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Mechanical Speedometer (cable driven), All Manufactures

With cable driven speedometers, there are potentially two gears that can go bad. First is the odometer gear pictured below. Located on the side of the speedometer. If you have a metal gear then you will not need this gear. If it is plastic inspect very closely where the shaft comes through the gear as there will generally have a hairline crack and this will cause the gear to not fit snugly.

You will need to count the number of teeth on the original gear before ordering. 10, 11, 11 tooth Super beetle, 12,13,14,15,16,17,18,19,21,24 (Chevrolet/GMC), 25, 29



Second is the lead gear on the same rail. Check to make sure it is tight on the shaft. Using a small screwdriver, see if it spins on the shaft. If it does, you should replace it also. There are three sizes. All you need to do is measure the overall thickness. 1/8" = 4.57mm, 3/16" = 5.44mm or 1/4" = 6.35mm



Audi On VDO units you need to open and count the teeth on the old gears to ensure that you order the correct tooth count. Part numbers from any part of the speedometer do not help in determining the tooth count.

| | | | |
|--|---|-----|--------------------|
| 80 | 1986-1992 | E15 | ? small pod |
| 90 | 1988-1995 | E15 | ? small pod |
| 100 C4 platform | 1992-1997 | E15 | ? small pod |
| 5000 | Late 1986 | E26 | 15 tooth Large Pod |
| A6 C4 platform | 1992-1997 | E15 | ? small pod |
| Late Model vehicles with electronic gauges that sweep when the ignition key is first turned. | Requires one gear per gauge. Speedometer, Tachometer, Temperature and Fuel Gauges | | E7 Gear |

Bentley On VDO units you need to open and count the teeth on the old gears to ensure that you order the correct tooth count. Part numbers from any part of the speedometer do not help in determining the tooth count.

| | |
|-----------------|-------|
| US Spec in MPH | 20x23 |
| Euro Spec in KM | 20x29 |

BMW On VDO & MotoMeter units you need to open and count the teeth on the old gears to ensure that you order the correct tooth count. Part numbers from any part of the speedometer do not help in determining the tooth count.

| | | | | | |
|-----|--|-------------|------------------|------------------------|------------|
| E23 | 1977-1986 7 Series | E1=12 tooth | E2=48x12 No Neck | E3=48x17 or 48x19 Neck | |
| E23 | 1977-1986 7 Series (Euro-KM) | 20x23 | | | |
| E24 | 1976-1989 6 Series | E1=12 tooth | E2=48x12 No Neck | E3=48x17 or 48x19 Neck | |
| E28 | 1982-1988 5 Series | E1=12 tooth | E2=48x12 No Neck | E3=48x17 Neck | |
| E28 | 1982-1988 5 Series | E1=12 tooth | E2=48x12 No Neck | E3=48x13 Neck | |
| E30 | 1982-1993 3 Series VDO | E1=12 tooth | E2=48x12 No Neck | E3=48x12 or 48x14 Neck | |
| E30 | 1982-1994 3 Series VDO South America | E1=12 tooth | E2=48x12 No Neck | E3=48x12 or 48x16 Neck | |
| E30 | 1982-1993 3 Series MotoMeter (US Spec) | E1=12 tooth | MM2=44x16 | MM3=40x22 | MM4=35x22 |
| E30 | 1982-1993 3 Series MotoMeter (Asian/Euro) R and K Series Motor Cycle | E1=12 tooth | MM2=44x16 | MM3b=40x28 | MM4b=28x22 |

| | | | | | |
|------|--|---------------------------------------|------------|----------------------------------|---|
| E30 | 1982-1993 3 Series MotoMeter (Asian/Euro) R and K Series Motor Cycle | E1=12 tooth | MM2c=44x17 | MM3c=38x23 .761mm diam. | MM4c=33x23 |
| E30 | 1982-1993 3 Series MotoMeter (Portugal/Greece) R and K Series Motor Cycle | E1=12 tooth | MM2c=44x17 | MM3d=38x28 .822mm diam. | MM4c=33x23 |
| E30 | 1982-1993 3 Series MotoMeter (Asian/Euro) R and K Series Motor Cycle | E1=12 tooth | MM2d=43x16 | MM3e=39x28 OEM color is Red | MM4e=28x22 Inside gear is start shaped. OEM color is tan |
| E30 | MotoMeter (Asian/Euro) R and K Series Motor Cycle | | MM2e=43x17 | | |
| E30 | MotoMeter (Australia) R and K Series Motor Cycle | | | MM3F=40x34 | |
| E31 | 1989-1999 8 Series | Either Seat Recline Gear | | E31 seat gear | |
| E36 | 1990-2000 3 Series | Driver's Seat Recline Gear= White | | Driver's Seat Bottom Gear= Pink | |
| E36 | 1992-1993.5 ; 1997.5-2000 | Passenger Seat Recline Gear= Green | | Passenger Seat Bottom Gear= Pink | |
| E36 | 1993.5-1997.5 | Passenger Seat Recline Gear= White | | Passenger Seat Bottom Gear= Pink | |
| E36 | 1996-2002 Z3 | Seat Bushing Kit for Both Seats | | Z3 Seat Bushing kit | |
| E39 | September 2000-2003 5 Series | Headlight Adjuster kit (one per side) | | Fits both xenon and standard | |
| 2002 | 1968-1977 | Mechanical 10 tooth for 2002 BMW | | Thin lead Gear | |

Chevrolet On VDO units you need to open and count the teeth on the old gears to ensure that you order the correct tooth count. Part numbers from any part of the speedometer do not help in determining the tooth count.

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|--------------------------|-------------------|
| 1997-1999 | M24 |
| 2005-Current Corvette C6 | Seat Bushings Kit |
| 1998-Current Pick-up | Seat Bushings Kit |

Chrysler/Dodge On VDO units you need to open and count the teeth on the old gears to ensure that you order the correct tooth count. Part numbers from any part of the speedometer do not help in determining the tooth count.

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|---|-----|---------------------|
| All with Electronic Speedometer except Monaco | E20 | 16 tooth Medium Pod |
| Monaco | E25 | 15 tooth Large Pod |

Eagle On VDO units you need to open and count the teeth on the old gears to ensure that you order the correct tooth count. Part numbers from any part of the speedometer do not help in determining the tooth count.

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|---------|-----|--------------------|
| Premier | E25 | 15 tooth Large Pod |
|---------|-----|--------------------|

Ford On VDO units you need to open and count the teeth on the old gears to ensure that you order the correct tooth count. Part numbers from any part of the speedometer do not help in determining the tooth count.

| | | |
|---|---------------------|---|
| Bronco (analog odometer) | | Worm Gear |
| Contour (analog odometer) | | Worm Gear |
| Crown Victoria (only if odometer and trip are stacked in middle of speedometer) | E20 | 16 tooth Medium Pod |
| Crown Victoria (only if odometer and trip are split left and right in the cluster) | Drive Gear (2 each) | Worm Gear (2 each) |
| Expedition (analog odometer) | | Worm Gear |
| Explorer (analog odometer) | | Worm Gear |
| F-Series Pickup (analog odometer) | | Worm Gear |
| Fairmont <i>Australia</i> | 1982-1988 | 20x29 |
| Falcon <i>Australia</i> | 1982-1988 | 20X29 |
| Fairlane <i>Australia</i> | 1979-1988 | 20x29 |
| Mustang | Drive Gear | Worm Gear (only need to replace if original is black) |
| Ranger (analog odometer) | | Worm Gear |
| Taurus (analog odometer) | | Worm Gear |
| Thunder Bird | E20 | 16 tooth Medium Pod |

Holden On VDO units you need to open and count the teeth on the old gears to ensure that you order the correct tooth count. Part numbers from any part of the speedometer do not help in determining the tooth count.

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|---------------------------|-----------|-----|--------------------|
| Astra LD <i>Australia</i> | 1987-1989 | E25 | 15 tooth Large Pod |
| Commodore VN, VP, VR, VS | 1988-1997 | E25 | 15 tooth Large Pod |

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|-----|-----------|--|
| All | 2003-2009 | Driver's Seat, power and automatic feature (has neck and collar) |
| All | 2003-2009 | Driver's Seat, power and without automatic feature (No neck and splined inside) |
| All | 2003-2009 | Passenger's Power Seat Gear (No neck and smooth inside) |

John Deere On VDO units you need to open and count the teeth on the old gears to ensure that you order the correct tooth count. Part numbers from any part of the speedometer do not help in determining the tooth count.

| | | | |
|--|-------------|------------------|---------------|
| With electronic Tachometer with odometer | E1=12 tooth | E2=48x12 No Neck | E3=48x15 Neck |
|--|-------------|------------------|---------------|

LaForza On VDO units you need to open and count the teeth on the old gears to ensure that you order the correct tooth count. Part numbers from any part of the speedometer do not help in determining the tooth count.

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| 1989- | 20x29 |
|-------|-------|

Lincoln On VDO units you need to open and count the teeth on the old gears to ensure that you order the correct tooth count. Part numbers from any part of the speedometer do not help in determining the tooth count.

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|--|---------------------|---------------------|
| If odometer and trip are stacked in middle of speedometer) | E20 | 16 tooth Medium Pod |
| If odometer and trip are split left and right in the cluster) | Drive Gear (2 each) | Worm Gear (2 each) |

Mazda On VDO units you need to open and count the teeth on the old gears to ensure that you order the correct tooth count. Part numbers from any part of the speedometer do not help in determining the tooth count.

| | |
|------------------|-----------|
| B series Pick-up | Worm Gear |
|------------------|-----------|

Mercedes-Benz On VDO units you need to open and count the teeth on the old gears to ensure that you order the correct tooth count. Part numbers from any part of the speedometer do not help in determining the tooth count.

| | | | | |
|--|--|---|--|------------------------|
| 107 = SL Class | 1972-1980 | M18 or M25 | Medium Lead Gear or Thick Lead Gear | |
| 107 = SL Class | 1981-1989 | E1=12 tooth | E2=48x12 No Neck | E3=48x12 or 48x16 Neck |
| 107 = SL Class Asian and Canadian Spec | 1981-1989 | E1=12 tooth | E2=48x12 No Neck | E3=48x12 or 48x13 Neck |
| 107 = SL Class Euro Spec | 1981-1989 | E1=12 tooth | E2=48x12 No Neck | E3=48x12 or 48x18 Neck |
| 123 Chassis | 1976-1985 | M18 | Medium Lead Gear or Thick Lead Gear | |
| 124 = E Class (Mechanical) | 1984-1995 | M18 or M25 | Medium Lead Gear or Thick Lead Gear | |
| 124 = E Class (Electronic) 400E, 500E, E420, E500 | 1981-1989 | E1=12 tooth | E2=48x12 No Neck | E3=48x12 or 48x17 Neck |
| 124 = E Class | 1984-1995 | Bosch wiper transmission Gear (U Shaped) /SWF gear not available | | |
| 126 = S Class Gas | 1981-1991 | E1=12 tooth | E2=48x12 No Neck | E3=48x12 or 48x16 Neck |
| 126 = S Class Diesel | 1981-1991 | E1=12 tooth | E2=48x12 No Neck | E3=48x12 or 48x15 Neck |
| 126 = S Class Euro Spec | 1981-1991 | E1=12 tooth | E2=48x12 No Neck | E3=48x12 or 48x18 Neck |
| 126 = S Class Asian and Canadian Spec | 1981-1991 | E1=12 tooth | E2=48x12 No Neck | E3=48x12 or 48x13 Neck |
| 129 = SL Class | 1990-1998 with analog odometer | E15 | 12 tooth Small Pod or 16 tooth Small Pod | |
| 129 = SL Class | 1990-2002 | Bosch wiper transmission Gear (U Shaped) /SWF gear not available | | |
| 140 = S Class | 1992-1999 | E15 | 12 tooth Small Pod or 16 tooth Small Pod | |
| 140 = S Class | 1992-1999 | Wiper transmission Gear | | |
| 201 = 190 Class | 1982-1993 | Bosch wiper transmission Gear (U Shaped) /SWF gear not available | | |
| 202 = C Class | 1993-2000 | Wiper transmission Gear (must grind shaft to install)/Gear inside of motor is NOT available. | | |
| Late Model vehicles with electronic gauges that sweep when the ignition key is first turned. | Requires one gear per gauge. Speedometer, Tachometer, Temperature and Fuel Gauges | | E7 Gear | |

Mercury On VDO units you need to open and count the teeth on the old gears to ensure that you order the correct tooth count. Part numbers from any part of the speedometer do not help in determining the tooth count.

| | | |
|--|---------------------|---------------------|
| Cougar | E20 | 16 tooth Medium Pod |
| Grand Marquis (only if odometer and trip are stacked in middle of speedometer) | E20 | 16 tooth Medium Pod |
| Grand Marquis (only if odometer and trip are split left and right in the cluster) | Drive Gear (2 each) | Worm Gear (2 each) |

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|----------------------------|-----------|
| Mystique (analog odometer) | Worm Gear |
|----------------------------|-----------|

Merkur On VDO units you need to open and count the teeth on the old gears to ensure that you order the correct tooth count. Part numbers from any part of the speedometer do not help in determining the tooth count.

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|---------|-----------|-----|---------------------|
| Scorpio | 1988-1989 | E20 | 16 tooth Medium Pod |
|---------|-----------|-----|---------------------|

Nissan On VDO units you need to open and count the teeth on the old gears to ensure that you order the correct tooth count. Part numbers from any part of the speedometer do not help in determining the tooth count.

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|----------------|-----------|---|--------------------|
| Pintara/Sentra | 1986-1993 | E25 | 15 tooth Large Pod |
| Pulsar N13 | 1987-1990 | E25 | 15 tooth Large Pod |
| R31 Skyline | 1985-1989 | E25 | 15 tooth Large Pod |
| All | 2003-2009 | Driver's Seat, power and automatic feature (has neck and collar) | |
| All | 2003-2009 | Driver's Seat, power and without automatic feature (No neck and splined inside) | |
| All | 2003-2009 | Passenger's Power Seat Gear (No neck and smooth inside) | |

Porsche On VDO units you need to open and count the teeth on the old gears to ensure that you order the correct tooth count. Part numbers from any part of the speedometer do not help in determining the tooth count.

| | | | |
|--|-------------|--|--------------------------|
| 911 (Mechanical) | 1965-1975 | M17 (Best to confirm tooth count) | |
| 911 US-MPH (Base, Carrera, SC, Turbo) | 1975-1989 | 20x30 | |
| 911 Euro-KM and Asian (Base, Carrera, SC, Turbo) | 1975-1989 | 20x22 or 20x32 (Best to confirm tooth count) | |
| 911 Middle East-KM (Base, Carrera, SC, Turbo) | 1975-1989 | 20x29 | |
| 911 US-MPH (C2, C2 Turbo, C4) | 1990-1998 | E15 | 16 tooth Small Pod |
| 911/930 US-MPH | 1986.5-1988 | E25 | 15 tooth Large Pod |
| 911/964 US-MPH Option 1 | 1989-1993 | E15 | 16 tooth Small Pod |
| 911/964 US-MPH Option2 | 1989-1993 | E25 | 15 tooth Large Pod |
| 911/964 Australia | 1989-1993 | E20 | 15 tooth Medium Pod |
| 911/964 Singapore | 1989-1993 | E15 | 17 tooth Small Pod |
| 911/993 US-MPH (C2, C4, T Turbo) | 1993-1998 | E15 | 16 tooth Small Pod |
| 911/993 Middle Eastern (C2, C4, T Turbo) | 1993-1998 | E20 | 15 tooth Medium Pod |
| 911/993 Euro-KM (C2, C4, T Turbo) | 1995-1998 | E15 | 17 tooth Small Pod |
| 912 (Mechanical) | 1965-1976 | M17 | |
| 914 (Mechanical) | 1970-1976 | M17 | |
| 924S US-MPH (Mechanical) | 1976-1988 | M17 | |
| 924S Euro-KM (Mechanical) | 1976-1988 | M11 | |
| 928 US-MPH (Base, GT, GTS, S4) | 1978-1991 | 20x21 | |
| 928 Euro-KM (Base, GT, GTS, S4) | 1978-1991 | 20x21 or 20x29 (Best to confirm tooth count) | |
| 944 US-MPH (Mechanical) | 1982 | M15 | |
| 944 US-MPH (Mechanical) | 1983 | M11 | |
| 944 US-MPH (Mechanical) | 1984-1985.1 | M17 | |
| 944 Euro-KM (Base, S, S2, Turbo) | 1982-1985.1 | 20x23 or 20x30 (Best to confirm tooth count) | |
| 944 US-MPH (Base, S, S2, Turbo) | 1985.2-1991 | 20x21 or 20x22 (Best to confirm tooth count) | |
| 944 US-MPH (Base, S, S2, Turbo) | 1991 | E25 | 15 tooth Large Pod |
| 944 Euro-KM | 1985.2-1991 | 20x22 or 20x30 | |
| 968 | 1992-1995 | E15 | 12 or 16 tooth Small Pod |

Rolls Royce On VDO units you need to open and count the teeth on the old gears to ensure that you order the correct tooth count. Part numbers from any part of the speedometer do not help in determining the tooth count.

| | |
|-----------------|-------|
| US Spec in MPH | 20x23 |
| Euro Spec in KM | 20x29 |

Saturn On VDO units you need to open and count the teeth on the old gears to ensure that you order the correct tooth count. Part numbers from any part of the speedometer do not help in determining the tooth count.

| | | |
|-----------|---|--------------------|
| 1991-1994 | E25 | 15 tooth Large Pod |
| 1991-1994 | Shift Grommet, Manual shifting Saturn (located at base of shifter under center console) | |

Vixen Motor Home On VDO units you need to open and count the teeth on the old gears to ensure that you order the correct tooth count. Part numbers from any part of the speedometer do not help in determining the tooth count.

| | |
|-----------|----------------|
| 1986-1989 | 20x23 or 20x29 |
|-----------|----------------|

Volkswagen On VDO units you need to open and count the teeth on the old gears to ensure that you order the correct tooth count. Part numbers from any part of the speedometer do not help in determining the tooth count.

| | | |
|--|--|--|
| Mechanical (cable driven) | Lead Gear (need to measure original gear, see top off page) | |
| Beetle and Super Beetle | 1972- | VW11, VW12 |
| Bus (Type 2) | 1968-1979 | VW11 or M11 (need to look before ordering) |
| Rabbit | 1980-1982 | M21 |
| Late Model vehicles with electronic gauges that sweep when the ignition key is first turned. | Requires one gear per gauge. Speedometer, Tachometer, Temperature and Fuel Gauges | E7 Gear |

Volvo On VDO units you need to open and count the teeth on the old gears to ensure that you order the correct tooth count. Part numbers from any part of the speedometer do not help in determining the tooth count.

| | | | |
|---|-----------|--|---------------------|
| 200 Series | 1986-1991 | E25 | 15 tooth Large Pod |
| 200 Series | 1992-1993 | E25 or E26 | 15 tooth Large pod |
| 440/460 (Only with Analog VDO Odometer) | 1987-1997 | E20 | 16 tooth medium pod |
| 700 Series (Only with VDO unit) | 1982-1988 | E26 | 15 Tooth Large pod |
| 850 | 1992-1997 | E15 | 12 tooth Small Pod |
| 850 | 1992-1997 | Horn Kit (consist of 4 each: bolt, washer, Plastic grommet, speed nut) | |
| C/S/V 70 Series | 1996-2000 | Horn Kit (consist of 8 plastic bushings) | |
| VDO unit | | UAF 2115 bipolar Integrated circuit chip (Has to be soldered) not common | |