

How to Change a Service Valve

Personal Safety Requirements:

- Always wear safety glasses, work gloves and long shirts while performing this work
- Always use the safety clamp when changing valve

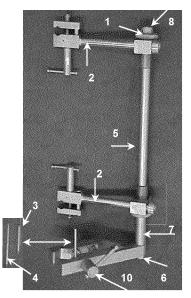
Tools Required:

- ✓ 12" Crescent Wrench
- ✓ 14" Pipe Wrench
- ✓ Wire Brush
- ✓ Soapy Water

Precautions:

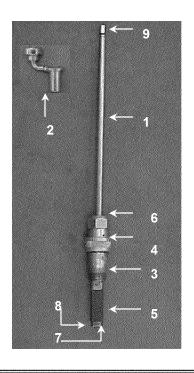
- O Check that there is no source of ignition within 30 feet of the riser while changing valve
- O Always place a 5lb. Class ABC fire extinguisher near the riser while changing valve

| Parts | Function | |
|---------------------------|---|--|
| 1. Shaft Tube Posit Slev. | Move Shaft tube clamp arm forward & backward | |
| 2.Shaft Tube Clamp Arm | Hold shaft tube in place when releasing front clamp | |
| 3. Short Locating Pin | Used as spacer to position pipe to valve | |
| 4.Long Locating Pin | Used as a spacer, when pipe must be rethreaded | |
| 5.Pipe Clamp | Used to support safety clamp on riser | |
| 6.Clamp Bar Nut | Used to hold clamp bar shaft together | |
| 7. Clamp Bar Spacer | Prov. clearance bet. pipe clamp & shaft tube position | |
| 8. Clamp Bar Collar | Holds components of the safety clamp in place | |
| 9.Clamp Bar Pin | Holds clamp bar collar to the safety clamp bar | |
| 10.Clamp Bar | Supports components of the safety clamp | |



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| 1. Shaft Tube | Holds rubber plug |
|-------------------------------------|--|
| 2. Shaft Crank | Use the expand rubber plug |
| 3. Stuffing Box | Connect to service valve & create gas tight seal |
| 4. Bleed Ring/Port | Used to depressurize |
| 5. Rubber Plug | Used to effect the shut-in of gas |
| 6. Shaft Tube "O" Ring | Used to create a gas tight seal |
| 7. Ferrule Retaining nut | Used to house rubber plug |
| 8. Shaft Ferrule | Used to hold rubber plug onto shaft |
| 9. Hexagon Shaft Nut | Used to received the crank shaft |
| 10.Tapered Portion of Shaft Tube | Used to indicated the shaft and rubber stopper insertion point |





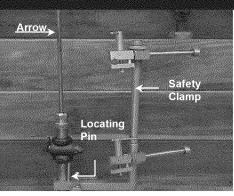
Turn Over



How to Change a Service Valve

Valve Changing Procedure:

- Perform piping inspection. Identify pipe and valve, inspect valve and inlet threads.
- Select proper stuffing box and rubber stopper. (Inspect stuffing box/rubber stopper assembly).
- 3. Insert shaft tube/rubber stopper assembly into stuffing box and lubricate rubber stopper.
- 4. Close valve. Remove meter set.
- Fully retract shaft tube in stuffing box, then install stuffing box on valve with bleeder close.
- 6. Install safety clamp with correct pin. (Fig. 1).
- 7. Install stuffing box with rubber stopper in the upper position, then clamp upper clamp around shaft tube. (Fig. 1).
- 8. Open valve and align shaft tube arrow parallel to valve tang. (Fig. 1).
- Position upper/rear shaft tube clamp around shaft tube, then lower shaft tube/rubber stopper assembly through valve tang port until small portion of shaft tube taper is aligned with bottom of clamp. Tighten clamp. (Fig. 2).
- 10. Install crank handle, then rotated crank handle clockwise until shaft tube stem extends from handle 1/4". This will tightens rubber stopper. (Fig. 2).
- 11. Open bleeder, blow-down line and confirm rubber stopper has shutdown gas line. (Fig. 2).
- 12. Unscrew valve and stuffing box assembly and raise valve slightly, then position lower/front shaft tube clamp on shaft tube and tighten. (Fig. 3).
- 13. Remove upper/rear clamp and remove valve and stuffing box assembly, then re-inspect threads, rethread if necessary. (Fig. 4)
- 14. Remove stuffing box assembly from old valve and install on new valve.
- 15. Install valve and stuffing box assembly onto shaft tube assembly, then re-install and tighten upper/rear shaft tube clamp.
- 16. Apply pipe dope to pipe threads, then install valve.
- 17. Loosen and disengage lower/front shaft tube clamp.
- 18. Closed bleeder valve.
- 19. Install crank handle, then turn crank handle counterclockwise to loose rubber stopper.
- 20. Realign shaft tube arrow parallel to tang position on new valve and fully retract shaft tube assembly. Close valve.
- 21. Open bleeder valve and blow-down stuffing box. Confirm that valve is sealed.
- 22. Remove stuffing box assembly.
- 23. Remove safety clamp assembly.
- 24. Reinstall meter set assembly .



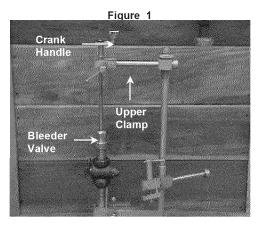


Figure 2

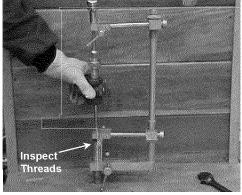


Figure 3

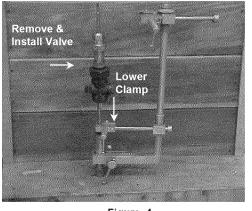


Figure 4

