TENNANT

NOBLES



Harness Kit, DC Connector

Models: T5e, Speed Scrub 24-32"

The purpose of this kit is to ensure the user props up the recovery tank to allow proper ventilation when charging batteries.

INSTALLATION INSTRUCTIONS:

Installation Time: 1/2 Hour

TOOLS REQUIRED: 9/16" & 10mm Wrench, 5/32" Hex Wrench, Phillips Screwdriver, Wire Cutter, Wire Stripper and Crimper, Hydrometer (for specific gravity), Voltmeter, Electrical Tape

PREPARATION

- 1. Park the machine on a clean level surface.
- 2. Turn off the machine and remove the key.
- 3. Disconnect charger's AC plug from the wall.
- 4. Disconnect the positive battery cable.

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

WARNING: Electrical Hazard. Disconnect Battery Cables Before Installing Kit.

FOR SAFETY: Wear protective gloves and eye protection when handling batteries and battery cables. Avoid contact with battery acid.

KIT INSTALLATION

1. Remove the (3) charger mounting screws (Figure 1).

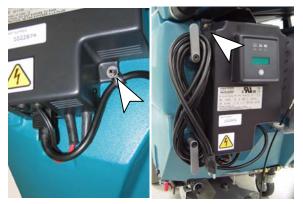


Fig. 1

2. Route the charger's AC cord up and through the channel behind the charger and into the battery compartment (Figure 2).

Kit Contents				
Part No.	Description	Qty.		
1049592	*BRACKET, MTG.	1		
1049586	*HARNESS, CABLE, CHRGR			
603331	*SPACER, PLUG, CHRGR			
33933	*SCREW, PAN, PHL, M3 X 0.50 X 25, SS	2		
579211	*NUT, HEX, LOCK, M3 X 0.50, NL, SS	2		
1022399	*SUPPORT, TANK, PROP, BL	1		
222460	*SLEEVE, P/M, 0.32B 0.50	2		
1039118	*SCREW, BTN, M8 X 1.25 X 30, BLK	1		
140027	*WASHER, FLAT, 0.35B 0.75D .04,SS	2		
1032763	*GASKET, STAND, SUPPORT	1		
08713	*NUT, HEX, LOCK, M8 X 1.25, NL	1		
11329	SCREW, HEX, M6 X 1.00 X 16, NL, SS	2		
01684	WASHER, FLAT, 0.27B 0.69D .05, SS	2		
614314	CONNECTOR, WIRE, WING NUT	2		
1049591	HARNESS, CABLE, BATTERY, W/ HANDLE	1		
1049610	HOOK, CORD	1		
06945	SCREW, HEX, M6 X 1.00 X 30, 8.8	2		
01684	WASHER, FLAT, 0.27B 0.69D .05, SS	2		
130040	TIE, CABLE, NYL, 06.0L .12W	4		
1051362	LABEL	2		
	*Parts pre-assembled			

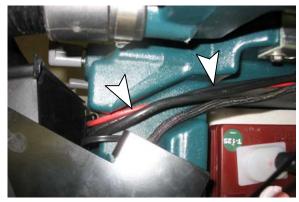


Fig. 2

3. Re-attach the charger and bracket with the AC cord secured below the charger as shown (Figure 3).



Fig. 3

Harness Kit, DC Connector INSTALLATION INSTRUCTIONS - Continued

4. Route the charger's AC cord through the cable clamp on the battery compartment wall. Secure the cord to the machine's wire harness using wire ties as shown (Figure 4).

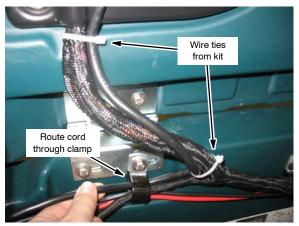


Fig. 4

 Remove (2) screws from the vac motor cover and install the cord hook from the kit, using (2) 06945 screws and (2) 01684 washers (Figure 5).



Fig. 5 6. Wrap AC cord on to cord hook (Figure 6).



Fig. 6

7. Remove (1) mounting screw from actuator cover plate as shown (Figure 7).

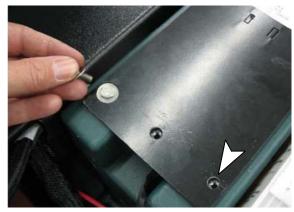


Fig. 7

 Install the charger bracket / DC connector assembly from the kit onto the actuator cover plate, using (2) 11329 screws and (2) 01684 washers (Figure 8).



Fig. 8

9. Cut the charger's DC wires (red and black) between the front clamp and the control box cover (Figure 9).

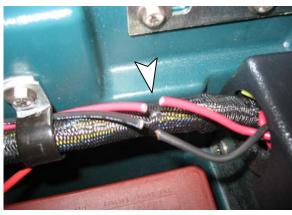


Fig. 9

Harness Kit, DC Connector INSTALLATION INSTRUCTIONS - Continued

10. Install wire nuts from the kit onto the red and black wires from the control box. Seal with electrical tape and tuck the wires into the control box (Figure 10).



Fig. 10

11. Strip back the ends of the red and black wires coming from the charger (Figure 11).





12. Crimp the barrel connectors on the DC connector wires to the red and black wires from the charger. Secure the wires to the machine wire harness using wire ties as shown (Figure 12).

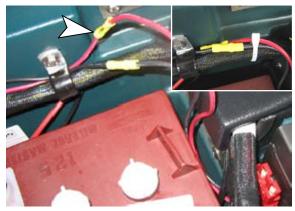


Fig. 12

13. Attach the 1049591 battery connector harness from the kit to the battery posts in positions shown, then reconnect main battery cables (Figure 13).

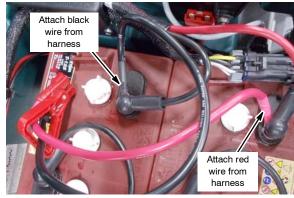


Fig. 13

14. Apply 1051362 label to the actuator cover plate as shown (Figure 14).





15. Remove and discard external cord hooks (Figure 15).



Fig. 15

Harness Kit, DC Connector INSTALLATION INSTRUCTIONS - Continued

16. IMPORTANT - BEFORE CHARGING THE BATTERIES:

If the machine's batteries are still under warranty, record the following battery information and e-mail to Tennant at: warrantyclaims@tennantco.com

Machine Serial No. Number of Hours on Batteries:

a) Check and note specific gravity of all cells:

,	,	,	,
,	,	,	,
,	,	,	

b) Check and note voltage of each battery:

____ , ____ , ____ , ____ volts.

c) Check and note complete battery pack voltage:

___ volts.

CHARGING BATTERIES

- Check the water level of each cell and add water as necessary per "Battery Maintenance" section in the service or operator manual. Do not overfill, as fluid expands when charging. Clean battery tops and connections.
- 2. Rotate support stand upward and attach the battery connector harness to the battery charger connector (Figure 16).

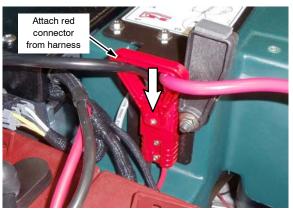


Fig. 16

3. Unwrap the battery charger's AC power cord from the cord hooks beneath the recovery tank and plug the cord into a properly grounded receptacle.

NOTE: The machine will not operate when charging.

4. Rest recovery tank on second support stand (Fig. 17).

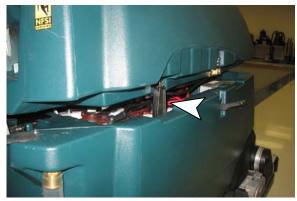


Fig. 17

5. After the charge cycle is complete, wrap AC cord on cord hook then disconnect the battery charger connector. Lower the support stand (Figure 18).



Fig. 18

SERVICE TECHNICIAN:

• Instruct user on proper battery charging procedure.

• Leave "Battery Charging Instructions" with user.

KIT NO. 9005456



(Harness Kit, DC Connector) Battery Charging Instructions

Models: T5e, Speed Scrub 24-32"

This kit ensures the recovery tank is propped up to promote proper ventilation when charging batteries.

CHARGING BATTERIES

- 1. Check the battery levels before charging as instructed in your operator manual.
- 2. Rotate support stand upward and attach the battery connector harness to the battery charger connector (Figure 1).

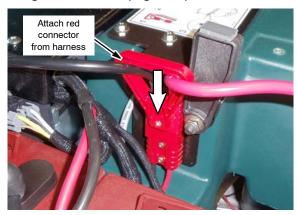


Fig. 1

3. Unwrap the battery charger's AC power cord from the cord hooks beneath the recovery tank and plug the cord into a properly grounded receptacle.

NOTE: The machine will not operate when charging.

4. Rest recovery tank on second support stand (Figure 2).



Fig. 2

 After the charge cycle is complete, wrap AC cord on cord hook then disconnect the battery charger connector. Lower the support stand (Figure 3).

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Fig. 3