



Caution



Hydraulic system operates at 4600 PSI (31716 kPa) follow instructions carefully to avoid hydraulic leaks. Improper assembly may void warranty



Caution: Multiple Hazards—Crush, high pressure oil and machine damage hazards are present when installing and pressurizing hydraulic components. Do not install machine unless qualified. Follow all safety procedures stated in the installation and service manuals.

Hydraulic installation sequence

(This is a quick start hydraulic assembly guide and is not intended to replace the installation instructions (see BIPPMI03 in the installation manual for full details).

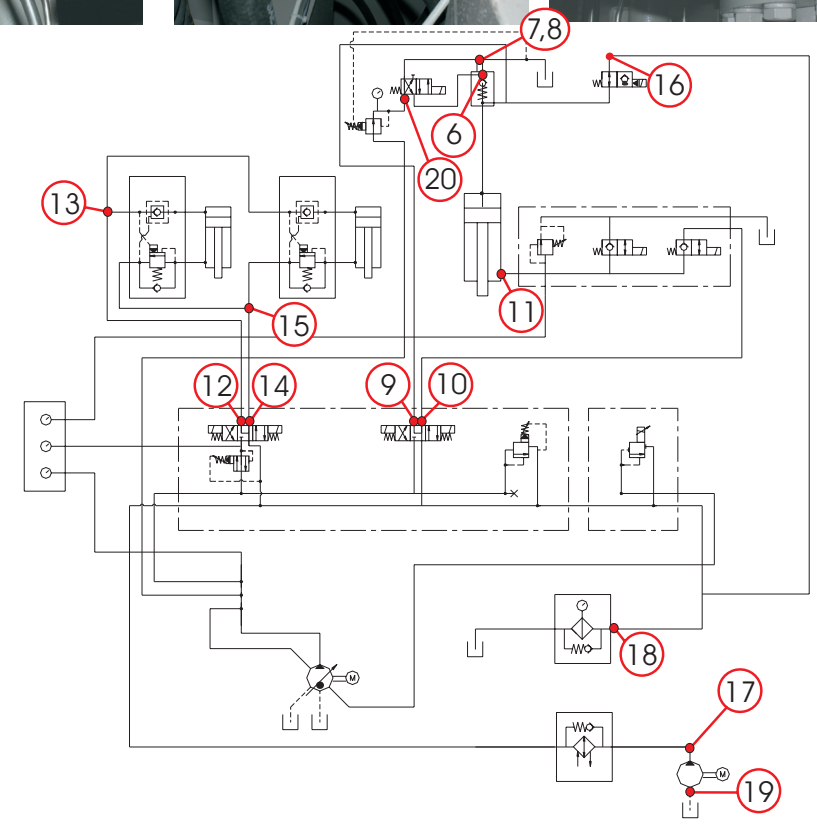
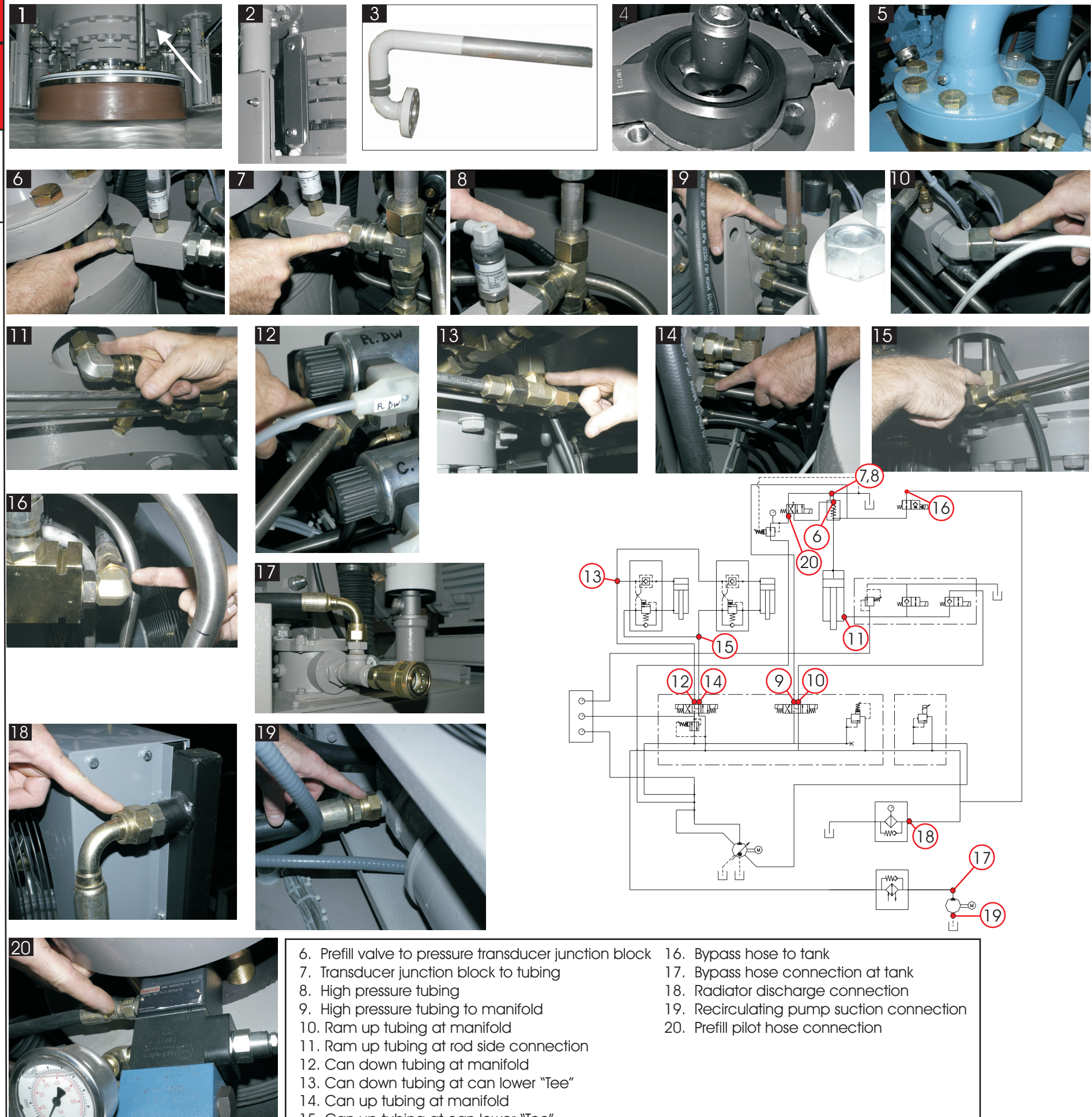
- 1. Raise ram into position and install mounting bolts (Figure 1, 764 foot-pounds/1036 Nm).
2. Install diaphragm safety bars (Figure 2).
3. If ceiling height is a concern, insert the prefill pipe goose neck into the tank (Figure 3) before mounting tank on press.
4. Set tank loosely on rails. Do not tighten the bolts.
5. Remove ram eyebolt and plate.
6. Set prefill valve in place (Figure 4).
7. Lift and rotate prefill pipe goose neck into position over the pre-fill valve.
8. Lightly coat the flange bolt threads with hydraulic fluid. Install backup plates and flange bolts (Figure 5). Do not tighten the bolts.
9. Install high pressure prefill valve tubing to pressure transducer (Figure 6) and transducer to the high pressure tubing "Tee" (Figure 7). Connect the high pressure tubing (Figures 8 and 9) to the manifold. Use new O-rings (supplied with the installation kit). See O-ring installation below. Adjust prefill valve and/or tank position as required to align piping.
10. Torque bolts and studs on the prefill pipe (Figure 5) to 750 foot-pounds/1017 Nm.
11. Tighten the tank mounting bolts.
12. Install the ram up (Figure 10 and 11), can down (Figure 12 and 13), can up (Figure 14 and 15) hydraulic tubing.
13. Install the bypass hose and bypass tank connections (Figures 16 and 17).
14. Install the recirculating (Figures 18 and 19) and prefill pilot hoses (Figure 20).
15. Use the supplied open end adapters and a torque wrench (customer supplied) to tighten fittings to the values shown in Table 1 below:

Table 1: Correct torque values

Table with 4 columns: Wrench size, Tube fittings, Hose fittings, SAE size. Rows include sizes 1 1/16, 1 5/16, 1 3/8, 1 5/8, 1 7/8.

O-ring installation

- Separate tags identify where an O-ring must be installed inside the pipe or hose nut before making the connection.
1. Lubricate the O-ring with Tellus 68.
2. Push the O-ring into the fitting groove.
3. Place the tube assembly against the fitting body so that the flat face of the sleeve comes in full contact with the O-ring.
4. Thread the nut onto the fitting body by hand. Use a wrench if necessary to pull the nut and seat to the finger tight position. Use a second wrench where necessary to prevent unwanted rotation of the fitting body, hose or connector.



- 6. Prefill valve to pressure transducer junction block
7. Transducer junction block to tubing
8. High pressure tubing
9. High pressure tubing to manifold
10. Ram up tubing at manifold
11. Ram up tubing at rod side connection
12. Can down tubing at manifold
13. Can down tubing at can lower "Tee"
14. Can up tubing at manifold
15. Can up tubing at can lower "Tee"
16. Bypass hose to tank
17. Bypass hose connection at tank
18. Radiator discharge connection
19. Recirculating pump suction connection
20. Prefill pilot hose connection