

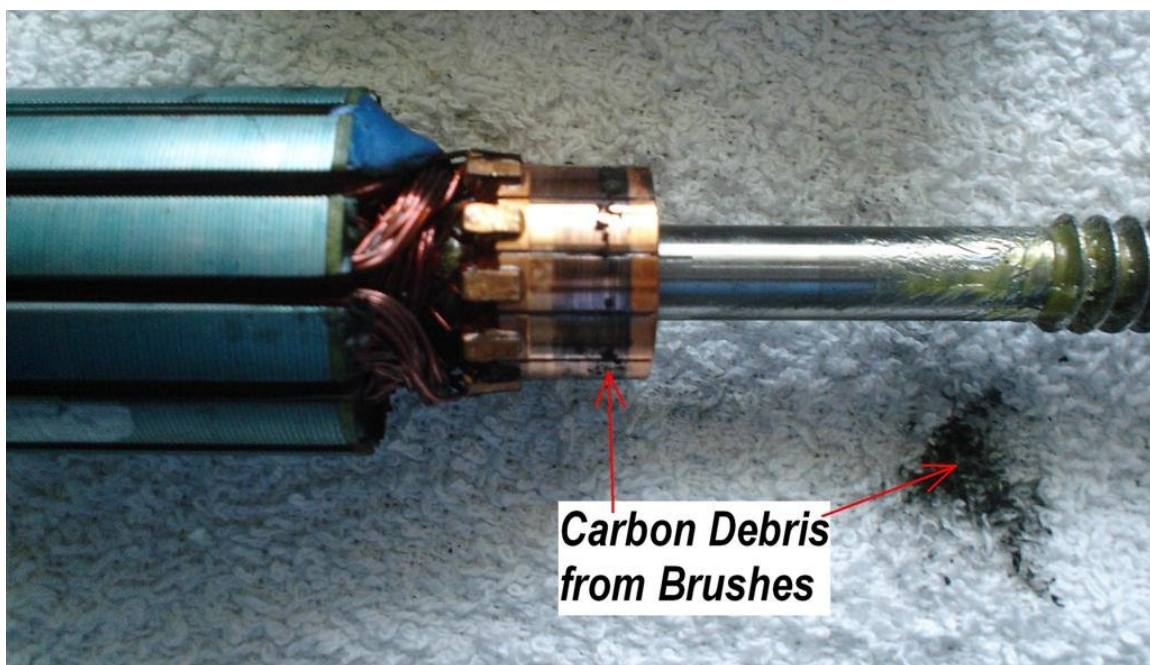


2010 43QGP Allegro Bus

11/7/2011

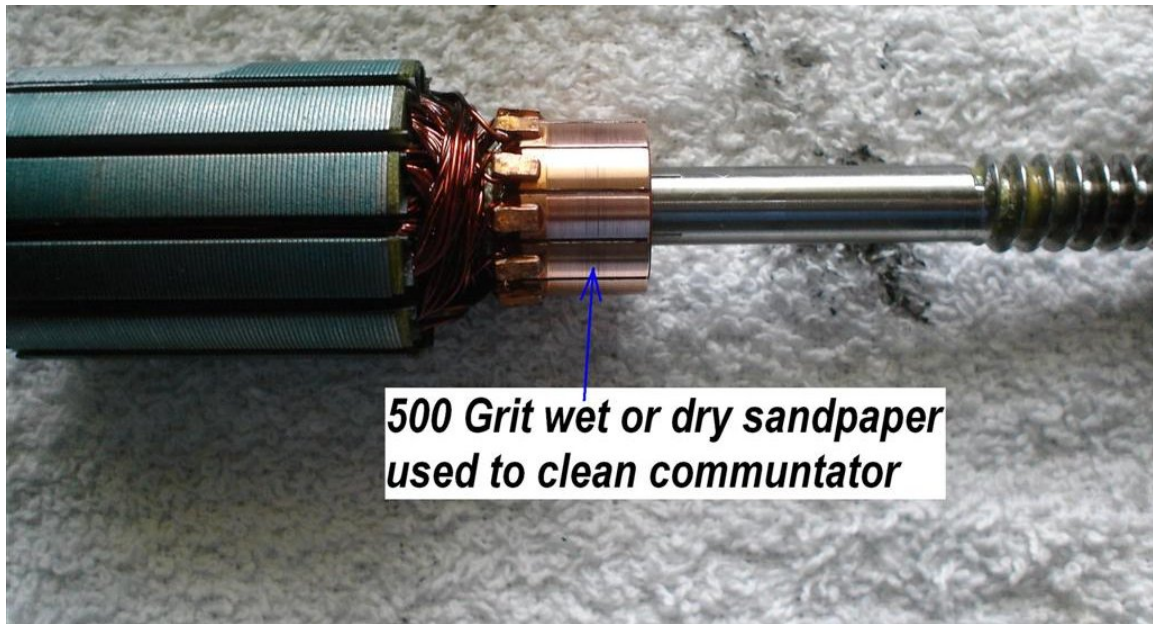
31C – FYI - COACH-STEP RV STEPS. This file is a continuation of the problems with the Lippert Component Company's "Coach Step" RV steps. The usual problem with both Kwikkee and Coach-Step RV Steps is the intermittent operation of the open and close mechanism when ever the steps have a mind to they just do not open or close when they are supposed to. In some cases the steps will hang in the open position while you are driving down the road unaware the steps are extended.

Most problems are related to the step motor which has become unreliable due to the build up of carbon material from the brushes on the commutator the build up prevents the proper operation until the motor is either replaced or repaired by cleaning the commutator.

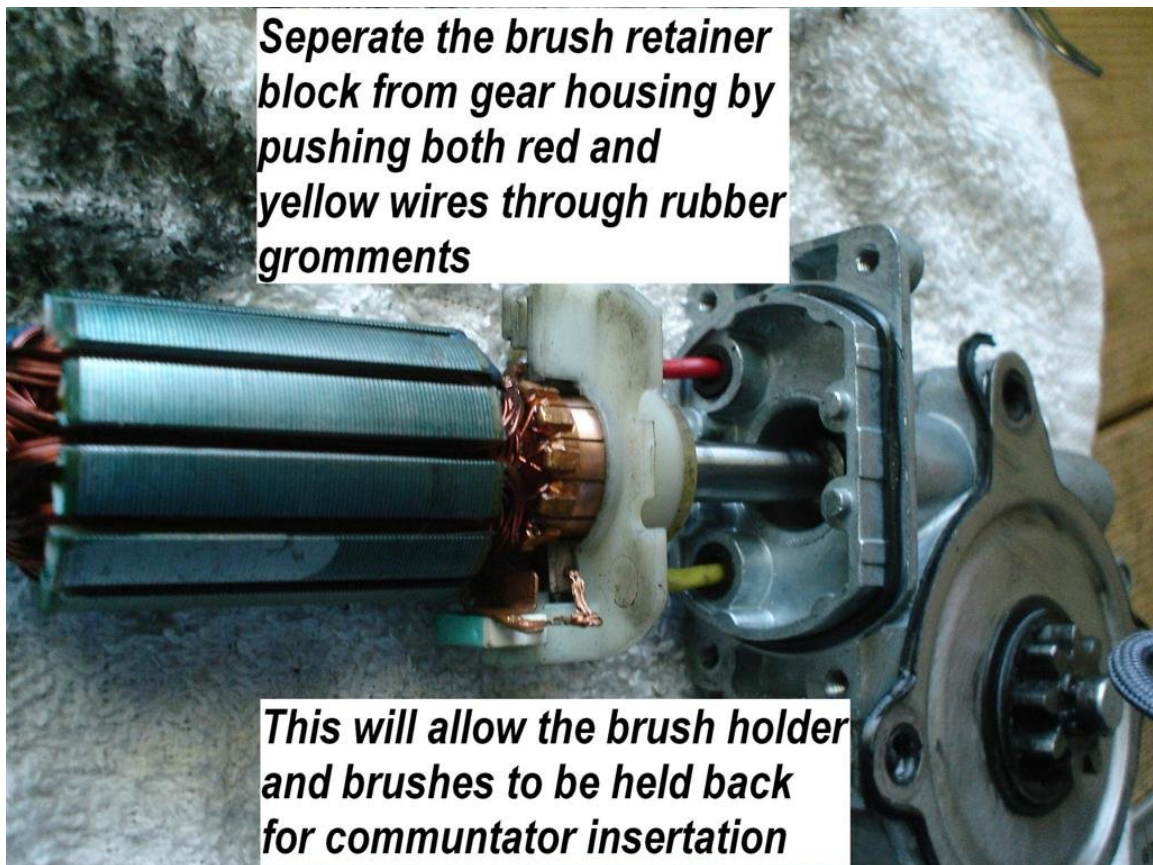


After motor housing disassembly the carbon on both the copper commutator and the towel are both evident.

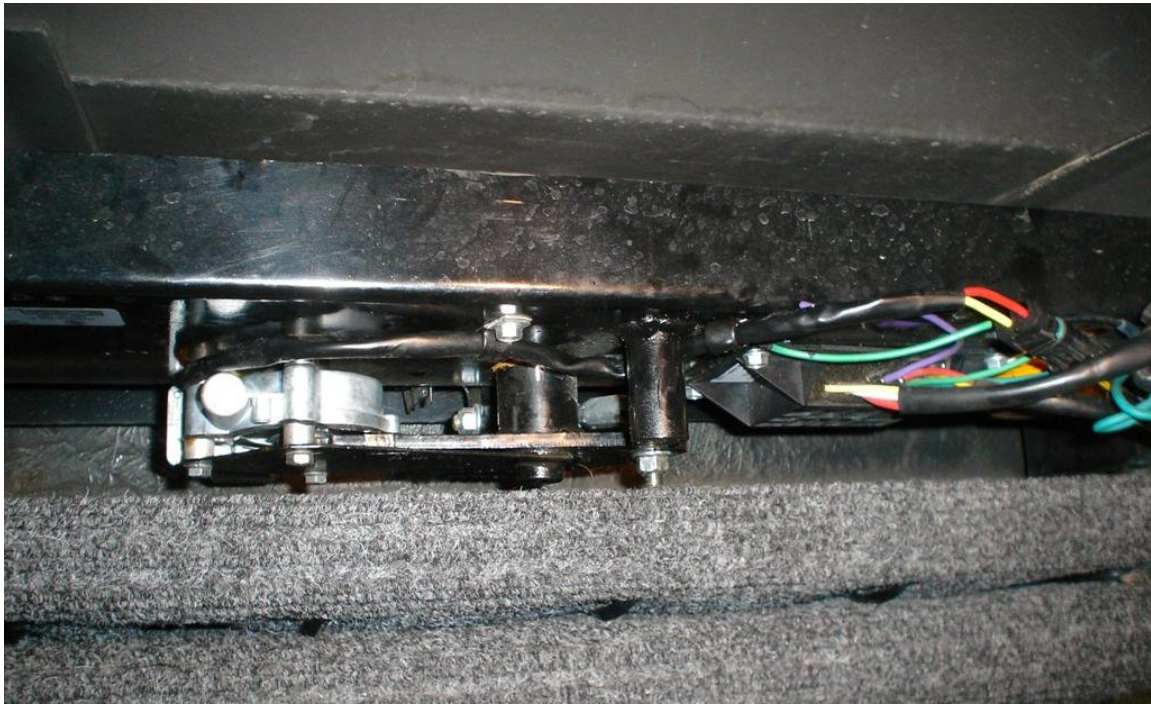
500 grit wet or dry sand paper was used to remove the carbon, after the carbon has been removed the spacing between each commutator bar is cleaned to prevent shorting out the motor which will also prevent its operation.



The next step is reassembly of the brushes into the brush holder which has springs to keep tension on the brushes holding them against the commutator.



As seen in the previous picture, the white brush holding block has to be separated from the gear housing to allow assembly of the brushes into the block. The brush springs will try to eject the brush until they are held in place after the commutator has been inserted through the brush holder. After the unit has been assembled to the point in the above picture the motor housing is slipped over the motor windings. Hold onto everything tightly as the magnets in the housing will pull the components apart if not held tightly in place. After the housing is slid into place push the brush holder in place. The Red and Yellow wires can be gently pulled back through the grommets until the motor has mated with the gear box. Install the four screws making sure the housing is turned the same way it was removed. If the cover is flipped over the motor will run in reverse of the way you desire it to.



The installed motor was refurbished by me. After experiencing step problems Tiffin was called about the problem a new motor was shipped. After the new motor had been installing everything was checked for proper operation, however the new motor sent by Tiffin would not completely retract the steps. The steps would not retract the last inch. After several hours of checking making sure the mechanism moved as designed and then making modifications to the installation of the step motor and gearbox the original step motor was re-installed. The original step motor is operating as designed after being cleaned and reassembled.