



INSTRUCTION BULLETIN

No. 340611
Machine: 7200 (ES™)
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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 369895**

DESCRIPTION:

This kit contains the parts needed to install a Recovery Tank ES™ float switch on 7200 (ES™) scrubbers. Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS:

(Estimated time to complete: 1 hour)

PREPARATION:

1. Empty the recovery tank.
2. Park the machine on a level clean surface, turn off the machine, set the parking brake, and remove the key from the switch.

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

3. Open the tank cover and lock the tank cover open.
4. Disconnect battery cables from the batteries.



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

5. Remove the vacuum fan assembly from the recovery tank. Set the vacuum fan assembly and all hardware aside. Refer to Fig. 1.



FIG. 1

6. **Machines equipped with the previous design of the float switch:** Remove the old liquid level sensor and guard from the recovery tank. Discard the liquid level sensor and guard. Refer to Fig. 2.

Machines equipped with the 14" pressure tube switch (375427) and 2" tube assembly (385750): Remove the old level sensor. Discard the level sensor. Refer to Fig. 2.

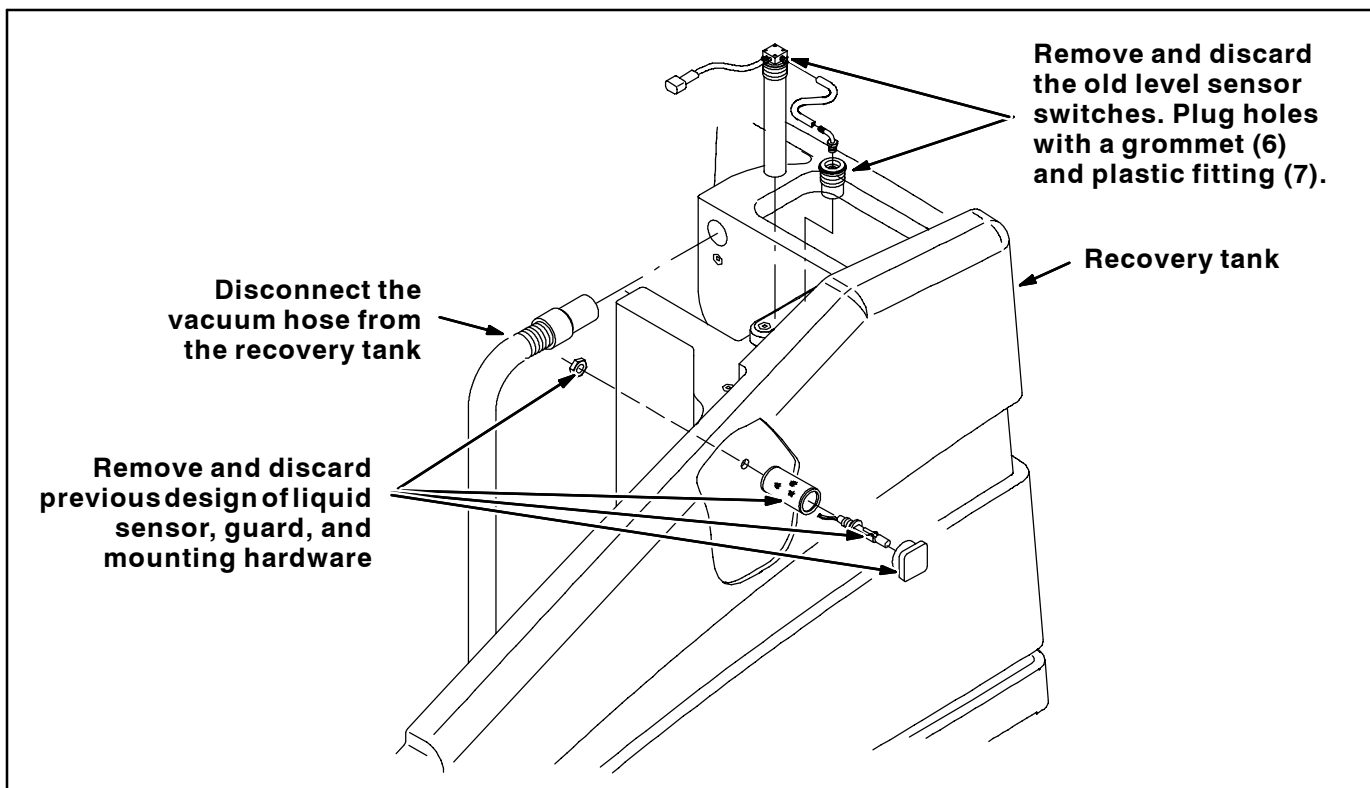


FIG. 2-Remove Old Liquid Level Sensor

1. **Machines serial numbers equipped with old design of the liquid level sensor:** Remove the nut from the new liquid level sensor (1). Proceed to Step 5.
2. **Machines equipped with the 14" pressure tube switch (375427) and 2" tube assembly (385750):** Use the grommets (6) and plastic fittings (7) to plug the holes where the level sensor removed in the previous step was located. Refer to Fig. 2.
3. **Machines equipped with the 14" pressure tube switch (375427) and 2" tube assembly (385750):** Measure and mark the location for the new liquid level sensor (1). Refer to Fig. 6.

NOTE: The hole for the new ES liquid level sensor is 6" below the hole for the standard 'FULL' liquid level sensor.

4. **Machines equipped with the 14" pressure tube switch (375427) and 2" tube assembly (385750):** Drill a 5/8" (0.625") hole into the point marked in the previous step. Clean the rough edges from the hole. Refer to Fig. 6.

5. Hold the liquid level sensor oriented in mounting position and use a black permanent marker to draw a line down the top of the threads. Refer to Fig. 3 and Fig. 4.

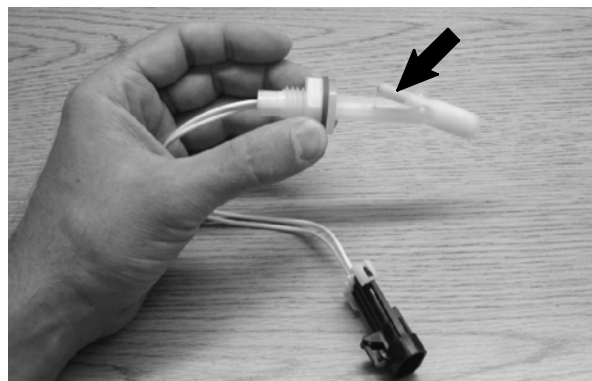


FIG. 3-Orient Liquid Level Sensor

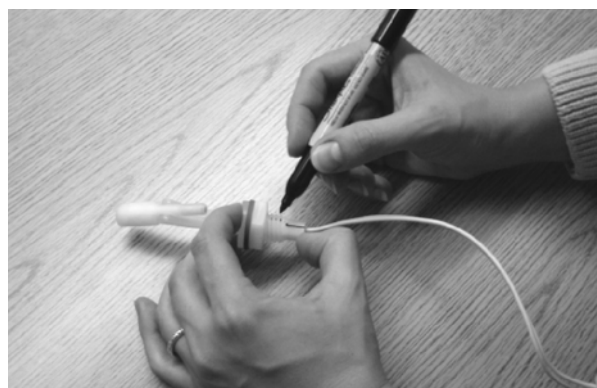


FIG. 4-Draw Line On The Threads

6. Pull the liquid level sensor (1) wires through the hole in the float switch protector bracket (2) and the hole inside the recovery tank. Refer to Fig. 5.
7. Position the liquid level sensor so the narrow end of the float sensor (1) is pointed up and the black mark is on top in the 12:00 position. Refer to Fig. 5.
8. Hold the level switch alignment plate (3) onto the liquid level sensor (1) and against the recovery tank and thread the nut from the liquid level sensor onto the liquid level sensor. Do not completely tighten the nut. Refer to Fig. 5.
9. Use the level switch alignment plate (3) as a template and drill a 1/2" (0.50") hole through the center hole in the level switch alignment plate and into the recovery tank. Refer to Fig. 5.
10. Tighten the hex screw (5) through the level switch alignment plate (3) and the isolator nut (4) and into the recovery tank. Refer to Fig. 5.
11. Install the connector and lock onto the liquid level sensor (1) wire terminals.
12. Draw a small black line in the 12:00 position outside the liquid level sensor mounting hole. Regularly check to ensure the black mark on the liquid level sensor (1) and the recovery tank are aligned. The switch may not function properly if it is rotated or twisted.
13. Tighten the nut from the liquid level sensor (1) enough to hold the sensor and float switch protector bracket (2) firmly into place inside the recovery tank.
14. Connect the level sensor to the main harness connector marked "HALF".
15. Use wire ties to secure the wire harness to the main harness.
16. Reconnect the vacuum hose to the recovery tank.
17. Reinstall the vacuum fan assembly onto the recovery tank.
18. Reconnect the battery cables to the batteries.
19. Turn on the scrubbing system and fill the recovery tank with enough water to cover the liquid level sensor (1).
20. Ensure the vacuum fan shuts off and the squeegee raises.

NOTE: The time delay is approximately one minute.

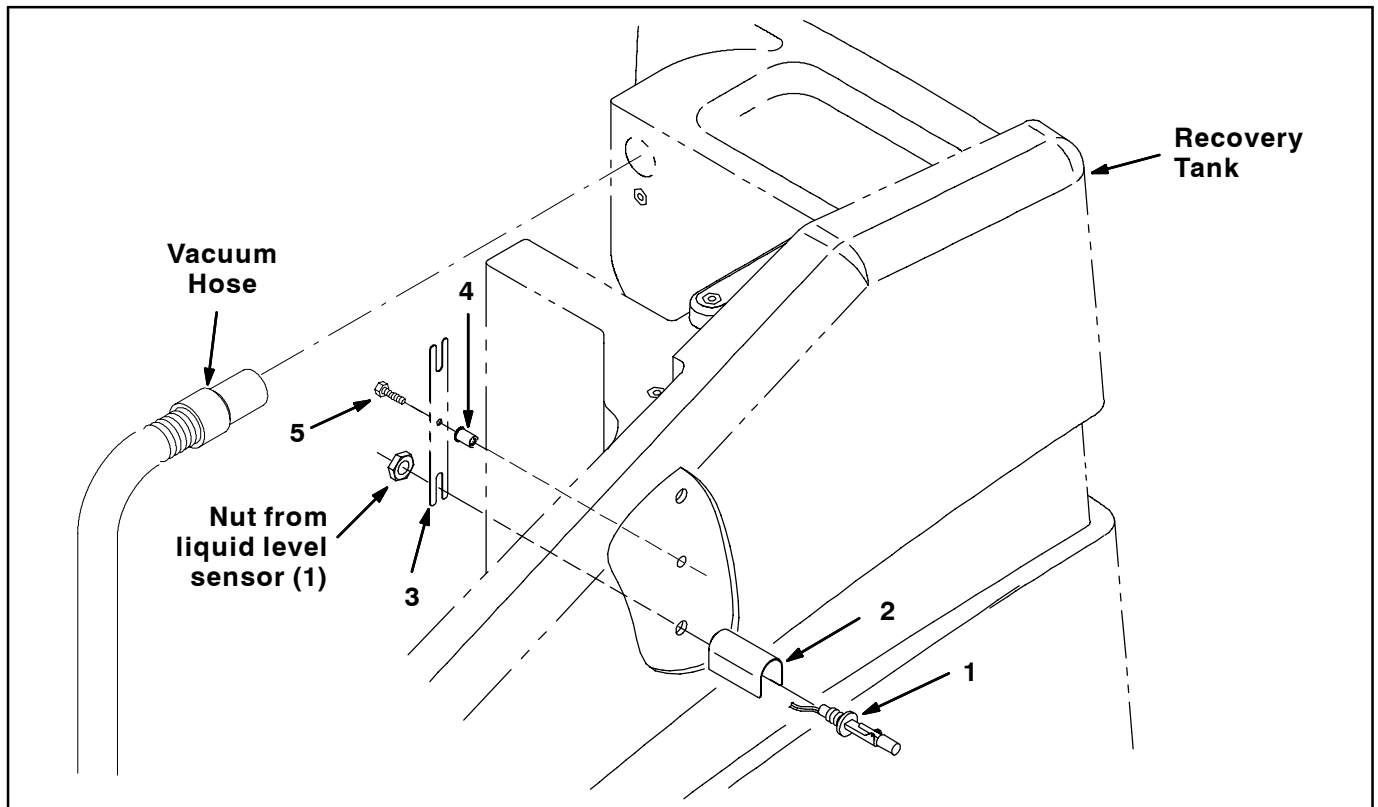


FIG. 5-Liquid Level Sensor Installation

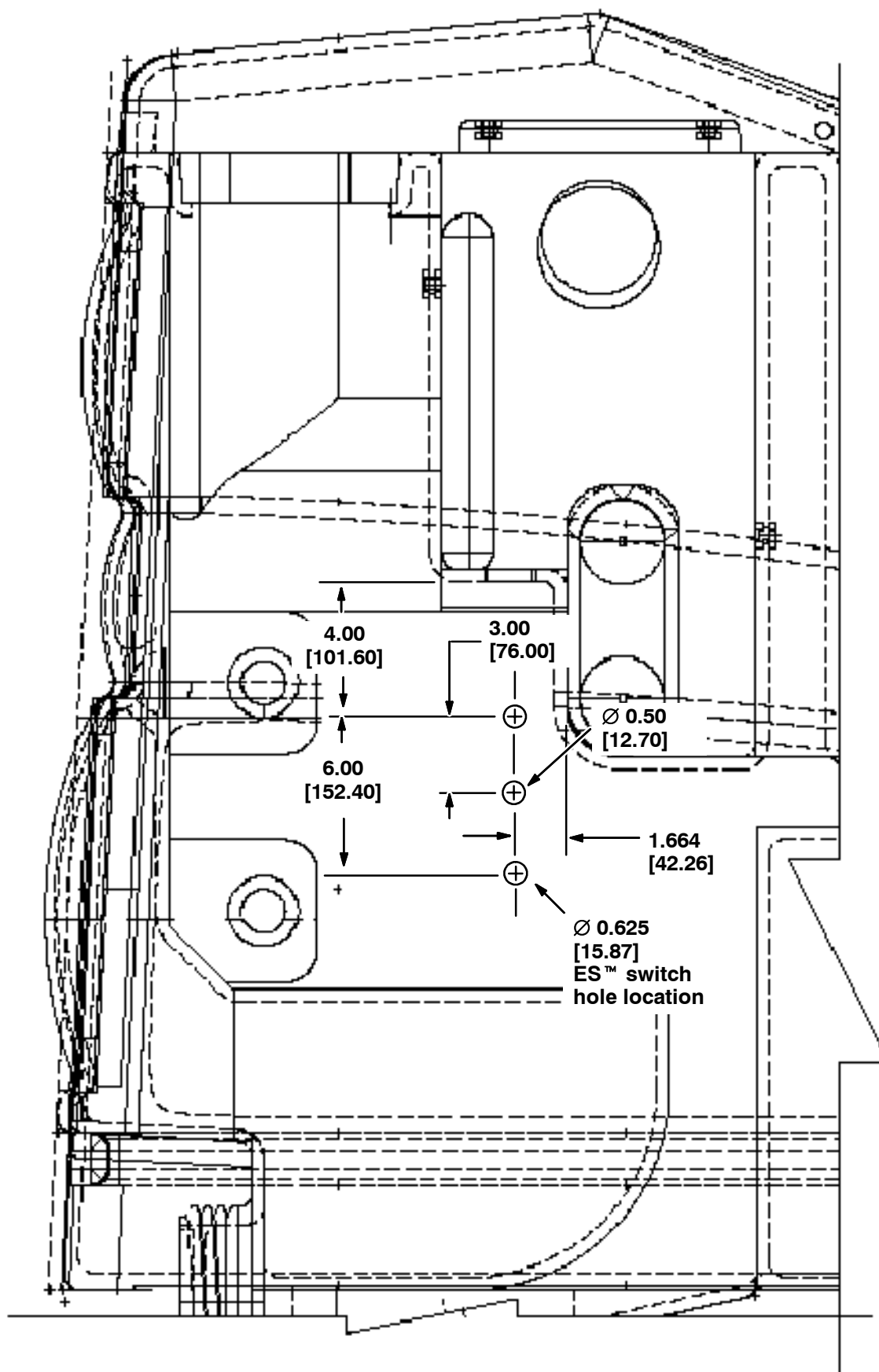


FIG. 6 - Tank Rework / Hole Location

Bill of Materials for Switch Kit, Sensor, Level, ES [7200]-369895

Ref.	TENNANT Part No.	Description	Qty.
1	385685	Sensor, Level, Liquid, 14VDC 01A 0.62-11	2
2	1019285	Bracket, Protector, Float Switch	2
3	1023365	Plate, Align, Switch, Level [7200]	1
4	397644	Nut, Isolator, .25-20 Wall .187-.343	1
5	16951	Screw, Hex, .25-20 X 1.25, Sems	1
6	223528	Grommet, Level Sensing, 1.6D 9.6L F/1.4H	2
7	49745	Fitting, Plstc, Plug, PM16	2

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