

Running-In Instructions for New and Replacement Engines

Job No.

00-7

Strict adherence to the running-in instructions is of vital importance for the reliable operation, service life, and economical running of every engine.

New and completely overhauled engines (replacement engines) are given their initial running-in in our works before they are installed in a vehicle or are shipped to a repair shop.

We recommend, therefore, that engines which have been repaired, e. g. by installing new bearings or new pistons, should be run in for a short period of time before they are installed in the vehicle. Since in most cases, however, a test stand and brake will not be available, the following short instructions show how engines can be run in on an ordinary test bench with outside cooling and without a braking system. Water temperature (appr. 80° C) and oil pressure must be checked at regular intervals.

Running-in Instructions

Engine speed rpm	Running-in period (minutes)		
	Models 180, 180a, 180b, 190, 190b	Models 190 SL, 220a, 219, 220 S	Model 220 SE
1500 *)	30	30	30
1800—2000	20	20	30
1800	10	20	30
2000	10	20	20
2500	5	5	20
2500—3000	5	5	20

*) When the engine has been run in at 1500 rpm, the cylinder head screws should be retightened according to our instructions, and in addition all screws and nuts for fastening the intake pipe, the carburetor, the exhaust manifold, the starter, and the generator should be retightened.

Running-in has the additional advantage that the engine, while removed from the car, can be checked for leakage, oil pressure, quiet operation, and idle.

Furthermore it is advisable to make an oil change directly after running in the engine and to clean the air filter at the same time. It is a common experience that very many impurities are left in the corners and cavities of the housing even if the engine components are carefully cleaned before assembly; these impurities are loosened by the splashing oil when the engine is being run in and are removed when the oil is drained off.

When the engine is installed in the car, the running-in instructions given in the Owner's Manual should be followed.