



LIPPERT COMPONENTS, INC.

LCI HYDRA-ELECTRONIC 5TH WHEEL LEVELING

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 ELECTRONIC 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 LIPPERT LEVELING SYSTEM COULD RESULT IN DAMAGE TO THE MOTOR HOME AND/OR CAUSE SERIOUS INJURY OR DEATH.

WARNING! – BE SURE TO PARK THE UNIT ON SOLID, LEVEL GROUND.

WARNING! – CLEAR ALL JACK LANDING LOCATIONS OF DEBRIS AND OBSTRUCTIONS. LOCATIONS SHOULD ALSO BE FREE OF DEPRESSIONS.

WARNING! – WHEN PARKING THE UNIT ON EXTREMELY SOFT SURFACES, UTILIZE LOAD DISTRIBUTION PADS UNDER EACH JACK.

WARNING! - PEOPLE AND PETS SHOULD BE CLEAR OF UNIT WHILE OPERATING LEVELING SYSTEM.

WARNING! – 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.

WARNING! - 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.

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 person, pets and property are clear of the coach while Lippert Leveling System is in operation.

DROPPING OFF UNIT

1. Turn main power disconnect switch "ON."
2. Turn touch panel on > push "ON" button, its green light illuminates.
3. Push "FRONT" button, this will extend both front jacks together Extend to about 1-2 inches from the ground .
4. Disconnect the fifth wheel engagement on tow vehicle.
5. Push the "FRONT " button to raise the unit to allow safe clearance from tow vehicle. To move only one front jack, push "RIGHT" plus "FRONT" button, to move the right front jack.
6. Push "LEFT" button plus "FRONT" to just move the left front jack.
7. To operate the "AUTOMATIC" FUNCTION, push "AUTO" button once. "AUTO" lights up "green" indicating system ready to ATUO LEVEL.
8. Push "AUTO" again and auto leveling will commence.
9. The hydraulic jacks will level the unit, the rear electric stabilizers will go to ground, and stop automatically.
10. Auto leveling is complete.

RECONNECTING THE UNIT TO A TOW VEHICLE

1. Turn main power disconnect switch "ON."
2. Push "ON" button, its green light illuminates.
3. Push "FRONT" button to raise the front end to allow clearance to back the tow vehicle under the unit.
4. Back tow vehicle up to align.
5. Push "RETRACT" plus the "FRONT" button at same time. This will lower the front end to achieve proper coupling engagement.
6. Engage and lock coupling, connect electric hook up.
7. To retract all the jacks and stabilizers, push "AUTO" button, it will light up.
8. Push "RETRACT" button. Rear stabilizer will start to retract first, then the hydraulic jacks will retract.
9. When all jacks and stabilizers are fully retracted, the system shuts off automatically.
10. You are ready to tow the unit.

MANUAL OPERATION, HYDRAULIC

1. Turn main power disconnect switch "ON."
2. Push "ON" button, its green light illuminates.
3. Push "MANUAL" button, it illuminates.
4. You are now ready to level manually.

NOTE: To operate manually, each button must be pushed and held for the duration of the operation. Operation ceases when the button is no longer pushed.

5. To raise the rear of the coach with both rear hydraulic jacks, push "REAR" button until desired height is achieved.
6. Push "FRONT" button and the 2 front jacks extend.
7. Push "RIGHT" button to actuate right front and right rear jacks.
8. Push the "LEFT" button to actuate the left front and left rear jacks.

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

9. To retract the rear jacks, push "RETRACT" button + "REAR" .
10. To retract the front jacks, push the "RETRACT" button + "FRONT."

MANUAL OPERATION OF THE REAR ELECTRIC STABILIZER

1. Turn main power "ON."
2. Push the "ON" button, its green light illuminates.
3. To retract the rear, push and hold "RETRACT" + "MANUAL" button.
4. To extend the rear, push and hold "RETRACT" + "AUTO" button.

ZERO SETTING THE CONTROL

1. Put unit in manual mode, see MANUAL OPERATION, HYDRAULIC above .
2. Level the unit using a reference level on a flat surface.
3. When unit is level, turn the touch panel "OFF."
4. Push the "FRONT" button quickly 10 times, then the "REAR" button 10 times.
5. The panel will flash all the lights and beep.
6. To memorize the level condition, push the "RETRACT" button 3 times
7. The WAIT light will flash for approximately 20 seconds.
8. When the "WAIT" light goes out level is set.
9. Push "ON/OFF" button to shut the system off.

STOPPING OR ABORTING AN OPERATION

1. Push "ON" button on the touch panel to stop or abort any operation.

WARNING LIGHTS

WAIT - Operation is in process.

JACKS DOWN - Indicates that the leveling system is not retracted.

LOW VOLTAGE - Indicates that the batteries are low, the level is 9.5 volts.

ENGAGE PARKING BRAKE - System not functional.

EXCESS ANGLE - Indicates the angle is to step to level.

ERROR CODES

- Visible on the "WAIT" light, the number of flashes in a row and pause and repeat.

<u>ERROR CONDITION</u>	<u># of FLASHES</u>
SATELLITE SENSOR PROBLEM.....	2
INTERNAL SENSOR PROBLEM.....	3
LOW VOLTAGE	4
OUT OF STROKE	5
PANIC STOP	6
JACK TIMEOUT, LEVELING TOOK TOO LONG.....	7
AUTO LEVL FAILED	8
STABILIZER TIMEOUT, STUCK/HITTING.....	9

ADDITIONAL NOTES

1. When the touch panel is turned "ON", the rear electric stabilizers and rear hydraulic jacks will retract for 4 to 10 seconds. 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. To reset if misc lights are flashing etc., push the "RETRACT" button.
3. 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 Electronic 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.

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.

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

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Over the years of running a mobile RV repair service, having a dedicated place to access service manuals for all the different appliances and components found on RVs was something that I always had a desire to create.

I hope this resource makes your RV repairs easier, as it has mine, but please be careful and follow proper safety practices when attempting to repair your own RV.

If in doubt, please consult with a professional RV technician!



DARREN KOEPP - OWNER, MY RV WORKS, INC.

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