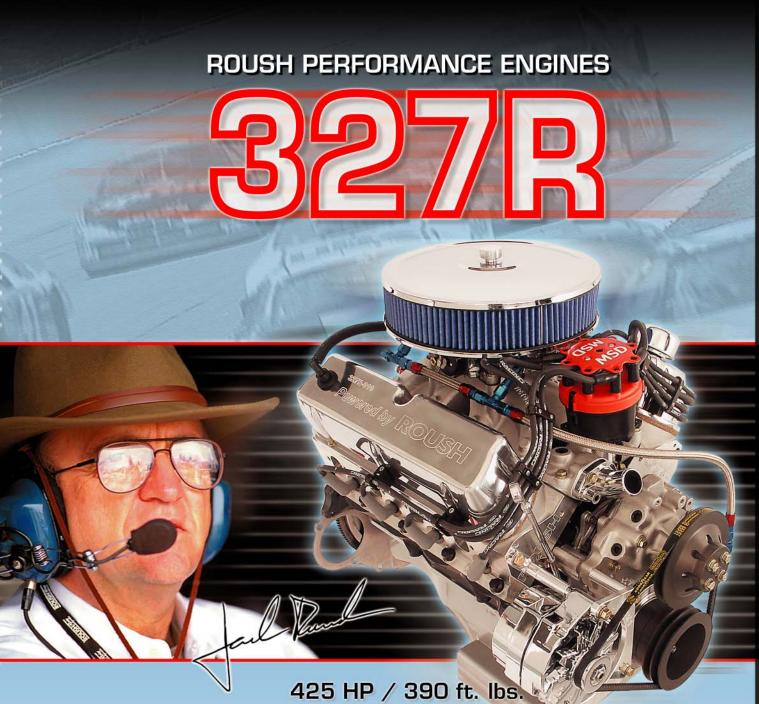


"R" SERIES



For the enthusiast who wants extreme performance from a 5.0-liter engine but is nervous about wrist-pin location, the Roush Performance 327R is the answer. This engine, with its long list of forged components, its main-cap girdle and fully CNC-ported heads, delivers both power and durability. The 327R is designed for hard driving and performs great on premium unleaded fuel. The 327R produces **425** horsepower and **390** ft. lbs. of torque. It's a great engine for that Mustang project you plan on driving regularly using premium unleaded pump fuel. This engine, like the others offered, is hot-tested, then dyno-tested to verify power. It is shipped with documentation and carries a warranty.

The engine department at Roush Performance has been assembling engines for more than 25 years. They have built thousands of engines that have competed and won in drag racing, road racing, oval-track racing and land-speed record attempts. Those same experienced engine builders inspect, assemble and test every engine offered.

Roush Performance 28156 Plymouth Rd. Livonia, MI 48150

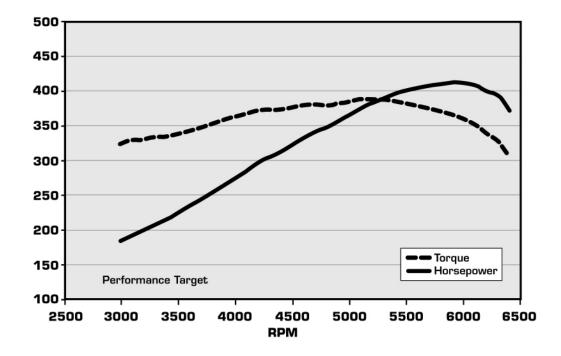
800-59-ROUSH

Technical Performance Solutions.

## 327R Engine Features

- 1. Base Engine: New production 2-bolt-iron-block with main cap girdle, forged crank, forged connecting rods with 3/8" high-strength bolts and forged pistons with a 10:1 compression ratio.
- 2. Cylinder Heads: Roush Aluminum "fully CNC-ported" with premium stainless steel valves and springs.
- 3. Camshaft: Hydraulic roller camshaft with double-roller timing chain.
- 4. Valve Train: 1.6:1 roller rocker arms with dual valve springs.
- 5. Intake Manifold: Victor Jr., single-plane aluminum standard (dual-plane available upon request).
- 6. Carburetor: Roush "tuned", Holley 770 CFM with vacuum secondaries and electric choke.
- 7. Air Cleaner: 14" Chrome (standard, others available).
- 8. Valve Covers: Polished, tall aluminum covers engraved with the POWERED BY ROUSH logo and your engine's Serial Number are standard (others are available).
- 9. Oil Pan and Oil Pump: 7-quart, dual-sump Canton pan is standard (front-sump is available). Adjustable Melling oil pump with heavy-duty oil pump "drive" shaft.
- 10. Water Pump: Reverse rotation is standard on the dual-sump oil pan engine (Mustang application). Standard rotation is standard on front-sump applications.
- 11. Accessory Drive (Optional): Aluminum under-drive V-belt pulley system, billet aluminum mounting bracket and spacers with 90-amp, single-wire alternator.
- 12. Fuel Pump: Not included.
- 13. Flywheel: SFI-approved 157-tooth billet steel flywheel installed (balanced to 28.2 in.-oz. factor). Aluminum flywheel available as an option.
- 14. Ignition: MSD "billet aluminum", vacuum advance distributor with Ford Racing 10 mm plug wires and wire looms (8-piece set).
- 15. Starter: New, super high torque starter (1.6kw) with cable.
- 16. Testing and Documentation: Each engine is "hot-tested" and then subjected to several "dyno pulls" to confirm power. Each 327R engine is shipped with a copy of the test results along with "fender and firewall badges".

Options: McLeod clutch (and installation), "Polished-Package" and others are available.



## **Technical Information**

Engine Model: 327R

Horsepower (maximum): 425 hp est. Torque (maximum): 390 ft. lbs.

Displacement: 327 cu. in.

Block: 8.2" deck, Ford Production, 2-bolt main with Main Cap Girdle

Crankshaft Type: Forged 4340 steel Crankshaft Stroke: 3.250"

Connecting Rod Type: Forged 4340

steel "H-beam"

Compression Ratio: 10:1

Pistons: Forged

Timing Chain: Double Roller

Camshaft Info: Roush Proprietary Lifter Type: Hydraulic Roller Cylinder Heads: Aluminum

Intake Runner Volume: 185 cc, fully

**CNC**-ported

Combustion Chamber Volume: 61 cc Valve Sizes: 2.05" Intake 1.60" Exhaust

Rocker Arm Ratio: 1.6:1 Spark Plugs: Autolite 3923 (or

comparable)

Intake Manifold: Edlebrock Victor Jr.

Water Pump: Reverse rotation is standard, standard rotation is

available

Fuel System: Holley 770 CFM carburetor with vacuum secondaries and electric choke

Fuel Requirements: Premium Unleaded (minimum)

Max. Recommended RPM: 6,250

Firing Order: 1-3-7-2-6-5-4-8

Oil Pump: High Output — Adjustable

Timing: 31 to 34 degrees @ 4,000 rpm (not to exceed 35)

Oil Pan: 8 qt. Front Sump — Baffled or Dual-Sump (Mustang) available \*Horsepower output can be reduced when engine

is equipped with the Dual-Sump pan.

Oil Filter: Motorcraft FL1 (or comparable)

Oil Weight: 10w30 — non-synthetic

for first 3,000 miles

Flywheel: Steel, 157 tooth (balanced

to 28.2 oz.)

Starter: Ford Motorsports Super High Torque (1.6kw) (or equivalent)

\*Size specifications may vary. Stated horsepowers are averaged and can vary  $\pm$  5%. Details

Specifications and content subject to change

