

# T5 ec-H2O™ Kit



This kit includes the parts needed to convert a standard model over to an ec-H2O™ model.

## INSTALLATION INSTRUCTIONS:

**Installation Time: 4-6 Hours**

**Special Tools Required: None**

### PREPARE MACHINE FOR KIT INSTALL:

1. Drain the solution and recovery tanks.
2. Park the machine on a level surface, lower the scrub head and remove the key.
3. Remove the scrub head assembly from the machine (Figure 1).

**FOR SAFETY: Before removing the scrub head assembly, disconnect the battery cables.**

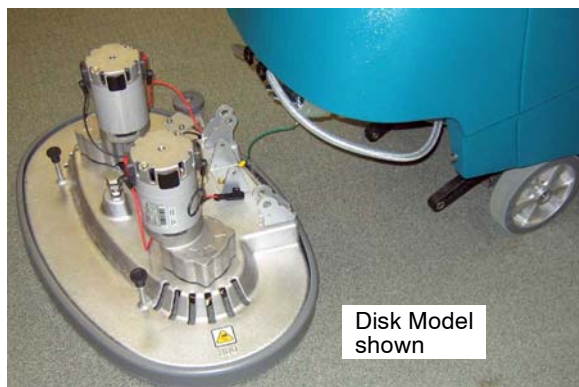


Fig. 1

4. Remove the batteries from machine (Figure 2).

**FOR SAFETY: When handling batteries, wear protective gloves and eye protection. Avoid contact with battery acid.**

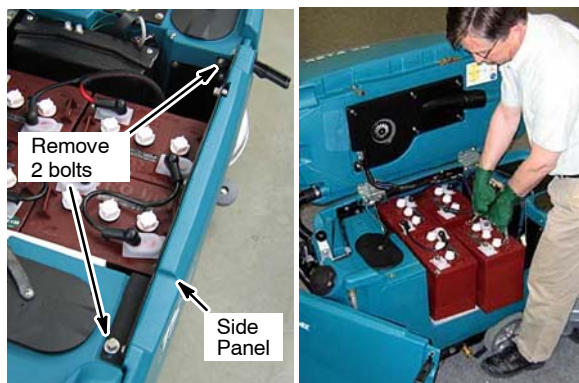


Fig. 2

### INSTALL *ec-H2O* WIRE HARNESS:

1. Unfasten the control panel box from the battery compartment to access the harness routing hole (Figure 3). Do not disconnect any of the wiring.

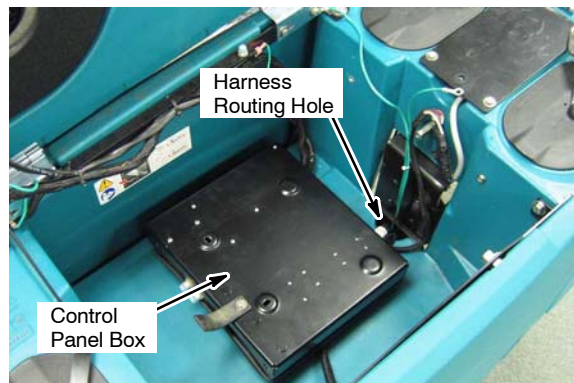


Fig. 3

2. Starting from inside the battery compartment, route the *ec-H2O* wire harness [p/n 1055398] as described in the following steps. Use the below wire code diagram for reference (Figure 4).

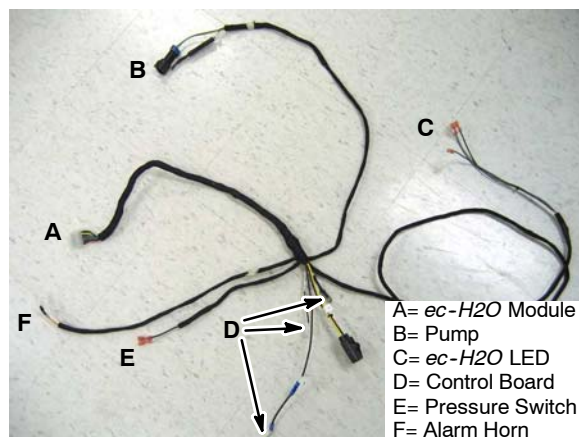


Fig. 4

3. Route harness wires (B, E & F) down through hole towards scrub head area as shown (Figure 5).



Fig. 5

## T5 *ec-H2O* Kit INSTALLATION INSTRUCTIONS - Continued

4. Replace control panel box. Connect wires (D) (Figure 4) to control board as shown (Figure 6) (wire #52 BRN to main contactor, wire #132/131 BLK to negative stand-off and BRN wire to Amp connector). Replace control board cover.

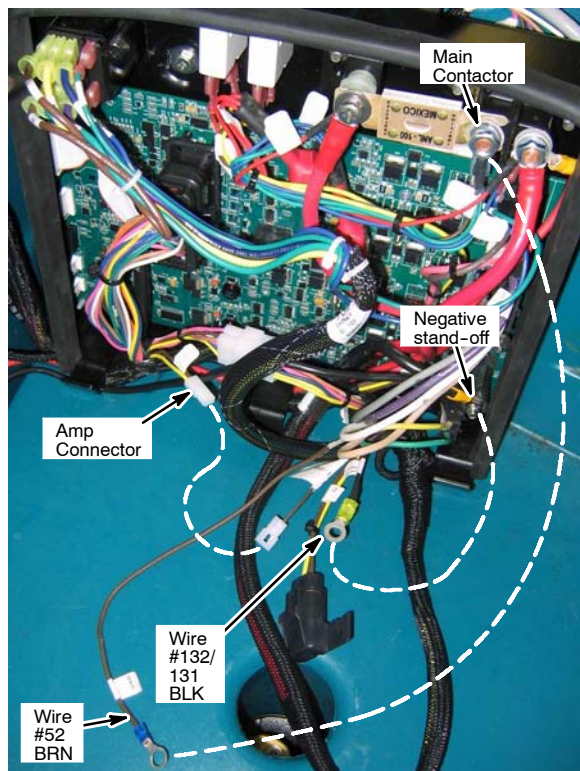


Fig. 6

5. Remove the vacuum motor and route harness wires (C) (Figure 4) through the recovery tank harness hole and into the control console (Figure 7).

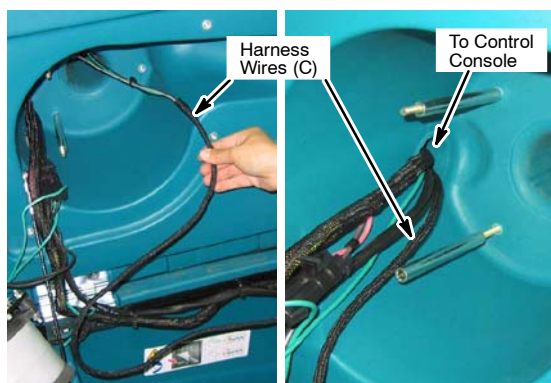


Fig. 7

6. Secure harness wires (C) (Figure 4) to the main machine harness with supplied wire-ties [p/n 130773] (Figure 8). Replace vacuum motor.

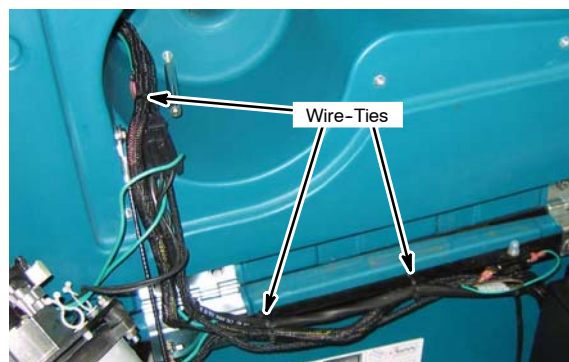


Fig. 8

7. Remove the lower control panel from the control console and pull the routed wires (C) out the opening (Figure 9).

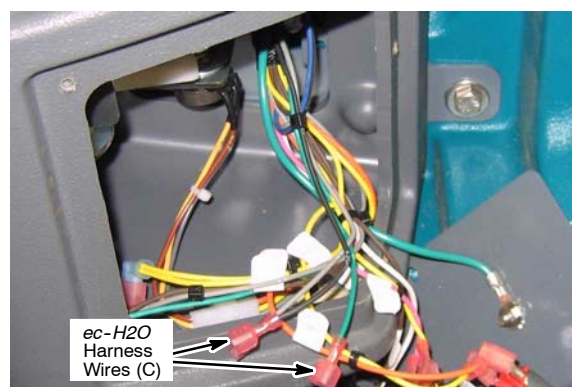


Fig. 9

8. Remove the components and the label from the lower control panel. Install new label [p/n 1050006], supplied with kit, and replace components (Figure 10). Leave the *ec-H2O* on/off switch location open.

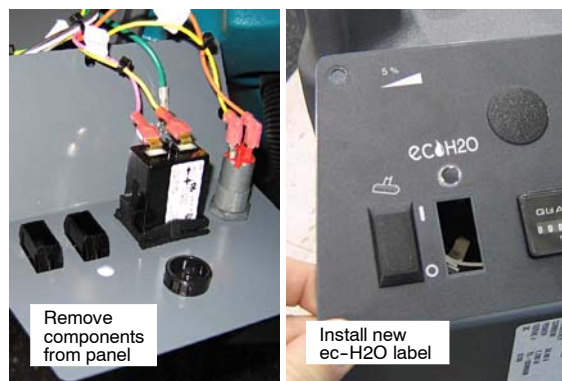


Fig. 10



## T5 *ec-H2O* Kit INSTALLATION INSTRUCTIONS - Continued

- Install the *ec-H2O* LED light [p/n 1041822] and connect the routed harness wires to the LED light (GRAY to RED, GRN to GRN and BLK to BLK) (Figure 11).

**NOTE:** If the panel does not have a LED light knockout, use the new label as a template and drill a 5/16" hole in panel.

Install the *ec-H2O* on/off switch [p/n 130787] into the open knockout and connect wire #29 WHT and wire #42E BRN (factory installed) to the switch (Figure 12). Replace control panel.

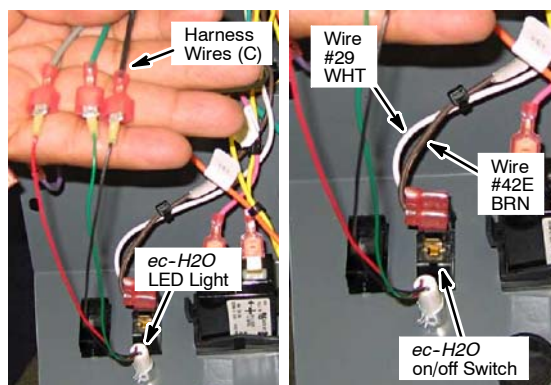


Fig. 11

Fig. 12

### INSTALL *ec-H2O* MODULE:

- Using two m6x1.00x16 sems screws [p/n 1034731], attach the *ec-H2O* module mounting bracket [p/n 1040881] to machine as shown (Figure 13).

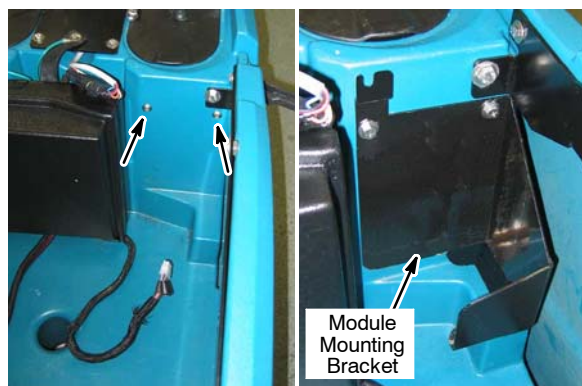


Fig. 13

- Cut the two *ec-H2O* module hoses to the specified length and set the DIP switch settings as shown (Figure 14). Install the DIP switch grommet [p/n 1054776].

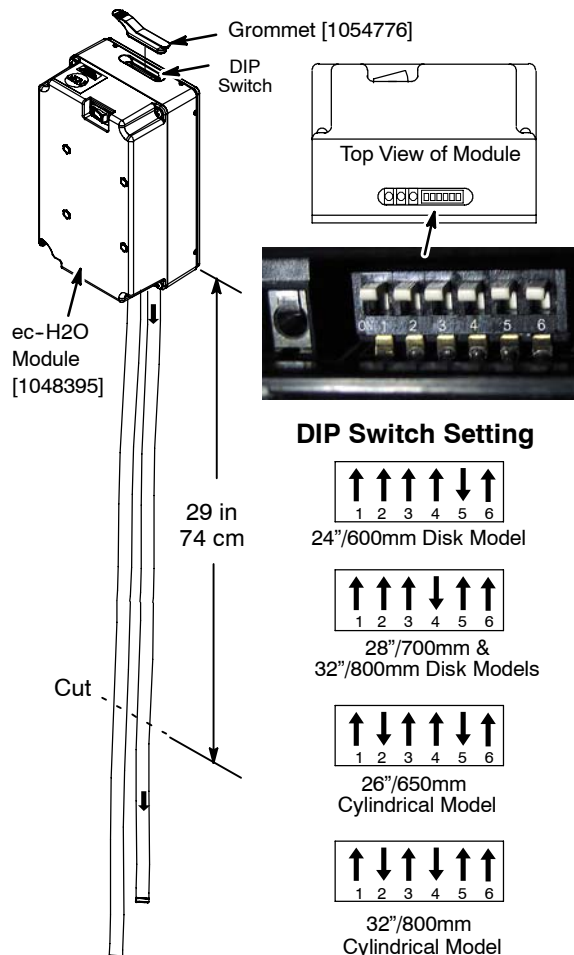


Fig. 14

- Secure the module's intake hose with clamp [p/n 140328] as shown (Figure 15).

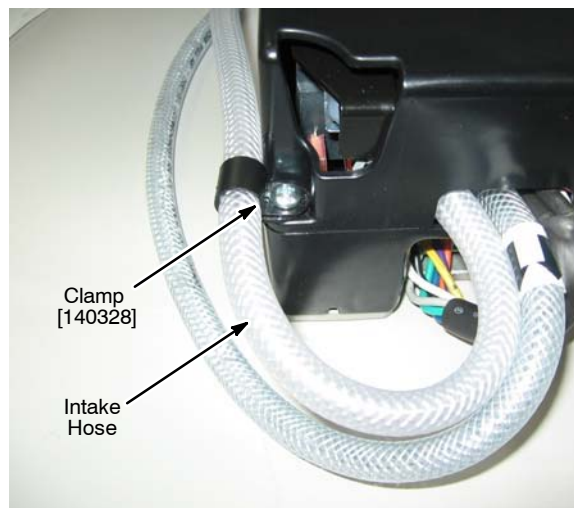


Fig. 15

## T5 *ec-H2O* Kit INSTALLATION INSTRUCTIONS - Continued

- Route the two *ec-H2O* module hoses behind the control board box and down towards the scrub head area (Figure 16).

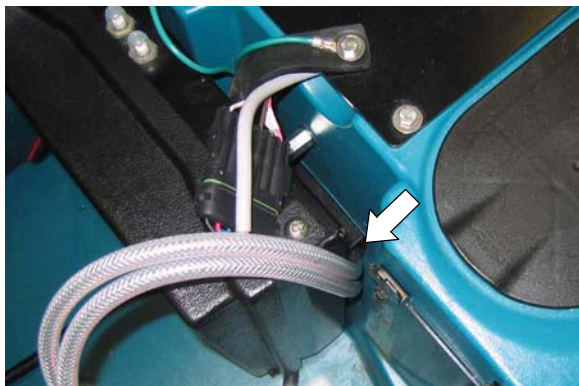


Fig. 16

- Plug the *ec-H2O* wire harness (A) (Figure 4) into the module (Figure 17).

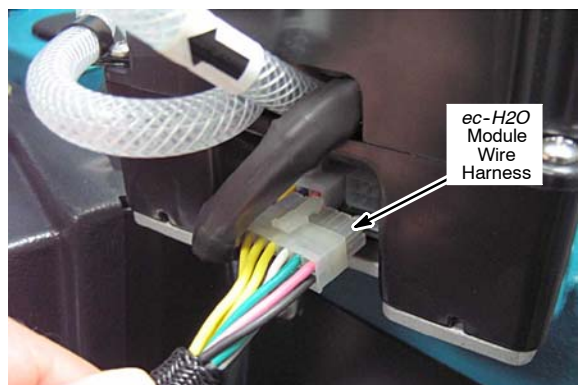


Fig. 17

- Thread one m6x1.00x16 sems screw [p/n 1034731] into the module as shown. Do not tighten screw. Install the module into the mounting bracket. Align screw with screw slot and tighten. Route the two module hoses as shown (Figure 18).

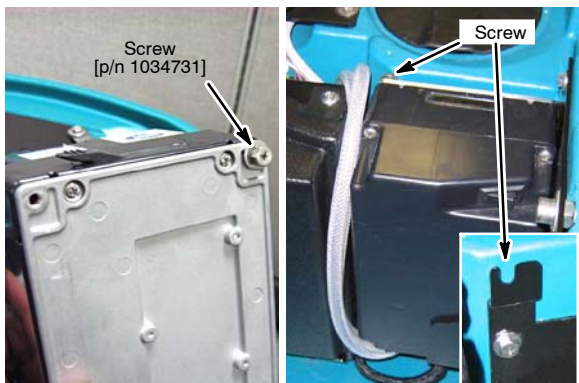


Fig. 18

### INSTALL *ec-H2O* SOLUTION SYSTEM:

- On a level non-marring surface carefully lay the machine on its right side and remove the squeegee mount bracket (Figure 19).

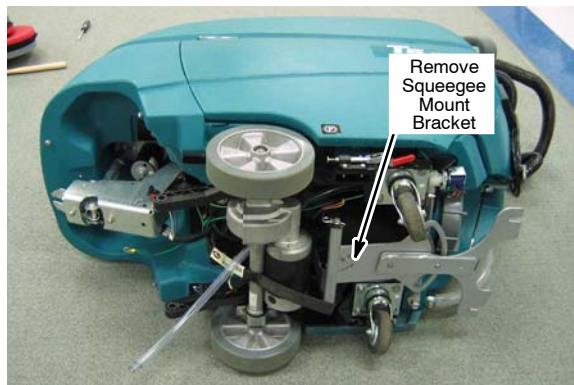


Fig. 19

- Assemble the *ec-H2O* pump assembly as shown (Figure 20). Use a thread sealer tape on all fittings.

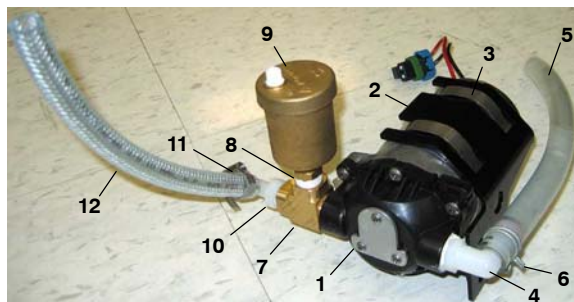


Fig. 20

#### Pump Assembly Parts List (Figure 20)

Ref	p/n.	Description	Qty.
1	1042495	Pump, Soltn, Ele, 24Vdc, 35psi	1
2	1023463	Bracket, Mtg, Pump	1
3	43555	Clamp, Hose, Wormdrive	2
4	1017532	Fitting, Plstc, E90, BM08/PM06	1
5	611259	Hose, Pvc, Clear, 0.50ID 0.75OD x 9.75"	1
6	607776	Clamp, Hose, Wire, .73-.77	1
7	601483	Fitting, Brs, Tee, PF06/PF06/PM06, Run	1
8	24698	Fitting, Brs, Str, PF02/PM06	1
9	1017386	Valve, Vent, Air, Float Type	1
10	1005630	Fitting, Plstc, E90, BM06/PM06, Nyl	1
11	54333	Clamp, Hose, Wormdrive, 0.31-0.88D, .31W	1
12	376720	Hose, Pvc, Brd, 0.38ID 0.60OD x 9.0"	1



## T5 *ec-H2O* Kit INSTALLATION INSTRUCTIONS - Continued

3. Mount the pump assembly to the machine frame with two M6x1.00x16 hex screws as shown (Figure 21). Route the two hoses as shown.



Fig. 21

4. Cut the solenoid valve solution hose 3" / 7.6 cm from end as described below (Fig. 22). Using the black T-fitting [p/n 1015486] and 3 wire clamps [p/n 607776 (1)/1041978 (2)] from kit, connect the *ec-H2O* pump intake hose as shown (Figure 23).

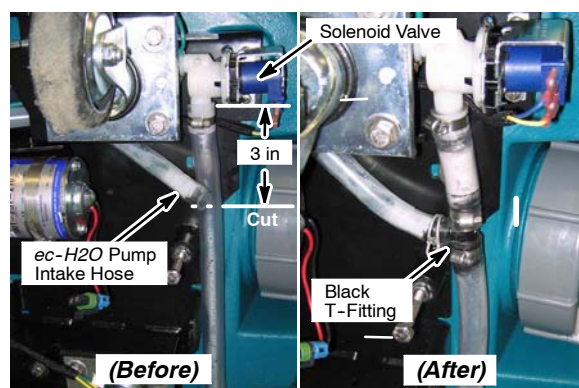


Fig. 22

Fig. 23

5. Connect the capacitor plug [p/n 1040868] to the *ec-H2O* wire harness that was routed down to the scrub head area (Figure 24).

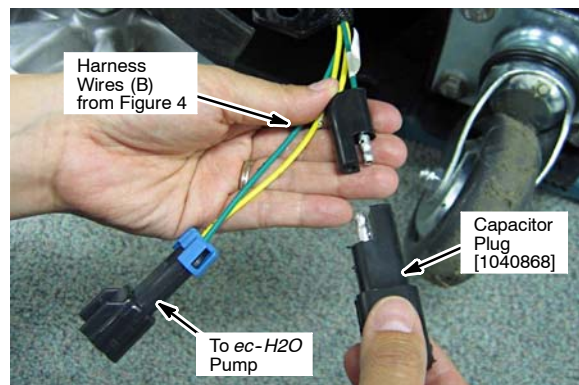


Fig. 24

6. Plug the pump wire connector into the *ec-H2O* wire harness. Secure the wire connection and capacitor plug to the machine frame with a wire-tie (Figure 25).

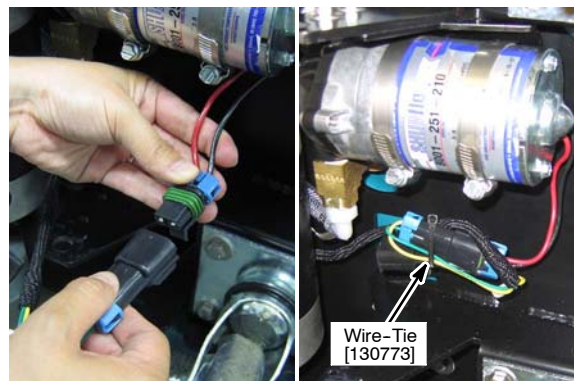


Fig. 25

7. Cut the 4 ft braided hose [p/n 578227000] into the specified hose lengths as described (ref. 1, 2, 3 & 4) then assemble the following parts as shown (Figure 26). Use thread sealer tape on all fittings.

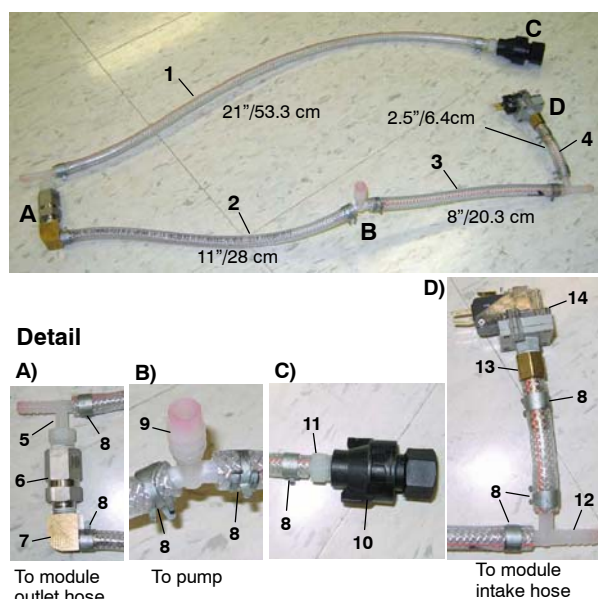


Fig. 26

### *ec-H2O* Solution Hose Assembly Parts List (Figure 26)

Ref	p/n.	Description	Qty.
1	578227000	Hose, Pvc, Brd, .25ID x .44OD x 21.00	1
2	578227000	Hose, Pvc, Brd, .25ID x .44OD x 11.00	1
3	578227000	Hose, Pvc, Brd, .25ID x .44OD x 8.00	1
4	578227000	Hose, Pvc, Brd, .25ID x .44OD x 2.50	1
5	607306	Fitting, Plstc, Tee, BM04/BM04/PM04, Br	1
6	1044790	Check Valve	1
7	1028773	Fitting, Brs Elbow 90, BM04/PF04	1
8	603654	Clamp, Hose, Ear	8
9	1014441	Fitting, Plstc, Tee, Bm04/BM04/Bm06	1
10	1043866	Fitting Asm., Quick Disconnect	1
11	50901	Fitting, plst, Str. Bm04/Pm04	1
12	150713	Fitting, plst, Tee, Bm04/Bm04/Bm04	1
13	150520	Fitting, Brs, Str Bm04/PF02	1
14	1044414	Switch, Pressure 15psi, PM02	1

T5 *ec-H2O* Kit

INSTALLATION INSTRUCTIONS - Continued

8. From the scrub head area, locate the two routed solution hoses from the *ec-H2O* module (Figure 27).

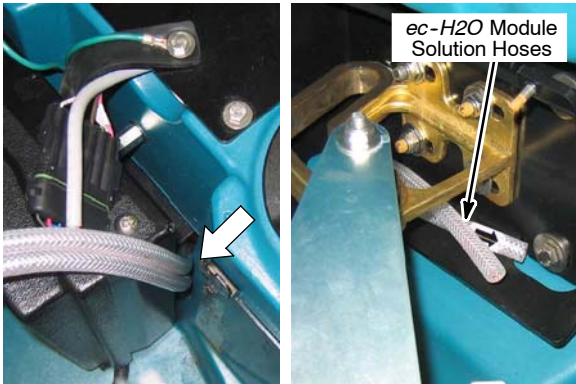


Fig. 27

9. Using two hose clamps [p/n 603654], connect the *ec-H2O* solution hose assembly (from step 7) to the *ec-H2O* module hoses as shown (Figure 28).

Connect wires #13T BLK/#99 WHT from the routed *ec-H2O* wire harness to the pressure switch as shown (Figure 28).

Secure hose assembly with wire-tie (p/n 130773).

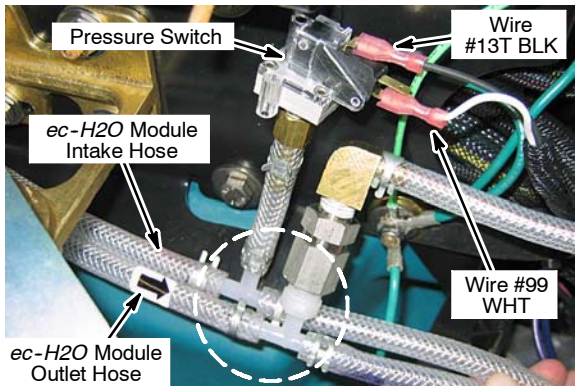


Fig. 28

10. Using a wormdrive clamp [p/n 54333], connect the *ec-H2O* solution hose assembly to the pump's outlet hose (Figure 29).

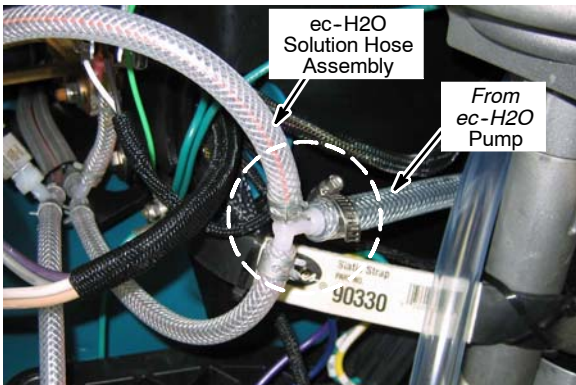
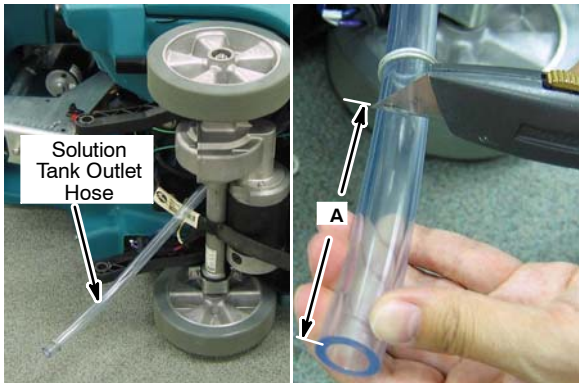


Fig. 29

11. Cut the machine's solution tank outlet hose as specified (Figure 30).



A =	Scrub Head Type
2" / 5.1cm	600mm Disk
3" / 7.6cm	700mm Disk
4" / 10.1 cm	800mm Disk
15.5" / 39.4 cm	Cylindrical Brush

Fig. 30

12. Using T-fitting [p/n 1010791] and two wire clamps [p/n 607776], connect the quick disconnect connector from the *ec-H2O* solution hose assembly to the solution tank outlet hose as shown (Figure 31). Use a thread sealer tape.

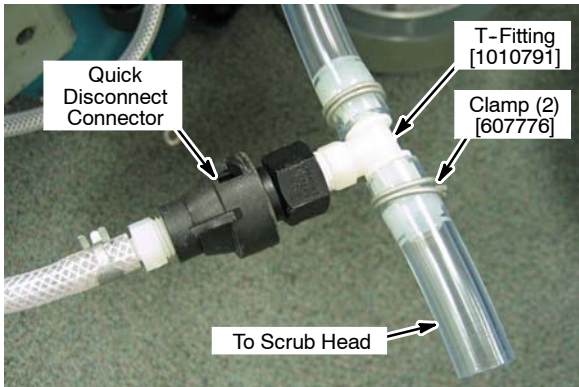


Fig. 31



## T5 *ec-H2O* Kit

### INSTALLATION INSTRUCTIONS - Continued

#### *ec-H2O* HORN INSTALLATION:

1. Connect the routed *ec-H2O* wire harness to horn [p/n 1018505] as shown. Using screw and lock washer supplied with horn, attach the horn bracket [p/n 1044192] to horn (Figure 32).

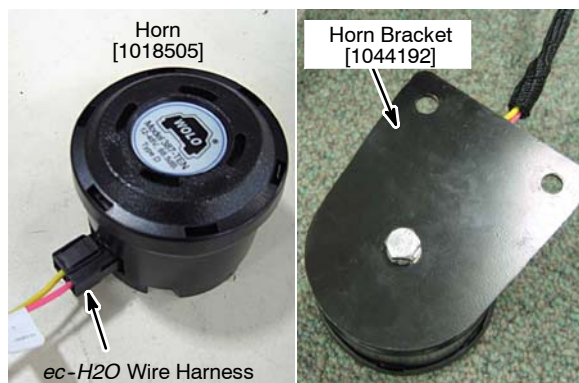


Fig. 32

2. Using two M6x1.00x16 sems hex screws [p/n 1034731], attach the horn to the machine as shown (Figure 33). Secure wire harness with wire-tie.

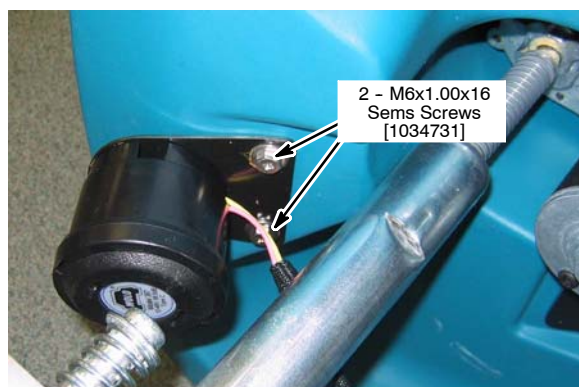


Fig. 33

3. Replace the squeegee mount bracket and carefully stand the machine upright. Replace the scrub head and batteries.

#### INSTALL *ec-H2O* LABELS:

Apply the new *ec-H2O* labels as described below (Figure 34).

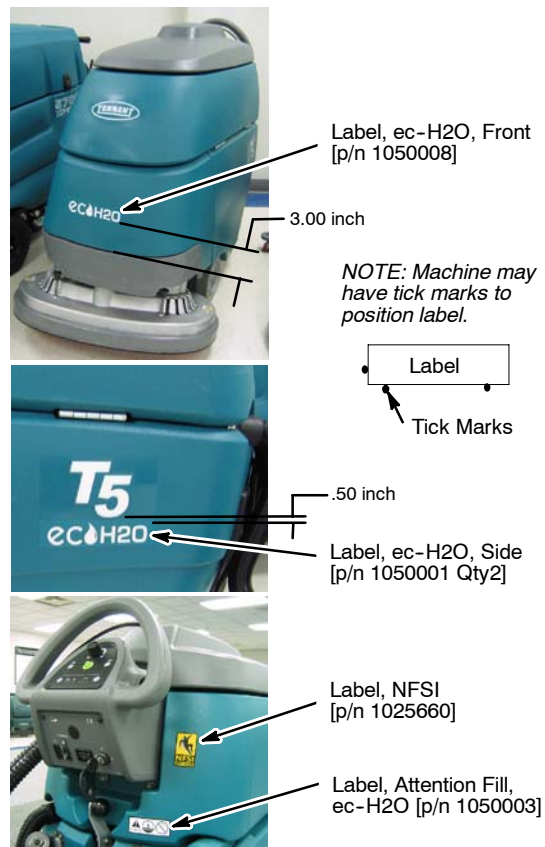


Fig. 34

#### OPERATE *ec-H2O* SYSTEM:

To ensure proper operation, operate the *ec-H2O* system according to T5 *ec-H2O* Operator Manual.