

DIESEL INJECTION

High pressure pipe: Check

13B

K9K

Equipment required

Diagnostic tool

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WARNING

Check that there are no diesel leaks after each operation.

Note:

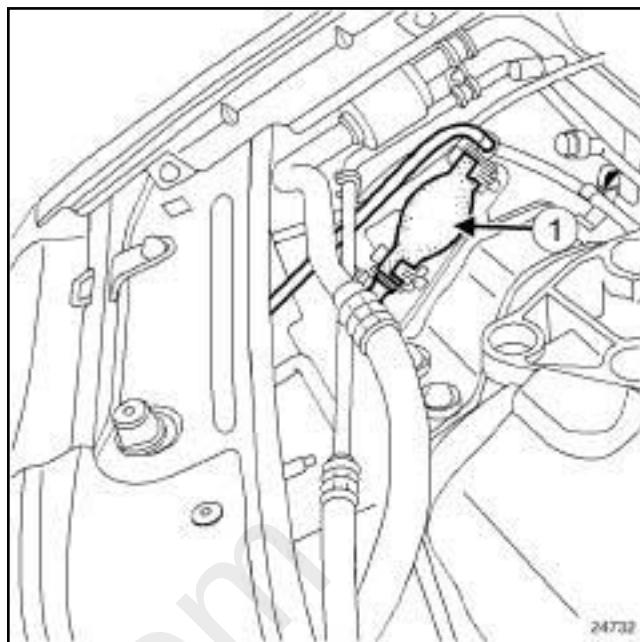
the **Diagnostic tool** can be used for testing the high pressure circuit with the engine running. This command can be used to run fault finding on a leak due to an incorrectly fitted or tightened union. This command only works if the engine coolant temperature is over **60°C**. The fault finding procedure does not reveal small leaks caused by insufficient tightening.

Note:

Respect the repair precautions (see **Diesel injection: Precautions for the repair**).

CHECK

- Remove the front engine cover.



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- Prime the fuel circuit using the manual priming pump (1) until the transparent pipes are filled with fuel (automatic degassing).
- Check that there are no fuel leaks.
- Connect the **Diagnostic tool** to the vehicle.
- Deal with present faults,

Note:

Certain faults will prevent this test from being carried out: deal with them first.

Note:

The engine automatically runs a cycle of four accelerations and decelerations to lower the rail pressure.

WARNING

Do not leave anything on the side of the engine housing during the test phase (significant vibration).

- Run command **AC 626 - high pressure circuit sealing test**.
- Check that there are no fuel leaks.
- Deal with the causes of any possible leaks.
- Use the **Diagnostic tool** to check for stored faults; deal with these and clear them as necessary.
- Disconnect the **Diagnostic tool**.

K9K

Equipment required

Diagnostic tool

Tightening torques

nut of the high pressure pipe between the pump and the injector rail on the high pressure pump **28 N.m**

nut of the high pressure pipe between the pump and the rail on the injector rail **28 N.m**

dipstick guide and filler neck nuts on the high pressure rail **21 N.m**

IMPORTANT

To avoid all risk of damage to the systems, apply the safety and cleanliness instructions and operation recommendations before carrying out any repair (see **Diesel injection: Precautions for the repair**) .

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.

It is essential to respect the safety and cleanliness advice whenever work is carried out on this system.

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

IMPORTANT

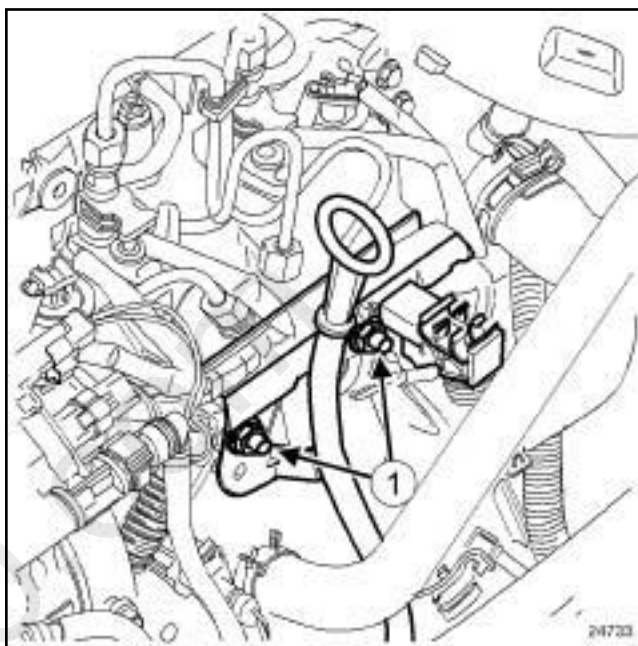
Wear leaktight gloves (Nitrile type) for this operation.

WARNING

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

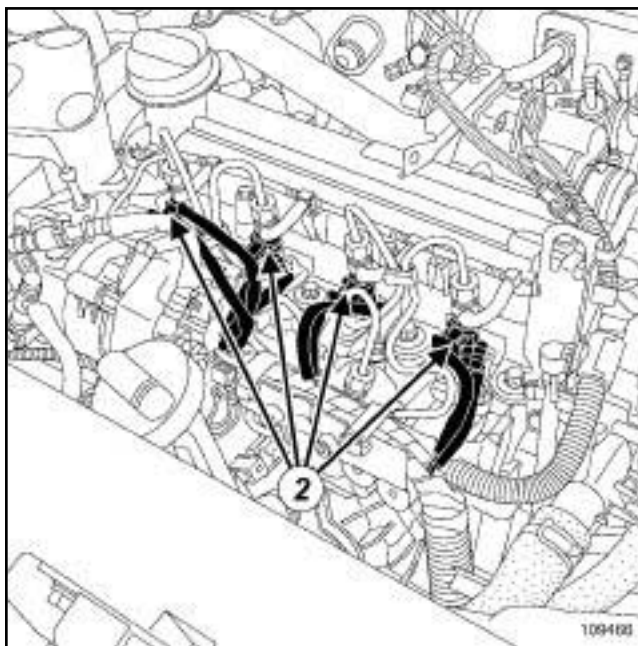
REMOVAL**I - REMOVAL PREPARATION OPERATION**

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



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- ☐ Remove the dipstick guide and filler neck bolts (1) .
- ☐ Put the dipstick to one side.

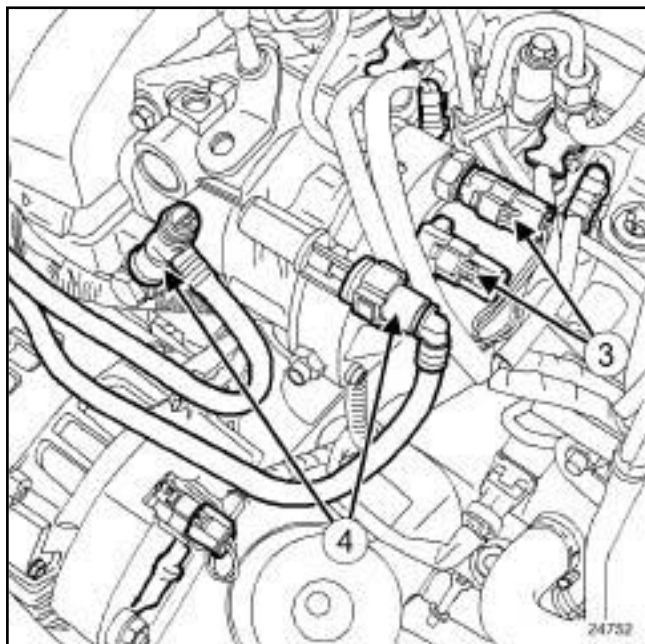


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- ☐ Disconnect the following connectors (2) :
 - the heater plugs,

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- the injectors.



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- ☐ Disconnect:
 - the high pressure pump connectors (3) .
 - the injector rail pressure sensor.
- ☐ Clean the diesel supply and return pipes (see **Diesel injection: Precautions for the repair**) .
- ☐ Disconnect the diesel supply and return pipes (4) .
- ☐ Disconnect the return pipe connecting the injectors to the high pressure pump.
- ☐ Fit the correct blanking plugs.
- ☐ Move the wiring to one side with the neck on the side.
- ☐ Clean the high pressure pipe unions between the rail and the injectors (see **Diesel injection: Precautions for the repair**) .

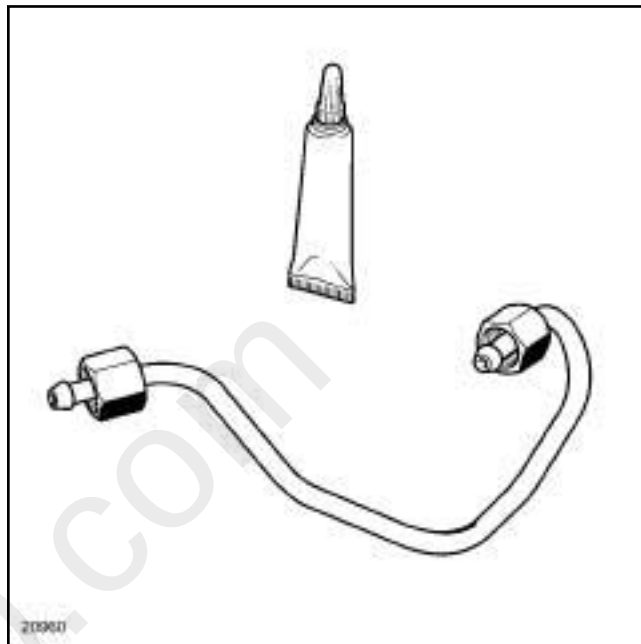
II - REMOVAL OPERATION

- ☐ Clean the unions of the high pressure pipe between the high pressure pump and the injector rail (see **Diesel injection: Precautions for the repair**) .
- ☐ Undo:
 - the high pressure pipe nut at the high pressure pump end,
 - the high pressure pipe nut at the injector rail end.
- ☐ Fit blanking plugs into the openings.

REFITTING

I - REFITTING PREPARATION OPERATION

- ☐ parts always to be replaced: High pressure pipe between the pump and rail.



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WARNING

Before fitting a new high pressure pipe, lightly lubricate the nut threads with oil from the applicator provided with the new part.

Be careful not to allow oil into the high pressure pipe.

Do not lubricate high pressure pipes supplied without an applicator, as these high pressure pipes are self-lubricating.

WARNING

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

II - REFITTING OPERATION

- ☐ Remove the blanking plugs.
- ☐ Insert the high pressure pipe olive in the high pressure pump high pressure outlet taper.
- ☐ Insert the high pressure pipe olive into the injector rail inlet taper.
- ☐ Finger tighten the high-pressure pipe nuts, starting with the one at the injector rail side.