

VEVOR

Upgrade · The Home Creator Way

Gas Welding And Cutting Torch Kit

Model: 1C016-0035

VEVOR Support Center






1C016-0035

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This is the original instruction, please read all manual instructions carefully before operating. VEVOR reserves a clear interpretation of our user manual. The appearance of the product shall be subject to the product you received. Please forgive us that we won't inform you again if there are any technology or software updates on our product.

SAFETY INSTRUCTIONS

	Read the instruction manual.
	Warning-Be sure to wear gloves when using this product.
	Warning- Be sure to wear eye protectors when using this product. protectors when using this product.

Warning

- To reduce the risk of injury, user must read instructions manual carefully.
 - The product complies with relevant standards and regulations.
- Installation of this device must comply with all applicable regulations, and it should only be operated in well-ventilated areas. Please read the user manual before installing and using this equipment.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
 - Children shall not play with the appliance.
 - This appliance shall not be used by children. Keep the appliance and its accessories out of reach of children.
 - Please properly keep product. Check whether the product is abnormal before use. If it is abnormal, please stop using it.
- Please use the product according to the intended use, warn of potential injury from misuse.

SPECIFICATIONS

TEM	DESCRIPTION
Torch Handle, Oxygen Regulator and Acetylene Regulator	All brass construction with polished finish
Cutting Nozzle	Brass and Steel.Chrome plated oxygen

	lever
Welding Nozzle and Heating Nozzle	Brass base with a Copper tip
Welding Hose Size	Two-15 Ft.Long x1/4"ID Rubber and brass fittings
Tip Cleaner	Steel files in an Anodized case
Flint Lighter	Chrome plated steel with a Flint tip

WORK AREA

1. **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.
3. **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control. Protect others in the work area from debris such as chips and sparks. Provide barriers or shields as needed.

PERSONAL SAFETY

1. **Stay alert. Watch what you are doing, and use common sense when operating a power tool. Do not use a power tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.
2. **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.
3. **Avoid accidental starting. Be sure the Power Switch is off before plugging in.** Carrying power tools with your finger on the Power Switch, or plugging in power tools with the Power Switch on, invites accidents.
4. **Remove adjusting keys or wrenches before turning the power tool on.** A wrench or a key that is left attached to a rotating part of the power tool may result

in personal injury.

5. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the power tool in unexpected situations.

6. **Use safety equipment. Always wear eye protection.** Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

TOOL USE AND CARE

1. **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.

2. **Do not force the tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.

3. **Do not use the power tool if the Power Switch does not turn it on or off.** Any tool that cannot be controlled with the Power Switch is dangerous and must be replaced.

4. **Disconnect the Power Cord Plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.

5. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.

6. **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools with a sharp cutting edge are less likely to bind and are easier to control. Do not use a damaged tool. Tag damaged tools "Do not use" until repaired.

7. **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.

8. **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool may become hazardous when used on another tool.

SERVICE

1. **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
2. **When servicing a tool, use only identical replacement parts. Follow instructions in the "Inspection, Maintenance, And Cleaning" section of this manual.** Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

SPECIFIC SAFETY RULES

1. **Maintain labels and nameplates on the Heavy Duty Welding Kit.** These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
2. **Maintain a safe working environment.** Keep the work area well lit. Make sure there is adequate surrounding workspace. Always keep the work area free of obstructions, grease, oil, trash, and other debris.
3. **Prevent eye injury and burns.** Wearing and using personal safety clothing and safety devices reduce the risk for injury. Wear ANSI approved safety impact eye goggles with a welding helmet featuring at least a number 10 shade lens rating. Leather leggings, fire resistant shoes or boots should be worn when using this product. Do not wear pants with cuffs, shirts with open pockets, or any clothing that can catch and hold molten metal or sparks. Keep clothing free of grease, oil, solvents, or any flammable substances. Wear dry, insulating gloves and protective clothing. Wear an approved head covering to protect the head and neck. Use aprons, cape, sleeves, shoulder covers, and bibs designed and approved for welding and cutting procedures. When welding or cutting overhead or in confined spaces, wear flame resistant ear plugs or ear muffs to keep sparks out of ears.
4. **Prevent accidental fires.** Remove any combustible material from the work area. 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. Use a fire resistant material to cover or block all open doorways, windows, cracks, and other openings. Enclose

the work area with portable fire resistant screens. Protect combustible walls, ceilings, floors, etc., from sparks and heat with fire resistant covers. If working on a metal wall, ceiling, 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 serve as a fire watch, equipped with a fire extinguisher, during the welding process and for at least one half hour after the welding is completed. Do not weld or cut on materials having a combustible coating or combustible internal structure, as in walls or ceilings, without an approved method for eliminating the hazard. Do not dispose of hot slag in containers holding combustible materials.

KEEP A FIRE EXTINGUISHER NEARBY AND KNOW HOW TO USE IT.

HAVE TYPE A, B, C FIRE EXTINGUISHER HANDY. After welding or cutting, make a thorough examination for evidence of fire. Be aware that easily visible smoke or flame may not be present for sometime after the fire has started. Do not weld or cut in atmospheres containing dangerously reactive or flammable gases, vapors, liquids, and dust. Provide adequate ventilation in work areas to prevent accumulation of flammable gases, vapors, and dust. 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. Clean and purge containers before applying heat. Vent closed containers, including castings, before preheating, welding, or cutting.

5. Avoid overexposure to fumes and gases. Always keep your head out of the fumes. Do not breathe the fumes. Use enough ventilation or exhaust, or both, to keep fumes and gases from your breathing zone and general area. Where ventilation is questionable, have a qualified technician take an air sampling to determine the need for corrective measures. Use mechanical ventilation to improve air quality. If engineering controls are not feasible, use an approved respirator. Work in a confined area only if it is well ventilated, or while wearing an air-supplied respirator. Follow OSHA guidelines for Permissible Exposure Limits (PEL's) for various fumes and gases. Follow the American Conference of Governmental Industrial Hygienists recommendations for Threshold Limit Values (TLV's) for fumes and gases. Have a recognized specialist in Industrial Hygiene or Environmental Services check the operation and air quality and make recommendations for the specific welding or cutting situation.

6.

!WARNING

INHALATION HAZARD:

Welding and Plasma 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 plasma cutting exhaust fumes are:

- Early onset of Parkinson's Disease
- Heart disease
- Ulcers
- Damage to the reproductive organs
- Kidney damage
- Kidney damage
- Inflammation of the small intestine or stomach

·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.

7. Always keep the Welding Hoses(1A or 1B)away from moving parts on the tool. Examine the Welding Hoses for cuts, burns,or worn areas before each use.If any damaged areas are found,replace the Welding Hoses immediately.Never repair or patch welding hoses.

8. Read and understand all instructions and safety precautions as outlined in the manufacturer's manual for the material you will weld or cut.

9. 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.Do not use cylinders that have been dented. Cylinder caps should be used when moving or storing cylinders. Empty cylinders should be kept in specified areas and clearly marked "empty".

10. Never use oil or grease on any inlet connector, outlet connector, or cylinder valves. Keep regulators free of grease/oil.

11. Always use reverse-flow check valves on the torch and regulator. This greatly reduces the possibility of mixing gases in the regulator or hose.

12. Working pressure on the Acetylene Regulator should NEVER be set above 15 PSI.

13. **There must be TWO O-Rings (C24,C25) on the Cone End (C23) end.** The absence of either O-Ring can lead to flashback within the Torch Handle or Cutting Attachment.

14. **For the Cutting Attachment,inspect the tapered seating surfaces on the Tip and in the Torch Head.** 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.

15. **Backfire and flashback.** When the flame goes out with a loud "pop", it is called a backfire. Backfire can be caused by (1) operating the Torch at lower pressures than required for the Tip used, (2) touching the Tip against the work piece, (3) overheating the Tip, or (4) an obstruction in the Tip. If backfire occurs, shut off the Torch Handle Valves (oxygen first) and after remedying the cause, relight the Torch. A flashback is a condition that results when the flame flashes back into the Torch and burns inside with a shrill hissing or squealing noise. If flashback occurs, close the Torch Handle Valves (oxygen first), IMMEDIATELY. Flashback generally indicates a problem that should be repaired. A clogged Tip, improper functioning of the Valves, or incorrect acetylene/oxygen pressure could lead to flashback. Make sure to find the cause before relighting the Torch.

16. A WARNING This product,when used for welding and similar applications contains or produces a chemical known to the State of California to cause cancer and birth defects (or other reproductive harm). (California Health &Safety Code 25249.5et seq.)

17. A WARNING The brass components of this product contain lead, a chemical known to the State of California to cause birth defects (or other reproductive harm). (California Health &Safety Code 25249.5 et seq.)

ASSEMBLY AND OPERATING INSTRUCTIONS

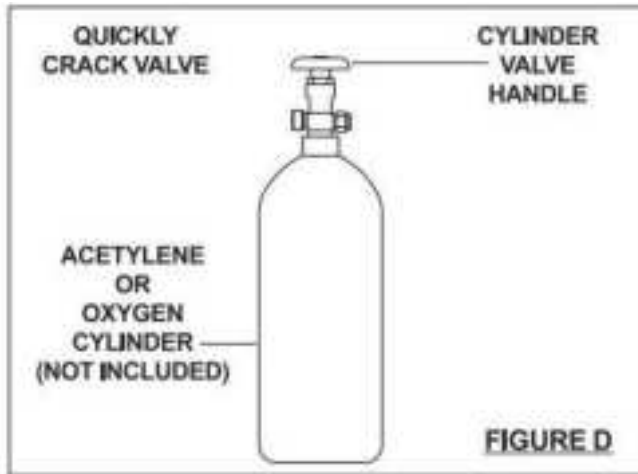
1. NOTE!The following instructions are for acetylene gas use only.

Do not use other fuel gases.

2. Make sure to secure the cylinders (as noted in the Specific Safety Rules section).

3. While standing to one side, "crack" each cylinder valve."Cracking" is to quickly open and close the valve, allowing gas to escape and clearing the valve of any

foreign material. If oil or grease is found,discontinue using cylinder and immediately contact your supplier. (See Figure D.)



4. Attach the GREEN Oxygen Regulator(parts A1-A21)to the oxygen cylinder. Then attach the RED Acetylene Regulator(pats 1-17) to the acetylene cylinder. Make sure they are tightened in the correct directions (normally,clockwise for oxygen and counterclockwise for acetylene.) **DO NOT USE THREAD SEALING TAPE.** (See Figure E.)

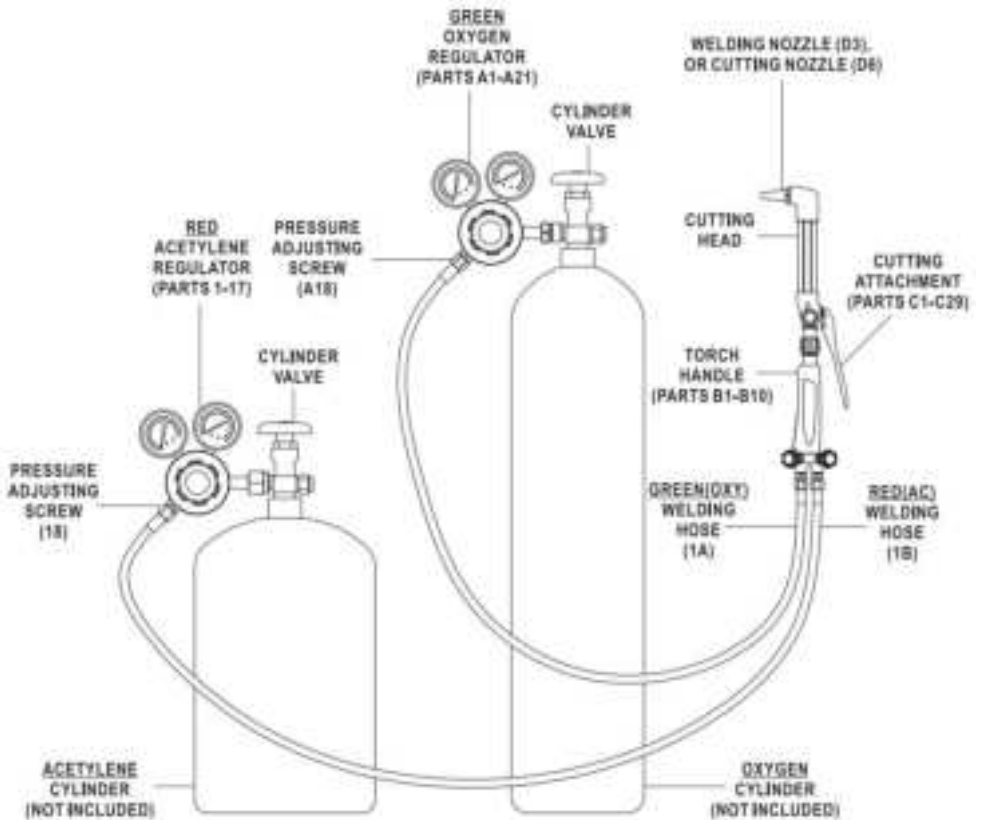
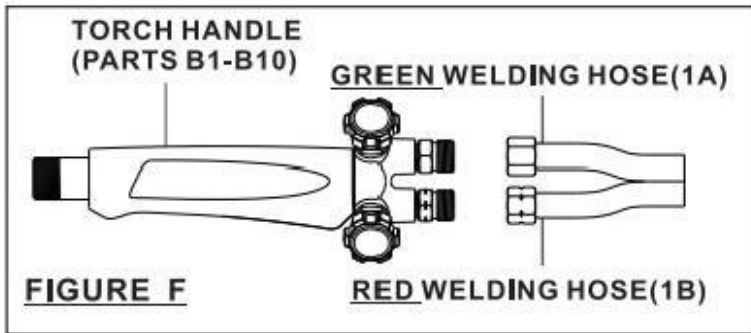


FIGURE E

5. **IMPORTANT!** The Pressure Adjusting Screw (18) on the Acetylene Regulator and the Pressure Adjusting Screw (A18) on the Oxygen Regulator should be turned counterclockwise to relieve pressure on the Regulator diaphragms before opening the cylinder valves. If this is not done, pressure from the cylinders may damage the diaphragms and render the Regulators inoperable.

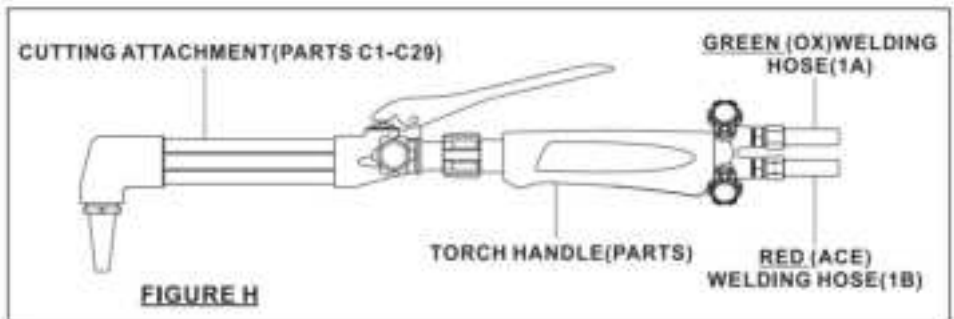
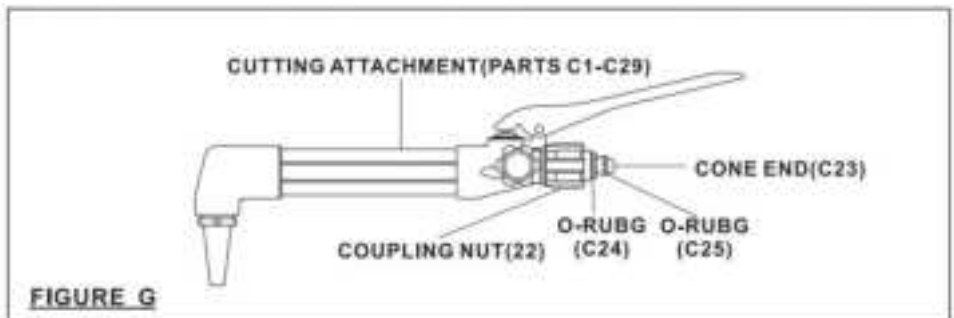
6. Connect the GREEN and RED Welding Hoses (1A, and 1B) to the proper connections on the Torch Handle (parts B1-B11).

AWARNING If any traces of oil or grease are found, do not use. Contact your gas supplier immediately. (See Figure F.)



7. Connect the Cutting Attachment (parts C1-C27) to the Torch Handle (parts B1-B10). Always check the Cone End (C23) and Coupling Nut (C22) for damage or oil. If either are found, discontinue use and contact your gas supplier.

WARNING Make sure the two O-Rings (C24, C25) are not damaged or missing otherwise gases will mix inside the Torch Handle (parts B1-B10) and result in flashback or backfires. (See Figures G, and H.)



8. Check connections for leaks. Adjust the Acetylene Regulator (parts 1-17) and Oxygen Regulator (parts A1-A21) to their normal operating pressure. Use an

approved leak detection solution to check for leaks at the Welding Hoses (1A, and 1B) and cylinder valve connections. If leaks are found, tighten the nuts more securely.

If a leak still persists, discontinue use and call your gas supplier

AWARNING NEVER set the Acetylene Regulator (parts 1-17) to a delivery pressure above 15 PSI. (See Figures I, J, and K.)

WELDING TIP CHART

Metal Thickness	Tip Size	Oxygen Pressure P.S.I.G.		Acetylene Pressure P.S.I.G.	
		Min	Max		
1/64"-3/64"	00	3	5	3	5
1/32"-5/64"	0*	3	5	3	5
3/64"-3/32"	1	3	5	3	5
1/16"-1/8"	2	3	5	3	5
1/8"-3/16"	3	4	7	3	6
3/16"-1/4"	4	5	10	4	7
1/4"-1/2"	5	6	12	5	8

FIGURE I *Included

OXY-ACETYLENE MULTI-FLAME HEATING CHART

Tip Size	Acetylene Pressure Range P.S.I.G.	Oxygen Pressure Range P.S.I.G.	Acetylene Cubic Feet Per Hour		Oxygen Cubic Feet Per Hour	
			Min.	Max	Min.	Max.
6	4-6	8-11	14	40	15	44
8	8-12	10-18	30	80	33	88

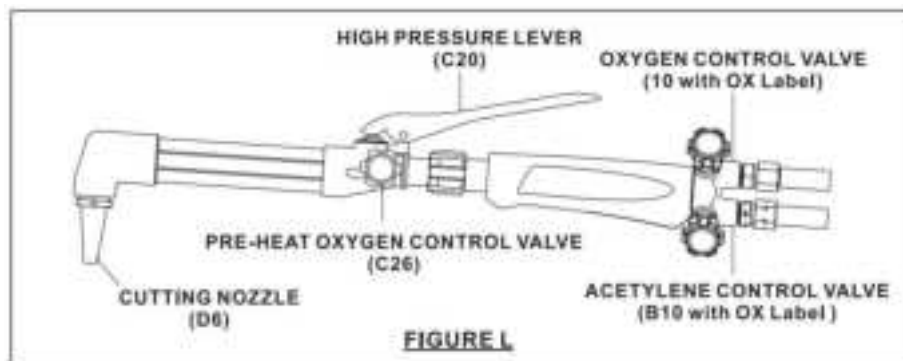
FIGURE J

OXY- ACETYLENE CUTTING NOZZLE CHART

Metal Thickness	Nozzle Size	Oxygen Pressure P.S.I.G.		Acetylene Pressure P.S.I.G.	
		Min.	Max.	Min.	Max.
1/2"	0	30	35	3	5
3/4"	1**	30	35	3	5

FIGURE K *Included

9. To determine the proper Acetylene Regulator (parts 1-17) pressure and Oxygen Regulator(parts A1-A21) pressure for neutral flame adjusting, refer to Figures I, and K.

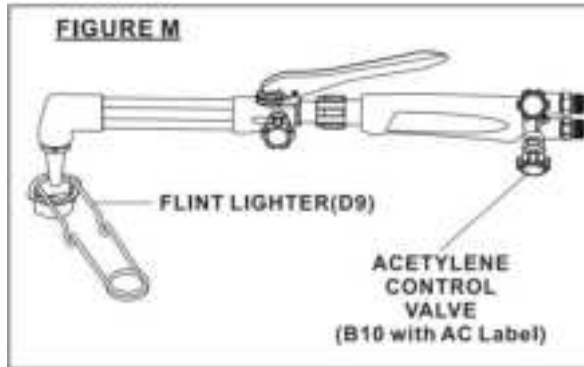


10. Depending on use, attach either the Cutting Nozzle(D6), or Welding Nozzle (D3) to the Cutting Attachment(parts C1-C29).(See Figure L.)

11. Open the Oxygen Control Valve (B10 with OX label) on the Torch Handle. Open the Pre-Heat Oxygen Valve(C26)on the Cutting Attachment. Adjust the Oxygen Regulator (partsA1-A21) to the desired working pressure. Then, close the Oxygen Control Valve on the Torch Handle.(See Figures E, and L.)

12. Open the Acetylene Control Valve (B10 with AC label)on the Torch Handle. Adjust the Acetylene Regulator (parts 1-17) to the desired working pressure. Then, close the Acetylene Control Valve on the Torch Handle. (See Figures E, and L.)

13. Hold the Torch Handle (parts B1-B11) in one hand and the Flint Lighter (D9) in the other hand. (See Figure M.)



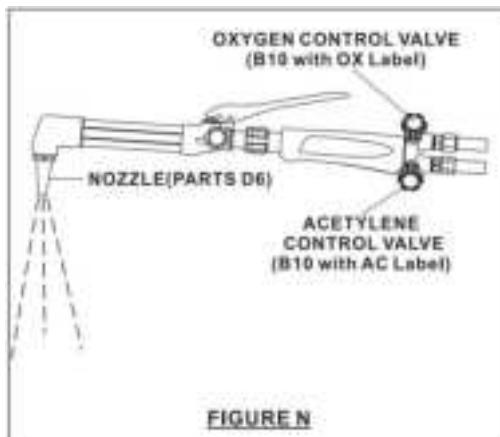
14. Open the Acetylene Control Valve (B10 with AC Label) about 1/4 turn, and ignite the acetylene gas coming out of the Nozzle (part D3,D6).

AWARNING Always point the Nozzle away from other people when lighting. (See Figures L, and M.)

15. Slowly open the Acetylene Control Valve (B10 with AC Label) further until the smoke subsides and the flame jumps away from the end of the Nozzle (part D3, D6) slightly. **(See Figure M.)**

16. Slowly open the Oxygen Control Valve (B10 with OX Label) until a brilliant neutral flame is reached. (If the flame has a smooth inner cone, the flame is called neutral.) **(See Figure N.)**

AWARNING Always use appropriate welding goggles or welding helmet when welding or cutting.



17. Once the welding or cutting job is completed, turn off the Oxygen Control Valve

(B10 with OX Label). Then, turnoff the Acetylene Control Valve (B10 with AC Label)

NOTE: Reversal of this procedure may cause dam ago to the Torch Handle (parts B1-B11). (See Figure N.)

18. Shut off both cylinder valves. (See Figure E.)

19. Drain the gas from the Oxygen Regulator (partsA1-A21) by opening the Oxygen Control Valve (B10 with OX Label). Repeat this Step on the acetylene side. (See Figure N.)

20. Release the pressure on the Acetylene and Oxygen Regulators by turning their Pressure Adjusting Screws (18,A18)counterclockwise. (See Figure E.)

INSPECTION, MAINTENANCE, AND CLEANING

1. **AWARNING** Make sure the Welding Kit is cool to the touch and disconnected from its oxygen and acetylene cylinders before performing any inspection, maintenance, or cleaning procedures.

2. **BEFORE EACH USE**, inspect the general condition of the Welding Kit. Check for loose screws,misalignment or binding of moving parts, cracked or broken parts, damaged Welding Hoses (1A, and 1B), and any other condition that may affect its safe operation. If a problem occurs,have the problem corrected before further use. Do not use damaged equipment.

3. **PERIODICALLY**, use the Tip Cleaner (D7) to clean out dirt and debris from the Nozzles (parts D3,D6). Make sure to use the correct size Tip Cleaner for each individual Nozzle. (See Assy. Diagram E.)

4. TO CLEAN, use a clean cloth. If necessary,a mild detergent may be used. Do not immerse any part of the Welding Kit in liquid.

Do not use solvents or other flammable agents to clean the Welding Kit.

PLEASE READTHE FOLLOWING CAREFULLY

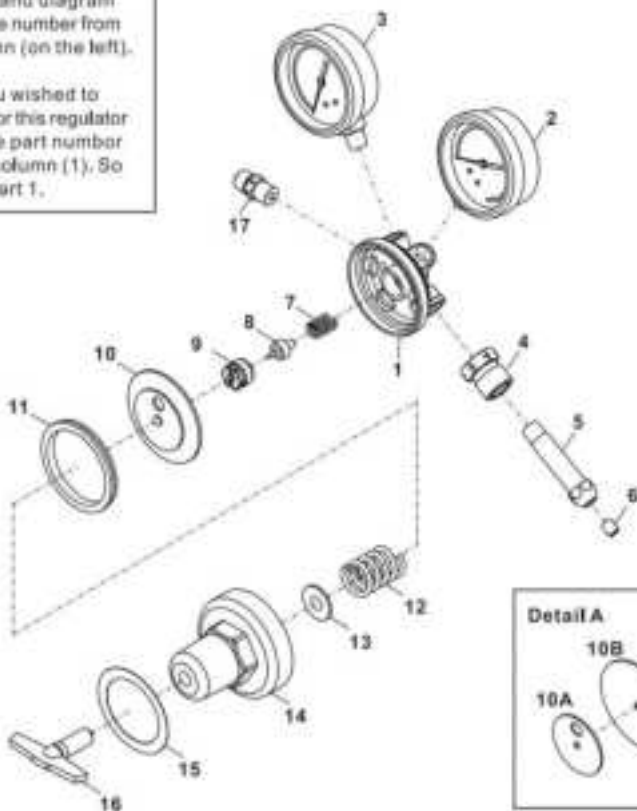
The manufacturer and/or distributor has provided the parts list and assembly diagram in this manual as a reference tool only. neither the manufacturer or distributor makes any representation or warranty of any kind to the buyer that he or she is qualified to make any repairs to the product, or that he 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.

PARTS LIST AND DIAGRAM 1-ACETYLENE REGULATOR

Note: When ordering parts from this parts list and diagram always take the number from the No. column (on the left).

For example: If you wished to order a Body for this regulator you'd take the part number from the No. column (1). So you'd order part 1.

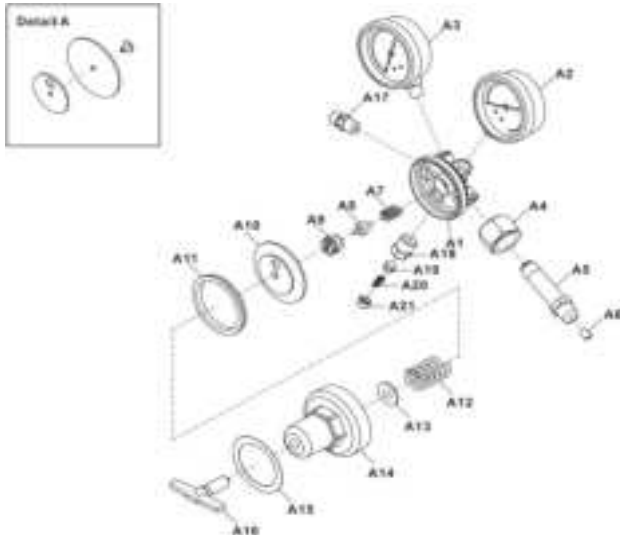


NO.	DESCRIPTION	NO.	DESCRIPTION
1	Body	10A	Diaphragm Plate
2	H.P.Gauge(2.1"x400pe/2800kpa)(UL)	10B	Diaphragm
3	L.P.Gauge(2.1×30psi200kpa)	10C	Centralizer
4	Inlet Nut(CGA510)	11	Gasket
5	Inlet Spigot	12	Adjusting Spring
6	Filter	13	Spring Button
7	Valve Spring	14	Bonnet
8	Valve	15	Label
9	Nozzle	16	Adjusting Screw "T"
10	Diaphragm Assembly	17	Bar Outer Adaptor

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

PARTS LIST AND DIAGRAM 2-OXYGEN REGULATOR

Note: When ordering parts from this parts list and diagram always take the number from the No. column (on the left) and add a suffix of A to the beginning. For example: If you wished to order a Filter for this regulator you'd take the part number from the No. column (6) and add an A to the beginning. So you'd order part A6.



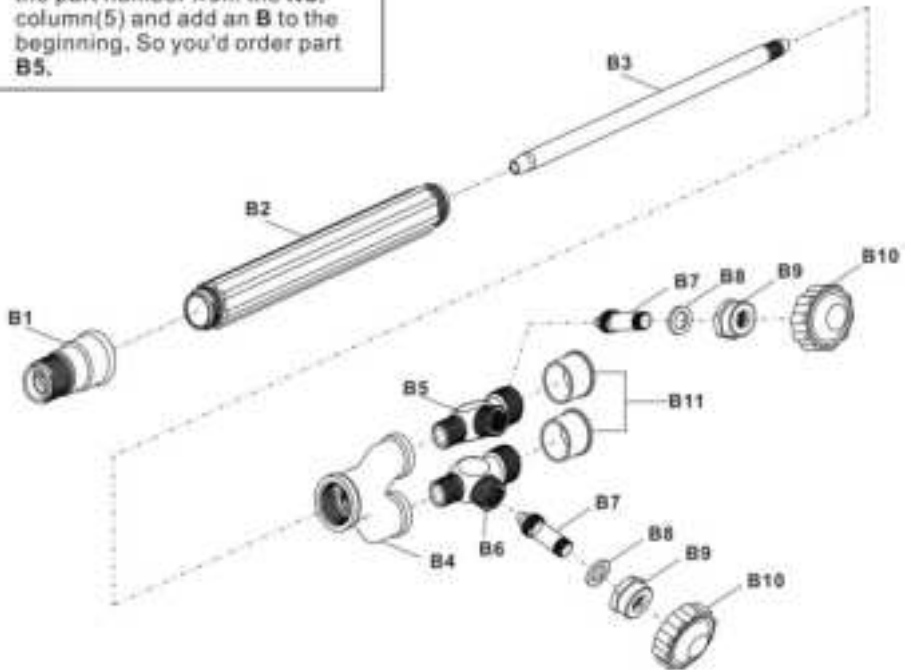
NO	DESCRIPTIQN	NO.	DESCRIPTION
A1	Body	A11	Gasket
A2	H.P.Gauge(2.1"x4000pe/28000kpa)(UL)	A12	Adjusting Spring
A3	L.P.Gauge (2.1x200psi1400kpa)	A13	Spring Button
A4	Inlet Nut (CGA540)	A14	Bonnet
A5	Inlet Spigot	A15	Label
A6	Filter	A16	Adjusting Screw" T"Bar
A7	Valve Spring	A17	Outlet Adaptor
A8	Valve	A18	Safety Body
A9	Nozzle	A19	Safety Seat
A10	Diaphragm Assembly	A20	Safety Spring
A10A	Diaphragm Plate	A21	Safety Cap
A10B	Diaphragm		
A10C	Centralizer		

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

PARTS LIST AND DIAGRAM3-TORCH HANDLE

Note: When ordering parts from this parts list and diagram always take the number from the **No.** column (on the left) and add a suffix of **B** to the beginning.

For example: If you wished to order a Tail for this handle you'd take the part number from the **No.** column(5) and add an **B** to the beginning. So you'd order part **B5**.



NO.	DESCRIPTION	NO	DESCRIPTION
B1	Torch Head	B7	Valve Stem Washer
B2	Handle	B8	Nut
B3	Inner Tube	B9	Adjusting Knob Cover
B4	Tail	B10	
B5	Oxygen Valve Body	B11	
B6	Gas Valve Body		

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

C6	Fuel Tube	C21	Spiral Pin
C7	Inner Tube(A)	C22	Coupling Nut
C8	Inner Tube(B)	C23	Cone End
C9	Spiro	C24	O-Ring(Big)
C10	O-Ring	C25	O-Ring (Small)
C11	Inner Tube(C)	C26	Valve Stem
C12	Washer (Teflon)	C27	Washer
C13	Spring	C28	Nut
C14	Nut	C29	Adjusting Knob
C15	Body		

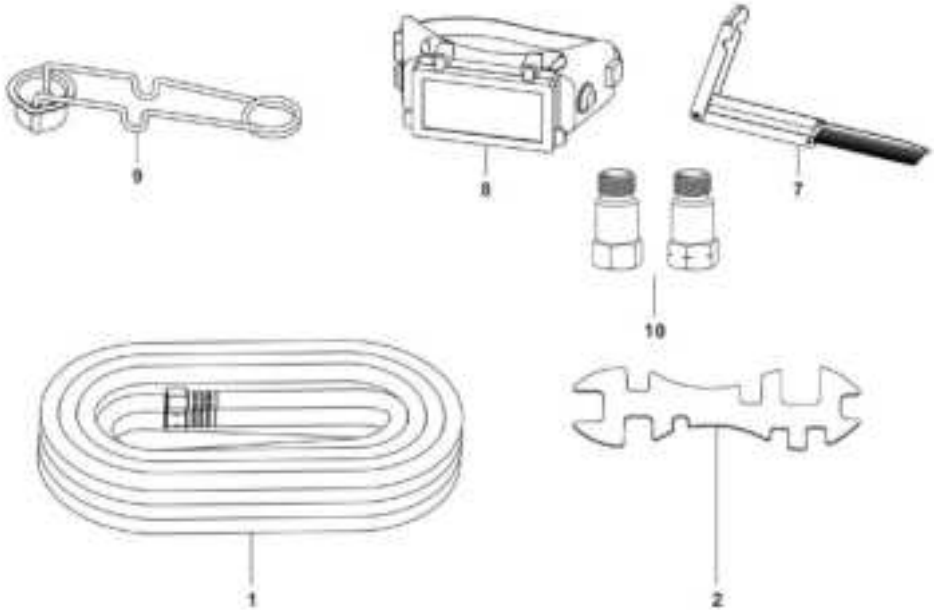
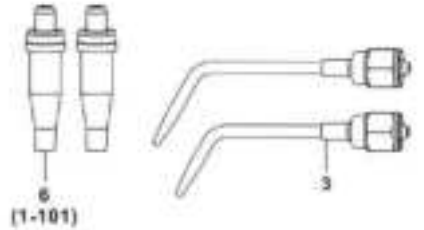
NOTE: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

PARTS LIST AND DIAGRAM 4-CUTTING ATTACHMENT

Note: When ordering parts from this parts list and diagram always take the number from the No. column (on the left) and add a prefix of D to the beginning.

For example: If you wished to order a Heating nozzle you'd take the part number from the No. column (2) and add an D to the beginning. So you'd order part D2.

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



NO.	Description	Qty	NO.	Description	Qty
1	Welding Hose	1	7	Tip Cleaner	1
2	Wrench	1	8	Welding Glasses (Shaded)	1
3	Welding Nozzle	2	9	Flint Lighter	1
6	Cutting Nozzle	2			

*OX and AC Welding Hoses are attached together and are only available as a set. To order set, specify part number 1A/1B.

