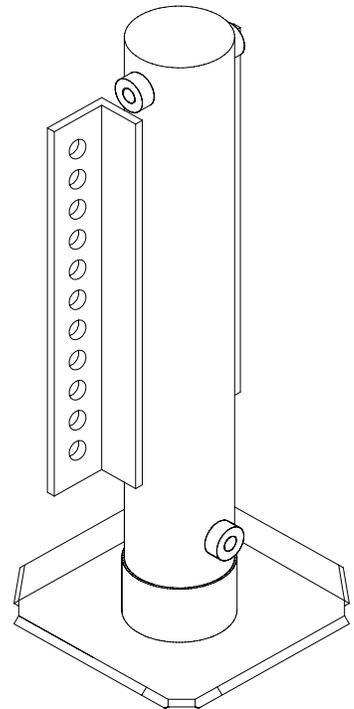
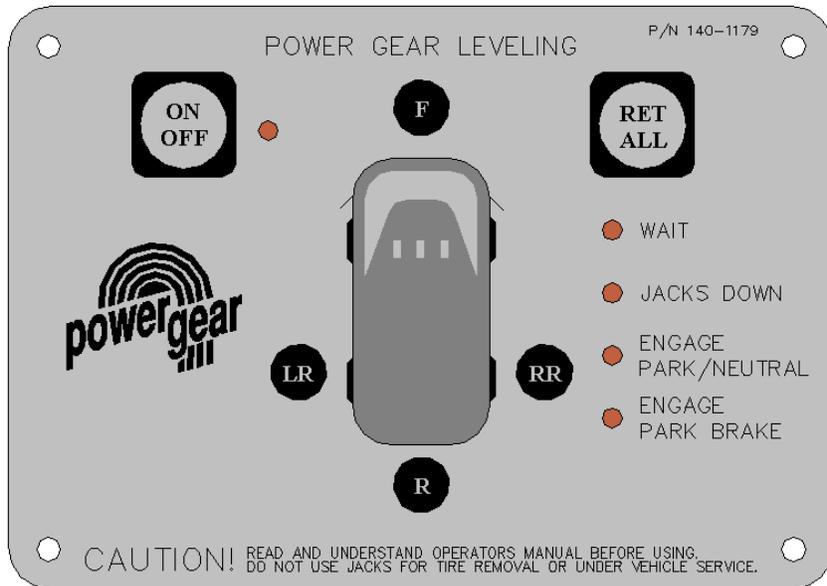




# OPERATION MANUAL for MANUAL LEVELING SYSTEMS

with square foot pads on jacks

## Dewald manual system touchpad #140-1179



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# **LEVELING PROCEDURES FOR DEWALD MANUAL LEVELING SYSTEM**

## **NOTES BEFORE YOU LEVEL YOUR COACH**

Park brake must be set and transmission in “park” (“neutral” for diesel coaches) before jacks will operate.

When looking for a leveling site, always make sure the surface is as level as possible.

Check leveling site to make sure obstructions have been cleared away for proper jack operation.

Keep people clear of coach prior to turning the leveling system on and while leveling system is in use.

Never expose hands or other parts of the body near hydraulic leaks. High-pressure oil leaks may cut and penetrate the skin causing serious injury.

### **WARNING**

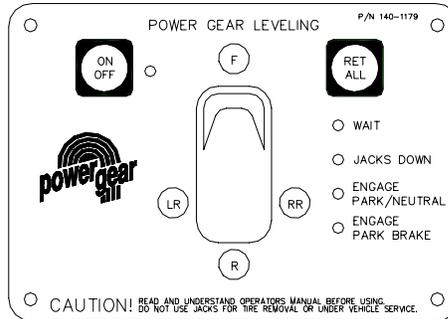
This is a leveling system *only* and is not intended to lift your coach completely off the ground. Attempting to lift your coach completely off the ground (for example, to use this leveling system to change a tire) could cause damage to the system and serious injury to the parties involved. If a tire should require changing please have the proper equipment and contact a professional.

**Important:** if your coach is equipped with a slide out(s) always level your unit first, and then operate the slide out room(s). When retracting the slide(s), always retract the room(s) first then retract the leveling jacks. Following this procedure will produce the least amount of stress on your chassis.

### **Selecting a site**

When the coach is parked on an excessive slope the leveling requirements may exceed the jack lift stroke capability. If the coach is parked on an excessive slope, the coach should be moved to a more level surface before the leveling system is deployed.

## Dewald manual system touchpad #140-1179

**LEVELING PROCEDURES**

1. Push the "On/Off" button on control panel. The system is now operational and the "On/Off" LED will turn on.
2. Check to see that the "engage park brake" LED is not flashing.

**NOTE:** Engage the parking brake if the "engage park brake" LED is flashing.

3. Check to see that the "engage park/neutral" LED is not flashing.

**NOTE:** Put the coach into Park (or neutral for a diesel coach) if the "engage park/neutral" LED is flashing.

4. Push "FRONT JACKS" button until the front of the coach rises at least 3 ". This is important and necessary to allow the coach to pivot when leveling side to side. If there is insufficient jack stroke to lift the front of the coach at least 3 inches the coach will have to be moved to an area with less front to back slope.
5. Push "REAR JACKS" button until jacks contact the ground.
6. If bubble is towards front of coach push "REAR JACKS" button, If bubble is towards rear of coach push "FRONT JACKS" button. Keep button depressed until bubble is centered in vial from front to back, then release.
7. If bubble is towards left of coach push "RIGHT JACKS" button, If bubble is towards right of coach push "LEFT JACKS" button. Keep button depressed until bubble is centered in vial, then release.

**NOTE:** The right and left rear jacks are used to level the coach side to side. Pushing the "LEFT REAR JACKS" pad on the control panel will extend the left rear jack. Pushing the "RIGHT REAR JACKS" pad on the control panel will extend the right rear jack. There is no individual control of the right or left front jacks on 4 jack systems.

8. Repeat steps 2 through 5 if needed.
9. Turn power off to leveling system by pushing "ON/OFF" pad.
10. Visually inspect jacks to ensure all pads are touching ground. Should one of the rear jacks not be touching the ground, press the corresponding left or right rear jack buttons to lower the appropriate jack to the ground. Never lift all the wheels off the ground to level the coach

**NOTE:** If the "Wait" LED is ever flashing by itself, it means the control is busy and you cannot operate the jacks. After a short period of time (from 5 to 30 seconds), the "Wait" LED will go off again, and you can resume operation as normal.

## **JACK RETRACT PROCEDURES**

**NOTE: Coach ignition must be on.**

STEP 1 - Energize the system by pushing the "On/Off" button on the control panel. The "On/Off" and "Jacks Down" LEDs will be lit.

STEP 2 - Push and release the "Retract All Jacks" button. All the jacks will start to retract and return to the "full retract position" automatically. As the jacks approach the "full retract position," the "Wait" LED will flash for about 30 seconds. This is to ensure that the jacks retract all the way. During this 30 second wait period, the control panel cannot be turned off. When all of the jacks return to the "full retract position," the "Jacks Down" LED will go off.

STEP 3 - When the "Jacks Down" LED turns off, push the "On/Off" button on the control panel to de-energize the system. After a visual inspection underneath the coach (to verify that all of the jacks are fully retracted), you may proceed to travel.

## **AUTOMATIC SAFETY SHUTOFF FEATURE**

If the control panel is left on and inactive for four minutes, it will shut off automatically.

To reset the system the coach ignition must be turned off, then back on.

## **DRIVE AWAY PROTECTION SYSTEM**

If the ignition is in the "RUN" position, the jacks are down, and the operator takes the transmission out of neutral or park, or releases the parking brake, the "Jacks Down" indicator will flash and the alarm beeper will activate. The system will then automatically retract the jacks until the jacks are fully retracted. During this time the control panel cannot be turned off.

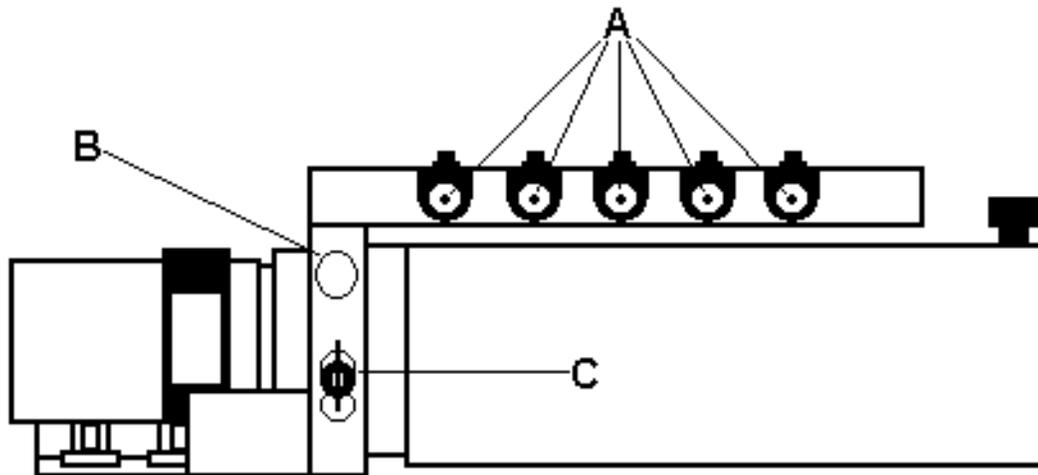
## MANUAL RETRACTION PROCEDURE

**Note: Please read the entire manual before operating this system.**

Your Dewald Hydraulic Power System has been designed to operate both the leveling and slide out system from one power source. This power unit has a built-in hand pump for manually retracting the jacks and slide out room(s) if complete power should be lost to your leveling system.

### Hand Pump Operation

1. Turn each of the small slotted setscrews (A) on the front of the pump assembly clockwise until they stop. This will hold the valves open.  
**Note:** Coaches that pre-date 2001 may have a red knurled knob on the end of each valve (A). Instead of turning a setscrew as instructed, you simply pull out the red knobs and turn them a  $\frac{1}{4}$  turn in either direction. When you release them, they will stay locked in the "out" position.
2. Turn the silver (larger) knurled knob (B) on the front of the power unit 2 turns counter-clockwise.
3. Insert the pump handle into the receptacle (C) and pump the hand pump.
4. When all the jacks and the slide out room(s) are fully retracted, tightly close the silver knurled knob clockwise.
5. Turn each of the small slotted setscrews counter-clockwise, until snug.  
**Note:** If equipped with red knobs (A), turn them a  $\frac{1}{4}$  turn to pop them back into normal operating position.

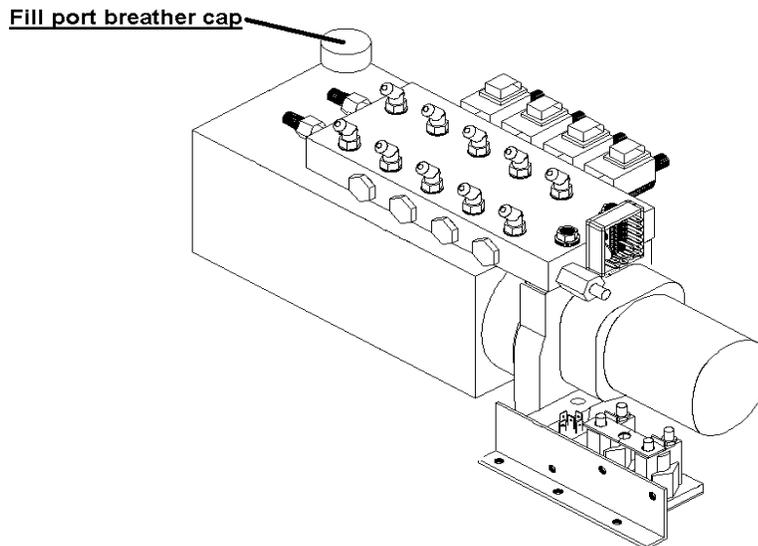


**Note:** Number of valves (A) shown will vary depending on how many slide rooms are operated by the pump assembly.

Please read the owners' manual from the manufacturer who built and designed your motor home for further leveling and slide out room operating information and safety features.

## PREVENTIVE MAINTENANCE

1. Check the fluid level every month.
2. Check and/or fill the reservoir with the jacks and room(s) in the fully **retracted** position.
3. The fluid should be within 1 inch of the top of the reservoir tank.
4. Change fluid every 24 months.
5. Inspect and clean all hydraulic pump electrical connections every 12 months.
6. Remove dirt and road debris from jacks as needed.
7. If jacks are down for extended periods, it is recommended to spray exposed leveling jack rods with a silicone lubricant every 5 to 7 days for protection.
8. **If your coach is located in a salty environment (within 60 miles of coastal areas), it is recommended to spray the rods every 2 to 3 days with a silicone lubricant.**



### RECOMMENDED HYDRAULIC FLUIDS FOR YOUR DEWALD HYDRAULIC PUMP

The fluids listed here are acceptable to use in your pump assembly. Contact coach manufacturer or selling dealer for information about what specific fluid was installed in your system.

It is not recommended that hydraulic fluid and automatic transmission fluids be mixed in the reservoir.

In most applications, Type A automatic transmission fluid (ATF, Dexron III, etc.) will work satisfactorily. Mercon V is also recommended as an alternative fluid for Dewald hydraulic systems.

If operating in cold temperatures (less than -10° F) the jacks may extend and retract slowly. For cold weather operation, fluid specially-formulated for low temperatures may be desirable. Mobil DTE 11M, Texaco Rando HDZ-15HVI, Kendall Hyden Glacial Blu, or any Mil. Spec. H5606 hydraulic fluids are recommended for cold weather operation.

Please consult factory before using any other fluids than those specified here.

## **WARNING**

**Your coach should be supported at both front and rear axles with jack stands before working underneath, failure to do so may result in personal injury or death.**

## TROUBLESHOOTING

<b>System will not turn on and "on/off" indicator light will not illuminate</b>	
<b>Probable Cause</b>	<b>Corrective Action</b>
Batteries disconnected	Reconnect batteries, and/or check connections
Battery voltage low (below 9.5 volts)	Recharge batteries or replace if necessary
Ignition must be in run position	Turn ignition to run position
Park brake must be set	Set parking brake
Transmission not in park or neutral	Take coach out of gear
Leveling control has timed out and shut down	Turn off touch pad for a moment, then turn back on
<b>System is on, but pump won't run</b>	
<b>Probable Cause</b>	<b>Corrective Action</b>
Bad connection of motor ground wire at pump	Check grounding of black wire coming directly out of 12v motor at the pump assembly
<b>Pump runs, but jacks do not extend</b>	
<b>Probable Cause</b>	<b>Corrective Action</b>
Manual override valves (see label "A", pg 9) are open	Turn slotted setscrews in the end of the valves counter clockwise until snug.
Hand pump valve (see label "B", pg 9) is open	Turn knob clockwise until snug
Low fluid	With all jacks and slide room(s) fully retracted, fluid should be 1 inch from the top of the tank reservoir
<b>Pump ran during extension or retraction, then stopped</b>	
<b>Probable Cause</b>	<b>Corrective Action</b>
Motor overheated, thermal overload protection in motor tripped	Let system rest for 5-10 minutes to allow automatic breaker in motor to reset

**Locations of breakers, fuses, fuse panels, etc. are coach specific. Consult your coach owner's manual or the coach manufacture for locations of these components.**

**The following information will guide you to repairs that may be made on site. For problems not covered here, contact your service center or our website for more extensive troubleshooting information in the service manual for your system.**

**Power Gear Technical Service:  
574-312-7480  
[www.lci1.com/support](http://www.lci1.com/support)**