



INSTRUCTION BULLETIN

No. 340615
Machine: 8200/8210
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Rev. 01

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 374255**

DESCRIPTION:

This kit contains the parts needed to replace the liquid level sensor on the model 8200 and 8210 sweeper/scrubbers **not equipped with ES™ option.**

Please follow step-by-step instructions.

SPECIAL TOOLS / CONSIDERATIONS: Hand drill, 5/8 in hole saw, 1/2 in. drill bit

(Estimated time to complete: 2 hours)

PREPARATION:

(Refer to FIG. 1 thru 5)

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

1. Disconnect battery cables from machine.



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

INSTALLATION:

(Refer to FIG. 1 thru 5)

1. Locate and disconnect the wire harness from the existing level sensor in the recovery tank.
2. Remove tube switch assembly 375426 and plug assembly 385750.
3. Install the expandable plugs (3) in the holes the tube switch and plug assembly were removed from. (Refer to FIG. 3)
4. Remove the side door latch bracket.
5. Mark the new level sensor mounting hole location on the recovery tank according to the illustration in FIG. 1. (Refer to FIG. 1)
6. Drill the hole out with a 5/8 in hole saw. (Refer to FIG. 1)
7. Cut out the inside-forward panel as shown in FIG. 2. (Refer to FIG. 2)
8. Mark and drill the 1/2 hole location on this panel as shown in FIG. 2. (Refer to FIG. 2)

9. Before installing the float switch: Hold the float switch, oriented in mounting position. Draw a line down the top of the threads with a black permanent marker. (Refer to FIG. 5)
10. Remove the red caps from the screen.
11. Push the wires from the level sensor (1) through the large screen (10) opening and then through the small hole. (Refer to FIG. 3)
12. Install the red cap back onto the screen (10) end.
13. Install the connectors and locks onto the level sensor (1) wire terminals. (Refer to FIG. 3)
14. Install the new level sensor (1) in the 5/8" hole, from the inside of the tank, running the wires through the hole. (Refer to FIG. 3)
15. Install the nut onto the level sensor (1). Do not tighten at this point.
16. Position the float sensor so that the float is in the correct position. The float is correctly positioned when the narrow end of the float mechanism is pointed up, and the black mark drawn on the threads earlier, is on the top in the 12:00 position. (Refer to FIG. 5)
17. Tighten the nuts securely.
18. Draw a small black line on the outside of each level sensor mounting hole, in the 12:00 position. Check regularly that the black marks on the switch and the machine are aligned.
If the switch rotates, or is twisted when the red filter is being cleaned or serviced, the float may not work properly.

NOTE: Check that all level sensors are installed with the float hanging down.

19. Connect the jumper wire (2) to the level sensor connectors and to the main wiring harness. (Refer to FIG. 3)
20. Connect the upper level sensor to the main harness connector mark "FULL".
21. Install the new side door bracket (4) by first installing the lower end. Then, swing the upper end into place and secure the upper end after the bracket (4) has touched the upper level sensor. Tighten both of the bracket bolts. (Refer to FIG. 4)
22. Remove the rubber stops from the original bracket and install one onto the new bracket (4). Adjust the latch and door stops.
23. Remove the prop rod holding the cover up.
24. Install the cable (5) and bushing (9) into the hole in the recovery tank. (Refer to FIG. 3)
25. Install the top end of the cable (5) onto the cover without the bushing (9). Rotate the top eyelet so it is perpendicular to the cover, and tighten the bolt. Check to make sure the cable swings out of the way of the cover seal when closing. (Refer to FIG. 3)
26. Secure the wire harnesses to the main harness with wire ties.
27. Reconnect the battery cables to the machine.

NOTE: Check that the solution tank is not full. There is a level sensor switch in the solution tank that will shut the system off, if the solution tank is full.

28. With the scrubbing system ON, fill the recovery tank with enough water to cover the upper level sensor. Check that there are no leaks around the level sensor.

29. Check that the vacuum fan shuts off and the squeegee raises.

NOTE: The time delay is approximately one minute.

NOTE: Use care when cleaning the screens covering the new liquid level sensors. Clean the screens with a low pressure water hose, and remove the screens only when necessary. Be careful not to rotate the liquid level sensors when removing or replacing the screens. If the liquid level sensors are moved when replacing the screens, realign the black marks made with the permanent marker to make sure the switches are upright in the correct operating position.

30. Discard the old level sensor and prop rod.

BILL OF MATERIALS FOR LIQUID LEVEL SENSOR KIT 374255

Ref.	TENNANT Part No.	Description	Qty.
1	222822	Sensor, level, liquid (magnetic)	1
2	369766	Harness, sensor, jumper	1
3	398850	Plug, expandable, 1.5D X 1.75L	1
4	369767	Bracket, door, side	1
5	87172	Cable, 0.13D, 10.0L	1
6	09010	Screw, hex, M08 X 1.25 X 25, Ss	2
7	01685	Washer, flat, 0.31 Ss	6
8	07786	Nut, hex, std, M08 X 1.25, Ss	2
9	46563	Bushing, sleeve, 0.37B, 0.50D, 0.50L	2
10	375302	Strainer, solution, switch guard	1

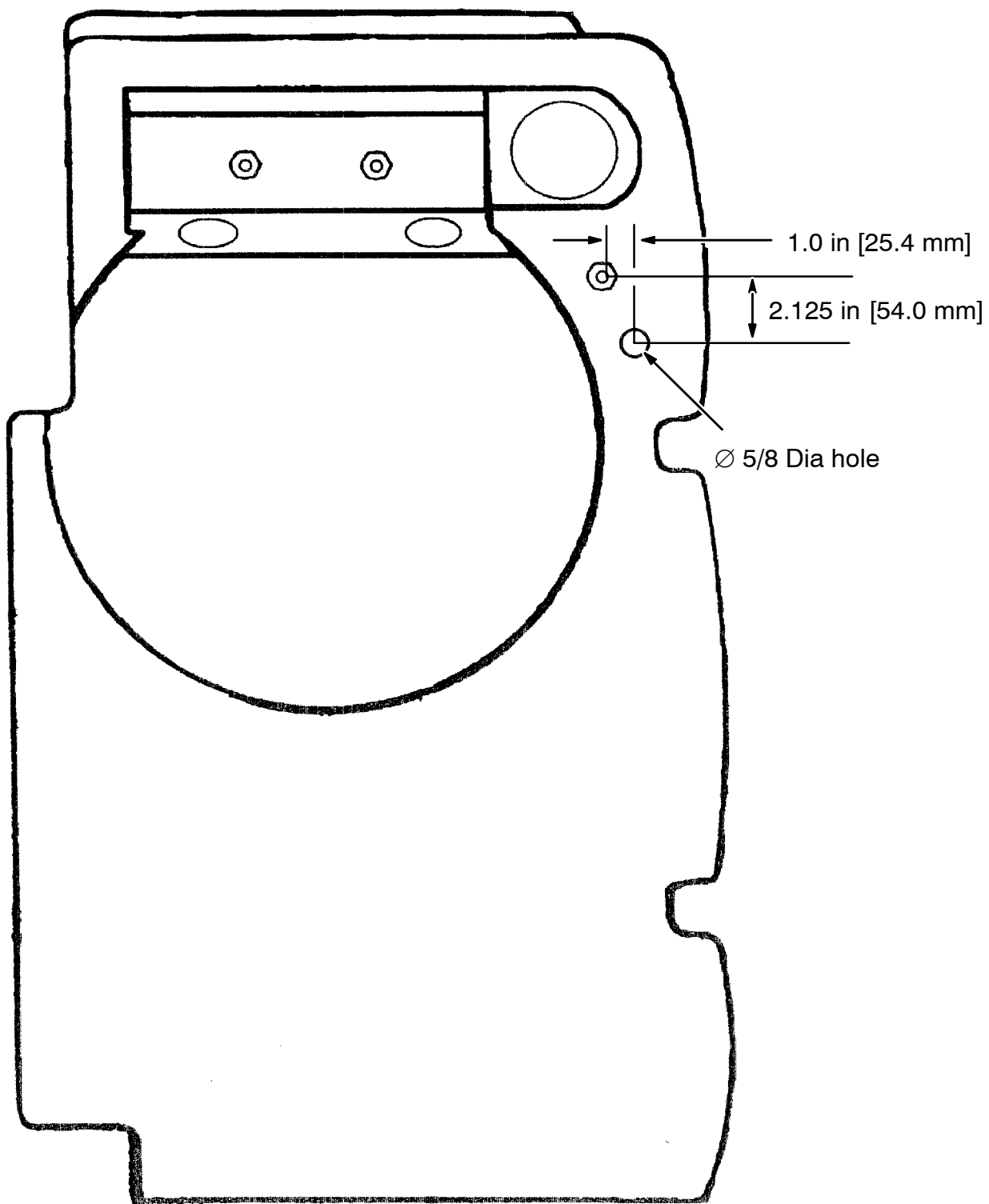


FIG. 1 - New Hole Locations

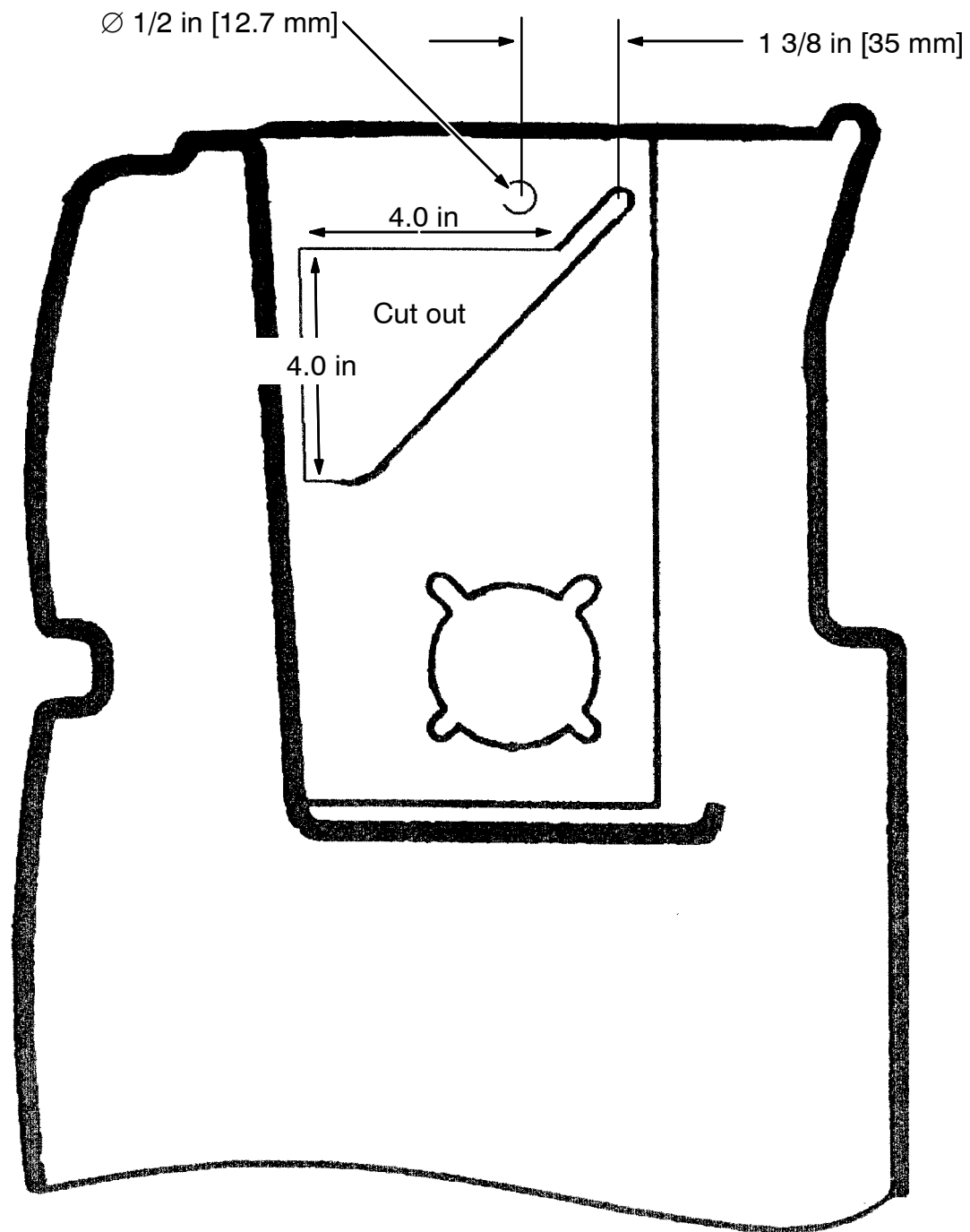


FIG. 2 - New Hole Locations

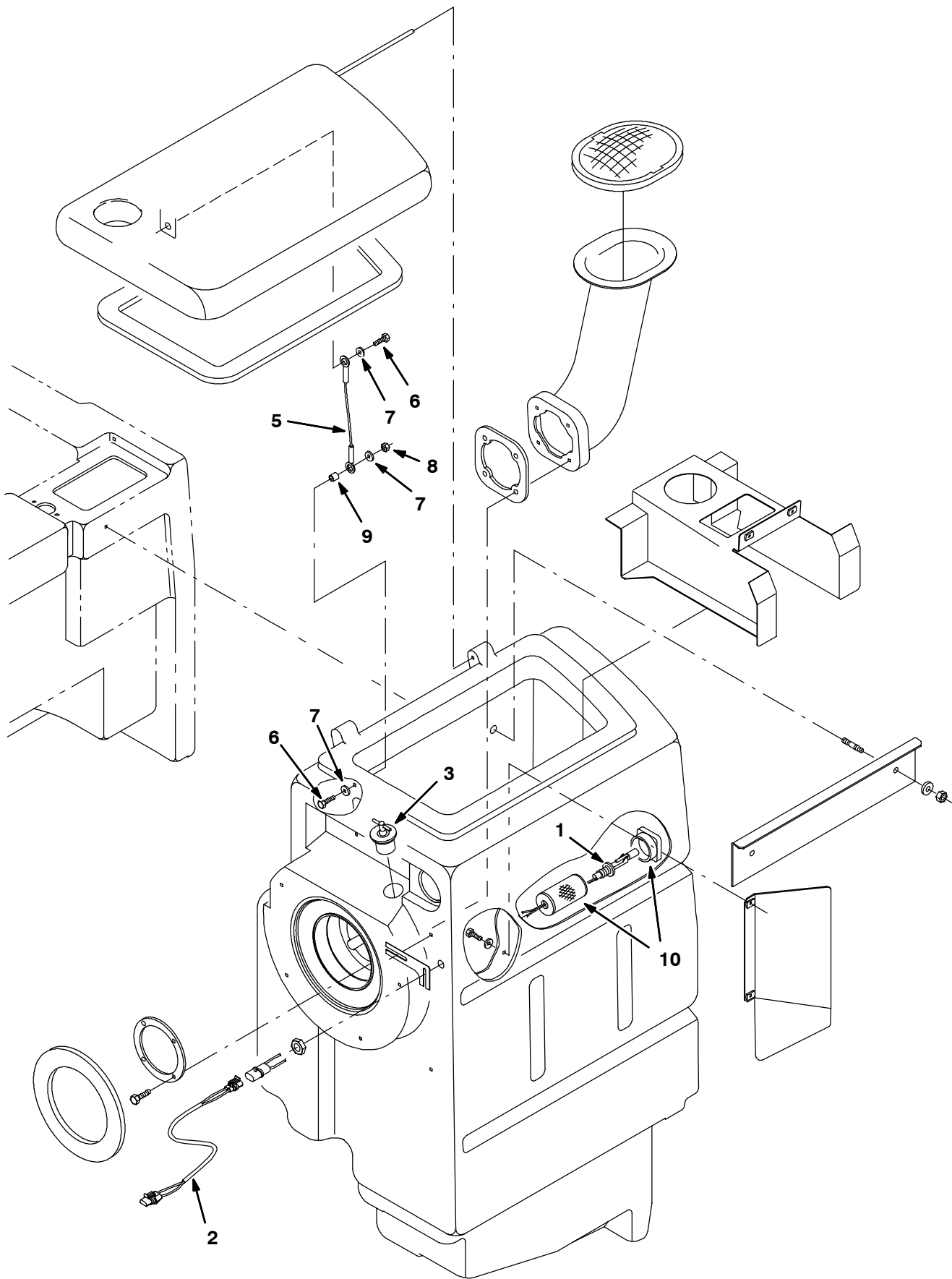


FIG. 3 - New Float Switch/Jumper Wire Installation

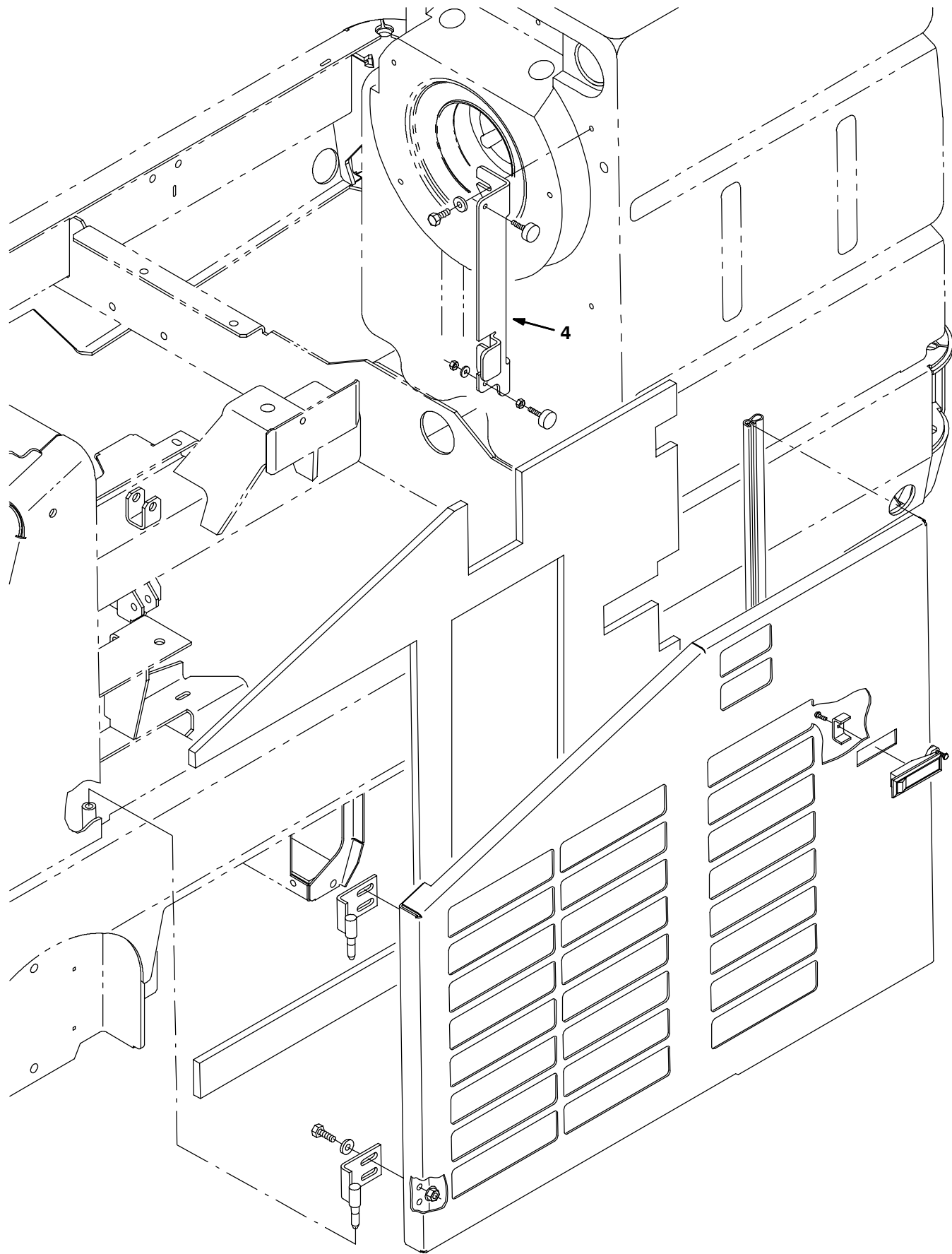
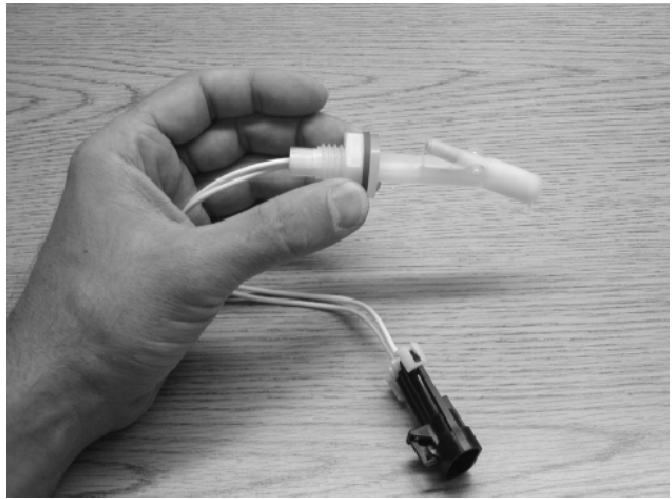


FIG. 4 - New Door Bracket Installation

Orient the float switch so the narrow end of the float mechanism is pointed up



Mark the top edge of the threaded end of the float switch with a permanent marker for orientation with the machine. The top edge should remain in the 12:00 position, to keep the float in proper working position.

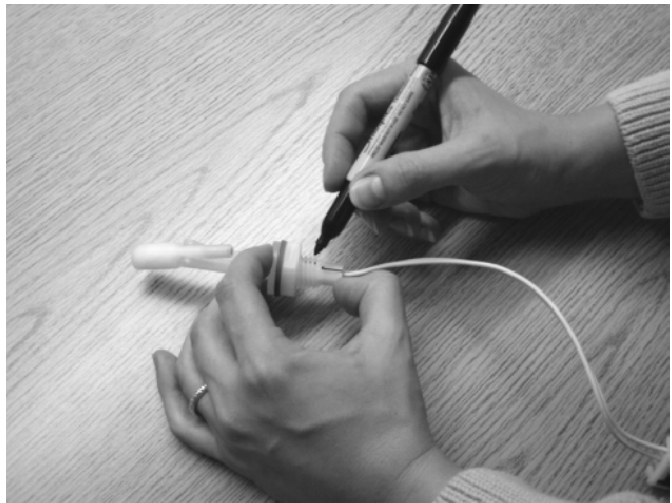


FIG. 5 - New Float Orientation

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