

SUZUKI FORENZA ZF4HP16 P0705 TRANSMISSION RANGE SENSOR FAULT

COMPLAINT: Suzuki Forenza models equipped with the ZF4HP16 may have a complaint of a re-occurring P0705 Diagnostic trouble code related to a fault with the Transmission Range Sensor also called the Park Neutral Switch. It may be noted that along with this code there may be 3rd gear starts. In addition, there have been many complaints of an issue with the shifter being loose in the gate. This can also be connected to a complaint of not being able to release the ignition key when selecting the park position.

CAUSE: The cause may be:

1. A faulty Transmission Range Sensor.
2. A broken spring in the bottom of the shifter housing, which can cause the range sensor to be in between shifter selections, as the shifter assembly will not indicate the correct positions and or will feel loose when moving thru the ranges as shown in Figure 1.

CORRECTION: To correct this condition:

1. Refer to Figure 2 for a location of the Transmission Range Sensor. See Figure 3 for a partial wiring diagram of the TRS and the TCM. Monitor the positions of L1, L2, L3 and L3 and consult the parity chart listed to see if the TRS is operating correctly, replace as necessary.
2. Refer to Figure 1 and move the shifter handle thru the ranges. If it feels loose, refer to Suzuki bulletin no. TS 09 03129R. This bulletin covers an issue with a broken shift lever tension spring. Replace as necessary.

SERVICE INFORMATION:

SHIFT LEVER TENSION SPRING (Suzuki no.).....28095-85Z00

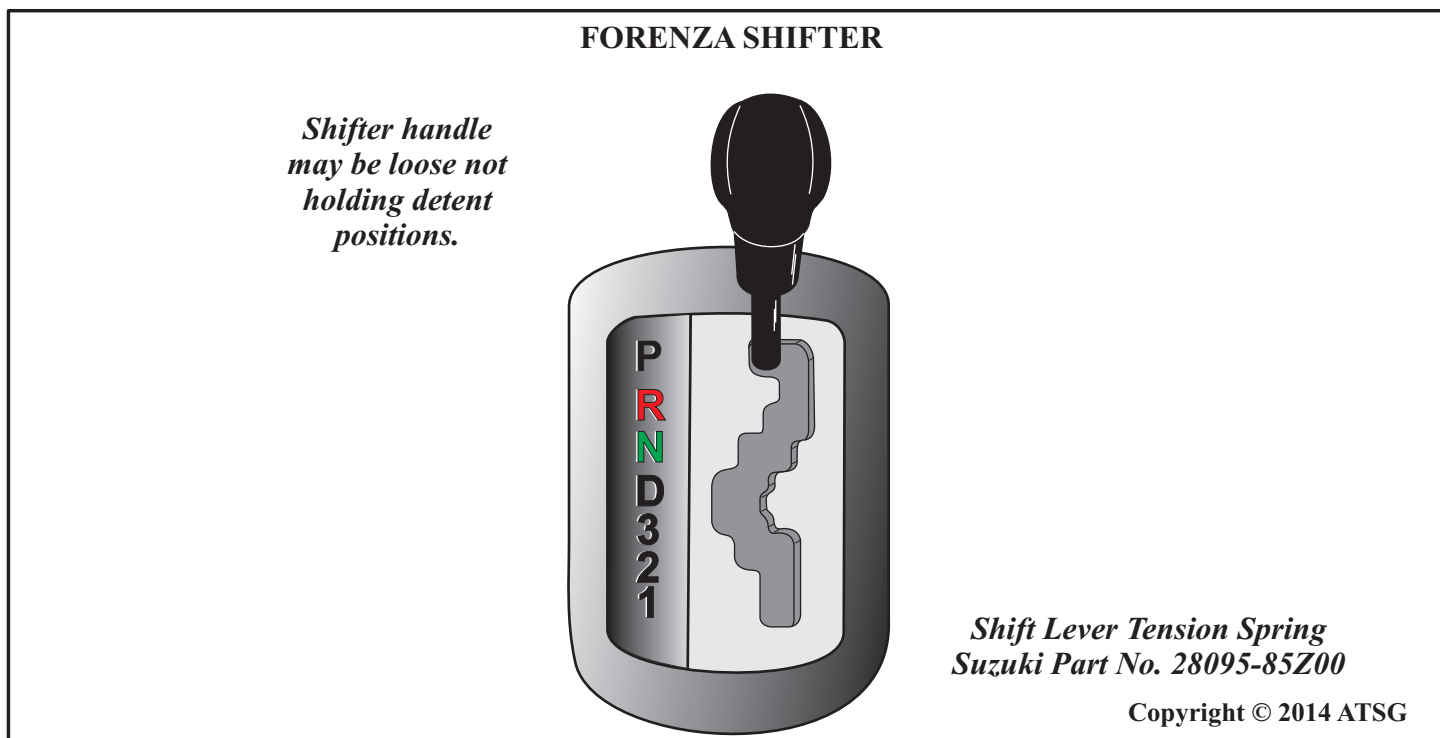


Figure 1

TRANSMISSION RANGE SENSOR LOCATION

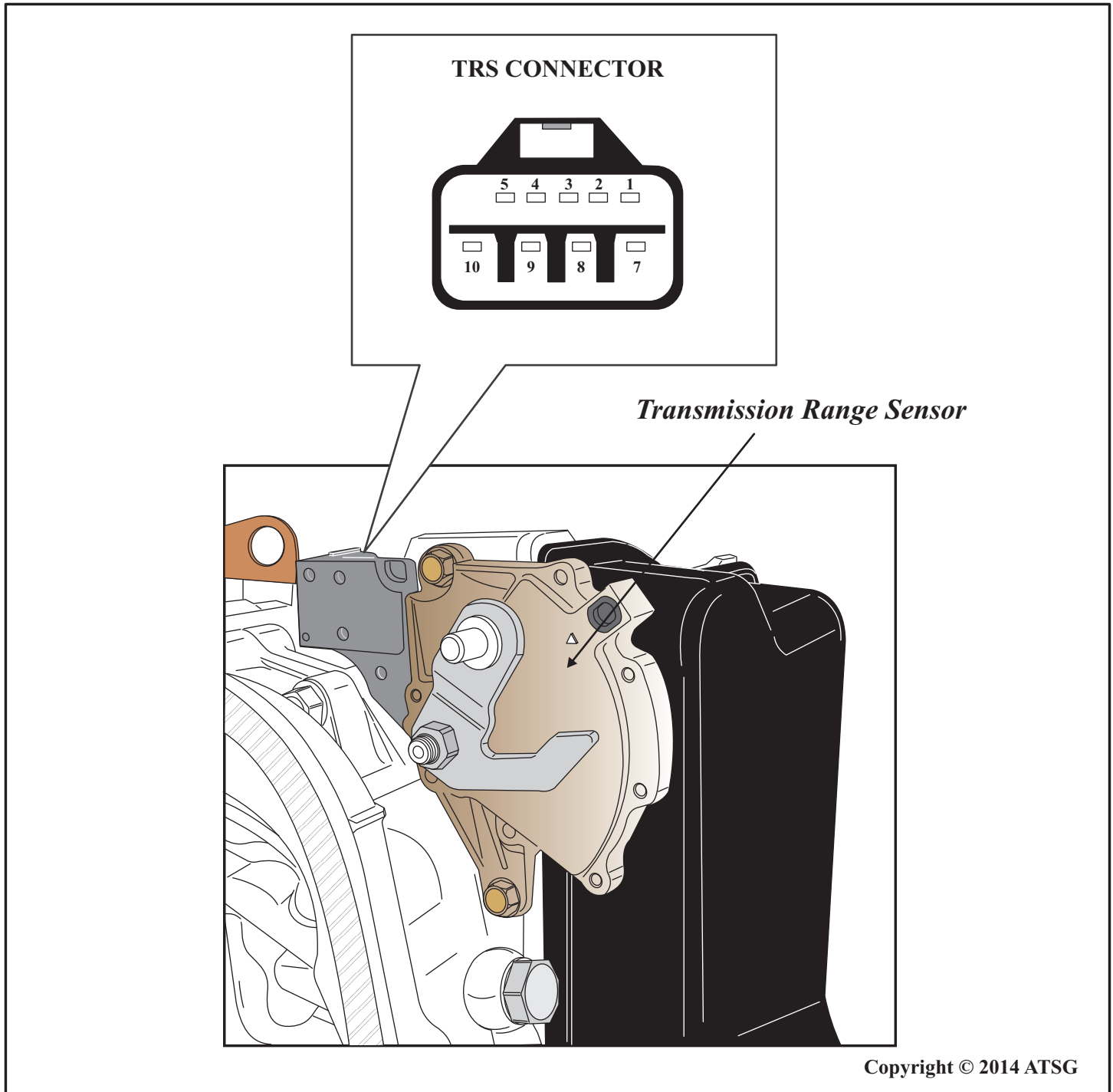
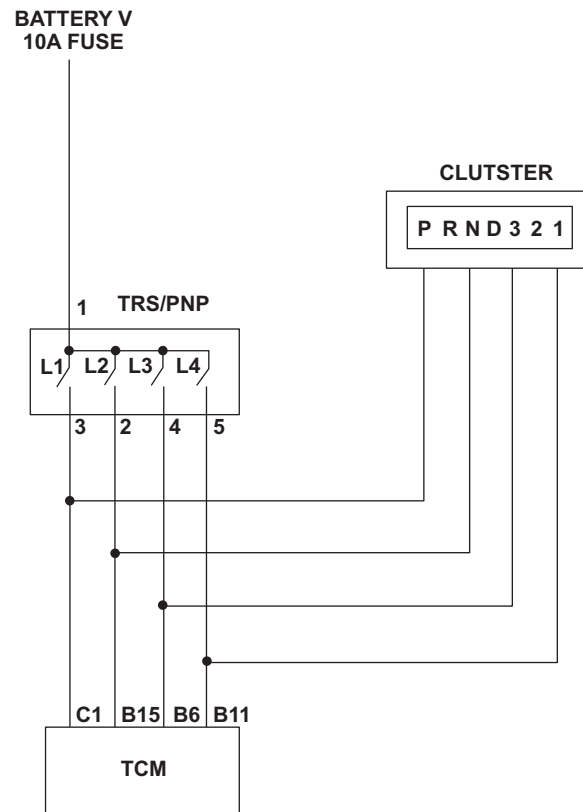


Figure 2



Technical Service Information

TRANSMISSION RANGE SENSOR PARTIAL WIRE DIAGRAM



TRANSMISSION RANGE SENSOR PARITY CHART

| | L1 | L2 | L3 | L4 |
|---|----|----|----|----|
| P | 0 | 0 | 12 | 0 |
| R | 0 | 0 | 0 | 12 |
| N | 0 | 12 | 0 | 0 |
| D | 12 | 12 | 12 | 0 |
| 3 | 12 | 12 | 0 | 12 |
| 2 | 12 | 0 | 12 | 12 |
| 1 | 0 | 12 | 12 | 12 |

0 = 0 Volts

12 = 12 Volts

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Figure 3