

Common failures for the 4L60E

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1. Slow, slipping or no reverse: "lo-reverse" clutches are worn out, fluid leak in the reverse apply circuit, or broken sunshell. It is possible to remedy a fluid problem by removing the checkball from its cage in the case in the rear of the trans may help (must remove valvebody), or adding a high-viscosity additive such as Lucas Transmission additive or other seal restorer product.
2. No 3rd or 4th gear: "3-4" clutches are worn out. Remove & Replace.
3. Sudden grinding noise with no prior warning primarily in 2nd gear, behavior in reverse may be abnormal; sunshell is fractured. R&R. Try not to run or drive the car or further damage could result.
4. No 2nd or 4th gear. 2-4 band is slipping. Servo seals may be damaged (can be fixed without removing trans. Otherwise, 2-4 band is worn out. R&R.
5. Trans shifts into gear harshly, 3rd gear starts, manual 2nd available but no 1st, no 4th, and no TCC lockup: No power to transmission, or trans is in limp-home mode. Check trans fuse underhood, and make sure transmission electrical connector is plugged in. Easy fix.
6. No 1st or 4th available: shift A solenoid failed. Easy fix in the pan.
7. No 2nd or 3rd available: shift B solenoid failed: Easy fix in the pan.
8. No TCC lockup: Brake pedal switches improperly adjusted (always on), TCC solenoid failed (easy fix in the pan), TCC clutch worn out (must remove trans and replace TC).
9. TCC always locked: TCC apply solenoid circuit shorted to ground, TCC solenoid blockage (easy fix in pan), or TC broken (must remove trans and replace TC).
10. 1-2 Shift shudder at WOT; delayed or abnormal 1-2 shift: 1-2 accumulator piston cracked or stuck cocked in the bore. Easy fix in the pan.
11. Horrible noise in 4th and feels like the brakes are on: overrun clutches are applying due to a cracked or leaking forward piston. Overrun clutches will be worn out after 30 seconds of this behavior. Car can be safely driven in D. R&R.
12. Soft shifting, gradual performance degradation: Leaking boost valve; clogged EPC filter screen, leaky seals. Transgo HD2-C kit fixes first two without removing trans. Seal restorer may fix last problem, but probably R&R.
13. No forward movement in OD or D, but L2, L1 and R work: Forward sprag is broken. R&R. Try not to run or drive the car or further damage could result.
14. Extremely harsh shifts from P or N, normal shifts at WOT: EPC (Electronic Pressure Control) solenoid failed. Easy fix in pan.
15. Loud bang, grinding sound, loss of all gears, and a binding driveshaft: snapped output shaft. R&R.
16. Trans seems noisy when moving in 1st and Reverse, noise goes away instantly if you shift to N: Reaction planetary is worn out due to high miles or insufficient lubrication. Not a critical failure, but not a good sign either. R&R.
17. No movement in any gear: pump failure, or total loss of fluid. R&R, or refill pan and find the leak. If out of fluid, avoid running the engine until the trans is refilled to avoid pump damage. To check for pump failure, check fluid level with the engine off, then start the engine and recheck fluid level. If level does not go down when engine is running, the pump is broken.
18. Trans does not upshift out of first, speedometer reads zero at all times: VSS failure. Easy fix on rear of transmission.
19. Transmission does not shift automatically, only manually. Swap in a known-good PCM, check wiring, check other sensors.
20. 1-2 shift is delayed and harsh, may not shift into OD: Check TPS for smooth and linear electrical response over the entire range of motion. If not, replace.

Credit for this information goes to Sherlock9C1 from the Impala SS forum and Killian96ss for bringing it to us.