FOR YOUR SAFETY

Do not use this torch in a space where gasoline or other liquids having flammable vapors are stored or used.

CAUTION

The appliance area shall be kept clear and free from combustible materials, gasoline, and other flammable vapors and liquids.

WARNING

Do not use open flame (matches, torches, candles, etc.) in checking for gas leaks. A fire or explosion may result.

WARNING

L.P. gas is extremely flammable, heavier than air and does not disburse readily. If gas is smelled, evacuate the area immediately and call your fire department.

We, at L.B. White, thank you for your confidence in our products and welcome any suggestions or comments you may have...contact us at 1-800-345-7200, or email us at customerservice@lbwhite.com.

SCAN THIS QR CODE with your smartphone or visit http://goo.gl/nvneR to view maintenance videos for L.B. White heaters.*

*Requires an app like QR Droid for Android or QR Reader for iPhone.

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Model | Output (Btuh) | Fuel                      |
-------|---------------|---------------------------|
156 (Industrial 250)  | 250,000       | LP Vapor Withdrawal       |
164 (Industrial 365N)| 365,000       | Natural Gas               |
166 (Bertha 500)     | 500,000       | LP Vapor Withdrawal       |
168 (Bertha 200)     | 200,000       | LP Vapor Withdrawal       |
**WARRANTY**

**A. Equipment**
L.B. White Co., Inc. warrants that the component parts of its heater are free from defects in material and workmanship, when properly installed, operated, and maintained in accordance with the Installation and Maintenance Instructions, safety guides and labels contained with each unit. If, within 24 months from the date of purchase by the end user, any component is found to be defective, L.B. White Co., Inc. will at its option, repair or replace the defective part or heater, with a new part or heater, F.O.B., Onalaska, Wisconsin.

Registering your product online with L.B.White will automatically qualify a unit and its component parts for warranty consideration. If a product has not been registered with L.B.White, a copy of the bill of sale will be required to establish warranty qualification. If neither is available, the warranty period will be 24 months from date of shipment from L.B. White.

**B. Parts**
L.B. White Co., Inc. warrants that replacement parts purchased from the company and used on the appropriate L.B. White equipment are free from defects both in material and workmanship for 24 months from the date of purchase by the end user. Warranty is automatic if a component is found defective within 24 months of the date code marked on the part. If the defect occurs more than 24 months later than the date code but within 24 months from the date of purchase by the end user, a copy of a bill of sale will be required to establish warranty qualification.

The warranty set forth above is the exclusive warranty provided by L.B. White, and all other warranties, including any implied warranties or merchantability or fitness for a particular purpose, are expressly disclaimed. In the event any implied warranty is not hereby effectively disclaimed due to operation of law, such implied warranty is limited in duration to the duration of the applicable warranty stated above. The remedies set forth above are the sole and exclusive remedies available hereunder. L.B. White will not be liable for any incidental or consequential damages directly or indirectly related to the sale, handling or use of the equipment, and in any event L.B. White’s liability in connection with the equipment, including for claims based on negligence or strict liability, is limited to the purchase price.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

To register your product and ensure full warranty, go to http://www.lbwhite.com/customer_care_center/product-registration
Please have the serial number(s) and model(s) handy for the products you are registering.

**GENERAL INFORMATION**

This Owner’s Manual and all safety-related information as shipped with this torch are to remain with the torch.

Read this Owner’s Manual and any other safety-related information accompanying this torch before attempting to install, use, or service it.

Save this manual and all other safety-related information for future reference.

The manufacturer assumes no responsibility for torches installed in violation of any code or regulation, or misapplication. This manual will instruct you in the service and care of your torch. Have your installer review this manual with you so that you fully understand the torch and how it functions.

Contact your local L. B. White distributor or the L. B. White Co., Inc. for assistance, or if you have any questions about the use of the equipment or its application.

The L. B. White Co., Inc. has a policy of continuous product improvement and parts standardization. It reserves the right to change specifications and design without notice.

**SAFETY PRECAUTIONS**

1. Read all Safety Instructions and follow L. B. White recommendations when installing this torch
2. Always use pipe joint compound that is resistant to LP gas and natural gas.
3. Check all connections with approved leak detectors.

**GENERAL HAZARD WARNING**

Failure to comply with the precautions and instructions provided with this torch can result in death, serious bodily injury and property loss or damage from hazards of fire, explosion, burn, asphyxiation, carbon monoxide poisoning, and/or electrical shock.

Only persons who can understand and follow the instructions should use or service this torch.

If you need assistance or torch information such as an instructions manual, labels, etc., contact the manufacturer.

**WARNING**

Fire, burn, inhalation, and explosion hazard. Keep solid combustibles, such as building materials, paper or cardboard, a safe distance away from the torch as recommended by the instructions. Never use the torch in spaces which do or may contain volatile or airborne combustibles, or products such as gasoline, solvents, paint thinner, dust particles or unknown chemicals.
4. All of L. B. White Co., Inc.’s torches must meet the requirements of local, state and national L.P. gas and natural gas, electrical and safety codes. Your gas supplier, local licensed electrician, local fire department, and governmental agencies can help you determine these requirements. In absence of local codes, comply with the Standard for Storage and Handling of Liquefied Petroleum Gas, ANSI/NFPA 58-Latest Edition. If you are still in doubt, contact the L. B. White Co.

5. Do not use the torch in unventilated areas. Adequate ventilation must be provided. Use of torches in unventilated, tightly-enclosed areas or living quarters may cause death or serious bodily injury due to asphyxiation.

6. Torches equipped with a safety control valve and thermocouple assembly are designed to automatically shut off the gas supply if the flame is extinguished. If the torch flame becomes extinguished, immediately close all fuel supply valves. Do not relight until you are sure that all gas that may have accumulated has cleared away. In any event, do not relight for at least 5 minutes before relighting.

7. Constant supervision of the torch is required when in operation.

8. Ensure the torch receives the proper operating pressure. See page 5 for operating pressures of the specific torch. Do not operate torch above prescribed operating pressure. Excess pressure may cause blowout of flame resulting in explosion with death or serious bodily injury.

9. Do not direct flame toward the gas cylinder as heat causes increased pressure. The safety valves on the cylinder may open releasing gas into the air, which can explode if ignited by the torch flame.

10. Keep the torch and its exposed flame away from all combustible materials (paper, cardboard, building materials, etc.)

11. Keep all gas cylinders out of enclosed areas.

12. Use of an incorrect hose, regulator, POL fitting, or excess flow valve may lead to gas leaks and explosion or asphyxiation. If the torch is purchased without these items, or if these items are lost or damaged, contact the L. B. White Co. to obtain information on the correct parts to use with each torch.

13. Incorrect assembly of torch can result in fire, explosion, death, or bodily injury from asphyxiation due to gas leaks.

14. Follow assembly and operating instructions in owner’s manual supplied with each torch, before using torch. If an owner’s manual is lost or not available, contact L. B. White to obtain a copy on the correct parts to use with each torch.

15. If you suspect a gas leak or smell gas odor, EXTINGUISH ALL FLAMES AND SPARKS IMMEDIATELY. CALL YOUR LP GAS DEALER AND YOU FIRE DEPARTMENT.

16. LP gas is heavier than air and settles in low areas. Do not install LP gas burning equipment in an area where gas may settle.

17. Inspect the torch at time of use for gas leaks and at least once a month and whenever accidental damage occurs. Any damage to the torch must be repaired immediately by a qualified service person.

18. If the torch is not operating properly, remove from service immediately. Have it repaired and tested by an authorized person before placing it back into service.

19. Use only L. B. White replacement parts on our torches.

20. This torch shall not be used for heating living quarters.

21. The hose assembly shall be visually inspected prior to each use of the torch. If it is evident there is excessive abrasion or wear, or if the hose is cut, it must be replaced prior to the torch being put into operation. The hose assembly shall be protected from traffic, building materials and contact with hot surfaces during use and while in storage. The replacement hose shall be that specified by the manufacturer. (See parts selection on page 5 for specific torch.)

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**WARNING**

Do not use a pressure washer, water, or liquid cleaning solution on any safety control components. Use of a pressure washer, water, or liquid cleaning solution on the safety control components can cause severe personal injury or property damage due to water and/or liquids:

* Causing corrosion which can result in gas leaks and fire or explosion from the leak.

Clean all components of the torch with a dry brush or dry cloth.

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**ASSEMBLY INSTRUCTIONS**

1. Assemble according to the instructions provided on page 5 for specific torch.

2. The unit’s gas regulator (with pressure relief valve) must be installed so its vent is pointed downward.

**LIGHTING INSTRUCTIONS**

1. Read all safety instructions accompanying the torch.

2. Light according to instructions within this manual.

3. Insert the regulator’s POL fitting into propane cylinder and tighten with wrench. (POL and cylinder valve have left-hand threads.)
4. Close manual burner valve by turning valve handle according to arrow on valve.

5. Open propane cylinder valve slowly and check all connections for gas leaks with approved leak detectors at every connection. Correct any leak by tightening or disassembling leaking joint, reapplying pipe compound and retightening the joint securely. Replace the component if the leak cannot be stopped.

6. If torch will not light, close manual valve at torch. Close the cylinder valve and wait for 1 minute to allow the regulator’s excess flow valve to reset itself. Open the cylinder valve very slowly.

A. Model 156, and 164 Torches

1. Fully depress the button on the pilot safety control while applying flame to the pilot orifice.

2. Keep the button depressed on the safety control until the thermocouple warms up so the pilot stays lit after the control button is released.

3. Open manual main burner valve on the torch so main burner ignites.

B. Model 166, and 168, Torches

1. Open manual main burner valve on torch about 1/8 turn.

2. Apply a flame to torch outlet until gas lights.

3. Open manual valve completely.

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**SHUT-DOWN INSTRUCTIONS**

1. Close cylinder valve and allow torch to burn off any gas remaining in the gas supply hose.

2. Close manual valve on torch handle.

3. For storage, the connection between the LP gas cylinder(s) and the torch must be disconnected. The cylinder(s) must be moved from torch and stored in accordance with Chapter 5 of Storage and Handling of Liquified Petroleum Gases ANSI/NFPA 58-latest edition.

**MAINTENANCE INSTRUCTIONS**

1. Shut off all gas supply valves before cleaning or performing maintenance procedures.

2. The torch should have all dust, dirt, or lint removed as necessary to ensure a clean unit. Special attention should be given to the primary air openings, controls, pilot light and burner.

3. Check all gas piping annually for leaks or restrictions in gas lines.
Model 156 (Industrial 250) 250,000 btu/h Operating Pressure 25 PSIG LP Gas

Connect hose nuts to adapter at inlet of safety control valve and at regulator outlet. Tighten securely.

Models 166 (Bertha 500) and 168 (Bertha 200) Operating Pressure 25 PSIG LP Gas

-- Connect hose to adapters at manual valve and regulator outlet. Ensure all connections are tightened securely.

Note: A gas regulator is not included in the torch kit, but is required for proper use when connecting to a propane gas supply container.

Model 164 (Industrial 365N) Max. 15 PSIG /Min. 10 PSIG Pressure to Regulator, Operating Pressure 7 PSIG

Model 164 torch is pre-assembled. The gas hose is an accessory, part number 20704 (1/2 in. ID x 10 ft.)