A10 / A20 Inflator Quick Start Manual

Safety Guidelines
This manual contains information that is very important to know and understand. This information is provided for safety and to prevent equipment problems. To help recognise this information, observe the following symbols.

![DANGER]
Danger indicates an imminently hazardous situation which if not avoided WILL result in death or serious injury.

![WARNING]
Warning indicates a potentially hazardous situation which if not avoided, COULD result in death or serious injury.

![CAUTION]
Caution indicates a potentially minor or moderate injury.

![NOTICE]
Notice indicates important information, that if not followed, may cause damage to equipment.

Unpacking
After unpacking the unit, inspect carefully for any damage that may have occurred during transit.

![WARNING]
Do not operate unit if damaged during shipping, handling or use.

General Safety Information
The operator of this product must take the necessary precautions to prevent the level of danger indicated by these symbols. The operator is required to read and understand this instruction manual and all safety warnings, labels etc.

Any employer allowing the use of this product in their field of work must distribute this instruction manual to all users. The employer must also ensure all users read, understand and follow the instructions as described in the manual, safety warnings, labels, etc.

Read and understand all safety warnings and instructions before operating this product. Failure to read and follow all safety warnings may result in serious personnel injury or death. Property damage and/or product damage may also occur if all warnings are not followed.

1. Do not expose the product to flammable gases, vapours or fumes
2. Do not store flammable gases in or near this product
3. Never use flammable or toxic solvents to clean the product or any of the unit’s parts
4. Never remove or alter any safety warning labels, tags, etc. located or provided with product.
5. Follow all directions for maintenance.

The use of other than genuine PCL replacement parts may result in reduced equipment performance. Repairs must be performed by authorised repair personnel, otherwise the warranty will be void.
General Specifications

Max inlet supply: 218 psi / 15 bar / 1500 kPa
Recommended supply: 10 psi / 0.7 bar / 70 kPa above the max set pressure of Inflator
Max operating pressure: 145 psi / 10 bar / 1000 kPa
Min operating pressure: 4 psi / 0.3 bar / 30 kPa
Display resolution: 1 psi / 0.1 bar / 10 kPa
Units of measurement: psi / bar / kPa / kg/cm

This Equipment also complies with the EC directives:
- 2004/108/EC (EMC directive) confirmed by report No.10655/TR/1
  Accordance with IEC/EN 61010-1:2001 confirmed by report No. TTR-004115-18-00

Installation

In order to provide a trouble free operation it is necessary to connect the power supply from the main switchboard with a MAX 3amp fuse/RCB protection device. This must be grounded.

The circuit breaker should be marked as the disconnecting device for the equipment.

The recommended supply line materials are copper or galvanised steel tube and it is important that the line is blown out thoroughly, to remove any foreign matter, before connection is made to the unit.

Air Supply Connection

Wall Mounted Unit - G 1/4 female thread.
Pedestal Mounted Unit - G 3/8 male thread

The compressor producing the air should have the necessary water and dirt filtration, to minimise accumulation of debris at the inflator line filter strainer.
For efficient tyre inflation, ensure that the air supply is 10 psi, 0.7 bar or 70kpa above the intended maximum inflation range.

Wall Mounted unit
When attached to a wall or other structure the unit must be surely fixed by the means of 4 screws (mounting footprint can be found on page 4)

Pedestal unit
This unit must be securely fixed to the floor by the means of 4 screws, running the air supply through the centre of the upright post (mounting footprint can be found on page 4)

Inside installations
Use 3 pin connecting plugs or 2 pin + Earth with the Earth Ground wire installed on electrical infrastructure.

Outdoor installations
The unit can be connected to an earth conductor or conducting metal work (metal pipe conduit or sheathing) which has equipotential bonding to the main Earthing point of the installation.

The unit is designed to run with the earth connection installed. "According to Class 1 - Basic insulation in conjunction with protective Earthing"

Calibration & Accuracy

The accuracy of our digital units when released from our factory is that:

The maximum permissible error (MPE) = 0.08 bar

Each unit, before release, is checked and calibrated on test equipment that has accuracy traceable to a UKAS Laboratory No. 0221 referenced to certificate 0029346.
### Control Panel

- 3 user touch type buttons

### Key Legend

- $\uparrow$ or $\downarrow$ Increase or decrease to set pressure in all modes
- $\bigcirc$ Start flat tyre inflation, or below 3psi / 0.2bar / 20kpa

### Start-up

After services connection to the unit ensure the following:

1. For efficient tyre inflation ensure that the maximum air supply is 10 psi or 0.7 bar above the intended maximum inflation range
2. The unit will open for a very short time one deflate pulse before returning to the SET default pressure. Do not connect hose to tyre during start-up or Error 3 will show.

### Standard Operation

#### Inflation and deflation

1. Set desired pressure, by touching either $\uparrow$ or $\downarrow$
2. Connect the hose to the tyre.
3. Automatic inflation will commence to the set pressure, periodically stopping to indicate the pressure of the tyre.
4. **If the pressure in the tyre is below 3psi, 0.2bar or 20kpa, the process will not commence until $\bigcirc$ is touched.**
5. When the Set pressure is reached, the buzzer will sound and the final tyre pressure displayed.
6. Remove the hose from tyre.

For adjustments to Inflators parameters please refer to your Distributor or PCL.

#### User Inspection mode

It is possible to set the inflator to act as a pressure gauge. The display resolution is changed and can be used to reference the inflator against a calibrated pressure source. The inflator automatic cycle is inhibited.

To access:

1. Touch $\uparrow$ and $\downarrow$ together
2. Touch $\bigcirc$ 5 times
   (if this is not undertaken within 10 seconds, the Inflator reverts back to normal Inflator mode)
3. Display will show the pressures to the minimum resolution:
   psi = 0.1 / Bar = 0.01 / kpa = 1 / kg/cm = 0.01
4. Connect the hose to the tyre and the display will show the pressure in the tyre
5. When complete, touch any button to return to the last set mode.

**WARNING**

This unit is not suitable for the filling of bicycle tyres with a standard (Presta, Woods) bicycle valves and adapters. Over fill of the tyre is possible!
Wall mounting footprint

Pedestal mounting footprint
Service/Maintenance
There is no requirement to service the following items:
1. Pressure Transducer
2. Electric Control Board

If these are faulty they can only be replaced by a competent person. Please refer to an Authorised dealer.

Periodically
- Check the hose.
- Check the tyre connector.
- Remove air input supply and tyre hose from the head. Unscrew captive sintered filters from filter housings and clean or replace.

Working safety instructions
Since the unit is not explosion-proof, the device should not be installed in areas where explosions are possible. Consideration must be given to the requirements relative to Hazardous Area Standards for your region or country.

The unit is designed and built to the relevant basic health and safety requirements of the EC.

This product can be dangerous if used improperly. Children should not be allowed to use this equipment, as incorrect setting can allow tyre to be over inflated and a subsequent tyre burst/explosion can occur!

Each person who is involved with installation, start-up, maintenance and the operation of the unit must read and understand the complete operating manual.

The PCL tyre inflators are exclusively approved for the dispensing of air/N₂. Each use which doesn’t follow this purpose as well as modifications to the product will be deemed to be improper use. The manufacturer is not liable for damages caused by improper use, the risk lies solely with the user.

Proper use of the product also implies the observance of the manufacturers instructions with regard to installation, start-up, operation and maintenance.

All works concerning installation, start-up, adjustment and maintenance must be made by qualified staff. For the operation of this tyre pressure inflator the local safety and accident prevention rules must be observed in all cases.

High Pressure air is stored within the system.

When using N₂P mode, locate this system in a well ventilated area. Position the system away from any heat source.

Do not exceed the maximum air input pressure.

Do not operate this product if tired or under the influence of medication, drugs or alcohol.

To avoid the risk of personal injury, especially to the eyes, face or skin DO NOT direct the air/N₂ stream at any person.
## Trouble Shooting Guide/Error Messages

Errors are indicated either by a continuous bleep or the pointer indicating an error number in the window at the bottom of the dial.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>No inflation process</td>
<td>Tyre is below 3 psi</td>
<td>Press flat tyre button</td>
</tr>
<tr>
<td></td>
<td>Faulty connector</td>
<td>Replace faulty connector</td>
</tr>
<tr>
<td>Buzzer does not sound</td>
<td>Buzzer volume has been turned off</td>
<td>Turn buzzer on</td>
</tr>
<tr>
<td></td>
<td>Buzzer is damaged</td>
<td>Replace buzzer</td>
</tr>
<tr>
<td>Inflation process starts but does not complete</td>
<td>Low or no supply pressure</td>
<td>Check supply pressure</td>
</tr>
<tr>
<td></td>
<td>Leaks exist</td>
<td>Confirm leaks do not exist</td>
</tr>
<tr>
<td>Supply pressure leaks out input</td>
<td>Input and tyre hoses are incorrectly reversed</td>
<td>Ensure input connection is to offset port, tyre connection is central between input and exhaust</td>
</tr>
<tr>
<td>Inflating or deflating is very slow</td>
<td>Check that mesh filters under input and output port fittings are blocked</td>
<td>Clean and or replace mesh filters</td>
</tr>
<tr>
<td>Connector will not seal to the tyre stems</td>
<td>Connector worn</td>
<td>Replace connector</td>
</tr>
<tr>
<td>Connector leak while not connected to tyres</td>
<td>Connector worn</td>
<td>Replace connector</td>
</tr>
<tr>
<td>Continuous Bleep</td>
<td>Pointer failed to home</td>
<td>Refer to authorised repairer</td>
</tr>
<tr>
<td>E1 indicated on dial</td>
<td>Unstable or insufficient supply pressure</td>
<td>Check the supply pressure</td>
</tr>
<tr>
<td>E2 indicated on dial</td>
<td>Small volume, caused inflator to check pressure &gt; 2bar / 29psi over target pressure</td>
<td>Check hose is not kinked or blocked, ensure a OPEN END connector is installed</td>
</tr>
<tr>
<td>E3 indicated on dial</td>
<td>Inflator started under pressure i.e. is connected to tyre or a CLOSED END connector is being used</td>
<td>Remove hose from tyre and allow inflator to reset Change connector to OPEN END type</td>
</tr>
<tr>
<td>E4 indicated on dial</td>
<td>Pressure sensor drift out</td>
<td>New sensor required Refer to authorised repairer</td>
</tr>
<tr>
<td>E5 indicated on dial</td>
<td>Pressure sensor failure - high/low</td>
<td>New sensor required Refer to authorised repairer</td>
</tr>
<tr>
<td>E6 indicated on dial</td>
<td>Voltage - high/low</td>
<td>Check power supply Refer to authorised repairer</td>
</tr>
<tr>
<td>E7 indicated on dial</td>
<td>Checksum corrupted</td>
<td>New PCB required Refer to authorised repairer</td>
</tr>
<tr>
<td>E8 indicated on dial</td>
<td></td>
<td>Refer to authorised repairer</td>
</tr>
</tbody>
</table>
PCL LIMITED WARRANTY

PCL warrants the components of each unit to which this Limited Warranty applies against defects in materials and workmanship for a period of twelve (12) months from date of sale (as evidenced by bill of sale or equivalent) or for a period of eighteen (18) months from date of shipment from PCL manufacturing facility (identifiable by the serial number and noted on original bill of lading from the manufacturing facility), whichever period is shorter. During this warranty period and subject to the conditions set forth in this statement, PCL will, at its option, repair or replace component parts that were defective at the time of shipment from PCL manufacturing facility, subject, however, to the following specific EXCLUSIONS: hoses and connections.

Repair or replacement will not extend the warranty period.

Customer must give PCL timely notice of any warranty claim by contacting an authorized PCL service centre. Claims must be accompanied by (1) evidence, by a bill of sale or equivalent, which clearly establishes date of purchase of the unit and (2) the serial number, found on the unit. Customers must properly pack parts in their original or equivalent packaging, prepay shipping charges, and insure the shipment or accept the risk for loss or damage in shipment. Return shipment to customer will be freight collect unless otherwise agreed. For service at a customers location, customer will be charged the then prevailing service rates.

The Limited Warranty applies to PCL manufactured units only. Items listed in the applicable operators manual under routine maintenance are not covered by this or any other warranty. Failure to complete maintenance as stated in any applicable maintenance schedule will void the Limited Warranty. The Limited Warranty is expressly conditioned upon proper and normal use and service of the unit and upon strict compliance by customer with all of PCL instructions and recommendations for installation, operation and maintenance. The Limited Warranty does not apply to the unit or parts that are damaged or become defective due to improper handling, maintenance, storage, use, or operation, and does not cover ordinary wear and tear, corrosion, or erosion.

THE LIMITED WARRANTY SET FORTH IN THIS STATEMENT CONSTITUTES PCL'S SOLE WARRANTY FOR THE UNIT AND THE REMEDIES SET FORTH HEREIN CONSTITUTE CUSTOMERS SOLE REMEDIES FOR BREACH OF WARRANTY. THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, IN FACT OR BY LAW, INCLUDING WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Determination of the suitability of the unit for the use contemplated by the customer is the sole responsibility of the customer. PCL shall not, under any circumstances, be liable in contract, tort or otherwise (including negligence and strict liability) for indirect, special, incidental, or consequential damages, and PCL’s total liability shall not exceed the net purchase price for the unit. PCL shall be excused for delay or inability to perform obligations due to events beyond its reasonable control.

Warranty Registration
Please complete and mail this form to activate warranty
Or visit us at www.pclairtechnology.com

Name ______________________________ Title ______________

Mail to:

Warranty Department
PCL
Holbrook Rise
Holbrook Industrial Estate
Sheffield
S20 3GE
United Kingdom

Company Name __________________________________________

Type of Business _________________________________________

Address ________________________________________________

City __________________ State ____________ Zip ______

Telephone __________________________

Part Number __________________ Serial No ________________

Purchased From _________________________________________

Purchase Date __________________________
Calibration Certificate

Each unit, before release, is checked and calibrated on test equipment that has accuracy traceable to Druck pressure indicator S/N2329290.

The Druck unit is referenced to Certificate 0029346 issued by UKAS Laboratory No. 0221. This accuracy exceeds EC Directive 86/217/EC and BS EN 12645:2014 (MPE = 0.08 bar).

<table>
<thead>
<tr>
<th>READING</th>
<th>SET PRESSURE</th>
<th>ACTUAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BAR</td>
<td>PSI</td>
</tr>
<tr>
<td>2</td>
<td>BAR</td>
<td>PSI</td>
</tr>
</tbody>
</table>

This Equipment also complies with the EC directives:

- 2004/108/EC (EMC directive) confirmed by report No.10655/TR/1
  This device has conformity under PTB approval Nr. 18.08.04.01

Emission: EN 61000-6-3:2007 Electromagnetic compatibility Generic standards
EN 61000-3-2:2006; EN 61000-3-3:1995 +A1+A2

EN61000-4-8:1993+A1:2001