

14-197. BOOM POSITION ACTUATOR AND STRUCTURE SUPPORT.

14-198. Description — Boom Position Actuator and Structure Support (figure 14-27). The boom position actuator is a rotary actuator with a maximum operating load of 8500 inch-pounds. Circuitry protection prevents operation when the maximum operating load is exceeded. The structural support assembly consists of an upper and lower stanchion assembly, and post assembly.

14-199. Removal — Boom Position Actuator and Structure Support.

- a. Remove high performance hoist assembly from aircraft. Refer to paragraph 14-149.
- b. Remove control panel assembly, refer to paragraph 14-191.
- c. During removal of the upper support assembly (21) lay winch assembly and boom head on workbench. Remove bolts (22, figure 14-16), washers (24), carrying handles (24.1), sleeve spacers (26), bracket assembly (25), and upper support assembly (21).
- d. Remove boom head assembly, refer to paragraph 14-158.
- e. During removal of the lower support assembly (34), lay winch assembly and boom head on workbench. Remove four bolts (32) and washers (33).

NOTE

Make sure electrical cables are disconnected and tied off to prevent interference during removal of winch assembly.

- f. Remove winch assembly (27).

14-200. Disassembly — Boom Position Actuator and Structure Support Assembly (AVIM). Refer to figure 14-27.

- a. Remove reaction arm assembly (9) from reaction plate (52), by removing quick release pin (30).
- b. Remove height adjuster assembly (1) from upper support assembly (3). Remove plunger (4) by loosening set screw (26).
- c. Disassembly of height adjuster assembly (1). Remove retaining ring (20), remove ceiling adapter (23), remove retaining rings (19 and 22), and press out bearings (18 and 21) if required.
- d. Remove four screws (16) and cover (15) from upper support assembly (3).

WARNING

Do not disassemble the reaction arm any further than step e. Otherwise, damage and personal injury could result.

- e. Disassembly of reaction arm assembly (9). Remove roll pin (27) and slide extension arm (28) off pivot arm (55). Remove extension cap (29), remove stud (56), remove roll pin (57), remove quick disconnect adapter (32), and remove extension lanyard.
- f. Remove stanchion plate (6) from stanchion tube assembly (43). Remove grommet (5) from cover plate (6).
- g. If required, remove bolt (13) and pendant hook (14).
- h. If required, remove socket cap screws (10), retainer hook (11), and retaining clip (12) from stanchion tube assembly (43).
- i. If required, loosen nut (7) and remove stud (8) from stanchion tube assembly (43).