

## RACER SAFETY BLOW-OFF FITTING P/N 16168NOS & 16169NOS

## INTRODUCTION:

All standard nitrous oxide cylinders are equipped with safety burst discs in the bottle valve assembly. If the bottle pressure is raised to approximately 3000 psig, the safety disc will burst and empty the contents of the cylinder through the diffuser nozzle cap.

In some applications, the nitrous oxide cylinder is installed in a vehicle location, which would result in nitrous oxide being vented to the interior of the vehicle if the safety cap were to burst. In these installations, the safety diffuser cap should be replaced with NOS Racer Safety P/N 16169NOS. The outlet from the Racer Safety should be vented outside the vehicle, either with NOS Blow-Down Tube P/N 16160NOS or via an 8AN braided steel hose.

## **INSTALLATION:**

- **WARNING!** Do not allow nitrous oxide to come in contact with the skin. Nitrous oxide can cause severe burns or frostbite. Do not breathe nitrous oxide. Inhalation of large amounts of nitrous oxide can cause death via suffocation.
- NOTE: 2<sup>nd</sup> Gen and 3<sup>rd</sup> Gen bottle valves will use the same safety. The 2<sup>nd</sup> Gen bottle valve will utilize a plug with a disc that is separate from the plug. The 3<sup>rd</sup> Gen design will have the disc made into the plug and also have "Made in Italy" cast into the valve. The safety in this kit is the 3<sup>rd</sup> Gen style that will work with both the 2<sup>nd</sup> and 3<sup>rd</sup> Gen valves.
- 1. Remove the nitrous oxide cylinder from the vehicle. Take it to a well-ventilated location. Gradually, open the bottle valve. Empty the contents of the cylinder completely.
- 2. Remove the safety burst cap 3<sup>rd</sup> Gen or the burst cap and burst disc 2<sup>nd</sup> Gen using an appropriate wrench.
- 3. Lay the bottle on its side with the safety port pointed upwards.
- 4. Place the new cap and disc assembly or racer safety fitting into the empty port on the valve and hand tighten. Safety Fitting (Fig. 1) or the Racer Safety Fitting (Fig. 2).
- 5. Tighten to 16 ft./lbs. (192 in./lbs.) using an appropriate socket.

**NOTE:** Over-tightening of the fitting <u>will</u> result in disc failure.

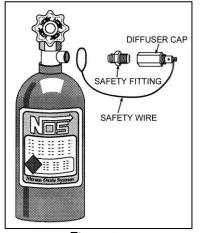




Figure 1 IN 16169NOS ONLY:

Figure 2

NOTE: The Stainless Steel safety wire needs to be captured between the Racer Safety and the nitrous bottle valve.

- 1. Connect the open port of the Racer Safety to the NOS Blow Down Tube or the 8AN vent hose.
- **IMPORTANT:** Whenever the NOS Blow-Down Tube or 8AN vent hose is unhooked from the nitrous oxide cylinder, install and finger tighten the Racer Safety's Diffuser Nozzle Cap. Failure to do so can result in the nitrous oxide cylinder "taking off" and injuring someone, or causing property damage if the safety disc were to burst when the bottle was not secured in place.

## NOS Technical Support: 1-866-464-6553

199R10493 Revision Date: 6-23-16