

3C Transmission List

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Subject: Transmission Failure during Exhaust Emission Testing

Models: All 1984, 1985, 1986 with 4-speed automatic transmission, 1987 635CSi, 735i, and L7.

Situation: There have been reported isolated cases of automatic transmissions failing during a High Idle Exhaust Emissions Check. The failures have resulted from a preconditioning procedure where the engine is held at high rpm for a prolonged period of time. The following applies to all states which have a High Idle Exhaust Emission Check.

As the internal transmission components experience normal wear over time, the possibility of transmission damage exists if the vehicle is operated for extended periods of time at high rpm in PARK or Neutral.

Such operation does not constitute normal operating conditions. If, in exceptional cases such as A/C recharging, injector cleaning, charging system tests, or emissions testing, vehicle operation at high rpm in PARK or Neutral is required the following setup procedure must be performed prior to beginning such operations.

If the engine RPM is held above 2000 RPM in park or neutral for several minutes some later 1980's to early 1990's transmission will fail. Two transmissions that were absolute problems was an early 4T60-E with a 1-2 roller clutch. It was updated and was no longer an issue. And a ZF4HP22 mostly in BMW's. It would take out the A clutch.....then would slip going forward.

Below are a list of the vehicles that had these transmission.

- **4T60-E**
 - 1994-1999 [Buick Century](#)
 - 1992-1997 [Buick LeSabre](#) 3800 V6, L27
 - 1991-1996 [Buick Park Avenue](#) V6 3.8 L
 - 1991 [Buick Reatta](#) 3800 V6
 - 1993-1997 [Buick Regal](#)
 - 1991-1993 [Buick Riviera](#) 3800 V6
 - 1995-1996 [Buick Riviera](#) L67 & L36
 - 1994-1998 [Buick Skylark](#)
 - 1991-1993 [Cadillac DeVille](#) 4.9L V8
 - 1991-1992 [Cadillac Fleetwood](#)
 - 1991-1993 [Cadillac Seville](#)
 - 1991-1993 [Cadillac Sixty Special](#)
 - 1994-1996 [Chevrolet Beretta/Corsica](#) V6 3.1 L
 - 1992-1996 [Chevrolet Lumina APV](#) V6 3.4 L/3.8 L

- 1993–2000 [Chevrolet Lumina](#)
- 1995-1999 [Chevrolet Monte Carlo](#)
- 1997-1998 [Chevrolet Venture](#)
- 1994-1998 [Oldsmobile Achieva](#)
- 1994-1996 [Oldsmobile Cutlass Ciera/Oldsmobile Ciera](#) V6 3100 L
- 1993-1997 [Oldsmobile Cutlass Supreme](#)
- 1992-1997 [Oldsmobile 88](#)
- 1991-1996 [Oldsmobile 98](#)
- 1992–1998 [Oldsmobile Silhouette](#) V6 3.4 L/3.8 L
- 1991-1992 [Oldsmobile Toronado/Trofeo](#) 3800 V6
- 1992-1997 [Pontiac Bonneville](#)
- 1994-1998 [Pontiac Grand Am](#) V6 3.1 L
- 1992-1996 [Pontiac Grand Prix](#) "GT" & GTP 3.4L V6 (LQ1 Motor)
- 1992–1998 [Pontiac Trans Sport](#) V6 3.4 L/3.8 L
- 4T60-E HD
 - 1991-1996 [Buick Park Avenue](#)
 - 1992-1996 [Oldsmobile 88](#)
 - 1992-1996 [Oldsmobile 98](#)
 - 1992-1996 [Pontiac Bonneville](#)
 - 1997 [Pontiac Grand Prix](#) "GT" 3800SC V6 (L67 Motor)
 - 1995-1996 [Buick Riviera](#)

4HP22

- [Austin](#)
 - [Austin Tempest](#)
 - 1997–2002 4.0
- [BMW](#)
 - [E30](#)
 - 1984–1985 318i M10/B18
 - 1984–1985 323i M20/B23
 - 1983–1988 325e M20/B27:^[1] Type A
 - 1986–1992 325i M20/B25:^[1] Type A
 - 1987–1991 325ix M20/B25:^[1] Type A
 - [E28](#)
 - 1981–1987 518i M10/B18:^[2] Type B
 - 1981–1987 520i M20/B20:^[2] Type B
 - 1986–1988 524d M21/D24:^[2] Type B
 - 1983–1987 524td M21/D24:^[2] Type B
 - 1983–1988 525e M20/B27:^[2] Type A
 - 1981–1987 525i M30/B25:^[2] Type A
 - 1981–1987 528e M20/B27
 - 1981–1987 528i M30/B28:^[2] Type A
 - 1983–1984 533i M30/B32
 - 1984–1988 535i M30/B34:^[2] Type A
 - [E24](#)
 - 1983–1989 633CSi M30/B32
 - 1983–1987 635CSi M30/B34

- [E23](#)
 - 1983–1984 733i M30/B32
 - 1984–1987 735i M30/B34:^[3] Type A
 - 1984–1987 745i (South African version) M88/3:^[4] Type A
- [E34](#)
 - 1988–1992 520i M20/B20: Type A
 - 1988–1992 524td M21/D24:^[5] Type B
 - 1988–1990 525i M20/B25 : Type A
 - 1988–1992 530i M30/B30 : Type A
 - 1988–1993 535i M30/B35:^[6] Type A
- [E32](#)
 - 1986–1994 730i M30/B30:^[6] Type A
 - 1986–1992 735i M30/B35:^[6] Type A
 - 1986–1992 735iL M30/B35:^[6] Type A
- [Chevrolet](#)
 - [Opala](#)
 - 1988–1992 2.5 ([151](#)):^{[7][8]} Type A
 - 1988–1992 4.1 ([250](#)):^{[7][8]} Type A

- [Jaguar](#)

- [XJ40](#)
 - 1987–1993 3.6
- [X300](#)
 - 1994–1997 3.2
- [XJS](#)

Jaguar xj6 1994-1997

- - 1987–1997 3.6
- [Land Rover](#)
 - [Defender](#)
 - 1997 90 V8 4.0L North America Spec
 - 1998 90 V8 4.0L Defender 50th Special Edition
 - [Discovery \(Series I\)](#)
 - 1992–1999 V8 3.9L
 - [Discovery \(Series II\)](#)
 - 1999–2002 V8 4.0L
 - [Range Rover](#)
 - 1987–2002 (except 4.6)
- [Lincoln](#)
 - [Continental](#)
 - 1984–1985 2.4 litre ([BMW-Steyr turbodiesel](#))
- [Lotus](#)
 - [Lotus Excel](#)
 - Excel SA 1986 –1991 Twin Cam 4 Cyl Lotus 2.2L 180bhp
- [Maserati](#)
 - [Biturbo](#)
 - 1988–1997 2.5 V6

- 1988–1997 2.8 V6
 - Quattroporte
 - 1994–1998 2.8 V6
- Peugeot
 - 505
 - 1986–1997 2.0 (XN,^{[9][10][11]}): Type A
 - 1986–1997 2.0 (ZEJ^{[9][11]}): Type A
 - 1986–1997 2.2 (N9T,^[11]): Type A
 - 1986–1997 2.2 (ZDJ^{[9][10][11][12]}): Type A
 - 1986–1997 2.5 (XD3^{[10][13]}): Type A
 - 1986–1997 2.8 (ZN3J^[11]): Type A
 - 604
 - 1987–1989 2.5
- Volvo
 - 740
 - pre–1985 GL, GLE 2.3 (non turbo) B230F:^[14] Type B
 - 1986–after GL, GLE 2.3 (non turbo) B230F:^[15] Type A
 - 1984–1986 2.4L TD (ZF 4HP22L)
 - 760
 - 1986–1991 2.3L
 - 1983–1986 GLE 2.4 Turbo Diesel D24T:^[16] Type B
 - 940
 - 1991–1995 2.3