

# Pictorial Guide to Ford Mustang Odometer Gear Replacement

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***Please read the first few steps carefully as these are our most common questions we receive after a client has performed a repair and the odometer still does not work.***

*The reason the original gear or gears have failed is that they are made of urethane and lubricated with petroleum grease. This combination breaks down the urethane into a waxy substance which flakes and breaks away. This will also leave a waxy film and deposits on the shafts, gears, housing and peg on the pods.*

*\* Work smart, meaning have a clean area to work and the proper tools to perform the repair. General tools that will be needed depending on the vehicle are small standard screwdriver, small Phillips screwdriver, assortment of torx drivers, diagonal cutters (dikes), 1/4" socket set are just a few of the items that may be needed.*

*\* No grease is needed with the new gears. Our gears are made using Celcon® which has graphite mixed into the material and does not require any additional lubricant.*

***\* Make sure that you have blown the speedometer and odometer assembly clean with high pressure compressed air. **Even if you think that you have found all of the broken pieces you still need to perform this step.*****

***\* Wipe the area around the gears, any shaft or shafts that the gears may ride on, the motor shaft and the peg on the pod that the small gear spins on clean, using a clean cloth and rubbing alcohol. Any residue left over from the old gears can allow the new gears to stick and not allow the odometer to work.***

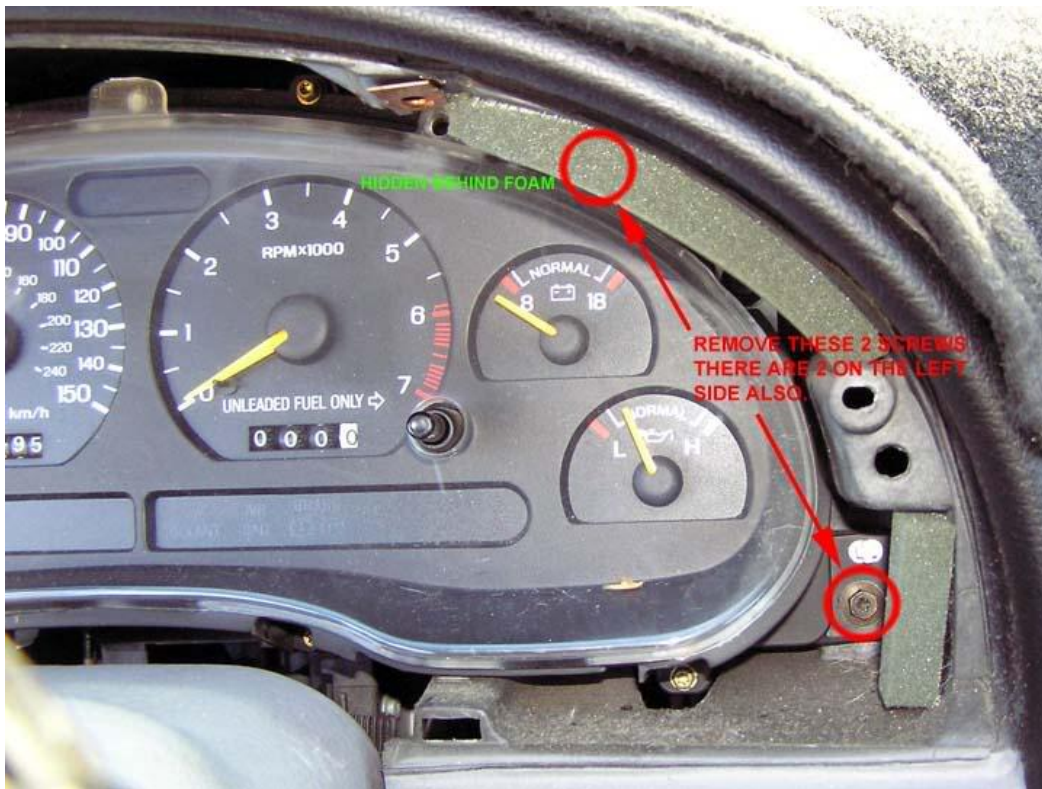
***\* Use a small screw driver to remove all of the old gear and residue in the drive gear cradles. Once you have the bulk of the debris removed use a few cotton swabs to thoroughly clean the cradles.***

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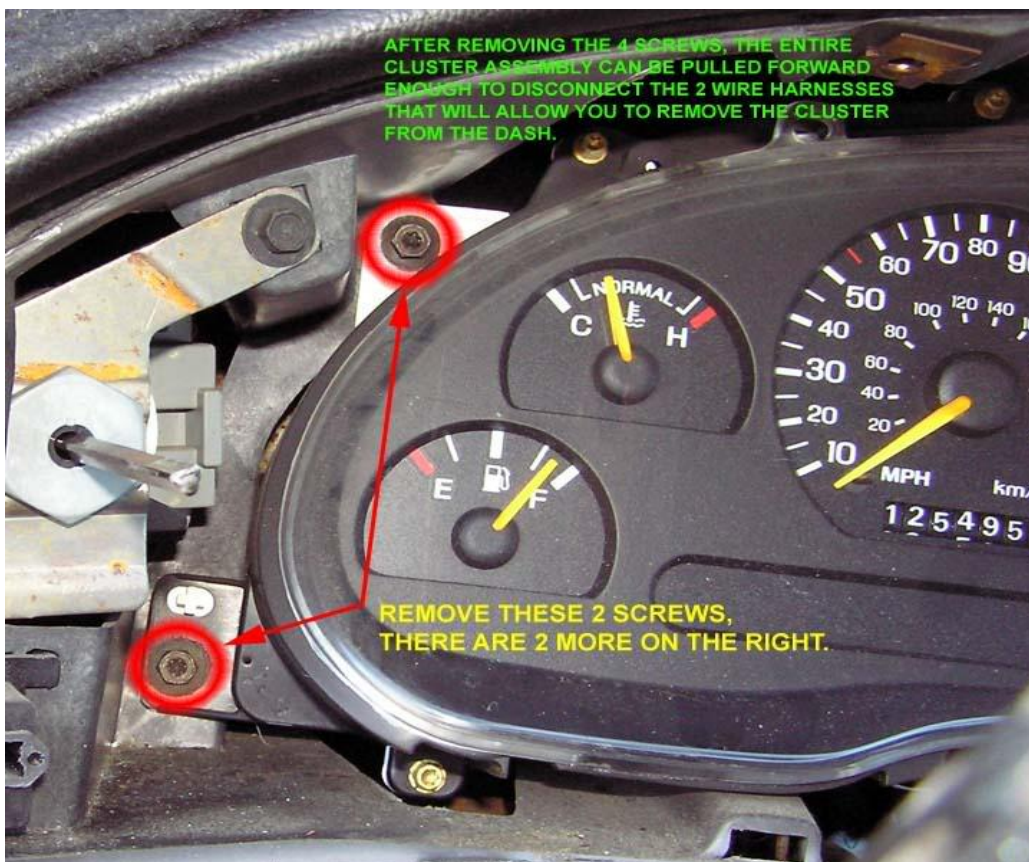








To see exact location of the screws to be removed, Please see picture below of the left side as this is a mirrored location of the right side of cluster.



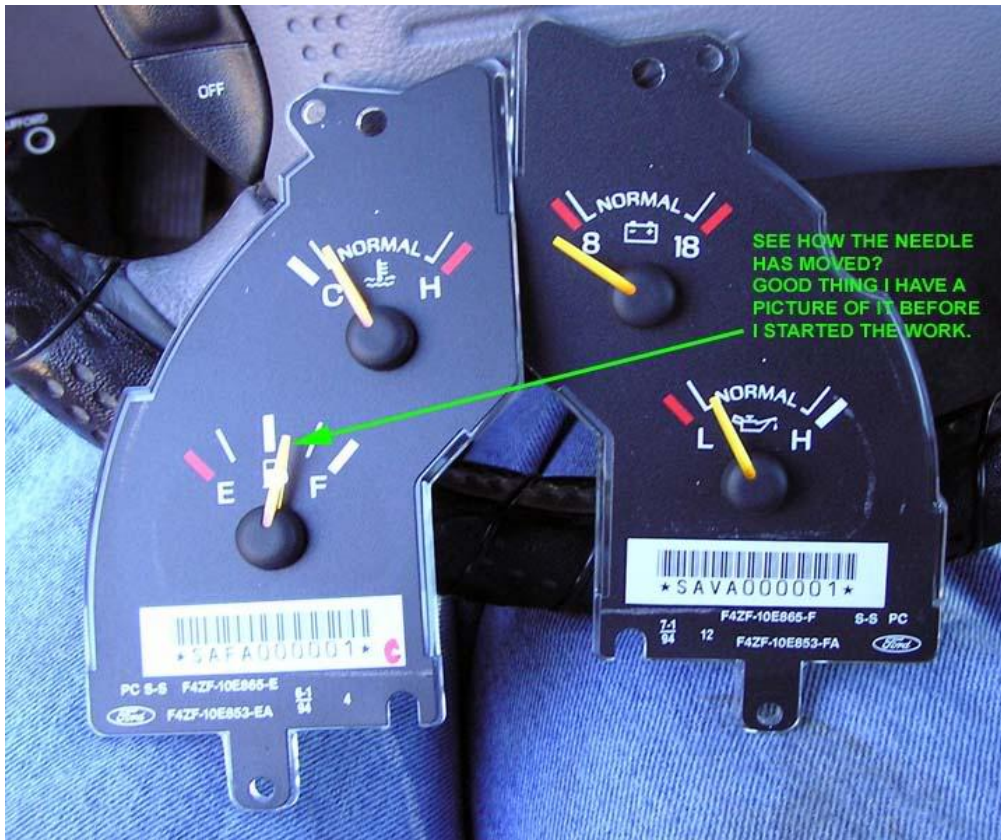


You will need to gently pry under the face of each gauge cluster to remove, using a flat blade screwdriver. It is best to remove the left and right gauge clusters first and then the speedometer. The gauges are held into place by electrical studs that press through electrical contact sleeves.



The five (5) illumination bulbs are part number #194 and can be purchased from your local auto parts store.





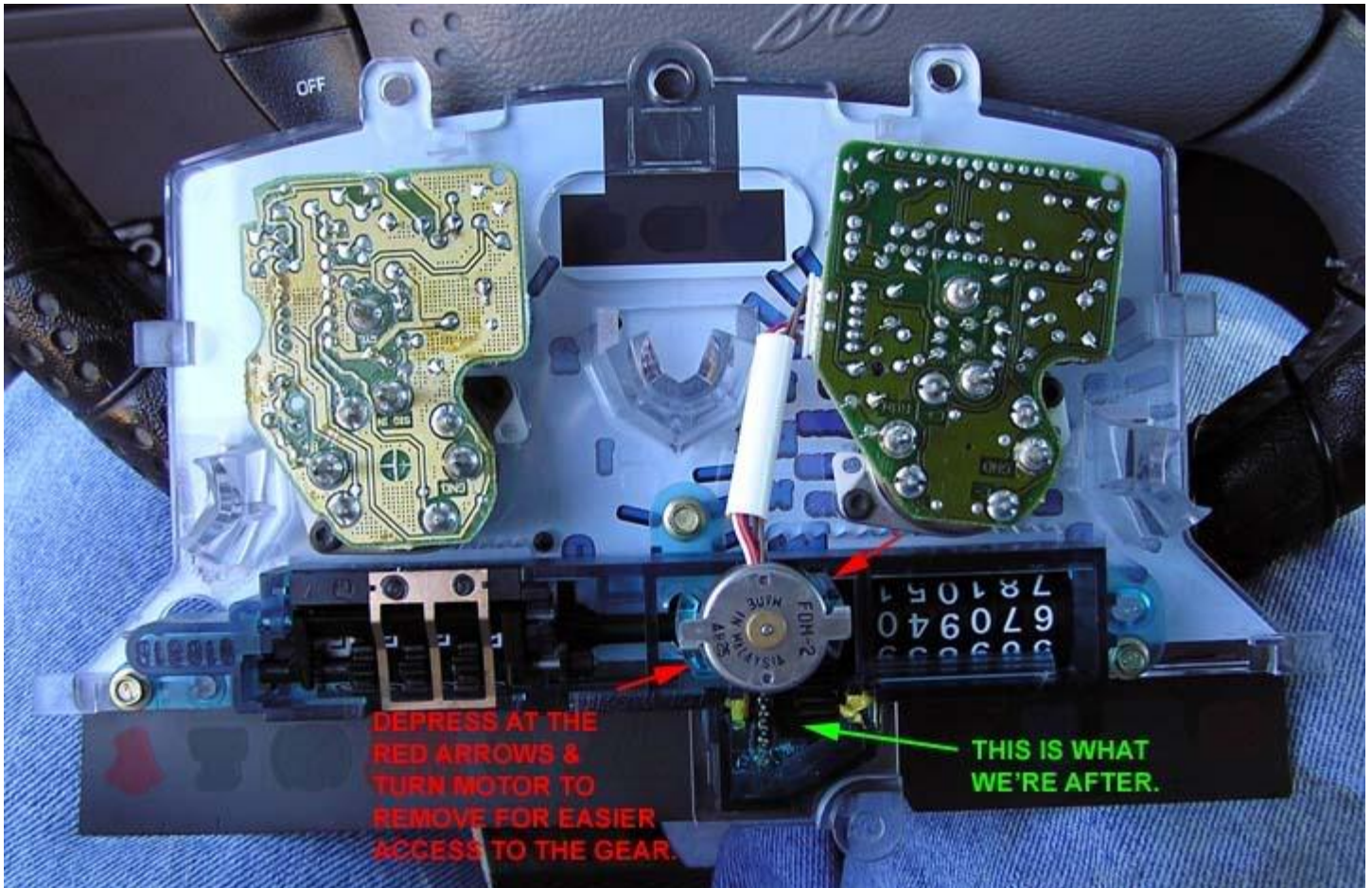
SEE HOW THE NEEDLE HAS MOVED? GOOD THING I HAVE A PICTURE OF IT BEFORE I STARTED THE WORK.

The gauges will synchronize once reinstalled and the ignition switch is switched on.



JUST A PICTURE OF THE BACK SIDE FOR REFERENCE



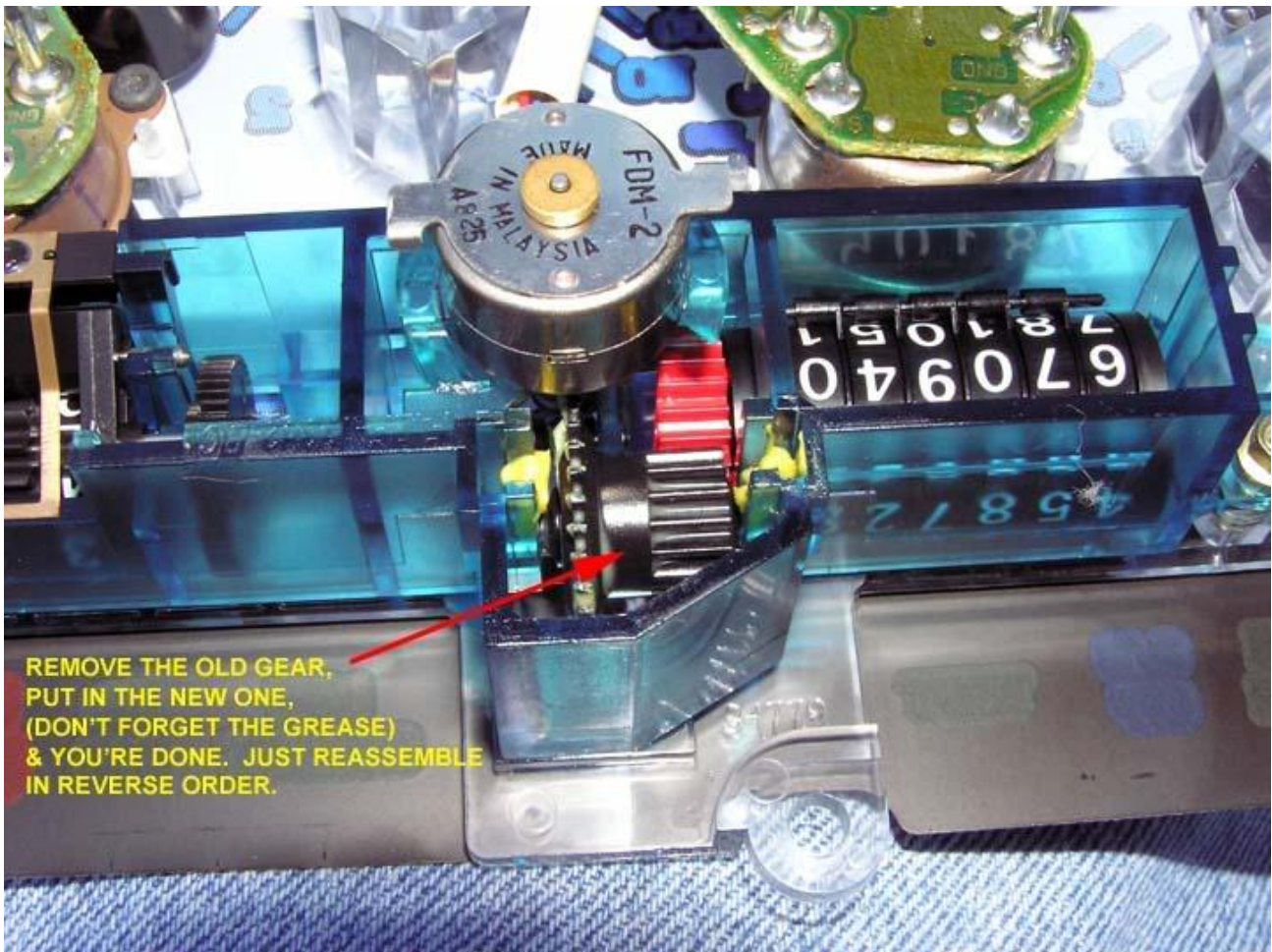




When trying to remove the motor you may either have to depress or lift up on the plastic tabs.

It is easier to do this with two people but can be done with only one person.

Once the motor is removed you will also see the worm gear attached to the bottom side of the motor. If replacing remove the old worm gear by pulling off with your fingers. Install the new worm gear using channel lock pliers or a bench vise leaving the thickness of two business cards between the motor and the gear. The new gear is installed with the neck towards the motor housing.



**Disregard the statement in the above picture.** There is **no** need to apply grease to the new gears as our gears have graphite mixed into the material.



HERE'S THE CULPRIT.  
NOTE THE MISSING TEETH.

