TW-15, TW-25 AND TW-35 CLUTCH OVERHAUL

REMOVAL

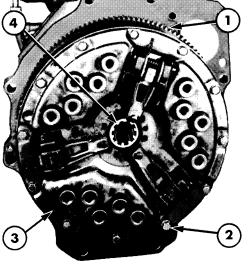
Withdraw the twelve bolts securing the clutch pressure plate and cover assembly to the flywheel and remove the pressure plate assembly together with the clutch disc.

With reference to Figure 14.

1. Separate the tractor between the engine and front transmission, see "SEPARATING THE TRACTOR" — Part 12.

IMPORTANT: The bolts must be slackened evenly and diagonally across the clutch to prevent distortion of the cover.

 Before removal of the clutch assembly, mark the clutch cover and flywheel to ensure the same position is maintained on installation.



DISASSEMBLY

To assist in the overhaul and adjustment of the clutch pressure plate and cover assembly, Tool Nos. FT.7110 (SW 12B) and FT.7110-3 (SW 12B-3) or 2142 (SW 510) are available in Service, See Figures 15, 16 and 19.

Figure 14
TW-15, TW-25 and TW-35 Clutch Assembly
Installed

- 1. Flywheel
- 2. Cover-to-Flywheel Bolts
- 3. Clutch Cover
- 4. Clutch Disc

IMPORTANT: Do not attempt to adjust or overhaul the clutch pressure plate and cover assembly using other than the recommended service tools.

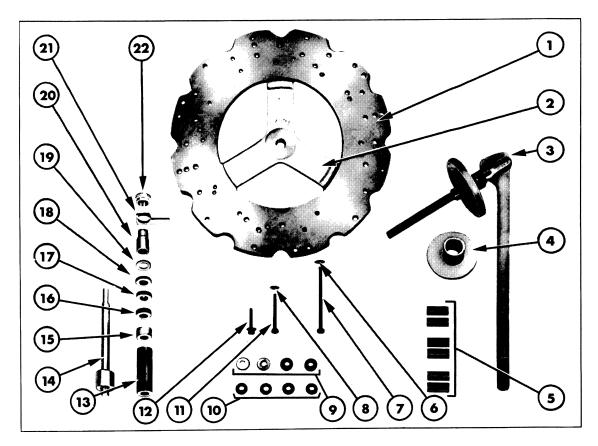


Figure 15

Clutch Pressure Plate Assembly Overhaul and Adjustment — Tool No. FT.7110 (SW 12B)

- Base Plate, Tool No. STM 7704
- 2. Bridge Spider, Tool No. 99MA/1
- 3. Actuator Assembly, Tool No. FT.7110/28 (SW 12B/28)
- 4. Actuator Cam Platform Extension, Tool No. STM 7707

- Riser Spacers, Tool No. STM 7703
 Washer, Tool No. FT.7110/26 (SW 12B/26)
 Bolt, Tool No. FT.7110/23 (SW 12B/23)
 Washers, Tool No. FT.7110/27 (SW 12B/27)
- Disc Spacers, Tool No. FT.7110/8 (SW 12B/8)
 Disc Spacers, Tool No. STM 6023 Code 3
- 11. Bolt, Tool No. FT.7110/25 (SW 12B/25)
- 12. Bolt, Tool No. FT.7110/24 (SW 12B/24) 13. Centre Spacer, Tool No. FT.7110/5 (SW 12B/5)

- 14. Pillar Spacer, Tool No. STM 7701
- 15. Centre Spacer, Tool No. FT.7110/4 (SW 12B/4)
- 16. Centre Spacer, Tool No. FT.7110/8 (SW 12B/8)
- 17. Centre Spacer, Tool No. FT.7110/3 (SW 12B/3)
- 18. Centre Spacer, Tool No. FT.7110/2 (SW 12B/2)
- 19. Centre Spacer, Tool No. FT.7110/6 (SW 12B/6)
- 20. Gauge Finger Body, Tool No. STM 6018 21. Gauge Finger, Tool No. STM 6755 22. Locknut, Tool No. STM 6020

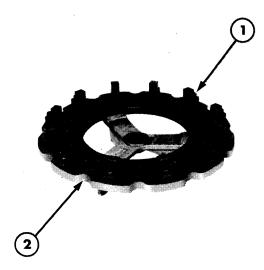


Figure 16
TW-15, TW-25 and TW-35 Clutch Setting
Adaptor Kit Installed on Base Plate

- Adaptor and Set Screw, Tool No. FT.7110-3 (SW 12B-3)
- 2. Base Plate, Tool No. STM 7704



- Install the twelve Adaptors and Set Screws, Tool No. FT.7110-3 (SW 12B-3) on the Base Plate, Tool No. STM 7704, as shown in Figure 16.
- Clean the pressure plate and cover assembly thoroughly then locate the assembly centrally on the twelve Adaptors.
- Secure the assembly to the Adaptors with the twelve special bolts, Figure 17. Tighten the bolts evenly and diagonally across the clutch.

NOTE: The clutch cover pressure plate and all other major parts, including springs, must be carefully marked and positions noted so that they may be returned to their original positions to maintain balance in the clutch.

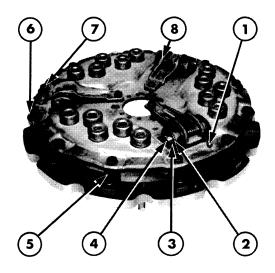


Figure 17 TW-15, TW-25 and TW-35 Clutch Mounted on Base Plate and Adaptor

- 1. Release Lever Spring
- 2. Washer
- 3. Split Pin
- 4. Clevis Pin
- 5. Adaptor
- 6. Base Plate
- 7. Bolt
- 8. Release Lever
- 4. Note the direction from which the clevis pins are installed then extract the split pins, remove the flat washers and pull the clevis pins from the clutch assembly. Note the installed position then remove the four release lever springs.
- Gradually slacken the bolts retaining the pressure plate cover to the base plate adaptors until all spring pressure is released then remove the bolts and pressure plate cover.

NOTE: The bolts must be slackened evenly and diagonally across the clutch to prevent distortion of the cover.

6. Lift the clutch cover from the assembly. Withdraw the release lever pins and levers from the clutch cover, Figure 18.

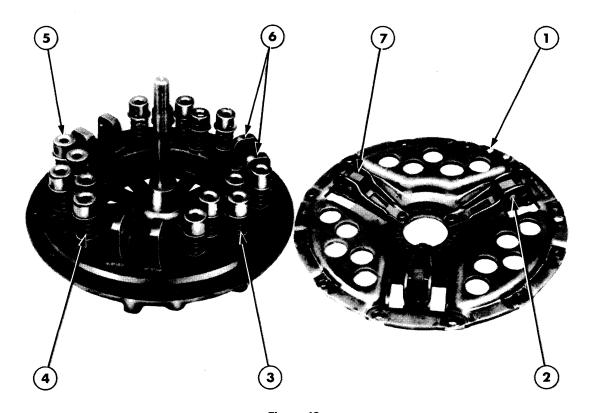


Figure 18 TW-15, TW-25 and TW-35 Cover Removed from Clutch

- 1. Clutch Cover
- 2. Release Lever Pins
- 3. Spring Seats
- - 4. Springs5. Spring Cups

- 6. Pressure Plate Drive Lugs
- 7. Release Levers

7. Remove the spring cups then remove the springs and spring seats from the pressure plate.

DISASSEMBLY USING TOOL NO. 2142 (SW 510)

With reference to Figure 19.

1. Insert the serrated end of the Fixture Spindle, Tool No. 1285 (SW 510-62), into the hub of the Fixture Base, Tool No. 1283 (SW 510-60). Place the fixture base on edge and install the Washer, Tool No. 1295 (SW 510-66) (not shown) and the Jam Nut. Tool No. 1294 (SW 510-65) (not shown) on the end of the spindle protruding from the bottom of the base. Tighten the nut until the spindle bottoms firmly in the hub.

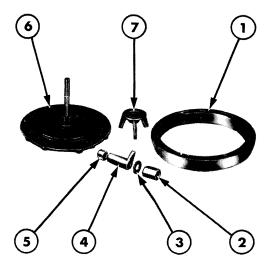


Figure 19

TW-15, TW-25 and TW-35 Clutch Tools

- Adaptor Ring, Tool No. 1194
 Spindle Nut, Tool No. 1280 (SW 510-9)
 Thrust Washer, Tool No. 1281 (SW 510-10)
- Release Lever Gauge, Tool No. 1267 (SW 510-2)
 Gauge Spacer, Tool No. 1193
 Fixture Base, Tool No. 1283 (SW 510-60)

- 7. Bridge, Tool No. 1268 (SW 510-3)