multifunction valve with leak detection product[Vehicle: Parts and consumables for the repair](#) (04B, Consumables - Products):

- fill the tank with several litres of LPG,
- start the engine, and operate it in "gas" mode,
- apply leak detector and check that there are no leaks on the union,
- wait for 5 minutes,
- check that there are no leaks on the union,
- fill up the tank,
- start the engine, and operate it in "gas" mode,
- apply leak detector and check that there are no leaks on the union,
- wait for 5 minutes,
- check that there are no leaks on the union.

Refit the protection of the LPG multifunction valve.

Position a retaining clip between the multifunction valve protection and the LPG tank protection (if the vehicle is equipped).

LPG TANK: DRAINING

Note, one or more warnings are present in this procedure

Special tooling required	
Magnet for manually opening the LPG/CNG tank solenoid valve	Ms. 1826

Equipment required
pneumatic or electric wrench

DRAINING

1. DRAINING PREPARATION OPERATION

It is essential to read the repair precautions (see 17C, LPG injection, LPG injection: Precautions for the repair) .

Note:

Refer to the instructions for use of the AEM LPG igniter in addition to the installation instructions below.

Park the vehicle outside.

Cut the retaining clip of the multifunction valve protection (if the vehicle is equipped).

Remove the protection of the multifunction valve.

Close the stop cock on the multifunction valve.

Drain the LPG multifunction valve - LPG expansion valve unit pipe:

- start the vehicle in LPG position,
- let the engine run until it automatically switches to petrol mode.

Disconnect the batteryBattery: Removal - Refitting (80A, Battery).

Loosen the nut of the LPG multifunction valve - LPG expansion valve unit pipe

2. DRAINING OPERATION

Disconnect the connector of the LPG tank solenoid valve.

Remove the bolt from the LPG tank solenoid valve.

Remove the LPG tank solenoid valve.

For flaring, use the pneumatic or electric wrench.

Position the flare in a stable position in the flare area.

Position the "TWINY" bottle further than 5 metresaway from the flare.

Position the tank to be emptied further than 10 metresaway from the flare.

Note:

The "TWINY" propane bottle and the nitrogen bottle are not supplied with the flare.

Ensure that all valves of all circuits are closed.

To connect the pilot flame hose between the flare and the "TWINY" bottle:

- Connect the quick-release union to the flare pilot flame end piece.
- Clip the expansion valve to the bottle. The valve must be closed.

For the connection between the tank and the flare:

- Connect the self-sealing union on the end of the hose to the flare connection end piece, with the valve closed.
- Fit the special pipe in place of the LPG multifunction valve - LPG expansion valve unit pipe.
- Connect the self-sealing joint at the end of the hose to the connection socket of the special pipes.

To connect the nitrogen circuit:

- Position the nitrogen bottle near the LPG tank.
- Attach the expansion valve onto the nitrogen bottle and tighten the expansion valve union.
- Fit the adapter on the filler end piece,
- Connect the special nitrogen pad to the LPG tank filler orifice and tighten manually. (make sure there is a seal).

After a check of all the seals to ensure there are no leaks, the system is ready for use.

To light the pilot flame (operator correctly attired):

- Open the "TWINY" bottle expansion valve switch.

- Introduce a flame into the opening provided in the flare cylinder to light the pilot flame.
- Check that the pilot flame is properly lit.

To light the igniter:

- The operator must be at least 10 metresaway from the flare and must ensure that this precaution is respected by everyone.
- Control the tank solenoid valve by putting the toolMagnet for manually opening the LPG/CNG tank solenoid valve (**Ms. 1826**) in place of the LPG tank solenoid valve.
- Open the stop cock of the multifunction valve,
- Open the progressive flow valve to position 1 (the maximum position is 5).
- The igniter lights.
- Check the passage of the liquid gas through the circulation indicator.
- Adjust the opening of the progressive flow control valve, increasing its opening to position 2 or 3 until the flow lines equalise through the circulation indicator.
- Try to open the progressive flow control valve slowly so as to not trigger the tank flow limiter. If the limiter is triggered, close the flow valve and start the operation again.
- After the flow has equalised, open the nitrogen bottle and adjust the expansion valve to a pressure 1 bar greater than the tank pressure (but not greater than 7 bar).

After the main flame has gone out, let the nitrogen flame sweep at 3 bars with the flow valve completely open for 1 minuteper 10 litrescapacity (e.g: for a 60 litrestank: sweeping = 6 min).

Close the tank solenoid valve and remove theMagnet for manually opening the LPG/CNG tank solenoid valve(**Ms. 1826**) .

Close the nitrogen circuit by resetting the expansion valve and closing the tap on the nitrogen bottle.

- Shut off the pilot flame by closing the expansion valve switch on the "TWINY" gas bottle.
- Close the progressive flow valve.

CAUTION

The flare should be left in place until it has cooled completely. Move the flare using the two side handles.

- Disconnect all of the unions.
- Wind up the hoses.
- Put away the equipment.
- Refit the LPG tank solenoid valve.
- Connect the connector of the LPG tank solenoid valve.

3. REFITTING OPERATION AFTER DRAINING

- Pretighten by hand the nut of the LPG multifunction valve - LPG expansion valve unit pipe.
- Torque tighten the nut of the LPG multifunction valve - LPG expansion valve unit pipe11 N.m.
- Check the sealing of the union between the LPG multifunction valve - LPG expansion valve unit pipe and the LPG