Door Lock Actuator Fix

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Inexpensive replacement for electric door lock actuators

I just fixed a balky electric door lock on my Waggy, and it was easy and cheap! Since it was on the passenger door usually used by my wife, having it unlock when its supposed to should significantly reduce the scowl factor on future rainy Jeep rides.

Since electric door locks are a popular option on car alarm installations, the parts are plentiful and inexpensive. Just go to any shop that installs car alarms and buy a Harada 2-wire power door lock actuator model DLA-01. The cost out here in pricey California was $21. Following are the basic installation steps I followed.

Remove the interior handles, arm rest, trim retaining screws, and pop off the door trim panel. Locate the two rivets holding the existing lock actuator in place and grind off the heads. When they're gone, remove the electric lock actuator. While I had always thought this was a solenoid actuator, it's actually a small electric motor that drives a pinion gear and rack to move the lock actuator bar up and down. There is no ground connection required, so poor door lock performance is not yet another poor grounding problem. The actuator is just a DC motor with 2 wires connected to it. The Harada part is exactly the same except the loop on the top is rotated 90 degrees from the Jeep (Ford?) original part, but this doesn't make any difference.

Cut off the connector on the end of the stock actuator wiring harness and crimp on a couple of blue female bullet connector sockets for 18 gauge wire. Plug the wires from the new actuator motor into them. On my car, the green Harada wire connected to the blue Jeep wire, and the blue Harada wire connected to the remaining brown Jeep wire. Test these connections with the lock switch to see if it moves up when you press up. If not, just reverse the two wires.

Look at where the old actuator mechanism was located and position the new one so it's in about the same place. Location is not really critical as long as it's reasonably near the stock position. Mark the locations of the three mounting holes and then drill pilot holes in the door sheet metal. These holes may be very close to where the original rivets were located, but are different enough that new holes will have to be drilled. Place the new actuator inside the door and fasten it in place with the provided screws. Then, take the new universal connecting bar and slip the elbow on the lower end through the loop on the top of the new actuator. Run the connecting bar upwards and slip on the clamp. Slide the clamp over the existing lock actuator bar. Like everything else, the Jeep bar is a little thicker than what the unmodified clamp would accept, so I had to drill it out a little to accept the thicker Jeep part. Leave the 2 set screws loose.

Use one of your lock switches to move the new actuator to the open position and pull the door lock button upwards to the open position. Tighten the 2 set screws in the "bar to bar" clamp and you're done!

This whole task took a leisurely 2 hours including lubing the window flex rack (since I was in there already). I'll replace the other lock actuators as they become balky, and expect it to take about 1 hour per door now that I'm experienced.

It occurs to me that, even if you don't have electric locks, you could use this ~$21 setup to eliminate the "phantom auto lock" feature on manual locks with broken or weak internal springs. There's enough resistance in the rack and pinion actuator to eliminate "auto lock", but you can still move the lock button up and down by hand.

Let me know if you need any more information.

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