

# Service Kit 753-05981

Date: 9/12/2008

Subject: Rear Wheel Drive (RWD) Ratchet

and Pawl Hardware Kit

Models 900 Series Walk-Behind RWD Self

Affected: Propelled Mowers

# Read through and understand these instructions completely before proceeding with repair.

**PURPOSE:** This kit provides the installation instructions and parts to repair the right and left hand rear wheel ratchet and pawl drive components.

**NOTE:** These materials are prepared for use by trained technicians who are experienced in the service and repair of equipment of the kind described in this publication, and are not intended for use by untrained or inexperienced individuals. Such individuals should seek the assistance of an authorized service technician or dealer.

NOTE: Save this Instruction Sheet. Refer to it when ordering replacement parts.

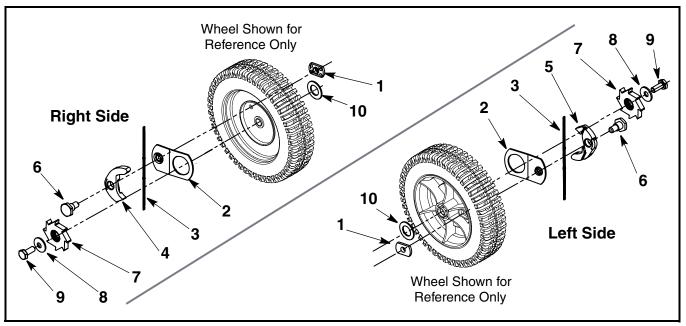


FIGURE 1

Service Kit Contents
(See Figure 1)

ITEM	PART	QTY	DESCRIPTION
NO.	NUMBER		
1	712-0414	2	WELD NUT: 1/4"-20: TOP LOCK TAB
2	16855	2	PLATE: PAWL: RATCHET
3	10622B	2	SPRING: RATCHET: PLASTIC
4	748-0381	1	PAWL: RH
5	748-0188B	1	PAWL: LH
6	738-0137A	2	SCREW: SHLDR: .340 ID x .285 OD X 1/4"-20
7	748-0318	2	RATCHET: WHEEL
8	736-0270	2	WASHER: BELL: .265 ID x .75 OD
9	710-0433	2	SCREW: 1/4"-20 x .620: GR5: (w/PATCH)
10	736-0369	2	WASHER: FLAT: .508 ID x 1.0 OD
11	*	1	THIS INSTRUCTION SHEET

<sup>\* -</sup> Not Available Separately

# **Pre-Service Preparation:**

- 1. Place mower on a flat and level surface, turn off engine and allow muffler and engine to cool before proceeding.
- 2. Remove spark plug wire from the spark plug and ground wire to the engine block.
- 3. Place sufficient wood blocking under rear edge of the deck so that the rear wheels are off the ground.

# Removal Instructions: Refer to Figure 1.

**NOTE:** Left (LH) and right (RH) are determined from the operator's position behind the handle bar facing the engine.

NOTE: Select a side to start on.

- 4. Using a 9/16" socket and ratchet remove the shoulder screw (#6) securing the pawls (#4 and #5) to the ratchet pawl plate (#2). Discard the shoulder screw, pawl and plastic spring.
- 5. Using a 7/16" socket and ratchet, remove the screw (#9) and bell washer (#8) securing the wheel ratchet (#7) and wheel to the transmissions output shaft. Discard the screw and bell washer.
- 6. Remove the wheel ratchet (#7), ratchet pawl plate (#2) and wheel. Discard the wheel ratchet and ratchet pawl plate only.
- 7. Remove the weld nut (#1) from the weld nut pocket on the back side of the wheel. Discard the weld nut.
- 8. Remove and discard the flat washer (#10) from the transmission output shaft.
- 9. Repeat Steps 4 through 8 for the other side.
- 10. Inspect the spline on the end of the transmission output shaft for spline damage or excessive wear. If the spline is worn to were the new wheel ratchet does not fit snug, replace the transmission.

#### **Installation Instructions:**

11. Install the new Plastic Springs (Item 3) into each of the new Pawls, Items 4 (RH) and 5 (LH). See Figure 2.

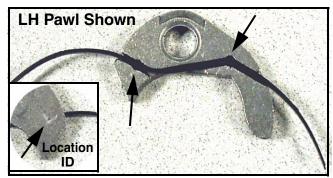


FIGURE 2

# Starting on the LH side...

- 12. Insert a new Weld Nut, Item 1, into the weld nut pocket in the back side of the wheel with its' extruded boss setting in the hole of the wheel.
- 13. Holding the wheel in one hand with a finger keeping the weld nut in place, install a Ratchet Pawl Plate, Item 2, onto the wheel hub. Ensure that the extruded boss on the Ratchet Pawl Plate is in towards the wheel. See Figure 3.

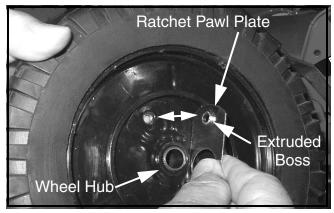


FIGURE 3

- 13. Install the LH Pawl w/ Plastic Spring (from Step 11) onto a Shoulder Screw, Item 6, and secure to the wheel. Ensure that the plastic spring is set into the inside wheel rim as shown in Figure 4.
- 14. Install a new Flat Washer, Item 10, onto the transmission output shaft.
- 15. Install the wheel sub-assembly from Step 13.
- 16. Refer to Figure 4. Install a new Wheel Ratchet, Item 7, onto the splined axle shaft. Make sure that the teeth on the wheel ratchet point towards the front of the mower.

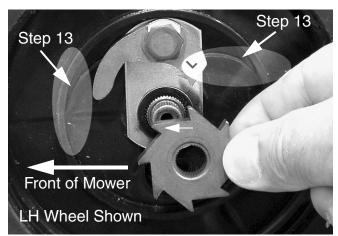


FIGURE 4

- 17. Secure the wheel ratchet and wheel using a 7/16" socket and ratchet to install a new Bell Washer, Item 8, and Lock Screw, Item 9, onto the end of the transmission output shaft.
- 18. Repeat Steps 12 through 17 for the right hand side of the mower. See Figure 5 for final assemby of the RH wheel drive.



FIGURE 5

# **Hub Cap Installation:**

NOTE: If the hub caps are found to not snap lock onto the inner wheel hub or come off during normal use, proceed to Step 19. The adhesive method should not be used if the hub caps snap firmly onto the inner wheel hub and do not dislodge during normal use.

19. Clean the area around the outside of the inner rim of the wheel and hub cap as shown in Figure 6 with isopropyl alcohol to remove dirt, debris and oils. Wipe dry with a clean cloth.





FIGURE 6

20. Apply 4 thin beads, 1/2" to 5/8" long, 90 degrees apart around the outside of the inner rim of 3M Scotch-Weld 1099 plastic adhesive (order P/N 721-04305) See Figure 7.

NOTE: Adhesive is fast setting, approximately 20-30 minutes, and will form a strong flexible bond between mating members.

DO NOT get adhesive on the face of the inner rim or inside the pawl / wheel ratchet area.

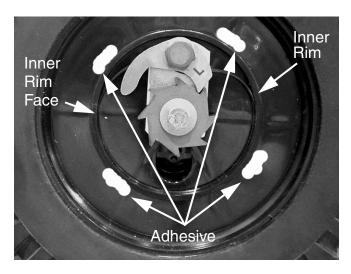


FIGURE 7

21. Install the clean hub caps by firmly pressing in around the outer edge of the center raised area of the hub cap until a light snap is heard. See Figure 8. Allow adhesive to set for 2-3 hours before using mower.

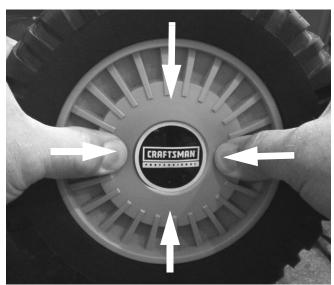


FIGURE 8

This completes the installation of this service kit.