



The Engine

"Specialist"
Specialist

Pacific Reman Centre

A Division of Vulcan Automotive Equipment Ltd.

The Inside Story of P.R.C. Remanufactured Engines

Remanufacturing processes

Cylinder Block

- **Premium core dismantled and visually inspected**
- **Cast iron cores are thermo-cleaned, shot blasted, wet magna-fluxed to detect any cracks**
- **Crankshaft tunnel is checked and line honed for trueness if required**
- **All cylinder bores are computer bored centered off the crankshaft tunnel for correct geometry, bores are sleeved as required, piston specific micro finish honed on Sunnen equipment**
- **Block to head mating area resurfaced**
- **Aluminum cores are soda blasted cleaned, and pressure checked for crack detection**
- **All threads are chased and tapped for installation free worries**
- **New camshaft bearings are installed**
- **New core and oil gallery plugs are installed**

Crankshaft

- **All cores checked and straightened as necessary**
- **Thermo-cleaned, shot blasted**
- **High destruction models magna-fluxed for cracks**
- **All journals precision ground, oil holes chamfered, micro polished, and all bolt holes tapped**
- **The seal surface is dressed or sleeved if required**
- **Final cleaning with rifle brushes and compressed air**
- **New main and rod bearings supplied**

Connecting Rods

- **Washed, shot blasted, checked for bend or twist and straightened, caps flat surfaced, resized, pins re-bushed and cut as required**
- **Checked and sorted in matched sets by weight**

Cylinder Heads

- **Cast iron heads thermo-cleaned, shot blasted, wet process magna-fluxed**
- **Aluminum heads soda blasted, and pressure tested for cracks, heated and straightened as required**
- **Resurfaced**
- **Guide holes machined out and re-centered, New bronze alloy liners or New O.E.M. cast guides pressed in, reamed and micro finish honed, top and bottom of guide finish cut**
- **Intake valve seats single carbide 3 angle cut**
- **Exhaust valve seats replaced as required, single carbide 3 angle cut**
- **New over size valves installed**
- **New valve seals installed**
- **New/rechecked valve keepers, calibrated springs installed**
- **Each valve/port low vacuum checked for positive seal**
- **New/rechecked rocker shafts installed with New/re-machined rockers**

Camshaft

- **New/precision O.E.M. spec reground and parkerized installed, low RPM high torque camshafts available upon request for additional charge**

Engine Assembly

- **The engine is assembled using all New seals, gaskets, pistons, piston rings, lifters, torque to yield head bolts, timing chain/gears, and oil pump or oil pump kit. The camshaft and all bearing surfaces are coated with TFE 33, a molybdenum based assembly lube to assure proper break-in and long life.**

Testing

- **The completed engine is driven on the electrical “Sim Test”, for a visual movement inspection, hot oil pressure and oil leak down verification at various speeds, and a peak-load simulation**
- **Camshaft break-in period**
- **Compression readings taken and recorded**
- **For an additional charge, the engine can be “Live Run” on our Dynamite Dynamometer, a spec sheet with the recorded foot pounds torque and produced horse power will be included in the owner’s package**

Packaging

- **Mounted on wooden skid for shipping (forklift/hand truck compatible)**
- **Oil pump/oil pump kit, completer gasket package attached to block**
- **Engine ID and warranty certificate included**
- **Engine Certificate of Installation included (to be filled in and returned by installer)**
- **Engine completely wrapped in protective shrink wrap**

Peace of Mind

- **Each P.R.C. engine carries a standard 2 year, 40,000 kms parts and service warranty. Labour paid for the first 12 months or 20,000 kms**
- **Extended 3 year, 60,000 kms full parts and labour warranty is available at the time of purchase, for an additional charge**

The reasons why we are:

The Engine *“Specialist”*