**TECHNICAL NOTE**
Edition Anglaise

**JANUARY 1998**
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**2917A**
Service 0422

| | Type | S/Section |
|---|---|---|
| **Twingo** | X06 X | 14 |
| **Kangoo** | XC0 X | 14 |
| **Clio** | XB0 X | 14 |
| **Mégane** | XA0 X | 14 |
| **Laguna** | X56 X | 14 |
| **Espace** | JE0 X | 14 |

## 14 CANISTER BLEED SOLENOID VALVE INTEGRATED IN CANISTER

- Engine : **XXX**
- Gearbox : **XXX**

**Basic manual** : M.R.

This note describes changes to the fuel vapour rebreathing circuit.

From now on, the canister bleed solenoid valve will be integrated in the canister.

**CANISTER BLEED SOLENOID VALVE INTEGRATED IN THE CANISTER**

Changes have been made to the fuel vapour re-breathing system.

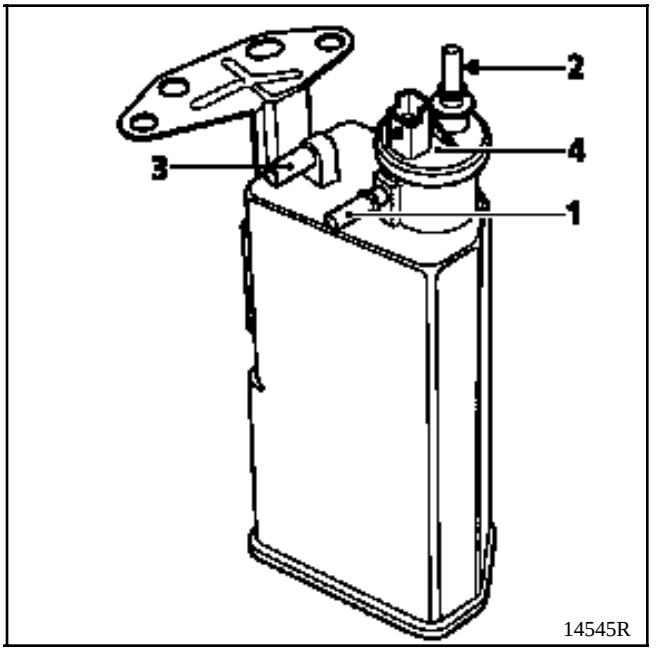
From now on the canister bleed solenoid valve will be integrated in the canister: it cannot be separated from the canister.

This change applies to the following vehicles: **CLIO**, **KANGOO**, **TWINGO**, **MEGANE**, **LAGUNA**, **ESPACE**.

The new canisters with an integrated solenoid valve are incorporated in the same position as old-type canisters.

Apart from the position of the solenoid valve, the petrol vapour rebreathing circuits have not been modified.

The conditions for bleeding the canister have not been modified.




1 Fuel vapour rebreathing from the fuel tank (snap-fit coupling)
2 Fuel vapour rebreathing leading to the engine
3 Fuel tank venting

**IMPORTANT:** For normal operation, the venting pipe must not be blocked and no pipe should be connected to it.

4 Canister solenoid valve

Solenoid valve resistance is **40** ± **4** Ω.

**OPERATING PRINCIPLE**

The fuel tank is vented via the petrol vapour absorber (canister).

The petrol vapour is trapped as it passes through the active carbon contained in the absorber (canister).

The petrol vapour contained in the canister is expelled and burnt in the engine.

To achieve this, the canister and the intake manifold are connected via a pipe. A solenoid valve which activates the bleeding procedure is mounted on the canister.

The solenoid valve operates in such a way so as to vary the size of the passage (produced by the **RCO** signal transmitted by the injection computer).

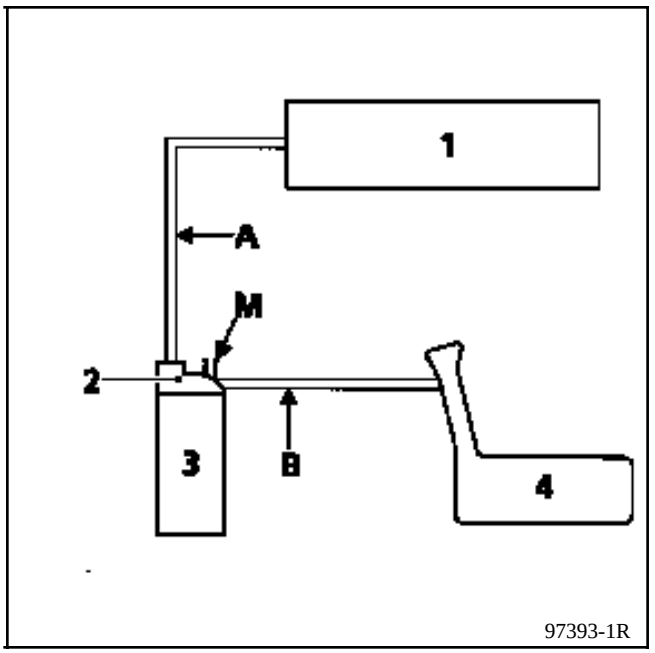
The variation in the size of the passage for the petrol vapour as controlled by the solenoid valve is produced by the equilibrium between the magnetic field created by the coil feed and the force of the return spring used for closing the solenoid valve.

**CHECKING CANISTER BLEED OPERATION (except L7X)**

If this system is not operating correctly, it may cause the idling speed to be unstable or the engine to stall

Check that the circuit is to specification (see operating diagram).

Check the condition of the pipes as far as the fuel tank.




1 Intake manifold
2 Integrated canister bleed solenoid valve
3 Canister (with solenoid valve)
4 Fuel tank
M Air venting

Check:
- at idling speed,
- by blocking circuit (B) from the fuel tank on the canister,
- by connecting a vacuum gauge (**- 3 / + 3 bars**) (**Mot. 1311-01**) at the canister venting pipe outlet (M),

that no vacuum is present. (Also, the control value read by the **XR25** at **# 23** is still minimal **X = 0.7** or **0 %**).
**Is vacuum present?**

**YES** With the ignition off, use a vacuum pump to apply vacuum of **500 mbars** to the solenoid valve at (A). This should not vary by more than **10 mbars** over **30 seconds**.
**Does the pressure vary?**

**YES** The solenoid valve is defective; change the solenoid valve canister assembly.

**NO** It is an electrical problem. Check the circuit.

**NO** Under bleeding conditions (except idling speed and a hot engine), there should be an increase in vacuum. (At the same time, there should be an increase in the value of **# 23** on the **XR25**.)

#### CHECKING THE CONNECTION BETWEEN THE CANISTER AND THE FUEL TANK

This connection can be checked as follows:
- Use a jack to lift the rear right-hand wheel off the ground.
- Remove the fuel filler cap.
- Connect a vacuum pump to pipe (B).

The system is correct if it is not possible to maintain a vacuum at the pipe.