

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

WARNING (CONT'D)

fall on the driller's control panel or the person making the change over.

- f. Disconnect the mast line hose at the hammer union above the mud pump control valve (35).

NOTE

Turn the hammer union counterclockwise to loosen.

- g. Connect the mast line hose securely at the hammer union above the air control valve (34).
- h. Accomplishing the above procedures completes the change over from mud to air operation. Refer to air compressor operation - manual for procedures for operating the air compressor and other components in the air system.

1-9. CHANGING FROM AIR TO MUD OPERATION

NOTE

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

- a. Move the air compressor clutch control lever (17, Figure 1-2) to the OUT position.
- b. Move the air control valve (34) to the closed position.
- c. Open the drain valve in the bottom of the air receiving tank, and allow all air pressure to bleed from the tank.
- d. Disconnect the mast line hose at the hammer union above the air control valve (34).

NOTE

Turn the hammer union counterclockwise to loosen.

- e. Check to see that the mud pump clutch control lever (16) is in the OUT position.
- f. Check to see that the mud pump control valve (35) is closed.
- g. Connect the mast line hose securely at the hammer union above the mud pump control valve (35).
- h. Refer to pump manual for mud pump operation.