



17 Dracut Road · Hudson, NH 03051 · (800) 591-9171 · www.golenengineservice.com
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Chevy 396ci 550hp LT1 Long Block



The 396ci Long Block is the King of the Street when it comes to NA LT1 Engines. This engine will keep up with most LS engines that you meet on the street and it is still a simple direct bolt in for your LT1 based car.

Peak Horsepower: 550bhp @ 6500rpm
Peak Torque: 500lb/ft @ 4000rpm
Compression Ratio: 11.5:1

Operating Range: 2300 – 6500rpm

Required Fuel: 91+ Octane Pump Gasoline

Block Specifications:

Block:

- GM LT1 Cast Iron Block
- Deck to Match Pistons
- Bored 4.030"
- Honed with Torque Plates and Pressure Washed
- New Durabond Cam Bearings Installed
- 4-Bolt Main Caps Installed, Line Bore and Hone
- ARP Main Studs

Pistons:

- Mahle Forged pistons with Anti-Friction Coating

Bearings:

- Clevite H-Series Main and Rod Bearings

Lifters:

- Comp Cams Hydraulic Roller

Covers:

- GM Factory Oil Pan
- GM Factory LT1 Timing Cover

Crank:

- Scat 4340 Forged Steel
- 3.875" stroke
- Internally Balanced Front and Externally Rear

Rods:

- Scat 4340 Forged I-Beam
- 6.000" Length
- ARP Rod Bolts

Rings:

- Mahle Plasma Rings

Camshaft:

- Comp Cams Hydraulic Roller

Timing Set:

- Cloyes Extreme Duty Roller Timing Set

Oil Delivery:

- Melling Select Performance
- Melling Pick Up Tube Tig Welded
- Melling HD Drive



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Gaskets:

- Fel Pro Head Gaskets .040"
- Fel Pro Performance Oil Pan, Timing Cover Gaskets

Cylinder Head Specifications:

Type:

- New AFR 195cc CNC Ported Eliminator

Combustion Chamber:

- 65cc Combustion Chambers

Intake Valves:

- Stainless Steel 2.05"

Spring Package:

- Double Valve Springs
- Titanium Retainers and Hardened Locks

Exhaust Valves:

- Stainless Steel 1.6"

Head Bolts:

- ARP Performance

Pushrods:

- Smith Brothers 5/16 .083" Wall Hardened

Rocker Arms:

- Comp Cams Ultra Pro Magnum 1.6 ratio, 7/16 ARP Rocker Studs

Notes:

Here are Golen Engine we build each LT1 Street engine with the same meticulous process used in our line of racing engines to ensure top quality performance and reliability throughout its lifetime.

When you purchase one of our LT1 High Performance Street Engines you will receive a full spec sheet listing the exact components your engine was built with. We will also provide you with a complete Set Up Guide as well as full phone tech support to aid you with the installation process. It is mandatory for you to contact Golen Engine Tech Support before starting your engine for the first time and you can reach our Tech Support Line at 1-800-591-9171 ext 2.

Each Golen Engine Performance Street Engine comes standard with a "Three Year no Mileage Limit Warranty" to keep you confident and covered!

We are able to custom build your engine to match just about any specs you desire and offer a long list of proven upgrades, so if you do not see it just ask us!

Feel free to contact us anytime for help choosing the perfect performance engine combination!!

Thank you,

Golen Engine