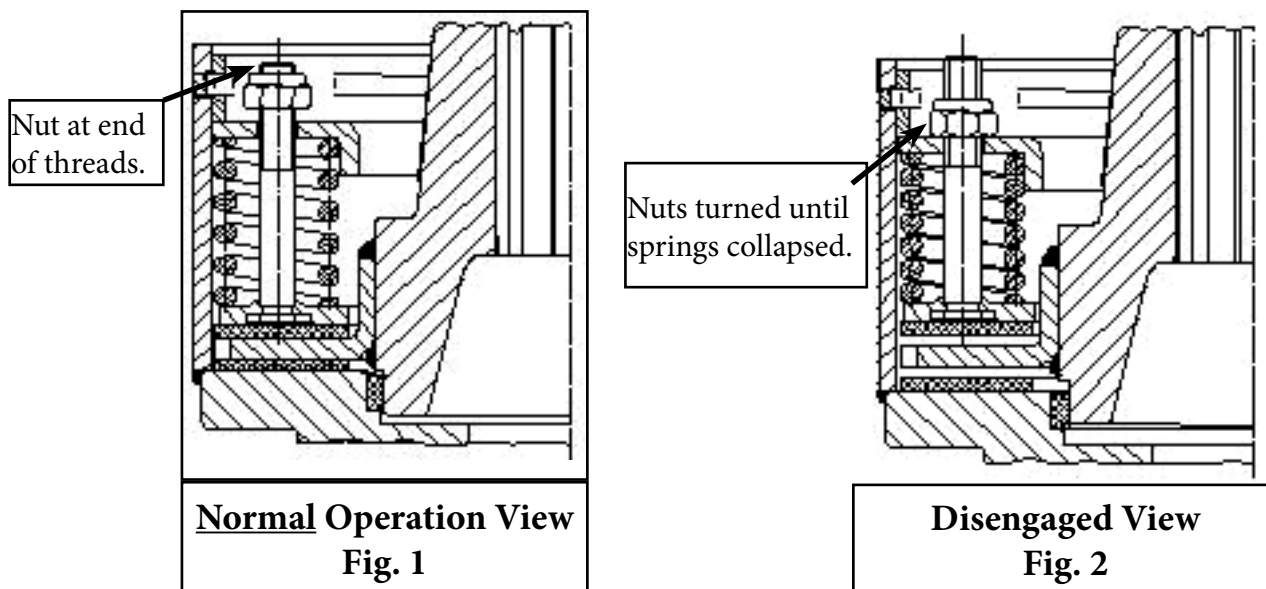


## 1. Maintenance Instructions for Friction Disc Clutch Assembly

Prior to first-time use and following prolonged stoppages, check the operation of the friction clutch and follow this procedure to disengage the pressure plate and slip the clutch approximately 2 seconds.

Note:

Clutches that are not used for extended periods are exposed to environmental influences (moisture/temperatures), that can cause seizing/sticking of the friction linings and render the clutch “frozen” and useless. Consequently, friction clutches must be disengaged after every lengthy stoppage, greater than 2 weeks. The clutch should be turned briefly while disengaged (Figure 2).



- 1) **Disengagement: Make sure tractor is off and key removed.** Uniformly tighten the nuts (Fig. 2) to relieve the pressure on the friction disks. Use hand ratchet and socket, not power tools. Do not over-tighten, watch spring, stop when air gap between coils is less than 1/32”.
- 2) **Make sure all personnel are at a safe distance.** Turn the clutch approximately 2 seconds at engine idle. Ensure that all components are free (not seized to other components).
- 3) **Normal:** Subsequently turn the nuts (Fig. 1) back to the end of the thread.

Note:

The friction surfaces must be clean and free of grease!

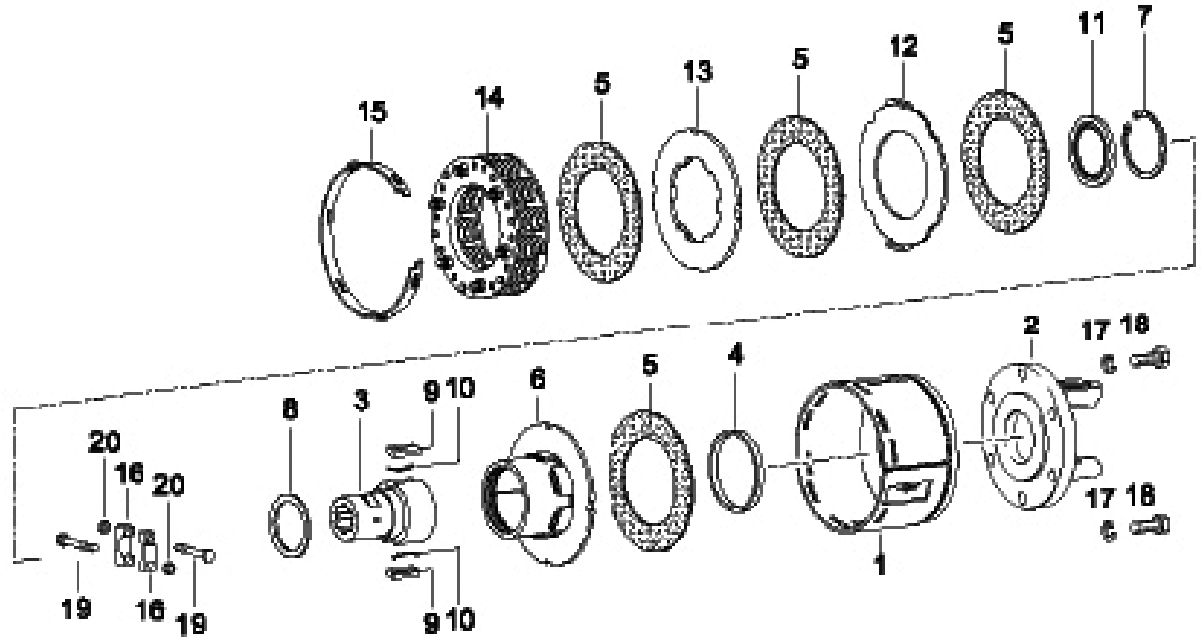
## Clutch Rebuild Instructions

With the spring pressure removed from the clutch, as in Page 1, Figure 2, insert a chisel through the slot the setting ring is locked into. Strike the chisel against the setting ring dislocating the ring from the slot. Continue this process around the clutch until the setting ring is free from the clutch.

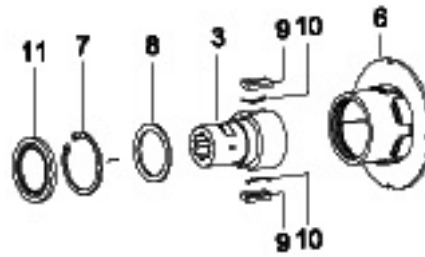
Remove the internal parts and set aside.

# Clutch Rebuild Instructions

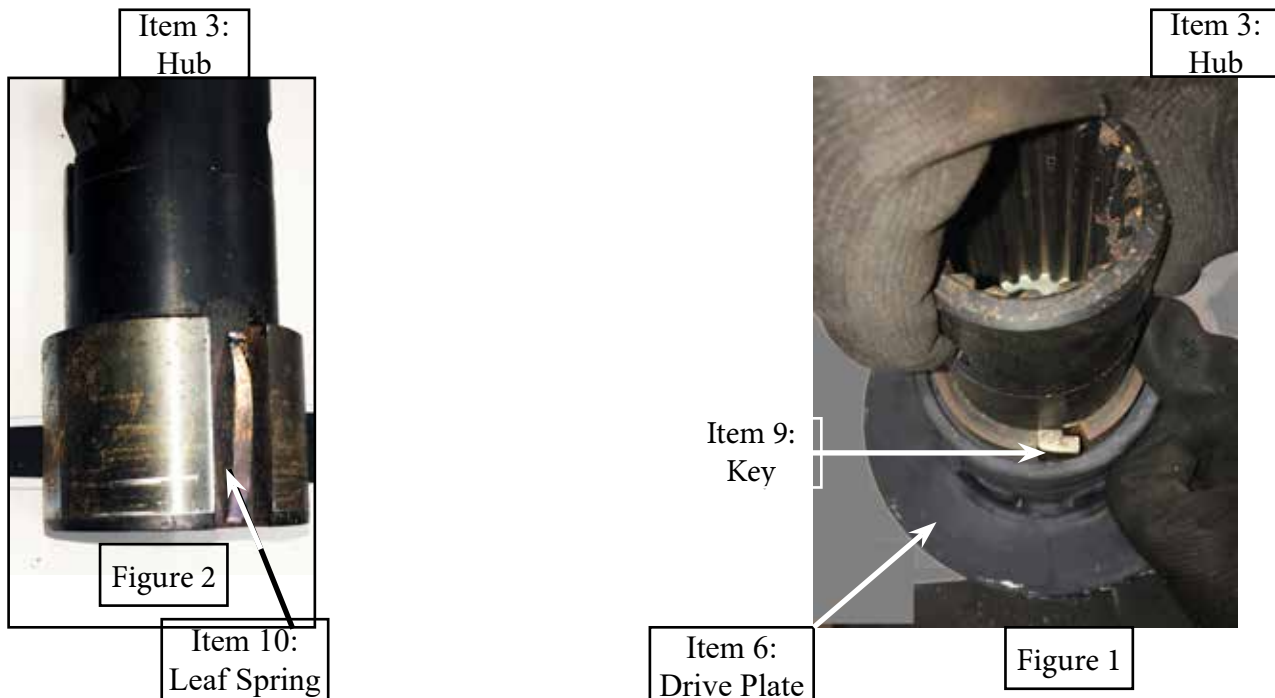
Use the following Diagram and Check list to rebuild your clutch.



Ref. No.	Part No.	Qty.	Description	Maintenance Checks
1	236-2099	1	Clutch Housing	Check Clutch Housing for dents and wear on socket in bottom of housing
2	236-2010	1	Yoke (Bolt On)	
3	T5-W30 T5-W43	1 1	Hub, 1 3/4" x 6 Spline 540 RPM Hub, 1 3/4" x 20 Spline 1000 RPM	Refer to page 3 for instructions on overrun rebuild Inspect keyways for wear
4	T5-W19	1	Centering Ring	<b>Very Important * Check when installing new linings, change if worn.</b>
5	T5-W20	4	Friction Lining	* Replace All*
6	T5-W21	1	Drive Plate	Clean rust and scale - do not polish, do not use any lubricants.
7	T5-W22	1	Lock Ring	Inspect for flatness, if deformed, replace
8	T5-W23	1	Supporting Ring	Inspect for flatness, if deformed, replace
9	T5-W25	2	Key	Inspect for wear
10	T5-W24	2	Leaf Spring	
11	T5-W32	1	Sealing Ring	
12	T5-W26	1	Drive Plate (Outer)	Inspect ears for wear, clean rust and scale
13	T5-W27	1	Drive Plate (Inner)	clean rust and scale
14	T5-W49	1	Spring Pack	*If paint is burned on springs, they may have lost tension
15	T5-W29	1	Setting Ring	
16	T5-W33	2	Clamp Bridge	
17	MLW12Z	6	Lock Washer M12	
18	MCS12C30Z88	6	M12 x 1.75 x 30 x 8.8GR Bolt	
19	T5-W35	2	Bolt M16 x 110mm for T5-W33	
20	T5-W34	2	M16 Nut for T5-W33	



## Clutch Overrun Key Installation



1. Place the leaf springs (Item 10) in the grooves of the hub, (Item 3) as shown in Figure 2, use a coating of **white lithium grease** to keep in place, and to lubricate the assembly. Do NOT use any other type grease!!!! Put a small amount of white lithium grease on the base of the hub and inside the socket of the drive plate, (Item 6) before assembling.
2. Place the keys (Item 9: T5-W25) over the springs in the correct orientation as shown.
3. Slide the hub into the drive plate, holding the keys in place as shown in Figure 1. Press down on hub until it bottoms out in drive plate.
4. Install Item 8: Supporting Ring, Item 7: Lock Ring, and Item 11: Sealing Ring.
5. This assembly is ready to install in your clutch. This can be done without dismantling the clutch if you need to service your overrun only.

### This is a prime opportunity to do the following checks:

- Check the gearbox mounting bolts for tightness.
- Check the deck structure for cracked welds.
- Check the oil in the gearbox.
- Check blade bar for cracks.
- Sharpen your blades.
- Be sure your blade bar is tight on the shaft and cotter pin is installed.

## Slip Clutches 236-2001 and 236-2101 Use Level IV for 6 foot cutters

### TORQUE SETTING FOR OVER RUNNING / SLIP CLUTCH



Torque level	Set ring position	clutch housing position
I	70%	min. 1
II	80%	max. 1
III	90%	min. 2
IV	100%	max. 2
* Recommended setting		

There are 2 ways to change the torque rating for a given clutch. Each method of adjustment has 2 positions for a total of 4 possible torque ratings for a given clutch. See table above for further details.

1. The set ring has a 'min' and 'max' position.
2. The clutch pack can be rotated relative to the housing in positions 1 and 2. (see picture)

The torque setting can be modified with the aid of the setting ring and two alternative location slots in the clutch housing.

1. The setting ring provides for a MIN. position and a MAX. position.
2. The clutch housing incorporates two location positions for the setting ring, (1 and 2), which are located at different levels.
3. To adjust the clutch to a higher or lower setting, tighten the 6 (six), 13mm lock nuts with a deep well socket until the pressure is removed from the setting ring. Tightening these bolts removes the spring pressure from the clutch. The nuts will need to be tightened sufficiently to allow a small amount of play between the clutch housing and the spring pack assembly. (Tighten lock nut until about 5/8" of the bolt protrudes through the nut).
4. With the spring pressure removed from the clutch, insert a chisel through the slot the setting ring is locked into. Strike the chisel against the setting ring dislocating the ring from the slot Continue this process around the clutch until the setting ring is free from the clutch.
5. Refer to the above diagram for proper ring position and slot position before reinstalling the setting ring.
6. With the setting ring on the proper side and seated into the proper slot position. Loosen the 6 lock nuts to restore spring pressure to the clutch.

**NOTE: Back the lock nut to the end of the spring bolts to insure all possible spring pressure is applied to the clutch.**