



## NISSAN/INFINITI RE4F04B

### NO TURBINE SENSOR READING

**COMPLAINT:** After an overhaul, a Nissan/Infiniti vehicle equipped with the RE4F04B may exhibit a complaint of no Turbine Sensor reading on a hand held scan-tool.

**CAUSE:** One cause may be the wrong Forward/Coast Clutch Housing installed in the transmission during the overhaul.

Unlike the RE4F04A, the RE4F04B transmission additionally uses a Turbine Sensor along with the Output RPM (Revolution) Sensor. The combination of the two sensors helps the computer to more accurately recognize input and output rpms which results in improved shifting characteristics and optimum shift timing during deceleration. Refer to Figure 1 for Turbine Speed Sensor location.

With the addition of the Turbine Sensor it was necessary to change the Forward/Coast Clutch Housing. The Forward/Coast Clutch Housing for the RE4F04A and RE4F04B look very similar, however, the lugs on the outside of the drum were increased in length to provide a surface for the Turbine Sensor to obtain its reading. Look at the diagrams in Figure 2. These partial cut-away diagrams show how the Turbine Sensor can read the Forward/Coast Clutch Housing with the RE4F04B drum installed, and how the Turbine Sensor is unable to read the Forward/Coast Clutch Housing with the RE4F04A drum installed.

**CORRECTION:** Use the correct Forward/Coast Clutch Housing for the application you are working on. Refer to the diagram in Figure 3. The two illustrations show the differences between the Forward/Coast Clutch Housing. The RE4F04B that is equipped with a turbine sensor has lugs that measure approximately 3.187" in length. The RE4F04B that IS NOT equipped with a Turbine Sensor has lugs that measure approximately 2.863" in length.

## NISSAN/INFINITI RE4F04B

### NO TURBINE SENSOR READING

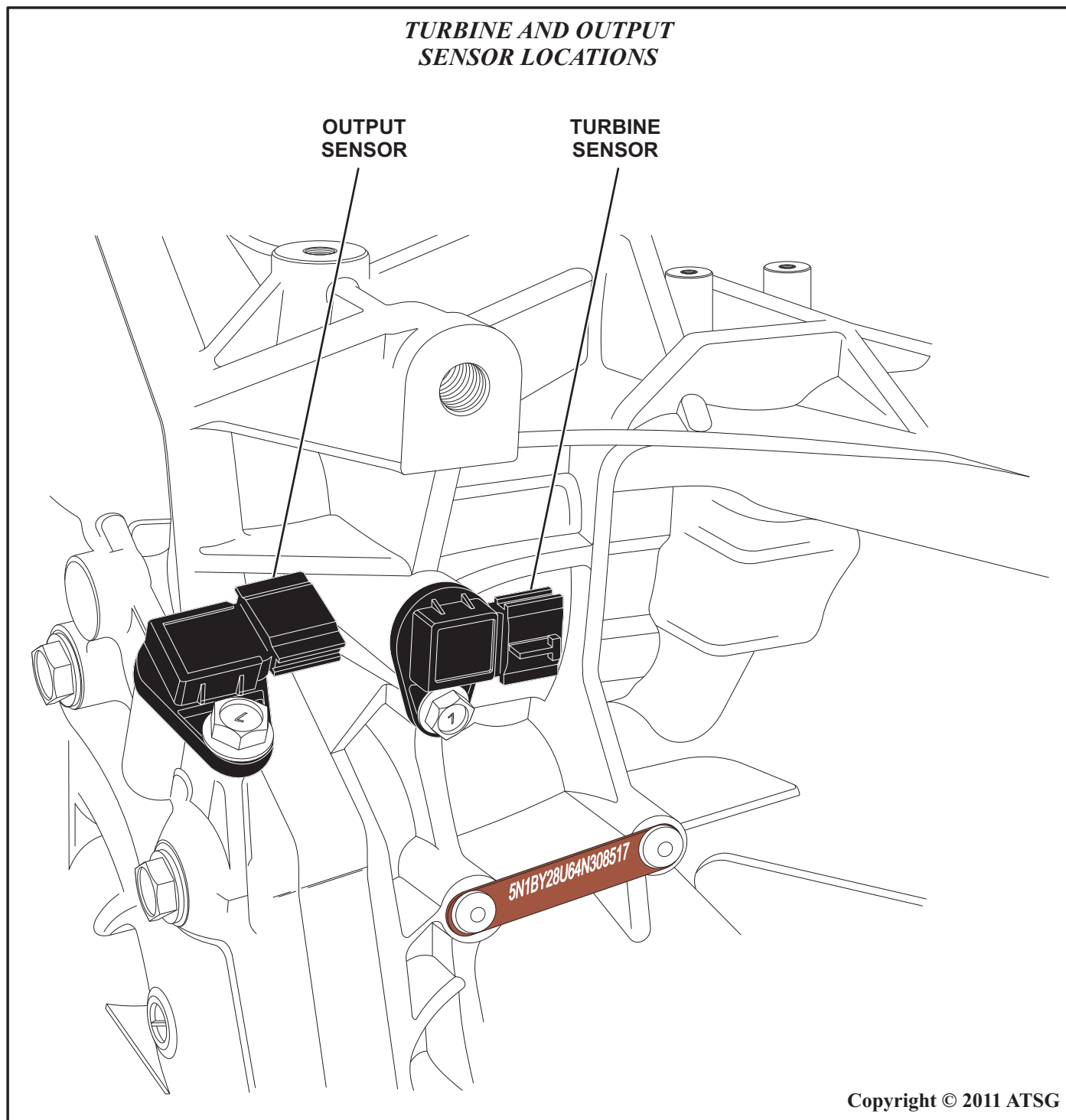
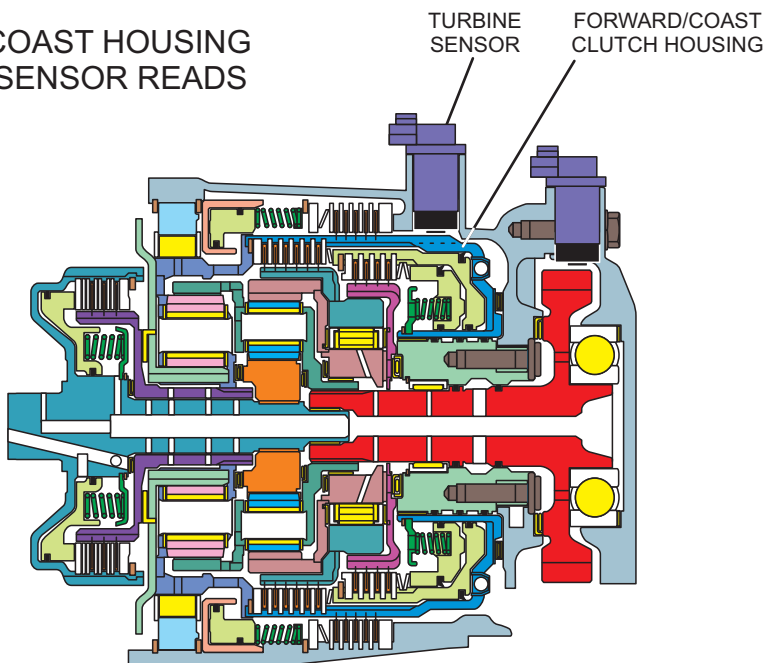


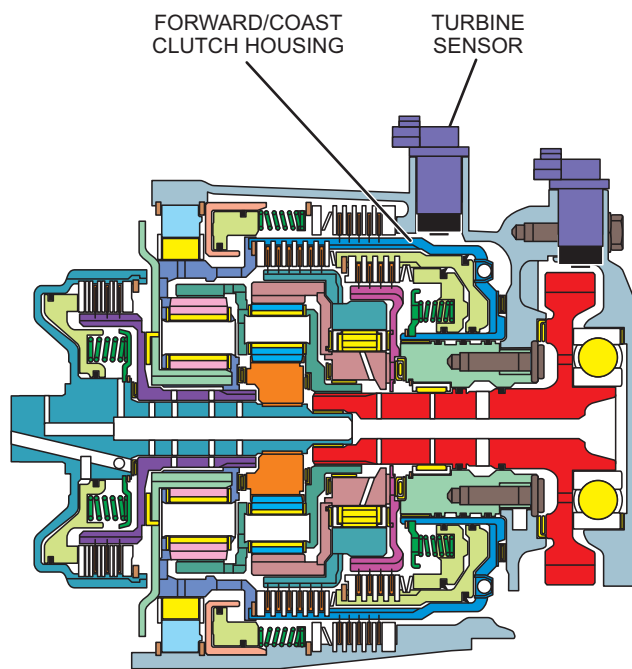
Figure 1

## NISSAN/INFINITI RE4F04B NO TURBINE SENSOR READING

RE4F04B FORWARD/COAST HOUSING  
INSTALLED TURBINE SENSOR READS  
DRUM SPEED



RE4F04A FORWARD/COAST HOUSING  
INSTALLED TURBINE SENSOR CAN NOT  
READ DRUM SPEED



Copyright © 2011 ATSG

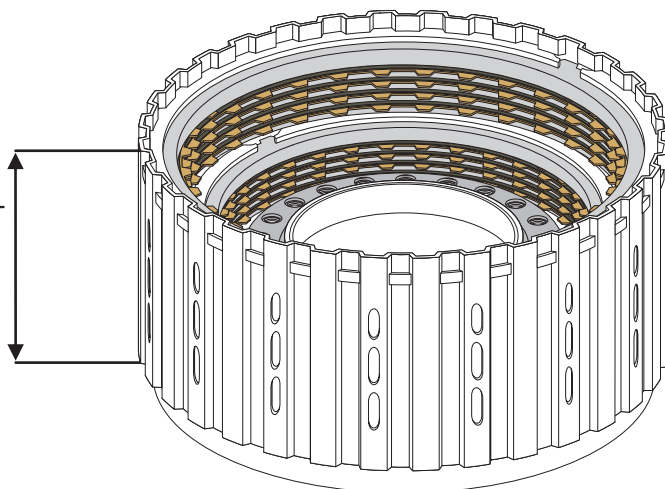
Figure 2

## NISSAN/INFINITI RE4F04B

### NO TURBINE SENSOR READING

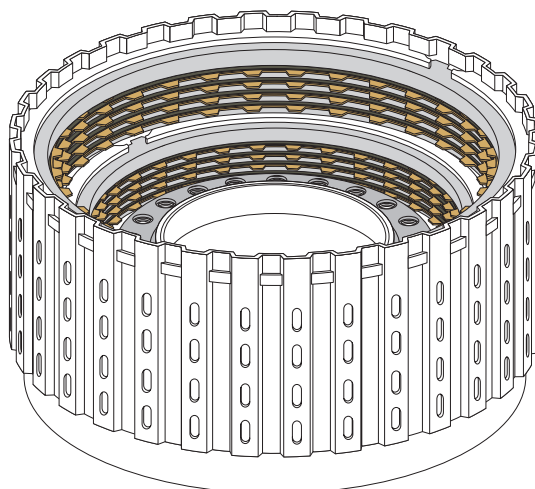
#### RE4F04B (WITH TURBINE SENSOR) FORWARD/COAST CLUTCH HOUSING

FORWARD/COAST  
HOUSING  
LUG LENGTH  
3.187"



#### RE4F04A (WITHOUT TURBINE SENSOR) FORWARD/COAST CLUTCH HOUSING

FORWARD/COAST  
HOUSING  
LUG LENGTH  
2.863"



Copyright © 2011 ATSG

Figure 3