

9. Assemble vibration damper. Insert the 8 pressure springs and 2 shear rubbers into flywheel and clamp uniformly by means of the two clamps 187 589 04 31 (Fig. 01-4/61).
10. Place outer contact disk (4), the compressed flywheel rings (5) and the inner contact disk (4) onto contact ring (9) of the pulley and attach by means of hexagon screws (11) to counterweight. Use spring washers with hexagon screws. Then remove the two clamps from vibration damper.
11. Lower engine, attach front engine supports to rubber mountings and fasten connecting rod of engine brace. Attach fan belt and tighten, then mount fan.
12. Install radiator and top up with cooling water (refer to Job No. 50-1).

O. Removal and Installation of Crankshaft with Counterweight and Flywheel

Repair procedures see Job No. 03-5, Sections A, B and G.

Removal and installation of the crankshaft for models 180 a, 180 b, 180 c, 190 SL, 220 a, 219, 220 S, 220 SE is the same as for model 190, except that the front seal of the crankshaft is no longer, as before, on the hub of the counterweight, but on a specially attached spacer ring (refer to Section N, page 01-4/47).

In addition, model 190 SL is provided as from engine, end No. 65 00 795 with a flywheel having a larger attaching flange. The bolt hole circle has been enlarged from 56 ± 0.2 mm to 78 ± 0.1 mm. For replacements, only crankshafts of the 2nd version with the matching flywheel will be available.

Instead of the former thrust washers fixing the crankshaft in axial direction, which are in part still used today, all our engines will in future be provided with a fitted bearing and collar in the cylinder crankcase (upper bearing shell section), and in some cases also in the crankshaft bearing cap (lower bearing shell section). (For details refer to Job No. 03-5, Section B.)

The bolts for the crankshaft bearing cap are now for all types uniformly assembled with spring washers B 12 DIN 137. For engines, where the second crankshaft bearing cap is used to attach the bracket for the oil pump, these bolts are assembled without spring washers.