**GAS-COMPRESSED AIR TORCHES**

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.