



## NISSAN/INFINITI RE4F04B NO UP-SHIFT DTC P0720 MAY BE STORED

**COMPLAINT:** After an overhaul a Nissan/Infiniti vehicle equipped with the RE4F04B automatic transaxle exhibits a no up-shift condition. Upon checking for codes, DTC P0720 may be stored.

**CAUSE:** One cause may be the connectors for the output sensor and turbine sensor cross-connected. Some late model Nissan/Infiniti models with the RE4F04B transmission utilize a turbine sensor as well as an output sensor. The turbine sensor and the output sensor are both Hall Effect type sensors and are located on the back of the transmission near the driver side axle. Refer to Figure 1 for output and turbine sensor locations.

If the output sensor connector is incorrectly plugged into the turbine sensor, the Transmission Computer (TCM) will not detect any output rpm when taking off, thereby causing DTC P0720 to be stored with a no up-shift condition.

The reason the TCM detects no output rpm is because there is no turbine sensor reading when the transmission is in 1st gear. Refer to the partial cut-away view of the RE4F04B in Figure 2. The output sensor obtains its reading from the output gear while the turbine sensor obtains its reading from the forward clutch drum. In first gear the forward clutch drum is held stationary by the action of the low one-way clutch.

**CORRECTION:** When installing the transmission make certain to connect the sensors correctly. Refer to the wiring diagrams provided in Figure 3 for wire color reference.

**Note:** Wire colors may differ between models and years. Consult the appropriate factory service manual for the vehicle you are working on. It may also be a good idea to tag the connectors before removal of the transmission to avoid cross-connecting.

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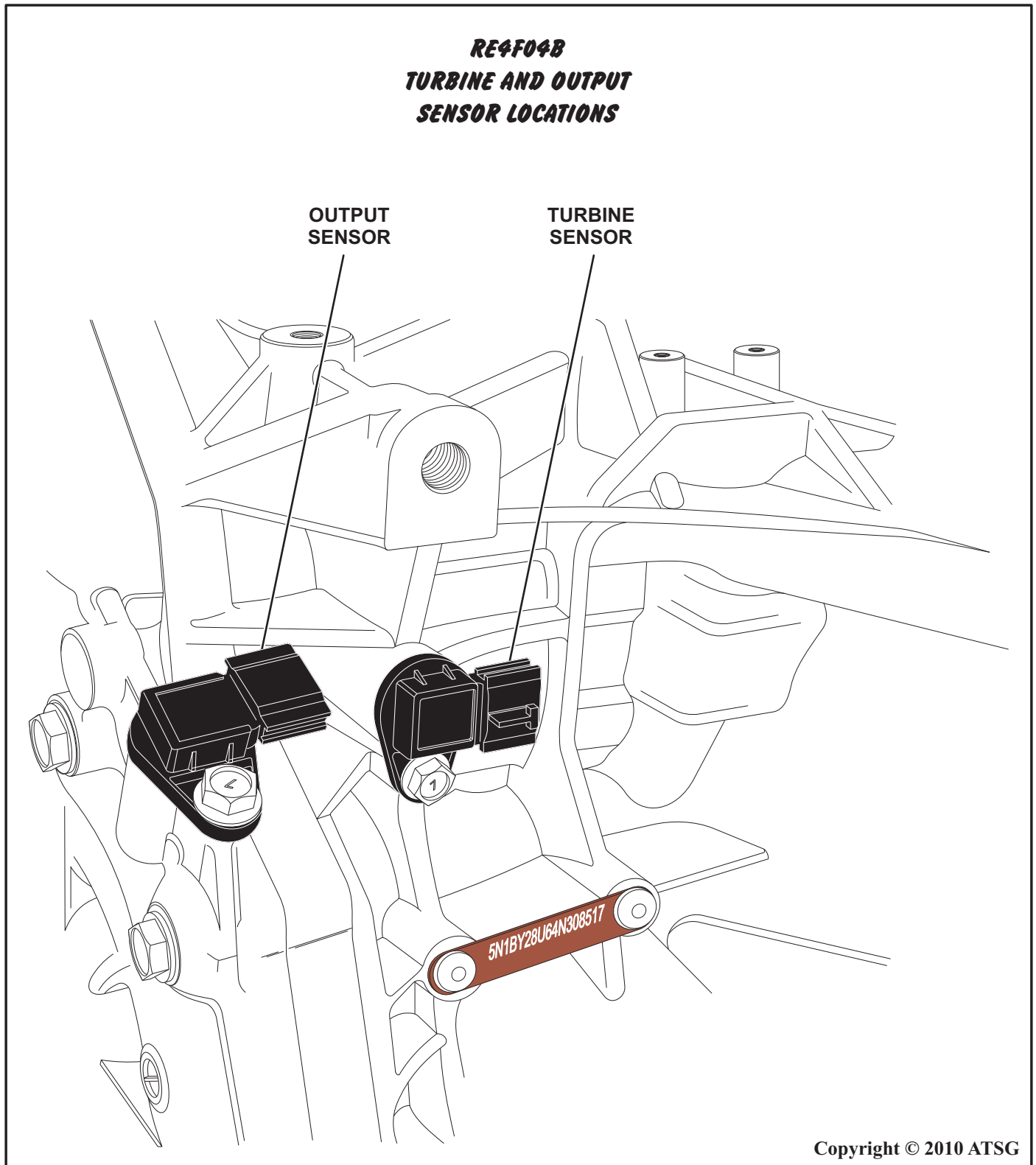
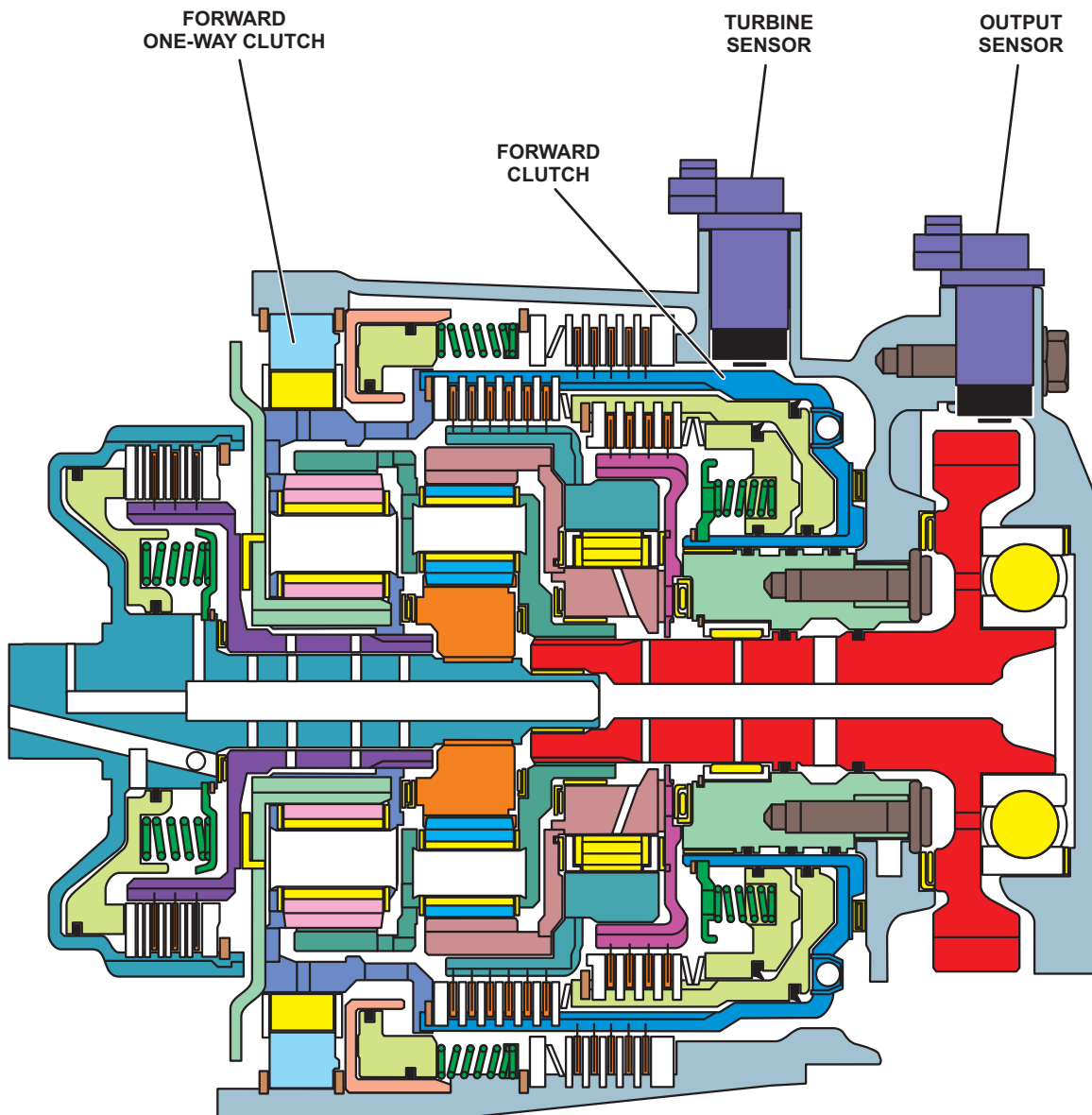


Figure 1

## NISSAN/INFINITI RE4F04B NO UP-SHIFT DTC P0720 MAY BE STORED

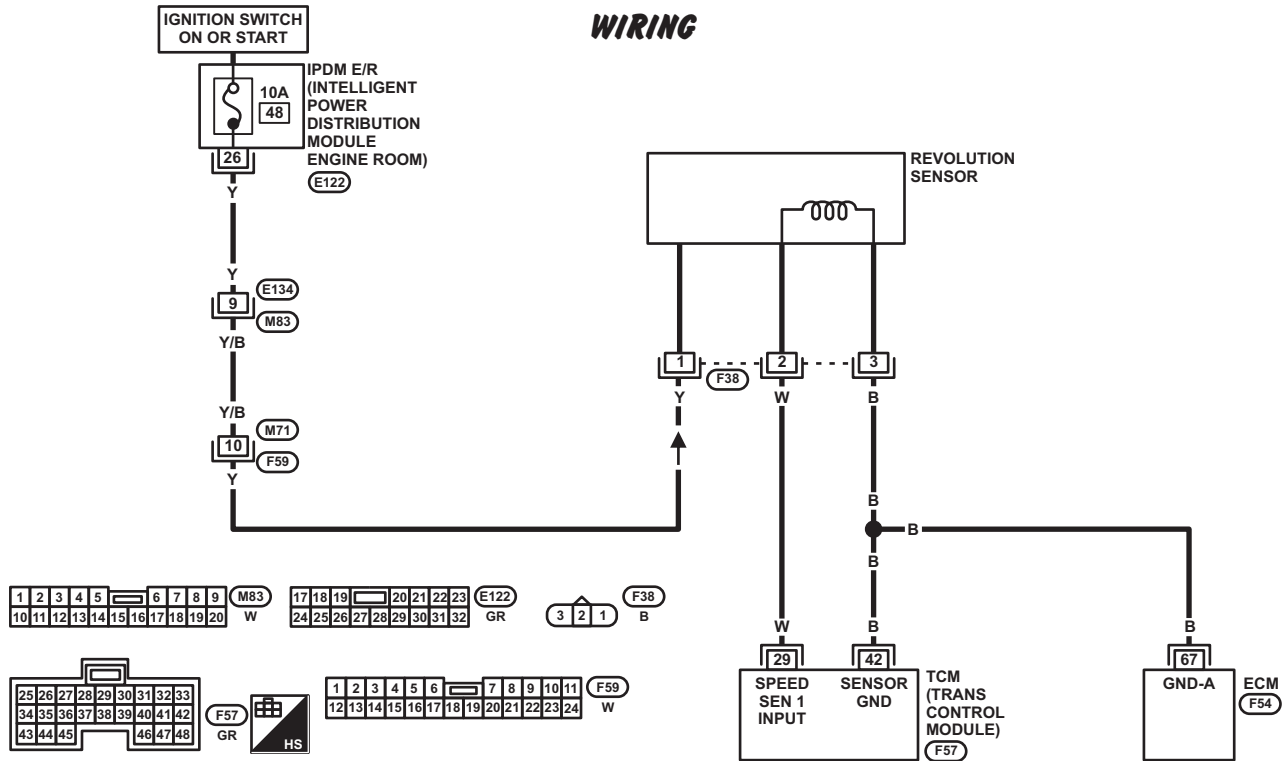
### **RE4F04B PARTIAL CUT-AWAY**



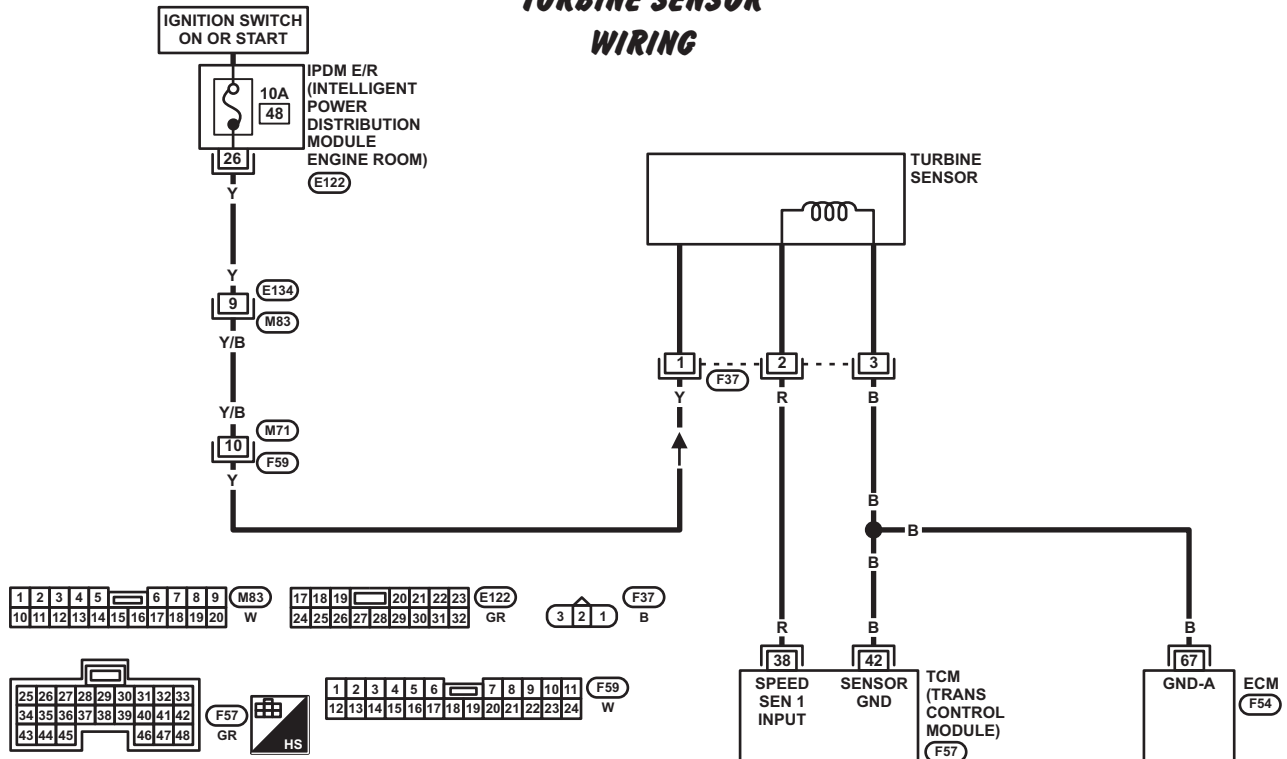
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Figure 2

## REVOLUTION SENSOR WIRING



## TURBINE SENSOR WIRING



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Figure 3