f. Close both mast locks.

g. Operate the auxiliary and hoist drum control (11), if necessary, to remove any excess slack in the cables.

h. Set the auxiliary and hoist drum brake control levers (30 and 31).

(i) Place a level on the rotary table and check to see that the machine is level both laterally and longitudinally.

NOTE

If raising the mast has disturbed the level of the machine, refer to paragraph 1-9 for procedures to restore the level condition.

1-5 LOWERING THE MAST. With the machine in the same configuration as above, for leveling or raising the mast, perform the following procedures to lower the mast.

a. Move the MAST CYL control lever (23, Figure 1-2) to the raise position momentarily and check the indication on the hydraulic system pressure gauge (21).

CAUTION

The above procedure is necessary to ensure that the up side of the mast raising cylinders are full of hydraulic fluid, which will prevent rapid descent of the mast during lowering.

b. Check to be sure the kelly has been removed, and that there are no obstructions that would interfere with the mast as it moves to the lowered position.

c. Open both mast locks.

d. Release the brake control levers (30 and 31) for the hoisting and auxiliary drums.

e. Operate the MAST CYL control lever (23) and lower the mast in one continuous movement to the fully lowered position. As the mast is in transit toward the lowered position, operate the auxiliary and hoist drum control (11) to alternately spool cable onto the auxiliary and hoist drums to avoid excess slack in the cables.

f. When the mast is resting firmly on the mast support, and all excess slack has been removed from the cables set the auxiliary and hoist drum brake control levers (30 and 31).

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