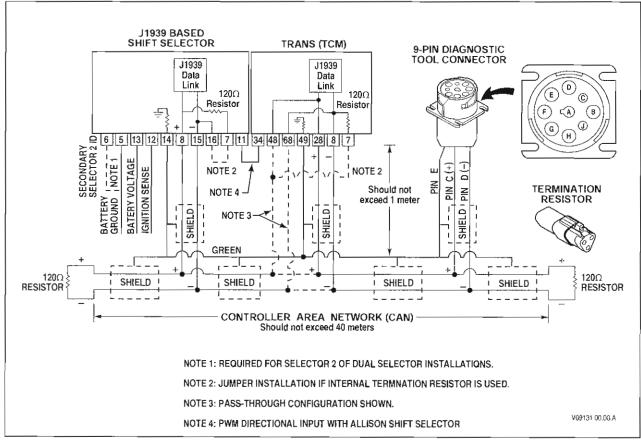
# **DIAGNOSTIC TROUBLE CODES (DTCs)**

### DTC U0103 Lost Communication With Gear Shift Module (Shift Selector) 1



## Circuit Description

Allison 4<sup>th</sup> Generation Controls shift selectors communicate with the transmission control module (TCM) by exchanging standardized digital messages over the SAE J1939 Controller Area Network (CAN). The physical network consists of a two-wire twisted pair, two 120 Ohm termination resistors and, in most cases, a third shield wire. A 120 Ohm termination resistor is located at each end of the network to maintain good J1939 signal quality. Vehicle OEMs may chose to configure the network to take advantage of 120 Ohm resistors built in to Allison 4<sup>th</sup> Generation Controls TCMs and shift selectors.

#### Conditions for Running the DTC

Ignition voltage is greater than 9V and less than 18V (12V TCM) or greater than 9V and less than 32V (24V TCM).

#### Conditions for Setting the DTC

DTC U0103 sets when the TCM has not received a state of health (SOH) message from the primary shift selector for 2 or more seconds.