

## SAFE WORK PROCEDURE

### BRAZING

Hazards Present:	Personal Protective Equipment (PPE) or Devices Required:	Additional Requirements:
<ul style="list-style-type: none"> <li>- Fire</li> <li>- Fumes</li> <li>- High Pressure</li> <li>- Dust</li> <li>- Temperature over 800 F</li> <li>- Sharp objects</li> </ul>	<ul style="list-style-type: none"> <li>- Safety glasses</li> <li>- Hard hat</li> <li>- Steel toe boots</li> <li>- Dust mask</li> <li>- Wet cloth</li> </ul>	<ul style="list-style-type: none"> <li>- Red River HVAC first level course or a equivalent course.</li> <li>- Fire extinguisher</li> <li>- A well ventilated area</li> </ul>
<b>Procedure:</b>		

1. If area is not already well ventilated- open doors or windows to ensure proper ventilation.
2. Before connecting the regulator to the tank, quickly open and close the tank valve slightly to blow out any dirt that may be lodged at the valve.
3. Connect the regulator with the hose and torch to the tank and be sure all connections are tight.
4. Open the tank valve one half turn.
5. Adjust the regulator valve to about mid-range.
6. Using a soap-bubble solution, check for leaks on the hose, regulator and torch handle.
7. Clean the mating parts of the joint with sandpaper.
8. Assemble the tubing and fittings to be brazed together.
9. Open the needle valve on the torch slightly and ignite the gas with the spark lighter.
10. Keep the torch away from flammable products and body parts.
11. Introduce nitrogen into the system and purge the air to reduce the possibility of oxidation.
12. Heat the joint.
13. Apply heat to the parts to be joined with an air-acetylene or oxyacetylene torch.
14. Heat the tube about 1" from the edge of the fitting and keep the flame in motion.
15. Heat the fitting at the base of the cap.
16. Apply the filler rod or wire at a point where the tube enters the socket. Once the proper temperature is reached the filler rod will flow readily.
17. After brazing allow the joint to cool down by applying a wet cloth.

Stay in the area after brazing is complete to ensure no fires occur.