

**TEST 20D - OPEN/SHORTED OUTPUT SPEED SENSOR (DTC 57)**

**NOTE:** Perform **TEST 2A** before proceeding with this test. For connector terminal identification, see **CONNECTOR IDENTIFICATION** . For wiring diagrams, see **WIRING DIAGRAMS** . Perform **VERIFICATION TEST VER-1A** after each repair.

**CAUTION:** Always turn ignition switch to **OFF** position prior to disconnecting or connecting any module connector.

1. Ensure ignition is off. Disconnect Transmission Control Module (TCM) connector. On F24S and FJ22 models, inspect terminals No. 53 and 54 of TCM connector. Clean or repair as needed. On all other models, inspect terminals No. 13 and 14 of TCM connector. Clean or repair as needed.
2. Use scan tool in ohmmeter mode. On F24S and FJ22 models, measure resistance at terminal No. 54 of TCM connector. On all other models, measure resistance on terminal No. 14 of TCM connector. On all models, if resistance is more than 5 ohms for all models, go to step 4). If resistance is less than 5 ohms, go to next step.
3. Disconnect output speed sensor connector. Repeat step 2). On all models, if resistance is less than 5 ohms, repair output speed sensor circuit for short to ground. If resistance is 5 ohms or greater, replace output speed sensor.
4. Use external ohmmeter. On F24S and FJ22 models, measure resistance between terminals No. 53 and 54 of TCM connector. On all other models, measure resistance between terminals No. 13 and 14 of TCM connector.
5. On all models, if resistance is 300-1200 ohms for all models, replace TCM. If resistance is not 300-1200 ohms, disconnect output speed sensor connector.
6. Use external ohmmeter. On F24S and FJ22 models, measure resistance between terminal No. 2 of output speed sensor connector and terminal No. 54 of TCM connector. On all other models, measure resistance between terminal No. 2 of output speed sensor connector and terminal No. 14 of TCM connector.
7. On all models, if resistance is 5 ohms or greater, repair open output speed sensor circuit. If resistance is less than 5 ohms, go to next step.
8. Use external ohmmeter. On F24S and FJ22 models, measure resistance between terminal No. 1 of output speed sensor connector and terminal No. 53 of TCM connector. On all other models, measure resistance between terminal No. 1 of output speed sensor connector and terminal No. 13 of TCM connector.
9. On all models, if resistance is 5 ohms or greater, repair open sensor ground circuit. If resistance is less than 5 ohms, replace output speed sensor.