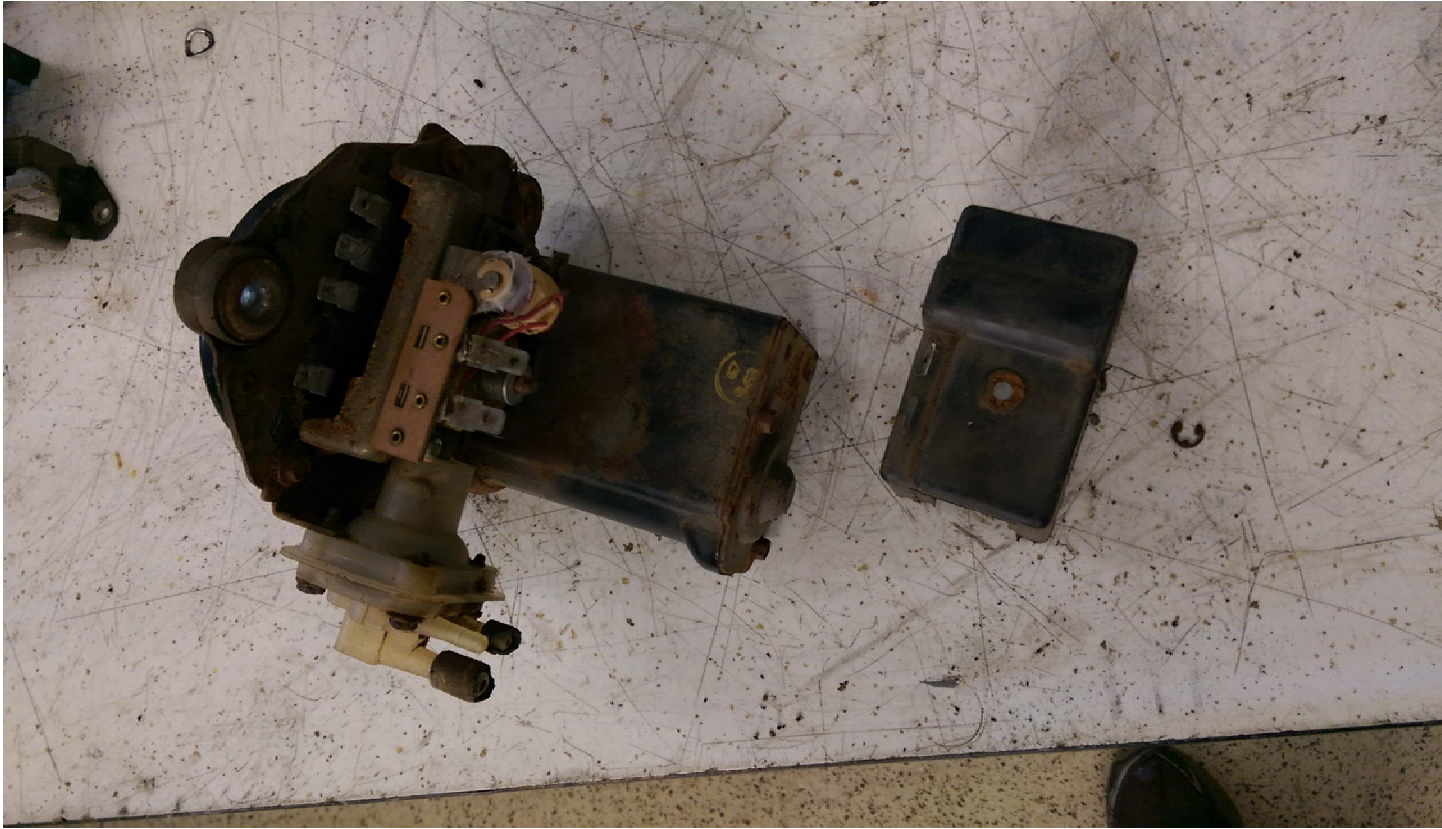


Here is a break down of how I did my 2 speed windshield wiper rebuild:

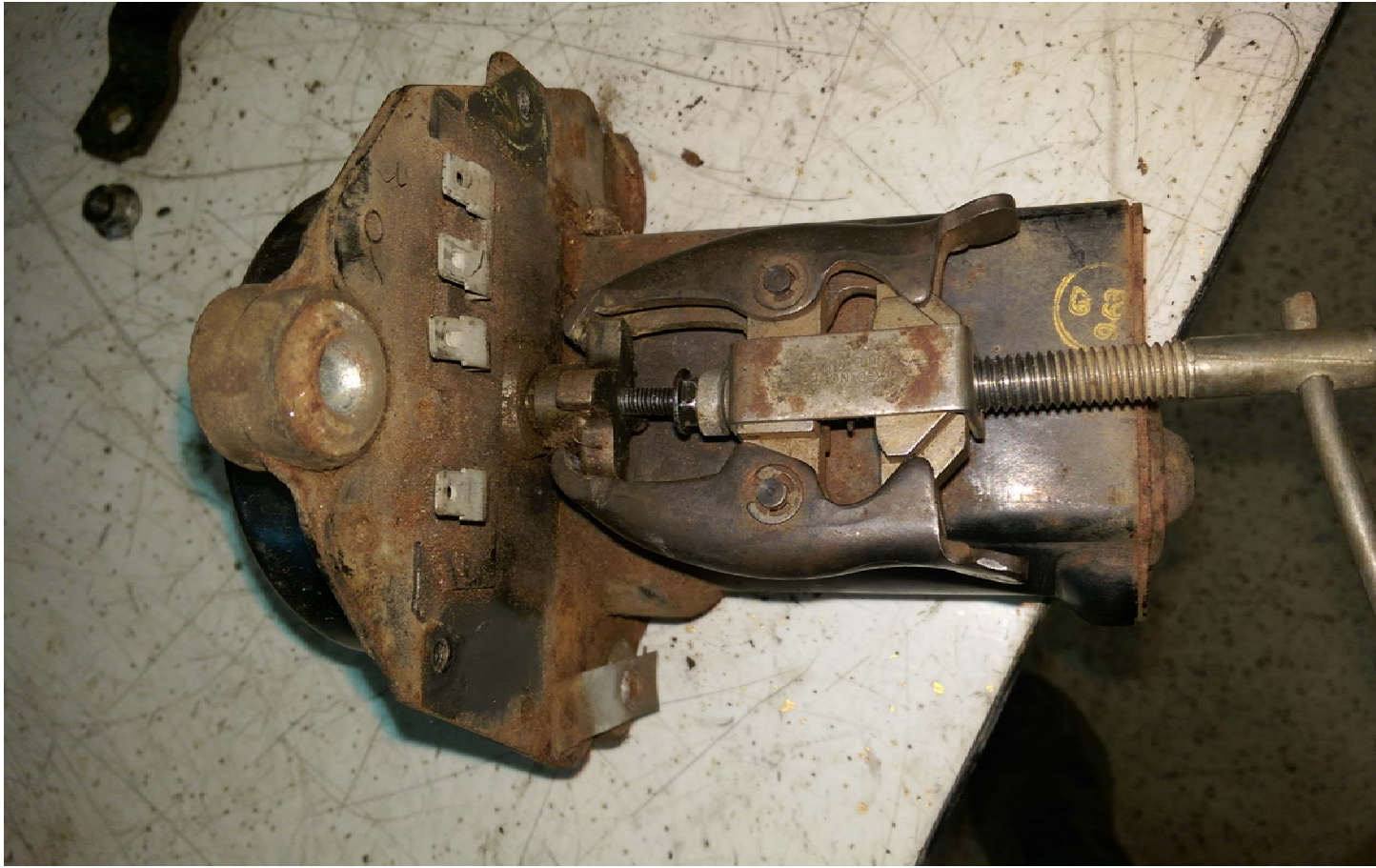
Took off E-clip off squirt pump cover and remove cover.



Remove 2 screw that hold on pump and arm on front:



Next used a small puller (and a 6mm bolt to press on shaft) to remove pump gear.



Next removed snap ring on front and washer:







Next Drilled out all rivet heads and punched out rivets:





Heat solder joints to pull out wires



Unbolt motor housing and separate: (Don't loose little plastic cone a end of shaft)





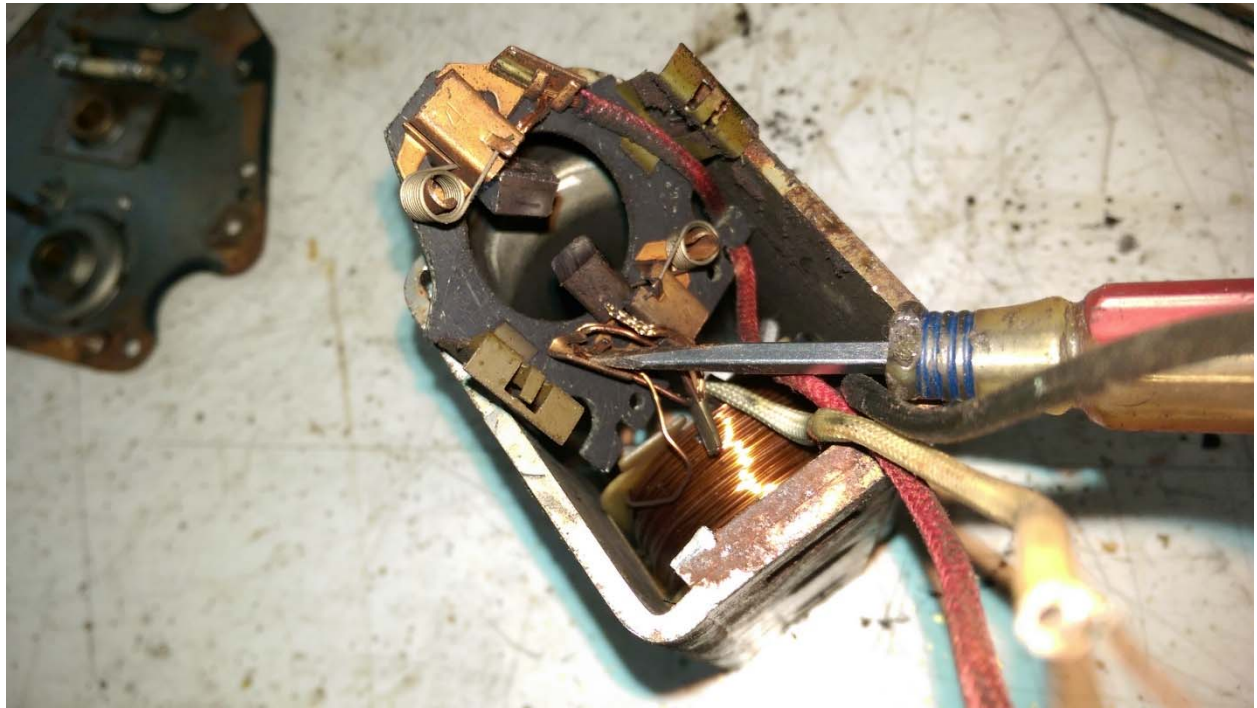


There will be 4 washers on the front of armature shaft, flat, wavy, wavy, flat.





To change brushes pry tab, where it is holds coil wires to brush and clip crimp off.



I split a inline splice in half to replace crimps when re assembling new brushes.





Also, when placing brushes in holders, move spring into holding notch so you don't have to fight brushes until armature is back in place. Then move arm up into slot.



Blasted and cleaned all parts and painted:





Cleaned up contacts on lathe: (not absolutely necessary)



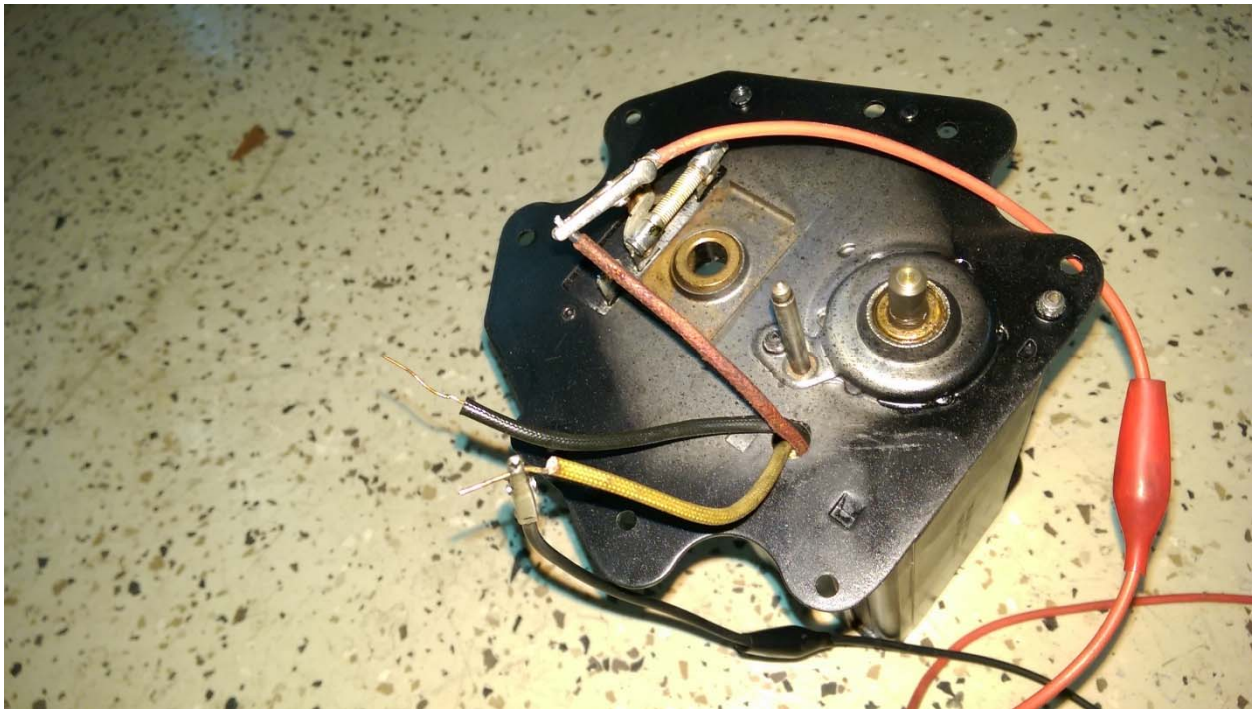
Place brush holder back in place and put washers back in place on shaft and release springs on brushes.



Don't forget the little plastic cone in end of shaft before placing on end cap and bolts:

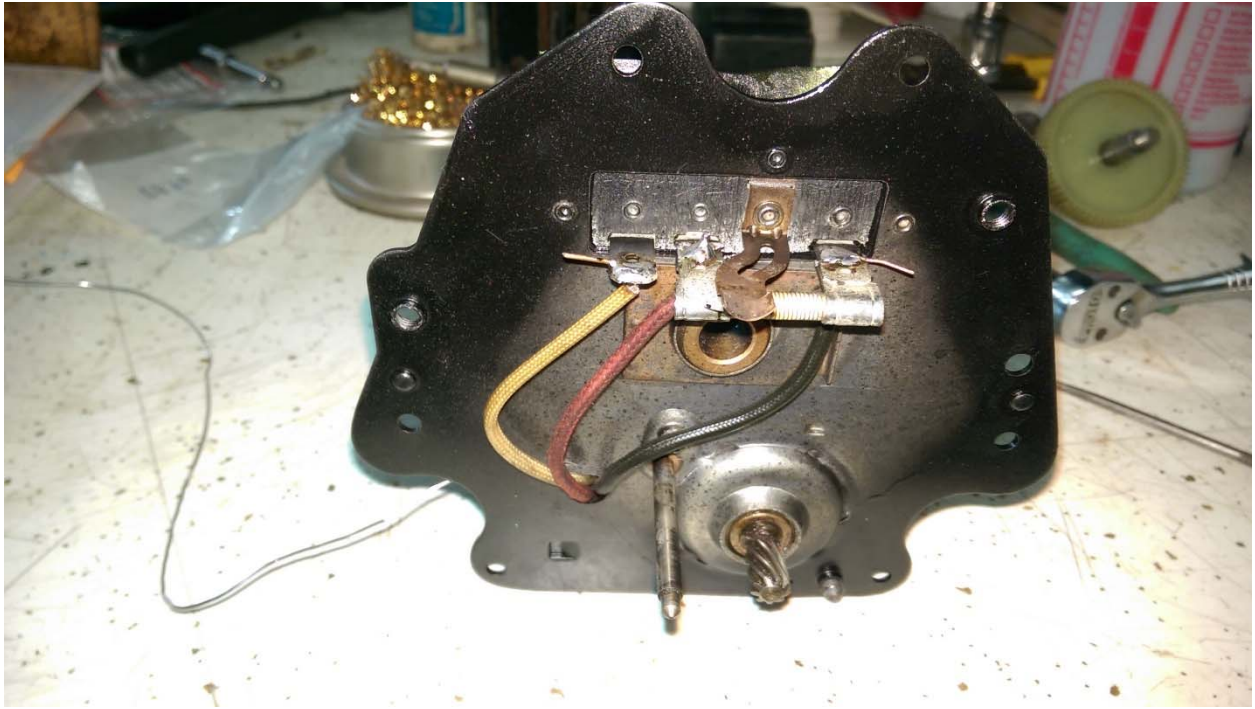


After assembly, check the running of motor, red to red, ground to white.





Resolder wires back in place:



Grease up all gears including the park ramp.



Place white gear through front cover and assemble washer and snap ring:





Re rivet the case together, do not forget the ground tab under the one rivet. Also press on squirts gear.



You can “park” motor by applying power to one of the left contacts and grounding the center left contact to run the motor for a second, then remove ground from contact and touch grounding tab.

Now line up marks on arm and case and reinstall in car.

