

NOS Solenoid Rebuild Instructions

A5141-SNOS

INTRODUCTION:

The seals used in NOS nitrous solenoid plungers are constructed from materials, which are designed to be used with nitrous oxide at pressures up to 1100 psi. When kept free from fuel contaminants or from overpressurization, they should provide trouble-free performance.

Exposing the plunger to pressures in excess of 1100 psi (whether sitting or in use), can result in the seal in the plunger swelling or in extreme cases disintegrating.

In wet manifold applications (such as 4bbl injector plates), the nitrous solenoid plunger will get exposed to fuel vapors. This is unavoidable. Fluctuations in the intake manifold pressure, due to the opening and closing of the throttle butterflies, induce flow into the out of the NOS injector plate spray bars (fuel and nitrous), when the NOS system is not in use. Long term exposure of the nitrous solenoid plunger seal to fuel vapors will result in the swelling of the plunger seal. This will reduce the nitrous flow (causing an excessively rich nitrous/fuel condition and a loss of power).

You should periodically (after every 20-30 pounds of nitrous usage) examine the seal in the nitrous solenoid plunger.

COMPONENT LIST:

| Item | Description | Quantity |
|------|----------------|----------|
| 1 | Spanner Nut | 1 |
| 2 | Plunger | 1 |
| 3 | Plunger Spring | 1 |
| 4 | "O" Ring Seal | 1 |

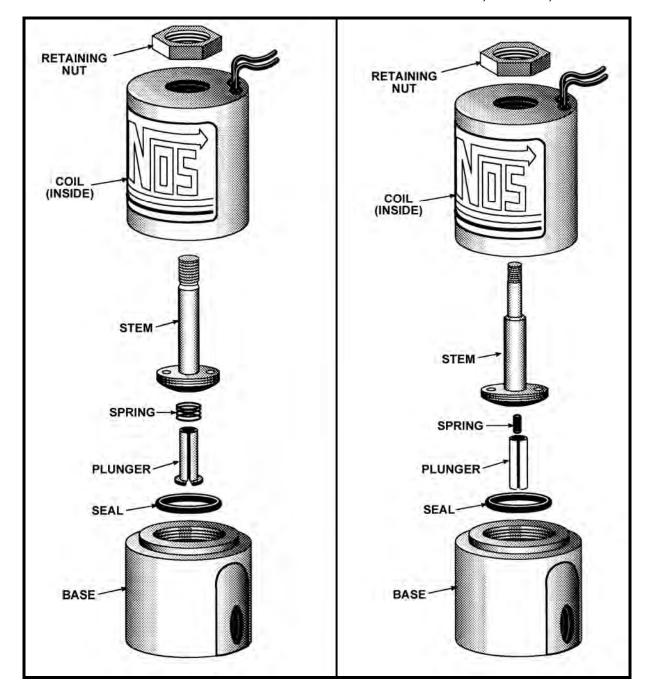
NITROUS SOLENOID PLUNGER DISASSEMBLY & INSPECTION:

- 1. Close the valve on the nitrous bottle.
- 2. Empty the main nitrous supply line.
- 3. Remove the solenoid coil retaining nut.
- 4. Remove the solenoid coil.
- 5. Place the solenoid spanner wrench over the solenoid stem. Engage the drive dowels in the top of the solenoid stem seat. Remove the stem by turning the spanner nut counter-clockwise.

CAUTION: Do not grab, attempt to loosen, or attempt to tighten the solenoid stem by gripping the stem with pliers. You will damage the stem irreparably.

- 6. Remove and examine the original plunger. The plunger sealing surface should be flat, free from crowning, or deep indentations. If the plunger seal is damaged, discard the plunger, spring and base, and the base "O" ring.
- 7. Clean, dry, and inspect the solenoid stem and base.
- 8. Reassemble the solenoid in the reverse order, using the new parts provided.

NOTE: When reassembling solenoids, make sure that the plunger return spring is correctly installed in the plunger before installing the plunger in the stem.



NOS Technical Support

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For online help, please refer to the Tech Service section of our website: www.holley.com

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