



LEVEL-UP® 5TH WHEEL
OWNER'S MANUAL

L I P P E R T
C O M P O N E N T S®

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Introduction

The Level-Up® 5th Wheel LCD Leveling System is a hydraulic leveling system. The system includes six points of contact utilizing aluminum jacks and a multi-valve system. A 12V DC electric motor drives a hydraulic pump that moves fluid through a system of hoses, fittings and jacks to level and stabilize the trailer. Mechanical portions of the Level-Up® 5th Wheel Hydraulic Leveling System are replaceable.

Components

1. Jacks
 - A. Rated at a lifting capacity for the trailer.
 - B. Standard 9-inch diameter (63.5 square inch) foot pad on a ball swivel for maximum surface contact on all surfaces.
 - C. Optional 12-inch diameter - (113 square inch) foot pad also available.
 - D. Operational Powered from a 12V DC Motor/Pump assembly.
2. Motor/Pump Assembly
 - A. 12V DC motor
 - B. Hydraulic fluid reservoir tank
 - C. Control valve manifold
 - D. Solenoid valve
3. System Controls
 - A. Touch pad can be operated in manual mode or fully automatic mode.

Contact Lippert Components, Inc. to obtain replacement parts.

Additional Information Sources

Additional information about this product can be obtained from lci1.com/support or by downloading the free myLCI app. The app is available on iTunes® for iPhone® and iPad® and also on Google Play™ for Android™ users.

iTunes®, iPhone®, and iPad® are registered trademarks of Apple Inc.

Google Play™ and Android™ are trademarks of Google Inc.

Information regarding the assembly and components of this system can be found online at <https://support.lci1.com/towable-br-level-up-support-towable-level-up-br-touch-pad>

Safety

WARNING

The “WARNING” symbol above is a sign that a safety risk is involved and may cause death, serious personal injury and/or severe product or property damage if not safely adhered to and within the parameters set forth in this manual.

Read and understand all instructions and safety labels before starting any procedures stated in this manual. Adhere to all safety labels to prevent serious personal injury and/or product damage. Failure to follow instructions and safety labels may void product warranty.

The Level-Up LCD 5th Wheel Leveling System is designed as a leveling system only and should not be used for any reason to provide service under the trailer, e.g. changing tires or servicing the leveling system. Lippert Components Inc. recommends trained professionals be employed to change the tires or perform other services on the 5th Wheel.

WARNING

The 5th Wheel MUST be supported per manufacturer's recommendations before working underneath. Any attempts to change the tires, or perform other service, while 5th Wheel is supported solely by the LCI Level-Up® with Automatic Leveling system could result in death or serious personal injury, severe product and/or property damage.

Make sure the 5th Wheel is properly supported with jack stands, or other adequate devices, under the frame of the 5th Wheel prior to performing any service or repair procedure. Never support the 5th Wheel by the axles or suspension. Never allow the tires to leave the ground when lifting the 5th Wheel—this creates an unstable and unsafe condition.

Make sure to keep hands and other body parts clear of fluid leaks. Oil leaks in the Lippert Leveling System may be under high pressure and can cause serious skin-penetrating injuries.

Make sure all persons, pets and property are clear of the 5th Wheel while LCI Level-Up Automatic Leveling system is in operation.

Preparation

WARNING

A fluid leak within a highly pressurized hydraulic system can cause serious skin-penetrating injuries. Wear appropriate Personal Protective Equipment (PPE), such as long sleeves, gloves, protective eyewear or a full face shield, when performing service or maintenance to the 5th Wheel.

CAUTION

The “CAUTION” symbol above is a sign that a safety risk is involved and may cause personal injury and/or product or property damage if not safely adhered to and within the parameters set forth in this manual.

CAUTION

Moving parts can pinch, crush or cut. Keep clear and use caution.

1. Make sure the 5th Wheel is parked on a reasonably level surface.
2. Clear all jack landing locations of debris and obstructions. Locations should also be free of depressions.
3. When parking the 5th Wheel on extremely soft surfaces, utilize load distribution pads under each jack.
4. Make sure the battery of the 5th Wheel is fully charged or that the 5th Wheel is plugged into shore power prior to attempting to operate the system.

Note: Level-Up requires a minimum of 12V DC from the battery for proper operation.

Prior to Operation

The leveling system shall only be operated under the following conditions:

1. The trailer is parked on a reasonably level surface.
2. Make sure all persons, pets and property are clear of the trailer while the Level-Up LCD 5th Wheel Leveling system is in operation.
3. Make sure the battery of the trailer is fully charged or that the trailer is plugged into shore power prior to attempting to operate the system. The automatic leveling system requires a minimum of 12V DC from the battery for operation.

Operation

Basic Jack Operation

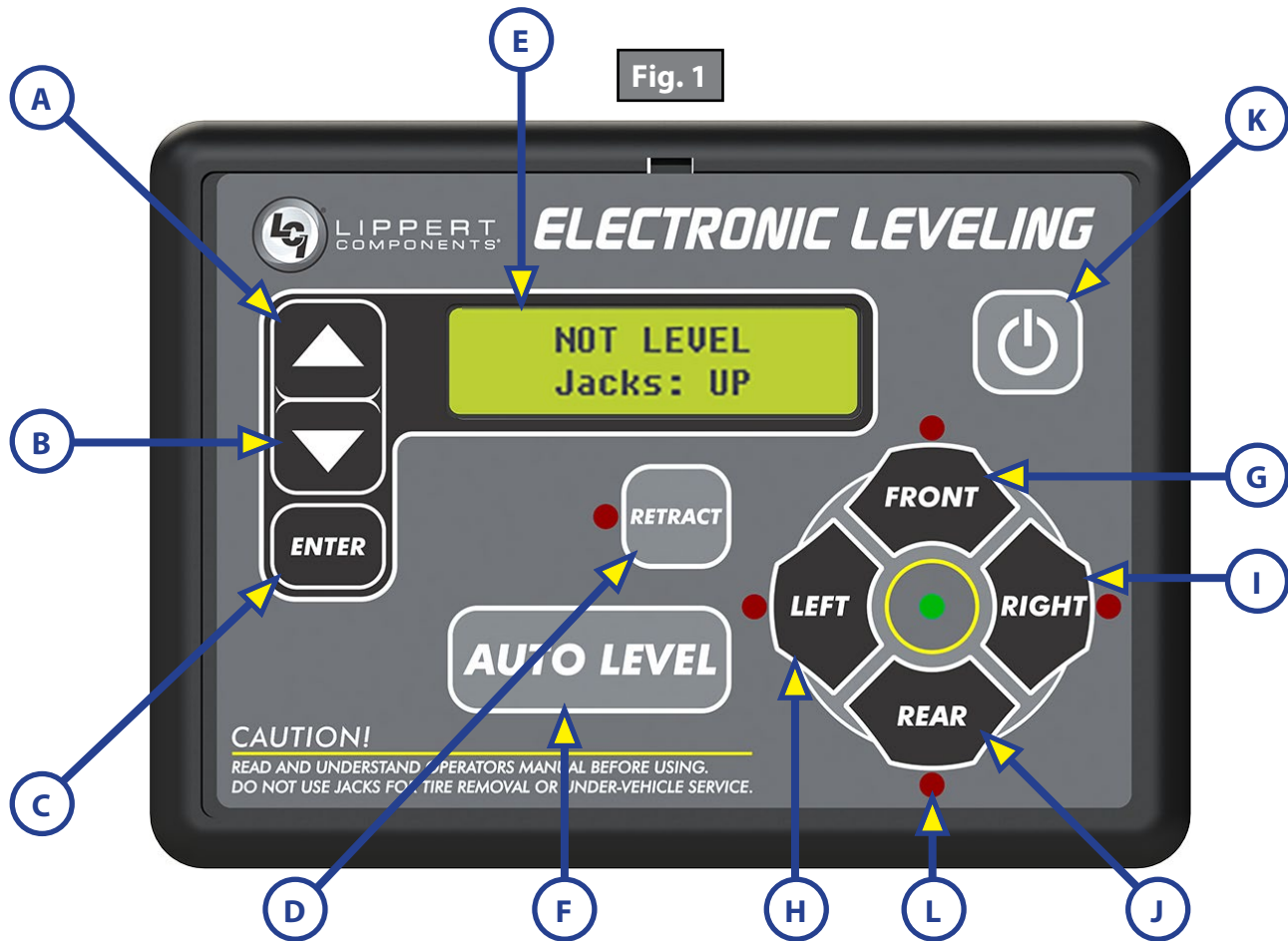
1. Landing Gear Jacks
 - A. Landing gear jacks can be operated any time the system is on, but not in AUTO MODE. Press the FRONT button (Fig. 1G), so that both the front or landing gear jacks can be extended.
 - B. If the touch pad is put in the RETRACT mode, indicated by the orange illuminated LED next to the RETRACT button (Fig. 1D), the front jacks can be retracted together by pressing the FRONT button.
2. Level-Up Jacks
 - A. The Level-Up jacks operate when “AUTO MODE” is activated or the touch pad is in “MANUAL MODE”.
 - B. Once the system is in “MANUAL MODE”, press the REAR button (Fig. 1J) to extend all Level-UP jacks at the same time.

Note: Manual and Auto modes can be selected through the LCD menu by using the Up and Down Arrow buttons, then press ENTER to select the desired mode

- C. Press the LEFT or RIGHT buttons (Fig. 1H or 1I) to operate Level-Up jacks on the left (road) or right (curb) side of the trailer, respectively.

Unhitching Instructions

1. Press Power button , (Fig. 1K) to turn system on. The LCD screen (Fig. 1E) lights up.
2. The LCD will display "NOT LEVEL; Jacks: UP" (Fig. 1E).
3. Orange arrow lights (Fig. 1L) may come on, indicating the current disposition of the trailer.
4. Press FRONT button (Fig. 1G) to extend landing gear jacks to lift front of the trailer to take the weight of the 5th Wheel off the hitch.
5. Uncouple the 5th Wheel connection on the tow vehicle.
6. Pull the tow vehicle away and park it at a safe distance.



LCD Touchpad Features	
Callout	Description
A	Up Arrow - Scrolls up through the menu on LCD.
B	Down Arrow - Scrolls down through the menu on LCD.
C	ENTER - Activates modes and procedures indicated on LCD.
D	RETRACT - Places leveling system into retract mode while in manual mode only.
E	LCD Display - Displays procedures and results.
F	AUTO LEVEL - Places leveling system into auto level mode.
G	FRONT Button - Activates both front jacks.
H	LEFT Button - Activates left leveling jack(s) in manual mode.
I	RIGHT Button - Activates right leveling jack(s) in manual mode.
J	REAR Button - Activates leveling jacks in manual mode.
K	Power Button (ON/OFF) - Turns leveling system on and off.
L	LED lights

Auto Level Sequence

Note: Prior to unhitching from the tow vehicle, make sure trailer is parked on a level surface and the tires are chocked.

1. After unhitching from tow vehicle, press AUTO LEVEL (Fig. 1F).

Note: Pressing any button during an Auto Level sequence will abort the auto leveling cycle.

Note: In order for the hitch recognition feature to function, the auto level sequence MUST be started with the front of the trailer above level.

2. Front landing gear will retract, lowering the front of the unit below level, stopping, then lifting the front end to level the unit front-to-back.
3. The left side leveling jack extends and raises the roadside of the unit.
4. The right side leveling jack extends and raises the curbside of the unit, beginning side-to-side leveling.
5. The front landing gear extend to complete the leveling cycle.
6. Additional left-to-right or front-to-back leveling may occur, if the controller deems necessary.

Note: If the auto level sequence does not happen as stated above, check to ensure proper manual function in all zones.

Hitch Recognition

1. Turn on touchpad.
2. Press the LEFT and RIGHT buttons simultaneously (Fig. 1H and 1I).
3. The front of the trailer will raise to the height where the auto level sequence was started.

Note: If the auto level sequence was started with the front of the trailer in a below-level condition, the hitch recognition will not function and the LCD will display "Feature Disabled." For hitch recognition to function, the auto level sequence must be started with the front of the trailer above level.

4. Connect tow vehicle and make sure 5th Wheel and hitch are connected and locked.
5. Press Up arrow (Fig. 1A) arrow until "AUTO RETRACT" appears in LCD screen.
6. Press ENTER. System will immediately retract all jacks.

Troubleshooting

Error Codes

To clear an error from the touch pad, repair or otherwise correct the issue, press ENTER. If the error is still present, the message will be displayed again.



Make sure the trailer is supported at both the front and rear with jack stands before performing any troubleshooting or service to the trailer. Failure to do so may result in death or personal injury.

After working to resolve the issue that led to an error code, press ENTER on the touchpad. If the error is still present, the message will be displayed again. If resolved the error message will clear.

Error Codes		
LCD Message	What's Happening?	What Should Be Done?
"EXCESS ANGLE"	Controller not properly secured.	Check and secure controller placement.
	Excessive angle reached during auto operation.	Relocate the 5th Wheel.
"EXCESSIVE ANGLE"	Controller not properly secured.	Check and secure controller placement.
	Excessive angle reached during manual operation.	Relocate the 5th Wheel.
"FEATURE DISABLED"	Front of 5th Wheel below level when starting auto-level process (only when trying to initiate Hitch Recognition).	Push the FRONT Button to raise the 5th Wheel up to hitch height and connect to tow vehicle.
	Touchpad power not cycled between consecutive leveling operations.	Turn touchpad off and then back on to reset the system.
	Zero Point not set.	Set Zero Point.
"LOW VOLTAGE"	Battery voltage dropped below 9.5V.	Check wiring - repair or replace.
		Test battery voltage under load - charge or replace.
"OUT OF STROKE"	Jack has reached maximum stroke length and is unable to lift.	Check disposition of jacks and/or relocate the 5th Wheel.
"EXTERNAL SENSOR"	Bad connection or wiring from the controller to the sensor.	Replace or repair connection to rear remote sensor.
"JACK TIME OUT"	Time limit exceeded for the requested auto operation.	Check disposition of jacks.
"AUTO LEVEL FAIL"	Unable to auto-level due uneven ground.	Check disposition of jacks and/or relocate the 5th Wheel.
	Unable to auto-level due to Zero Point being set incorrectly.	Reset zero point.
"BAD CALIBRATION"	Sensor calibration values are out of range.	Replace controller.
"INTERNAL SENSOR"	Internal sensor problem.	Replace controller.
PANIC STOP "FUNCTION ABORTED"	The User pressed a button on the touchpad during an automatic operation.	Restart automatic operation and then refrain from pressing any buttons on the touchpad.

Manual Override

The Level-Up LCD 5th Wheel Leveling system can be manually operated with an electric drill. In the event of electrical or system failure, this manual override method of extending and retracting the jacks can be used.

Note: Unhook the hydraulic power unit motor from the main power source (battery or shore power) prior to attempting the manual override procedure.

1. Locate the valves that are paired with the landing gear or leveling jack to be manually overridden.
 - A. Landing Gear - Valve located on the lead landing gear (Fig. 2).
2. Using a 5/32" hex wrench, open the valve by turning the manual override set screw clockwise (Fig. 3).
3. Remove protective label (Fig. 4A) from power unit motor revealing manual override coupler.
4. Using an electric drill with a 1/4" hex bit, insert the hex bit into the manual override coupler (Fig. 5) to manually operate the system.
 - A. Run the drill forward (clockwise) (Fig. 5A) to retract the landing gear or leveling jacks.
 - B. Run the drill in reverse (counterclockwise) (Fig. 5B) to extend the landing gear or leveling jacks.
5. Make sure to turn the manual override set screw on the valve back to the counterclockwise position after extending or retracting the landing gear or leveling jacks.

Fig. 2

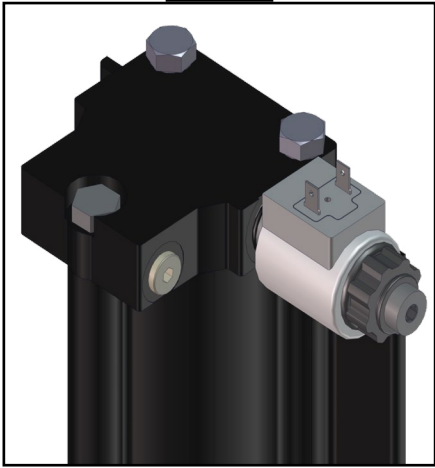


Fig. 3

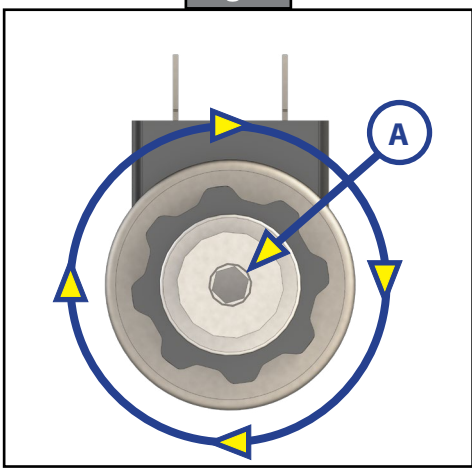


Fig. 4



Fig. 5

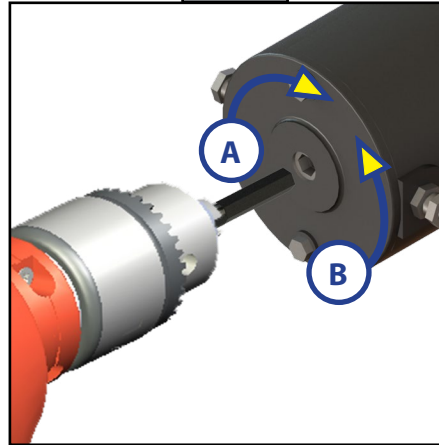
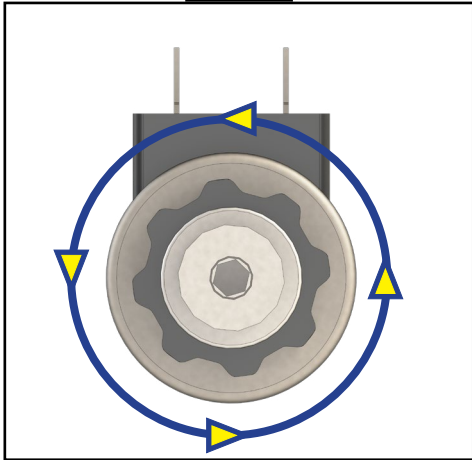


Fig. 6



Zero Point Calibration

The "Zero Point" is the programmed point to which the 5th Wheel will return whenever the auto-level feature is used. The Zero Point is preset at the factory and should never have to be reset. However, if necessary, Zero Point can be reset.

Note: The Zero Point must be programmed prior to using the auto-level feature to ensure the proper operation of the system. Prior to starting the Zero Point Calibration procedure, check all connections on the controller, valve coils, landing gear, leveling jacks and touchpad.

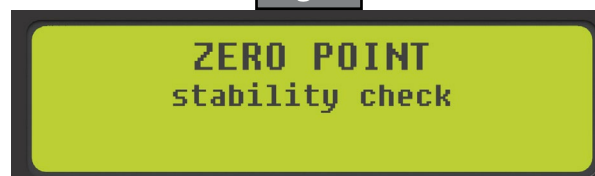
1. Manually run all leveling jacks and landing gear to level the 5th Wheel.
 - A. This is best achieved by placing a level in the center of the 5th Wheel and leveling it both front-to-back and then side-to-side.
 - B. See Basic Jack Operation section for instructions on how to manually operate the system.
2. After the 5th Wheel has been leveled, turn off the touchpad.
3. With the touchpad off, press and release the FRONT button (Fig. 1G) ten times and then press and release the REAR button (Fig. 1J) ten times.
4. The touchpad will flash and beep, then the LCD screen will read "ZERO POINT CALIBRATION ENTER to set, Power to Exit" (Fig. 7).

Fig. 7



5. To set the current position as the zero point, press the ENTER button (Fig 1C).
 - A. the LCD screen will read "Zero point stability check" (Fig. 8).

Fig. 8



6. LCD display will read "Zero point set successfully" once process is complete (Fig. 9).

Fig. 9



7. The system will set this point as its level state and the touch pad will turn off.

Maintenance-General

1. Remove dirt and road debris from leveling jacks and landing gear and stabilizer struts (if equipped) as needed.
2. If jacks are down for extended periods, it is recommended to spray exposed jack tubes with a spray lubricant every three months for protection. If the 5th Wheel is located in a salty air environment, it is recommended to spray the jack tubes every 4 - 6 weeks.
3. Each month, check that the fluid level is within $\frac{1}{4}$ " of the fill spout lip while leveling jacks and slide-outs are fully retracted.

Note: Always fill the reservoir with the leveling jacks and slide-outs fully retracted. Filling the reservoir when leveling jacks and slide-outs are extended will cause the reservoir to overflow into its compartment when the leveling jacks and slide-outs are retracted.

4. Inspect and clean all of the 5th Wheel's power and electrical connections prior to the first use of the 5th Wheel at the start of the traveling season and prior to storing the 5th Wheel. If corrosion is evident, clean all corrosion with a wire brush, then apply dielectric grease to the connections.
5. Make sure to turn the manual override set screw on the valve back to the counterclockwise position after extending or retracting the landing gear or leveling jacks.

Fluid Recommendation

Automatic transmission fluid (ATF) with Dexron®III or Mercon® V or a blend of both is recommended by Lippert Components, Inc. For a list of approved fluid specifications, see [TI-188](#). To obtain this Technical Information sheet on-line, go to <http://lci-support-lci4a3lcd>. Then click on the Technical Information sheets tab. Look for *TI-188: Hydraulic Operation Fluid Recommendation* within the listing.

Note: In colder temperatures (less than 10 ° F) the jacks may extend and retract slowly due to the fluid's molecular nature. For cold weather operation, fluid specially formulated for low temperatures may be desirable.

Preventive Maintenance

1. Check hydraulic fluid in reservoir every 12 months. If fluid is a clear, red color, do not change. If fluid is milky, pink and murky, and not clear red in color, drain reservoir and add new fluid. Hydraulic fluid in reservoir should be changed a minimum of every five years.

Note: Check the fluid only when all the jacks are fully retracted.

Note: When checking the hydraulic fluid level, fill to within $\frac{1}{4}$ " to $\frac{1}{2}$ " of fill spout.

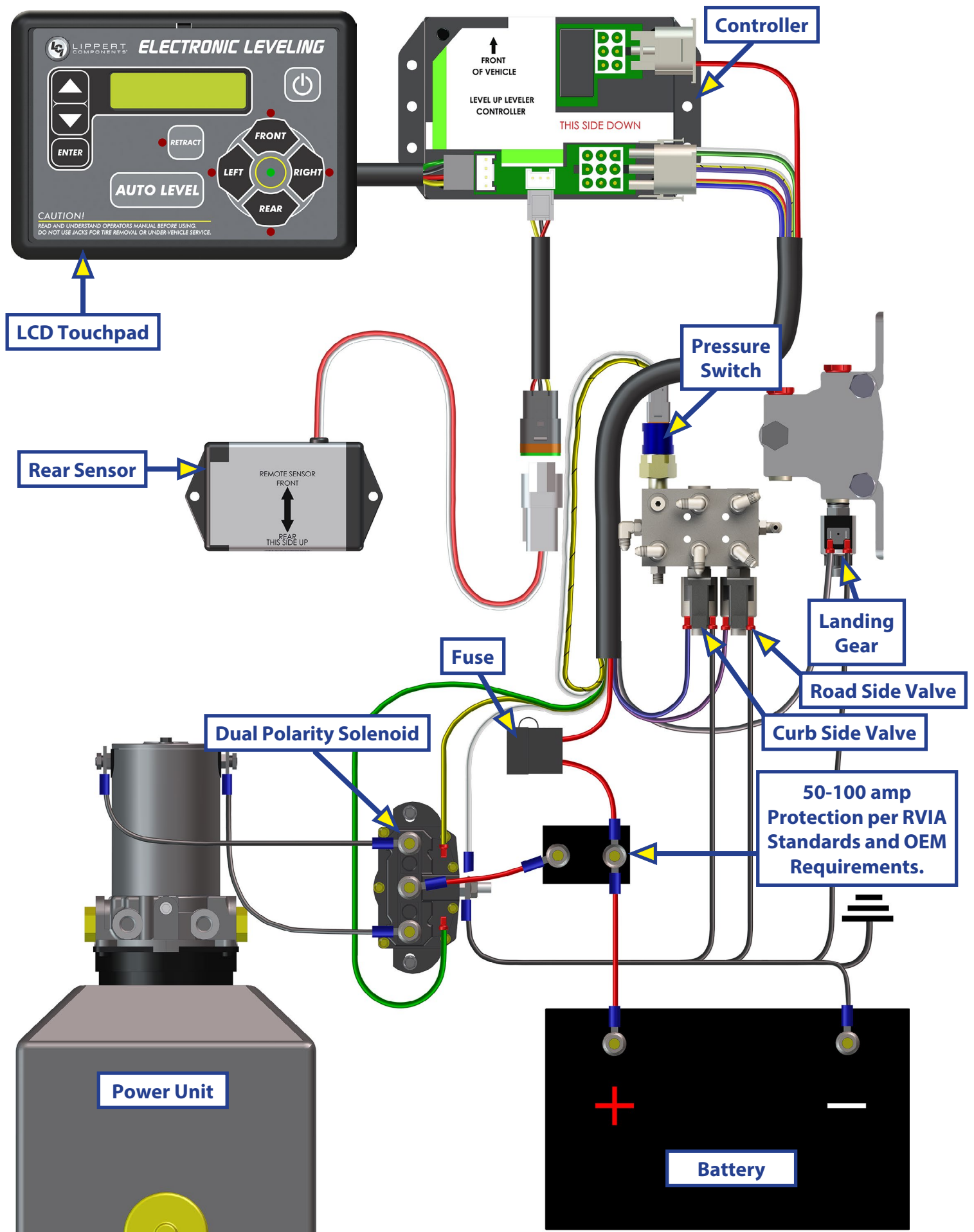
2. Inspect and clean all power unit electrical connections every 12 months. If corrosion is evident, use a small amount of lubricant to remove corrosion. Contacts must be cleaned with a non-residue cleaner prior to use. LCI recommends the use of an electrical contact cleaner spray.
3. Remove dirt and road debris from jacks as needed.

WARNING

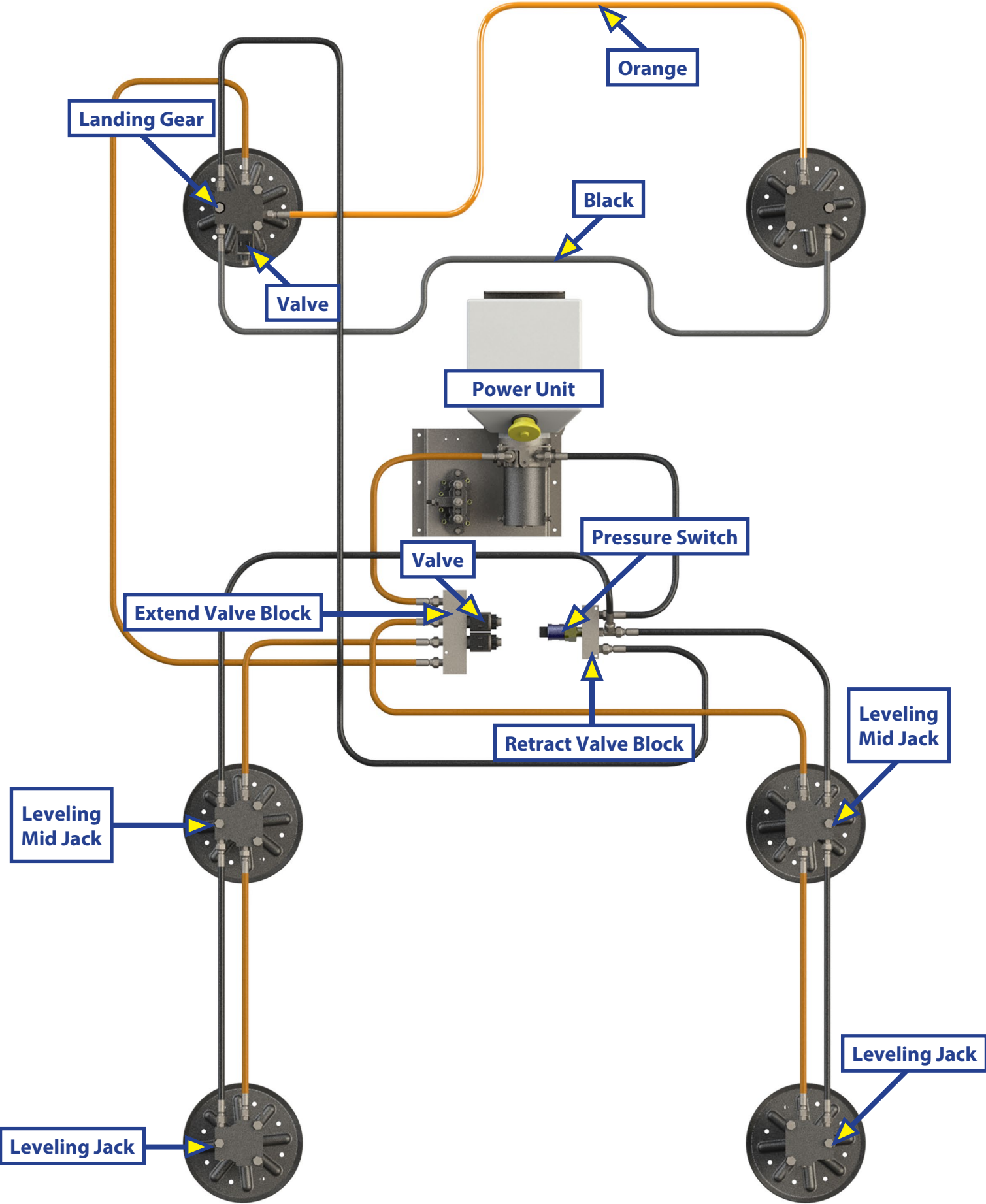
The coach should be supported at both front and rear axles with jack stands before working underneath. Failure to do so may result in death, serious personal injury or severe product or property damage.

4. If jacks are down for extended periods, it is recommended to spray exposed jack rods with a dry silicone lubricant every three months for protection. If the trailer is located in a salty environment, it is recommended to spray the rods every four to six weeks.

Wiring Diagram - 6-Point Level Up



Plumbing Diagram - 6-Point Level Up



This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



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