

JET MAP INFORMATION

Edelbrock engineering has conducted dyno testing with the Performer RPM system to provide jetting maps for the three separate plates at different jetting levels. These jet combinations are supplied with this system kit to enable you to vary your engine's power output. On a typical mildly modified 350 cubic-inch engine, you can expect the following approximate power gains for each of the jetting levels:

Square-Flange Jet Map

Nitrous/Fuel Jetting	Approx. HP Gains	Final Air/Fuel Ratio	Timing Adj.	Footnotes
55/61	100hp	11.0:1	32 Deg. Total.	1, 3
71/75	150hp	11.0:1	30 Deg. Total.	1, 3
78/82	175hp	11.0:1	30 Deg. Total.	1, 3
85/89	200hp	11.0:1	28 Deg. Total.	2, 4, 5
99/102	250hp	11.0:1	26 Deg. Total.	2, 4, 5

Spread-Bore Jet Map

Nitrous/Fuel Jetting	Approx. HP Gains	Final Air/Fuel Ratio	Timing Adj.	Footnotes
59/62	100hp	10.8:1	32 Deg. Total.	1, 3
71/75	150hp	10.5:1	30 Deg. Total.	1, 3
81/86	175hp	10.2:1	30 Deg. Total.	2, 3

Dominator-Flange Jet Map

Nitrous/Fuel Jetting	Approx. HP Gains	Final Air/Fuel Ratio	Timing Adj.	Footnotes
57/63	100hp	11.0:1	32 Deg. Total.	1, 3
71/75	150hp	11.0:1	30 Deg. Total.	1, 3
85/89	200hp	11.0:1	28 Deg. Total.	2, 4, 5
104/108	250hp	11.0:1	26 Deg. Total.	2, 4, 5

The dyno tests were conducted at Edelbrock using a mildly modified 350 cubic-inch engine. Both dual-plane and open-plenum intake manifolds were tested to ensure validity of jetting maps for each horsepower setting. Modifications included Edelbrock intake manifolds, Edelbrock aluminum heads, dyno headers, and improved ignition. We also used different grades of fuel and colder plugs during the testing. All stated timing adjustments listed in jet maps is where the motor being tested worked best. Final timing should be adjusted to achieve best power and/or MPH per application. These tests were conducted at 950 psi nitrous and 6.5 psi to 7 psi fuel.

These jetting patterns are designed to be rich and will provide the above-listed power settings under normal operational usage of this system. Any variation in jetting patterns other than what is listed above and engine damage could occur. Please contact the Edelbrock Technical Department with any questions you have concerning jetting patterns and their effects on engine performance.

Jet Map Footnotes

The jet map above has footnotes that offer the following instructions and technical information:

1. Spark Plugs use Champion RC-12-YC or equivalent.
2. Spark Plugs use Champion C-61C or equivalent.
3. Fuel use 92 octane pump gasoline or better.
4. Fuel use 110 octane race gasoline or better.
5. Single Plane manifold only. DO NOT use a dual plane manifold at this horsepower level.

NOTE: The last two horsepower settings (200 and 250) are for single plane manifolds only. In testing, we found that dual-plane manifolds have some distribution problems at these super high flowrates that could cause engine damage. Please contact the Edelbrock Technical Department with any questions you have concerning jetting patterns and their effects on engine performance when using a dual-plane manifold.

ENGINE OPERATION CONSIDERATIONS

When used correctly, nitrous oxide safely elevates cylinder pressures and temperatures while increasing combustion rate. These characteristics make the engine more sensitive to detonation. To ensure proper performance and engine life, the following tips are suggested:

Adequate Fuel Pressure and Delivery

When designing your fuel system, plan on your pumps and lines flowing at least 0.10 gallons per hour per horsepower. The testing at Edelbrock was conducted with a fuel pressure of 6.5 psi to 7 psi. Any variation from this fuel pressure will cause your final air/fuel ratio to change. Be sure that your fuel system is delivering 6.5 psi to 7 psi at the outlet of the jet. Do not set the pressure with the solenoid closed due to when the solenoid opens the pressure will drop dramatically. Consult our technical department for any questions on fuel pressure and its effects on final air/fuel ratios when using nitrous oxide.

Fuel Quality

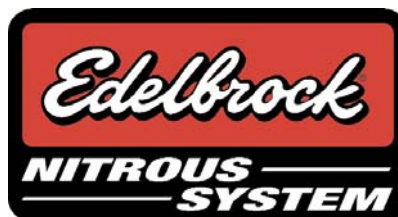
Because nitrous oxide is an oxidizer, fuel selection is critical. Both octane and fuel consistency affect fuel burn rate. The oxidizer quality of nitrous oxide will accelerate the burn rate, so we recommend a high quality of gasoline. We also recommend you use the same grade of gasoline every time you use your nitrous oxide system. This will maintain the same fuel burn rate every time.

Engine System Upgrades

With all performance modifications, complementary system upgrades will always serve to elevate the consistency and longevity of an engine, especially when using nitrous oxide as a power adder. Ignition upgrades, intake manifold upgrades, fuel controls and fuel pumps can all add to the performance of a nitrous oxide injected engine.

Cast Pistons

With all nitrous oxide applications, forged pistons are highly recommended. Because of heightened potential for detonation, cast pistons are more prone to failure and cannot handle horsepower increases over 125 hp. Never initiate your nitrous system before you are at full-load, wide-open throttle conditions. Cast pistons will not be able to survive this kind of stress.



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