



Technical Service Information

4L60-E TRANSMISSION LATE 2-3 SHIFT

COMPLAINT: A 2003 Chevy Blazer with a 4.3L V6 using a 4L60-E transmission has what felt like a late 2-3 shift then slipping into 4th gear during light to medium throttle. This is typically the type of sensation experienced when the 3-4 clutches are burnt. The fluid level and condition does not indicate burnt clutches and code P0758 is stored for a 2-3 shift solenoid circuit error. When the code is erased and the vehicle is road tested again, the transmission continues to malfunction yet the code does not return. Nothing was discovered when the solenoid and its related wiring and connectors were checked for resistance, corrosion and shorts.

CAUSE: The 2-3 shift solenoid is energized for 1st and 2nd gear and turns off for 3rd and 4th. When the solenoid command signal from the VCM was monitored on a scope, at the time the 2-3 shift was to occur, it took the VCM near 3 seconds to fully release the ground (Figure 1). Once the ground was fully released the transmission made the 2-3 shift causing the late 2-3 shift complaint. By the time the 2-3 shift was made, the 3-4 shift came soon after giving it a perceived slip feel.

CORRECTION: If driven long enough, code P0758 would return indicating a circuit error for the solenoid. Since the circuit was checked during cold and operating temperatures with no circuit issues discovered, it was decided to replace the VCM. Once replaced, all shifts were restored to normal operations during light, medium and heavy throttle conditions.

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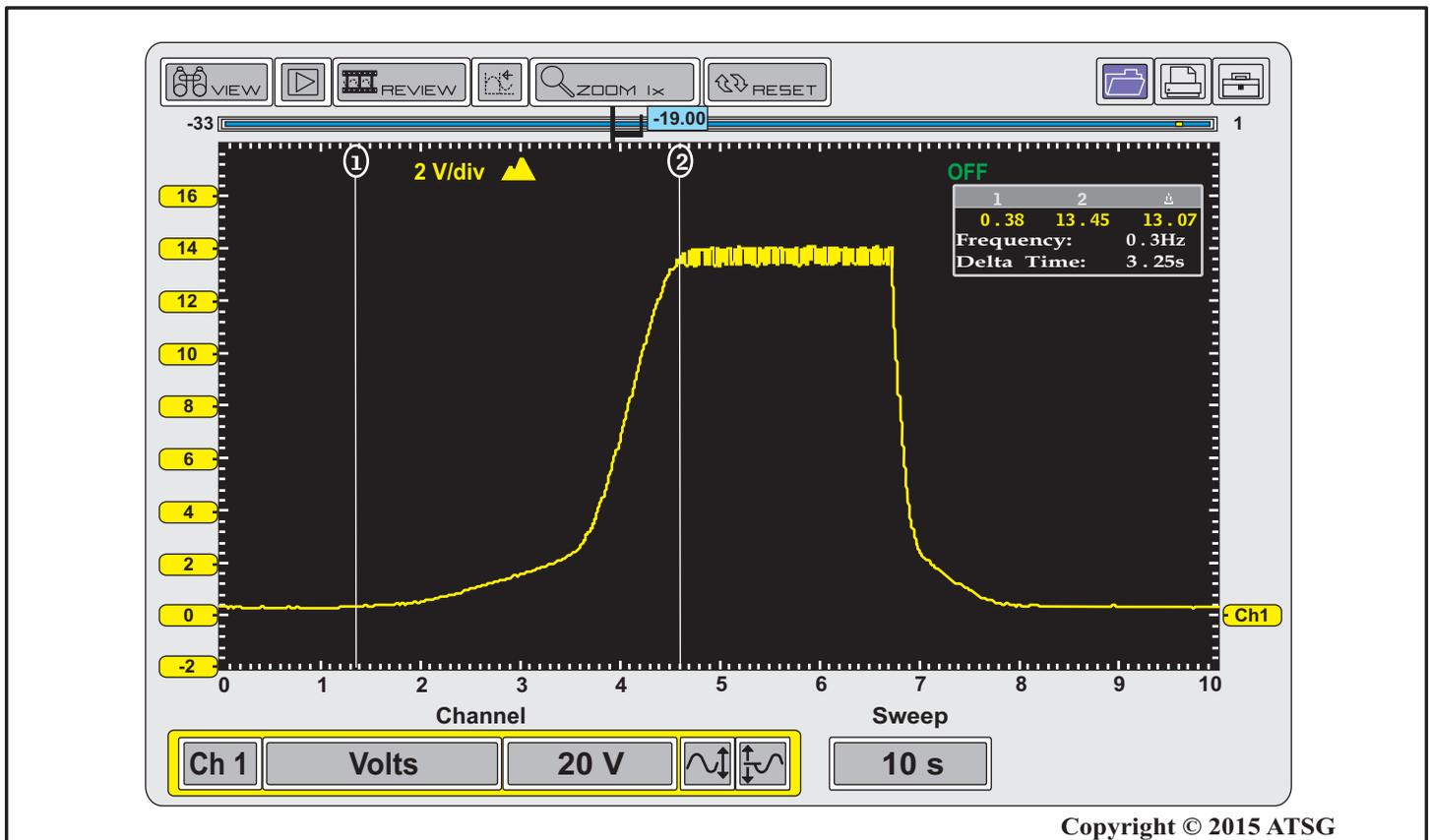


Figure 1