



WARRANTY RUN IN PROCEDURE

RECOMMENDED RUNNING IN PROCEDURE

Please read carefully prior to starting engine

The first several hours of a reconditioned engine are crucial to ensure efficiency and optimum performance throughout the engine life.

Always follow the manufacturer's run in procedure if one is available.

It is very important to ensure that the engine is NOT running too long at idle and is given load as soon as possible after initial start up. Turbo timers fitted to engines must be turned off or set to no more than 1 minute for the first 1000 km's of the reconditioned engine's life. This will ensure that the piston rings will bed in correctly and minimise the potential of bore glazing. This occurs when the engine has had insufficient hard work or prolonged idling periods during the running in period up to 10,000km. You must not use friction modified oil or oil additives during this period. A warranty claim resulting from excessive oil use through glazing or seizing caused by incorrect running in will not be accepted.

We recommend you use **Total Oils Rubia S30w** for the initial running in procedure.

Pre-Lube

Please call your ERAA Engine Reconditioner

For details on the specific start up procedure required for this engine to ensure that the camshaft which has been fitted is not damaged. Any warranty claim following an incorrect start up procedure will not be considered.

Head

For engines that have roller rockers, cut off the fuel and electrical supply, remove sparkplugs, glow plugs or injectors and crank engine while observing oil pressure. If the oil pressure is below the manufacturer's recommendations, please fix this before proceeding.

Start up

Reassemble if necessary, start the engine and again check oil pressure. Turn on the heater and any other water accessory to prevent airlocks in the cooling system and look for oil or water leaks. If any are found or if abnormal engine noises are heard, shut the engine down inspect and correct. Run engine at 1500 to 2000 rpm for 15 minutes. To run in camshaft and tappets/lifters, or as advised by your engine reconditioner. RPM may vary depending on manufacturer's specification. Test engine by dyno or by road test for approx 45 minutes, taking note of oil pressure and water temperature. Do not let the engine run past 75% of its recommended maximum RPM level as per the manufacturer's specifications.

Give the engine some hard work within the first 20 km's. Accelerate hard several times from 60 to 90 Km/h in high gear with a brief return to 60 km/h in between. Automatics should be held in 2nd gear at a somewhat lower speed. This provides load to build up the pressure behind the compression piston rings and help them bed in.

Important

In the first one thousand kilometres, both prolonged high and low speeds should be avoided. Alternating speeds from 80-110 km's is recommended.

Do not let petrol or gas engines idle for any longer than 5 minutes. Diesels should not idle for any longer than 2 minutes. Please check the settings for the turbo timer if applicable to ensure that the above idling times are not exceeded during the running in period. Dual fuel engines must be run in as above on petrol for the first 5000 km, before switching to gas.

FIRST SERVICE DETAILS

DATE.....

SPEEDO/HR.....

SERVICED BY.....