

# **INSTRUCTION BULLETIN**

No. 340835 Machine: T20 Published: 12-2012 Rev. 02

## 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 9003139

#### SYNOPSIS:

This kit contains the parts needed to install a spray nozzle kit on T20 machines. Please follow step-by-step instructions.

#### SPECIAL TOOLS / CONSIDERATIONS: NONE

(Estimated time to complete: 3 hours)



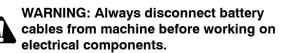
#### PROTECT THE ENVIRONMENT

Please dispose of packaging materials, old machine components, and hazardous fluids in an environmentally safe manner according to local waste disposal regulations.

Always remember to recycle.

#### **PREPARATION:**

- 1. Completely empty the recovery and solution tanks. Refer to the Operators Manual for instructions.
- 2. Park the machine on a clean level surface, turn off the machine, remove the key, and set the parking brake.
- 3. Open the front shroud, disconnect the battery cables from the battery, and remove the battery from the machine.



4. Remove the rear squeegee assembly from the machine. Set the rear squeegee assembly and all mounting hardware aside.

#### **INSTALLATION:**

 Cut a 35" section from the 144" PVC hose (33). Set the remaining PVC hose (33) aside. (Fig. 1)

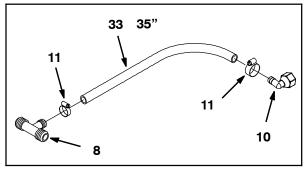


FIG. 1

 Use a hose clamp (11) to attach a 90° plastic fitting (10) and the plastic t-fitting (8) to the 35" PVC hose (33). (Fig. 1) 3. Cut the existing PVC hose 18" from the water valve assembly. (Fig. 2)

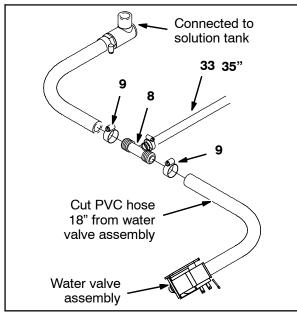


FIG. 2

- Use two hose clamps (9) to connect the loose ends of hose cut in the previous step to the plastic t-fitting (8) already attached to the 35" PVC hose (33). (Fig. 2)
- 5. Press the debris tray carriage release lever and pull the debris tray carriage open. (Fig. 3)

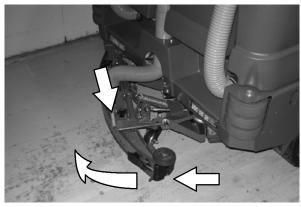


FIG. 3

 Use four pan screws (5), four flat washers (6), and four hex nuts (7) to install the pump mounting plate (1) onto the pump (4). (Fig. 4 / Fig. 5)





- Use two hex screws (3) and two flat washers
  (2) to install the pump mounting plate (1) onto the tank mounting bracket located at the rear of the machine. (Fig. 4 / Flg. 5)
- Use the 90° plastic fitting (10) to connect the 35" PVC hose (33) to the pump (4). (Fig. 5)
- 9. Cut the remaining portion of the PVC hose (33) to 72". (Fig. 5)
- Use a hose clamp (17) to attach a 90° plastic fitting (10) onto the 72" PVC hose (33). (Fig. 5)
- 11. Use the 90° plastic fitting (10) to connect the 72" PVC hose (33) to the pump (4). (Fig. 5)
- 12. Close the debris tray carriage.

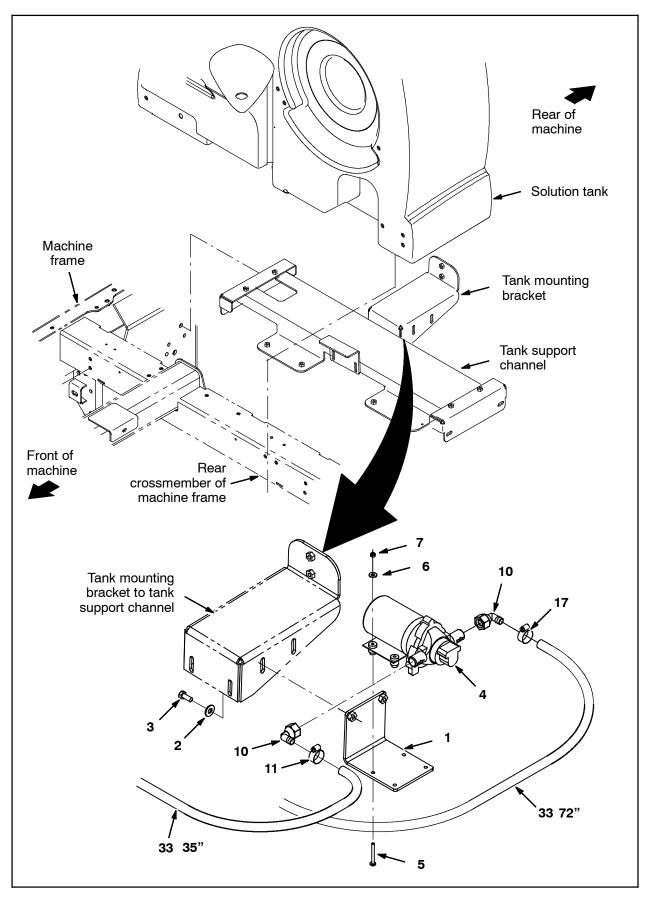


FIG. 5

- 14. Lock the operator seat open.
- Route the 72" PVC hose (33) under the recovery tank, around the vacuum fan, and towards the rear of the operator compartment. (Fig. 6)

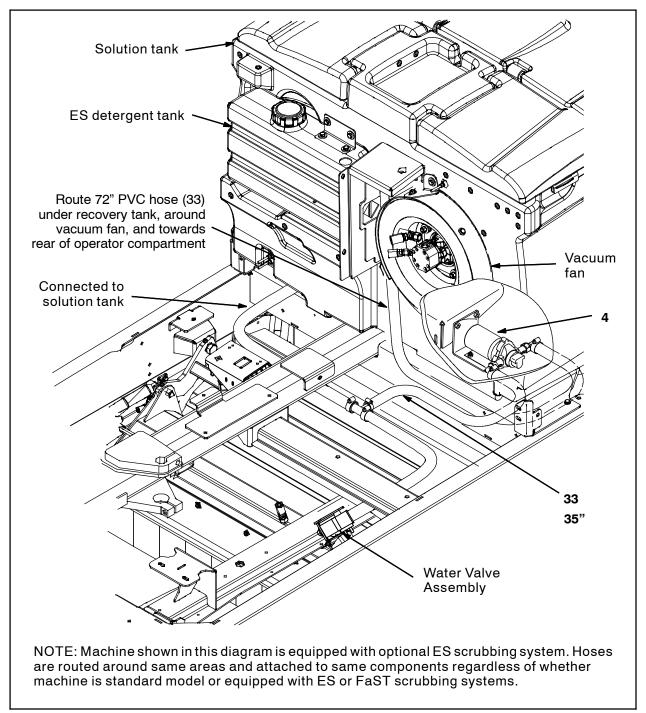
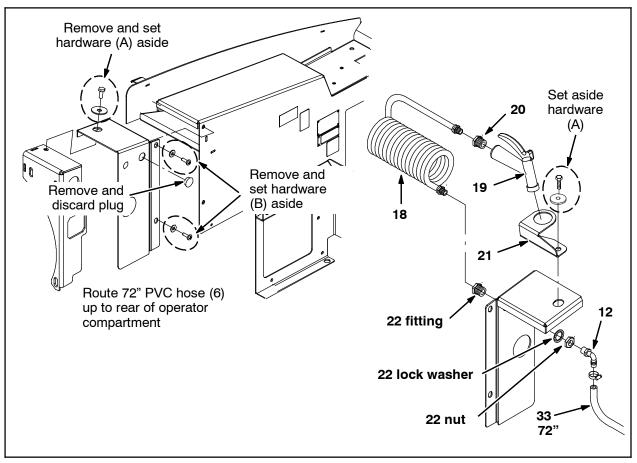


FIG. 6

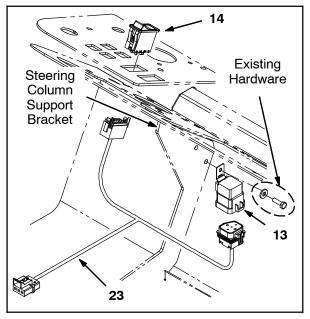
- 15. Remove the removeable panel from the rear corner of the operator compartment. Set the panel and hardware (A) and (B) aside. (Fig. 7)
- 16. Remove the plug from the removeable panel. Discard the plug. (Fig. 7)
- 17. Route the 72" PVC hose (33) up to the rear of the inner back corner of the operator compartment. (Fig. 7)
- Remove the lock washer and nut from straight fitting (22) and use the lock washer and nut to install the straight fitting into the rear of the operator compartment where the plug was previously located. (Fig. 7)
- 19. Use a hose clamp (17) to attach a 90° plastic fitting (12) onto the 72" PVC hose (33). (Fig. 7)
- Apply sealant onto the threads of the 90° plastic fitting (12) and install the fitting into the straight fitting (22) installed in the rear of the operator compartment. (Fig. 7)

- Apply sealant onto the threads at one end of the coiled hose (18) and install the coiled hose into the straight fitting (22) installed in the rear of the operator compartment. (Fig. 7)
- 22. Use the saved hardware (B) to reinstall the removeable panel into the rear corner of the operator compartment. (Fig. 7)
- 23. Use the saved hardware (A) to install the spray handle mounting bracket (11) onto the removeable panel reinstalled in the previous step. (Fig. 7)
- 24. Thread the straight brass fitting (20) into the spray gun (19). (Fig. 7)
- 25. Apply sealant onto the threads at the other end of the coiled hose (18) and thread the spray gun (19), with brass fitting (20) already installed, onto the coiled hose. (Fig. 7)



**FIG.** 7

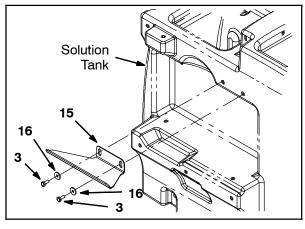
 Use existing hardware to install the relay (13) onto the steering column support bracket. (Fig. 8)



**FIG. 8** 

- 27. Remove the blank from the hole in the instrument panel. (Fig. 8)
- 28. Insert the rocker switch (14) into instrument panel. (Fig. 8)
- 29. Connect the spray nozzle harness (23) to the main wire harness. (Fig. 8 / Fig. 13)
- 30. Connect the main wire harness to the pump (4). (Fig. 13)
- Connect the spray nozzle harness (23) to the rocker switch (14) and relay (13). (Fig. 8 / Fig. 13)
- 32. Use two hex screws (3) and two flat washers (16) to install the spray wand mounting bracket (15) onto the recovery tank. (Fig. 9)

NOTE: The spray wand mounting bracket (15) only needs to be installed if the machine is not equipped with a bracket. Discard the new bracket or replace existing bracket with new bracket.





33. Apply sealant onto the threads of the nozzle (31) and thread the nozzle into the wand (34). (Fig. 10)

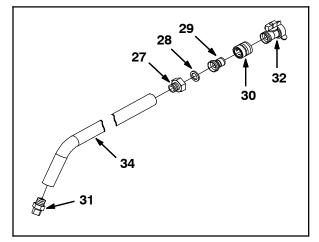


FIG. 10

- 34. Apply sealant onto the threads of the straight brass fitting (27) and thread the fitting into the other end of the wand (34). (Fig. 10)
- 35. Insert the rubber flat washer (28) into the straight brass fitting (27). (Fig. 10)
- 36. Thread the hose nipple (29) into the spray nozzle coupling (30). (Fig. 10)
- Thread the hose nipple (29) / spray nozzle coupling (30) into the straight brass fitting (27). (Fig. 10)
- 38. Thread the shutoff valve (32) into spray nozzle coupling (30). (Fig. 10)

- 39. Drill two 1/8" holes holes into the engine shroud. (Fig. 11)
- 40. Use a hex screw (25) and three flat washers (26) to install each clip (24) onto the engine shroud. (Fig. 11)
- 41. Insert the wand into the clips (24). (Fig. 11 / Fig. 12)
- 42. Reinstall the rear squeegee assembly onto the machine.
- 43. Reinstall the battery and reconnect both battery cables to the battery.
- 44. Start the machine and operate/test the spray nozzle. Inspect the hoses / connections for leaks.

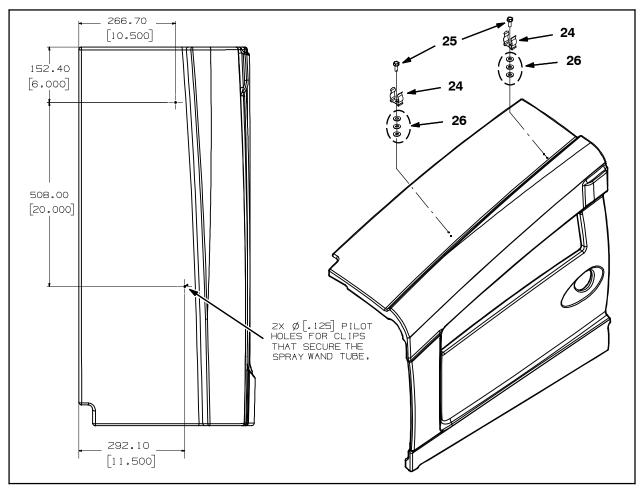


FIG. 11

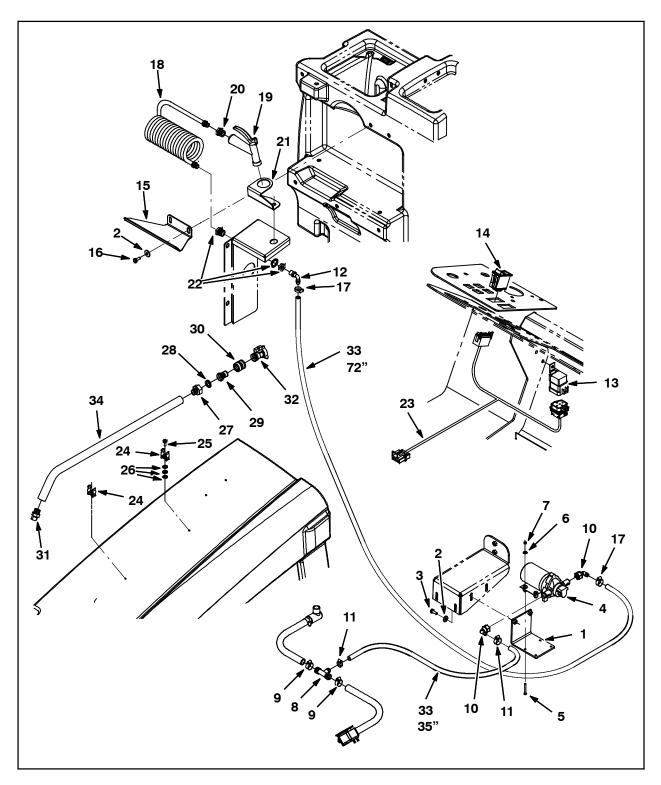


FIG. 12

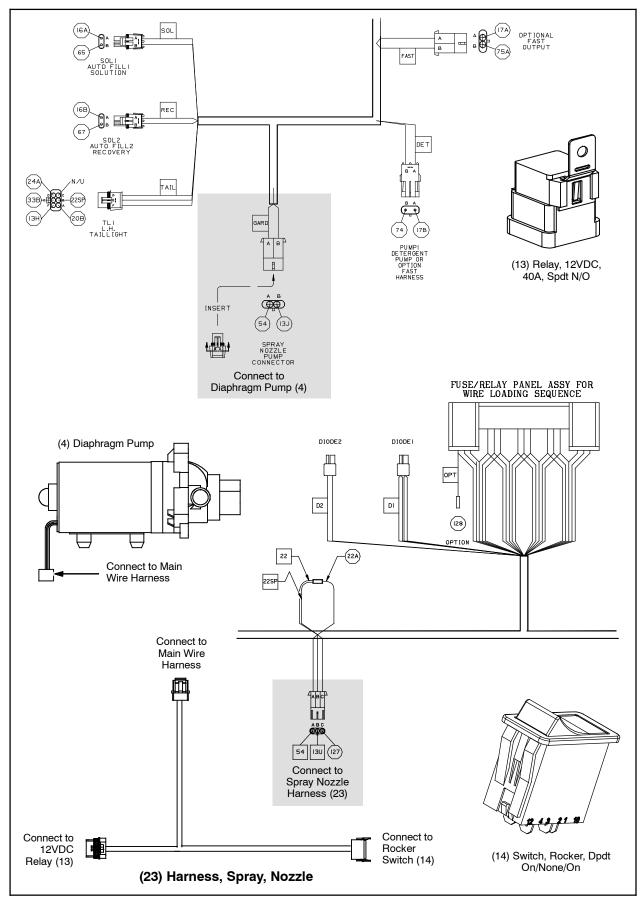


FIG. 13

### Bill of Materials for Nozzle Kit, Spray, Cl [T20] - 9003139

	Ref.	Tennant Part No.	Description	Qty.
$\nabla$		9003139	Nozzle kit, Spray, CI [T20]	1
	1	1023585	Bracket, Mtg, Pump	1
	2	32491	Washer, Flat, 0.31, Std	2
	3	09740	Screw, Hex, M8 X 1.25 X 20, SS	4
	4	1026743	Pump, Diaphragm	1
	5	06939	Screw, Pan, M5 X 0.80 X 45, 4.8	4
	6	19066	Washer, Flat, #10	4
	7	06549	Nut, Hex, Lock, M5 X 0.80, NI	4
	8	385644	Fitting, Plstc, Tee, BM08/BM12/BM12, Br	1
	9	63810	Clamp, Hose, Wormdrive, 0.56-1.06d, .56w	2
	10	1018499	Fitting, Plstc, E90, BM08/PF08s, Swivel	2
	11	54333	Clamp, Hose, Wormdrive, 0.31-0.88d, .31w	2
	12	64778	Fitting, Plstc, E90, BM08/PM06	1
	13	56186	Relay, 12vdc, 040a, Spdt No	1
	14	398500	Switch, Rocker, Dpdt, On / None / On	1
	15	1029790	Bracket, Mtg, Spray Wand [Fast, Conv]	1
	16	1017218	Washer, Flat, 0.32b 1.00d .12, SS	2
	17	63810	Clamp, Hose, Wormdrive, 0.56-1.06d, .56w	2
	18	1019250	Hose, Water, Coil, 0.38id 0.56od	1
	19	769785	Nozzle, Spray, Gun	1
	20	1027976	Fitting, Brs, Str, PF06/PM12	1
	21	1027237	Bracket, Mtg, Spray Handle	1
	22	1027978	Fitting, Brs, Str, PF06/PF06 BH	1
	23	1021881	Harness, Spray, Nozzle	1
	24	1029057	Clip, Grip, Finger, .875-1.25	2
	25	20394	Screw, Hex, #10-16 X 0.62, Fmg [Ab]	2
	26	01683	Washer, Flat, #10, SS	6
	27	375321	Fitting, Brs, Str, PM08/Garden Hose	1
	28	01316	Washer, Flat, 0.66b 1.00d .12, Rbr	1
	29	1029153	Fitting, Brs, Spcl [Garden Hose]	1
	30	1029155	Coupling, Nozzle, Spray	1
	31	1029156	Nozzle	1
	32	1029399	Valve, Shutoff	1
	33	1011837	Hose, Afmkt, PVC, Brd, 0.50id, 12ft, Clr	1
	34	1029055	Wand, Clean-Out	1

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