



ELECTRIC LEVELING MOTOR BRAKE REPLACEMENT INSTRUCTIONS

© Copyright PowerGear Issued: December, 2007

Modified: 11/18

Contents

Inspection	1
Installation	2
System Test	5

NOTE

Inspection is not required for boots with metal clamps (FIGURE 4) or boots with an extra band seal just above the existing boot (FIGURE 5)

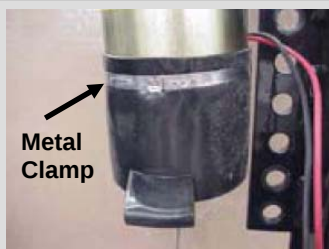


Figure 4



Figure 5

WARNING

DO NOT WORK ON OR AROUND A VEHICLE THAT CAN BE MOVED. To ensure personal safety, place the transmission into PARK (NEUTRAL) and set the parking brake. Turn off the ignition and remove the ignition key. Maintain control of keys while working. Attach a notice, "DO NOT USE", to the ignition switch in order to prevent activation of the systems.



Electric Leveling Motor Brake Replacement Instructions

Inspection

The electric leveling jack motor may become inoperative due to moisture entering the motor brake boot causing corrosion. The following instructions are inspection and repair of this condition.

1. To inspect the motor brake, safely cut the old plastic wire tie and rubber boot. Remove these items from the motor and discard (see FIGURE 1).
2. Inspect the condition of the brake. Any brake with no evidence of corrosion (FIGURE 2) is in good condition and will only require a new boot installation (see *Installation of Boot Replacement Kit*, page 2). Any brake with evidence of corrosion (FIGURE 3) will require a new brake and boot installation (see *Installation of Motor Brake Service kit # 1010001289*, page 2).

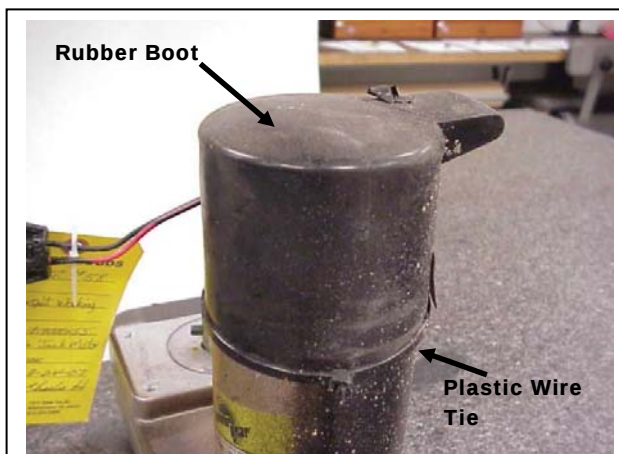


Figure 1 Boot Removal



Figure 2 Good Condition



Figure 3 Bad Condition

NOTE

If brake is in **GOOD** condition (FIGURE 2) but motor does not operate when 12V is directly applied, replace with motor service kit.

LH motor kit: 1010001018

RH motor kit: 1010001019

Installation of Boot Replacement Kit #1010001232

1. Slide the metal clamp around the motor housing and hold in place (FIGURE 6).
2. While holding the clamp in place, slide the new boot around the motor housing making sure that the motor brake handle fits inside the duck-bill (see FIGURE 8) in the boot.
3. Position the clamp over the boot, approximately ¼" from the edge of the boot.
4. Using Oetiker Pincer pliers (readily available via the internet, if not found locally with a tool supplier), crimp the raised part of the clamp until it tightens around the boot (see FIGURE 7). The deformation of the clamp ear provides a visible and instant check that closure has been accomplished (see FIGURE 7a).

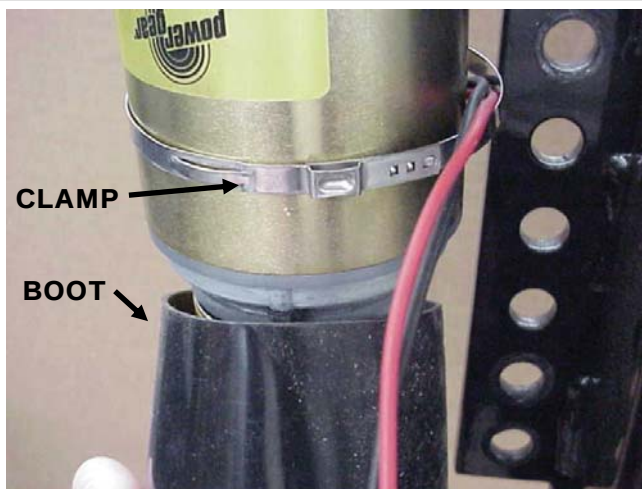


Figure 6

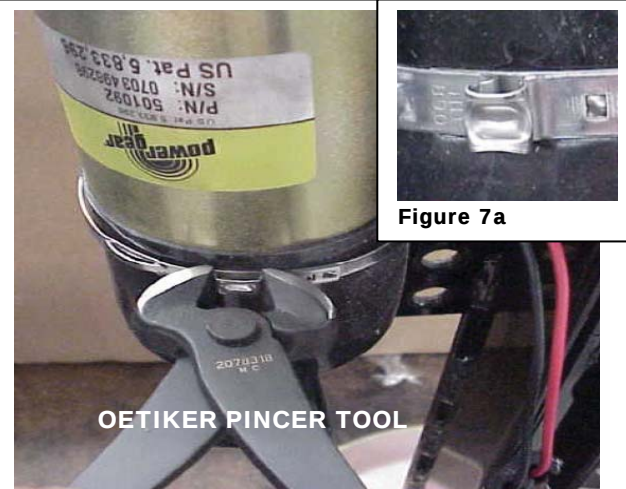


Figure 7



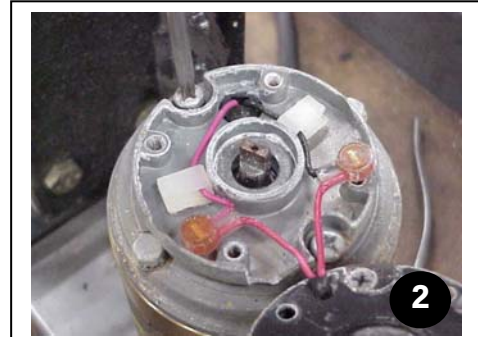
Figure 8

NOTE: In cases where the electric jack assembly is mounted where water spray from the tire will come in direct contact, it is recommended to apply a continuous bead of RTV silicone around the perimeter of the edge of the boot.



Installation of Motor Brake Service Kit #1010001289

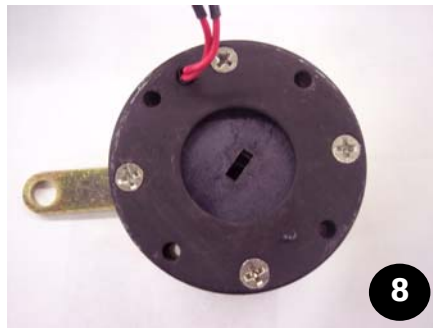
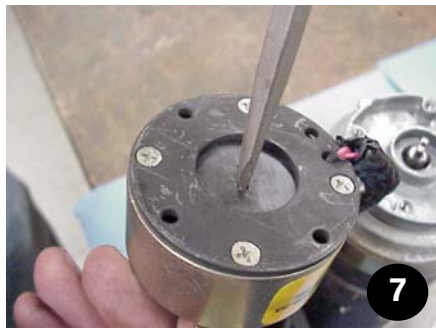
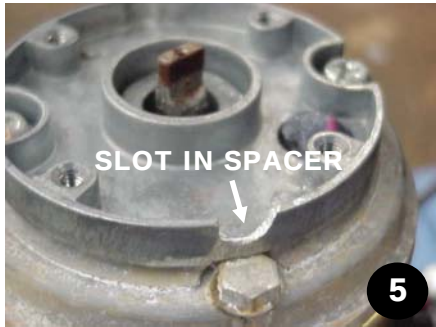
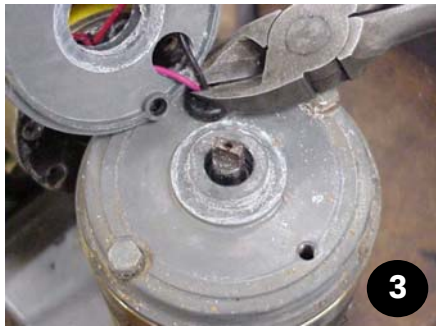
1. Remove the four screws that attach the brake to the motor.
2. Remove the two screws and washers that attach the spacer to the motor.



NOTE

A breakdown of Motor Brake Service Kit 1010001289 is shown on Page 5, FIGURE 9 of this tip sheet.





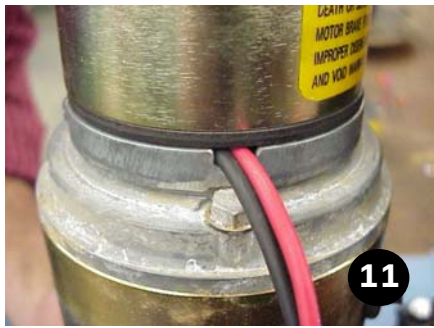
3. Lift the spacer, and cut the wires leading to the brake flush with the motor.
4. Apply RTV silicone sealant over exposed wires.
5. Install new spacer with the slot in the spacer oriented as shown.
6. Install the two screws and washers, and tighten to 18-20 in/lbs.
7. In preparation to install brake to motor, it may be necessary to turn the brake disc to orient the slot in the brake disc with the motor tang. This can be accomplished by releasing the brake lever and using a screw driver to manually turn the brake disc to the desired location.
8. Align slot in brake with the mounting holes. Orient brake lever to match existing.
9. Turn motor shaft to align with mounting holes
10. Install brake onto motor, wrap wires, and insert them through the slot in the spacer.

Note: If you suspect that a wire may be pinched between the spacer and the brake, use a multimeter to check for continuity between each brake wire and the motor housing. If brake was installed properly, there should NOT be continuity.

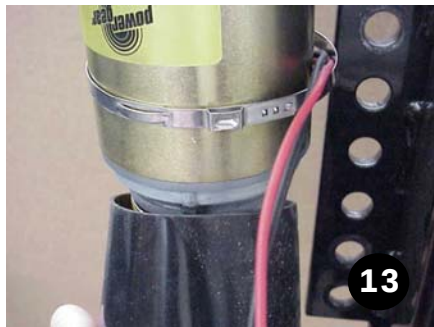
CAUTION

BE CAREFUL NOT TO
TWIST OR CUT WIRES ON
EDGE OF SPACER





11. Make sure wires are not pinched in the slot of the spacer.
12. Install brake screws. Make sure of washer location. Torque to 14-16 in/lbs.
13. Slide clamp over harness, boot, and motor



14. Now slide the clamp over the boot, approximately 1/4" from the edge of the boot. Using Oetiker Pincer pliers (readily available via the internet, if not found locally with a tool supplier), crimp the raised part of the clamp until it tightens around the boot. The deformation of the clamp ear provides a visible and instant check that closure has been accomplished (14a).



NOTE: In cases where the electric jack assembly is mounted where water spray from the tire will come in direct contact, it is recommended to apply a continuous bead of RTV silicone around the perimeter of the edge of the boot.



15. Install new jumper harness to both the brake and motor harness connectors. Connect jumper harness to jack power distribution harness on the coach. **Note:** jumper harness wire colors may not match coach harness colors. This is ok.



LABOR ALLOWANCE:

- 1010001232 Motor Boot Service Kit: 30 minutes per jack
- 1010001289 Motor Brake Service Kit: 30 minutes per jack



WARNING

DO NOT WORK ON OR AROUND A VEHICLE THAT CAN BE MOVED. To ensure personal safety, place the transmission into PARK (NEUTRAL) and set the parking brake. Turn off the ignition and remove the ignition key. Maintain control of keys while working. Attach a notice, "DO NOT USE", to the ignition switch in order to prevent activation of the systems.

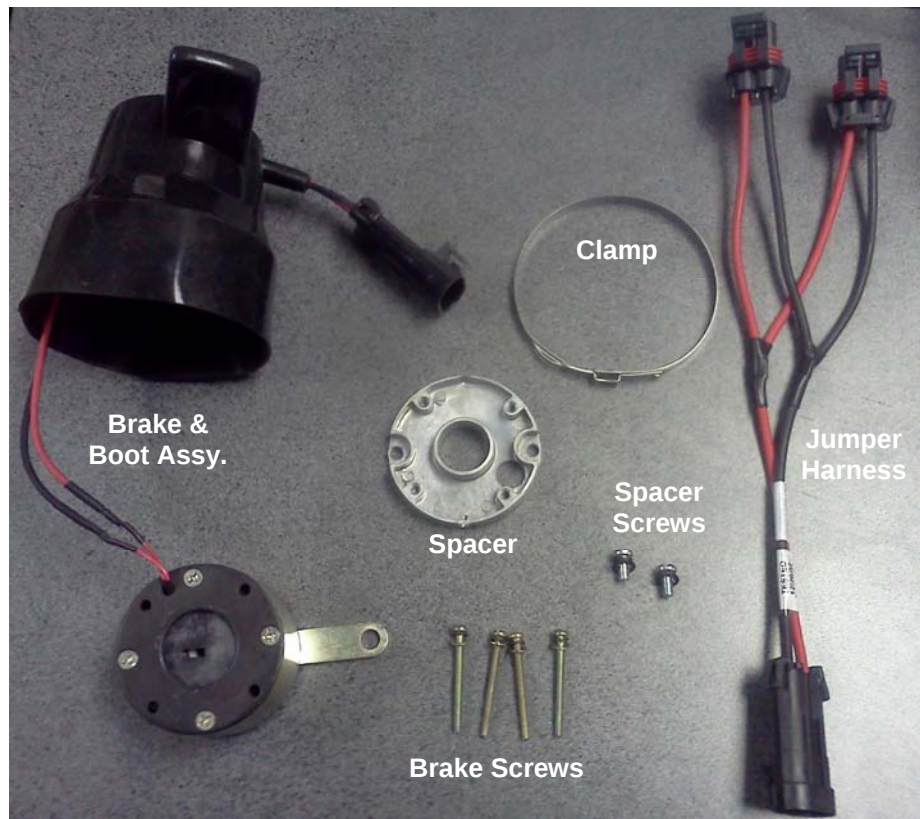


Figure 9 Motor Brake Service Kit # 1010001289

System Test

Perform an auto level cycle to ensure repairs were properly completed

TO BEGIN LEVELING OPERATION

1. Engine must be running
2. Transmission must be out of gear (this could be "Park" or "Neutral", depending on your transmission).



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



Professional resources for the whole RV industry — free.

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



rvtechcheatsheet.com/manuals

Find thousands more RV manuals, wiring diagrams and parts lists

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

Join our free Facebook group →



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