

TOPIC 5—BRAKE BANDS

A. DESCRIPTION

Brake bands on following listed tractors may be removed for replacement or repair without removing steering clutches.

HD6A (Prior to S/N 18540)
HD6B (Prior to S/N 18540)
HD6E (All)
HD6G (Prior to S/N 18540)
HD11 (All)

Effective S/N 18540 on HD6A, B and G tractors, brake bands are wider and CANNOT be removed without removing steering clutches; refer to "STEERING CLUTCHES AND BRAKES" for removal of steering clutches.

B. REMOVAL

1. Remove seat cushion and tool box; HD6 - also disconnect fuel lines.
2. Remove band support, Fig. 5, and compartment cover.
3. Turn band adjuster counter-clockwise until loose from adjusting yoke.

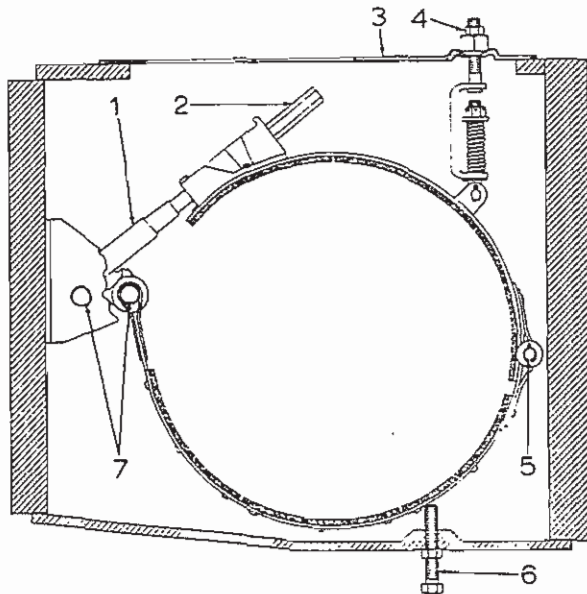


Fig. 5 -- Typical Steering Brake
(T-71905)

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|------------------------|-----------------------|
| 1. Yoke (adjusting) | 5. Hinge pin |
| 2. Adjuster | 6. Band support (HD6) |
| 3. Cover | 7. End pins |
| 4. Band support (HD11) | |

4. Remove pipe plugs from side of final drive housing, Fig. 6 or 7; insert long capscrew through hole and into tapped end pin; pull pin and remove adjusting yoke (remove both end pins, Fig. 5 (7) same way).

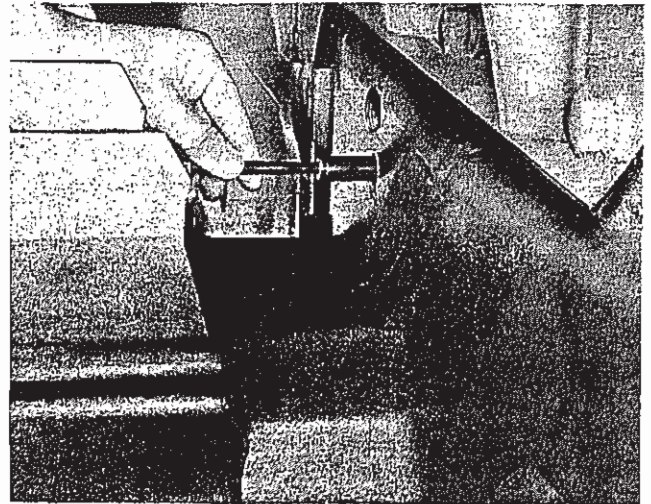


Fig. 6 -- HD6 End Pin Removal
(T-17863)

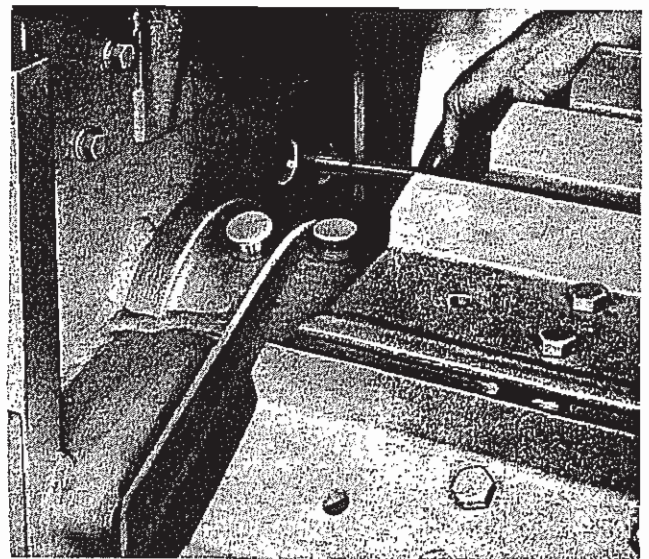


Fig. 7 -- HD11 End Pin Removal
(T-12123)

5. Turn top band section forward on drum and remove hinge pin, Fig. 5 (5); remove top band section, Fig. 8, and then bottom band section.

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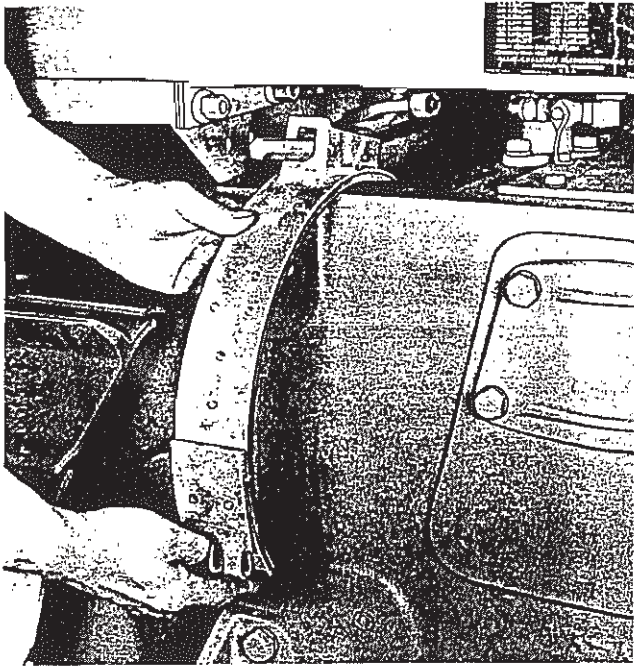


Fig. 8 -- Removing Top Band Section
(HD6 Shown, HD11 Similar)
(T-18036)

C. INSPECTION

1. Replace brake linings before worn to allow rivets to contact brake drum.

2. Replace brake drum if worn, scored, or grooved excessively; refer to "STEERING CLUTCHES AND BRAKES" to remove brake drum.
3. Replace brake bands if worn excessively or damaged.
4. Replace any pin, yoke, or adjuster component worn excessively or damaged.
5. Operate brake pedal; inspect pedal shaft, bell-cranks, levers, rods, (including bushings) for looseness and excessive wear; replace parts as necessary.

D. INSTALLATION

1. Lubricate all pins and bushings SPARINGLY as each is assembled and/or installed.
2. Place brake band sections on brake drum and check for roundness; form sections around drum with soft hammer if necessary before installation.
3. Install brakes by direct reversal of removal procedure.
4. Adjust brakes; refer to "STEERING AND BRAKE LINKAGE ADJUSTMENTS" for complete information.

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TOPIC 6—STEERING CLUTCHES AND BRAKES

A. DESCRIPTION

Steering clutches are located at each end of bevel gear shaft and attached to driving hubs; brake drums enclose steering clutches and are attached to hubs on final drive pinion shaft. Steering clutches consist of hub, friction plates, pressure plates, throwout plate, and heavy springs to hold plates in engaged (driving) position. Operation of steering linkage disengages clutch to steer tractor.

Brakes are located around brake drums that enclose steering clutches. Brakes consist of a two section band and lining assembly, drum, band adjuster, band support, and operating linkage. Operation of brake linkage tightens band sections around drum and stops rotation of drum and final drive to stop and/or steer tractor; brakes are used in conjunction with steering clutches to steer tractor.

B. REMOVAL

1. Remove fuel tank:
 - a. HD6; remove arm rests and capscrews (inside each battery box) attaching tank to battery boxes.

HD11; remove seat and back cushions, and battery cable clip from tank.
 - b. Close fuel shut-off valve and disconnect fuel lines to tank.
 - c. Remove capscrews attaching battery boxes and rear fenders to tank; remove tank; keep tank shims separated so they may be re-installed in original positions.
2. Remove battery ground cable from final drive housing and tape end of cable. Remove bolts attaching battery box to fender and move box outward on fender to provide clearance for steering clutch removal.
3. Remove band support screw (HD6), or jam nut and band support nut (HD11); refer to Fig. 5.
4. Remove clutch compartment cover. Turn band adjuster counterclockwise until loosened from band adjusting yoke.
5. Remove pipe plugs located on side of final drive housing, Fig. 6 or 7, and insert long capscrew through proper hole; turn capscrew into yoke end pin and remove pin; remove adjusting yoke, Fig. 5. Remove end pin securing bottom band section by same method. Do not remove brake bands.
6. Remove capscrews attaching brake drum hub to brake drum, and clutch assembly to clutch driving hub.

NOTE

Late model tractors use self locking place bolts, rather than capscrews and lockwashers, to retain hubs.

Clutch assembly and brake drum will have to be rotated to remove capscrews; use jack under track shoe grouser to move tractor, or turn track sprocket with heavy bar.

7. Attach chain to brake band, as shown in Fig. 9, and lift clutch and brake drum assembly from steering clutch compartment.

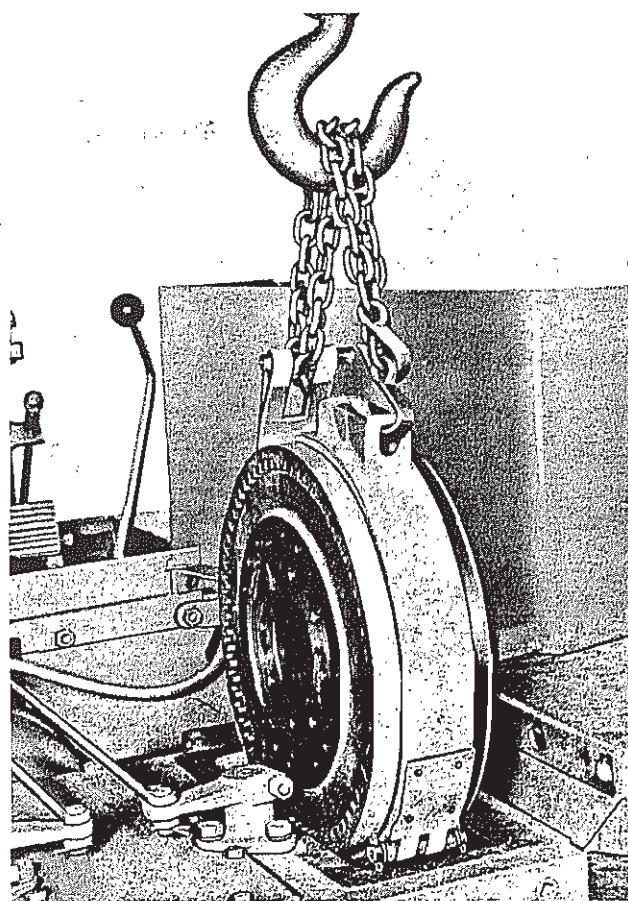


Fig. 9 -- Removing Steering Clutch
(HD6 shown - HD11 similar)
(T-17864)

C. DISASSEMBLY

1. Remove brake drum from clutch assembly; center punch or mark pressure plate, clutch hub, and throwout plate so they will be reassembled in same positions.
2. Remove lock wires from drilled head capscrews. Refer to Figs. 10 and 11 and position