

No. 3745

Machine: 255, 528, 365, 250,

355, 385 Published: 9-03

Rev. 03

NOTE: DO NOT DISCARD the Parts List from the Instruction Bulletin. Place the Parts List in the appropriate place in your machine manual for future reference. Retaining the Parts List will make it easier to reorder individual parts and will save you the cost of ordering an entire kit.

NOTE: Numbers in parenthesis () are reference numbers for parts listed in Bill of Materials.

Installation Instructions for Kit number 84588, 84592, and 84604

SYNOPSIS / PROBLEM:

This kit contains the parts needed to replace the starter (kits 84588 and 84592) and/or the bellhousing and starter locating ring (kit 84604) on the model sweeper listed above. Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS:

(Est. Time to complete: 1 hour, starter only)

(Est. Time to complete: **4** hours, bellhousing, ring, starter)

TO INSTALL KIT 84588 AND 84592:

(Refer to FIG. 1)

FOR SAFETY: Before leaving or servicing machine, stop on level surface and set parking brake. Then turn off machine and remove key.

1. Disconnect battery cables from machine.



WARNING: Always disconnect battery cables from machine before working on electrical components.

- 2. Open the engine cover and side door.
- 3. Disconnect the larger cable and smaller wire leading to the starter solenoid. (Refer to FIG. 1)
- 4. Remove and retain the hardware holding the old starter to the bellhousing. Remove the starter from the machine. Retain the top two M10 bolts. Replace 120mm long M10 bolt with M8 120mm bolt 49883. Tighten the top two bolts. Confirm that the 120mm long bottom bolt fits before tightening. If the bottom bolt doesn't align, remove the starter, and drill out the bottom hole for more clearance. (Refer to FIG. 1)
- 5. Install the tab terminal (6) on the new starter using the M6 nyloc nut (8) and the #10 flat washer (7) on the smaller stud on the starter solenoid. Firmly hand tighten. (Refer to FIG. 1)
- 6. For kit 84592, install a new engine oil filter to clear the starter.
- 7. Position the new starter in the bellhousing. Line up the smaller hole (reworked) in the new starter with the bottom hole in the bellhousing. Install the 1/4 in. x 4-1/2 in. hex screw (2), 1/4 in. flat washer (3), and 1/4 in. nyloc nut (4). Do not tighten at this time. (Refer to FIG. 1)

- 8. Install the two other hex screws that were removed in step 4 in the remaining holes in the new starter. (Refer to FIG. 1)
- 9. Tighten all of the hardware at this time.

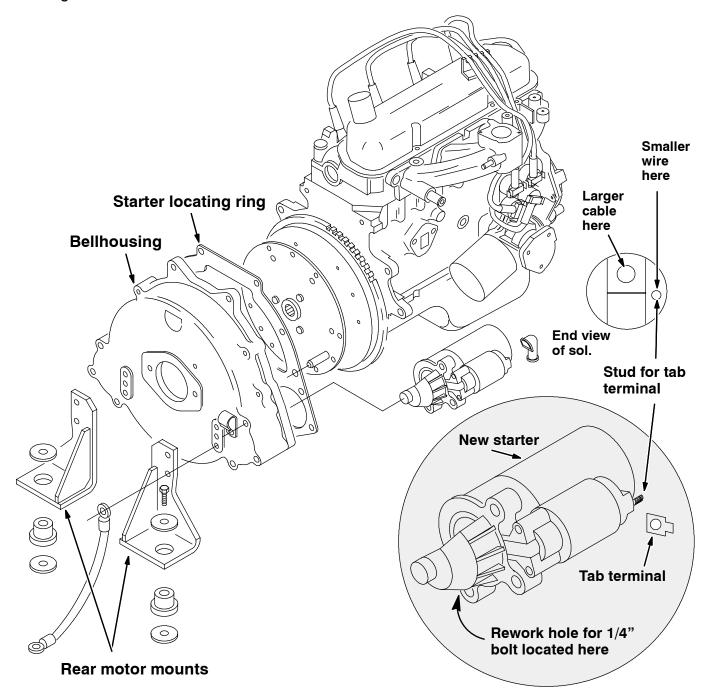


FIG. 1 - Starter And Bellhousing

- 10. Reconnect the larger cable and smaller wire to the new starter solenoid.
- 11. Reconnect the battery cables to the battery. Start the machine. (Refer to FIG. 1)

TO INSTALL KIT 84604:

(Refer to FIG. 1)

FOR SAFETY: Before leaving or servicing machine, stop on level surface and set parking brake. Then turn off machine and remove key.

1. Disconnect battery cables from machine.



WARNING: Always disconnect battery cables from machine before working on electrical components.

- 2. Open the engine cover and side door.
- 3. Disconnect the larger cable and smaller wire leading to the starter solenoid. (Refer to FIG. 1)
- 4. Remove and retain the hardware holding the old starter to the bellhousing. Remove the starter from the machine. (Refer to FIG. 1)
- 5. Disconnect the propel linkage at the pump.
- 6. Remove the two hex screws holding the propel and accessory pumps to the old bellhousing.
- 7. Pull the propel and accessory pumps back out of the old bellhousing. Do not disconnect any of the hydraulic hoses. (Refer to FIG. 1)
- 8. Place an overhead hoist and chain on the engine to keep it from dropping when the rear motor mounts are removed. If no overhead hoist is available--put a block under the engine oil pan.
- 9. Remove the rear motor mounts from the old bellhousing. (Refer to FIG. 1)
- 10. Remove and retain the hardware attaching the bellhousing to the rear of the engine block. (Refer to FIG. 1)
- 11. Remove and discard the old bellhousing and starter locating ring. (Refer to FIG. 1)
- 12. Position the new starter locating ring (2) and new bellhousing (1) on the back of the engine block. Reinstall and tighten the hardware. (Refer to FIG. 1)
- 13. Reinstall the rear motor mounts on the new bellhousing. (Refer to FIG. 1)
- 14. Position the propel and accessory pumps in the new bellhousing. Reinstall and tighten the two hex screws.
- 15. Reconnect the propel linkage to the pump.
- 16. Position the new starter in the bellhousing. Line up the smaller hole (reworked) in the new starter with the bottom hole in the bellhousing. Install the 1/4 in. x 4-1/2 in. hex screw (2), 1/4 in. flat washer (3), and 1/4 in. nyloc nut (4). Don not tighten at this time. (Refer to FIG. 1)
- 17. Install the two other hex screws that were removed in step 4 in the remaining holes in the new starter. (Refer to FIG. 1)
- 18. Tighten all of the hardware at this time.
- 19. Reconnect the larger cable and smaller wire to the new starter solenoid.
- 20. Reconnect the battery cables to the battery. Start the machine. (Refer to FIG. 1)

BILL OF MATERIALS FOR STARTER REPLACEMENT KIT 84588 (355/385)

Ref.	TENNANT Part No.	Description	Qty.
1	84583	Starter, 1.8 hp	1
2	48418	1/4 in. hex screw, 4-1/2 in. L.	1
3	32490	1/4 in. flat washer	1
4	32981	1/4 in. nyloc nut	1
5	08709	M8 nyloc nut	1
6	79081	Tab terminal	1
7	19066	#10 flat washer	1
8	08708	M6 nyloc nut	1
9	49266	Cable tie	2
10	49883	M8 hex screw X 1.25	1

BILL OF MATERIALS FOR STARTER REPLACEMENT KIT 84592 (255/528/365/250)

Ref.	TENNANT Part No.	Description	Qty.
1	84591	Starter, 1.8 hp	1
2	48418	1/4 in. hex screw, 4-1/2 in. L.	1
3	32490	1/4 in. flat washer	1
4	32981	1/4 in. nyloc nut	1
5	08709	M8 nyloc nut	1
6	79081	Tab terminal	1
7	19066	#10 flat washer	1
8	08708	M6 nyloc nut	1
9	49266	Cable tie	2
10	19205	Engine oil filter	1
11	49883	M8 hex screw X 1.25	1

BILL OF MATERIALS FOR BELLHOUSING REPLACEMENT KIT 84604 (355/385)

Ref.	TENNANT Part No.	Description	Qty.
1	70263	Bellhousing	1
2	70262	Starter locating ring	1
3	392525	Starter, Ford, 1.8 hp	1
4	07819	M10 hex screw	1
5	79081	Tab terminal	1

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