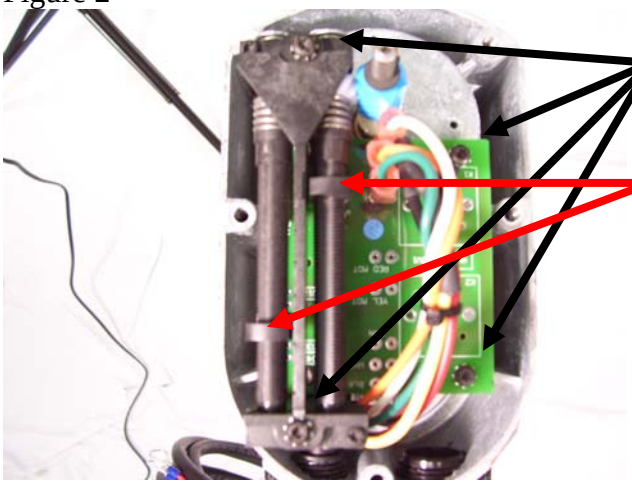
Patriot Actuator DL12 motor replacement guide.

Figure 1

Remove 5 bolts 5/16
Then remove rear housing

Tap on rear shaft to break seal

Figure 2

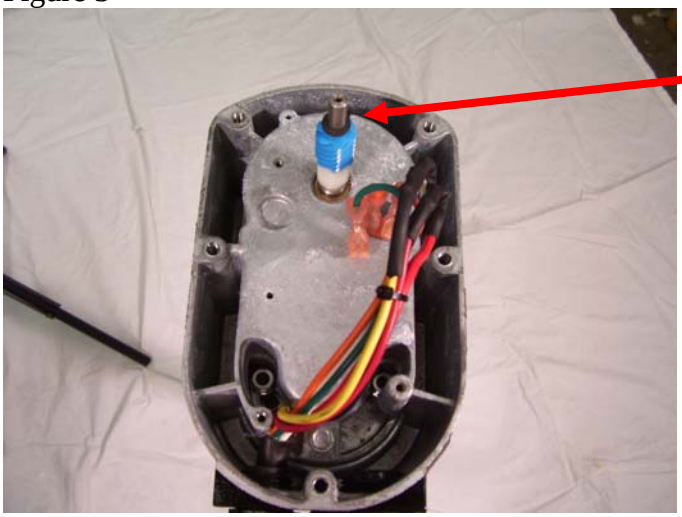


Remove limit assembly 4 screws

Note, picture shown shows correct limit nut setting for open gate position

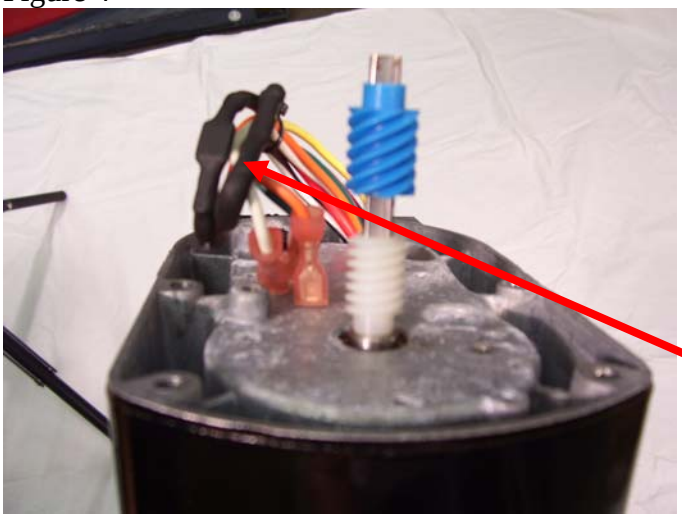
IMPORTANT: when reassembling the limit assembly install the 4 screws but do not tighten.
Slide the limit assembly over so that the small white gear is against blue gear. Do not force hold and tighten 4 screws.

Figure 3



Remove 2 retaining clips holding blue gear in place.

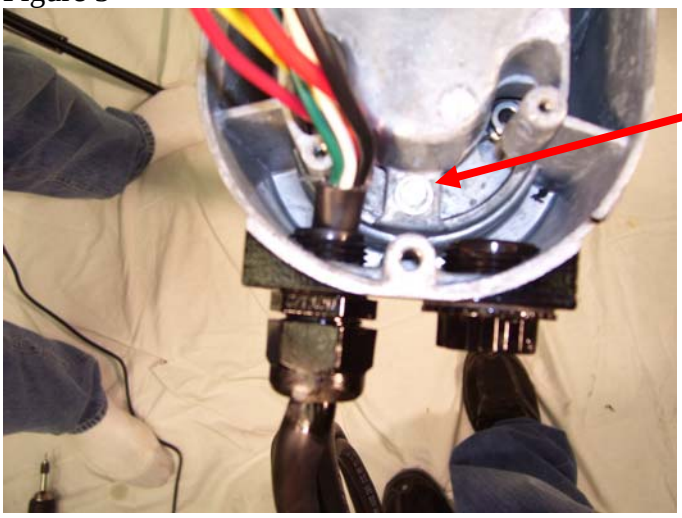
Figure 4



Remove blue and white gear and inspect blue gear teeth for any signs of damage.

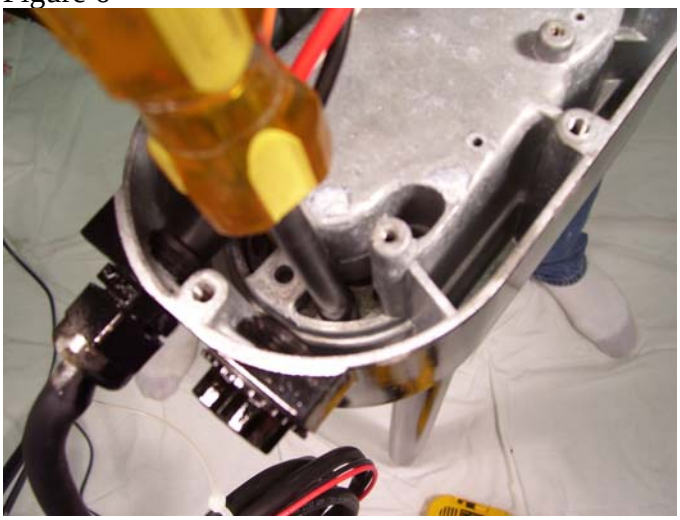
Motor wires insulated with heat shrink

Figure 5



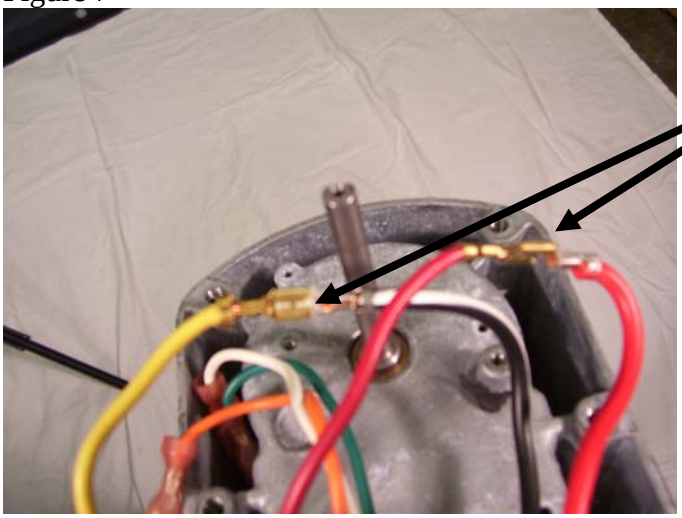
Locate bolt holding gear box together

Figure 6



Remove gear box bolt

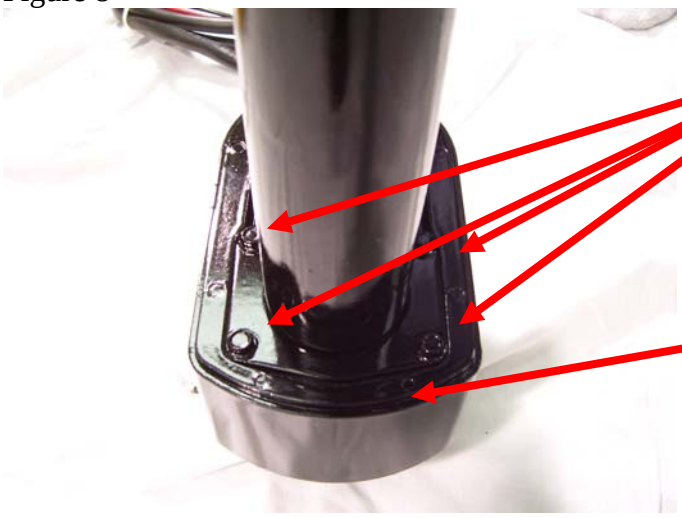
Figure 7



Remove insulation from motor wires.

Unplug motor wires once insulation is removed.

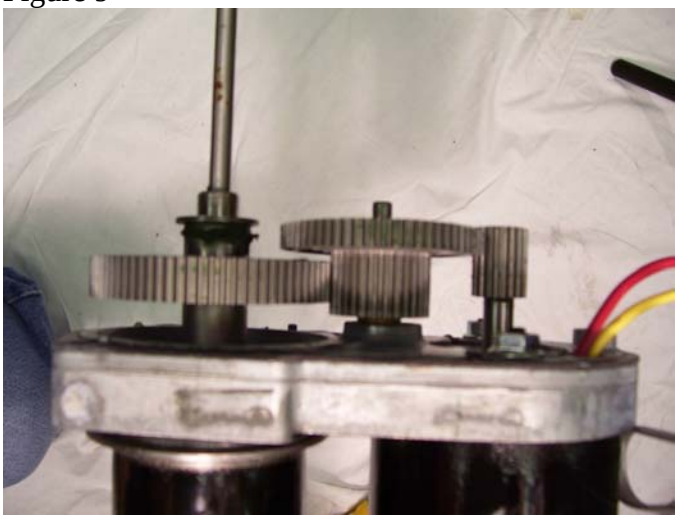
Figure 8



Remove 4 bolts holding extension tube flange in place

Per step 9 tap on housing here moving around outer edge to break seal.
Actuator should be flipped so that you are tapping from the bottom, opposite this picture.

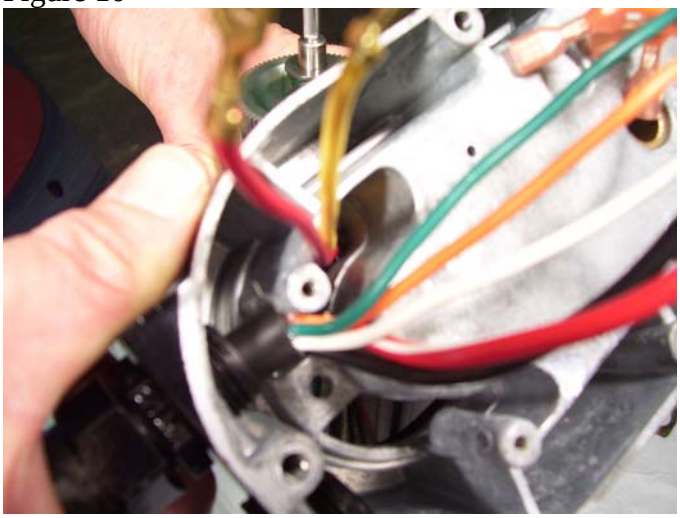
Figure 9



Separate gear box exposing gears per picture on left. This will allow access to the 2 motor mounting screws.

Separating gear box can be fun, stand actuator on the floor gear box up, tap on outer edge of housing going around the housing until it begins to separate. See figure 8 for surface to be tapped.

Figure 10



Once motor is replaced route wires through gear box as shown.
Install 2 motor mounting screws and reassemble.

Pull to open installation
Before installing limit assembly turn extension screw so that only about 3 inches of stainless steel is visible. This will be close to the open gate position. Install limit assembly with limit nuts matching picture in figure 2.

NOTE: when installing limit assembly install the 4 screws and then slide the entire limit assembly over until the white gear on the limit assembly meshes tightly with the blue gear. Hold in that position and tighten all 4 screws.

Push to open installation
The same as above with the difference being this will be close to the closed gate position.