

L. Removal and Installation of Oil Pan

I. Models 180 a, 180 b, and 190 SL

Removal and installation procedures for the oilpan are exactly the same as described for Model 190.

II. Models 220 a, 219, and 220 S with Split Oil Pan

Removal:

1. Drain off the oil, remove the tie-rod and the steering shock absorber.
2. Unscrew the front engine brace (judder brace) from the oil pan and the front axle support (only if installed).
3. Unscrew the front part of the oil pan and remove it.
4. If the oil pan is removed only in order to remove the oil pump or to check the connecting rod bearings, the rear part of the oil pan need not be unscrewed (Fig. 01-4/57). If complete removal is necessary, first unscrew the cover plate for the clutch housing, then unscrew the two M 10 fixing screws fixing the clutch housing to the oil pan as well as the two long and two short fixing screws on the oil pan rear part and remove the oil pan.

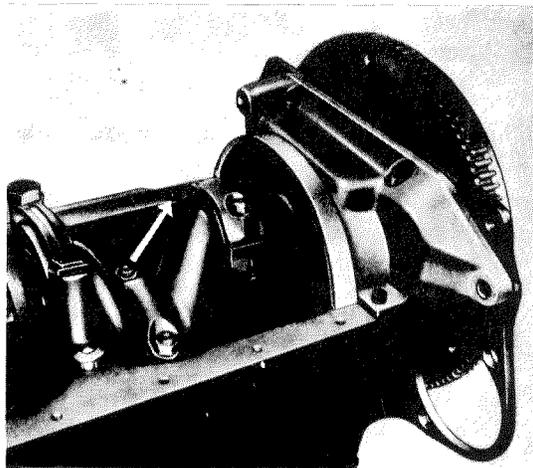


Fig. 01-4/57

Installation:

5. Check the fabric sealing ring in the oil pan rear part which serves to seal the crankshaft and, if necessary, replace it. Carefully press the sealing ring into the sealing ring retainer by means of a hammer handle and cut the ends off so that the ring projects appr. 0.2 mm at the separating surface. This is necessary in order to achieve sufficient contact pressure at the joints. Oil the fabric sealing ring, coat the separating surface of the oil pan rear part with sealing compound and screw it on.
6. Fit the rubber sealing ring for sealing the front and rear parts of the oil pan in the groove and lightly glue it in place in such a way that the ends project 1–2 mm and that the distance from the separating surface is the same on both sides. Apply sealing compound to the separating surface of the oil pan and also to the sealing surface for the front sealing ring, put on the oil pan and tighten the screws.
7. Fix the front engine brace (judder brace) to the front axle support and to the oil pan. If necessary, adjust the connecting rod to its correct length (see Job No. 22-2).
8. Screw on the cover plate for the clutch housing, screw in the two M 10 fixing screws and insert the oil dipstick.
9. Install the tie-rod and the steering shock absorber and top up the engine oil.

III. Models 219, 220 S, and 220 SE with One-Piece Oil Pan

On Model 219 as from Engine End No. 7501549 and on Model 220 S as from Engine End No. 7503461 the split oil pan was replaced by a one-piece oil pan. This one-piece oil pan cannot be removed with the engine installed in the vehicle. When the engine is removed, the removal and installation procedures for the oil pan are the same as described for Model 190.

Note: On Models 220 a, 219, and 220 S the split oil pan can be subsequently replaced by the one-piece oil pan without any modification.

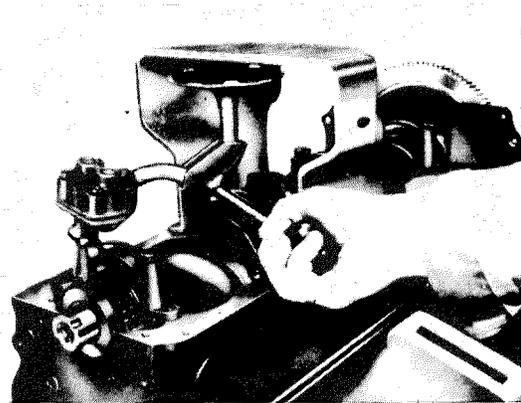
With the introduction of the crankcase with closed left side wall (without cylinder cover) the front left hexagon socket screw for fastening the oil pan to the crankcase was moved outward 35 mm. This oil pan cannot be installed in engines of previous design.

M. Removal and Installation of Oil Pump

Repair procedures see Job No. 18-5, Section B.

Note: In the case of engines with a one-piece oil pan, the oil pump cannot be removed with the engine installed in the vehicle.

Fig. 01-4/58



I. Models 180 a, 180 b, and 190 SL

Removal and installation procedures for the oil pump are the same as described for Model 190.

II. Models 220 a, 219, 220 S, and 220 SE

The removal and installation procedures for the oil pump are basically the same as described for Model 190, but the oil pump suction pipe is fastened with a bracket to the second crankshaft bearing cap. Since, furthermore, the suction pipe is screwed to the oil

pump housing and is not cast integral with it, care must be taken to ensure that the suction strainer is parallel to the bottom of the oil pan when the pump is being installed. If this is not the case, the suction pipe must be turned (Fig. 01-4/58).