



**MODEL 130
NITROGEN INFLATION
CART**

Installation, Operation
& Repair Parts
Information



Branick Industries, Inc. • 4245 Main Avenue • Fargo, North Dakota 58103

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SAFETY INSTRUCTIONS

- NEVER allow unauthorized personnel to operate this product.
- NEVER use this product for anything other than its intended use.
- THOROUGHLY train new employees in the proper use and care of this product.
- PROHIBIT unauthorized personnel from being in shop area while this product is in use.

DEFINITIONS

- **CAUTION:** Indicates a potentially hazardous situation, which if not avoided, may result in damage to property or minor personal injury.
- **HAZARD:** A source of potential injury to a person.
- **MAINTENANCE:** Those actions that preserve the correct and proper conditions under which the machine shall be used. This may include adjustment, replacement of wear items, lubrication and cleaning, but not modifications or repair of damage.
- **MAY:** This word is understood to be permissive.
- **MUST:** This word is understood to be mandatory.
- **OPERATION:** The correct and proper use of the machine as described in this manual.
- **SAFETY ALERT SYMBOL:** A symbol that indicates a potential personal safety hazard. It is composed of an equilateral triangle surrounding an exclamation point.
- **SHALL:** This word is understood to be mandatory.
- **SHOULD:** This word is understood to be advisory.
- **WARNING:** Indicates a potentially hazardous situation, which if not avoided, may result in death or

CAUTION

- ◆ Before using this product, read and fully understand the operating instructions and all decals on the product. This is necessary to prevent injury to the operator and damage to the product.
- ◆ Do not attempt to use this product for anything other than its intended purpose.
- ◆ Use of this product should be in a suitably ventilated shop.
- ◆ Ensure tank is properly secured before use.
- ◆ Do not use this product if it is visibly worn, distorted or damaged.

SPECIFICATIONS

Operating Temperature	-4° to 158° F (-20° to 70° C)
Max Inflation Pressure	145 psi (10.0 bar)
Max Inlet Pressure	217 psi (15 bar)
Digital Inflator Accuracy	+/- 0.5% of full scale reading
Display Increments	1 psi (0.1 bar)
Dimensional data	20 x 22.5 x 59 in (51 x 57 x 150 cm)
Weight	80 lbs (36 kgs)
Shipping Weight	100 lbs (45 kgs)

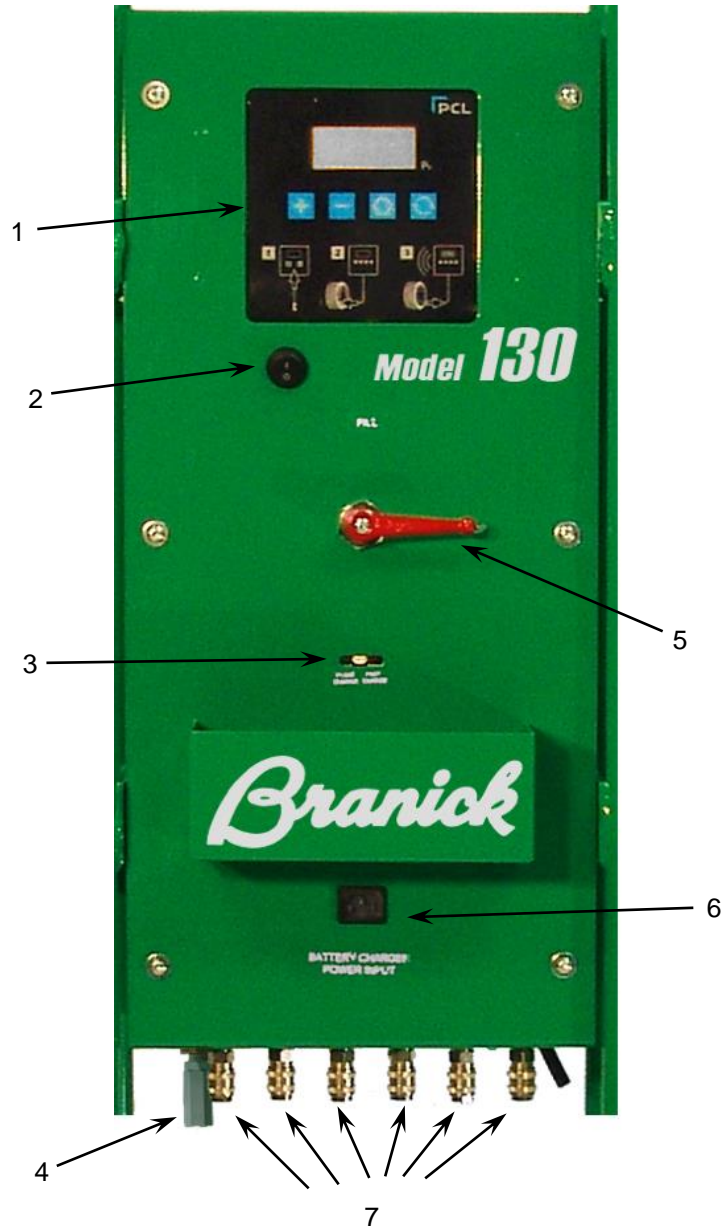
INTENDED USE

The Nitrogen Inflation Cart is a pneumatic device designed to provide deoxygenated air for the purpose of inflating vehicle tires.

WARNING

This product is designed for use with a high pressure nitrogen tank. Ensure that a fully functional regulator is installed on the tank and a tank key is kept with the cart.

COMPONENT IDENTIFICATION



-
- | | |
|---|--------------------------|
| 1 | Inflator Control Board |
| 2 | Power Switch |
| 3 | Battery Charge Indicator |
| 4 | Inlet Port |
| 5 | Fill Control Valve |
| 6 | Battery Charge Input |
| 7 | Outlet Ports |
-

SET-UP INSTRUCTIONS

1. Unpack and remove unit from shipping carton and pallet.
2. Inspect the unit for any visible damage.

Bottle set-up

1. Attach tank brackets to cart body using included hardware (Fig 1).
2. Attach one end of each tank strap to the tank brackets (Fig 2).
3. Place the nitrogen tank on the cart's tank support. Do not let the tank stand unsupported.
4. Attach other end of each tank strap to tank brackets. Pull on loose end of tank strap to tighten securely against tank (Fig 3). Tank should be held firmly with no play (Fig 4).
5. Connect N2 input line to the inline filter using a gas tight 1/4" NPT male fitting. Connect other end of hose to regulator on tank.
6. Connect output hoses to output ports and coil onto hangers.



Figure 1



Figure 2

Generator set-up

1. Connect hose from existing generator to cart's inline filter using a gas tight 1/4" NPT male fitting.
2. Connect output hoses to output ports and coil onto hangers.

Power Requirements & Charging Instructions

- The system is powered by an internal Sealed Lead Acid (SLA) 12 volt rechargeable battery.
- Charge system by plugging the included charger cord into the charger socket on the front of unit, and the other end into a 110/120 volt outlet.
- Charging a completely flat battery could take up to 7 hours to obtain a full charge.
- The length of battery charge is dependent upon many factors including use, how often charged, etc. But once fully charged, the system should provide up to 8 hours of continuous inflation/deflation.
- Under no circumstances should battery be left in flat state designated by a blank display or diagnostic code "LO".

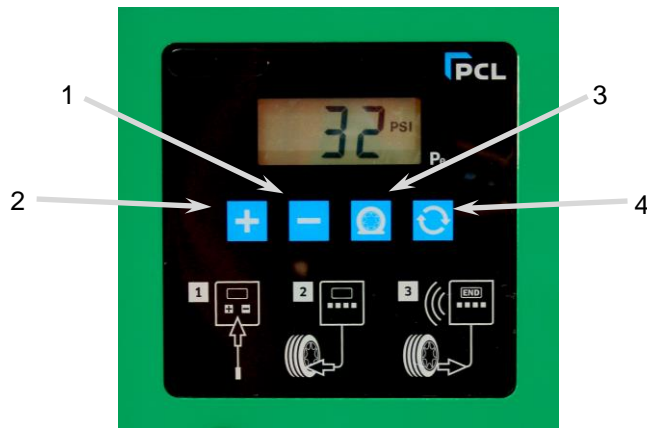


Figure 3



Figure 4

DIGITAL INFLATOR OPERATING INSTRUCTIONS



-
- | | |
|---|--------------------------|
| 1 | Decrease Key |
| 2 | Increase Key |
| 3 | Top-Off Key |
| 4 | Nitrogen Purge Cycle Key |
-

Converting Air Filled Tires to Nitrogen

1. Turn the Fill Control Valve handle to the STOP position and flip the ON/OFF button to turn on power.
2. Connect the output hoses to the valve stems of the tires and ensure that leaks do not exist.
3. Set the tire pressure with the ⊕ and ⊖ buttons on the front panel.

Note: *The target pressure should be the vehicles recommended tire pressure found on the sticker inside the driver's door jamb or inside the fuel access door.*

4. Turn the Fill Control Valve handle to FILL.
5. Press the ☻ button to start the nitrogen conversion.
6. When the alarm sounds the cycle is complete.
7. Turn the Fill Control Valve handle to STOP and remove hoses from valve stems.
8. Flip the ON/OFF button to turn inflator off.

Filling Tires to Two Different Pressures

Some vehicles require two different tire pressure settings from the front tires to the rear. In this example, the front tires require 32 psi while the rear tires require 40 psi.


1. Go through steps 1 through 6 above in "Converting Air-filled Tires to Nitrogen" using the lowest of the two pressures (32 psi) as the target pressure.
2. After finishing step 6, turn Fill Control Valve handle to STOP. Disconnect the hoses from the tires that are at their final pressure (in this example the front tires are at 32 psi).
3. Change the target pressure for the remaining two tires using the ⊕ or ⊖ buttons (in this example press the ⊕ button to 40 psi).
4. Turn the Fill Control Valve handle to FILL position.
5. Press the ☻ button.
6. When the alarm sounds the cycle is complete.
7. Turn the Fill Control Valve handle to STOP and remove hoses from valve stems.
8. Flip the ON/OFF button to turn inflator off.

To Top-off Tires Already Filled with Nitrogen

1. Turn the Fill Control Valve handle to the STOP position and flip the ON/OFF button to turn on power.
2. Connect the output hoses to the valve stems of the tires and ensure that leaks do not exist.

- Set the tire pressure with the ⊕ and ⊖ buttons on the front panel.

Note: The target pressure should be the vehicles recommended tire pressure found on the sticker inside the driver's door jamb or inside the fuel access door.

- Turn the Fill Control Valve handle to FILL.
- Press the  button.
- When the alarm sounds the cycle is complete.
- Turn the Fill Control Valve handle to STOP and remove hoses from valve stems.
- Flip the ON/OFF button to turn inflator off.

Emergency Stopping

Stop the inflation / deflation cycles by pressing any button on the front panel or by turning the Fill Control Valve handle from FILL to STOP.

Additional Application Modes

The inflator software contains two other fill modes, 'Std' and 'tir', that are not applicable to nitrogen inflation. If one of these modes is accidentally entered, the system will not purge tires before filling. Please call our customer service line for assistance

TROUBLESHOOTING / DIAGNOSTIC CODES

The following diagnostic codes are reported via the inflator display.

Problem / Code	Possible Cause	Solution
Hose connectors leak or will not seal to the valve stem	Hose Connectors are worn	Replace connectors
No Display	No power connected	Switch power on / Plug in / Replace Battery
Inflation process starts but does not complete	Low supply pressure or leaks exist	Check supply pressure and confirm leaks do not exist
Inflation or deflation is very slow	Inline filter or mesh filters at input or output ports may be clogged	Clean or replace filters
E1	Unstable or insufficient supply pressure	Check supply pressure
E4	Over inflation due to blocked hose	Remove blockage or replace hose
E5	Unit powered ON under pressure; i.e., hose is connected to tire and control valve set to FILL	Rotate control valve to STOP and cycle the power ON/OFF again
E6, E8, E9	Pressure sensor error	Contact Customer Service 800-437-4394
E10 or LO	Under voltage	Plug in power cord and charge battery
E11	Over voltage	Check power supply
E12	PCB fault	Contact Customer Service 800-437-4394
E13	Lost or corrupted calibration settings	Contact Customer Service 800-437-4394
E17	Calibration data corrupted	Calibration is required. Contact Customer Service
E19	Capacitive touch interface error	Contact Customer Service
E18, E20, E21, E22, E23, E28	Software error	Contact Customer Service

MAINTENANCE

See repair parts breakdown for replacement parts.

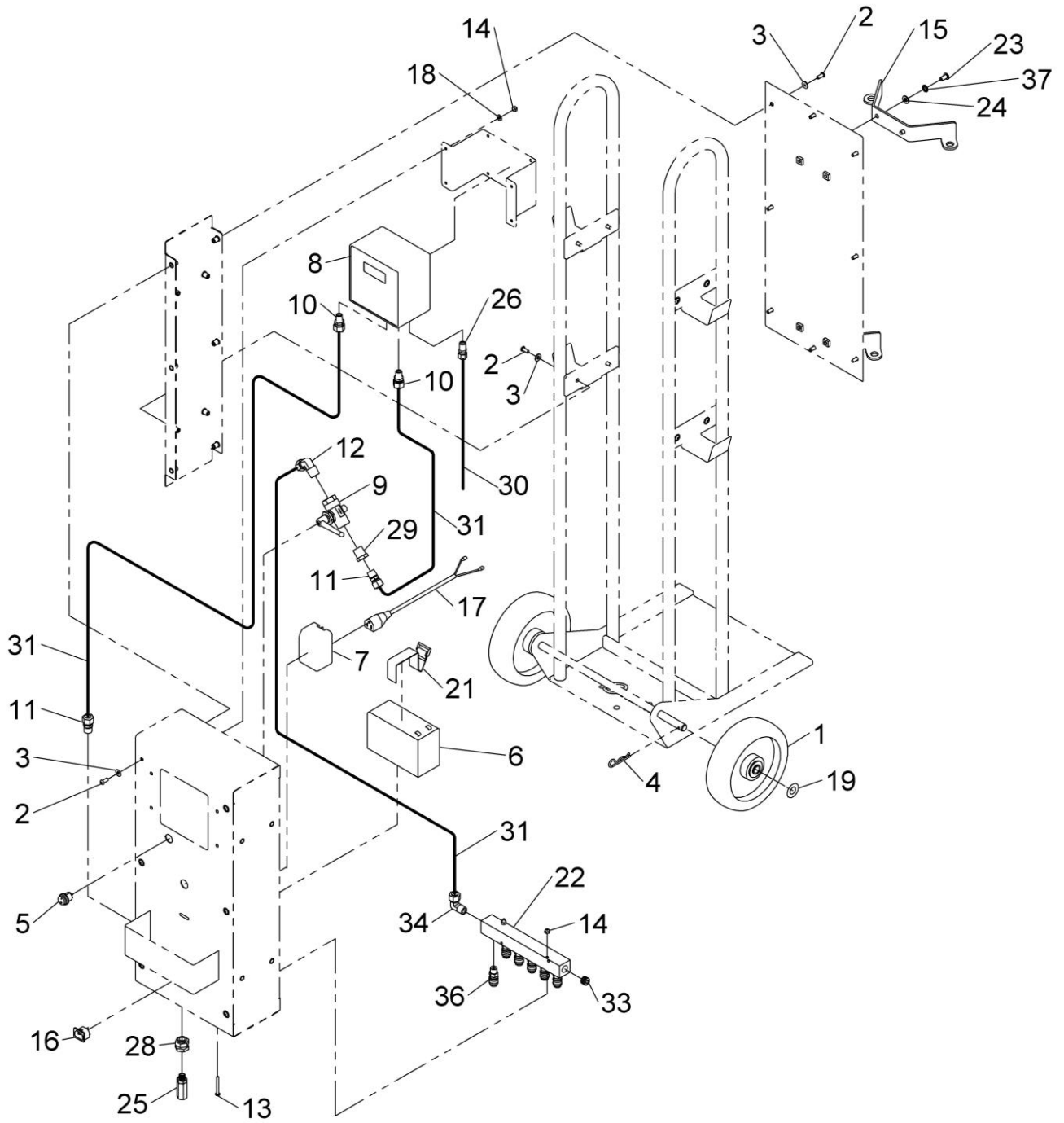
ALWAYS: **Keep Nitrogen Inflation System clean.**
DAILY: **Plug in System to Charge Battery**

OWNER'S RECORDS

Date Installed: _____

Serial number _____

REPAIR PARTS



REPAIR PARTS LIST

ITEM	QTY	PART NO.	DESCRIPTION	
1	2	90-0004	Wheel, 8"	
2	22	50-0125	1/4-20 X 5/8" Socket Button Head Screw	
3	22	108-110	1/4 SAE Flat Washer	
4	2	54-0053	1/8 X 2-1/2" Reusable Cotter Pin	
5	1	41-0042	ON/OFF Rocker Switch	
6	1	40-0063	12V Battery	
7	1	40-0064	12V Charger	
8	1	02-0023	Inflator with Harness	
9	1	60-0208	1/2" NPT Ball Valve	
10	2	60-0316	1/2" Tube X 1/4" NPT Male Connector Fitting	
11	2	60-0177	1/2" Tube X 3/8" NPT Male Connector Fitting	
12	1	60-0181	1/2" Tube X 1/2" NPT Male Elbow Fitting	
13	2	028-307	#10-24 X 1 3/4" Phillips Head Machine Screw	
14	6	055-127	#10-24 Nylon Hex Nut	
15	2	06-0205	Tank Bracket	
16	1	43-0048	Power Entry Module	
17	1	42-0025	Power Harness	
18	4	108-024	#10 SAE Washer	
19	2	52-0049	5/8" SAE Washer	
20	2	59-0084	Tank Safety Strap	*
21	1	59-0085	Velcro Battery Strap	
22	1	60-0330	Manifold	
23	4	50-0126	5/16-18 X 5/8" Socket Button Head Screw	
24	4	108-123	5/16" SAE Washer	
25	1	932-001	In-Line Filter	
26	1	60-0191	3/8" Tube X 1/4" NPT Male Connector Fitting	
27	4	62-0038	25' Hose Assembly	*
28	1	60-0192	1/4" NPT X 3/4-16 Straight Bulkhead Fitting	
29	1	60-0107	1/2" NPT X 3/8 NPT Bushing	
30	-	D20-006	3/8" O.D. Nylon Tube (Black)	
31	-	D20-031	1/2" OD Tube (Black)	
32	1	42-0027	Inflator Harness	*
33	1	60-0074	3/8" NPT Plug	
34	1	60-0175	1/2" Tube X 3/8" NPT Male Elbow Fitting	
35	1	81-0256	Instruction and Troubleshooting Guide Placard	*
36	6	60-0331	1/4" NPT Quick Connect Coupler	
37	4	108-067	5/16" Lock Washer	
38	4	60-0201	Clip-On Chuck	*
39	4	60-0332	1/4" NPT Quick Connect Nipple	*
40	1	42-0023	6' Power Cord	*

* Items not shown

COMMERCIAL WARRANTY

This product is warranted by BRANICK INDUSTRIES, INC. to the original user-owner against defective materials or workmanship for a period of one year from the date of shipment. During the warranty period, at the discretion of Branick management, if the product is found to be defective, it will be repaired or replaced without charge. For service, contact Branick (800-437-4394) to obtain an RMA. Any product shipped to Branick must have an RMA and proof of original shipment date. The repaired or replacement product will be returned with transportation charges prepaid by Branick.

This warranty does not cover defects in the product caused by ordinary wear and tear, abuse, misuse, overloading, accident (including shipping damage), improper maintenance, alteration, or any other cause not the result of defective materials or workmanship.

REPAIR OR REPLACEMENT IS THE EXCLUSIVE REMEDY FOR DEFECTIVE PRODUCT UNDER THIS WARRANTY. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANT ABILITY OR ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OF THIS PRODUCT. BRANICK INDUSTRIES, INC. SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES.

BRANICK INDUSTRIES, INC. reserves the right to make changes in the design or construction of our products without obligation to incorporate such changes in products already sold and without notice.

Service parts and regular repair service are available from authorized distributors of Branick products, or from:

BRANICK INDUSTRIES, INC.
4245 Main Ave.
 Fargo, North Dakota 58103
 Toll Free: 800-437-4394