WIRELESS REMOTE CONTROLLED

Electric Camper Jacks Plus Two Auxiliary Devices

One button raises and lowers all jacks Heavy duty construction 2,500 lb. capacity per jack

Rugged precision drive system

Self-braking for safe operation

Large footpads for added stability

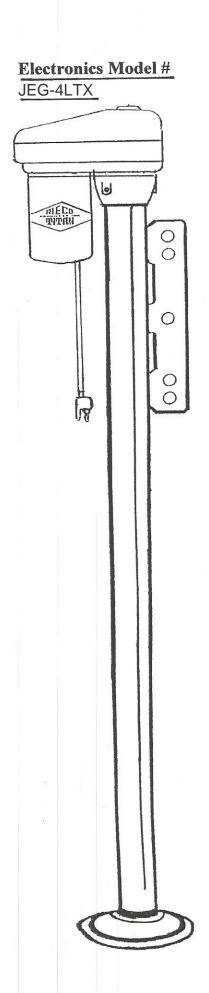
Secure, safe mounting system

Corrosion resistant powder coating

Weatherproof sealed head



965 Lambrecht Road ◆ Frankfort, IL 60423 Phone: 866.403.9803 ◆ Fax:815.469.4705 Email:customerservice@riecotitan.com www.riecotitan.com



Rieco-Titan Products, Inc. 965 Lambrecht Road Frankfort, IL 60423

ELECTRIC JACK INSTALLATION& OPERATION INSTRUCTIONS

REL-2 2500# Capacity Camper Jack 4 Per Set

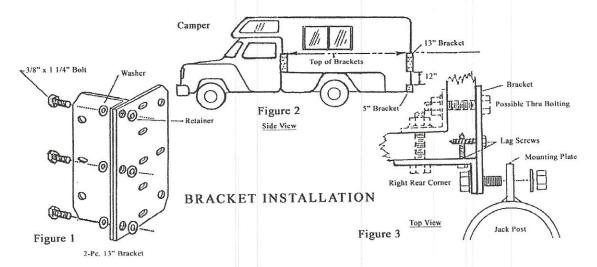
Phone: 866.403.9803 Fax: 815.469.4705

SAFETY ALERT! This symbol - !!! is used here to alert you to potential personal safety hazards and property damage. Obey all safety messages that follow this symbol to avoid possible property damage, injury or death.

NOTE: Camper manufacturers must insure that camper wall corners are adequately reinforced for mounting jacks.

BRACKET & JACK INSTALLATION

- Bolt the flat and formed bracket pieces of each 13" corner bracket together using the 3/8" x 1 1/4" bolts and hardware in bracket kit. Assemble as shown in figure 1.
 Swing-out brackets can be purchased to allow front jacks to be mounted to clear dual wheels.
- 2. Position the brackets on the four corners of the camper, starting with the two front brackets. Next, place the top of the rear brackets at the same height as the top of the front brackets. See figure 2.
- 3. Mark, saw and remove bracket length of trim molding, which will be replaced by the brackets.
- 4. Tap down ribbed aluminum with mallet, so brackets will draw tight to camper corner.
- 5. Place a thin strip of sealer compound on each side of corner and across top of the brackets.
- 6. Mount brackets so that the flat side(joined together in step 1), extends away from front and rear of camper. See figure 3.
- 7. Position brackets and drill 5/32" holes into camper corner. Insert lag screws alternately into each bracket side, and tighten screws. Holes are provided in the bracket for through bolting on heavier campers. See figure 3, dotted outline.
- 8. These lag screws must be retightened later in the process, after the camper has been lifted a few times. Take caution not to shear off screw heads or strip threads in wood.



MECHANICAL INSTALLATION (continued)

- 9. Position the 5" lower bracket on the rear corners of the camper at least 12" below the main corner brackets. Fasten brackets as previously stated in #7. See figure 2.
- 10. Bolt each jack to the upper bracket through the mounting holes in the mounting plate of the jack, using 3/8" x 1 1/4" bolts, washers, and nuts. Place a washer under the bolt head and under the nut. Tighten loosely.
- 11. Open the "C" clamp for each rear jack and fit them over the jackpost for attaching to the lower 5" bracket. Place the clamp flanges on each side of the mounting bracket, inserting a bolt and washer into the "C" clamp and bracket holes, then add a washer and nut. Tighten loosely. Fig. 4.
- 12. Rotate jack power heads so that the motors face toward the center of the camper on all jacks, and check the height to assure all jacks are at the same level. Tighten all nuts on all brackets securely. Torque them to 15-20 foot-pounds.
- 13. As a final installation procedure, it is necessary that you coat the entire surface of the jacks and brackets with a liquid wax such as Mothers Polish, McGuires, or Turtle Wax. An excellent alternative is Mercury's Corrosion Guard. This will prevent corrosion and maintain the beauty of the jacks.

Also See Attached Six Circuit Electronic Controls Description ELECTRICAL INSTALLATION

- 1. The electric jack kit comes equipped with four (4) female receptacles and cords. Each jack has a cord with a male plug that accesses power through the receptacle. The receptacle must be mounted in close proximity to the jack near each corner of the camper.
- 2. Wire the receptacles as shown on the diagram in figure 3. The receptacle is a flange design which fits snugly into a 7/8" diameter hole which must be drilled into the exterior wall of the camper. Fasten to the camper wall with two screws 6" from the edge of the camper.
- 3. Interior wires connecting the receptacles to the receiver control box should be #10 AWG copper stranded 600 V, UL wire, using locking spade connectors for #10 studs.
- 4. The interior wiring from these receptacles can be routed up to the top of the camper, and run above the ceiling line to avoid the tedious routing through the various lower compartment walls. Alternately, they can be brought out and routed externally to a point where they re-enter the camper for connection to the receiver control box terminals.
- 5. Install a heavy duty Marine/RV battery in the camper with charging provisions. Locate the battery in a separate compartment, but near the receiver control box.
- 6. Connect the two wires from each jack to the receiver. The left front jack should be connected to the receiver terminals marked LF. The right front to the RF terminals, and so on for the rear jacks. Each set of terminals has a (+) and a (-) side. Connect according to the wiring diagram shown in figure 3. Red wire is positive; black wire is negative.
- 7. Mount the receiver control box near a compartment door to maximize transmitter wire length outside the camper. Also, locate it as close to the battery compartment as feasible. Use #8 AWG wire to connect the battery terminals to the power input terminals in the receiver control box. Use a ring connector (or split wire)
- 8. !!! Install a 60 amp circuit breaker in the wiring to protect the receiver control box electronics.*
- 9. The negative lead from the battery must be connected to the negative terminal, and the positive lead from the battery must connect to the positive terminal in the receiver control box. !!! (See special note of caution, below)
- 10. The transmitter can be used in either one of these modes: (1) Wired, with a cable and plug connection to the receiver control box or remote switch panel (2) Wireless, which is operated with a 12 volt battery, sending radio frequency signals to an antennae in the receiver control box.
- 11. A remote "on-off "switch panel is provided to control the power to the system. This switch should be mounted inside the camper, near the door. The switch is equipped with an LED light which is lit when the power is on. The power stays on for 15 minutes, and then automatically shuts off along with the LED light, stopping any possible operation of the jack system. (This safety feature eliminates the need to remember to switch the system "off") Plug the attached cable from the remote switch panel into the receiver control box. Whenever the LED light is off, it will be necessary to press the "on" switch to restore power to the system to operate the jacks. The receiver control box and the remote switch panel have manual off controls.
- 12. The wireless transmitter needs no wired connection from the transmitter to the receiver control box, but instead, an antennae wire is provided to pick up the RF (radio frequency) commands.

^{*} Item #8 above - 60 Amp circuit breaker can be acquired from Rieco- Titan Products, Inc. 866-403-9803. Part # 46931

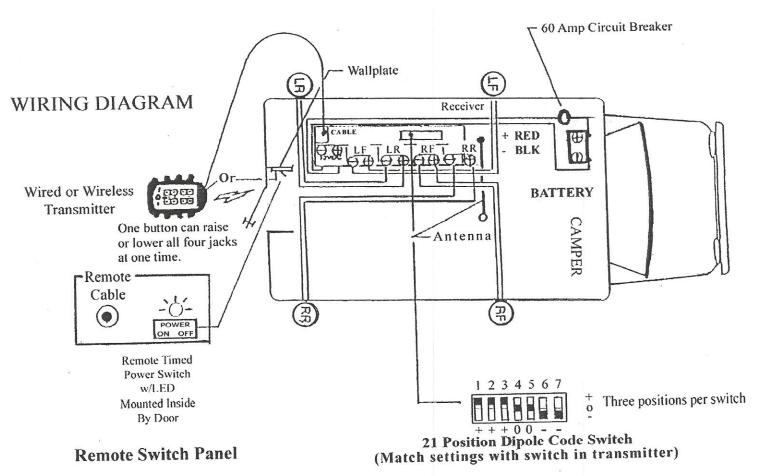
ELECTRICAL INSTALLATION (continued) Also See Attached Six Circuit Electronic Controls Description

!!! CAUTION !!! Do not connect 12VDC power from the battery to any receiver terminals except the two 12VDC battery terminals marked on the receiver case. To do so will burn out the receiver. This is not covered by the warranty.

13. To ensure that your operating signal of the system is secure, both the transmitter and the receiver control box have identical 7 actuator, 21 position code switches. You may want to change the codes on the switches. The actuators must be set to match each other in both the transmitter and the receiver control box. The 21 possible positions provide you with about 1.5 million combinations, so the odds of having the same code as someone nearby are almost impossible, after you have changed the codes. Follow the instructions on the next page.

Fig. 3

Use #8 AWG wire between receiver control box & battery. Use #10 AWG wire between receiver and jacks.



IN ORDER TO OPERATE THIS ELECTRIC JACK SYSTEM, IT IS NECESSARY TO INSTALL A HEAVY DUTY MARINE/RV BATTERY WITH PROVISION TO KEEP THE BATTERY CHARGED. LOCATE IT IN A SEPARATE SITE, BUT NEAR THE RECEIVER.