

1. The first step is to disassemble the core engine and visually inspect the Cylinder Block, Crank Shaft and Cylinder Head castings. If they pass this step they move on to the next step the Thermal Cleaning.

2. Thermal Cleaning in this step the disassembled Cylinder Heads and Block Castings go through the first cleaning step in which they are heated in a flameless oxygen depleted environment to 650 degrees to prevent cracking or warping while burning off sludge, carbon and oil residue.

3. In this step the Cylinder Head and Block Castings are sent to a Steel Shot Blast Machine where they are blasted with Stainless Steel Shot pellets that leave a like new finish on all surfaces of the Cylinder Head and Block castings and stress relieves the castings.

4. Now we magniflux the Cylinder Head and Cylinder Block castings to insure no cracks or casting faults went unnoticed.

5. Block Preparation in this step we remove any broken bolts and chase all threaded holes, if any problems are found they are repaired at this point. All Oil Galleys and passage ways are brushed clean and the Cylinder Head castings and Blocks are sent back to cleaning.

6. The Block and Cylinder Head castings now receive a high pressure wash in a Pressure Wash Cabinet that removes any particulates from the earlier steps.

7. Line Hone in this step the main bearing bores are align honed which insures proper main bearing journal size and alignment.

8. The Cylinder Block is now bored to within .002 using a Rottler Boring Bar to insure all cylinders are a consistent size.

9. We deck the Block using Rottler milling machine equipped with CBN cutters to insure a superior head gasket sealing surface.

10. Now we hone the cylinders to the final bore size and finish using a Sunnen power hone.

11. The engine block goes back to cleaning receives a final wash, is put on a engine stand and sent to assembly

12. Cylinder heads recieve a 5 angle valve job using a Serdi seat machine, surfaced and assembled.

13. After a Berco crankshaft grinder is used to machine the crankshaft to exact size the oil holes are chamfered, micro polished and cleaned.

14. We resize the connecting rods on a Sunnen rod machine to exact size and fit the pistons to them.

15. The engine is now assembled using the highest quality components by highly skilled craftsmen taking utmost care assembling the engine.

16. After assembly the engine is sent to Quality Control where the engine is run on a Sim Test Machine where we check the engine for compression, oil pressure, valve adjustment and drag.

17. The engine is painted and given a final inspection.