

(8) Remove the level from the rotary table.

1-4. RAISING THE MAST. With the machine in the same configuration as for leveling, perform the following procedures to raise the mast.

- a. Check to see that there are no obstructions that would interfere with the mast as it moves to the raised position.
- b. Open both mast locks.

#### WARNING

When raising the mast, all personnel in the immediate area should stand clear of the machine. Never attempt to perform any maintenance or repair on the machine during the mast raising operation. It is important that all personnel in the immediate area are alerted and aware of the operation, in event a malfunction should occur.

#### CAUTION

DO NOT RAISE MAST OR OPERATE DRILL UNIT WITH  
LESS THAN 25 FOOT WORKING CLEARANCE TO ANY  
ELECTRICAL POWER LINE

- c. Operate the MAST CYL control lever (23, Figure 1-2 and raise the mast approximately one foot above the mast support. Lower the mast down onto the mast support.

#### NOTE

Repeat the above procedure two or three times to ensure that the mast raising cylinders are full of oil.

- d. Release the brake control levers (30 and 31) for the hoisting and auxiliary drums, to allow slack in the cables as the mast moves to the raised position.

- e. Operate the MAST CYL control lever (23) and raise the mast to the fully raised position in one continuous movement.

- 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).