

## NITROKIT - Nitrogen Pressure Leak Check Kit

Congratulations on your purchase of the CPS model NITROKIT automotive Air Conditioning Nitrogen Pressure Leak Test Kit. This kit is needed to pre-check automotive A/C systems for leaks due to loose mechanical connections, leaks in hoses, evaporators and condensors, before re-introducing refrigerant back into the A/C system. This will prevent unnecessary leakage of refrigerant into the atmosphere.

The NITROKIT consists of the following items:

- NITRO test manifold with 0-200 PSIG gauge
- 6' Red Service Hose with 1/4 SAE Female
- R 134a High Side Snap Coupler
- 25' Coiled Air Hose Assembly with 1/4 MPT X 1/4 Coupler
- Instructional Manual



Manifold Assembly



25' Coil Hose with Coupler



6' Red Service Hose with R134a Coupler



Complete Assembly

## **GENERAL SAFETY INSTRUCTIONS**

ONLY QUALIFIED SERVICE PERSONNEL SHOULD OPERATE THIS EQUIPMENT. MOST STATES, COUNTRIES, ETC... REQUIRE THE USER TO BE LICENSED. PLEASE CHECK WITH YOUR LOCAL GOVERNMENT AGENCY.

DANGER: THE NITROGEN PRESSURE FROM AN <u>Unregulated</u> nitrogen bottle can be in excess of 2500 psi. This product is designed to be used only in conjunction with a <u>regulated</u> nitrogen supply which provides a regulated pressure that does not exceed 200 psig and a pressure relief value. <u>Do not under any circumstances</u> use with <u>unregulated</u> nitrogen supply or an <u>explosion</u>, <u>serious injury</u> or sudden death can occur.

DANGER: THE NITROGEN MANIFOLD IS NOT A REGULATOR. DO NOT ATTEMPT TO USE THE MANIFOLD TO REGULATE PRESSURE. FAILURE TO FOLLOW THESE WARNINGS CAN CAUSE AN EXPLOSION, SERIOUS INJURY OR SUDDEN DEATH.

## INSTALLATION

Connect the 1/4" male pipe threaded end of the 25' Coiled Air Hose assembly to the female threaded outlet port connection of the nitrogen regulator (not included in NITROKIT). See pictures below.

NOTE: Depending on the manufacturer or the nitrogen regulator, additional fittings maybe required to complete this connection.



IMPORTANT: CPS does not sell Nitrogen Regulators. It is required to use a certified Regulator with a pressure relief valve.

## **TESTING PROCEDURE**

WARNING: Always make sure the regulator is turned off.



With the Nitro Kit Manifold Valve turned off (CW), open the Nitrogen Tank Supply Valve. Then slowly open the Nitrogen Regulator Handle (clockwise) so that the outlet pressure gauge is set to 150 PISG.

Nitrogen Tank Supply Valve

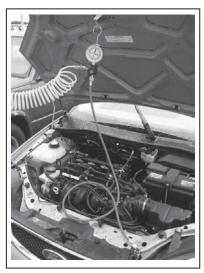
Nitrogen Regulator (provided by others)

Connect the quick coupler on the end of the hose coil assembly to the air hose nipple on the side of the NITROKIT manifold.

Make sure the Valve on the NITROKIT manifold is closed.

Connect the Red HIGH SIDE coupler at the end of the red NITROKIT service hose to the HIGH SIDE service port of the vehicle you are working on

Slowly open the Valve on the NITROKIT manifold by turning it counter-clockwise. The pressure on the NITROKIT gauge should read approximately 150 PSIG.



Close the NITROKIT manifold Valve, set the gauge indicator to the current pressure and wait approx. 10 minutes. A drop in pressure on the NITROKIT manifold gauge indicates you have a leak in the system. Proceed to find and fix leak. Repeat procedure.

Note: This method does not replace the use of an electronic leak detector to find small refrigeration leaks. This method does find large leaks before re-introducing refrigerant back into the A/C system. This method will reduce the overall emissions of CFC, HCFC and HFC emissions into the atmosphere.

To disconnect your NITROKIT, make sure the Valve on the NITROKIT manifold is closed. Disconnect the quick coupler on the coil hose from the manifold. "Slowly" open the NITROKIT manifold Valve to relieve the pressure from the vehicle test. The nitrogen pressure will vent through the air hose fitting on the side of the NITROKIT manifold. When the NITROKIT manifold gauge reads "0" disconnect the Red HIGH SIDE coupler from the vehicle.