

ROUSH PERFORMANCE ENGINES

342RE

342RE 402iR



Jack Roush



430 HP / 420 ft. lbs.

What do you get when you add Electronic Fuel Injection to a Roush 342R? . . . The 342RE, a powerhouse 5.0 liter with the horsepower and torque of a stroked 342 Cu. In. engine with the efficiency and driveability of today's electronically controlled fuel injection vehicles. It comes complete with Throttle Body fuel injection utilizing Roush calibration, harness, computer and fuel pump making it a "Plug and Play" application. This engine, with its "Laundry List" of forged components and fully CNC ported heads delivers both power and durability. The 342RE was designed to be driven hard and performs great on Premium Unleaded fuel. Like the others offered, this engine is *hot tested*, then *dyno tested* to verify power (and is shipped with documentation) and *carries a warranty*. The 342RE delivers **430 horsepower, 420 ft-lbs of torque**. . . a great engine for that Mustang or Street Rod project you plan on driving regularly on premium unleaded "pump fuel".

We've built engines that have won us championships... Now it's your turn.

Isn't it time to put a little "Jack" in your car?

Roush Performance
28156 Plymouth Rd.
Livonia, MI 48150

800-59-ROUSH

ROUSH
Performance

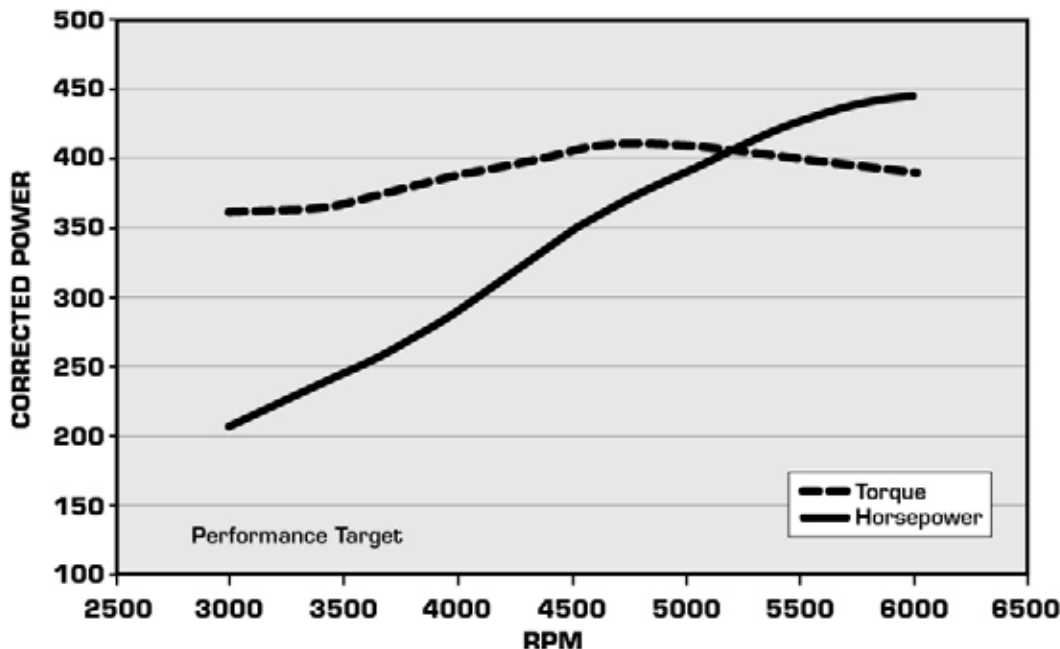
Technical Performance Solutions.

"FUEL INJECTION" SERIES

342RE 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.
- 2. 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:** Multi-Port Injected High Performance W/High Flow Fuel Rails.
- 6. Fuel Management:** Engine Control unit utilizing "ROUSH" Calibration, High Volume Electric Fuel Pump W/1000CFM Throttle, Heated Oxygen Sensor W/O2 Bung, TPS, IAT, ECT, MST and Bar MAP Sensor, Mallory Hyfire Ignition, 36 Lb./Hr. Fuel Injectors and Fuel Pressure Regulator (Wide Band O2 Sensor available).
- 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 and heavy-duty 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. Flywheel:** SFI approved 157-tooth billet steel flywheel installed (balanced to 0 in./oz. factor). Aluminum flywheel available as an option.
- 13. Ignition:** MSD "billet" aluminum, vacuum advance distributor with Ford Racing 10 mm plug wires and wire-looms (8-piece set).
- 14. Starter:** New, Super High Torque starter (1.6kw) with cable.
- 15. Testing and Documentation:** Each engine is "hot-tested" and then subjected to several "dyno pulls" to confirm power. Each 342RE is shipped with a copy of the test results along with "fender and firewall badges".

Other Options: "Polished-Package" and others are available.



Technical Information

Engine Model: 342RE

Electronic Throttle Body Fuel Injection

Horsepower (maximum): 430 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 (Internally Balanced)

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)

Intake Manifold: Multi-Port Injected High Performance w/High Flow Fuel Rails

Water Pump: Reverse rotation is standard, standard rotation is available

Fuel System: Electronic Fuel Injection utilizing Roush Calibration High Output Fuel Pump w/1000 CFM Throttle Body, Heated Oxygen Sensor w/O2 Bung, TPS, IAT, ECT, MST and Bar MAP Sensor and Mallory Hyfire Ignition.

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: 7 qt. Front Sump — 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 0 oz.)

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

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

Specifications and content subject to change.

ROUSH
Performance™