HANG NEAR CHLORINATOR

CHANGING TON CYLINDERS SAFELY

Read COMPLETELY before you begin!

SAFETY FIRST: **Wear safety glasses or full face shield (preferred). Air pack or gas mask should be available. Keep the cylinder wrench on the valve for fast shutoff. Have plastic squeeze bottle of ammonia 1/4 full for testing leaks.**

CHLORINE SUPPLIER_____ PHONE_____

1. **Turn chlorine cylinder valve off (clockwise). BE SURE CHLORINE CYLINDER VALVE IS CLOSED AND NOT STUCK IN AN OPEN POSITION.**
2. **The chlorinator rate valve should be open about 2 turns.**
3. Turn on ejector water to produce vacuum. Ball in meter tube should drop to bottom and indicator should show red if cylinder valve is closed tight.
4. **Turn off ejector water supply** and wait 5 minutes. By turning reset the red indicator flag must continue to drop to show red. If flag does not drop to show red, you may not have a vacuum tight system or your cylinder valve is not closed properly.
5. Be **POSITIVE** the chlorine cylinder valve is closed before you remove the chlorinator. **Slowly turn the yoke screw loose to carefully remove the chlorinator from the cylinder valve.** Place cap and hood on empty cylinder.
6. Secure new full cylinder. Remove hood and place cylinder so valves are in 12 and 6 o'clock position. Slowly remove cap to be sure valve is tightly closed.
7. **Remove old lead gasket and install NEW lead gasket on chlorinator inlet.** If you re-use lead gasket you will have leaks.
8. With new lead gasket in place, put chlorinator on cylinder and **tighten yoke screw with wrench we provided. (Do not use excessive force.)**
9. **OPEN CHLORINE CYLINDER VALVE 1/4 TURN AND CLOSE IMMEDIATELY.** Check for leaks with ammonia using plastic squeeze bottle to direct ammonia fumes around lead gasket, cylinder valve and two fittings on chlorinator. The ammonia will appear as a white smoke if you have a chlorine leak. If you have a leak, connect tubing from ejector to top fitting on chlorinator and **turn on ejector so chlorine may be pulled through ejector to process water.**

   ******* CORRECT LEAKS BEFORE PROCEEDING *******

   (A) Hook up 5/8" vacuum tubing from ejector to top chlorinator fitting.
   (B) Hook up 3/8" vacuum tubing from chlorinator bottom fitting to vent to safe outside location. **(Not near walkways or ventilation intakes.)**
10. **If no leaks were detected, turn on chlorine cylinder valve 1/4 turn and recheck for leaks. (Keep the wrench on the cylinder valve.)**
11. Adjust chlorinator rate valve 2 turns for low feed rate. Turn on water supply to ejector. Your meter on chlorinator should indicate chlorine flow.
12. It may be necessary to break vacuum by removing 5/8" poly tubing from top fitting on chlorinator and reconnecting.
13. After feeding at 100 PPD or less for 5 minutes, adjust feed rate to desired flow with rate valve on top of chlorinator and test for free or total chlorine.
14. **Be sure you understand this information before you begin. Before you ever turn on a chlorine valve, be sure your ejector has vacuum or suction so you could feed chlorine to process water.**
15. To shut down for extended period: (1) Turn off chlorine valve, (2) Turn off water supply to ejector.
16. Drip leg heater must be turned on 15 minutes prior to startup and left on.

hydro INSTRUMENTS 600 Emlen Way • Telford, PA 18969 • (215) 799-0980