



ICE HOUSE
w/ LCD TOUCHPAD
OWNER'S MANUAL

L I P P E R T
C O M P O N E N T S ®

TABLE OF CONTENTS

System Information	2
Touch Pad Diagram	3
Menu	3
Prior to Operation	4
Operation	4
Cabin Mode	4
Travel Mode	4
Programming	5
Maintenance	5
Grease Specification	5
Grease Application	5
Troubleshooting	7
Error Codes	7
Manual Override - Top of Jack Motor	8
Manual Override - Bottom of Jack Motor	9
Wiring Diagram	10
Ice House Axle Assembly	11
Ice House Axle Components	12
Ice House Axle Components	13
Ice House Leveling Components	14
Ice House Electrical Components	15
Ice House Electrical Components	16
Notes	17

System Information

The Ice House is equipped with Ground Control™ 3.0 and pivot axles. LCI has taken its Ground Control Automatic Electric Leveling System to the next level. Its new leveling jacks are driven by Hall Effect Technology, which measures the jack leg motor revolutions instead of amps, ensuring more accurate leveling. The pivot axles offer a smooth operation to lower the ice house without disturbing the ice. We are continually offering better options for a better camping experience. Additional information about this product can be obtained from www.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.

Safety Information

WARNING

Any attempt to perform service while the trailer is supported by the Ground Control 3.0 leveling system could result in death, serious injury or damage to the ice house.

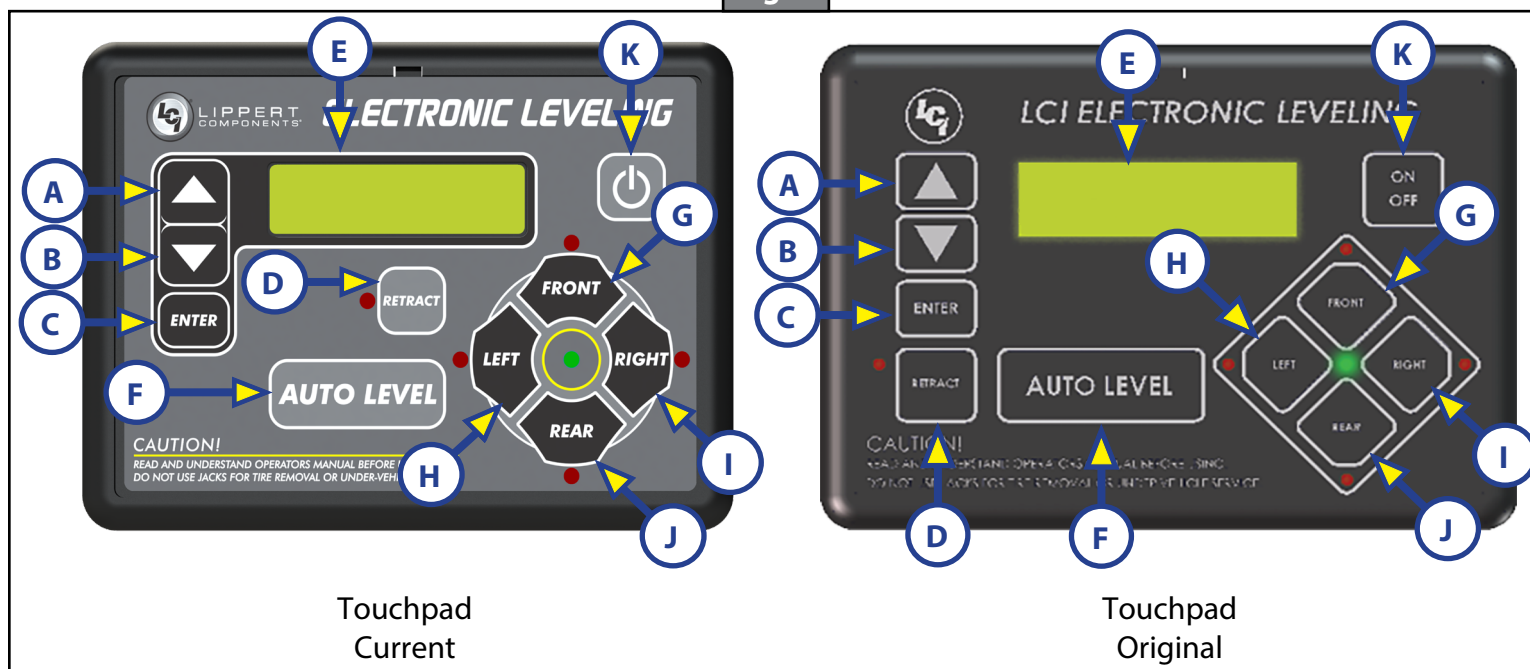
CAUTION

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

NOTE: Lippert Components, Inc. recommends that inspections, troubleshooting, component replacement, and verifications be completed only by certified RV technicians.

Touchpad Diagram

Fig. 1



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. - Press and hold down for 1 second to initiate Auto Retract.
E	LCD Display - Displays procedures and results.
F	Auto Level - Extends all jacks simultaneously when pressed and held. NOTE: If retract button is pressed first, all jacks will retract simultaneously when pressed and held.
G	Front Jack Button - Activates front jack.
H	Left Jack Button - Activates left jack.
I	Right Jack Button - Activates right jack.
J	Rear Jack Button - Activates both rear jacks.
K	Power Button - Turns leveling system on and off.

Menu

Jack State – Displays the current state for the jack system (if at least one jack is not fully retracted, displays “Jacks: Down”, otherwise displays “Jacks: Up”).

Auto Retract All – Press Enter to automatically retract all of the jacks.

Auto Retract Rear – Press Enter to automatically retract the left rear and right rear jacks.

Front Stroke – Displays the stroke (inches of extension) of the front jack.

Rear Stroke – Displays the stroke (inches of extension) of the rear jacks.

Battery – Displays the current battery voltage.

Error - Displays an error. To clear the error, auto retract all jacks by pressing and holding retract (Fig. 1D).

NOTE: If any of the jacks are already retracted, extend them 6 inches and then retract all.

Prior to Operation

1. Park the trailer on level and stable ground/ice.
2. Be sure all persons, pets, and property are clear of the trailer before and during operation.
3. Make sure battery(ies) are fully charged and test at 12+VDC under load.



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

Operation

Cabin Mode

1. Extend the front jack.

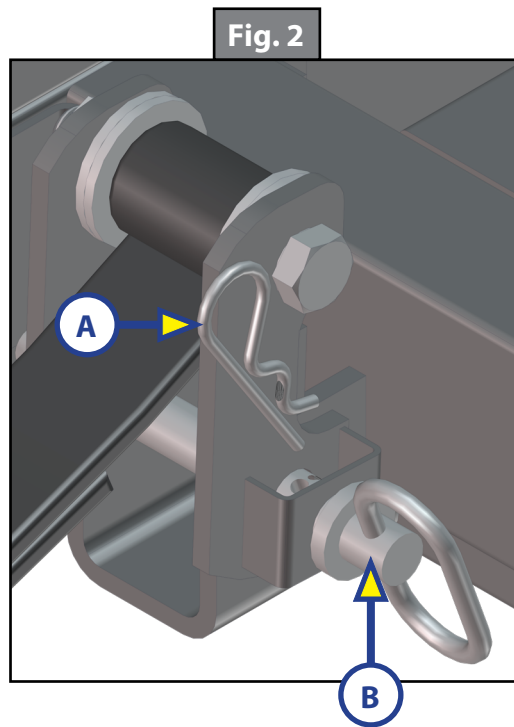
NOTE: This can also be done with the switch on the front jack.

2. Disconnect the trailer coupler from the tow vehicle hitch.
3. Extend the rear jacks to make contact with the ground or ice.
4. Remove the cotter pin (Fig. 2A) from each hitch pin (Fig. 2B).
5. Remove the hitch pins (Fig. 2B) from the axle assemblies to free the axles.
6. Retract all jacks until the trailer sets flat to the ground or ice.

Travel Mode

1. Extend all jacks until axle assembly is returned to travel position.
2. Insert hitch pins (Fig. 2B) into each axle assembly and secure the cotter pins (Fig. 2A).
3. Retract rear jacks completely.
4. Connect the trailer coupler to the tow vehicle hitch.
5. Retract the front jack.

NOTE: This can also be done with the switch near the front jack.



Programming

NOTE: Begin with the touchpad off.

1. Press the "LEFT" button (Fig. 1H) on the touchpad 10 times.
2. Press the "RIGHT" button (Fig. 1I) on the touchpad 10 times.
3. The touchpad will read "Wireless Configuration" (Fig. 3).

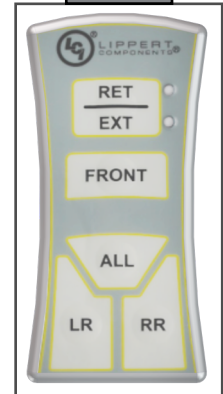
NOTE: If the touchpad does not read "Wireless Configuration", repeat steps 1 and 2.

4. Press any button on the remote (Fig. 4) to sync the system.

Fig. 3



Fig. 4



Maintenance

Grease Specification

LCI recommends a NLGI # 2 grade lithium complex EP grease for all applications contained within this manual. A molybdenum-based grease is preferred.

CAUTION

Do not mix lithium, calcium, sodium or barium complex greases. Chemical compatibility problems may occur. If you are changing from one chemical grease to another, be sure all old grease is removed prior to applying new grease. If the old grease is not removed completely, chemical compatibility problems may result in component failure or damage.

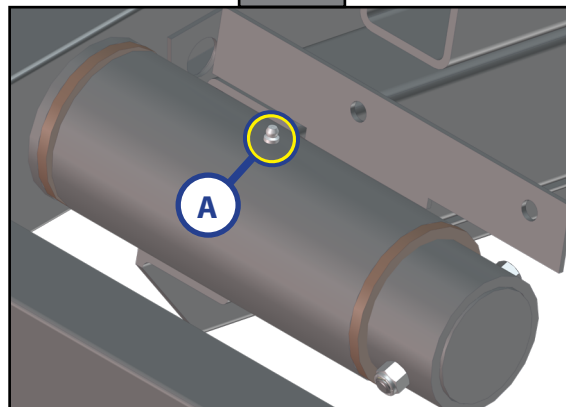
Grease Application

This maintenance must be completed every 3,000 miles or 3 months, which ever comes first.

1. Use a grease gun to grease the zerk (Fig. 5A) located on the front pivot tube.

NOTE: 80 milliliters or $\frac{3}{8}$ of a cup of lithium-based multipurpose grease should be used on each side of the unit.

Fig. 5



Pivot Axle and Brake Maintenance Schedule

Item	Function Required	Weekly	3 Months / 3,000 Miles	6 Months / 6,000 Miles	12 Months / 12,000 Miles
Brakes	Test that they are operational.	At Every Use			
Breakaway System	Check battery charge and switch operation.	At Every Use			
Brake Adjustment	Adjust to proper operating clearance.		◆		
Brake Magnets	Inspect for wear and current draw.			◆	
Brake Linings	Inspect for wear or contamination.				◆
Brake Controller	Check for correct amperage and modulation.			◆	
Trailer Brake Wiring	Inspect wiring for bare spots, fray, etc.				◆
Hub/Drum	Inspect for abnormal wear or scoring.				◆
Wheel Bearing	Inspect for corrosion or wear. Clean and repack.				◆
Seals	Inspect for leakage. Replace if removed.				◆
Springs	Inspect for wear, loss of arch.				◆
Suspension Parts	Inspect for bending, loose fasteners, wear.			◆	
Hangers	Inspect welds.				◆
Wheel Nuts and Bolts	Tighten to specified torque values.		◆		
Wheels	Inspect for cracks, dents, or distortion.			◆	
Tire Inflation Pressure	Inflate tires to mfg's. specifications.	◆			
Tire Condition	Inspect for cuts, wear, bulging, etc.		◆		
Pivot Shaft	Apply grease through grease zerk (see grease specifications on page 5).		◆		

Electric Leveling Maintenance Schedule				
Item	Function Required	Monthly (or as needed)	3 Months	16 Months
Jacks	Remove dirt and road debris.	◆		
	² Lubricate inner jack legs.		◆	
	Jack mounting bolt torque (90 ft-lb).			◆
Wiring/Electrical	Inspect wiring for bare spots, fray, etc.			◆
	Inspect and ensure that all wiring harness connections are tight and free of corrosion.			◆
	Battery voltage (should be 12.75V DC)	At each use		
¹ 6-month interval could also be the beginning and end of the travel season if not a full-time traveler.				
² Lubricate inner jacks legs: A 3-month interval is for normal environments. A 4- to 6-week interval would be appropriate for units located in a salty environment.				

Troubleshooting

Error Codes

To clear one of these errors:

1. Correct or otherwise repair the issue (see the table below).
2. Extend all of the jacks at least six (6) inches, then press and hold the "RETRACT" button on the touchpad until the jacks begin retracting.
3. All of the jacks will retract fully to clear the error code.

LCD Message	What Is Happening?	What Should Be Done?
ERROR Left Jack Right Jack	Error at a specific jack (front, left rear, right rear). Hall signal issue (open, short, malfunction).	Check harness connections at controller and at jack. Check that harness connections are in the proper location on the controller by verifying the labels on the harness and controller. Check harness for damage. Repair or replace as necessary.
	Unexpected high amp current stall.	
****ERROR**** Low Voltage	Battery voltage dropped below 10.8V.	Check wiring for loose connection.
		Test battery voltage under load - charge or replace.
****ERROR**** Comm Error	Communication between controller and touchpad has been lost.	Check harness for proper connections or damage. Replace if necessary.
****ERROR**** 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 - Top of Jack Motor

NOTE: Use of a 12V-18V cordless screw gun or pneumatic screw gun is acceptable to manually override the jacks. Do not use an impact screw gun to perform the override procedure, as this may damage the motor.

If manual override is necessary on any jack in the system, there are two options. The following process will describe how to use the top override. See next page for the bottom override.

Tools needed: $\frac{3}{8}$ " drive ratchet and extension (no socket).

1. Find the port on the top of the jack motor (Fig. 6A).
2. Remove the rubber plug.
3. Insert the $\frac{3}{8}$ " drive into the port (Fig. 7).
4. Turn override until the jack extends or retracts to desired position.

Fig. 6

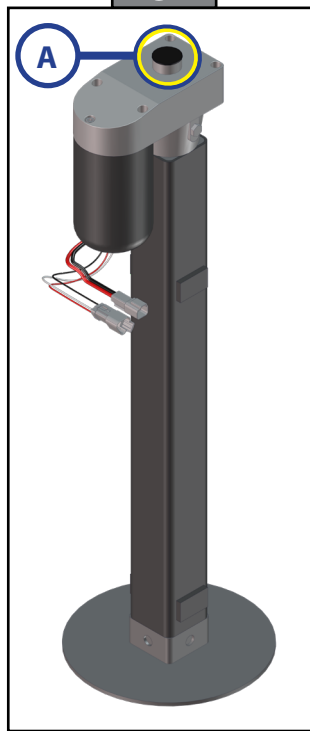
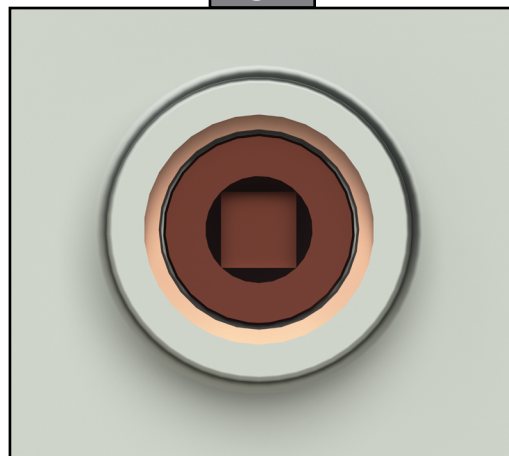


Fig. 7



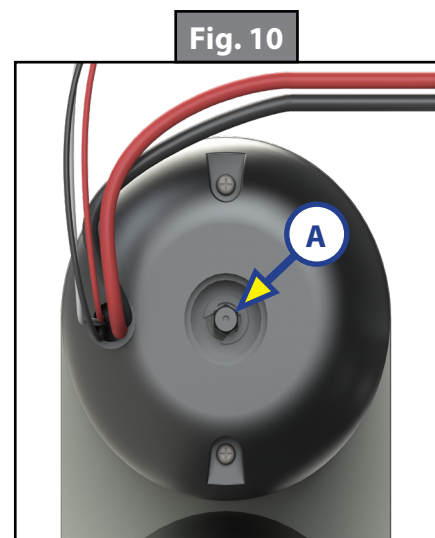
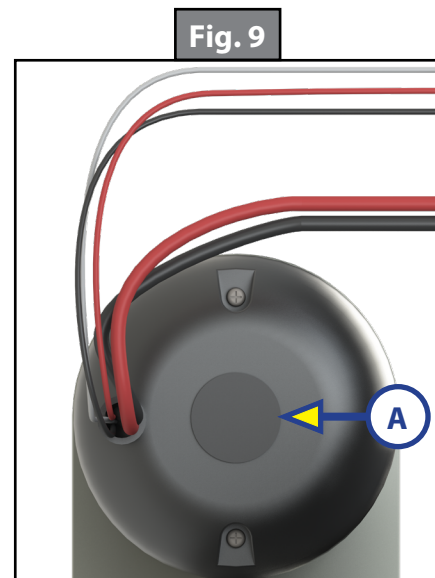
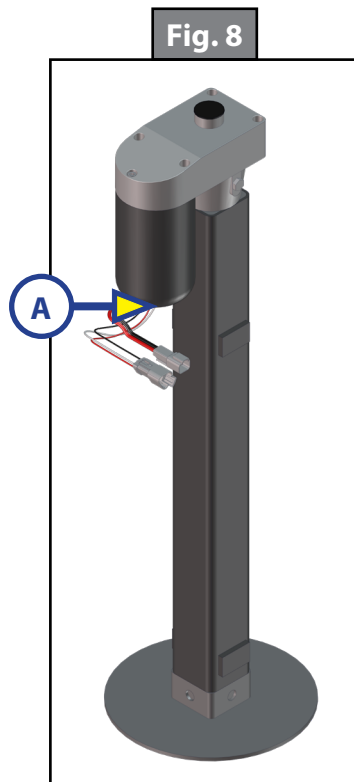
Manual Override - Bottom of Jack Motor

NOTE: Use of a 12V-18V cordless screw gun or pneumatic screw gun is acceptable to manually override the jacks. Do not use an impact screw gun to perform the override procedure, as this may damage the motor.

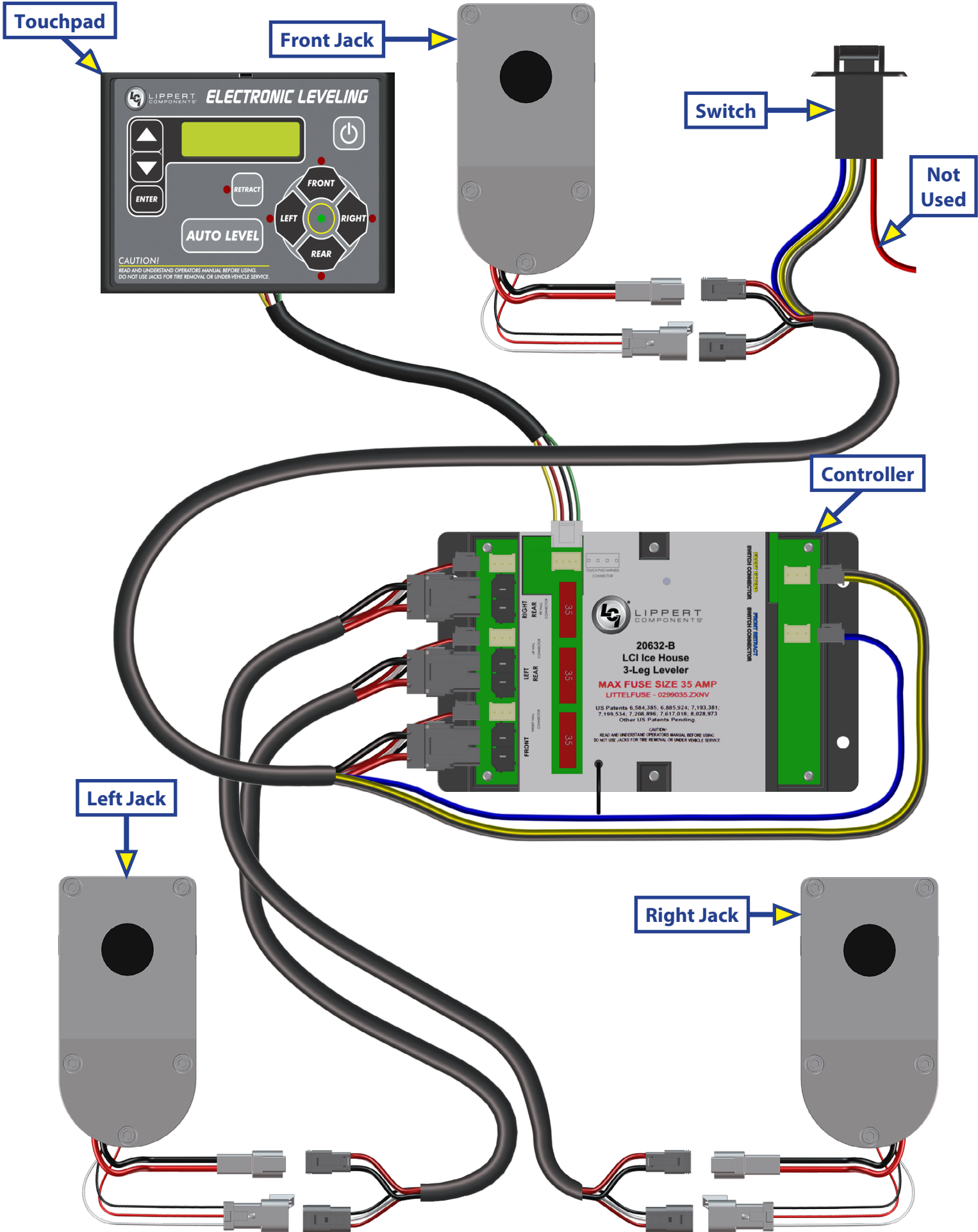
If manual override is necessary on any jack in the system, there are two options. The following process will describe how to use the bottom override. See the previous page for the top override.

Tools needed: $\frac{3}{8}$ " drive ratchet and extension, $\frac{5}{16}$ " socket.

1. Find the port on the bottom of the jack motor (Fig. 8A).
2. Remove the rubber plug (Fig. 9A).
3. Insert the $\frac{5}{16}$ " socket into the port (Fig. 10A).
4. Turn override until the jack extends or retracts to desired position.

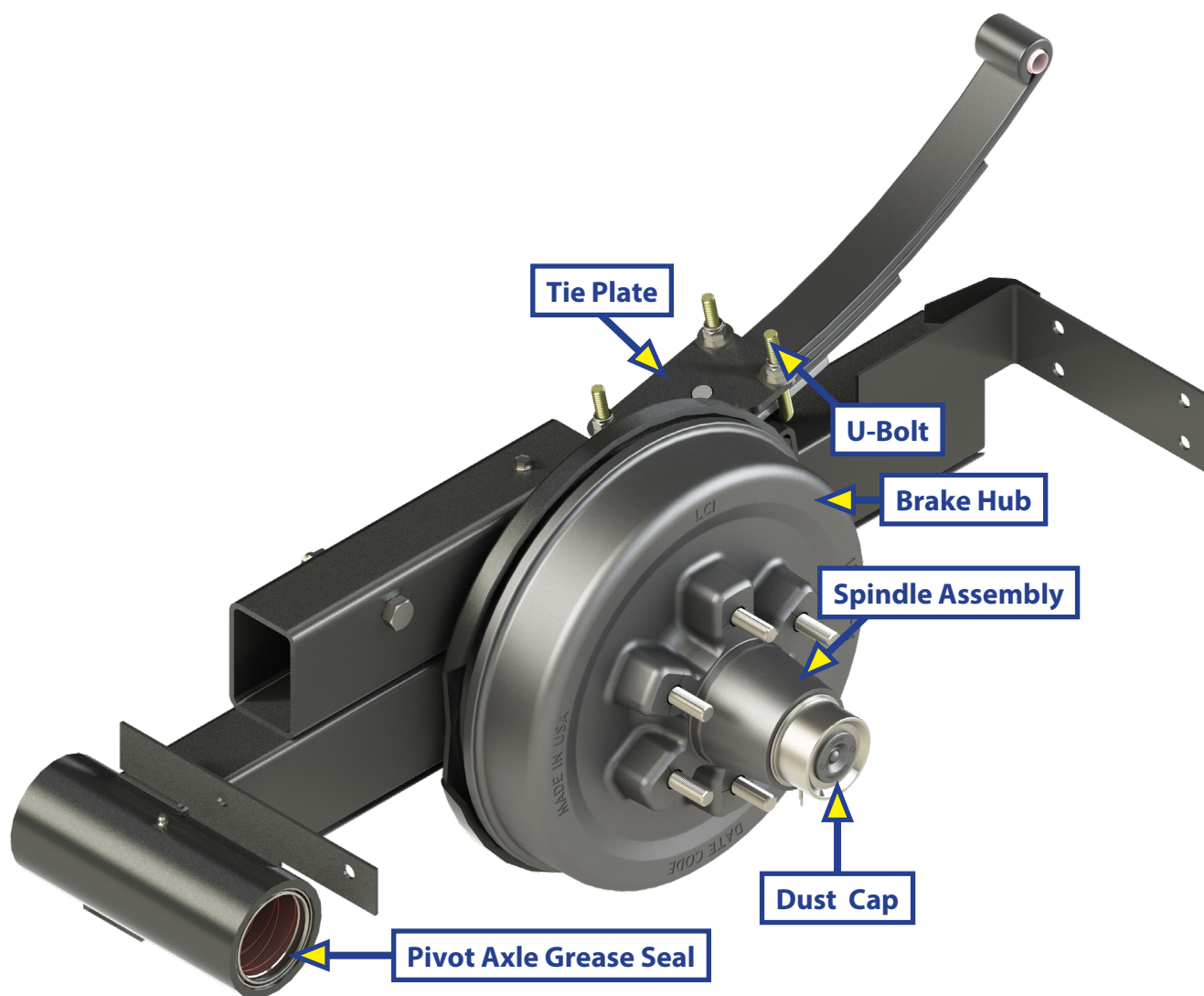


Wiring Diagram



ICE HOUSE AXLE ASSEMBLY

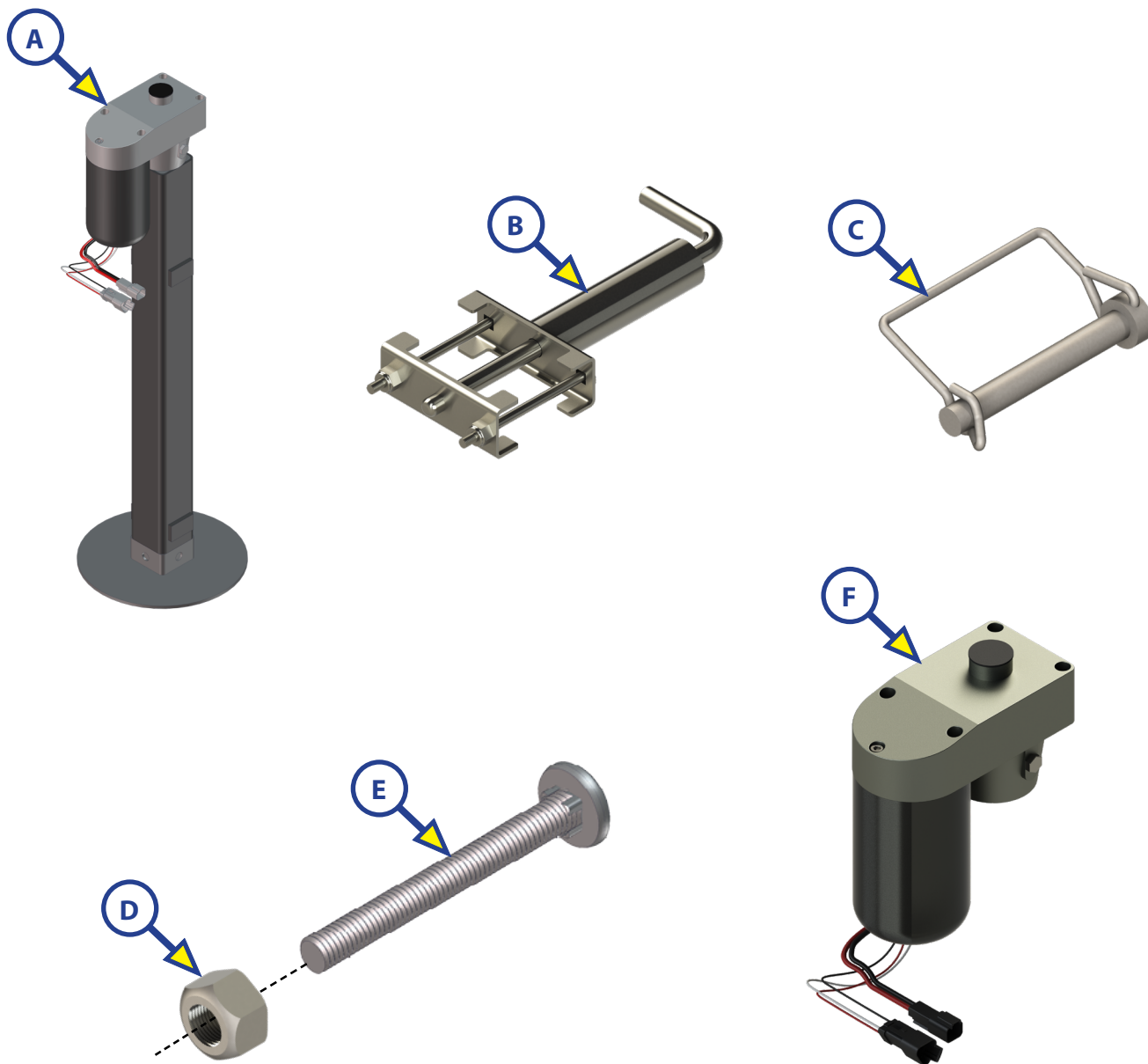
AXLES AND SUSPENSION



ICE HOUSE AXLE COMPONENTS

AXLES AND SUSPENSION

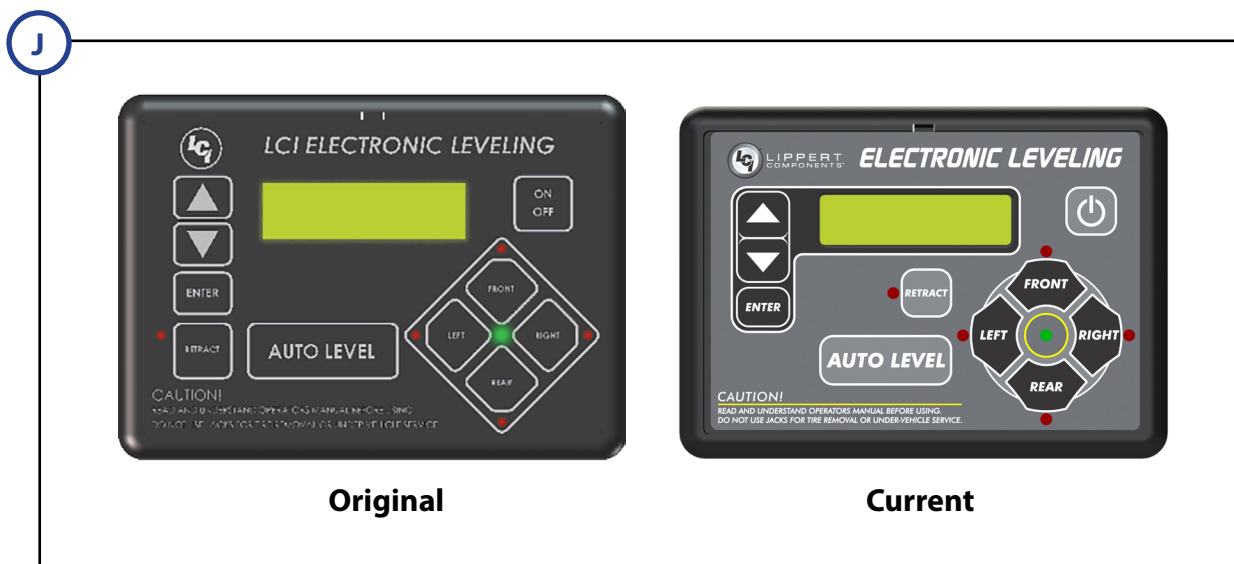
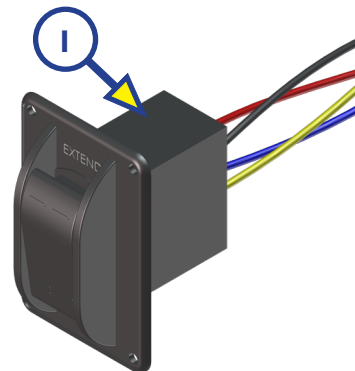
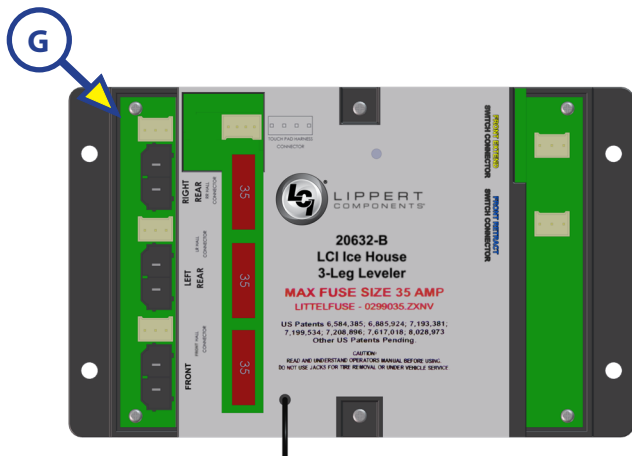
NOTE: Part numbers are shown for identification purposes only. Not all parts are available for individual sale. All parts with a link to the Lippert Store can be purchased.



Callout	Part #	Description
A	354149	Hall Effect Leveling Jack
B	119113	Bolt On Pull Pin
C	225598	Snapper Pin, $\frac{3}{8}$ x 3"
D	119073	Nut, $\frac{3}{8}$ " - 16
E	125878	Bolt, $\frac{3}{8}$ " - 16 x 3 $\frac{1}{2}$ "
F	343758	Hall Effect Motor

ICE HOUSE AXLE COMPONENTS

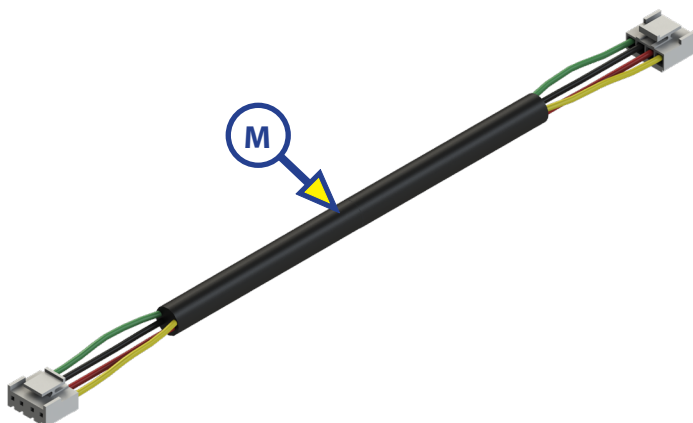
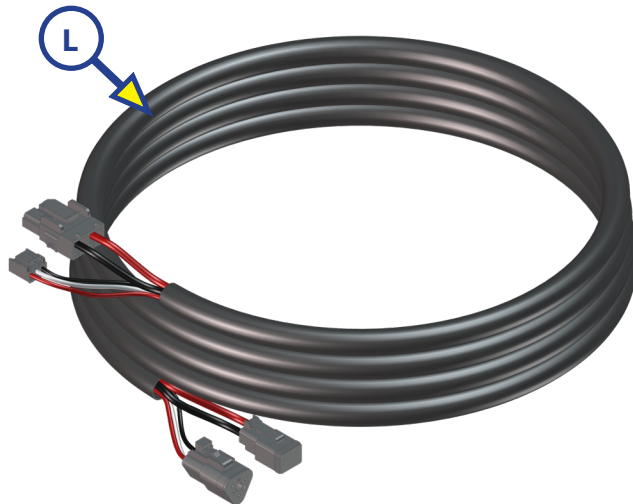
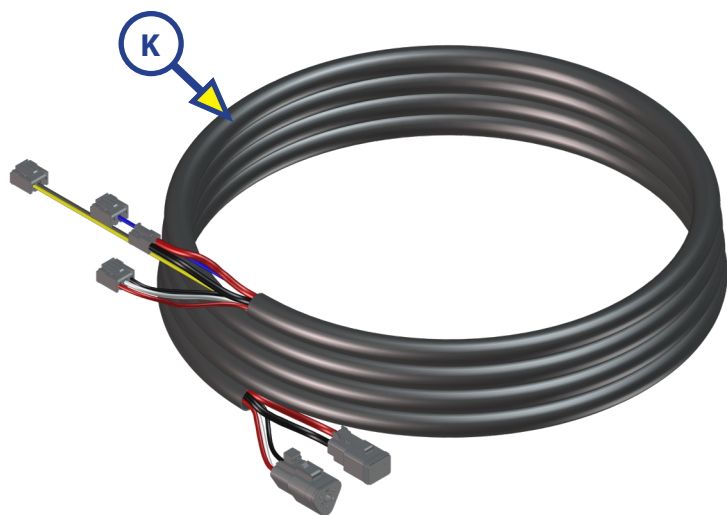
AXLES AND SUSPENSION



Callout	Part #	Description
G	380397	3 Point Wireless Controller
H	380554	Ice House Remote
I	344484	Switch
J	234802	Touchpad (Original)
	421484	Touchpad (Current)

ICE HOUSE LEVELING COMPONENTS

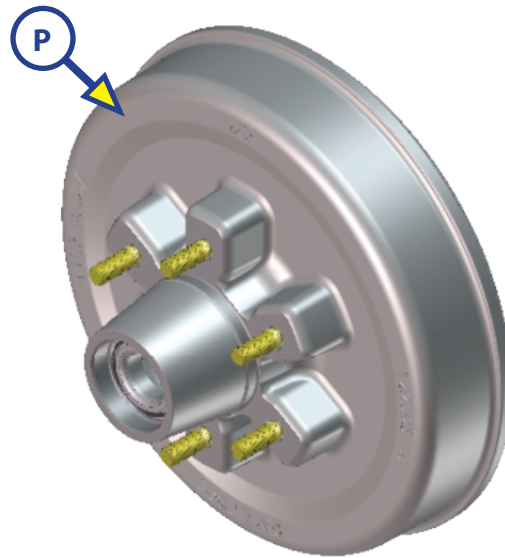
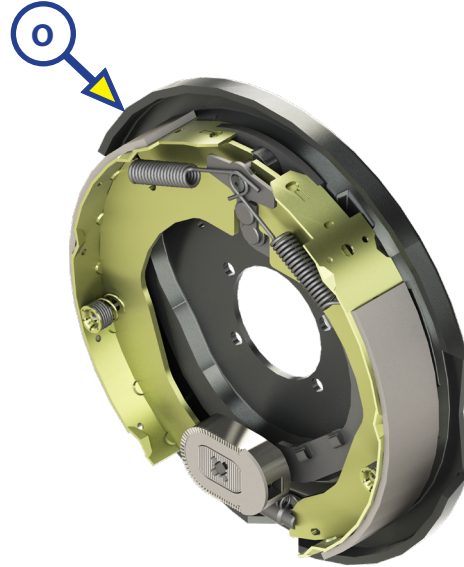
AXLES AND SUSPENSION



Callout	Part #	Description
K	384806	Landing Gear and Switch Harness
L	387498	Leveling Jack Harness, Left
	387499	Leveling Jack Harness, Right
M	232937	Touchpad Harness

ICE HOUSE ELECTRICAL COMPONENTS

AXLES AND SUSPENSION



Callout	Part #	Description
N	298275	LH Brake Assembly
O	298276	RH Brake Assembly
P	122462	Hub Assembly

ICE HOUSE ELECTRICAL COMPONENTS

AXLES AND SUSPENSION



Callout	Part #	Description
Q	257970	U-Bolt
R	257969	Tie Plate
S	122064	Dust Cap
T	122065	Dust Cap Plug
U	364157	Pivot Axle Grease Seal
V	122077	Locking Nut, 3/8" - 24
W	122081	Castle Nut
X	119214	Washer
Y	122075	Cotter Pin, 1.75"

Notes

[illegible]



L I P P E R T C O M P O N E N T S®

The contents of this manual are proprietary and copyright protected by Lippert Components, Inc. ("LCI"). LCI prohibits the copying or dissemination of portions of this manual unless prior written consent from an authorized LCI representative has been provided. Any unauthorized use shall void any applicable warranty. The information contained in this manual is subject to change without notice and at the sole discretion of LCI.

Revised editions are available for free download from lci1.com.

Please recycle all obsolete materials.

For all concerns or questions, please contact
Lippert Components, Inc.

Ph: (574) 537-8900 | Web: lci1.com | Email: customerservice@lci1.com



This manual is provided courtesy of **RV Tech Cheat Sheet**



Professional resources for the whole RV industry — free.

We put manuals, wiring diagrams and hard-won tech knowledge in every technician's hands, so repairs get done right the first time, techs work faster, and RV owners everywhere get better service.



rvtechcheatsheet.com/manuals

Find thousands more RV manuals, wiring diagrams and parts lists

RV techs: share fixes, ask questions and learn from each other.

Join our free Facebook group →



Follow proper safety practices. If in doubt, consult a professional RV technician.