

CHAPTER 3

MAINTENANCE

3-1. INTRODUCTION. This chapter contains instructions for accomplishing repairs to components of the drilling machine that are more extensive than routine maintenance tasks, required to keep the machine operating under normal conditions. Complete disassembly procedures are included for reparable components, because exact failure within a particular assembly cannot be predicted. Although complete disassembly procedures are included, the components should only be disassembled to the extent necessary to effect repairs.

3-2. AIR COMPRESSOR CONTROLS. Perform the following procedures to remove, disassemble, and repair the air compressor pilot valves and interconnecting tubing.

- a. Disconnect tubing (1, Figure 3-1).
- b. Remove tubing (2), elbows (3 and 4), and tee (5).
- c. Remove tubing (6), elbows (7 and 8), adaptor (9), valve (10), nipple (11) and tee (12).
- d. Remove the nipple (13), reducer (14), nut (15), connection (16), nut (17), and pilot valve (18).
- e. Remove shutoff valve (19), nut (20), connection (21), nut (22), and pilot valve (23).
- f. Perform the following procedures to disassemble the pilot valve (Figure 3-2).

NOTE

Note which notch of the lever the spring is in to aid in assembly.

- (1) Loosen the spring adjusting nut until spring (1) can be removed.
- (2) Remove locknut (2), washer (3), spring hook (4) and adjusting nut (5).
- (3) Remove locknut (6), washer (7) and adjusting screw (8).
- (4) Remove screw (9) and lever (10).
- (5) Remove locknut (11), washer (12) and vent adjusting screw (13).
- (6) Remove screws (14) and washers (15) to remove cap (16) and gasket (17). Discard gasket.