



INSTRUCTION BULLETIN

No. 9013041
Machine: T17 / M17
Published: 07-2016
Rev. 01

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.

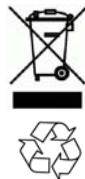
Installation instructions for **kit number 9020302 (T17 machines NA serial numbers 000000-010999 / EU serial numbers 0000-0330) / 9015000 (T17 machines NA serial numbers 011000- / EU serial numbers 0400-) (All M17 machines)**

SYNOPSIS:

This kit contains the parts needed to install the severe environment kit on T17 scrubbers / M17 sweeper- scrubbers.
Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: NONE

(Estimated time to complete: 4.5 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:

1. Completely empty the solution tank and recovery tank. Refer to the Operator Manual for instructions how to empty both tanks.
2. Park the machine on a clean level surface, lower the scrub head, turn off the machine, set the parking brake, and remove the key.

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

3. Jack up the front end of the machine high enough to access the area under the machine where the detergent pump is to be installed. Place jack stands under the machine frame and lower the machine onto the jack stands. (Fig. 1)



FIG. 1

FOR SAFETY: When servicing machine, block machine tires before jacking machine up. Use a hoist or jack that will support the weight of the machine. Jack machine up at designated locations only. Support machine with jack stands.

4. Turn on the machine, completely lower the scrub head as low as it will go, and turn off the machine.
5. If necessary, remove the scrub head from the machine.

NOTE: It may be necessary to remove the scrub head from the machine to get better access to the area where the detergent pump is to be installed. If removing the scrub head, disconnect the main wire harness and all hoses from the scrub head, remove hardware securing the scrub head to the machine, and pull the scrub head from under the machine. Set the scrub head and all hardware aside.

6. Disconnect the battery cable from the machine.



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

7. Disconnect the main wire harness from the vacuum fan(s) and remove the vacuum fan(s) from the machine. Set the vacuum fan(s) and all mounting hardware aside.

INSTALLATION:

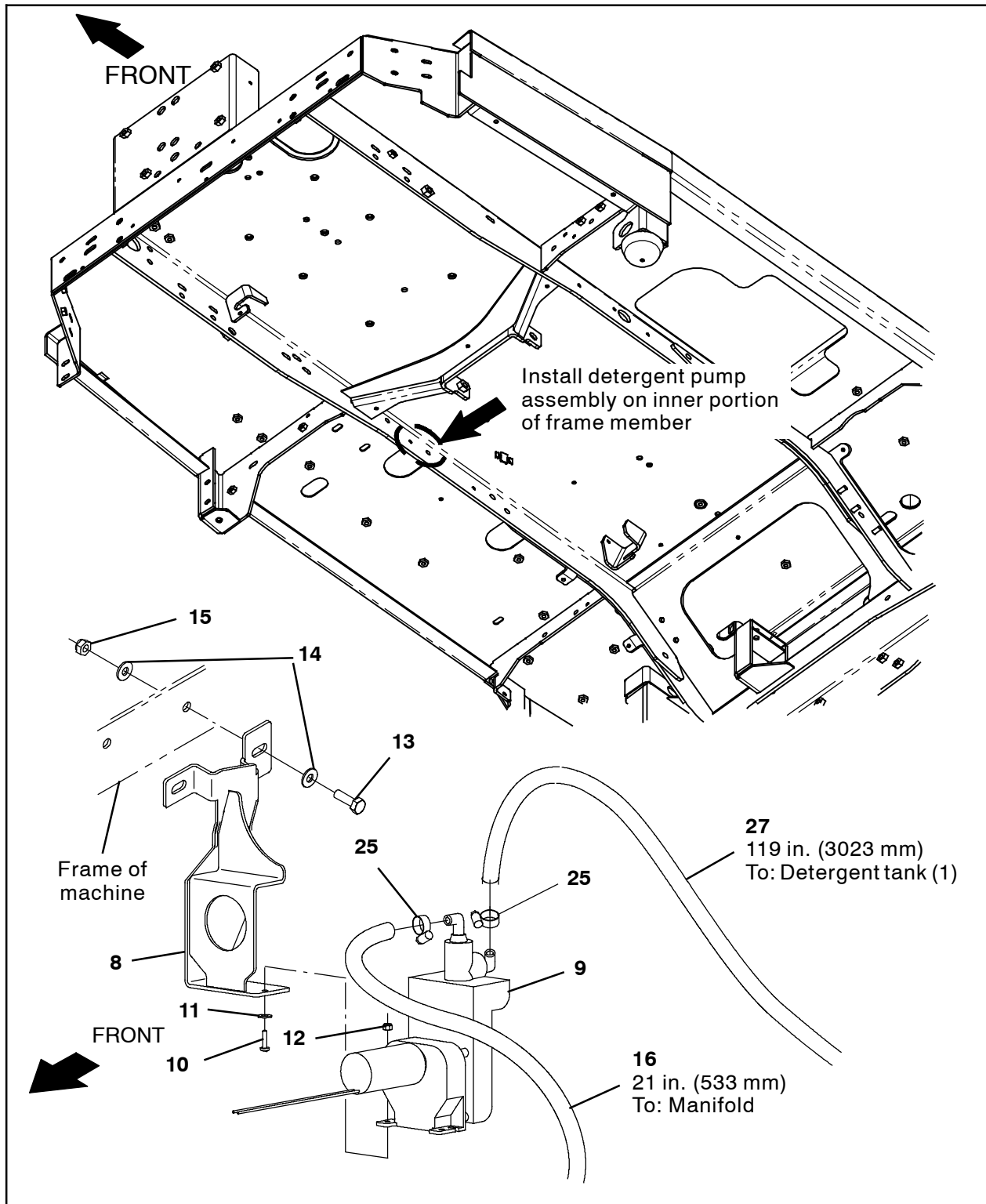


FIG. 2

1. Use two M4 pan screws (11), two flat washers (10), and two M4 hex nuts to install the detergent pump (9) onto the pump bracket (8). (Fig. 2)
2. Use a hose clamp (25) to connect the 21 in. (533 mm) PVC hose (16) and the 119 in. (3023 mm) PVC hose (27) to the detergent pump (9). (Fig. 2)

3. Use two M8 hex screws (13) four flat washers (14), and two M8 hex nuts (15) to install the detergent pump assembly assembled in the previous several steps onto the frame of the machine. (Fig. 2)
4. Connect the main wire harness to the detergent pump (9). (Fig. 2 / Fig. 6 / Fig. 8)
5. Remove the plug from the solution manifold. Discard the plug. (Fig. 3)
6. Install the 90° plastic fitting (17) into the solution manifold. (Fig. 3)
7. Route the 21 in. (533 mm) PVC hose (16) already installed on the detergent pump assembly to the solution manifold. (Fig. 2 / Fig. 3)
8. Route the 119 in. (3023 mm) PVC hose (27) already installed on the detergent pump to the back of the machine. (Fig. 2)

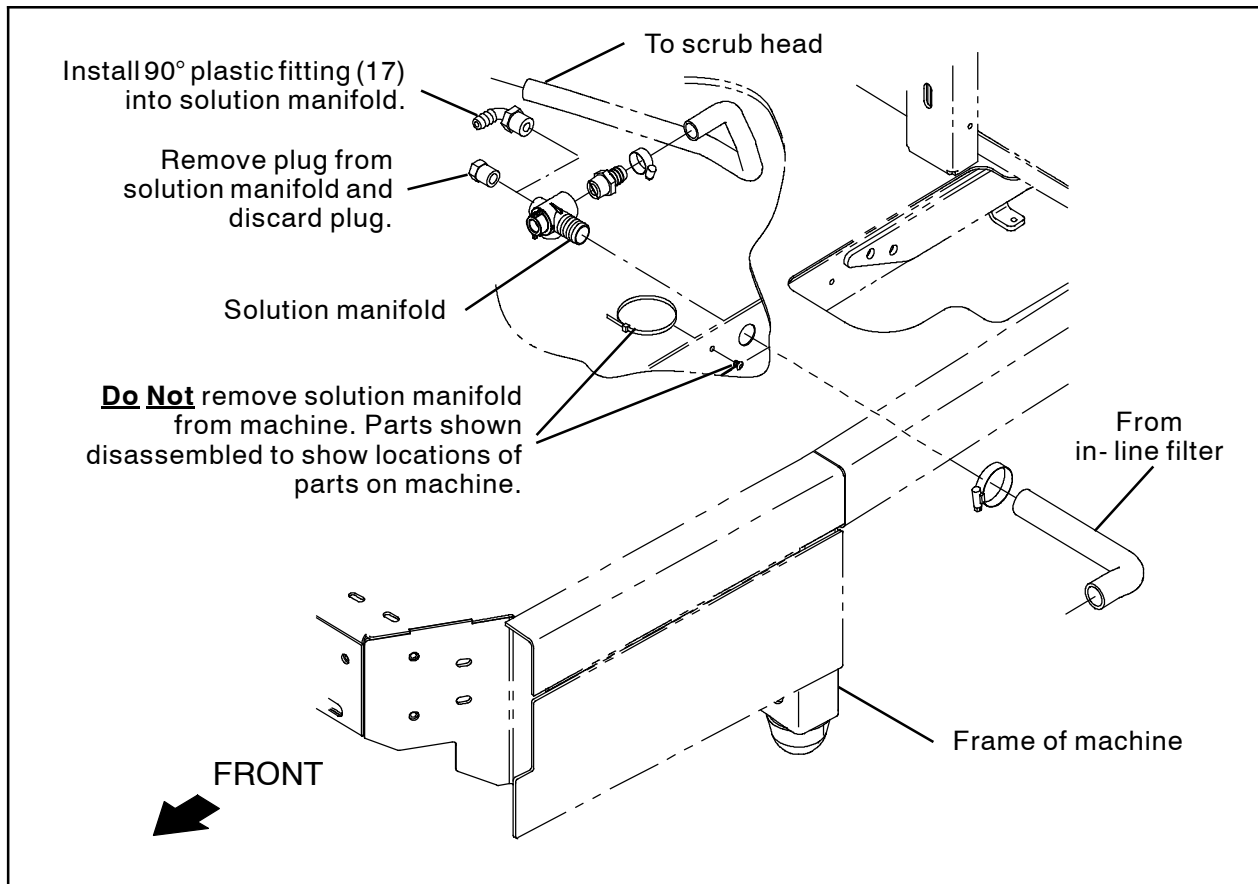


FIG. 3

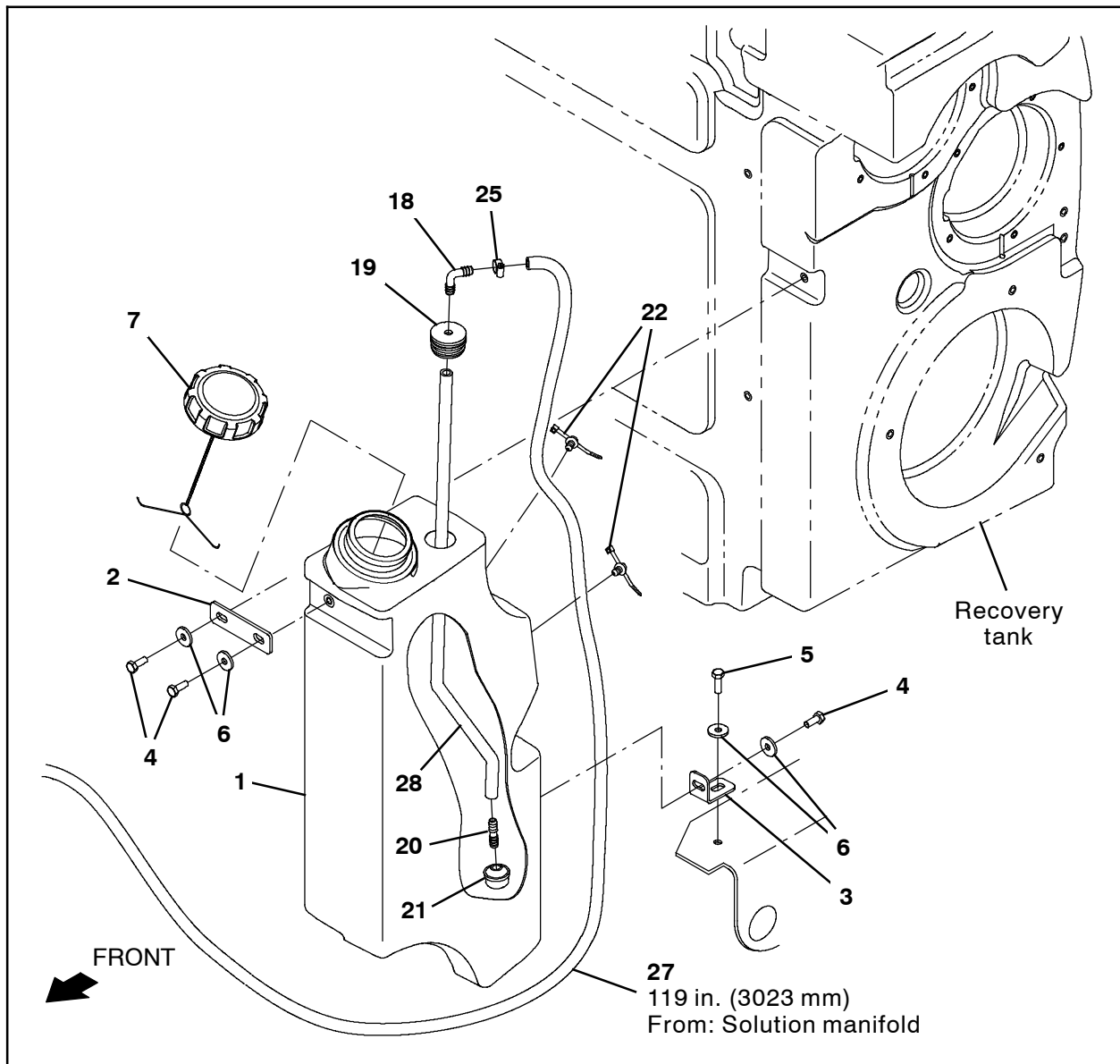


FIG. 4

9. Thread the straight fitting (20) into the pump screen (21). (Fig. 4)
10. Install the screen assembly assembled in the previous step onto the 28 in. (711 mm) PVC hose (28). (Fig. 4)
11. Install the 90° plastic fitting (18) into the grommet (19) and insert the end of the 90° plastic fitting inside the grommet into the 28 in. (711 mm) PVC hose (28). (Fig. 4)
12. Install the hose assembly assembled in the previous several steps into the detergent tank (1). (Fig. 4)
13. Use one M8 hex screw (5) and one flat washer (6) to install the detergent tank bracket (3) onto the frame of the machine. (Fig. 4)
14. Use one M8 hex screw (4) and one flat washer (6) to install the detergent (1) onto the detergent tank bracket (3). (Fig. 4)
15. Use one M8 hex screw (4) and one flat washer (6) to install the detergent tank plate (2) onto the detergent tank (1). (Fig. 4)
16. Use one M8 hex screw (4) and one flat washer (6) to secure the detergent tank plate (2) / detergent tank (1) to the recovery tank. (Fig. 4)

17. Use a hose clamp (25) to connect the 119 in. (3023 mm) PVC hose (27) to the 90° plastic fitting (18) installed on the detergent tank (1). (Fig. 4)
18. Install both wire ties (22) onto the detergent tank (1) and use the wire ties to secure the 119 in. (3023 mm) PVC hose (27) to the detergent tank. (Fig. 4)
19. Install the tank cap (7) onto the detergent tank (1). (Fig. 4)
20. Remove the pan screws securing the right console panel to the machine. Set the pan screws aside. (Fig. 5)
21. Carefully pull the right console panel from the machine. **Do Not** break any wire connections when removing the right console panel from the machine. (Fig. 5)
22. Remove the blank from the right console panel and install the switch (26) into the right console panel where the blank was previously installed. Discard the blank. (Fig. 5)
23. Connect the main wire harness to the switch (9). (Fig. 5 / Fig. 7 / Fig. 8)
24. Reinstall the right console panel onto the machine. (Fig. 5)

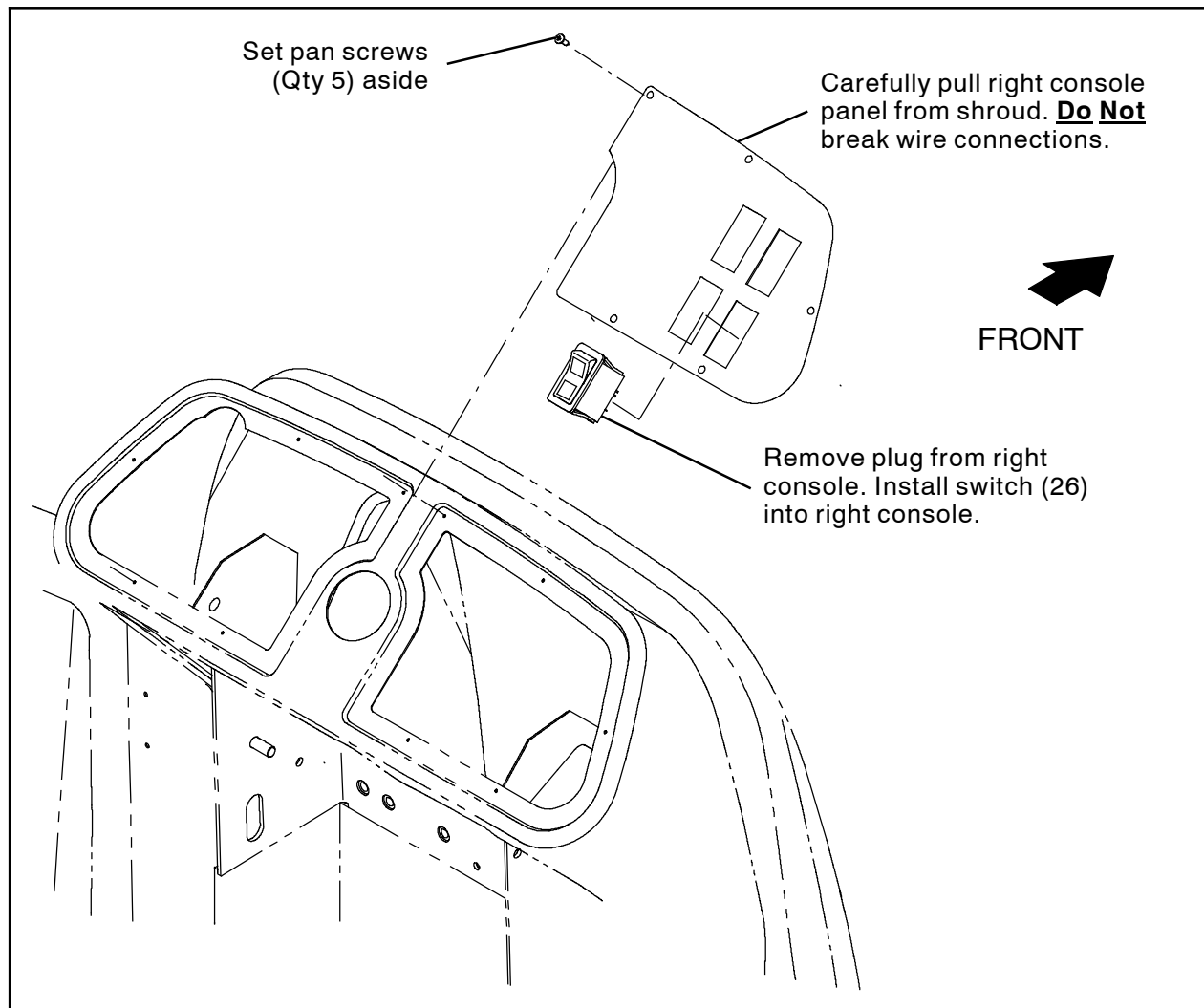


FIG. 5

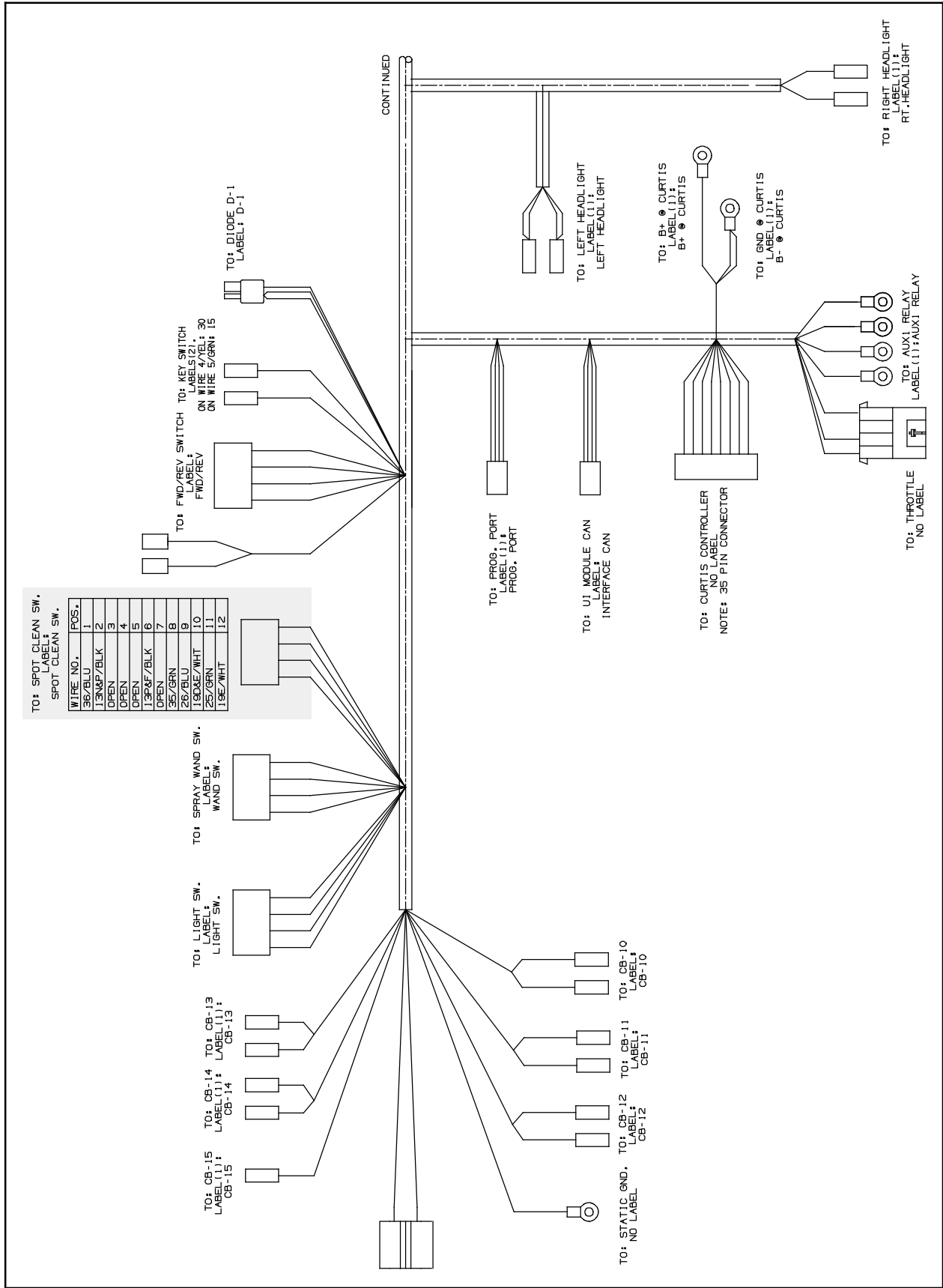


FIG. 7

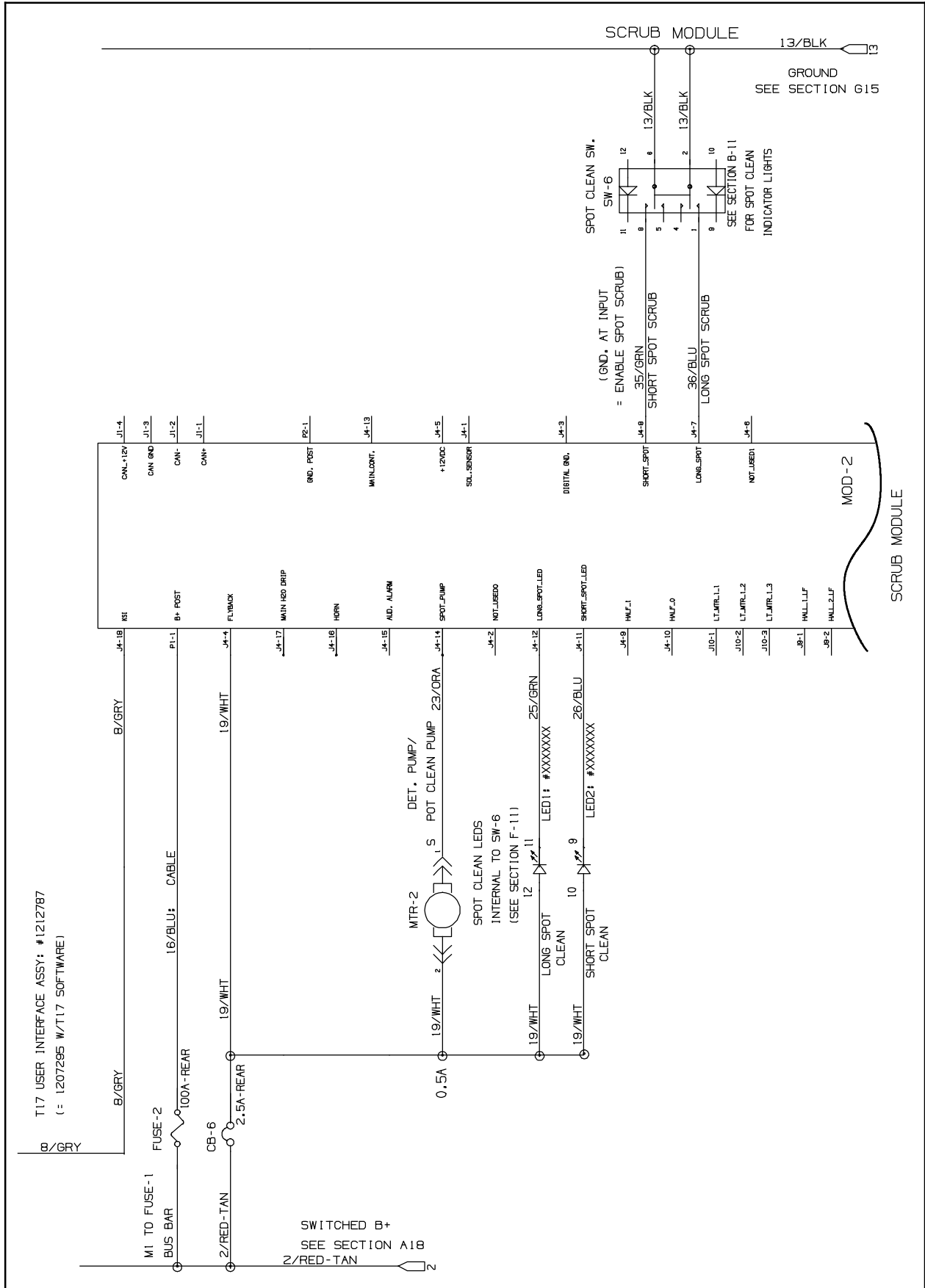


FIG. 8

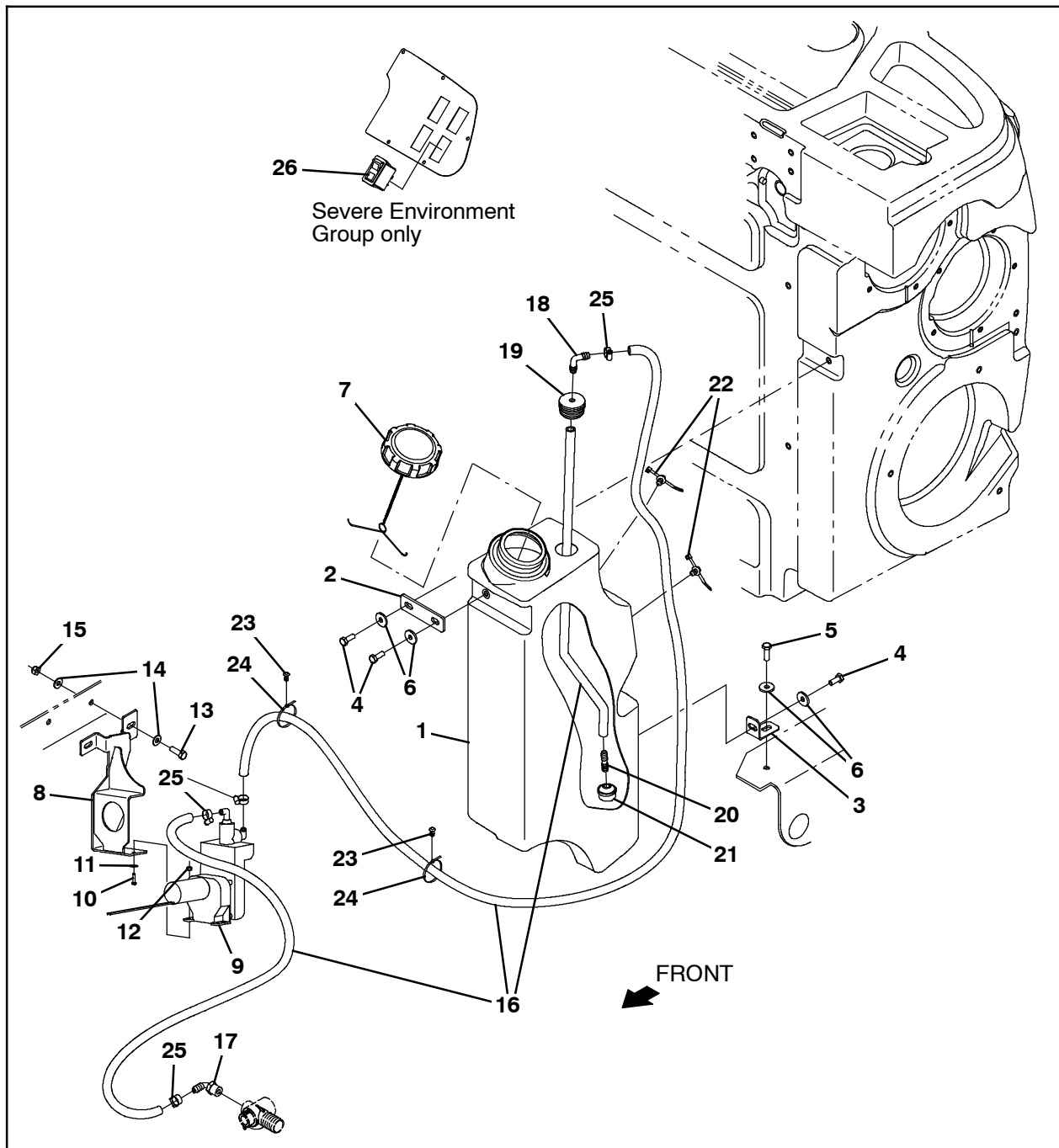


FIG. 9

- 25. Use tie clips (23) and cable ties (24) to secure the 119 in. (3023 mm) PVC hose (27) to the machine. (Fig. 9)
- 26. If the scrub head was removed from the machine to install the severe environment kit, slide the scrub head under the machine, reinstall the scrub head onto the machine, and reconnect the solution supply hose and main wire harness to the scrub head.
- 27. Remove the jack stands from under the machine and lower the machine to the floor.
- 28. If the scrub head was removed from the machine to install the severe environment kit, reinstall hardware to secure the scrub head under the machine.
- 29. Reconnect the battery cable to the machine.
- 30. Fill the solution tank with cool clean water.
- 31. Fill the detergent tank with detergent.

32. Start and test the machine. Place machine into scrub mode and begin scrubbing.
33. While scrubbing press the top of the severe environment switch. The light on top of the switch should illuminate and detergent should be added to the solution stream for 30 seconds. The light on top the switch will go out and the severe environment system will cease dispensing detergent at the end of the 30- second interval.
34. While scrubbing press the bottom of the severe environment switch. The light on the bottom of the switch should illuminate and detergent should be added to the solution stream for five minutes . The light on the bottom the switch will go out and the severe environment system will cease dispensing detergent at the end of the five- minute interval.

**Bill Of Materials For Severe Environment Switch Kit, DI [T17] - 9020302 /
Severe Environment Switch Kit, DI [T17] - 9015000**

Ref.	Tennant Part No.	Description	Qty.
	9020302	Severe Environment Switch Kit, DI [T17]	
1	1207168	Tank, Detergent, Trimmed [T17]	1
2	1208732	Plate, Mtg, Tank, Detergent	1
3	1207750	Bracket, Mtg, Tank, Detergent	1
4	12273	Screw, Hex, M8 X 1.25 X 20, NI, SS	3
5	09011	Screw, Hex, M8 X 1.25 X 30, SS	1
6	1017218	Washer, Flat, 0.32b 1.00d .12, SS	4
7	1011885	Cap, Tank	1
8	1213317	Bracket Wldt, Pump (Kit 9020302 Only)	1
8	1225439	Bracket Wldt, Pump (Kit 9015000 Only)	1
9	386364	Pump, Detgt, 36VDC	1
10	24265	Screw, Pan, Phl, M4 X 0.70 X 16, SS	2
11	01683	Washer, Flat, 10, SS	2
12	33932	Nut, Hex, Lock, M4 X 0.70, NI, SS	2
13	09010	Screw, Hex, M8 X 1.25 X 25, SS	2
14	32490	Washer, Flat, 0.25, Std	4
15	08713	Nut, Hex, Lock, M8 X 1.25, NI, SS	2
16	376720	Hose, PVC, Brd, 0.38id, 0.60od, Bulk, Clr (21 in.)	1
17	1005630	Fitting, Plstc, E90, Bm06/Pm06, Nyl	1
18	20951	Fitting, Plstc, E90, Bm06/Bm06	1
19	20944	Grommet, Pye, 0.37id, F/1.5h, .13 Matl	1
20	20950	Fitting, Plstc, Str, Bm06/Bm06	1
21	20952	Screen, Pump	1
22	1210807	Wire, Tie [W/.25" Fir Tree Clip]	2
23	1071085	Clip, Tie, 0.25d, Plstc	4
24	763114	Tie, Cable, Nyl, 11.3l, 2.75d Max	6
25	43844	Clamp, Hose, Wormdrive, 0.25- 0.62d, .31w	4
26	1207284	Switch, Rocker [Mom,Off,Mom, Dual Led] (Only on Severe Environment Group)	1
27	376720	Hose, PVC, Brd, 0.38id, 0.60od, Bulk, Clr (119 in.)	1
28	376720	Hose, PVC, Brd, 0.38id, 0.60od, Bulk, Clr (28 in.)	1

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