

# Manual: Full automatic nitrogen generator tire

Model : ZOLITE 5000

GUFKA



## Inflation system main features:

- \* Pump the air from the tire by the internal vacuum generator
- \* Auto start inflation
- \* Single tire application
- \* Suit for : Motorcycle , Car , Light truck

## **Technical Specifications:**

**Vehicle Type: Motorcycle - Passenger Car - Light Truck**

**Power supply: 220V 50HZ**

**Power consumption: 60W**

**Nitrogen purity: 95% -99.5%**

**Inlet air pressure: (100-145 psi) - (8-10 kg / cm<sup>2</sup>)**

**Stored pressure in the tank: (58-100psi) - (4-7 kg / cm<sup>2</sup>)**

**Nitrogen Tank Capacity: 70 Li**

**Nitrogen production rate: 2000-4000 L / h**

**Measurement amount: (5-145 psi) - (0.4-9.99 kg / cm<sup>2</sup>)**

**Accuracy:  $\pm 1$  psi**

**Display Method: Digital Segmentation of the Segment**

**Working temperature: -10 ° c , + 60 ° c**

**Dimensions: 1350-600-520 mm**

**Weight: 90 kg**

## **Nitrogen Production Method (PSA)**

**In this method, the compressed air is first compressed after passing through the dryer and the catchment trap by removing the high percentage of moisture and suspended oil in the compressed air .**

**The residual moisture and residual oil are also completely eliminated by a completely dry and compressed air filter into the Nitrogen Filter.**

**This nitrogen filter ,Regular pore diameters are about 4 angstrom, due to differences in molecular oxygen diameter of 3.2 angstrom and nitrogen diameter 3.8 angstrom only smaller oxygen molecules can penetrate and trap 4 angstrom. Therefore, the nitrogen molecules are released from the top of the filter with a certain purity of carbon material.**

**After a certain amount of time, depending on the size of the filter and the discharge, the CMSs are saturated with oxygen and must exit the compressed porous air through the carbon vents and exit the filter's low exhaust. Because the resuscitation process wastes time during the gas production process. Nitrogen.**

**In this arrangement two filters are used while one filter is being redone. The second filter performs the nitrogen production process, which is continued oscillating by continuous control circuit with solenoid valve control. Inlet compression is very important and if proper microfilters are not used, moisture, especially compressed oil, will compress the outlet of the compressor at high speed, preventing oxygen absorption and in fact destroy the productive CMS material and severely deplete the nitrogen purity decrease. Under normal conditions, the purity obtained by this method for nitrogen production is 99.9995.**

# **Instructions for using a nitrogen generator**

## **Full automatic model : ZOLITE 5000**

- 1. Connect the power supply cable to the power supply (220 V).**
- 2- Connect the compressor compressed air hose to the air inlet of the nitrogen generator.(Figure 3 Part 1)**
  
- 3 - Turn the “on/off” key on. (Figure 2 Part 1)**
  
- 4 - Wait for the Nitrogen source pressure gauge (Fig. 2 Section 2) and Compressed Inlet Air gauge (Fig. 2 Section 3) to reach BAR6 and display nitrogen purity on the control panel is 99,5%.**
  
- 5- Output (Out) (Fig. 2, Part 7) The tires can be automatically inflator, with Nitrogen or Air.**
  
- 6. AIR Output (Fig. 2, Section 6) The air can be manually adjusted by adjusting the tire pressure.**

### **Details of operation:**

#### **1- Filling N2 with N2 or air**

- 1-1- Select the NIR or AIR by pressing Select on the N2 panel. (Figure 1 Part 7)**

**1-2- Select unit pressure according to unit pressure (PSI-BAR-KG / cm<sup>2</sup>) so that the LED of the selected unit is illuminated on the panel. (Figure 1 Part 8)**

**1-3- Press set. Select the tire adjustment pressure value (+ or -). (Figure 1 part 6)**

**1-4- Connect the outlet clip hose head to the tire.**

**The system automatically adjusts the tire pressure according to the set pressure.**

**2- Nitrogen gas filling with AUTO (automatic)**

**2-1-Select the AUTO option with the select push bottom on the panel (the corresponding LED will light up) (Figure 1, Section 7).**

**2-2- Select the type of pressure unit (PSI-BAR-KG / cm<sup>2</sup>) with unit push bottom (Figure 1, Part 8).**

**2-3-push bottom" set press". Adjust the tire pressure setting with the bottom (+ , -) (Figure 1, Part 6).**

**2-4- Adjust the time of the vacuum tire with the bottom (+ or -) by pressing the "time vacuum " bottom (Figure 1 Part 5).**

**2-5- Connect the outlet caliper inflatable hose head to the tire, then press the START bottom. (Figure 1 part 10)**

**2-6- End of work is declared as END on the screen.**

**The system automatically first empties the tire wind (you can open the tire needle to shorten the tire wind release time and then re-tire after the tire wind has been emptied) then, depending on the vacuum setting time, the vacuum**

**action of the tire air is then discharged. After the vacuum is completed, the nitrogen gas enters the tire and adjusts to the tire pressure.**

- **Service and maintenance**

- **Drainage trap drain (Fig. 2, Part 5) and (Figure 3, Part 2), weekly, and drain trap reservoir water weekly (by device user).**

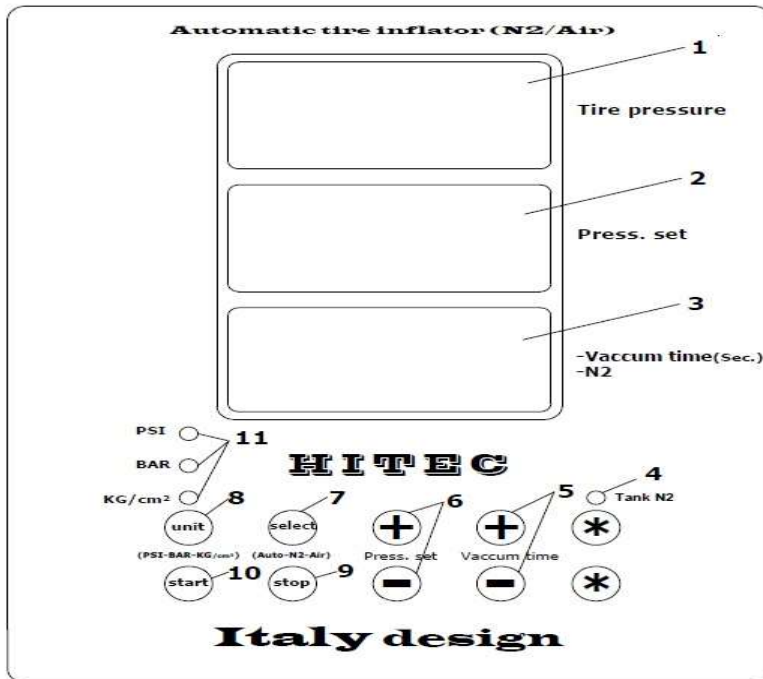
- Correct control and operation of the charcoal annually by after-sales service experts.**

- **Troubleshooting**

- Err1 Problems connecting the head of the tire or not connecting the head of the clip to the tire.**

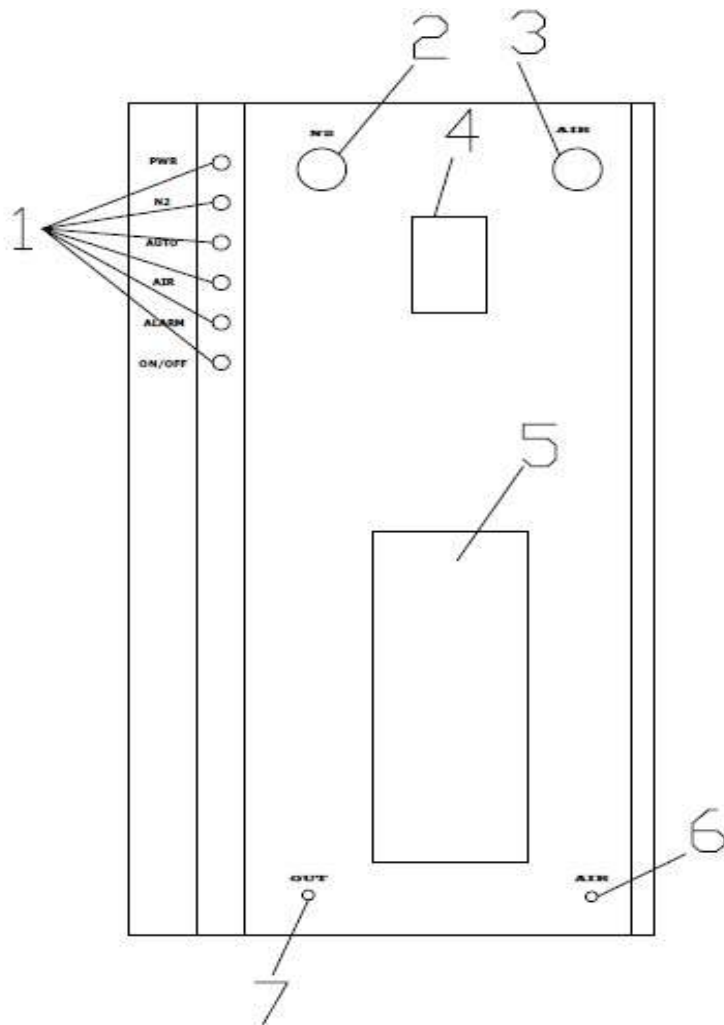
- Err2 Low nitrogen tank pressure, which may be due to faulty solenoid valve or faulty air compressor, which must be controlled.**

**-Keyboard function**



**Picture 1**

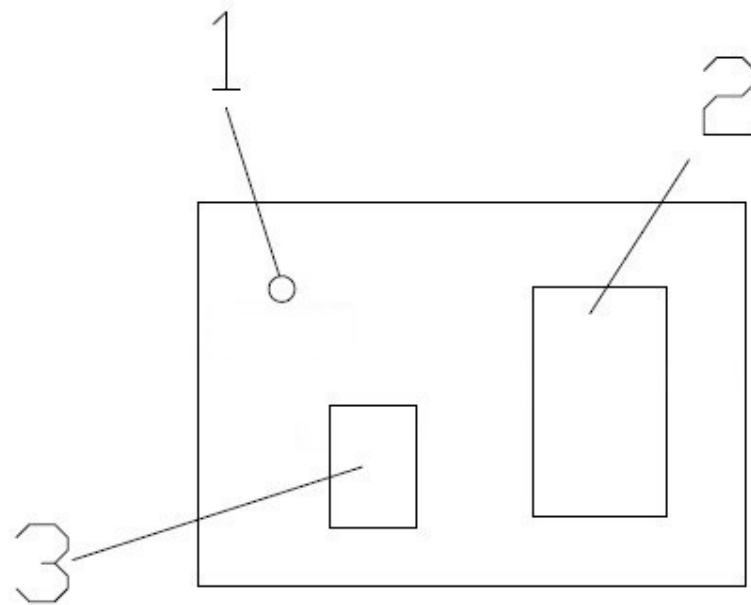
- 1- Tire pressure indicator.**
- 2- Indicates the amount of pressure to be adjusted.**
- 3-Tire vacuum time display while the tire is operated on AUTO. or nitrogen purity indicator when the tire is operated on N2.**
- 4-When the nitrogen tank is in rebuild mode, the LED for Tank N2 flashes.**
- 5- The bottom + and - is related to the vacuum tire timing.**
- 6-“Press set” + and- are related to the tire pressure of the tire pressure to inflate.**
- 7- to select “select” the type of operator to adjust N2 pressure or to discharge the tire wind then vacuum the tire and then complete the tire with AUTO nitrogen wind or “AIR” adjust the air tire so that each time with the push bottom “ select “ the LED light The corresponding N2 or AUTO or AIR is light.**
- 8-The unit bottom is to select the pressure unit PSI or BAR or Kg / cm2.**
- 9- Stop bottom for stopping the device, which is running the operator.**
- 10-The start bottom is in AUTO mode to start the operation.**
- 11- LED is related to display of pressure unit.**



**Picture 2**

- 1- Operator LED Lights If each of the operators is activated, the relevant LED lights will illuminate.
- 2- Nitrogen stored in the tank ,pressure gauge.
- 3- Inlet air pressure gauge.
- 4- Display panel.
- 5- Big filter Trap.
- 6- Air outlet manually.
- 7- Air or nitrogen outlet automatically.





**Picture 3**

- 1- Inlet hose head.
- 2- Small filter trap.
- 3- Inlet air limiter.