

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 9021203**

Kit installation must be performed by TennantTrue[®] service or an authorized service provider.

SYNOPSIS:

This kit contains parts needed to install a blue spotlight kit on T17 scrubbers/M17 sweeper scrubbers. Please follow step-by-step instructions.

SPECIAL TOOLS/CONSIDERATIONS: NONE

(Estimated time to complete: 1.5- 2.5 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: M17/T17

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

1. **M17 Only:** Remove the hopper cover from the machine. Set the hopper cover aside.
2. Disconnect the battery cable from the battery.

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

3. Remove the access panel from the machine. Set the access panel and all hardware aside. (Fig. 1)



FIG. 1

- Remove the hardware securing the left control panel to the machine and carefully lift the panel from the steering shroud. **Do Not** break or damage any wires/cables/ connections when moving the left control panel. Set all mounting hardware aside. (Fig. 2)



FIG. 2

- Remove both M8 hex screws securing the circuit breaker bracket to the machine. Set the hardware aside. (Fig. 3)

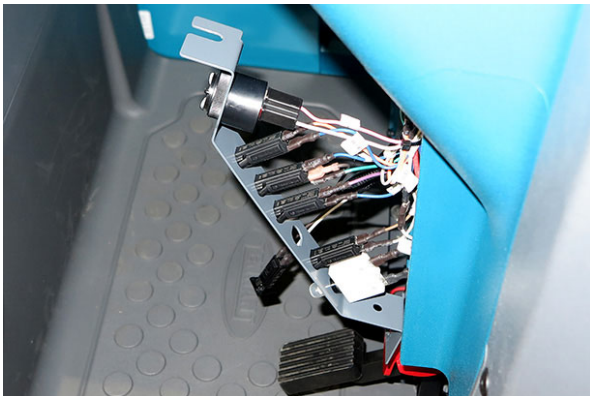


FIG. 3

- Carefully pull the circuit breaker bracket out enough to access the main wire harness connections to the circuit breakers. Do not break harness connections to the circuit breakers when pulling the circuit breaker bracket from the machine. (Fig. 3)

INSTALLATION: T17

- Use the blue light front mounting bracket (3) as a template on the front shroud and measure/mark the locations for the three 0.375 in. (9.5 mm) holes onto the front shroud. (Fig. 4)

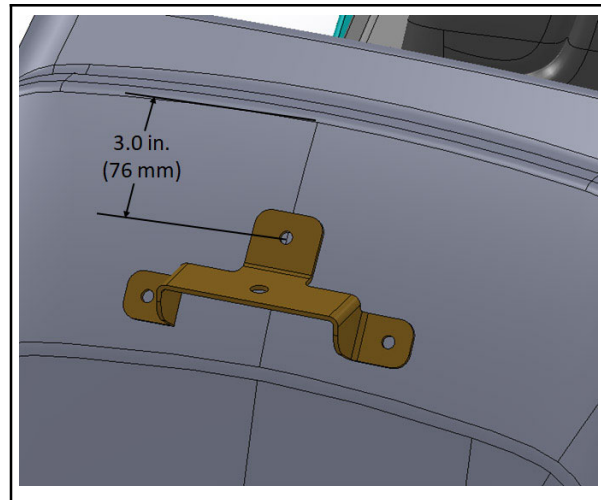


FIG. 4

- Drill three 0.375 in. (9.5 mm) holes into the areas marked onto the front shroud in the previous step. **Do Not** drill into any parts/ components located behind the front shroud. (Fig. 5)

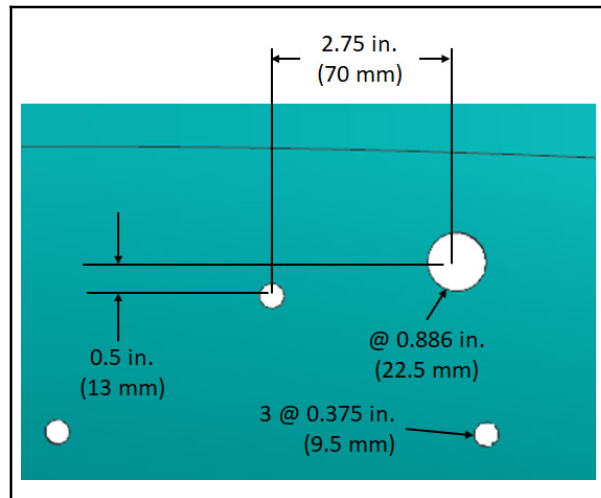


FIG. 5

- Measure and mark a location for the 0.886 in. (22.5 mm) to be drilled into the front shroud. (Fig. 5)
- Drill a 0.886 in. (22.5 mm) into the front shroud. **Do Not** drill into any parts/ components located behind the front shroud. (Fig. 5)

11. Use three M8 pan screws (4), three flat washers (5), and three M8 hex nuts (6) to install the blue light front mounting bracket (3) onto the front shroud. (Fig. 6)
12. Remove the hex nut included with the blue LED spotlight (1) from the light. (Fig. 6)
13. Use the hex nut removed from the blue LED spotlight (1) in the previous step and a lock washer (2) to install the blue LED spotlight (1) onto the blue light front mounting bracket (3). (Fig. 6)
14. Remove the nut from the sealed chord grip on the blue spotlight harness (7). (Fig. 6)
15. Route the blue spotlight harness (7) connector to be connected to the blue LED spotlight (1) through the 0.886 in. (22.5 mm) in the front shroud and slide the removed nut back onto the harness. (Fig. 6)
16. Connect the blue spotlight harness (7) to the blue LED spotlight (1) installed on the front shroud. (Fig. 6)
17. Use the sealed chord grip/nut on the blue spotlight harness (7) to secure the harness to the front shroud. (Fig. 6)

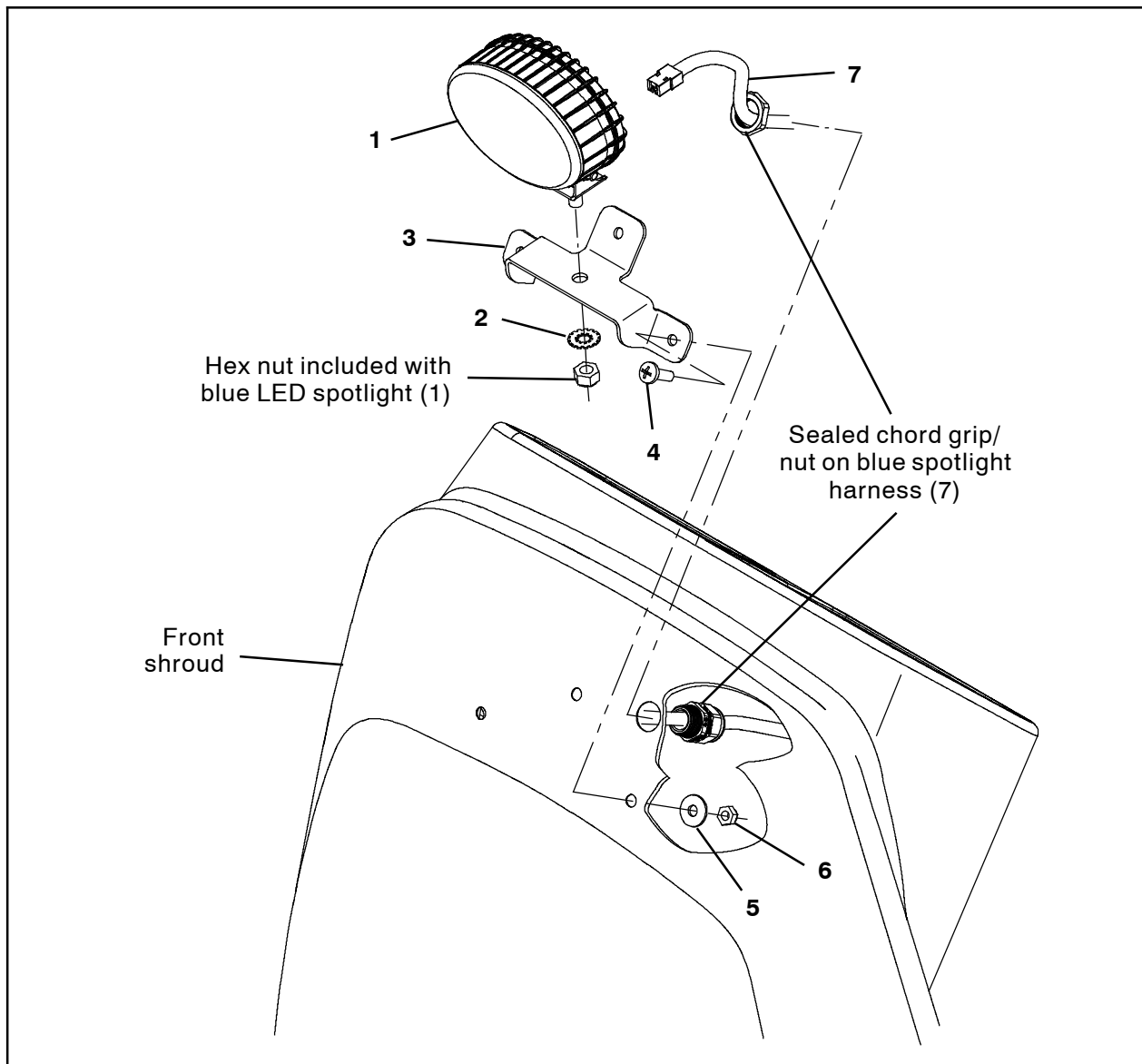


FIG. 6

18. Route the blue spotlight harness (7) down the left side of the steering channel between the front shroud and steering channel, and into the operator compartment. (Fig. 7/ Fig. 8)

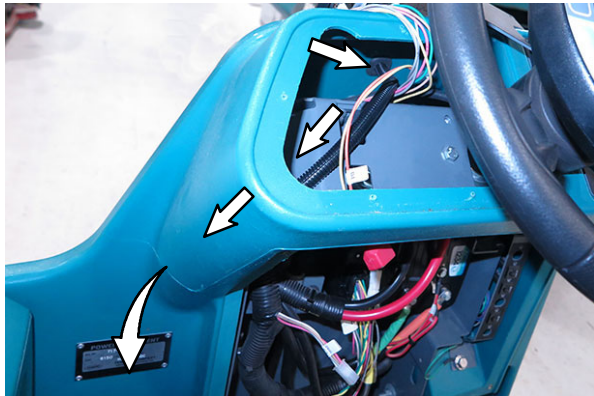


FIG. 7

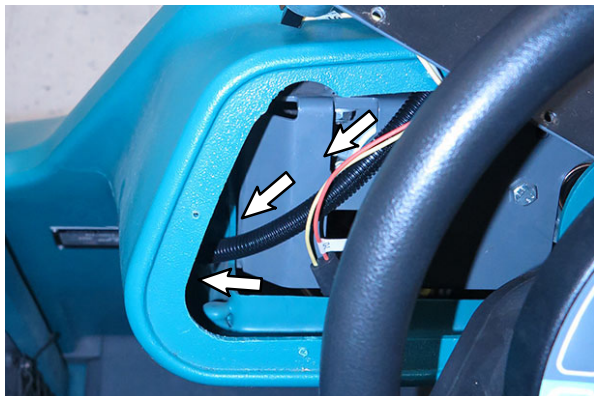


FIG. 8

19. Disconnect the main wire harness 65 GRN wire from circuit breaker 11. (Fig. 9)

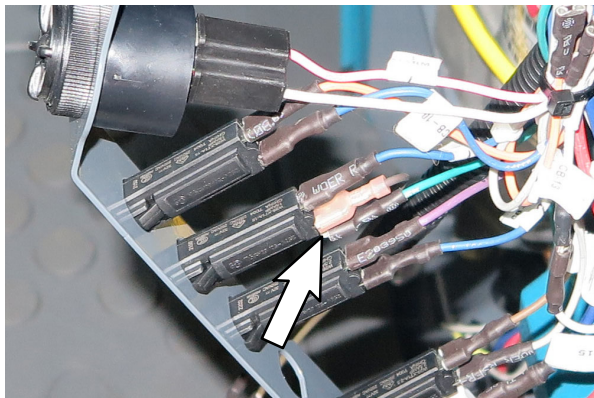


FIG. 9

20. Connect blue spotlight harness (7) T3 lead to terminal where 65 GRN was previously connected to circuit breaker 11. (Fig. 9/ Fig. 13)

21. Connect main wire harness 65 GRN to blue spotlight harness (7) T3 lead terminal. (Fig. 9/ Fig. 13)

22. Install the circuit breaker boot (20) onto the 2.5- Amp circuit breaker (8).

23. Connect blue spotlight harness (7) T1/T2 leads to the 2.5- Amp circuit breaker (8) (Fig. 10/ Fig. 13)

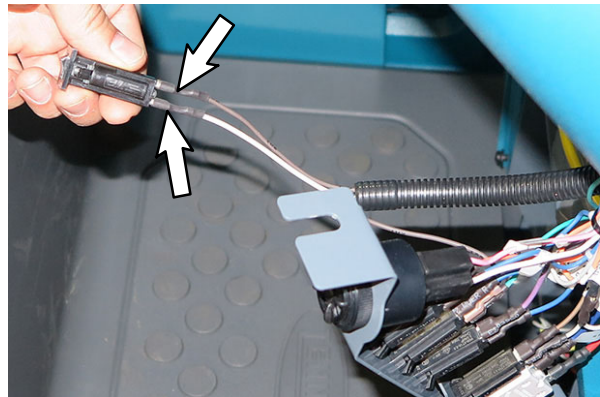


FIG. 10

24. Remove the hex screw from propel controller B- terminal, place the blue spotlight harness (7) RT1 lead onto the propel controller B- terminal, and reinstall the previously removed hex nut onto the propel controller B- terminal. Torque to: 4.07 Nm - 4.52 Nm (36 in. lbs. - 40 in. lbs). (Fig. 11/Fig. 12). (Fig. 11/Fig. 12)

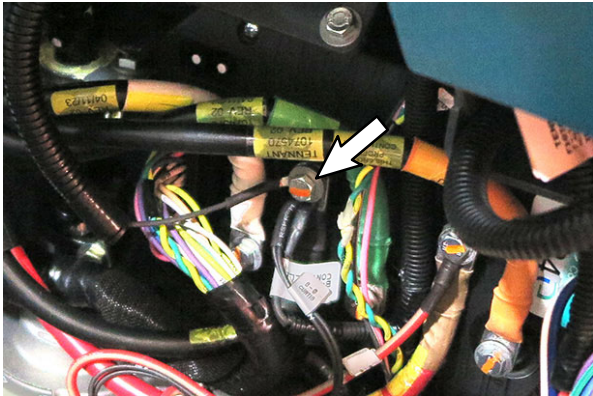


FIG. 11

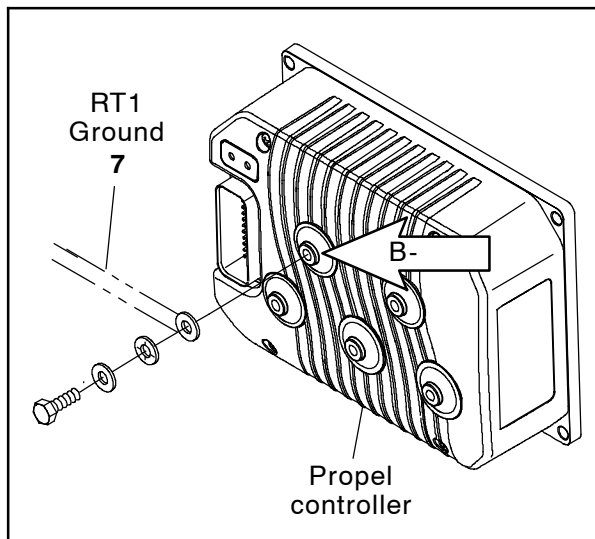


FIG. 12

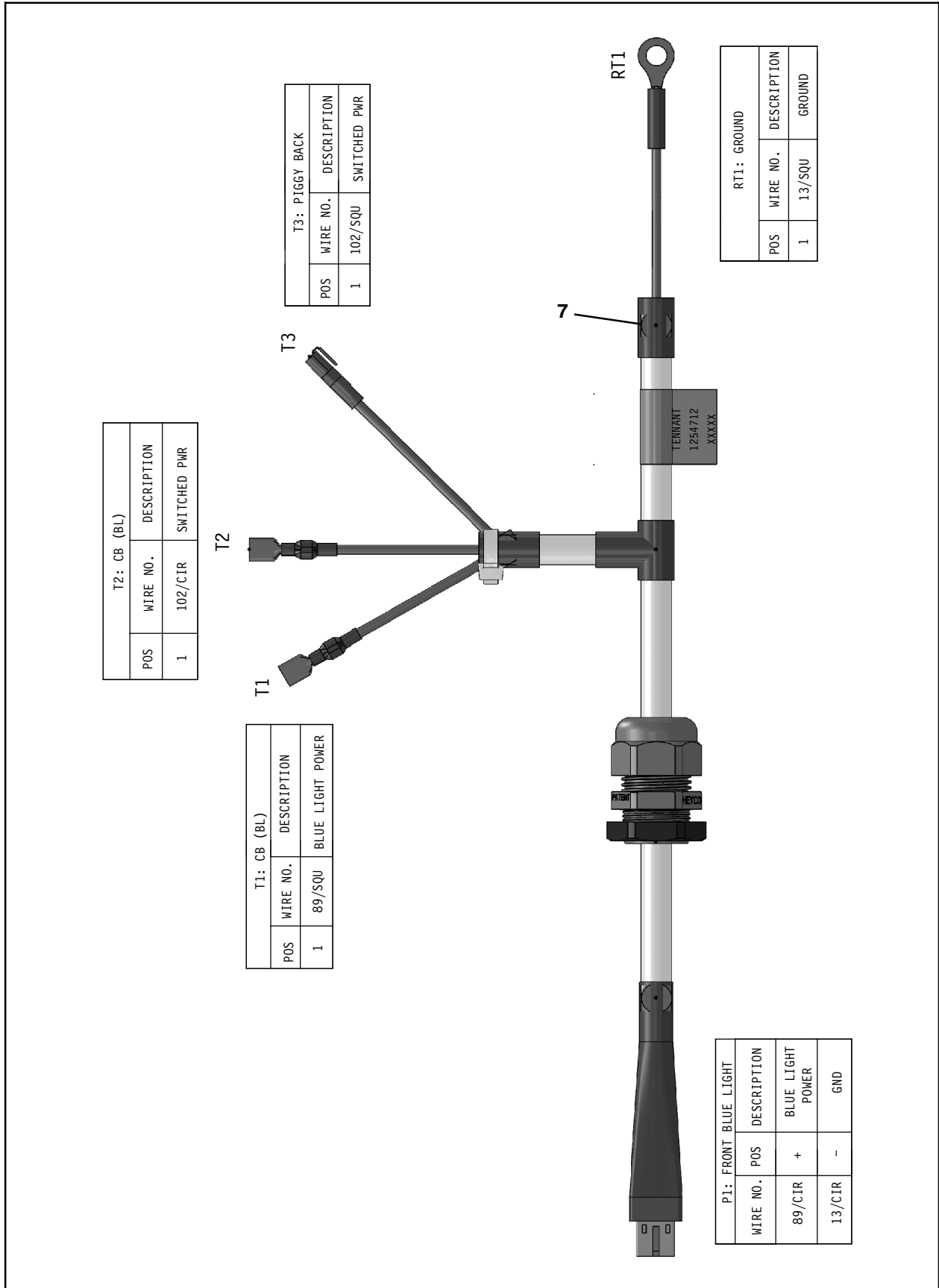


FIG. 13

INSTALLATION: M17

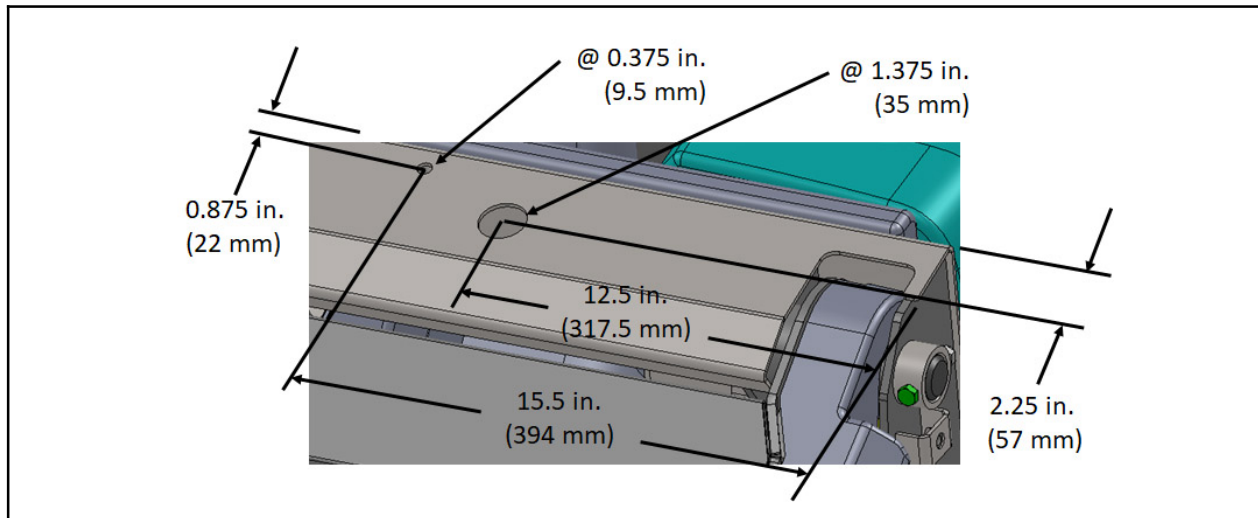


FIG. 14

1. Remove the plugs from the front lintel if holes for installing blue light are already drilled into the front lintel. Discard the plugs.
2. If holes were not already drilled into the front lintel, measure and mark locations for the holes to be drilled into the front lintel. (Fig. 14)
3. Drill a 0.375 in. (9.5 mm) and a 1.375 in. (35 mm) into the locations marked on the front lintel in the previous step. (Fig. 14)

4. Use a SEMS M8 hex screw (10) to install the blue spotlight mounting bracket (9) onto the front lintel. (Fig. 15)
5. Remove the hex nut included with the blue LED spotlight (1) from the light. (Fig. 15)
6. Use the hex nut removed from the blue LED spotlight (1) in the previous step and a lock washer (2) to install the blue LED spotlight onto the blue spotlight mounting bracket (9). (Fig. 15)
7. Route the end of the blue spotlight harness (11) to be connected to the blue LED spotlight (1) through the 1.375 in. (35 mm) hole in the front lintel. (Fig. 15)
8. Slide the rubber grommet (12) onto the end of the blue spotlight harness (11) to be connected to the blue LED spotlight (1). (Fig. 15)
9. Connect the blue spotlight harness (11) to the blue LED spotlight (1). (Fig. 15)
10. Insert the rubber grommet (12) into the 1.375 in. (35 mm) hole in the front lintel. (Fig. 15)

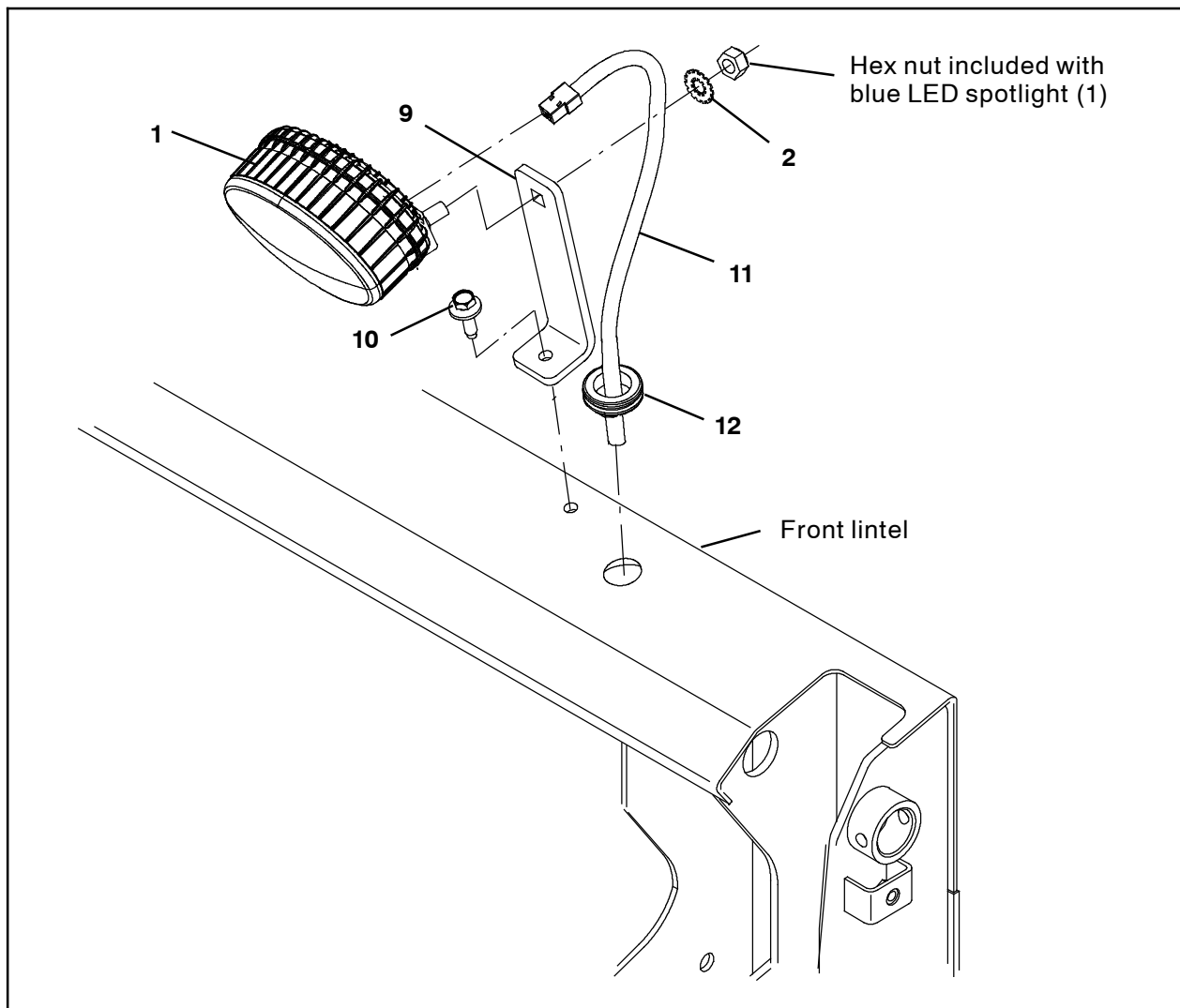


FIG. 15

11. Route the blue spotlight harness (11) down along the main wire harness, under the front shroud, and into the operator compartment. (Fig. 16)

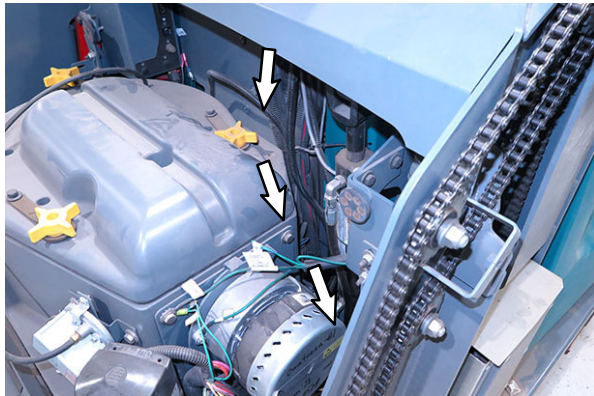


FIG. 16

12. Disconnect the main wire harness 65 GRN wire from circuit breaker 11. (Fig. 17)

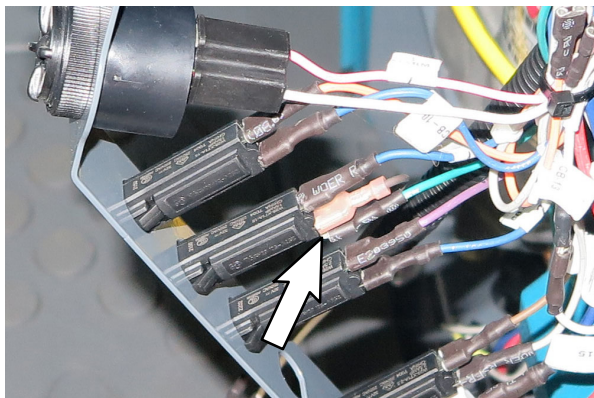


FIG. 17

13. Connect blue spotlight harness (11) T3 lead to terminal where 65 GRN was previously connected to circuit breaker 11. (Fig. 9/ Fig. 17)

14. Connect main wire harness 65 GRN to blue spotlight harness (11) T3 lead terminal. (Fig. 17/Fig. 21)

15. Install the circuit breaker boot (20) onto the 2.5- Amp circuit breaker (8).

16. Connect blue spotlight harness (11) T1/T2 leads to the 2.5- Amp circuit breaker (8) (Fig. 18/Fig. 21)

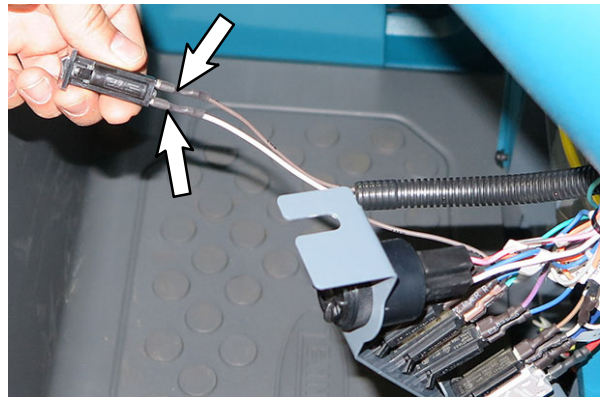


FIG. 18

17. Remove the hex screw from propel controller B- terminal, place the blue spotlight harness (11) RT1 lead onto the propel controller B- terminal, and reinstall the previously removed hex nut onto the propel controller B- terminal. Torque to: 4.07 Nm - 4.52 Nm (36 in. lbs. - 40 in. lbs). (Fig. 19/Fig. 20). (Fig. 19/Fig. 20)

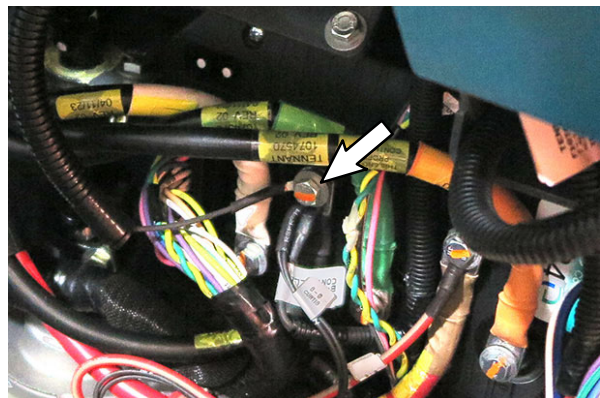


FIG. 19

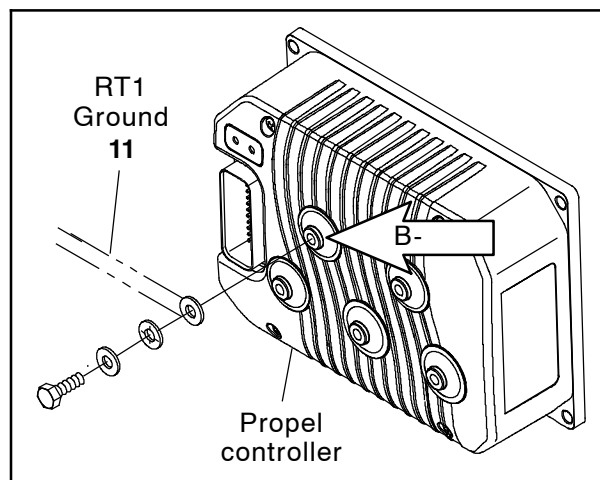


FIG. 20

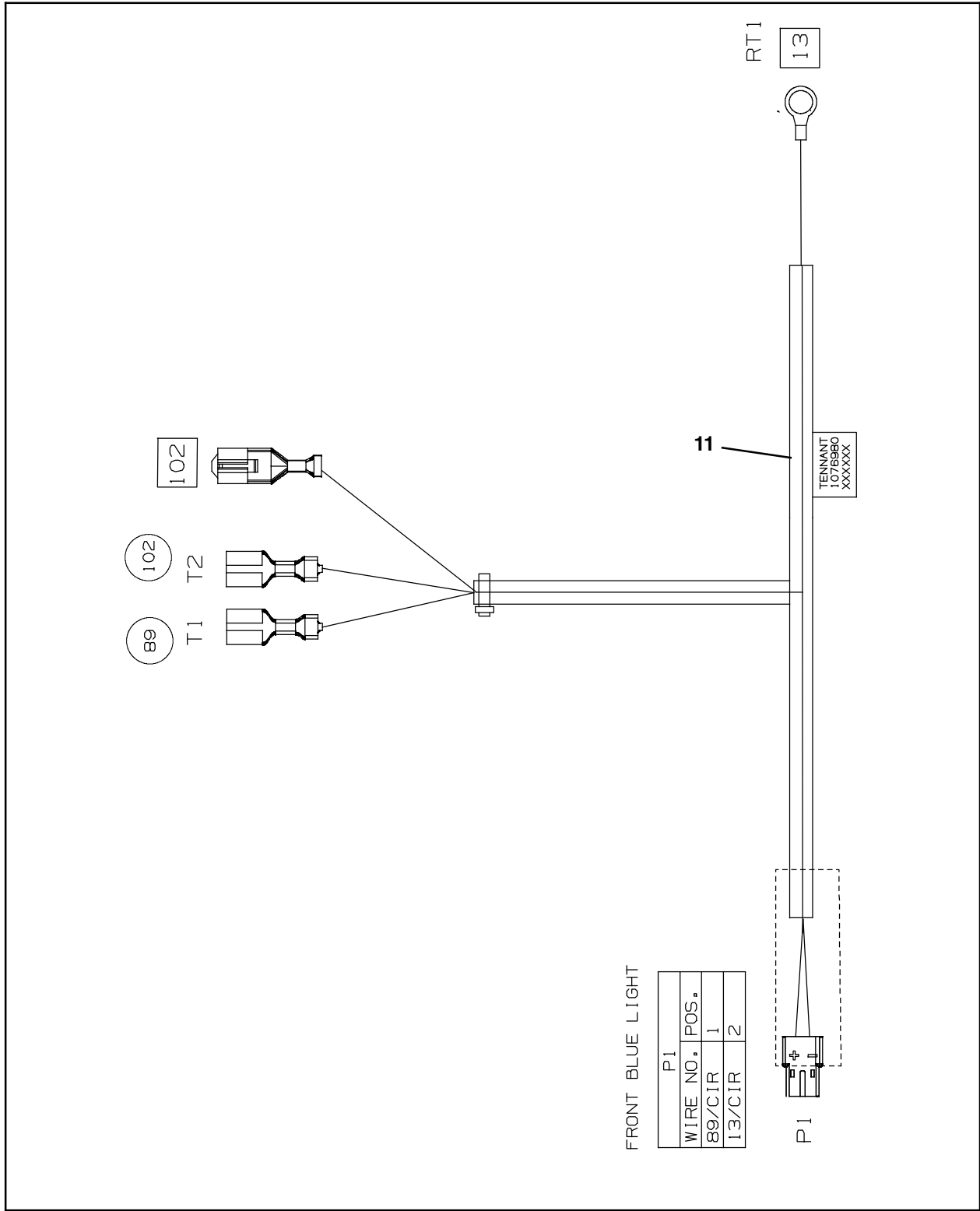


FIG. 21

INSTALLATION (M17/T17 machines without alarm/flashing light on recovery tank cover)

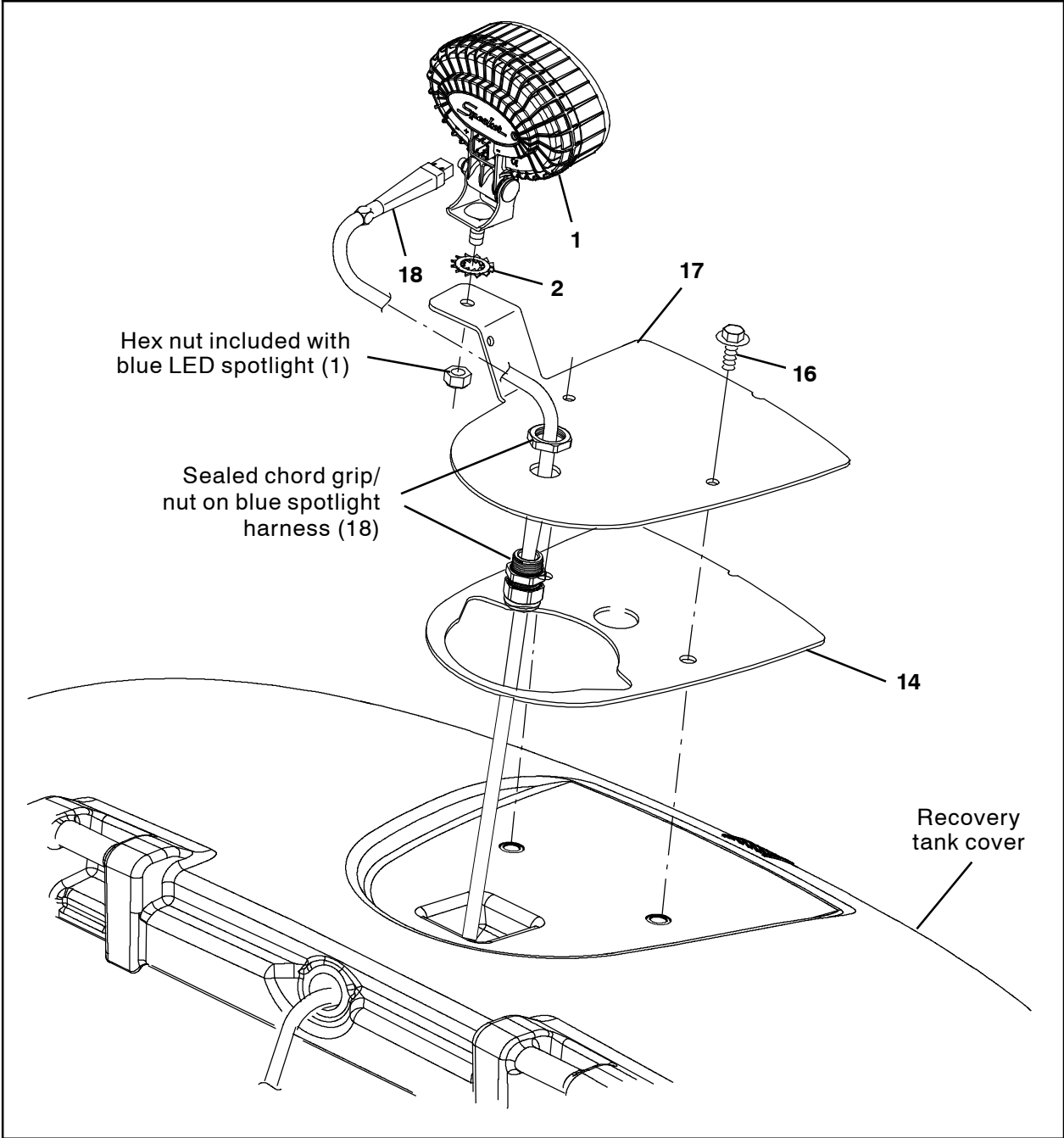


FIG. 22

18. Remove the label covering the light mounting holes and routing channel on the recovery tank cover from the recovery tank cover. (Fig. 23)

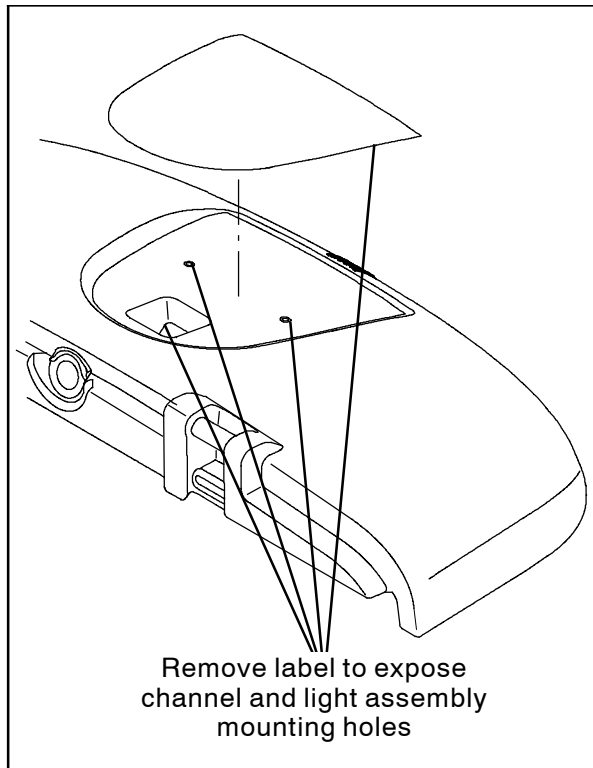


FIG. 23

19. Route the end of the blue spotlight rear harness (18) to be connected to the main wire harness flashing light connector through the channel from the top of the recovery tank cover and to the back of the battery compartment. (Fig. 22)
20. Remove the nut from the sealed chord grip on the blue spotlight rear harness (8). Set the nut aside. (Fig. 22)
21. Remove the backing from the module base gasket (14) and install the gasket onto the blue spotlight rear cover mounting bracket (17). (Fig. 22)
22. Route the end of the blue spotlight rear harness (18) through the hole in the blue spotlight rear cover mounting bracket (17). (Fig. 22)

23. Use the nut to secure the blue spotlight rear harness (18)/sealed chord grip to the blue spotlight rear cover mounting bracket (17). (Fig. 22/Fig. 25)

24. Use two SEMS M8 hex screws (16) to install the blue spotlight rear mounting bracket (17) onto the recovery tank cover. (Fig. 22)

25. Remove the hex nut included with the blue LED spotlight (1) from the light. (Fig. 22)

26. Use the hex nut removed from the blue LED spotlight (1) in the previous step and a lock washer (2) to install the blue LED spotlight onto the blue spotlight rear mounting bracket (17). (Fig. 22)

27. Connect the blue spotlight rear harness (18) to the blue LED spotlight (1). (Fig. 22/Fig. 25)

28. Connect the blue spotlight rear harness (18) to the main wire harness flashing light connector. (Fig. 24/Fig. 25)

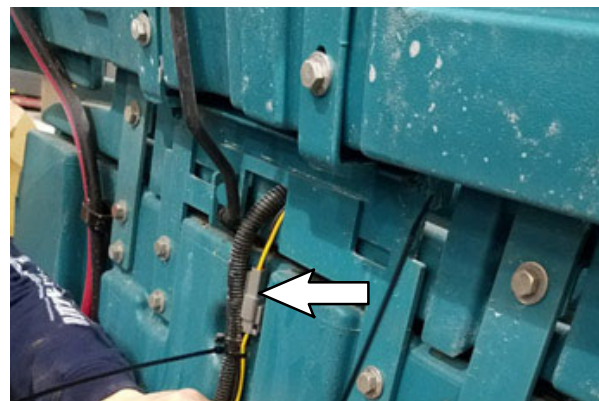


FIG. 24

29. Reinstall all parts/components previously removed for installing the blue light kit back onto the machine.
30. Reconnect the battery cable to the machine.
31. Turn the key switch ON and test machine. Both blue lights should immediately illuminate when the key switch is turned ON.

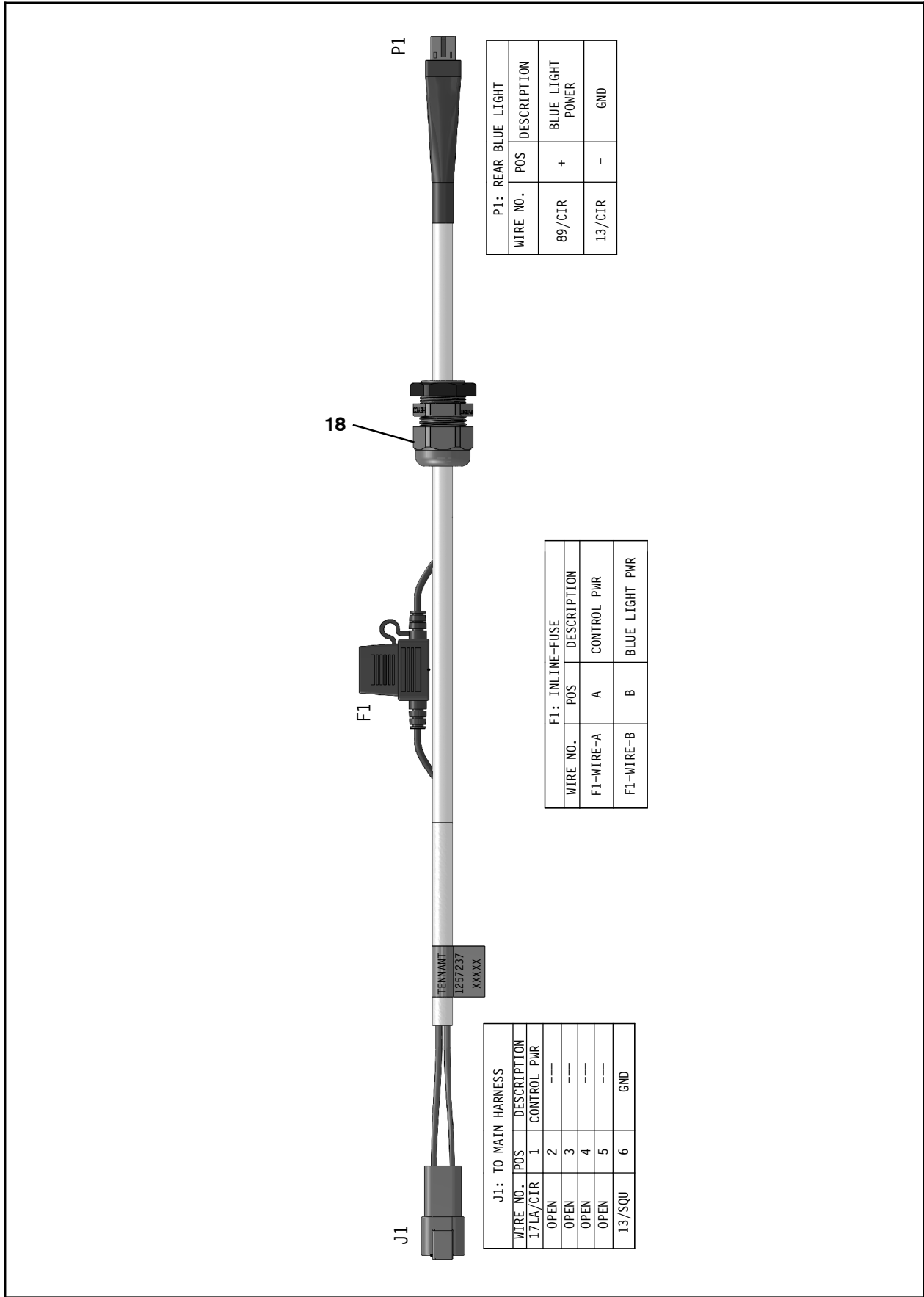


FIG. 25

**INSTALLATION (M17/T17 machines with alarm/
flashing light on solution tank cover)**

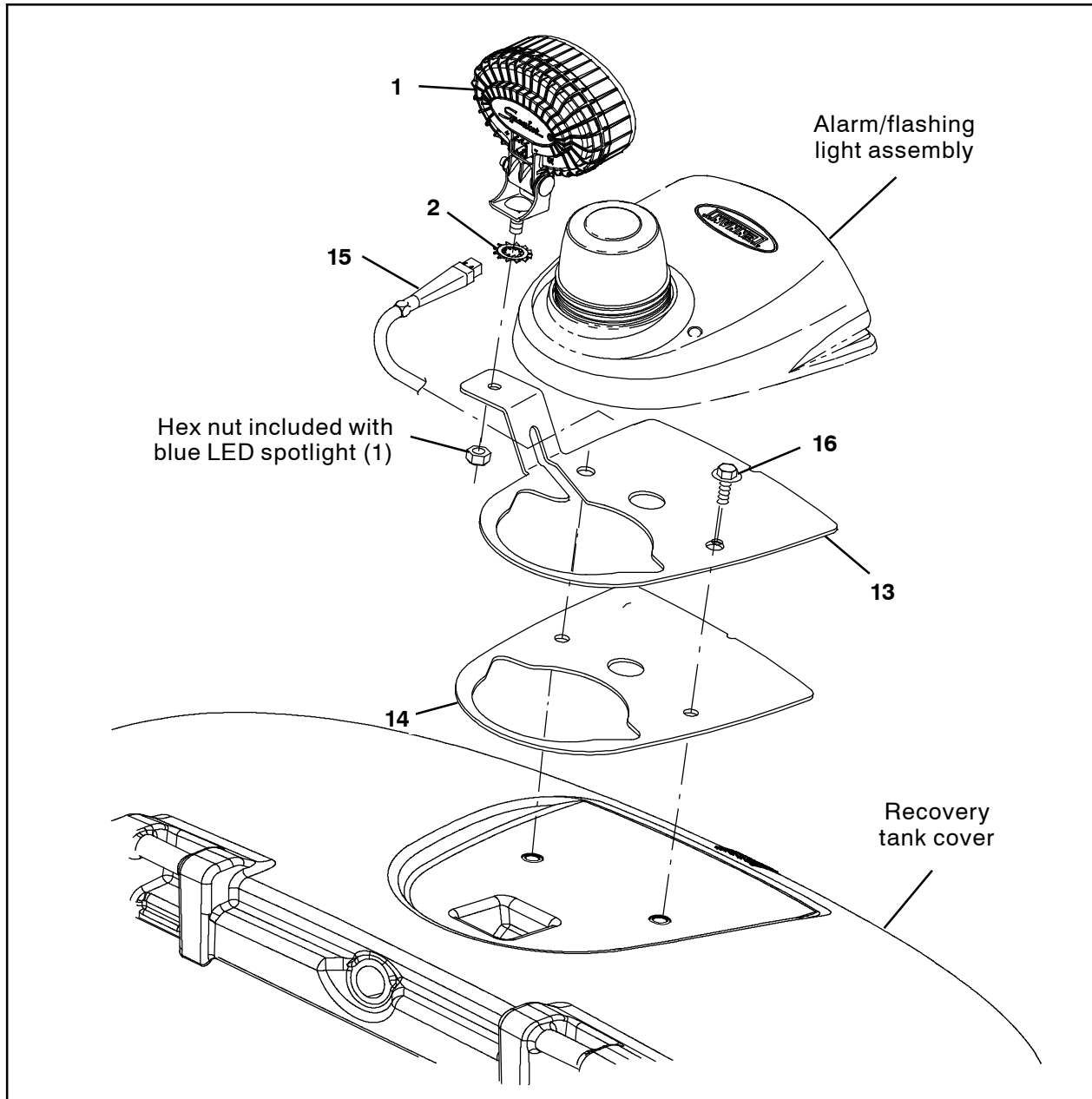


FIG. 26

32. Remove the two pan screws securing the light module cover to the alarm/flashing light assembly. Set the pan screws aside. (Fig. 26)

33. Carefully lift the light module cover from the alarm/flashing light assembly and allow the cover to hang out of the way. (Fig. 26)

34. Remove the two SEMS M8 hex screws securing the alarm/flashing light assembly to the recovery tank cover from the alarm/flashing light assembly. Set the SEMS M8 hex screws aside. (Fig. 26)

35. Carefully move the alarm/flashing light assembly away from where it was installed on the recovery tank. Do not disconnect all harness connections/completely remove the alarm/flashing light assembly from the recovery tank cover. (Fig. 26)

36. Remove the backing from the module base gasket (14) and install the gasket onto the blue spotlight rear cover mounting bracket (13). (Fig. 26)
37. Use two SEMS M8 hex screws (16) to install the blue spotlight rear cover mounting bracket (13) onto the recovery tank cover. (Fig. 26)
38. Install the alarm/flashing light assembly onto the rear cover mounting bracket (13). Do not install the light module cover onto the alarm/flashing light assembly. Light module cover is later installed after all cable connections are completed. (Fig. 26)
39. Remove the hex nut included with the blue LED spotlight (1) from the light. (Fig. 26)
40. Use the hex nut removed from the blue LED spotlight (1) in the previous step and a lock washer (2) to install the blue LED spotlight onto the rear cover mounting bracket (13). (Fig. 26)
41. Route the blue spotlight rear harness (15) through the notch in the blue spotlight rear cover mounting bracket (13) and connect the blue spotlight rear harness to the blue LED spotlight (1). (Fig. 26/Fig. 30)
42. Disconnect the 17/PUR lead from the circuit breaker located in the alarm/flashing light assembly. (Fig. 27)

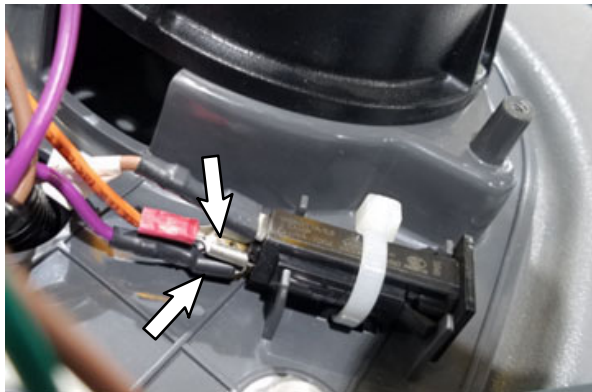


FIG. 27

43. Connect the blue spotlight rear harness (15) T3 lead to the circuit breaker terminal where 17/PUR lead was previously connected. (Fig. 27)
44. Connect the main wire harness 17/PUR lead to the blue spotlight rear harness (15) T3 lead. (Fig. 27)

45. Disconnect the 13/LC lead labeled FLASH/STROBE LT from the flashing light on the alarm/flashing light assembly. (Fig. 28)

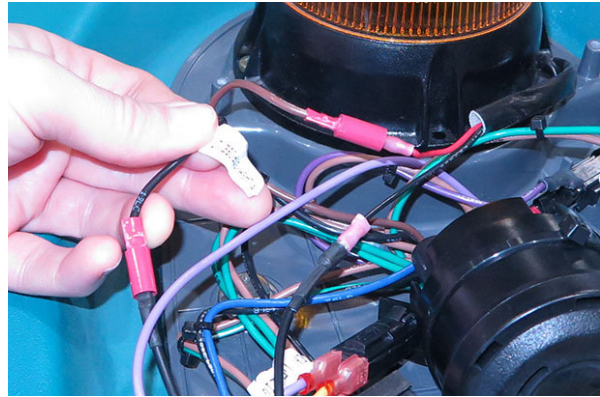


FIG. 28

46. Connect the blue spotlight rear harness (15) T4 lead to the 13/LC lead labeled FLASH/STROBE LT disconnected from the flashing light in the previous step. (Fig. 28/Fig. 30)
47. Connect the flashing light black lead previously disconnected from the 13/LC lead labeled FLASH/STROBE LT to the blue spotlight rear harness (15) T5 lead. (Fig. 29/Fig. 30)

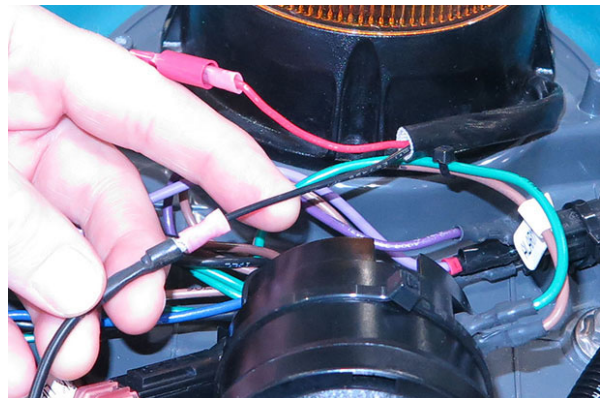


FIG. 29

48. Reinstall the light module cover onto the alarm/flashing light assembly. (Fig. 29)
49. Reinstall all parts/components previously removed for installing the blue light kit back onto the machine.
50. Reconnect the battery cable to the machine.
51. Turn the key switch ON and test machine. Both blue lights should immediately illuminate when the key switch is turned ON.

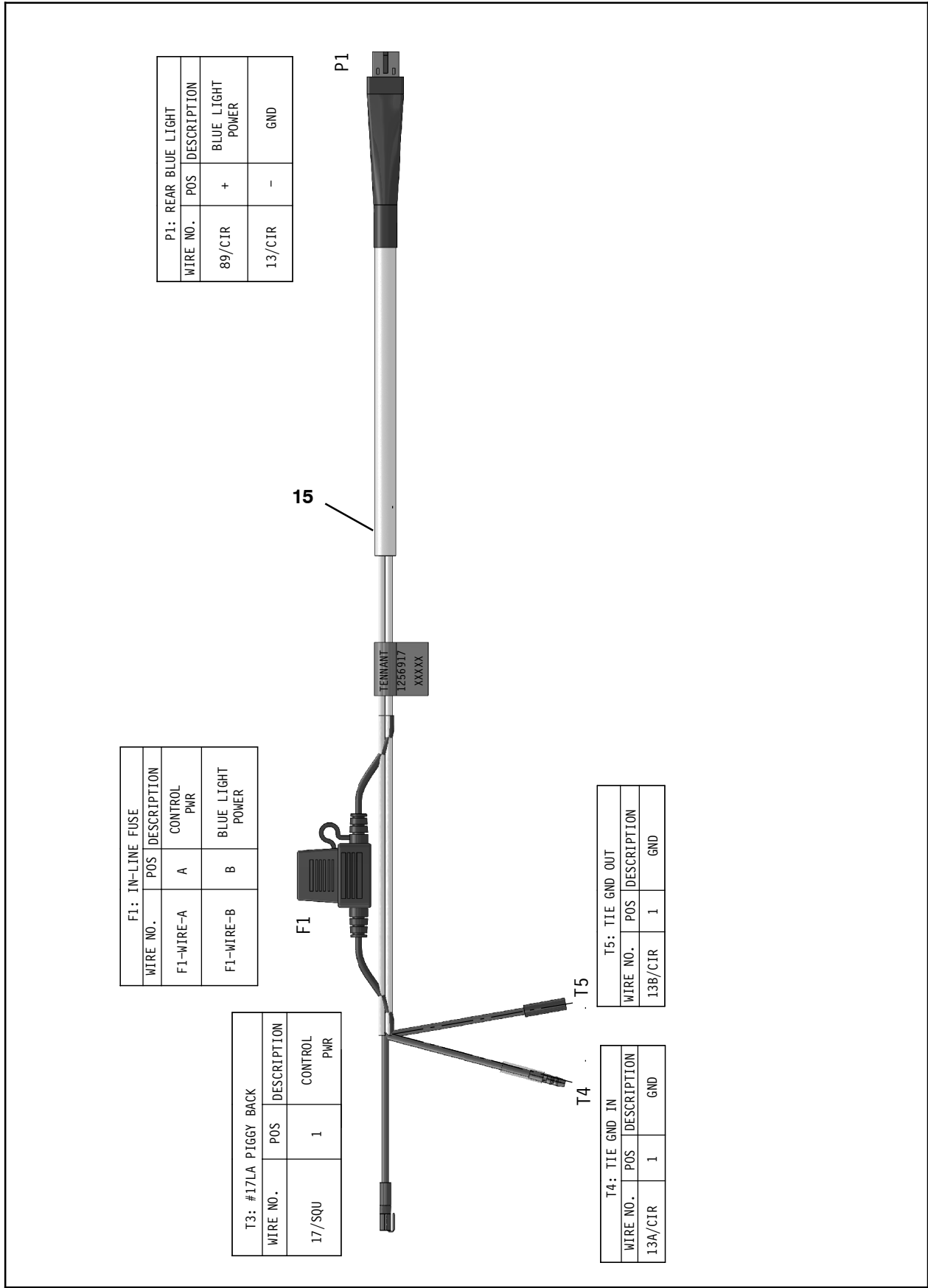


FIG. 30

Bill Of Materials For Spotlight Kit, Blue, CI [M17/T17] - 9021203

Ref.	Tennant Part No.	Description	Qty.
1	1240687	Light, Spot, Blue, LED	2
2	41143	Washer, Lock, Int- Ext, 0.50	2
3	1076808	Brkt, Blu Spotlight, Fr, Cover Mtg (T17 Machines ONLY)	1
4	1031665	Screw, Pan, M8 X 1.25 X 25, Blk (T17 Machines ONLY)	3
5	39890	Washer, Flat, M8, Fendr (T17 Machines ONLY)	3
6	08713	Nut, Hex, Lock, M8 X 1.25, NL, SS (T17 Machines ONLY)	3
7	1254712	Harness, Blu Spotlight, Front	1
8	1064184	Circuit Breaker, 02.5A, Resettable	1
9	1076786	Brkt, Blu Spotlight, Fr, Frame Mtg (M17 Machines ONLY)	1
10	1037354	Screw, Hex, M8 X 1.25 X 30, 9.8, SEMS (M17 Machines ONLY)	1
11	1076980	Harness, Blu Spotlight [M17] (M17 Machines ONLY)	1
12	10632	Grommet, Rbr, 0.89ID, F/1.2H, .14 Matl (M17 Machines ONLY)	2
13	1076810	Brkt, Blu Spotlight, Rr, Cover Mtg (Machines with strobe light ONLY)	1
14	1063263	Gasket, Base, Module	1
15	1256917	Harness, Blu Spotlight, Rear (Machines with strobe light ONLY)	1
16	1020341	Screw, Hex, M8 X 1.25 X 20, SS, SEMS	2
17	1262447	Brkt, Blue Spotlight, Rr (Machines w/o strobe light ONLY)	1
18	1257237	Harness, Blu Spotlight, Rear (Machines w/o strobe light ONLY)	1
19	763114	Tie, Cable, 11.3L, 2.75D Max	10
20	1064191	Boot, Circuit Breaker	1

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