

1. REFITTING PREPARATION OPERATION



Lubricate the O-ring with engine oil.

2. REFITTING OPERATION



Refit [\(see 10A, Engine and cylinder block assembly, Engine oil circuit assembly: Exploded view\)](#) :



the oil level sensor,



the oil level sensor bolt.



Torque tighten the oil level sensor bolt [\(see 10A, Engine and cylinder block assembly, Engine oil circuit assembly: Exploded view\)](#) .



Proceed in the reverse order to removal.



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OIL PRESSURE: CHECK



Note, one or more warnings are present in this procedure



Special tooling required

22 mm socket for removal - refitting of oxygen sensors.

Mot. 1495-01

Oil pressure gauge kit.

Mot. 836-05

Equipment required

1/2" long socket (12.7 mm square drive)

multimeter

roll pin punch

CAUTION



Always check the oil level using the dipstick.

Do not exceed the maximum level on the dipstick (could destroy the engine).

Correct the engine oil level if necessary before delivering the vehicle to the customer.

Note:



When topping up the engine oil, always leave at least 10 minutes before checking the level with a dipstick.

Locations and specifications (tightening torques, parts always to be replaced, etc.) [\(see 10A, Engine and cylinder block assembly, Engine and transmission assembly sensors\)](#) .

1. PREPARATION OPERATION FOR CHECK



Position the vehicle on a two-post lift [Vehicle: Towing and lifting](#) .



Disconnect the battery [Battery: Removal - Refitting](#) .



Remove the engine undertray.



Remove:



the intercooler air outlet pipe [Air inlet assembly: Exploded view](#) ,



the oil-water heat exchanger [\(see 10A, Engine and cylinder block assembly, Engine oil circuit assembly: Exploded view\)](#) .

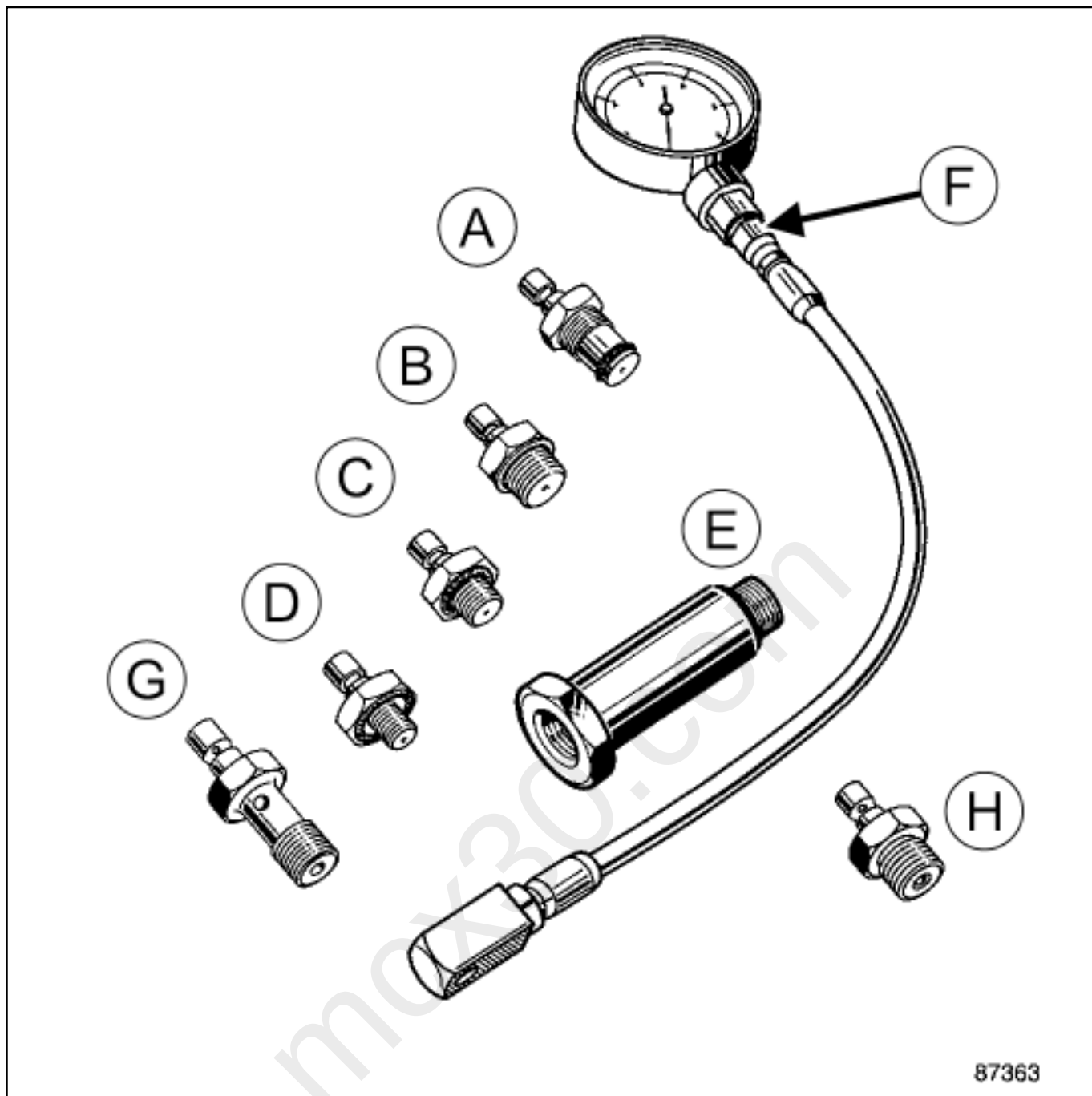


Remove the oil pressure sensor [\(see 10A, Engine and cylinder block assembly, Oil pressure sensor: Removal - Refitting\)](#) .

2. CHECK



Check the correct operation of the oil pressure sensor valve using the roll pin punch with a diameter of 2 mm and the multimeter.



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Position the engine oil pressure sensor tool Oil pressure gauge kit. (Mot. 836-05) fitted with suitable end pieces using the tool 22 mm socket for removal - refitting of oxygen sensors. (Mot. 1495-01) or a 1/2" long socket (12.7 mm square drive).

End pieces:

- D4F engine:

end piece C+ F

- K9K engine:

■
end piece E+ C+ F

- H4B/H5F engine:
■

end piece D+ F

- H4D engine:
■

end piece D+ F



Refit the oil-water heat exchanger([see 10A, Engine and cylinder block assembly, Engine oil circuit assembly: Exploded view](#)) .



Start the vehicle.



Monitor the engine oil pressure as the engine oil temperature increases (approximately 80°C or the first time the engine cooling fan is triggered)which must not be lower than the pressure at idle speed.



If the oil pressure is lower at idle speed, check that:



the oil filter is not clogged,



there is no dirt or swarf in the engine oil,

the oil pump is in good condition and being correctly driven.



Drive the engine speed at 3000 rpm.



Check the oil pressure values:



idling < X < 4000 rpm: 1.7 bar < X < 2.5 bar

4000 rpm < X < MAX rpm: 3.5 bar < X < 4.5 bar

3000 rpm: 1.5 to 2.8 bar

disconnect the oil pump connector.

3000 rpm: 3.2 to 4.5 bar

Switch off the engine.

Remove the oil-water heat exchanger([see 10A, Engine and cylinder block assembly, Engine oil circuit assembly: Exploded view](#)) .

Remove the toolOil pressure gauge kit.([Mot. 836-05](#)) with the end pieces.

3. FINAL OPERATION

Proceed in the reverse order to the preparation operation for the check.

Wipe away any oil run-off with a cloth.

Wait at least 10 minutes.

Check the oil level using the dipstick.

Top up the oil level if necessary[Engine oil: Specifications](#) .