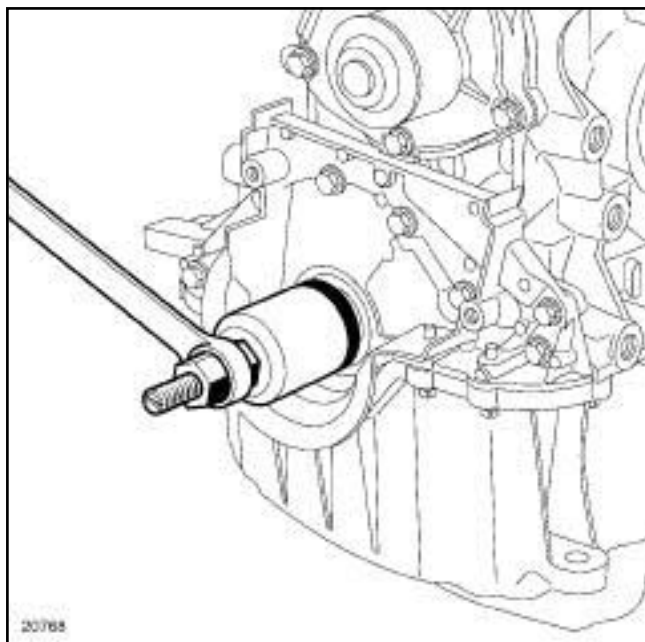
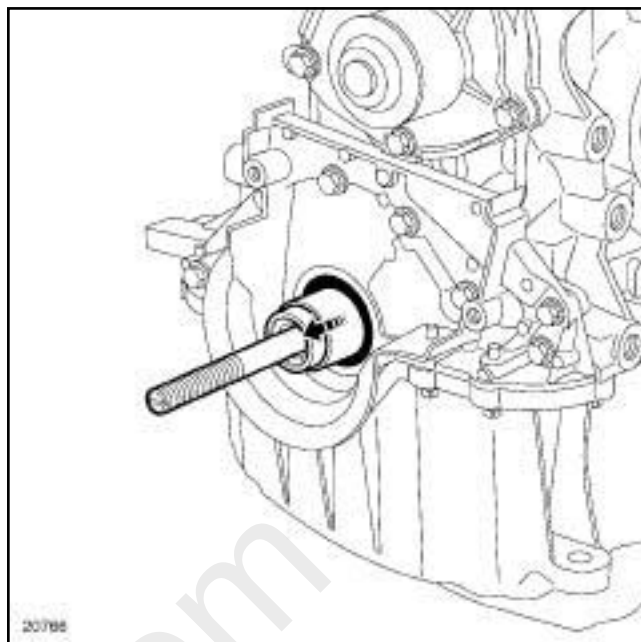


K9K



20768

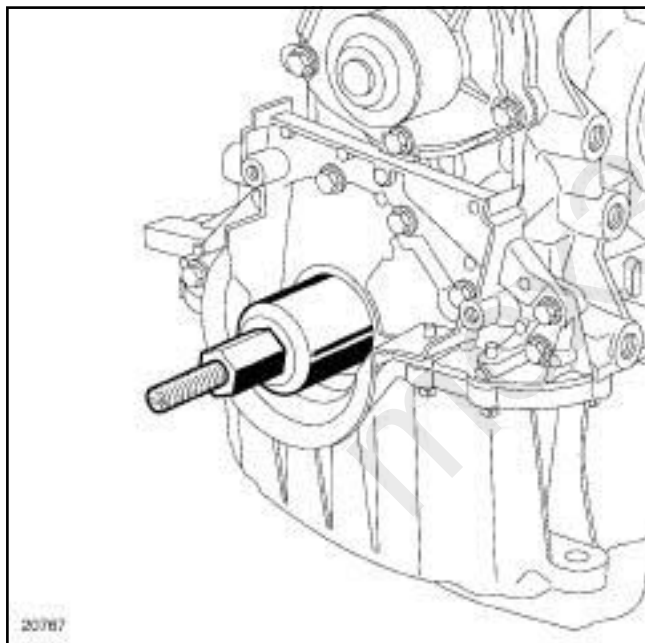


20766

- ☐ Remove the nut, the cup, the protector and the threaded rod.

### III - FINAL OPERATION

- ☐ Refit:
  - the timing belt sprocket (see **11A, Top and front of engine, Timing belt: Removal - Refitting**, page **11A-17**) ,
  - the timing belt (see **11A, Top and front of engine, Timing belt: Removal - Refitting**, page **11A-17**) ,
  - the front right-hand wheel (see **Wheel: Removal - Refitting**) (35A, Wheels and tyres).
- ☐ Connect the battery (see **Battery: Removal - Refitting**) (80A, Battery).



20767

- ☐ Screw on the nut until the cover touches the spacer.

# ENGINE AND CYLINDER BLOCK ASSEMBLY

## Crankshaft seal, gearbox end: Removal - Refitting

# 10A

K4M or K9K

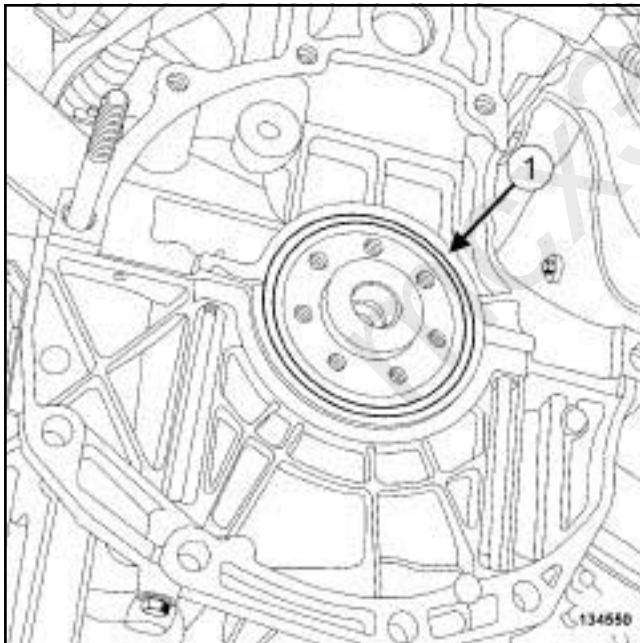
### REMOVAL

#### I - REMOVAL PREPARATION OPERATION

- ☐ Position the vehicle on a two-post lift (see **Vehicle: Towing and lifting**) (02A, Lifting equipment).
- ☐ Disconnect the battery (see **Battery: Removal - Refitting**) (80A, Battery).
- ☐ Remove:
  - the gearbox (see **Manual gearbox: Removal - Refitting**) (21A, Manual gearbox),
  - the clutch (see **Pressure plate - Disc: Removal - Refitting**) (20A, Clutch),
  - the flywheel (see **10A, Engine and cylinder block assembly, Flywheel: Removal - Refitting**, page 10A-75) (20A, Clutch).

#### II - REMOVAL OPERATION

K4M



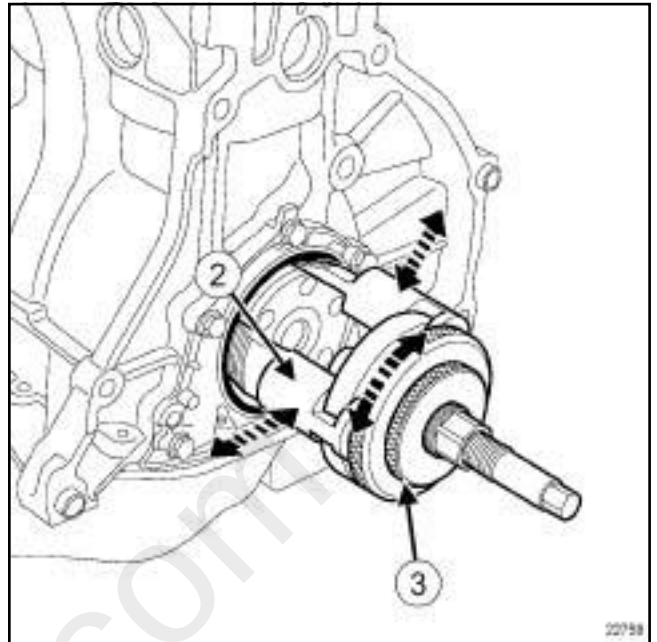
134550

- ☐ Remove the crankshaft seal (1) at the gearbox end using a screwdriver.

Note:

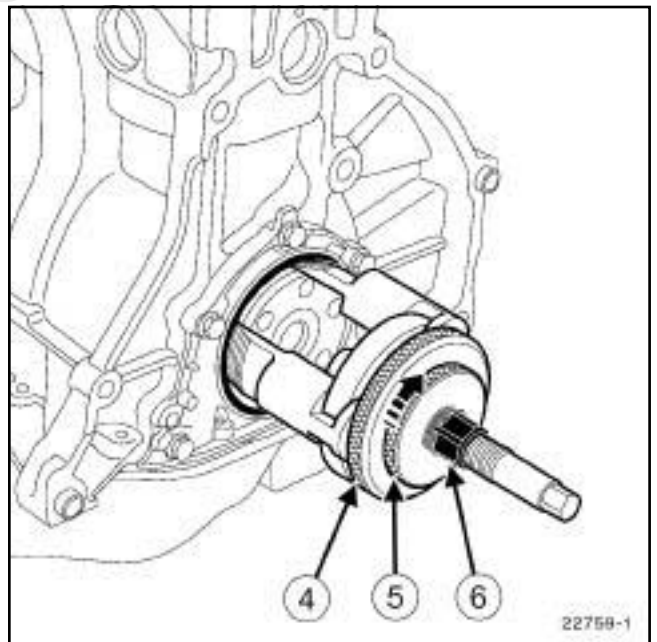
Take care not to damage the crankshaft mating face.

K9K



22759

- ☐ Fit the extractor to the shaft, adjusting the fingers (2) to the diameter of the shaft using the knurled plate (3).



22759-1

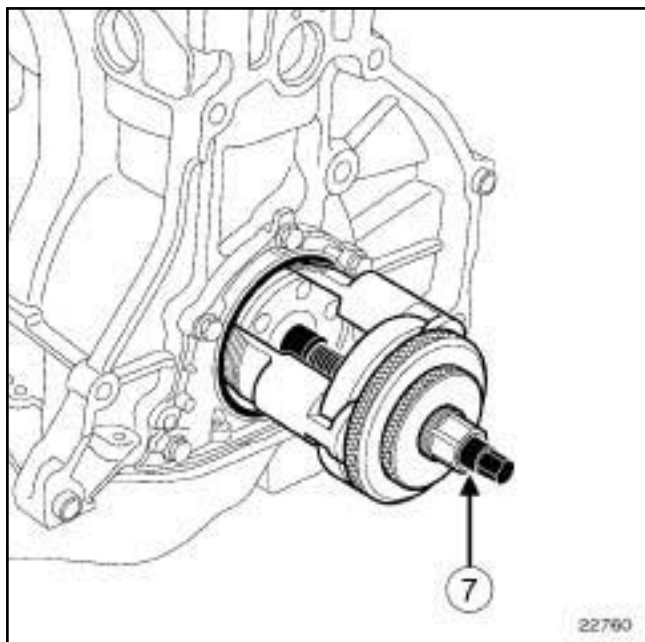
- ☐ Screw knurled plate (5) until it is locked to knurled plate (4) to keep the fingers in position on the shaft.
- ☐ Screw the extractor into the seal using the hexagonal nut (6).

# ENGINE AND CYLINDER BLOCK ASSEMBLY

## Crankshaft seal, gearbox end: Removal - Refitting

# 10A

K4M or K9K



22760

- ❑ Extract the crankshaft seal at the gearbox end by screwing the threaded rod (7) .

### REFITTING

#### I - REFITTING PREPARATION OPERATION

- ❑ **parts always to be replaced: Crankshaft seal on gearbox end.**

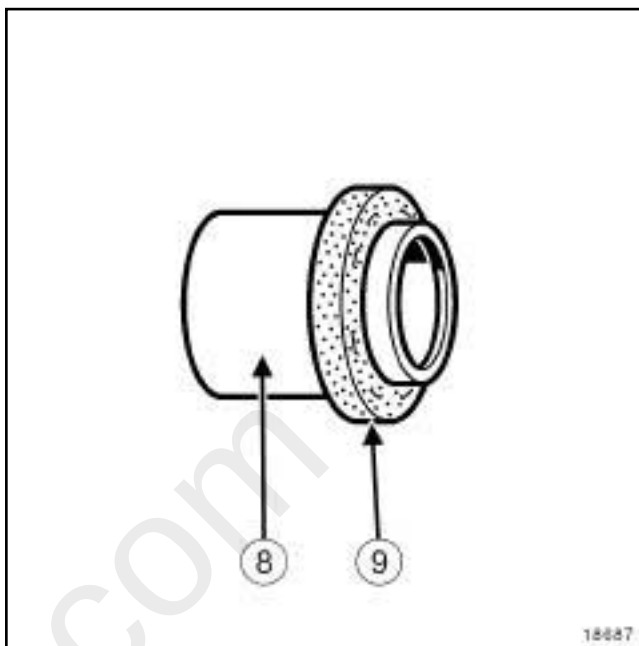
#### WARNING

To ensure proper sealing, the gasket surfaces must be clean, dry and not greasy (avoid any finger marks).

- ❑ Use **SURFACE CLEANER** (see **Vehicle: Parts and consumables for the repair**) (04B, Consumables - Products) to clean and degrease:
  - the crankshaft seal mating face,
  - the crankshaft seal housing on the cylinder block.

#### II - REFITTING OPERATION

K9K



18687

❑

#### Note:

This type of seal is extremely fragile.

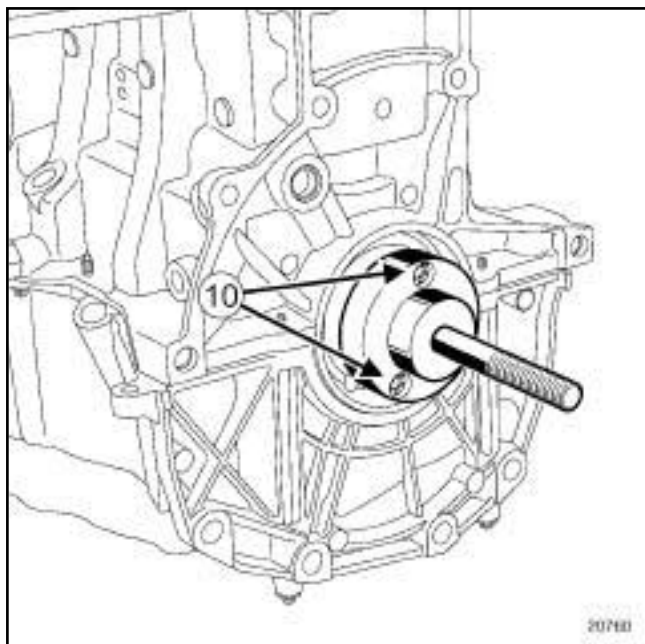
Only touch the protective part (8) when handling the gasket. It is strictly forbidden to touch the seal (9) ; this is to prevent any oil leaks once the oil seal is fitted to the engine.

# ENGINE AND CYLINDER BLOCK ASSEMBLY

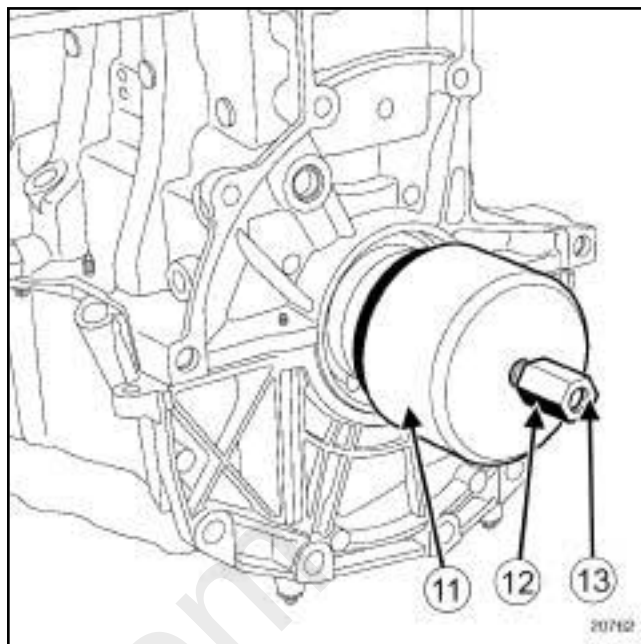
## Crankshaft seal, gearbox end: Removal - Refitting

# 10A

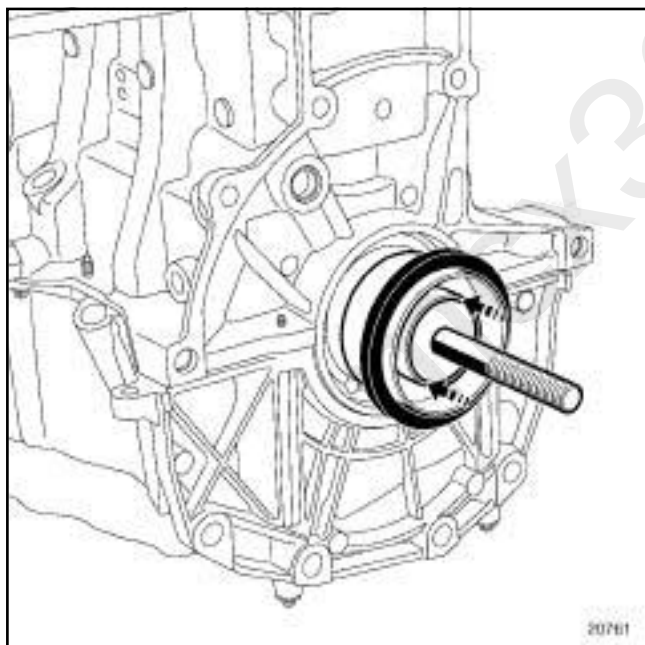
K4M or K9K



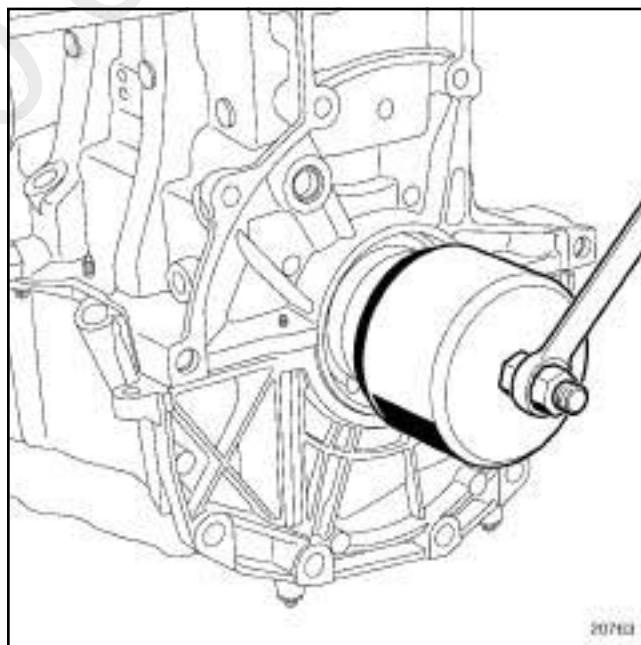
- ❑ Mount theon the crankshaft, securing it using bolts (10) .



- ❑ Fit the cover (11) and nut (12) (with the thread (13) of the nut towards the outside of the engine) of the.



- ❑ Fit the protector with its seal in place on the, taking care not to touch the seal.



- ❑ Tighten the nut until the cover touches the cylinder block.