



# OPERATING INSTRUCTIONS & PARTS MANUAL

Models: VT 2-23 C & VT 2-23 SVC  
Weed Dragon® Lawn & Garden Weeder  
100,000 BTU Maximum

***Please read this manual before operating your Weed Dragon  
and retain this information for future reference.***

## **For Your Safety:**

If you smell gas:

1. Shut off gas to the device.
2. Extinguish any open flame.
3. Check the device for leaks using soapy water.
4. Do not attempt to relight the device until leaks are repaired and there is no gas smell.

## **For Your Safety:**

Do not use this device in areas where gasoline or other liquids having flammable vapors are stored or used.

## **WARNING:**

### **DO NOT OPERATE THIS EQUIPMENT IF:**

- You are subject to seizures, loss of consciousness, or fainting.
- You have been drinking alcohol, using illicit drugs, or prescription drugs that might effect your judgment or balance.
- You have not read or do not understand the operator's manual.
- You are not capable of safely operating this type of equipment.

**DO NOT ALLOW CHILDREN TO OPERATE THIS EQUIPMENT.**

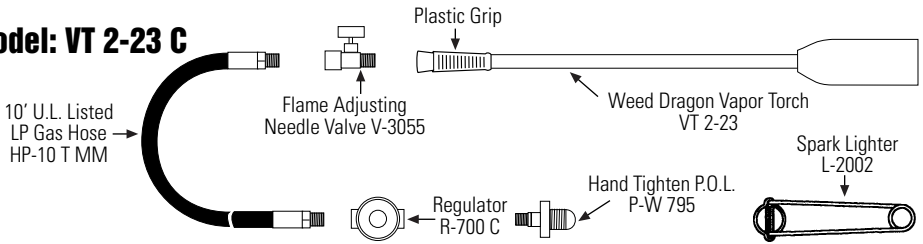
- This device is intended for outdoor use only.
- This torch is designed for a vapor-withdrawal LP-Gas cylinder.

# Assembly Instructions

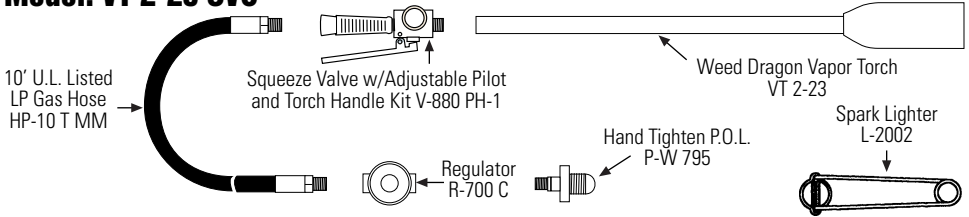
*Note: Unpack and inspect for damage*

1. The Weed Dragon® Lawn and Garden Weeder is pre-assembled.
2. Take time now to inspect your Weed Dragon®.
3. Make sure all parts are in place as shown on the parts list.

## Model: VT 2-23 C



## Model: VT 2-23 SVC



# Connecting to the Supply Cylinder

The propane supply cylinder used with this torch should be no less than 12 lb. capacity and must be designed, fabricated, tested and marked in accordance with regulations of the U.S. Department of Transportation, the Canadian Transport Commission or the Interstate Commerce Commission. This torch is designed for a vapor withdrawal LP-Gas cylinder.

1. Inspect the nut and nipple of the P.O.L. connection on the LP-Gas hose. O-ring should be present. Check for dents or physical damage. If physical damage is evident call for replacement parts.
2. Be certain the supply cylinder valve is fully turned off. Remove the protective plastic plug from the cylinder valve outlet connection.
3. Connect the P.O.L. (nut/nipple) fitting on the hose to the propane supply cylinder by turning the left-hand, threaded, P.O.L. nut counter clockwise into the cylinder valve outlet. Snug the connection tight. **DO NOT OVERTIGHTEN.**
4. Slowly open the cylinder valve. Check all LP Gas connections for leaks using soapy water or suitable leak detection solution. **DO NOT USE MATCHES OR OPEN FLAME TO CHECK FOR LEAKS.** Do not attempt to operate the torch if there is evidence of a leak or at any time the odor of gas is detected.

# Connecting to the Supply Cylinder

## IMPORTANT NOTE

The P.O.L. contains an integral flow-check valve. Opening the LP-Gas cylinder valve rapidly can cause the valve to check. If the P.O.L. flow valve checks, close the LP-Gas cylinder valve, wait 10-15 seconds and *slowly* open the LP-Gas cylinder valve.

- If no leaks are found, proceed with lighting the torch.
  - Always use a flint lighter to ignite the torch. **DO NOT USE MATCHES OR CIGARETTE LIGHTER TO IGNITE THE TORCH.**
  - Be certain the flame adjusting valve is closed before opening the LP-Gas cylinder valve.
1. Familiarize yourself with the functions of the flame adjusting needle valve (VT 2-23 C) or squeeze valve operations (VT 2-23 SVC). The round knob, marked with arrows “off” and “on,” is the adjustment valve for lighting the torch and adjusting the flame. (VT 2-23 SVC only: Once the desired pilot flame is achieved, the squeeze handle is depressed to give the required working flame pattern.)
  2. Be certain the flame adjusting valve is closed before opening the LP-Gas cylinder valve.
  3. Slowly open the LP-Gas cylinder valve. Check all gas connections to the torch for leaks with a leak detection solution, such as soapy water. Leaks will be indicated by forming bubbles around the source. Please allow one minute for bubbles to appear. Repair all leaks and test for leaks prior to lighting torch.
  4. Open the flame adjusting valve (the round knob) 1/8 turn or until a small amount of gas is heard escaping. Using a flint lighter, ignite the torch. **DO NOT PLACE YOUR HAND OR ANY PART OF YOUR BODY IN THE PATH OF THE BURNER WHILE LIGHTING OR OPERATING THE TORCH. DO NOT USE MATCHES OR CIGARETTE LIGHTER TO IGNITE THE TORCH.**

Adjust the size of the flame by using the flame adjusting valve. (VT 2-23 SVC only: Adjust to a low pilot flame that will keep the torch burning in existing conditions, a small flame is usually adequate. Then depress the squeeze valve for working flame.)

## Torch Shut-Off

1. Close the LP-Gas cylinder valve.
2. Allow the gas to burn out of hose. After the flame is no longer visible, turn the flame adjusting valve to the closed or “off” position.

*TO RESTART follow lighting instructions.*

# Disconnecting From The Supply Cylinder

1. Be certain supply cylinder valve is turned off.
2. Disconnect the P.O.L. nut/nipple fitting on the LP hose to the propane supply.
3. Replace the protective plastic plug into the cylinder valve outlet.

## Storage

Never attempt to store the torch while it is hot. When the torch is stored indoors, the connection between the LP-Gas supply cylinder and the torch must be disconnected and the cylinder removed from the torch and stored in accordance with Chapter 5 of ANSI/NFPA 58, the standard for storage and handling of liquefied petroleum gases. Do not store the torch in locations where it may be damaged.

### **WARNING**

The gas supply hose shall be protected from traffic and contact with hot surfaces during use and while in storage.

## Maintenance

- Surfaces of the torch may be cleaned with soap or detergent and water solutions. **DO NOT** use petroleum-based cleaners to clean any components of the torch or the torch body.
- **DO NOT** use lubricants on any part of the torch.
- Remove any debris and combustible material from the torch. The torch must be kept clear and free from combustible materials, gasoline and other flammable vapors and liquids.
- The supply hose assembly shall be visually inspected prior to each torch use. If there is evidence of excessive abrasion or wear, or the hose is cut, always replace prior to igniting torch. The replacement hose assembly shall be specified by Flame Engineering, Inc. Contact Flame Engineering for further information.
- This torch is designed to operate on a preset 18 P.S.I. LP-Gas Regulator. Replace only with regulator set for 18 P.S.I. Check with your LP-Gas dealer or Flame Engineering Inc. for assistance.

# Warning

Use extreme caution at all times. You are using an intense open flame. This torch produces an extremely hot and nearly invisible flame. Read and follow the Safety Check List and Daily Equipment Check List before attempting to operate this torch.

## CAUTION

- Propane is heavier than air which can cause it to accumulate in low areas. Be certain all areas are well ventilated.
- Propane has a distinct ODOR. If you smell it, IMMEDIATELY discontinue work, extinguish all flames, locate the leak and correct it before lighting torch.
- Use extreme caution at all times. This device has an intense open flame. Disregard of safe practices can result in severe fire damage, personal injury, or possible death.
- Never direct torch flame toward any person or animal.

## Daily Equipment Check List

- Visually inspect all parts of the torch equipment for damage and wear. If the hose is evident of excessive abrasion or wear, or if the hose is cut, the hose must be replaced before operating the torch. Replace torch hose assembly with CSA or UL listed LP-Hose, 350 P.S.I. working pressure.
- Using a soapy water solution, check all connections and fittings for leaks. DO NOT USE A MATCH OR OPEN FLAME TO TEST FOR LEAKS. See lighting instructions.
- Check LP cylinders for dents, damage to collar, damage to valve, or corroded foot ring. Do not use damaged cylinder. Use only vapor withdrawal with the Weed Dragon Torch Kit. Consult your LP dealer or Flame Engineering, Inc. if you are uncertain of your cylinder type.
- Ignite torch. Check operation of valve and other adjustable parts.  
*Note: when extinguishing a torch, shut off cylinder valve first and allow gas to burn out of lines.*
- For outdoor use only.

# Safety Check List

- Gloves should be used at all times. Long sleeves, long pants and boots are recommended.
- Use vapor torches on cylinders equipped with vapor withdrawal valves. **DO NOT** use liquid withdrawal cylinders.
- Secure cylinders in a level, upright position. Do not invert or lay cylinders on their sides.
- Do not apply flame to cylinders to check for leaks or to increase gas pressure.
- Keep torches, open flame and sources of ignition away from cylinders, regulators and hose.
- Do not operate torches or any equipment if the odor of LP-Gas is evident. Immediately shut-off all valves and, using soapy water, check all equipment for leaks.
- Cylinder valves must be protected. Do not hoist a cylinder by the valve.
- Do not leave the torch unattended while in operation.
- Do not stand or prop the torch on the burner end while in operation.
- This equipment is for outdoor use only with adequate ventilation.
- Have a type ABC fire extinguisher on the job site, easily accessible to the person operating the torch.

## Where & When To Use The Weed Dragon

The Perfect Weeding Tool For:

- **Rock Gardens**
- **Play Areas & Sand Boxes**
- **Along Landscaped Edges**
- **Along Chainlink Fences**
- **Between Garden Rows**
- **Rock Driveways**
- **Cracks in Sidewalks & Driveways**
- **Brick Patios and Walkways**
- **Pond Edges & MORE!**

More than just a great weeder. It's also great for:

- **Starting Charcoal & Camp Fires**
- **Melting Snow & Ice**
- **Thawing Outdoor Metal Pipes**
- **Removing Paint & Grease From Non-Flammable Surfaces**
- **Starting Brush Pile Fires**
- **Sterilizing Non-flammable Animal Cages or Confinement Areas**
- **Heating Tar or Asphalt**

**5** *You'll think of lots of uses. Have fun and always be safe.*

# Important Weeding and General Use Tips

1. Most generally it is not necessary to reduce weeds and undesirable plants to ashes. Your Weed Dragon will generate sufficient heat to kill at a slow walk. Within hours you will witness green weeds wilting and dying. It's Weed Dragon magic!
2. Flaming is not a cure-all. It may be necessary to repeat weeding several times per year. Some weeds are more heat resistant than others and may require several flamings. Do not flame closer than 16 inches when weeding flowers and desirable plants. In time you will determine the range of your Weed Dragon and may operate in and around plants with ease. Practice makes perfect!
3. If in doubt, don't. This philosophy will save your lawn, garden and peace of mind.
4. Always keep a type ABC fire extinguisher handy.
5. Avoid desirable lawn and garden plants as the Weed Dragon does not distinguish between desirable and undesirable growth.
6. To determine effectiveness, press flamed weed leaf between thumb and fore-finger. A fingerprint usually indicates a good kill.
7. Whenever possible, flame small weeds - the more tender, the easier to kill.
8. Always remain a safe distance from evergreens, pine needles, and all conifers. Highly flammable and easily ignited, pine needles are a fire hazard.
9. Do not flame poison oak, ivy or any other poisonous plants – the smoke from flamed leaves could carry the poison to your skin, eyes and lungs!
10. A cylinder dolly makes moving the cylinder easy. The Red Dragon CD-100 is specifically designed for torch users and holds up to a 40 lb. cylinder. To order, call or visit our web-site: 800-255-2469 [www.flameengineering.com](http://www.flameengineering.com).

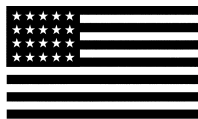
*The Red Dragon CD-100 Cylinder Dolly  
makes the perfect companion to the Weed Dragon!*

# For More Information

Consult your local LP Dealer, Flame Engineering, NPGA, NFPA Pamphlet 58, AGA, or CGA . This information is provided as a general guide for safe LP-Gas use *and in no way constitutes a complete safety program.*



**Model VT 2-23 C Weed Dragon® Torch Kit is CSA Certified for the United States and Canada.** CSA International (formerly the American Gas Association and Canadian Gas Association) is an independent testing laboratory specializing in LP and Natural Gas Equipment. Flame Engineering was the first torch manufacturer to receive both American Gas Association and Canadian Gas Association Certification.



**MADE IN USA**



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