EMERGENCY JACK RETRACTION

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Unless a jack is seriously damaged, most jacks can be retracted simply by opening the manual valve release for each of the jacks. This includes spring-retract (single-acting) jacks and power-retract jacks (double-acting jacks without springs).

Spring-retract jacks should retract by themselves when the valves are opened. If the springs are missing or the jack does not retract, the jack can usually be pried up using a bar, board or shovel. Power retract jacks will have to be pried up after the valves have been opened.

Locate the hydraulic control unit. If the pump runs, you can operate the system so you can use the sound of the pump to locate the control unit. The park brake (if so equipped) must be set to use the pump. The ignition must be on or for towable units, there may be a master power switch that must be on. Locate the HWH Leveling System control panel. If the top left button has an "I" or "HYD" on it, push the button one time. When the light above the button is on, the manual arrows on the right side of the panel will function. If the top left button has a symbol instead of an "I" or "HYD", the manual arrows will function with the ignition or master power switch on. Push any of the "UP" arrow buttons to run the pump so you can locate the control unit. The control unit can be mounted in a compartment, behind the front grill, or mounted to the frame of the vehicle under the vehicle. The solenoid valves on the control unit should be accessible without crawling under the vehicle.

WARNING: DO NOT CRAWL UNDER ANY VEHICLE SUPPORTED ON THE LEVELING JACKS WITHOUT PROPERLY SUPPORTING THE FRAME OF THE VEHICLE SO IT CANNOT DROP. WHEN THE FLUID IS RELEASED

FROM A JACK THE VEHICLE MAY DROP AND/OR MOVE FORWARD OR BACKWARD CAUSING INJURY OR DEATH.

Make sure people and objects are clear of the vehicle before opening valves. Allow clearance for the vehicle to lower. Open solenoid valves slowly so the vehicle drops slowly as the fluid is released.

If *all* of the jacks must be retracted, proceed to the appropriate instructions for "**MOTORIZED VEHICLES**" or "**NON-MOTORIZED VEHICLES**".

If *individual* jacks need to be retracted, refer to the "**HYDRAULIC CONTROL UNIT ARRANGEMENTS**" later in this section for valve locations.

Refer to "**VALVE IDENTIFICATION AND OPERATION**" located later in this section to help identify the valves you are dealing with so they can be opened and closed properly.

MOTORIZED VEHICLES

Motorized Vehicles

Standard Control Unit

Spring-Retract Jacks

The two center valves control the front jacks. Slowly open the two center valves. When the weight is off the front jacks, open the two outer valves. When the jacks are fully retracted, the vehicle can be moved. If necessary, pry the jacks up. **It is recommended to leave the valves open until the coach has been delivered to the repair site.**

This type of hydraulic control unit has a shuttle valve. If none of the jacks will retract after the valves have been opened manually, there is most likely a shuttle valve problem. Click here, MI158813, for a detailed explanation and diagram to retract jacks if there is a shuttle valve issue.

If a jack will not retract no matter what is tried, the cylinder may have to be removed. The vehicle may have to be lifted to remove a cylinder. It may be possible due to a hose issue, the jack will retract when the hose is removed.

Motorized Vehicles

With Two Solenoid Valves for each Jack

With or Without Auxiliary Hand Pump

These control units have a manifold that is labeled with the valve location for each jack or function and which is the extend or retract valve. Slowly open the appropriate valves to retract the two front jacks.

Although the power retract style jack will have to be pried up if the system does not have an auxiliary hand pump, the vehicle will still lower when the valve is opened until weight is off the jack. When the weight is off the front jacks, the valves for the rear jacks can be opened.

If the control unit is equipped with an auxiliary hand pump, click here MP349904 for detailed instructions on the use of the hand pump. For power retract jacks, when the weight is off the jacks, it may be easier to use the hand pump to retract one jack at a time. If the hand pump will not function it may need to be primed, click here MP440009 for detailed priming instructions. If the hand pump still does not function, the jack(s) will have to be pried up or removed. **It is recommended to leave the valves open until the coach has been delivered to the repair site.** .

If a jack will not retract no matter what is tried, the cylinder may have to be removed. The vehicle may have to be lifted to remove a cylinder. It may be possible due to a hose issue, a jack will retract when the hose is removed.

VALVE IDENTIFICATION AND OPERATION

LARGE VALVES – 2.25" Diameter. May have a T-Handle Release, 1/4" Nut Release, or a Cam Release.

T-Handle Release –

- Turn the T-handle counterclockwise to open the valve. The T-handle should turn easy at first and then meet some resistance as it compresses a spring. The T-handle will have to turn approximately 4 ½ full turns to fully open the valve.
- When closing the valve, the T-handle only has to be snug. Do not over tighten.

1/4" Nut Release –

The nut release is located under a plastic cap in the center of the valve between the two wires.

- Remove the cap.
- Use a ¼" nut driver to turn the nut counterclockwise. DO NOT turn the nut more than 2 full turns. Turning the nut more than 2 turns will damage the valve.
- When closing the valve, the nut release only has to be snug. Do not over tighten.

PLASTIC CAP

- Replace the plastic cap to keep debris out of the valve.

Cam Release –

When the valve is closed, the cam release sticks straight out from the valve and should seem loose.

- To open the valve, move the cam 90 degrees from the closed position. The cam can rotate to any position on the valve but can only be move to the open position in one direction. If pushed the wrong way, the valve will be damaged.
- Make sure the cam is loose when it is moved back to the closed position.

VALVE CLOSED

VALVE OPEN

SMALL VALVES – 1.5" Diameter. May have a 1/4" Nut Release or a Cam Release.

¼" Nut Release –

The nut release is in the center of the valve between the two wires. There is a small jam nut on top of the main ¼" release nut. DO NOT loosen the small nut.

- Use a ¼" nut driver to turn the nut release counterclockwise. DO NOT turn the nut more than 4 ½ turns, damage to the valve may occur.
- When closing the valve, the nut needs only be snug, do not over tighten the nut.

NUT RELEASE

Cam Release –

When the valve is closed, the cam release sticks straight out from the valve and should seem loose.

- To open the valve, move the cam 90 degrees from the closed position. The cam can rotate to any position on the valve but can only be move to the open position in one direction. If pushed the wrong way, the valve will be damaged.
- Make sure the cam is loose when it is moved back to the closed position.

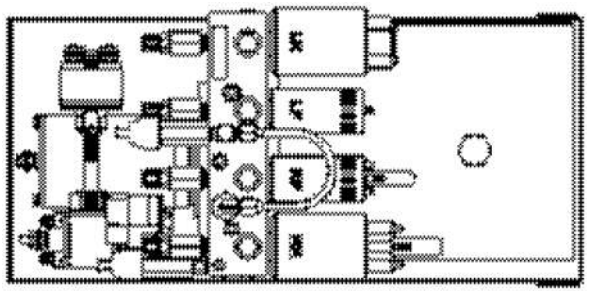
VALVE CLOSED

VALVE OPEN

HYDRAULIC CONTROL UNIT ARRANGEMENTS

Standard Hydraulic Control Unit.

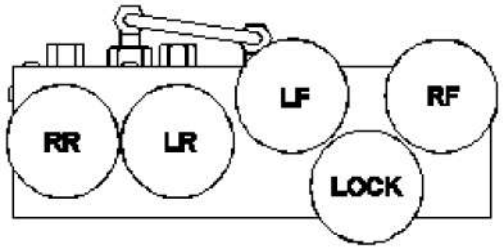
Most commonly used on most motor homes but can also be used on specialty vehicles and trailers. Can only be used with spring-retract jacks. One solenoid valve for each jack. Can have four large solenoid valves, four small solenoid valves or a combination of two large, two small solenoid valves and a shuttle valve.



TOP VIEW

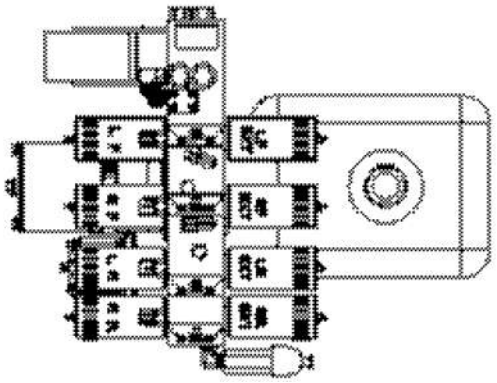
Standard Hydraulic Control Unit with Lock/Equalize Valve.

This control unit is only used for non-motorized vehicles with spring-retract jacks. The valve location and connections are different from the standard manifold. There is one valve per jack with a fifth valve called the lock valve. This control unit will usually have all large valves but may



VIEW FROM TANK END

have a combination of large and/or small valves. The manifold also has a shuttle valve.



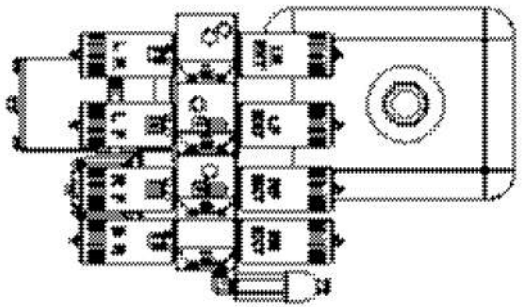
TOP VIEW

Hydraulic Control Unit

with Two Solenoid Valves per Jack

and an Auxiliary Hand Pump

Most commonly used on specialty vehicles and trailers with power retract jacks. This control unit has two valves for each jack or function. One valve for extending the jack and one for retracting the jack. This control unit is used with power retract jacks, spring-retract jacks or a combination of the two. The hand pump can be used to extend either power retract or spring-retract jacks. The hand pump can only be used to retract power retract jacks. This can also be used with a remote manifold for two front or rear jacks.



Hydraulic Control Unit

with Two Solenoid Valves for Each Jack

Most commonly used on specialty vehicles and trailers with power retract jacks when an auxiliary hand pump was not requested. This control unit has two valves for each jack or function. One valve for extending the jack and one for retracting the jack. This control unit is used with power retract jacks, spring-retract jacks or a combination of the two.

This can also be used with a remote manifold for two front or rear jacks.

TOP VIEW