



17 Dracut Road · Hudson, NH 03051 · (800) 591-9171 · www.golenengineservice.com
questions@golenengineservice.com

LSx 454ci 700hp HP Replacement Engine



The 454ci makes max power and torque with a hydraulic cam which is very street able but also gives you the sound you are looking for!!

Peak Horsepower: 725bhp @ 6700 rpm

Peak Torque: 580lb/ft @ 5200 rpm

Compression Ratio: 11.5:1

Operating Range: 2500 – 6700rpm

Required Fuel: 91+ Octane Pump Gasoline

Block Specifications:

Block:

- New GM LSx Cast Iron Block
- Zero Decked
- Bored 4.185"
- Honed with Torque Plates and Pressure Washed
- New Durabond Cam Bearings Installed
- Line Honed
- 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:

- New GM Oil Pan
- GM Timing Cover
- GM Rear Cover
- GM Lifter Valley Cover
- GM Valve Covers

Crank:

- Callies Comp Star 4340 Forged Steel
- 4.125" stroke
- Internally Balanced Front and Rear
- 24x or 58x Reluctor Wheel

Rods:

- Callies Comp Star 4340 Forged H-Beam
- 6.125" length
- ARP 2000 Rod Bolts

Rings:

- Mahle Plasma rings

Camshaft:

- Comp Cams Hydraulic Roller

Timing Set:

- Cloyes Billet Hex Adjust Roller Timing Set

Oil Delivery:

- Melling Select HV Performance
- GM Pick Up Tube
- GM Windage Tray



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Damper:

- Powerbond SFI
- ARP Damper Bolt

Gaskets:

- MLS Head Gaskets .040"
- GM Cover Gaskets

Cylinder Head Specifications:

Type:

- Trick Flow LS7 CNC Ported
- Three angle performance valve job

Combustion Chamber:

- 70cc

Intake Valves:

- Stainless Steel 2.20"

Flow:

- 390 CFM @ .650" Lift

Exhaust Valves:

- Stainless Steel 1.65"

Spring Kit:

- PAC Racing Double Valve Spring
- Light Weight Tool Steel Retainers and Hardened Locks

Head Studs:

- ARP Performance

Rocker Arms:

- GM Factory 1.8 Ratio

Intake System:

- Fast LSxR LS7 Intake
- 102mm Nick Williams Billet Throttle Body
- Fast 50lb Uscar Fuel Injectors
- Fast Billet Fuel Rails

Pushrods:

- Smith Brothers 3/8 .083" Wall Hardened

Ignition System:

- MSD 8.5mm Plug Wires
- Autolite Racing Spark Plugs

Dyno Test Service:

- Run Engine for Full Break In and Power Test
- 2 Oil Changes using Joe Gibbs Break In Oil
- Graphs Listing HP, Torque and all Engine Vitals

Notes:

Here are Golen Engine we build each LS 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 LS HP or Hot Rod Series 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



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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