

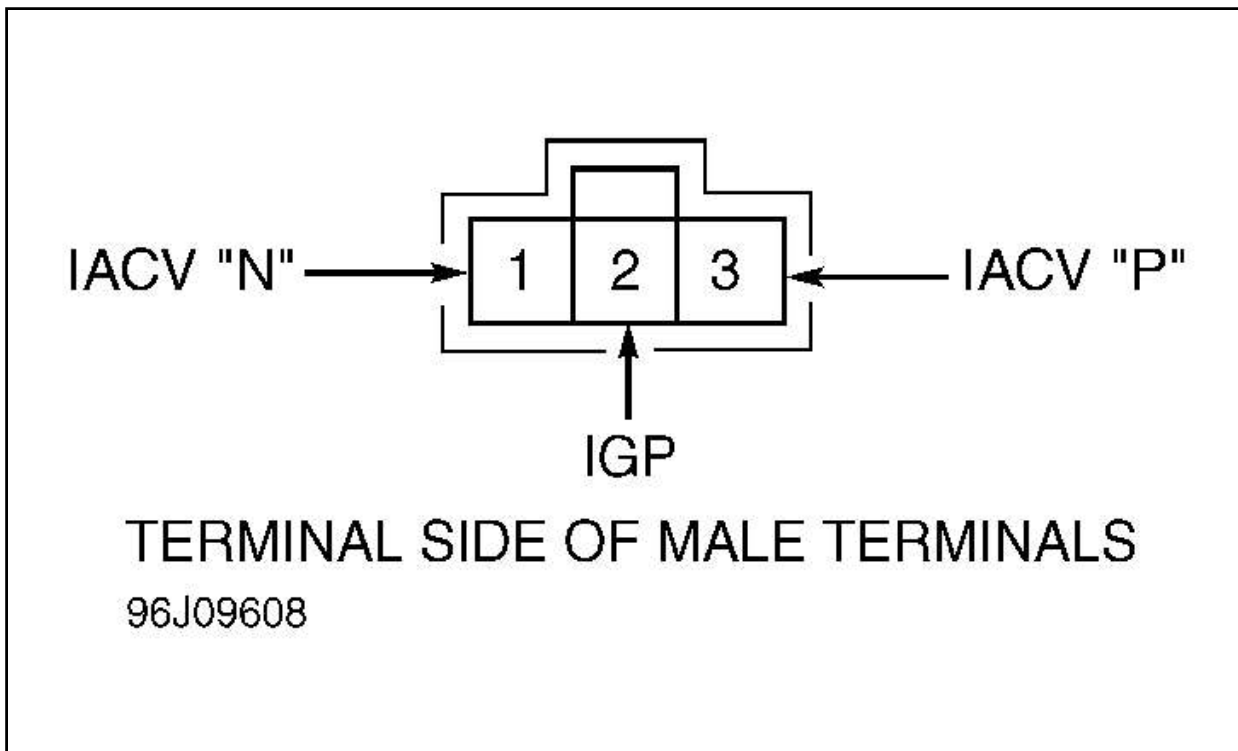
DTC P1509 (D16Y5 A/T, D16Y7 & D16Y8 A/T) - IDLE AIR CONTROL (IAC) VALVE

1. Perform PCM reset procedure. See Self Diagnostic section. Turn ignition on. If DTC P1509 is indicated, go to next step. If DTC P1509 is not indicated, problem is intermittent. System is okay at this time. Check for poor connections or loose wires between IAC valve connector and PCM connector. See WIRING DIAGRAMS article.
2. Measure voltage between ground and PCM 32-pin connector "A" terminal A10 (Black wire) and terminal A23 (Black wire), individually. See Figure . If one volt or less exists, go to next step. If more than one volt exists, repair open in wire(s) between PCM connector terminal(s) and G101 ground connection located at thermostat housing.
3. Turn ignition off. Disconnect PCM 32-pin connector "A". Turn ignition on and measure voltage between ground and PCM 32-pin connector "A" terminal A13 (Orange wire) and terminal A14 (Black/Blue wire), individually. See Figure . If battery voltage exists, go to next step. If battery voltage does not exist, go to step 5).
4. Turn ignition off. Disconnect IAC valve 3-pin connector. Measure resistance between IAC terminal No. 2 and terminals No. 1 and 3, individually. See Fig 1 . If resistance is not 16-28 ohms, replace IAC valve. If resistance is 16-28 ohms, substitute a known-good PCM and recheck. If symptom or indication goes away, replace original PCM.
5. Turn ignition off. Disconnect IAC valve 3-pin connector. Turn ignition on. Measure voltage between ground and IAC harness

connector terminal No. 2 (Yellow/Black wire). See Fig 1 . If battery voltage exists, go to next step. If battery voltage does not exist, repair open in Yellow/Black wire between IAC valve connector and PGM-FI main relay. See WIRING DIAGRAMS article.

6. Turn ignition off. Disconnect PCM 32-pin connector "A". Check for continuity in Orange wire between IAC valve harness connector terminal No. 1 and PCM 32-pin connector "A" terminal A13. Check for continuity in Black/Blue wire between IAC valve harness connector terminal No. 3 and PCM 32-pin connector "A" terminal A14. See Figure and Fig 1 . See WIRING DIAGRAMS article. If continuity exists, go to next step. If continuity does not exist, repair open in suspect wire between IAC valve connector and PCM connector "A". See WIRING DIAGRAMS article.
7. Check for continuity between ground and PCM 32-pin connector "A" terminal A13 (Orange wire) and terminal A14 (Black/Blue wire), individually. See Figure . See WIRING DIAGRAMS article. If continuity exists, repair short in suspect wire between IAC valve connector and PCM connector "A". See WIRING DIAGRAMS article. If continuity does not exist, substitute a known-good PCM and recheck. If symptom or indication goes away, replace original PCM.

Fig 1: Identifying IAC Valve 3-Pin Connector Terminals



Courtesy of AMERICAN HONDA MOTOR CO., INC.