

Power Seat Motor Maintenance

Last fall when I put my concours Thunderbird blue '55 T-Bird away for the winter I found that the horizontal power seat motor was not working. This was somewhat strange since the mechanism was totally restored 10 years ago and had worked well. The seat was jammed all the way back. Pressing the switch produced the relay clicking sound and the motor would "clunk" but would not move the seat forward. No matter how much I pushed and pulled on the seat while working the switch it just would not move. I checked the switch and even bypassed it but the result was the same. In order to completely understand and solve the problem I would have to remove the horizontal motor which is no small task. The steps required to remove the horizontal seat motor and transmission are listed below.

First, raise the seat all the way up with the vertical seat motor. If the vertical motor does not work, detach it from the power seat frame bar and raise the seat manually and prop it up. Next, remove the four ½ inch seat frame nuts at each end of the seat. A ratchet end wrench works the best for this since the front nuts are in tight quarters. By removing the seat nuts the seat can be lifted up further and any binding of the motor mechanism is removed. The seat can be propped up higher and the clip on the front pin of the seat motor removed. The pin itself is then removed and the motor will drop out of the seat. Next remove the clip and pin at the transmission tube end of the motor under the seat and disconnect the four motor wires from the loom and remove the motor.

When I inspected the seat motor transmission I found the reason for the motor not moving--hard grease. I had lubricated the motor screw drive with white lithium grease but that was ten years prior and it had hardened to the point that the screw drive would barely turn. In retrospect I should have suspected this was the problem since the seat mechanism worked better when it was warm last summer probably due to the grease being softer with the heat. I cleaned the old grease and lubricated it with new white lithium grease and tested the

"I had lubricated the motor screw drive with white lithium grease but that was ten years prior and it had hardened to the point that the screw drive would barely turn."

motor which worked fine. When testing a seat motor connect the black wire to a battery ground. Connect the green (armature) wire and the red (field) wire to the hot side of the battery. To reverse the motor rotation connect the other field wire, the yellow one, and the green wire to the hot lead of the battery. Be sure to have the screw drive tube held in a vise and hold the motor end firmly while the screw moves in and out of the tube.

Next lubricate the seat tracks with spray white lithium grease. Reverse the steps to install the seat motor and bolt the seat back to the frame. Test the motor and if it works well, congratulate yourself on a difficult job well done. Total time- 3 ½ hours.