



INSTRUCTION BULLETIN

No. 340239
Machine: 510 515 515SS
8010 MAX PRO 1000
Published: 2-99/00
System: SCRUBBING

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 375066

SYNOPSIS / PROBLEM:

This kit contains the parts needed to replace one scrubbing gear box on the models listed above. The replacement gearbox is provided by a new manufacturer.

Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: None

(Estimated time to complete: 3 hours)

TO REMOVE TWO BRUSH SCRUB HEAD (Max Pro 1000):

(Refer to FIG. 1)

1. Start the machine, lower the scrub head, shift the scrub head all the way to the right hand side, shut off the key.

FOR SAFETY: Before Leaving Or Servicing Machine; Stop On Level Surface, Set Parking Brake, Turn Off Machine And Remove Key.

2. Raise the machine cover and unplug the batteries.
3. Raise the front of the machine and install jack stands under the frame.

FOR SAFETY: Block machine tires before jacking machine up. Jack machine up at designated locations only. Block machine up with jack stands.

4. Remove both side squeegee assemblies.
5. Unplug both scrub brush motors from the main harness.
6. Disconnect the solution hose from the 90° fitting in the center of the scrub head. Pull the hose off the scrub head.
7. Remove the M8 hex screw and nut holding the side shift pull cable to the RH side of the scrub head.
8. Pull the clip up on the end of the side shift gas spring and remove it from the ball on the RH side of the scrub head.
9. Remove the two nyloc nuts holding the scrub head lift links to the lift casting. Pull the links out of the casting.
10. Remove the cotter pins from the castle nuts on the two scrub head links where they attach to the machine frame.

11. Remove the castle nuts and lift links from the machine frame.
12. The scrubber head can now be brought out from under machine on the right hand side.

TO REPLACE SCRUB BRUSH GEAR BOX ON TWO BRUSH HEAD (Max Pro 1000):

(Refer to FIG. 1)

1. The scrub head needs to be removed to replace a scrub brush gear box. **See TO REMOVE TWO BRUSH SCRUB HEAD** instructions.

FOR SAFETY: Before Leaving Or Servicing Machine; Stop On Level Surface, Set Parking Brake, Turn Off Machine And Remove Key.

2. Lift the scrub head up to gain access to the scrub brush drive plug.
3. Remove the scrub brush from the gear box that needs to be replaced.
4. Remove the hex screw holding the brush drive plug to the gear box shaft. Remove the drive plug, washers, and square key from the gear box.
5. Remove the four hex screws and nyloc nuts holding the motor and gear box assembly to the scrub head frame. Remove the motor and gear box assembly and the two spacer blocks from the scrub head frame. Discard the spacer blocks and hardware.
6. Remove the four hex screws holding the scrub brush motor to the gear box.
7. Pull the scrub brush motor straight out of the gear box. Be careful not to loose the square key from the motor shaft.

NOTE: Make sure to note the orientation of the scrub brush motor in the gear box.

8. Position the scrub brush motor on the new gear box (1). Make sure the square key is in place on the motor shaft.
9. Reinstall the four hex screws and tighten to 31 - 40 Nm (27 - 35 ft lb).
10. Position the gear box assembly on the scrub head. Install the four hex screws (2), washers (3), and nyloc nuts (4). Tighten to 31 - 40 Nm (27 - 35 ft lb).
11. Reinstall the square key, drive plug, washers, and hex screw on the gear box output shaft. Tighten the hex screw to 18 - 24 Nm (15 - 20 ft lb).
12. Reinstall the scrub brush.
13. Reinstall the scrub head in the machine. **See TO INSTALL TWO BRUSH SCRUB HEAD** instructions.
14. Operate the machine and check for proper scrub brush gear box operation.

TO INSTALL TWO BRUSH SCRUB HEAD (Max Pro 1000):

FOR SAFETY: Before Leaving Or Servicing Machine; Stop On Level Surface, Set Parking Brake, Turn Off Machine And Remove Key.

1. Raise the front of the machine and install jack stands under the frame.

FOR SAFETY: Block machine tires before jacking machine up. Jack machine up at designated locations only. Block machine up with jack stands.

2. Position scrubber head under machine from the right hand side.
3. Reinstall the scrub head links in the holes in the machine frame.
4. Reinstall the castle nuts on the scrub head links and tighten to 90 - 117 Nm (65 - 85 ft lb). Turn the castle nut far enough to line up with the cotter pin hole. Reinstall the cotter pin.
5. Reinstall the two hex screws holding the head lift pivot bracket to the head lift casting. Tighten to 18 - 24 Nm (15 - 20 ft lb).
6. Reconnect side shift return cable to the right hand side of the scrub head. Tighten the M8 hex screw to the point were the cable is able to rotate.
7. Install gas spring ball end back on the ball on the right hand side of the scrub head. Make sure to reinstall the locking clip.
8. Reconnect the main solution feed line to the 90° fitting in the center of the scrub head.
9. Reconnect both scrub brush motors to the main electrical harness. See schematic in the ELECTRICAL section.

NOTE: Make sure to reinstall any clamps or plastic ties that were removed during disassembly.

10. Reinstall the LH and RH side squeegees.
11. Reconnect the batteries
12. Remove the jack stands and lower the machine. Check for proper operation of scrub brushes and side shift.

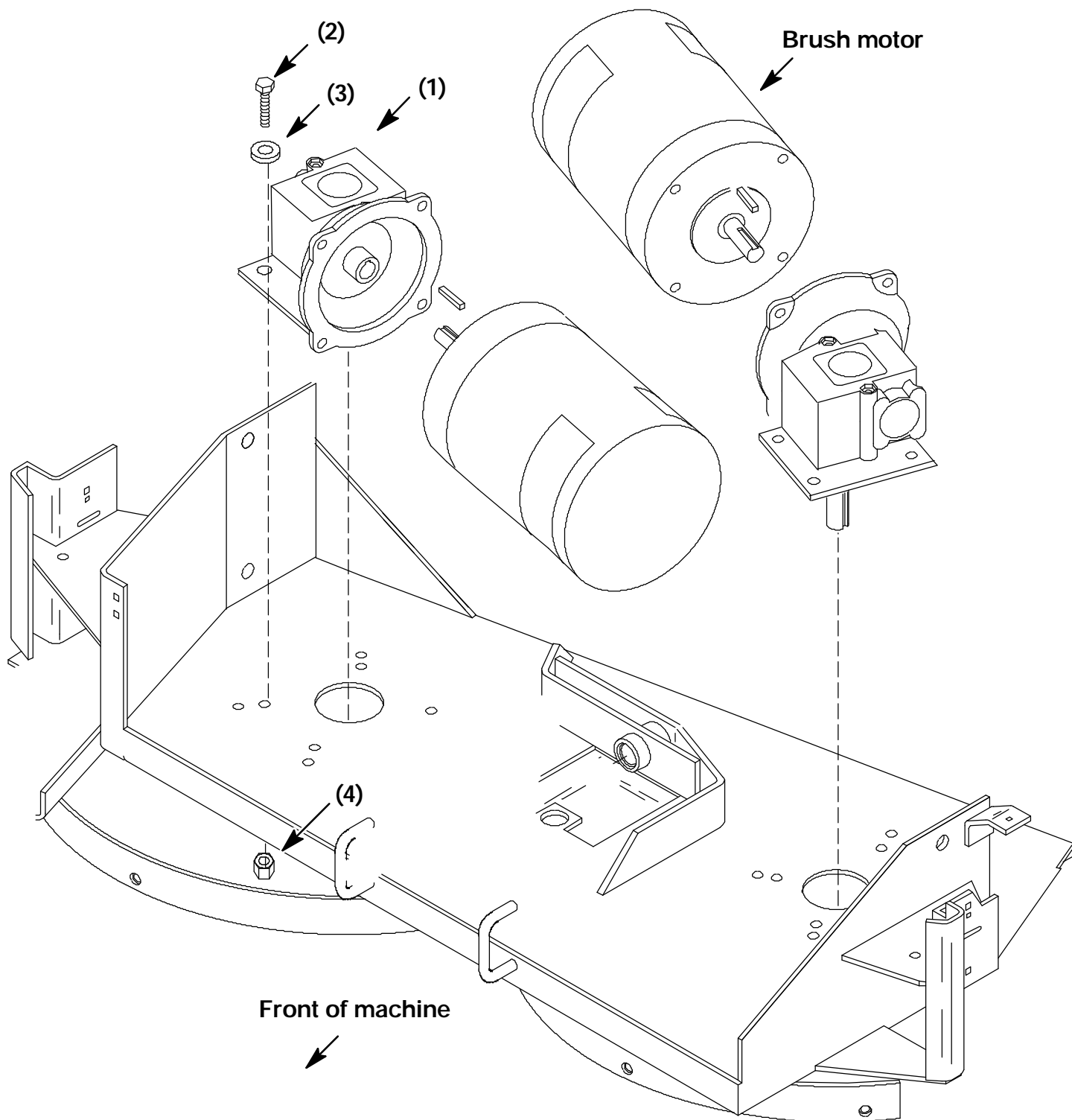


FIG. 1 - MAX PRO 1000 Scrub Head

BILL OF MATERIALS FOR GEARBOX REPLACEMENT KIT 375066 (MAX PRO 1000)

Ref.	TENNANT Part No.	Description	Qty.
1	375100	Gearbox	1
2	09011	Screw, hex, M8x1.25-30mm	4
3	01685	Washer, flat, .31	4
4	08713	Nyloc nut, M8x1.25	4

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