## TENNANT INSTRUCTION BULLETIN

No. 340603 Machine: 5700, 5700XP Published: 7-03 Rev. 00

#### 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 397901

#### **DESCRIPTION:**

This kit contains the parts needed to install the FaST<sup>™</sup> detergent system on the model 5700 and 5700XP scrubbers.

Please follow step-by-step instructions.

# SPECIAL TOOLS / CONSIDERATIONS: This FaST<sup>™</sup> kit is only for use with machines Serial Number 022000 or greater.

(Estimated time to complete: 4 hours)

#### **PREPARATION:**

#### (Refer to FIG 1 thru 6)

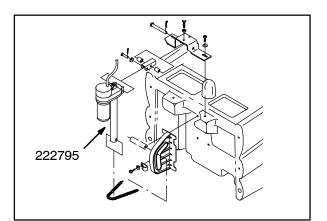
- 1. Drain the solution and recovery tanks.
- 2. Park the machine on a level surface and turn the machine power off.

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

- 3. Lower the machine scrub head. Remove the front cover and scrub head from the machine.
- 4. Remove scrub head lift actuator 222795 to allow more room for FaST<sup>™</sup> component bracket installation.

NOTE: Do not rotate the actuator shaft once the actuator is removed from the machine.

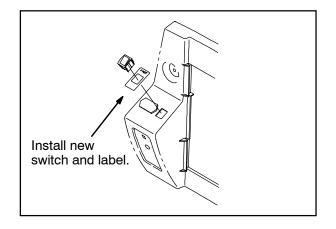




5. Raise the solution tank and remove all of the negative ground cables from the batteries.

## FOR SAFETY: Disconnect battery connections before working on machine.

- 6. Remove the rear cover from the machine.
- 7. Remove switch plug 222534 from the left hand side of the machine.
- 8. Install the new FaST<sup>™</sup> switch and label in place of switch plug 222534. Install new decal on the front side of the machine cover.



#### **COMPONENT INSTALLATION - FRONT OF MACHINE:**

NOTE: Use teflon tape or pipe sealant on all plastic fittings.

- 1. Install detergent pump 1006473, air pump 1008211 and timer 1005199 to mounting bracket 1008349. (Refer to FIG 1)
- 2. Install two fittings 1005564 on shut off valve 1005015. Mount valve 1005015 on mounting bracket 1008349 with pan screw 49162. (Refer to FIG 2)
- NOTE: Make sure that fittings are not screwed all the way into the port, or they can block off the flow route. Screw fittings in with pipe sealant on threads, turning no more than 5–5 1/2 times.
  - 3. Remove the scrub head guide bracket mounting bolts 49826 from the right side of the guide bracket. They will be used to mount FaST<sup>™</sup> assembly mounting bracket 1008349.
  - 4. Route the machine wire harness up behind the FaST<sup>™</sup> component bracket and out, over the top of the bracket. Connect FaST<sup>™</sup> harness to main harness. Route harnesses behing bracket, and plug in diode.
  - 5. Mount FaST<sup>™</sup> assembly mounting bracket 1008349 on the right side of the scrub head guide bracket with the scrub head guide bracket mounting bolts 49826. (Refer to FIG 1)
  - 6. Install the fittings on solution pump 1005866. Mount solution pump 1005866 to pump bracket 1002603 with the worm drive clamp 43555. (Refer to FIG 1)
  - 7. Remove scrub head guide bracket 49826 mounting bolts from the right side of the guide bracket.
  - 8. Mount solution pump bracket 1002603 on the right hand side of the scrub head guide bracket with the scrub head guide bracket mounting bolts. (Refer to FIG 3)
  - 9. Using the wiring harness diagram for a reference, connect the wires to each component as shown. (Refer to FIG 5 and 6)

- 10. Connect the new installed FaST<sup>™</sup> switch to the FaST<sup>™</sup> wire harness. (Refer to FIG 5 and 6)
- 11. Install in-line water filter 1005388 into the upper tank with fittings. (Refer to FIG 3)
- 12. Using the hose diagram/info for reference, connect the hoses and foam filter as shown in FIG. 2. Secure all of the hoses with proper sized worm clamps. (Refer to FIG 2)
- 13. Secure all wiring with tie wraps as needed, to keep wires away from the scrubhead lift actuator and guide pin when scrub head moves up and down.

#### FINAL ASSEMBLY:

- 1. Replace the scrub head lift actuator.
- 2. Replace the scrub head.
- 3. Reconnect all of the negative cables to the batteries, including 13PBLK.
- 4. Clean machine surface with isopropyl alcohol. Apply decals to machine
- 5. Power up the machine and raise and lower the scrub head. Check that there is no interference with wires or hoses.
- 6. Install the FaST detergent bottle in the support bracket. Connect the hose fittings together.

#### **TESTING OF SYSTEM:**

- 1. Partially fill the solution tank with cool, clean water.
- 2. Lower the scrub head, and turn on the FaST system with the rocker switch. Propel the machine forward.
- 3. Due to the small quantity of solution dispensed by the solution pump and detergent pump, it may take a few minutes after the initial start-up for foam to appear.
- 4. Scrub the floor as normal.

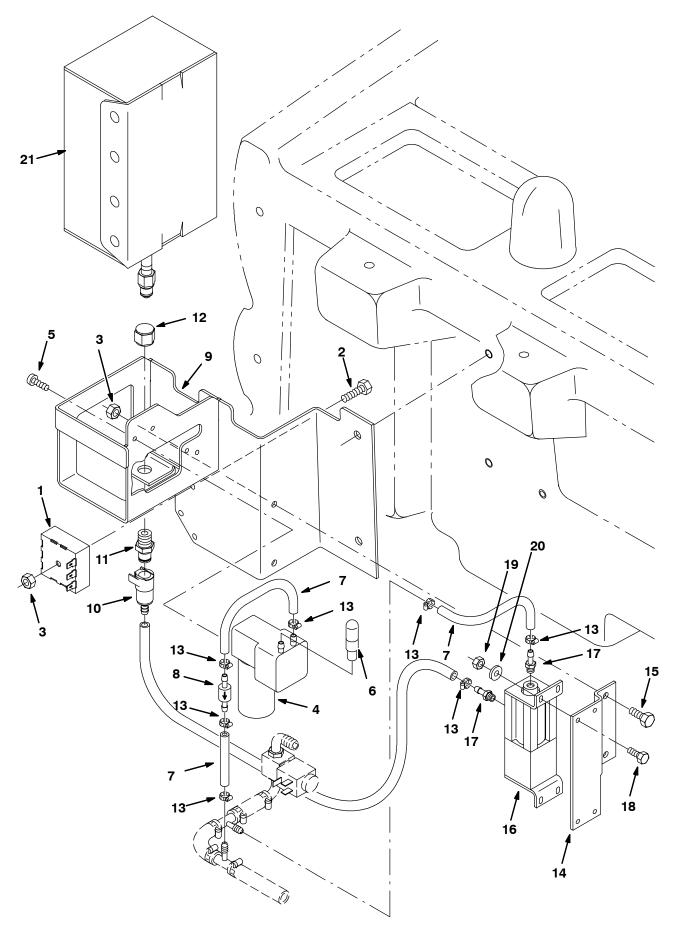


FIG. 1 - FaST™ Air Pump and Detergent Group, 5700

### FaST<sup>™</sup> Air Pump and Detergent Group (Fig. 1):

	Ref.	Tennant Part No.	Machine Serial Number		Description	Qty.
	1	1005199	(000000-	)	Module, Timer, Detergent, 36v	1
	2	06945	(000000-	)	Screw, Hex, M06 X 1.0 X 30, 8.8	1
	3	08708	(000000-	)	Nut, Hex, Lock, M06 X 1.0, NI	3
$\nabla$	4	1008211	(000000-	)	Pump, Air, Ele, 24vdc	1
		391449	(000000-	)	Kit, Repair, Diaphragm, Air Compressor	1
	5	49162	(000000-	)	Screw, Pan, #08-10 X 0.50, F/Plstc	2
	6	1005255	(000000-	)	Filter Assy, Air, Molded Ure	1
	7A	1005183	(000000-	)	Parts, Phantom, Hose, PVC, 0.19ID X 7.0	1
	7B	1005183	(000000-	)	Parts, Phantom, Hose, PVC, 0.19ID X 7.0	1
	7C	1005430	(000000-	)	Parts, Phantom, Hose, PVC, 0.25ID X 12.0	1
	7D	1005183	(00000-	)	Parts, Phantom, Hose, PVC, 0.19ID X 7.0	1
	8	1005327	(000000-	)	Fitting, Plstc, Cvalve, Bm03/Bm03	1
	9	1008349	(000000-	)	Brkt Wldt, Box, Dtrgt	1
	10	1002898	(000000-	)	Coupling, Fem, W/ Valve, .25 Brb	1
	11	1002899	(00000-	)	Coupling, Mal, .25 Npt	1
	12	1005435	(000000-	)	Fitting, Plstc, Piep, Cap, Pf04	1
	13	43844	(00000-	)	Clamp, Hose, Wormdrive, 0.25-0.62d	7
	14	1008354	(00000-	)	Plate, Mtg, Pump	1
	15	08716	(000000-	)	Screw, Hex, M06 X 1.0 X 20, Ss	2
$\Delta$	16	1006473	(00000-	)	Pump, Detgt, 36vdc	1
		391450	(00000-	)	Kit, Repair, Pump, Concentrate	1
	17	1005739	(00000-	)	Fitting, Plstc, Str, Bm03, 1/4-28, Kynar	2
	18	09206	(00000-	)	Screw, Hex, M04 X 0.7 X 12, 8.8	4
	19	42368	(000000-	)	Nut, Hex, Std, M04 X 0.7	4
	20	19065	(000000-	)	Washer, Flat, #08	4
	21	1002887	(000000-	)	Detgt, Tco 365 (1pc=1cartn=(2)Boxes)	-
	21	1002889	(000000-	)	Detgt, Tco 362 (1pc=1cartn=6boxes)	-
	22	1006415	(000000-	)	Hose, aftmkt rplmt, clr, 0.25id 3ft	1

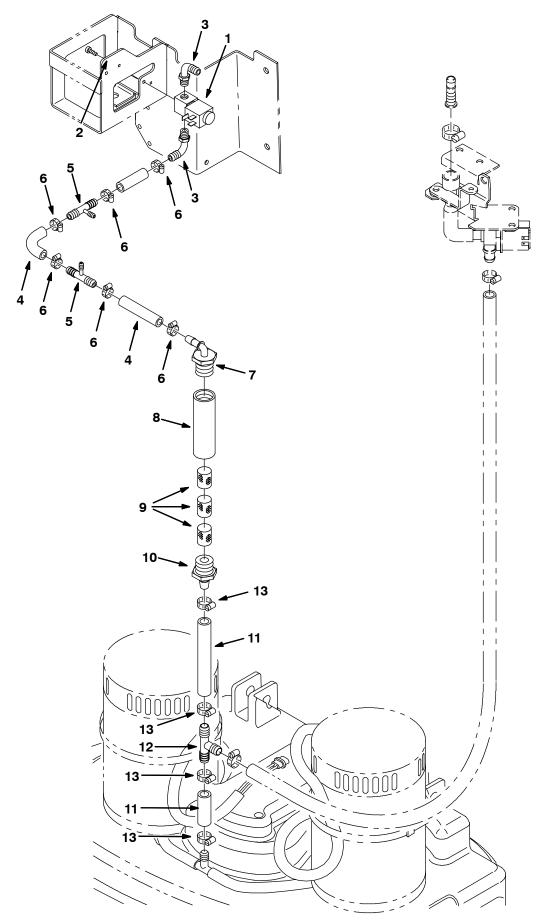
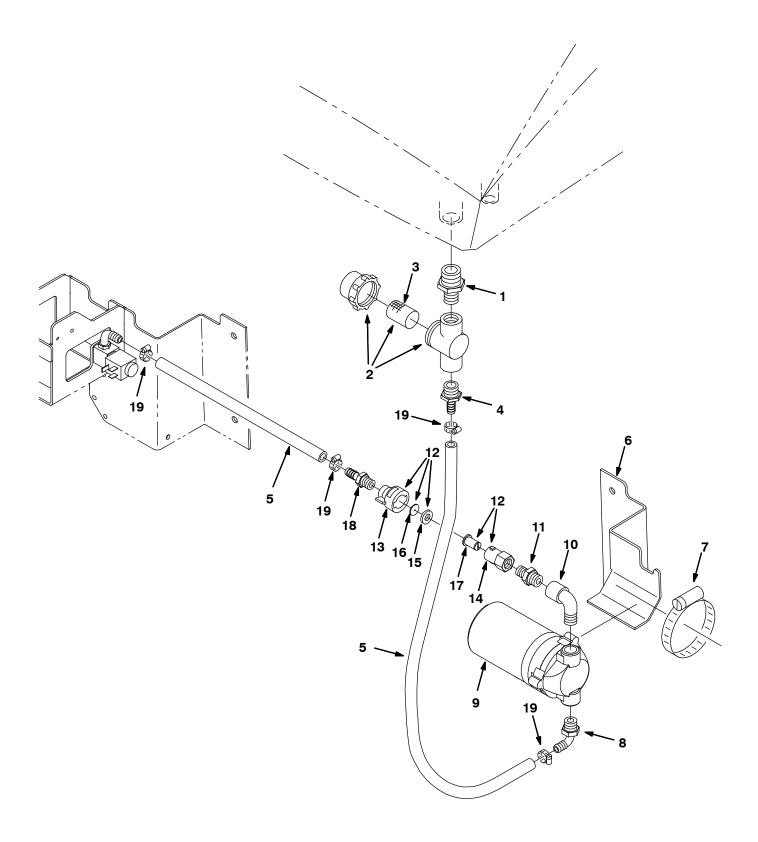


FIG. 2 - FaST™ Foam Filter Group, 5700

## FaST<sup>™</sup> Foam Filter Group (Fig. 2):

Ref.	Tennant Part No.	Machine Serial Number		Description	Qty.
1	1005015	(000000-	)	Valve, Shutoff, Ele, 36vdc	1
2	49162	(000000-	)	Screw, Pan, #08-10 X 0.50, F/Plstc	2
3	1005564	(000000-	)	Fitting, Plstc, E90, Bm06/Pm02, Nyl	2
4	1006400	(000000-	)	Parts, Phantom, Hose, PVC, Brd 0.38ID X 3.0	1
5	61456	(000000-	)	Fitting, Plstc, Tee, Bm06/Bm03/Bm06	2
6	43844	(000000-	)	Clamp, Hose, Wormdrive, 0.25-0.62d	5
7	79484	(000000-	)	Fitting, Plstc, E90, Bm06/Pm12, Nyl	1
8	1005086	(000000-	)	Tube, Plastic, 25mm Id	1
9	1002789	(000000-	)	Filter, Foam	3
10	79273-1	(000000-	)	Fitting, Plstc, Str, Bm08/Pm12	1
11	1006401	(000000-	)	Parts, Phantom, Hose, PVC, BRD, 0.50ID X 5.0	1
12	63245-1	(000000-	)	Fitting, Plstc, Tee, Bm08/Bm08/Bm08	1
13	54333	(000000-	)	Clamp, Hose, Wormdrive, 0.31-0.88d	4



## FIG. 3 - FaST™ Solution Pump Group, 5700

## FaST<sup>™</sup> Solution Pump Group (Fig. 3):

		Tennant	Machine Serial			
	Ref.	Part No.	Number		Description	Qty.
	1	1005218	-000000	)	Fitting, Plstc, Str, Pm08/Pm12	1
$\Delta$	2	1005388	(000000-	)	Filter, Inline, Pf08/Pf08, 80 Mesh	1
	3	1005304	(000000-	)	Screen, Filter, 80 Mesh	1
	4	79273	(000000-	)	Fitting, Plstc, Str, Bm06/Pm08	1
	5	1006400	(000000-	)	Hose, Afmkt Replmt, Brd, 0.38id 3ft	1
	6	1002603	(000000-	)	Brkt, Pump, Solution	1
	7	43555	(000000-	)	Clamp, Hose, Wormdrive, 1.62-3.50d	1
	8	1005630	(000000-	)	Fitting, Plstc, E90, Bm06/Pm06, Nyl	1
$\Delta$	9	1005866	(000000-	)	Pump, Solution, Ele, 36vdc	1
▲		391433	(000000-	)	Head, Pump, Kit	1
	10	1005318	(000000-	)	Fitting, Plstc, E90, Pf06/Pm06, Nyl	1
	11	1005219	(000000-	)	Fitting, Plstc, Str, Pm04/Pm06	1
$\nabla$	12	1005522	(000000-	)	Fitting, Plstc, Cap Assy, 0.040b, Pf04	1
	13	1005506	(000000-	)	Fitting, Plstc, Cap, Spray, Pf04	1
	14	1005507	(000000-	)	Fitting, Plstc, Body, Spray, Pf04	1
	15	1005508	(000000-	)	Washer, 0.34b 0.75d 0.12, Epdm	1
▲	16	1005510	(000000-	)	Plate, Orifice, 0.040id	1
▲	17	1006447	(000000-	)	Screen, 50 Mesh, Ss	1
	18	1005220	(000000-	)	Fitting, Plstc, Str, Bm06/Pm04	1
	19	43844	(000000-	)	Clamp, Hose, Wormdrive, 0.25-0.62d	4

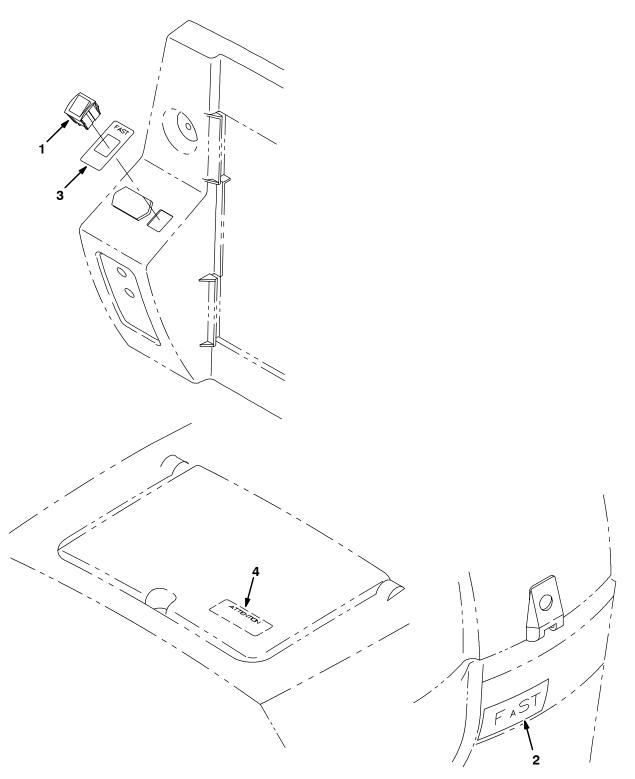


FIG. 4 - FaST<sup>™</sup> Operator Console Group, 5700

		Tennant	Machine Serial			
	Ref.	Part No.	Number		Description	Qty.
	1	363607	(000000-	)	Switch, Rocker, 28vdc 16a Dpdt On/N/On	1
	2	1005416	(000000-	)	Label, Fast	2
$\nabla$		1005425	(000000-	)	Label Set, Fast	1
	3	1008270	(000000-	)	Label, Switch, Fast	1
	4	1006779	(000000-	)	Label, Attention, Fast	1

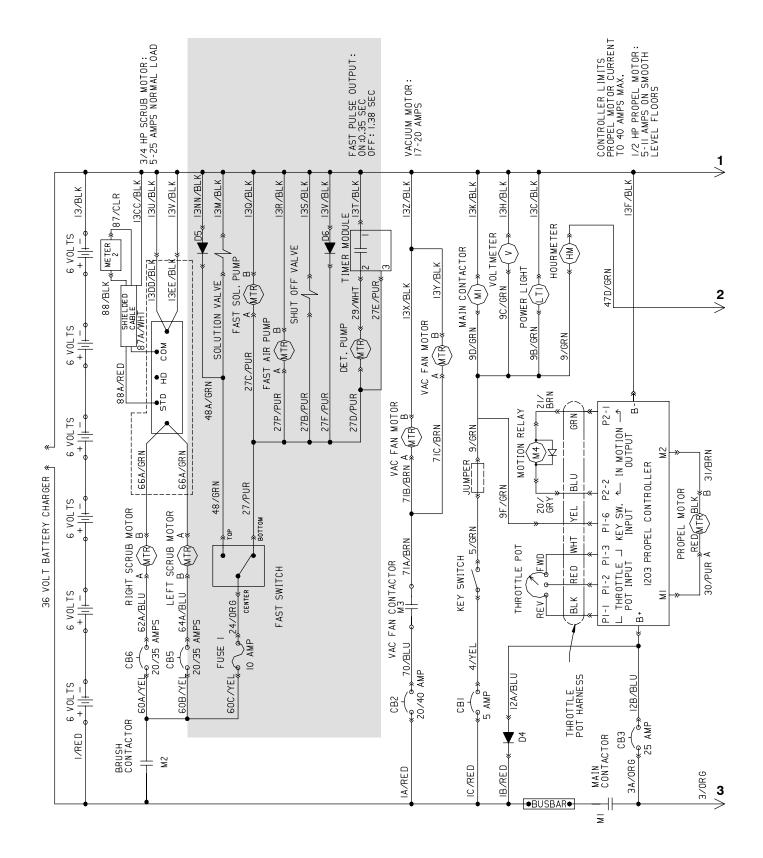


FIG. 5 - Electrical Schematic (022000- )

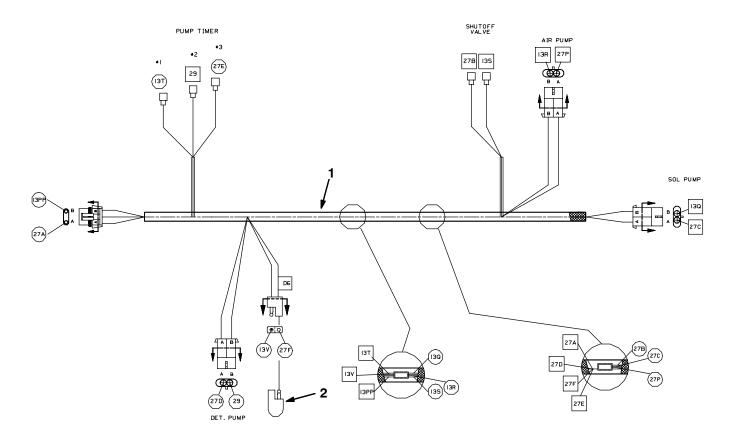


FIG. 6 - FaST<sup>™</sup> Wire Harness Group, 5700

 Ref.	Tennant Part No.	Machine Serial Number		Description	(	Qty.
 1	397606	(000000-	)	Harness, Ele, Fast [5700]		1
2	222290	(000000-	)	Diode, Ele, Plug		1

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