# WELDING CUTTING TORCH KIT VICTOR TYPE

## ITEM: 55146




# OWNER'S MANUAL AND SAFETY INSTRUCTIONS

**SAVE THIS MANUAL: KEEP THIS MANUAL FOR SAFETY WARNINGS, PRECAUTIONS, ASSEMBLY, OPERATING, INSPECTION, MAINTENANCE AND CLEANING PROCEDURES. WRITE THE PRODUCT'S SERIAL NUMBER ON THE BACK OF THE MANUAL NEAR THE ASSEMBLY DIAGRAM (OR MONTH AND YEAR OF PURCHASE IF PRODUCT HAS NO NUMBER).**

**FOR QUESTIONS PLEASE CALL OUR CUSTOMER SUPPORT: (909) 628 4900 MON-FRI 9AM TO 3PM PST**

WARNING

## GENERAL SAFETY WARNINGS

**Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. Save all warnings and instructions for future reference.**

## SAFETY

The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator. Read carefully and understand all ASSEMBLY AND OPERATION INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

- **Read and understand all instructions.** Failure to follow all instructions may result in serious injury or property damage.
- **DO NOT** allow persons to operate or assemble the product until they have read this manual and have developed a thorough understanding of how it works.
- **DO NOT modify this product in any way.** Unauthorized modification may impair the function and/or safety and could affect the life of the product. There are specific applications for which the product was designed.
- I**nspect the work area before each use**. Keep work area clean, dry, free of clutter, and well lit. Cluttered, wet, or dark work areas can result in injury. Using the product in confined work areas may put you dangerously close to cutting tools and rotating parts.
- **DO NOT use the product where there is a risk of causing a fire or an explosion**; e.g., in the presence of flammable liquids, gases, or dust. The product can create sparks, which may ignite the flammable liquids, gases, or dust.
- **DO NOT allow the product to come into contact with an electrical source.** The tool is not insulated and contact will cause electrical shock.
- **Keep children and bystanders away from the work area while operating the tool. DO NOT** allow children to handle the product.
- **Be aware of all power lines, electrical circuits, water pipes, and other mechanical hazards in your work area.** Some of these hazards may be hidden from your view and may cause personal injury and/or property damage if contacted.
- Stay alert, watch what you are doing, and use common sense when operating the tool. **DO NOT** use the tool while you are tired or under the influence of drugs, alcohol, or medication.
- **Dress properly. DO NOT** wear loose clothing, dangling objects, or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery, or long hair can be caught in moving parts.
- **DO NOT overreach.** Keep proper footing and balance at all times.
- **Wear the proper personal protective equipment when necessary.** Use ANSI Z87.1 compliant safety goggles (not safety glasses) with side shields, or when needed, a face shield. Use a dust mask in dusty work conditions.

- Remove keys or wrenches before connecting the tool to an air supply, power supply, or turning on the tool. A wrench or key that is left attached to a rotating part of the tool may cause personal injury.
- **Check for damaged parts before each use.** Carefully check that the product will operate properly and perform its intended function. Replace damaged or worn parts immediately. Never operate the product with a damaged part.
- **DO NOT use a product with a malfunctioning switch.** Any power tool that cannot be controlled with the power switch is dangerous and must be repaired by an authorized service representative before using.
- **Disconnect the power/air supply from the product and place the switch in the locked or off position before making any adjustments**, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.
- When possible, move the work to a location well away from combustible materials. If relocation is NOT possible, protect the combustibles with a cover made of fire resistant material. Remove or make safe all combustible materials for a radius of 35 feet (10 meters) around the work area.
- Enclose the work area with portable fire resistant screens. Use a fire resistant material to block all openings and protect combustible walls, ceilings, floors, etc.
- If working near/on a metal wall, ceiling, floor, etc., prevent ignition of combustibles on the other side by moving the combustibles to a safe location. If relocation of combustibles is **NOT** possible, designate someone to act as a fire watch equipped with a fire extinguisher during the welding or cutting process and for at least one half hour after the welding or cutting project is completed.
- **DO NOT** place the Torch on any material other than bare concrete until it has cooled completely.
- **DO NOT** weld or cut any material that has a combustible coating or a combustible internal structure, such as drums or tanks, without an approved method for eliminating the hazard.
- **DO NOT** dispose of hot slag in containers holding combustible materials.
- Keep a fully charged fire extinguisher close by and know the proper way to use it.
- After welding or cutting make a thorough check for evidence of fire and be aware the easily visible flame or smoke may not be present for some time after a fire has started.
- Clean and purge containers before applying heat. **DO NOT** apply heat to a container that has held an unknown substance or a combustible material whose contents, when heated, can produce flammable or explosive vapors. Vent closed containers, including castings, before preheating, cutting, or welding.
- **INHALATION HAZARD:** Welding and Cutting Produce **TOXIC FUMES**. Exposure to welding or cutting exhaust fumes can increase the risk of developing certain cancers, such as cancer of the larynx and lung cancer. Also, some diseases that may be linked to exposure to welding or cutting exhaust fumes are: Early onset of Parkinson's Disease • Heart disease • Ulcers • Damage to the reproductive organs • Inflammation of the small intestine or stomach • Kidney damage • Respiratory diseases such as emphysema, bronchitis, or pneumonia Use natural or forced air ventilation and wear a respirator approved by NIOSH to protect against the fumes produced to reduce the risk of developing the above illnesses.
- **WARNING**: This product, when used for welding, plasma cutting, soldering, or similar applications, produces chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. (California Health & Safety Code § 25249.5, et seq.)
- **WARNING**: The brass components of this product contain lead, a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. (California Health & Safety Code § 25249.5, et seq.)

# WARNING IMPORTANT SAFETY INFORMATION

- Make sure you are prepared to begin work before opening gas supply.
- Always use reverse-flow on the torch and regulator. This greatly reduces the possibility of mixing gases in the regulator or hose.
- Use with oxygen and acetylene only. **DO NOT** modify this torch or use it for a purpose for which it is not intended.
- Set Acetylene Regulator no greater than 15 PSI. Acetylene is unstable and can explode if over-pressurized.
- **DO NOT** use oil, grease or thread seal tape on any connector.
- Use clamps (not included) or other practical ways to secure and support the work piece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control, fire and/or personal injury.
- Use only accessories that are recommended by the manufacturer for your model Torch. Accessories that may be suitable for one Torch may become hazardous when used on another Torch. Only use proper gas hoses.
- Proper cylinder care. Secure cylinders to a cart, wall or post to prevent them from falling. All cylinders should be used and stored in an upright position. Never drop or strike a cylinder. Cylinder caps should be used when moving or storing cylinders. Empty cylinders should be kept in specified areas and marked “empty”
- Never use oil or grease on any inlet connector, outlet connector or cylinder valves. Keep regulators free of gas and oil.
- There must be TWO O-rings on the cone end. The absence of either O-ring can lead to flashback within the torch handle or cutting attachment.
- **DO NOT** store cylinders in temperatures 120° F or higher.
- **KEEP WRENCH ON ACETYLENE CYLINDER’S VALVE** whenever cylinder is in use to allow quick shut off in case of emergency.
- **DO NOT USE FLAME TO DETECT LEAKS**.
- **INSPECT BEFORE EVERY USE.** Look for the following, and do not use kit if any damage is noted:
  **A.** Inspect the tapered seating surfaces on the Nozzles and the Tip Nut. Have a qualified technician resurface the seat area if it has dents, burrs, or is burned. A poor seating surface may result in backfire or flashback.
  **B.** Examine all hoses for cuts, cracks, burns, worn areas, or other damage. **DO NOT** use if damaged.
  **C.** Check for loose connections using soapy water solution. Tighten or repair any leaks found.
  **D. DO NOT** use the Torch Kit if either gas does not turn off completely when the Oxygen Torch Valve and Acetylene Torch Valve are closed. Leakage of gas from the tip is a substantial safety risk. If gas cannot be turned off at the Torch Handle, it is dangerous and must be replaced.
  **E.** Inspect for any other defects or damage. Do not use any damaged parts. Tag damaged parts “Do not use” until repaired.
- **Backfire and Flashback:** When the flame goes out with a loud “pop” it is called a backfire. Backfire can be caused by **A**. Operating the torch at low pressures required for the toll tips used. **B.** Touching the tip against the work piece. **C**. Overheating the tip or abstraction in the tip. If backfire occur, shut off the torch handle valves, oxygen first, and after remedying the cause, relight the torch. If flashback occurs, close the torch handle valves immediately. Flashback generally indicates a problem that needs repaired. A clogged tip, improper functioning in the valves or incorrect oxygen pressure. Make sure to find and fix the cause before lighting the torch.

## TOOL SET UP 1 OF 3

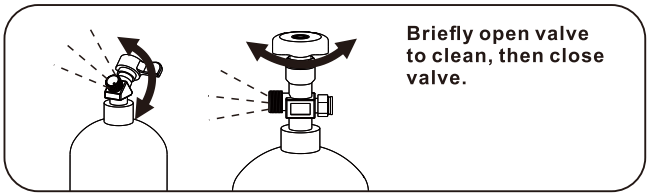
**1.** Secure cylinders to a cart, wall or post to prevent them from falling. **DO NOT** place an Acetylene cylinder on its side.

**2.** While standing to one side “crack” each cylinder valve. “Cracking” is to simply open and close the valve, allowing a small amount of gas to escape and to clear the valve of any foreign material.

**WARNING: TO PREVENT FIRE AND EXPLOSION: Make sure there is no oil or grease, or ignition source nearby before proceeding with the next step.**

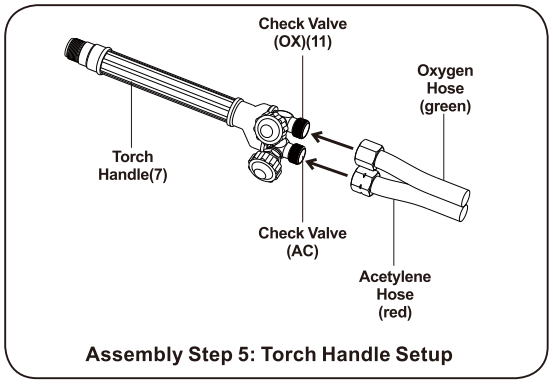
**WARNING: KEEP A WRENCH ON THE ACETYLENE VALVE whenever cylinder is in use to allow for quick shut off in case of emergency.**

**3.** Attach the green labeled Oxygen Regulator (9) to the Oxygen Cylinder (13) and the green Oxygen Hose to the Regulator.




**4.** Attach the red labeled Acetylene Regulator (10) to the Acetylene Cylinder (14) and the red Acetylene hose to the regulator. Tighten counter-clockwise, threads are reversed.

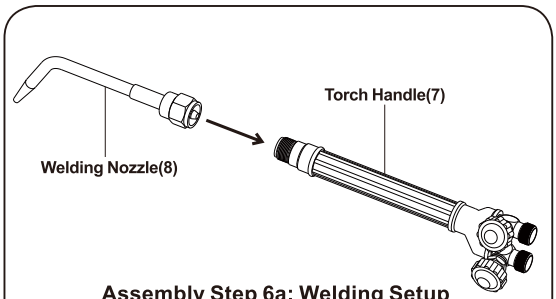
**5.** To set up the Torch Handle (7): A. Remove the plastic inlet covers. B. Make sure both check valves are in place on the torch handle. C. Connect the green Oxygen Hose to the Oxygen check valve and the Torch Handle. D. Connect the red Acetylene hose to the Acetylene check valve on the torch handle. Tighten counter-clockwise, threads are reversed.



Assembly Step 5: Torch Handle Setup

**6A.** Connect the welding nozzle (8) to the torch handle.

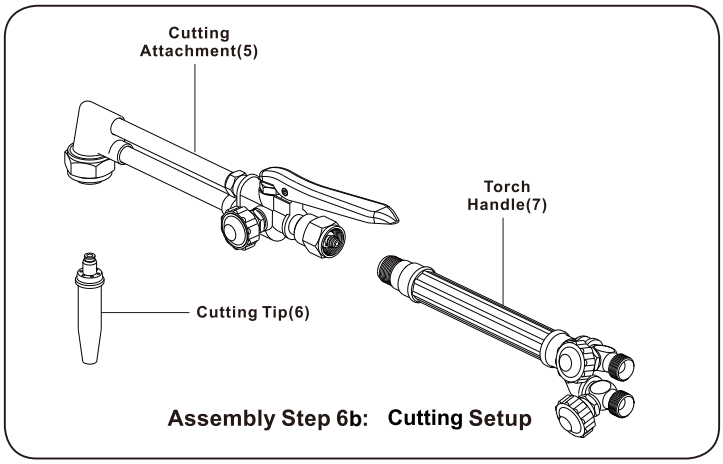
**6B. WARNING: BEFORE CONNECTING**, make sure the two O-Rings on the end of the cutting attachment (5) are not damaged or missing, gases will mix inside the Torch Handle and result in flashback or backfires.



Assembly Step 6a: Welding Setup

Connect the Cutting Attachment (5) to the Torch Handle. Then connect the Cutting Tip (6) to the Cutting Attachment.

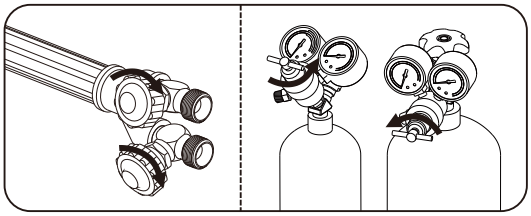
**7.** Before operation, perform “leak tests” must be done after connection to check for leaks in the system. See the following pages for more information.



Assembly Step 6b: Cutting Setup

## TOOL SET UP 2 OF 3: Detecting Major Leaks

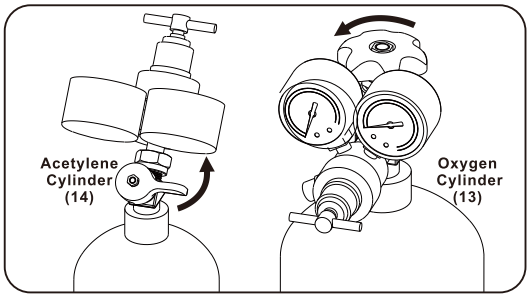
**1.** After everything is connected, close both Torch Handle Valves, turning clockwise. Close regulators, turning knobs counter-clockwise until loosened.



Leak Test 1 Step 1

**2.** Open the cylinder valves turning counter-clockwise only until the gas starts flowing. **WARNING: Only open Acetylene Cylinder Valve 1/4 to 1/2 turn.**

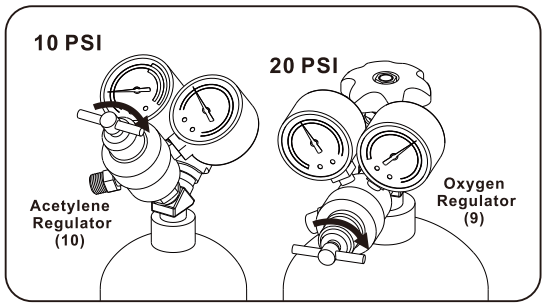
**WARNING: KEEP WRENCH ON ACETYLENE VALVE whenever the cylinder is in use to allow shut off in case of an emergency.**



Leak Test 1 Step 2: Open Cylinder Valves

**3.** Adjust the Oxygen Regulator to deliver 20 PSIG. Adjust the Acetylene Regulator to deliver 10 PSIG. **DO NOT EXCEED 15 PSI ACETYLENE PRESSURE.**

**4.** Check all connections for leaks using soapy water. If leaks are found, tighten connections. If a leak persists, discontinue use and call a gas supplier. If no leaks are found with this test, move on to the gauge monitoring test.



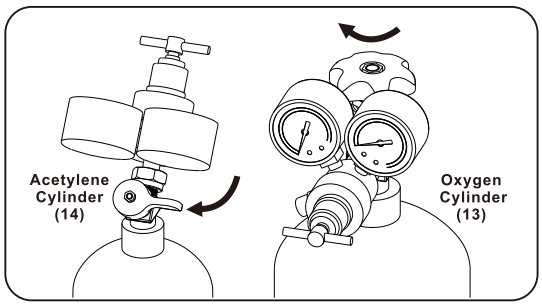
Leak Test 1 Step 3: Set Testing Pressures

## TOOL SET UP 3 OF 3: Gauge Monitoring Leak Test

**1.** Follow all steps from the “soapy water test” above to prepare the gauge monitoring test.

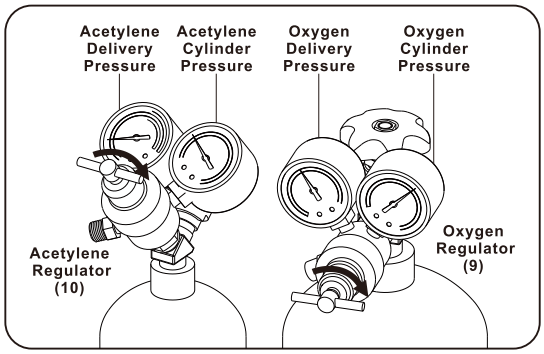
**2.** Close both cylinder valves by turning clockwise.

**3.** Monitor gauges on both regulators for five minutes.



Leak Test 1 Step 2: Open Cylinder Valves

- **If the readings do not change,** the test is completed and the system has no leaks.
- **If the readings do change,** there is a leak on that side of the system. Follow the Gauge Leak Analysis on the next page to diagnose.



Leak Test 2 Step 3: Monitor Gauges

# GAUGE LEAK ANALYSIS

**If the Cylinder pressure decreases and the delivery pressure increases, there is a leak in the regulator seat.**

**There is a leak in the regulator seat. Have the regulator repaired by a qualified technician.**

If the Cylinder pressure decreases but the delivery pressure remains constant, the leak is at the cylinder valve or connection between regulator and cylinder valve.

**DANGER: To prevent serious injury and DEATH, DO NOT tighten or adjust any connection between the cylinder and the cylinder valve. If the cylinder valve is leaking, move the cylinder outside and call your gas company immediately.**

**1.** Release pressure from the system.

**2.** Tighten the connection between the regulator and the cylinder valve.

**3.** Repeat the Gauge Leak Test.

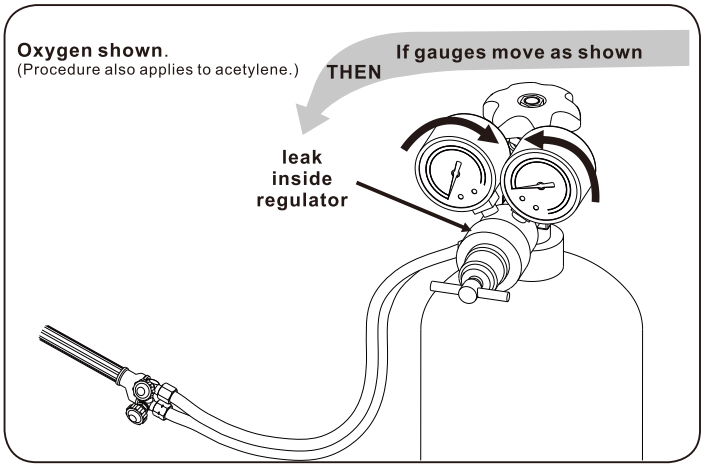
If the delivery pressure decreases, the leak is at the regulator outlet connection, within the hose, at the torch inlet connection or at the torch valve on the torch handle.

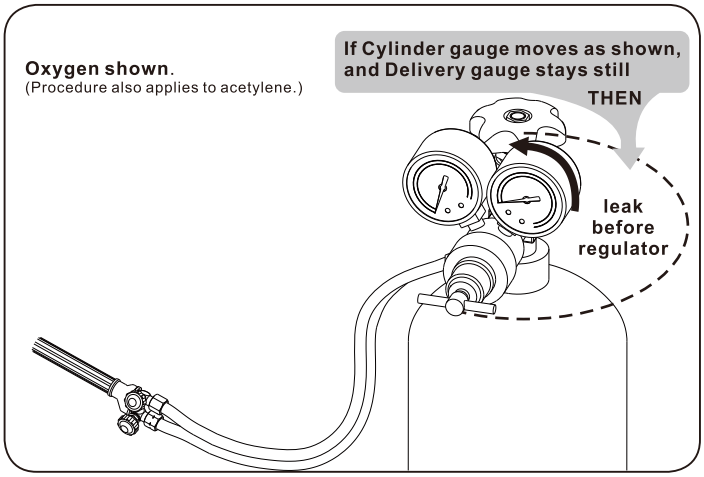
**1.** Release pressure from the system.

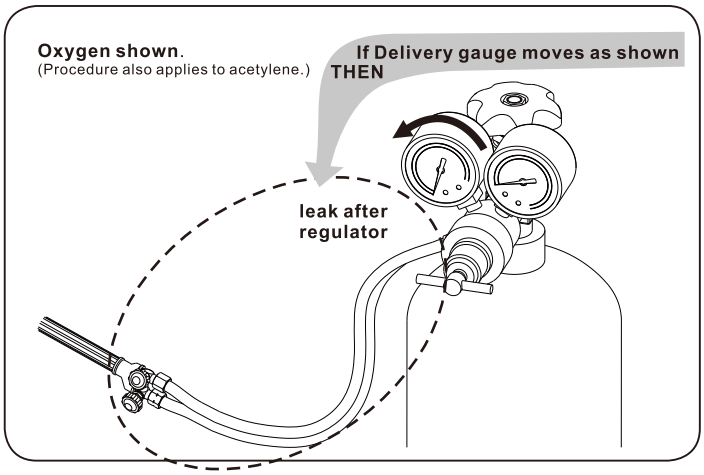
**2.** Tighten the regulator outlet connection.

**3.** Tighten the torch handle inlet connection.

**4.** Repeat the Gauge Leak Test. If the gauges do not change, the test is completed and the system has no leaks. If the connections are still leaking, have it examined by a qualified technician.



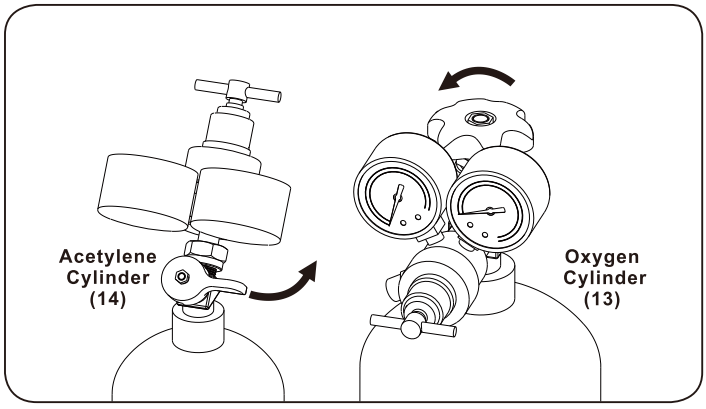




## No Leaks Found

If the leak testing has been completed and the unit is found to be working properly, open the cylinder valves, turning counter-clockwise and proceed to operation.

**WARNING: Only open Acetylene Cylinder Valve 1/4 to 1/2 turn to allow quick shut off.**

**WARNING: KEEP WRENCH ON ACETYLENE VALVE whenever the cylinder is in use to allow shut off in case of an emergency.**




**Open Cylinder Valves Only After Testing Confirms There Are No Leaks**

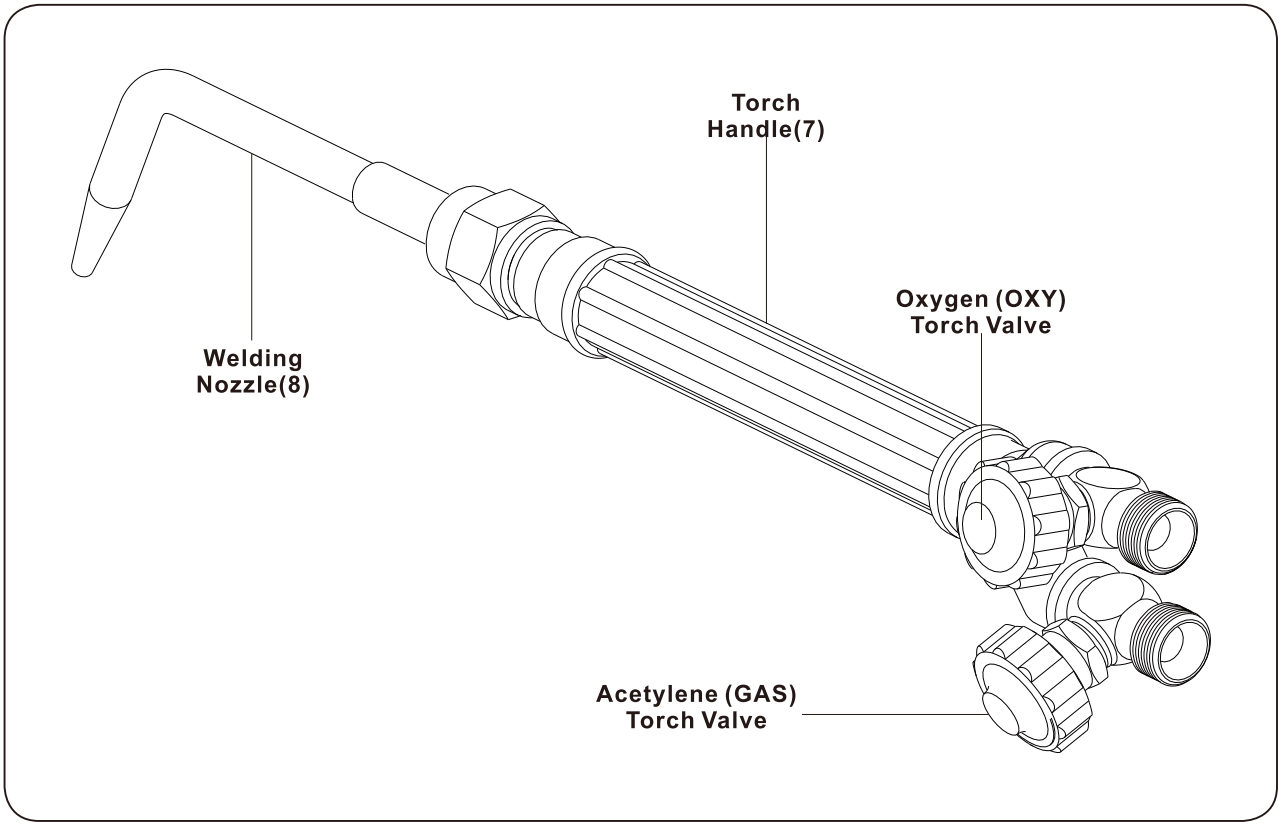
## Welding Tip Pressure Settings

This torch handle is capable of welding metals from 1/32” up to 1/1/4” thick. The included welding nozzle, size 0, will weld metals up to 1/16” thick. Check the thickness of the metals to be welded and use the chart below to choose the size nozzle for the job. If welding metals other than 1/32” to 1/16” thick, a different welding nozzle will be needed.

**NOTE:** Welding the thicker metals noted below will require special techniques, such as edge chamfering, that are outside the scope of this manual.

### Table A: Welding Nozzle Flow Data

| Metal Thickness (inches) | Nozzle Size | Tip Orifice Diameter (inches) | Oxygen Pressure (PSIG) | Acetylene Pressure (PSIG) | Acetylene (CFH) |
|---|---|---|---|---|---|
| 1/32 | 000 | 0.024 | 3~5 | 3~5 | 1~2 |
| 3/64 | 00 | 0.028 | 3~5 | 3~5 | 1.5~3 |
| 1/16 | 0 | 0.031 | 3~5 | 3~5 | 1.7~3.4 |
| 5/64 | 1 | 0.035 | 3~5 | 3~5 | 2~4 |
| 3/32 | 2 | 0.039 | 3~5 | 3~5 | 3~6 |
| 1/8 | 3 | 0.051 | 3~6 | 3~6 | 5~10.5 |
| 1/4 | 4 | 0.067 | 4~6 | 4~6 | 8.5~19 |
| 3/8 | 5 | 0.079 | 5~7 | 5~7 | 11.5~26 |
| 1/2 | 6 | 0.091 | 6~8 | 5~8 | 15~35 |
| 1-1/4 | 7 | 0.126 | 8~10 | 8~10 | 30~60 |

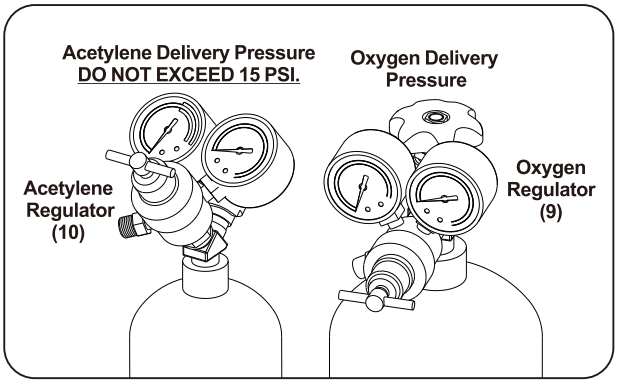


## Welding instructions

**1.** Set up welding according to instructions on pages 6-9.

**2.** Close both valves on the Torch Handle securely.

**3.** Adjust the Acetylene and Oxygen regulators to their proper working pressures, see table A on the previous page. **DO NOT EXCEED 15PSI ACETYLENE PRESSURE.**

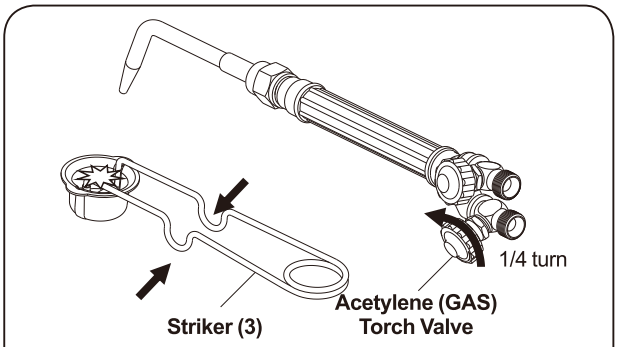



**Welding Step 3: Set Welding Pressures**
**See Table B on page 7.**

**4.** Hold the Torch Handle in one hand and the striker in the other hand.

**5.** Open the Acetylene Torch valve about a 1/4 turn and quickly ignite the gas coming out of the nozzle by squeezing the handle of the striker, creating a spark.

**WARNING: DO NOT use matches or a butane lighter to light the torch.**




**Welding Step 5: Lighting Acetylene**

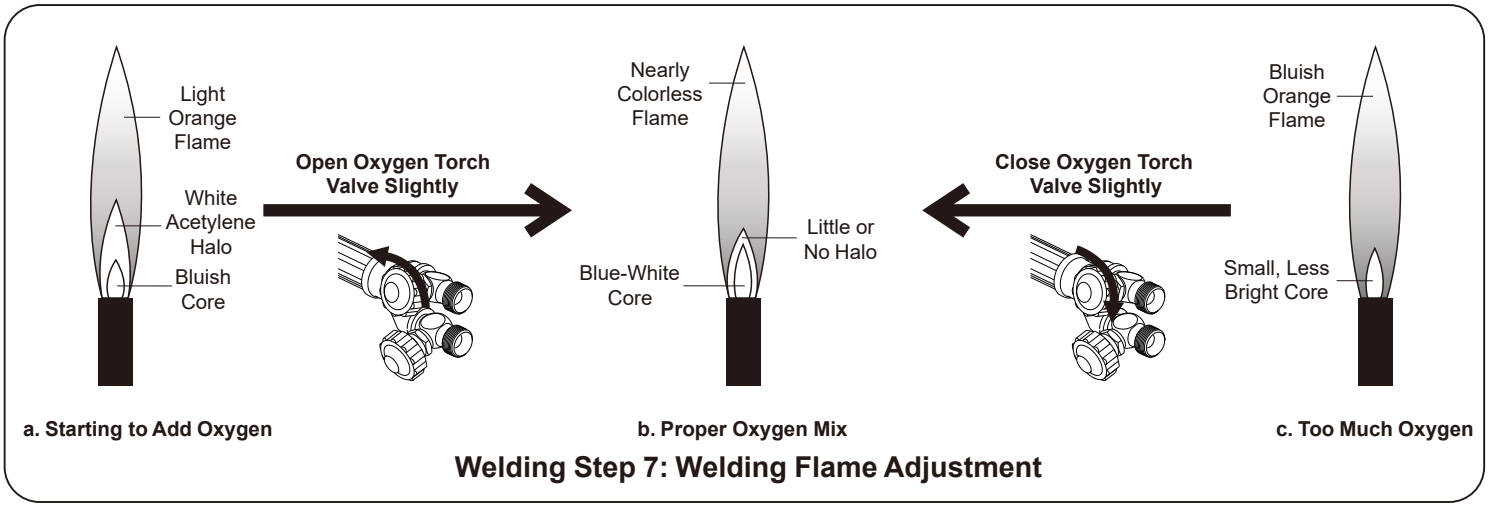
**6.** Put the striker down on a fireproof surface and slowly open the acetylene torch valve farther until the flame feathers at its edges slightly as shown.

**Cutting Step 6: Slowly Open**
**Acetylene Torch Valve Until Flame Feathers**

**7. Flame Adjustment: A**. Start adding oxygen by slowly opening the Oxygen Torch Valve. The flame will change to a carbonizing flame a blue/white inner core, a white halo surrounding the core and a light orange flame shown.

**B. Proper Oxygen Mix:** Continue slowly opening the Oxygen Torch Valve until the large light orange section of the flame becomes nearly colorless and the center flame has a white core with little or no halo.

**C. Too Much Oxygen:** If you open the Oxygen Valve too far, the large section of the flame will be bluish orange and the inner core will be small as shown in welding step 7. Close the Oxygen Torch valve slightly until you achieve the flame described above.




**Welding Step 7: Welding Flame Adjustment**

## Cutting Tip Pressure Settings

The Cutting Attachment is used to cut metal up to 3” thick. This included tip size 0, cuts metal up to 1/2” thick. Check the thickness of the metal to be cut and use the chart below to choose the appropriate size tip for the job. If cutting metals over 1/2” thick, a different tip will be needed.

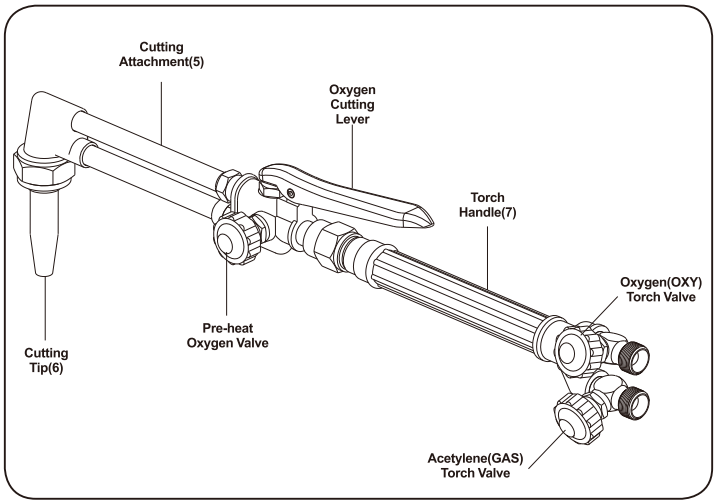
### Table B: Cutting Tip Flow Data

| Cutting Thickness (inches) | Standard Nozzle Size | Cutting OXygen Pressure (PSIG) | Acetylene Pressure (PSIG) | Speed (IPM) |
|---|---|---|---|---|
| 1/2 | 0 | 30~35 | 3~5 | 20~24 |
| 3/4 | 1 | 30~35 | 3~5 | 17~21 |
| 1-1/2 | 2 | 40~45 | 3~7 | 13~17 |
| 2-1/2 | 3 | 45~50 | 4~10 | 10~13 |
| 3 | 4 | 45~50 | 5~10 | 9~12 |

The Cutting Attachment is attached to the Torch Handle and a Cutting Tip is attached to the end of the cutting attachment.

**Preheat Oxygen Valve** Adjusts preheat flame oxygen level.

**Oxygen Cutting Lever** Activates extra flow of oxygen for cutting.



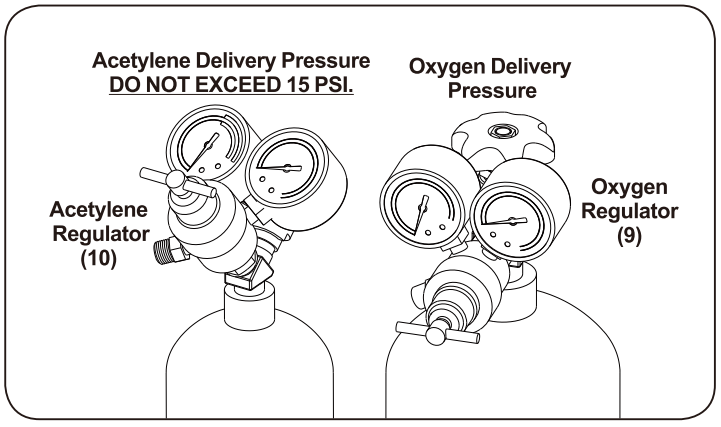

## Cutting Instructions

**1.** Set up for cutting according to instructions on 6-9.

**2.** Close all valves on the Torch handle and Cutting Attachment securely.

**3.** Adjust the Acetylene and Oxygen regulators to their proper working pressures. See Table B. **DO NOT EXCEED 15 PSI ACETYLENE PRESSURE.**

**4.** Hold the Torch Handle in one hand and the striker in the other hand.



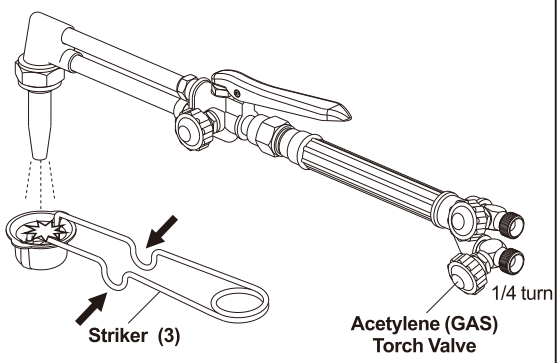

**Cutting Step 3: Set Cutting Pressures**
**See Table B on page 9.**

**5.** Open the Acetylene Torch Valve about 1/4 turn and quickly ignite the Acetylene gas coming out of the nozzle by squeezing the nozzle by squeezing the handle of the striker, creating a spark.

**WARNING: DO NOT use matches or a butane lighter to light the torch.**

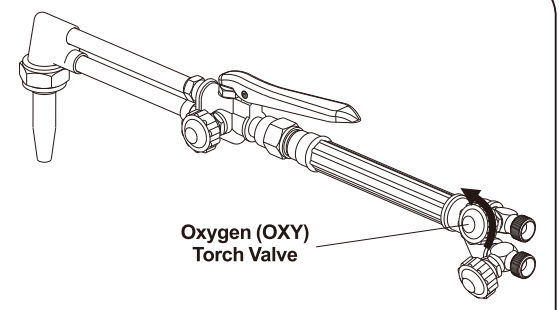
**6.** Put the striker down on a fireproof surface. Slowly open the Acetylene Torch Valve farther until the flame feathers at its edge slightly.

**Cutting Step 6: Slowly Open Acetylene Torch Valve Until Flame Feathers**



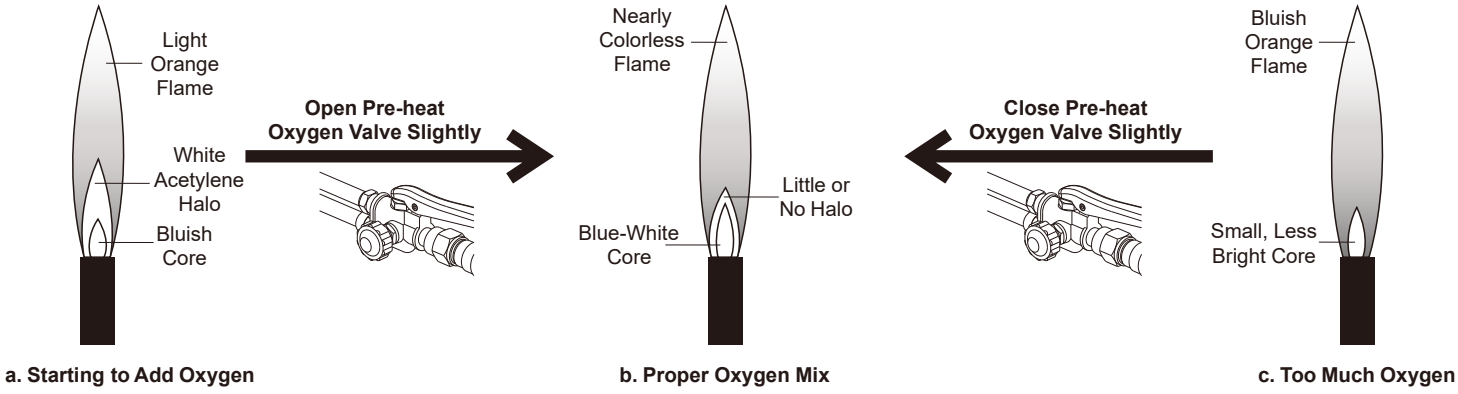

**Cutting Step 5: Lighting Acetylene**

**7. DO NOT SQUEEZE THE OXYGEN CUTTING LEVER.** Open the oxygen Torch Valve.




**Cutting Step 7: Open Oxygen Torch Valve**

**8. Flame Adjustment: A. Starting to add Oxygen:** Slowly open the preheat oxygen valve. The flame will change to a carbonizing flame with a blue/white inner core, a white halo surrounding the core and a light orange flame as shown in Cutting Step 8




**Cutting Step 8: Pre-heat Flame Adjustment**

**B. Proper Oxygen Mix:** Continue slowly turning the Preheat Oxygen Valve until the large light orange section of the flame becomes nearly colorless and the center of the flame has a white core with little or no halo. This is the NEUTRAL FLAME needed for operation as shown in Cutting Step 8 Illustration, center.

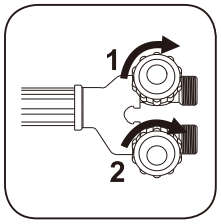
**C. Too Much Oxygen:** If you open the Preheat Oxygen Valve too far, the large section of the flame will be bluish orange and the inner core will be small as shown in Cutting step 8 right side. Close the Preheat Oxygen Valve slightly until you achieve the flame described above.

**9a.** After the flame is adjusted as explained and illustrated, proceed with cutting. Heat the edge where starting the cut until it is red hot.

**WARNING:** Start the cut at the edge of the workpiece.

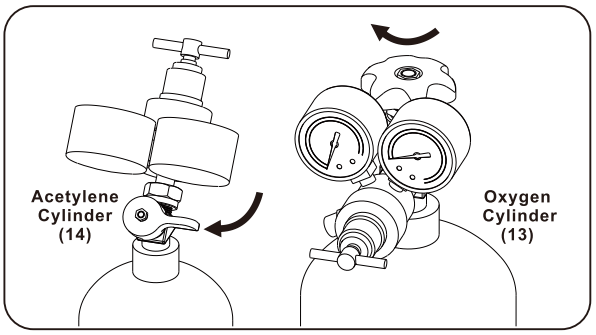
**9b.** After preheating, press the Oxygen Cutting Lever and slowly guide the torch along the cut line to cut the metal. After cutting, follow the shut down instructions on the following page.

## Welding Shut down Settings



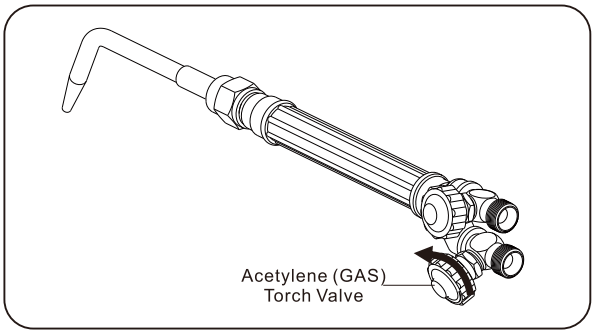

**1.** After work is complete, close the Oxygen Torch Valve First clockwise, then close the Acetylene Torch Valve clockwise.

**2.** Fully close both cylinder valves by turning clockwise.



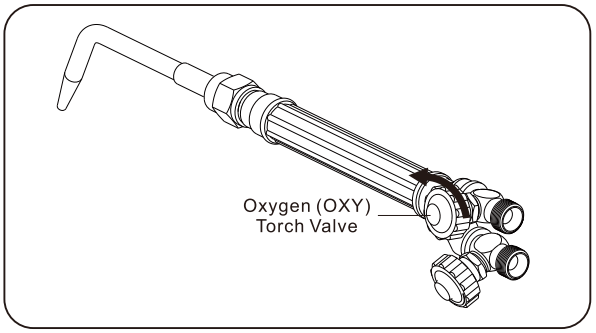

**Shutdown Step 2: Close Cylinder Valves**

**3.** Open the Acetylene Torch Valve counter clockwise to allow the pressure to bleed out.



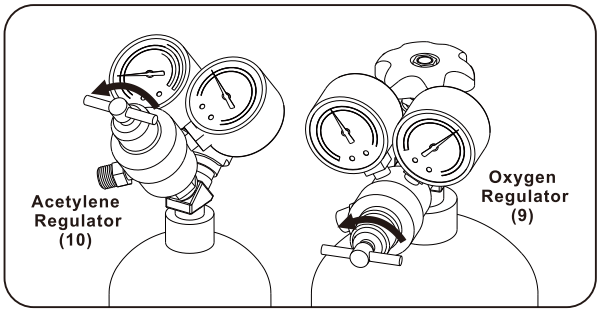

**Shutdown Step 3: Open Acetylene Valve**

**4.** Open the Oxygen Torch Valve counter clockwise to allow all the pressure to bleed out.




**Shutdown Step 4: Open Oxygen Valve**

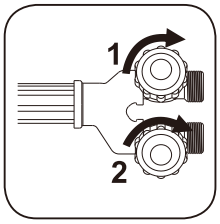
**5.** After releasing pressure, turn the Pressure Adjusting Screws counter clockwise and remove them from the regulators.




**Shutdown Step 5: Close Regulators**
(Turn counterclockwise until loose.)

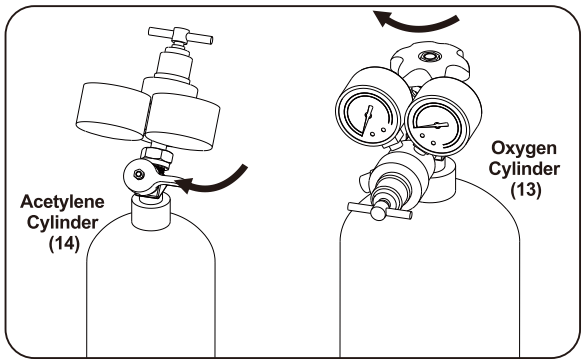
**IMPORTANT:** Failure to do this may permanently damage the regulators.

## Cutting Shut down Settings



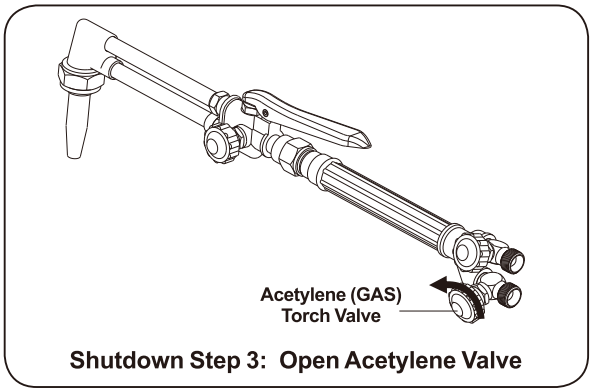

**1.** After work is complete, close the Oxygen Torch Valve First clockwise, then close the Acetylene Torch Valve clockwise.

**2.** Fully close both cylinder valves by turning clockwise.



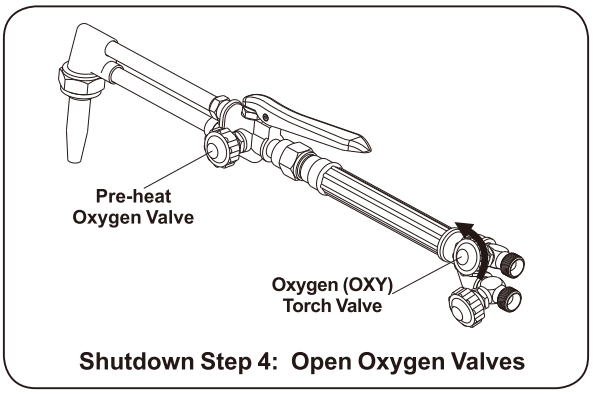

**Shutdown Step 2: Close Cylinder Valves**

**3.** Open the Acetylene Torch Valve counter clockwise to allow the pressure to bleed out.



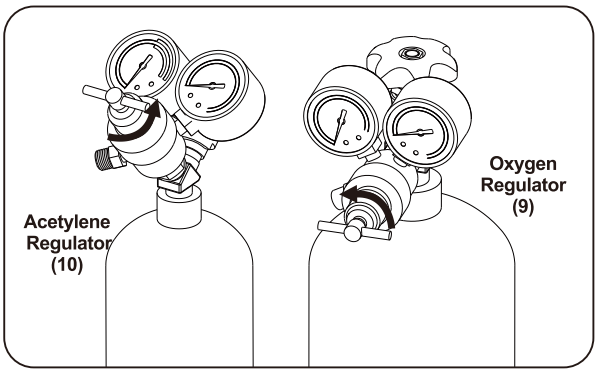

**Shutdown Step 3: Open Acetylene Valve**

**4.** Open the Oxygen Torch Valve counter clockwise and open the preheat Oxygen Valve counter clockwise to allow all pressure to bleed out.




**Shutdown Step 4: Open Oxygen Valves**

**5.** After releasing pressure, turn the Pressure Adjusting Screws counter clockwise and remove them from the regulators.




**Shutdown Step 5: Close Regulators**
(Turn counterclockwise until loose.)

**IMPORTANT:** Failure to do this may permanently damage the regulators.

**WARNING: To prevent serious injury from accidental operation. Close the oxygen, then acetylene and allow the torch to cool completely, then disconnect the hoses before performing any inspection, maintenance or cleaning procedures.**

**To prevent serious injury from tool failure, DO NOT use damaged equipment. If abnormal noise, vibration or leaking gas occurs, have the problem corrected before further use.**

**1. BEFORE EACH USE:** inspect the general condition of the Torch Kit. Check for loose hose connections, cracked or worn hoses and any other condition that may affect its safe operation.

**2.** Periodically use a tip cleaner to clean out Cutting Tip and Welding Nozzle.

**3.** To clean the outer body of the Cutting Attachment, use a clean, dry cloth. **DO NOT** immerse any part of the Cutting Attachment in **ANY** liquid. **DO NOT** use solvents or other flammable agents to clean the Cutting Attachment.

| MAINTENANCE CHART | | |
|---|---|---|
| **Maintenance Type** | **Before Use** | **After Use** |
| Inspect tool for damage. | **X** | **X** |
| Use tip cleaner to clean tip opening. | **X** | **X** |
| Wipe off with clean. dry cloth. NEVER USE SOLVENTS TO WIPE DOWN THIS CUTTING ATTACHMENT. | | **X** |

## Troubleshooting

| Problem | Possible Causes | Likely Solutions |
|---|---|---|
| Before turning on Torch, gas odor is noticed. | 1. Hose connections loose.<br>2. Crack in hose.<br>3. Cylinder leak at neck. | 1. Tighten all connections.<br>2. Check hoses. If any cracks are found, replace entire hose. DO NOT PATCH OR TAPE GAS HOSES.<br>3. Check neck area of cylinders. If cracks or damage are found, do not use. Secure upright, in a well-ventilated area, well away from sources of ignition. Contact gas supplier IMMEDIATELY. Replace cylinders before proceeding with work. |
| Flame is irregular. | 1. Cutting tip clogged or dirty.<br>2. Gas low. | 1. Close gas, oxygen first, then acetylene. Let Torch cool completely. Remove Tip, check for dirt and debris. Use tip cleaner to clean Tip or replace if necessary.<br>2. Check gas level and refill if needed. |

**Follow all safety precautions whenever diagnosing or servicing the tool.**
**Disconnect air supply before service.**

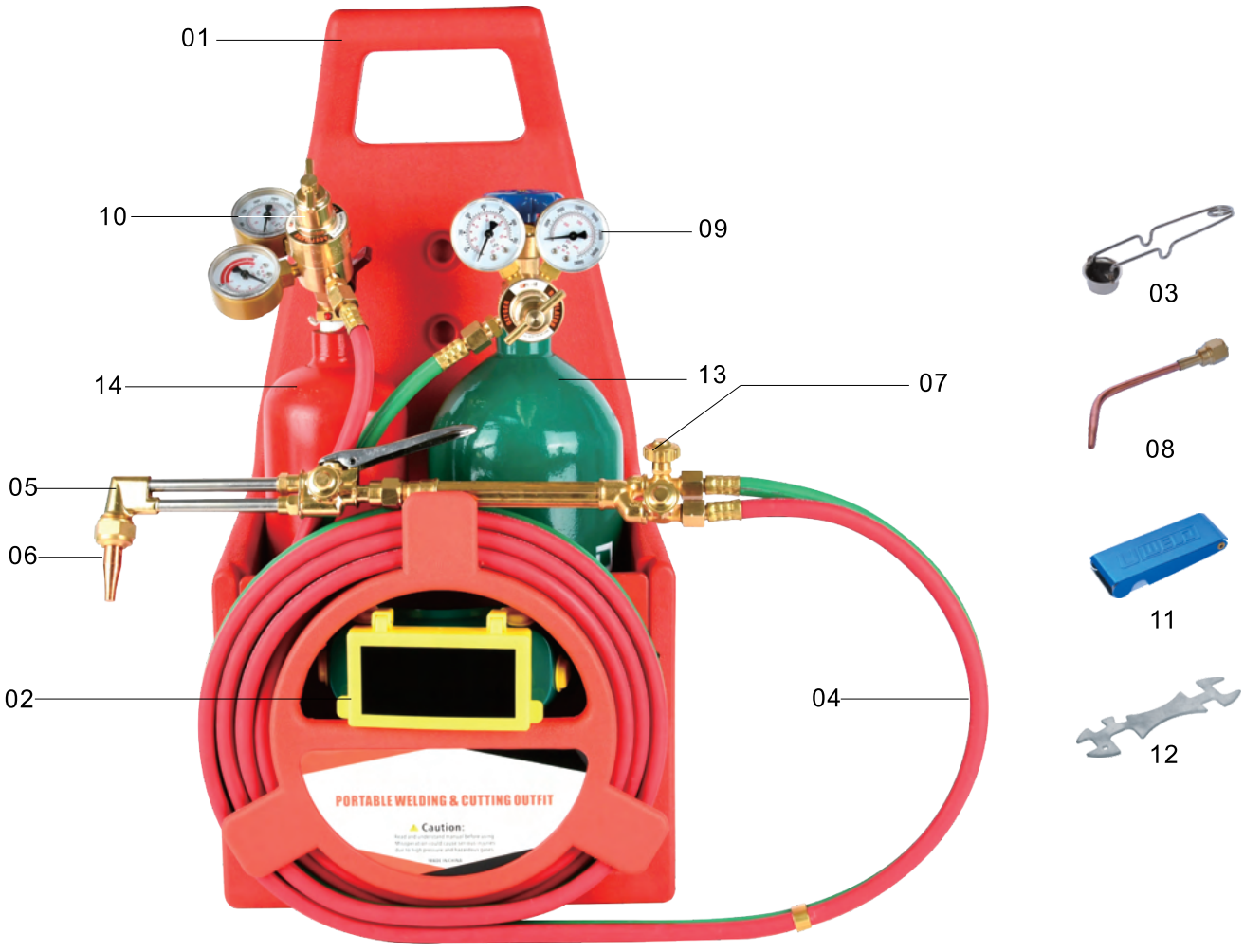
## PRODUCT SPECIFICATIONS

| | |
|---|---|
| Regulators | Oxygen: CGA 540<br>Acetylene: CGA 200 |
| Welding Nozzle | VM-W, welds up to 1/16 IN. |
| Cutting Tip | 3-101, cuts up to 1/2 IN. |
| Hose Size | 12.5 FT. L x 3/16 IN. inside diameter |
| Hose type | Color coded Twin Hose<br>(green: oxygen, red: acetylene) |
| Torch Inlet Thread | 9/16 IN. x 18 |
| Hose Fitting Threads | Oxygen: Right-Hand<br>Acetylene: Left-Hand |
| Cylinders included | 20 CU. FT. oxygen<br>10 CU. FT. acetylene |
| Accessories | Goggles, Spanner, Tip cleaner<br>Striker |

## PARTS LIST

| Part | Description | Qty |
|---|---|---|
| 1 | Carry Tote | 1 |
| 2 | Google | 1 |
| 3 | Lighter | 1 |
| 4 | Hose Assembly | 1 |
| 5 | Cutting Attachment | 1 |
| 6 | Cutting Tip | 1 |
| 7 | Torch Handle | 1 |
| 8 | Welding Nozzle | 2 |
| 9 | Oxygen Regulator | 1 |
| 10 | Acetylene Regulator | 1 |
| 11 | Tip Cleaner | 1 |
| 12 | Wrench | 1 |
| 13 | Oxygen Cylinder | 1 |
| 14 | Acetylene Cylinder | 1 |

- Capable of welding from 1/32" up to 1-1/4" with the appropriate welding nozzle.
- Capable of cuttiing from 1/2" up to 3" with the appropriate cutting tip.
- Larger welding and cutting tips are sold seperately.
- Will cut up to 1/2" and weld up to 1/16" with the included welding and cutting tips.



# WARRANTY INFORMATION

## PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

**Record Product's Serial Number Here:** _____

**Note**: If product has no serial number, record month and year of purchase instead.

**Note**: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.

**SAVE THESE INSTRUCTIONS.**


Questions, problems, missing parts?

Before returning to your retailer, our exceptional customer service is available.

Call us Tel: 909 628 4900
Hour : 9am To 3pm PST (Monday to Friday)
Email : info@starktoolsusa.com