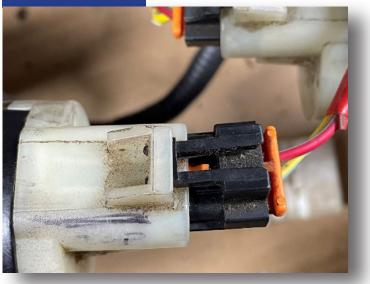


# 98-02 RAM Forward/Backward Kit Instructions

## **STEP 1**



Unplug the electrical connector.

# **STEP 2**



Remove the T45 Torx bolt that holds the gear/motor assembly to the seat frame.



You have two options for this step.

**Option A:** Remove the second T45 bolt holding the rear motor bracket to the frame and let the whole assembly drop down.

**Option B:** Loosen the second T45 bolt and remove the coiled roll pin holding the motor to the frame. You can then just rotate the motor frame down.





Remove the two T45 bolts holding the gear assembly to the side of the seat track. Try to not rotate the bracket that screws onto the gear shaft. You will want to make sure it is in the same position on the shaft during assembly.

### **STEP 5**



Remove the gear/motor assembly from the seat track.



Remove the two screws holding the motor assembly to the gear housing and take the motor assembly off the gear housing. Remove the short flexible drive shaft and put it aside for later. It is used during reassembly so don't discard it.





Install the adapter provided in the kit to the gear box as shown. You can insert the flexible shaft later if you want, but when you do, make sure it is fully engaged into the gear assembly. Use the provided #8 screws and #8 lock nuts (9 mm wrench) to fasten it to the gear box.







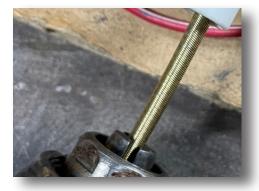
Install the motor onto the adapter. Make sure the square end of the flex shaft is fully seated into the motor. Align the holes on the motor with the predrilled holes on the adapter and secure using the two #8 hex (1/4) head threading screws.

#### **STEP 9**





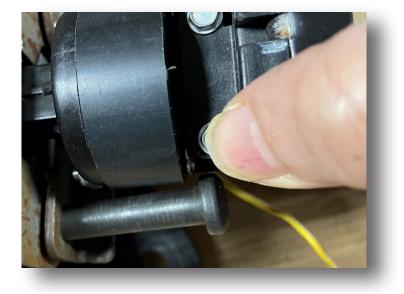




Measure the other side for/back gear assembly travel bracket. Measure from the gear box to a point on the travel block. Record this measurement and adjust the motor/gear side assembly to the same measurement. If you need to rotate the screw assembly to dial in the measurement, chuck up the short flex shaft provided in the kit to a reversible drill. You need to make sure enough shaft is sticking out of the drill chuck so it will engage the motor's shaft. Slowly run the drill in the required direction to get the measurement you recorded from the other side. Both sides need to be at the same point on the threaded shaft so your seat will travel back and forth without binding.



Install the motor/gear assembly onto the seat frame as shown. Make sure the rear vertical lift motor bracket goes under the for/back motor/gear assembly. Install the T45 screw into the bracket and seat frame. Do not tighten it yet.



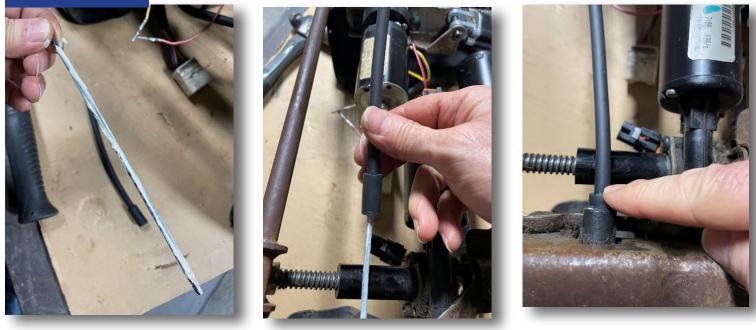
# STEP 11

Attach the travel bracket to the seat frame with the two T45 bolts removed in step 4. You may have to manually slide the lower seat frame to align the holes. Once these two bolts are in, tighten them up along with the two T45 bolts holding the motor bracket to the seat frame from step 10.



If you removed the coiled roll pin holding the rear lift motor to the bracket, then reinstall the motor with the coiled roll pin. It is easy to rotate the arm to far which will disengage the cross bar holding both frame sides together. If it does disengage, then just insert both ends of the cross bar into each side of the seat frame and rotate the shaft so the ears are behind the tabs on both sides as shown in the second photo. You can clamp a pair of vice grips on the long cross bar to help rotate the bar to align the motor with the holes.



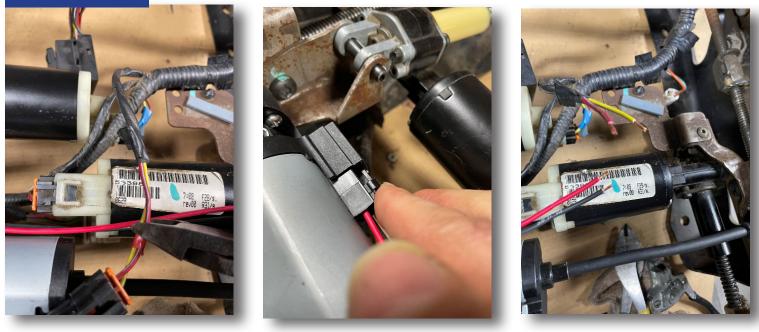


Apply white lithium grease or tribolith from my website to the flex shaft. This helps lubricate the shaft and reduce whipping from the flex shaft as it spins. Avoid bear/axle grease as it will attack the rubber tube. Insert one end into the gear box and then slide the supplied rubber tube onto the shaft. The big end goes into the gear box. One end of the flex shaft has a longer squared end. The long end goes into the motor. If the flex shaft seems to long, try reversing the ends.

#### STEP 14



Bend the motor side of the flexible shaft and insert it and the tube into the motor. You may have to rotate and wiggle the shaft to get the square end to engage inside the motor.



Clip the factory plug off the forward/backward connector. Insert the provided pig tail connector into the motor and cut off the excess wire. Strip all four ends and connect the factory red wire to the pigtail red wire on the motor. And connect the factory yellow wire to the pigtail black wire. If you get these backwards, the seat will move the opposite direction of your switch. Crimp the butt connectors and secure the for/back harness to the power base harness with the provide zip tie.

## STEP 16



Crimp the butt connectors and secure the for/back harness to the power base harness with the provide zip tie.



This is how it should all work once completed.

Please contact me at **rustyhubgarage@gmail.com** with any issues.