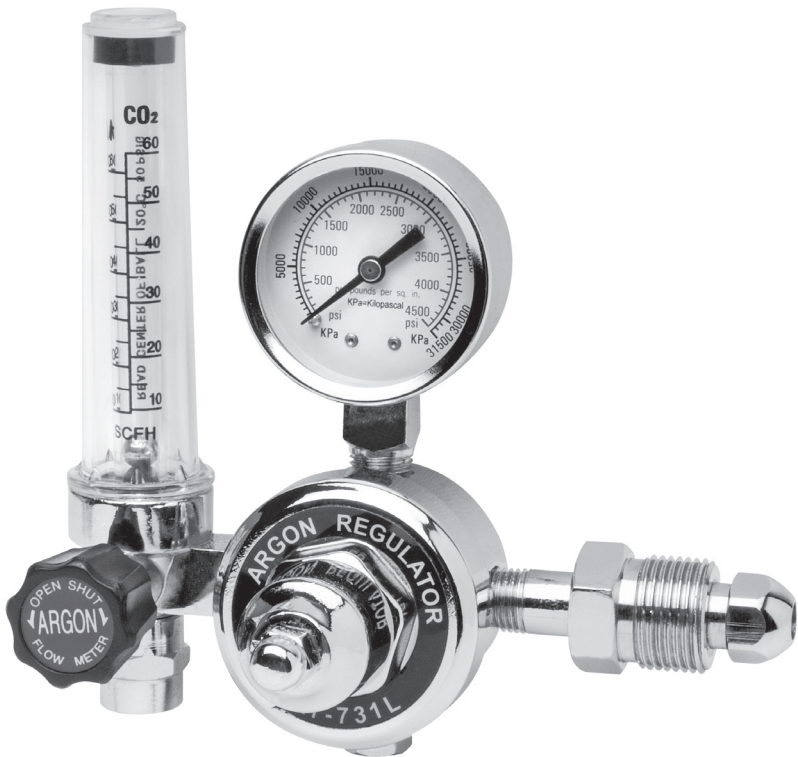


Eastwood

DO THE JOB RIGHT.

Part #20277

EASTWOOD FLOWMETER REGULATOR INSTRUCTIONS

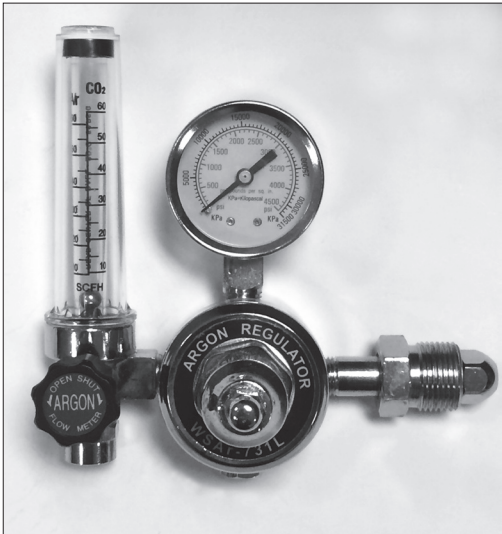


Accurately measure the flow of Argon or CO2 welding shield gases with the Eastwood Flowmeter Regulator. The large, easy to read, shatter-resistant Flowmeter Gauge provides improved control of gas flow with quick, easy and repeatable flow adjustment.

- Ideal for use with both MIG or TIG welders
- Accurately measures and displays gas flow
- Dual calibrated Flowmeter for Argon or CO2 gases
- Flowmeter Scale is graduated in SCFH
- Uses U.S. Industry Standard inlet and outlet connections

INCLUDES:

- Flowmeter Regulator



SPECIFICATIONS:

- Inlet connection: CGA 580
- Sintered bronze inlet filter
- 2" Diameter high pressure gauge (gas cylinder pressure)
- Inlet pressure gauge range: 0-4500 psi (0-31500KPa)
- Gas use: Argon, Argon/CO2, CO2
- Shielded, shatter-resistant polycarbonate flow meter
- Flowmeter gauge range: 10-60 SCFH
- Outlet connection: 5/8" x 18, internal RH thread
- Outlet pressure (pre-set): 50 psi
- External safety pressure relief

Note: When using an Argon/CO2 mix, read flow on the Argon scale.

SAFETY INFORMATION

In this manual, on the labeling, and all other information provided with this product:

DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

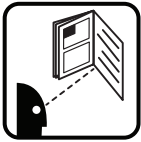
WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to personal injury.



- Read and understand all instructions before using this machine. Save this instruction manual for future reference.
- Keep out of reach of untrained persons and children.



WARNING SUFFOCATION HAZARD!

- High pressure gas can cause rapid suffocation. Store and use gas cylinders only in areas with adequate ventilation.
- Close valve on gas cylinder after each use and when empty.
- Never attempt to service a gas cylinder valve. If a cylinder valve is leaking place the cylinder outdoors and contact the gas supplier.

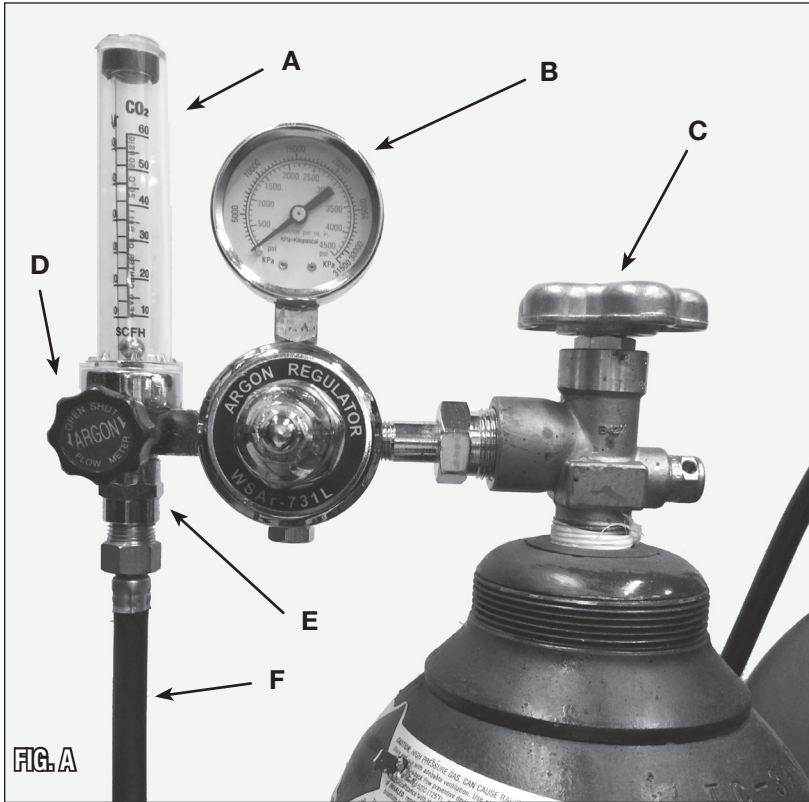


WARNING BURSTING HAZARD!

- Use gas cylinders only in a vertical position. Prevent cylinders from tipping over by securing to stationary objects such as a work benches, columns, or wall brackets, or by mounting them to appropriate welding carts.
- This equipment is designed for use with gas shielded welders. Do not use equipment for any other purpose.

FLOWMETER REGULATOR INSTALLATION:

1. Remove the cap from the shielding gas cylinder.
2. Examine threads on cylinder outlet. Damaged cylinder outlet threads can damage the threads on the flowmeter regulator and lead to a poor gas seal.
3. Momentarily open and close (crack) the cylinder valve to dislodge dirt and debris.
4. Insert the large male fitting on the Flowmeter Regulator into the female fitting on the shielding gas cylinder. **(FIG. A)**



NOTE: Do not use white teflon tape on this connection as it is not required. If a leak is found, check for burrs or dirt in the threads or on the male/female fittings.

- | | |
|--|-------------------------------|
| A. Gas Flowmeter (Flow Rate) | D. Flow Rate Adjustment Valve |
| B. High Pressure Gauge (Gas Cylinder Pressure) | E. Gas Line Fitting |
| C. Gas Cylinder Valve | F. Gas Line (from Welder) |

5. Tighten the fitting nut with a wrench until snug - do not over tighten.
6. Connect either end of the gas line included with your welder to the fitting on the regulator and wrench-tighten until snug.
7. Connect the other end of the gas line to the fitting on the rear of your welder and wrench-tighten until snug.
8. Slowly open the valve on the gas cylinder and check the gas line for leaks. When welding, the valve on the cylinder should always be all the way open.

FLOWMETER REGULATOR ADJUSTMENT:

INITIAL SETTINGS

After connecting the Flowmeter Regulator, adjust the gas flow. Too little gas flow leads to porosity in welds and excessive spatter. Too much gas flow is wasteful and may affect weld quality. The Flowmeter Regulator has 2 gauges. The gas flowmeter (the vertical gauge on the left) indicates the flow rate, while the high pressure gauge (the round gauge on the right) indicates the gas cylinder pressure. **(FIG. A)**

1. Fully open the shielding gas cylinder valve.
2. Turn on the welder and trigger the torch switch to start the flow of gas.
3. The ball in the flowmeter will rise to indicate the gas flow rate. Read the flow rate from the middle of the ball.
4. Adjust the flow rate adjustment valve at the base of the flowmeter so the middle of the ball aligns with the mark corresponding to ~ 20 SCFH while the gas is flowing steadily.
5. 20 SCFH is the most typical flow rate. It may be necessary to adjust this rate in situations where additional shielding gas is required such as a slight breeze.
6. When finished welding remember to close the valve on the gas cylinder

Tips for fine tuning the gas flow for MIG welding applications:

- Eastwood recommends the use of 75% Argon / 25% CO2 for shielding gas when MIG welding steel, 100% Argon for aluminum, and Tri-Mix (90% He / 7.5% Ar / 2.5% CO2) for stainless steel.
- As a general rule when welding steel using Argon / CO2 mix gas, gas flow settings will usually fall between 15-20 SCFH. This will vary depending on nozzle size, welding amperage, welding habits / torch position, etc.

Tips for fine tuning the gas flow for TIG welding applications:

- Eastwood recommends the use of 100% Argon shielding gas when TIG welding steel, aluminum, and stainless steel. See flow rate recommendations in table below.

Material	Thickness	SCFH
Aluminum	18 gauge or thinner	15
Aluminum	1/16"	15
Aluminum	1/8"	17
Aluminum	3/16"	21
Aluminum	1/4"	25
Aluminum	3/8"	29
Aluminum	1/2"	31
Steel or Stainless Steel	18 gauge or thinner	11
Steel or Stainless Steel	1/16"	11
Steel or Stainless Steel	3/32"	11
Steel or Stainless Steel	1/8"	11
Steel or Stainless Steel	3/16"	13
Steel or Stainless Steel	1/4"	13
Steel or Stainless Steel	3/8"	14
Steel or Stainless Steel	1/2"	15

CARE OF YOUR FLOWMETER REGULATOR:

The Eastwood Flowmeter Regulator is a rugged device that, with reasonable care, will provide many years of reliable service.

- Do not drop or subject to mechanical shock.
- Store the Regulator in a clean, dry environment.
- Clean with damp cloth. Do not use solvents on plastic gauge surfaces.

TROUBLESHOOTING:

POOR GAS FLOW:

- Adjust the flow rate of the shielding gas as recommended above.
- Check for loose fittings and leaks.

ADDITIONAL ITEMS

#13953 TIG Consumable Kit

#20284 Gas Lens

#20167 Mini #9 TIG Torch

If you have any questions about the use of this product, please contact

The Eastwood Technical Assistance Service Department: 800.544.5118 >> email: techelp@eastwood.com

PDF version of this manual is available online >> eastwood.com/20277manual

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