Personal Safety Requirements:

☺ Always wear safety glasses, work gloves and long shirts while performing this work

☺ Always use the safety clamp when changing valve

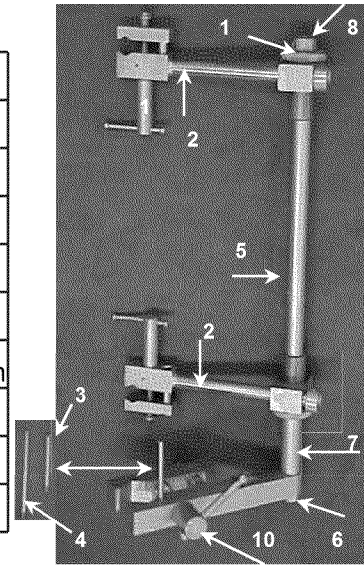## Tools Required:

✔ 12" Crescent Wrench
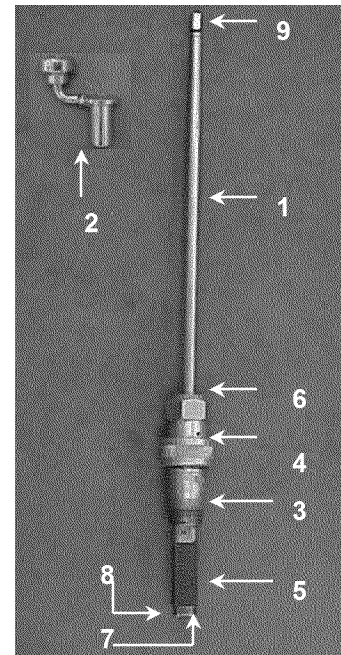
✔ 14" Pipe Wrench

✔ Wire Brush

✔ Soapy Water

Precautions:

0 Check that there is no source of ignition within 30 feet of the riser while changing valve

0 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

Parts	Function
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

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Valve Changing Procedure:

1. Perform piping inspection. Identify pipe and valve, inspect valve and inlet threads.

2. 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.

5. 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).

9. 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.
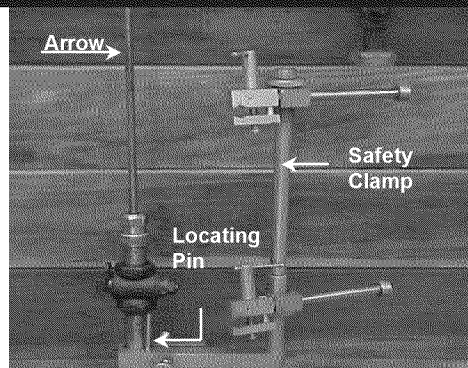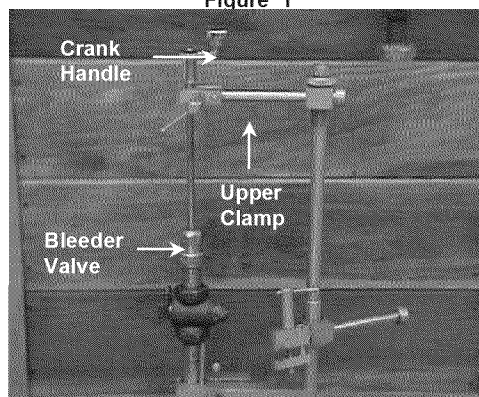
23. Remove safety clamp assembly.

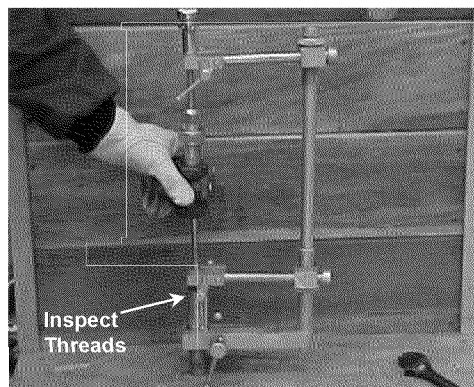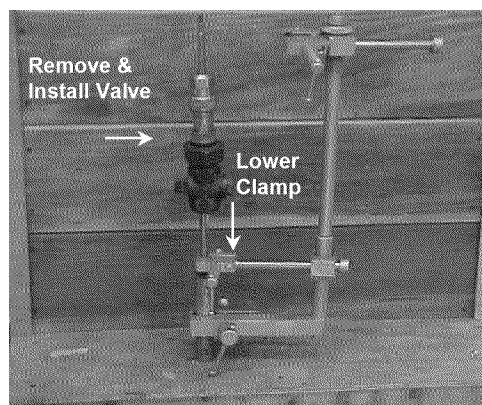24. Reinstall meter set assembly .

Figure 1

Figure 2

Figure 3

Figure 4

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