

insider info.

4EAT Speed Sensors

If you are in the process of diagnosing delayed or erratic shifting on a 4EAT transmission, pay close attention to the comparison of readings between speed sensor 1 and speed sensor 2 as displayed on the Select Monitor. If these sensors are working properly, the two readings should be close, but are rarely absolutely identical. If, however, in the vehicle that you are driving, you notice that the speed sensor 1 signal and the speed sensor 2 signal are always precisely identical, there may be a malfunction in the signal or circuit from one of the sensors. When the transmission computer senses a failure in one of the speed sensor circuits, it may substitute the other sensor's reading in the display of the Select Monitor. This is why the two readings would be identical. Check the computer's memory for fail codes corresponding to either or both of the sensors.

If you have codes for both, identify which sensor is the one that is not sending a proper signal by looking at the speed sensor display in the engine computer side of the Select Monitor. The engine computer only monitors speed sensor 2. If the engine computer reports a good speed sensor 2 reading, then you're likely to have a concern with the signal from speed sensor 1 to the transmission control computer. Speed sensor 1 is the speed sensor in the back of the transmission by the transfer clutch on an AWD vehicle and inside the transmission back cover of a two-wheel drive vehicle. Diagnose with resistance readings, direct signal monitoring, and physical examination, if required.

If speed sensor 1 checks out, and it has been determined that speed sensor 2 itself is okay (since the engine control computer can read it), check the connections from speed sensor 2 to the transmission computer.