NOTE

There are no controls on the pneumatic lubricator that must be actuated as part of the drilling operation, however, it is essential that the lubricator be operating properly in order to provide adequate lubrication for the air operated controls.

a. Remove the cover from the pneumatic lubricator housing.

b. Check the lubricant level in the oil level sight glass (80, Figure I-2 . Add oil if necessary.

c. Open the drain cock (77) and drain any moisture that may have collected in the air filter. Close the drain cock.

d. Open the drain dock located on the bottom of the controls air reservoir and drain any moisture that may have collected in the reservoir. Close the drain cock.

e. Open the cutoff valve (76).

f. Operate the engine to buildup air pressure.

g. Check the indication on the pressure regulator air pressure gauge (79).

h. If necessary, adjust the pressure with the pressure regulator control valve (78) to attain the desired indication on the pressure gauge (79).

NOTE

The machine must be operating and controls actuated to perform the following procedures.

i. Observe the rate of lubricant flow in the sight glass (81). The rate of flow should be 1 to 3 drops per minute.

j. If necessary, adjust the rate of flow to obtain 1 to 3 drops per minute by turning the adjusting screw (82).

k. Reinstall the cover on the pneumatic lubricator housing.

I-20. COLD WEATHER SHUTDOWN' If operation of the drilling machine is to be discontinued for a period of time, and the ambient temperature is expected to drop below freezing, the following procedures should be accomplished to avoid possible damage.

a. Remove the drain plugs on the bottom of the mud pump and drain the mud pump.

b. Open the drain valve on the bottom of the water tank and drain the water tank.

c. Open the two drain cocks on the water injection pump to drain the water injection pump.

d. Open the drain cock in the water supply line between the water tank and the water injection pump.

e. Open the drain cock in the piping below the water injection flow relief valve.

NOTE

When this drain cock is opened and water starts to drain, a partial vacuum can be created in the line that will prevent complete drainage of the line. Opening the water injection flow relief valve (55, Figure 1-2 and the water injection shutoff valve (32) will eliminate the vacuum and ensure complete drainage of the line.

f. If the foam injector was being used, remove the foam injector suction hose with foot valve attached, and drain the hose.

g. Check the coolant in the engine cooling system to be sure it has sufficient antifreeze for the lowest expected ambient temperature.

CAUTION

When freezing weather is expected, any cooling system not adequately protected by antifreeze should be drained. Leave all drain cocks open until refilling the coolant system.

Drain cocks are located on each side of the cylinder block at both the front and rear of the engine. The drain cocks at the rear of the engine are below the exhaust manifold. The front surface of the cylinder block has drain cocks on each side above the front cover. The oil cooler has a drain cock at the extreme bottom of the housing. Other components that do not have drain cocks are drained through the oil cooler housing drain cock. The radiator has a drain cock located below the core.

NOTE

Removing the radiator filler cap permits air to enter

NOTE (CONT'D)

the cooling passages and allows the cooling system to drain completely.

I-21 VACATING THE DRILLING SITE

a. Disconnect all hose, lines, etc., that were connected to the machine in order to accomplish the drilling operation.

b. Lower the mast (see paragraph I-5).

c. Check the tire pressure.

d. Raise the leveling jacks (see paragraph I-3)

CAUTION

Make sure the snap-on safety links are installed on each of the four jacks, to prevent the jacks from creeping down while the machine is in transit.

e. If cold weather is a factor, refer to paragraph I-20 and perform the cold weather shutdown procedures.