

NITROGEN OPERATING INSTRUCTIONS

NITROGEN INFLATION SYSTEM



NG-4

NG-6

READ INSTRUCTIONS THOROUGHLY BEFORE OPERATING



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MADE IN USA

SAFETY INSTRUCTIONS

WARNING

Only Personnel trained in the operation of Nitrogen Units should operate them.

Use general safety precautions when dealing with tires and pressurized air.

Make sure all fittings, hoses, valves and air filters are properly fastened and secured before plugging in unit.

Using protective eyewear is recommended.

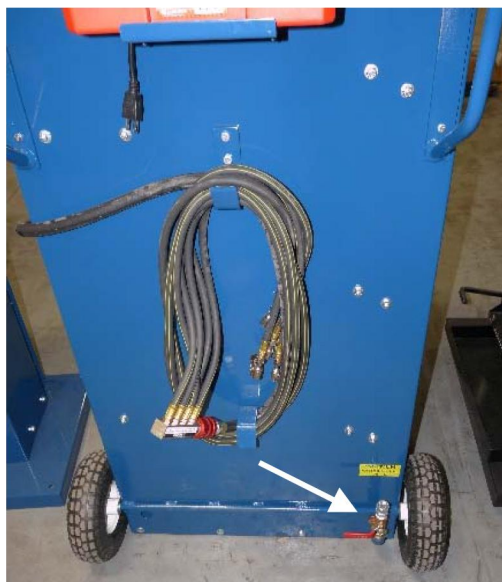
General: Disconnect Electrical Power Supply before any Maintenance.

Electric Power: Unless otherwise stated, all TSI Nitrogen Inflation Systems require 120 volt, 20-amp, single phase 60 Hz service. Current is 1 amp.

Air Pressure: Maximum inlet air supply to Nitrogen unit is 175 PSI.
Maximum air supply to Inflation unit is 150 PSI.

Overview: The manufacturer's recommended operating temperature for running this unit is 32°F to +140°F.

NG-4 SET-UP INSTRUCTIONS



Use Teflon Tape or other suitable pipe fitting sealer

Connect air line. The recommended air supply is a 1/2" line. Fasten a fitting capable of providing 1/2" of air flow onto the air inlet supply valve. Air Supply 175 PSI Max.

Plug unit into a 120 volt, 20 amp 60 Hz power source.

Open Air Supply Valve. Check for air leaks. Tighten if necessary.

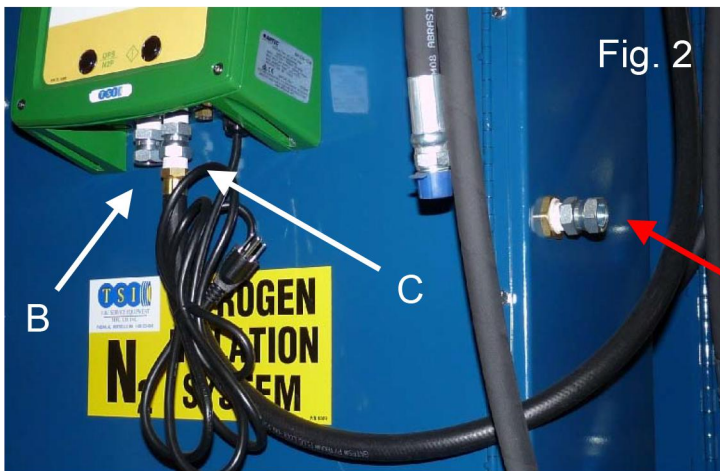
NG-6, NG-12, NG-18 SET-UP INSTRUCTIONS

Use Teflon Tape or other suitable pipe fitting sealer

Fasten Nitrogen Unit and Tank to a permanent location.

Connect air line. The recommended air supply is a 1/2" line. Fasten a fitting capable of providing 1/2" of air flow onto the air inlet supply valve. Air Supply 175 PSI Max. See Fig. 1.

Note: The Air Valve shown is in a closed position. Keep closed until all air lines are installed.



Refer to Fig. 2 & Fig. 3

Two 1/2" fitted hoses are shipped with each Nitrogen unit. Connect the shorter of the two hoses at "A".

Connect longer hose from "B" in Fig. 2 to "B" in Fig. 3.

The remaining hoses shipped with each unit are connected to a Manifold Assembly (see right.) Fasten the 1/2" male fitting to "C" in Fig. 2.

Plug unit into a 120 volt, 20 amp 60 Hz power source.

Open Air Supply Valve. Check for air leaks. Tighten if necessary.



OPERATING INSTRUCTIONS

CAUTION: Operation of this machine for use other than purging and inflating tires is strictly prohibited.

DO NOT exceed the tire manufacturers recommended air pressure ratings.

Digital Tire Inflator

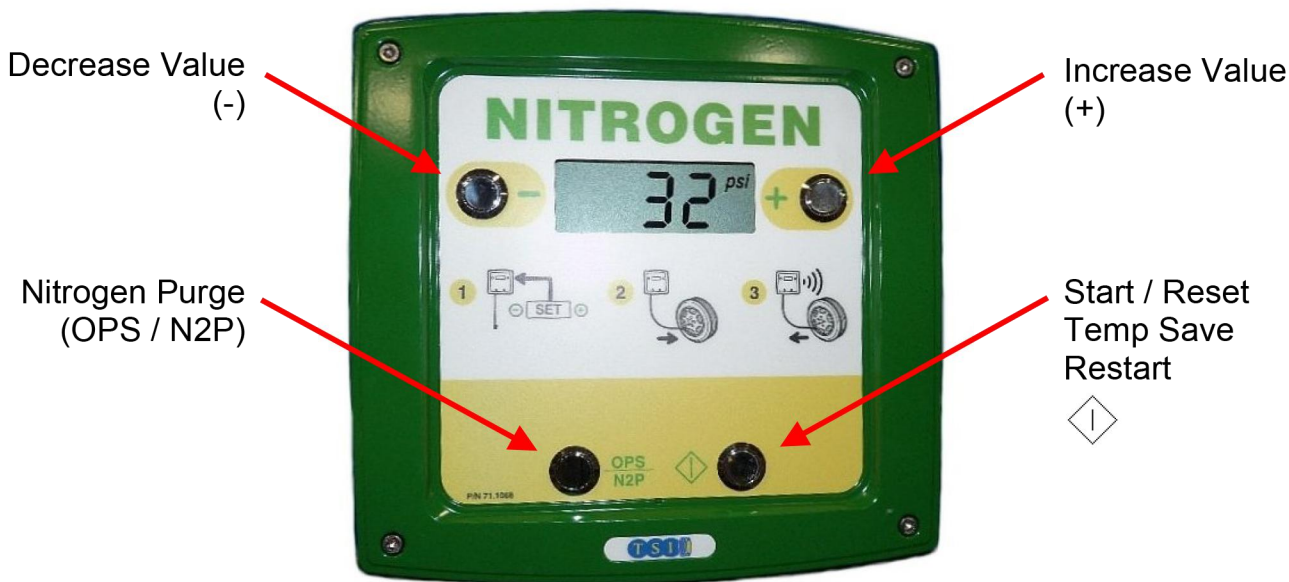


Fig. 4

The Digital Tire Inflator has 4 Touch sensitive buttons (see Fig. 4 above) and an LCD Display screen. **Completely review all the following before operating Nitrogen unit.**

The (+) and (-) buttons increase and decrease the PSI, OPS and N2P values. Pressing the OPS / N2P button will cycle through which mode the unit is displaying. As you cycle through each of these modes you can press (+) to increase or (-) to decrease the values displayed on the screen.


The unit starts in default mode. These defaults are predetermined by the manufacturer and cannot be changed.

Default settings

OPS is set to "0" (TSI recommends not changing this)

N2P is set to "1" (Number of purge cycles)

PSI is set to 32 (Pounds per Square Inch)

Once you establish your desired settings you have about 5 seconds to press the  button to temporarily Save your settings. Press and hold until you hear 2 beeps. The unit will Start and your input is now temporarily saved in the unit.

Note: The system will not operate properly unless you hear the 2 beeps.

POINTS OF INTEREST WHILE USING THE DIGITAL TIRE INFLATOR

- ✓ Most tire centers use the default settings while only adjusting the PSI setting. This means the OPS set at “0” and the N2P set at “1” do not change.
- ✓ TSI highly recommends not changing the Over Pressure Setting (OPS) from “0”. This is an advanced feature not recommended for use by most standard users.
- ✓ Changing the number of purge cycles (N2P) to more than “2” isn’t necessary.

Operators using a TSI Nitrogen unit need to verify these settings prior to connecting the hoses to more tires after it completes each inflation process.

The Manifold Assembly shown in Fig. 5 & 6 identifies a Red Slide Valve in two different positions.

A general rule of practice is to keep the Red Slide in position as shown in Fig. 5.

Each time you start and complete a tire inflating process “Lock-out” is the position the slide needs to be in. When connecting the Valve Stem Lock (Fig. 7) to each tire the position of the Red Slide Valve prevents tires from being deflated.

If you connect a Valve Stem Lock to a tire and hear air hissing the Red Slide Valve is probably in the wrong position.

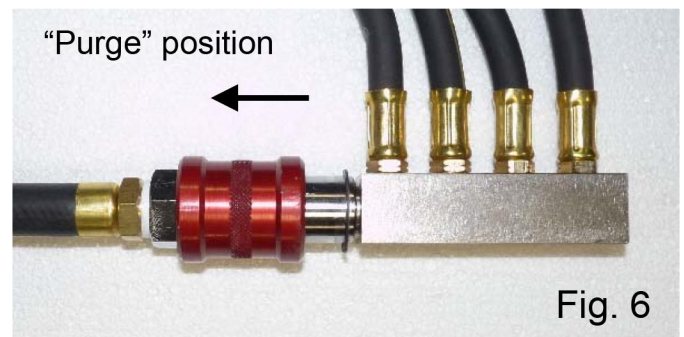
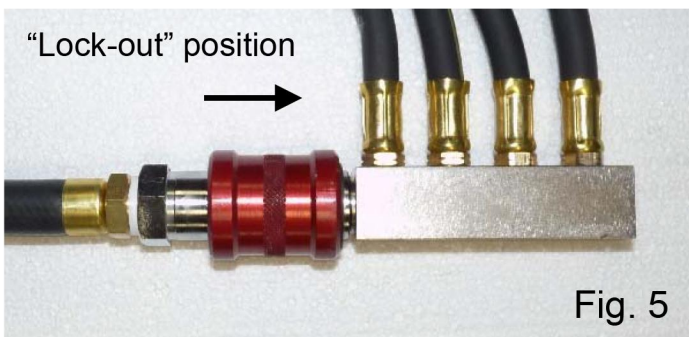


Fig. 6 shows the location of the Red Slide Valve in a “Purge” position. Once you connect the Valve Stem Locks to 1, 2, 3 or 4 tires (see Fig. 7) and the Digital Tire Inflator settings have been set slide the Red Slide Valve into this “Purge” position. At the end of each purge cycle you’ll hear two short beeps then the unit will begin nitrogen inflation.

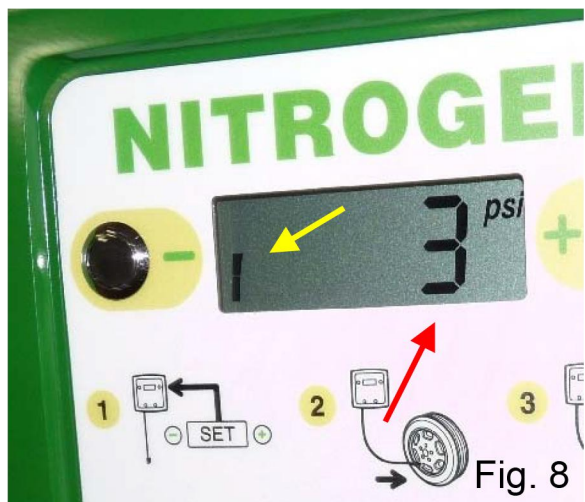
After hearing a series of 5 short beeps two times, the unit is finished.

Upon completion relocate the position of the Red Slide Valve into a “Lock-out” position as shown in Fig. 5.

Remove the Valve Stem Locks from tires.

Firmly attach the Valve Stem Locks to tires. Make sure air doesn’t leak.

The previous steps are a basic overview to operate TSI Nitrogen units. The following will explain more in-depth functions or features each unit goes through during the process of purging air from tires and inflating them with nitrogen.



Purging Air (Fig. 8)

As the unit purges air from tires there's a bar graph indicator showing air is being purged. (See yellow arrow.)

It starts at the top of the screen simulating a peak which narrows to the bottom of the screen.

The tire pressure is displayed (see red arrow) at varying pressures of tire(s) being deflated. Once the unit reaches a tire pressure of between 3 and 10 PSI the Digital Tire Inflator will reach its 'cycle.'

At this point the tires are considered deflated and the unit will beep twice to begin inflating nitrogen.

Inflating Nitrogen (Fig. 9)

As the unit inflates nitrogen into tires there's a bar graph indicator showing nitrogen being inflated. (See yellow arrow.)

It starts at the bottom of the screen simulating pressure increasing and widens toward the top of the screen.

The tire pressure is displayed (see red arrow) as the unit inflates tire(s) with nitrogen. It will continue to increase until it reaches the desired tire pressure you set.

When the unit reaches the pressure setting you set it will beep twice and cycle through a purge cycle or you'll hear a series of 5 short beeps, two times meaning the unit is finished.

At this point the tires are inflated. Remove Valve Stem Locks.

Use the supplied valve stem caps on tires filled with Nitrogen. (See Fig. 10)

The colored or chromed caps are used to indicate a tire(s) are filled with Nitrogen.



Some Tips:

When the Digital Tire Inflator is powered down it resets to the default settings of 32 PSI, an OPS setting of "0" and the N2P setting of "1".

Only inflate a tire to the manufactures recommended pressure rating for that tire.

Purging air from commercial truck tires can be time consuming. Service technicians often remove the Valve Stem Core(s) and replace them during the final inflation cycle of the unit. Make sure all Valve Stem Cores are replaced before reaching the pre-set air pressure setting.

Shut off air supply each day.

Troubleshooting

Error codes in the display screen can be resolved by the following suggestions.

- The most frequent problem the Digital Tire Inflator encounters are air leaks. Whether a loose fitting, Valve Stem Locks being incorrectly connected to Valve Stems or a leaking air hose; in most cases the only solution is to stop all leaks.
- The Red Slide Valve not being located in the correct position is another frequent issue. Simply review the directions and correct the location of the Red Slide Valve.
- If a tire does not fill to the amount of air you set the Digital Tire Inflator to, check to make sure you have enough Air Supply to the TSI Nitrogen machine. Multiple lines tapping into an Air Supply source may cause too limited of an air supply for the machine to function properly.

In isolated cases the Digital Tire Inflator may need to be reset. If difficulties are still being encountered after evaluating the three previous situational problems, simply unplug the Digital Tire Inflator for a minimum of 5 seconds to allow a reset.



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