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#### Caution – EXTREME DANGER – Caution Do not use or mix any other manufacturer's products with any Nitrous Express products. Do not use or mix any Nitrous Express products with any other manufacturer's products. THESE INSTRUCTIONS APPLY TO NITROUS EXPRESS PRODUCTS ONLY! <u>FOR SANCTIONED RACE USE ONLY - NOT FOR SALE OR USE IN CALIFORNIA</u>

#### Master Flow Check Instructions (Part # 15519 or 15529)

The Master Flo-Check is used to set your fuel pressure regulator and to establish a base line tune-up for your NX system. After a clean, full power pass, the final tune-up will be deter-mined by spark plug readings (see "Power Tuning Tips" in your nitrous system instructions).

- 1. PN 15529 only. The 6" certified calibration gauge is designed to operate in the up-right position only, do not lay flat when checking the fuel pressure! The gauge should be help up right at about the same height as the fuel solenoid, varying the height will change the fuel pressure readings. The needle should be adjusted to zero before use to compensate for atmospheric pressure changes.
- 2. PN 15519 only. Install the supplied fuel pressure gauge directly on the adaptor manifold.
- 3. Fuel pressure should be measured between the fuel pressure regulator and fuel jet(s). Select the proper adaptors, included in the Flo-Check kit, to connect the supplied pressure gauge to the proper location on the N2O system fuel supply side.
- 4. Direct Port systems only. On either single or double solenoid nozzle systems the fuel pressure may be checked anywhere in the fuel system after the regulator and before the fuel solenoid. Select the proper adaptors, included in the Master Flo-Check kit, to connect the supplied pressure gauge to the proper location on the N2O system fuel supply side.
- Plate systems only. Use the supplied fitting to secure the jet to the 3/16 stainless steel fuel jumper line that connects the solenoid to the N2O plate.
   Note: On dual entry plates use the supplied 3AN plug to block one side of the fuel plumbing.

6. Before beginning the flowing adjustments disconnect the power from the N2O solenoid(s) to avoid accidental nitrous discharge into the intake tract and avoid electro-magnet overheating.
Note: Plate systems require the fuel solenoid to be activated while the fuel pressure is being adjusted. Your particular application may require the fuel pressure to be substantially lower than indicated on your jet chart. If you plug readings indicate an over rich condition lower the fuel pressure in small increments until the plug readings improve.

Note: The nitrous and fuel solenoids are rated only for intermittent duty. Do not engage either solenoid for more than 20 continuous seconds. Solenoids that have "burned or scorched" electromagnets will not be replaced under warranty.

- 7. Attach a hose to the jet fitting to carry the fuel to a safe, approved storage container away from hot engine parts.
- 8. Use extreme caution when using this device. Gasoline is very flammable and could cause serious injury or death if ignited.
- 9. When all cautions have been observed turn the fuel pump on and using the fuel pressure regulator, adjust the fuel pressure to the proper level.

#### Flow jet size calculation.

Master Flow Check systems are designed to flow fuel through a single fuel jet.

If your nitrous system has only one fuel jet (like many plate systems or single nozzle systems) use the same size jet in the flow tool as you are using for the fuel jet in your nitrous system.

If your nitrous system has more than one fuel jet (direct port systems as well as plate systems that have more than one fuel jet) use the following calculation to determine the proper single jet that will equal the combined flow of multiple fuel jets.

(Fuel jet size x fuel jet size x the number of fuel jets) square root.

For example, if you have an 8cyl direct port system with .022 fuel jets the math would be as follows: 22x22x8 (this equals 3872). The square root of 3872 is 62.22 so you would flow through a single 62 jet. If the exact calculated flow jet size is not offered you should select a flow jet that is the next larger size available. You may also reference the attached charts for common nitrous system configurations.

### 8-cyl direct port flow jet chart

If your nitrous system has 8 fuel Jets of this size	Use one NX jet of this size in your flow tool
10	28
11	31
12	34
13	37
14	40
15	42
16	45
17	48
18	52
19	54
20	57
21	62
22	62
23	67
24	70
25	73
26	78
27	78
28	82
29	82
30	88
31	88
32	93
33	93
34	99
35	99
36	110
37	110
38	110
39	110
40	116
41	116
42	136
43	136
44	136
45	136
46	136
47	136
48	136

## 6cyl direct port flow jet chart

If your nitrous system has 8 fuel Jets of this size	Use one NX jet of this size in your flow tool
10	24
11	27
12	29
13	32
14	34
15	37
16	39
17	42
18	44
19	47
20	49
21	52
22	54
23	57
24	62
25	62
26	67
27	67
28	70
29	73
30	73
31	78
32	78
33	82
34	88
35	88
36	88
37	93
38	93
39	99
40	99
41	110
42	110
43	110
44	110
45	110
46	116
47	116
48	136

### 4cyl direct port flow jet chart

If your nitrous system has 8 fuel Jets of this size	Use one NX jet of this size in your flow tool
10	20
11	22
12	24
13	26
14	28
15	30
16	32
17	34
18	36
19	38
20	40
21	42
22	44
23	46
24	48
25	50
26	52
27	54
28	57
29	62
30	62
31	62
32	67
33	67
34	70
35	70
36	73
37	78
38	78
39	78
40	82
41	82
42	88
43	88
44	88
45	93
46	93
47	99
48	99

# Plate systems that have 2 fuel jets

If your nitrous system has 2 fuel Jets of this size	Use one NX jet of this size in your flow tool
16	23
18	25
20	28
22	31
24	34
26	37
28	40
30	42
32	45
34	48
36	52
38	54
40	57
42	62
44	62
46	67
48	70
50	73
52	78
54	78
56	82
58	82
60	88
62	88
64	93
66	93
68	99
70	99
72	110
74	110
76	110
78	110
80	116
82	116
84	136
86	136
88	136
90	136
92	136