



# Technical Service Information

## ACURA TSX MCTA 5 SPEED

### NO START CONDITION

**COMPLAINT:** A 2005 Acura TSX with the MCTA five speed transmission has a complaint of a no start condition after the transmission was repaired and installed back into the vehicle. The Immobilizer lamp was flashing and the scan tool could not communicate with the Engine Control Module, all other modules would communicate.

**CAUSE:** Since this was not an original problem the transmission installation work was inspected. The ECM/PCM power and ground circuits checked good but upon inspection of the three sensor five volt supply circuits, the five volt supply circuit for the countershaft speed sensor was found to be shorted to ground, this was the Yellow/Blue wire seen in the wire diagram in figure 1, the other two five volt supply circuits check good.

The actual cause of this was the fact that when the transmission was removed, the R&R technician did not disconnect the countershaft speed sensor, instead it was removed from the transmission and left connected to the vehicle wire harness.

When the transmission was installed back into the vehicle the R&R technician did not realize that there is an .080" thick spacer that goes between the speed sensor and the transmission case....this was left out! When an attempt was made to start the vehicle, the speed sensor was instantly damaged by the counter shaft gear, refer to figure 2. This damage was what shorted the five volt supply for the countershaft speed sensor. It also caused the no start condition and the loss of communication with the ECM. The Immobilizer lamp was flashing because it could not communicate with the ECM.

The damaged speed sensor was disconnected, the engine now started and ran, the Immobilizer lamp stopped flashing and communication with the ECM returned.

**CORRECTION:** Once a new speed sensor and .080" spacer was installed, refer to figure 3, all complaints were gone and the vehicle operated normally.

As a side note there were no communication codes set however there was a message in the Multiplex Module signaling a loss of communication with the ECM.

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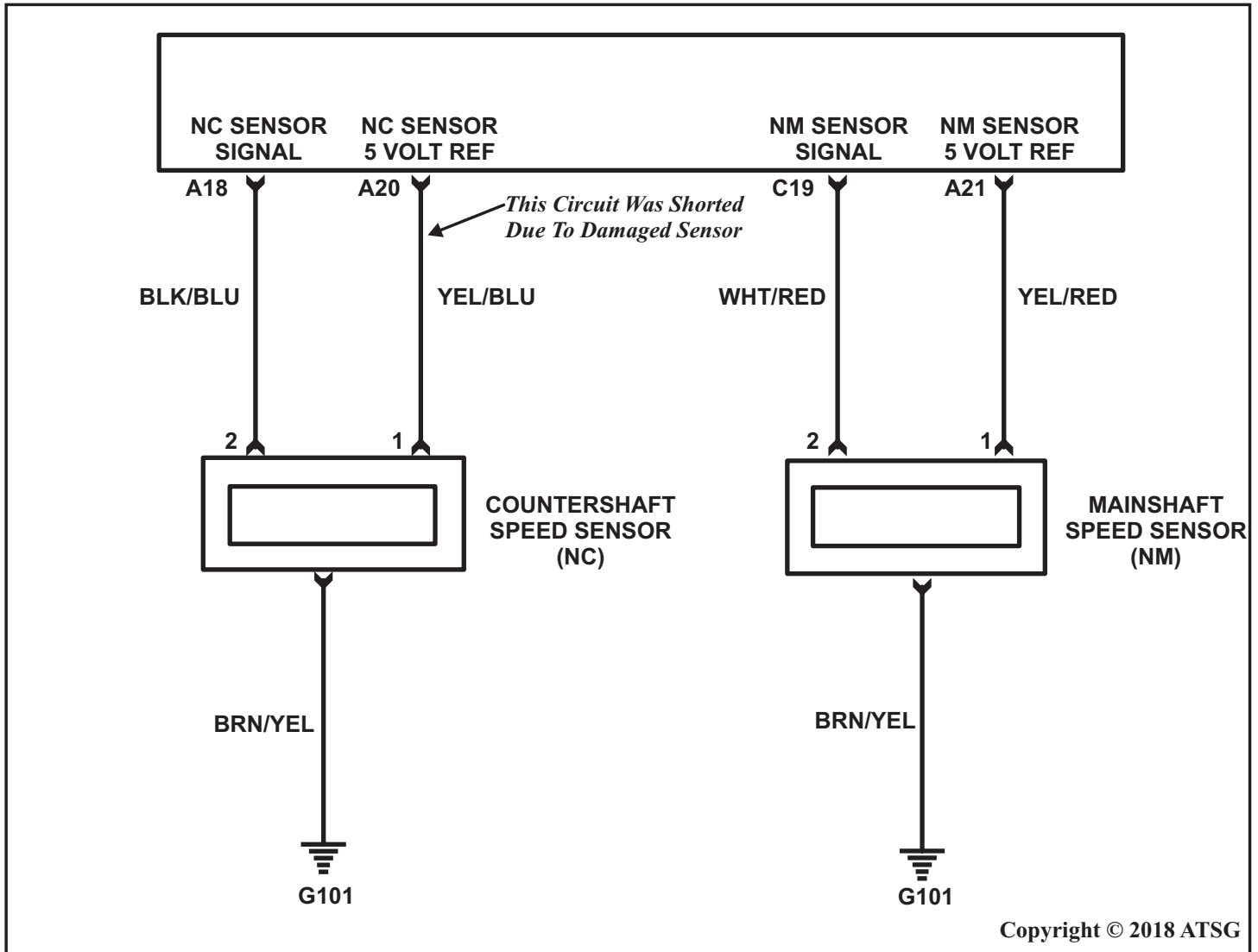


Figure 1

## ACURA TSX MCTA 5 SPEED NO START CONDITION

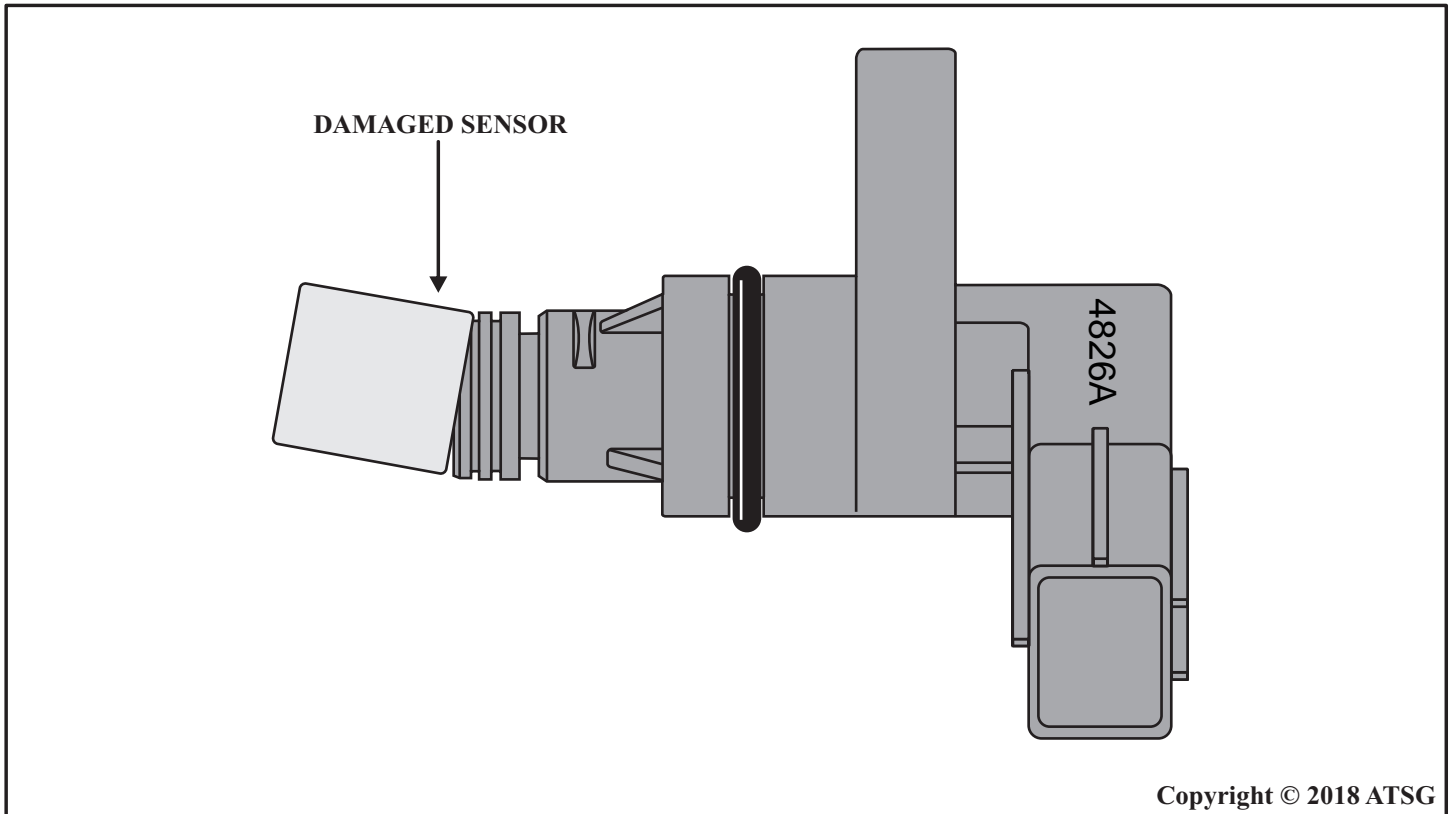


Figure 2

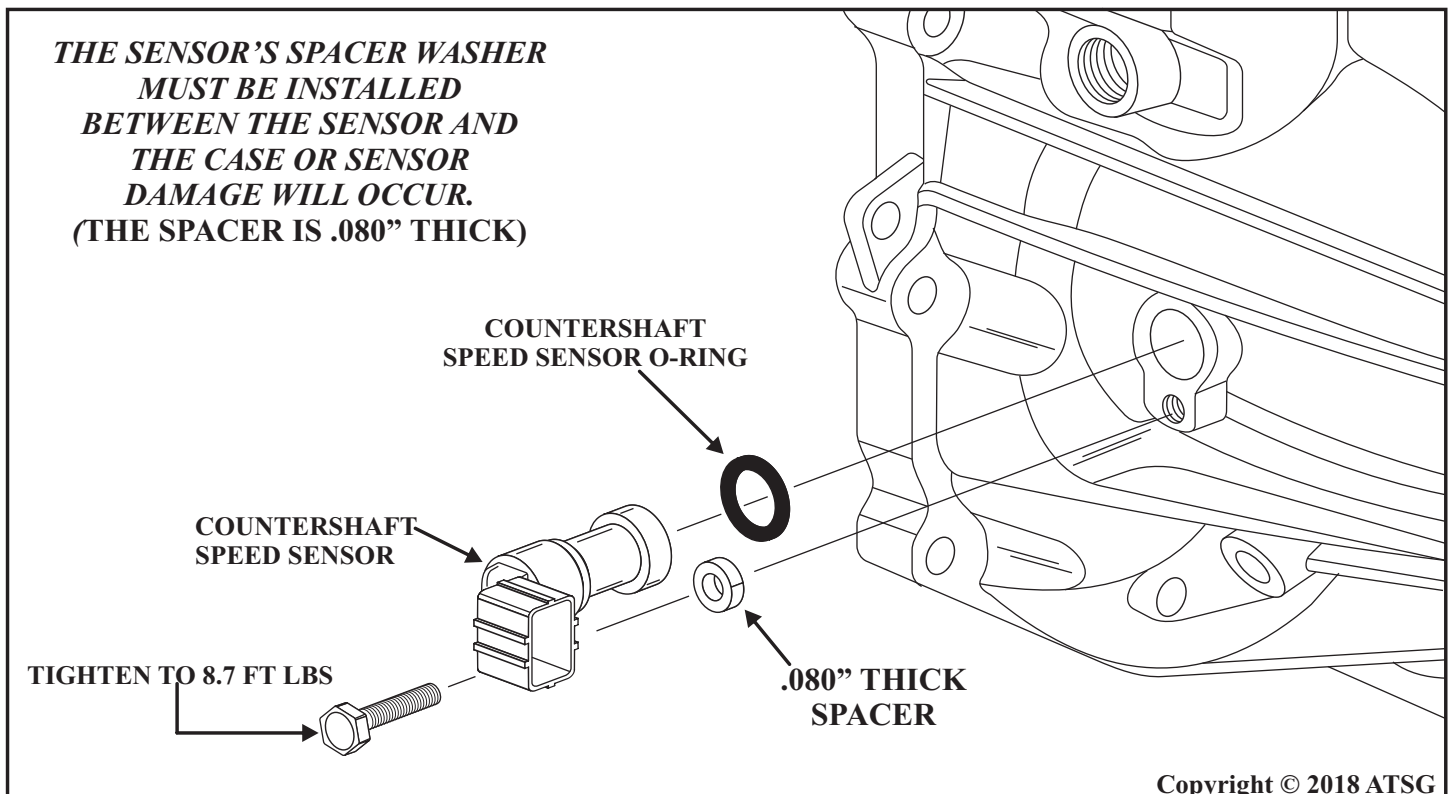


Figure 3