



OPERATING and MAINTENANCE, MANUAL

Balloon Light Model BL2000

Code: B



**Utility Equipment
P.O. Box 868 - 501 Sanford Ave
Mocksville, N.C. 27028**

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This manual contains instructions and technical data to cover all routine operation and scheduled maintenance tasks by operation and maintenance staff. Major overhauls are outside the scope of this manual and should be referred to an authorized Ingersoll-Rand service department.

Details of approved equipment are available from Ingersoll-Rand Service departments.

The use of repair parts other than those included within the Ingersoll-Rand approved parts list may create hazardous conditions over which Ingersoll-Rand has no control. Therefore, Ingersoll-Rand cannot be held responsible for equipment in which non-approved repair parts are installed.

Ingersoll-Rand reserves the right to make changes and improvements to products without notice and without incurring any obligation to make such changes or add such improvements to products sold previously.

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SECTION 1 - SAFETY



SAFETY

PRECAUTIONS FOR USE

- Protect the envelope from aggressive external contacts (projectiles, electric wires, walls, trees, animals, etc.)
- Do not clean the balloon with a solvent.
- If the envelope gets damp, dry before storing.
- Do not kick the balloon.
- To extend bulb lifetime, avoid touching the bulbs with your bare hands. Use the glove provided.
- Do not cut the electric cable.
- Do not switch on the balloon if the cable is wound.
- Make sure that the tripod or crane is stable and firmly anchored in windy conditions.
- Do not use the BL2000B if wind speed exceeds 50MPH (80km/h).
- Generator set: minimum recommended capacity: 2.5kw-120V-20A. Be careful of phase unbalance if several devices are connected to the same generator.

Storage:

- Store the BL2000B in its storage Bag.
- Store in a dry, ventilated area.
- Do not store the BL2000B near a heat source.
- Do not store the BL2000B near chemical products.
- Do not store anything else in the case that may interfere with the envelope or equipment provided.

Transporting the Balloon:

- Transport the balloon in it's case.

SECTION 2- WARRANTY



WARRANTY

- The balloon envelope is guaranteed 6 months from the date of purchase against any manufacturing defects and under normal conditions of use.
- The rest, except for “consumables” such as bulbs, fuses, etc., is guaranteed one year from the date of purchase against any manufacturing defects and under normal conditions of use.
- In the event of a manufacturing defect or incorrect operation, return the balloon to your IR distributor.
- IR cannot be held responsible for improper handling by the user. Any operation on the envelope or electric equipment that is not specified in this manual, or any use of unapproved tools, components or bulbs is not covered by this warranty and remains the sole responsibility of the user.
- Using a bulb of general use may cause destruction of the envelope. All use of such bulb other than IR referenced bulb cancels the warranty.

LIMITED WARRANTY

Ingersoll-Rand, through its distributors, warrants to the initial user that each BL2000B will be free of defects in material and workmanship for a period of twelve (12) months from shipment to the initial user. The balloon envelope for a period of six (6) months from shipment to the initial user.

Ingersoll-Rand will provide a new part or repaired part, at its election, in place of any part, which is found upon its inspection to be defective in material and workmanship during the period prescribed above.

Labor cost to replace the part is the responsibility of the user. User must present proof of purchase at the time of exercising warranty.

The above warranty does not apply to failures occurring as a result of abuse; misuse, negligent repairs, corrosion, erosion and normal wear and tear, alterations or modifications made to the product without express written consent of Ingersoll-Rand; or failure to follow the recommended operating practices and maintenance procedures as provided in the product's operating and maintenance publications.

Accessories manufactured by others, including, but not limited to, engines, shall carry whatever the manufacturers have conveyed to Ingersoll-Rand and which can be passed on to the initial user.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, (EXCEPT THAT OF TITLE), AND THERE ARE NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.

Section 3 - Warranty Registration



WARRANTY REGISTRATION

Registration

Fill out the Warranty Registration Form in this section, keep a copy for your records and mail form to:

Ingersoll-Rand Company
Utility Equipment
P.O. Box 868
Mocksville, North Carolina 27028
Attn: Warranty Department

Warranty Registration

Selling Distributor	Servicing Distributor	WARRANTY REGISTRATION
Name _____	Name _____	Owner/User Name _____
Address _____	Address _____	Address _____
City _____	City _____	City _____
County _____	County _____	County _____
State _____	State _____	State _____
Zip Code _____	Zip Code _____	Zip Code _____
Telephone _____	Telephone _____	Telephone _____

Complete the Applicable Blocks Owner / User Type of Business (check one only)

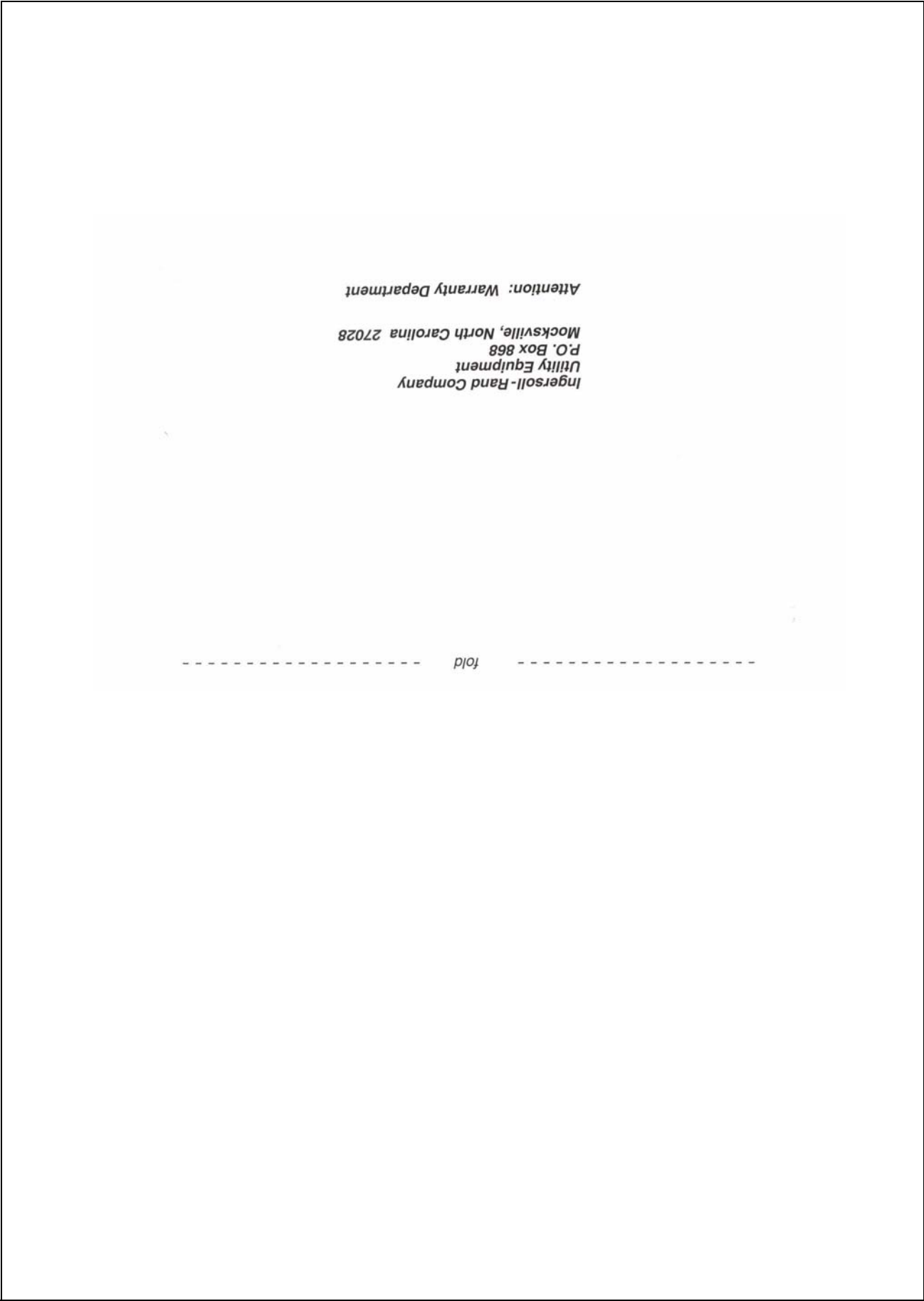
<input type="checkbox"/> Construction-Heavy (highway, excavation, etc.)	<input type="checkbox"/> Asphalt Contractor	<input type="checkbox"/> Coal Mining	<input type="checkbox"/> Other Mining
<input type="checkbox"/> Construction-Light (carpentry, plumbing, pools, mason, etc.)	<input type="checkbox"/> Government (municipal, state, county, etc.)	<input type="checkbox"/> Quarry	<input type="checkbox"/> Shallow Oil & Gas
<input type="checkbox"/> Rental (rental center, rental fleet, etc.)	<input type="checkbox"/> Building Contractor	<input type="checkbox"/> Waterwell	<input type="checkbox"/> Utility Company
<input type="checkbox"/> Industrial (plant use)	<input type="checkbox"/> Other specify	<input type="checkbox"/> Exploration	<input type="checkbox"/> Utility Contractor

Model	Unit S/N	Engine S/N	Date Delivered
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Model	Unit S/N	Engine S/N	Date Delivered
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

SERVICING DISTRIBUTOR/USER ACKNOWLEDGEMENT

1. The Purchaser has been instructed and/or has read the manual and understands proper preventative maintenance, general operation and safety precautions.
2. The warranty and limitation of liability has been reviewed and understood by the owner/user.
3. In the event that this unit is to be used within a nuclear facility, the owner/user shall notify Ingersoll-Rand of such use so that Ingersoll-Rand may arrange for appropriate nuclear liability protection from the owner-licensee of the facility.
4. Ingersoll-Rand reserves the right to make design changes or modifications of Ingersoll-Rand products at anytime without incurring any obligation to make similar changes or modifications on previously sold units.



Section 4 - General Data



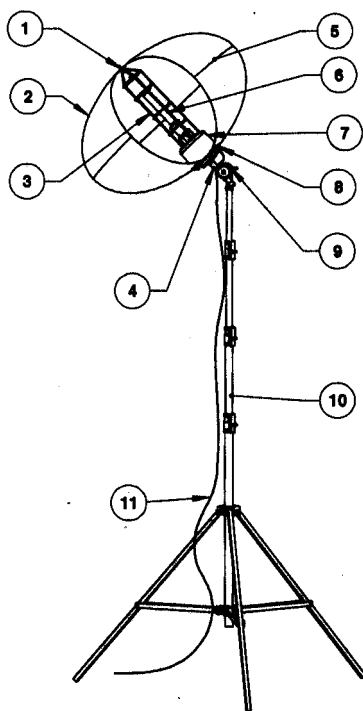
GENERAL DATA

Power Requirements	2000 Watts/2kw
Number of Lamps	2 x 1000W
Power Supply	
Amps	19.2 amps
Volts	110-130
Diameter	43.3 in/1.1M
Material	Woven Compound
Operating Height	25m to 5m/7.5 ft to 15 ft
Inflation Time	45 seconds
Weight	17 lbs/8kg
Wind Speed Resistance	63 mph/100 kmh
Surface Area Lit	2500m ² /26909 ft ²

SECTION 5 - BALLOON



Balloon Description



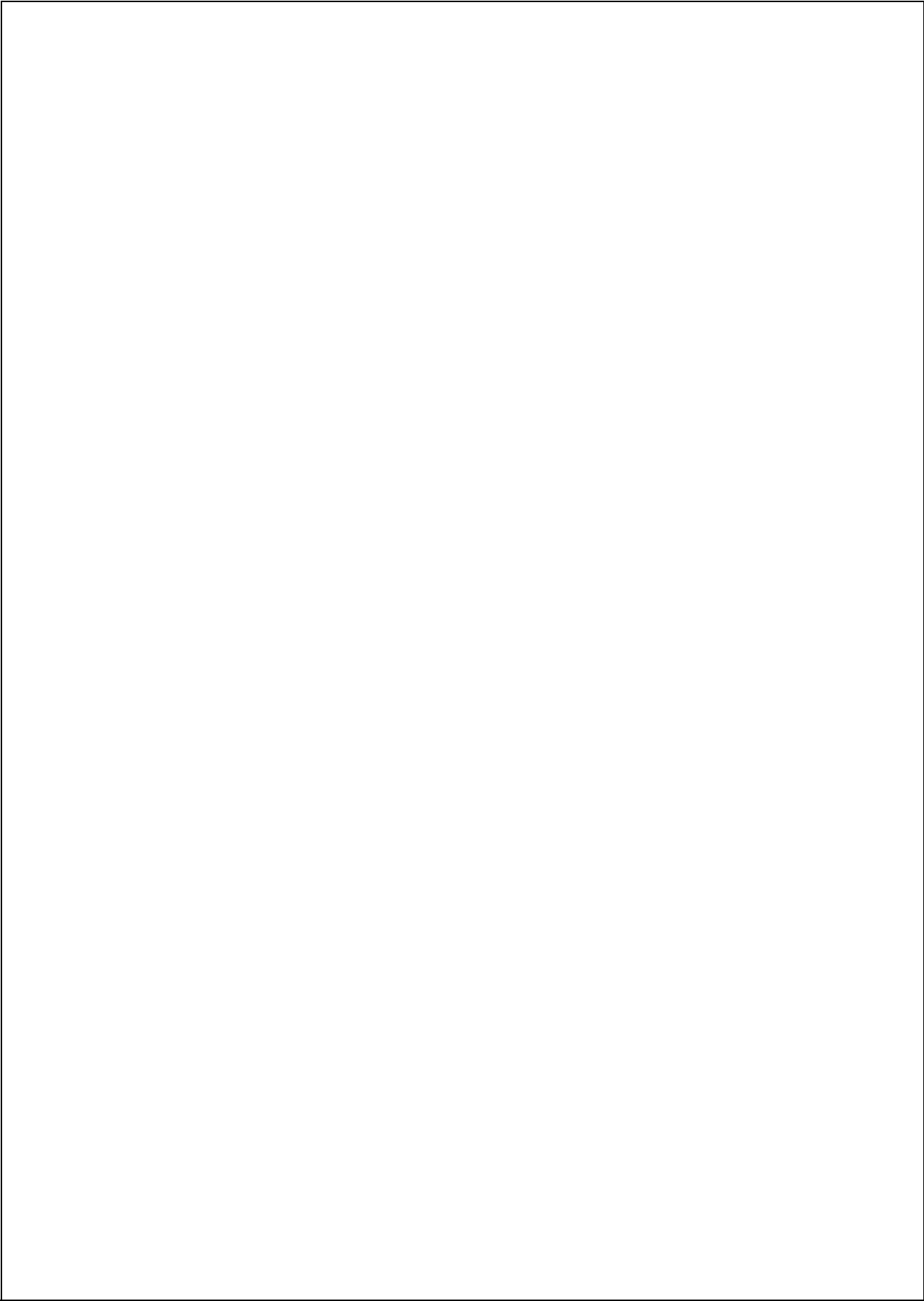
Identification

1. Nut
2. Envelope
3. Protection bowl (The polycarbonate bowl should be cleaned with a damp cloth). Bowl needs to be completely dry before use.
4. Support stand
5. Zip
6. Bulbs
7. Cover
8. South pole
9. Tilting head
10. Pole
11. Power supply cable

SECTION 5 - BALLOON

List of Parts

- 1 Internal equipment (bowl, base, support stand)
- 2 bulbs
- 1 accessory kit (glove, thumb wheels, nut, fuses)
- 1 repair kit (2 sheets)
- 1 storage bag
- 1 packing foam
- 1 user manual



SECTION 6 - ASSY/INSTALLATION



Assembly and Installation

ASSEMBLY - Unfolding the Envelope

- Unfold the envelope on a smooth, clean surface.
- Open the zip.
- **Assembling the Equipment**
- Wear the glove to handle the bulb. We recommend cleaning the bulb with ethylated spirits before each use.
- Bulbs should come with each balloon light. Bulbs do not screw in.
- Close the zip.

Installation - Positioning

- Fix the balloon on the optional/pole.
- Use of the tilting device is optional. If used, make sure the handle is tight.

Inflation and Switching On

- Connect the BL2000B's power plug to its power source.
- As soon as it is plugged in, it will start to inflate and light will come on.

Safety Systems

- Make sure the balloon is always under surveillance.

SECTION 6 - ASSY/INSTALLATION

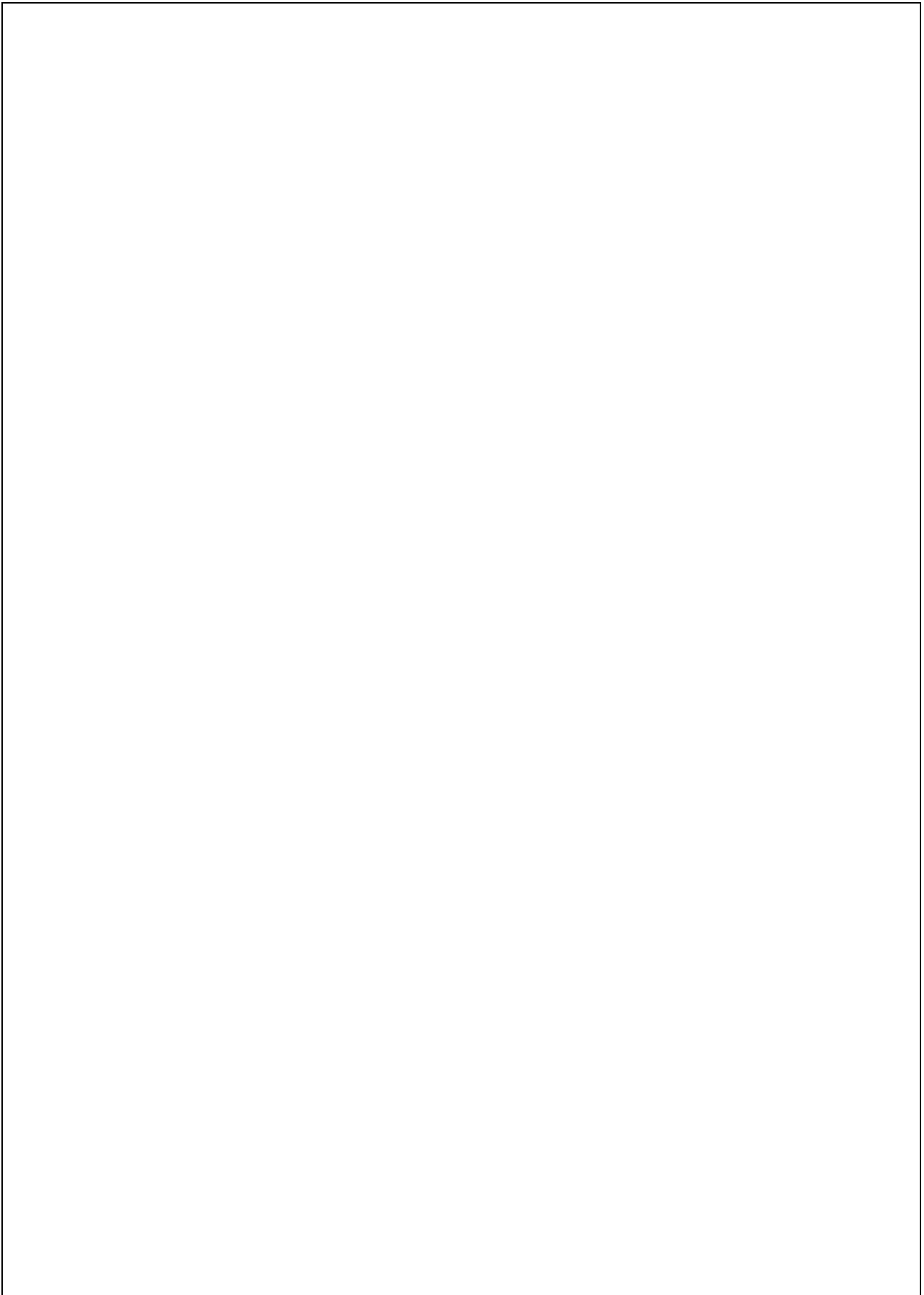
Disassembly

Deflation

- Disconnect the BL2000B.
- Take the BL2000B off its optional pole.
- Wait 5 minutes for the bulb to cool.
- Open the zip to accelerate deflation.

Folding and Storage

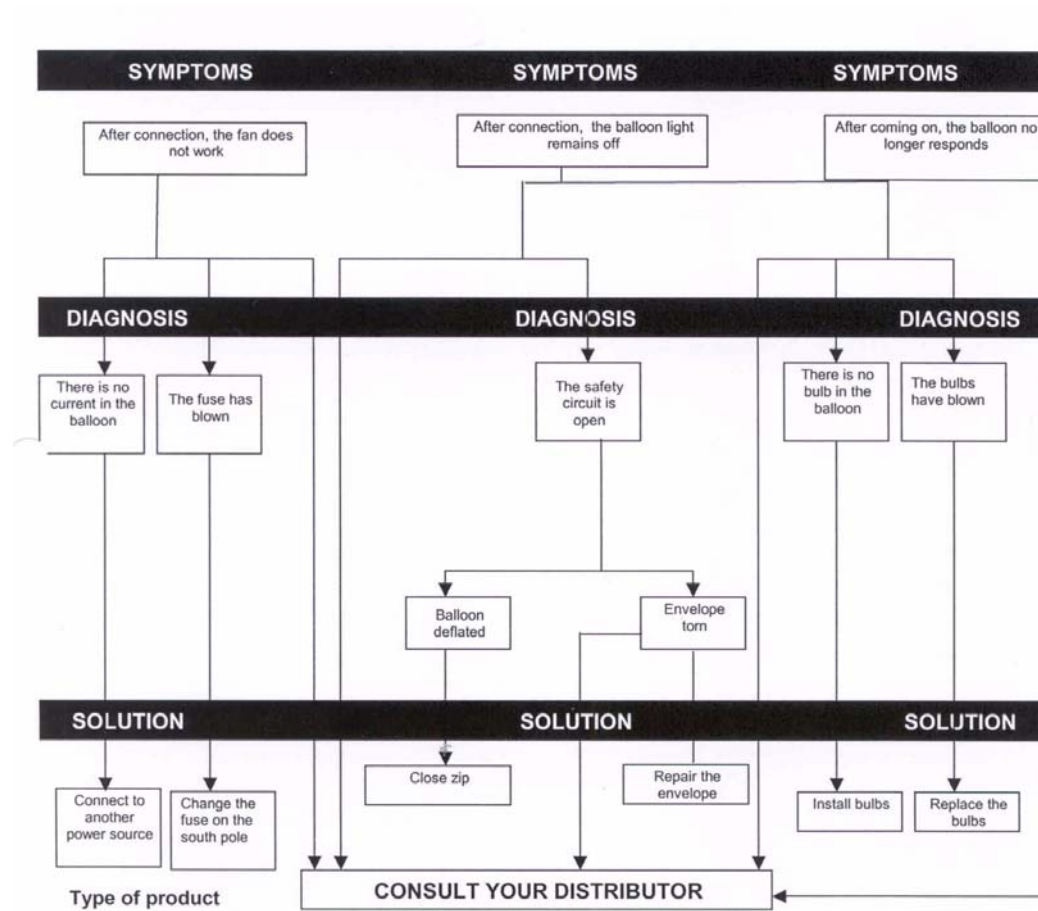
- Place the BL2000B in its storage bag.



SECTION 7- TROUBLESHOOTING



MALFUNCTIONS and SOLUTIONS



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