STEERING CLUTCHES AND BRAKES

Steering clutch and brake assembly removal

Preparatory steps

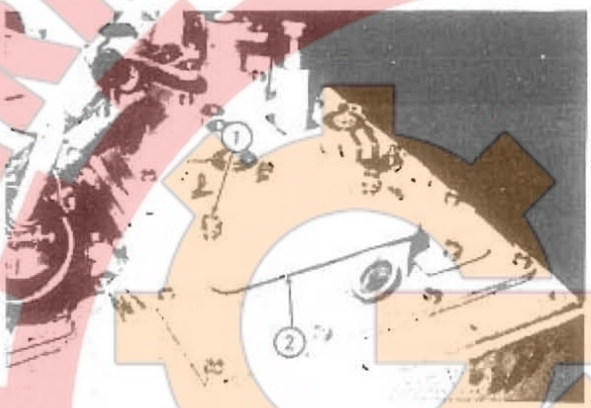
(a) Have the seat and seat bracket dismounted.

(b) Have the brake control rods taken down.

(c) Have the steering clutch control linkage removed.

(d) Take down the battery.

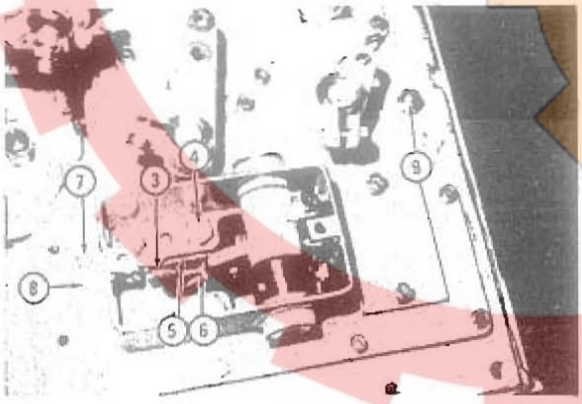
(1) Remove two bolts (1) and take off cover (2).



(2) Remove spring (3) and anchor mounting bolts (4), thus disconnecting anchor (5) and lever (6).

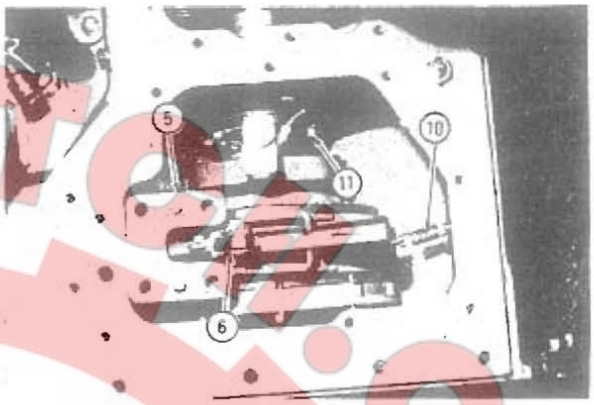
(3) Remove bolts (7) and take off bracket (8).

(4) Remove grease nipple nut (9).

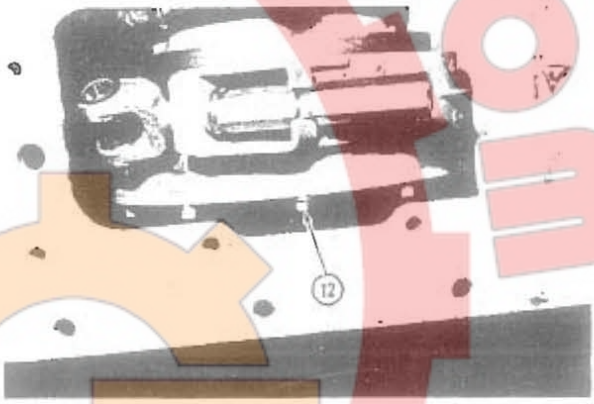


(5) From brake band, remove anchor (5), lever (6) and spring (10).

(6) Remove a total of 8 bolts (11) to sever coupling from clutch shaft.



(7) Remove a total of 20 bolts (12) to undo the flange connection between brake drum and pinion.



NOTE

Removal of bolts (11) (12) will be facilitated by pushing the machine to rotate the drive line just a little at a time.

(8) Push clutch shaft toward final drive to undo the spigot fit in the coupling and, under this condition, remove the steering clutch and brake assembly (complete with yoke).

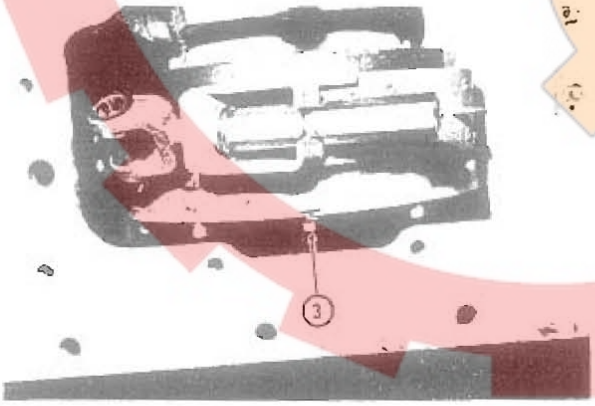
Steering clutch and brake assembly installation

(1) Fit "O" ring (1) to the flange part of clutch shaft. Gently feed the steering clutch and brake assembly into the steering case.

(2) Position the assembly in place, letting the ball stud portion of the yoke enter the boss portion of the case.

(3) Fasten the coupling to clutch shaft by tentatively tightening bolts (2), each with a lock washer.

(4) Secure the pinion flange to brake drum by tightening bolts (3) to 4.3 kg-m (31.1 lb-ft). A spring washer must be used with each bolt (3).



(5) Tighten bolts (2) equally, and bend the tongue of each lock washer.

(6) Install the grease-hose nipple on the case, and secure the nipple by tightening its nut.

(7) Install the coil spring, hooking it to the brake band and to the case.

(8) Connect the lever and anchor to the brake band. Put on the bracket, bolt the anchor, and put on the cover.

Subsequent steps

(a) Installation of the steering clutch control, and clutch adjustment.

(b) Installation of the brake control rods.

(c) Installation of the seat and seat bracket.

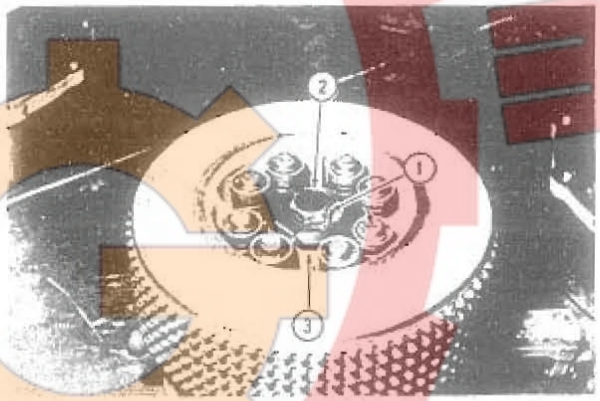
Steering clutch disassembly

Preparatory step

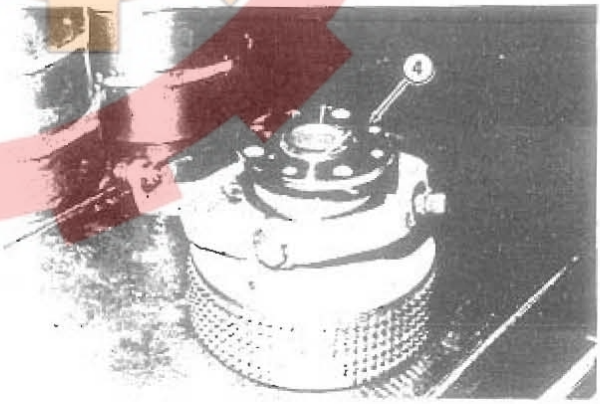
Have the steering clutch severed from the brake drum, and have the below-named tool on hand.

Needed tool	Qt.	Symbol
Steering clutch tool: 58609-01900	1	(A)

(1) Unbend lock washer (1), remove bolt (2) and pick out washer (3).

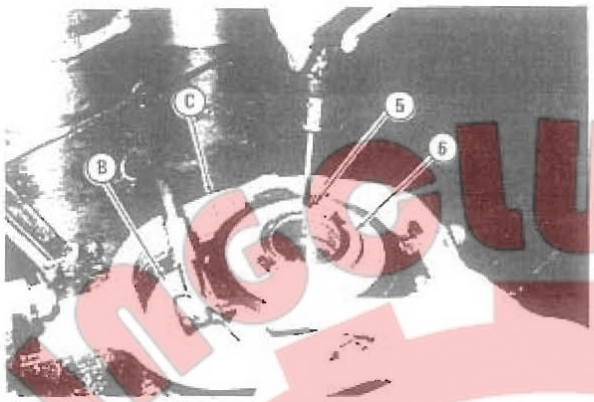


(2) Withdraw clutch shaft (4) from the assembly.



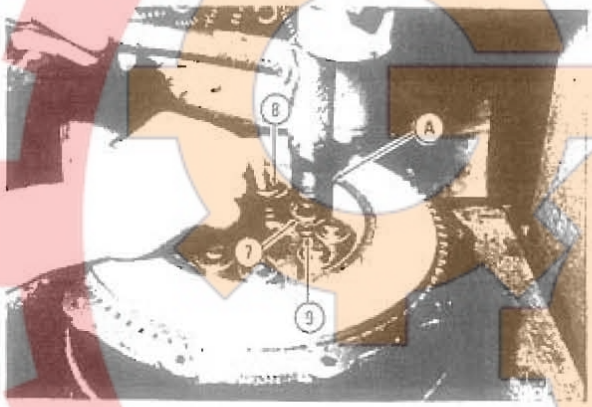
(3) Remove set screw (5), and run out nut (6).

(4) Remove yoke sub-assembly (C) from clutch plate sub-assembly (B).



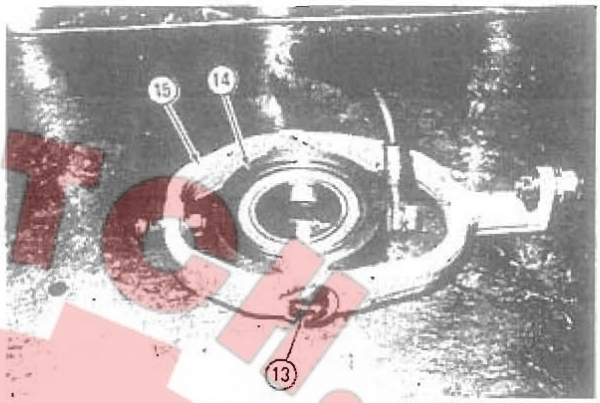
(5) Firmly hold clutch plate sub-assembly. Give a downward push with tool (A) to spring guide (7) to compress the spring and remove retainer (8): repeat this process to remove all retainers (7).

(6) From each guide pin, remove guide (7) and spring (9).



(7) Draw out drum (10), and take out a total of 12 plates (11) (12).

(8) Disassemble the yoke sub-assembly into bolts (13), shifter (14) and yoke (15).

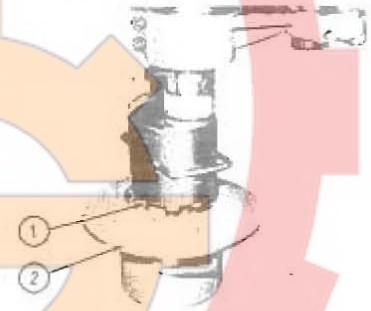


Steering clutch reassembly

Needed tool	Qt.	Symbol
Steering clutch tool: 58609-01900	1	(A)

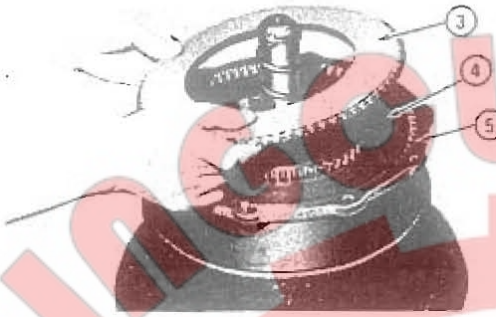
The reassembling procedure is the reverse of the disassembling procedure, but some of the individual steps must be carried out as follows:

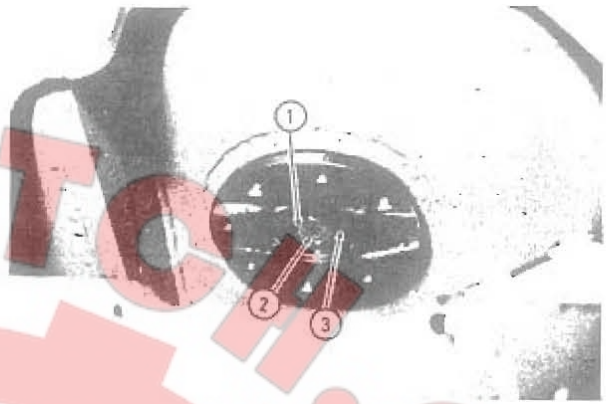
(a) Force guide pins (1) into plate (2).



(b) When inserting the two kinds plates into drum (5), be sure to mate the toothed faces of plate (3) and plate (4).

(c) Be sure to use tool (A) when fitting the retainer to each guide pin. Compress the spring with this tool and fit the retainer.





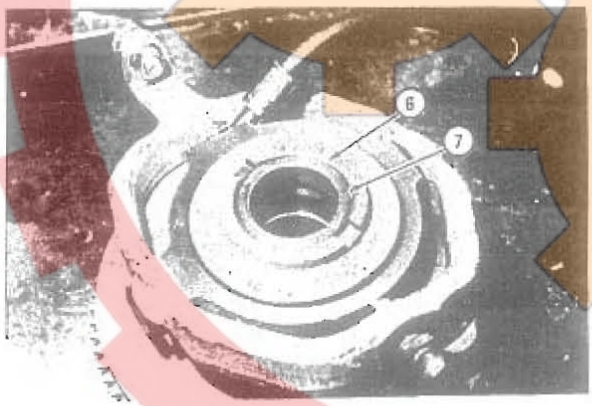
(d) After running in and tightening nut (6) against plate (2), drill and tap a hole anew for the set screw.

Use 5-mm (0.20-in.) drill and make a 14-mm (0.55-in.) deep hole.

Thread with M6 × 1 tap to 10-mm (0.39-in.) depth.

(e) After tightening the set screw to lock the nut, lock the screw by punching at two places.

(f) The tightening torque for the bolts securing the flanged portion of shaft is 17 ± 1.7 kg-m (123 ± 12.3 lb-ft).



Bevel gear and shaft disassembly

Preparatory step

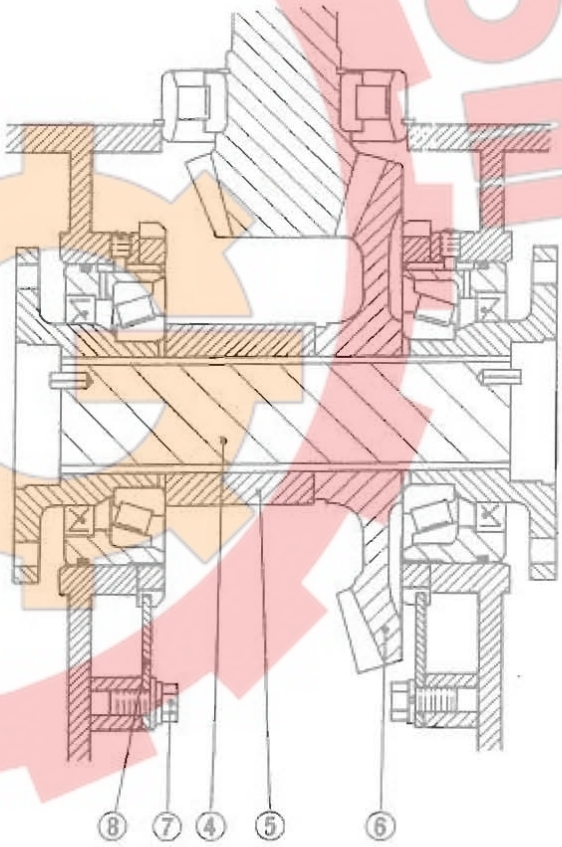
Have the steering clutch and brake assemblies, right and left, removed in advance, and have the below-named tool on hand.

Needed tool	Qt.	Symbol
Wrench: 58809-10200	1	(A)

(1) Unbend lock washer (1). Remove bolt (2) and washer (3). Repeat this at the other end of bevel gear shaft.

(2) Force out bevel gear shaft (4) by driving with a soft-metal hammer while taking out spacer (5) and bevel gear (6).

(3) Remove bolts (7), each securing locking washer (8). Take out washers (8).



(4) Using wrench (A), loosen nuts (9). Remove nuts (9), bearing cages (10) and coupling (11).