SERVICE INSTRUCTIONS

**TOOLS REQUIRED**

1. (1/2)" Box wrench or socket
2. (1) Flat blade screwdriver
3. (1) Needle nose pliers

* Overrunning clutch only

**RUN-IN & REBUILDING**

**RUN-IN** (Necessary for all new clutches and any clutch that have not been used for approximately 60 days.)

1. Make sure tractor is off and PTO is disengaged.
2. Disconnect drive shaft from tractor.
3. Loosen bolts on outside diameter of clutch until all bolts are just loose, then tighten all bolts one half turn.
4. Attach implement to tractor and drive shaft to tractor PTO. Stand clear of machine.
5. Start tractor. Engage PTO and run for a few seconds or until clutch visibly smokes, then disengage PTO.
6. Make sure tractor is off and PTO is disengaged.
7. Disconnect drive shaft from tractor.
8. Tighten all bolts on outside diameter of clutch until compression plate is tight against housing

**DRIVE SHAFT REMOVAL**

1. With tractor off and PTO disengaged, disconnect drive shaft from tractor PTO.
2. Remove the bolt(s) that are clamping the clutch drive shaft to the implement input shaft.
3. The shaft with the clutch is heavy. Grasp clutch firmly with both hands and slide it off implement input shaft.

**FRICTION PACK REBUILDING**

**DISASSEMBLY:**

1. Place clutch and universal joint assembly on a bench, with end of clutch accessible.
2. Remove long bolts on outside of housing that hold friction pack together.
3. Remove plate(s) and all internal components, leaving yoke/hub intact.
4. Discard friction discs.
5. If rebuilding overrunning clutch, refer to the OVERRUNNING REPAIR section (over), starting with step 2.

**INSPECTION:**

6. Inspect steel and iron parts for wear, warping or cracking and replace if necessary.
7. Inspect yoke/hub for looseness. Replace if there is more than .03 end play.
8. Clean any rust or dust from plate surfaces with a wire brush or steel wool.

**ASSEMBLY:**

9. Place one new friction disc inside housing, then separator plate, then other friction disc.
10. Add pressure plate so flat surface rests on friction disc (tangs on plate must fall into reliefs in housing).
11. Add disc spring so spring inside diameter contacts fins of pressure plate.
12. Assemble compression plate and all long bolts, making sure all nuts are in their pockets. Tighten all long bolts to 30 ft-lbs.

**MOUNTING**

1. Mount and clamp the clutch hub onto the implement input shaft. Make sure the grooves of the shaft and clutch line up.
2. Reinstall any shielding that was moved or removed.
3. The clutch must be run-in before it is used. Follow the instructions for run-in of the clutch.
M-TYPE FRICTION CLUTCH

TOOLS REQUIRED
(1) 1/2" Box wrench or socket
*(1) Flat blade screwdriver
*(1) Needle nose pliers
* Overrunning clutch only

OVERRUNNING REPAIR

DISASSEMBLY:
1. Remove the four bolts that are securing the friction pack to the yoke. Remove friction pack.
2. Using screwdriver and pliers remove retaining ring holding overrunning clutch together.
4. Remove and discard keys and leaf springs

INSPECTION:
5. Inspect steel parts for wear and replace if necessary.
6. Inspect yoke/hub for looseness. Replace yoke/hub if there is more than .03 end play.
7. Scrape any hardened grease from overrunning key pockets with screwdriver.

ASSEMBLY:
8. Using Shell Super Duty or equivalent grease, place one grease gun pump in each key pocket. Wipe two more pumps over overrunning surface.
9. Press a new leaf spring into each pocket, with ends of springs touching bottom of pockets.
10. Add new keys. With one hand hold the two keys in the pockets for the next step.
11. Slide collar onto hub in same orientation as removed.
12. Add washer.
13. Install retaining ring.
14. Make sure clutch spins freely in the correct direction only.
15. Reassembly friction pack.

ADJUSTMENT (friction clutch does not require adjustment)

MOUNTING
1. Mount and clamp clutch hub onto the implement input shaft. Make sure grooves of shaft and clutch line up.
2. Reinstall any shielding that was moved or removed.
3. Clutch must be run in before it is used. Follow the instruction for running in the clutch.