



INSTRUCTION BULLETIN

No. 340482
Machine: ATLV 4300
Published: 4-02
Rev. 02

NOTE: DO NOT DISCARD the Parts List from the Instruction Bulletin. Place the Parts List in the appropriate place in your machine manual for future reference. Retaining the Parts List will make it easier to reorder individual parts and will save you 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 368612**

DESCRIPTION:

This kit contains the parts needed to install a dust control system on the ATLV 4300 model litter vacuum.

Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: Chain hoist

(Estimated time to complete: 4-6 hours)

HYDRAULIC PRINCIPLES:

1. Cleanliness is extremely important when working with hydraulic components. Work in a clean, dust-free area. Dirt or foreign material in hydraulic systems can impair operation and damage equipment.
2. Before disconnecting hydraulic hoses or fittings, thoroughly clean outside of hydraulic component to prevent dirt from entering system.
3. Mark hydraulic hoses and record locations for proper installation.
4. Cap disconnected hoses or open ports to keep dirt out of system.
5. Discard any hydraulic fluid drained from the system. Use only new, approved hydraulic fluid to replenish hydraulic reservoir.
6. Flush hose and fittings at pressure port of hydraulic component with air, solvent or hydraulic fluid to help avoid contamination.

PREPARATION:

(Refer to FIG. 1 thru 4)

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

1. Disconnect battery cables from machine.

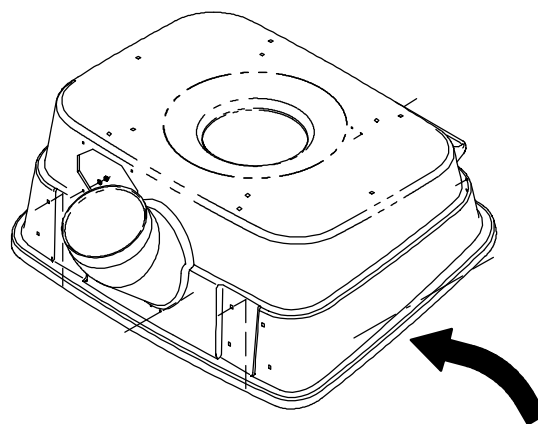


WARNING: Always disconnect battery cables from machine before working on electrical components.

INSTALLATION:

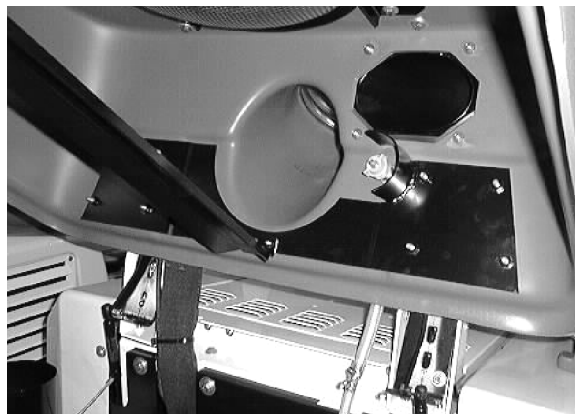
(Refer to FIG. 1, 2 and 3)

1. Open the debris canister. Remove and set aside the filter bags. Center a lift strap in between the canister cover and the canister. Close the debris canister and secure with latches. Disconnect and remove the vacuum fan hoses from the vacuum fan motor. Disconnect and remove the mounting hardware connecting the left and right hand hinges to the canister cover. Check that the canister cover latches are secure. Set the hinge mounting hardware aside. Lift the rear of the canister cover using the lift strap and a hoist.



2. **MACHINES W/ S.N. 4300-1917 AND BELOW:**

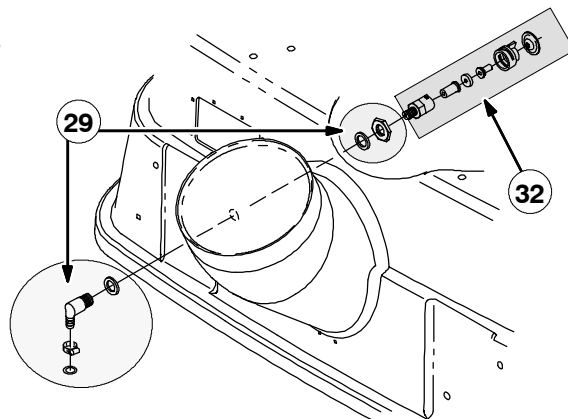
Remove the old backing plate (#367567) from the debris canister hinges. Install the new backing plate (#368552) in place of the old backing plate.



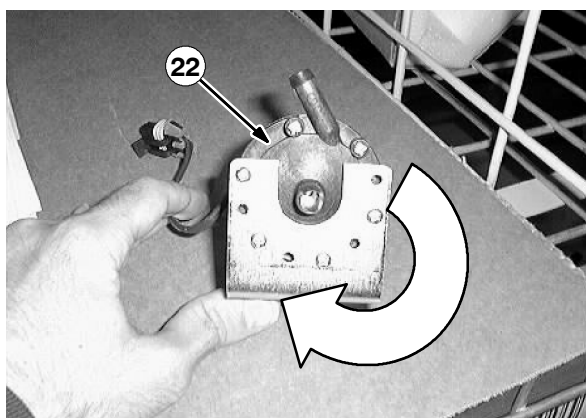
3. Mark and drill an 11/16 (0.6875 in) hole in the back of the debris canister, centered in the spray deflector of the new backing plate (33).



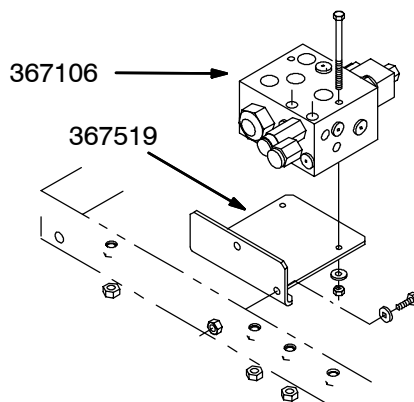
4. Install the dust control spray nozzle (32) in the new mounting hole, in the front wall of the debris canister cover, with nozzle mount (29), while the debris canister cover is raised up off the machine.



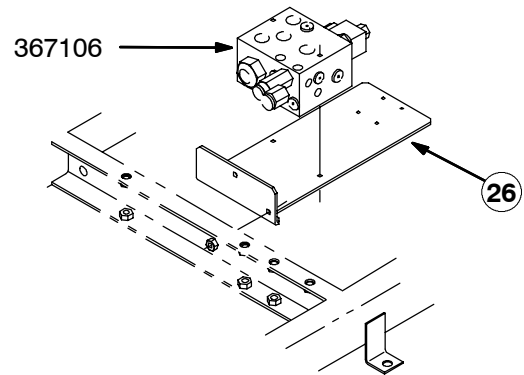
5. Examine the water pump (22). Remove the water pump from the pump mounting bracket. Rotate the water pump (22) clockwise one mounting hole, in the pump mounting bracket, so the straight hose connection is pointing straight up. Remount the water pump (22) to the pump mounting bracket.



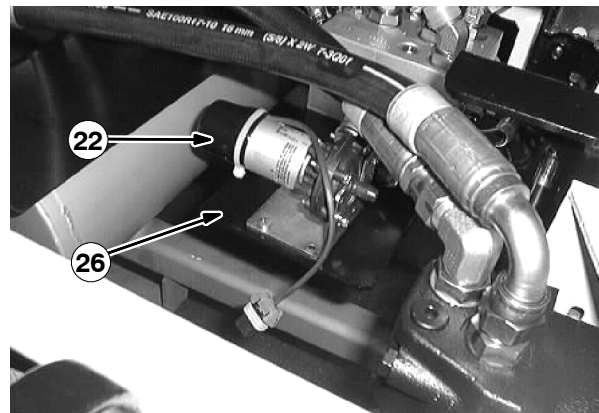
6. Remove hydraulic control valve (367106) from the old hydraulic valve mounting bracket (367519). Remove and discard hydraulic valve mounting bracket (367519) from the machine.



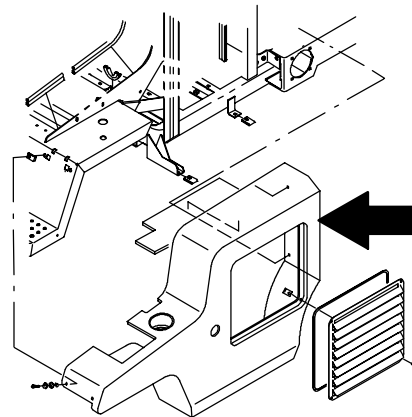
7. Mount the hydraulic valve (367106) to the new pump mounting bracket (26).



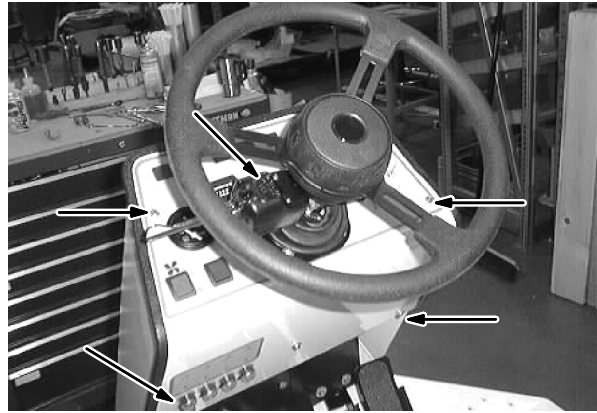
8. Mount the water pump (22) to the new pump mounting bracket (26). Mount the pump mounting bracket (26) to the machine frame.



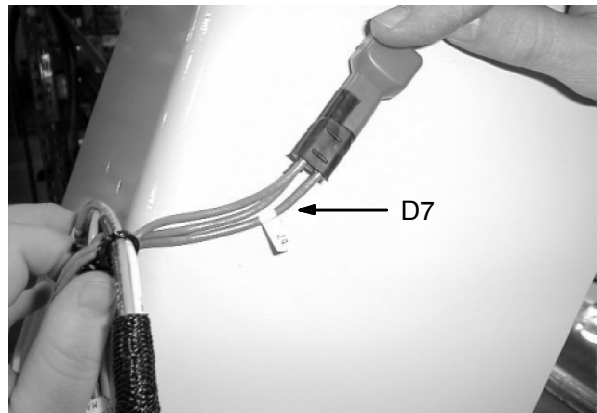
9. Remove the side panel from the left hand side of the machine.



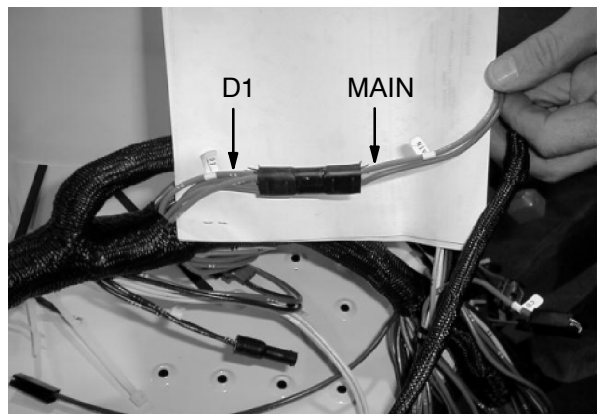
10. To allow access to the wiring under the control panel: Loosen the turn signal switch assembly clamp on the steering column (if installed). Remove the four screws and two flange nuts holding the panel to the frame. Pull the panel away from the frame pedestal.



11. Under the left hand side of the control panel, locate the diode pack attached to the connector labeled "D1" (18/GREEN and 20/BROWN) on the main harness. Remove the diode pack from the main harness "D1" connector and re-attach it to the connector labeled "D7" (19B/BLOCK and 18B/GREEN) on the dust control harness.



12. Plug the connector labeled "MAIN" (18B/BLOCK and 19B/GREEN) on the dust control harness, into the connector labeled "D1" on the main harness.

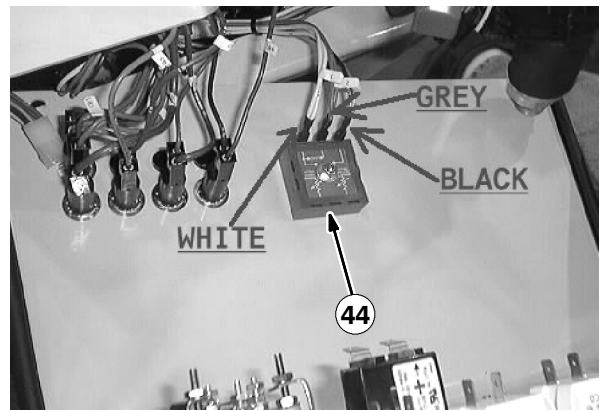


13. Plug the diode pack (supplied with kit) into the connector label "D8" (13DA/BLOCK, 13DB/BLOCK 44/ORANGE and 44A/ORANGE wires) on the dust control harness.

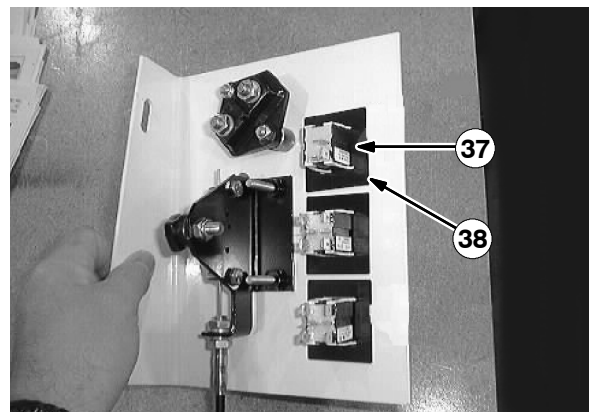
14. Install the new dust control relay (40) on the control panel support bar with the other control relays.
(Refer to FIG 2 and 3)



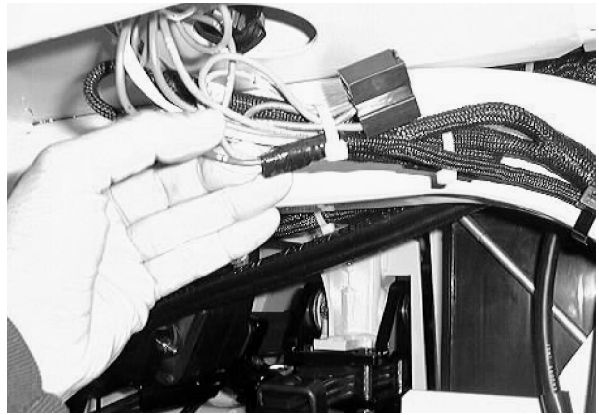
15. Mount the water flow timer (44) to the back side of the control panel, next to the circuit breakers. Connect the wire harness (34) to circuit breaker 1 using connector 378953. Close the control panel and replace the steering wheel, boot seal and steering wheel tilt lever knob. (Refer to FIG 2 and 3)



16. Route the dust control harness (34) down and back along the main harness to the control panel on the left hand side of the machine. Install the dry dust control switch (37) and switch retainer plate (38).
(Refer to FIG 2 and 3)



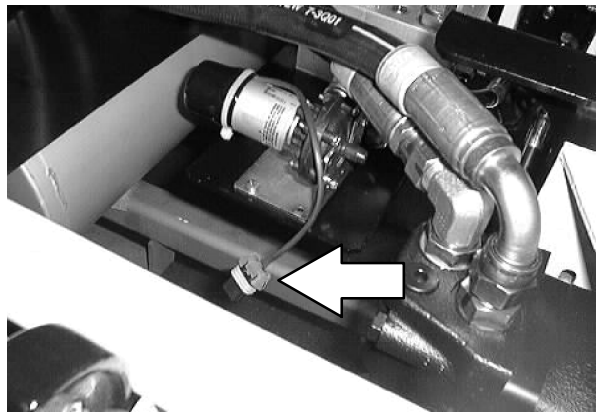
17. Route the smaller branch of the dust control harness to the dust control switch (37). Connect the wire harness (34) to the rocker switch. (Refer to FIG 2 and 3)



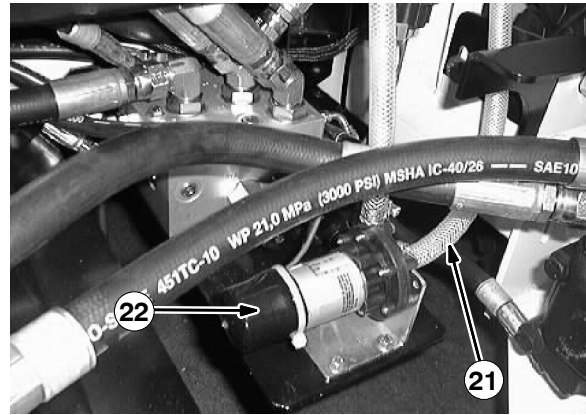
18. Continue routing the main branch of the dust control wire harness (34) along the main harness. Route the dust control wire harness back over the bell housing and ground at the main harness ground location. (Refer to FIG 2 and 3)



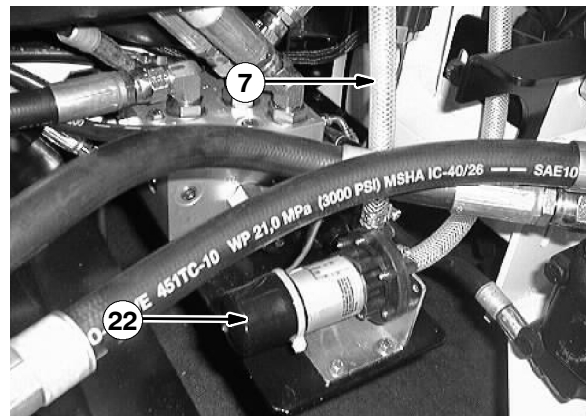
19. Connect the dust control wire harness (34) to the water pump. (Refer to FIG 2 and 3)



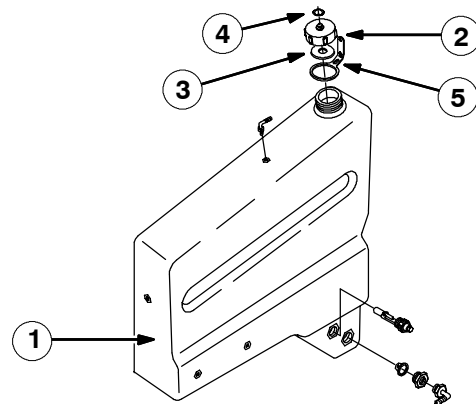
20. Connect one end of the narrow 42 in. PVC hose (21) to the end of the water pump (22) with a hose clamp. Temporarily route the hose over the right hand rear fender.



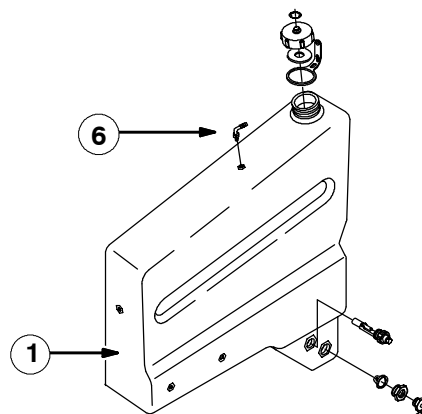
21. Connect one end of the narrow 19 in. PVC hose (7) to the connection pointing straight up from the water pump (22). Secure the hose (7) to the water pump with a hose clamp.



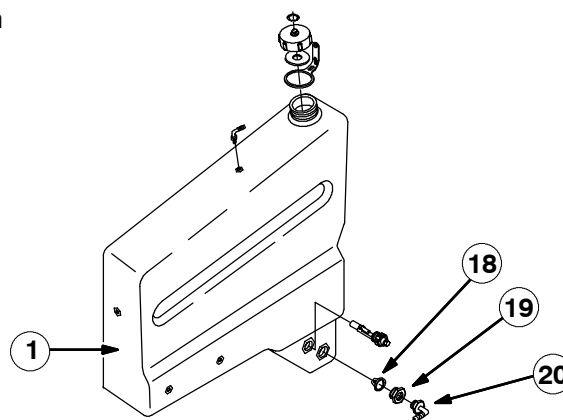
22. Place the water tank (1) up on clean work surface. Secure the tank cap gasket (3) in the tank cap (2). Mount the cap strap (5) to the water tank opening. Secure the tank cap (2) to the cap strap (5) with the retaining ring (4). (Refer to FIG 1)



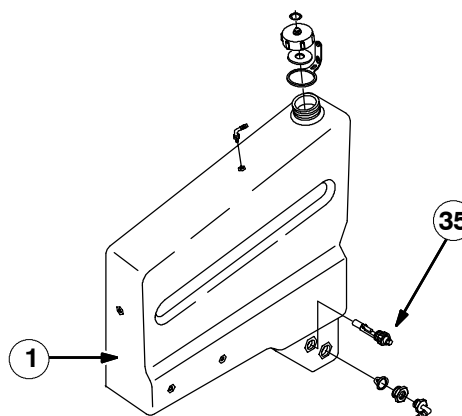
23. Apply RTV sealant to the small 90° plastic fitting (6). Thread the small 90° plastic fitting (6) into the top of the water tank (1). (Refer to FIG 1)



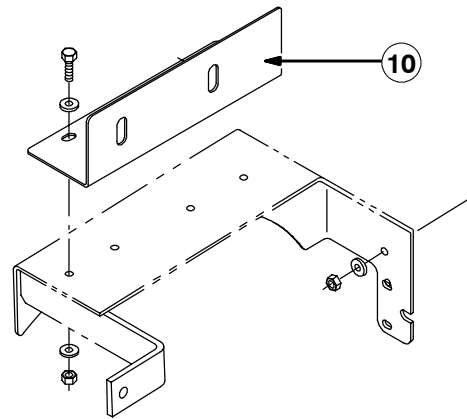
24. Install the filter strainer (18) and straight fitting (19) in the lower opening of the water tank (1). Seal the straight fitting (19) threads with RTV sealant. Mount the larger 90° fitting (20) in the open end of the straight fitting (19) with RTV sealant. (Refer to FIG 1)



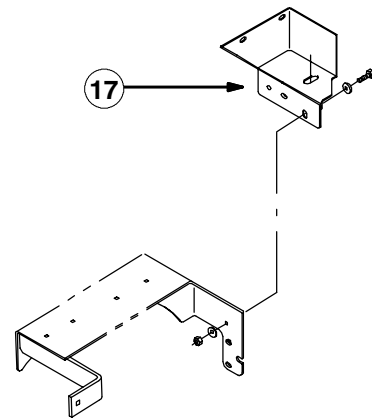
25. Mount the water level switch (35) in the bottom opening of the water tank (1) with RTV sealant. Mount foam spacer (48) to the bottom of the water tank (1) using foam self adhesive. (Refer to FIG 1)



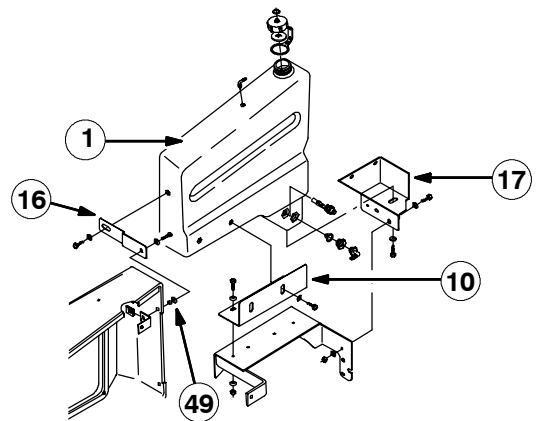
26. Loosely mount the front water tank mounting bracket (10) to the right rear fender of the machine with mounting hardware. (Refer to FIG 1)



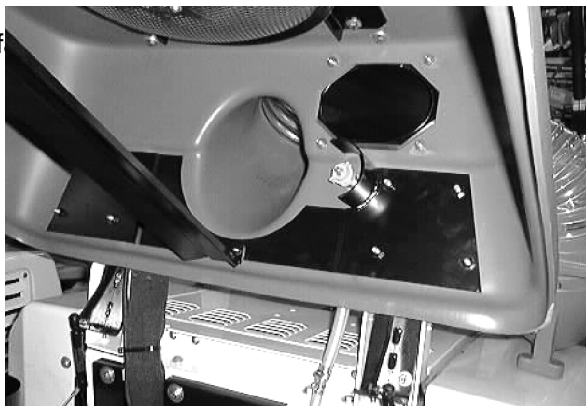
27. Loosely mount the rear water tank mounting bracket (17) to the the rear of the right rear fender with mounting hardware. (Refer to FIG 1)



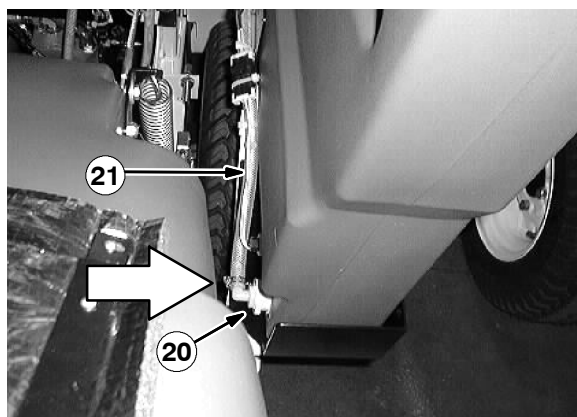
28. Mount water tank (1) to the tank mounting brackets (10, 17) and side panel with mounting hardware, top plate (16) and sleeve (49). Tighten the tank mounting bracket mounting hardware. (Refer to FIG 1)



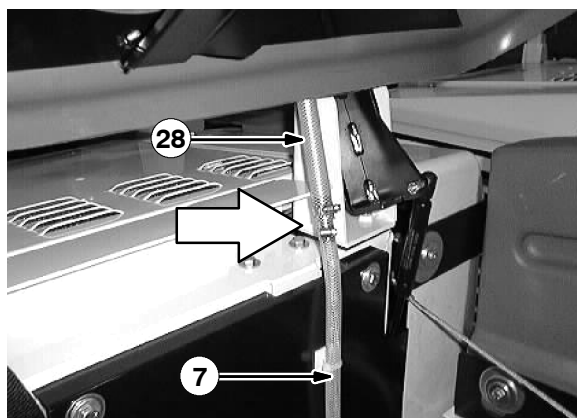
29. Mount the debris canister cover back on top of the canister. Reconnect the vacuum hose and vacuum assembly. Reinstall the filter bags.



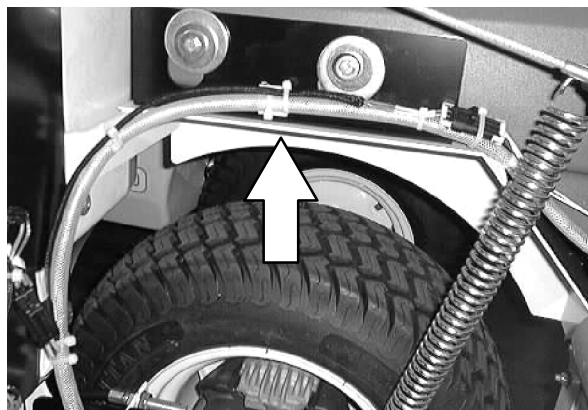
30. Route the narrow 42 in. PVC hose (21) from the end of the water pump over to the 90° fitting (20) in the bottom of the solution tank. Secure the PVC hose (21) to the fitting (20) with a hose clamp.



31. Route the narrow 19 in PVC hose (7) straight up from the water pump (22) and connect it to the 0.75 in hose (28) with the hose adapter and two hose clamps. Connect the open end of the 0.75 in hose (28) to the water nozzle connection on the outside of the debris canister cover.



32. Secure the water hose and electrical harness to the side of the water tank with wire ties and retaining rings.



33. Check the water tank and water hoses for leaks

34. Close the debris canister. Start the machine, and check the dust control system for proper operation.

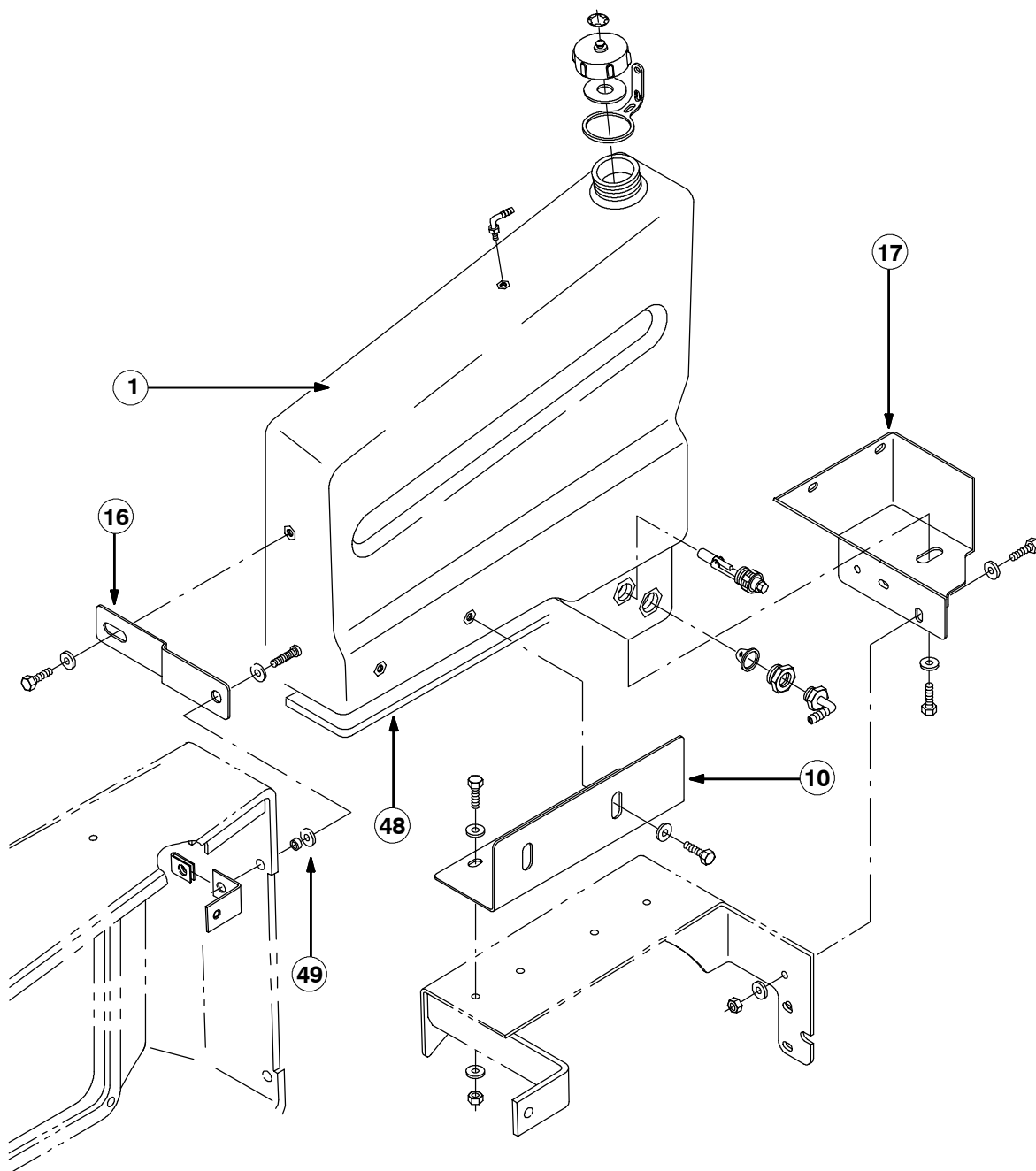


FIG. 1 - WATER TANK INSTALLATION

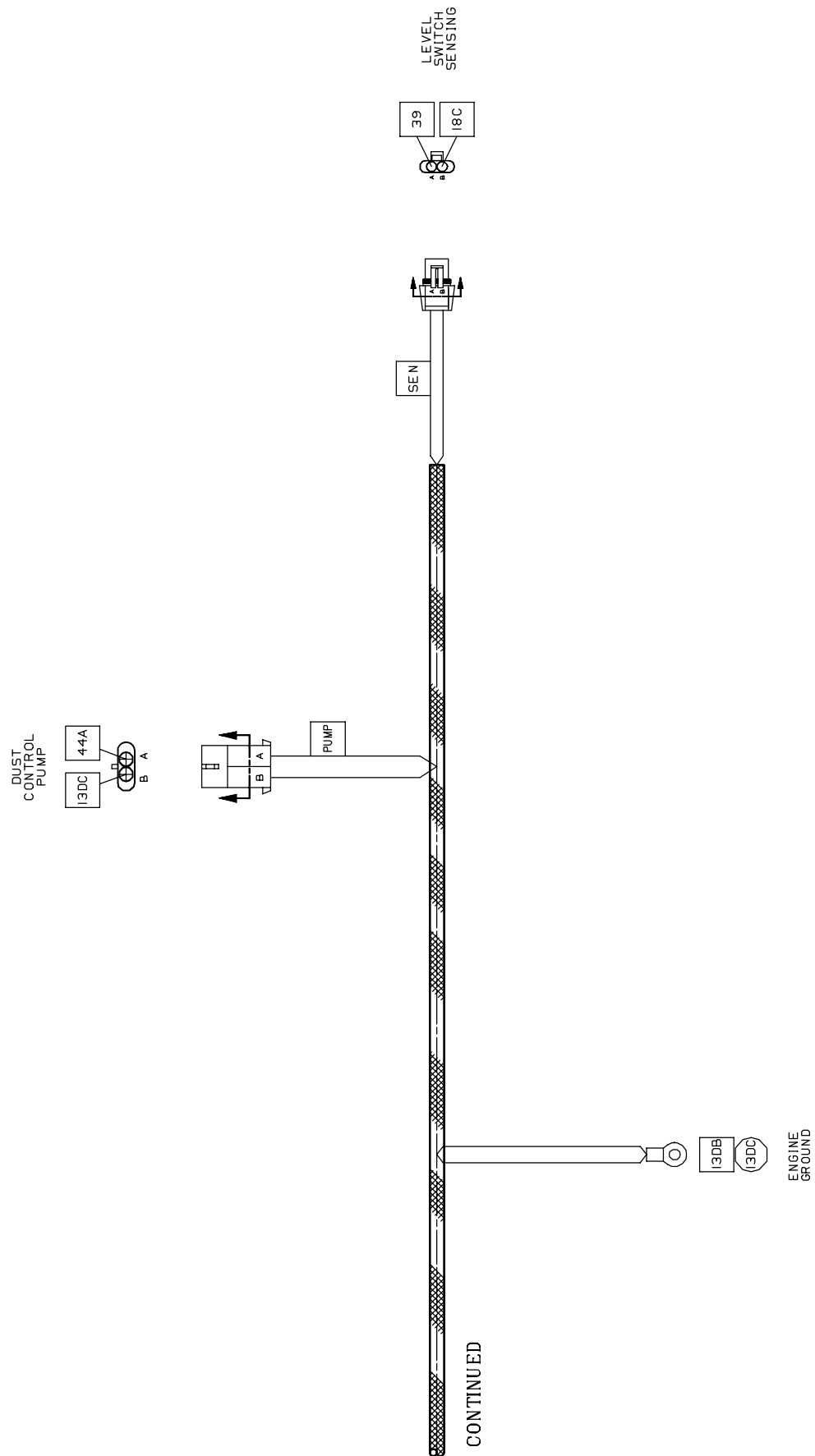


FIG. 2 - DUST CONTROL HARNESS

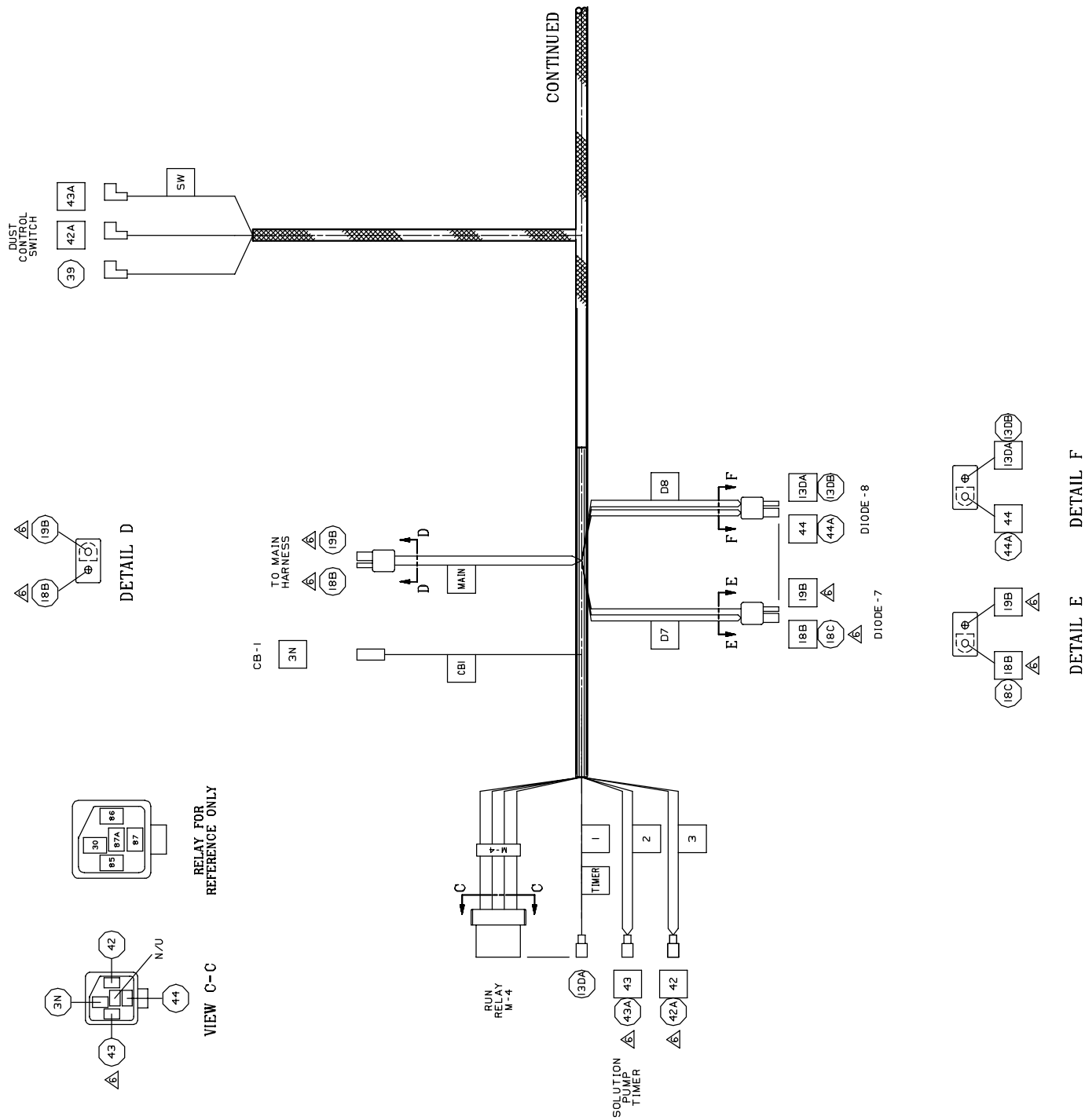


FIG. 3 - DUST CONTROL HARNESS, CONT.

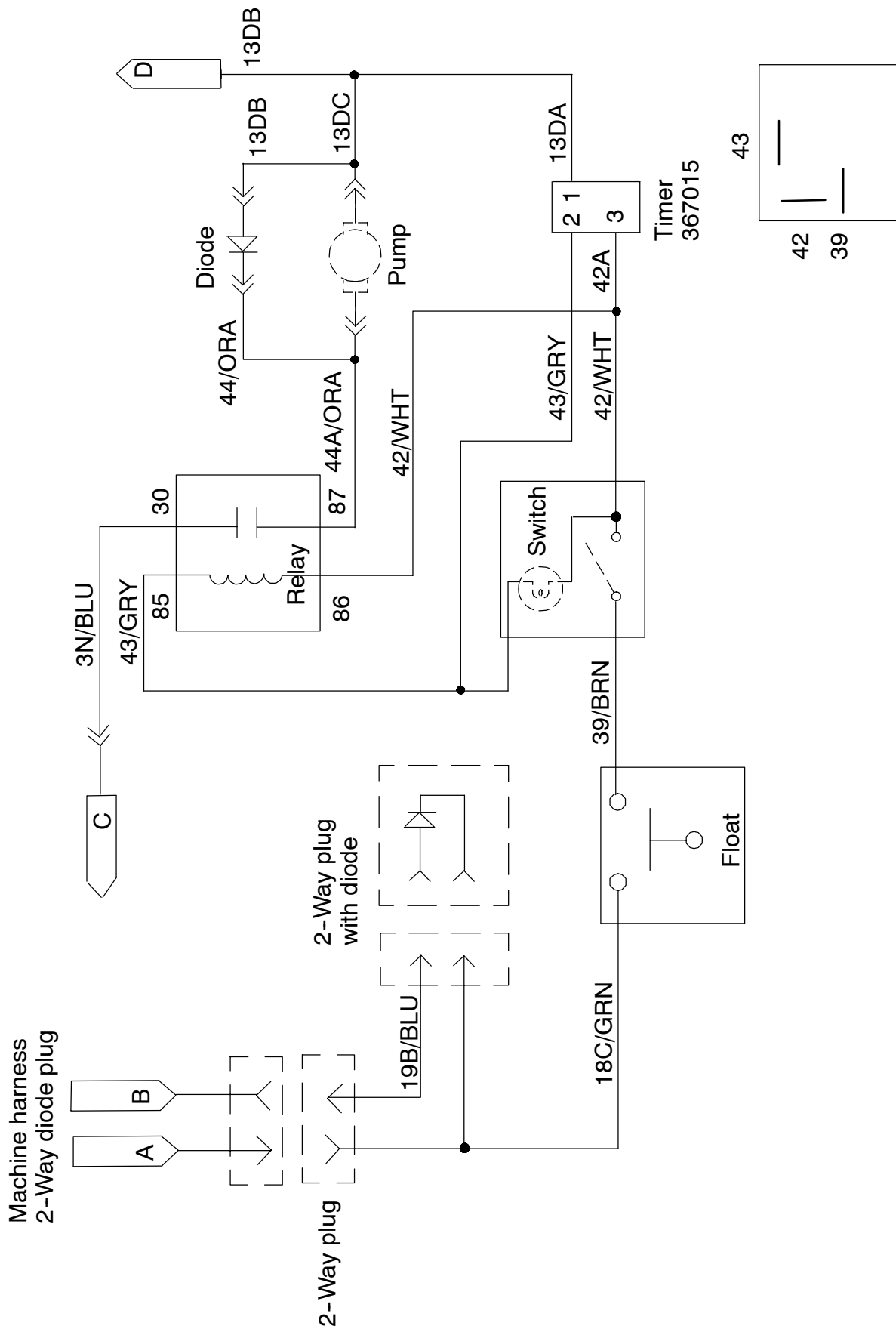


FIG. 4 - DUST CONTROL HARNESS, CONT.

BILL OF MATERIALS FOR DUST CONTROL KIT 368612

Ref.	TENNANT Part No.	Description	Qty.
1	368608	Tank, water, dust control	1
2	32613	Cap, tank, drain, 2.25 thread pye	1
3	32614	Gasket, cap	1
4	32669	Ring, retaining, ext, 0.75D, Ss	1
5	32508	Strap	1
6	57248	Fitting, plstc, E90, BM06/PM04	1
7	382602	Hose, PVC, clr, 0.38ID 0.56OD 19.00L	1
8	43844	Clamp, hose, wormdrive, 0.25-0.62D	1
9	49266	Tie, cable, NYL, 07.3L 0.19W 1.8 MAX D	2
10	368631	Bracket, front	1
11	13248	Washer, 0.40B 1.12D 0.12, STL, PL	4
12	16735	Screw, hex, M08 X 1.25 X 16, 8.8	5
13	50388	Screw, hex, M08 X 1.25 X 12, 8.8	9
14	32491	Washer, flt, 0.31 std	6
15	08709	Nut, hex lock, M08 X 1.25, NL	5
16	368630	Plate, top	1
17	368626	Bracket, rear	1
18	382298	Strainer, sprayer	1
19	382299	Fitting, plastic, str, PM16/PF08	1
20	03394	Fitting, plastic, E90, BM06/PM08	1
21	365113	Hose, PVC, clr, 0.38ID 0.60D 42.00L	2
22	382138	Pump, water, 12VDC, 0.5GPM	1
23	24199	Screw, hex, M05 X 0.8 X 16, Ss	4
24	01683	Washer, flt, #10 Ss	8
25	07784	Nut, hex, std, M05 X 0.8, Ss	4
26	368625	Bracket, mtg, valve and pump	1
27	222375	Fitting, plstc, str, BM06/BM08	1
28	223515	Hose, PVC, BRD, 0.50ID 0.75OD	1
29	382423	Mount, nozzle	1
30	382425	Housing, nozzle	1
31	382433	Strainer, fluid	1
32	382517	Nozzle assy, spray	1
33			
34	368543	Harness, water, dust control	1
35	382410	Switch, level, water	1
36	378953	Connector	1
37	222117	Switch	1
38	80326	Plate	1
39	222290	Diode, elect, plug	1
40	56186	Relay, 12VDC, 40A, SPDT, [potter]	1

41	08708	Nut, hex, lock, M06 X 1.0, NL	1
42	32483	Washer, flt, 0.25 SAE	1
43	87308	Screw, hex, M06 X 1.0, NL	1
44	382421	Timer, [4 sec on 6 sec off, 12 volt]	1
45	33944	Screw, pan, M06 X 1.0 X 35, 4.8	1
46	32483	Washer, flt, 0.25 SAE	1
47	08708	Nut, hex, lock, M06 X 1.0, NL	1
48	368664	Spacer, foam, tank	1
49	222516	Sleeve, 0.318 0.496D 0.312 Ss	1

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