INSTRUCTION BULLETIN

No. 340485
Machine: 8300
Published: 03-2010
Rev: 01

NOTE: DO NOT DISCARD the Parts List from the Instruction Bulletin. Place the Parts List in the appropriate place in the machine manual for future reference. Retaining the Parts List will make it easier to reorder individual parts and will save 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 **387548** / **9006965**

SYNOPSIS:

This kit contains the parts needed to install an update/retrofit kit on the 8300 sweeper/scrubber. Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: NONE

(Estimated time to complete: 5 hours)

FIELD ENGINEERING REPORT DETAILS: It is possible for water or moisture to wick itself between the touch panel material layers. This can cause traces on the touch panel to corrode and short the backlighting and digital system circuits. The circuit board could also be damaged.

PREPARATION:
(Refer to Fig. 1 through Fig. 6)

SECTION 1:
7300/8300 TOUCH PANEL/CIRCUIT BOARD MOISTURE / CORROSION INSPECTION: (TSB No. 017300-00)

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

1. Disconnect battery cables from the batteries.

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

2. Remove the touch panel from the machine instrument panel housing.
3. Remove the surrounding rubber bezel. (Refer to FIG. 1)
4. Inspect the lower outside perimeter of the touch panel assembly for green copper oxide formations. Refer to Fig. 1.
5. Replace the touch panel assembly if excessive corrosion is found.
6. If the touch panel assembly does not need to be replaced, add clear dielectic grease (TENNANT PN# 86385) to the lower outside perimeter of the touch panel.
7. Clean the inside channel of the bezel and attach the bezel to the touch panel assembly. Wipe any exposed dielectic grease from the assembly surfaces.
8. Ensure the switch plugs did not pull away from switches, before reinstalling touch panel. Reconnect the touch panel and the battery cables to the machine.
9. Check the machine functions and run the self test.

NOTE: If excessive corrosion is found, and a new panel must be ordered, the machine can be kept operational by disconnecting and taping 21ORA wire from the backlighting touch panel circuit (backlighting will be inoperative). This will also prevent damage to the circuit board while waiting for a new touch panel to be installed.

NOTE: If replacing the touch panel, be sure the new panel edge is treated with a coating before installing.

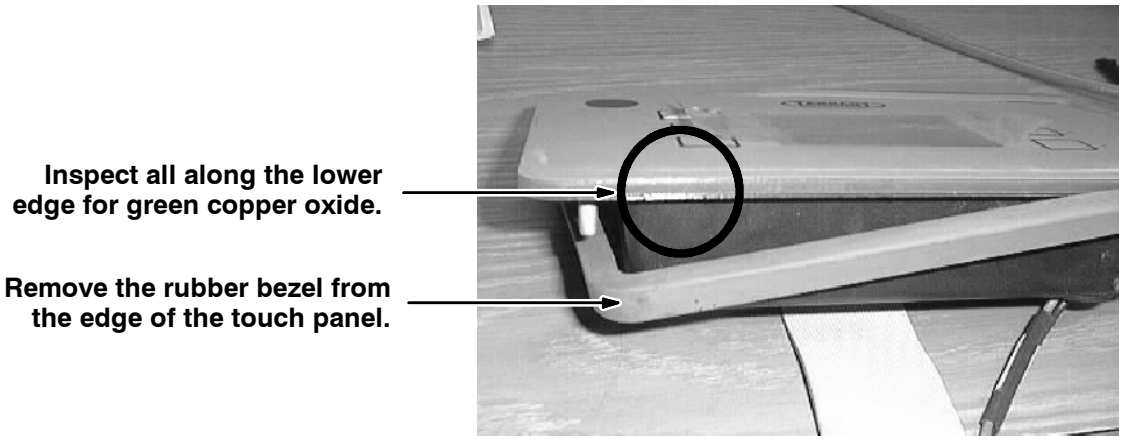


FIG. 1 - Control Panel Inspection

SECTION 2:

INSTALLATION:
(Refer to Fig. 2 and Fig. 3)

NOTE: Machines with serial numbers after 003053 are already equipped with correct fuses and propel cable. Check all connection hardware for tightness and proceed to section 3.

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

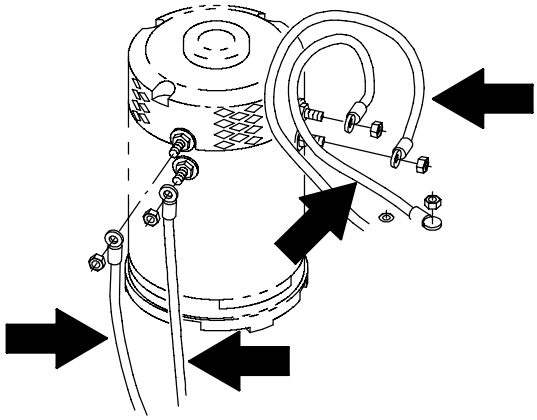
1. Secure rear machine cover open with the cover support rod.
2. Disconnect battery cables from the batteries.

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

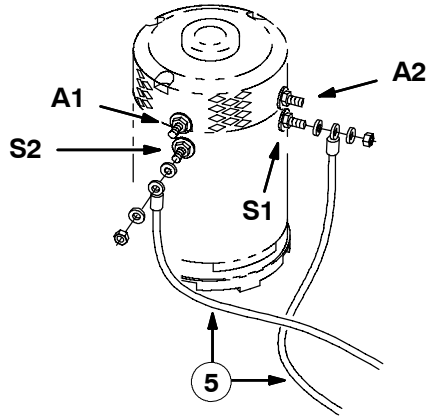
3. Secure side cover on the left side of the machine open with the cover support rod.
4. Open the side door on the left side of the machine.
5. Remove and set aside the detergent tank (option) if necessary.
6. Remove and set aside the contactor cover.
7. Remove the drive motor cover panel from inside the operator compartment. Set the panel and mounting hardware aside.
8. Label or note how all propel motor wires are routed and tied before disconnecting.

NOTE: Once the new hardware and cables are installed, all motor wires must be routed and tied as shown in Fig. 3.

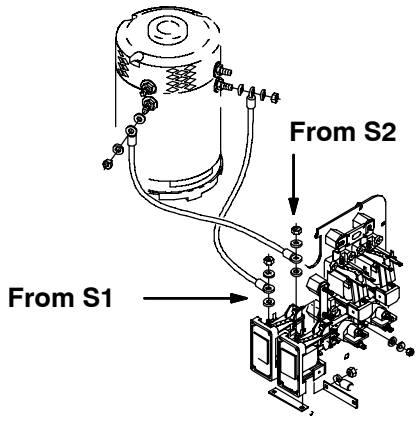
8. Disconnect and remove both 2 gauge and both 4 gauge wires from the propel motor. Leave the terminal nuts on the posts close to the motor. Disconnect the other ends of the 4 gauge wires from the contactor. Disconnect the other ends of the 2 gauge wires from the motor controller. Remove and discard the propel motor wires.



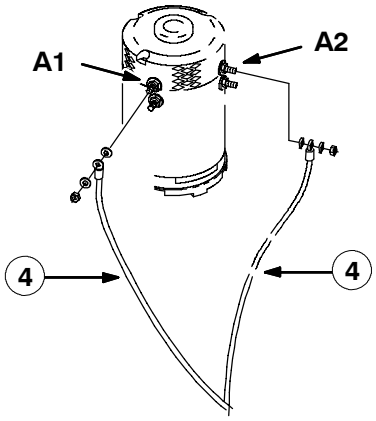
9. Connect each new 4 gauge wire (5), to each of the lower posts (S1 and S2) on the propel motor, with new nuts (6), flat washers (7), and lock washers (8) as shown in Fig. 2. Hand tighten the mounting hardware.



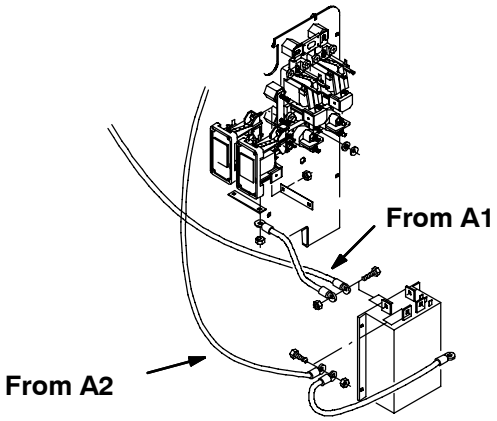
1. Carefully route the 4 gauge wire from post S1 to the inside contactor. Route the 4 gauge wire from post S2 to the outside contactor. Connect the wires to the contactors with new lock washers (11), flat washers (10), and nuts (9) as shown in Fig. 2. Hand tighten the mounting hardware.



2. Connect each new 2 gauge wire (4), to each of the top posts (A1 and A2) on the propel motor, with new nuts (6), flat washers (7), and lock washers (8) as shown in Fig. 2. Hand tighten the mounting hardware.



3. Carefully route the 2 gauge wire from post A1 to the inside post on the motor controller. Route the 2 gauge wire from post A2 to the outside post on the motor controller. Connect the wires to the posts on the motor controller with set aside hardware as shown in Fig. 2. Hand tighten the mounting hardware.



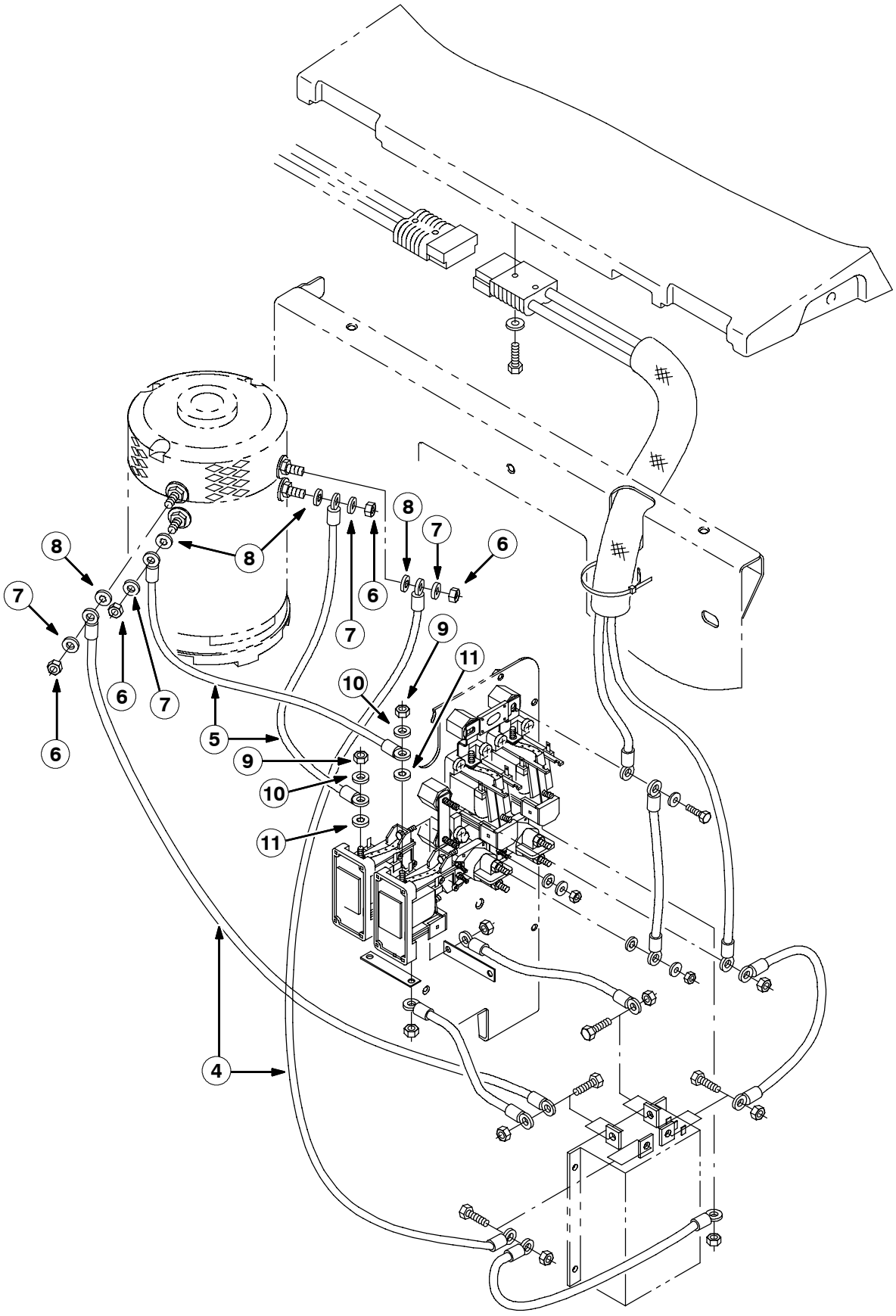


FIG. 2 – New Cable And Hardware Installation, Propel Motor
(Refer to FIG. 3 for cable routing)

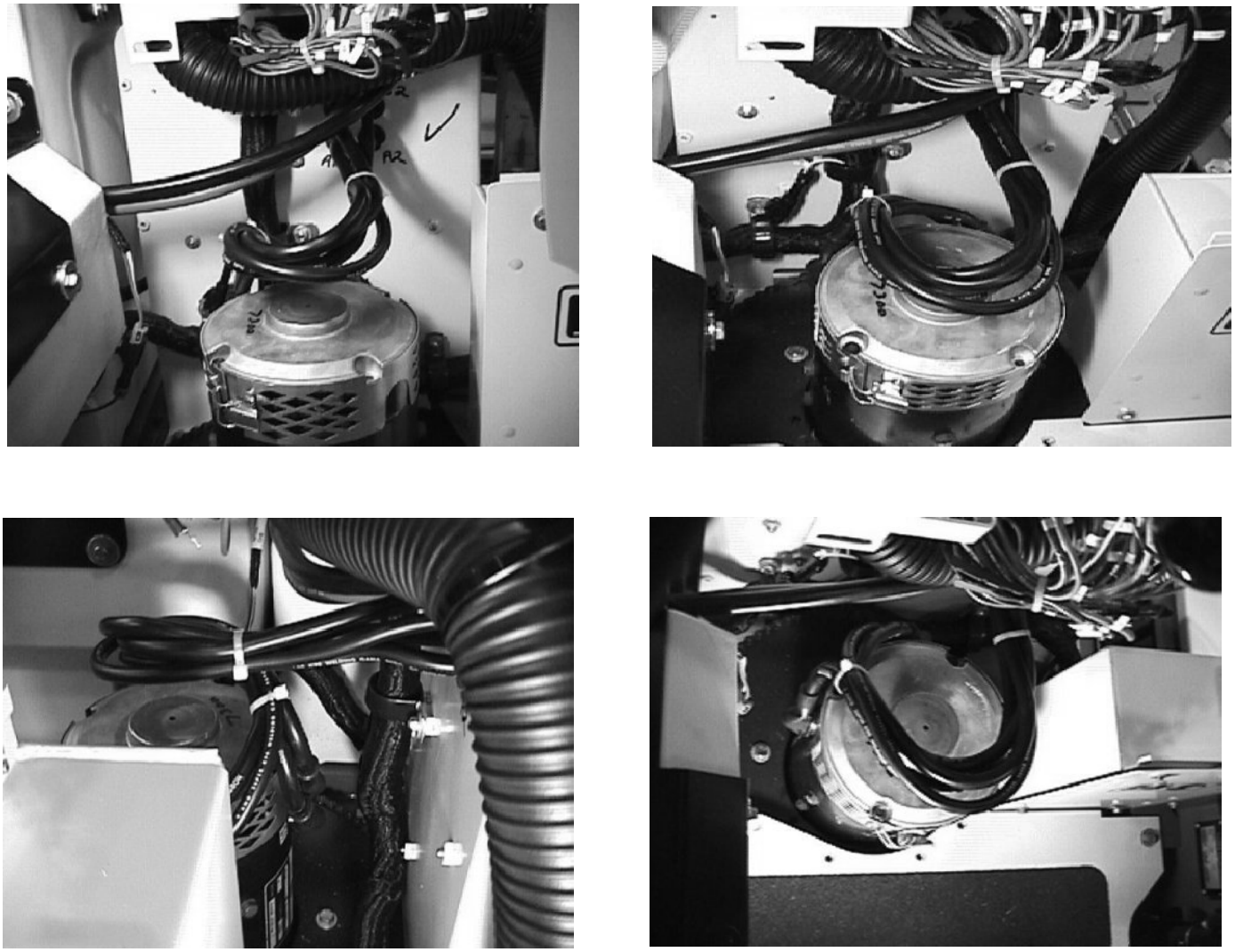


FIG. 3 - New Cable Routing, Propel Motor

9. Be sure all new motor wires are routed the same way as shown in Fig. 3.

NOTE: All motor wires must be routed and tied as shown in Fig. 3.

10. Tighten all mounting hardware to 125 in. lbs.
11. Slide any excess length of the 4 gauge wires into the panel box. Secure the new motor wires with wire ties. Refer to Fig. 3.
12. Open the circuit board panel next to the motor and set the cover mounting hardware aside. Refer to Fig. 4.
13. Carefully label or note all ribbon cable mounting locations on both circuit boards.
14. Disconnect all ribbon cables from both circuit boards. Remove both circuit boards from the machine, and place them on a clean work surface.
15. Replace the three 10A fuses in the two circuit boards with three new slo-blo 20A fuses. Refer to Fig. 4.

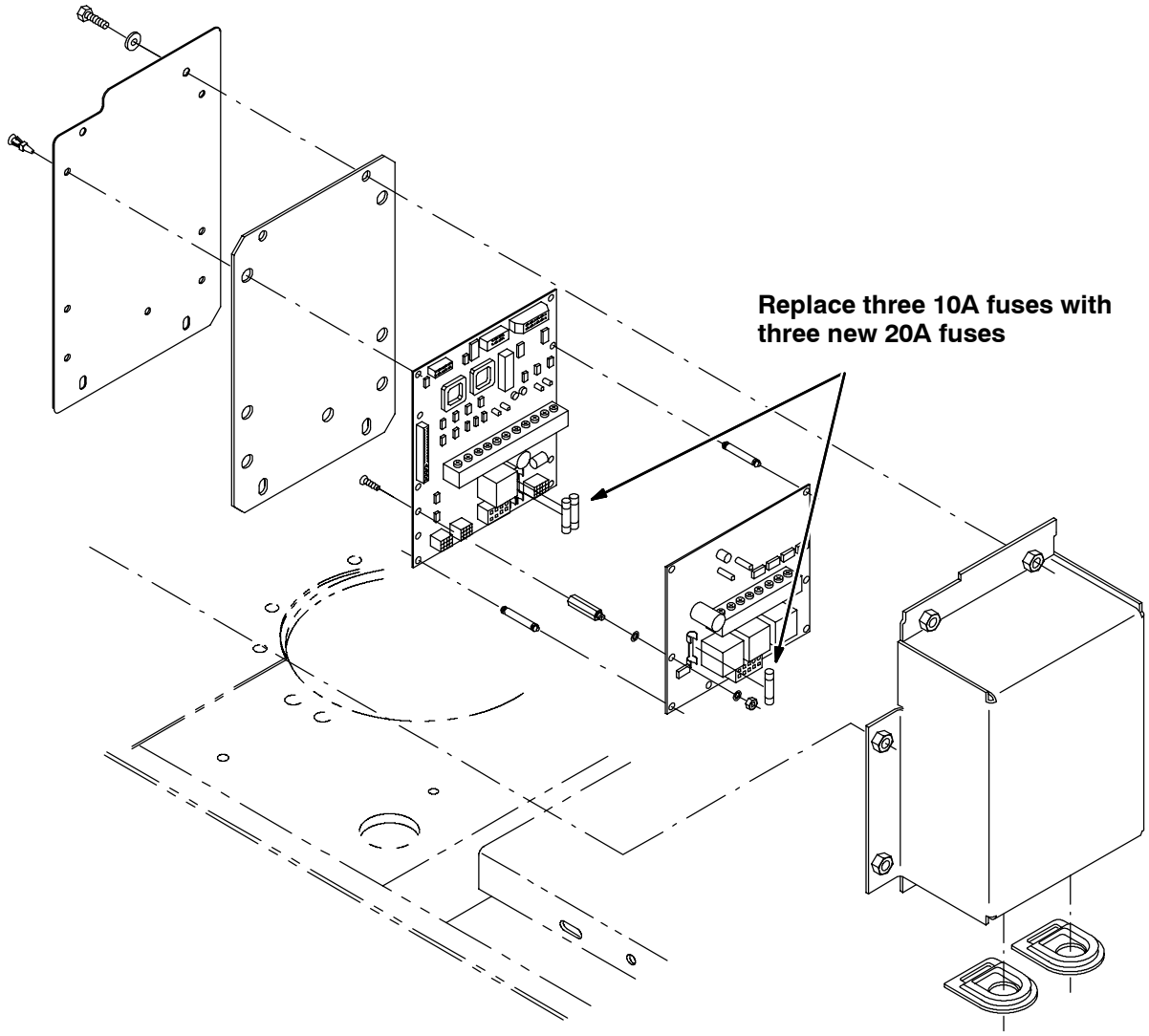


FIG. 4 - Circuit Board Assembly

16. Install the circuit boards in the machine and reconnect all ribbon cables to the boards.
17. Close and secure the circuit board cover.
18. Reinstall the motor panel cover inside the operator compartment.
19. Reinstall the detergent tank (option) if removed.
20. Reinstall the contactor cover.
21. Close the side door and cover on the left side of the machine.
22. Reconnect the battery cables to the machine. Close the rear machine cover.
23. Turn the machine power on. Check the machine for proper operation.

SECTION 3:

MAXPRO 1000 VACUUMIZED SIDE SQUEEGEE INSTALLATION:
(Refer to IB 340474 for removal and installation of new vacuumized side squeegee)

1. Install the new vacuumized side squeegee. (Refer to INSTRUCTION BULLETIN 340474)

SECTION 4:

MAXPRO 1000 REAR SQUEEGEE INSTALLATION:
(Refer to IB 340398 for removal and installation of new MaxPro 1000 rear squeegee)

1. Install the new MaxPro 1000 rear squeegee. (Refer to INSTRUCTION BULLETIN 340398)

SECTION 5:

FRONT SIDE BRUSH ADJUSTMENT:
(Refer to Fig. 4 and Fig. 5)

1. Drive the machine to a clean, level surface.
2. Check that the front side brush is raised. Turn the machine power off.

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

3. Observe the side brush from the side of the machine. The side brush should be pointing down at a 5° angle, towards the front of the machine. Refer to Fig. 5 and Fig. 6.
4. If brush adjustment is needed, turn the machine power on. Raise the hopper and secure with the hopper support arm. Lower the side brush.
5. Loosen side brush adjustment screw (A) if the side brush needs front/back adjustment. Tighten side brush adjustment screw (A) after readjusting the front/back brush angle. Refer to Fig. 5 and Fig. 6.
6. Raise the side brush.
7. Observe the side brush from the front of the machine. The side brush should be pointing down at a 5° angle, towards the outside of the machine. Refer to Fig. 5 and Fig. 6.
8. If brush adjustment is needed, lower the side brush.
9. Loosen side brush adjustment screw (B) if the side brush needs left/right adjustment. Tighten the side brush adjustment screw (B) after readjusting the left/right brush angle. Refer to Fig. 5 and Fig. 6.
10. Raise the hopper and disengage the hopper support arm. Lower the hopper, and the side brush. Check the side brush for proper operation.

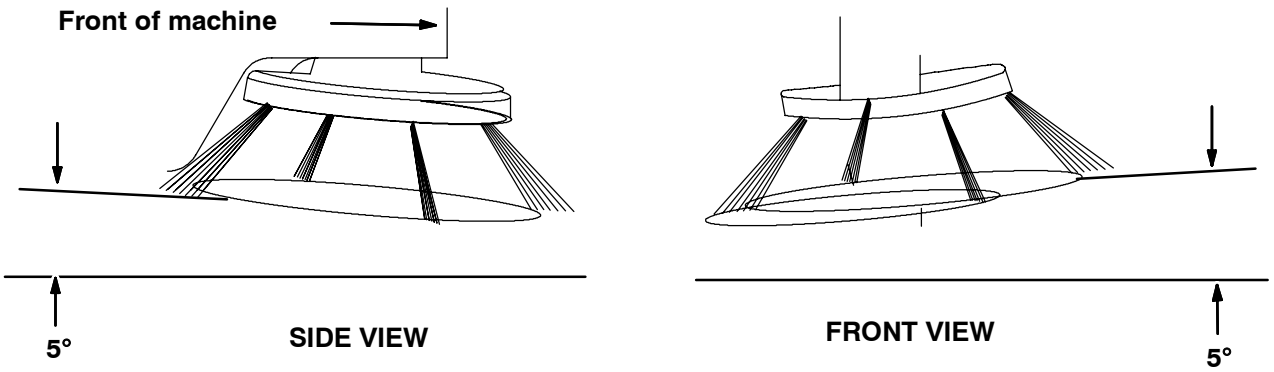


FIG. 5 – Recommended Side Brush Angle Settings

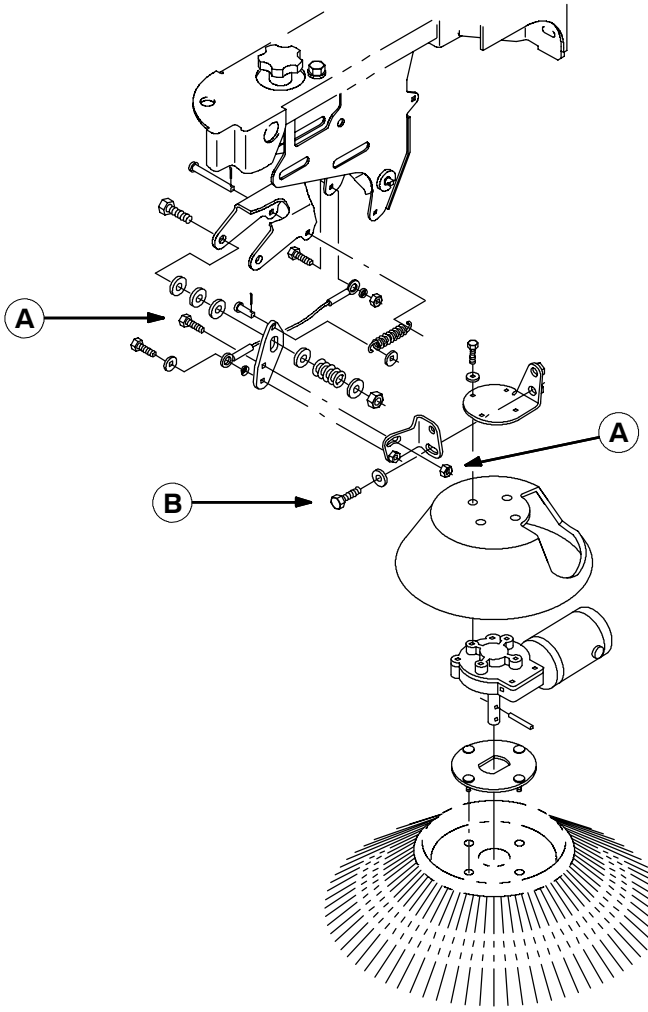


FIG. 6 – Side Brush Adjustment Screws

SECTION 6:
8300 ADDITIONAL DOCUMENTATION:

1. Mount the 8300 Quick Reference Guide to the machine key chain for future reference.
2. View the 8300 video (2) for recommended operating and maintenance procedures.

Bill Of Materials For 8300 Retrofit Kit 387548

Ref.	TENNANT Part No.	Description	Qty.
1	387505	Kit, conv, scrub head, disk, [MP1200]	1
2	387547	Kit, video, [8300]	1
3	86385	Sealant, silicone, [type Z5], 01.00Z	1
4	386804	Wire, 2 gauge, 32.0L BLK, 0.31 ring/0.31 ring	2
5	71529	Wire, 4 gauge, 32.0L BLK, 0.31 ring/0.31 ring	2
6	39311	Nut, hex, std, M08 X 1.25	4
7	32490	Washer, flt, 0.250 std	4
8	32988	Washer, lock, int, 0.38	4
9	41359	Nut, hex, std, M06 X 1.0	2
10	32483	Washer, flt 0.25 SAE	2
11	32982	Washer, lock, int 0.25	2
12	603103000	Fuse, 20A, 3AG, SLO-BLO	3

Bill Of Materials For Retrofit Kit, Iron Gray, CI [8300] - 9006965

Ref.	TENNANT Part No.	Description	Qty.
1	9006962	Kit, conv, scrub head, disk, gray [MP1200]	1
2	387547	Kit, video, [8300]	1
3	86385	Sealant, silicone, [type Z5], 01.00Z	1
4	386804	Wire, 2 gauge, 32.0L BLK, 0.31 ring/0.31 ring	2
5	71529	Wire, 4 gauge, 32.0L BLK, 0.31 ring/0.31 ring	2
6	39311	Nut, hex, std, M08 X 1.25	4
7	32490	Washer, flt, 0.250 std	4
8	32988	Washer, lock, int, 0.38	4
9	41359	Nut, hex, std, M06 X 1.0	2
10	32483	Washer, flt 0.25 SAE	2
11	32982	Washer, lock, int 0.25	2
12	603103000	Fuse, 20A, 3AG, SLO-BLO	3

TENNANT COMPANY
P. O. Box 1452
Minneapolis, MN 55440-1452