



# NOS ROOTS-TYPE NITROUS SYSTEMS SUPERCHARGER SERIES

**P/N 13350NOS & 02520NOS**

**INSTRUCTION P/N A5118-SNOS**

## **APPLICATIONS:**

These kits are designed to work on highly modified domestic V-8 engines using 671 and 871 roots-type superchargers, with mechanical fuel injection or carburetion.

## **PERFORMANCE POTENTIAL:**

These kits come with jetting that allows power gain to be easily adjusted to 225-250 HP. Typical power gains for the roots-type supercharger systems are as follows:

| <b>Nitrous/Fuel<br/>Jetting</b> | <b>Power Gain (BHP)</b> |
|---------------------------------|-------------------------|
| 16/20*                          | 80                      |
| 20/24*                          | 120                     |
| 26/29                           | 175                     |
| 32/36*                          | 200                     |
| 36/38*                          | 200+                    |

\*Not supplied with kits.

At the 200+ horsepower level, the Cheater nitrous solenoid is flowing at maximum capability. Increasing jetting sizes beyond this point will probably not result in any performance increase.

If performance greater than 200+ horsepower is desired, it is recommended that the roots-type supercharger plate system be upgraded with a Pro Shot nitrous solenoid. This will increase maximum power capability to 325+.

## **TUNING SUGGESTIONS:**

The tuning combinations listed on the next page are for engines using a moderate amount of supercharger boost (5-10 psi). If attempting to use one of these systems with elevated boost, extreme care should be taken in arriving at proper ignition timing setting. Ignition timing will vary with engine combination, but you can expect at least 4°-8° less than the value recommended in these tables. When using kit P/N 02520NOS at higher power levels, gasoline of at least 116 octane is required.

## Suggested Tuning Combinations for NOS Roots-Type Super Charger Systems—Kit P/N 02520NOS

| Jetting<br>N <sub>2</sub> O/Fuel | Fuel Quality   | Ignition Timing    | Spark Plug Heat Range         |
|----------------------------------|--|--------------------|-------------------------------|
| 16/20                            | 100+ octane (R+M/2) racing fuel or 92+ octane pump gas with octane booster | 2° ignition retard | Decrease heat range 1-2 steps |
| 20/24                            | 105 octane (R+M/2) racing fuel   | 4° ignition retard | Decrease heat range 2-3 steps |
| 26/29                            | 110+ octane (R+M/2) .74 or higher specific gravity racing fuel             | 6° ignition retard | Decrease heat range 3-4 steps |
| 32/36                            | 110+ octane (R+M/2) .74 or higher specific gravity racing fuel             | 6° ignition retard | Decrease heat range 3-4 steps |
| 36/38                            | 110+ octane (R+M/2) .74 or higher specific gravity racing fuel             | 6° ignition retard | Decrease heat range 3-4 steps |

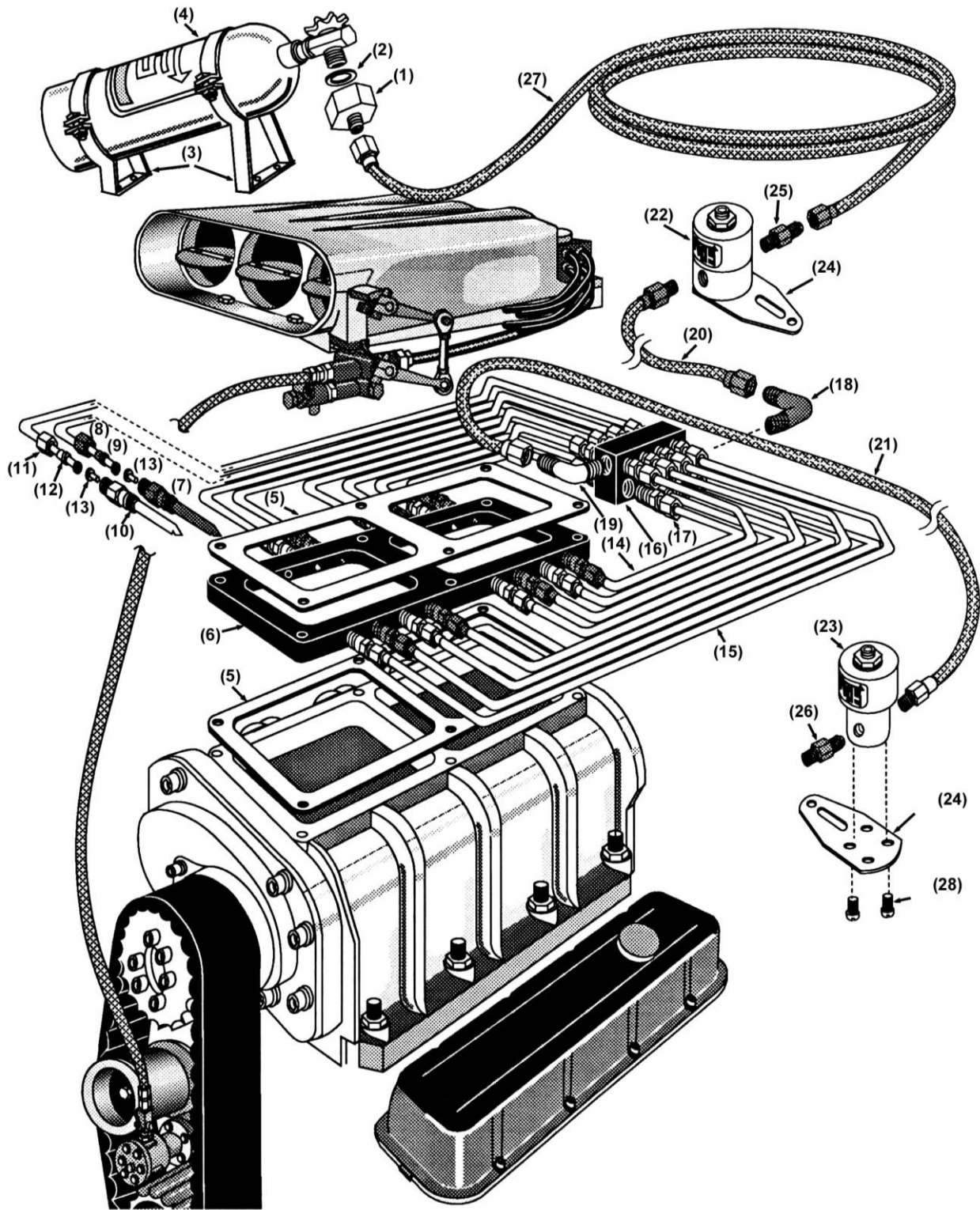
## Kit Number 13350NOS—Parts List

| Description                                 | Quantity | NOS P/N     |
|---|----------|-------------|
| Injector Plate (includes the following:)    | 1        | 13350NOS    |
| Fan Spray Nozzle (Blue)                     | 8        | 13500NOS    |
| 3AN x 3/16" B-Nut (Blue)                    | 8        | 17550NOS    |
| 3AN x 3/16" Sleeve (Blue)                   | 8        | 17600NOS    |
| Fan Spray Nozzle (Red)                      | 8        | 13502NOS    |
| 3AN x 3/16" B-Nut (Red)                     | 8        | 17551NOS    |
| 3AN x 3/16" Sleeve (Red)                    | 8        | 17601NOS    |
| Flare Jet                                   | 8        | 13750-26NOS |
| Flare Jet                                   | 8        | 13750-29NOS |
| 3/16" x 16" Tube                            | 8        | 16370-SNOS  |
| 3/16" x 24" Tube                            | 8        | 16380-SNOS  |
| 1/8" NPT Distribution Block (2 In & 16 Out) | 1        | 16750NOS    |
| 1/8" x 3/16" Compression Fitting            | 16       | 16433NOS    |
| 4AN x 1/8" NPT (Blue) 90° Adapter           | 1        | 17660NOS    |
| 4AN x 1/8" NPT (Red) 90° Adapter            | 1        | 17661NOS    |

**Kit 02520NOS—Parts List**

| <b>Item</b> | <b>Description</b>                          | <b>Quantity</b> | <b>NOS P/N</b> |
|-------------|---|-----------------|----------------|
| 1           | 4AN-660 Bottle Nut Adapter                  | 1               | 16220NOS       |
| 2           | Teflon Bottle Nut Washer                    | 1               | 16210NOS       |
| 3           | Bottle Bracket Set (Metal)                  | 1               | 14125NOS       |
| 4           | 10 lb. Nitrous Bottle                       | 1               | 14745NOS       |
| 5           | Injector Plate Gasket                       | 2               | 13486-SNOS     |
| 6           | Injector Plate (includes the following:)    | 1               | 13350NOS       |
| 7           | Fan Spray Nozzle (Blue)                     | 8               | 13500NOS       |
| 8           | 3AN x 3/16" B-Nut (Blue)                    | 8               | 17550NOS       |
| 9           | 3AN x 3/16" Sleeve (Blue)                   | 8               | 17600NOS       |
| 10          | Fan Spray Nozzle (Red)                      | 8               | 13502NOS       |
| 11          | 3AN x 3/16" B-Nut (Red)                     | 8               | 17551NOS       |
| 12          | 3AN x 3/16" Sleeve (Red)                    | 8               | 17601NOS       |
| 13          | Flare Jet                                   | 8               | 13750-26NOS    |
|             | Flare Jet                                   | 8               | 13750-29NOS    |
| 14          | 3/16" x 16" Tube                            | 8               | 16370-SNOS     |
| 15          | 3/16" x 24" Tube                            | 8               | 16380-SNOS     |
| 16          | 1/8" NPT Distribution Block (2 In & 16 Out) | 1               | 16750NOS       |
| 17          | 1/8" x 3/16" Compression Fitting            | 16              | 16433NOS       |
| 18          | 4AN x 1/8" NPT (Blue) 90° Adapter           | 1               | 17660NOS       |
| 19          | 4AN x 1/8" NPT (Red) 90° Adapter            | 1               | 17661NOS       |
| 20          | 4AN x 1/8" NPT Hose 2 ft. (Blue)            | 1               | 15230-1-SNOS   |
| 21          | 4AN x 1/8" NPT Hose 2 ft. (Red)             | 1               | 15230-2-SNOS   |
| 22          | Cheater N <sub>2</sub> O Solenoid           | 1               | 16000NOS       |
| 23          | Cheater Fuel Solenoid                       | 1               | 16050NOS       |
| 24          | Solenoid Mounting Bracket (Cheater)         | 2               | 16500NOS       |
| 25          | 4AN x 1/4" NPT Nitrous Filter (Blue)        | 1               | 15560NOS       |
| 26          | 1/8" NPT Male x 1/8" Female Adapter         | 1               | 16784NOS       |
| 27          | 14 ft. 4AN Hose (Blue)                      | 1               | 15295NOS       |
| 28          | Solenoid Screw                              | 4               | 16501-SNOS     |

Figure 1 Supercharged System Assembly Drawing—Mechanical Fuel Injection or Carburetion



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For online help, please refer to the Tech Service section of our website: [www.holley.com](http://www.holley.com)