



7100 ec-H2O™ Kit



This kit includes the necessary parts to convert a standard model over to an ec-H2O™ model. The kit is intended for models manufactured after serial number 7100-10455304 (Dec 2009).

INSTALLATION INSTRUCTIONS:

Installation Time: 4-6 Hours

Special Tools Required: None

PREPARE MACHINE FOR KIT INSTALL:

1. Empty solution tanks.
2. Park the machine on a level surface, lower the scrub head and remove the key.
3. Disconnect the battery cable connector to disable power (Figure 1).

FOR SAFETY: Before installing kit, disconnect the battery cable connector.



Fig. 1

4. Disconnect the instrument panel from the front shroud then remove the shroud from machine (Figure 2).

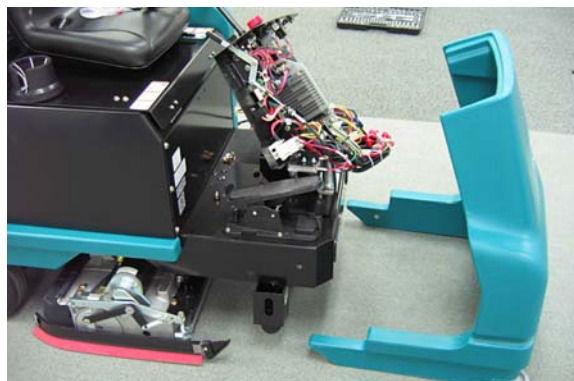


Fig. 2

CONNECT *ec-H2O* WIRE HARNESS TO INSTRUMENT PANEL:

1. Route the *ec-H2O* wire harness [p/n 1050759] up through the harness hole located in the floorboard as shown (Figure 3).

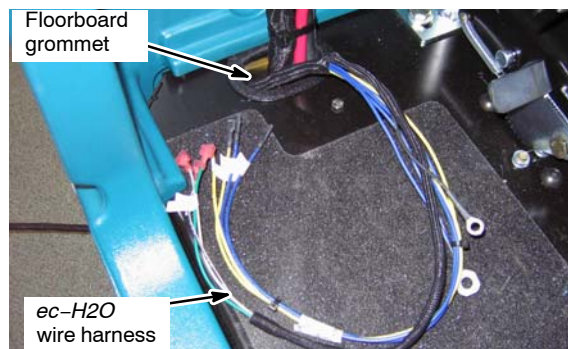


Fig. 3

2. Remove the two circuit breaker plugs from the instrument panel (Figure 4).

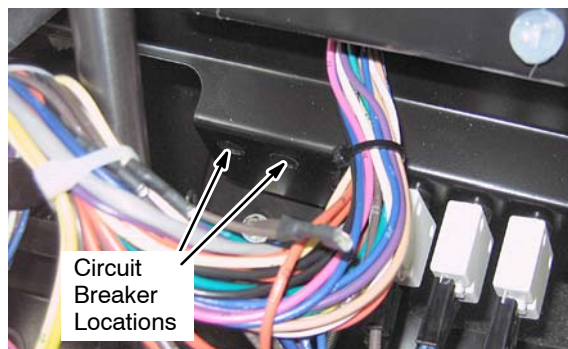


Fig. 4

3. Using rubber boots [p/n 1046173], install two 2.5A circuit breakers [p/n 1046152] into the instrument panel as shown (Figure 5).

Remove the existing circuit breaker label from instrument panel and apply new label [p/n 1057583] (Figure 5a).



Fig. 5



Fig. 5a

7100 *ec*-H₂O Kit

INSTALLATION INSTRUCTIONS – Continued

4. Connect the routed *ec*-H₂O harness wires to the two circuit breakers as shown (Figure 6).

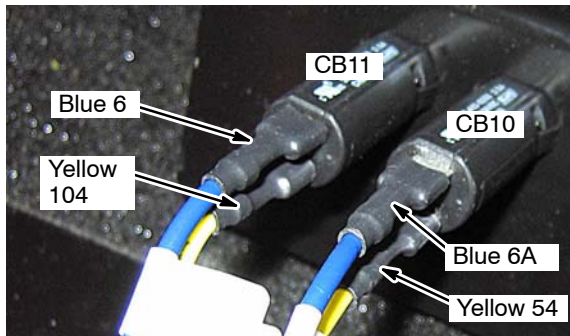


Fig. 6

5. Connect the routed *ec*-H₂O harness wires to the instrument panel as shown (Figure 7).

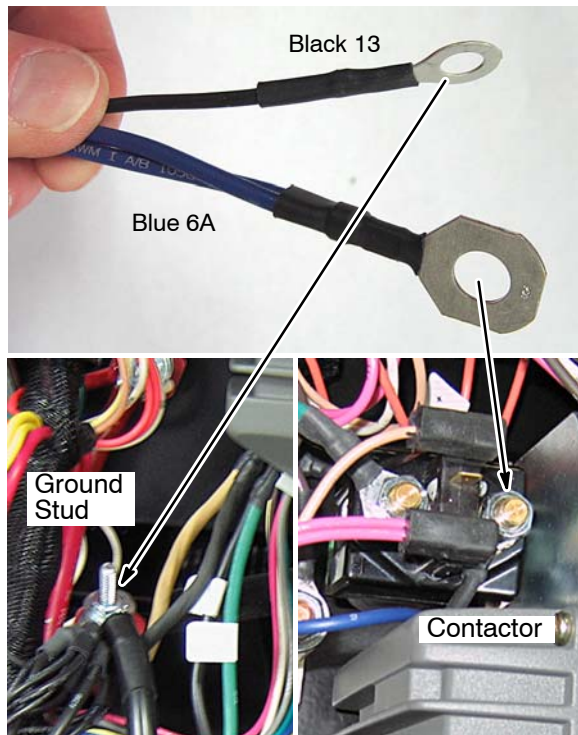


Fig. 7

6. Locate the LED light hole under the panel label and cut away the label material as shown (Figure 8).

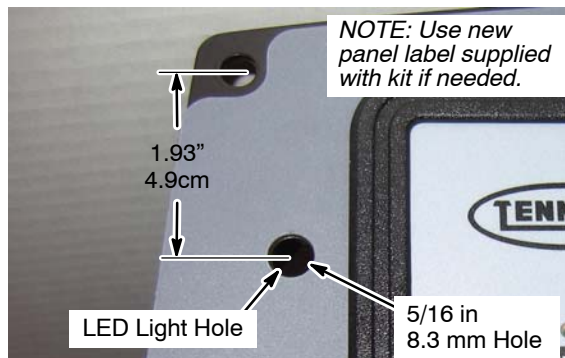


Fig. 8

7. Install the LED light [p/n 1041822] into the panel as shown (Figure 9).

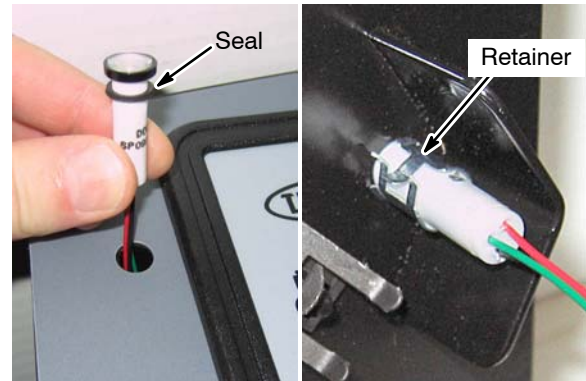


Fig. 9

8. Connect the routed *ec*-H₂O harness wires to the LED light as shown (Figure 10). (Gray to Red, Green to Green, Black to Black)

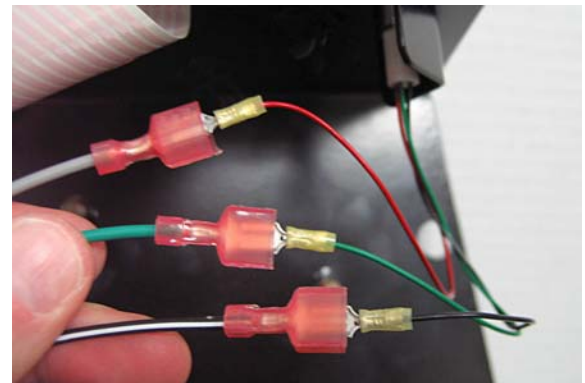


Fig. 10

9. Secure the LED wires as shown (Figure 11).

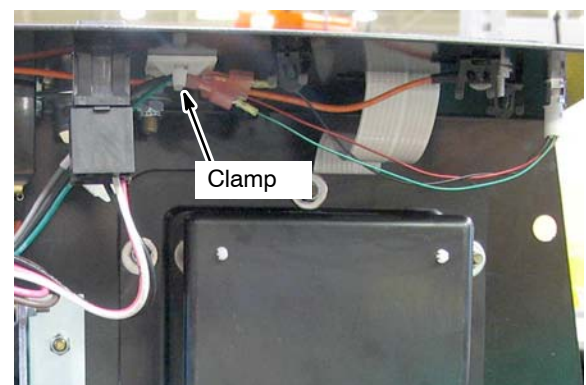


Fig. 11

10. Secure the the remaining *ec*-H₂O harness wires with wire-ties provided [p/n 130773].

7100 *ec-H2O* Kit INSTALLATION INSTRUCTIONS – Continued

INSTALL NEW TOUCH PANEL:

1. Remove the control board box from panel and disconnect the white ribbons (Figure 12).

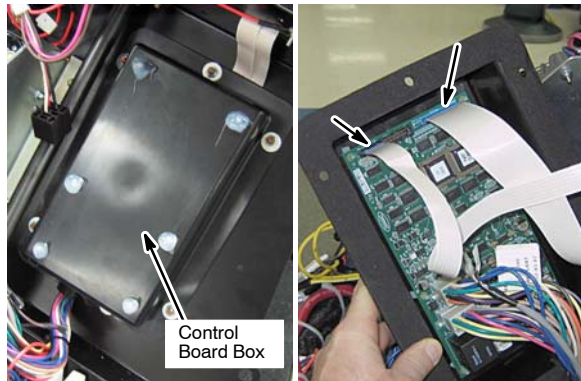


Fig. 12

2. Remove the existing touch panel (Figure 13).



Fig. 13

3. Install the new *ec-H2O* touch panel [p/n 1056240], connect ribbons to control board and replace control board box (Figure 14).



Fig. 14

4. Reinstall the machine's front shroud and reconnect the instrument panel (Figure 2).

ROUTE *ec-H2O* HARNESS TO REAR OF MACHINE:

1. Continue to route the other end of the *ec-H2O* wire harness along the main harness under the machine. Secure with wire-ties (Figure 15).



Fig. 15

2. From the right side of the machine, connect the extension wire harness [p/n 385623] to the routed *ec-H2O* wire harness as shown (Figure 16).

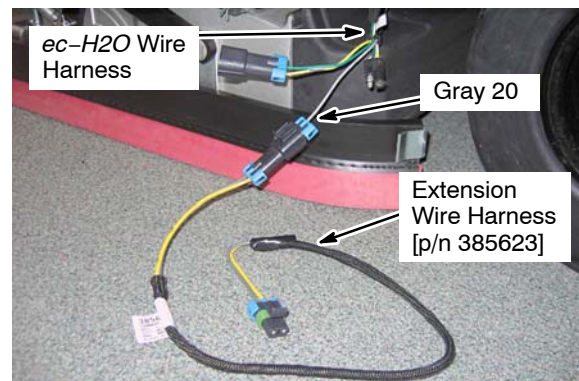


Fig. 16

3. Connect the capacitor plug [p/n 1040868] and diode plug [p/n 22290] into the routed *ec-H2O* wire harness (Figure 17).

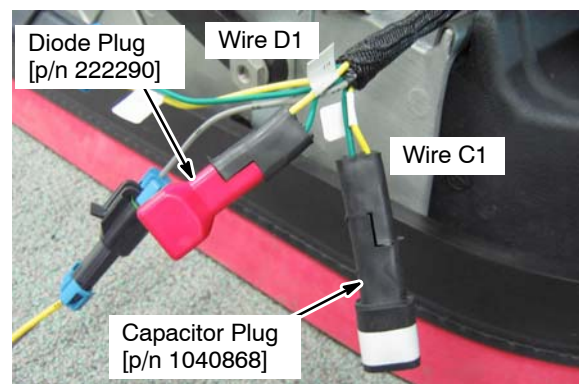


Fig. 17

7100 ec-H2O Kit

INSTALLATION INSTRUCTIONS – Continued

4.
- Route the extension wire harness towards the rear of the machine along side the machine's harness as shown (Figure 18).

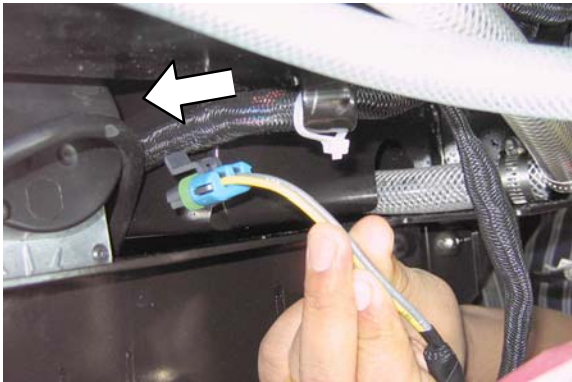


Fig. 18

5.
- Locate the factory installed wire connector near the squeegee hose and connect the extension wire harness (Figure 19).

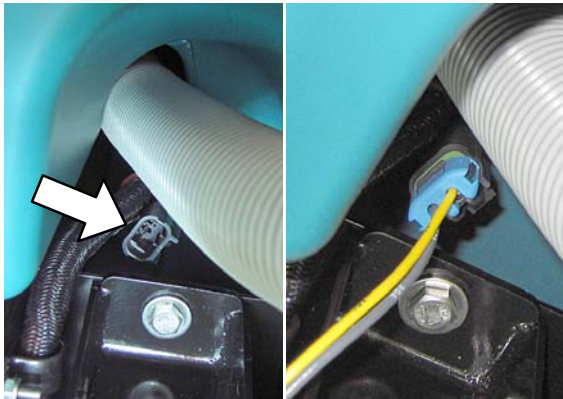


Fig. 19

6.
- Route the following ec-H2O harness wires up through the battery compartment knockout as shown (Figure 19).

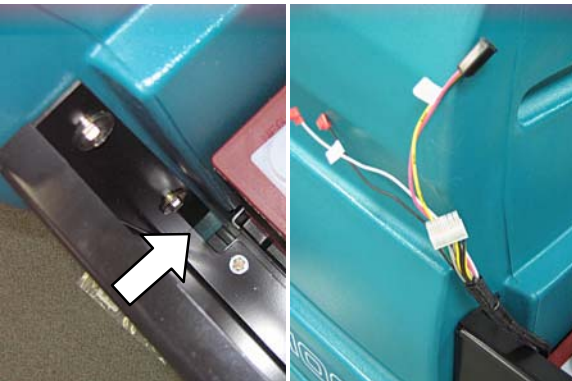


Fig. 20

INSTALL THE ec-H2O SOLUTION PUMP ASSEMBLY:

1.
- Assemble the pump assembly as shown (Figure 21). Use a thread sealer on all fittings. Cut hose lengths as specified.

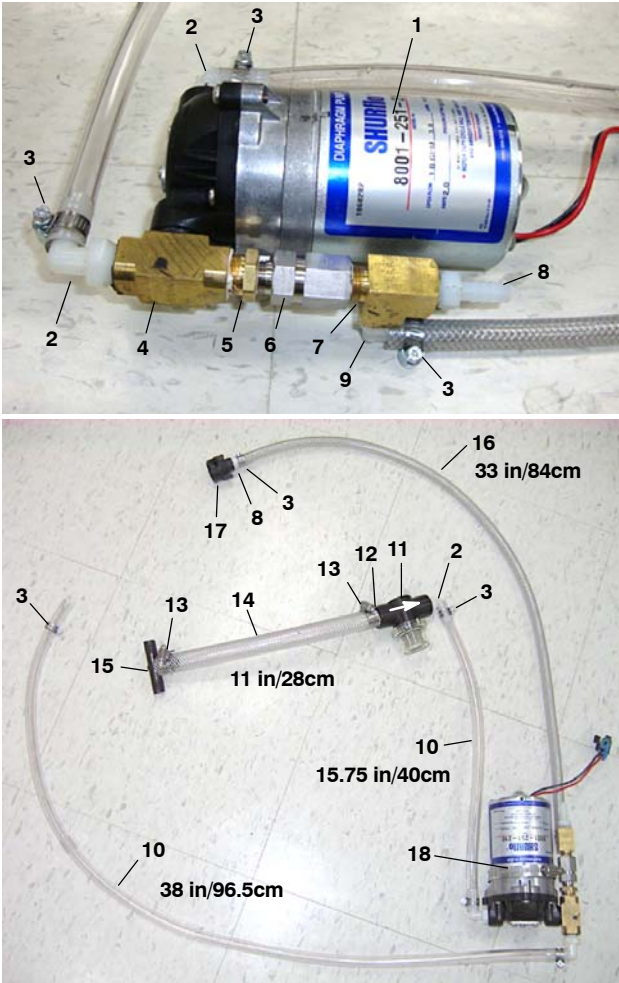


Fig. 21

Pump Assembly Parts List (Figure 21)			
Ref	p/n.	Description	Qty.
1	1042495	Pump, Soltn, Ele, 24Vdc, 35psi	1
1	1042592	Pump, Soltn, Ele, 24Vdc, 35psi (CE kit)	1
2	150412	Fitting, Plstc, E90, BM06/PM06, Nyl	3
3	43844	Clamp, Hose, Worndrive,0.25–0.62D,.31W	6
4	1051621	Fitting, Brs, Tee, PF06/PF06/PM06	1
5	1016383	Fitting, Brs, Str, PF04/PM06	1
6	1044790	Valve, Check, 0025psi, PM04/PF04	1
7	24929	Fitting, Brs, Tee, PF04/PF04/PM04, Run	1
8	1052017	Fitting, Plstc, Str, BM05/PM04	2
9	1052015	Fitting, Plstc, E90,BM05/PM04	1
10	1014930	Hose, Afrmkt, PVC, CLR, 0.38ID, 08FT	1
11	1055302	Filter, In-Line, PF06/PF06 080mesh 02.6L	1
12	1013900	Fitting, Plstc, Str, BM10/PM06, Nyl	1
13	63810	Clamp, Hose, Worndrive,0.56–1.06D,.56w	2
14	1015033	Hose, Afrmkt, PVC, Brd, 0.62id, 01ft, clr	1
15	16356	Fitting, Plstc, Tee, BM10/BM10/BM10	1
16	105336	Hose, Afrmkt, PVC, Brd, 0.31id, 03ft, clr	1
17	1043866	Fitting, Assy, QCD, PF04	1
18	17188	Clamp, Hose, Wormdrive,2.50–3.50D,.50W	1

7100 *ec-H2O* Kit INSTALLATION INSTRUCTIONS – Continued

2. Locate the pump mount tab under the machine and add clamp [p/n 17188] as shown (Figure 23).



Fig. 22

3. Slide the pump assembly into the clamp as shown and tighten (Figure 23).

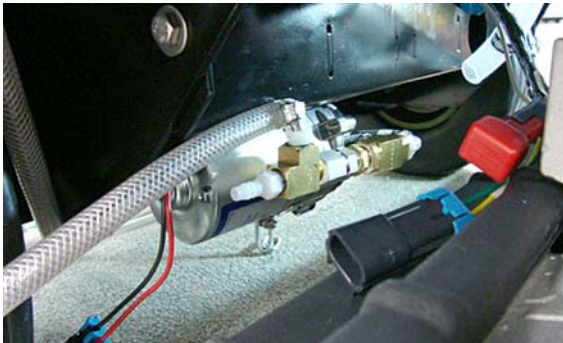


Fig. 23

4. Plug the pump wire connector into the *ec-H2O* wire harness. Secure the wire connection, capacitor and diode plugs to the machine frame using a wire-tie (Figure 24).



Fig. 24

5. Remove the elbow fitting from the solution tank hose as shown (Fig. 25).

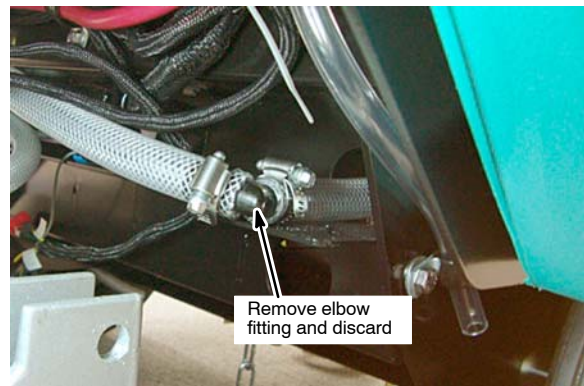


Fig. 25

6. Connect the T-fitting from the *ec-H2O* pump assembly as shown (Figure 26).

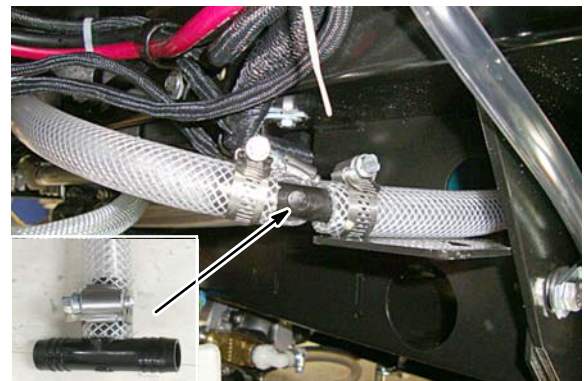


Fig. 26

7. Install clamp [p/n 09570] to frame as shown and route the clear hose from the pump assembly through clamp and up into battery compartment (Figure 27).

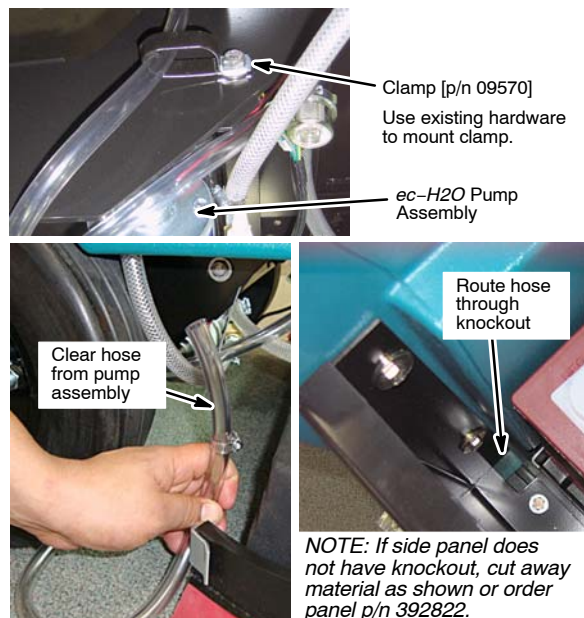


Fig. 27

7100 *ec-H2O* Kit INSTALLATION INSTRUCTIONS – Continued

INSTALL THE *ec-H2O* MODULE:

1. Cut the two *ec-H2O* module hoses to the specified length and set the DIP switch settings accordingly (Figure 28). Install the DIP switch grommet [p/n 1054776].

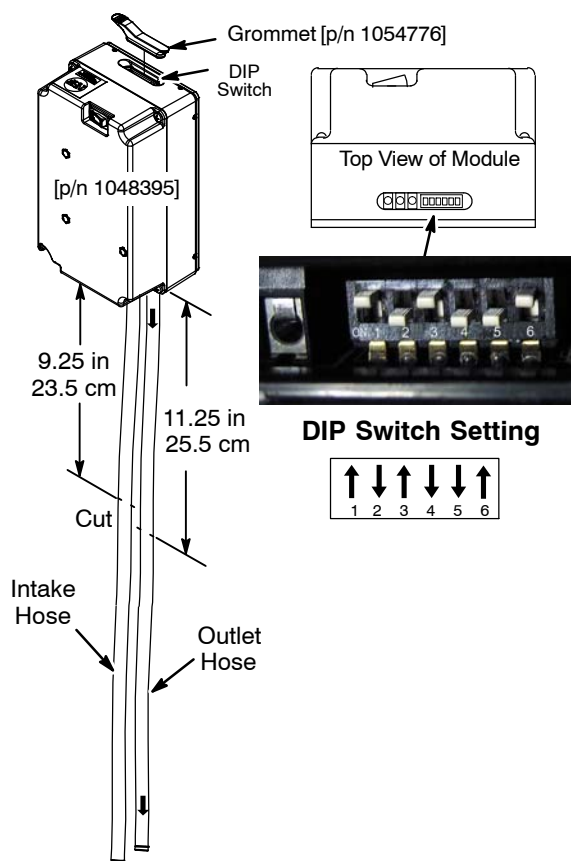


Fig. 28

2. Mount the pressure switch [p/n 1044415] and alarm [p/n 1052726] to the *ec-H2O* module mounting bracket [p/n 1056122] as shown (Figure 29).

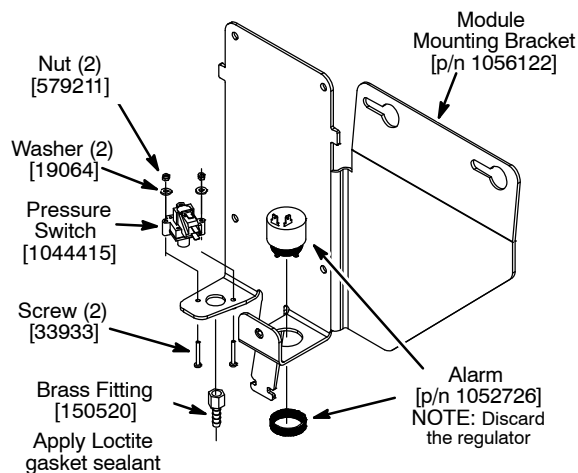


Fig. 29

3. Using four m6x1.00x16 sems screws [p/n 1034731], attach the *ec-H2O* module mounting bracket [to the *ec-H2O* module as shown (Figure 30).

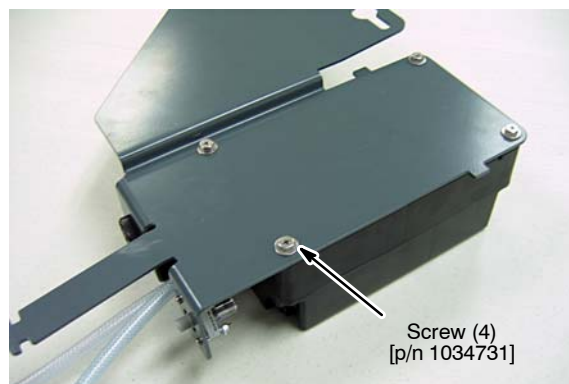


Fig. 30

4. Connect solution hoses to *ec-H2O* module as shown (Figure 31). Cut hose lengths as specified.



Fig. 31

5. Mount module to machine as shown (Figure 32).



Fig. 32

7100 *ec-H2O* Kit INSTALLATION INSTRUCTIONS – Continued

6. Connect the *ec-H2O* harness wires (Figure 20) to Module assembly (Figure 33).

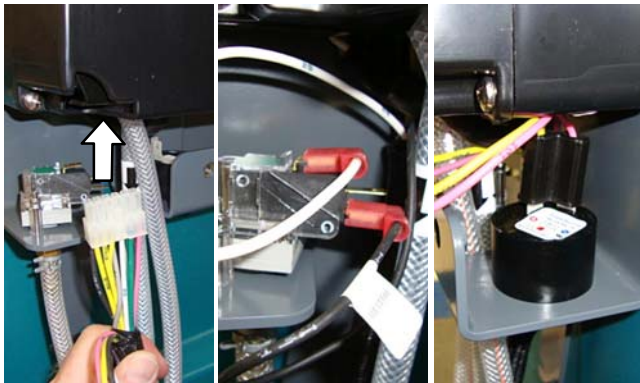


Fig. 33

7. Secure hoses with wire-tie as shown and route the 33 inch/84 cm length hose through the battery compartment knockout (Figure 34). Route hose through clamp as shown in Figure 27.

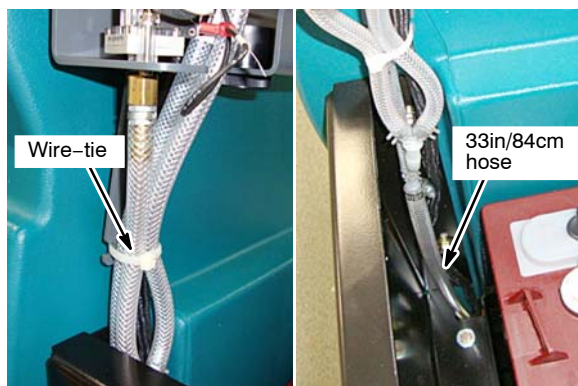


Fig. 34

8. Connect the 33 inch/84 cm length hose to the *ec-H2O* pump assembly as shown (Figure 35).

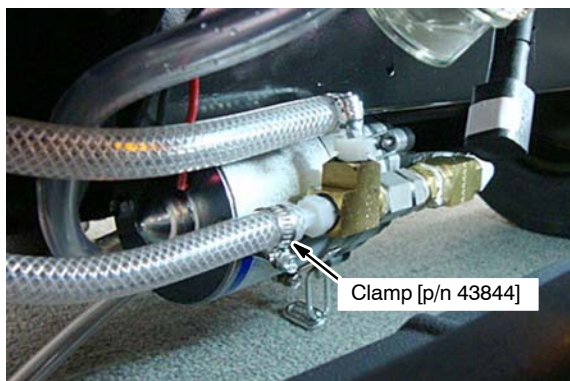


Fig. 35

9. Connect the clear hose from the pump assembly (Figure 27) to the Y-Fitting from the module assembly as shown (Figure 36).



Fig. 36

10. Using screw [p/n 367770] and washer [p/n 32483] attach the module cover [p/n 1051164] to module bracket (Figure 37).

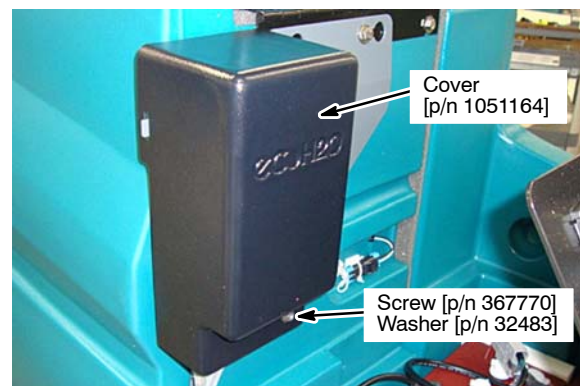


Fig. 37

7100 *ec*-H₂O Kit

INSTALLATION INSTRUCTIONS – Continued

INSTALL THE SCRUBHEAD SOLUTION HOSE ASSEMBLY:

DISK MODEL: (See page 9 for Cylindrical Model)

1. Assemble the *ec*-H₂O solution hose assembly as shown (Figure 38). Use a thread sealer on all fittings. Cut hose length as specified.

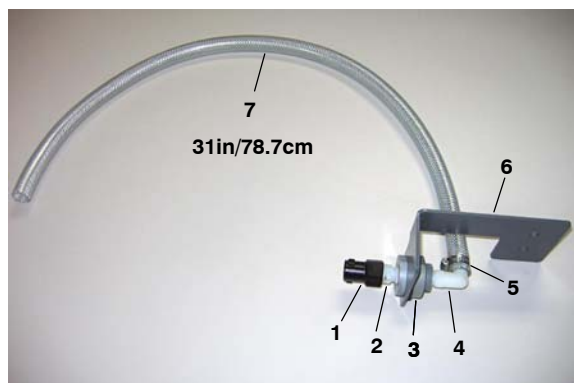


Fig. 38

Ref	p/n.	Description	Qty.
1	1043866	Fitting, Assy, QCD, PF04	1
2	1052010	Fitting, Plstc, Str, PM04/PM04	1
3	1052026	Fitting, Plstc, Str, PF04/PF04, BH	1
4	1010713	Fitting, Plstc, E90, BM08/PM04, Nyl	1
5	54333	Clamp, Hose, Wormdrive, 0.31-0.88D, .31D	1
6	1057633	Bracket, Hose, Drain	1
7	1006401	Hose Afmkt, PVC, BRD, 0.50ID, 3FT, CLR	1

2. Using two self-tapping screws [p/n 361339], attach the hose assembly bracket to machine frame as shown (Figure 39).

NOTE: If machine is not equipped with mounting holes, use bracket as template and drill two 7/32" / 5.5 mm holes.

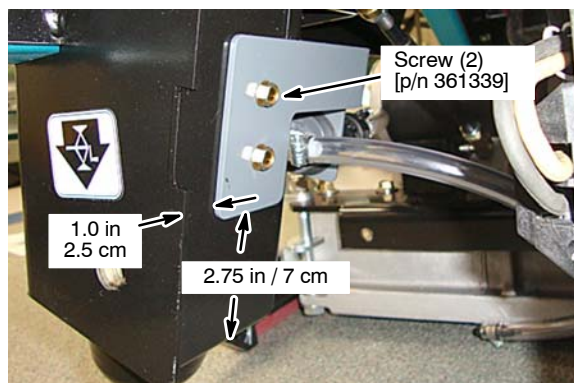


Fig. 39

3. Connect the quick disconnect connector from the *ec*-H₂O pump assembly as shown (Figure 40).

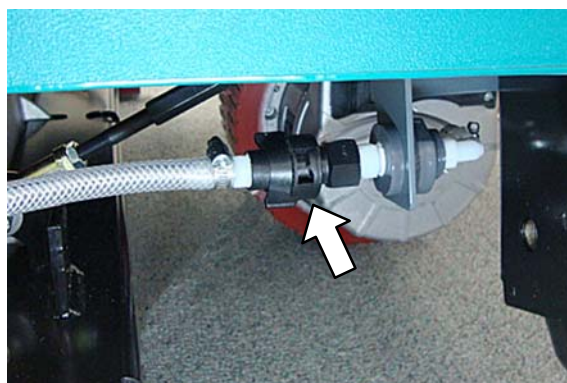


Fig. 40

4. Cut the machine's solution hose going to the scrubhead as specified and connect the *ec*-H₂O hose using Y-fitting [p/n 1010668] as shown (Figure 41).

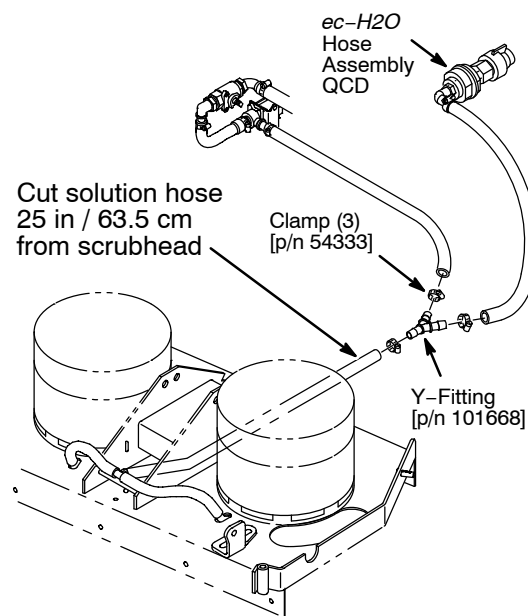


Fig. 41

7100 *ec*-H₂O Kit

INSTALLATION INSTRUCTIONS – Continued

CYLINDRICAL BRUSH MODEL:

1. Assemble the *ec*-H₂O solution hose assembly (Figure 42). Use a thread sealer on all fittings. Cut hose length as specified.



Fig. 42

ec-H₂O Solution Hose Assembly Parts List (Figure 42)

Ref	p/n.	Description	Qty.
1	1043866	Fitting, Assy, QCD, PF04	1
2	1052010	Fitting, Plstc, Str, PM04/PM04	1
3	1052026	Fitting, Plstc, Str, PF04/PF04, BH	1
4	150415	Fitting, Plstc, E90, BM06/PM04	1
5	43844	Clamp, Hose, Wormdrive, 0.25–0.62D, .31D	3
6	1057633	Bracket, Hose, Drain	1
7	1014930	Hose, Afrmkt, PVC, CLR, 0.38ID, .08FT	1
8	20951	Fitting, Plstc, E90, BM06/BM06	1

2. Using two screws [p/n 361339], attach the hose assembly bracket to machine frame as shown (Figure 43). *NOTE: Screws are self-tapping.*

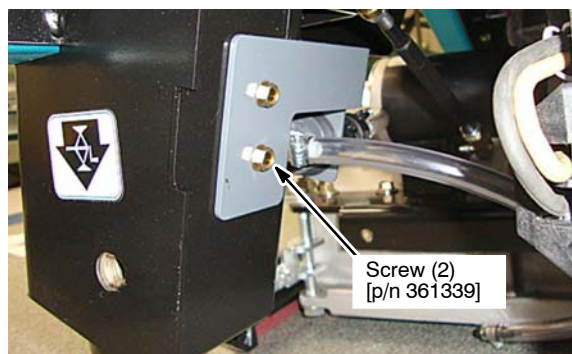


Fig. 43

3. Connect the quick disconnect connector from the *ec*-H₂O pump assembly as shown (Figure 44).

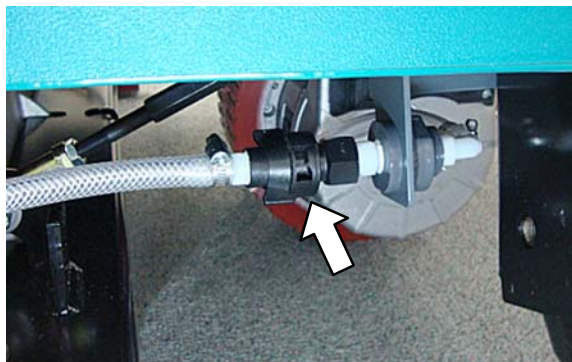


Fig. 44

4. Attach the *ec*-H₂O spray bar assembly to scrubhead as shown (Figure 45).

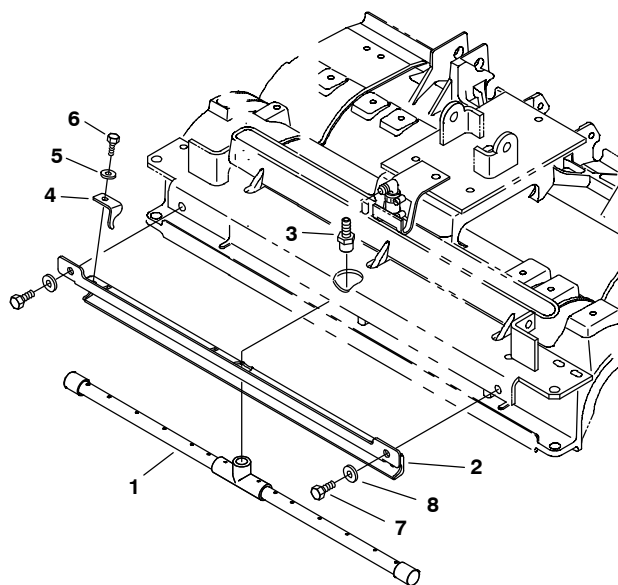


Fig. 45

ec-H₂O Spray Bar Assembly Parts List (Figure 45)

Ref	p/n.	Description	Qty.
1	1014791	Tube Asm., Spray Bar (700mm model kit)	1
	1013079	Tube Asm., Spray Bar (800mm model kit)	1
2	1014993	Bracket, Spray Bar (700mm model kit)	1
	1014957	Bracket, Spray Bar (800mm model kit)	1
3	150538	Fitting, Plstc, Str, BM06/PM06	1
4	1014673	Bracket, Spray Bar Retainer	3
5	01684	Washer, Flat, 0.27B 0.69D .05, SS	3
6	11635	Screw, Hex, M6x1.00x12, NL, SS	3
7	12273	Screw, Hex, M8x1.25x20, NL, SS	2
8	01685	Washer, Flat, 0.38B 0.88D .08, SS	2

5. Connect the *ec*-H₂O solution hose assembly (Figure 42) to the spray bar as shown (Figure 46). Clamp is not required.

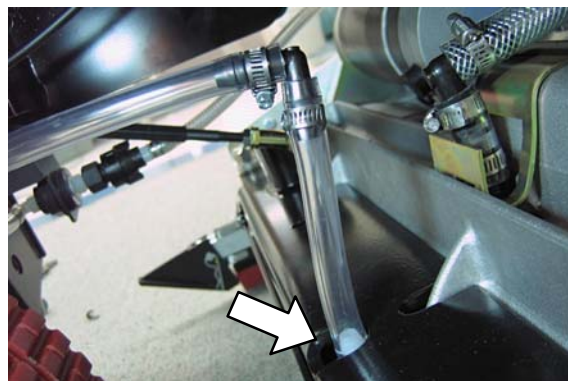


Fig. 46

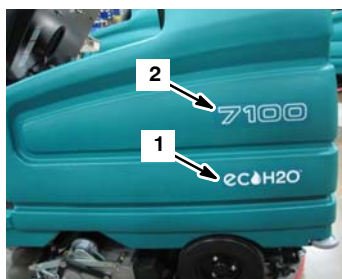
7100 *ec-H2O* Kit INSTALLATION INSTRUCTIONS – Continued

INSTALL *ec-H2O* MODEL LABELS:

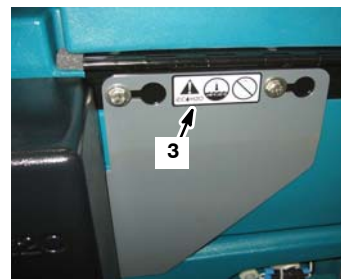
Apply the new *ec-H2O* labels as described below.



1) Label, *ec-H2O* [p/n 1050014] (Qty 3)

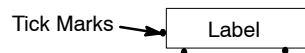


2) Label, 7100 [p/n 1047740] (Qty 2)
Move the "7100" Labels to the upper position



3) Label, Attention Fill, *ec-H2O* [p/n 1050003]

NOTE: Machine may have tick marks to align label.



OPERATE *ec-H2O* SYSTEM:

To ensure proper operation, operate the *ec-H2O* system according to 7100 *ec-H2O* Operator Manual.