

Warranty Policy

EQUIPMENT

L.B. White Co., Inc. warrants that the component parts of its equipment 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 12 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 equipment, with a new part or equipment, F.O.B., Onalaska, Wisconsin.

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 12 months from the date of purchase by the end user. Warranty is automatic if a component is found defective within 12 months of the date code marked on the part. If the defect occurs more than 12 months later than the date code but within 12 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 im-

plied 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.

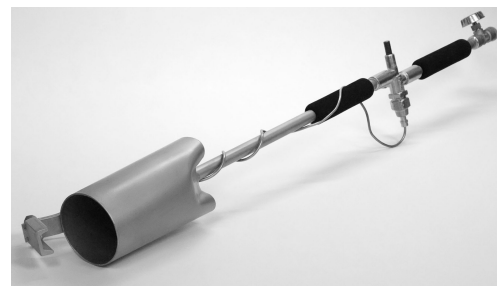
Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific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

Replacement Parts and Service

Contact your local L.B. White dealer for replacement parts and service or call the L.B. White Co., Inc. at (800) 345-7200 for assistance. Be sure that you have your heater model number and configuration number when calling.



Owner's Manual and Instructions TORCHMAN® SV Hand Held Torch



MODEL	OUTPUT (BTUH)	FUEL
173B	300,000	Propane Vapor Withdrawal



Congratulations!

Your new L.B. White torch incorporates the benefits from the most experienced manufacturer of heating products using state-of-the-art technology.

We, at L.B. White, *thank you* for your confidence in our products and welcome any suggestions or comments you may have...call us toll free at (800) 345-7200.

ATTENTION ALL USERS

This torch has been designed and tested by L.B. White as a direct gas-fired hand held torch intended for temporary use in industrial, farm, or construction applications where strong, direct, localized heat is required. If you are considering using this product for any application other than its intended use, then please contact your fuel gas supplier, or the L.B. White Co., Inc.

150-28482



Quality heaters you can count on.

170238 L.B. White Rd., Onalaska, WI 54650 ■ (800) 345-7200 ■ (608) 763-5691 ■ (608) 763-6115, fax ■ info@lbwhite.com

⚠ GENERAL HAZARD WARNING

- Failure to comply with the precautions and instructions provided with this torch can result in:
 - Death
 - Serious bodily injury or burns
 - Property damage or loss from fire or explosion
 - Asphyxiation due to lack of adequate air supply or carbon monoxide poisoning
- Read this Owner's Manual before using this torch.
- Only properly-trained service people should repair this torch.
- Save this Owner's Manual for future use and reference.
- Owner's Manuals and replacement labels are available at no charge. For assistance, contact L.B.White at 800-345-7200.

⚠ WARNING

Fire and Explosion Hazard

- Not for home or recreational vehicle use.
- Installation of this torch in a home or recreational vehicle may result in a fire or explosion.
- Fire or explosions can cause property damage or loss of life.

FOR YOUR SAFETY

If you smell gas:

1. Open windows.
2. Don't touch electrical switches.
3. Extinguish any open flame.
4. Immediately call your gas supplier.

FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

⚠ WARNING

Fire and Explosion Hazard

- Keep solid combustibles a safe distance away from the torch.
- Solid combustibles include wood or paper products, building materials and dust.
- Do not use the torch in spaces which contain or may contain volatile or airborne combustibles.
- Volatile or airborne combustibles include gasoline, solvents, paint thinner, dust particles or unknown chemicals.
- Failure to follow these instructions may result in a fire or explosion.
- Fire or explosions can lead to property damage, personal injury or loss of life.

Torch Component Function

Burner

Component used to channel gas/air mixture and provide an area at which the fuel may ignite.

Burner Orifice

Brass metering device used to feed gas to the burner at a specific rate.

Gas Hose

Flexible connector used to convey gas from gas supply to torch.

Manual Burner Valve

Used for supplying or closing off gas to the burner head.

Regulator

Used to deliver a working pressure to the torch under varying conditions in tank pressure.

Safety Control Valve

A gas control valve which is held open by electrical power supplied by the thermocouple and which closes automatically to shut off the flow of gas to the main burner when flame is extinguished or is too small to heat the thermocouple.

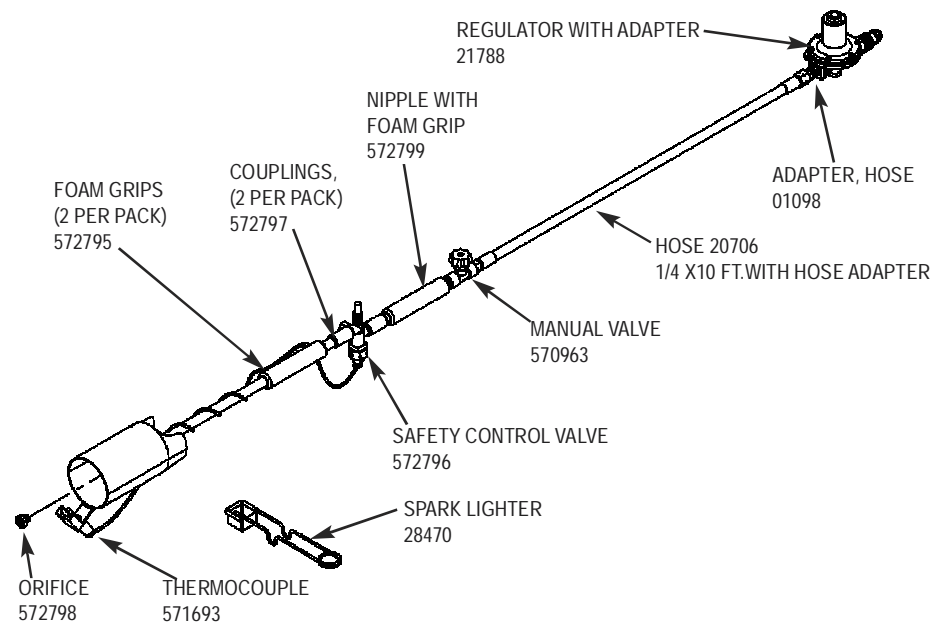
Spark Lighter

Used for safely igniting the fuel gas by creating spark when rapidly squeezing the handle.

Thermocouple

A thermoelectric device that converts heat directly into electrical energy. Works in conjunction with electromagnet in gas control valve thereby assisting in maintaining gas supply for the pilot light.

Parts Identification



Maintenance Instructions

- The area surrounding the torch shall be kept clear and free from combustible materials, gasoline, and other flammable vapors and liquids.
- Review labels at the time of maintenance for legibility. Make sure none are cut, torn, or otherwise damaged. Any damaged labels must be replaced immediately by contacting L.B.White. Labels are available at no cost.

Service Instructions

- Close the fuel supply valves to the torch and allow the torch to cool before servicing
- Do not use pliers to loosen or tighten torch components. Doing so may round off the component creating service problems. Use the appropriate wrench.
- Do not push instruments into the burner orifice hole. Doing so may enlarge or distort the hole creating improper combustion, or burner flame blow out.
 - Use only a soft brush, dry rag, or pressurized air to clean the burner orifice.
- Observe the flow direction arrow on the safety control valve and manual valve when installing replacements.
- Leak check all gas connections after performing service work. Use approved leak detectors.

Troubleshooting Information

PROBLEMS	CAUSES	REMEDIES
1. Burner will not light.	<ul style="list-style-type: none"> * Valve closed on torch or at fuel supply. * Cylinder or tank low on fuel. * Burner orifice plugged. * Gas hose blocked. 	<ul style="list-style-type: none"> * Open valves. * Fill cylinder/ tank. * Clean the burner orifice. * Remove hose and blow out with air.
2. Burner flame lifting off burner, or burner flame blows out.	<ul style="list-style-type: none"> * Blockages in burner orifice or at primary air inlets of burner. * Gas pressure too high. 	<ul style="list-style-type: none"> * Clean with soft brush, dry cloth. * Set pressure to 25 PSI.
3. Burner flame is small.	<ul style="list-style-type: none"> * Gas supply valves not fully open. * Burner orifice plugged. * Cylinder low on fuel. * The check valve in POL fitting is locked. 	<ul style="list-style-type: none"> * Open all valves. * Clean it. * Replace or refill. * Close fuel supply valve and wait to allow check valve to reset. * Allow 30 seconds to warm up.
4. Burner lights but goes out after releasing button on safety control.	<ul style="list-style-type: none"> * Insufficient time to allow thermocouple to warm up. * Loose thermocouple at control valve. * Defective thermocouple. * Defective safety control valve. 	<ul style="list-style-type: none"> * Tighten it. * Replace it. * Replace it.



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General Information

This Owner's Manual includes all options and accessories commonly used on this torch.

When calling for technical service assistance, or for other specific information, always have complete model number, and serial number available. This information is contained on the dataplate.

This manual will instruct you in the operation and care of your torch. Have your qualified installer review this manual with you so that you fully understand the torch and how it functions.

The repair and servicing of the torch requires continuing expert training and knowledge of gas appliances and should not be attempted by anyone who is not so qualified. See page 5 for definition of the necessary qualifications.

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

L.B.White Company has a policy of continuous product improvement. It reserves the right to change specifications and design without notice.

Heater Specifications

SPECIFICATIONS	Model
	173B
Fuel Type	Propane Vapor Withdrawal
Maximum Input (BTUH)	300,000
Gas Supply Pressure Required at the Torch Inlet (PSI)	25
Fuel Consumption Per Hour (lb)	13.9
Minimum Safe Distance From Propane Gas Supply Container	6 ft. (1.83 m)
Net Weight (Includes Gas Hose, Regulator and Valve)	5 lb. 2 oz.

Safety Precautions

▲ WARNING Asphyxiation Hazard

- Do not use this torch space heating or for heating human living quarters.
- Do not use in unventilated areas.
- The flow of combustion and ventilation air must not be obstructed.
- Proper ventilation air must be provided to support the combustion air requirements of the torch.
- Lack of proper ventilation air will lead to improper combustion.
- Improper combustion can lead to carbon monoxide poisoning leading to serious injury or death. Symptoms of carbon monoxide poisoning can include headaches, dizziness and difficulty in breathing.

FUEL GAS ODOR

LP gas has man-made odorants added specifically for detection of fuel gas leaks.

If a gas leak occurs, you should be able to smell the fuel gas.

THAT'S YOUR SIGNAL TO GO INTO IMMEDIATE ACTION!

- Do not take any action that could ignite the fuel gas. Do not operate any electrical switches. Do not pull any power supply or extension cords. Do not light matches or any other source of flame. Do not use your telephone.
- Get everyone out of the building and away from the area immediately.
- Close all propane (LP) gas tank or cylinder fuel supply valves.
- Propane (LP) gas is heavier than air and may settle in low areas. When you have reason to suspect a propane leak, keep out of all low areas.
- Use your neighbor's phone and call your fuel gas supplier and your fire department. Do not re-enter the building or area.
- Stay out of the building and away from the area until declared safe by the firefighters and your fuel gas supplier.
- FINALLY, let the fuel gas service person and the firefighters check for escaped gas. Have them air out the building and area before you return. Properly trained service people must repair the leak, check for further leakages, and then re-light the appliance for you.

ODOR FADING -- NO ODOR DETECTED

- Some people cannot smell well. Some people cannot smell the odor of the man-made chemical added to propane (LP) gas. You must determine if you can smell the odorant in these fuel gases.
- Learn to recognize the odor of propane (LP) gas. Local propane (LP) gas dealers will be more than happy to give you a scratch and sniff pamphlet. Use it to become familiar with the fuel gas odor.
- Smoking can decrease your ability to smell. Being around an odor for a period of time can affect your sensitivity to that particular odor. Odors present in animal confinement buildings can mask fuel gas odor.
- The odorant in propane (LP) gas is colorless and the intensity of its odor can fade under some circumstances.
- If there is an underground leak, the movement of gas through the soil can filter the odorant.
- Propane (LP) gas odor may differ in intensity at different levels. Since propane (LP) gas is heavier than air, there may be more odor at lower levels.
- Always be sensitive to the slightest gas odor. If you continue to detect any gas odor, no matter how small, treat it as a serious leak. Immediately go into action as discussed previously.

1. Slowly open the gas container supply valve to prevent lock up of the excess flow valve within the POL fitting.
 - If opened quickly, lock-up may occur, and gas flow will be blocked.
 - If this occurs, close the fuel supply valve and wait about 30 seconds for the flow device to reset itself.
 - Open the propane gas supply container valve slowly.
2. Open the manual valve on the torch about 1/4 turn.
3. Fully depress the button on the safety control valve while using the spark lighter to ignite the torch.
4. Keep the button depressed for about 30 seconds to allow the thermocouple to warm up.
5. Release the safety control button.
6. Once the burner is lit, open the torch's manual valve to the desired position.

Shut-Down Instructions

1. Close the main fuel supply valve.
2. Allow the torch to burn off any fuel gas remaining in the gas supply line.
3. Close the manual valve on the torch.

Cleaning Instructions

▲ WARNING Fire, Burn, and Explosion Hazard

- This torch contains components used in the gas management system.
- Such components may become inoperative or fail due to dust, dirt, wear and aging.
- Periodic cleaning and inspection as well as proper maintenance are essential to avoid serious injury or property damage.

1. Before cleaning, shut off all gas supply valves and disconnect gas supply.
2. Periodically give the torch assembly a general cleaning using pressurized air, a soft brush or dry rag.

▲ WARNING

Do not use a pressure washer, water, or liquid cleaning solution on torch components.

Use of a pressure washer, water, or liquid cleaning solution on the 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.

Clean the components of the torch with pressurized air, a dry brush or a dry cloth.

Torch Assembly

1. Assemble all components as shown in Fig.1. Use pipe thread compound.
2. Ensure all connections are tightened securely.
3. Connect to the propane gas supply.

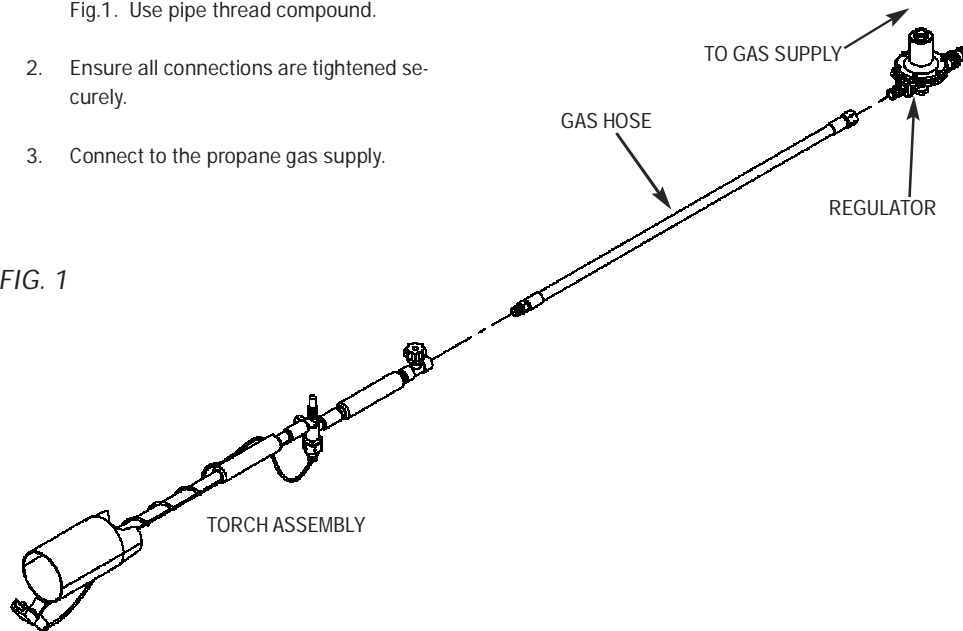
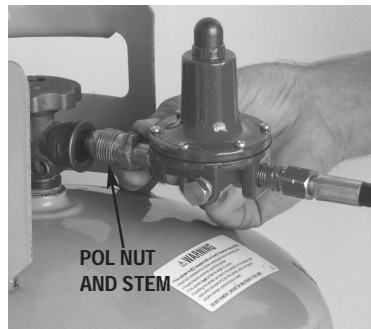


FIG. 1

Connecting the Torch to the Propane Gas Supply

1. Remove the cap from the POL. Insert POL stem into the valve on the tank. Thread the nut counterclockwise into the tank valve. Tighten the nut securely with a wrench. See Fig. 2.
2. Slowly open the tank valve. This will prevent lock-up of the excess flow valve within POL stem.
3. Check all connections with approved leak detector. Do not use flame to check for leaks. A fire or explosion may result.
4. When storing or transporting the torch, ensure the POL is protected from damage and dirt entry.

FIG. 2



⚠ WARNING

**Fire and Burn Hazard.
Can Cause Property Damage,
Severe Injury or Death**

- Torches produce an intense and extremely hot open flame.
- Always be aware of the direction of the torch's burner head relative to people and any combustible materials when the torch is lit.

⚠ WARNING

Explosion and Fire Hazard.

- Do not leave this torch unattended when in use.
- Constant supervision of the torch is required.
- Do not use this torch in an enclosure.
- Combustion air is required for safe operation.
- If combustion air is restricted, burner flame will be extinguished:
 - Gas will continue to flow and accumulate until the safety control valve closes and gas flow is stopped.
- If ignited, accumulated gas will cause explosions or fires leading to property damage, injury, or death.

1. Do not attempt to install, repair, or service this torch or the gas supply line unless you have continuing expert training and knowledge of gas heaters.

Qualifications for service and installation of this equipment are as follows:

- a. To be a qualified gas heater service person, you must have sufficient training and experience to handle all aspects of gas-fired heater installation, service and repair. This includes the task of installation, troubleshooting, replacement of defective parts and testing of the torch.

You must completely familiarize yourself with the torch by reading and complying with the safety instructions, labels, Owner's Manual, etc., that is provided with the torch.

- b. To be a qualified gas installation person, you must have sufficient training and experience to handle all aspects of installing, repairing and altering gas lines, including selecting and installing the proper equipment, and selecting proper pipe and tank size to be used. This must be done in accordance with all local, state and national codes as well as the manufacturer's requirements.

2. All installations and applications of L.B.White torches must meet all relevant local, state and national codes. Included are L.P. gas, and safety codes. Your local fuel gas supplier, the local fire department or similar government agencies, or your insurance agent can help you determine code requirements. Also refer to
 - ANSI/NFPA 58, latest edition, Standard for Storage and Handling of Liquefied Petroleum Gas
 - ANSI Z223.1/NFPA 54, National Fuel Gas Code

3. Adequate ventilation air for combustion must be provided in accordance with OSHA 29 CFR 1926.154, Temporary Heating Devices, and ANSI A10.10, Safety Requirements for Temporary and Portable Space Heating Devices, as appropriate

4. We cannot anticipate every use which may be made of our torches. Check with the local fire safety authority if you have questions about applications.

5. Do not locate fuel gas containers or fuel supply hoses within 20 ft. of the discharge of the torch.

6. Do not block air intakes or discharge outlets of the torch. Doing so may cause improper combustion or damage to torch components leading to property damage.
7. The hose assembly shall be visually inspected on a daily basis after torch relocation and when the torch is in use. 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 building materials, and contact with hot surfaces during use. The hose assembly shall be that specified by the manufacturer. See parts list.
8. Check for gas leaks and proper function upon initial use, when relocating, and after servicing. Refer to leak check instructions within installation section of this manual.
9. This torch shall be inspected for proper operation by a qualified service person before each use and at least annually.
10. Always turn off the gas supply at the LP gas supply container if the torch is not planned for immediate use.
11. If gas flow is interrupted and flame goes out, do not relight the torch until you are sure that all gas that may have accumulated has cleared away. In any event, do not relight the torch for at least 5 minutes.

12. This torch may be used with a minimum size 20 lb. capacity propane container when portability is desired. However, this size will not provide sufficient vaporization and pressure for extended torch operation. Ensure that additional 20lb. containers are available, or use a larger gas container (50 or 100 lb.).
13. When the torch is to be stored indoors, the connection between the propane gas supply cylinder(s) and the torch must be disconnected and the cylinder(s) removed from the torch and stored in accordance with the Standard for the Storage and Handling of Liquefied Petroleum Gases, ANSI/NFPA 58.
14. Propane gas supply containers have left handed threads. Always use the appropriate wrench to make a connection to tighten or loosen the POL fitting at the container's gas supply valve.
15. Always use pipe thread compound that is resistant to propane gas when making threaded connections.
16. The components on the torch that call for hand operation should work with hand pressure only. If more force is required, have a qualified gas heater service agency replace the defective part. Do not attempt to repair.

1. Read all safety precautions and follow L.B.White recommendations when using this torch. If you suspect that a part is damaged or defective, call a qualified service agency for repair or replacement.
2. Check all connections for gas leaks. Gas leak testing is performed as follows:

⚠ WARNING
Fire and Explosion Hazard

- Do not use open flame (matches, candles, etc.) in checking for gas leaks.
- Use only approved leak detectors.
- Failure to follow this warning can lead to fires or explosions.
- Fires or explosions can lead to property damage, personal injury or loss of life.

- In the event a gas leak is detected, check the components involved for cleanliness and proper application of pipe compound before further tightening.
- Further tighten the gas connections as necessary to stop the leak.
- After all connections are checked and any leaks are stopped, wait at least 5 minutes to allow gas to dissipate.
- Light the torch.
- With the torch in operation, check all connections, hose connections, fittings and joints with approved gas leak detectors.
- If a leak is detected, check the components involved for cleanliness in the thread areas and proper application of pipe compound before further tightening.
- Tighten the gas connection as necessary to stop the leak.
- If necessary, replace the parts or components involved if the leak cannot be stopped.
- Ensure all gas leaks have been identified and repaired before proceeding.

User Instructions

L.P Gas Installation Requirements

- Ensure all L.P. gas containers are secured and protected from people, vehicular traffic and contact.
- L.P. gas containers must be located on a flat, level, and stable surface.
- L.P. gas cylinders (100 cylinders/tanks) must be secured from tip-over. Contact your local authorities, L.P. gas dealers, or fire marshalls for specifics dealing with installation in your area.

3. Light according to instructions within owner's manual.
4. Use only the L.B. White regulator originally supplied with the heater. This regulator includes a POL fitting with an excess flow valve. The excess flow valve is a safety device which protects against discharge from the propane gas supply container if the regulator is broken off. If the POL fitting is ever replaced, it needs to be replaced with an L.B. White POL fitting. Failure to do so can result in fires, explosions, loss of property, injury or death.
5. This torch is configured for use for propane vapor withdrawal only. Do not use the torch in a propane liquid withdrawal system or application. If you are in doubt, contact L.B.White Company.
6. Take time to understand how to operate and maintain the torch by using this Owner's Manual. Make sure you know how to shut off the gas supply to the torch. Contact your fuel gas supplier if you have any questions.
7. Any defects found in performing any of the service or maintenance procedures must be eliminated and defective parts replaced immediately. The torch must be retested by properly qualified service personnel before placing it back into use.