

**Pressure Reducing Regulators**  
**Oxy-fuel gas**  
**Welding and cutting**  
**4-22-13**

**(9) Pressure Reducing Regulators**

**(a)** When using pressure reducing regulators you must:

**(A)** Use them with cylinder and piping outlets to ensure suitable working pressure for fuel gas and oxygen-fuel gas applications.

**(B)** Use them for the gas and pressures for which they are intended. 253(e)(6)(i)

**(C)** Ensure that regulator inlet connections are marked with an identifying CGA number. 253(e)(6)(i)

**NOTE:** The CGA numbers identify the cylinder valve and gas service for which an inlet connection is designed.

**(D)** Ensure that inlet connections of regulators intended for attachment to gas storage cylinders comply with the requirements of CGA V-1, Standard for Compressed Gas Cylinder Valve Outlet and Inlet Connections and CGA V-7, Standard Method of Determining Cylinder Valve Outlet Connections for Industrial Gas Mixtures. (CGA E-4 2010 5.1.1) 253(e)(6)(i)

**(E)** Ensure that regulators or parts of regulators, including gauges, are repaired only by skilled mechanics who have been properly instructed. 253(e)(6)(ii)

**(F)** Use oxygen regulators that are marked in red with "USE NO OIL." 253(e)(6)(iii)

**(G)** Use acetylene regulator with a delivery pressure gauge that graphically indicates the maximum 15 psig working pressure.

**(H)** Inspect regulator union nuts and connections to detect faulty seats before the regulators are attached to the cylinder valves. 253(e)(6)(iv)

**(I)** Fully turn the regulator pressure-adjusting screw counter clockwise before slowly opening the cylinder valve. 437-002-0294(1)

**(J)** Keep pressure-reducing regulators in good repair. 437-002-0294(2)

**(K)** Replace cracked, broken or otherwise defective parts (including gauge glasses). 437-002-0294(2)

**(b)** When using pressure reducing regulators you must not:

**(A)** Use the regulator adjusting screw as a “shut-off” mechanism.

**(B)** Use oxygen and/or fuel gases from cylinders, piping, or manifolds through torches or other devices equipped with shutoff valves without using a pressure reducing regulator. 253(b)(5)(iii)(I)