

When space in the engine compartment is limited but maximum performance is desired, the 342R is the answer. With its lengthy list of forged components, its main-cap girdle and fully CNC-ported heads, this engine delivers both power and durability. The 342R was designed to be driven hard, and performs great on premium unleaded fuel. It delivers **450** horsepower and **420** ft. Ibs. of torque... a great engine for that Mustang project you'll be driving regularly on premium unleaded pump fuel. This engine, like the others offered, is hot-tested, then dynotested to verify power. It is shipped with documentation and carries a warranty.

450 HP / 420 ft. lbs.

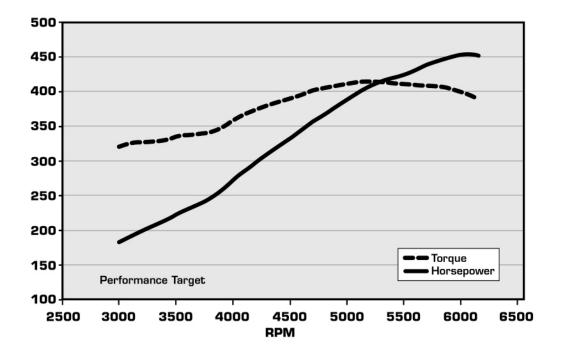
The engine department at Roush Performance has been assembling engines for more than 25 years. They have built thousands of engines that have competed and won in drag racing, road racing, oval-track racing and land-speed record attempts. Those same experienced engine builders inspect, assemble and test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

Roush Performance 28156 Plymouth Rd. Livonia, MI 48150 Performance

## 342R 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.
- Cylinder Heads: Roush aluminum with premium stainless steel valves and springs, fully CNC-ported.
- 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: Single-plane aluminum (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).
- Oil Pan and Oil Pump: 7-quart, dual-sump Canton pan is standard (front-sump is available).
  Adjustable Melling oil pump and heavy-duty shaft.
- 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 342R is shipped with a copy of the test results along with "fender and firewall badges".

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



## **Technical Information**

Engine Model: 342R

Horsepower (maximum): 450 hp est. Torque (maximum): 420 ft. lbs.

Displacement: 342 cu. in.

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

Crankshaft Type: Forged 4340 Steel

Crankshaft Stroke: 3.40"

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: 2.02" Intake 1.60" Exhaust

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

comparable)

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 ± 5%. Details

Specifications and content subject to change.

