

INSTRUCTION BULLETIN

No. 9052011 Machine: T16AMR Published: 03-2022 Rev. 00

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 9052012 and kit number 9052016

Kit installation must be performed by Tennant *True*[®] service or an authorized service provider.

SYNOPSIS:

This kit contains the parts needed to install the Lithium- Ion battery kit into T16AMR scrubbers. Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: Torque Wrench, Electrical Pin Extraction Tool (Molex[®] Extractor Tool - 011030044E)

(Estimated time to complete: 4 hours)



PROTECT THE ENVIRONMENT

Please dispose of packaging materials, used machine components such as batteries and fluids in an environmentally safe way according to local waste disposal regulations.

Always remember to recycle.

PREPARATION:

 Ensure the new lithium batteries (1) are turned off. All batteries must be OFF prior to installation. (Fig. 1)

Quickly press the power button and observe the charge indicator bars near the button. None of the lights should be illuminated, indicating the battery is off.



If any of the lithium batteries are on (the charge indicator bars are illuminated), press and hold the power button for 20 seconds to turn the battery off. Quickly press the power button again to ensure the battery is off.

Use voltmeter to measure the battery terminal voltage to ensure the batteries are turned off (there must be no voltage present on the terminals).

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

- 2. Raise the operator seat and engage the seat support bar to secure the operator seat in the raised position.
- 3. Disconnect the battery cable from the machine.

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4. Disconnect the wire harness from the seat switch. (Fig. 2)



FIG. 2

- 5. Lift the seat/seat plate from the machine. Set the seat/seat plate aside.
- 6. Remove the hardware securing the seat shroud cover to the machine. Set the hardware aside. (Fig.3)



FIG. 3

- 7. Lift the seat shroud cover from the machine.
- 8. Remove the bracket that previously secured the seat shroud cover to the machine from the seat shroud cover. Set the bracket and hardware aside. Discard the seat shroud cover. (Fig.3)
- 9. Install the bracket removed from the previously removed seat shroud onto the new seat shroud (35). (Fig. 4)



FIG. 4





- 10. Remove the battery connector cable assembly connected to the battery (+) terminal and (-) terminal from the batteries. Set the battery connector cable assembly aside. (Fig. 5)
- 11. Remove the existing batteries, foam spacers, battery tray, interconnecting battery cables, and hardware from the machine. Discard parts removed in this step. (Fig. 5)

FOR SAFETY: Before leaving or servicing machine, Use a hoist and adequate assistance when lifting batteries, Keep all metal objects off batteries. Use a non-conductive battery removal device.





- 12. Remove the hardware securing the Kinetek controller to the charger mounting bracket and carefully pull the Kinetek controller from the charger mounting bracket. Do not break any cable/harness connections when pulling the controller from the charger mounting bracket. Set the hardware aside.
- 13. Photograph/note/mark harness connection locations to the Kinetek controller onto the wire harness. The harness must be connected to the same locations on the new Kinetek controller (15).
- 14. Disconnect all wire harness connections from the Kinetek controller. Discard the removed Kinetek controller.
- 15. Remove the cable attached to the switch mounting bracket from the machine. Set the cable aside. Discard the mounting hardware. (Fig. 6)

- 16.Disconnect the main wire harness connections from the snap switch. (Fig. 6)
- 17. Remove the snap switch/switch mounting bracket from the seat support bracket. Discard the snap switch/switch mounting bracket and all mounting hardware. (Fig. 6)
- Remove the cable from the charger mounting bracket. Discard the hardware previously securing the cable to the charger mounting bracket. (Fig. 6)
- 19. Remove the charger mounting bracket from the machine. Discard the charger mounting bracket and all mounting hardware. (Fig. 6)



FIG. 7

- 1. Install two M6 u- nuts (17) onto the seat support bracket. (Fig. 7)
- Use two SEMS M6 hex screws (18) to secure the controller support plate (16) to the two M6 u- nuts (17) installed onto the seat support bracket in the previous step. (Fig. 8/Fig. 7)



FIG. 8

 Observe the new Kinetek controller (15) for label "For use on Tennant T16AMR with Lithium Batteries Only". The new controller must have this label. (Fig. 9)



FIG. 9



FIG. 10

- Connect the leg electric harness (51) to the main wire harness P3 20- pin connector terminals 15 and 19. (Fig. 10)
- 5. Connect all main wire harness connections to the new Kinetek controller (15). (Fig. 11)





6. Use saved hardware to install the Kinetek controller (15) onto the charger mounting bracket where the removed Kinetek controller was previously located. (Fig. 7)





 Connect the UI power electric harness (39) B+ lead to the main contactor B+ switched terminal and the B- lead to the B- standoff. (Fig. 12/Fig. 13)



FIG. 13

8. Route the UI power electric harness (39) through the hole in the seat support bracket and into the battery compartment. (Fig. 13)

9. Route the saved battery connector cable assembly previously installed on the batteries through the openings in the seat support bracket. Leave connector end of the cable assembly setting in the battery compartment. (Fig. 14)



FIG. 14

10. Connect the battery connector cable assembly from the previous step red cable to the main contactor B+ terminal and the black cable to the B- standoff. (Fig. 15)







 Install four nylon spacers (23) onto the M5 studs on the board mounting plate (19). (Fig. 17/Fig. 16)



FIG. 17

12.Install the communication board (20) onto the board mounting plate (19). (Fig. 8/Fig. 16)



FIG. 18

13. Use four M5 hex nuts (24) and four nylon spacers (23) to secure the communication board (20) onto the board mounting plate (19). Do Not over tighten the M5 hex nuts. Communication board could be damaged if the M5 hex nuts are over tightened. (Fig. 19/ Fig. 16)



FIG. 19

- 14.Use four SEMS M6 hex screws (18) to install the board mounting plate (19) onto the controller support plate (16). (Fig. 16)
- 15. Use one M4 pan screw (26), two flat washers (27), one sleeve (25), and one M4 hex nut (28) to secure the board mounting plate (19) to the seat support bracket. (Fig. 16)
- 16.Connect the digital pot 5V enable electrical harness (50) to the communication board (20) J4 terminal. (Fig. 20)



FIG. 20

17. Connect the leg electric harness (51) 4- pin connector to the communication board (20) J5 terminal. (Fig. 21)



FIG. 21

- 18. Route the UI power electric harness (39) around to the communication board (20).
- 19. Connect the UI power electric harness (39)10- pin connector to the communication board (20) main J7 terminal. (Fig. 22)



FIG. 22

20. Connect the signals UI to BMS electrical harness (37) to the communication board (20) J3 and J10 terminals. (Fig. 23/Fig. 24)



FIG. 23



21.Connect the USB harness (38) to the communication board (20) USB terminal. (Fig. 25)



FIG. 25

22. Use a cable tie (22) to secure the the UI to BMS electrical harness (37) to the board mounting plate (19). (Fig. 26)



FIG. 26





- 23. Install the latch assembly (7) onto the connector cover plate (5). (Fig. 27)
- 24. Use two M4 hex screws (8), two flat washers (9), and two M4 hex lock nuts (10) to install the connector cover plate (5) onto the hinge (6). (Fig. 27)
- 25. Use two M4 hex screws (8) and two flat washers (9) to install the hinge (6)/connector cover plate (5) onto the battery support bracket (2). (Fig. 27)
- 26.Use two M3 hex screws (12), two flat washers (13), and two M3 hex nuts (14) to install the snap switch (11) onto the battery support bracket (2). (Fig. 27)
- 27. Adjust the snap switch (11) so the roller is aligned with and slightly protrudes from the hole in the battery support bracket (2). (Fig. 27)

28. Completely close connector cover plate (5). The connector cover plate should push the snap switch (11) roller back from the hole in the battery support bracket (2). (Fig. 28/ Fig. 27)



FIG. 28





- 29. Use two SEMS M8 hex screws (34) to install the battery support bracket (2) onto the seat support bracket. (Fig. 29)
- 30.Use one SEMS M8 hex screw (36) to install the battery stop bracket (4) into the battery compartment. (Fig. 30/Fig. 29)



FIG. 30

31.Use two SEMS M8 hex screws (34) to install the battery stop bracket (4) onto the battery support bracket (2). (Fig. 31/Fig. 29)



FIG. 31

32. Connect the main wire harness connectors previously connect to the removed snap switch to the snap switch (11). (Fig. 32)



FIG. 32

33.Use two wire ties (22) to secure the wires connected to the snap switch (11) to the battery support bracket (2). (Fig. 33/Fig. 32)



FIG. 33

34. Use two M6 hex screws (47), four flat washers (48), and two M6 hex nuts (49) to install the saved battery connector cable assembly onto the battery support bracket (2). (Fig. 34/Fig. 35/Fig. 36)



FIG. 34



FIG. 35



FIG. 36

35.Use saved hardware to install previously disconnected cable to the battery support bracket (2). (Fig. 37/Fig. 38)



FIG. 37



FIG. 38

36. Route the USB harness (38) under the signals UI to BMS electrical harness (37) and communication board (20) and through the board mounting plate (19). (Fig. 39)



FIG. 39

37.Install the adhesive rubber seal (29) onto the board mounting bracket (21). (Fig. 40)





38.Use one M6 SEMS hex screw to install the board mounting bracket (21) onto the board mounting plate (19). (Fig. 41)



FIG. 41



FIG. 42

39. Install the spacer (33) directly underneath the controller support plate (16)/communication board (20) assembly. (Fig. 43/Fig. 42)



FIG. 43

40.Install the two larger spacers (32) next to the smaller spacer (33). (Fig. 44/Fig. 42)



FIG. 44

41.Install the spacer (30) against the the battery support bracket (2). (Fig. 45/Fig. 42)



FIG. 45

42. Install the two spacers (31) against the recovery tank. (Fig. 46/Fig. 42)



FIG. 46

- 43. Ensure the lithium batteries (1) are OFF. Refer to Step 1 at beginning of procedure for instructions how to check/turn off the lithium batteries.
- 44.Install one lithium battery (1) and the three spacers (30) into the battery compartment and against the solution tank. (Fig. 47/Fig. 42)



FIG. 47

45.Install the remaining three lithium batteries (1) into the battery compartment. (Fig. 48)





46.Connect the resister plug (44) to the communication port on lithium battery (1D). (Fig. 49/Fig. 51)



FIG. 49

47.Connect the 19.7 in. cable assembly (43) to the other communication terminal on lithium battery (1D). (Fig. 50/Fig. 51)



FIG. 50



FIG. 51

48. Connect the 19.7 in. cable assembly (43) connected to lithium battery (1D) to the communication terminal on lithium battery (1C). (Fig. 52/Fig. 51)



FIG. 52

49.Connect a 19.7 in. cable assembly (43) 19.7 in cable assembly (43) to the other communication terminal on lithium battery (1C). (Fig. 53/Fig. 51)



FIG. 53

50.Connect the 19.7 in. cable assembly (43) connected to lithium battery (1C) to the communication terminal on lithium battery (1B). (Fig. 54/Fig. 51)



FIG. 54

51.Connect the 19.7 in. cable assembly (43) to the other communication terminal on lithium battery (1B). (Fig. 55/Fig. 51)



FIG. 55

52. Connect the 19.7 in. cable assembly (43) connected to lithium battery (1B) to the communication terminal on lithium battery (1A). (Fig. 56/Fig. 51)



FIG. 56

53.Connect the UI to BMS electrical harness (37) to the remaining open communication terminal on lithium battery (1A) . (Fig. 57/Fig. 51)



FIG. 57



FIG. 58

NOTE: To achieve correct torques it may be necessary to slightly bend (approximately 20° (degrees)) the cable ends of cables to be connected to the lithium batteries (2). (Fig. 59)



FIG. 59

- 54. Slide a red battery terminal boot (45) onto one 18 in. red battery cable (41). (Fig. 58)
- 55. Connect the 18 in. red battery cable (41) from the previous step to the lithium battery (1A) positive terminal. Torque the hex screw to 22 Nm (16 ft. lbs.). (Fig. 60/Fig. 58)



FIG. 60

56. Slide a red battery terminal boot (45) onto another 18 in. red battery cable (41). (Fig. 58)

57. Connect the 18 in. red battery cable (41) from the previous step and the 18 in. red battery cable connected to the lithium battery (1A) positive terminal to the lithium battery (1B) positive terminal. Torque the hex screw to 22 Nm (16 ft. lbs.). (Fig. 61/Fig. 58)





- 58.Slide a red battery terminal boot (45) onto the 18 in. red battery cable (41) connected to the lithium battery (1B) positive terminal. (Fig. 58)
- 59. Connect the 18 in. red battery cable (41) connected to the lithium battery (1B) positive terminal and another the 18 in. red battery cable to the lithium battery (1C) positive terminal. Torque the hex screw to 22 Nm (16 ft. lbs.). (Fig. 62/Fig. 58)



FIG. 62

- 60. Slide a red battery terminal boot (45) onto the other end of the 18 in. red battery cable (41) connected to the lithium battery (1C) positive terminal. (Fig. 58)
- 61. Connect the 18 in. red battery cable (41) connected to the lithium battery (1C) positive terminal and the cable assembly (40) red cable to the lithium battery (1D) positive terminal. Torque the hex screw to 22 Nm (16 ft. lbs.). (Fig. 63/Fig. 58)



FIG. 63

- 62. Slide a black battery terminal boot (46) onto one 18 in. black battery cable (42). (Fig. 58)
- 63. Connect the 18 in. black battery cable (42) from the previous step and cable assembly (40) black cable to the lithium battery (1A) negative terminal. Torque the hex screw to 17 Nm (12.5 ft. lbs.). (Fig. 64/Fig. 58)



FIG. 64

64. Slide a black battery terminal boot (46) onto another 18 in. black battery cable (42). (Fig. 58) 65. Connect the 18 in. black battery cable (42) from the previous step and the 18 in. black battery cable (42) connected to the lithium-ion batter (1A) negative terminal to the lithium battery (1B) negative terminal. Torque the hex screw to 17 Nm (12.5 ft. lbs.). (Fig. 65/ Fig. 58)



FIG. 65

- 66. Slide another black battery terminal boot (46) onto the other end of the 18 in. black battery cable (42) connected to the lithium battery (1B) negative terminal. (Fig. 58)
- 67. Connect the 18 in. black battery cable (42) connected to the lithium battery (1B) negative terminal another the 18 in. black battery cable (42) to the lithium battery (1C) negative terminal. Torque the hex screw to 17 Nm (12.5 ft. lbs.). (Fig. 66/Fig. 58)



FIG. 66

68. Slide a black battery terminal boot (46) onto the other end of the 18 in. black battery cable (42) connected to the lithium battery (1C) negative terminal. (Fig. 58) 69. Connect the 18 in. black battery cable (42) connected to the lithium battery (1C) negative terminal to the lithium battery (1D) negative terminal. Torque the hex screw to 17 Nm (12.5 ft. lbs.). (Fig. 67/Fig. 58)



FIG. 67

70. Remove the front shroud from the machine. Set the front shroud and all mounting hardware aside. (Fig. 68/Fig. 69/Fig. 70)



FIG. 68



FIG. 69



FIG. 70

71.Install an inductor (53) onto the right headlight cable. (Fig. 71)



FIG. 71

- 72. Reinstall the front shroud onto the machine.
- 73. Turn on the lithium batteries (1). Press and hold the battery power buttons for 5 seconds to turn each battery on. The battery charge indicator bars are illuminated when battery is on. (Fig. 72)



FIG. 72

74. Install the molding (3) into the seat shroud (35). (Fig. 73)



FIG. 73

- 75.Use saved hardware to install the seat shroud onto the machine.
- 76. Reinstall the seat onto the machine and reconnect the main wires harness to the seat switch.
- 77. Turn the key switch ON.
- 78. Double click the Service Diagnostics desktop shortcut or find the software in All Programs to launch the software.
- 79. Allow the Service Diagnostics tool to connect to the control module network. (Fig. 74)



FIG. 74

80. The Service Diagnostics tool automatically detects a new board was installed. A Service Diagnostic window with text "A new board has been installed in this machine and must be properly configured. This wizard will guide you through the process." appears on the screen. (Fig. 75)

Fennant Engineering 2.0.4.2	
CONNECTED: T350 chui0001455	Oxf720: Scrub Controller Board CAN Communication Lost
COMPANY	A new board has been installed in this machine and must be properly configured. This wizard will guide you through the process.
	Seriel Number Tre 1200.1222
	Model v
	*

FIG. 75

Enter the serial number, select the model from the pull down menu, and click the arrow button to proceed with reconfiguring the machine for the lithium batteries. (Fig. 76)

Serial Number	Ex: T300-1234	
Model		~
		•
		+

FIG. 76

I.

81. The firmware update screen appears and will begin programming the machine for the lithium batteries. The process status indicator and firmware update status box appear on the left side of the screen. (Fig. 77)



FIG. 77

Allow the lithium battery firmware update to proceed. A process status indicator with a percent status of the update also appears next to the selected lithium battery firmware update. Firmware update process typically takes 2 or 3 minutes. (Fig. 78)



FIG. 78

82.A check appears where the process status indicator with the percent status was previously located when the lithium firmware update is complete. (Fig. 79)





83.A text box with "Press OK, then Key cycle machine." appears. Select the OK button and then key cycle the machine to complete the Lithium- Ion battery firmware update. (Fig. 80)

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		ENN/	ANT.	
		СОМРА	ANY	
Press (OK, then Key c	ycle machii	ne.	
		OK		

NOTE: Firmware update status box on left side of the screen will be at "Reset Machine" when text box to key cycle machine appears. All previous listed items are checked/completed. (Fig. 81)



FIG. 81

84.A screen with "Machine Setup Complete" appears when the lithium battery firmware update is complete. (Fig. 82)



FIG. 82

85.Use the Service Diagnostics tool to access the lithium battery screen. (Fig. 83)



FIG. 83

86.Observe the lithium battery information pane on the left side of the screen. Both the "Number of Batteries" and "Number of Active Batteries" should be four (4.00), and the number of "Number of Faulted Batteries" should be zero (0.00). (Fig. 84)



FIG. 84

- 87.Disconnect the USB cable from the service device and the USB harness (18).
- 88. Machines with Charger, 36VDC 1200W 100-240VAC [Off Brd] (56) only: Connect the extension cable assembly (58) and extension cord (57) to the 36VDC battery charger (56).
- 89. Use the 36VDC battery charger (56) to charger the lithium batteries (1). Refer to Operators Manual for battery charging instructions.

VIEW CURRENT CHARGER PROFILE/ CHANGE CHARGER PROFILE: (Complete only if installing kit 9052012 with battery charger 1242861)

Follow these steps to identify the current charger profile.

NOTE: **<u>Do</u>** <u>Not</u> connect the battery charger to the batteries before completing this checking/ changing the battery charger profile procedure.

90. Plug the new battery charger (56) into the proper power outlet to power up the charger.

NOTE: Charger power cable included in kit may not be suitable for use in some locations. If necessary, retain charger cable from previous charger or locally obtain suitable power cable.

91.Press and release the Charger Profile Selection Button. (Fig. 85)



FIG. 85

92. View the flashing battery charging status indicator light sequence to identify the profile in use. (Fig. 86)



FIG. 86

The charger profile is displayed as a series of quick flashing red lights followed by a sequence of slower green flashing lights that identify the active charger profile. This sequence is repeated twice.

Charger Profile 7:

άφ φαφάφάφ	Repeated Twice
RR GGGGGGG	Repeated Twice

A profile with a number ten or greater is displayed similar, but with a pause between the green flashes for the first digit, the second digit, and then the third digit.

Charger Profile 187:

<u> </u>	Repeated Twice
R R G II G G G G G G G G II	Repeated
G G G G G G G G	Twice

Follow these steps to change the charger profile.

- 93. Plug the charger into the proper power outlet to power up the charger if charger is not already plugged into a power outlet.
- 94. Press and hold the Charger Profile Selection Button (Fig. 87) for five seconds to enter the profile selection mode. A sequence of rapid flashing red lights followed by slower amber lights (Fig. 88) will flash identifying the charger is in the profile selection mode.



FIG. 87



FIG. 88

95. Release the Charger Profile Selection Button after battery charger has entered the profile selection mode. (Fig. 89)



FIG. 89

96. The flashing red and amber sequence identifies the profile currently in use in the same flashing pattern as the current profile. This sequence is repeated four times in the profile selection mode rather than twice as in the current profile setting. (Fig. 90)



FIG. 90

97.Press the Charger Profile Selection Button (Fig. 89) while in the profile selection mode (4 flashing sequence), to display the next available profile. The flashing pattern for the next available profile will begin a new sequence flashed four times (Fig. 90). 98. Press the Charger Profile Selection Button (Fig. 89) to locate the 187 LITHIUM, SDI profile and start the four flashing sequence of that profile (Fig. 90).

<u>\$\$\$\$</u> \$	Repeated 4 Times
RR AIIAAAAAAAAII	Repeated 4
AAAAAAA	Times

99. Press and hold the Charger Profile Selection Button (Fig. 89) for seven seconds to select the desired profile. The LED changes red and after the seven seconds the new profile sequence is displayed in green (repeated twice) (Fig. 90).

NOTE: If the Charger Profile Selection Button is released before the 7 seconds, the Charge Status LED reverts back to the last profile displayed in red.

- Press the Charger Profile Selection Button to confirm the desired profile has been selected. (Fig. 89)
- 101. Connect the battery charger (56) to the lithium- ion battery charging cable to begin charging the batteries. Refer to Operators Manual for battery charging instructions.



FIG. 91





Bill Of Materials For Conv Kit, Batt, Li-Ion, CI,33A Chrg [T16AMR] - 9052012 or Conv Kit, Batt, Li-Ion,CI,90A Chrg [T16AMR] - 9052016

		Tennant		
	Ref.	Part No.	Description	Qty.
	1	1257716	Battery, Lithium, 36VDC, 80ah	4
	2	1257743	Bracket Wldt, Sppt, Battery	1
	3	1020170	Molding, Afmkt, Trim, PVC, .08 .11, 02ft	1
	4	1257780	Bracket, Battery, Stop	1
	5	1253265	Plate, Cover, Connector	1
	6	1255143	Hinge, .06 3.0w 3.5l	1
	7	1256896	Latch, Cmpr [Small]	1
	8	09206	Screw, Hex, M4 X 0.70 X 12, 8.8	4
	9	19065	Washer, Flat, 0.19b 0.44d .05, Pl, 08	4
	10	33932	Nut, Hex, Lock, M4 X 0.70, NI, SS	2
	11	1258893	Switch, Snap, 16a, Rlr	1
	12	06922	Screw, Pan, Phl, M3 X 0.50 X 20, 4.8	2
	13	39658	Washer, Lock, Int, 04	2
	14	01754	Nut, Hex, Std, M3 X 0.50, 8	2
	15	1258587	Controller, Mach [KCCA0237, T16AMR, Rk2]	1
	16	1258181	Plate Wldt, Sppt, Controller	1
	17	12271	Nut, U, M6 X 1.00	2
	18	1034731	Screw, Hex, M6 X 1.00 X 16, SEMS, SS	5
	19	1256633	Plate Wldt, Mtg, Board, CHUI	1
	20	1248505	Circuitboard [UI, RTOS]	1
	21	1256604	Bracket, Mtg, Board	1
	22	1210807	Wire, Tie [W/.25" Fir Tree Clip]	3
	23	1252810	Spacer, Plstc, 0.20b 0.32d 0.47l, Nyl	8
	24	06549	Nut, Hex, M5 X 0.80 X 16, 8.8	4
	25	222460	Sleeve, P/M, 0.32b 0.50d 0.5l [430ss]	1
	26	06930	Screw, Pan, Phl, M4 X 0.70 X 30, 4.8	1
	27	19065	Washer, Flat, 0.19b 0.44d .05, Pl, 08	2
	28	33932	Nut, Hex, Lock, M4 X 0.70, NI, SS	1
	29	1020280	Seal, Afmkt, Rbr, Clsd, Adh, 01ft	1
	30	1243754	Spacer, Battery, 0.50 X 3.0 X 10.0	3
	31	630375	Spacer, Battery, 1.25 X 3.3 X 13.7	2
	32	1247131	Spacer, Battery, 2.25 X 4.75 X 10.5	2
	33	83415	Spacer, Battery, 2.0 X 2.0 X 11.0	1
	34	1020341	Screw, Hex, M8 X 1.25 X 20, SS, SEMS	4
	35	1058308	Shroud, Seat, Chrgr, Rm-Cptl, Trim [T16]	1
	36	1037346	Screw, Hex, M8 X 1.25 X 25, 9.8, SEMS	1
	37	1077080	Harness, Ele [Signals, UI To BMS]	1
	38	1228665	Cable [USB, Mini- B, Male 90d, Female]	1
∇	39	1077079	Harness, Ele [UI Power]	1
▲		9009990	Fuse, 0002A, 250VDC, Cartridge	1

		Tennant		
	Ref.	Part No.	Description	Qty.
∇	40	1258589	Cable Assy, 02ga .31ring /.41ring, 175A	1
		22892	Connector, Anderson, 175A, Gray	1
	41	1077083	Cable, 04ga 18.0l Red .41ring /.41ring	3
	42	223364	Cable, 04ga 18.0l Blk .34ring /.34ring	3
	43	1077084	Cable Assy, 8 Pos, Male To Male, 19.7I	3
	44	1077081	Resistor, Ele, Plug [120, 1/2W, 5%]	1
	45	68873	Boot, Terminal, Battery, 02-01ga, Red	4
	46	68872	Boot, Terminal, Battery, 02-01ga, Blk	4
	47	06947	Screw, Hex, M6 X 1.00 X 40, 8.8	2
	50	32483	Washer, Flat, 0.25, SAE	4
	51	08708	Nut, Hex, Lock, M6 X 1.00, NI	2
	52	1077078	Harness, Ele [Digital Pot 5V Enable]	1
	53	1077142	Harness, Ele, Leg	1
	54	763114	Tie, Cable, 11.3l, 2.75d Max	1
	55	1259462	Inductor, Clamp, 0.19id [162 Imp@25Mhz]	1
	56	1242861	Charger, 36VDC 1200W 100- 240VAC [Off Brd] - Kit 9052012 ONLY	1
	56	1253031	Charger, 36VDC/90A, 200-240VAC 1ph - Kit 9052016 ONLY	1
	57	1017079	Cord, Extn, 16ga/3, 10ft [SJT] - Kit 9052012 ONLY	1
	58	223679	Cable Assy, 06ga Red/Blk, 050A/175A - Kit 9052012 ONLY	1

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