

INSTRUCTION BULLETIN

No. 9018916

Machine: M17 / T17

Published: 09-2019

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 9018830

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

SYNOPSIS:

This kit contains the parts needed to install the optional power washer assembly onto M17 machines serial numbers 011000 and above (European serial numbers 0500 and above) and T17 machines serial numbers 013000 and above (European serial numbers 1200 and above). Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: NONE

(Estimated time to complete: 7 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.

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

2. Disconnect the battery cable from the machine.



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

- 3. Remove the existing battery compartment cover from the machine.
- 4. Remove the battery from the machine.

FOR SAFETY: When servicing machine, battery installation must be done by trained personnel, follow site safety guidelines concerning battery removal.

FOR SAFETY: When servicing machine, avoid contact with battery acid, keep all metal objects off batteries, use a non-conductive battery removal device, use a hoist and adequate assistance when lifting batteries.

5. Remove parts/components necessary for installing the power sprayer onto the machine.

INSTALLATION:

- 1. Orient the fittings on the water pump (1) as shown and install the water pump unto to water pump mounting bracket. (Fig. 1)
- 2. Install the water pump assembly onto the frame of the machine. (Fig. 1)

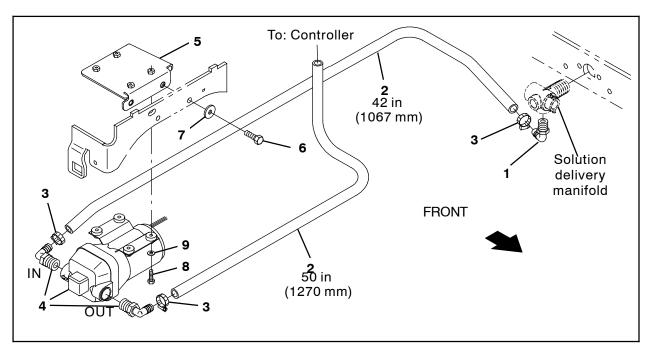


FIG. 1

- 3. Connect the 42 in (1067 mm) hose (2) to the solution delivery manifold. (Fig. 1)
- Route the 42 in (1067 mm) hose (2) from the solution delivery manifold to the water pump assembly and connect the hose to the water pump assembly IN port. (Fig. 1)
- Route the 50 in (1270 mm) hose (2) down from the battery compartment and to the water solution assembly and connect the hose to the water pump assembly OUT port. (Fig. 1)
- 6. Remove both SEMS M6 hex screws securing the electrical enclosure cover to the electrical enclosure. Set the SEMS M6 hex screws aside. (Fig. 2)



FIG. 2

Carefully remove the electrical enclosure cover from the electrical enclosure and position the electrical enclosure cover out of the way. <u>Do Not</u> break or damage wires / wire connections when removing the electrical enclosure cover from the electrical enclosure. (Fig. 2 / Fig. 3)



FIG. 3

- Connect the pressure washer harness (1) to the auxiliary lead on the main wire harness connection connected to the water circuit board. (Fig. 4/Fig. 5)
- Connect the fused cable assembly to the ground stud and switched main terminal. (Fig. 5)

- 10. Route the pressure washer harness (1) and fused cable assembly to the water pump (4) and connect the pressure washer harness to the water pump. (Fig. 5)
- 11. Route the pressure washer harness and fused cable assembly along the main wire harness, into the battery compartment, and along the main wire harness up the front to the recovery tank (rear of the battery compartment).
- 12. Connect a static ground lead on the pressure washer harness to one of the hex screws securing the recovery tank to the frame of the machine. (Fig. 5)
- 13. Route the pressure washer harness along the main wire harness and up to the top of the recovery tank.

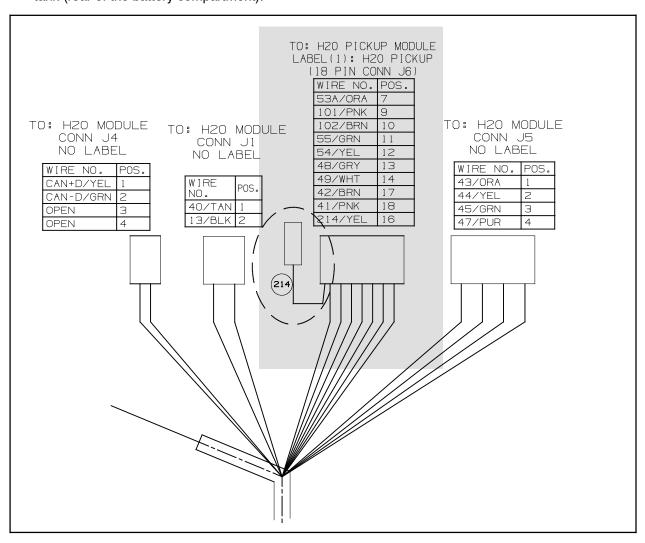


FIG. 4

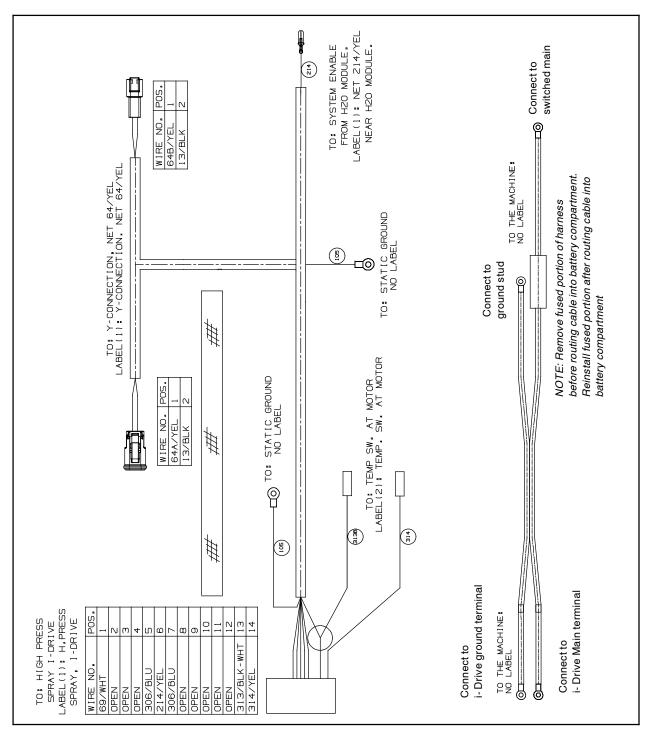


FIG. 5

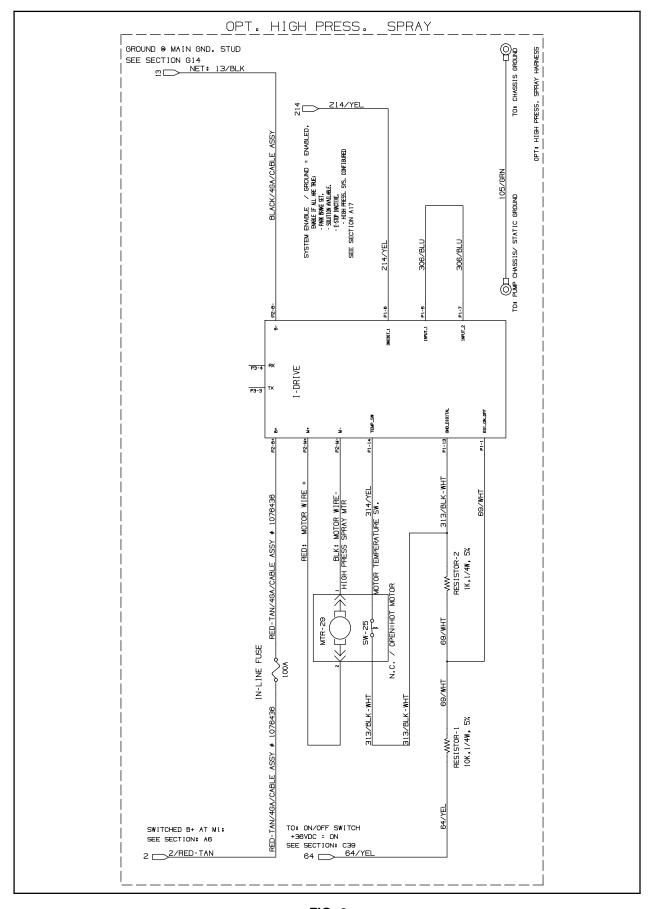


FIG. 6

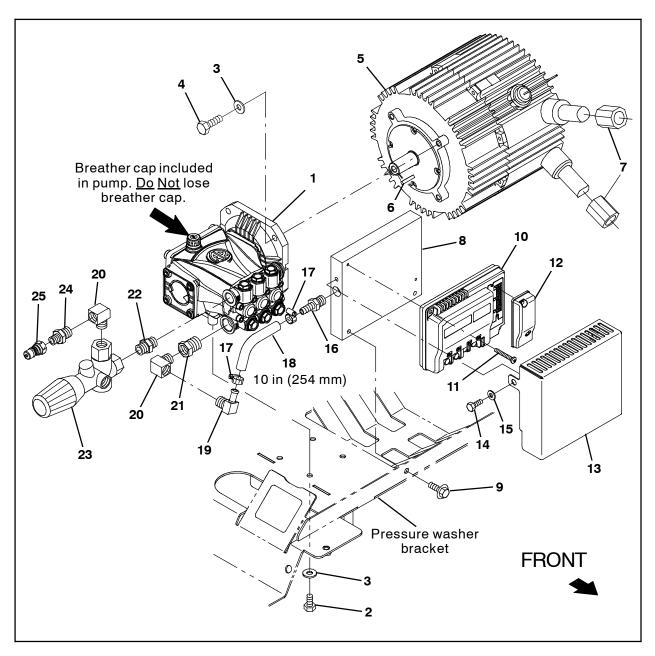


FIG. 7

14. Assemble the power washer components onto the pressure washer mounting bracket. (Fig. 7)

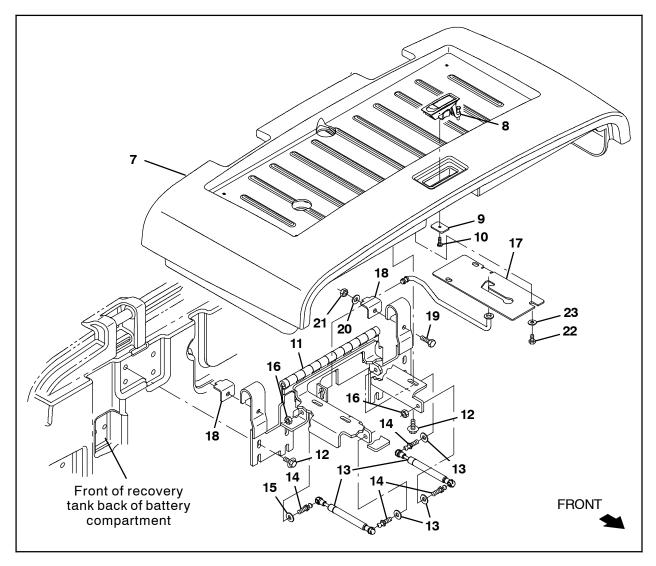


FIG. 8

- 15. Assemble parts onto the new power washer battery compartment cover. (Fig. 8)
- 16. Reinstall the battery into the battery compartment. **<u>DO NOT</u>** connect the battery cable to the machine.

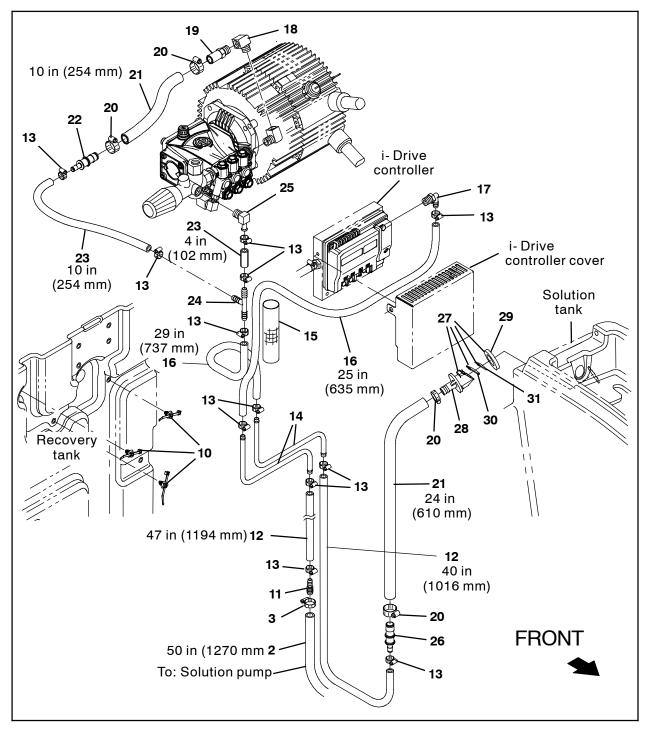


FIG. 9

- 17. Connect the 40 in (1016 mm) hose (12) to the 24 in (610 mm) hose (21). (Fig. 9)
- 18. Connect the 24 in (610 mm) hose (21) to the solution tank. (Fig. 9)
- 19. Connect the other end of the 40 in (1016 mm) hose (12) to a pressure washer water tube (14). (Fig. 9)
- 20. Connect the 29 in (737 mm) hose (16) to the other end of the pressure washer water tube (14) from the previous step. (Fig. 9)
- 21. Connect the 47 in (1194 mm) hose (12) to the 50 in (1270 mm) hose (2) from the water pump IN port. (Fig. 9)

- 22. Connect the other end of the 47 in (1194 mm) hose (12) hose connected to the 50 in (1270 mm) hose (2) to the remaining pressure washer water tube (14). (Fig. 9)
- 23. Connect the 25 in (635 mm) hose (16) to the other end of the pressure washer water tube (14) from the previous step. (Fig. 9)
- 24. Use wire ties (10) to secure the pressure washer water tubes (14) to the front of the recovery tank. (Fig. 9)
- 25. Install the battery compartment cover assembly onto the recovery tank/battery compartment. (Fig. 8)
- 26. Install the pressure washer assembly onto the recovery tank/battery compartment cover. (Fig. 7/ Fig. 8)

NOTE: Due to the weight/size of pressure washer assembly, use a hoist/seek assistance when placing the pressure washer assembly onto the battery compartment cover.

27.Install the remaining hoses/fittings to the pressure washer assembly. (Fig. 8)

- 28. Connect the pressure washer harness to the power washer motor and the pressure washer i- Drive controller. (Fig. 4/Fig. 6/Fig. 7)
- 29. Connect the fused cable assembly to the i- Drive controller. (Fig. 4/Fig. 6/Fig. 7)
- 30.Install the i- Drive controller cover onto the i- Drive controller. (Fig. 6)
- 31. Remove the electrical access panel from the machine. Set the electrical access panel and hardware aside.
- 32.Install the 15- Amp circuit breaker (3) into the circuit breaker panel location 10 and connect the main wire harness to the circuit breaker. (Fig. 10)
- 33. Plug the electrical diode (2) into the main wire harness. (Fig. 10)
- 34. Remove the hardware securing the control panel to the machine. (Fig. 9)
- 35. Carefully pull the control panel from the machine. Do not break any wire/cable connections. (Fig. 10)

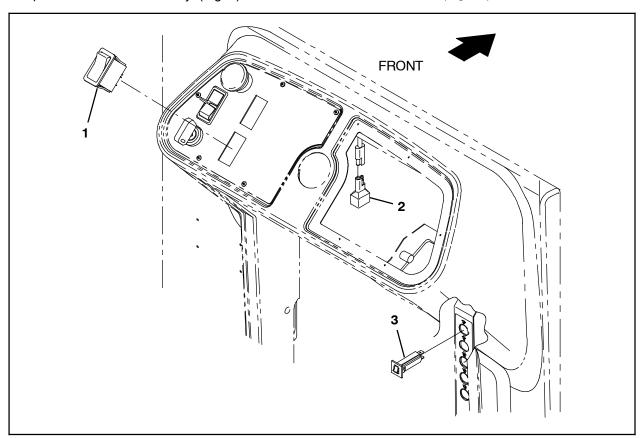


FIG. 10

- 36. Remove the plug from the control panel and insert the switch (1) into the location where the plug was previously located. (Fig. 10)
- 37. Connect the main wire harness to the switch (1). (Fig. 10)
- 38. Reinstall the control panel onto the machine. (Fig. 10)
- 39. Reinstall the electrical access panel onto the machine.
- 40. Reinstall the electrical enclosure cover onto the electrical enclosure.
- 41.Install the power washer cover (24) onto the power washer assembly. (Fig. 11)
- 42. Assemble remaining hardware and components onto the power washer cover (24). (Fig. 11)

- 43. Assemble the power sprayer wand (35) (36) (37) (38) (39) and hose (40) (41) (42) and connect the hose to the power sprayer assembly. (Fig. 11)
- 44. Connect the battery cable to the machine.
- 45. Fill the solution tank with cool clean water.
- 46. Test the newly installed pressure washer system. Turn on the machine and turn on the pressure washer system. Operate the pressure washer to ensure it is functioning.
- 47. When finished testing the pressure washer system, turn off the pressure washer, point the pressure wand in a safe direction and squeeze the trigger to release pressure from the system, stow the pressure washer wand/hose on the pressure washer, and turn off the machine.

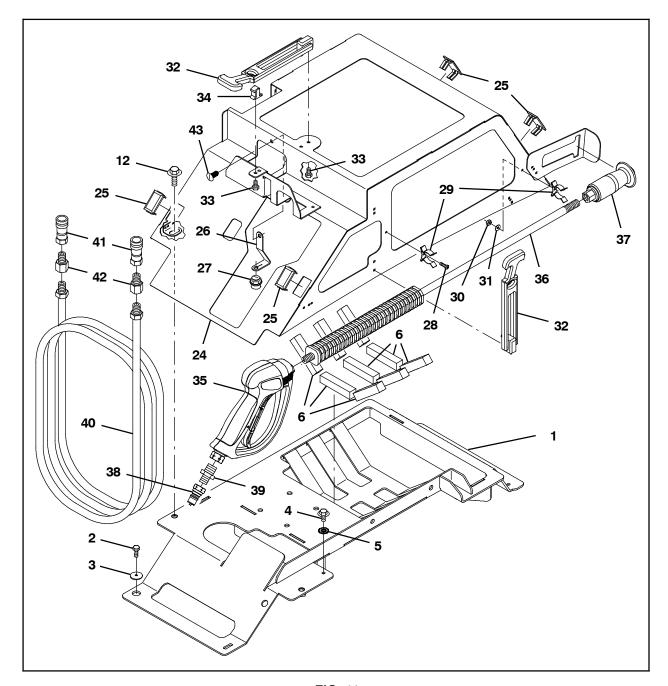


FIG. 11

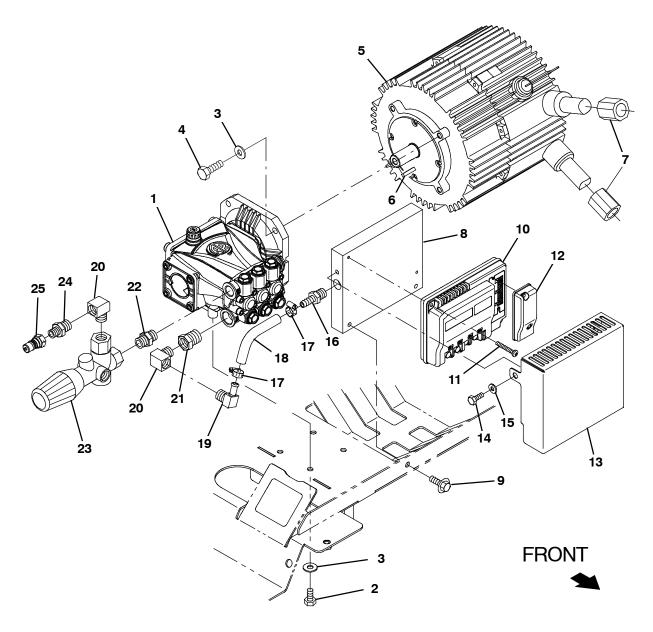


FIG. 12 - Pressure Washer Motor / Pump Group

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Pressure Washer Solution Supply Group Bill of Materials

	Tennant		
Ref.	Part No.	Description	Qty.
1	1236318	Pump, Pressure Washer	1
2	16735	Screw, Hex, M8 X 1.25 X 16, 8.8	4
3	32491	Washer, Flat, 0.31, Std	8
4	21198	Screw, Hex, .38- 16 X 1.25, G5	4
5	1239141	Motor, Ele, 24-72vdc 3400rpm 6.71hp	11
6	00912	Key, Sq, 0.19 X 0.19, 1.00l	1
7	1052126	Inductor, 12.7mmid [156 Imp At 25mhz]	2
8	1241608	Block, Cooling, Press Wash	1
9	1020341	Screw, Hex, M8 X 1.25 X 20, SS, SEMS	2
10	1238746	Controller, Propel [36vdc,200a, I-Drive]	1
11	06938	Screw, Pan, Phl, M5 X 0.80 X 40, 4.8	2
12	1241005	Cover Assy, I- Drive	1
13	1239673	Cover, Wash, Press [I- Drive]	1
14	06942	Screw, Hex, M6 X 1.00 X 16, 8.8	2
15	32483	Washer, Flat, 0.25, SAE	2
16	150538	Fitting, Plstc, Str, Bm06/Pm06	1
17	43844	Clamp, Hose, Wormdrive, 0.25-0.62d, .31w	10
18	376720	Hose, PVC, Brd, 0.38Id, 0.60Od, Bulk, Clr (10 in (254 mm))	1
	1014971	Hose, Afmkt, PVC, Brd, 0.38Id, 01ft, Clr	
19	1243150	Fitting, Brs, E90, Bm06/Pm06	2
20	24584	Fitting, Brs, E90, Pf06/Pm06, Spcl	2
21	47167	Fitting, Brs, Str, Pf06/Pm08	1
22	1224331	Fitting, Brs, Str, Pm06/Pm06	1
23	1239018	Valve, Needle, [M17/T17]	1
24	1044428	Fitting, Brs, Str, Pm04/Pm06 [Hp]	1
25	1042191	Fitting, SS, QDC, Mal	1

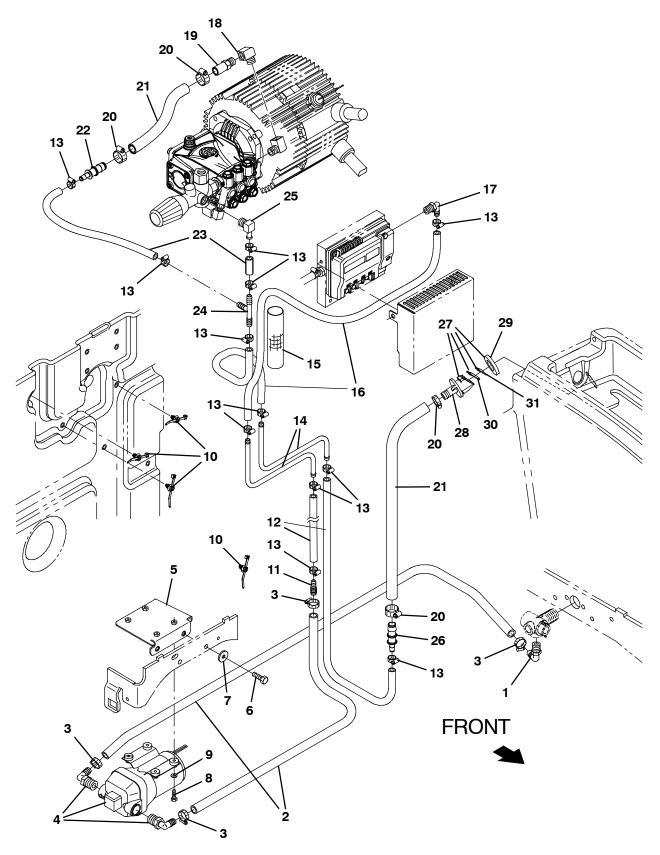


FIG. 13 - Pressure Washer Solution Supply Group

Pressure Washer Solution Supply Group Bill of Materials

		Tennant		
	Ref.	Part No.	Description	Qty.
	1	64778	Fitting, Plstc, E90, Bm08/Pm06	1
	2	376716	Hose, PVC, Brd, 0.50id, 0.73od, Bulk, Clr	1
			(50 in (1270mm)) (40 in (1067 mm))	
		1011412	Hose, Afmkt, PVC, Brd, 0.50id, 08ft, Clr	
	3	54333	Clamp, Hose, Wormdrive, 0.31-0.88d, .31w	4
	4	1242823	Pump, Soltn, Ele, 36vdc, 45psi	1
	5	1244427	Plate Wldt, Pump	1
	6	09010	Screw, Hex, M8 X 1.25 X 25, SS	2
	7	1017218	Washer, Flat, 0.32b 1.00d .12, SS	2
	8	12316	Screw, Hex, M5 X 0.80 X 25, SS	4
	9	01683	Washer, Flat, 10, SS	4
	10	1210807	Wire, Tie [W/.25" Fir Tree Clip]	4
	11	222375	Fitting, Plstc, Str, Bm06/Bm08	1
	12	376720	Hose, PVC, Brd, 0.38id, 0.60od, Bulk, Clr	1
		1011070	(47 in (1016 mm)) (40 in (1194 in))	
		1014976	Hose, Afmkt, PVC, Brd, 0.38id, 12ft, Clr	
	13	43844	Clamp, Hose, Wormdrive, 0.25- 0.62d, .31w	13
	14	1240293	Tube, Water, Pressure Washer	2
	15	87677	Sleeve, Nyl, 1.22id 20.0l	1
	16	376720	Hose, PVC, Brd, 0.38id, 0.60od, Bulk, Clr	1
		1014976	(25 in (635 mm)) (29 in (737 mm)) Hose, Afmkt, PVC, Brd, 0.38id, 08ft, Clr	
	17	150412	Fitting, Plstc, E90, Bm06/Pm06	1
	18	24584	Fitting, Piste, E90, Pf06/Pm06, Spcl	2
	19	1242000	Valve, Pop- Off, 3500 Psi	1
	20	63810	Clamp, Hose, Wormdrive, 0.56-1.06d, .56w	4
	21	C460117	Hose, PVC, Brd, 0.62id, 03ft, Clr	1
	۷1	0400117	(10 in (254 mm)) (24 in (610 mm))	ı
		1015026	Hose, Afmkt, PVC, Brd, 0.62id, 0.96od, Bulk	
	22	1243167	Fitting, Plstc, Str, Bm06/Bm10	1
	23	376720	Hose, PVC, Brd, 0.38id, 0.60od, Bulk, Clr	1
		5.5.25	(10 in (254 mm)) (4 in (102 mm))	·
		1014974	Hose, Afmkt, PVC, Brd, 0.38id, 02ft, Clr	
	24	87173	Fitting, Plstc, Tee, Bm06/Bm06/Bm06	1
	25	1243150	Fitting, Brs, E90, Bm06/Pm06	1
	26	1243167	Fitting, Brs, Str, Bm06/Pf08	1
\triangle	27	9014338	Valve Kit, Check, ES [T17]	1
•	28	78840	Valve, Check, Pump, Water	1
•	29	73342	Gasket, .25 1.88d 1.0id [Poron]	1
•	30	78841	Flapper, Valve, Pump, Water	1
A	31	1217187	Flap, Restrictor, Check Valve	1

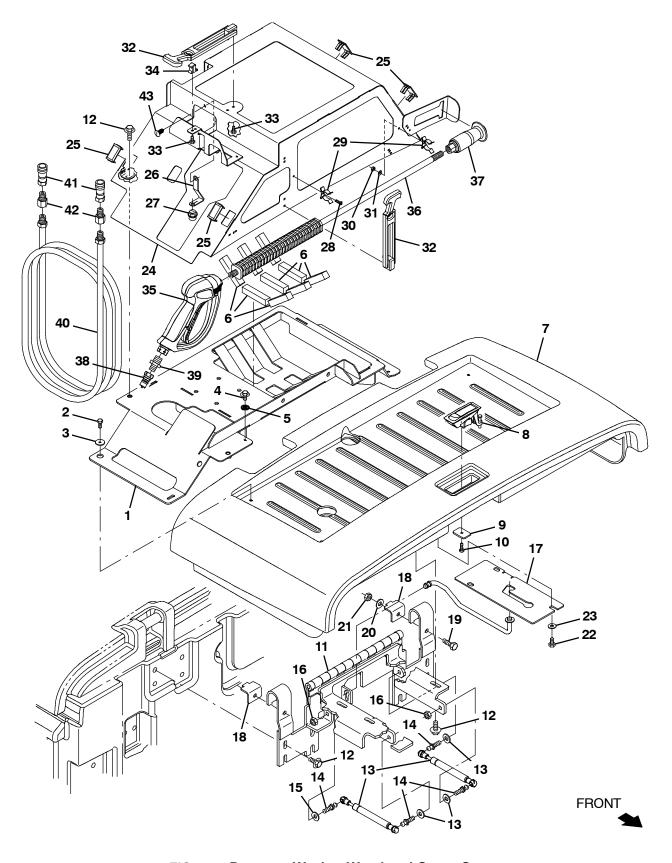


FIG. 14 - Pressure Washer Wand and Cover Group

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Pressure Washer Wand and Cover Group Bill of Materials

	Ref.	Tennant Part No.	Description	Qty.
	1	9018850	Brkt Kit, Press Wash, Afmkt [T/M17]	1
	2	12312	Screw, Hex, M5 X 0.80 X 12, 8.8	4
	3	397779	Washer, Flat, 0.28b 1.00d .06, Stl, Blk	1
	4	222158	Screw, Hex, M6 X 1.00 X 10, Fmg	1
	5	41140	Washer, Lock, Int- Ext, 0.25	1
	6	1239531	Seal, Rbr, Clsd, 0.63, 0.63, 3.0l	<u>'</u>
	7	9018979	Cover, Battery, Pw, Dv, NA [T/M17]	1
	7	9018981	Cover, Battery, Pw, Dv, OHG [T/M17]	1
	8	398806	Latch	1
	9	1208748	Plate, Latch [T17]	1
-	10	06935	Screw, Pan, Phl, M5 X 0.80 X 25, 4.8	1
	11	1225700	Hinge Wldt, Cover, Battery	1
	12	1020341	Screw, Hex, M8 X 1.25 X 20, SS, SEMS	12
	13	1245866	Gasspring, 90lb, 3.15strk	2
	14	1243500	Stud, Ball, 10mm Ball, M8x1.25	4
	15	32491	Washer, Flat, 0.31, Std	4
	16	08713	Nut, Hex, Lock, M8 X 1.25, NI, SS	4
	17	1225704	Plate, Mtg, Cover	1
	18	1207130	Bracket, Retain, Hinge, Cover	2
	19	09010	Screw, Hex, M8 X 1.25 X 25, SS	2
	20	01685	Washer, Flat, 0.38b 0.88d .08, SS	2
	21	08713	Nut, Hex, Lock, M8 X 1.25, NI, SS	2
	22	15678	Screw, Hex, M6 X 1.00 X 16, SS	3
	23	32490	Washer, Flat, 0.25, Std	3
	24	9018847	Cover Kit, Press Wash, Afmkt [T/M17]	1
	25	57772	Plug, Hole, Rt, 1.45 X 0.83, Blk Nyl	4
\triangle		9018841	Plug Kit, Press Wash, Pump, Afmkt[T/M17]	1
A	26	1243644	Strap, Plug	1
_	27	1243645	Plug, Oil	1
_	28	06927	Screw, Pan, Phl, M4 X 0.70 X 16, 4.8	2
	29	23446	Clip, Grip, Finger, 0.31-0.75d, Nk Pl	2
	30	02850	Nut, Hex, Lock, M4 X 0.70, NI	2
	31	41579	Washer, Flat, 08, SS	2
	32	1244570	Latch, Draw	1
	33	09244	Screw, Hex, M5 X 0.80 X 16, 8.8	3
	34	1244906	Keeper, Latch, Draw	1
Δ		9018842	Wand Kit, Press Wash, Afmkt [T/M17]	1
•	35	1039042	Handle, Gun, Trigger	1
•	36	1039044	Wand, Str, SS, 28I	1
•	37	1238513	Nozzle, Press Washer	1
A	38	1042191	Fitting, SS, QDC, Mal	1
•	39	1044428	Fitting, Brs, Str, Pm04/Pm06 [Hp]	1
Δ		9018844	Hose Kit, Press Wash, Afmkt [T/M17]	1
•	40	1039056	Hose, Rbr, 25ft	1
•	41	1042051	Fitting, SS, QDC, Fem	2
A	42	1042772	Fitting, Brs, Str, Pf06/Pm04	2
	43	21168	Plug, Hole, Rnd, 0.25h 0.8l, Brb, Nyl	1

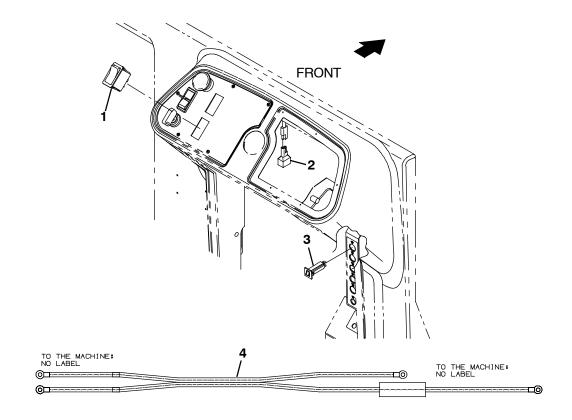


FIG. 15 - Pressure Washer Electrical Group

Pressure Washer Electrical Group Bill of Materials

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Qty.
1
1
1
1

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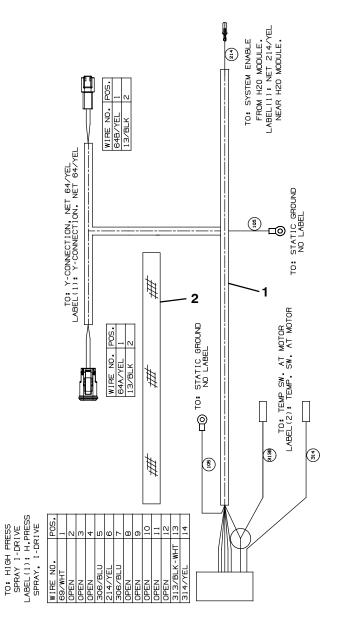


FIG. 16 - Pressure Washer Electrical Wire Harness Group

Pressure Washer Electrical Wire Harness Group Bill of Materials

	Tennant		
Ref.	Part No.	Description	Qty.
1	1076449	Harness, Ele [Pressure Washer, M17/T17]	1
2	87677	Sleeve, Nyl, 1.22id 20.0l	1

TENNANT COMPANY P. O. Box 1452 Minneapolis, MN 55440-1452