

- g. Close both mast locks.

## 1-6. AIR COMPRESSOR OPERATION

- a. Position controls as indicated in paragraph 1-2.
- b. Open the drain cock on the bottom of the compressor sump tank and drain any accumulation of moisture and sediment. When draining is completed, close the valve.
- c. Open the drain valve on the bottom of the air receiving tank and bleed all pressure from the tank. When pressure is depleted, close the valve.

### NOTE

Refer to paragraph 1-2 for identification and explanation of control settings when performing the following procedures.

- d. Set the compressor shut-off valve (61, Figure 12), and the two 3-way valves (62 and 63) for single or 2-stage operation, depending on the compressor output desired.
- e. Make sure the mast line hose is securely connected at the hammer union above the air control valve (34).
- f. Start and operate the engine (see paragraph 1-2.)
- g. Engage the power take-off control lever (58).
- h. Move the air compressor clutch control lever (17) to the IN position and buildup air pressure. Observe the air pressure gauge (57).
- i. Move the air control valve (34) to the open position to apply air to the drilling operation.
- j. To stop operation of the air compressor, move the air compressor clutch control lever (17) to the OUT position.

## 1-7. MUD PUMP OPERATION

- a. Position controls as indicated in paragraph 1-2.
- b. Check to be sure that the drain plugs on the bottom of the mud pump are installed.

### NOTE

Refer to paragraph 1-2 for identification and explanation

of control settings when performing the following procedures.

- c. Check to see that the auxiliary mud pump control valves (73 and 74, Figure 1-2) are closed.
- d. Make sure the mast line hose is securely connected at the hammer union above the mud control valve (35).
- e. Start and operate the engine (see paragraph 1-2).
- f. Engage the power take-off control lever (58).
- g. Move the mud pump clutch control lever (16) to the IN position. Observe the pressure on the mud pump pressure gauge (71).
- h. Operate the mud pump control valve (35) to the desired setting, to apply mud to the drilling operation.
- i. To stop operation of the mud pump, move the mud pump clutch control lever (16) to the out position.

#### 1-8 CHANGING FROM MUD TO AIR OPERATION

##### NOTE

Refer to paragraph 1-2 for identification and explanation of control settings when performing the following procedures.

- a. Move the mud pump clutch control lever (16, Figure 1-2) to the OUT position.
  - b. Check the indication on the mud pump pressure gauge (71). The indication should drop to zero.
  - c. Close the mud pump control valve (35).
  - d. Check to see that the air compressor clutch control lever (17) is in the OUT position.
  - e. Bleed all air pressure from the air receiving tank by opening the drain valve on the bottom of the tank.
- Air pressure can also be bled from the receiving tank by using the blow-down hose, however, this procedure will not drain any moisture or sediment that may have collected in the receiving tank.

##### WARNING

Do not use the air control valve (34) to bleed air pressure from the receiving tank. If the hammer union above the air control valve (34) is not tight it can be blown off the piping, or moved sufficiently to become disconnected and