Ground Control® TT Leveling OneControl® Touch Panel (3K-5K)

Installation and Owner's Manual

(For Aftermarket Applications)



Ground Control TT Leveling OneControl Touch Panel Aftermarket Kit	
Part #	**Description**
799870	Ground Control TT Levelong OCTP

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Introduction

With the push of a button, the Ground Control TT Leveling System levels and stabilizes a trailer quickly and accurately, enhancing the overall camping experience. The Ground Control TT Leveling System saves the owner time by leveling and stabilizing the trailer in a matter of minutes.

Features:

- Saves time setting up the trailer at the campsite
- Both fast and accurate automatic electronic leveling
- Includes an automatic hitch recognition function

NOTE: Images used in this document are for reference only when assembling, installing and/or operating this product. Actual appearance of provided and/or purchased parts and assemblies my differ.

Additional information about this product can be obtained fAdditional information about this product can be obtained from lci1.com/support or by using the LippertNOW app. Replacement kits can be ordered from https://store.lci1.com/ or by using the LippertNOW app.
The LippertNOW app is available for free on Apple App Store® for iPhone® and iPad® and also on Google Play™ for Android™ users.

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For additional support on this product, scan this QR code or go to: https://support.lci1.com/ground-control-tt-leveling-onecontrol-touch-panel

Safety

Read and understand all instructions before installing or operating this product. Adhere to all safety labels.

This manual provides general instructions. Many variables can change the circumstances of the instructions, i.e., the degree of difficulty, operation and ability of the individual performing the instructions. This manual cannot begin to plot out instructions for every possibility, but provides the general instructions, as necessary, for effectively interfacing with the device, product or system.
Failure to correctly follow the provided instructions may result in death, serious personal injury, severe product and/or property damage, including voiding of the Lippert limited warranty.

Trailer Weight Rating

Ground Control Travel Trailer Leveling System has a maximum Gross Vehicle Weight Rating (GVWR) of 14,000 lbs (6,350 kg) for vehicles equipped with straight rear and C-jack fronts. For vehicles equipped with all 4 C-jacks, the GVWR is 10,000 lbs (4,536 kg).

⚠ WARNING

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

⚠ WARNING

FAILURE TO FOLLOW INSTRUCTIONS PROVIDED IN THIS MANUAL MAY RESULT IN DEATH, SERIOUS PERSONAL INJURY AND/OR SEVERE PRODUCT AND PROPERTY DAMAGE, INCLUDING VOIDING OF THE COMPONENT WARRANTY.

⚠ WARNING

TRAILER MUST BE SUPPORTED PER MANUFACTURER'S RECOMMENDATIONS BEFORE WORKING UNDERNEATH. FAILURE TO DO SO MAY RESULT IN DEATH OR SERIOUS PERSONAL INJURY.

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⚠ 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

ALWAYS WEAR EYE PROTECTION WHEN PERFORMING SERVICE OR MAINTENANCE TO THE UNIT. OTHER SAFETY EQUIPMENT TO CONSIDER WOULD BE HEARING PROTECTION, GLOVES AND POSSIBLY A FULL FACE SHIELD, DEPENDING ON THE NATURE OF THE SERVICE.

⚠ CAUTION

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

Resources Required

- 1 - 2 persons, depending on task
- Cordless or electric drill or screw gun
- Appropriate drive bits
- 5⁄16" drill bit
- 7⁄16" drill bit
- Ratchet
- 9⁄16" deep well socket
- 1⁄2" socket
- 5⁄8" socket
- 9⁄16" open end wrench
- 1⁄2" wrench
- 5⁄8" wrench
- 3⁄4" wrench (optional)
- String
- Silver or white paint or permanent marker
- Clamps
- Hydraulic floor jack (optional)

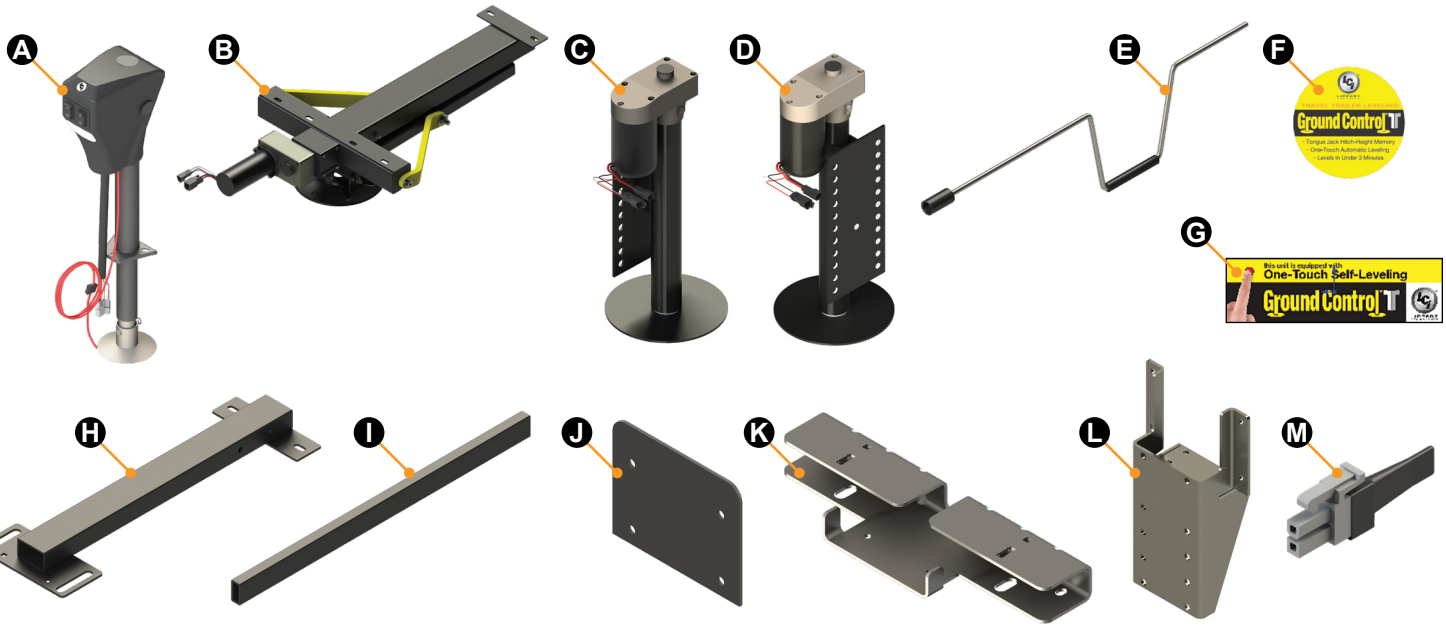
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Parts List

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	Qty.
A	421366	Power Tongue Jack	1
B	404488	3K C-Jacks	2
C	428493	5K Short Right-Hand Jack	1
D	342610	5K Short Left-Hand Jack	1
E	116112	Scissor Jack Crank Handle	1
F	428191	TT Leveling Ground Control Label	1
G	688837	GC One Touch Self-Level Label	1

Callout	Part#	Description	Qty.
H	671102	Bolt On Spacer Bracket	2
I	671294	Center Tube 38" x 2" x 1"	1
J	675725	Leveling Sensor Mounting Plate	2
K	671292	Bolt On I-beam Mounting Bracket	2
L	349975	Bolt On Bracket for 8" and 10" I-beam	2
M	333041	Canbus Terminating Resistor	2

NOTE: Parts list continued on next page.

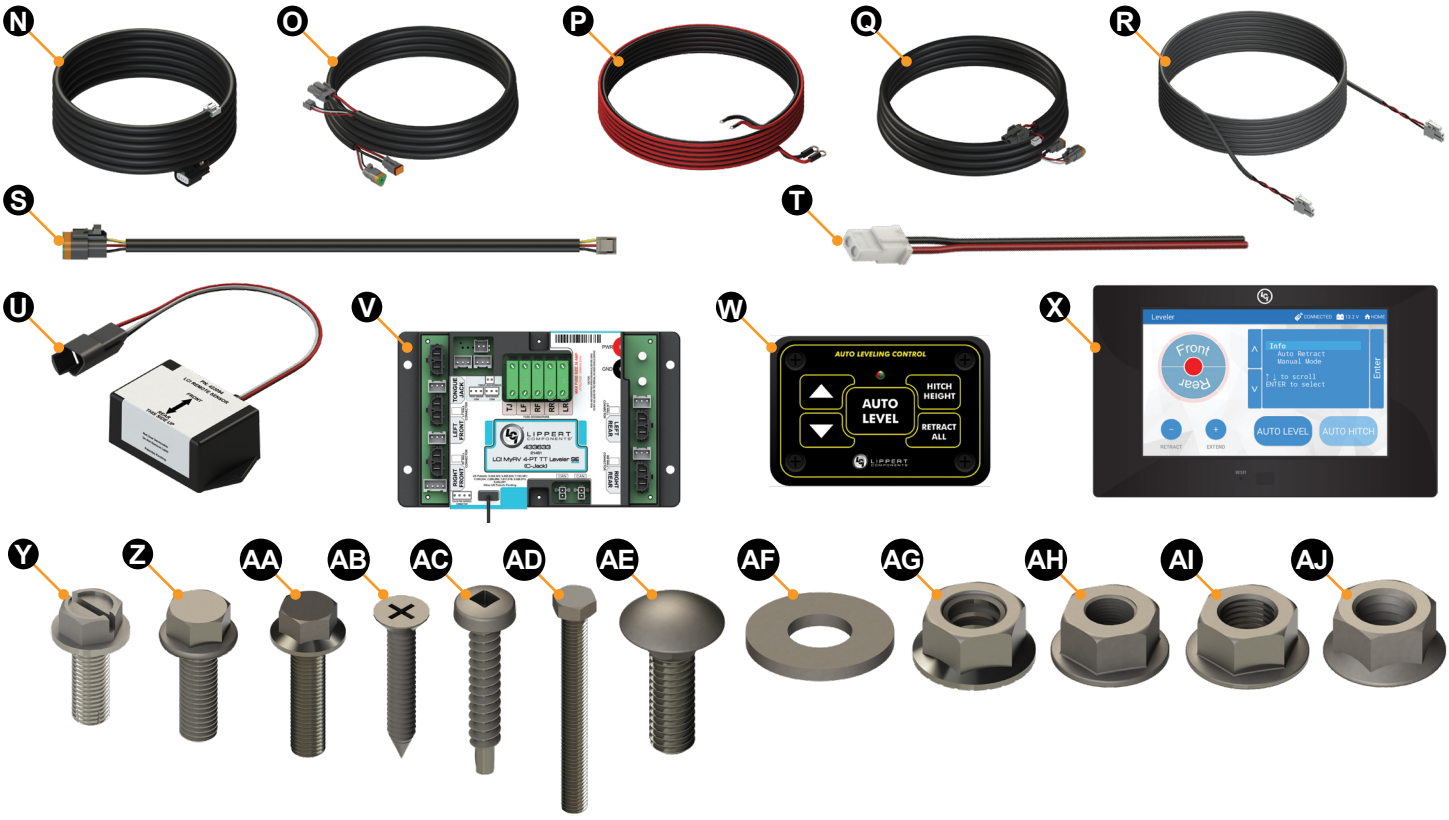
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Parts List Continued

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	Qty.
N	425585	4 Pin Pigtail Harness	1
O	305115	Hall Effect Right Rear Sensor Harness	1
	306298	Hall Effect Left Rear Sensor Harness	1
	307489	Hall Effect Right Front Sensor Harness	1
	307490	Hall Effect Left Front Sensor Harness	1
P	426526	Power and Ground Supply Harness	1
Q	421372	Power and Ground Supply Harness	1
R	331116	Canbus Data Harness	1
S	243688	Leveling Sensor Harness 35'	1
T	329080	Canbus Power Connector Harness	1
U	423094	Leveling Sensor	2
V	433632	Blue Controller SE	1
W	425306	Auto Leveling Control Touch Pad	1

Callout	Part#	Description	Qty.
X	406345	OneControl Touch Panel	1
Y	191021	Hex Washer Head Screw, 3/8" - 16 x 1"	8
Z	118076	Bolt, 1/2" - 20 x 1 1/2"	12
AA	663511	Flange Bolt, 3/8" - 16 x 1 1/2"	12
AB	690759	Wood Screws, #8 x 1"	4
AC	241940	Self-Drilling Square Head Screws, #8	4
AD	206614	Hex Cap Screw Bolt, 3/8" - 16 x 3 1/2"	4
AE	378272	Carriage Bolt, 5/16" - 18 x 1"	12
AF	119075	Flat Washer, 3/8"	4
AG	119072	Serrated Flange Nut, 3/8"	4
AH	117891	Serrated Flange Nut, 5/16"	12
AI	178210	Serrated Flange Nut, 1/2" - 20	12
AJ	365417	Hex Serrated Flange Nut, 3/8" - 16	12

Measuring Departure and Approach Angle

Before checking ground clearance make sure the trailer is level front-to-back.

Departure and approach angles are measured by running a string line from the meeting point of the tire and ground up at an angle to the lowest point on the front or rear of the trailer. These string lines are shown as dotted lines **(Fig.1)**.

Measure from the front of the frame and make a mark at 60". This will be the maximum allowable distance for the location of the center of the C-Jack footpad. The final location should be as close to the draw bar as possible, staying within the approach angle **(Fig.1)**.

Measure 12" from the center of the rear axle hanger to the center of the rear 5K short jack footpad. This will be the maximum allowable distance for the location of the center of the 5K jack footpad. Make sure the jack footpad is within the departure angle **(Fig.1)**.

NOTE: Before checking ground clearance make sure the trailer is level front-to-back.

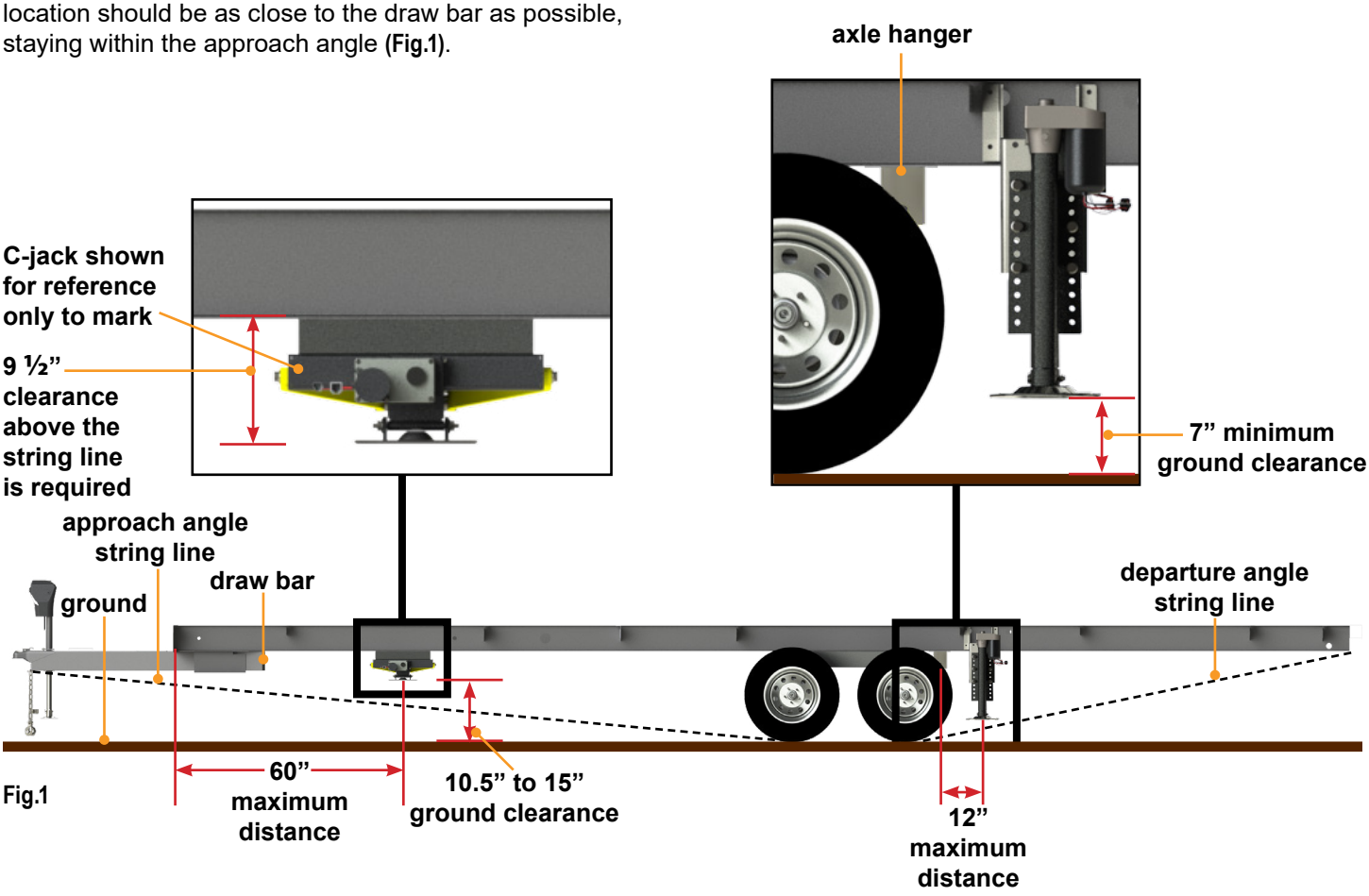


Fig.1

Mounting Brackets and Jack Installation

⚠ WARNING

THE TRAILER MUST BE SUPPORTED PER MANUFACTURER RECOMMENDATIONS BEFORE WORKING UNDERNEATH. FAILURE TO DO SO MAY RESULT IN DEATH OR SERIOUS PERSONAL INJURY.

Front Bolt On Spacer Kit and C-Jack Installation

This bracing system is to be mounted across the frame (roadside-to-curbside) and jacks are to be installed roadside-to-curbside as well.

Make sure that all wires and hoses are clear from the path going from the curbside I-beam mounting bracket to the roadside I-beam mounting bracket before starting the installation.

1. Measure the I-beam mounting bracket and make a mark at the center. This will be the center of the C-Jack footpad.

2. Measure from the front of the frame and make a mark at 60" **(Fig.1)**. This will be the maximum allowable distance for the location of the center of the C-Jack footpad. The final location should be as close to the draw bar **(Fig.1)** as possible, staying within the approach angle **(Fig.1)**. Make sure the bracket lip is flush with the outside lip of the I-beam **(Fig.2A)**.

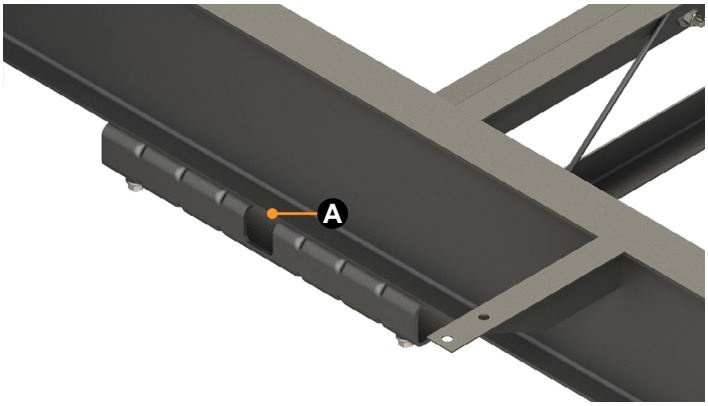


Fig.2

3. Use clamps to hold the I-beam mounting bracket to the frame rail.

4. Mark the four holes on the lip of the I-beam frame with the spaces provided on the bracket **(Fig.3A)**. Use the notches on the I-beam mounting bracket to find the center point.

NOTE: The center point is dependent on the width of the frame. The hole **(Fig.3B)** needs to be drilled between the two notches.

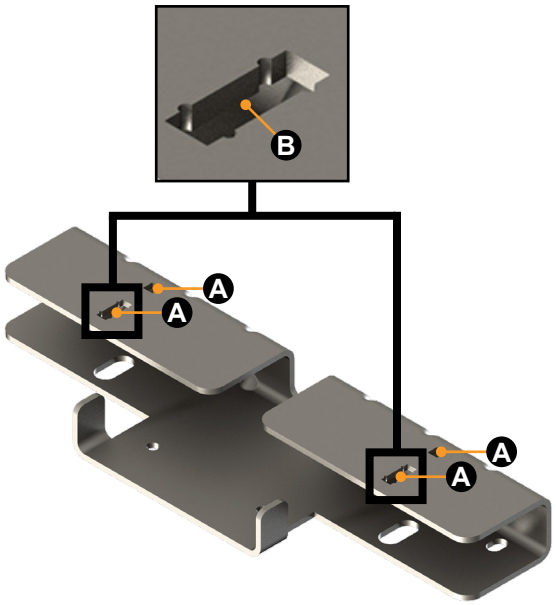


Fig.3

5. Drill a hole into the frame as marked in step 4 for all carriage bolts.

6. Fasten the I-beam mounting bracket **(Fig.4C)** to the I-beam frame **(Fig.4A)** with four 5⁄16" carriage bolts **(Fig.4B)**. Secure the carriage bolts with 5⁄16" flange nuts. Torque nuts to 13 ft-lbs (18 Nm).

NOTE: The 5⁄16" carriage bolts will need to be fed upward through the C-channel of the I-beam mounting bracket.



Fig.4

7. Repeat steps 1-6 on the opposite side of the frame.

8. Align the tabs provided on the I-beam mounting bracket **(Fig.5A)** with the slotted holes on the spacer bracket **(Fig.5B)**. Fasten the I-beam mounting bracket to the spacer bracket with 5⁄16" carriage bolts **(Fig.5C)**. Secure the carriage bolts with 5⁄16" flange nuts. Torque nuts to 13 ft-lbs (17 Nm).

NOTE: The 5⁄16" carriage bolts **(Fig.5C)** will need to be fed downward through the square opening.

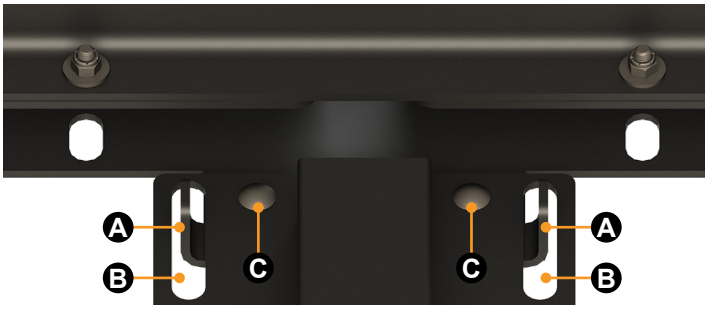


Fig.5

9. Repeat step 8 on the opposite side of the frame

10. Insert the center tube **(Fig.6A)** into one of the spacer brackets and slide until clear to insert into the spacer bracket on the opposite side. Make sure that the center hole or mark is facing downward on the center tube. Use the hole to center the tube between both ends of the I-beam mounting brackets.

NOTE: If there is no mark or hole for the center location on the center tube, measure and mark the location.

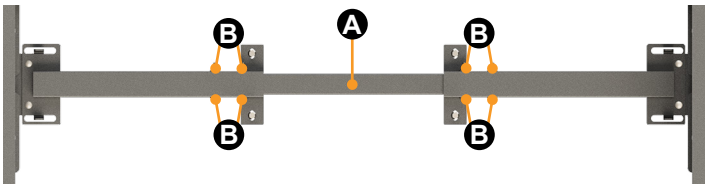


Fig.6

11. Use the eight pre-drilled holes **(Fig.6B)** on the spacer brackets to mark holes on the center tube.

12. Drill the eight marked holes on the center tube with a 3⁄8" drill bit.

NOTE: Remove the center tube from the spacer brackets before drilling, if desired.

13. Insert two 3⁄8" hex cap screw bolts **(Fig.7A)** with 3⁄8" flat washer **(Fig.7B)** through the spacer bracket **(Fig.7C)** and center tube **(Fig.7D)**. Secure bolts with 3⁄8" flat washers **(Fig.7B)** and 3⁄8" flange nuts **(Fig.7E)**. Torque nuts to 23 ft-lbs (31 Nm).

14. Do step 13 for the opposite side spacer bracket and center tube.

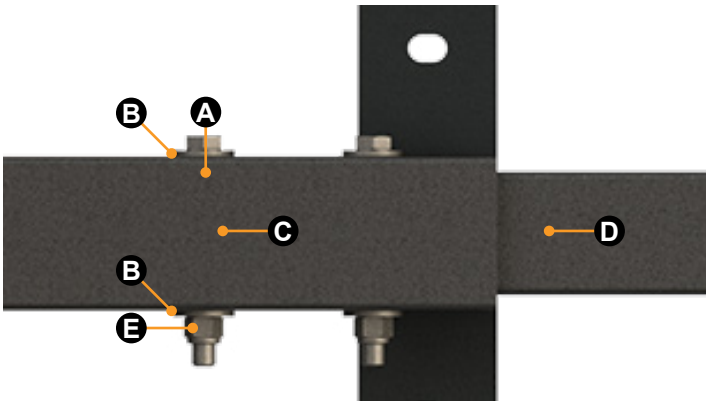


Fig.7

15. Align the C-Jack mounting holes with the holes on the I-beam mounting bracket across the frame roadside to curbside **(Fig.8)**.

NOTE: Use the optional aid of a hydraulic floor jack to assist in holding the C-Jack in place or manually open the C-Jack so that the footpad is touching the ground. See the "Troubleshooting" section "Manual Override" to fully extend the C-Jack.

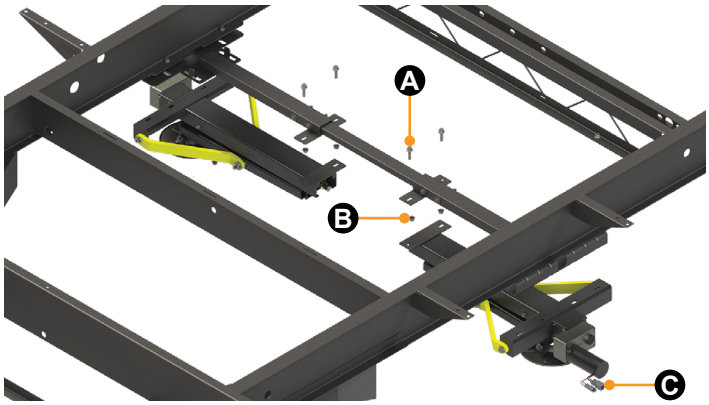


Fig.8

16. Insert six ⅜" flange bolts **(Fig.8A)** through each set of aligned I-beam mounting brackets, four at the I-beam end and two on the opposite end.

17. Secure the bolts with ⅜" flange nuts **(Fig.8B)**. Torque nuts to 23 ft-lbs (31 Nm).

18. Connect the 3-pin Deutsch Connector to the C-Jack motor wires **(Fig.8C)** and run the harnesses to the compartment where the controller will be mounted. See "Installing the Controller" section.

NOTE: Lippert recommends zip-tying the harnesses tight against the front jack motors to prevent damage to the harnesses.

Rear Mounting Bracket and 5K Short Jack Installation

1. Measure from the center of the rear axle hanger **(Fig.9A)** back 12" maximum distance on the frame and mark the location on the web of the I-beam **(Fig.9B)**.

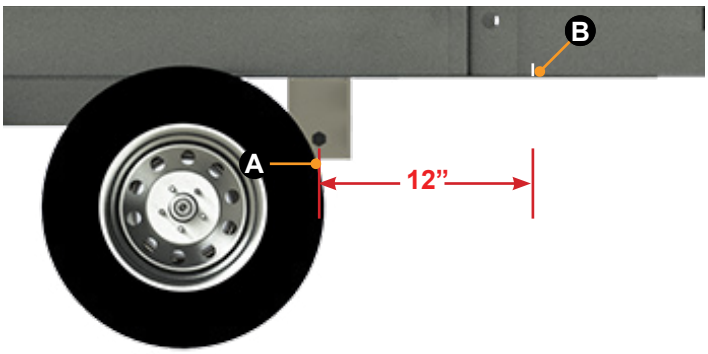


Fig.9

2. Measure the center location of the mounting bracket **(Fig.10A)**. Place the mounting bracket center aligned to the previously made 12" mark on the frame from step 1. The lip of the mounting bracket will rest on the I-beam flange **(Fig.10B)**.

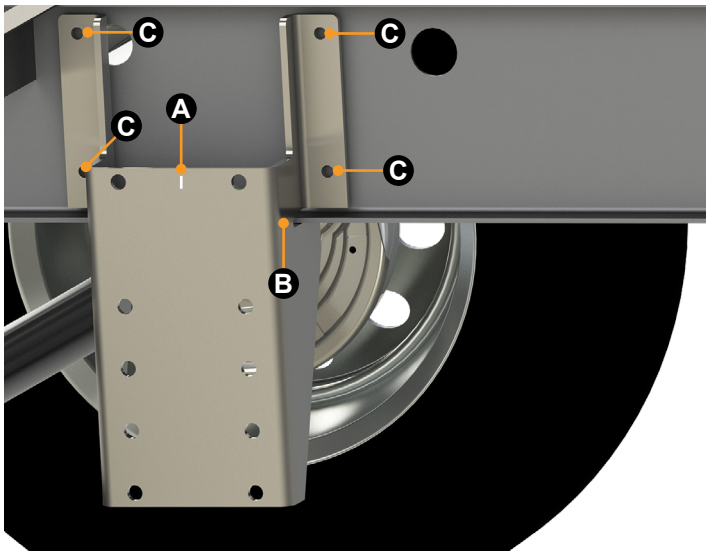


Fig.10

3. Clamp or hold the bracket in place.

4. Using a 7⁄16" drill bit, drill at the four pre-drilled hole locations **(Fig.10C)** above the lip of the bracket **(Fig.10B)** using the pre-drilled holes in the bracket as a template, through the web of the I-beam.

5. At the four hole locations, bolt the mounting bracket **(Fig.11A)** to the I-beam **(Fig.11B)** using ⅜" - 16 x 1 ½" bolts **(Fig.11C)**, ⅜" washers **(Fig.11D and Fig.12A)** on both sides of the I-beam and ⅜" - 16 nuts **(Fig.12B)**.

6. Torque bolts to 90 ft-lbs (122 Nm).

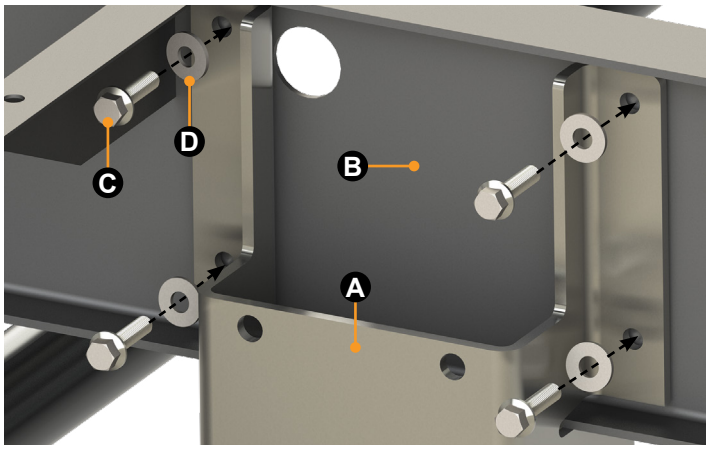


Fig.11

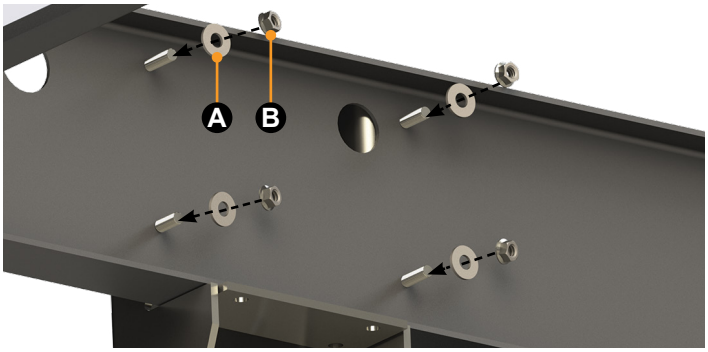


Fig.12

7. Underneath the flange of the I-beam frame, where the horizontal support of the mounting bracket is located, bolt the 5K jacks to the mounting brackets. Insert a ⅜" washer **(Fig.13B)** through a ⅜" - 16 x 1 ½" bolt **(Fig.13A)**, insert the bolt and washer through the mounting bracket. Attach another ⅜" washer **(Fig.13C)** and ⅜" - 16 nut **(Fig.13D)** on the back of the mounting bracket.

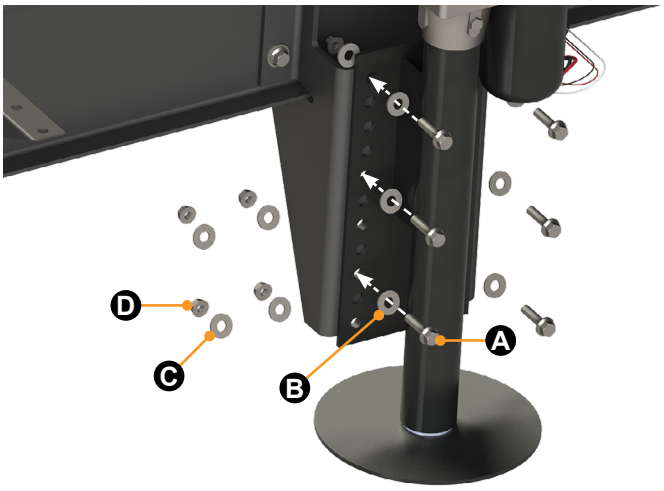


Fig.13

8. Distribute the fasteners evenly, three on each side of the bracket **(Fig.13)**.

9. Torque bolts to 90 ft-lbs (122 Nm).

10. Connect the wire harnesses to the jack motor wires and run the harnesses to the compartment where the controller will be mounted.

NOTE: Lippert recommends zip-tying the harness tight against the rear jack motors to prevent damage to the harness.

11. Repeat steps 1-10 for the opposite side of the frame.

Power Tongue Jack Installation

⚠WARNING

THE TRAILER MUST BE SUPPORTED PER MANUFACTURER RECOMMENDATIONS BEFORE WORKING UNDERNEATH. FAILURE TO DO SO MAY RESULT IN DEATH OR SERIOUS PERSONAL INJURY.

1. Remove the footpad from the Power Tongue Jack, if necessary.

A. Remove the hairpin cotter pin **(Fig.14D)** and clevis pin **(Fig.14B)** holding the footpad **(Fig.14C)** to the jack leg **(Fig.14A)**. Set the pins and the footpad aside.

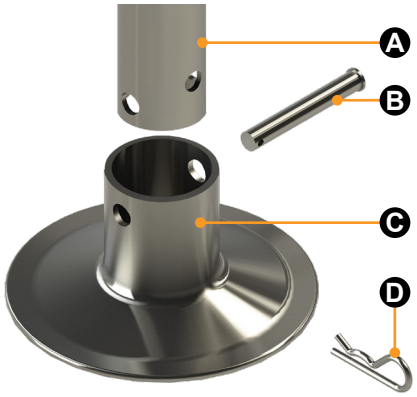


Fig.14

2. With trailer supported, remove the existing tongue jack.

3. Make sure the new Power Tongue Jack is facing the front of the trailer **(Fig.15A)**. Carefully slide the jack leg **(Fig.15B)** through the hole in the coupler **(Fig.15C)** on the trailer A-frame **(Fig.15D)**.

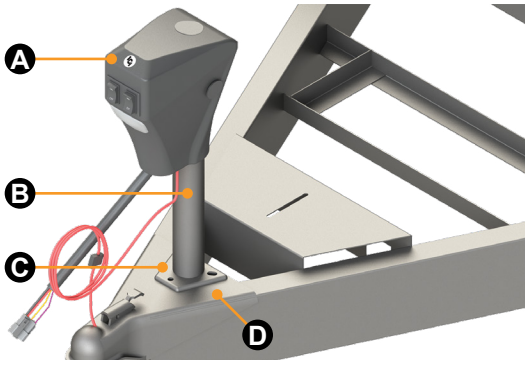


Fig.15

4. Align the three holes in the Power Tongue Jack mounting plate **(Fig.16A)** with the three holes in the coupler **(Fig.16B)**.

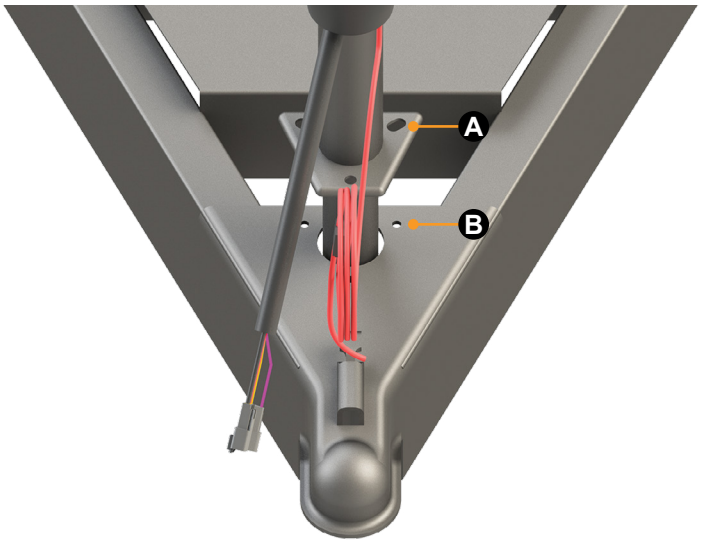


Fig.16

5. Secure the Power Tongue Jack to the coupler plate with the three previously used bolts **(Fig.17A)**.

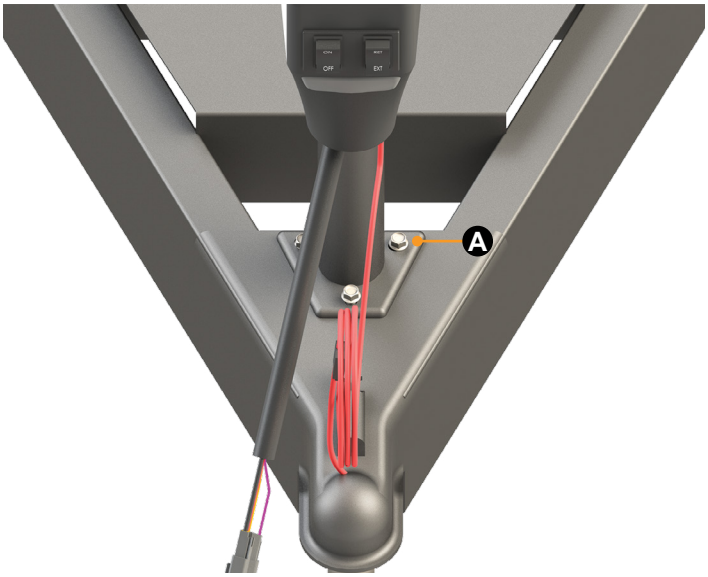


Fig.17

6. Connect the 2-pin Deutsch Connector to the Power Tongue Jack wires and run the harness to the compartment where the controller will be mounted. See "Installing the Controller" section.

7. Connect the power wire from the Power Tongue Jack to a grounded 12V power supply on the trailer.

8. The Power Tongue Jack must be wired through a 30 amp fused circuit, supplied on the jack.

9. Reattach the footpad to the jack leg by sliding the footpad back over the bottom of the jack leg. Secure footpad with the clevis pin **(Fig.14B)** and hairpin cotter pin **(Fig.14D)**, which were previously removed **(Fig.14)**.

Determining the Mounting Position and Installing Leveling Sensors

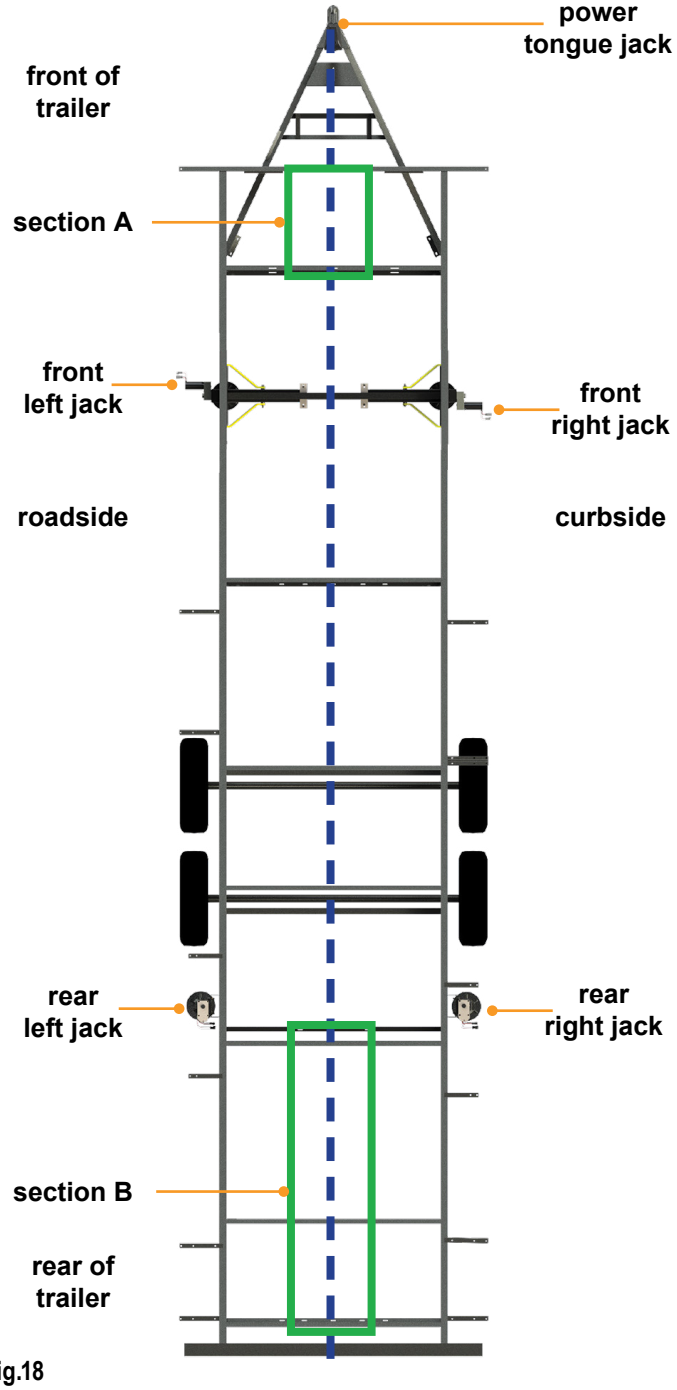


Fig.18

Installing Leveling Sensors

The leveling sensors have a limited mounting area for proper performance. The front sensor must be within 36" from the front of the frame as signified by section A in **(Fig.18)**. Make sure the front sensor is mounted in line or in front of the front leveling jacks. The rear sensor must be in line with or behind the rear leveling jacks, as signified by section B in **(Fig.18)**. Both the front sensor and the rear sensor must also be mounted in line with the center of the frame, as signified by the dotted blue line in **(Fig.18)**.

The Leveling Sensors **(Fig.19)** must be oriented on the crossmembers with the arrows on the top of the sensor pointing in the correct direction **(Fig.19)**. See **(Fig.18)**, sections A and B, for location clarification.

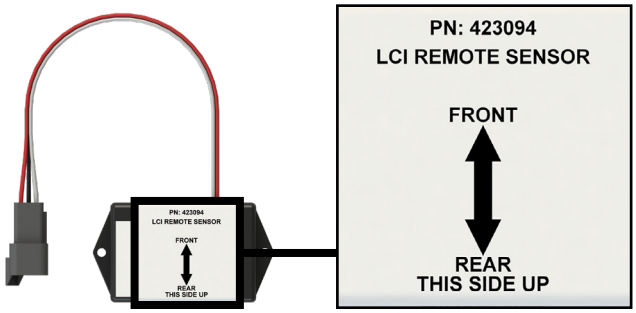


Fig.19

NOTE: The following process will be repeated for both sensor installations.

NOTE: If the frame is Ground Control Travel Trailer ready, it may be possible that the Leveling Sensor Mounting Plate may have already been pre-installed onto the frame.

1. Dry fit the mounting plate **(Fig.20C)** and the leveling sensor **(Fig.20B)** to the crossmember **(Fig.20A)**. The pre-drilled holes closest to the rounded edges are for mounting the sensor to the plate. Mark on the plate where the sensor will sit.

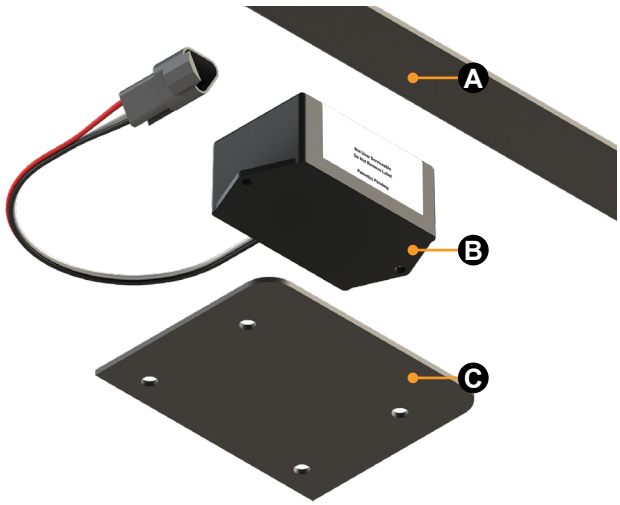


Fig.20

NOTE: Make sure there is a space between the sensor and crossmember so the wire harness is not pinched.

NOTE: The wire harness **MUST** be pointed toward the front of the trailer. Orientation is imperative for the correct operation of the leveling system.

2. Attach the sensor **(Fig.21A)** to the mounting plate **(Fig.21B)** using two #12 x 1" screws **(Fig.21C)**.

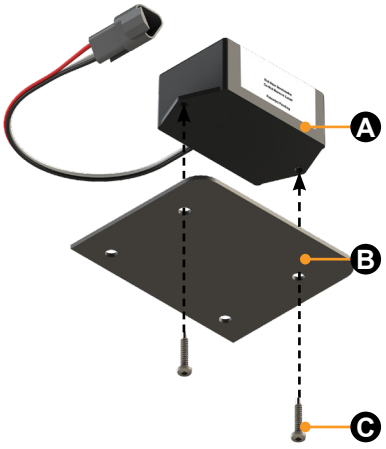


Fig.21

NOTE: To avoid cracking the mounting sensor housing, do not over-tighten the screws.

3. Attach the mounting plate and sensor assembly **(Fig.22B)** to the crossmember **(Fig.22A)** using two #12 x 1" screws **(Fig.22C)**. Make sure that the plate is centered side to side on the frame and that the sensor is oriented properly. See figure 18, sections A and B, for location clarification.

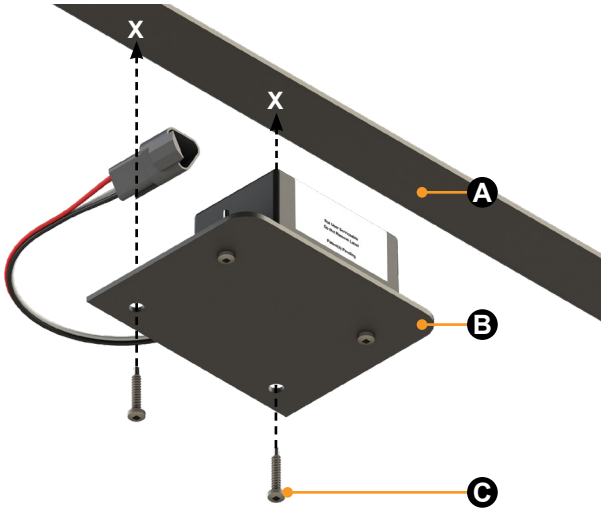


Fig.22

4. Connect the sensor harness to the 3-pin Deutsch Connector on the sensor **(Fig.23A)** and run the harness through the frame and up to the compartment where the controller will be mounted.

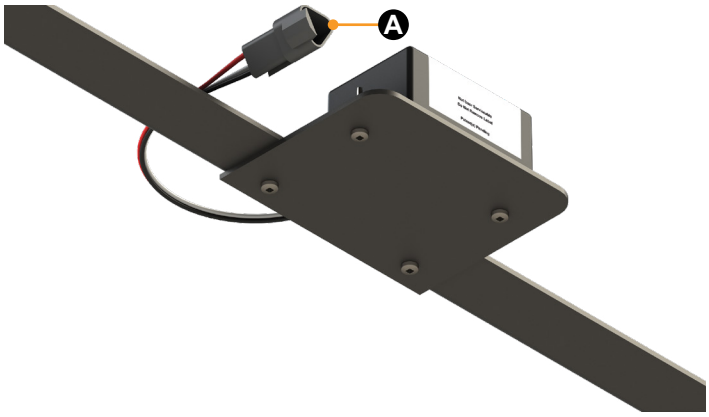


Fig.23

Ground Control® TT Leveling OneControl® Touch Panel (3K-5K)

Installation and Owner's Manual

(For Aftermarket Applications)

Controller Installation

NOTE: Prior to starting this portion of the installation, double check that all of the harnesses are properly and securely connected to the leveling jacks, Power Tongue Jack and leveling sensors.

NOTE: The compartment where the controller will be installed must be protected from the elements and the controller must be installed in compliance with RVIA Gas Codes, as the controller connections are not spark-proof.

1. Using four #8 x 1" wood screws **(Fig.24B)**, attach the controller **(Fig.24A)** to the compartment wall or ceiling.

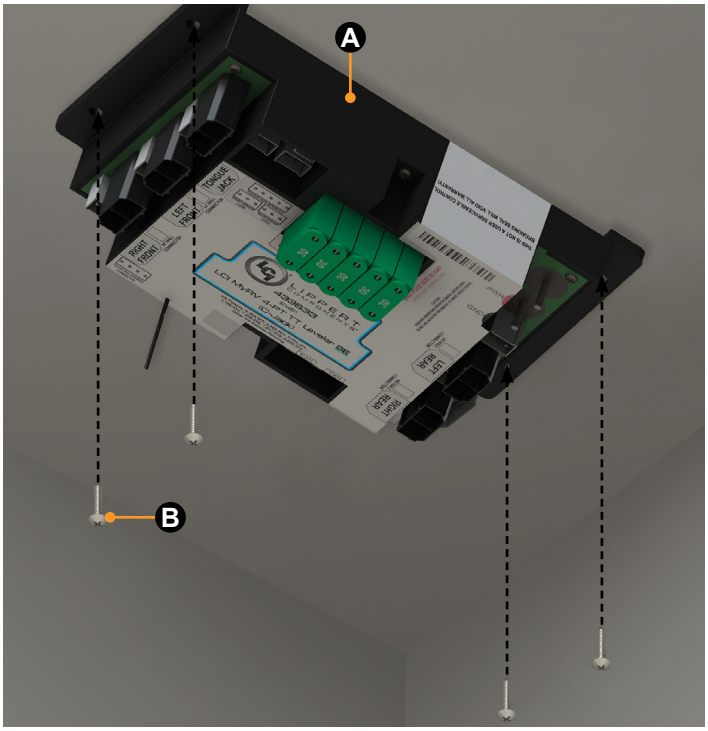


Fig.24

2. Attach the power and ground harnesses to the corresponding posts on the controller with the provided keps nuts and then connect the harnesses to the correct posts on the trailer battery.

3. Connect all jack harnesses to the appropriate connectors on the controller. Insert one terminating resister into the open CAN port on the controller. See the "Wiring Diagram" section.

OneControl Touch Panel/Pad Installation

OneControl Touch Panel

1. Determine where to mount the OneControl Touch Panel. The touch panel can be mounted anywhere inside the trailer or trailer compartment. The mounting location must be watertight. The typical location for the touch panel is near the entry door.

2. Dry fit mounting bracket where controller will be located.

3. Cut a hole in the wall of the compartment using the inside opening of the bracket as a guide. Use the bracket to trace where the cutout should be located. The top and bottom horizontal cuts should be parallel to the floor of the trailer or trailer compartment.

4. Secure the mounting bracket with the four provided ¼" Phillips pan head sheet metal screws **(Fig.25)**.

5. Feed the touch panel harness (signal to the touch panel) and canbus power connector (power to the touch panel) through the bracket and run to the compartment where the controller is mounted. Plug the harness and canbus power connector into the appropriate connectors on the controller. Insert one terminating resister at the back of the OneControl Touch Panel in the canbus port. See the "Wiring Diagram" section.

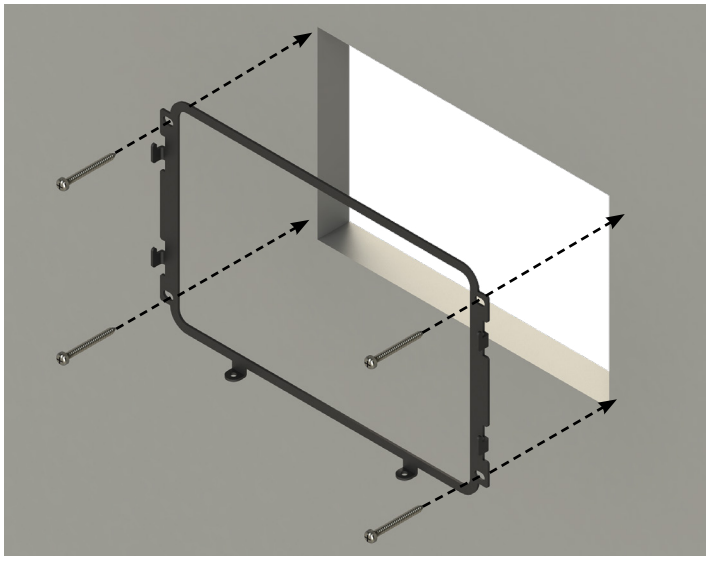


Fig.25

NOTE: It is recommended to wire the canbus power connector to the controller. The canbus power connector **MUST** be powered from a fused power source. Failure to provide circuit protection could cause damage to the system.

6. Insert touch panel into mounting bracket. Align the four slots on the back of the OneControl Touch Panel with the four tabs **(Fig.26A)** on the mounting bracket. Gently push the OneControl in and then slide down. The mounting bracket has two screw mounting tabs on the bottom **(Fig.26B)**. Secure the touch panel into the screw mounting tabs using the two provided Phillips pan head sheet metal screws.

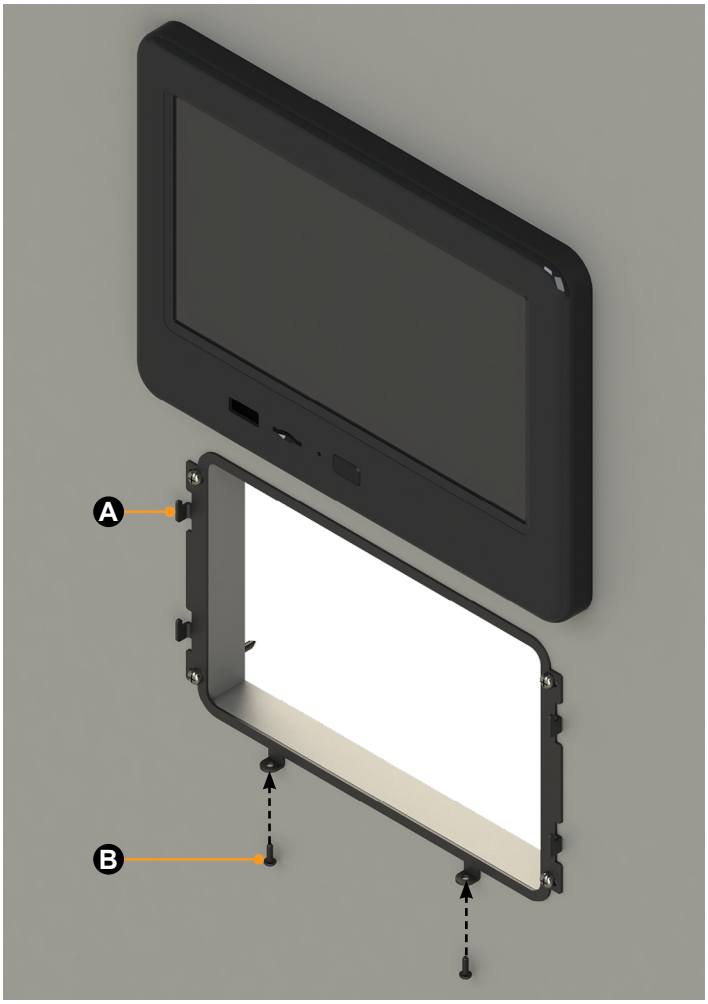


Fig.26

Auto Leveling Control Touch Pad

1. Determine where to mount the Auto Leveling Control Touch Pad. The touchpad should be mounted on the exterior of the trailer so the operator will have a view of the coupler during operation.

2. Cut a hole in the desired location 1 ¾" wide by 1 ¼" high and have a depth of ⅝" **(Fig.27)** so the top and bottom horizontal cuts are parallel to floor of the compartment or floor of the unit.

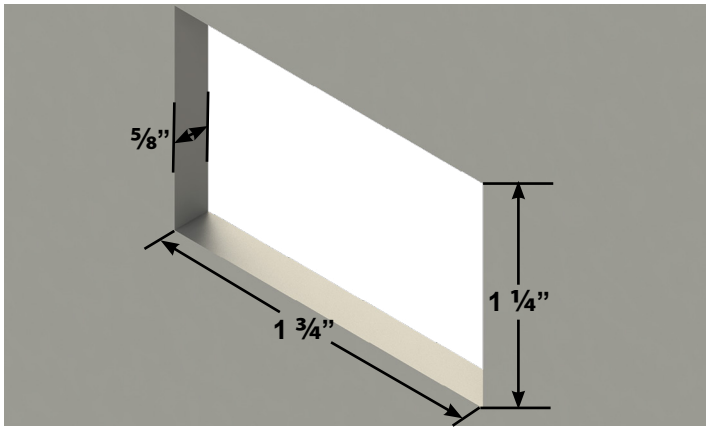


Fig.27

3. Plug the touchpad harness into the connector on the back of the touchpad to ensure that the product is functional before mounting.

4. Feed the touchpad harness through this hole and run it to the compartment where the controller is mounted **(Fig.25)**. Plug the harness into the appropriate connector on the controller.

5. Attach the touchpad with four #8 x 1" wood screws **(Fig.28A)**.

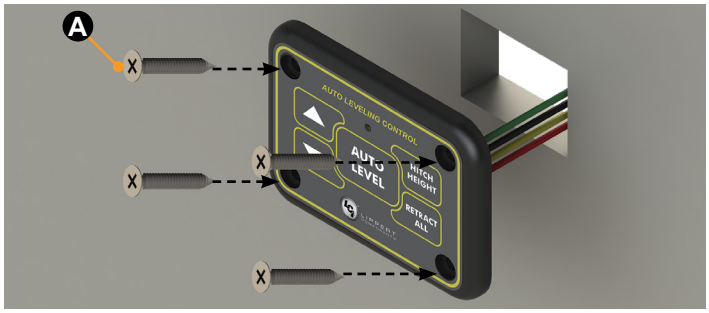


Fig.28

Power Tongue Jack Operation

NOTE: The ON and OFF switch **(Fig.29A)** controls the Power Tongue Jack's light only. If left on for an extended period of time, the light will drain the trailer's battery.



Fig.29

NOTE: The Power Tongue Jack is designed for vertical movement of the trailer only.

Connecting to Tow Vehicle

1. Chock the tires of the trailer.

2. Press EXT **(Fig.29C)** if needed to allow the coupler to clear the hitch ball.

3. Push RET **(Fig.29B)** to retract the Power Tongue Jack until the coupler properly mounts the hitch ball.

4. Latch the tow vehicle hitch and connect any wires, chains or sway control that may be equipped between the tow vehicle and trailer.

5. Press RET two times and hold on the 3rd time approximately five seconds until the Power Tongue Jack stops. Release the switch and the Power Tongue Jack will automatically retract.

NOTE: Make sure the leg of the Power Tongue Jack **(Fig.30A)** is fully retracted prior to moving the tow vehicle.

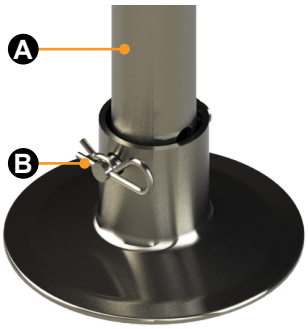


Fig.30

Unhitching from Tow Vehicle

1. Prior to unhitching from the tow vehicle, make sure the trailer is parked on a level surface and chock the tires of the trailer.

2. Make sure the footpad of the Power Tongue Jack is pinned securely in place with the clevis pin and hairpin cotter pin **(Fig.30B)**.

3. Disconnect any wires, chains, or sway control that may be equipped between the tow vehicle and the trailer.

4. Push EXT **(Fig.29C)** two times holding on the 3rd time approximately five seconds, then release the switch and the Power Tongue Jack will automatically extend to the ground.

5. Push EXT until the coupler clears the hitch ball.

6. Disconnect the trailer wire connection at the tow vehicle, if not previously completed.

7. Move the tow vehicle away from the trailer.

8. Push RET **(Fig.29B)** as needed to return the front of the trailer to level or use the Auto Level function to level the trailer. See "Auto Leveling Control Touch Pad Operation" and "OneControl Touch Panel Operation" sections.

Auto Leveling Control Touch Pad Diagram

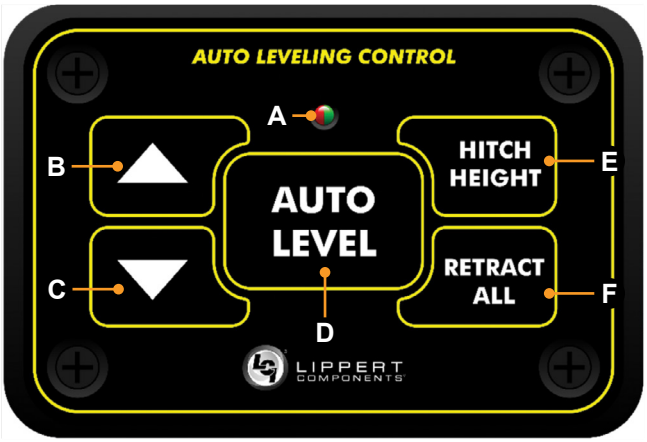


Fig.31

Callout	Description	
A	Red/Green LED - Indicates the status of the system.	
B	Up Arrow - Extends the Power Tongue Jack.	To turn on the touchpad, press the Up and Down Arrow buttons at the same time
C	Down Arrow - Retracts Power Tongue Jack.	
D	Auto Level Button - Places leveling system into auto level mode.	
E	Hitch Height Button - Initiates the Hitch Recognition feature.	
F	Retract All Button - Places leveling system into full retract mode. Power Tongue Jack does not retract.	

Auto Leveling Control Touch Pad Operation

Basic Power Tongue Jack Operation

1. To turn on the touchpad, press both Up and Down Arrow buttons **(Fig.31B and C)** at the same time. The green indicator LED **(Fig.31A)** will turn on.

NOTE: The touchpad will remain on as long as the user is pressing buttons. It will time out after approximately five minutes without use.

2. Press the Up Arrow button **(Fig.31B)** to extend the Power Tongue Jack.

3. Press the Down Arrow button **(Fig.31C)** to retract the Power Tongue Jack.

Unhitching from the Tow Vehicle

1. Prior to unhitching from the tow vehicle, make sure the trailer is parked on a level surface and chock the tires of the trailer.

2. Make sure the footpad of the Power Tongue Jack is pinned securely in place with the clevis pin and hairpin cotter pin.

3. Disconnect any wires, chains, or sway control that may be equipped between the tow vehicle and the trailer. Unlatch the trailer coupler.

4. Turn on the Auto Leveling Control Touch Pad.

5. Press the Up Arrow button **(Fig.31B)** on the Auto Leveling Control Touch Pad to extend the Power Tongue Jack and lift the front of trailer to take the weight of the trailer off of the hitch.

6. Pull tow vehicle away and park at a safe distance.

NOTE: To utilize the Power Tongue Jack for the unhitching process, see "Power Tongue Jack Operation" section.

Auto Level

1. Prior to auto leveling, make sure the trailer is unhitched from the tow vehicle and the tow vehicle is parked a safe distance away from the trailer.

2. Press both Up and Down Arrow buttons **(Fig.31B and C)** at the same time if the green indicator LED is not on.

3. Press AUTO LEVEL button **(Fig.31D)**.

NOTE: Once the automatic leveling cycle has been started, it is important that there is no movement in the trailer until the trailer has completed the leveling process. Failure to remain still during the leveling cycle could have a detrimental affect on the performance of the leveling system.

NOTE: Pressing any button during an auto leveling sequence will abort the auto leveling cycle.

NOTE: Sequence may vary slightly based on the height of the trailer coupler prior to leveling.

4. When the auto leveling sequence begins:

A. The system checks that the rear jacks are retracted.

B. The Power Tongue Jack may adjust depending on the orientation of the trailer.

C. Front jacks will extend until movement of the trailer is sensed.

D. The Power Tongue Jack will then retract.

E. The front jacks will extend/retract near level.

F. Rear jacks will extend and ground. The trailer will level front-to-back, then side-to-side.

G. The auto leveling sequence will ground all jacks to make sure all footpads are on the ground.

H. The auto leveling sequence is complete when the indicator light turns solid green.

NOTE: If the auto leveling sequence does not perform as described above, locate the OneControl Touch Panel or use the OneControl App to place the system in Manual Mode. Test that the jacks operate correctly by pushing their corresponding buttons on the OneControl Touch Panel or App; e.g., FRONT button operates only the front jacks, etc. See "OneControl Touch Panel Operation" or "OneControl App Operation" section.

Hitch Recognition

1. To turn on the Auto Leveling Control Touch Pad, press both Up and Down Arrow buttons **(Fig.31B and C)** at the same time. The green indicator LED **(Fig.31A)** will turn on.

2. Press HITCH HEIGHT button **(Fig.31E)**.

A. Rear jacks will retract.

B. The Power Tongue Jack will extend to the ground.

C. The front leveling jacks will retract.

D. The tongue jack will then adjust the height of the front of the trailer coupler to the point at which the AUTO LEVEL button was most recently pressed.

3. Back the tow vehicle into position to align the tow vehicle hitch and trailer coupler with each other.

4. Press and hold the Down Arrow button to retract the tongue jack until the coupler sets into position on top of the tow vehicle hitch.

5. Latch the tow vehicle hitch and connect any wires, chains or sway control that may be equipped between the tow vehicle and trailer.

6. Press and hold the Down Arrow button until the Power Tongue Jack is fully retracted.

NOTE: To utilize the Power Tongue Jack for the hitching process, see "Power Tongue Jack Operation" section.

OneControl Touch Panel Diagram

jack buttons in manual mode, see figure 35

leveling in standard mode

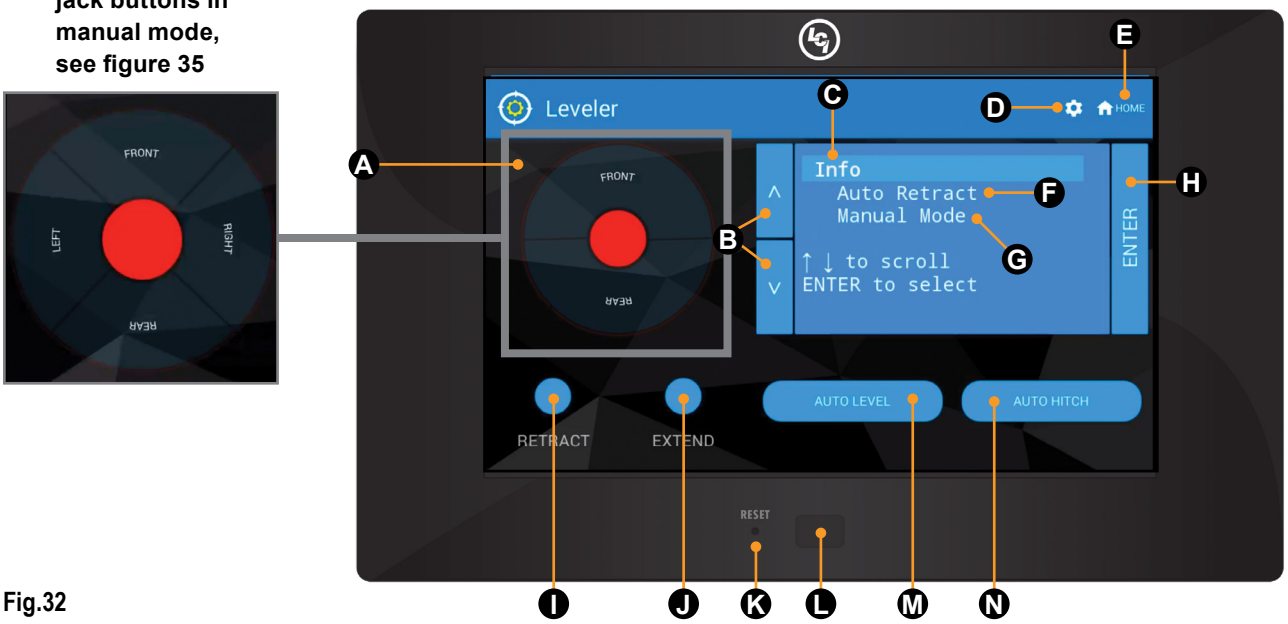


Fig.32

Callout	Description
A	Jack Buttons - Select FRONT, REAR, RIGHT and LEFT jacks to be operated depending on mode. Jacks available to be operated will be highlighted in blue. Only the Power Tongue Jack can be operated in Standard Mode **(Fig.32)**. In Manual Mode **(Fig.32)**, all leveling jacks are available to be operated (No Power Tongue Jack operation available).
B	Up and Down Arrows - Scrolls through options on screen.
C	Info - Displays system information, e.g. angle, jack stroke or software version.
D	Options Icon - Press to program zero point/wireless configurations.
E	Home Icon - Returns screen to home page.
F	Auto Retract - Enters Auto Retract mode to retract all jacks. Power Tongue Jack does not retract.
G	Manual Mode - Enters Manual Mode to manually operate jacks.
H	ENTER - Push to select various modes.
I	RETRACT - Retracts jacks in several modes. Jacks available will have a red stroke on button.
J	EXTEND - Extends jacks in several modes. Jacks available will have a red stroke on button.
K	RESET - Resets to factory default.
L	Power Button - Turns touch panel on and off.
M	AUTO LEVEL - Starts the auto leveling sequence.
N	AUTO HITCH - Returns trailer to previous hitch height for reconnecting to tow vehicle.

OneControl Touch Panel Operation

⚠ WARNING

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

⚠ CAUTION

PEOPLE AND PETS SHOULD BE CLEAR OF THE TRAILER WHILE THE LEVELING SYSTEM IS OPERATED. 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.

OneControl Touch Panel Basic Jack Operation in Standard Mode

To reach Standard Mode **(Fig.32)** for leveling:

1. Power on the OneControl Touch Panel **(Fig.32L)**. The touch screen will open up to the OneControl logo **(Fig.33)** and then the access screen to various functions, including leveling, choose the Leveling icon **(Fig.34A)**.



Fig.33



Fig.34

2. The screen will show the system menu **(Fig.32)** for Standard Mode. The Power Tongue Jack can be extended/retracted in Standard Mode. Front and rear jacks cannot be operated in standard mode.

OneControl Touch Panel Basic Jack Operation in Manual Mode

To reach Manual Mode for leveling:

1. While in Standard Mode **(Fig.32)**, use the arrows **(Fig.32B)** to scroll to Manual Mode **(Fig.32G)**. Press ENTER button **(Fig.32H)**.

2. Front and rear jacks can be operated in Manual Mode. The Power Tongue Jack cannot be operated in Manual Mode **(Fig.35)**.

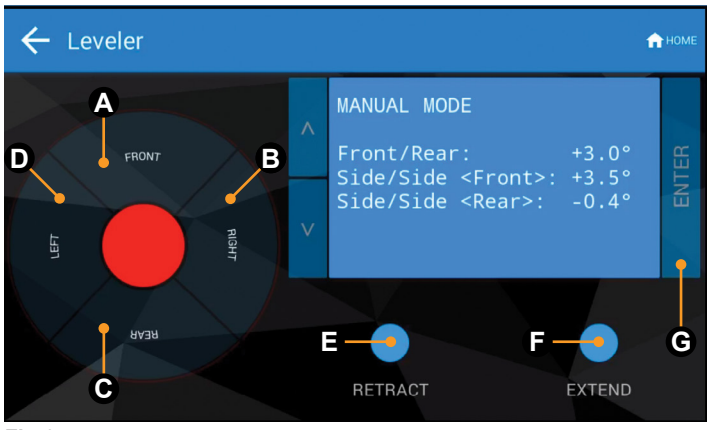


Fig.35

OneControl Touch Panel Standard Mode Features

1. Press EXTEND **(Fig.32I)** or RETRACT button **(Fig.32H)** and FRONT button **(Fig.32A)** to extend or retract the Power Tongue Jack.

2. Press the AUTO LEVEL button **(Fig.32M)** to start the auto leveling sequence.

3. Press the AUTO HITCH button **(Fig.32N)** to start the hitch recognition sequence when reconnecting to the tow vehicle.

4. Use the Up or Down Arrow buttons **(Fig.32B)** to cycle through the menu screen options:

A. Info: Scroll to "Info" **(Fig.32C)** and press ENTER button **(Fig.32G)** to display system information, e.g., angle, jack stroke or software version.

B. Auto Retract: Scroll to "Auto Retract" **(Fig.32F)** and press ENTER button to start the auto retract sequence, which will retract all jacks. The Power Tongue Jack does not retract.

C. Manual Mode: Scroll to "Manual Mode" **(Fig.32G)** and press ENTER button to start the manual leveling operation.

OneControl Touch Panel Manual Mode Features

The jacks operate in pairs. While in manual mode, the jacks operate individually, the Twist Protection Prevention System has been activated to prevent frame twist. The OneControl Touch Panel or OneControl App will display "Relieving frame twist." The jacks will resume operating in pairs when potential frame twist has been relieved.

1. Press EXTEND **(Fig.35F)** or RETRACT **(Fig.35E)** button and FRONT button **(Fig.35A)** to operate front jacks.

2. Press EXTEND or RETRACT button and REAR button **(Fig.35C)** to operate rear jacks.

3. Press EXTEND or RETRACT button and RIGHT button **(Fig.35B)** to operate right jacks.

4. Press EXTEND or RETRACT button and LEFT button **(Fig.35D)** to operate left jacks.

NOTE: To operate jacks individually, press EXTEND or RETRACT button, then press the LEFT **(Fig.35D)** or RIGHT button **(Fig.35B)** while simultaneously pressing the FRONT **(Fig.35A)** or REAR button **(Fig.35C)**, depending on which jack needs to be operated.

OneControl Touch Panel Unhitching from Tow Vehicle

1. Prior to unhitching from the tow vehicle, make sure the trailer is parked on a level surface and chock the tires of the trailer.

2. Make sure the footpad of the Power Tongue Jack is pinned securely in place with the clevis pin and hairpin cotter pin.

3. Disconnect any wires, chains or sway control that may be equipped between the tow vehicle and the trailer. Unlatch the trailer coupler.

4. Press EXTEND **(Fig.32J)** and FRONT button **(Fig.32A)** on the OneControl Touch Panel in Standard Mode to extend the Power Tongue Jack until the footpad touches the ground and the coupler clears the hitch ball.

NOTE: If using the OneControl Touch Panel and the hitch is not visible, a second person will be needed to monitor the operation of the unhitching process.

5. Pull tow vehicle away and park at a safe distance.

NOTE: To utilize the Power Tongue Jack for the unhitching process see "Power Tongue Jack Operation" section.

OneControl Touch Panel Auto Leveling

1. Prior to auto leveling, make sure the trailer is unhitched from the tow vehicle and the tow vehicle is parked a safe distance away from the trailer.

2. Press the Power button **(Fig.32L)** if the OneControl Touch Panel is not on.

3. Press the "Leveling" icon **(Fig.34A)**.

4. Press AUTO LEVEL **(Fig.32M)**.

NOTE: Once the automatic leveling cycle has been started, it is important that there is no movement in the trailer until the leveling process is complete. Failure to remain still during the leveling cycle could have a detrimental affect on the performance of the leveling system.

NOTE: Sequence may vary slightly based on the height of the trailer coupler prior to leveling.

5. When the auto leveling sequence begins:

A. The system checks that the rear jacks are retracted.

B. The Power Tongue Jack may adjust depending on the orientation of the trailer.

C. Front jacks will extend until trailer movement is sensed.

D. The Power Tongue Jack will then retract.

E. The front jacks will extend/retract near level.

F. Rear jacks will extend and ground.

G. Trailer will level front-to-back and then side-to-side.

H. The auto leveling sequence will ground all jacks to ensure all footpads are on the ground.

I. The auto leveling sequence is complete when the OneControl Touch Panel indicates "Auto Level Success."

NOTE: If the auto leveling sequence does not perform as described above, locate the OneControl Touch Panel or use the OneControl App to place the system in Manual Mode. Test that the jacks operate correctly by pushing their corresponding buttons on the OneControl Touch Panel or App; e.g., FRONT button operates only the front jacks, etc. See "OneControl Touch Panel Operation" or "OneControl App Operation" section.

OneControl Touch Panel Hitch Recognition

1. Press the Power button to turn the OneControl Touch Panel on **(Fig.32L)**.

2. Press the Leveling icon **(Fig.34A)**.

3. Press AUTO HITCH button **(Fig.32N)**.

A. Rear jacks will retract.

B. The Power Tongue Jack will extend to the ground.

C. Front leveling jacks will retract.

D. The tongue jack will then adjust the height of the front of the trailer coupler to the point at which the AUTO LEVEL button was most recently pressed.

4. Back the tow vehicle into position to align the tow vehicle hitch and trailer coupler with each other.

NOTE: If using the OneControl Touch Panel and the hitch is not visible, a second person will be needed to monitor the operation of the hitching process.

5. Press RETRACT button, then press the FRONT button to retract the tongue jack until the coupler sets into position on top of the tow vehicle hitch.

6. Latch the tow vehicle hitch and connect any wires, chains or sway control that may be equipped between the tow vehicle and trailer.

7. Press the RETRACT button and then press and hold the FRONT button until the Power Tongue Jack fully retracts.

NOTE: To utilize the Power Tongue Jack for the hitching process, see "Power Tongue Jack Operation" section.

OneControl App Touch Panel Diagram

NOTE: The OneControl Leveling App is available on iTunes® for iPhone® and iPad® and also on Google Play™ for Android™ users.

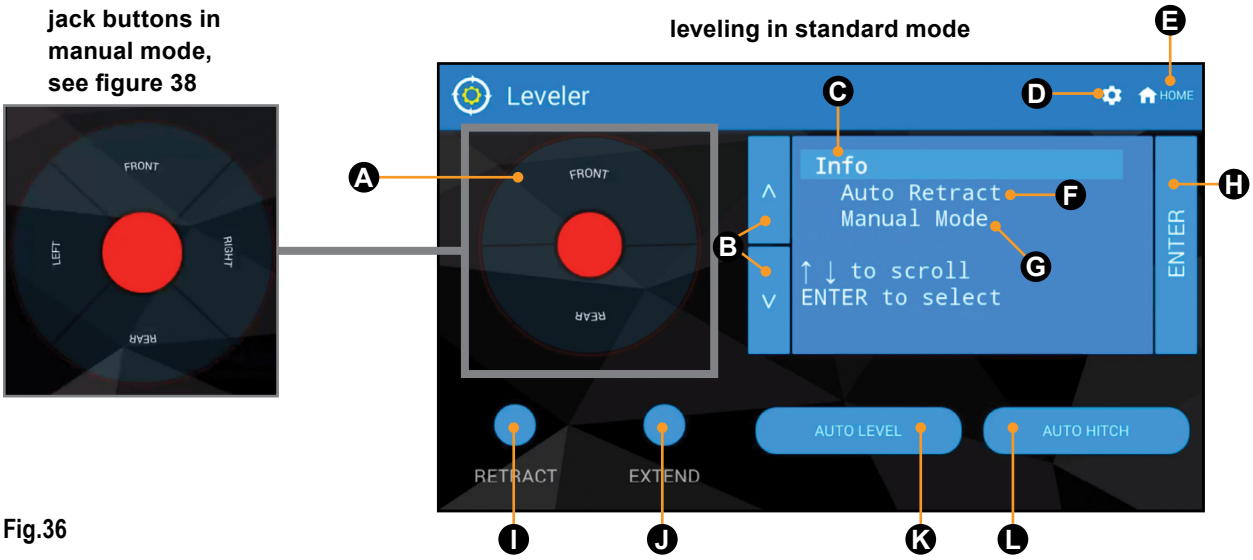


Fig.36

Callout	Description
A	Jack Buttons - Select FRONT, REAR, RIGHT and LEFT jacks to be operated depending on mode. Jacks available to be operated will be highlighted in blue. Only the Power Tongue Jack can be operated in Standard Mode **(Fig.36)**. In Manual Mode **(Fig.36)**, all leveling jacks are available to be operated. (No Power Tongue Jack operation available.)
B	Up and Down Arrows - Scrolls through options on screen.
C	Info - Displays system information, e.g. angle, jack stroke or software version.
D	Options Icon - Press to program zero point/wireless configurations.
E	Home Icon - Returns screen to home page.
F	Auto Retract - Enters Auto Retract mode to retract all jacks. Power Tongue Jack does not retract.
G	Manual Mode - Enters Manual Mode to manually operate jacks.
H	ENTER - Push to select various modes.
I	RETRACT - Retracts jacks in several modes. Jacks available will have a red stroke on button.
J	EXTEND - Extends jacks in several modes. Jacks available will have a red stroke on button.
K	AUTO LEVEL - Starts the auto leveling sequence.
L	AUTO HITCH - Returns trailer to previous hitch height for reconnecting to tow vehicle.

OneControl App Operation

NOTE: The OneControl App will only function if the trailer is equipped with the myRV Wi-Fi hub **(Fig.37)**. To wire the OneControl and the controller into the existing circuit:

1. Disconnect an existing canbus cable from any myRV component.

2. Connect the canbus cable to either the OneControl Touch Panel or controller.

3. Connect the provided canbus cable to the remaining component (OneControl or controller).

4. Run a canbus cable back to the existing component from which the circuit was originally disconnected.

NOTE: If the use of the OneControl App is desired and the trailer is not equipped with myRV, call Lippert to order additional parts and instructions.

Accessing the OneControl App

1. Make sure there is power to the trailer's wireless network.

2. Navigate to the device's (smart phone, tablet, etc.) Wi-Fi settings. Turn wireless feature on and connect to the myRV wireless network.

NOTE: If this is the first time connecting to the myRV wireless network, a password will be required. The password is located on the trailer's Wi-Fi hub **(Fig.37)**.

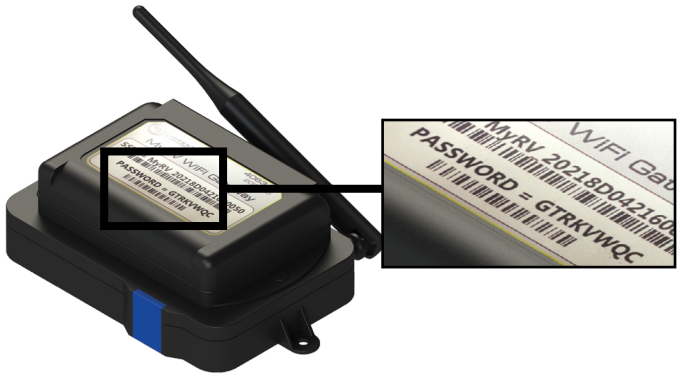


Fig.37

3. Open OneControl application on the compatible device.

NOTE: If the device states "Unresolved Network Connection," retry connecting to the myRV wireless network and/or wait for the connection to resolve and display "Connected" under the myRV wireless connection.

4. The application will request the user "Agree" to an end user license agreement, create a PIN and "Re-enter PIN to confirm."

5. On "Initial Setup" choose myRV button **(Fig.38A)**.

6. The OneControl app will now display all functions.

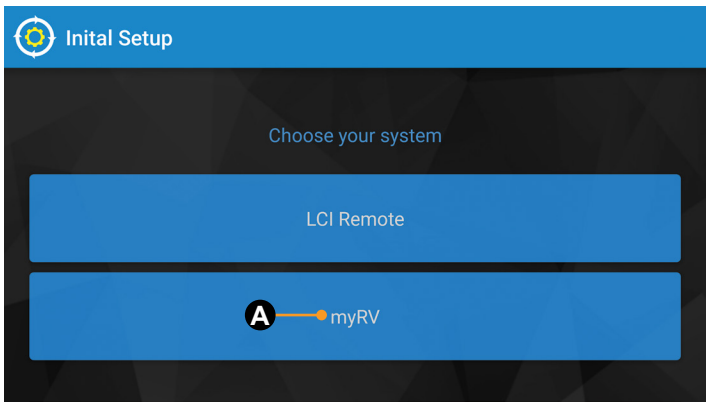


Fig.38

⚠ WARNING

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

⚠ CAUTION

PEOPLE AND PETS SHOULD BE CLEAR OF THE TRAILER WHILE THE LEVELING SYSTEM IS OPERATED. 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.

OneControl App Basic Jack Operation in Standard Mode

To reach Standard Mode **(Fig.36)** for leveling:

1. Power on the OneControl Touch Panel App.

2. Press the "Leveling" icon **(Fig.39A)**.

3. The screen will show the system menu **(Fig.36)** for Standard Mode. The Power Tongue Jack can be extended/retracted in Standard Mode. Front and rear jacks cannot be operated in Standard Mode.

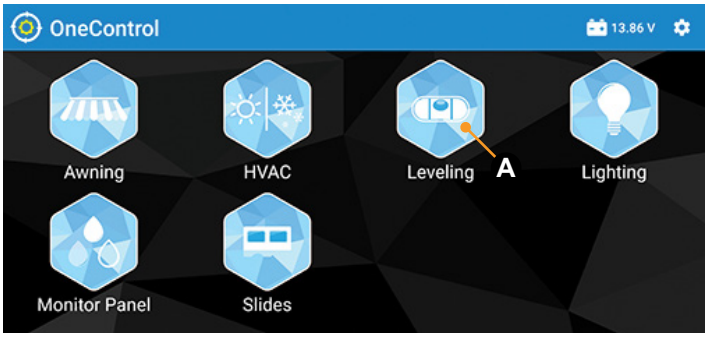


Fig.39

OneControl App Basic Jack Operation in Manual Mode

To reach Manual Mode **(Fig.40)** for leveling:

1. While in Standard Mode **(Fig.36)**, use the arrows **(Fig.36B)** to scroll to Manual Mode **(Fig.36G)**. Press ENTER button **(Fig.36H)**.

2. Front and rear jacks can be operated in Manual Mode. Power Tongue Jack cannot be operated in Manual Mode.

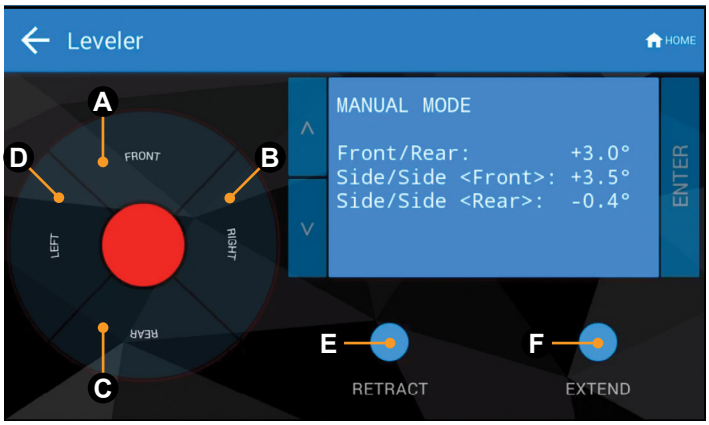


Fig.40

OneControl App in Standard Mode Features

1. Press EXTEND **(Fig.36J)** or RETRACT **(Fig.36I)** buttons and FRONT button **(Fig.36A)** to extend or retract the Power Tongue Jack.

2. Press the AUTO LEVEL button **(Fig.36K)** to start the auto leveling sequence.

3. Press the AUTO HITCH button **(Fig.36L)** to start the hitch recognition sequence when reconnecting to the tow vehicle.

4. Use the Up or Down Arrow buttons **(Fig.36B)** to cycle through the menu screen options:

A. Info: Scroll to "Info" **(Fig.36C)** and press ENTER button **(Fig.36G)** to display system information, e.g., angle, jack stroke or software version.

B. Auto Retract: Scroll to "Auto Retract" **(Fig.36E)** and press ENTER button to start the auto retracting sequence, which will retract all jacks. The Power Tongue Jack does not retract.

C. Manual Mode: Scroll to "Manual Mode" **(Fig.36F)** and press ENTER button to start manual leveling operation.

OneControl App in Manual Mode Features

1. Press EXTEND **(Fig.40F)** or RETRACT **(Fig.40E)** button and FRONT button **(Fig.40A)** to operate front jacks.

2. Press EXTEND or RETRACT button and RIGHT button **(Fig.40B)** to operate right jacks.

3. Press EXTEND or RETRACT button and REAR button **(Fig.40C)** to operate rear jacks.

4. Press EXTEND or RETRACT button and LEFT button **(Fig.40D)** to operate left jacks.

NOTE: To operate jacks individually, press the EXTEND or RETRACT button, then press the LEFT **(Fig.40D)** or RIGHT button **(Fig.40B)** while simultaneously pressing the FRONT **(Fig.40A)** or REAR button **(Fig.40C)**, depending on which jack needs to be operated.

OneControl App Unhitching from the Tow Vehicle

The jacks operate in pairs. While in manual mode the jacks operate individually, the Twist Protection Prevention System has been activated to prevent frame twist. The OneControl Touch Panel or OneControl App will display "Relieving frame twist." The jacks will resume operation in pairs when potential frame twist has been relieved.

1. Prior to unhitching from the tow vehicle, make sure the trailer is parked on a level surface and chock the tires of the trailer.

2. Make sure the footpad of the Power Tongue Jack is pinned securely in place with the clevis pin and hairpin cotter pin.

3. Disconnect any wires, chains, or sway control that may be equipped between the tow vehicle and the trailer. Unlatch the trailer coupler.

4. Press the EXTEND **(Fig.33I)** and FRONT **(Fig.33A)** buttons on the OneControl Touch Panel App in Standard Mode to extend the Power Tongue Jack until the footpad touches the ground and the coupler clears the hitch ball.

5. Pull tow vehicle away and park at a safe distance.

NOTE: To utilize the Power Tongue Jack for the unhitching process, see "Power Tongue Jack Operation" section.

OneControl App Auto Leveling

1. Prior to auto leveling, make sure the trailer is unhitched from the tow vehicle and the tow vehicle is parked a safe distance away from the trailer.

2. Power on the OneControl Touch Panel App.

3. Press the Leveling icon **(Fig.39A)**.

4. Press AUTO LEVEL button **(Fig.36K)**.

NOTE: Once the automatic leveling cycle has been started, it is important that there is no movement in the trailer until the leveling process is complete. Failure to remain still during the leveling cycle could have a detrimental affect on the performance of the leveling system.

NOTE: Sequence may vary slightly based on the height of the trailer coupler prior to leveling.

5. When the Auto Level Sequence begins:

A. The system checks that the rear jacks are retracted.

B. The Power Tongue Jack may adjust depending on the orientation of the trailer.

C. Front jacks will extend until movement of the trailer is sensed.

D. The Power Tongue Jack will then retract.

E. The front jacks will extend/retract near level.

F. Rear jacks will extend and ground.

G. Trailer will level front-to-back and then side-to-side.

H. The auto leveling sequence will ground all jacks to ensure all footpads are on the ground.

I. The auto leveling sequence is complete when the OneControl App indicates, "Auto Level Success."

NOTE: If the AUTO LEVEL sequence does not perform as described above, locate the OneControl Touch Panel or use the OneControl App to place the system in Manual Mode. Test that the jacks operate correctly by pushing their corresponding buttons on the OneControl Touch Panel or App; e.g., FRONT button operates only the front jacks, etc. See "OneControl Touch Panel Operation" or "OneControl App Operation section."

OneControl App Hitch Recognition

1. Power on the OneControl Touch Panel App.

2. Press the Leveling icon **(Fig.39A)**.

3. Press AUTO HITCH **(Fig.36L)**.

A. Rear jacks will retract.

B. The Power Tongue Jack will extend to the ground.

C. Front leveling jacks will retract.

D. The tongue jack will then adjust the height of the front of the trailer coupler to the point at which the AUTO LEVEL button was most recently pressed.

4. Back the tow vehicle into position to align the tow vehicle hitch and trailer coupler with each other.

5. Press RETRACT button, then press the FRONT button to retract the tongue jack until the coupler sets into position on top of the tow vehicle hitch.

6. Latch the tow vehicle hitch and connect any wires, chains or sway control that may be equipped between the tow vehicle and trailer.

7. Press the RETRACT button and then press and hold the FRONT button until the Power Tongue Jack fully retracts.

NOTE: To utilize the Power Tongue Jack for the hitching process, see the "Power Tongue Jack Operation" section.

Auto Leveling Control Touch Pad Troubleshooting

Red/Green LED Indicator

What is happening?	Why?
Off	Touch panel is locked.
Solid Green	Touch panel is active.
Blinking Green	Jacks are moving.
Solid Red	Low battery.
Blinking Red	Error - Refer to OneControl Touch Panel screen or the Leveling App for the specific error, then consult the "Troubleshooting" section to clear the error.

Error Display in OneControl Touch Panel or OneControl App

Errors can only be cleared via the OneControl Touch Panel or OneControl Leveling App. The only exception is when the Auto Leveling Control Touch Pad **(Fig.31)** was used to abort an auto-sequence. In this case the error can be cleared by pressing any AUTO LEVELING CONTROL button. To clear an error, correct the issue, then press OK. If the error is still present, the message will be displayed again.

OneControl Touch Panel Error Message Troubleshooting

OneControl Touch Panel Error Messages

Touch Panel Message	Why?	What should be done?
"EXCESS ANGLE"	Unsecured sensor.	Check and secure sensor placement.
	Uneven or sloped site.	Relocate the trailer.
"EXCESSIVE ANGLE"	Excessive angle reached during manual operation.	Stop manual operation and reset jacks to a more level state. The code will self-clear. There is no need to hit "OK."
"BAD CALIBRATION"	Trailer zero point was not set correctly.	Reset zero point.
"FEATURE DISABLED"	Hitch recognition requested but no hitch height set.	Perform AUTO LEVEL sequence to establish hitch height.
	Zero point not set.	Set zero point.
"LOW VOLTAGE"	Bad connection or wiring.	Check wiring - repair or replace.
	Discharged or bad battery.	Test battery voltage under load - charge or replace.
"OUT OF STROKE"	Unsecured sensor.	Check and secure sensor placement.
	Uneven or sloped site.	Relocate the trailer.
"EXTERNAL SENSOR"	Bad connection or wiring.	Replace or repair connection to rear remote sensor.
"JACK TIME OUT"	System could not level in expected time.	Check disposition of jacks.
"AUTO LEVEL FAILURE"	Unsecured sensor.	Check and secure sensor placement.
	Voltage drop.	Test battery voltage under load - charge or replace.
"FUNCTION ABORTED"	User has aborted an automatic leveling sequence.	Restart the sequence.
"HALL POWER SHORT"	Short circuit detected on one or more of the jack hall effect power lines.	Check harness and replace or repair.
"CAN'T COMPLETE LEVEL IN THIS LOCATION. PLEASE RELOCATE RV TO FLATTER TERRAIN"	The trailer is parked on a steep incline during auto level. The front cannot be leveled and the front jacks are already fully retracted.	Relocate the trailer.

Special Jack Error Codes on OneControl Touch Panel or OneControl App

To clear the error codes listed below:

1. Correct or otherwise repair the issue. See the table below.

2. To clear the special jack error code, the jacks need to be "homed." To "home" jacks, each jack must be able to retract a minimum of 6".

3. The Power Tongue Jack does not need to be "homed." The Power Tongue Jack cannot be operated from the OneControl Touch Panel or OneControl App while clearing the special jack error codes. The Power Tongue Jack can be operated using the RET/EXT switch **(Fig.42)** on the tongue jack during this procedure.

4. Extend all jacks to reach the 6" of minimum retract needed.

A. Press EXTEND and FRONT buttons to extend the front jacks, if required. See "OneControl Touch Panel Operation" or "OneControl App Operation" section.

B. Press EXTEND and REAR buttons to extend the rear jacks, if required. Refer to "Operation - OneControl Touch Panel" and "Operation - OneControl App sections."

5. Press ENTER button to begin auto retracting the jacks. The jacks will retract until they reach the hard current limit. The Power Tongue Jack will perform an automatic grounding during the auto retracting sequence.

6. The jacks are now "homed" and the special jack error code will be cleared.

NOTE: If the jacks do not retract, an error should display on the touch panel screen. This is typically caused by wiring interruption.

Touch Panel Message	Why?	What should be done?
ERROR Left-Front Jack Fault Right-Front Jack Fault Left-Rear Jack Fault Right-Rear Jack Fault Tongue Jack Fault	Error at a specific jack (left front, right front, left rear, right rear, tongue). Hall signal issue (open, short, malfunction or loss of communication); open or short circuit between controller and motor.	• Check voltage at the battery under load. • Check harness connections at controller and at jack. • Check harness for damage. • Check fuses at controller. • Repair or replace as necessary.

Manual Override

Power Tongue Jack Manual Override

1. Chock the tires of the trailer.

2. Make sure the footpad of the Power Tongue Jack is pinned securely in place with the clevis pin and hairpin cotter pin **(Fig. 41A)**.

3. Remove the rubber plug **(Fig. 42A)** on top of the Power Tongue Jack's gearbox to expose the manual drive shaft.

4. Insert the manual crank handle **(Fig.43)** into the manual drive shaft.

5. Turn the crank handle counterclockwise to retract the tongue jack or clockwise to extend the tongue jack.

6. Remove the crank handle **(Fig.43)**.

7. Replace the rubber plug **(Fig.42A)**.

NOTE: Make sure the leg **(Fig.41B)** of the Power Tongue Jack is fully retracted prior to moving the tow vehicle.

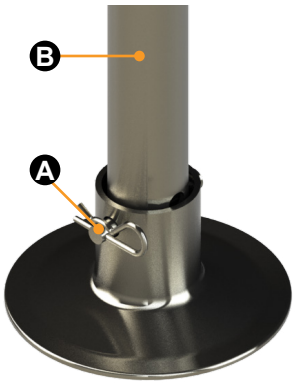


Fig.41



Fig.42

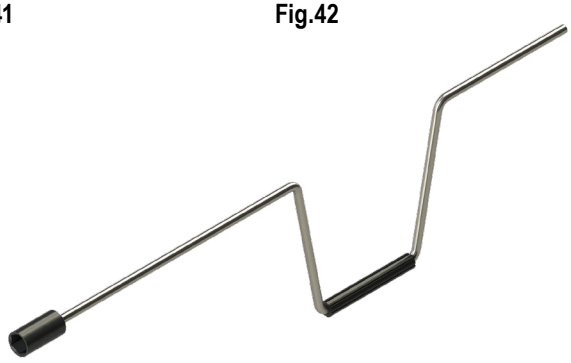


Fig.43

C-Jacks Manual Override

NOTE: For ease of manual override it is recommended to unplug the power harness to the motor prior to performing the manual override procedure.

NOTE: Use of a 12-18 volt cordless screw gun or pneumatic screw gun is acceptable to manually override the jacks. Do **NOT** use an impact screw gun to perform any of the override procedures, as this may damage the motor. If manual override is necessary there are two options; Jack Motor Override and Jack Manual Override Nut.

Jack Motor Override:

Tools needed: ⅜" drive ratchet and extension (no socket)

1. Find the port on the jack gearbox **(Fig.44A)**.

2. Remove the rubber plug **(Fig.44A)**.

3. Insert the ⅜" drive ratchet and extension into the port.

4. Turn the override until the jack extends or retracts to desired position.

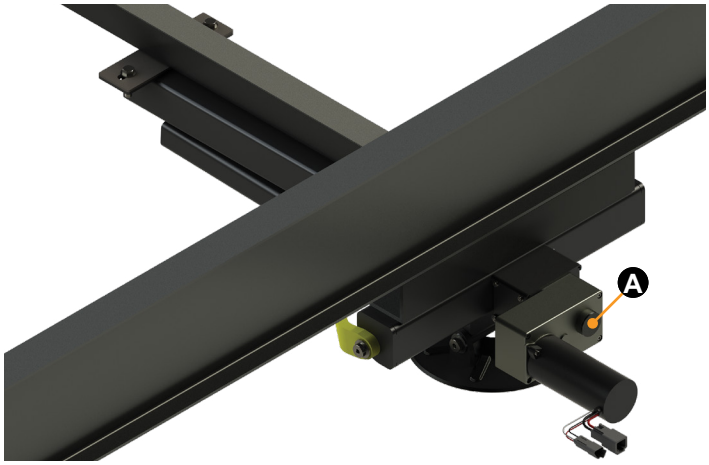


Fig.44

Jack Manual Override Nut:

Tools needed: ¾" socket wrench

1. Locate the manual override nut **(Fig.45A)**.

2. Place ¾" socket wrench over the manual override nut **(Fig.45A)** and turn the override nut until the jack extends or retracts to desired position.

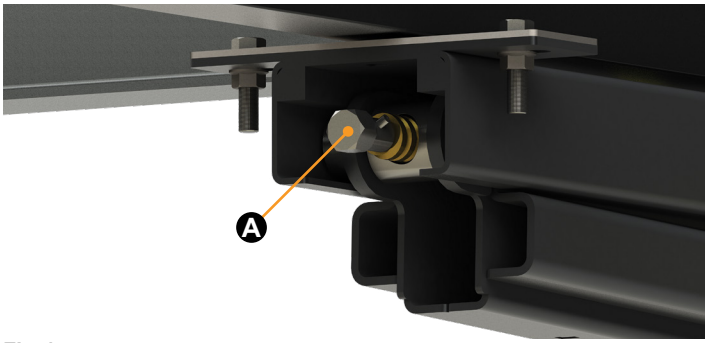


Fig.45

5K-Short Jack Manual Override

Top of Jack Motor Override:

Tools needed: ⅜" drive ratchet and extension (no socket)

1. Find the port on the top of the jack motor **(Fig.46A)**.

2. Remove the rubber plug **(Fig.46A)**.

3. Insert the ⅜" drive ratchet into the port **(Fig.47A)**.

4. Turn the override until the jack extends or retracts to desired position.

5. Replace the rubber plug **(Fig.46A)**.

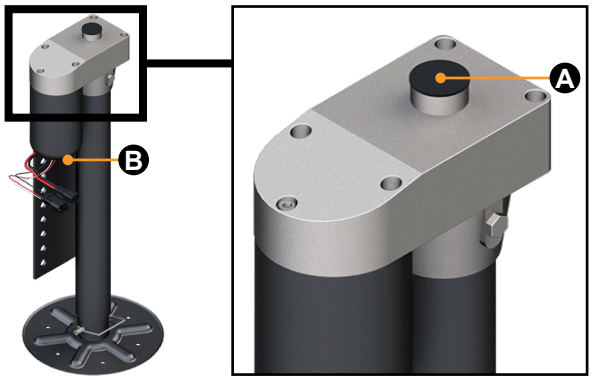


Fig.46

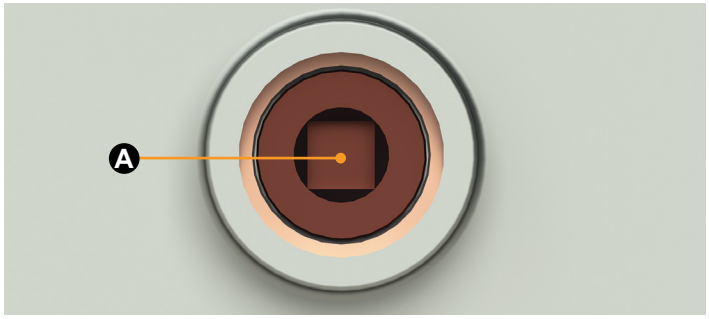


Fig.47

Bottom of Jack Motor Override:

Tools needed: ⅜" drive ratchet and extension, 5⁄16" socket

1. Find the port on the bottom of the jack motor **(Fig.46B)**.

2. Remove rubber plug **(Fig.48A)** on the bottom of the jack.



Fig.48

3. Insert 5⁄16" socket into the port and onto the nut **(Fig.49A)**.

4. Turn the override until the jack extends or retracts to desired position.

5. Remove the drive ratchet from the port.

6. Replace the rubber plug **(Fig.48A)**.

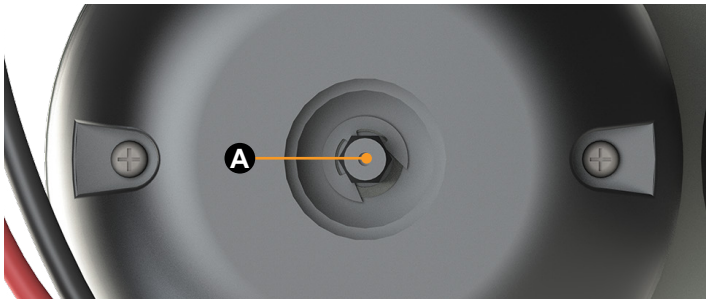


Fig.49

Zero Point Calibration

The "Zero Point" is the programmed point that the trailer will return to each time the Auto Level feature is used. The "Zero Point" must be programmed prior to using the Auto Level feature to ensure the proper operation of the system. The "Zero Point" feature is available on the OneControl Touch Panel or the OneControl App.

NOTE: Images depicted are from the OneControl Touch Panel.

1. Prior to starting this procedure, double check all connections on the controller, jacks and touch panel.

2. When calibrating Zero Point, the user has full manual control over the jacks. See "Basic Jack Operation In Manual Mode in the Operation - OneControl Touch Panel" section to adjust to the desired level position. Press the ENTER button **(Fig.35G)** to set.

3. Press the gear icon **(Fig.50A)** for "options."

4. The screen will show "WARNING: ADVANCED FEATURE" **(Fig.50B)**.

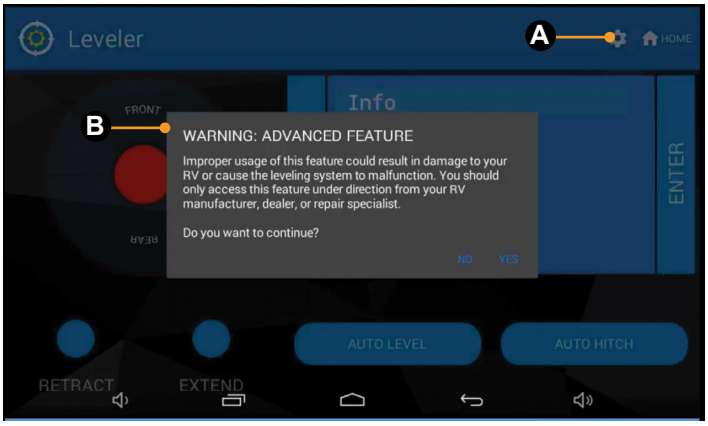


Fig.50

5. Click "YES" to continue.

6. The screen will show "SET UP: Zero Mode Press Enter" **(Fig.51)**.

7. Press the ENTER button **(Fig.51A)**.

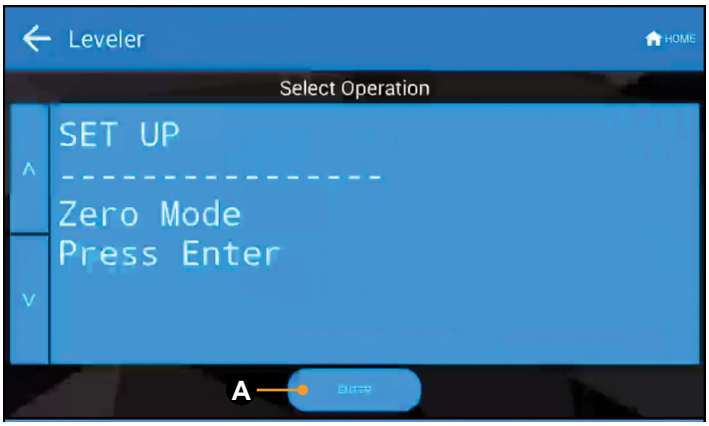


Fig.51

8. The touch panel will present options for further leveling of the trailer if needed. The screen will also state "ZERO POINT CALIBRATION - Press Enter to Set" **(Fig.52)**.

9. Press ENTER button **(Fig.52A)**.

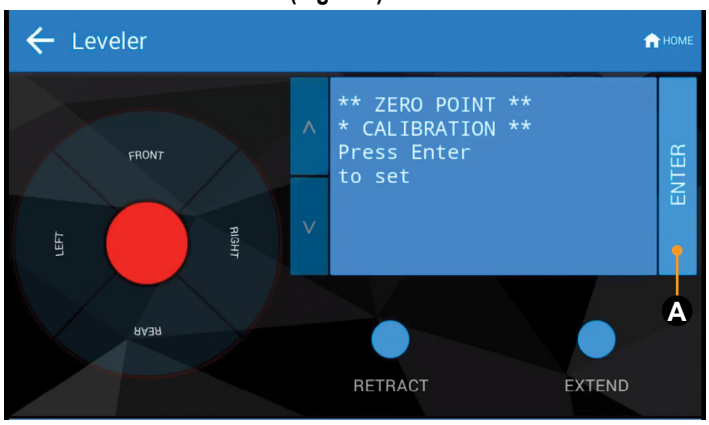


Fig.52

10. Screen will show "Zero point set!" **(Fig.53)**.

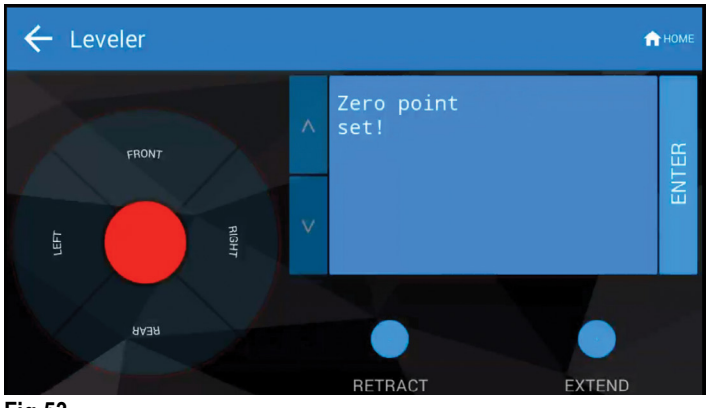


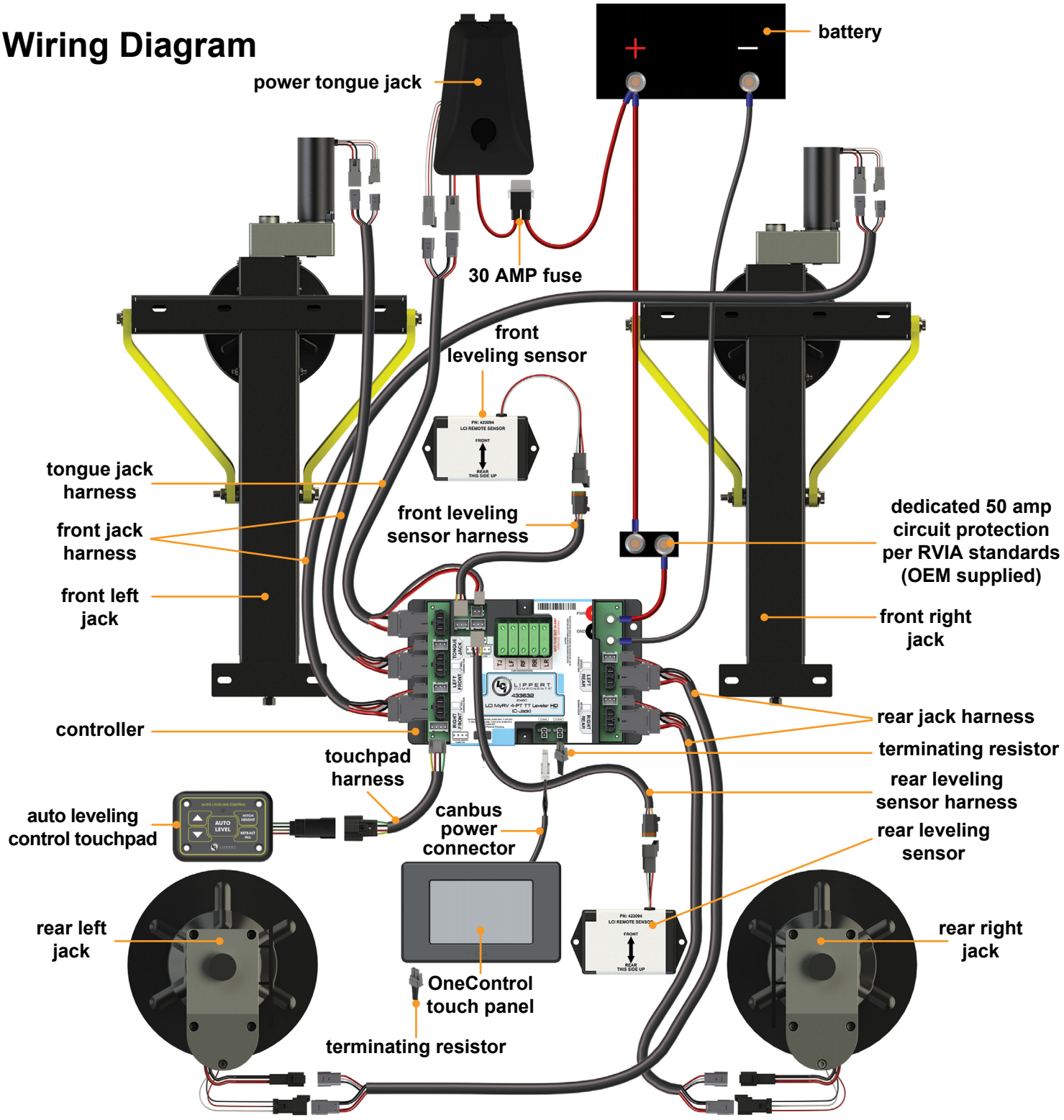
Fig.53

Ground Control® TT Leveling OneControl® Touch Panel (3K-5K)

Installation and Owner's Manual

(For Aftermarket Applications)

Wiring Diagram



Preventive Maintenance

1. For optimum performance, the system requires full battery current and voltage. The battery MUST be maintained at full capacity.

2. Check the terminals and other connections at the battery, the controller and the jacks for corrosion, and loose or damaged connections.

3. Remove dirt, road debris and grease from jacks as needed. Then lightly lubricate the jack screw and wipe off any excess lubrication, leaving only a thin coating.

Notes

Notes

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