

# Revolution Series Electric Steps



***The Next Generation Of Steps  
From Kwikkee Products***

**A Rigid Lightweight  
Steel Step**

## ***Introduction***

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This manual has been provided to assist you with the operation, maintenance, and troubleshooting of the Kwikkee electric step equipped for use with a step lockout switch, control unit and permanent magnet motor. This manual does not apply and should not be used as a reference to previous versions of a Kwikkee electric step.

The control unit is essentially a current sensor as well as a switching device. When the motor assembly moves the step tread to its extended position or stops moving because of an obstruction such as a curb or the binding of a damaged or bent step frame, the motor draws a larger amount of current. The control unit 'senses' the larger current draw and shuts off the power to the motor.

All control units are equipped with an ignition override system. This system is designed so that the vehicle will not be driven with the step in the extended position. When the step is locked in the extended position (step lockout switch is in the 'off' position), the door closed, and the ignition is turned on, the ignition override system will engage and the step will automatically retract.

The 'Auto Extend' feature is another safety feature designed to extend the step when the door is opened for the first time after the vehicle ignition is turned off, even if the step lockout switch is turned off. When the ignition is switched on, the function of the step lockout switch is disabled and the step will always extend when the door is opened and retract when the door is closed.

 **WARNING**

Step control wiring is only to be used for step and step light (provided with the step) functions. Do not splice, cut or tap into any of the step wiring. Failure to heed this warning may result in voiding the warranty and/or failure of step control, which may result in loss of step function or severe damage to the step control. Refer any questions to the step manufacturer.

 **WARNING**

Stepping on a partially extended step can cause damage to the step frame. Wait until the step is fully extended before stepping on it.

 **CAUTION**

Follow the instructions in this manual carefully. Failure to do so may result in damage to the step control, the motor and/or the vehicle wiring. Such damage may also result in voiding the warranty.

 **NOTICE**

- An important change covered in this owner’s manual is the “**Override Switch**” (previously called the “Power Switch”). The name changed because of a change of functionality from the former “Power Switch”.
- The new Control Units are equipped with an ignition override system designed to prevent the vehicle from being driven with the step in the extended position (**OVERRIDE SWITCH IS IN THE ‘ON’ POSITION**), the door is closed, and the ignition is turned on, the ignition override system will engage and the step will automatically retract.

*Please note that is a change from the “Power Switch”, which needed to be in the “OFF” position to lock the step out.*

**Operation**

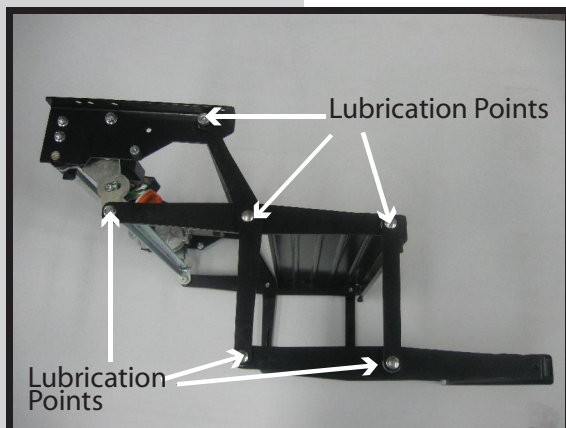
1. After the installation is complete and with the entrance door open, turn the override switch to the ‘OFF’ position.
  - NOTE:** Some steps are not equipped with an override switch. They are activated only with a door switch.
2. Close the door. The step should retract and lock in the ‘up’ position.
3. Open the door. The step should extend and lock in the ‘down’ position with the understep light illuminated.
  - NOTE:** The understep light operation is as follows:
    - The light is ‘on’ when the step is extended
    - The light is ‘off’ when the step is retracted
    - In the event the coach door / screen door is left open, the light will turn ‘off’ after 5 minutes
    - The understep light is not available on all step models
4. If your step is equipped with an override switch, turn it to the ‘ON’ position. The step should remain in the extended position with the understep light ‘off’ when the door is closed.
5. With the step override switch turned ‘ON’, the step extended, and the entrance door closed, turn the vehicle ignition on. The ignition override system will go into effect and the step will automatically retract.
  - NOTE:** If the yellow wire from the four-way connector is not connected to an ignition power source, the ignition safety system will be inoperative and the step will remain in the extended position. In this case, the step override switch must be turned ‘OFF’ for the step to retract.
6. Turn the vehicle ignition off and open the door. The step will extend and lock in the ‘down’ position. This is the ‘Auto Extend’ feature. When the vehicle ignition is turned on, the step will always activate with the door movement, regardless of the step override switch position.
  - NOTE:** If the yellow wire from the four-way connector is not connected to an ignition power source, the ignition will not cause the step to retract if the step override switch is on, regardless of the door position.

**! WARNING**

12 volt automotive batteries contain sulfuric acid which can cause severe burns. Avoid contact with the skin, eyes, and clothing. 12 volt automotive batteries produce hydrogen gas which is explosive; keep cigarettes, open flames, and sparks away from the battery at all times

**! CAUTION**

Do not allow the battery terminals to come in contact with the step.



**! CAUTION**

If the vehicle is driven with the step in the extended position, there is the possibility of causing major damage to both the step and the vehicle.

**! NOTICE**

Silicone lubricants and WD-40 are not recommended as they have a tendency to evaporate and dry the mating surfaces which leave them vulnerable to the elements

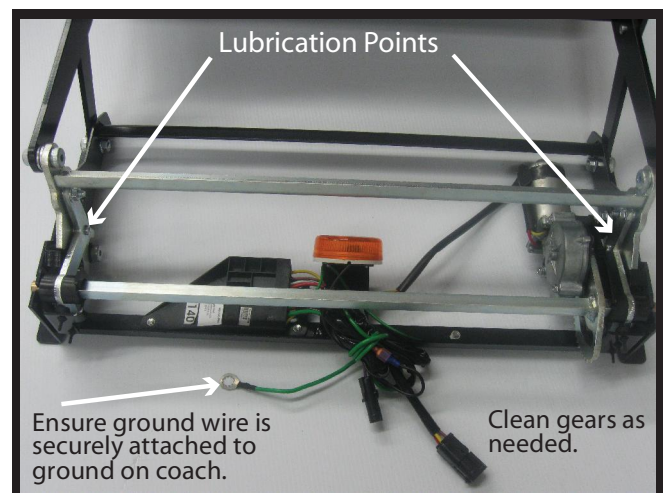
**General Service Notes**

If the power wire to the step is disconnected from its source and reconnected, a spark is common. This is caused by the momentary charging of the control unit and does not necessarily indicate the system is staying on, which would cause a drain on the battery.

If the step does not work or operates erratically (for example, extends part way and shuts off) the first item to check is the vehicle battery. Low supply voltage may cause erratic operation of the step. Check battery voltage and condition. A battery in good condition and properly charged will have a no load voltage of approx. 12.6 volts. Check the voltage at the battery and at the four-way connector at the control unit. Insure that all battery and step control unit connections are clean and secure. Recharge or replace the battery as necessary, retest the step for proper operation.

The step may also operate erratically if it is operating directly from a converter and the converter output is not adequate or properly filtered for clean DC voltage. The converter must be capable of producing a minimum of 30 amps for proper operation.

Poor ground connections may also cause erratic operation of the step. The step will not function if the ground to the control unit is lost between the step control unit and the vehicle chassis (the long green ground wire) or between the vehicle battery and the ground (negative battery cable).



**Maintenance**

Clean all mud, salt, and road grime from the step before lubricating. Lubricate all moving parts (bearings, pivot points, slides, clevis pin, and drive linkage ball) every 30 days with a good quality moisture and heat resistant penetrating grease. KwikLube™ Spray Grease is specially formulated to lubricate Kwikkee Electric Steps and is recommended for lubricating all moving parts. For lubrication points, refer to the pictures above.

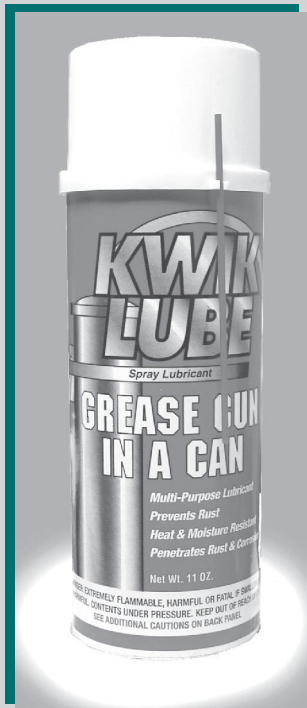
Maintain clean, dry electrical connections at the two-way and four-way connectors and any butt connections leading from the four-connector to the vehicle. A small dab of di-electric grease at the connections and replacing corroded butt connections with heat shrink type crimp style automotive connectors will help maintain a good electrical source for the step.

**MAINTENANCE IN SALT ENVIRONMENT:** To maintain step finish when step is exposed to a salt environment for extended periods of time, routinely spray with fresh water

**KwikLube™** is a unique aerosol grease that has hundreds of automotive, household, and industrial uses in addition to lubricating Kwikkee Electric Steps.

KwikLube sprays on (and into) places that are hard to reach. Then it changes from a penetrating fluid to a tough, protective grease in a matter of minutes!

The cured KwikLube film is impervious to moisture and can withstand temperatures above 400° F (204° C). This formulation also contains additives to prevent rust and reduce wear.



Ask your local RV Dealer for KwikLube



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Mishawaka, IN 46544  
800-334-4712  
www.powergearus.com

## Power Gear | Kwikkee Limited Warranty

Power Gear warrants to the original retail purchaser that the product will be free from defects in material and workmanship for a period of two (2) years. Labor to repair these components will be covered for two (2) years. Power Gear will, at its option, repair or replace any part covered by this limited warranty which, following examination by Power Gear or its authorized distributors or dealers, is found to be defective under normal use and service. No claims under this warranty will be valid unless Power Gear or its authorized distributor or dealer is notified in writing of such claim prior to the expiration of the warranty period. Warranty is transferable pending documentation of original sale date of product.

### THIS WARRANTY SHALL NOT APPLY TO:

- Failure due to normal wear and tear, accident, misuse, abuse, or negligence.
- Products which are modified or altered in a manner not authorized by Power Gear in writing.
- Failure due to misapplication of product.
- Telephone or other communication expenses.
- Living or travel expenses.
- Overtime labor.
- Failures created by improper installation of slideout systems to include final adjustments made at the plant; sealing interface between slideout rooms and side walls; synchronization of rails; or improper wiring or ground problems.
- Failures created by improper installation of leveling systems, including final adjustments made at the plant, or low fluid level, wiring or ground problems.
- Replacement of normal maintenance items.

There is no other express warranty other than the foregoing warranty. THERE ARE NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL POWER GEAR BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. Some states do not allow the limitations of implied warranties, or the exclusion of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

For service contact your nearest Power Gear authorized warranty service facility or call 1-800-334-4712. Warranty service can be performed only by a Power Gear authorized service facility. This warranty will not apply to service at any other facility. At the time of requesting warranty service, evidence of original purchase date must be presented.

## FILL OUT AND SAVE WITH VEHICLE RECORDS

In the event that servicing the step becomes necessary, the information that you supply below will improve service response time. The Step Series number, Serial number, and Control Unit numbers are on the identification labels attached to the control unit and the underside of the step, near the motor. Please take a moment to record this information:

Step Serial #	Step Series #
Year / Make / Model of RV	
Date of Purchase	
<b>CONTROL UNIT</b> Complete the following only if your step is equipped with Control Unit.	
Control Unit Serial #	Control Unit #