

Technical Bulletin #269

Transmission: *GM* 4L60-E Subject: *Solenoid/switch resistances* Application: *GM* Issue Date: 1995

GM 4L60-E

Solenoid/Switch Resistances

Part of the 4L60E electrical diagnosis should include checking the electrical resistance of solenoids and other devices inside and around the unit. The following is a chart showing a typical case connector and pins, the devices they go to, and the resistance or voltage values of the circuits involved.



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In order to properly test the Transmission Fluid Pressure Switch Assembly, the engine must be running and under full computer control (all wiring connected). Since the computer is sending 12 volts to each of these switches, the resistance of the switches con not be checked with an ohmmeter. Use a voltmeter and check for the proper voltage on the appropriate harness wires in each of the shift lever positions (the wire will need to be pierced).

The chart below shows the correct voltage values for each of the shift lever positions.

Harness Pin	Ν	R	Ρ
PARK	12	0	12
REVERSE	0	0	12
NEUTRAL	12	0	12
D4	12	0	0
D3	12	12	0
D2	12	12	12
D1	0	12	12
ILLEGAL	0	12	0
ILLEGAL	0	0	0

Transmission Fluid Pressure Switch Assembly



EXPECTED VOLTAGE READINGS

Points to remember when working with the transmission electrical connector.

-To remove the connector, squeeze the two tabs toward each other and pull straight up (See illustration).

Limit twisting or wiggling the connector during removal. This can bend the pins. -DO NOT pry the connector off with a screwdriver or other tool.

-To install the connector, first orient the pins by lining up the arrows on each half of the connector. Push the connector straight down into the transmission without twisting or angling the mating parts.

-The connector should click into place with a positive feel and/or sound.

-Whenever the transmission pass-through connector is disconnected from the vehicle harness and the engine is running, multiple Diagnostic Trouble Codes will set. Be sure to clear these codes after re-connecting the pass-through connector.

DTCs 59, 67 and 82 will set with key on, engine off.

DTCs 59, 66, 67, 73 and 82 will set with key on, engine on.

