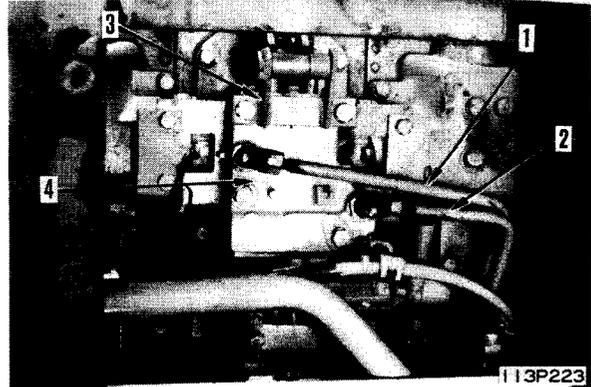


DISMOUNTING STEERING VALVE ASSEMBLY

1. Remove operator's seat.
2. Remove tool box.
3. Disconnect tubes (1) and (2).
★ Remove the clamp on the left side of the frame.
4. Disconnect bracket (3).
5. Pull up valve assembly (4) to remove.

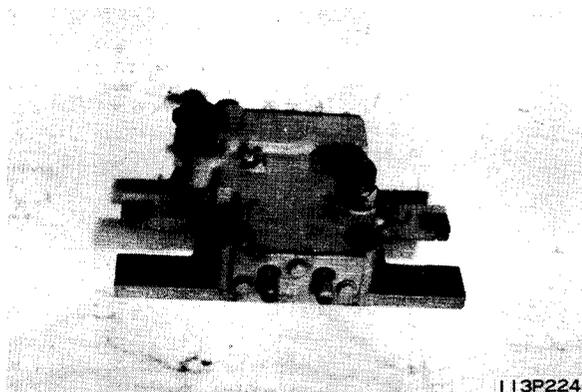


MOUNTING STEERING VALVE ASSEMBLY

1. Fit O-ring, align tube with hole in steering clutch cylinder and install valve assembly (4).
2. Connect bracket (3).
3. Connect tubes (2) and (1), then install clamp.
 Sleeve nut: 8 ± 2 kg.m
4. Install tool box.
5. Install operator's seat.

DISASSEMBLY OF STEERING VALVE ASSEMBLY

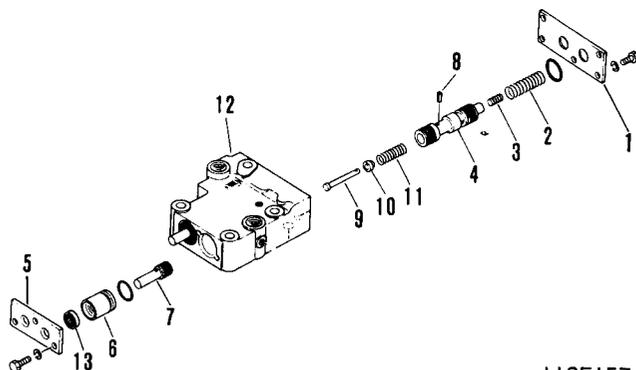
1. Remove cover (1), then remove spring (2), piston (3) and spool assembly (4).
2. Remove cover (5), then remove collar (6) and stem (7).
3. Remove spring pin (8), then remove shaft (9), guide (10) and spring (11).



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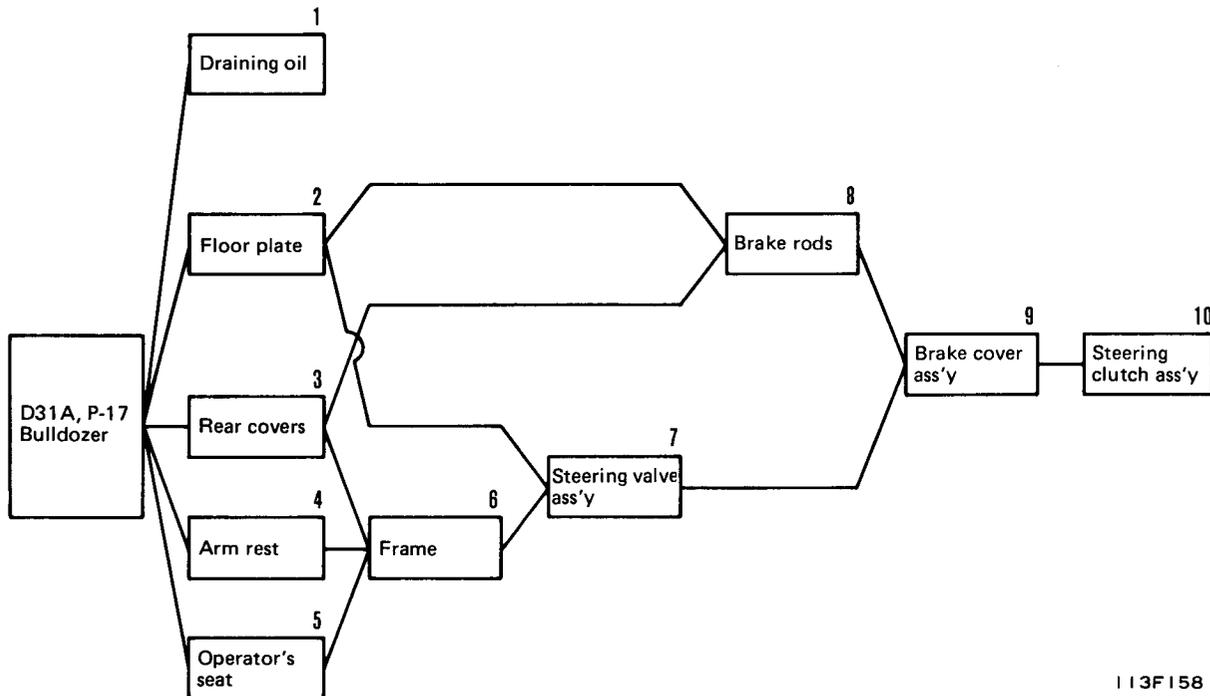
ASSEMBLY OF STEERING VALVE ASSEMBLY

1. Fit guide (10) and spring (11) on shaft (9), set on spool (4), then install spring pin (8).
2. Assemble spool assembly (4) in body (12), fit piston (3) and spring (2), then install cover (1).
3. Fit oil seal (13) in collar (6), assemble stem (7), set in body (12) and install cover (5).



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DISMOUNTING STEERING CLUTCH ASSEMBLY



PREPARATORY WORK

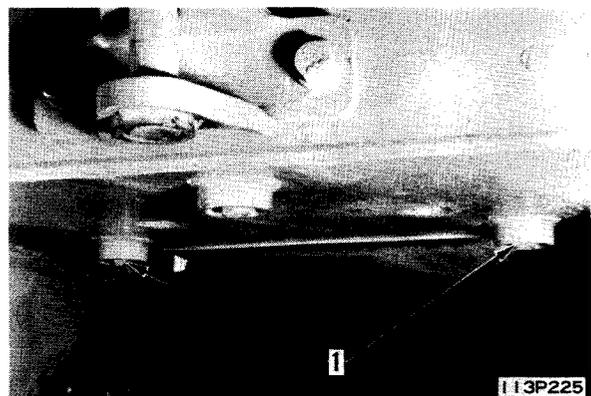
- Jack up machine and put blocks under steering case and equalizer bar.

1. **Draining oil**
Remove drain plug (1) and drain oil from case.



Case: 30ℓ

2. **Floor plate**
Remove floor plate.
★ Pull up parking brake fully to remove.



3. Rear covers

Remove two rear covers.

4. Arm rest

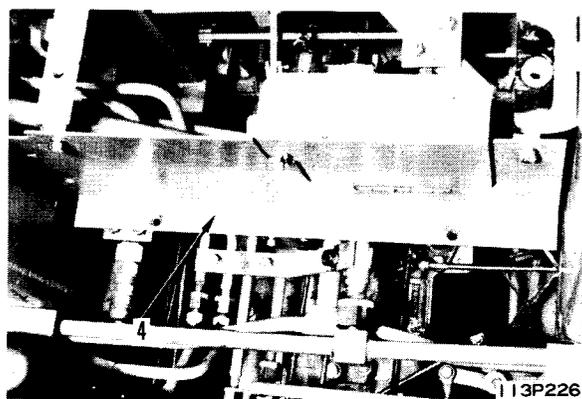
Remove left arm rest.

5. Operator's seat

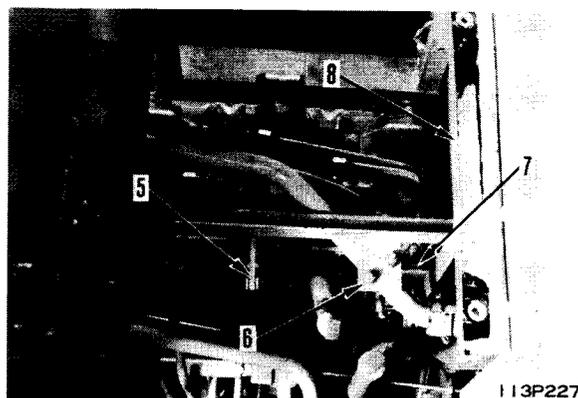
Remove four mounting bolts, then remove operator's seat.

6. Frame

- 1) Remove cover (4).
- 2) Remove tool box.



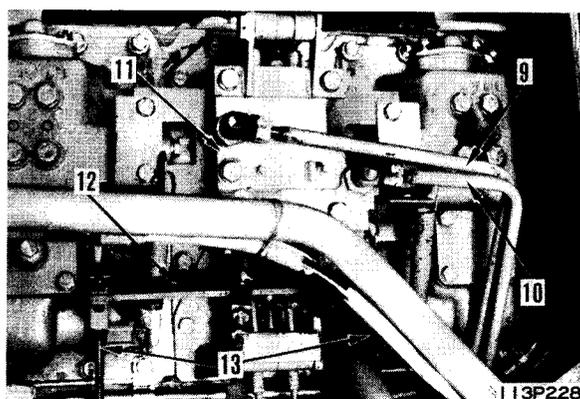
- 3) Disconnect parking brake rod (5).
- 4) Remove tube clamp (6).
- 5) Disconnect fuel rod bracket (7).
- 6) Remove frame (8).

**7. Steering valve assembly**

- 1) Remove tubes (9) and (10).
- 2) Remove steering valve assembly (11).

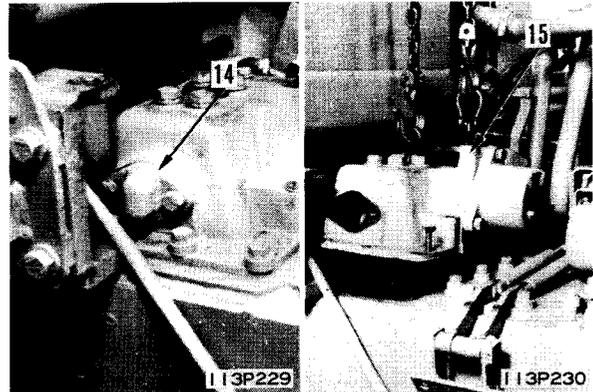
8. Brake rods

- 1) Remove parking brake rod (12).
- 2) Remove R.H. and L.H. brake rods (13).

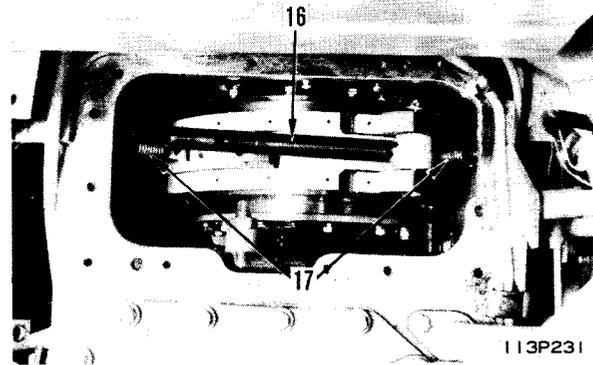


9. Steering brake cover assembly

- 1) Remove cover (14), then remove adjustment screw.
 - 2) Using two eye bolts (10 mm, P = 1.5), remove cover assembly (15).
- ★ Pull out the adjustment rod from the lever.

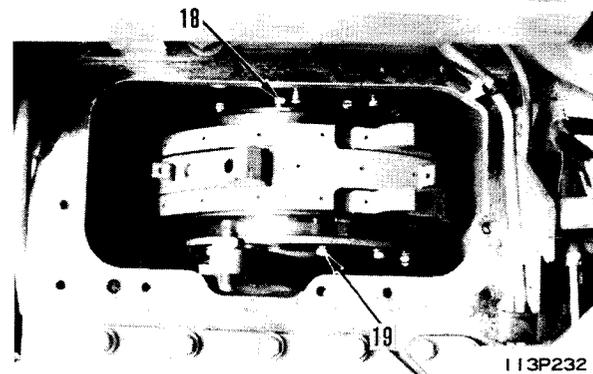


- 3) Remove adjustment rod (16) and spring (17).

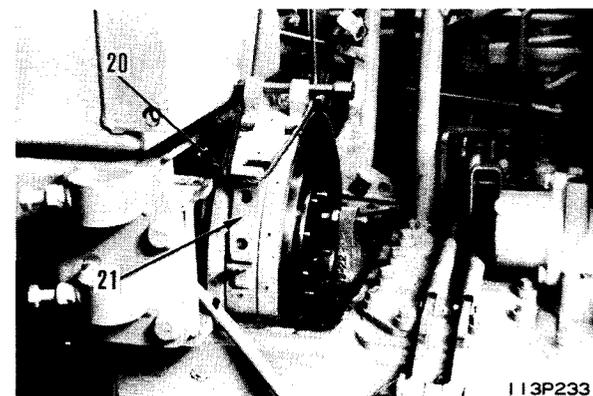


10. Steering clutch assembly

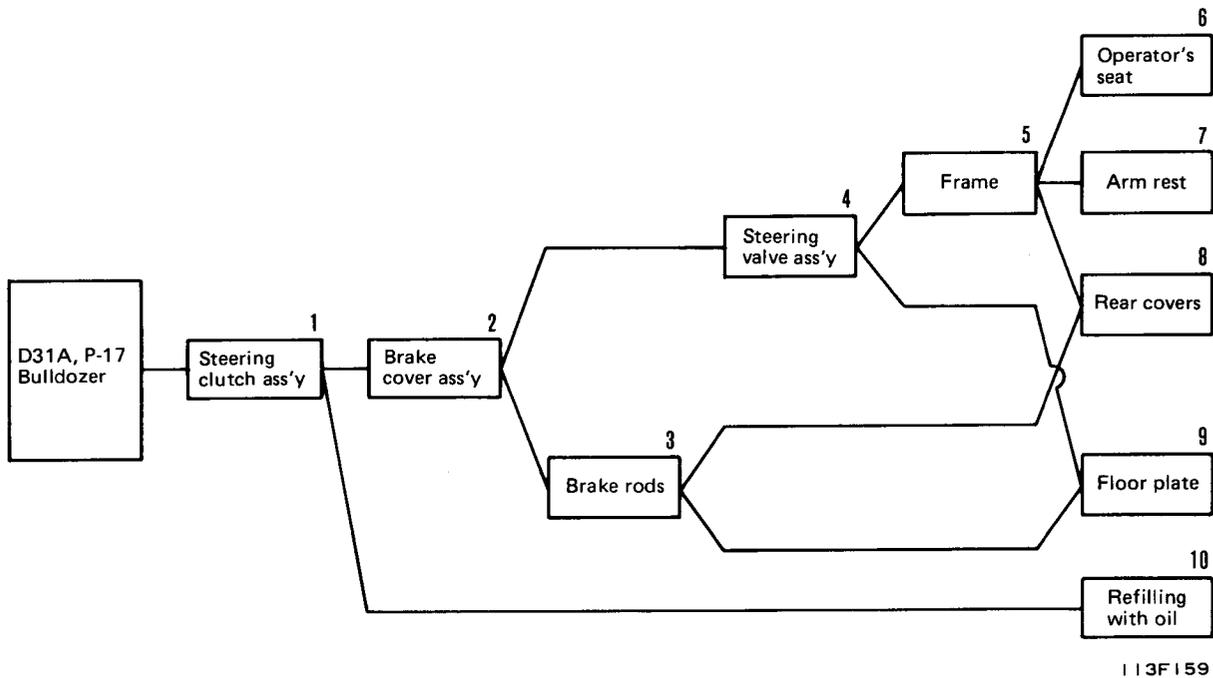
- 1) Rotate track and remove mounting bolts (18) and (19).
- ★ To remove outer mounting bolts (18), remove the plug from the frame and insert a wrench through the hole.
- ★ Outer mounting bolts (18) are 5 mm longer.



- 2) Attach wire to brake shoe (21) and lift out steering clutch assembly (20).

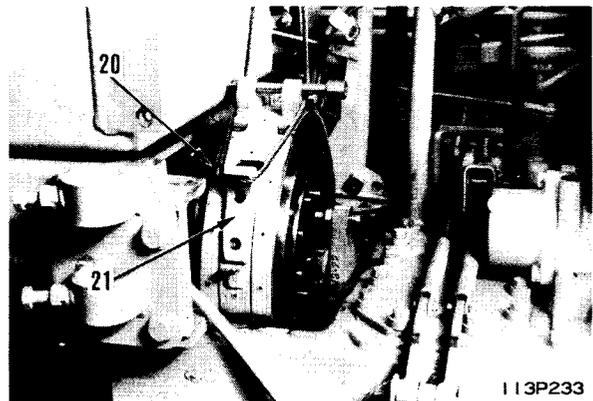


MOUNTING STEERING CLUTCH ASSEMBLY

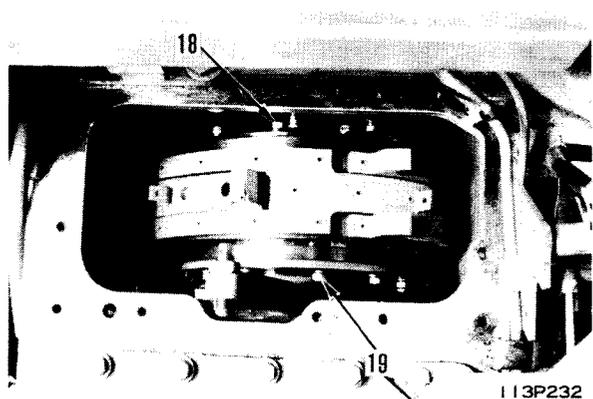


I. Steering clutch assembly

- 1) Attach brake shoe (21) to steering clutch assembly (20), raise and set in mounting position.
 - ★ Be careful to install brake band facing in right direction.
- 2) Align bolt holes and install bolts.
 - ★ Move brake assembly carefully to bring drum and flange into close contact, then tighten bolts fully.

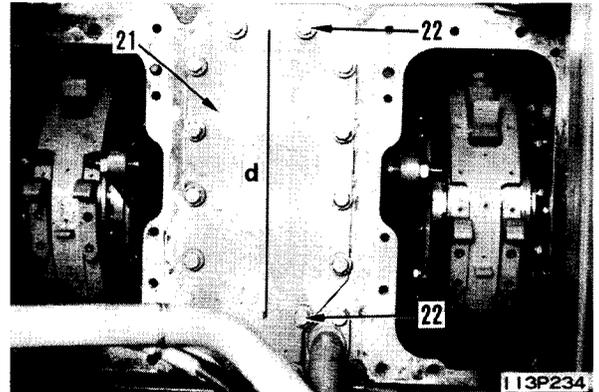


- 3) Rotate shoe assembly and tighten all mounting bolts (19) and (18).

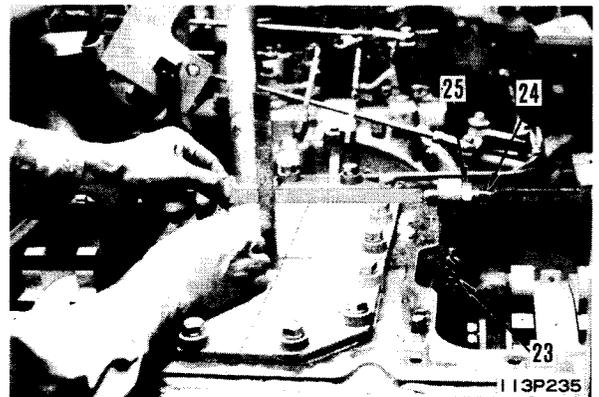


- 4) Adjust adjustment screw of yoke assembly (23) as follows.

- i) Draw center line *d* of machine on cover (21).
 - ★ The center line between right and left mounting bolts (22) of the cover is the center line of the machine.
- ii) Make a perpendicular line with a squar or other tool, and measure horizontal distance *e* from here to adjustment screw.
 - ★ Distance *e*: 135 mm

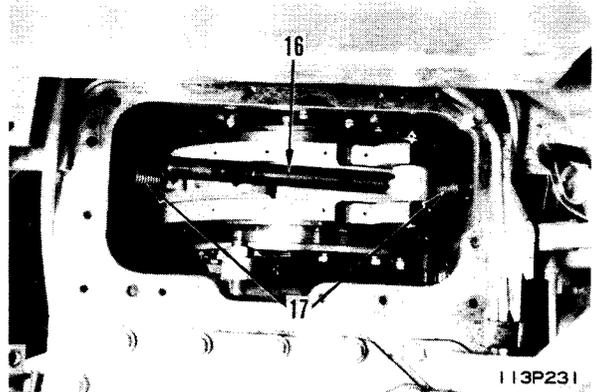


- iii) Loosen nut (25) and turn screw (24) to adjust.



2. Steering brake cover

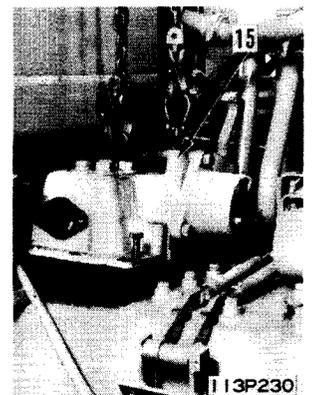
- 1) Install spring (17).
- 2) Set adjustment rod (16) in position.
 - ★ Add engine oil before installing the cover.



- 3) Fit gasket and install cover assembly (15).

-  Mounting bolt: Thread tightener (LT-2)
-  Gasket: Gasket sealant (G2-L1)

- ★ Pass the brake adjustment rod through the lever of the cover, and screw in the adjustment screw.



3. Brake rods

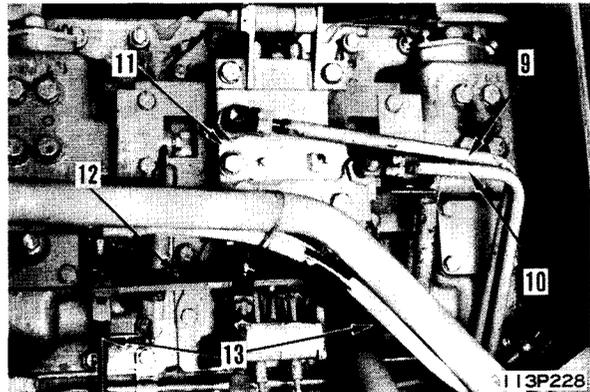
Install R.H. and L.H. brake rods (13) and parking brake rod (12).

 Bend cotter pin securely.

4. Steering valve assembly

- 1) Install steering valve assembly (11).
- 2) Install tubes (10) and (9).

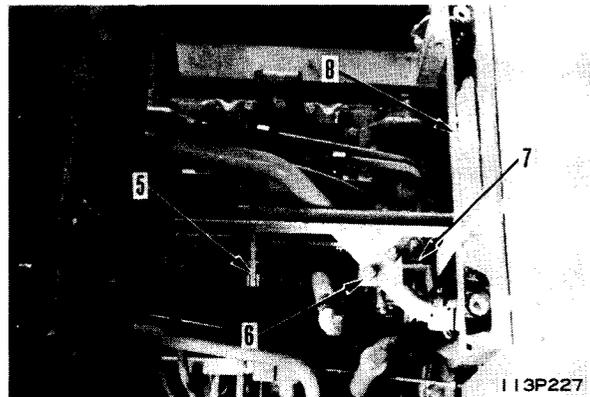
★ There is a clamp on the left side of the frame.



5. Frame

- 1) Install frame (8).
- 2) Connect fuel rod bracket (7).
- 3) Install tube clamp (6).
- 4) Connect parking brake rod (5).

 Bend cotter pin securely.



- 5) Install tool box.
- 6) Install cover (4).

6. Operator's seat

Install operator's seat.

7. Arm rest

Install arm rest.

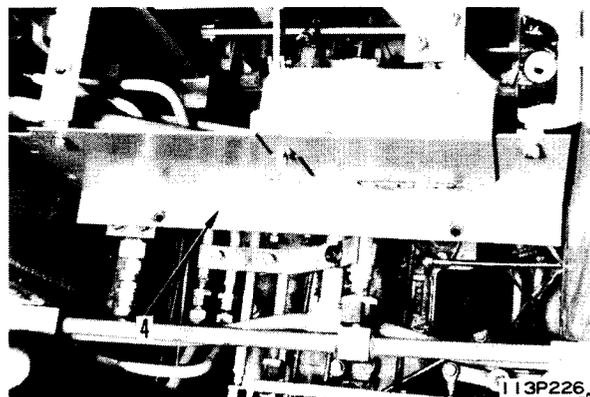
8. Rear covers

Install two rear covers.

9. Floor plate

Install floor plate.

★ Pull up parking brake fully to install.



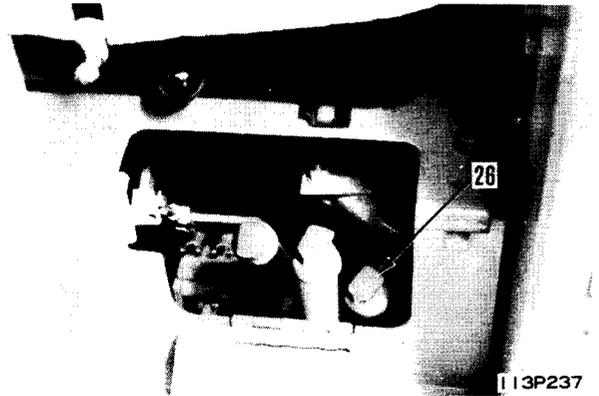
10. Refilling with oil

Tighten drain plug and add engine oil through oil filler (26) to the specified level.



Case: Approx. 30ℓ

- ★ If oil was added to the specified level before installing the brake cover, check the level again.



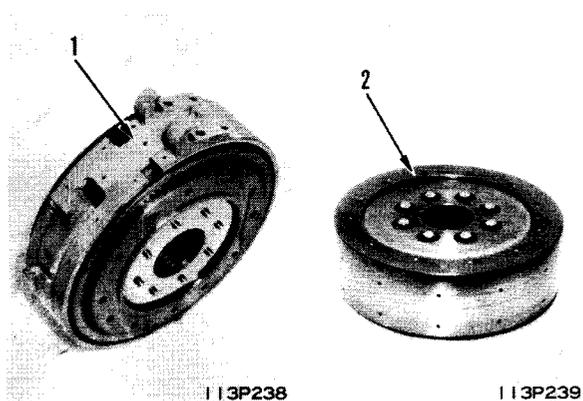
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DISASSEMBLY OF STEERING CLUTCH ASSEMBLY

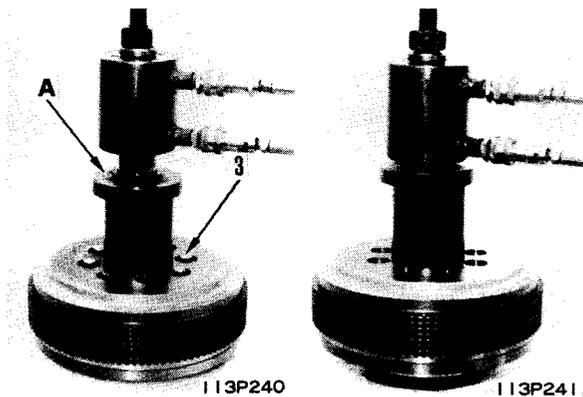
Special tools

Part No.	Part Name	A
791-431-5000	Compressor	1
790-101-1102	Pump	1
790-101-2102	Puller (30t)	1
790-201-2750	Spacer	1

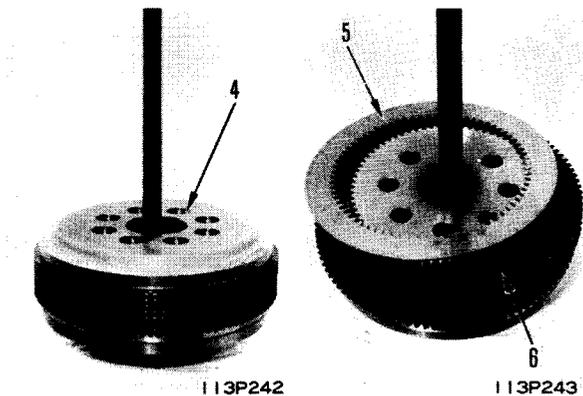
1. Remove brake band (1).
2. Remove brake drum (2).



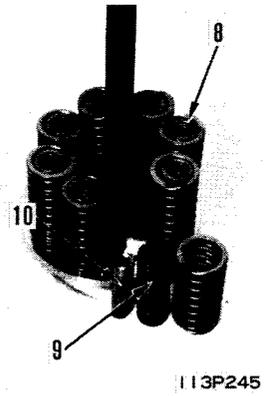
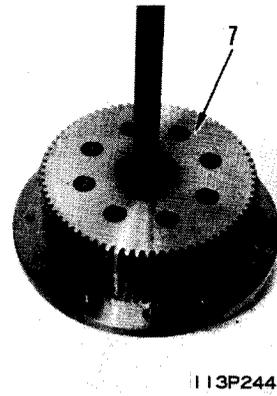
3. Set steering clutch assembly in tool A.
4. Expand puller of tool A to compress clutch springs.
5. Remove eight mounting bolts (3).
6. Release hydraulic pressure of pump slowly. When clutch spring tension is fully released, remove puller and spacer of tool A.



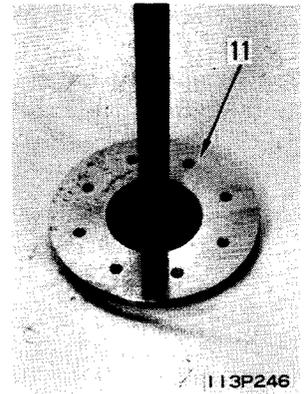
7. Remove pressure plate (4).
8. Remove nine plates (5) and eight discs (6).
★ To prevent deformation of plates or discs, store in a horizontal place.



- 9. Remove clutch drum (7).
- 10. Remove springs (8) and (9) and pipes (10).



- 11. Remove retainer (11).

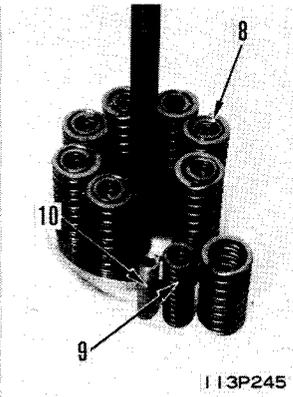
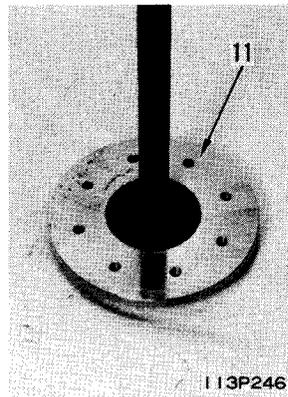


ASSEMBLY OF STEERING CLUTCH ASSEMBLY

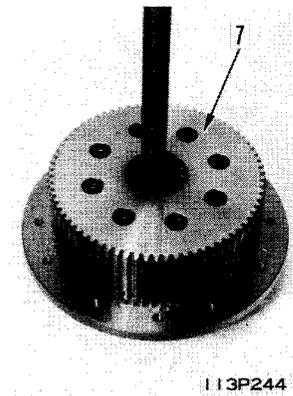
Special tools

Part No.	Part Name	A
791-431-5000	Compressor	1
790-101-1102	Pump	1
790-101-2102	Puller (30 t)	1
790-201-2750	Spacer	1

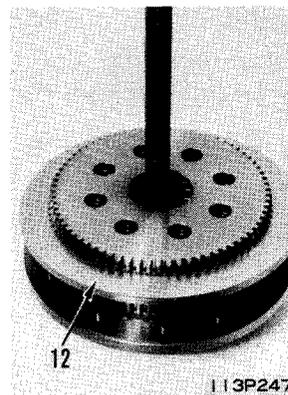
1. Set retainer (11) on plug of tool A.
2. Set pipes (10) and spring (9) and (8) in retainer (11).
 - ★ Check the free length and installed load of the springs when deciding whether to use again.



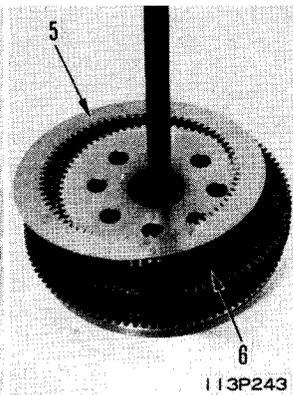
3. Set clutch drum (7) on spring.
 - ★ Check that the spring is fitted properly into the spring mounting seat of the drum.



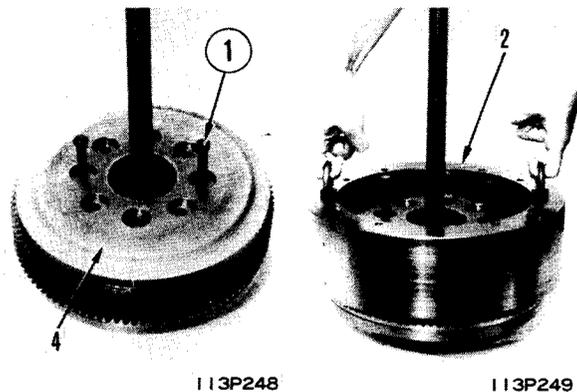
4. Assemble plate (12) on clutch drum.
 - ★ Plate (12) is thicker than the other plates.



5. Assemble eight plates (5) and eight discs (6).
 - ★ Clean the plates and discs and coat with engine oil.



6. Align pressure plate (4) with match mark on clutch drum, and set in position.
7. Using guide bolts ① (12 mm, P = 1.75), align bolt holes of pressure plate and retainer.
8. Align internal teeth of brake drum with external teeth of discs and install brake drum (2).



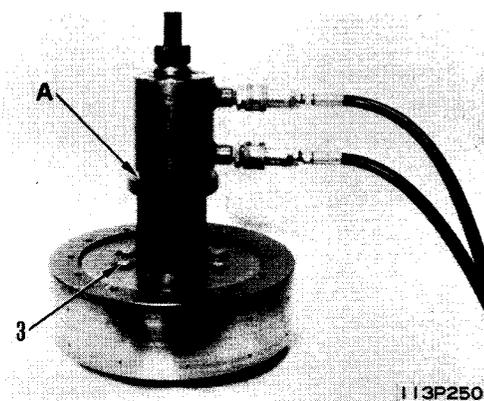
9. Set spacer and puller of tool A in position, slowly apply hydraulic pressure and compress clutch springs.
 - ★ Be careful not to let the bolt holes of the pressure plate and retainer slip out of alignment.

10. Tighten eight mounting bolts (3).

 Mounting bolts: $6.7 \pm 0.7 \text{ kg.m}$

4 B, 5 U/AT

11. Remove tool A.



12. Install brake band (1).

- ★ Be careful to install the brake band facing in the right direction.

