



# Universal Electric Landing Gear 6K Installation and

**Owner's Manual** 

(For Aftermarket Applications)

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Landing Gear Kit		
Part	Description	
333964	Landing Gear Kit, Universal, Power, 6K	

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### Introduction

The Universal Electric Landing Gear system, utilizing heavy duty jacks with a dependent motor drive is a leveling system for 5th Wheel recreational vehicles. Utilizing a series of heavy duty jacks with a dependent drive motor, the Universal Electric Landing Gear has a maximum capacity of 6000 lbs.

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

Replacement components can be ordered from <a href="https://store.lci1.com/">https://store.lci1.com/</a> or by using the myLCl app.

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### **Safety**

### **AWARNING**

THE "WARNING" SYMBOL ABOVE IS A SIGN THAT AN INSTALLATION PROCEDURE HAS A SAFETY RISK INVOLVED AND MAY CAUSE DEATH, SERIOUS PERSONAL INJURY OR SEVERE PRODUCT OR PROPERTY DAMAGE IF NOT PERFORMED SAFELY AND WITHIN THE PARAMETERS SET FORTH IN THIS MANUAL.

### **AWARNING**

DO NOT USE THE LANDING GEAR TO SERVICE THE TRAILER OR CHANGE TIRES. THE TRAILER MUST BE SUPPORTED PER MANUFACTURER'S RECOMMENDATIONS BEFORE WORKING UNDERNEATH. FAILURE TO DO SO MAY RESULT IN DEATH, SERIOUS PERSONAL INJURY OR SEVERE PRODUCT OR PROPERTY DAMAGE.

### **AWARNING**

MAXIMUM CAPACITY RATING: 6000 LBS. DO NOT EXCEED MAXIMUM CAPACITY RATING OR PRODUCT OR PROPERTY DAMAGE MAY OCCUR.

### **AWARNING**

NEVER LIFT THE TRAILER COMPLETELY OFF THE GROUND. LIFTING THE TRAILER SO THE WHEELS ARE NOT TOUCHING THE GROUND WILL CREATE AN UNSTABLE AND UNSAFE CONDITION.

### **A** CAUTION

MOVING PARTS CAN PINCH, CRUSH OR CUT. KEEP CLEAR AND USE CAUTION.

### **ACAUTION**

WEAR EYE PROTECTION WHEN PERFORMING THIS INSTALLATION PROCEDURE. OTHER SAFETY EQUIPMENT TO CONSIDER WOULD BE HEARING PROTECTION, GLOVES AND POSSIBLY A FULL FACE SHIELD, DEPENDING ON THE NATURE OF THE INSTALLATION PROCEDURE.

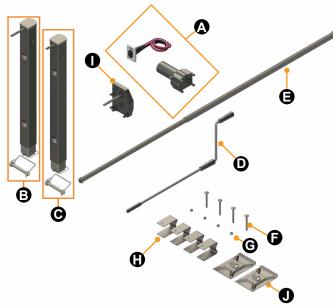
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### **Parts List**



Letter	Part #	Description	Qty
Α	217884	Landing Gear Motor w/ IP Switch	1
В	<u>179013</u>	Lead Leg w/ Drop Leg and Snapper Pin	1
С	<u>179014</u>	Follow Leg w/ Drop Leg and Snapper Pin	1
D	<u>119226</u>	Manual Crank Handle	1
Е	<u>156842</u>	Landing Gear Cross Shaft w/ hardware	1
F	125878	Carriage Bolt; %" - 16 x 3 ½"	4
G	<u>119073</u>	Fasten Nut; ¾" - 16	4
Н	<u>113511</u>	Mounting Bracket	4
1	276602	Aluminum Landing Gear Box	1
J	700052	Landing Gear Footpad and Pin	2

### **Resources Required**

- · Cordless or electric drill or screw gun
- Appropriate drive bits
- · Carbide drill bit
- · Torque wrench plus appropriate sockets
- Welder
- Grinder
- Plasma cutter
- · Hex wrenches
- Zip ties
- Marker
- Jack stands

### **Preparation**

### **AWARNING**

THE TRAILER MUST BE SUPPORTED PER MANUFACTURER'S RECOMMENDATIONS. FAILURE TO DO SO MAY RESULT IN DEATH, SERIOUS PERSONAL INJURY OR SEVERE PRODUCT OR PROPERTY DAMAGE.

- **1.** Be sure to park the trailer on solid, level ground. Clear all jack landing locations of debris and obstructions. Locations should also be free of depressions. When parking the trailer on extremely soft surfaces, utilize load distribution pads under each jack.
- **2.** Remove all loose items from the front storage compartments of the trailer.
- **3.** Support the trailer at all four corners with jack stands (or other adequate supports).
- **4.** Remove existing landing gear (front jacks) from the trailer by removing the carriage bolts and nuts in the brackets holding the front jacks in place.

### **A** CAUTION

USE APPROPRIATE PROTECTIVE EQUIPMENT (EYEWEAR, FACE SHIELD, GLOVES, ETC.) WHEN USING A PLASMA CUTTER AND GRINDER.

**5.** Cut the old landing gear brackets off of the frame, then grind the frame until smooth.

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#### Installation

**NOTE:** Some frame components have been removed for clarity.

**NOTE:** Solid Red/Black lines in this service form refer to using a welder to add frame components per instructions and image references.

### **AWARNING**

FAILURE TO REMOVE FLAMMABLE OBJECTS OR OBSTRUCTIONS MAY RESULT IN DEATH, SERIOUS INJURY OR PROPERTY DAMAGE.

1. Attach feet (Fig.1A) to the landing leg with included clevis pin (Fig. 1B) and bridge pin (Fig. 1C).

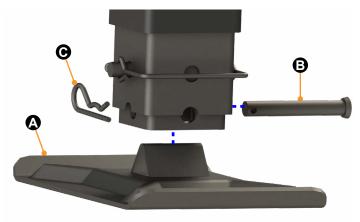


Fig.1

- 2. Attach the securing brackets onto the landing leg with one securing bracket installed below the upper stop tab (Fig.2A) and the other installed above the lower stop tap (Fig.2B).
- **3.** With the assistance of another person or jack stand, place the landing leg against the frame and lift until the landing foot is 12 inches off the ground (Fig.2)
- 4. Mark the location of the brackets on the frame (Fig.2C).

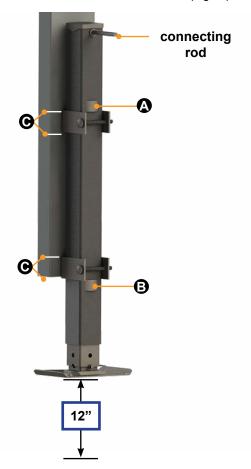


Fig.2

5. Repeat steps 1 through 4 for the other landing leg.

**NOTE:** Both landing legs must be mounted at exactly the same height with the connecting rods (Fig. 2) directly across from each other for correct installation of the cross shaft.

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**6.** Remove the securing brackets from the landing legs then attach each bracket onto the frame at the marks made previously by welding it on both sides (Fig.3).

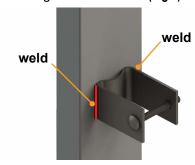


Fig.3

**7.** Place landing legs into the securing brackets with the connecting rods (Fig. 4A) facing inward. The landing gear should be placed so that the stop tabs (Fig.4B) are outside of the brackets. A ground clearance of 12" from foot pad to ground is recommended for installation.

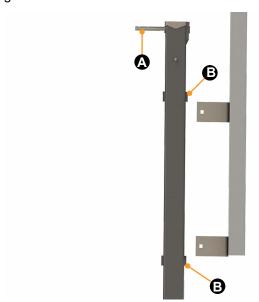


Fig.4

**8.** After the landing leg and bracket are seated correctly, the nut can be tightened. Torque the landing gear bracket nut (**Fig.5A**) to 10-18 ft-lbs. The inside surfaces of the landing gear bracket flanges should not measure less than 2 3/8".

**NOTE:** The bolt is not used as a stop.

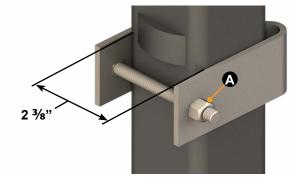


Fig.5

**NOTE:** If there is not a hole in the frame to accommodate the manual override shaft, drill a hole using a carbide drill bit. The override shaft must be accessible from the outside of the frame.

**9.** Attach landing gear box to lead landing leg, so that the manual override shaft faces toward the back (**Fig. 6**). The connecting rod goes through the hole in the gear box and the manual override shaft through the hole in the frame (hole not shown).

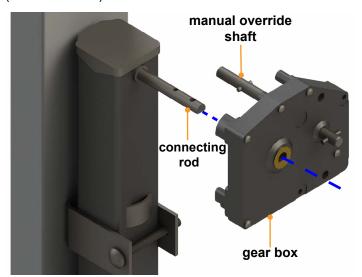


Fig.6

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**10.** Attach the drive motor to the gear box with two motor bolts (Fig.7).

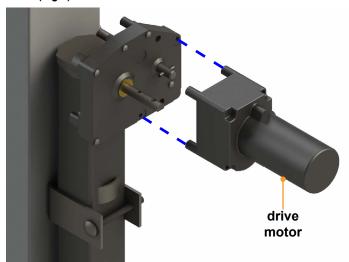


Fig.7

- **11.** Remove installation hardware from both ends of the cross shaft.
- **12.** Slide the cross shaft onto the follow leg. Extend the shaft to the gear box. Secure cross shaft in place with previously-removed installation hardware (**Fig.8**).

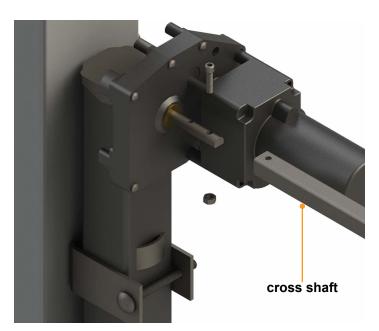


Fig.8

**13.** Determine where to install the IP landing gear switch. The switch should be mounted on the side of the trailer, so the operator will have a view of the 5th wheel hitch when using the switch.

**NOTE:** The switch is water resistant, so it can be mounted to the exterior of the trailer.

**14.** Wire the landing gear motor and switch as shown in the wiring diagram (Fig.9).

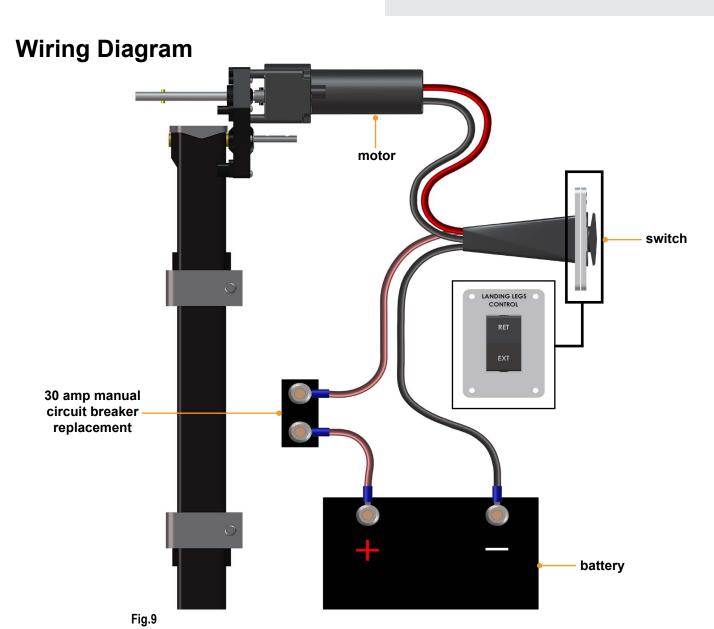
**NOTE:** LCI recommends zip-tying the harnesses tight against the motor to prevent damage to the harnesses.

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The Lippert Components, Inc. electric landing gear switch and harness come supplied with a 30A inline fuse on the power lead wire from the battery to the switch.

It is acceptable for the 30A fuse to be removed and replaced with a 30A manual circuit breaker. If any of the electrical wiring is removed and discarded along with the fuse, exact gauge and quality wire must be used to replace the preexisting wire.

Replacing the 30A fuse with the 30A manual circuit breaker does not void Lippert Components, Inc. Limited Warranty and is RVIA compliant. However, in the event of the system becomes inoperative or damaged stemming from the condition, quality or installation of the 30A manual circuit breaker, liability shall lie with the installer of the breaker.

It is understood that this revision can be performed with the permission of Lippert Components, Inc., but is not a recommended operation or replacement.

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### **Operation**

### **AWARNING**

NEVER EXCEED THE RATED CAPACITY OF THE LEVELER AS STATED ON ITS LABEL.

### **AWARNING**

NEVER ATTEMPT OPERATING THE SYSTEM WITHOUT THE FOOTPAD PROPERLY INSTALLED.

### **AWARNING**

MAKE SURE PEOPLE AND PETS ARE CLEAR OF THE TRAILER WHEN OPERATING THE LEVELING SYSTEM.

### **AWARNING**

ELECTRIC LANDING GEAR IS DESIGNED FOR VERTICAL OPERATION. EXCESSIVE SIDE LOADS MAY CAUSE DAMAGE TO THE LANDING GEAR.

### **AWARNING**

BE SURE TO PARK THE TRAILER ON SOLID, LEVEL GROUND. CLEAR ALL JACK LANDING LOCATIONS OF DEBRIS AND OBSTRUCTIONS. LOCATIONS SHOULD ALSO BE FREE OF DEPRESSIONS. WHEN PARKING THE TRAILER ON EXTREMELY SOFT SURFACES, UTILIZE LOAD DISTRIBUTION PADS UNDER EACH JACK.

#### **Electric Extension**

To extend the landing gear, press and hold the EXT switch (Fig.10A) until the landing gear is fully extended.

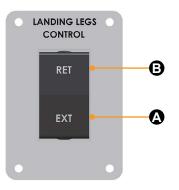


Fig.10

#### **Electric Retraction**

To retract the landing gear, press and hold the RET switch (Fig.9B) until the landing gear is fully retracted.

### **AWARNING**

RETRACT LANDING GEAR COMPLETELY BEFORE MOVING THE TRAILER OR PRODUCT DAMAGE MAY OCCUR.

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#### **Drop Leg Extension and Retraction**

**1.** To extend the drop leg, pull out the snap pin (**Fig.11A**) and adjust the leg to the desired height.

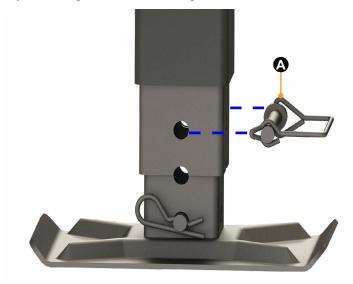


Fig.12

**2.** Reinstall the snap pin, ensuring that it is fully inserted through both the inner tube and the drop leg tube before using the landing gear.

### **AWARNING**

THE SNAP PIN MUST BE INSERTED FULLY THROUGH BOTH SIDES OF THE TUBE PRIOR TO USE.

#### **Manual Extension**

**1.** Place the manual crank handle coupler (Fig.12A) onto the manual override shaft of the reduction gearbox (Fig.12B).

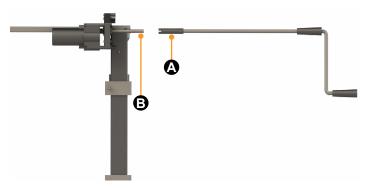


Fig.11

- **2.** Turn the crank handle counterclockwise to extend the landing gear.
- **3.** Stop cranking when the desired level is reached.
- 4. Remove and store the crank handle.

### **AWARNING**

RETRACT LANDING GEAR COMPLETELY BEFORE MOVING THE TRAILER OR PRODUCT DAMAGE MAY OCCUR.

#### **Manual Retraction**

- **1.** Place the manual crank handle coupler (Fig.12A) onto the manual override shaft of the reduction gearbox (Fig.12B).
- 2. Turn the crank handle clockwise to retract the landing gear.
- **3.** Stop cranking when the desired level is reached.
- 4. Remove and store the crank handle.
- **5.** Make sure all jacks are fully retracted and all previously disconnected chains and harnesses are reconnected before traveling.

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Notes	



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