



Operation Guide Class C Leveling System

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PowerLevel™ Operation Guide ▲ series ▲ Class C Leveling System

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Introduction

The Power Gear Class C leveling and stabilizing system is an electronically controlled/hydraulically operated unit that consists of a 12 volt DC powered motor/pump/manifold assembly with fluid reservoir, hydraulic hoses, four hydraulically operated jacks, a control unit with switch panel, and optional level sensor unit. It is designed to meet the varying requirements of class "C" motorhomes.

If, after thoroughly reading this manual, you still have questions in regard to the operation and maintenance of this PowerLevel system, please contact the Power Gear Service Department at 1-800-334-4712.



WARNINGS

- Do not use the vehicle's suspension or leveling jacks to support the vehicle for servicing or inspection. Instead, install adequate blocking before working under any vehicle. The system is designed as a 'leveling' system only.
- Keep people clear of the coach while leveling system is in use.
- Never lift the wheels off the ground to level the coach. Doing so may create an unstable condition.
- 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.



CAUTIONS

- Park the coach on a reasonably solid surface or the jacks may sink into the ground. On soft surfaces, use load distribution pads under each jack.
- Check that potential jack contact locations are clear of obstructions or depressions before operation.
- Read and understand the entire operator's manual before using or servicing your leveling system.
- Do not use the leveler as an emergency brake. They are not designed for any type of vehicle braking purpose.
- Your leveling system should be serviced only by qualified personnel.
- Leaks in a vehicle's hydraulic system can cause the vehicle to lower over time regardless of whether the leveling system is operational.

CAUTION
READ ALL
OPERATING INSTRUCTIONS
FIRST BEFORE USING YOUR
LEVELING SYSTEM.



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Note: To prevent improper operation of the leveling system, which could result in damage to the levelers and/or the vehicle itself, read the operating instructions carefully before using the leveling jacks

NOTE: In occasional adverse driving conditions, it is possible for mud, ice and other debris to accumulate around the leveler units. This debris may interfere with the operation and should be cleaned off prior to using the system.

Operating Instructions

The PowerLevel Class C system performs the dual function of leveling the vehicle and, once a level plane has been achieved, stabilizing the vehicle. When leveling the vehicle, it may not be necessary to use all of the leveling jacks however, to stabilize the vehicle, all jacks should be extended to contact the ground.

SITE SELECTION

1. When selecting a site for parking the vehicle, choose a spot that is as flat as possible - this will minimize the extent of leveling.
2. Check that the area under the vehicle is free from any obstacles that might interfere with the operation of the levelers. Check the ground surface to assure the leveler feet have a flat solid surface for contact. When parking on grass, soft dirt and/or uneven terrain, it is advisable to extend the surface area of the leveler feet by using leveling pads. These pads are included with your purchase.

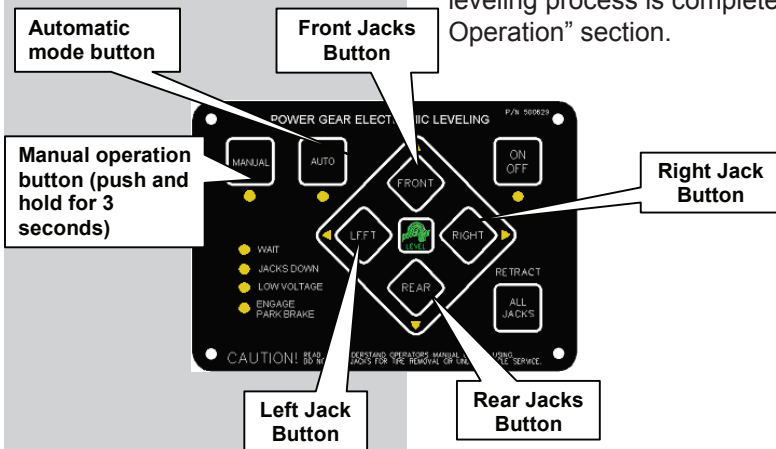
LEVELING YOUR COACH

1. Turn on the ignition and start the coach. Your leveling control will start a self check sequence indicated by the lights on the panel blinking in a rotating pattern. It will turn off when it has finished it's self check.
2. Push the "On/Off" button on control panel. The system is now operational and the "On/Off" LED will turn on.
3. Check to see that the engage park brake light is not illuminated. If so, engage the parking brake. (Your coach will have to be in neutral or park to operate the system).
4. Push the "AUTO" button. The automatic leveling system will begin it's leveling procedure. Please avoid movement in the coach during automatic leveling as it can cause errors in the results. It will signal that it has completed the process by illuminating the center green "LEVEL" light. Check to make sure that all jacks are on the ground. Also check to make sure that no tire is off the ground. If so, your leveling process is complete. If further adjustments are needed, refer to the "Manual Operation" section.

5. You can then turn the system off by pushing the on/off button again.

RETRACTING YOUR LEVELING JACKS

1. Turn on the ignition
2. Turn on the system by pushing the "on/off" button. The system is now operational and the "On/Off" LED will turn on.
3. Push the "RETRACT-ALL JACKS" button. When the "JACKS DOWN" light turns off, visually check to make sure that all jacks have fully retracted. If so, your coach leveling system is ready to travel.



Manual Operation

There are certain conditions where manually leveling your coach may be desirable. Conditions where large amounts of side to side leveling are necessary may work better using the manual leveling procedures that follows.

1. Turn on the ignition and start the coach.
2. Push the "On/Off" button to turn on the system.
3. Push and hold the "MAN" button for 3 seconds in order for the system to switch to the manual mode. It will signal that it is in the manual mode when the light under the "MAN" button is illuminated.
4. Push "FRONT" button until the front jacks touch the ground.

NOTE: The right and left rear jacks are used to level the coach side to side. Pushing the “LEFT” button on the control panel will extend the left rear jack. Pushing the “RIGHT” button 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. The automatic pressure equalization built into the system automatically shifts the front jacks.

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.



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.

5. Push the “REAR” button until jacks contact the ground.
6. Level the coach from front to rear by pushing the “REAR” button if the light under the “REAR” button is illuminated. If the light is illuminated above the “FRONT JACKS” button, push the “FRONT” button. In either case, keep button depressed until the green center “LEVEL” light is illuminated, or both front and rear lights are dark.
7. Level the coach from side to side by pushing the “RIGHT” button if the light beside the “RIGHT” button is illuminated. If the light beside the “LEFT” button is illuminated, push the “LEFT” button until the “LEVEL” light is illuminated.
8. Repeat steps 6 and 7 if needed.
9. Turn power off to leveling system by pushing “ON/OFF” button.
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 the wheels off the ground to level the coach. This can lead to an unsafe condition and damage to the leveling system or coach.

Preventative Maintenance

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

Troubleshooting

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.

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
System will not turn on, indicator light does not light.	Coach ignition not in run position.	Turn ignition to run position.
	Blown fuse on ignition circuit.	Replace fuse.
Jacks will not extend, pump is running.	Battery voltage is too low.	Recharge battery.
All jacks will not retract or will not retract fully.	Fluid level low.	Fill tank to proper level with ATF, see tip sheet 140.
Any one or two jacks will not retract at all.	System overfilled with fluid.	Drain fluid to recommended level, see tip sheet 140.

ZERO POINT: The zero point is the stored level position — the orientation the control sees as level. This can only be set when you are in calibration mode. This mode is indicated by all of the lights flashing. *If the control is in this mode already, you can skip the recalibration procedure and move straight to the set-up procedure.*

Recalibration Procedure

RECALIBRATION PROCEDURE

Use these steps to put the control into calibration mode.

1. Turn the ignition on and the touch pad on.
2. Push the front button 5 consecutive times. Within ten seconds, push the rear button 5 consecutive times. All of the lights on the touch pad will begin flashing.. This indicates that you have successfully returned the control box to calibration mode.

SET-UP PROCEDURE

Follow this procedure to reprogram a new zero point.

1. Place a carpenter's level on the floor in the center of the coach.
2. Manually level the coach.
 - Push the front button until the front jacks touch the ground.
 - Push the rear button until the jacks contact the ground. Once the rear jacks are on the ground, get the coach level from front to rear using the level.
 - After front to rear level is achieved, turn level 90° & level coach from side to side.
3. To store the zero point into the leveling controls.
 - Push the retract button three consecutive times to store the zero point.
 - After the retract button has been pushed 3 times, all of the lights on the touch pad will stop flashing except the ON/OFF light. The ON/OFF light will flash for 20 seconds.

Warranty

Power Gear warrants to the original retail purchaser that the product will be free from defects in material and workmanship for a period of three (3) years following the retail sales date. Power Gear will, at its option, repair or replace any part covered by this limited warranty which, following examination by Power Gear or its authorized distributors or dealers, is found to be defective under normal use and service. No claims under this warranty will be valid unless Power Gear or its authorized distributor or dealer is notified in writing of such claim prior to the expiration of the warranty period.

THIS WARRANTY SHALL NOT APPLY TO:

- Failure due to normal wear and tear, accident, misuse, abuse, or negligence.
- Products which are modified or altered in a manner not authorized by Power Gear in writing.
- Failure due to misapplication of product.
- Telephone or other communication expenses.
- Failures created by improper installation of leveling systems, including final adjustments made at the plant, or low fluid level, wiring or ground problems.
- Replacement of normal maintenance items.
- Living or travel expenses.
- Overtime Labor.

There is no other express warranty other than the foregoing warranty. THERE ARE NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL POWER GEAR BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. Some states do not allow the limitations of implied warranties, or the exclusion of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

For service contact your nearest Power Gear authorized warranty service facility or call 1-800-334-4712. Warranty service can be performed only by a Power Gear authorized service facility. This warranty will not apply to service at any other facility. At the time of requesting warranty service, evidence of original purchase date must be presented.



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