



LCI HYDRA-ELECTRIC 5TH WHEEL LEVELING - LCD

OPERATION AND SERVICE MANUAL

WARNING!

FAILURE TO ACT IN ACCORDANCE WITH THE FOLLOWING MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

THE USE OF THE LCI HYDRA-ELECTRIC 5TH WHEEL LEVELING SYSTEM TO SUPPORT THE UNIT FOR ANY REASON OTHER THAN WHICH IT IS INTENDED IS PROHIBITED BY LIPPERT'S LIMITED WARRANTY. THE LIPPERT LEVELING SYSTEM IS DESIGNED AS A "LEVELING" SYSTEM ONLY AND SHOULD NOT BE USED TO PROVIDE SERVICE FOR ANY REASON UNDER THE COACH SUCH AS CHANGING TIRES OR SERVICING THE LEVELING SYSTEM.

LIPPERT COMPONENTS, INC. RECOMMENDS THAT A TRAINED PROFESSIONAL BE EMPLOYED TO CHANGE THE TIRE ON THE UNIT. ANY ATTEMPTS TO CHANGE TIRES OR PERFORM OTHER SERVICE WHILE UNIT IS SUPPORTED BY THE LCI HYDRA-ELECTRIC 5TH WHEEL LEVELING SYSTEM COULD RESULT IN DAMAGE TO THE 5TH WHEEL AND/OR CAUSE SERIOUS INJURY OR DEATH.

WARNINGS!

- > **BE SURE TO PARK THE UNIT ON SOLID, LEVEL GROUND.**
- > **CLEAR ALL JACK LANDING LOCATIONS OF DEBRIS AND OBSTRUCTIONS. LOCATIONS SHOULD ALSO BE FREE OF DEPRESSIONS.**
- > **WHEN PARKING THE UNIT ON EXTREMELY SOFT SURFACES, UTILIZE LOAD DISTRIBUTION PADS UNDER EACH JACK.**
- > **PEOPLE AND PETS SHOULD BE CLEAR OF UNIT WHILE OPERATING LEVELING SYSTEM.**
- > **BE 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.**
- > **NEVER LIFT THE UNIT COMPLETELY OFF THE GROUND. LIFTING THE UNIT SO THE WHEELS ARE NOT TOUCHING GROUND WILL CREATE AN UNSTABLE AND UNSAFE CONDITION.**

BASIC JACK OPERATION

1. Front jacks or Landing gear jacks.
2. Rear jacks
3. Rear electric stabilizer jack.

Landing gear jacks can be operated any time the system is "ON" but NOT in the "AUTO MODE." By pushing the "FRONT" button, both front or landing gear jacks can be extended. By pushing either the "LEFT" or "RIGHT" button, the individual front jacks can be extended. If the touch panel is put in the "RETRACT" mode, indicated by the orange illuminated LED next to the "RETRACT" button, the front jacks can be retracted together by pushing the "FRONT" button or individually by pressing either the "LEFT" or "RIGHT" button.

The rear jacks can only be operated when the touch panel is in the "MANUAL MODE." Once system is in "MANUAL MODE," pressing the "REAR" button will extend both rear jacks at the same time. To operate individual rear jacks, press the "LEFT" or "RIGHT" button first, depending on what is needed at the time, then press the "REAR" button and hold both at the same time.

The rear electric stabilizer jack can only be operated when in the "STABILIZER MODE." Once in the Stabilizer mode, follow the prompts on the LED screen to operate the jack.

PRIOR TO OPERATION

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

1. The unit is parked on a reasonably level surface.
2. Be sure all persons, pets and property are clear of the coach while Lippert Hydra-Electric 5th Wheel Leveling System is in operation.

DROPPING OFF UNIT

1. Turn battery power "ON," Fig. 2(B) "ON". Locate battery power in the battery compartment, the third door from the front of the coach on the passenger side, Fig 1(A).



FIG. 1 - (A) Battery compartment
(B) Storage with Touch Panel



FIG. 2 - (A) Off

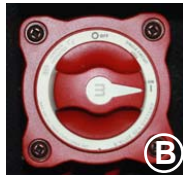


Fig. 2 - (B) ON

2. Push touch panel "ON/OFF," Fig. 4(A) to turn system on. LCD Screen lights up, Fig.4(B).



FIG. 3 - Storage Compartment - Note location of touch panel.



FIG. 4 - Touch Panel

3. LCD will display status ... "READY"

NOTE: Orange arrow lights, Fig. 4(C) may come on, indication the current disposition of the unit, in this case the FRONT and RIGHT sides of the unit are low.

4. Uncouple the fifth wheel connection on the tow vehicle.
5. Push "FRONT BUTTON" to extend landing gear jacks and lift front of vehicle to take the weight of the 5th wheel off of the hitch.
6. Pull tow vehicle away and park at a safe distance.
7. Push "AUTO LEVEL." The unit will commence to auto level by setting the landing gear jacks close to level. The driver side rear jack will then extend and touch the ground, followed by the passenger side rear jack. There may be several level checks from the system at this time. Once the coach is level, the rear electric stabilizer jack will extend until it contacts the ground and stabilizes the rear of the coach.
8. When auto level is complete, LCD indicates READY - Jacks: Down and the green light in the middle of the jack buttons will light Fig. 4(D).
9. Push "ON/OFF" button to turn system off or system will time out and shut off automatically.



FIG. 5 Touch Panel - Unit Level

RECONNECTING THE UNIT TO A TOW VEHICLE

1. Be sure main power switch "ON."
2. LCD display will indicate "READY: JACKS DOWN."
3. Push arrow key until "Manual Mode" comes is displayed.
4. Press the "RETRACT" button; orange LED illuminates, See Fig. 8.
5. Push the "REAR" button and hold until both rear jacks have retracted completely.
6. Push "FRONT" to raise the front end to attain clearance with tow vehicle.
7. Back tow vehicle up to align coupling.
8. Push "RETRACT" button, it lights up (this puts the control in retract mode).
9. Push "FRONT," the front end will lower (front jacks retract) until the coupling can be completed.
10. Latch the coupling.
11. Push the scroll arrow to display "AUTO RETRACT."
12. Push "ENTER."
13. The rear stabilizer will begin to retract, and then the hydraulic jacks will retract. When all of the actuators are full retracted, the system will stop.
14. LCD display "JACKS UP."
15. Turn "ON/OFF" button off.
16. Turn main power "OFF." Main power should be "OFF" during travel.
17. The vehicle can be towed.

MANUAL OPERATION, HYDRAULIC

1. Front jacks

- a. The front jacks will operate manually any time system is "ON" except "AUTO MODE."



FIG. 6



FIG. 7

2. Rear jacks - EXTEND

- a. Turn main battery power on.
- b. Turn "ON/OFF" button "ON."
- c. Push scroll arrow to display "MANUAL MODE," see Fig. 6
- d. Push "ENTER," see Fig. 6. "MANUAL MODE" displayed, Fig. 7

Rear jacks - RETRACT

- e. To retract , push "RETRACT" (orange LED lights up), see Fig. 8
- f. Push "REAR" to retract both rear jacks. For individual rear jacks, push and hold either "LEFT" or "RIGHT" and "REAR."
- g. To extend , the "RETRACT" light should be "OFF."



FIG. 8

NOTE: The side to side movement in manual mode is limited to 3° of tilt.

MANUAL OPERATION OF THE REAR ELECTRIC STABILIZER

1. Turn main power "ON."
2. Turn ON/OFF button "ON."
3. Push scroll arrows to display "STABILIZER."
4. Push "ENTER."
5. Follow on-screen prompts for operation.

ZERO SETTING THE CONTROL

1. Turn "ON/OFF" button "OFF"
2. Push "FRONT" button 10 times,
3. Push "REAR" button 10 times
4. Control will flash and beep, LCD says "ZERO POINT CALIBRATE"
5. To memorize this level condition , press "ENTER"
6. LCD says "ZERO POINT STABILITY SUCCESSFULLY SET"
7. The control will then turn off.
8. Turn "ON/OFF" on to commence operation.



FIG. 9

ERROR DISPLAY IN LCD

1. If an error occurs before or during operation, the error will be displayed in the LCD and a "buzzer " will sound
2. The errors that will be displayed are.
 - a. "EXCESS ANGLE" > relocate the unit.
 - b. "BAD CALIBRATION" > bad zero point.
 - c. "FEATURE DISABLE"
 - d. "LOW VOLTAGE"
 - e. "OUT OF STROKE" > relocate the unit.
 - f. "EXTERNAL SENSOR" > bad connection to rear remote sensor.
 - g. "JACK TIME OUT" > system could not level in expected time, check for obstructions, leaks, fluid level and voltage to pump motor under load.
 - h. "AUTO LEVEL FAILURE" > retry.
 - i. "STABILIZER TIME"> rear stabilizers ran too long ... bad motor or connections.
 - j. "NOT CONFIGURED" > unit was not zeroed properly.
 - k. To clear error, push "ENTER" > if error remains, it will appear again.

ADDITIONAL NOTES

1. When the touch panel is turned "ON", the rear electric stabilizers will retract fully unless interrupted. This assures that the rear stabilizers and rear jacks are off the ground before the front jacks can extend. Unit can now pivot on the wheels when lifting the front to hook up to tow the unit.
2. The system will only allow "1" auto level operation for each MAIN POWER UP. You must turn main power disconnect "off", then "ON" again to perform another auto level operation. This is a built-in safety feature.

FLUID RECOMMENDATION

The *Lippert Hydra-Electric 5th Wheel Leveling System* is pre-filled, primed and ready to operate direct from the manufacturer. Type "A" Automatic Transmission Fluid (ATF) may utilized and will work. ATF with Dexron III or Mercon 5 or a blend of both is recommended by Lippert Components, Inc.

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.

Please consult factory before using any other fluids.

PREVENTATIVE MAINTENANCE PROCEDURES

1. Change fluid in **RESERVOIR ONLY** every 36 months.
 - a) Check fluid only when jacks are fully retracted.
 - b) Always fill the reservoir with the jacks in the fully **retracted** position. Filling reservoir when jacks are extended will cause reservoir to overflow into its compartment when jacks are retracted.
 - c) When checking fluid level, fluid should be within ¼" of fill spout lip.
2. Check the fluid level every month.
3. Inspect and clean all Pump Unit electrical connections every 12 months. If corrosion is evident, spray unit with WD-40 or equivalent
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 rods with a silicone lubricant every seven days for protection. If your coach is located in a salty environment, it is recommended to spray the rods every 2 to 3 days.

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.

6. If jacks are down for extended periods, it is recommended to spray exposed leveling jack rods with a silicone lubricant every seven days for protection. If your coach is located in a salty environment, it is recommended to spray the rods every 2 to 3 days.

**IF YOU HAVE ANY PROBLEMS OR QUESTIONS CONSULT YOUR LOCAL AUTHORIZED DEALER OR CALL LIPPERT AT:
(866) 524-7821.**