

## Dowel Pin Crankcase – Partition Plate – Clutch Housing

Diameter of bore in			Part No.	Dimension		
Crankcase	Partition plate	Clutch housing		b	a	c
8	8	8	186 991 07 01	—	—	26
8	8	12	180 991 01 62	14	16	30
8	12	12	1)	11	19	30
12	8	8	180 991 03 62	19	11	30
12	12	8	180 991 02 02	13	17	30
12	12	12	180 991 00 60	—	—	34

1) If a partition plate and a clutch housing with 12 mm dowel pin bores is installed, a dowel pin must be made as shown in Fig. 01-4/64. Dowel Pin 180 991 02 62 can be used in an emergency.

## Dowel Pin Crankcase – Partition Plate

Diameter of bore in		Part No.	Dimension		
Crankcase	Partition plate		a	b	c
8	8	186 991 08 01	—	—	16
8	12	180 991 04 62	11	11	22
12	8	180 991 04 62	11	11	22
12	12	180 991 01 60	—	—	20

## R. Removal and Installation of Front Grease Seal for Crankshaft with Engine Installed in Vehicle

On Models 180 a, 180 b, 190 SL, 220 a, 219, 220 S, and 220 SE the removal and installation procedures for the front grease seal for the crankshaft are the same as described for Model 190. If the grease seal is being replaced, always check the spacer ring, or in older engines of Models 190 and 190 SL the hub of the counterweight to see whether the sealing surface for the grease seal is badly worn (see Figs. 01-4/59 and 01-4/60). If the sealing surface is badly worn the parts must be replaced.

## S. Removal and Installation of Flywheel

Repair procedures see Job No. 03-5, Sections E to H.

On Models 180 a, 180 b, 190 SL, 220 a, 219, 220 S, and 220 SE the removal and installation procedures for the flywheel are the same as described for Model 190. The following points deserve attention:

On Models 190 SL, 219, and 220 S a spacer sleeve was installed on some cars between crankshaft and annular grooved bearing. On the present crankshafts the bore is not so deep and consequently the spacer sleeve is no longer necessary.

On Model 190 SL a flywheel with a larger attaching flange was installed as from Engine End No. 65 00795. The bolt hole circle was increased from  $56 \pm 0.2$  mm to  $78 \pm 0.1$  mm.

On Models 219 and 220 S with hydraulic automatic clutch the annular grooved bearing has been replaced by a centering ring for the journal of the clutch end plate in the crankshaft. On recent cars the centering ring is no longer fitted and the journal has been correspondingly increased in diameter.

On Models 219 and 220 S the flywheel has been changed and is now of the same design

as on Models 180 a, 180 b, and 190 SL. The new flywheel can only be installed subsequently if the clutch (without drive plate) is replaced.

The flywheel fixing screws (stretch screws) are tightened with a torque of 6–6.5 mkg in the case of 4-cylinder engines and of 4–4.5 mkg in the case of 6-cylinder engines. The screws are not locked.

## **T. Removal and Installation of Roller Chain with Engine Installed in Vehicle**

For Models 180 a, 180 b, 190 SL, 220 a, 219, 220 S, and 220 SE the removal and installation procedures for the roller chain are the same as described for Model 190.

If repair should be necessary, a chain with a jointing link (spare link) can be installed as a substitute for the endless chain. This enables the chain to be replaced without disassembling the engine.

When the engine is being overhauled, however, an endless chain should always be fitted if the chain has to be replaced.

On earlier cars of Model 180 a, a single roller chain was fitted. Later, as from Engine End No. 85 10924, this was replaced by a twin roller chain of the type used in the other models.