

#07-04-21-002: Intermittent Service 4 Wheel Drive Message Displayed in DIC, DTC C0378 Set (Diagnose and Reprogram Transfer Case Control Module (TCCM), if Necessary - (Oct 29, 2007)

Subject: Intermittent Service 4 Wheel Drive Message Displayed in DIC, DTC C0378 Set (Diagnose and Reprogram Transfer Case Control Module (TCCM), if Necessary)



Models: 2007 Chevrolet Avalanche, Suburban, Tahoe
2007 GMC Yukon, Yukon XL
with NVG246 Transfer Case (RPO NP8)

Condition

Some customers may comment on a "SERVICE 4 WHEEL DRIVE" message displayed in the DIC. Upon investigation, the technician may find DTC C0378 set in history or as current.

Cause

With the transfer case selector switch in either AUTO or 4WD, the front axle actuator can retract on key on. Then when the transfer case control module (TCCM) powers up, it extends back to the 4WD position. On 2007 model utilities, the control loop is faster than previous models, and the actuator may not make it back to 2WD mode and therefore does not advance forward after start up. This "Creep" can lead to an intermittent or no connection on the feedback circuit.

Note: There is nothing wrong with the actuators. It is possible that after successive key on cycles, the "SERVICE 4 WHEEL DRIVE" message could be displayed, with DTC C0378 set.

Correction

Inspect the front axle for proper mechanical engagement. Inspect pin terminal tension at the front axle actuator, connector C2 at the TCCM, C109 and C110. Refer to SI for the connector locations. If the front axle engages properly, and there are no connector problems, update the TCCM with the latest calibration available on TIS2WEB.

~~Customers should be advised that their vehicle should normally be driven in 2WD mode, using Auto Mode or 4WD when weather and road conditions are appropriate.~~

Warranty Information

For vehicles repaired under warranty, use:

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