INSTRUCTION SHEET
ROOM EXTENSION SOLENOID VALVE REPLACEMENT

This sheet is to be followed only when changing the small solenoid valves used for a room extension manifold.

When a vehicle is in warranty and a room is creeping in or out and it is determined a solenoid valve is at fault, both the Cylinder Extend and Cylinder Retract valves for that room should be replaced. If out of warranty, it is a good idea to determine which valve should be changed. This will save the cost of a valve.

If a valve has a visible oil leak, change only that valve.

When a particular valve is determined to be mechanically or electrically faulty, change only that valve.

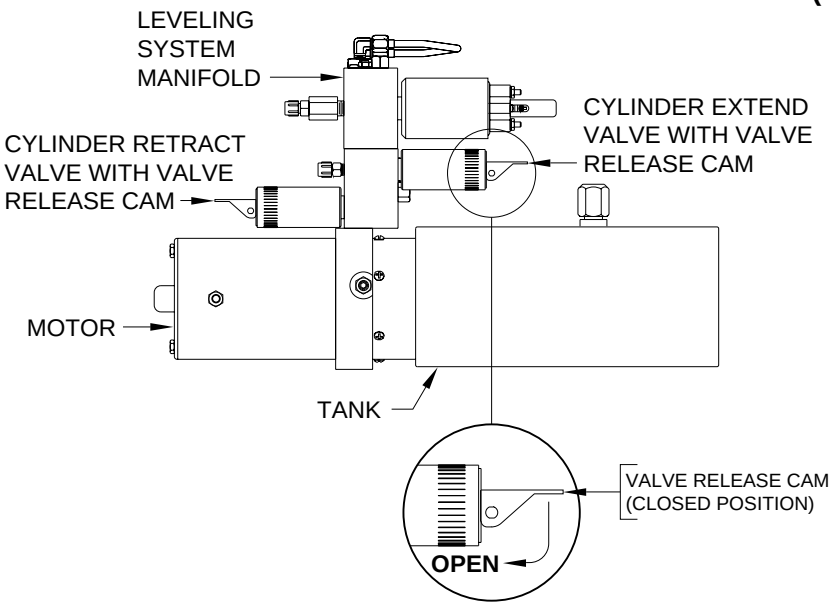
When there are multiple rooms, such as shown below, it is important to determine which set of valves (Cylinder Extend and Cylinder Retract) operate a particular room. Although the valves may be labeled it is a good idea to check that you have the correct pair of valves. Do not depend on the diagrams in the owners manual. The vehicle manufacturer may not have used the HWH diagram when wiring or plumbing the assembly.

If the room is operating correctly, unplug one set of Cylinder Extend and Cylinder Retract valves at a time and try to operate the room. When the room will not extend or retract, the correct set of valves have been located.

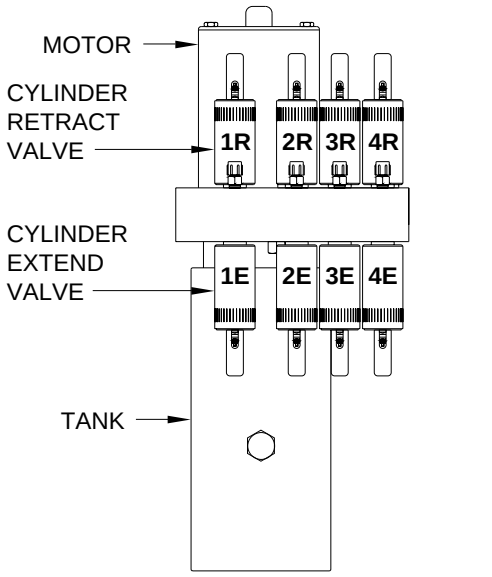
If the room will not operate, unplug one valve (Cylinder Extend or Cylinder Retract) and check for +12 volts between the two pins in the harness plug while someone pushes the room control switch to Extend AND Retract. When voltage is present while the switch is being pushed, the correct set of valves have been located.

NOTE: Due to the designs of different rooms, Room Extend or Room Retract is not always the same as Cylinder Extend or Cylinder Retract.

SIDE VIEW



TOP VIEW
(Leveling System Manifold Not Shown)



IMPORTANT: Open both the Cylinder Extend and Cylinder Retract valves for a room to release pressure before replacing one or both valves for that room. Turn the Valve Release Nuts NO MORE THAN 4 1/2 full turns counter clock wise to open the valves. Remember to close the valve(s) after the repair is complete. Tighten the Valve Release Nuts snug only. DO NOT over tighten.

NOTE: Make sure the o-rings for the old valve did not come off and stay in the manifold. Compare the old valve to the new valve to make sure.

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PRODUCT/SERVICE BULLETIN

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RE: Hydraulic Solenoid Valve Identification and Replacement:
To ensure the correct room solenoid valve is replaced and to simplify diagnostics HWH is directing that both the Extend and the Retract solenoid valves are to be replaced when diagnostics indicate a solenoid valve problem.

FIRST: Identify which pair of solenoids controls the room (or other function) in question. The rooms are USUALLY numbered counterclockwise starting with the first room behind the driver. See FIGURE 1.

Solenoid valves on the power unit are USUALLY numbered from Right to Left when viewed from the motor end. See FIGURE 2A. (or FIGURE 2B for some 2002 and earlier models)

Check that the wires labeled ROOM 1 EXTEND or CYLINDER 1 EXTEND and ROOM 1 RETRACT or CYLINDER 1 RETRACT etc. are connected to the appropriate pairs of solenoids.

SECOND: Verify that the correct set of valves have been selected by unplugging the valves in question and operating the Room Control Switch of the malfunctioning room. If the pump operates, but the room does NOT move, the correct set of valves has been selected.

THIRD: Loosen the Valve Release Nut or T-Handle of the EXTEND valve. Loosen the Valve Release Nut or T-Handle of the RETRACT valve. Remove the EXTEND and RETRACT solenoid valves. Install the new valves and plug the wiring back into the valves.

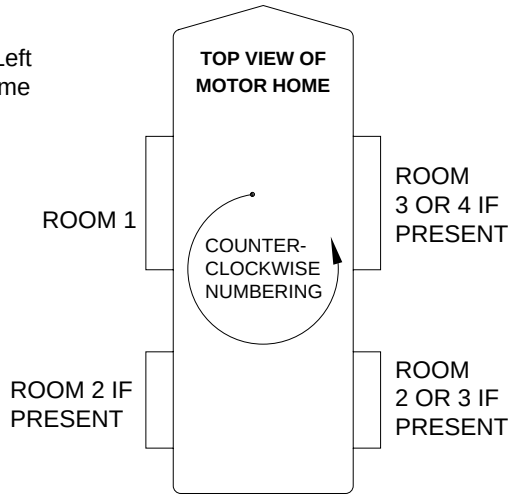

FIGURE 1

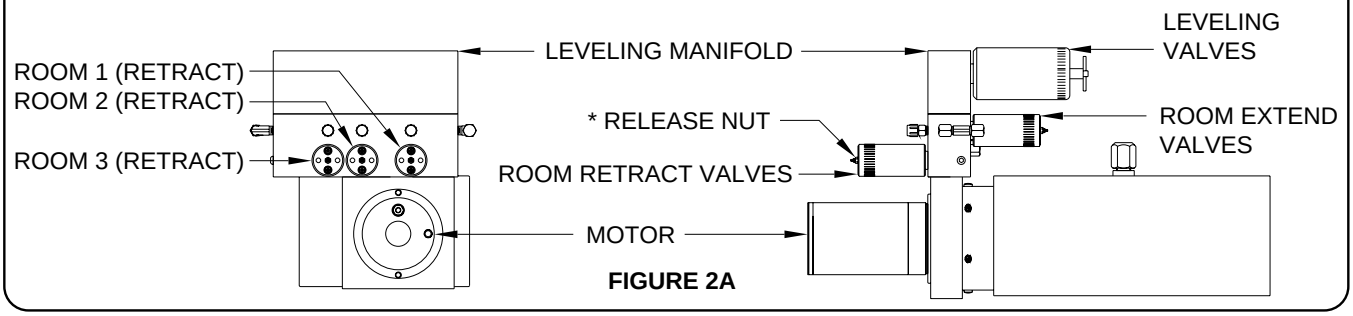

FIGURE 2A

* DO NOT loosen the Release Nut (Counter Clockwise) more than 4 and 1/2 turns. DO NOT over tighten when closing.

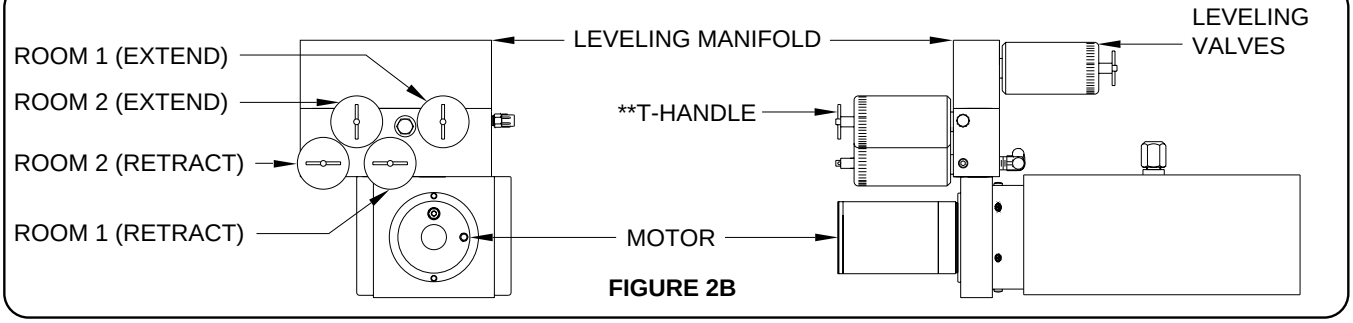

FIGURE 2B

** T-Handles should be turned (Counter Clockwise) 4 to 5 complete turns.

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