

Testing and Repairing Engine

The test and repair procedures for the engines of Models 180 a, 180 b, 190 SL, 220 a, 219, 220 S, and 220 SE are basically the same as those described for Model 190.

The following pages contain only the deviations from the basic procedures and the tables listing the measurements necessary for testing and repairing the engine.

Crankcase and Cylinder Head

Job No.

01-5

A. Cleaning, Pressure-Testing and, if necessary, Surface-Grinding of Crankcase

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

Machining Dimensions for Crankcase

| Model | 180 a, 180 b, 190, 190 b, 190 SL | 220 a and 219, 220 S with ε = 7.6:1 | 219, 220 S with ε = 8.7:1 and 220 SE |
|---|-------------------------------------|---|--|
| Total height | 238.4—238.5 | 213.6—213.7 | 213.1—213.2 |
| Permissible stock removal | 0.3 | | |
| Permissible departure from plane | in a longitudinal direction | 0.05 | |
| | in a lateral direction | 0 | |
| Permissible departure from parallelity between upper and lower separating surface in a longitudinal direction | 0.1 | | |
| Test pressure with air in hot water (70° C) | 2 atm. | | |
| Distance between piston bottom and separating surface — = piston recedes + = piston projects | + 0.3±0.25 | — 0.3 +0.25 —0.35 | + 0.2 +0.25 —0.35 |