No. 2875

Machines: 527; (SRS),

550; (SRS) Published: 8-92/01

NOTE: DO NOT discard Parts List from Instruction Bulletin. Place 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.

Installation Instructions for Water Pump Replacement Kit 57444.

This kit contains parts needed to install a pump on the machines listed above. Note that there are two procedures. Please follow step-by-step instructions.

#### PREPARATION FOR 527 SRS MACHINES:

(Refer to Figures 1 and 2)

1. Empty detergent, solution/recovery and cleaning solution tanks.

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

2. Disconnect battery cables from machine.



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

3. Block front tires. Hoist or jack up machine and block securely.



WARNING: Do not trust a scissors jack or a hydraulic jack to hold the load. Use jack stands or blocks.

- 4. Remove side instrument panel from machine for easy access to solution control handle.
- 5. Disconnect water and detergent hoses at points A, B, and C as shown in FIG. 2.
- 6. Remove pump, pump bracket and attached fittings from scrubber frame.
- 7. Drill one 3/8" diameter hole through top of solution tank under operator's seat. Refer to FIG. 1 for hole location.

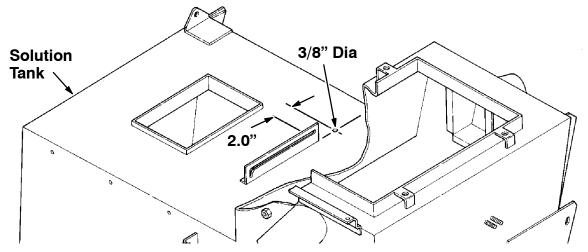


FIG. 1 - Hole Location in top of Solution Tank

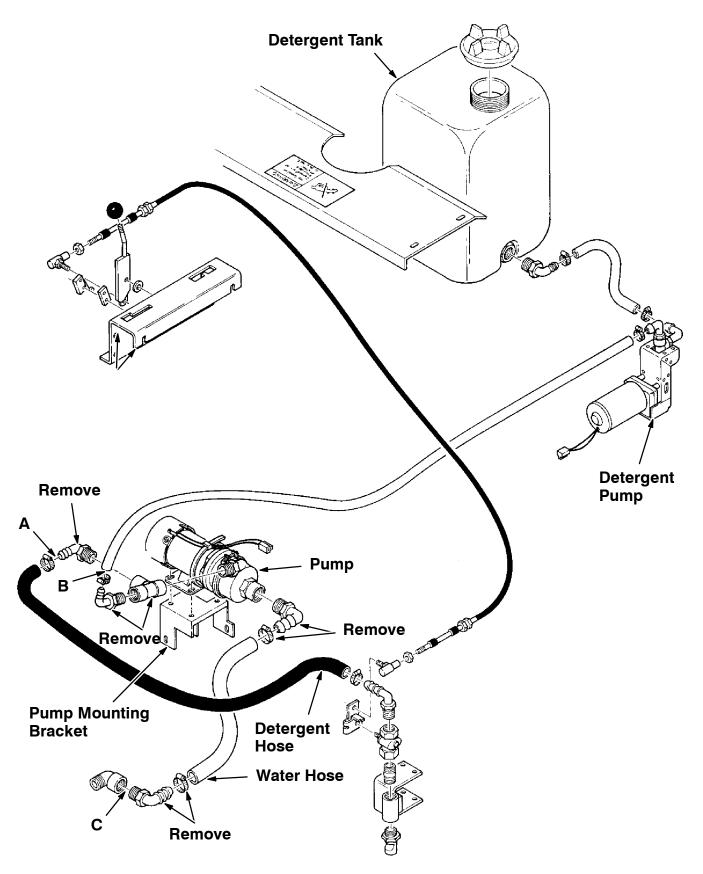


FIG. 2 - Existing Parts for 527 SRS Machines

## **INSTALLATION FOR 527 SRS MACHINES:** (Refer to Figures 3 and 4)

- 1. Apply new sealant (15) on threads of two new elbow fittings (7 and 8). Then install elbow fitting (7) on water tank and elbow fitting (8) on elbow fitting (7).
- 2. Install new solution pump assembly (34) on new pump mounting bracket (35) with three new hex screws (17), six new flat washers (2) and three new hexlocknylon nuts (3).
- 3. Install new pump mounting bracket (35) on scrubber frame with new hex screw (1), two new flat washers (2), one new hex nut (3), two new pan screws (4), two new flat washers (5) and new hex nut (6).
- 4. Connect new pump inlet hose (36) to new pump (34) and new fitting (8), on water tank with two new wormdrive clamps (13).
- 5. Install new nipple fitting (38) and new elbow fitting (39) on branch of one new tee fitting (37). Then install new nylon fitting (22) on new tee fitting (37).
- 6. Install new pump outlet hose (21) on new nylon fitting (22) with new wormdrive clamp (13). Then install tee fitting assembly on outlet port of new solution pump (34) with new wormdrive clamp (13).
- 7. Connect new vinyl hose (11) to new elbow fitting (39) with new wormdrive clamp (12). Then thread hose to top of solution tank and connect hose to tank with new hex screw (9), new hexlocknylon nut (10) and new wormdrive clamp (12).

NOTE: Apply new sealant (15) to threads on hex screw (9) to prevent leakage.

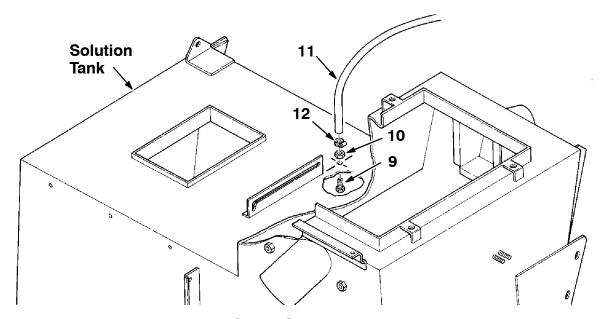


FIG. 3 - Solution Tank

- 8. Install new tee fitting (37) on new nipple fitting (38).
- 9. Install new elbow fitting (39) and new coupling fitting (40) on branch of new tee fitting (37).
- 10. Connect existing hose from detergent pump to new elbow fitting (39), on new tee fitting (37) with new wormdrive clamp (12).
- 11. Connect existing hose from water valve to new coupling fitting (40) on branch of new tee fitting (37) with new wormdrive clamp (13).

- 12. Install new label (14) on side instrument panel.
- 13. Lower machine to ground and connect battery cables to machine. Start engine and test operation.

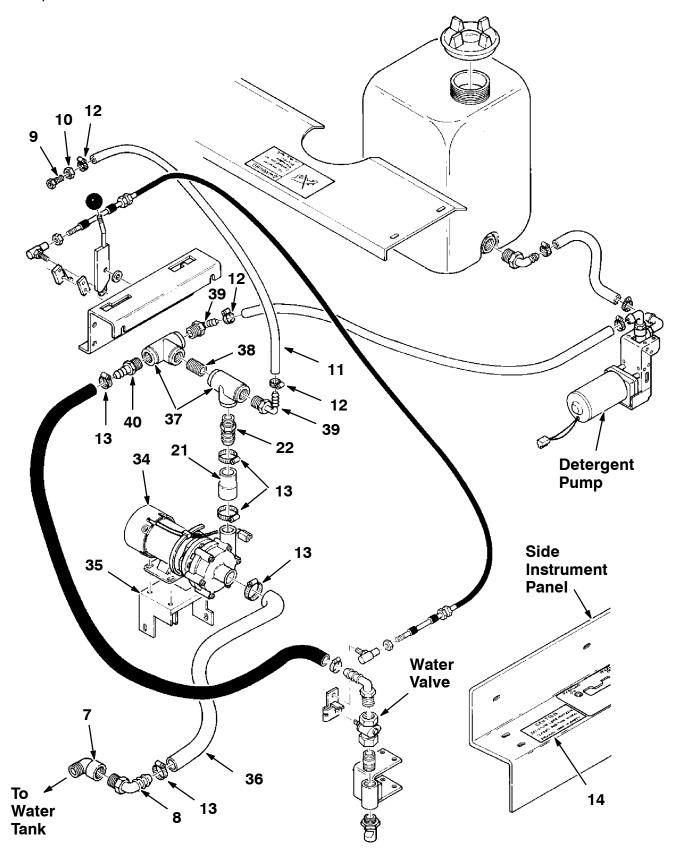


FIG. 4 - Solution Pump Assembly

#### PREPARATION FOR THE 550 SRS:

(Refer to Figures 5, and 6)

1. Empty solution and recovery tanks.

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

2. Disconnect water and detergent hoses at points A and B as shown in FIG. 6.

NOTE: Disconnect hoses at point C on Machines with serial number below 3370.

- 3. Drill one 3/8 inch diameter hole in tank next to existing coupling Refer to FIG. 5 for hole location.
- 4. Weld new stainless steel coupling (26) to tank, around 3/8 inch diameter hole.

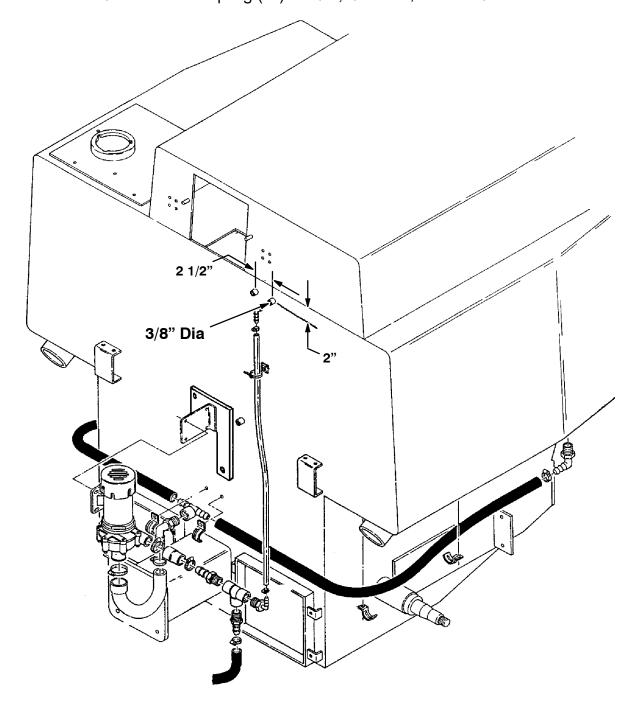


FIG. 5 - Solution Tank Coupling Hole Location

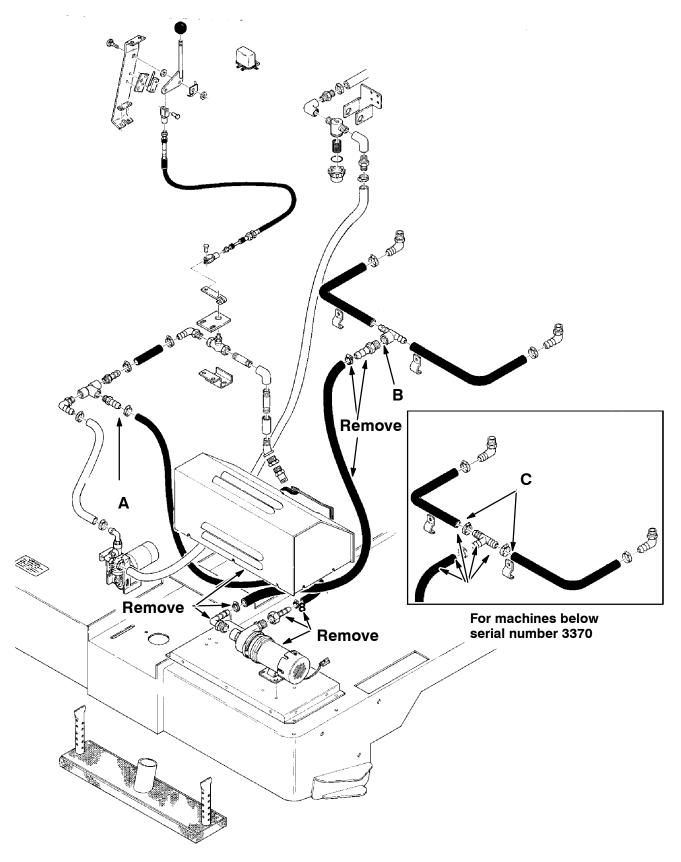


FIG. 6 - Existing Parts

### **INSTALLATION FOR THE 550 SRS:**

(Refer to Figures 4, 5, and 6)

- 1. Install new solution pump assembly (34) on new mounting bracket (16) with four new hex screws (19), four new hexlocknylon nuts (3) and four new lock washers (20).
- 2. Install mounting bracket and pump assembly on tank, below blue border, in existing holes for cable clamps with two new hex screws (17).

NOTE: Use new hex screw (18), in place of hex screw (17), if needed.

3. Steer machine to right and left to check clearance between frame and pump. If machine frame hits new pump (34), move new bracket (16) to gain clearance.

NOTE: Apply new sealant (15) on threads of new fittings to prevent leakage.

- 4. Connect new inlet hose (36) to new pump (34) with new wormdrive clamp (13).
- 5. Install new elbow fitting (7) on new inlet hose (36) with new wormdrive clamp (13).
- 6. Install new or existing tee fitting (23) on new elbow fitting (7).

NOTE: Install new tee fitting (23) on Machines with serial number below 3370.

- 7. Connect existing rubber hose to branches of new tee fitting (23).
- 8. Connect new outlet hose (21) to new pump (34) with new wormdrive clamp (13).
- 9. Install new straight fitting (22) and new elbow fitting (39) on branches of new tee fitting (37). Then install new straight fitting (40) on new tee fitting (37).
- 10. Install new straight fitting (22) in new outlet hose (21) with new wormdrive clamp (13).
- 11. Install new elbow fitting (30) on new coupling fitting (26).
- 12. Connect new vinyl hose (24) between new elbow fittings (30 and 39) with two new wormdrive clamps (25).
- 13. Hold new hose (24) in place with new cable tie mounts (28) and new cable ties (29).
- 14. Connect new rubber hose (27) to new straight fitting (40) on solution tank with new wormdrive clamp (13).
- 15. Thread new rubber hose (27) from tank, under tractor to scrub head. Then connect hose to existing straight fitting.
- 16. Hold new hose (27) in place with new cable tie mounts (28) and new cable ties (29).

# FOR SAFETY: Do not operate solution lever when solution tank is empty or pump seals will fail and damage pump.

- 17. Prime pump before operating. Follow instructions on new label (31).
- 18. Install new labels (14 and 31) next to solution control handle.

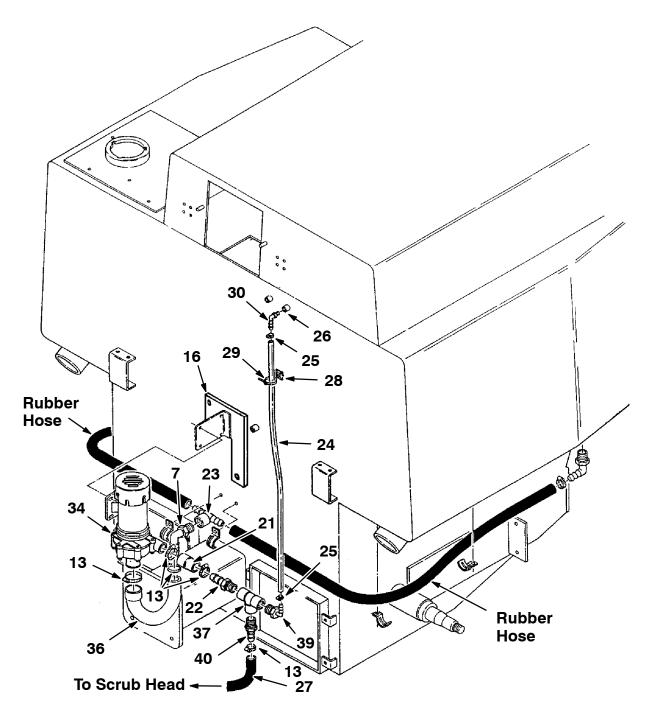


FIG. 7 - New Pump and Connections

### **WIRING:**

(Refer to Figure 6)

1. Disconnect battery cables from machine.



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

2. Block front tires. Hoist or jack up machine and block securely.



WARNING: Do not trust a scissors jack or a hydraulic jack to hold the load. Use jack stands or blocks.

- 3. Cut wire no. 234, three to four inches from connector, for pump and disconnect ground wire no. 235.
- 4. Lengthen wire no. 234 with two new parallel connectors (33) and new 16 gauge electrical wire (32)
- 5. Thread new wire (32) along length of tractor. Then connect and ground to pump.

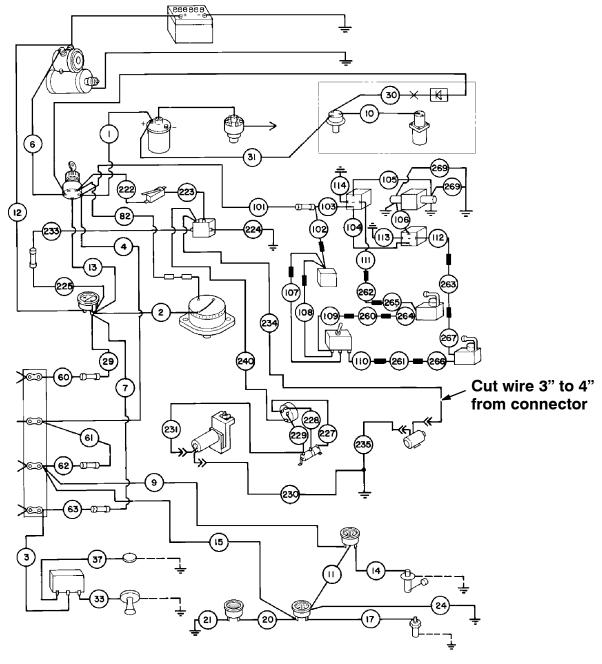


FIG. 8 - Electrical Diagram

### **BILL OF MATERIALS FOR WATER PUMP REPLACEMENT KIT 57444**

Ref.	TENNANT Part No.	Description	Qty.
1	48419	Hex screw, 1/4" - 20 x 3-1/2"	1
2	32490	Flat washer, 1/4"	8
3	32981	Hexlocknylon nut, 1/4" – 20	5
4	39650	Pan screw, 10 - 24 x 5/8"	4
5	19066	Flat washer, 10	2
6	19311	Standard hex nut, 10 - 24	1
7	18595	Plastic elbow fitting, .75 Pt - 1.0 Hose	2
8	69785	Plastic elbow fitting, 90° Npt 12Pf-12Pm	1
9	57442	Hex screw, 3/8" - 16 x 1.0"	1
10	36643	Hexlocknylon nut, 3/8" — 16	1
11	79610	Vinyl hose, 3/8" Id	1
12	43844	Wormdrive clamp, 1/4" - 5/8" Dia	4
13	11399	Wormdrive clamp, 13/16" - 1-1/2" Dia	7
14	02586	Pump lever model label	2
15	08317	RTV sealant, 3.0 oz	1
16	03698	Pump mounting bracket	1
17	19317	Hex screw, 1/4" — 20 x 3/4"	5
18	19318	Hex screw, 1/4" — 20 x 7/8"	1
19	19315	Hex screw, 1/4" — 20 x 1/2"	4
20	41140	Internal-external lock washer, 1/4"	4
21	57377	Solution pump outlet hose	1
22	57379	Straight nylon fitting, 1.0 Hose, 3/4 Npt	1
23	02446	Plastic tee fitting, .75 Pt – 3/4" Hose	1
24	68301	Clear vinyl hose, 3/8" ld x 27.0 Lg	1
25	54333	Wormdrive clamp, 5/16" - 7/8" Dia	2
26	76349	Coupling half pipe fitting, 1/8" Pt.Sst	1
27	47846	Rubber hose, 3/4" ld x 1-1/16 Od 113.0" Lg	1
28	55248	Adhesive cabletie mount	8
29	49263	Cable tie, 3.0" Dia Max, 11-13/32 Lg	9
30	03401	Plastic elbow fitting, 90°, 1/8 Npt, 3/8 Barb	1
31	31260	Pump prime label, 550	1
32	C350114	Electrical wire, 16 Ga, 13 ft Lg	1
33	04174B	Parallel connector, 16 & 14 Ga.	2
34	33327	Solution pump assembly, 12V Dc	1
35	48784	Pump mounting bracket	1
36	57378	Solution pump inlet hose	1
37	42133A	Plastic tee fitting 3/4" - 3/4" - 3/4" Pipe	2
38	69784	Plastic nipple fitting, 3/4" Ptx, 1-11/16 Lg	1
39	79484	Plastic elbow fitting, 3/4" Pt — 3/8" Hose	2
40	79273-2	Plastic coupling fitting, 3/4" Pt - 3/4" Hose	1

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