



INSTRUCTION BULLETIN

No. 9015139
Machine: M17
Published: 08-2016
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 9017166**

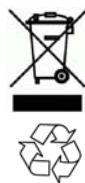
SYNOPSIS:

This kit contains the parts needed to install the severe environment kit on M17 machines equipped with Pro- Panel controls.

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 and recovery tank. Refer to the Operator Manual for instruction 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, set parking brake, 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. Refer to the *MAINTENANCE* section in the *OPERATOR MANUAL* for information how to safely jack up the machine

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 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 scrub vacuum fan(s) and remove the scrub vacuum fan(s) from the machine. Set the scrub vacuum fan(s) and all mounting hardware aside.

INSTALLATION:

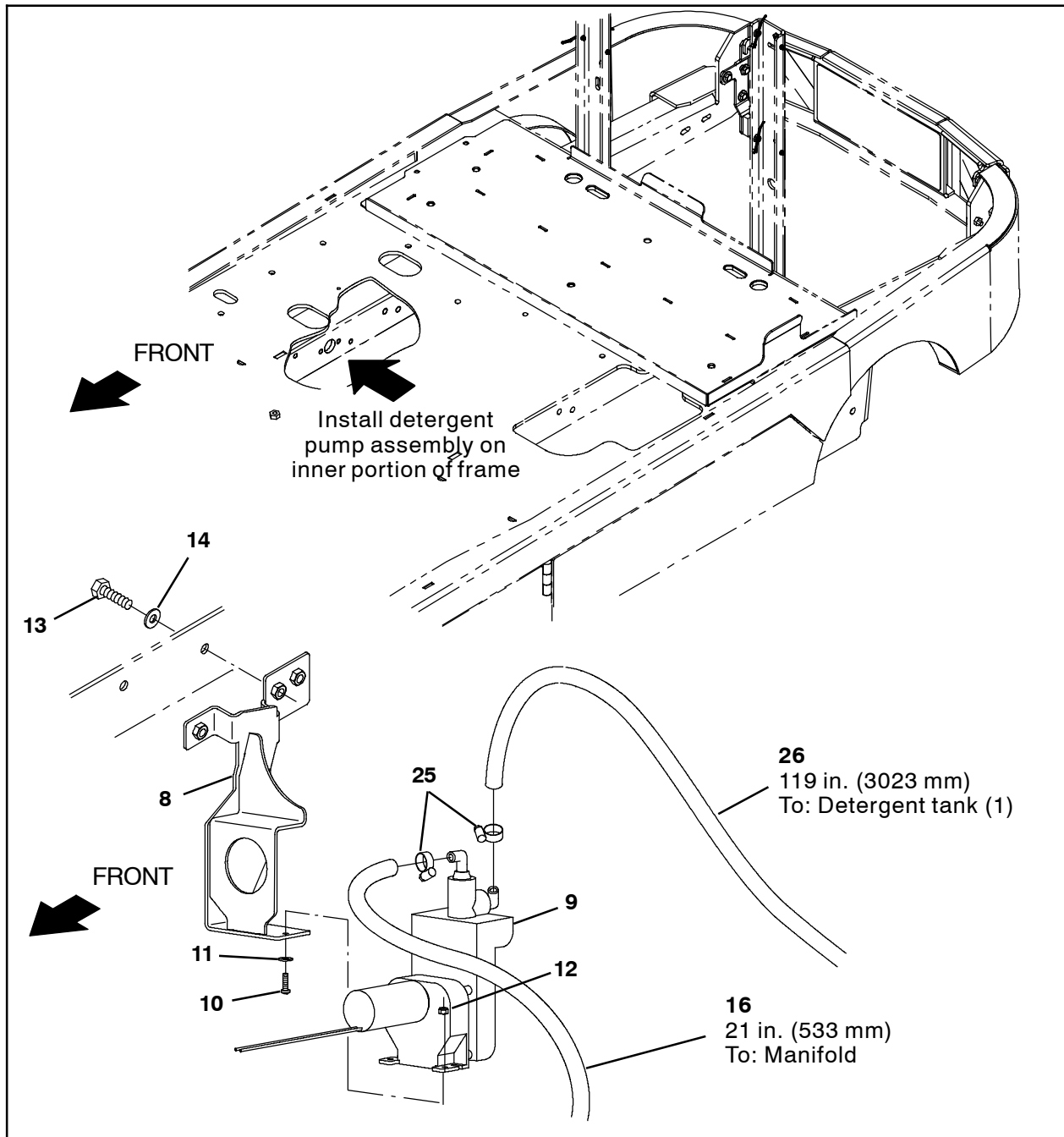


FIG. 1

1. Use two M4 pan screws (10), two flat washers (11), and two M4 hex nuts (12) to install the detergent pump (9) onto the pump bracket (8). (Fig. 1)
2. Use a hose clamp (25) to connect the 21 in. (533 mm) PVC hose (16) and the 119 in. (3023 mm) PVC hose (26) to the detergent pump (9). (Fig. 1)
3. Use two M8 hex screws (13) and two flat washers (14) to install the detergent pump assembly assembled in the previous several steps onto the frame of the machine. (Fig. 1)
4. Connect the main wire harness to the detergent pump (9). (Fig. 1 / Fig. 4 / Fig. 5)

5. Remove the plug from the solution manifold.
Discard the plug. (Fig. 2)
6. Install the 90° plastic fitting (17) into the solution manifold. (Fig. 2)

7. Route the 21 in. (533 mm) PVC hose (16) already installed on the detergent pump assembly to the solution manifold. (Fig. 2 / Fig. 2)

8. Route the 119 in. (3023 mm) PVC hose (26) already installed on the detergent pump to the back of the machine. (Fig. 1)

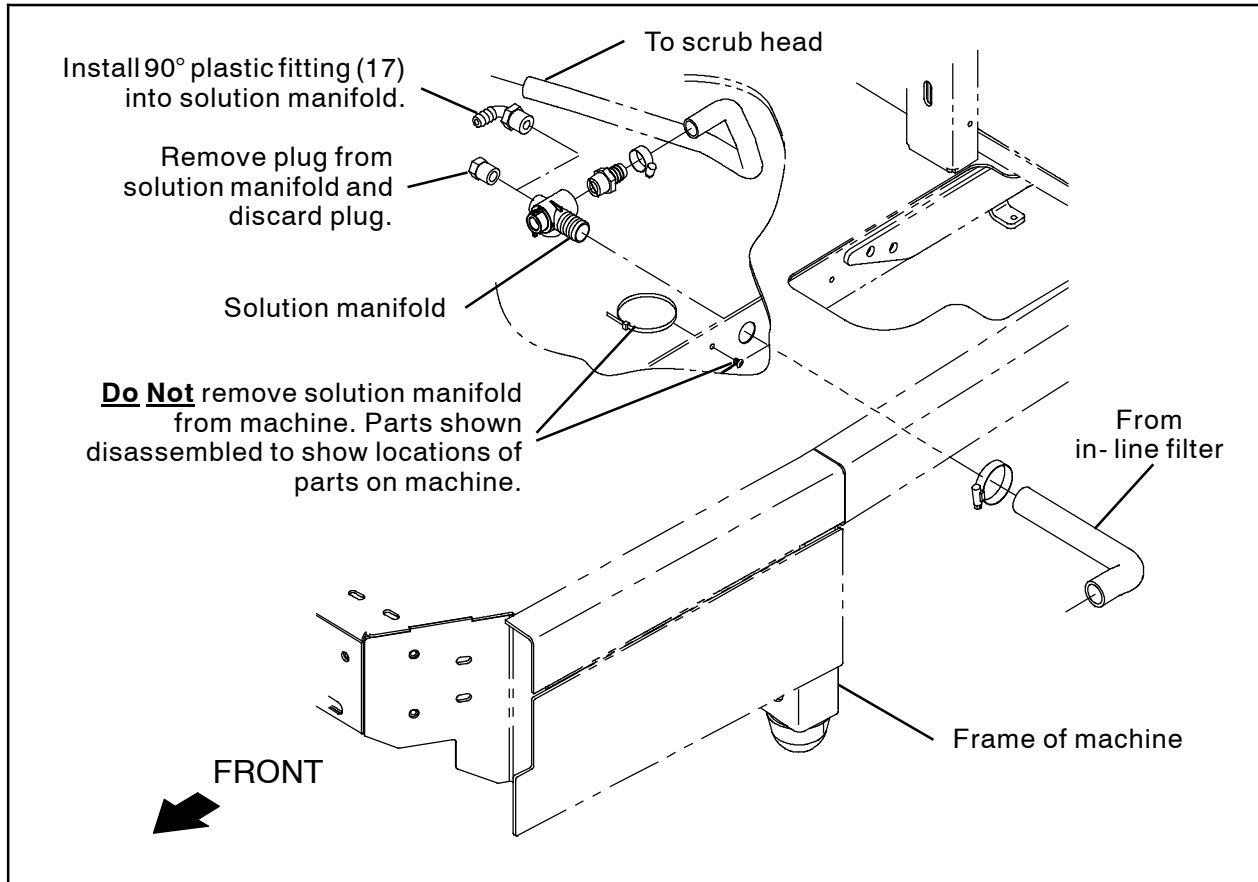


FIG. 2

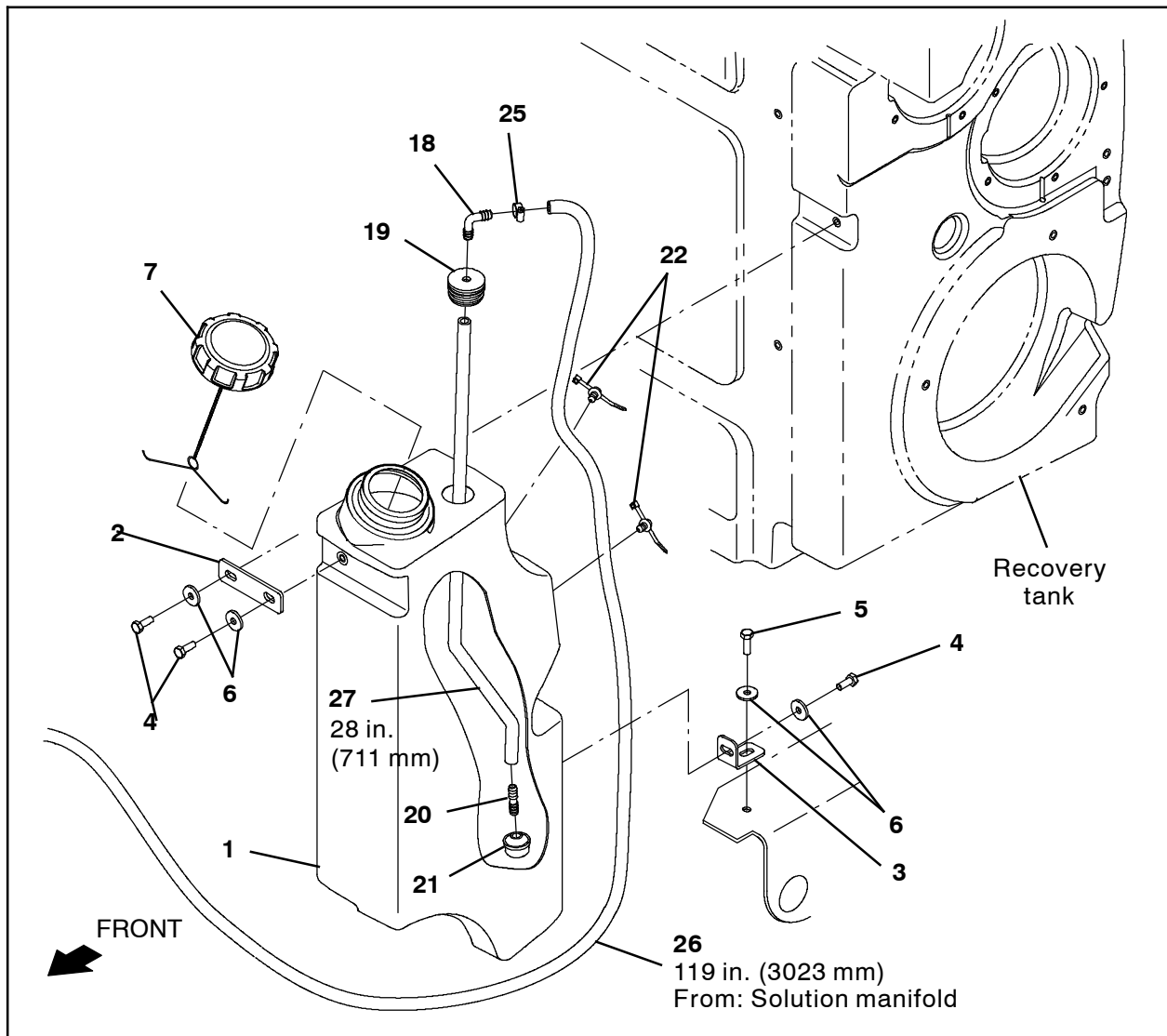


FIG. 3

9. Thread the straight fitting (20) into the pump screen (21). (Fig. 3)
10. Install the screen assembly assembled in the previous step onto the 28 in. (711 mm) PVC hose (27). (Fig. 3)
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 (27). (Fig. 3)
12. Install the hose assembly assembled in the previous several steps into the detergent tank (1). (Fig. 3)
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. 3)
14. Use one M8 hex screw (4) and one flat washer (6) to install the detergent tank (1) onto the detergent tank bracket (3). (Fig. 3)
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. 3)
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. 3)
17. Use a hose clamp (25) to connect the 119 in. (3023 mm) PVC hose (26) to the 90° plastic fitting (18) installed on the detergent tank (1). (Fig. 3)

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 (26) to the detergent tank. (Fig. 3)

19. Install the tank cap (7) onto the detergent tank (1). (Fig. 3)

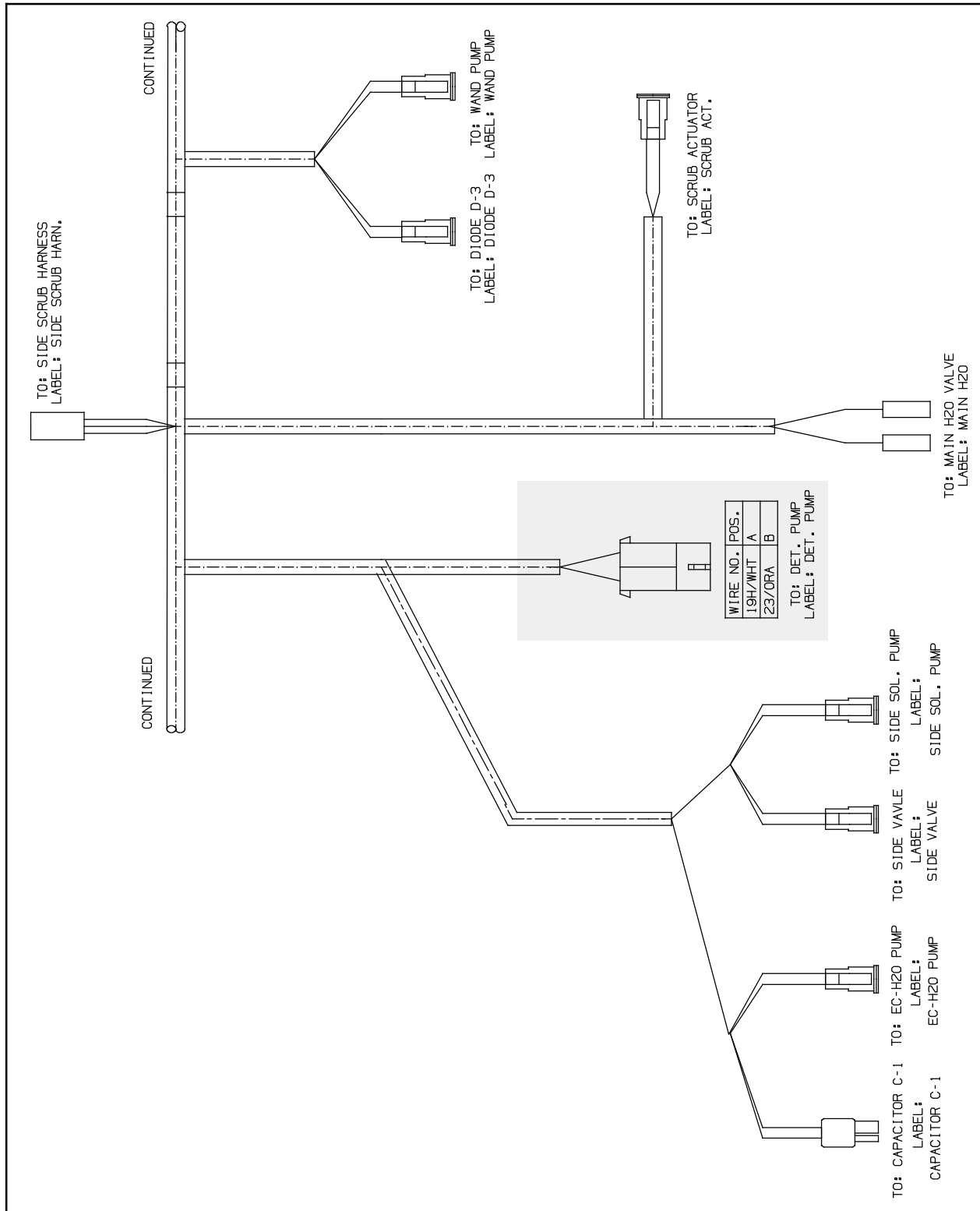


FIG. 4

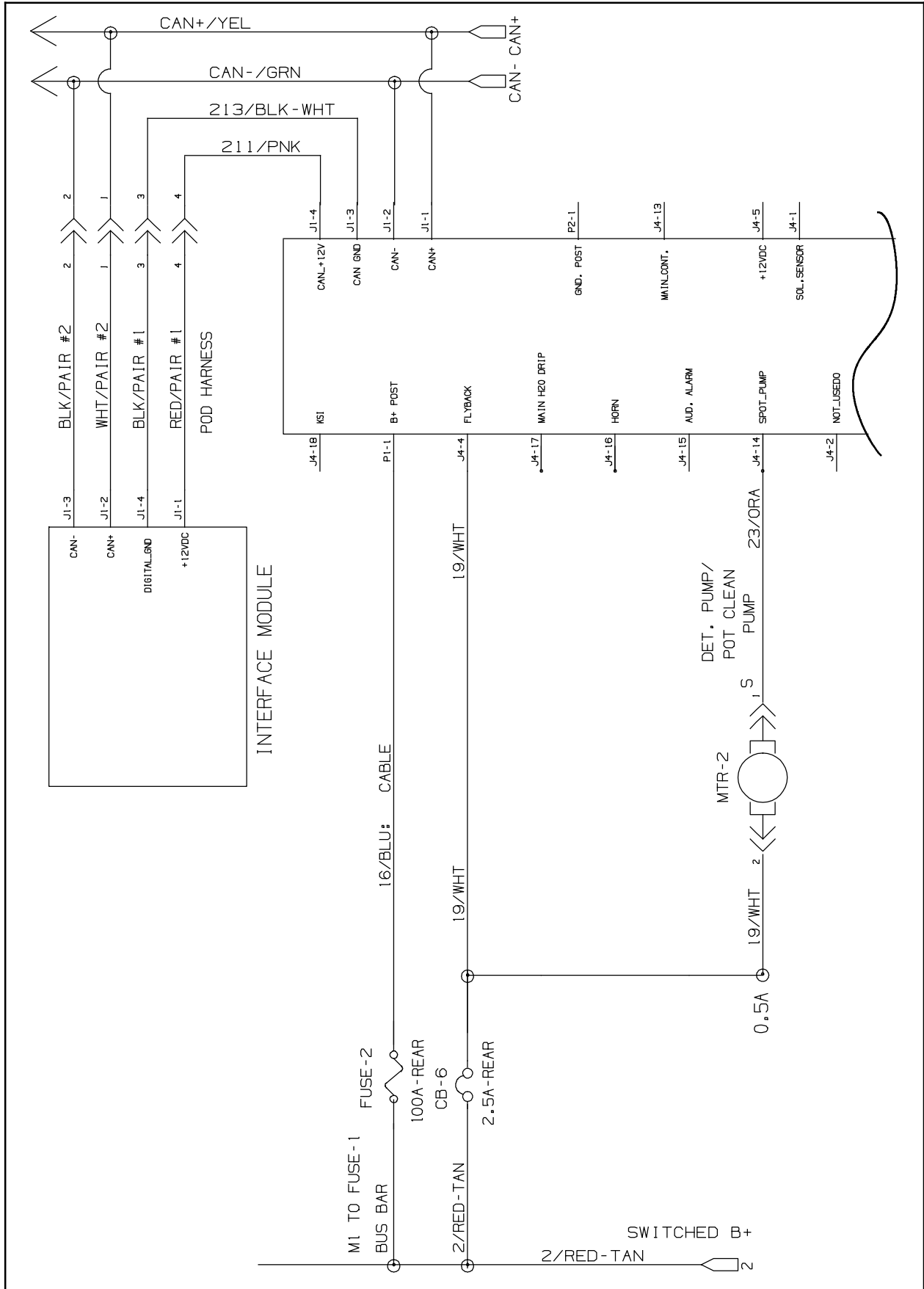


FIG. 5

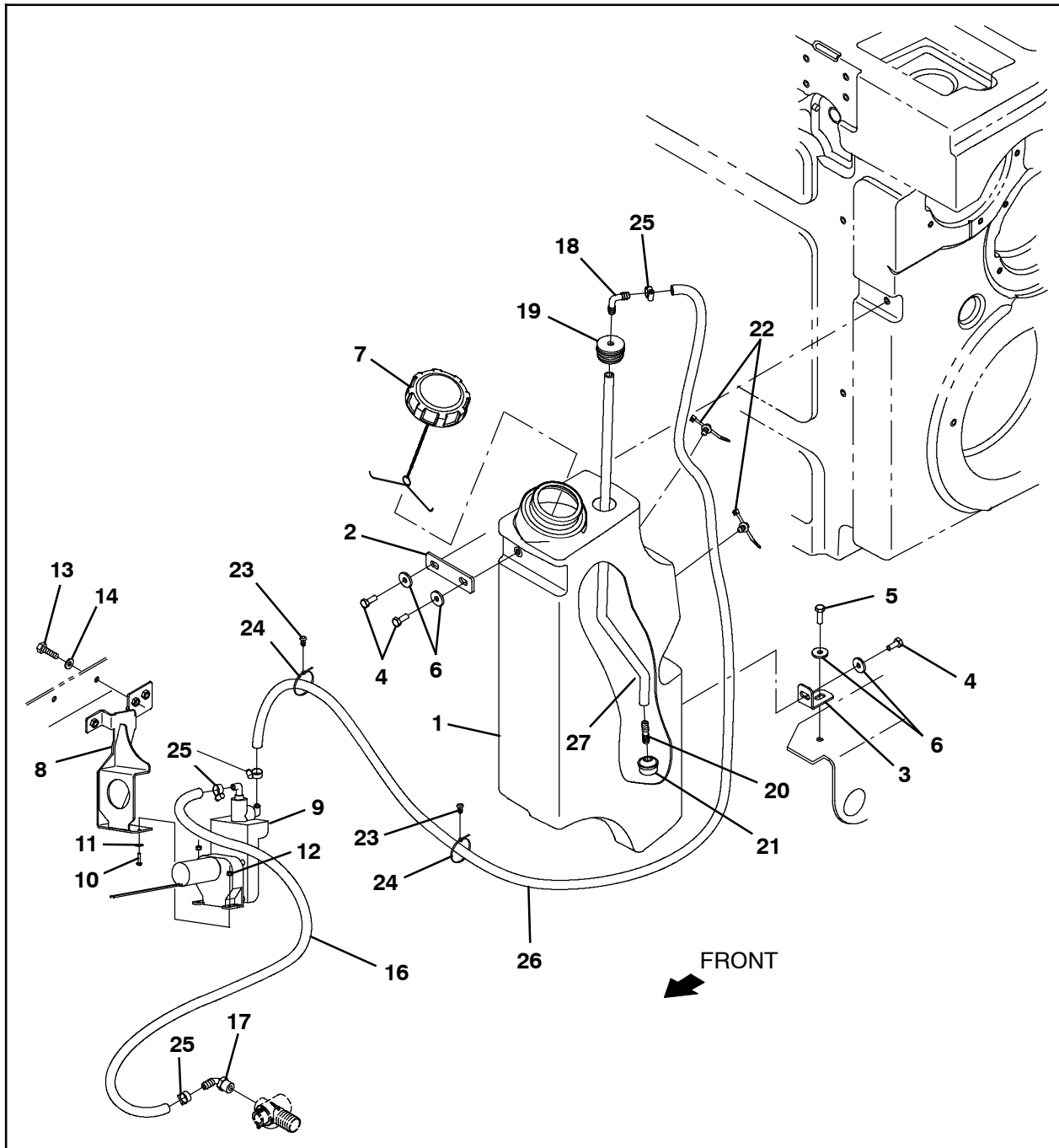


FIG. 6

20. Use tie clips (23) and cable ties (24) to secure the 119 in. (3023 mm) PVC hose (26) to the machine. (Fig. 6)
21. If the scrub head was removed from the machine to install the severe environment kit, reinstall the scrub head onto the machine and reconnect the solution supply hose and main wire harness to the scrub head.
22. Remove the jack stands from under the machine and lower the machine to the floor.
23. If the scrub head was removed from the machine to install the severe environment kit, reinstall hardware to secure the scrub head to the machine.

24. Reinstall the vacuum fan(s) onto the machine and reconnect the main wire harness to the vacuum fan(s).
25. Reconnect the battery cable to the machine.
26. Fill the solution tank with cool clean water.
27. Fill the detergent tank with detergent.
28. Start and test the machine. Place machine into the scrub mode and begin scrubbing.
29. While scrubbing press the severe environment button. The button should illuminate and detergent should be added to the solution stream for 30 seconds. The button will go out and the severe environment system will cease dispensing detergent at the end of the 30- second interval.
30. While scrubbing press the severe environment button for approximately 5- 10 seconds. The button should illuminate and detergent should be added to the solution stream for five minutes. The button will go out and the severe environment system will cease dispensing detergent at the end of the five- minute interval.

Bill Of Materials For Switch Assy, SE, w/ Pro-Panl, DI - 9017166

Ref.	Tennant Part No.	Description	Qty.
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	1225439	Bracket Wldt, Pump	1
9	386364	Pump, Detgt, 36VDC (See Breakdowns)	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	3
14	32490	Washer, Flat, 0.25, Std	3
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. / 533 mm)	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	130773	Tie, Cable, Nyl, 11.0l, .14w, 3.0 Max. D	6
25	43844	Clamp, Hose, Wormdrive, 0.25- 0.62d, .31w	4
26	376720	Hose, PVC, Brd, 0.38id, 0.60od, Bulk, Clr (119 in. / 3023 mm)	1
27	376720	Hose, PVC, Brd, 0.38id, 0.60od, Bulk, Clr (28 in. / 711 mm)	1

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