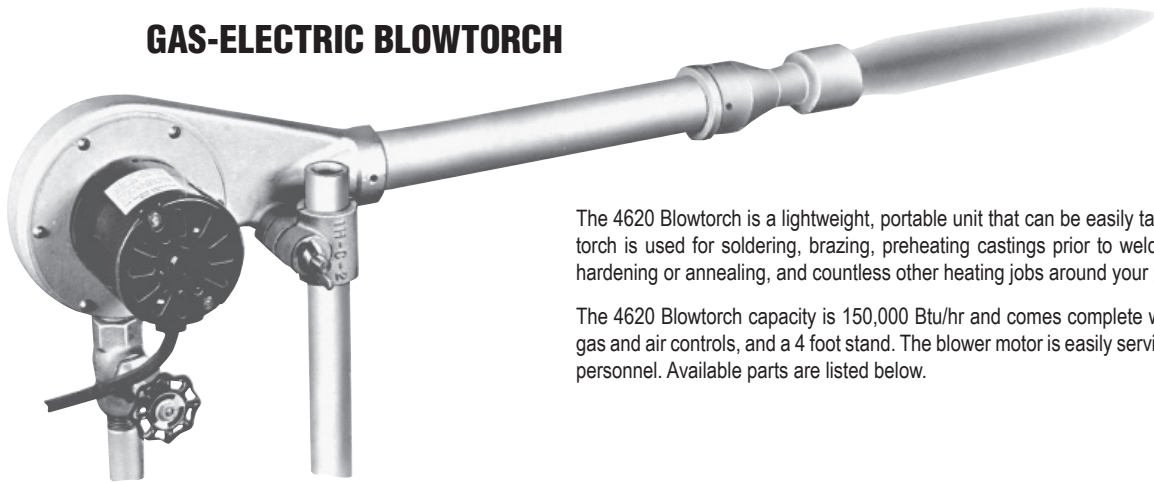
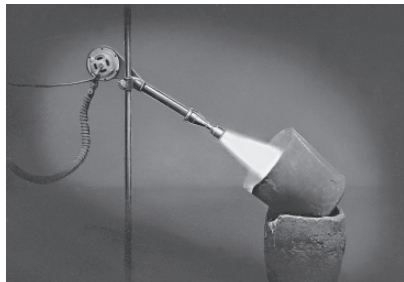


GAS-ELECTRIC BLOWTORCH

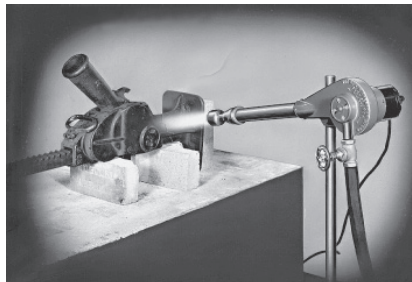


The 4620 Blowtorch is a lightweight, portable unit that can be easily taken to the job site. The torch is used for soldering, brazing, preheating castings prior to welding, preheating ladles, hardening or annealing, and countless other heating jobs around your plant.

The 4620 Blowtorch capacity is 150,000 Btu/hr and comes complete with a 120/60/50 motor, gas and air controls, and a 4 foot stand. The blower motor is easily serviced or repaired by your personnel. Available parts are listed below.



Pouring temperatures are easier to maintain and ladle life is increased when foundry ladles are preheated.



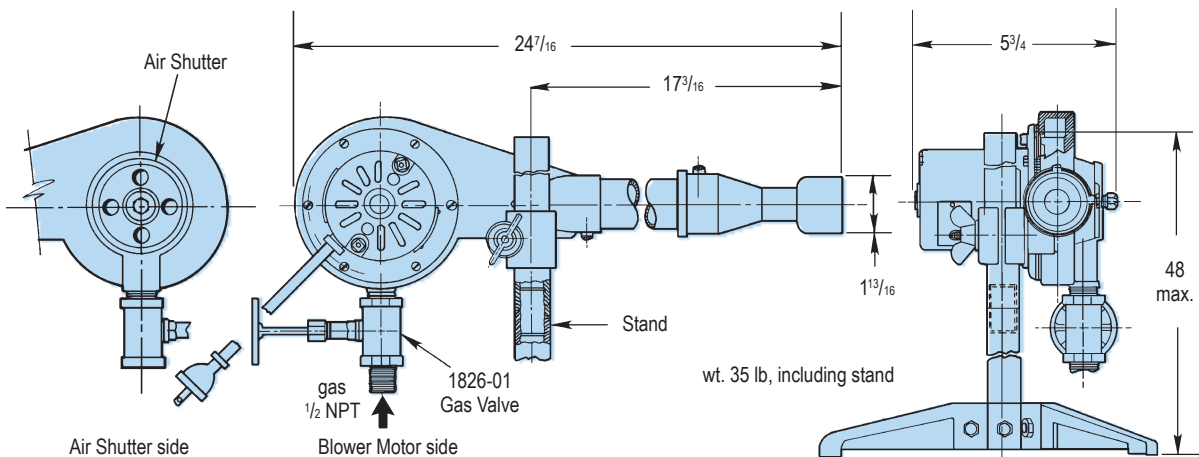
Preheating castings prior to welding will help to insure a solid weld and save oxygen and acetylene.

Blower motor repair parts:

Motor brushes	P.N. R430-3805
Contact cleaner	P.N. R430-3810

Note: Motor is not rated for continuous duty.

DIMENSIONS
inches



Torch height is adjustable to maximum of about 4' off floor.

INSTRUCTIONS

1. Connect the gas inlet of the 4620 Blowtorch to a 2-8 psi gas supply using a 3/4" flexible hose that is rated for gas service. DO NOT use common garden hose. Attach the hose securely with clamps. Plug the blower motor power cord into a 120/60 V ac outlet.
2. Close the blower air shutter. Place a propane torch or other source of flame at the burner nozzle. Slowly open the manual gas valve until an 18" long flame is produced.
3. Gradually open the blower shutter and adjust the gas valve until the desired flame is obtained. A purple tinted flame without body indicates a lean (oxidizing) flame; a green tint indicates a rich (reducing) flame. Yellow or orange flames are highly reducing. The highest temperatures and the best fuel economy result from a neutral (on-ratio) air/fuel mixture.

CAUTIONS: 1) Stand behind burner when lighting. 2) Do not leave unattended burner when firing. 3) In bright light flame can be almost invisible.

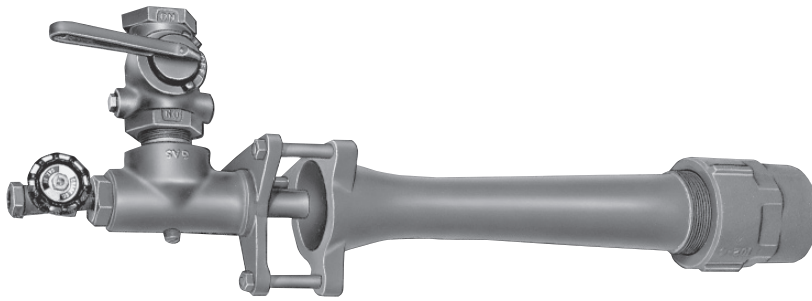
GAS-COMPRESSED AIR TORCHES

• portable

• handy

• effective

• intermittent



FIRING — hand forging
spot heating

PREHEAT — for soldering, brazing, welding
ladles and crucibles
dies

CAPACITIES with 60 psi air

Torch	natural* gas cfh	compressed air cfm	spud drill size
4696-1-A	90	2.3	55
4696-2-D	188	3.4	52
4696-4-C	615	10	34
4696-6-C	1060	23	19
4696-7-C	1670	35	6

* Minimum gas pressure is 1"wc for natural gas.

The 4696 Torch is a packaged unit that uses 40-80 psi compressed air with low pressure gas to create a well defined, high velocity flame that can be directed into relatively tight and deep chambers. A gas-compressed air torch is far more effective than a raw gas torch and has much more flexibility than torches using high pressure gas inspirators.

4696's are used singly or in groups for a wide variety of industrial heating jobs. They can be very effective for specific requirements such as incinerator ignition, lighting a cupola coke bed, etc.

The 4696 assembly includes gas and compressed air valves. Flexible hoses feeding torches increase their usefulness. Air register type nozzle mountings are available—see Bulletin 4682.

LIGHTING

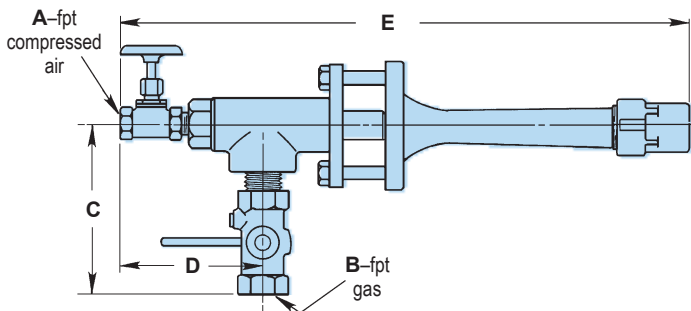
Initially, set air at about 10 psi; put lighting torch in front of nozzle; slowly open gas valve until burner lights.

Increase gas and air flows until desired high fire rate is achieved —60 psi air is standard.

Some users install an 1807 Limiting Orifice Valve between gas cock and torch so cock can be wide open at high fire. In this case, for initial lighting, adjust the 1807 Valve from closed to appropriate high fire setting (with cock wide open). On subsequent lightings, ease the cock up along with the air, until it is full open (the 1807 is permanently set).

Torch-type burners are designed to be used only for heating items in the open. They do not have provisions for the mounting of flame detection devices and other safety-related features required for the firing of closed or covered enclosures or vessels that contain the products of combustion and thus fall under the provisions of the NFPA 86 Standard for Ovens and Furnaces.

When firing in the open, precautions are needed to protect personnel and property from the flame, heat and products of combustion generated. These precautions include but are not limited to items such as operating instructions appropriate to the specific task to which the torch is applied, operator training, a suitable ignition source, heat shields, clamps to hold the torch in the desired positions, safety ventilation, etc. Flexible hoses rated for the intended fuel service are required. Valves for remote fuel shut off and fuel flow limiting are recommended. The user assumes complete responsibility for all aspects of using portable torches.



DIMENSIONS inches

Torch	A	B	C	D	E	wt, lb
4696-1-A	1/4	1/2	4 ³ / ₈	3 ³ / ₁₆	15 ³ / ₈	5 ¹ / ₂
4696-2-D	1/4	3/4	4 ⁵ / ₈	3 ⁹ / ₁₆	17 ³ / ₄	8 ¹ / ₂
4696-4-C	1/4	1	5 ¹ / ₄	3 ³ / ₄	22 ¹ / ₂	15 ³ / ₄
4696-6-C	3/8	1 ¹ / ₂	6 ⁵ / ₈	4 ¹³ / ₁₆	32 ³ / ₄	33
4696-7-C	3/8	2	7 ⁵ / ₈	5 ³ / ₁₆	37 ³ / ₈	52 ¹ / ₂

Note: Replacement nozzles are ordered as 4682-1-A/BO for standard, 4682-1-AN/BO for alloy, etc.

DIMENSIONS SHOWN ARE SUBJECT TO CHANGE. PLEASE OBTAIN CERTIFIED PRINTS FROM FIVES NORTH AMERICAN COMBUSTION, INC.
IF SPACE LIMITATIONS OR OTHER CONSIDERATIONS MAKE EXACT DIMENSION(S) CRITICAL.

WARNING: Situations dangerous to personnel and property may exist with the operation and maintenance of any combustion equipment. The presence of fuels, oxidants, hot and cold combustion products, hot surfaces, electrical power in control and ignition circuits, etc., are inherent with any combustion application. Parts of this product may exceed 160F in operation and present a contact hazard. Fives North American urges compliance with National Safety Standards and insurance Underwriters recommendations, and care in operation.

Fives North American Combustion, Inc., 4455 East 71st Street, Cleveland, OH 44105 USA, Phone 216.271.6000

Fax 216.641.7852 email: fna.sales@fivesgroup.com • www.fivesgroup.com/fivesna