



## 2005-2007 RX-8 RI4615

### Automatic Transmission Does Not Shift

The RX-8's transmission shifting logic is referred to as "ACTIVE SHIFT LOGIC" due to the different shift modes the TCM may enter based on driving style, or vehicle driving conditions. The TCM uses the ABS/TCS wheel speed sensor signals to determine if the vehicle is cornering, or driving in a straight line. During cornering, the TCM will hold the current gear and not up/downshift until the vehicle returns to straight line driving.

Because the AT shift logic is partly dependent on ABS/TCS wheel sensors, some automatic transmission shifting concerns may be caused by different sized tires, or tire brands on the same vehicle. Verify all 4 tires on the vehicle are the same size & brand. Although the size of the tire may be the same between different manufacturers, the revolutions per mile may be different. Also, tires of the same brand may cause concerns if the set contains new and worn tires.

Before troubleshooting AT shift concerns, verify all tires are the same brand, size & condition.