



INSTRUCTION BULLETIN

No. 340770
Machine: T7
Published: 08-2005
Rev. 01

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 9000498**

SYNOPSIS / PROBLEM:

This kit contains the parts needed to install a FaST kit on the T7 model scrubbers.
Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: NONE

(Estimated time to complete: 4 hours)

PREPARATION:

Refer to Fig. 1, Fig. 2, and Fig. 3

1. Completely empty the solution tank and recovery tank. Refer to the operators manual for instructions.
2. Park the machine on a clean level surface.
3. Lower the scrubber head and squeegees.
4. Turn off the machine and remove the key.

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

5. Disconnect battery cables from the machine.



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

6. Disconnect the operator seat cable from the main wire harness and remove the seat from the machine. Refer to Fig. 1.
7. Remove the existing compartment door from the battery compartment shroud. Remove the hardware holding the battery compartment shroud onto the machine. Remove the shroud from the machine. Refer to Fig. 1. Discard the existing compartment door.
8. Use a mechanical hoist or lift to remove the battery group from the machine.

NOTE: When servicing machine, use hoist or lift that will support the weight of the battery pack.

9. Jack or lift the front end of the machine between 6" and 12" from the floor, slide jack stands to appropriate points underneath the machine, and lower the machine onto the jack stands. Refer to the Operators Manual for additional information.

FOR SAFETY: When servicing machine, block machine tires before jacking machine up. Use a hoist or jack capable of supporting the weight of the machine. Jack machine up at designated locations only. Support machine with jack stands.

10. Disconnect the cables from both scrub head drive motors and the water valve solenoid from the main wire harness. Refer to Fig. 2.
11. Disconnect the hose connected to the scrub head water valve.
12. Remove the cotter pins from clevis pins (A), (B), (C), and (D) and pull the clevis pins from the scrub head lift assembly. Do not lose any hardware removed from the machine in this step since these items are needed to reinstall the scrub head lift assembly. Refer to Fig. 3.
13. Remove the scrub head lift assembly from underneath the machine. Refer to Fig. 3.

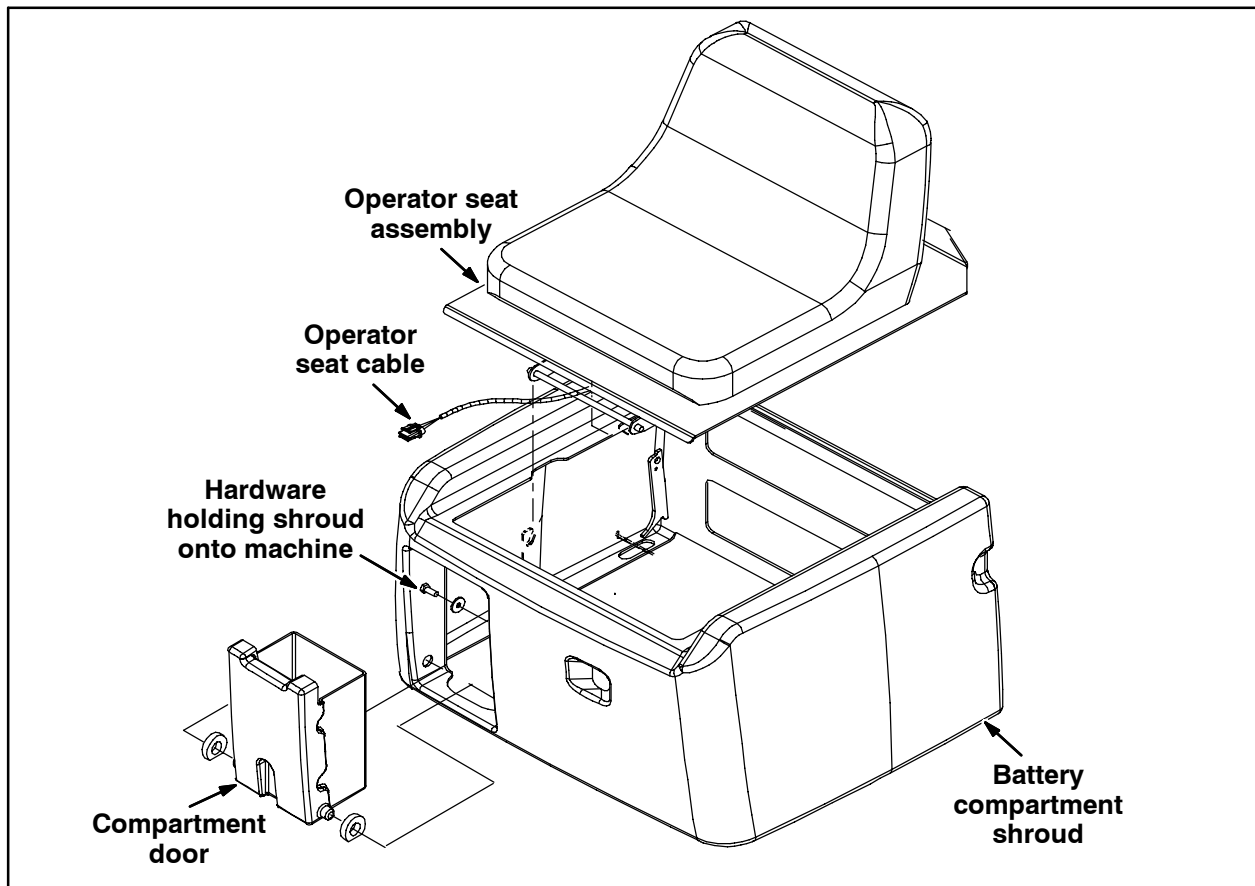


FIG. 1

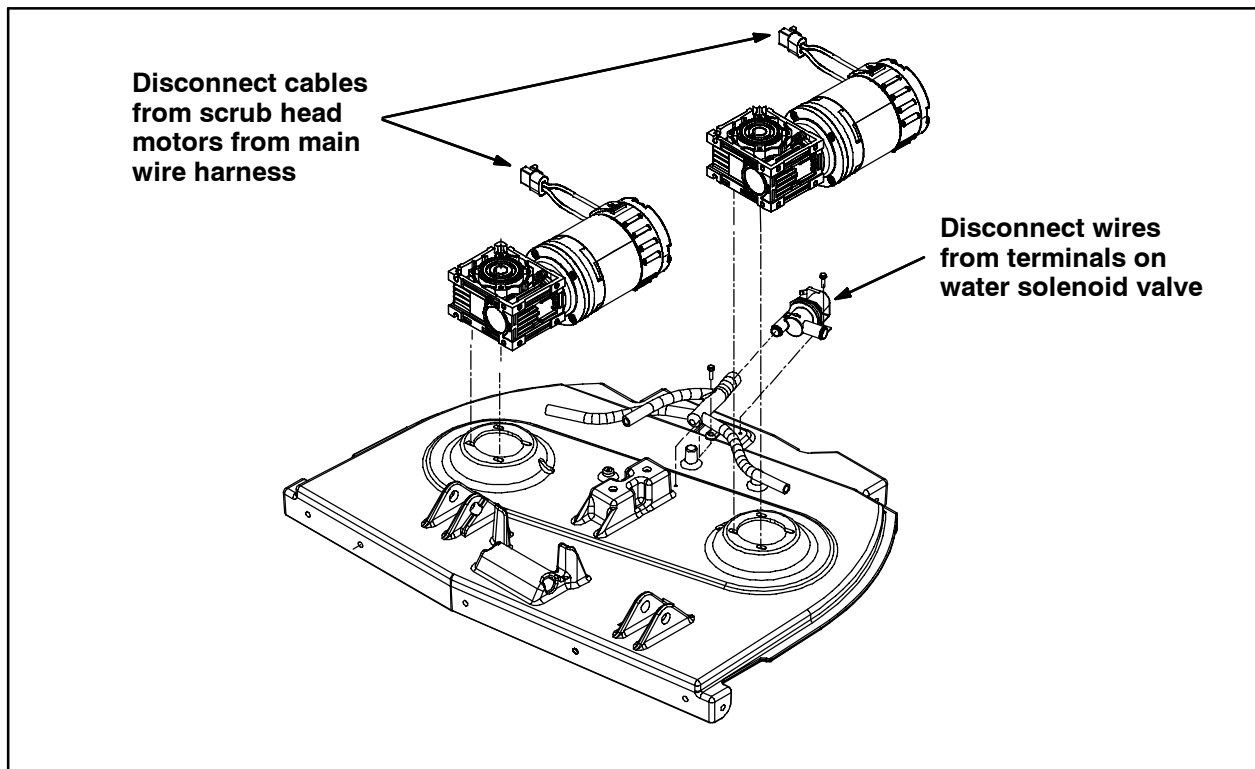


FIG. 2

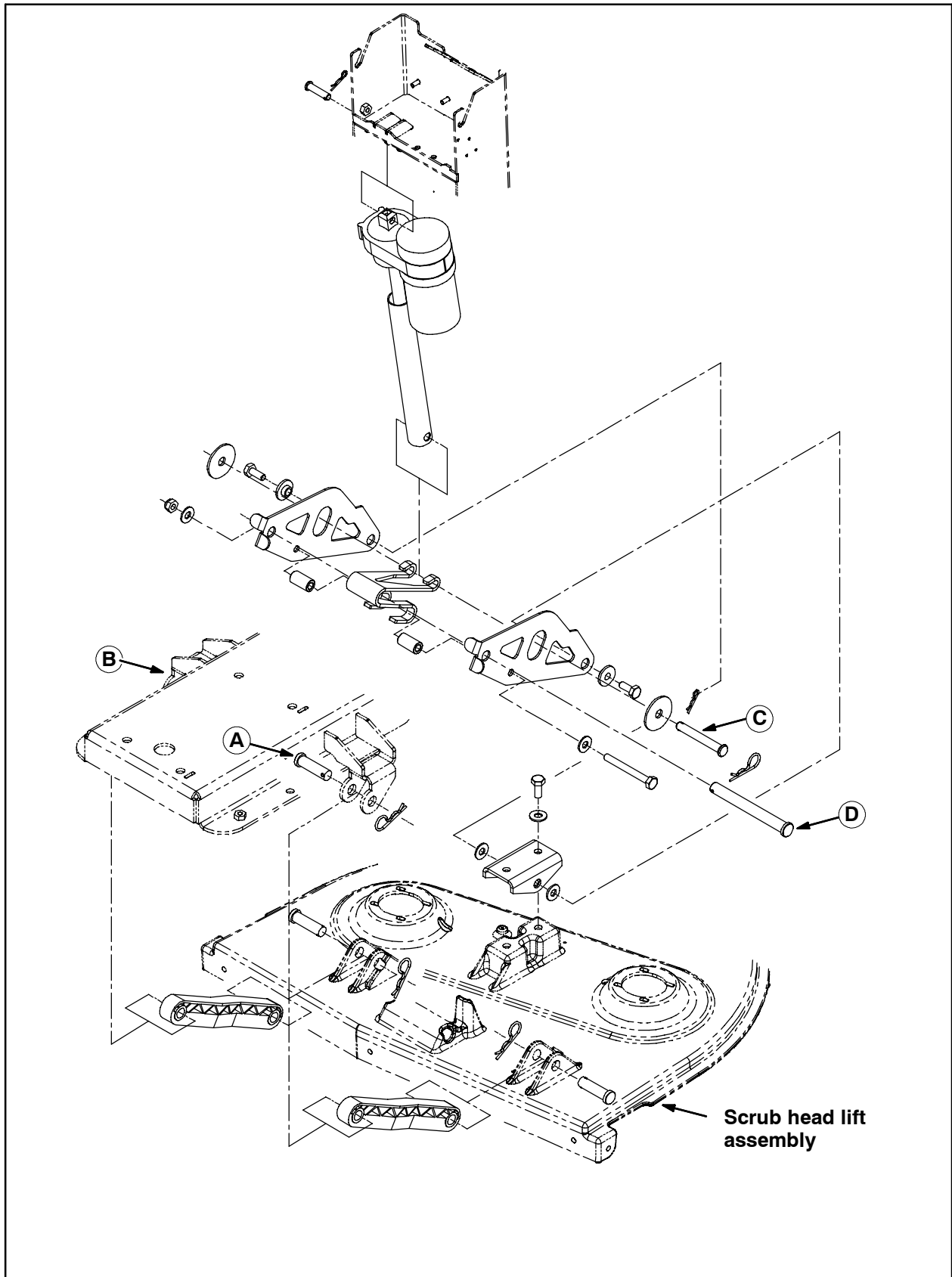


FIG. 3

INSTALLATION:

NOTE: Refer to Fig 19 for additional information for installing the FaST system.

1. Use a hose clamp (33) to connect the 2' braided hose (34) to the solution pump (6). Refer to Fig. 19.
2. Use the hose clamp (13) to install the solution pump (6) onto the pump bracket (14). Tighten the hose clamp enough to hold the solution pump firmly into place on the pump bracket. Refer to Fig. 4.

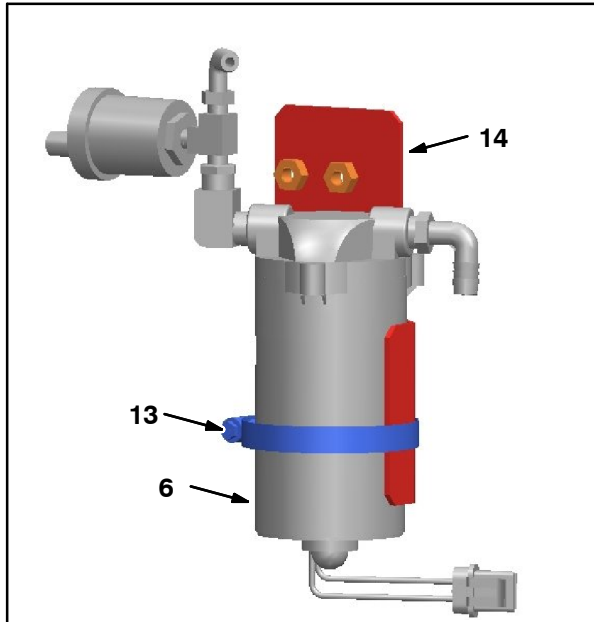


FIG. 4

3. Use two hex screws (15) and two flat washers (16) to mount the pump bracket (14) to the frame of the machine. Refer to Fig. 5.

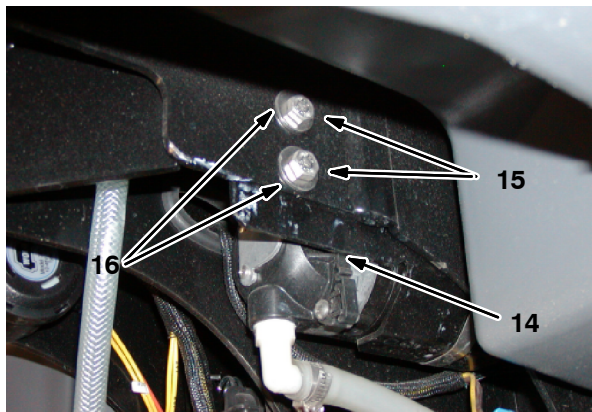


FIG. 5

4. Cut the plug from the end of the hose from the solution tank. Refer to Fig. 19.

5. Use a hose clamp (33) to attach the hose from the solution tank to the plastic fitting (7) on the solution pump (6). Refer to Fig. 6.

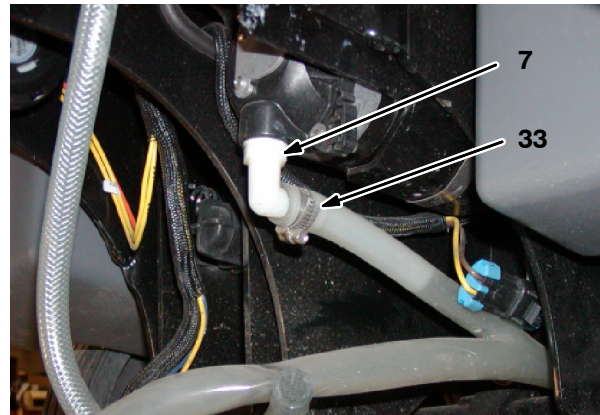


FIG. 6

6. Use a hex screw (20) to attach a spring holder clip (19) to the scrub head lift assembly. Refer to Fig. 7.

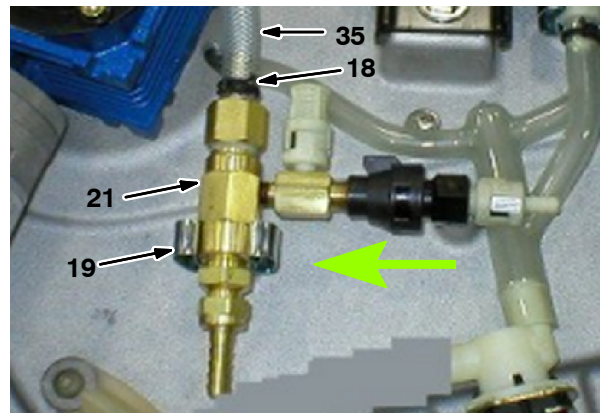


FIG. 7

7. Place the FaST injector assembly (21) into the spring holder clip (19). Refer to Fig. 7.
8. Use a hose clamp (18) to attach the 3' braided hose (35) to the FaST injector assembly (21). Refer to Fig. 7 and Fig. 19.

9. Route the loose end of the 3' braided hose (35) through the scrub head lift assembly and to the solution manifold. Refer to Fig. 8.

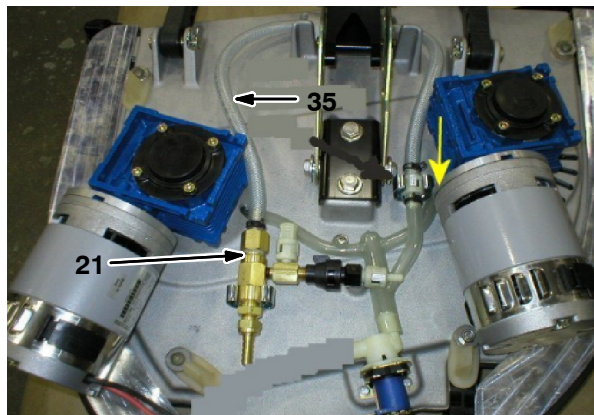


FIG. 8

10. Use a hex screw (20) to attach another spring holder clip (19) to the scrub head lift assembly. Refer to Fig. 9.

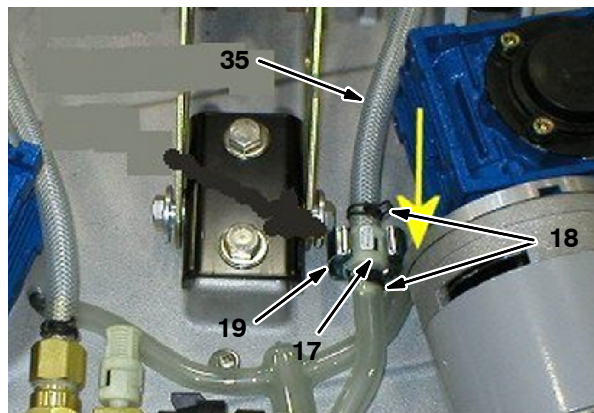


FIG. 9

11. Cut the plug from the end of the solution manifold hose. Refer to Fig. 19.
12. Use a hose clamp (18) to install a check valve (17) onto the solution manifold. Refer to Fig. 9 and Fig. 19.
13. Use a hose clamp (18) to install the other end of the 3' braided hose (35) onto the check valve (17). Refer to Fig. 9 and Fig. 19.

14. Insert the rubber grommet (42) into the hole in the frame of the machine. Refer to Fig. 10.

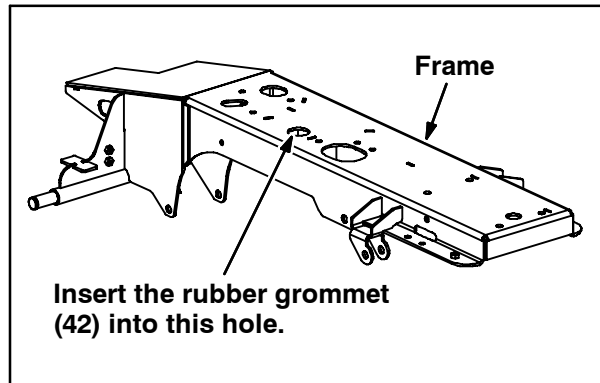


FIG. 10

15. Use the clevis pins (A), (B), (C), and (D) to reinstall the scrub head lift assembly onto the machine. Refer to Fig. 3.

NOTE: Adjust the screw actuator sleeve to align holes, if necessary.

16. Reconnect the scrub head drive motor cables previously disconnected from the main wire harness and the wires previously disconnected from the water valve solenoid terminals. Refer to Fig. 2.
17. Reconnect the hose previously disconnected from the scrub head water valve.
18. Use a hose clamp (33) to attach the loose end of the 2' braided hose (34) attached to the solution pump (6) to the FaST injector assembly (21). Refer to Fig. 19.
19. Attach the 3' clear hose (36) to the FaST injector assembly (21), loop the 3' clear hose as shown in Fig. 11, and route the 3' clear hose up through the grommet (42) installed in the frame. Refer to Fig. 10 and Fig. 19.

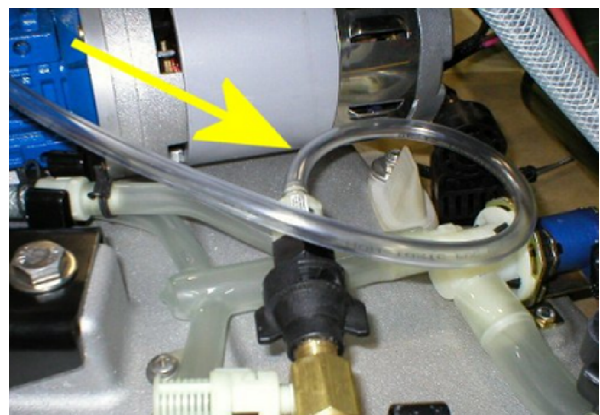


FIG. 11

20. Route the 3' clear hose (36) under the actuator tower and to area (A). Refer to Fig. 12.

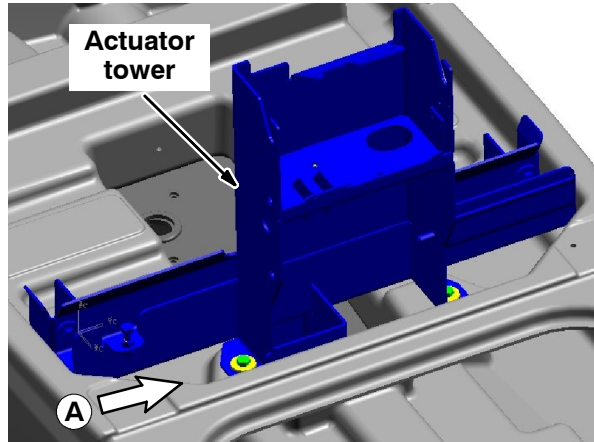


FIG. 12

21. Install the straight plastic fitting (4) and the flat washer (5) onto the end of the 3' clear hose (36) in the FaST compartment area. Refer to Fig. 19.
22. Use a rivet (40), washer (41), and a cable clamp (39) to install the spring (38) onto a portion of the the 3' clear hose (36) inside the battery compartment. Refer to Fig. 13 for locations.



FIG. 13

23. Install the straight plastic fitting (31) and the cap fitting (32) onto the actuator tower. Refer to Fig. 14 and Fig. 15.

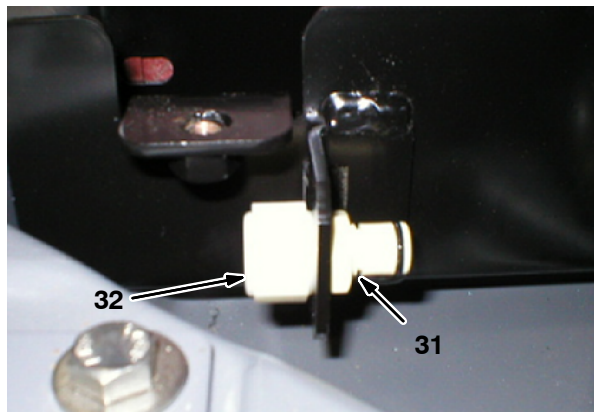


FIG. 14

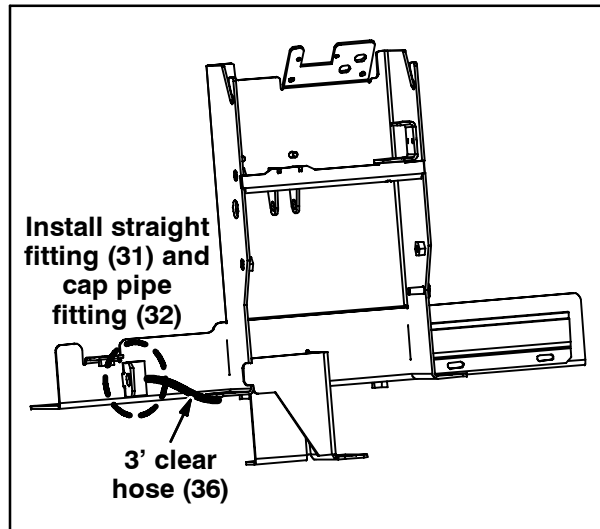


FIG. 15

24. Install the spring bracket (37) onto the spring (38). Refer to Fig. 16.

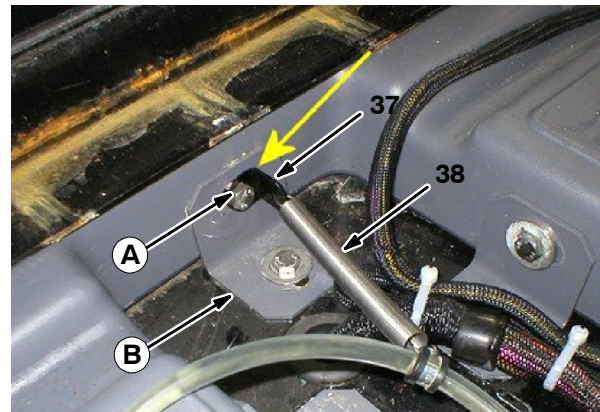


FIG. 16

25. Remove the fastener and washer (A) from the bracket (B) holding the solution tank onto the machine frame. Refer to Fig. 16.
26. Use the fastener and washer (A) removed from the machine in the previous step to install the spring (38) onto the machine as shown in Fig. 16.
27. Use a mechanical hoist or lift to remove the machine from the jack stands, slide the jack stands from underneath the machine, and lower the machine to the floor.

FOR SAFETY: When servicing machine, block machine tires before jacking machine up. Use a hoist or jack capable of supporting the weight of the machine. Jack machine up at designated locations only. Support machine with jack stands.

28. Use a mechanical hoist or lift to reinstall the batteries into the machine.

NOTE: When servicing machine, use hoist or lift that will support the weight of the battery pack.

29. Reinstall the battery compartment shroud onto the machine. Refer to Fig. 1.
30. Install the two rubber grommets (3) onto the new FaST holder box (2). Refer to Fig. 19.
31. Install the new FaST holder box (2) into the FaST compartment on the battery compartment shroud. Refer to Fig. 19.
32. Remove the perforated knock outs from the new FaST-PAK detergent package (1). Do Not remove the bag from the package. Pull out the hose connector located on the bottom of the bag and remove the hose cap from the connector.
33. Insert the FaST-PAK detergent package (1) approximately half way into the new FaST holder box (2) and close the FaST holder box. Refer to Fig. 19.
34. Connect the hose from the FaST-PAK detergent package (1) to the FaST system, slide FaST-PAK detergent package the rest of the way into the the FaST holder box (2), and close the FaST holder box. Refer to Fig. 17 and Fig. 19.



FIG. 17

NOTE: The FaST-PAK Floor Cleaning Concentrate is specially designed for use with the FaST system scrubbing application. NEVER use a substitute cleaning solution. Other cleaning solutions may cause the FaST system to fail.

35. Reinstall the seat onto the machine and reconnect the operator seat connector to the main wire harness. Refer to Fig. 1.

36. Reconnect the battery cables.

37. Remove the old labels from the sides of the recovery tank. Install a FaST label (43) onto each side of the recovery tank. Refer to Fig. 18.



FIG. 18

38. Start the machine.
39. Observe the FaST button. If the light next to the FaST button is illuminated, press the FaST button to turn off the FaST system.
40. Turn off the machine.
41. **SELF-TEST:** Press and hold both the fan button and the FaST button and start the machine (keep both buttons pressed while starting the machine).

If machine fails self-test, turn off the machine, repair fault, and repeat self-test.

If machine passes self-test, the machine is ready for use.

NOTE: It may be necessary to scrub with the FaST system for a few minutes before the detergent reaches maximum foaming.

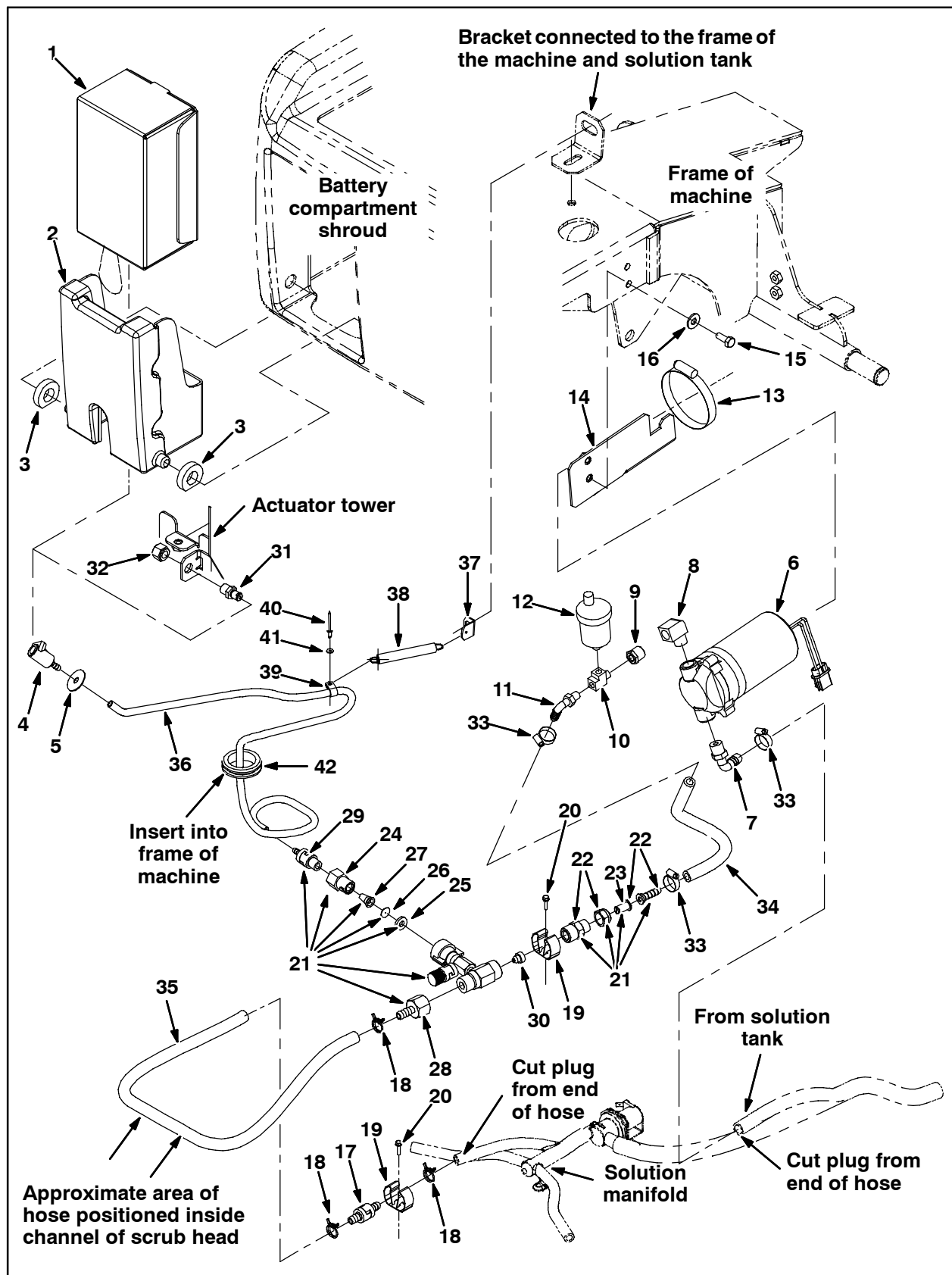


FIG. 19

Bill of Materials for FaST Kit, DI, [T7]-9000498

Ref.	Tennant Part No.	Description	Qty.	
	9000498	FaST Kit, DI, [T7]-(Kit includes all items listed below)	1	
1	1017015	Detergent Package, 2 Liter, SGL, 365	1	
2	1012087	Box, Holder [FaST Trimmed]	1	
3	1016553	Seal Rbr	2	
4	1002898	Fitting, Plstc, Str, BM04, CPLF, Fem	1	
5	30013	Washer, Flat, 0.31 Fender	1	
▽	6	1014282	Pump, Soltn, Ele, 24VDC	1
▲		9001240	Pump Kit, Head, Soltn	1
7	64778	Fitting, Plstc, E90, BM08/PM06	1	
8	24584	Fitting, Brs, E90, PM06/PF06 Special	1	
9	24698	Fitting, Brs, Str, PF02/PM06	1	
10	26426	Fitting, Brs, Tee, PF02/PM02/PM02	1	
11	1005564	Fitting, Plstc, E90, BM06/PM02, Nyl	1	
12	1017386	Valve, Air Vent, Float Type	1	
13	43555	Clamp, Hose, Wormdrive, 1.62-3.50D, .56W	1	
14	1014617	Bracket, Pump, Soltn	1	
15	09740	Screw, Hex, M8 X 1.25 X 20, SS	2	
16	01685	Washer, Flat, 0.31 SS	2	
17	1015455	Valve, Check, BM06/BM06, 5PSI	1	
18	607775	Clamp, Hose, Wire, .63-.66, Blk	1	
19	1014295	Clip, Spring Holder, Blk Vinyl Coat	2	
20	1016520	Screw, Hex, M4 X 0.7 16FMG, SS	2	
▽	21	1014265	Injector Assy [FaST]	1
▲▽	22	1013411	Filter Assy, 50 Mesh	1
▲▲	23	1013408	506ter, Brass/SS, 50 Mesh	1
▲▲	24	1005507	Fitting, Plstc, Body, Spray, PF04	1
▲▲	25	1005508	Washer, Flat, 0.34B 0.75D .12, Viton	1
▲▲	26	1015842	Plate, Orifice, 0.008	1
▲▲	27	1014203	Screen, 300 Mesh, Fuzed Bronze	1
▲	28	1014276	Fitting, Brs, Str, BM06/PF12	1
▲	29	1014254	Valve, Check, BM04/PM04, 2PSI	1
▲	30	1013382	Plug, Orifice, .033	1
31	1002899	Fitting, Plstc, Str, PM04, Cplg, Mal	1	
32	1005435	Fitting, Plstc, Pipe, Cap, PF04	1	
33	54333	Clamp, Hose, Wormdrive, 0.31-0.88D, .31W	3	
34	1014974	Hose, Afmkt, PVC, Brd 0.38ID 2ft	1	
35	1006400	Hose, Afmkt, PVC, Brd 0.38ID 3ft	1	
36	1006415	Hose, Afmkt, PVC, Clr 0.25ID 3ft	1	
37	18188	Bracket, Spring	1	
38	1018504	Spring, Extn, 0.50OD X 0.04WIR, 4.0L	1	
39	26395-2	Clamp, Cable, Stl, 0.38D X 0.38W, 1H	1	
40	56799	Rivet, Blind, .125D X 0.38 X .25D, Alm	1	
41	02892	Washer, Flat, 0.12B 0.38D .03, Stl, PI	1	
42	10632-13	Grommet, Rbr, 1.50ID, F/1.8H, .19Matl	1	
43	1016056	Label, Model, Side, White [T7 FaST]	2	

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