



Remanufactured Engine Installation Directions

IMPORTANT!!!

PLEASE READ THE FOLLOWING INFORMATION CAREFULLY

CAUTION!! FAILURE TO FOLLOW PROPER

ASSEMBLY & BREAK-IN PROCEDURES

WILL VOID WARRANTY.

- WE RECOMMEND THE USE OF A NEW EGR VALVE, EGR COOLER, OIL PUMP, OIL COOLER AND WATER PUMP IF NOT INCLUDED WITH YOUR ENGINE.
- ENGINE DAMAGE DUE TO CUSTOMER SUPPLIED INJECTORS IS NOT WARRANTABLE.
- ENGINE COMPUTER PROGRAMMING MAY BE REQUIRED TO CALIBRATE TURBOS, INJECTORS, ETC. THIS MUST BE COMPLETED PRIOR TO THE INITIAL START UP, FAILURE TO DO PROGRAMMING IS NOT CONSIDERED A WARRANTABLE CLAIM.
- INSTALLING TECHNICIAN IS RESPONSIBLE TO VERIFY PROPER DIPSTICK IS INSTALLED AND OE OIL LEVELS ARE FOLLOWED (Reviva is happy to assist with locating the correct oil capacity for your engine). OVERFILLING THE ENGINE OIL WILL RESULT IN EXCESSIVE BLOWBY AND WILL NOT BE A WARRANTABLE CLAIM.
- NEWLY REBUILT ENGINES MUST RUN AT A MINIMUM TEMPERATURE OF 190 DEGREES FARENHEIT AND 75% OF FULL LOAD FOR THE FIRST 4 HOURS. **THE ENGINE MUST NOT BE ALLOWED TO IDLE ANY EXTENDED LENGTH OF TIME DURING THE FIRST 4 HOURS.** DURING THE FIRST 100 HOURS, A CONVENTIONAL OR SYNTHETIC BREAK IN OIL THAT MEETS OE SPECIFICATION SHOULD BE USED TO ALLOW THE PISTON RINGS TO SEAT WITH THE CYLINDER SURFACE.

Piston rings are designed to apply a certain amount of tangential force outward. Compression rings rely on greater combustion pressure to force them down against the bottom of the piston's ring lands and outward to the cylinder wall. Without this combustion force, these rings may not seat or seal properly. Oil control rings regulate the amount of oil film left on the cylinder wall to lubricate the compression rings, and each compression ring removes some amount of this oil film resulting in proper oil control.

While it is ideal to break an engine in under a controlled environment (such as a dynamometer test where load factors, horsepower, temperatures, etc. can be controlled and monitored), it is simply not always an option available after a repair or rebuild. That's not to say you cannot get piston rings to seat without such equipment, but it is important that an adequate load be put on the engine to create enough combustion pressure and temperatures to seat the rings. This is most critical within the first few hours of the engine's new service life. Idling, increasing the RPM, and hauling light loads will not create enough combustion pressure to seat new rings. Only under load can you obtain the pressure and temperatures needed.

Delaying this loading process can result in increased oil consumption and blowby.

Questions or Concerns: Contact the Reviva Warranty Department
Phone: 877-470-3524 / Email: warranty@reviva.com