## Two Men One Garage

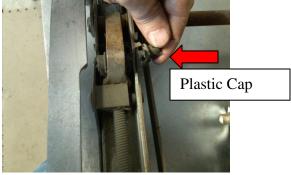
# Mustang Factory Type Forward/Backward Gear Replacement Instructions



#### Kit components

- 1 Left gear assembly
- 1 Right gear assembly
- 2 Clevis pins
- 2 Cotter pins
- 4 Washers
- 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.





- 2. Remove the forward/backward motor by unscrewing the two ¼ head screws. Carefully pull the motor out and away from the seat assembly. This will disengage the flexible drives shafts which connect the motor to the gear assemblies. You don't need to remove the electrical wires from the connector. Once the motor is free of the shafts, temporarily reattach the motor to prevent damage to the harness. Carefully unclip the plastic caps from each gear casing.
- 3. Use a T45 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 threaded metal block off the shaft.



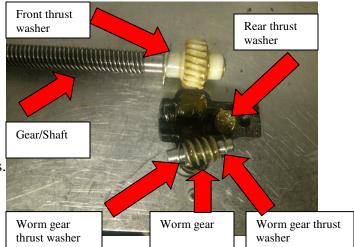
4. Grind off the mushroomed end of the pin holding each drive gear assembly to the seat frame. Use a punch or similar tool to push the old pin assembly out. You can now lift the gear assembly out of the frame and slide it out of the metal retaining strap. See the last part of the instructions for sticking slides.



5. Carefully pry the locking rings off each side of the gear casing. These rings must be reused.



6. Separate the gear casing. Remove the old shaft/gear and the old worm gear. Reassemble using the new shaft/gear and worm gear. Use white lithium grease to lubricate the new gears. Do not use bearing grease, it will deteriorate the gears.







7. Slide the locking rings onto each side the gear casing. Note the inner raised edge points away from the center housing. Use a ½ drive 13/16 deep well socket and gently drive the ring back onto the gear casing.

- 8. Slip the new gear/shaft through the metal retaining strap and install the gears in the frame. Insert the provided clevis pin through the frame and gear assembly. Use a provided washer at each end of the clevis pin and secure with a cotter pin.
- 9. 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. You can use the flexible drive shafts to manually turn each gear assembly to get proper adjustment. 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.
- 10. Attach the plastic cap onto the gear housing. Slide the flexible drive shaft with the rubber tube into the plastic cap. Make sure the square end of the flexible drive shaft is fully engaged into the gear assembly.



Plastic Cap

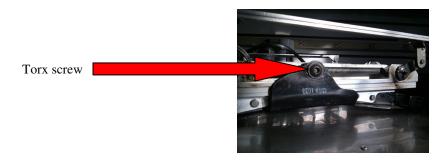
- 11. If you haven't all ready done the other side, repeat the above steps to complete both forward/backward shafts.
- 12. Unbolt the electrical motor and slide one side onto the flexible drive shaft. Then install the other side by maneuvering the motor out and around until the other drive shaft engages 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. Ensure the flexible shafts are fully engaged into the motor. If all ends are properly engaged, the bolt holes on the motor will line up easily to the mounting bracket.
- 13. 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.
- 14. If you have any install problems, please contact me at humrich@comcast.net.

### Cleaning 92-98 Mustang Power Seat Slides

#### www.2men1garage.net

The Mustang power seat assemblies are over 20 years old, so it's understandable why the seat slides are often difficult to move. Gummed up seat slides can cause the forward/backward motor to seem under powered as well as cause excessive strain on the forward/backward gear assemblies. I believe the increased resistance contributes to broken gears.

When replacing the forward/backward motor or forward/backward gear assemblies, check the slides for proper operation. Follow these steps in order to free up the slides. All the steps don't have to be completed to fix your problem. Perform them in order until you get satisfactory movement from the slides.



1. To check the slides, you will have to disconnect the lower slide from the gear assembly. Remove the T45 Torx head screw. Once the screw is out, the traveling block will be loose and could rotate on the screw. When you reassemble, make sure it is at the same distance on the screw as the opposite side. You want both sides to be in synch.



2. Check the mounting bracket to make sure it's not bent, which causes it to drag on the aluminum frame. If it's bent, carefully straighten it out.



3. You should be able to move the disconnected with minor to moderate effort. If you cannot move the slide this way, it's too tight.





4. If the slide it difficult to move, spray WD40 in the rail as shown. Working the slide back and forth which will loosen up dirt and debris in the aluminum channel. You will see a black film in the channel after moving the slide. Wipe it out the best you can, and repeat the procedure numerous times. Most of the time, I can get the slides cleaned enough to improve movement.





5. If the slide is still hard to move, you can trim the ridges on the black nylon slides with a razor. On the top and sides of each slide is a ridge about 1/16 tall and wide. Sometimes the ridge is all ready worn off, but if not, trim it off to decrease slider drag. Try to determine what side is dragging by looking for wear marks and carefully trim it off as shown.

6. The last step can be difficult and could result in breaking the nylon slides, although I have not ever broken one but **do so at your own risk**. The slides can be removed from the aluminum channels. If you want to proceed, do the following steps.

a. Grind down the sharp edges on both rotating assemblies for the side you plan on removing. This helps the bracket slide over it. Important: The seat must be in the fully upright



Grind both levers

**b.** You will drive the slide out by hitting the large end of the slide. Do not hit the front brackets. They are smaller and very weak. Only hit on the larger back mounting bracket. Move the slide until it contacts the rotating assembly you dressed up in step "a".



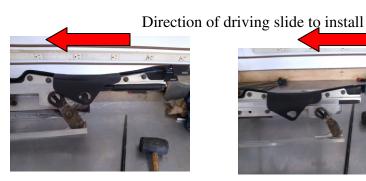




**c.** If needed, use a pry bar to lift up the black bracket and drive the slide over the rotating lever. Make sure you pry in the location shown. If you pry in another place, you could bend the aluminum. Be patient and drive the slide out, over the rotating lever.



**d.** Once the slide is removed, clean the aluminum channel and black nylon slides. Finish removing any remaining ridges that you trimmed up in step 5. Take note on what end of the slide goes towards the front of the seat assembly. Putting them in backwards will result in a seat angled the wrong way in the car.



e. The slide is installed into the aluminum channel from the opposite end you removed it. Installing this way ensures you are driving it back in by hitting the strong end of the slide. Make sure the sharp edges on the rotating lever are dressed up and the seat frame is in the fully up position. Remember, you are driving the slide in by striking the big bracket. Once the slide is up against the rotating lever, use the pry bar again to lift the black bracket up as you drive the slide in with a rubber mallet. Call me with any questions: 912 667 4198.