

# **INSTRUCTION BULLETIN**

No. 9010955 Machine: T12 Published: 10-2022 Rev. 02

# 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 9009866

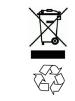
Kit installation must be performed by Tennant*True<sup>®</sup>* service or an authorized service provider.

### SYNOPSIS:

This kit contains the parts needed to install an on-board battery charger on T12 scrubbers. Please follow step-by-step instructions.

## SPECIAL TOOLS/CONSIDERATIONS: NONE

(Estimated time to complete: 1.5 hours)



# **PROTECT THE ENVIRONMENT**

Please dispose of packaging materials, old machine components, and hazardous fluids in an environmentally safe manner according to local waste disposal regulations.

Always remember to recycle.

### **PREPARATION:**

1. Park the machine on a clean level surface, turn off the machine, and remove the key.

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

2. Disconnect the battery cable from the machine.



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

### **INSTALLATION:**

1. Remove the SEMS M8 hex screw securing the side cover to the machine. Remove the side cover from the machine. Set the SEMS M8 hex screw aside. (Fig. 1)

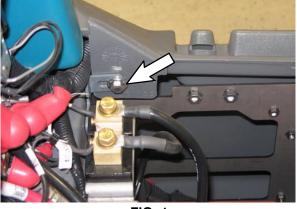


FIG. 1

- Remove the bracket from the side cover. Set the bracket and mounting hardware aside. Discard the side cover.
- 3. Use three M5 pan screws (2) and three flat washers (3) to install the charger (1) onto the electronic component mounting plate. (Fig. 3)
- Remove the backing from the foam seal (16) and install the foam seal into the heat outlet duct (13). (Fig. 3)
- Use two M5 hex screws (2), four flat washers (3), and two M5 hex nuts (15) to install the heat duct mounting plate (14) onto the heat outlet duct (13). (Fig. 3)

- Use two M5 hex screws (2) and two flat washers (3) to install the items assembled in the previous several steps onto the electronic component mounting plate. (Fig. 3)
- 7. Route the charger (1) wires and cable up into the battery compartment. (Fig. 3)
- 8. Disconnect the main wire harness from the snap switch installed on the electrical plate located behind the operator seat. (Fig. 2)

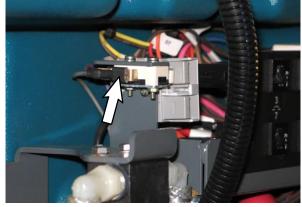


FIG. 2

- 9. Remove the snap switch from the electrical plate. Discard the snap switch and mounting hardware. (Fig. 2)
- Connect the charger (1) wires to the wires disconnected from the snap switch. (Fig. 2/ Fig. 3)
- 11. Connect the cable assembly (12) to the batteries. (Fig. 3)
- 12. Connect the cable assembly (12) to the charger (1) cable. (Fig. 3)

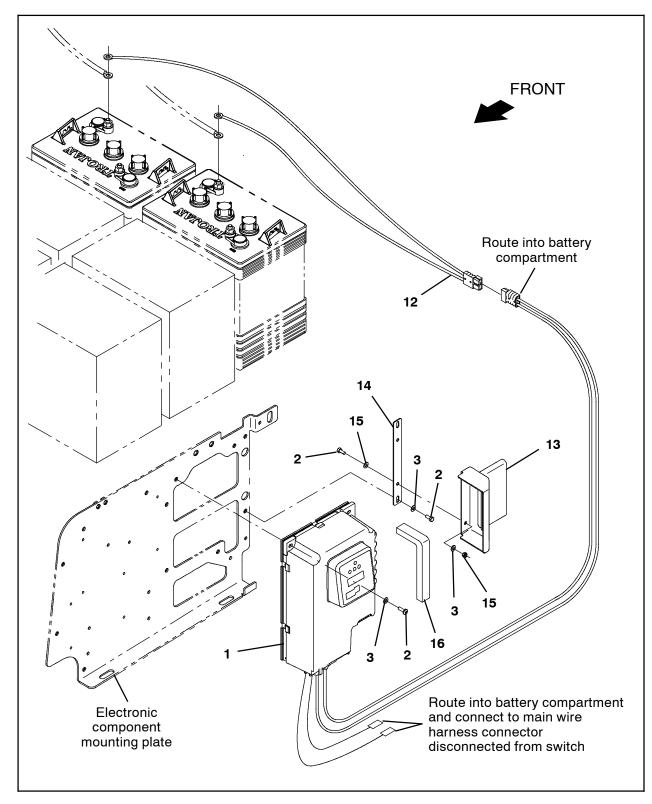


FIG. 3

- Use a M8 hex screw (9) to install each flat washer (8) and sleeve (7) onto the bottom of the seat channel. (Fig. 4)
- 14. Loosen the hardware securing the operator seat shroud to the seat channel enough to be able to install the tie clip (11) into the seat channel in the following step.
- 15. Insert the tie clip (11) into the seat channel. (Fig. 4)
- 16. Tighten the loosened hardware securing the operator seat shroud to the seat channel.
- 17. Insert the cable tie (10) into the tie clip (11) and use the cable tie to secure the charger power chord (4) to the seat channel. (Fig. 4)

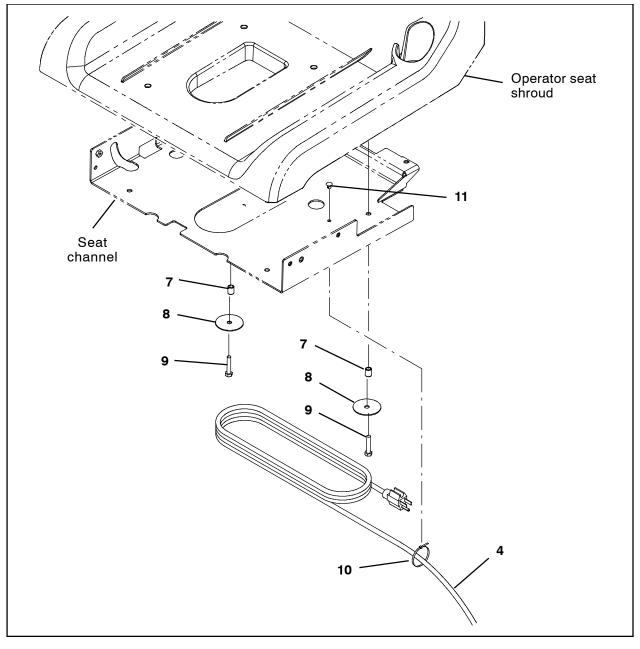


FIG. 4

18. Install the molding (6) into the charger access cover (5). (Fig. 5)

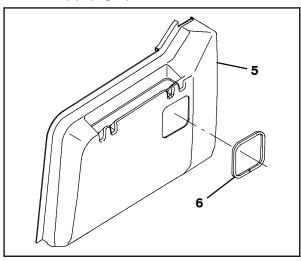


FIG. 5

- 19. Install the bracket removed from the discarded side panel onto the charger access cover (5).
- 20. Install the charger access cover (5) onto the machine. (Fig. 10)
- 21. Reconnect the battery cable to the machine.
- 22. Verify the on- board battery charger (1) settings.
- 23. Connect the on- board charger power cord (4) to an appropriately rated outlet.
- 24. Press the arrow button to verify the codes/setting. Refer to MAINTENANCE section of Operator Manual for settings/codes information. (Fig. 6)



FIG. 6

25. Disconnect the on- board charger power cord (4) from the outlet.

26. To change on- board battery charger (1) setting, peel up the corner of the display label to access the switches. The default setting for the on- board charger is for Lead Acid 240Ah batteries. (Fig. 7/Fig. 8)



FIG. 7

Lead Acid 240Ah (Default):	ON D D D D D D D D D D D D D D D D D D D
Lead Acid 360Ah:	ON 0 0 0 0 0 0 0 0 0 0 0 0 0
Gel:	ON 1 2 3 4 5 6 7 8
Lithium- Ion:	ON

# FIG. 8

Adjust the switches to the correct setting for the batteries. Refer to MAINTENANCE section of Operator Manual for applicable safety information and more detailed instructions how to use the on- board battery charger and change the on- board battery charger settings.

- 27. Reconnect the on- board charger power cord (4) to an appropriately rated outlet and verify changed setting.
- 28. When through verifying/changing on- board battery charger settings, disconnect the on- board charger power cord (4) from the outlet, neatly wrap the cord (4) onto the spacers (7)/ washers (8) installed for storing the power cord. (Fig. 9/Fig. 10)



FIG. 9

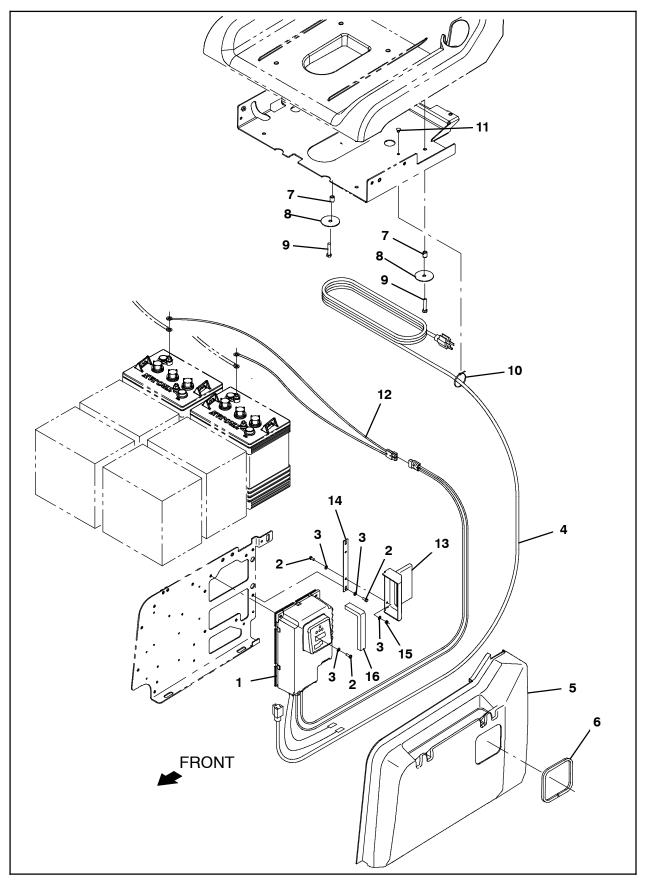


FIG. 10

	Tennant		
Ref.	Part No.	Description	Qty.
1	1246421	Charger, 36VDC 20A 115- 240VAC [Onb]	1
2	06933	Screw, Pan, Phl, M5 X 0.80 X 16, 4.8	7
3	01683	Washer, Flat, 10, SS	9
4	1073882	Cord, Power, 14/3, 15A, 15ft Blk [US]	1
5	1201501	Cover, Access, Chrgr, Trimmed	1
6	1020170	Molding, Afmkt, Trim, PVC, .08 .11, 02ft	1
7	80395	Sleeve, P/M, 0.32b 0.50d 0.7l [430SS]	2
8	373117	Washer, Flat, 0.38b 2.25d .07, Stl, Pnt	2
9	09026	Screw, Hex, M8 X 1.25 X 40, SS	2
10	763115	Tie, Cable, 6.0l, 1.25d Max	1
11	1202868	Clip, Tie, 0.25d, Plstc	1
12	1070508	Cable Assy, 6ga [6100e-Telemetry]	1
13	1206990	Duct, Outlet, Heat	1
14	1206052	Plate, Mtg, Heat Duct	1
15	09739	Nut, Hex, Lock, M5 X 0.80, NI, SS	2
16	1206096	Seal, Foam, 0.50 0.75w 8.0l, PVC, Adh	1

# Bill Of Materials For Charger Kit, On-Board, US CI [T12] - 9009866

TENNANT COMPANY 10400 Clean Street Eden Prairie, MN 55344-2650