INSTRUCTION MANUAL
High-Temperature Torches

Models: JT539, TS839, BZ4600SW, TS99

⚠️ DANGER

This torch is used with a flammable product. Failure to comply with these Warnings and Instructions may result in an explosion or fire that may cause property damage, serious personal injury or death.

Read and comply with the instructions and warnings in this manual and familiarize yourself with the torch before lighting and using. Review instructions and warnings periodically to maintain awareness. Do not try to operate before reading instructions.

Torches are to be used with propane only. Use only with Hand Held Propane Cylinders specifically designed for use with torches. (DOT-39 or TC-39M cylinders)

⚠️ WARNING

- Materials used in the construction of this device may contain brass (which may contain lead), a chemical known to the State of California to cause birth defects or other reproductive harm.
- Combustion by-products produced when using this device contain chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.
- Keep torch out of reach of children and anyone who has not read instructions. Do not point torch towards face, other persons or flammable objects. Never attempt to use torch as a cigarette lighter.
- Disconnect cylinder when not in use.
- Never attempt to modify the torch construction and Never use unapproved accessories or fuels.
- Be extra careful when using the torch outdoors on sunny or windy days. Bright sun makes it impossible to see the torch’s flame. Wind may carry the torch’s heat back towards you or other areas not intended to be heated. Windy conditions may also cause sparks to be blown into other areas with combustible materials.
- Treat the torch as you would any fine tool or instrument. Do not drop, throw, or otherwise abuse.
- Do not use a leaking, damaged or malfunctioning torch.
- Radiant energy can harm your eyes. Wear goggles having ANSI 287.12979 shade lens number appropriate to the torch operation as indicated; brazing and light cutting (3 or 4), medium cutting and light welding (4 or 5), heavy cutting and medium/heavy welding (5-8).
- Never use torch to strip paint.
- Heating a surface may cause heat to be conducted to adjoining surfaces that may be combustible or become pressurized when heated. Always check to make sure no unintended parts or materials are being heated.
- Work only in well-ventilated areas. Avoid the fumes from fluxes, lead-based paint, and all metal heating operations. Be especially careful to avoid fumes from cadmium plating and galvanized metal- remove these coatings in the area to be heated by filing or sanding prior to heating.
- Avoid contact of flux with skin or eyes.
- Always wear safety glasses, protective gloves and use proper tools to handle hot work.
- Be aware that the tip of the torch can get extremely hot during use. Take precautions to protect yourself and others from accidental burns.
- Never use the torch on or near combustibles. Be especially careful around motor vehicles or any gasoline-fired products and beware of hidden fuel lines and tanks.
- Always make certain the torch is placed on a level surface when connected to the fuel cylinder to reduce the risk of accidental tip over. Be sure the torch is not pointed in a direction which could cause nearby objects to ignite when the torch is set down.
- Never leave the torch unattended when lit.
- Never attempt to repair or heat a gasoline tank, a chemical drum an aerosol can, a compressed gas container that held flammable liquid or gas or any other chemical. Heating these is extremely dangerous, especially after they have been “emptied”.

DO NOT DISCARD THESE WARNINGS AND INSTRUCTIONS

200 Old Wilson Bridge Road
Columbus, OH USA 43085
(866) 928-2657
worthingtoncylinders.com | bernzomatic.com
• When thawing pipes, be very careful not to overheat surrounding materials. Use heat shield.
• Always have a fire extinguisher and a bucket of water near the torch and work area.
• This torch consumes oxygen and must only be used in well ventilated areas. Do not use in a confined space.
• Never attempt to light the torch with a setting that would result in a main flame less than one quarter inch (1/4”) long. An excessively short flame will cause lighting difficulties, will result in inefficient heating and may damage the ignition mechanism.

⚠️ DANGER

EXTREMELY FLAMMABLE. CONTENTS UNDER PRESSURE.
• Keep fuel cylinders away from heat or flame.
• It is illegal and dangerous to refill the cylinder. When empty, obtain a new cylinder from your dealer.
• Federal law prohibits transportation if refilled. Penalty up to $500,000 fine and five years imprisonment (49 U.S.C. 5124)
• Keep cylinders out of reach of children
• Avoid prolonged exposure to sunlight.
• Do not store near source of heat or in a room used for habitation.
• Always detach torch from cylinder when not in use,
• Do not breathe gas, fumes, vapor or spray. If inhaled, remove affected person to fresh air.
• Avoid contact with eyes or skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. For skin contact, flush with large amounts of water.
• When cylinder is empty, discard in a safe place. Do not throw cylinder in fire. Do not puncture or incinerate cylinder.

COMPONENTS

TS99
- BURN TIP
- TO ADJUST
- ADJUSTMENT KNOB
- REGULATOR
- CONNECT TO CYLINDER

BZ4600SW
- BURN TIP
- TO ADJUST
- ADJUSTMENT KNOB
- REGULATOR
- CONNECT TO CYLINDER

TS839
- BURN TIP
- TO ADJUST
- ADJUSTMENT KNOB
- REGULATOR
- CONNECT TO CYLINDER

JT59
- BURN TIP
- TO ADJUST
- ADJUSTMENT KNOB
- REGULATOR
- CONNECT TO CYLINDER

ASSEMBLY

1. Make sure regulator valve is off by turning adjustment knob clockwise until it stops. A light stop is sufficient. Do not force.
2. Hold torch so that burn tube is pointed away from persons and highly flammable materials. Thread gas cylinder into regulator/torch body. Hand tighten only. Do not force.
3. Check all joints and couplings periodically to insure against loose connections. With valve closed, without lighting, test all connections with soapy water. If bubbles appear, gas is leaking and torch must be repaired or replaced. Never use a flame to check for leaks. Make this test in a well ventilated and spark-free area and where there are not open flames.
LIGHTING AND OPERATION

JT539 / BZ4600SW
1. To light with match, do not hold the match directly in front of the torch opening. Rather, hold just below the opening as shown.
2. Light match before opening regulator valve and then open regulator valve slowly by turning adjustment knob counterclockwise until the torch lights. This may require up to 3 turns.
3. To light with spark lighter, open valve slowly before sparking. Hold spark lighter at a 45° angle to the torch opening. NOTE: It is very difficult to light with valve fully open. Turn adjustment knob to obtain the proper flame as shown.
4. Turn adjustment knob to obtain the proper flame as shown.

TS839 / TS99
1. Open regulator valve fully by turning adjustment knob counter clockwise until it stops. Do not force. Always fully open valve when lighting to prevent damage to ignition system. Never look into the burner tube or point in unsafe direction.
2. Point torch in a safe direction and push the ignition button. Repeat if necessary while adjusting the valve slightly.
3. After the torch lights the ignition button may be released and the flame may be adjusted.
4. To adjust flame, grasp the regulator with one hand and use the other hand to turn the adjustment knob to the required setting.
   • To adjust the flame direction, grasp the torch body and rotate burn tube to desired position.
   • Do not use the torch with fuel cylinder tipped more than 60 degrees from its upright position as this may cause torch to flare.

ADDITIONAL WARNINGS

• Make sure the torch is cool before lighting or removing burner head or before installing or removing accessories.
• Check all joints and couplings periodically to insure against loose connections. With valve open, without lighting, test all connections with soapy water. If bubbles appear, gas is leaking and torch must be repaired. Never use a flame to check for leaks. Make this test in a well ventilated and spark-free area and where there are no open flames.
• In cold weather the size of the flame will be smaller. To produce a larger flame, pre-warm the cylinder to room temperature prior to use.

STORAGE

REMOVE CYLINDER FROM TORCH WHEN NOT IN USE
1. Turn ignition button to the off position. Make sure regulator valve is closed by turning flame adjustment knob fully clockwise until it stops. Do not force.
2. When torch is cool, disconnect cylinder and store torch and cylinder separately and out of reach of children. Observe cautions on cylinder label.
3. Do not expose cylinders to temperatures in excess of 49°C (120°F).
4. Store cylinders in well ventilated areas.