

# OXWELD<sup>®</sup> Regulation Panels

Panel Part No.	Service	Nominal Capacity		Max. Inlet Pressure psig (bar)		Max. Delivery Pressure psig (bar)		
		Oxygen ft <sup>3</sup> /hr (m <sup>3</sup> /hr)	Fuel Gas ft <sup>3</sup> /hr (m <sup>3</sup> /hr)	Oxygen	Fuel Gas	Oxygen Cut	Oxygen Preheat	Fuel Gas
2119101	2 - Outlet High Flow	10,000 (283)						
2116395	3 - Outlet High Flow							
2224539	2 -Outlet Standard Flow	6,000 (170)	2,000 (945)	300 (20.6)	100 (6.9)	150 (10.3)	75 (5.2)	75 (5.2)
2224540	3 - Outlet Standard Flow							
2225202	2 - Outlet Standard Flow No Filter (Not Illustrated)							
2225203	3 - Outlet Standard Flow No Filter (Not Illustrated)							

## CAUTION

These Instructions are for experienced operators. If you are not familiar with the principles of operation and safe practice for oxy-fuel gas equipment, we urge you to read our booklet "Precautions and Safe Practices for Welding, Cutting and Heating", Form 2035. Do not attempt to install or operate this equipment until you have read and fully understand these Instructions. If you do not fully understand these Instructions, contact your supplier for further information.

**Be sure this information reaches the operator.  
You can get extra copies through your supplier.**



**ESAB** Welding & Cutting Products

## INSTALLATION

As supplied, Oxweld Regulation Panels are ready to be permanently flush-mounted to a wall or column. Bolt holes in the steel frame are conveniently located to simplify placement of the panel. Regulation panels should be mounted securely by fastening the frame to the wall or steel column. (See specific Regulation Panel Diagram for hole spacing and physical size).

**NOTE: Install panels in vertical position, gas inlets up.**

1. If mounting to a wall of masonry construction, use 1/2-in. bolts or lag screws. Thread the bolts into expansion anchors placed in holes drilled in the wall.
2. If mounting to a steel column, fabricate horizontal braces wide enough to extend to the outside edges of the panel. Permanently mount the braces to the column by securely welding or bolting in place then attach the panel with 1/2-in. machine hardware.

## CONNECTIONS

### INLET CONNECTIONS

#### IMPORTANT!

**Before beginning, make sure all inlet and outlet ball valves are closed and pressure adjusting screws on regulators are backed out all the way.**

Regulation Panels are supplied with 3/4" NPT oxygen and fuel gas inlet ball valves. For proper installation, permanently attach mill piping to gas service inlets. See Figures 2 and 3.

### OUTLET CONNECTIONS

- (2) **Outlet Panels - P/N 2219101, 2224539 and 2225202** - Attach 3/8" diameter fuel gas hose with "B" size (CGA No. 023) fitting to brass fuel gas outlet nipple then attach 1/2" diameter oxygen hose with "C" size (CGA No. 024) fitting to oxygen outlet nipple.
- (3) **Outlet Panels-P/N 2116395, 2224540 and 2225203** - Attach 3/8" diameter fuel gas hose with "B" size (CGA No. 023) fitting to brass fuel gas outlet nipple then attach 3/8" diameter oxygen hose with "B" size (CGA No. 022) fitting to oxygen outlet nipple.

**NOTE: Make certain hose lengths do not exceed recommended maximum lengths for the torch being used.**



**PIPE FUEL GAS RELIEF VALVE TO EXHAUST OUT OF BUILDING AS NOTED IN REGULATION PANEL DIAGRAMS.**

### TESTING FOR LEAKS

All connections should be thoroughly tested for leaks after the panel is first hooked up, and at regular intervals thereafter. After all connections have been made, make sure all valves downstream are closed. Then turn in the regulator pressure-adjusting screw until the oxygen delivery-pressure gauge registers 50 psi, the fuel gas delivery-pressure gauge registers 10 psi. Using Leak Test Solution suitable for oxygen service, such as P/N 998771 (8 oz. container) check for leaks at all connections. Bubbling at any point indicates leakage and the leaking connection should be tightened. If this does not stop the leakage, close the appropriate inlet valve, open the downstream valve to remove all pressure from the line, and finally release the regulator pressure-adjusting screw by turning it counterclockwise. Then, break the leaking connection, wipe metal seating surfaces with a clean, dry cloth, and examine them for nicks and scratches. Remake the connection(s) and retest. Do not try to operate until all connections are gas-tight.

## OPERATING INSTRUCTIONS

### To Increase Delivery Pressure

Turn the pressure-adjusting screw to the right (clockwise). To decrease delivery pressure, turn the pressure adjusting screw to the left (counterclockwise). The torch and regulation panel ball valves should be open whenever adjusting delivery pressure. If they are not open, true work-pressure reading on the delivery-pressure gauge cannot be obtained.

### To Release Pressure

If work is to be stopped for a half-hour or more, release all pressure from the regulators as follows:

1. Close the inlet ball valves.
2. Open the torch valves until the regulator gauge hands return to the pins.

3. Release the pressure adjusting screws by turning them to the left (clockwise) until they turn freely.
4. Close the torch valves.

Always follow the steps outlined above before removing a regulator from a station. If the regulator is to be out of service for several days, or longer, turn in the pressure adjusting screw enough to move the seat off the nozzle.

## **MAINTENANCE**

Refer to the individual "Maintenance Instructions" found in the appropriate instructions for the component parts of the regulation panels. These instructions are supplied with every panel. Refer to the list below and contact your Oxweld supplier if additional copies are needed.

### **High Flow Panels**

R-52 Regulator Instruction Literature ..... F-12-859

### **Common Components**

R-6700 Regulator Instruction Literature ..... F15-396

H-16 Flash Arrestor Instruction Literature ..... F-9615

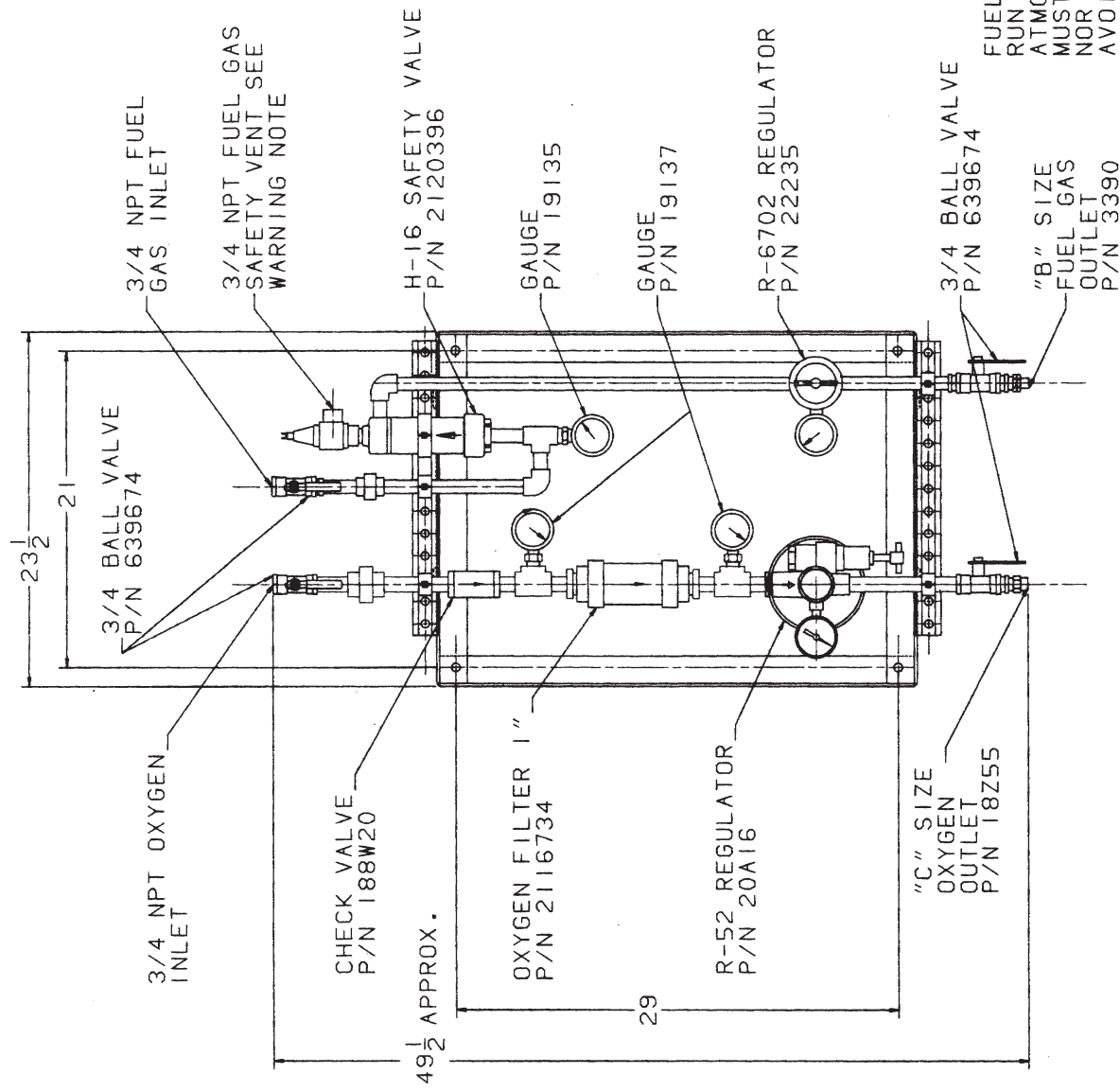
Oxygen Line Filter ..... F-12-950  
(Except panels without filter)

## **REPLACEMENT PARTS**

Major components are listed in Figures 2 and 3. For individual parts of these components, refer to the specific instruction literature. (See "Maintenance" section).



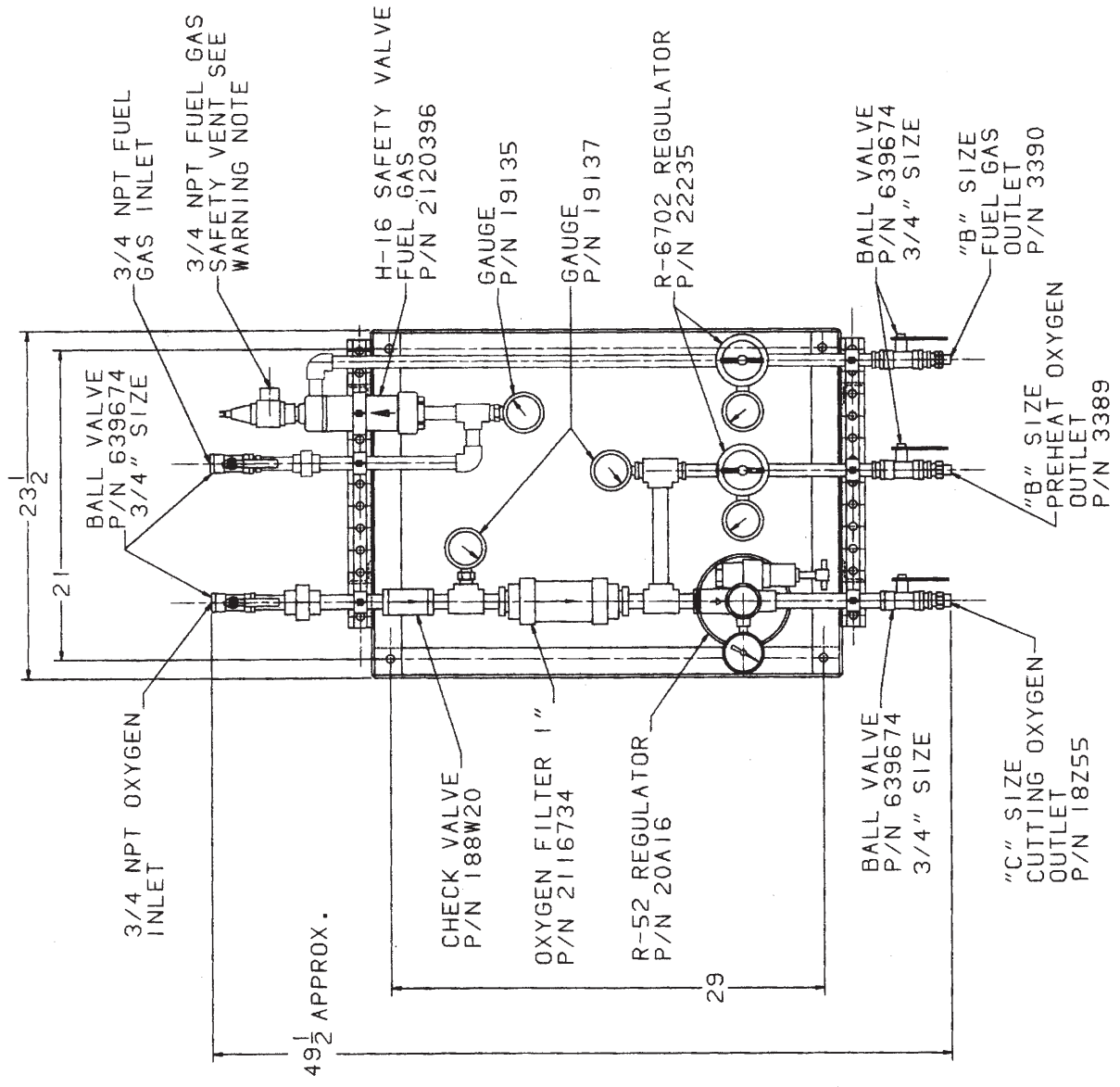
**DO NOT USE OIL ON THIS APPARATUS. OIL AND GREASE ARE EASILY IGNITED AND BURN VIOLENTLY IN THE PRESENCE OF OXYGEN UNDER PRESSURE**



**! WARNING**

FUEL GAS SAFETY VENT LINE TO BE RUN BY CUSTOMER TO OUTSIDE ATMOSPHERE. DISCHARGE FROM VENT MUST NOT BE NEAR HEAT OR FLAMES, NOR ENDANGER PERSONNEL OR PROPERTY. AVOID TRAPS OR POCKETS IN LINES. MUST TERMINATE IN HOOD OR BEND. REFERENCE: H-14/H-16 INSTRUCTION LITERATURE FORM F-9615

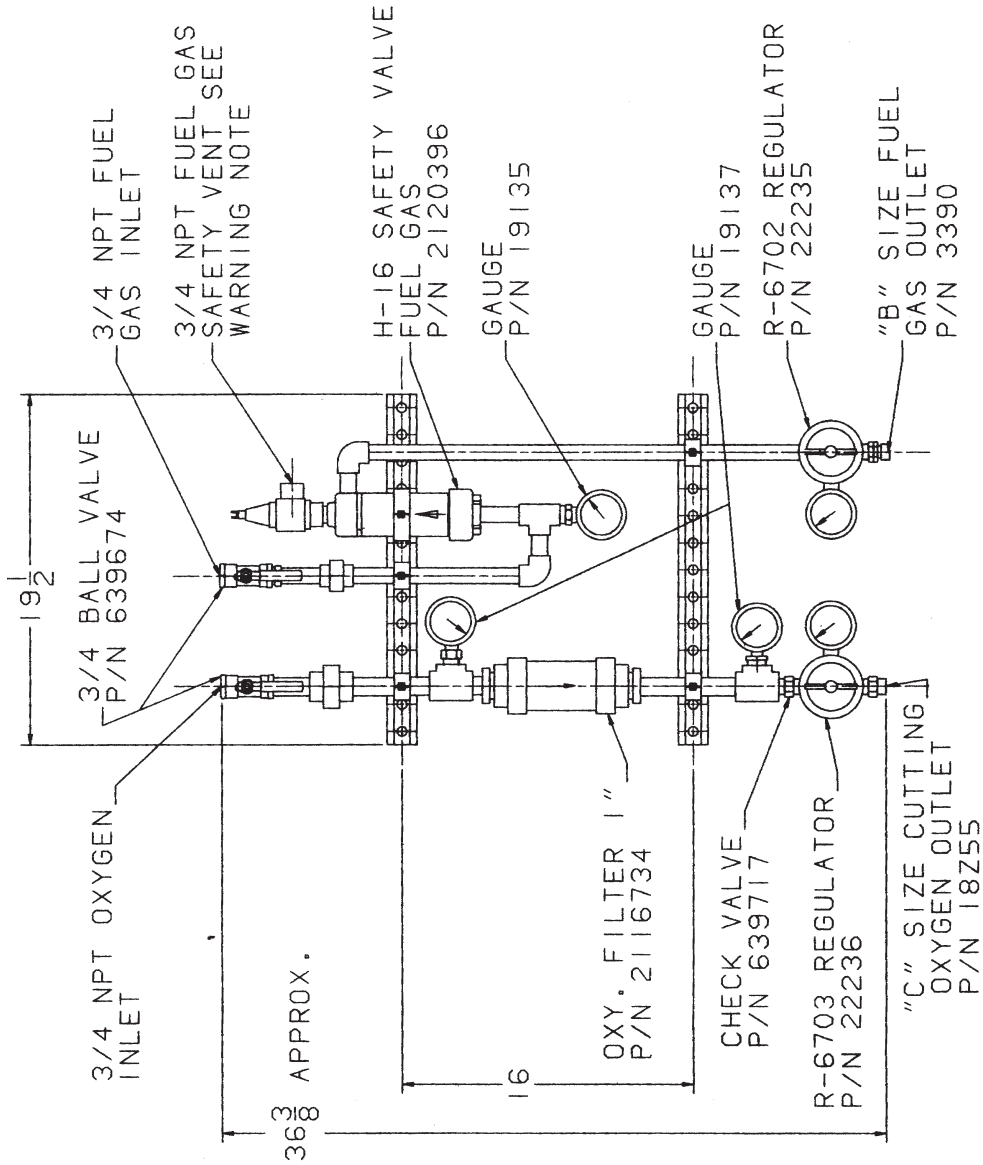
Figure 1 - Panel Assembly P/N 2119101



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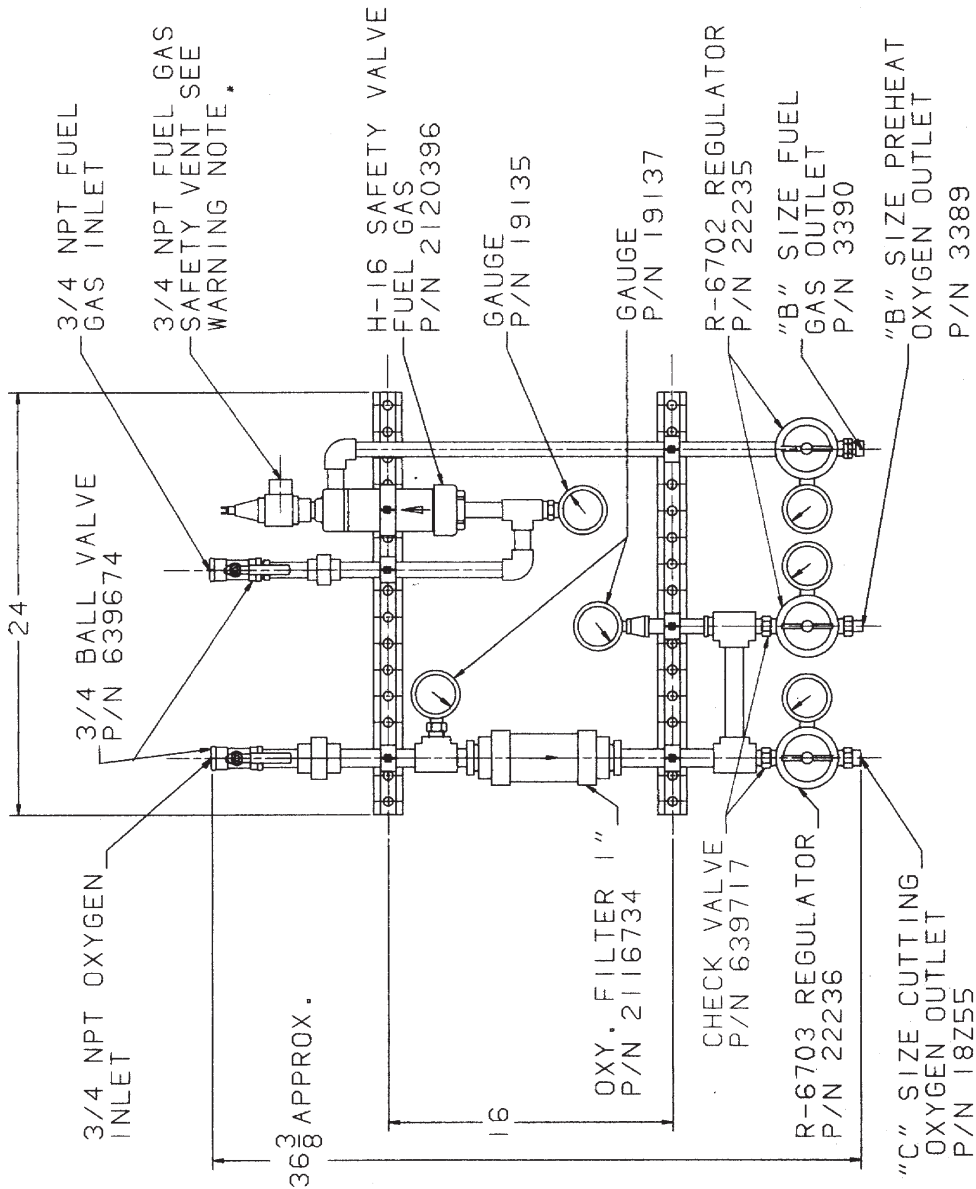
Figure 2 - Panel Assembly P/N 2116395



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Figure 3 - Panel Assembly P/N 2224539



**! WARNING**

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Figure 4 - Panel Assembly P/N 2225540

