WARRANTY

FOR

Remanufactured Perkins Diesel Engines

SCOPE AND DURATION OF WARRANTY

PERKINS PACIFIC INC. ("**PPI**"), Warrants to each purchaser of a Perkins remanufactured engine that has been remanufactured by **PPI** (the "Engine") that the Engine will be free from defects in materials and workmanship under normal use and service for a period of "<u>ONE YEAR</u>" from the documented date on which the Engine is installed by the purchaser. This Warranty is limited to the repair of the engine or replacement of parts needed to correct any malfunction or defect in the Engine that exists at the time the Engine is sold to the purchaser. This Warranty also is limited in that it is given only to those purchasers who use the Engine for an industrial purpose and given said application in the equipment has not been altered from the original intent.

PROCEDURE FOR WARRANTY SERVICE

To obtain warranty service under this Warranty, the purchaser shall, within the one-year warranty period, notify **PPI** immediately of the need for warranty service. If **PPI** authorizes the warranty service, the purchaser will allow **PPI** (or another qualified facility approved by **PPI**) a reasonable time in which to perform the warranty service. Any replacement parts authorized by **PPI** will be new Perkins parts only.

WARRANTY PERIOD	
Application - Industrial	Limitations - 12 Months Hrs / No Limit

SERVICE SUPPLIES

PPI will replace any service supplies, including coolant, oil, and Genuine PERKINS filters, which are removed from the Engine during the warranty service/repair and which are not reusable.

ENGINE REMOVAL AND REINSTALLATION

Warranty R & R will apply only to an Engine that is sold by and installed by **PPI** or another authorized Perkins Pacific Inc. service outlet. **PPI**'s warranty obligation under this Warranty will terminate after **PPI** or the authorized Perkins Pacific Inc. service outlet has expended a total of 15 hours maximum of labor in providing warranty service/repair or R & R to an Engine used by the purchaser for an industrial purpose. In any event, **PPI**'s warranty obligation will terminate at the end of the one-year warranty period described above.

THIS WARRANTY DOES NOT COVER:

- A. Damage to or defects in the Engine caused by or resulting from modification by the purchaser
- B. Damage to or defects in the Engine caused by or resulting from repair of the Engine by Someone other than **PPI** or a qualified and authorized service facility.
- C. Damage to or defects in the Engine caused by or resulting from the use of ETHER or other starting aids not approved by PERKINS PACIFIC INC.
- D. Damage to or defects in the Engine caused by or resulting from the purchaser's failure to perform normal maintenance services on the Engine or to use Fuel, Oil, or Genuine PERKINS Fuel & Oil Filters or the O.E.M's supplied filters, or coolants in the Engine that do not meet PERKINS' recommended specifications.

WARRANTY

Continued

DISCLAIMER OF WARRANTIES AND LIMITATION OF REMEDY

The Warranty described previously is in lieu of any other warranty, expressed or implied, including but not limited to any warranty of merchantability or fitness for a particular purpose, which are disclaimed. Obtaining repairs and/or replacement parts is the purchaser's sole and exclusive remedy under this warranty and does not extend the warranty period stated previously. Under no circumstances shall **PPI** be liable to the purchaser for any incidental, consequential, or punitive damages arising out of or resulting from breach of this warranty. Any action by a purchaser for breach of this warranty must be commenced within one year after the cause of action accrues. Any such action must be commenced and tried in a state or federal court in Multnomah County, Oregon.

WARRANTY INSTRUCTION

In the event of a warrantable failure contact the service outlet from which the engine was purchased.

Supply the Engine Serial #, PDX#, date of installation, date of failure, and a brief description on what type of failure has occurred.

DO NOT MAKE REPAIRS WITHOUT AUTHORIZATION

When returning an engine for warranty evaluation, <u>DO NOT</u>, remove oil filters, intake manifolds, thermo starts, heat tabs, atomizers, Injection pumps or water pumps. <u>DO NOT</u> drain the oil or add fresh oil to the engine. Warranty will be **VOID** if any of the previously described items have been removed. Warranty will be **VOID** if the oil has been drained or there has been fresh oil added. For PPI to make an accurate and fair assessment of the failure the preceding conditions must be met on engines returned for failure analysis.

Please read the accompanying Warranty Disclaimer for critical information on circumstances that will not be covered by warranty. These items are not caused by nor are they a result of

DEFECTIVE PARTS OR WORKMANSHIP

All PPI Remanufactured Perkins engines are assembled using only the highest quality O.E.M. Perkins parts. They have been machined to exacting factory specification utilizing only premium crack fee cores. It has also been tested on one of two Dynamometers in our facility to insure you will receive the same quality, and longevity, if installed and maintained properly, and longevity as you received from your original engine.

WARRANTY DISCLAIMER

For

Remanufactured Perkins Pacific Inc. Diesel Engines

The following is a list of items and or failures which will not be covered by the PPI warranty.

- 1. **Bearing and/or Crankshaft failure:** due to swapping location of Oil filter from right to left or vice-versa after shipment from our plant.
- 2. <u>Gear train failure:</u> which primarily remove teeth from the Idler gear and or Air Compressor gear on units where the air compressor is mounted to timing case or from auxiliary drive shaft. (This type of failure is due to an Air compressor & or unloader valve on the brake system malfunctions.)
- 3. Water in the Oil: due to erosion of block parent bores from aeration of cooling system. (This type of failure is common in lift trucks with cab heaters and or any part of the cooling system higher than the radiator that has no provision to bleed the air from the system at that point.)
- 4. **<u>Piston ring land failure</u>**: Broken ring lands are the result of a violent combustion process almost exclusively caused by the use of ether (starting fluid) and can sometimes be the result of gasoline being accidentally introduced into the fuel system of a diesel engine.
- 5. **Bearing & or Crankshaft Failures:** due to inadequate lubrication on initial startup. On initial start up of a remanufactured engine, which has had all of its oil drained for shipping and has possibly been on the shelf for a week or more, has likely lost all oil remaining in the oil pump and could probably suffer bearing damage from a dry start. This type of failure may not be evident immediately but show up later as a knock. Once the bearing has been scuffed from metal to metal contact, its ability to support the necessary oil film is reduced. Consequently resulting in a premature bearing failure later. This type of failure can be avoided by pre-lubing the engine prior to initial start up with a pressurizing tank. (Available through **PPI** or any **Atlas** shop supply Dist. Part# APL-5)
- 6. **Bearing & or Crankshaft failures**: Bearing failure's can and will occur if oil level in sump drops to or below pick up level for any reason, oil leaks, loss of filter seal after an oil change, etc. It is the CUSTOMERS RESPONSIBILTY to verify proper oil level at all times. Leaks of any type resulting in this type of failure, without the customer contacting **PPI** to remedy the leak, will not be warranted. (PPI has the ability to diagnose a bearing failure due to low oil level resulting in loss of oil pressure) **DO NOT USE REMOTE MOUNT OIL FILTERS OR OIL FILTERS OTHER THAN PERKINS OR THE EQUIPMENT O.E.M. SUPPLIED FILTER**
- 7. <u>Customer Modification failures</u>: any failure due to modification, or disassembly of a remanufactured engine within the one-year warranty period without prior authorization by PPI. Will not be covered under said warranty.
- 8. Overheating failures. Every remanufactured PPI engine has a Heat tab installed at time of dyno testing. It is the customer's responsibility to insure the engine does not overheat. Operator error and or gauge malfunction are not the responsibility of PPI. Under our Warranty, removal of heat tabs will VOID the Warranty. It is not unusual that when a hose leaks or breaks an overheat may occur prior to or without indication on a temperature gauge because when coolant is absent, the sender cannot register coolant temperature properly. This type of condition is out of PPI's control and is therefore the customer's responsibility. Failures resulting from said condition will not be warranted by PPI.

All operators of the equipment should be made aware of their responsibility to notify the appropriate personnel whenever they notice something unusual about the operation of their engine. Perkins Pacific, Inc. has absolutely no control over what happens to an engine once it leaves our plant. It is the sole responsibility of the customer to provide adequate maintenance and inspection (daily, weekly, monthly etc.) to insure the engine's continued life. Manufacturer's service intervals should be followed given the operational environment would be considered normal. Hostile environments obviously dictate increased and more frequent service and inspection intervals.