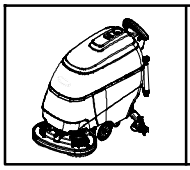

CIRCUIT BOARD KIT

Model: T5

The purpose of this kit is to replace a defective circuit-board.

INSTALLATION INSTRUCTIONS:

Installation Time: 1.5 Hour

TOOLS REQUIRED: 1/2", 9/16" and 10mm socket wrench, 5mm nut driver, Philips Screwdriver and Wire Cutters

PREPARATION

1. Park the machine on a clean level surface.
2. Turn off the machine and remove the key.

FOR SAFETY: Before installing kit, stop on level surface, turn off machine, and remove key.

3. Remove the (2) bolts that hold the machine's right side panel in place, then remove the side panel from machine (Figure 1).

Fig. 1

4. Disconnect the positive and negative battery cables and remove the two front batteries from machine.

⚠ WARNING: Electrical Hazard. Disconnect Battery Cables Before Servicing Machine.

INSTALLATION

1. Remove the two screws from the circuit board cover and remove the cover from the circuit board box (Figure 2).

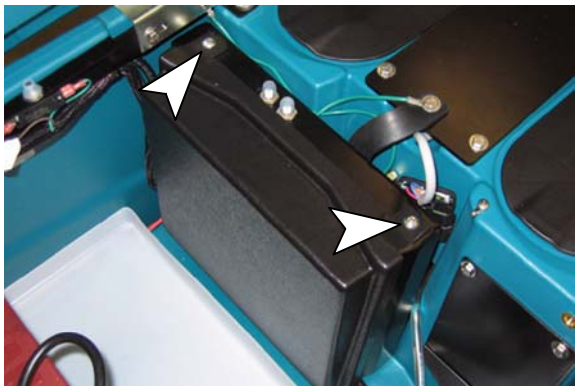

Fig. 2

2. Remove the (2) circuit board box mounting bolts. Be careful to not let the flat washers on the bolts fall behind the circuit board. Disconnect the static strap from the machine (Figure 3).

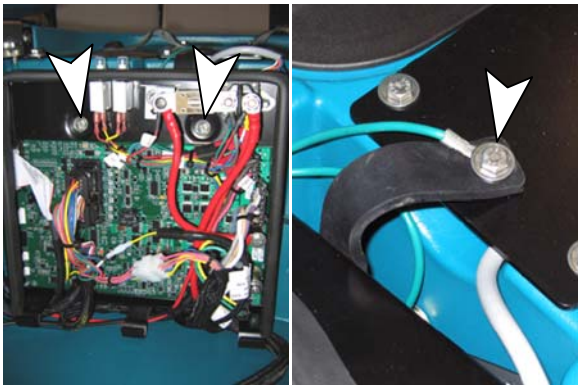

Fig. 3

3. Unplug all main harness connectors from the circuit board and lift out the circuit board box and lay it on the solution tank (Figure 4). If the machine is equipped with an on-board charger, cut the wire-tie holding the red and black charger wires in place along side the battery compartment. This will prevent any possible tension on the wires.

CIRCUITBOARD KIT
INSTALLATION INSTRUCTIONS - Continued

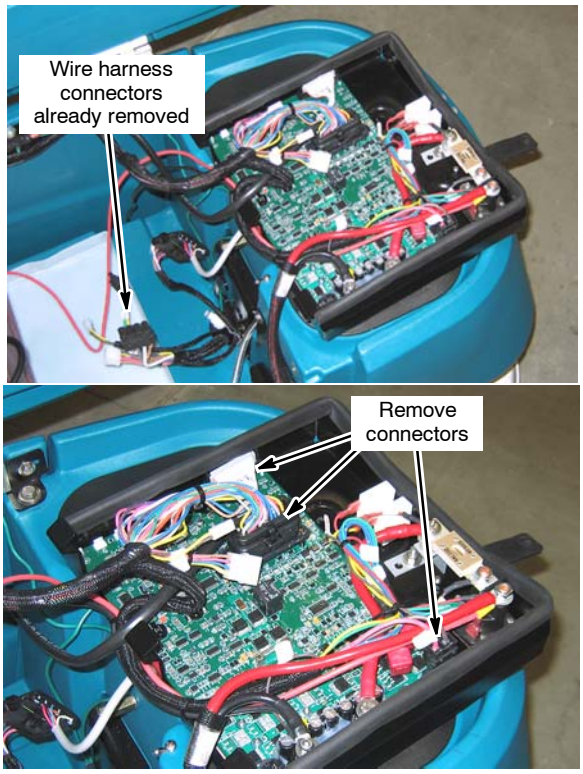

Fig. 4

4. Remove the positive (+) red power cable and the negative (-) black power cable from the circuit board (Figure 5).

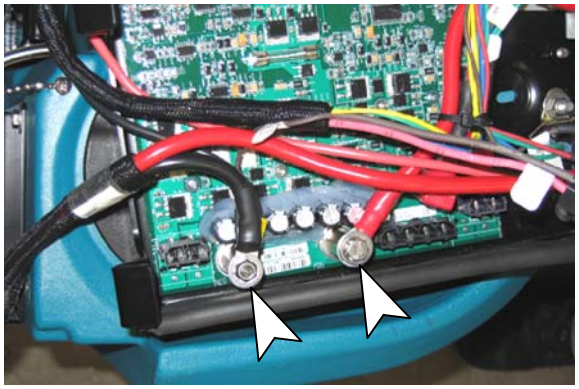

Fig. 5

NOTE: Refer to page 5 for alpha reference for following steps.

5. Remove the (8) mounting screws (ref. A,C, *see page 5*) and (4) washers and nuts (ref. D,E) that are used to mount the circuit board to the circuit board box. Remove and discard old circuit board. To make screw removal easier, the (4) nylon circuit board supports (ref. B) can be clipped off and discarded.
6. Replace the (4) 1016825 nylon circuit board supports (ref. B) removed in previous step with new ones supplied in kit. Mount to circuit board box using (4) screws (ref. A).
7. Put on the static ground wrist strap supplied in kit, and attach the other end of the strap to the frame of the machine. Wear the static ground strap through Step 10.

NOTE: *The ground strap prevents static electricity from damaging the circuit board.* ***Always wear a ground strap whenever handling the circuit board or other electronic components that could possibly be damaged by static electricity.***

8. Apply the thermal heat sink pad to back of the new circuit board as shown on Figure 11. Align the holes in the pad with the holes in the heat sink.
9. Mount new circuit board to circuit board box using (4) remaining screws, washers and nuts (ref. C,D,E).
10. Re-attach all wiring and hardware to circuit board in reverse order of disassembly. Secure wiring with wire ties supplied in kit.

IMPORTANT: For safety, make sure the vacuum motor harness connector is plugged into the J9 board connector, and the propel motor harness connector is plugged into the J10 board connector (Figure 6). If the connections are reversed, the machine will propel when the squeegee lever is lowered.

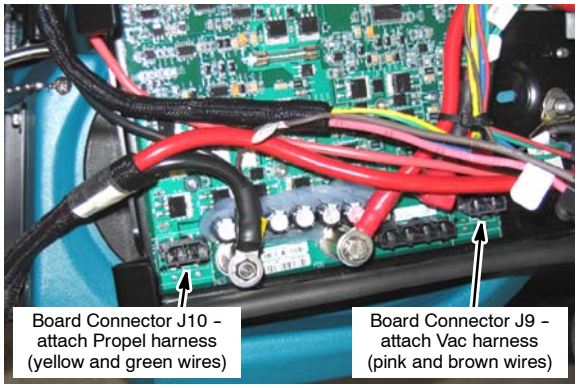

Fig. 6

11. Mount the circuit board box on the machine. Re-install batteries and re-attach side panel.

CIRCUITBOARD KIT INSTALLATION INSTRUCTIONS - Continued

12. Re-attach ground wire and strap to metal plate as shown (Figure 7).

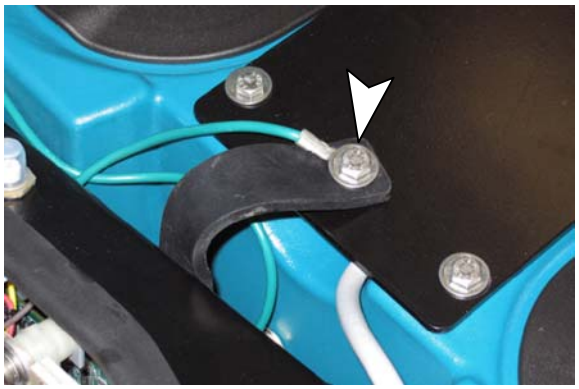

Fig. 7

AS A SAFETY PRECAUTION: Before performing steps 13 and 14, make sure the squeegee lever is in the raised position.

13. Turn the machine on and observe the instrument panel. All of the panel LED's should light briefly when the machine is turned on. If the panel LED's do not light, check all connections and re-test.

14. Test the propel system by activating the bail. If the propel system does not function, turn off machine and check all connections at the control board.

RE-PROGRAM THE circuit board FOR THE MACHINE'S SCRUB HEAD SIZE AND TYPE

1. Simultaneously hold down the Brush Pressure Decrease (-) button and the Solution Flow Decrease (-) button when turning on the key switch. Hold the buttons until a Down Pressure LED and a Solution LED are illuminated. This displays the current machine configuration (Figure 8).

2. **To change the scrub head setting**, press and hold the One-Step button for five seconds until the One-Step button starts to blink. Use the Brush Pressure Increase (+) button to change the scrub head type. Use the Solution Flow Increase (+) button to change the scrub head size (Figure 8).

3. Turn off the machine when the desired configuration is achieved.

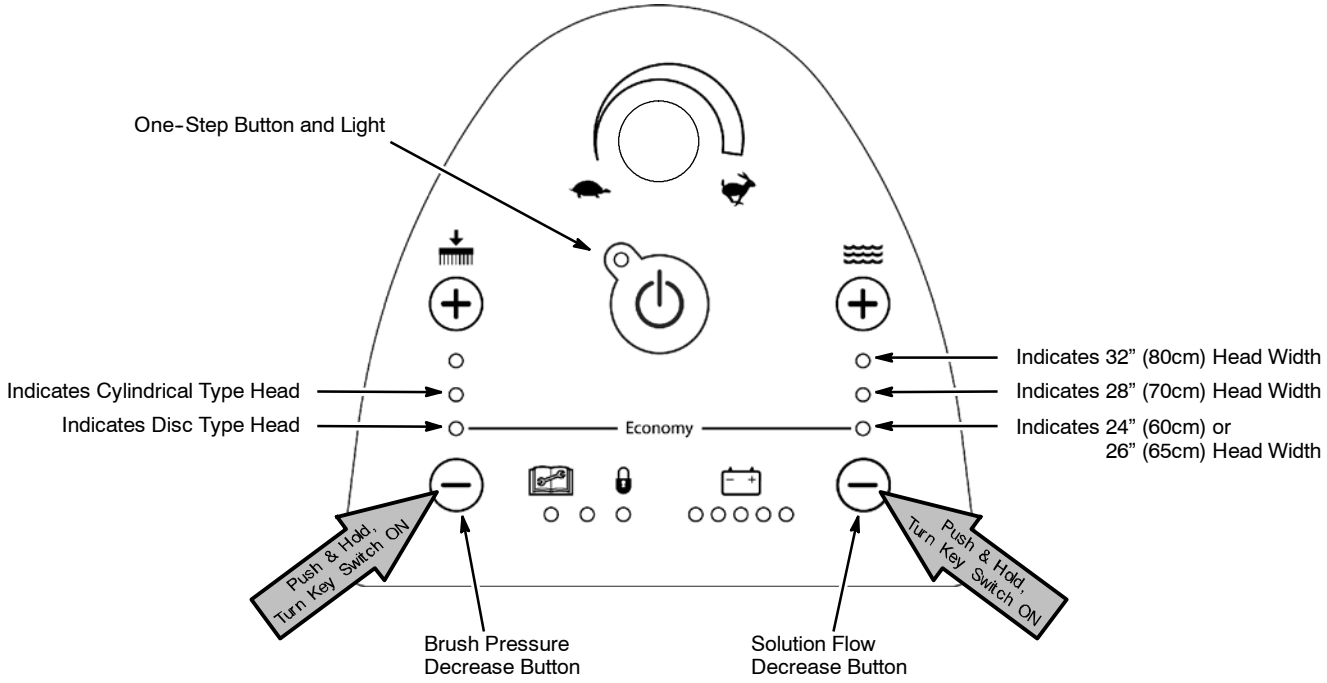

Fig. 8

CIRCUITBOARD KIT INSTALLATION INSTRUCTIONS - Continued

PERFORM SELF-TEST PROCEDURE

Before operating the machine, the circuit board must pass a self-test mode system check.

NOTE: *If the machine is equipped with the FaST, ec-H2O and/or Wand Pump options, each switch must be in the ON position before entering Self-Test Mode. If the FaST, ec-H2O or Wand Pump switches are in the OFF position when entering Self-Test Mode, that circuit will not be tested (Figure 9).*

Fig. 9

1. Hold the Brush Pressure Decrease (-) button and the Solution Flow Increase (+) button simultaneously on start-up. Machine will perform Self-Test for about 30-40 seconds.
2. After the self-test, either
   A: The One-Step Button LED will be lit solid to indicate system is OK, **or**
   B: A panel LED will be flashing (which means OPEN fault) **or**
   C: A panel LED will remain lit (which means a SHORT fault) to indicate a system failure.
   Fault LED #3: Flashing indicates an actuator stall during retract. Solid LED on indicates a retract timeout error, or a mid-stroke switch fault.

NOTE: *If any of the above faults occur, turn the machine off and check all wire harness connections.*

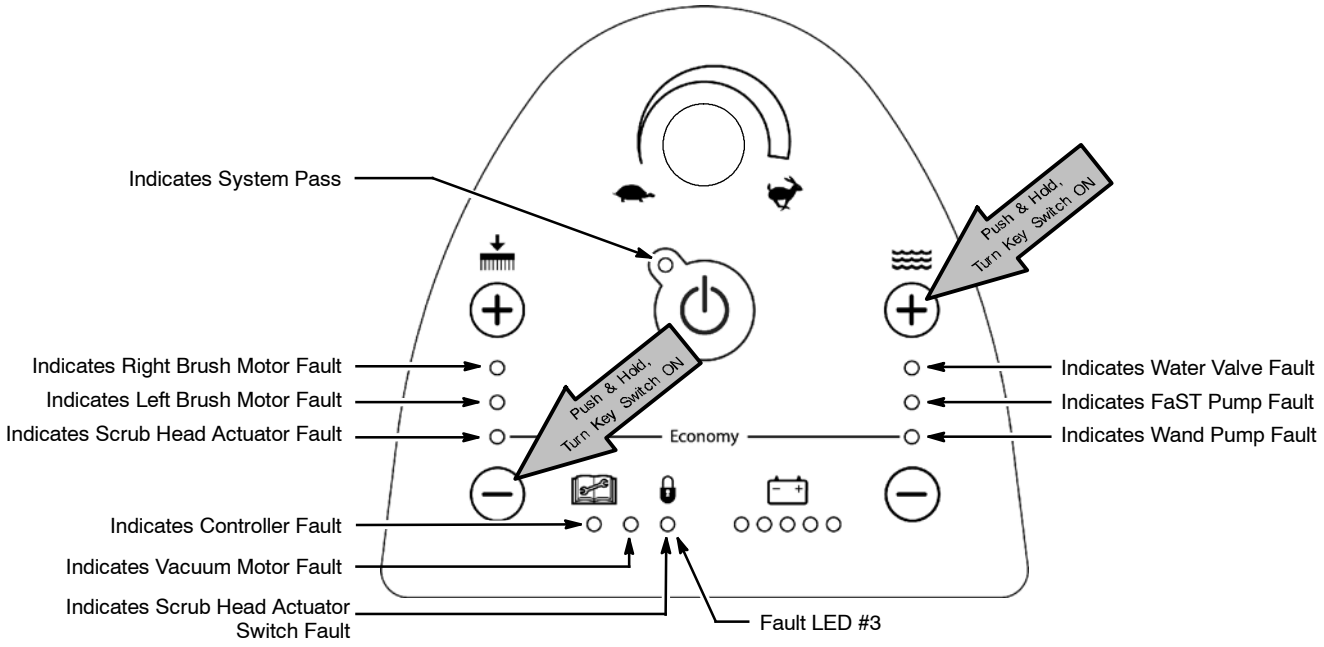

Fig. 10

CIRCUITBOARD KIT
INSTALLATION INSTRUCTIONS - Continued

CIRCUIT BOARD KIT PARTS LIST (9008406)

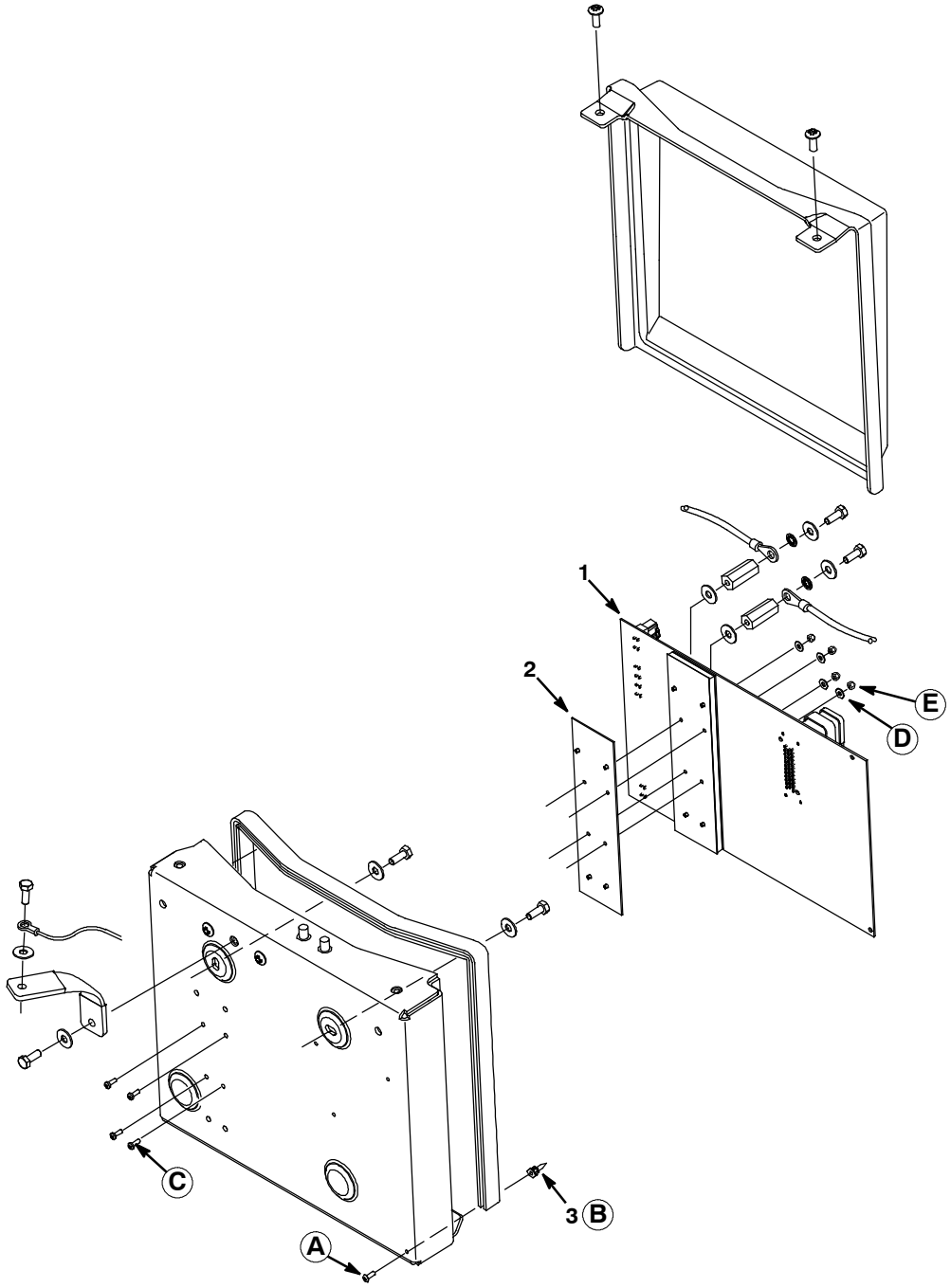

Fig. 11

	Ref.	Tennant Part No.	Description	Qty.
▽		9008406	Circuit board Kit, Logic, [T5]	1
▲	1	1065079	Circuit board, Logic, [T5]	1
▲	2	1016816	Pad, Thermal, Heat Sink	1
▲	3	1016825	Support, Circuit board	4
▲	N/S	27964	Strap, Ground, Static, Disposable	1