



LIPPERT
COMPONENTS®

Formally  Atwood Mobile Products

LITERATURE NUMBER 670903. REV. C

WIRELESS CAMPER JACK

Effective **NOV 2018**

● Installation ● Operation ● Maintenance

SAFETY ALERT SYMBOLS

Safety Symbols alerting you to potential personal safety hazards.
Obey all safety messages following these symbols.



WARNING

Avoid possible
Injury or death



CAUTION

Avoid possible injury
and/or property damage

Refer to MPD 87903 and 71125 for complete installation, operation and maintenance instructions for camper jacks and landing gear respectively.

FOR YOUR SAFETY READ ALL INSTRUCTIONS BEFORE OPERATING

Installer: Provide these instructions to the consumer.

Consumer: Keep documents for future reference.

Our remote control is designed for use only with Electric Ball Screw Truck Camper Jacks (EBSTCJ) equipped for remote control capability. There are two types of EBSTCJ; one with remote capability and one without; **they are not interchangeable.**

REMOTE CONTROL SPECIFICATIONS:

DESCRIPTION	SPECIFICATIONS
Channels:	1
Frequency:	433 MHz
Operating Temperature Range:	-20°C to 120°C
Power Source:	23A
Weight:	2.7 ounces

FCC Compliance Statement - Remote Control P/N 670890, 670891, and 670892

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

You do not need an FCC license to operate the wireless remote. However; any changes or modifications to the device will void the user's authority to operate the equipment.



WARNING

PERSONAL INJURY & PROPERTY DAMAGE

- To deactivate the wireless system when you are finished, press and release the "On/Off" button. The blue LED will turn off.
- Only operate jack system when camper or trailer is unoccupied.
- Store the remote in a secure place, away from children.

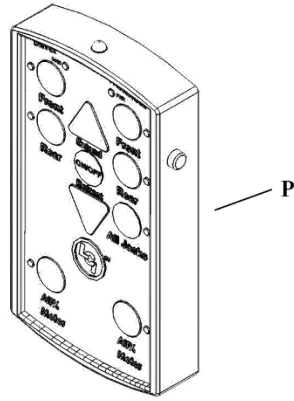
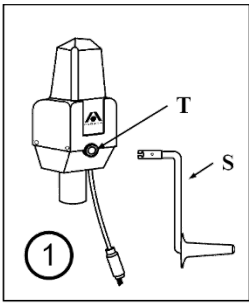


WARNING

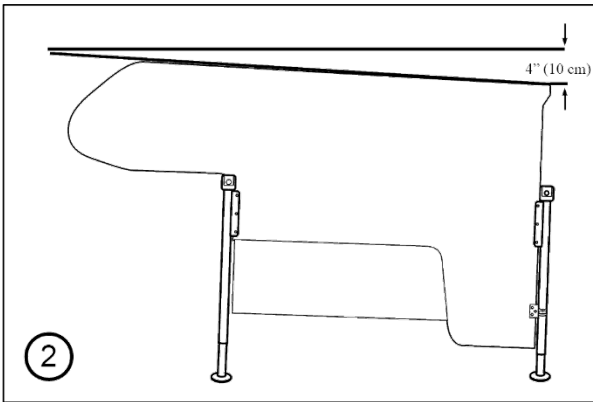
EXPLOSION

- To avoid possible interference with blasting operations, do not use your remote near ELECTRICAL BLASTING CAPS or in a BLASTING AREA or in areas posted: TURN OFF TWO-WAY RADIOS. Obey all signs and instructions.
- Do not use the remote near explosive atmospheres.

Explosive atmospheres are often, but not always, clearly marked. They include fueling areas, fuel or chemical transfer or storage facilities: areas where the air contains chemicals or particles, such as grain, dust, or metal powders, and any other area where you would normally be advised to turn the vehicle engine off.

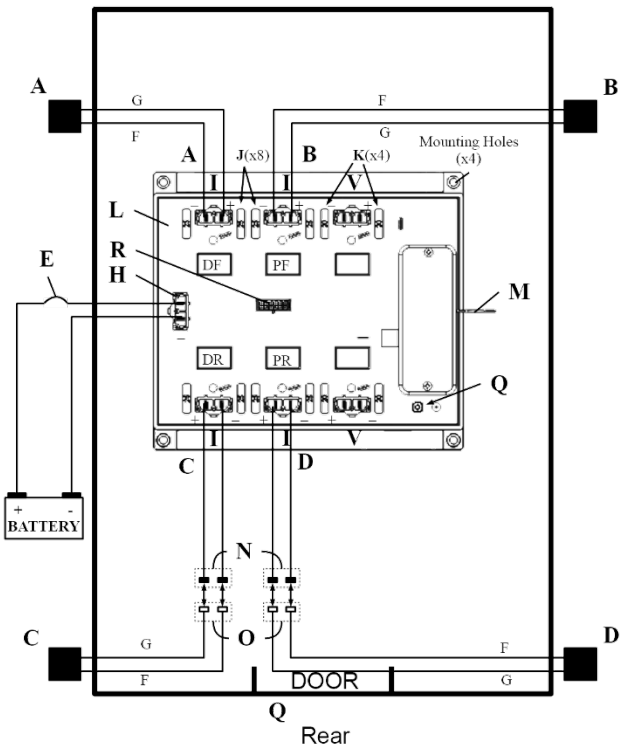


- A - Driver Front Jack or Leg
- B - Passenger Front Jack or Leg
- C - Driver Rear Jack or Leveleg
- D - Passenger Rear Jack or Leveleg
- E - 40 AMP Circuit Breaker for all camper jacks or 60 AMP resettable circuit breaker for 8AWG battery wire.
- F - Red (-) Motor Gear Box Lead
- G - Yellow (+) Motor Gear Box Lead
- H - Input Power Terminal Block
- I - Output Jack
- J - Jack 25A Fuse
- K - Aux 20A Fuse
- L - Relay Module (RF receiver)
- M - Antenna
- N - Male Connector
- O - Female Connector
- P - Remote
- Q - Relay Module Button
- R - Control Interface
- S - Manual Override Handle
- T - Alignment Tube
- U - Light 5A Fuse
- V - Aux Motor(s)
- W - Light supply



③ Truck Camper (kit 670887)

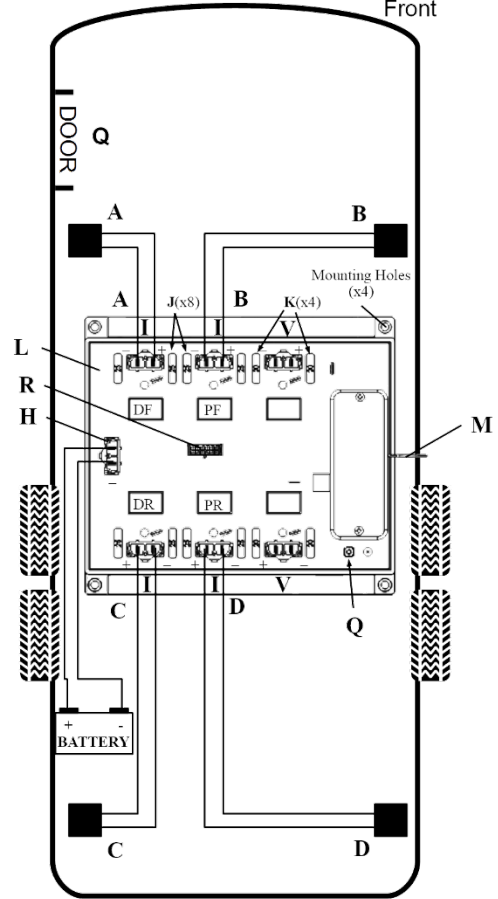
Front



Rear

④ 5th Wheel Trailer (kit 670887)

Front


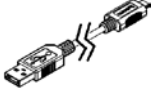


Rear

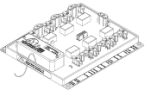

WIRELESS REMOTE KIT COMPONENTS

The following are the wireless kit components. Kits are based off of the system purchased.

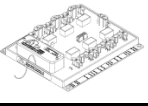
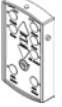
Common to Kits 670887, 670888, and 670889

	Part Number	Title	Qty.
	670903	Wireless Remote IOM	1
	670904	Wireless Remote Quick Start Guide	1
	670911	Wireless Remote Holder	1
	670905	USB Recharge Cable	1

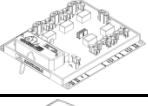

670887 Wireless Remote Kit with 2 Auxiliary Motors

	Part Number	Title	Qty.
	678927	Controller with 2 Auxiliary Motors	1
	670890	Remote with 2 Auxiliary Motors	1


670888 Wireless Remote Kit with 1 Auxiliary Motor and 1 Light Switch

	Part Number	Title	Qty.
	678928	Controller with 1 Auxiliary Motor and 1 Light Switch	1
	670891	Remote with 1 Auxiliary Motor and 1 Light Switch	1

670889 Wireless Remote Kit with 2 Light Switches


	Part Number	Title	Qty.
	678929	Controller with 2 Light Switches	1
	670892	Remote with 2 Light Switches	1

INSTALLATION

 CAUTION PRODUCT DAMAGE
<ul style="list-style-type: none">• Disconnect power to the power relay module prior to high potential ("HiPot") testing of the camper or the microprocessor will be damaged.

Note: Fig 3, 5 and 7 are the overhead view of a pickup camper with power relay module shown flat for clarity. Fig 4, 6 and 8 is the overhead view of 5th wheel trailer. With all installations, correct polarity must be observed as noted on the circuit board next to (H). The unit will not function if the input power is installed in reverse.


1. Install the power relay module in a clean, dry interior area protected from moisture. Use the four (4) 3/16" diameter holes for mounting the relay module (L). Position the base on the mounting surface and secure it using appropriate hardware for the wall material. Orient antenna straight away from base. Permanently secure antenna to mounting surface with appropriate hardware. Take care to ensure that the antenna on the board is not located next to other electrical wiring which could interfere with operation. Take care to ensure that the target location has good RF reception (avoid "faraday cage" scenarios, i.e. metal box).

 CAUTION PRODUCT DAMAGE
<ul style="list-style-type: none">• Failure to orient antenna properly will result in intermittent operation of the wireless remote system.

2. Supply power to unit: The unit operates from a +12 VDC battery and must be supplied through a 40 AMP circuit breaker (E). Route the #8 AWG, +12 VDC from the circuit breaker and the ground wiring, to the terminal block (H). Terminate the wires in the labeled positions.
3. Route the two #10 AWG wires from each jack to the terminal block (I). Refer to the labels next to each terminal position for driver front, passenger front, driver rear, and passenger rear jacks. Connect the wires for each jack.
4. If the power relay module (Kits 670887 and 670888) has auxiliary motor ports (V), auxiliary motors (such as slide-outs and awnings) may be connected in similar fashion to the jacks.
5. If the power relay module (Kits 670888 and 670889) has a light supply connection (W), lights (or other lower current appliances) may be connected here. The positive (+) power conductor from the light will be connected here with the negative (-) connected to battery negative (-).
6. Install the optional Manual Switch Panel near the floor just inside the door of the pickup camper or in an outside compartment of the fifth wheel. Plug the optional Control Cable into the center of the power relay module (R) and route to the location of the Manual Switch Panel. Plug other end of the cable into the back side of the Manual Switch Panel. Connect the optional accessory harnesses (controlling up to two additional motor outputs) to their associated connector on the base receiver. Any use of the accessory ports needs to be approved in advance by the manufacturer of the accessory. Connect the power harness to the base receiver.

NOTE: Take care not to apply power to the motor/accessory connectors, as they utilize the same connector. Doing so will void the unit's warranty.

WIRELESS REMOTE:

 WARNING PERSONAL INJURY & PROPERTY DAMAGE
<ul style="list-style-type: none">• Do not replace or charge batteries in a potentially explosive atmosphere. Contact sparking may occur while installing or removing batteries and cause an explosion.• All batteries can cause property damage and/or bodily injury such as burns if a conductive material such as jewelry, keys or beaded chains touches exposed terminals. The material may complete an electrical circuit (short circuit) and become hot. Exercise care in handling any charged battery, particularly when placing it inside a pocket, purse or other container with metal objects.


The remote control that is provided with the relay module is ready to use without any additional programming.

REMOTE PAIRING:

If a second remote is purchased as a replacement or backup, it will need to be paired with the relay module. The relay module will have to be placed in learning mode and the remote needs to communicate with to the relay module so they will be paired and work together.

1. To enter learn mode: Push and hold the relay module button (Q) on the relay module until the yellow LED flashes. When the yellow LED flashes, release the button.
2. Push and hold the "On/Off" button on the remote control until the yellow LED on the relay module is constant on (not flashing.) Release the "On/Off" button. The relay module remote control has "learned" the remote control and is paired.
3. Optional: To pair a 2nd or 3rd remote control, repeat step 2. NOTE: the relay module is in "learn mode" as long as the yellow LED is flashing.
4. To Exit "Learn Mode": Push and release the relay module button (Q). The yellow LED will change to a constant on. The relay module will also exit "learn mode" after 30 seconds of no activity.

OPERATION

 WARNING CAMPER CAN TIP OVER
<ul style="list-style-type: none">• All jacks must be on firm, solid ground prior to operation. Sandy/soft/spongy ground may cause jacks to sink; camper may tip over. Insure area below and around jack is clear of obstructions.• Do not place blocks under the jack for additional ground clearance.• Always keep the front of camper higher than or equal to the rear of the camper. Never allow either side or end of camper to be more than 4" out of level (Fig 2).

1. Remove the hand held remote control from its secure compartment.
2. Activate the remote control by pressing the "On/Off" button. A blue LED indicates the remote control is activated.

3. Select the JACK or AUX item to be controlled by pressing the button of that item. The button glows red when selected.
The following operations are possible when controlling jacks.
 - Extension or retraction of an individual jack.
 - Extension or retraction of all 4 jacks by enabling the “All Jacks” button
 - Paired operation - adjacent jacks can be operated simultaneously by holding down desired two jack buttons for three (3) seconds until both buttons glow red.
4. To extend a JACK (lifting the camper or fifth wheel) or AUX, once the selected item(s) is glowing red, press the “Extend” (▲) button.
5. To retract a JACK (lowering the camper or fifth wheel) or AUX, once the selected item(s) is glowing red, press the “Retract” (▼) button.
6. When controlling an AUX item, only one auxiliary can be powered at a time.
7. If the power relay module (Kits 670887 and 670888) has auxiliary motor ports (V), auxiliary motors (such as slide-outs and awnings) may be controlled in similar fashion to the jacks.
8. If the power relay module (Kits 670888 and 670889) has a light supply connection (W), lights (or other lower current appliances) may be controlled with the remote. Select the desired AUX LIGHT by pressing the button. Once the selected item(s) is glowing red, press the “Extend” (▲) button to turn “on” the light or press the “Retract” (▼) button to turn “off” the light.



- Do not over-extend or over-retract jacks. The electric jack has an internal slip clutch to help prevent damage; when clicking sound is heard, release switch. Continuing to hold the switch will wear out the slip clutch or cause damage to the motor.

TRUCK CAMPER

To Lift:

1. Extend front jacks so camper is 4” higher in front than in the rear (Fig 2).
 - a. Power on the remote control.
 - b. Push and hold the Driver Front and Passenger Front jack select buttons for at least three seconds until both buttons are lit up.
 - c. Press and hold the “Extend” (▲) button until the front of the camper is 4” higher than in the rear.
 - d. Press any of the lit buttons to deactivate the jack selection.
2. Once the camper front is higher than the rear:
 - a. Press the all jacks button,
 - b. Use the “Extend” (▲) and “Retract” (▼) buttons to position the camper to the desired height.
 - c. Press any of the lit buttons to deactivate the jack selection.
3. Use the individual jacks buttons to adjust an adjustment individual jack:
 - a. Press the desired jack button. It will glow red when selected.
 - b. Use the “Extend” (▲) and “Retract” (▼) buttons to position the jack as desired.

NOTE: Jacks may be operated in pairs by pressing and holding down the jack selection button for at least three seconds until both buttons are lit. Then the “Extend” (▲) and “Retract” (▼) buttons may be used to position the as desired. Only the following combinations can be paired in this way:

- Both Front
- Both Rear
- Both Driver
- Both Passenger



CAUTION PERSONAL INJURY & PRODUCT DAMAGE

- Do not enter camper after it is removed from truck until it is lowered to its lowest position. This will minimize sway which could cause structural damage to the camper, jacks and/or injury to persons.

To Lower:

1. Retract rear jacks so camper is 4” higher in front than in the rear (Fig 2).
 - a. Power on the remote control.
 - b. Push and hold the Driver Rear and Passenger Rear jack select buttons for at least three seconds until both buttons are lit up.
 - c. Press and hold the “Retract” (▼) button until the front of the camper is 4” higher than in the rear.
 - d. Press any of the lit buttons to deactivate the jack selection.
2. Once the camper rear is lower than the front:
 - a. Press the all jacks button,
 - b. Use the “Extend” (▲) and “Retract” (▼) buttons to position the camper to the desired height.
 - c. Press any of the lit buttons to deactivate the jack selection.
3. Use the individual jacks buttons to adjust an adjustment individual jack:
 - a. Press the desired jack button. It will glow red when selected.
 - b. Use the “Extend” (▲) and “Retract” (▼) buttons to position the jack as desired.

NOTE: Jacks may be operated in pairs by pressing and holding down the jack selection button for at least three seconds until both buttons are lit. Then the “Extend” (▲) and “Retract” (▼) buttons may be used to position the jack as desired. Only the following combinations can be paired in this way:

- Both Front
- Both Rear
- Both Driver
- Both Passenger

Removing Camper from Truck

Disconnect the electrical connections between camper and truck (refer to your camper operation instructions or contact the camper manufacturer for more information). Follow the instructions from the “To Lift:” or “To Lower:” truck camper sections and the diagram in Fig 2. Raise the camper until bottom of the camper clears the truck’s bed. Slowly drive the truck from underneath the camper. Lower the camper to the lowest possible position without any part of the camper touching the ground.

Loading camper on Truck

Following the instructions “To Lift:” or “To Lower:” truck camper sections and the diagram in Fig 2, raise camper high enough to clear the truck’s bed. Carefully back the truck under the camper making sure not to damage any portion of the camper or jacks. Campers should be centered in the truck bed with front of camper as far forward in truck bed as possible. Attach electrical connections between the truck and camper, (refer to your camper operating instructions or contact the camper manufacturer for further information). Lower camper into truck bed, and then fully retract all jacks.

Manual Override Operation:

To manually extend or retract jack, unplug jack from camper to disable the jack motor’s dynamic brake. Place manual override handle (S) into alignment tube (T) and engage drive pin. Rotate handle counter-clockwise to raise or clockwise to lower camper. Plug the jack back into camper to activate the jack motor’s dynamic brake.

LED Flashlight

To operate the flashlight, press and release the push button on the side of the remote. The flashlight will turn off when the button is pressed again.

Battery Charging

The remote contains a rechargeable battery with a battery indicator LED. These are the indications that the LED provides:

1. When the remote is NOT connected to the charger:
 - a. Green – the remote is fully charged.
 - b. Flashing Red – the battery is low.
 - c. Solid Red – the battery charge is very low and the remote should be recharged.
2. When the remote is being charged:
 - a. Solid Red – the battery is charging
 - b. Solid Green – the battery is fully charged and can be disconnected from the charger.

To charge the battery use the micro USB connector on the bottom of the remote. The included USB Recharge Cable may be used to connect the remote to a standard USB port or use a standard USB charger.

TROUBLESHOOTING

If all or any of the jacks or landing legs fails to operate:

1. Check whether the 12VDC battery is fully charged. You may need to recharge it.
2. Check that the camper jack cords are securely plugged into the exterior sockets. You may need to pull a plug out, check the connection, and re-plug it.
3. If the motor does not extend/retract the jack and the motor is making a ratcheting sound (clutch slipping), do not use the manual override. Immediately contact a Lippert Service Center and have jack replaced. Do not use the jack until replaced.
4. Assure the remote control's power switch is turned on. The blue LED on the remote control should be lit.
5. Check that you are within 20 feet of the camper.
6. Be sure that the remote is fully charged. The battery indicator LED should be green. If the LED is a solid red or not lit when remote is turned on, charge the remote until the LED changes to a solid green.
7. Check to ensure all battery terminals are clean and have no corrosion.
8. Look to see if other radio frequency devices such as an automobile key fob, cellular phone, TV remote control, are operating within range of your remote. These devices may make the jacks pause. Lift your finger from the button on the remote and re-press the button.

If the jacks keep running, press the "On/Off" button on the remote to turn it off (the blue LED will turn off). This will shut the power off to the jacks. If not, unplug the jack(s) from its (their) exterior socket(s). Immediately contact Lippert Customer Service.

MAINTANENCE

The following are important steps to keeping your wireless camper jack properly maintained.

1. To clean the remote, wipe with a soft cloth dampened with water. Don't use cleaners or solvents on the remote, they can harm the remote body and leak inside, causing permanent damage.
2. If the remote gets wet, remove the batteries immediately. Dry battery compartment with a soft cloth to minimize potential water damage. Leave cover off the battery compartment overnight or until completely dry. Do not use the remote until completely dry.
3. If power relay module gets wet, turn off circuit breaker to the unit. Allow unit to fully dry before attempting to use it.
4. If it is not possible to get jack to operate freely, replace jack.
5. For any questions, contact your dealer, the camper manufacturer, or the Lippert Service Department.

As a supplier of components to the RV industry, safety, education and customer satisfaction are our primary concerns.

Should you have any questions, please do not hesitate to contact us at (574) 537-8900 or by email at customerservice@lci1.com. Self-help tips, technical documents, product videos and a training class schedule are available at lci1.com or by downloading the MyLCI app.
