



Technical Service Information

GM AF23/33-5 (AW55-50SN) TCM RELOCATION

CHANGE: At the start of production for the 2007 model year the Chevrolet Equinox has had the Transmission Control Module relocated to the top of the transmission, Refer to Figure 1.

REASON: Less wiring and connectors which results in fewer wire and connector related electrical faults.

PARTS AFFECTED:

- (1) All external transmission electrical component wiring has been eliminated.
- (2) The Transmission Range Sensor is now part of the TCM.
- (3) The case has been changed to accommodate a newly designed 22 pin case connector that the TCM will plug directly into.

INTERCHANGEABILITY:

There is no interchangeability with the previous designed components mentioned above.

SERVICE INFORMATION:

The X1 TCM 16 pin connector, Figure 2, can be serviced with available terminal ends.

The X2 TCM 4 pin connector, Figure 3, is not serviceable, it is only replaceable.

The X3 TCM 22 pin connector (case connector), Figure 4, is not serviceable, it is only replaceable.

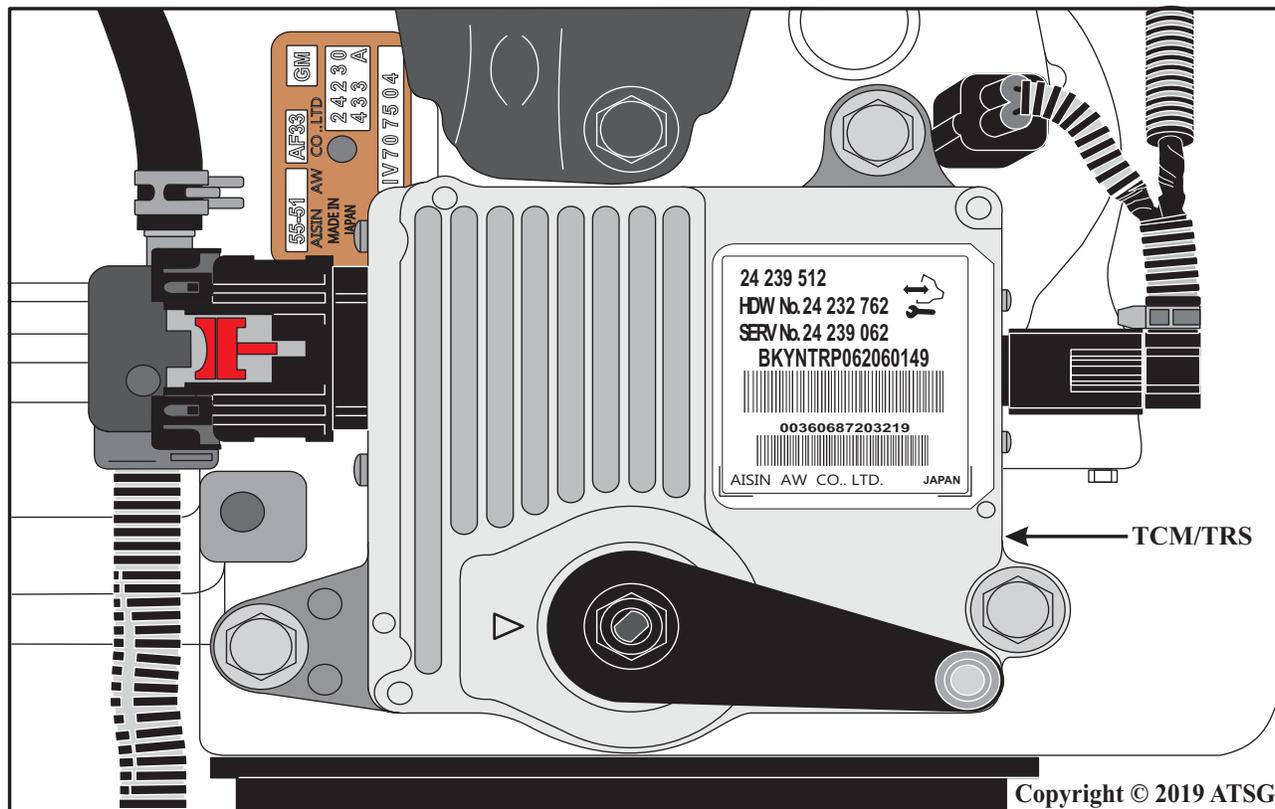
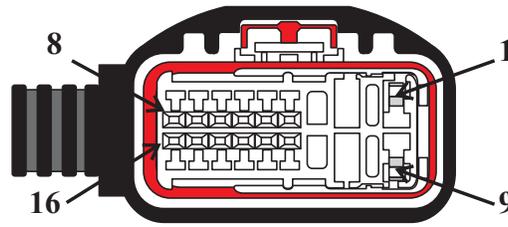


Figure 1

GM Af33 TCM CONNECTOR ID

TRANSMISSION CONTROL MODULE CONNECTOR X1

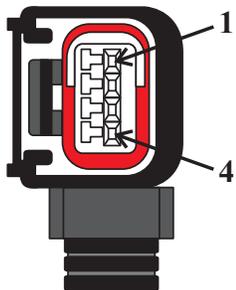


| TERMINAL NUMBER | WIRE COLOR | CIRCUIT NUMBER | CIRCUIT FUNCTION |
|-----------------|--------------|----------------|--|
| 1 | Red/White | 540 | Battery Positive Voltage (KAM) |
| 2-4 | Not Used | ————— | ————— |
| 5 | Orange/Black | 1786 | Ignition Lock Cylinder Control Actuator Signal |
| 6 | Tan | 2501 | High Speed GMLAN Serial Data Bus - |
| 7 | Tan/Black | 2500 | High Speed GMLAN Serial Data Bus + |
| 8 | Tan/Black | 2500 | High Speed GMLAN Serial Data Bus + |
| 9 | Black/White | 451 | Ground |
| 10 | Not Used | ————— | ————— |
| 11 | Pink | 1339 | Ignition Voltage |
| 12 | Brown | 4 | Accessory Voltage |
| 13 | Not Used | ————— | ————— |
| 14 | Tan | 2501 | High Speed GMLAN Serial Data Bus - |
| 15-16 | Not Used | ————— | ————— |

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Figure 2

TRANSMISSION CONTROL MODULE CONNECTOR X2



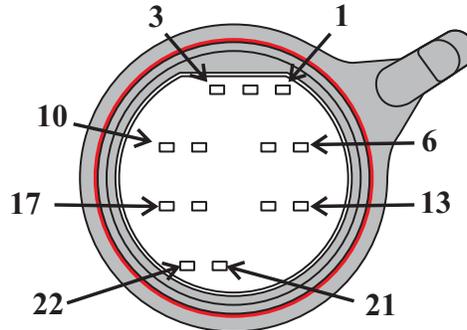
| TERMINAL NUMBER | WIRE COLOR | CIRCUIT NUMBER | CIRCUIT FUNCTION |
|-----------------|------------|----------------|---------------------------------|
| 1 | Black | 401 | Output Speed Sensor Signal Low |
| 2 | Red | 400 | Output Speed Sensor Signal High |
| 3 | Lt Blue | 1230 | Input Speed Sensor Signal High |
| 4 | Tan | 1231 | Input Speed Sensor Signal Low |

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Figure 3

GM Af33 TCM CONNECTOR ID

TRANSMISSION CONTROL MODULE CONNECTOR X3



| TERMINAL NUMBER | WIRE COLOR | CIRCUIT NUMBER | CIRCUIT FUNCTION |
|-----------------|------------|----------------|--------------------------------------|
| 1 | White | 1222 | Shift Solenoid 1 Control High |
| 2 | Black | 1223 | Shift Solenoid 2 Control High |
| 3 | Green | 1994 | Line Pressure Solenoid Control High |
| 4-5 | Not Used | _____ | _____ |
| 6 | Gray | 5510 | Line Pressure Solenoid Control Low |
| 7 | Brown | 5509 | TCC Pressure Solenoid Control Low |
| 8 | Not Used | _____ | _____ |
| 9 | Lt Green | 5511 | TCC Pressure Solenoid Control High |
| 10 | Blue | 5508 | Shift Pressure Solenoid Control Low |
| 11-12 | Not Used | _____ | _____ |
| 13 | Orange | N/A | Transmission Fluid Temp Sensor Low |
| 14 | Orange | N/A | Transmission Fluid Temp Sensor High |
| 15 | Not Used | _____ | _____ |
| 16 | Red | 2880 | Shift Pressure Solenoid Control High |
| 17 | Yellow | 898 | Shift Solenoid 3 Control High |
| 18-20 | Not Used | _____ | _____ |
| 21 | Lt Blue | 2527 | Shift Solenoid 5 Control High |
| 22 | Purple | 2879 | Shift Solenoid 4 Control High |

Figure 4