



## OPTIMIZER 6500 DIESEL ENGINE PERFORMANCE BY US ENGINE PRODUCTION, INC.

### COMPLETE DROP-IN INCLUDES (OEM SPEC):

- Long Block Supreme
- Injector Pump
- Injectors
- Glow Plugs
- Water Pump
- Intake Manifold
- Exhaust Manifolds
- Turbo (\* if required & assembled)

### LONG BLOCK SUPREME INCLUDES (OEM PARTS):

- Block
- Crankshaft
- Camshaft
- Connecting Rods
- Lifters
- Pistons/Rings/Pins
- Timing Chain Set
- Crankshaft
- Connecting Rod
- Lifters
- Pistons/Rings/Pins
- Gasket Set
- Nuts & Bolts
- Valves
- Rocker Arms
- Springs/Retainers/Keepers
- Oil Pan/Pick-up Tube
- Oil Pump
- Cylinder Heads
- Valve Covers
- Gear Housing
- Front Cover & Seal
- Vibration Damper
- Oil filter
- Front & Rear Lifting Brackets
- Oil Pressure Sensor

### PLACING AN ORDER IS EASY!

To speed up your order please  
provide the following information:

1. Year, Make, Model, VIN # of Vehicle
2. Original Engine Serial Number
3. Original Engine CPL Number

\* The CPL and Serial Numbers are  
located on the injection pump side of  
the engine in the front gear cover.



\* representative image

#### MANUFACTURING PROCESS: BLOCKS THE FOUNDATION OF A GREAT ENGINE

USEPINC methods are anything but routine. First, we bore every cylinder to within .004 of the finished size. Next, we use a diamond hone to ensure bore geometry is held within 200 millionths of an inch. Every block is then subjected to a surface finish test to measure the roughness and plateau finish of the cylinder wall. (With today's lightweight motor oils and low-tension oil rings, this is critical for achieving the proper ring seal.) Blocks are checked and align honed through the main bearing bores to align and size to the proper factory specifications. This is critical to maintain uniform oil clearances and good oil pressure. After all machine work is done to the block, it is cleaned and completely grit free. We scrub each cylinder with soap and water and clean all oil galleries with a high-pressure wash.

#### MANUFACTURING PROCESS: ASSEMBLY

USEPINC completely assembles each engine in a clean and controlled environment under the supervision of our highly trained Quality Control department.

Constant supervision, testing, and cross-department auditing ensures every Engine gets the same attention to careful assembly and results in consistent superior quality.

#### MANUFACTURING PROCESS: CRANK/CAMSHAFTS

Crankshafts are re-ground to factory tolerance for size and oil holes are completely chamfered. The crankshaft is then micro-polished to exceed the original finish, ensuring proper bearing lubrication. A final wash is done to ensure that every crank is clean.

- Bake cleaned and then shot blasted
- Checked for bend
- Ground to size
- Oil holes chamfered
- Journals polished

#### MANUFACTURING PROCESS: RODS

Each and every rod installed in our engines goes through a rigorous restoration process with the final result as a virtually new rod installation.

Rods are:

- Chemically cleaned
- 100% re-manufactured - bores are machined to original tolerances for size and surface finish
- Checked for bend and twist - any rod that doesn't meet our exacting tolerance is discarded
- All bushings are 100% replaced

Like every other component of a International Diesel, the rods are as close to perfect as possible; it's just part of building the most reliable re-manufactured engine on the road today.

Cam lobes are re-ground to the same specifications as the original cam. Cams are Parkerized.

All camshafts are replaced with new or re-manufactured camshafts.

Following assembly of the engine it is put through a vigorous load-bearing run on the DYNO TEST Machine for over one hour to test its excellence, after which it heads over to our lead technician for a final inspection and approval for release to the customer.

In addition, to guarantee the satisfaction of our clients we provide a one year Unlimited Mileage unlimited mileage-parts only.

Re-manufactured long block with NEW OEM Parts.

**MSRP CALL FOR LONG BLOCK PRICE, CALL FOR COMPLETE DROP IN PRICE**

**All of our engines carry a 1 YEAR UNLIMITED MILEAGE WARRANTY!  
No nonsense complete coverage.**

ORDER HOT-LINE (989) 823-3800

**US ENGINE PRODUCTION MI, INC.**  
Quality Remanufactured Engines!

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