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## FORD EXPLORER ODOMETER WORM GEAR REPLACEMENT

http://216.189.1.23/forums/showthread.php?t=247368 (some content omitted)

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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.

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Speedo works but odometer doesn't? I fixed mine..

Almost at exactly 150,000k, my odometer and trip counter stopped working. I could hear a clicking noise in the dash.

Did some research on the board, and it turns out the worm gears tend to break.



I removed my cluster (it wasn't hard)

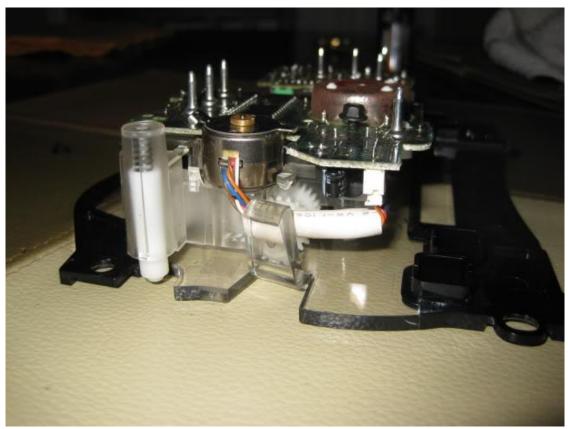
On the kitchen table...here is what I did.

I took the lens off and removed the gauges on the right (oil pressure and voltage).



This section will just pull straight out with no screws once the lens is removed.

Now you should be able to see the worm gear through the. It's probably broken or slipping on the motor shaft.



On each side of the motor here you can see the clear plastic clip that holds it in. The motor has tabs on it that when you twist it, go under the plastic tabs. So to get the motor out, you have to push down on it and twist to get it out.

Once you get it out, you have this (you do not have to disconnect the cable to replace the gear)



Once the motor is removed you will see the worm gear attached to the bottom side of the motor. Remove the old worm gear by pulling it off with your fingers or a flat blade screw driver. 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 (non-threaded end) towards the motor.

Reverse the procedure to reinstall the motor. It took me some time to get it to go in with the gear lined up enough so that I could lock it in place.

Reinstall the gauges, they just push straight in.

Push the oil pressure and voltage gauge set back into the front.

Assemble the lens and gauges and re-install in the truck.

Works perfectly!



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