Jet Map Information for Performer Nitrous Plates

(For use in kits 70011 and 70012)

Edelbrock engineering has conducted dyno testing with the Performer system to provide jetting maps for three 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 three jetting levels:

Square-Flange Jet Map

Nitrous/Fuel Jetting	Approx. HP Gains	Final Air/Fuel Ratio	Timing Adj.
38/46	50hp	11.0:1	2 Deg. Retard.
46/53	75hp	10.8:1	3 Deg. Retard.
57/65	100hp	10.6:1	4 Deg. Retard

Spread-Bore Jet Map

Nitrous/Fuel Jetting	Approx. HP Gains	Final Air/Fuel Ratio	Timing Adj.
40/45	50hp	11.4:1	2 Deg. Retard.
50/55	75hp	11.0:1	3 Deg. Retard.
59/65	100hp	10.6:1	4 Deg. Retard

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, dyno headers and improved ignition. These tests were conducted at 950 psi nitrous and 5.5 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.

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 5.5 psi. Any variation from this fuel pressure will cause your final air/fuel ratio to change. Be sure that you fuel system is delivering 5.5 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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