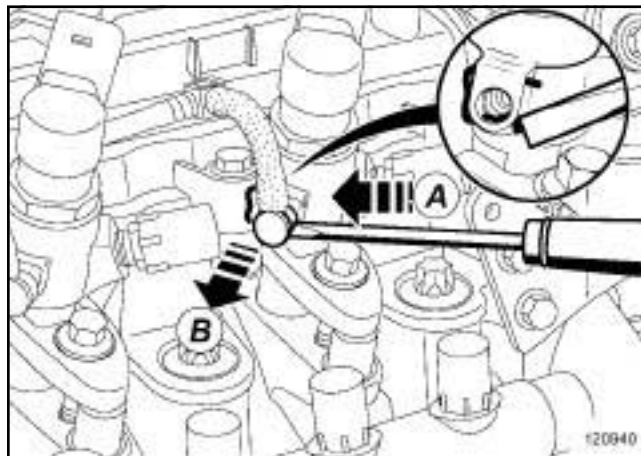
- ❑ Using a fine flat-blade screwdriver, push the lower tabs (7) of the injector fuel return union clips towards the rocker cover in order to unfasten them and fully fit them on the rocker cover.

Note:

Take care not to dislodge the clip fully from its housing in case it becomes damaged when extracting the diesel return union.

Any clips that become completely separated from a diesel injector that has not been removed must always be replaced: to do this, it is essential that the diesel injector in question is removed (see **13B, Diesel injection, Diesel injector: Removal - Refitting**, page **13B-83**) (13B, Injection).

Second stage in removing the injector fuel return unions



120940

- ❑ Using a fine flat-blade screwdriver, push down (A) on the lower tabs of the clips, which were first resting on the rocker cover, without separating them fully from their injectors.
- ❑ Manually remove the injector diesel return unions at (B), while **pressing (A) on the lower tabs of the clips using a fine flat-blade screwdriver.**

Note:

With sufficient force applied to the clip while pressing continuously with the screwdriver, the injector diesel return unions will come out effortlessly.

WARNING

Do not use the screwdriver as a lever on the injector fuel return unions.

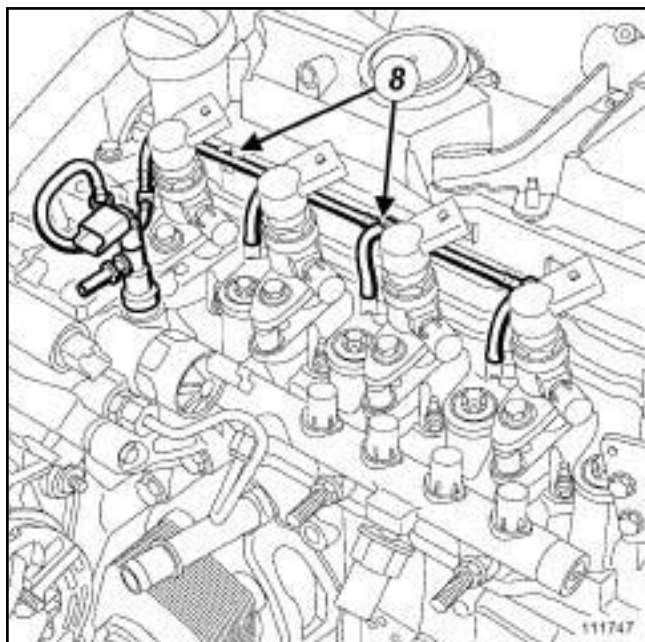
- ❑ Fit blanking plugs on:
 - the diesel return unions on the injectors,
 - the diesel return openings on the injectors.

DIESEL INJECTION

Diesel return pipe: Removal - Refitting

13B

K9K, and 764 or 772



111747

- ☐ Unclip the diesel return pipe from the rocker cover at (8) .
- ☐ Remove the diesel return pipe.

Note:

If the diesel return pipe is to be reused, keep it in a sealed bag throughout the removal operation.

REFITTING

I - REFITTING PREPARATION OPERATION

☐

WARNING

Only remove the blanking plugs from the protected components at the last possible moment.

Also, do not remove the components from their packaging until just before fitting them to the vehicle.

II - REFITTING OPERATION FOR PART CONCERNED

☐

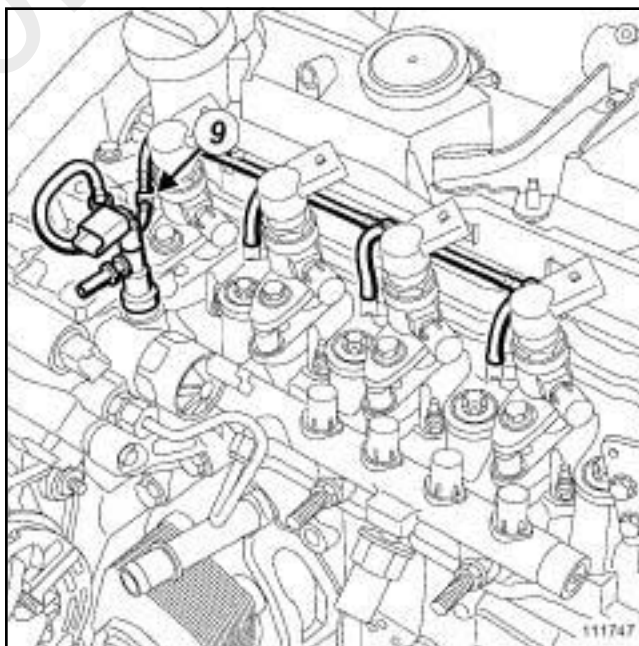
WARNING

Check the condition of the seals on the fuel return unions on the injectors.

Check that they are not cut, crushed and have not come out of their grooves.

Replace the entire diesel return pipe if one of the components is damaged.

- ☐ Push the retaining clips for the diesel return unions on the injectors towards the front of the vehicle until they are in their original positions.
- ☐ Remove the blanking plugs from the injector fuel return openings, and discard.
- ☐ Remove the diesel return pipe from its packaging.
- ☐ Lubricate the injector diesel return unions with **SILICONE FREE LUBRICANT** (see **Vehicle: Parts and consumables for the repair**) (04B, Consumables - Products) so that the seals are completely covered.



111747

- ☐ Offer up the diesel return unions to the injector diesel return openings, starting with injector number 4 (9) .