

1-3 POSITIONING AND LEVELING THE MACHINE

- a. Position the drilling machine on the drill site.

CAUTION

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

- b. The hydraulic system will have to be operated to complete installation of the machine on the drill site.

Read the following cautions before attempting to complete installation of the machine on the drill site.

CAUTION

IMPROPER USE OF THIS MACHINE CAN BE HAZARDOUS

TO PERSONNEL

READ YOUR SERVICE MANUAL AND KNOW FUNCTIONS

OF ALL CONTROLS BEFORE OPERATING UNIT

DO NOT START MACHINE WITHOUT CHECKING ALL CON-

TROLS FOR NEUTRAL POSITION AND ASSURING ALL

PERSONNEL ARE CLEAR

DO NOT OPERATE MACHINE WITH ANY GUARDS REMOVED

CAUTION (CONT'D)

DO NOT EXCEED RECOMMENDED AIR ,MUD OR HYDRAULIC
PRESSURES

DO NOT ALLOW BODY OR CLOTHING TO COME IN CONTACT
WITH MOVING PARTS

DO NOT USE CONTROL HANDLES AS HAND GRIPS OR STEPS

DO NOT ADJUST, LUBRICATE, OR PERFORM ANY MAINTENANCE
WITH ENGINE RUNNING

DO NOT LEAVE MAST IN ANY POSITION BUT FULL UP OR DOWN

DO NOT REMOVE SAFETY CHAINS FROM HOSES

DO NOT TRY TO LOWER MAST WITH MAST LOCKS CLOSED OR
WITH KELLY IN ROTARY TABLE

c. Remove the locking pins from the driller's and helper's platforms and lower the platforms to the operating position. Reinstall the locking pins.

NOTE

Refer to Figure 1-2 and Table -2 for location and identification of components followed by reference numbers in the following procedures.

d. Position the controls as indicated in paragraph 1-2.

CAUTION

Make sure the hydraulic suction and return line valves (67 and 68) are open. If the machine is operated with any of these valves closed, the hydraulic pump will be damaged.

e. Perform the following procedures to extent the rotary table.

(1) Move the right auxiliary transmission shift lever (65) to low gear.

(2) Refer to paragraph 1-2 to start and operate the engine.

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e. Perform the following procedures to extend the rotary table.

(1) Move the right auxiliary transmission shift lever (65) to low gear.

(2) Refer to paragraph 1-2 to start and operate the engine.

(3) Move the power take-off control lever (58) to the engaged position.

(4) Open the rotary table control valve (28).

(5) Set the hand throttle (2) or accelerate the engine with the foot throttle (1) to the desired engine rpm.

Engine rpm can be observed on tachometers (42 and 46).

(6) Check to see that there are no obstructions that would interfere with the movement of the rotary table from the retracted to the extended position.

(7) Move the TABLE CYL. control lever (22) to extend the rotary table. When the rotary table is fully extended, release the control lever.

(8) Close the rotary table control valve (28).

(9) Sight through the aperture in the rotary table to see if the drilling machine is accurately positioned over the proposed drilling point. Reposition the machine if necessary.

f. Perform the following procedures to level the drilling machine.

(1) Place supporting timbers under the jack pads as necessary, depending on the terrain on which the drilling site is located.

(2) Place a level on the rotary table.

NOTE

The drilling machine must be level both laterally and longitudinally when leveling is completed.

(3) Open the jack control valve (24 thru 27) for the jack desired to be operated.

(4) Unsnap the safety link holding each jack in the retracted position.

(5) Operate the jacks control lever (22) to extend the jack selected for operation.

(6) Repeat steps (3) and (4) above and operate all jacks as necessary to complete the leveling operation.

NOTE

When leveling is completed, the machine should be at the lowest possible level position with weight off the tires.

(7) Check to see that all jack control valves (24 thru 27) are fully closed.

(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.

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- 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.