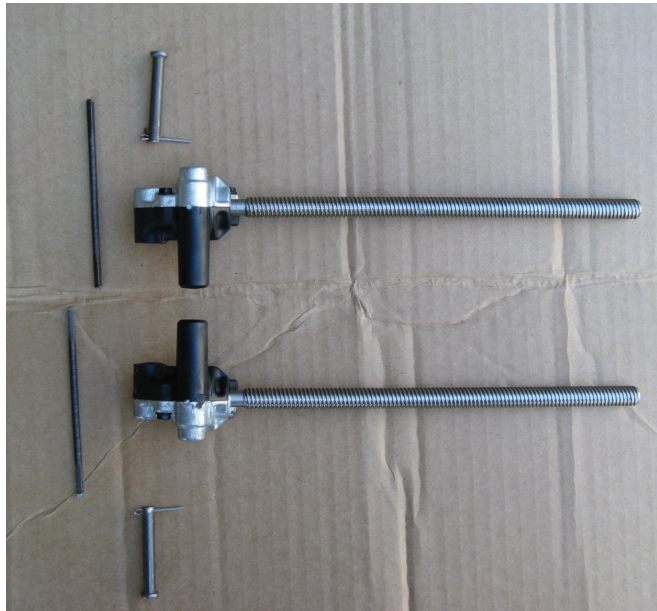




MUSTANG

Forward/Backward Gear Set Installation



KIT COMPONENTS

- 1 Left gear assembly
- 1 Right gear assembly
- 2 Flexible drive shafts
 - 2 Clevis pins
 - 2 Cotter pins
- 4 Washers (*not pictured*)

STEP 1

Remove the power seat assembly from the car. If possible, make sure the seat is raised all the way up. This makes removing and repairing the assembly easier.

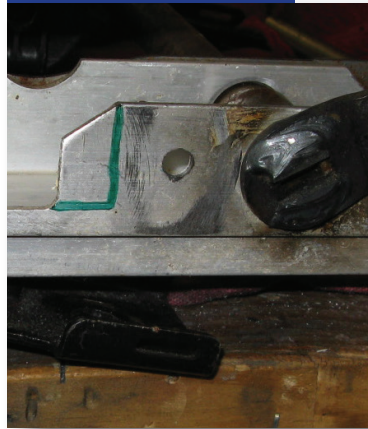
STEP 2

Use a torx bit to remove each torx bolt, which is holding the gear screw block to the seat slider assembly. Once the torx bolts are removed, unscrew the block off the threaded gear shaft.

STEP 3

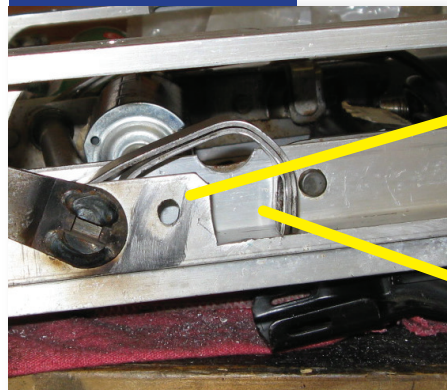
Use an air grinder or some type of saw to grind/cut off the mushroomed end of the pin holding each drive gear assembly to the seat frame. Use a punch or similar tool to push the pin assembly out. You can now lift the gear assembly out of the frame channel and maneuver it from the metal straps. Remove the forward/backward motor; this will help disengage the flexible drive shafts from the input side of the gears. You don't need to remove the electrical wires from the connector. Once both gear assemblies are removed, temporarily reattach the motor to prevent damage to the wires while you make the needed modifications to the frame. See the last part of the instructions for sticking slides.

STEP 4



Some minor trimming is required to the outside of the frame. Draw a similar cut line as seen in the picture below and remove unneeded metal.

STEP 5

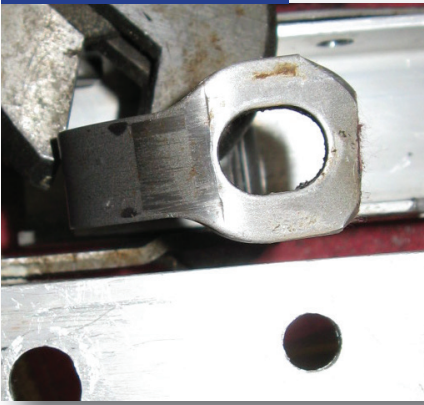


Elongated hole

Trimmed area

Because the replacement gears are oversized compared to the factory units, the mounting holes need to be slightly vertically elongated. Take small steps and periodically test fit the new gears into the frame. Below is a picture of the side trimmed off and the hole vertically elongated. Notice the top corner is also trimmed at 45 degrees.

STEP 6



The metal straps that go over the gearbox portion need to be bent out slightly. However, if you bend them to much, the strap will come in contact with the threads on the shaft and rub. Bend the strap outwards some like shown in the picture and test fit. These straps prevent the shaft block from hitting the gear housing and act as a safety restraint, so don't just cut them off.

STEP 7

When finished, the threaded screw shaft should be parallel to the frame channel. If the shaft is not parallel, the shaft will bind and strain your electrical motor.



View from the side

View from the top

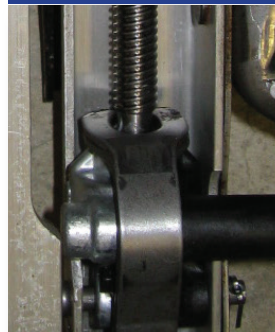
STEP 8

Keep test fitting everything until it all fits just right. When the shaft is parallel with the bottom of the frame and parallel with the inside of the frame, you are done making adjustments.

STEP 9

Install the gears in the frame and slide the provided clevis pin through the frame and gear assembly. Use a provided washer at each end of each clevis pin and secure with a cotter pin.

STEP 10



Thread the shaft block assembly back onto the new shaft. Mate the track slide and the block assembly back together at the fully extended position.

Try to get each side installed at the fully extended position. If both sides are not relatively the same length, your seat could feel a little off center when installed. When both are attached and the torx bolt is tightened, apply a light coat of white lithium grease to the shafts.

STEP 11

This step is optional, but makes for a cleaner install. Take off the small plastic end cap from the old gear assembly input shaft and trim the 3 small prongs off. Use a drill bit, knife, or round file to open the small hole up to the same size as the other end. The rubber hose covering the flexible drive shafts will slide into this new opening. Then the plastic piece will slide into the new gear input housing, making for a clean fit. Before sliding the plastic end cap into place, coat it with some grease, this will help it seal the cap to the housing, keeping dirt from getting inside the hose. See the picture for reference.

STEP 12

Trim ½ inch off the rubber hose which shields the flexible drive shafts. See the attached picture. When in doubt, remove less material and keep test fitting until the rubber hose is the correct length between the motor and the gear housing. A good reference point is the old crease in the hose. I always cut the hose at the crease instead of measuring.



Before trimming

After trimming

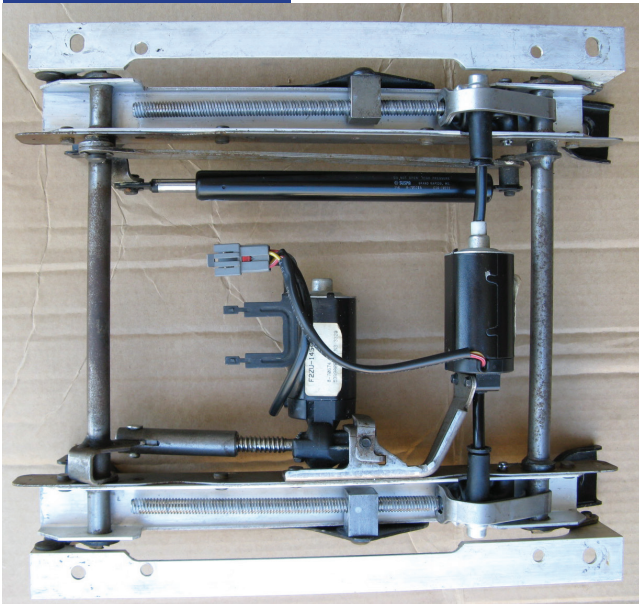
STEP 13

I've found it easiest to install the new flexible drive shafts into the gear assembly first, then sliding the rubber hose with plastic end cap over the drive shaft. Make sure to lightly grease the flexible drive shafts so the shafts have lubrication while turning in the rubber hose. The shafts will rotate inside the hose and contact with the inside of the hose is certain.

STEP 14

Unbolt the electrical motor and slide one side onto the flexible drive shaft. Then install the other side by maneuvering the motor out and around until the other drive shaft engages into the motor. Don't worry about bending the shaft assemblies. These are like speedometer cables and are made to flex and bend. Once you have both sides engaged, bolt the motor back up to the bracket.

STEP 15



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

*Enjoy your newly repaired seat
assembly. Remember, the gears
are warranted for life. If they fail,
just contact me for a replacement.*

Put the seat assembly back into your car and hook up the wiring before mounting the seat. Test the seat assembly to make sure it operates correctly before mounting the seat to the frame.