

340-10 Ignition System

7. **Check the amplifier switching function.** Connect the voltmeter between coil terminals 15 (+) and 1 (–) on conventional coils or between terminal 3 (+) and 4 (–) on coils with integrated amplifier. Turn the ignition on. The voltage should rise to about 6 volts (DC) and then drop to 0 volts within 1 to 2 seconds. If any faults are found, replace the amplifier. If no faults are found proceed to the next step.
8. **Check the pulse signal from the EZK control unit to the amplifier.** Peel back the rubber boot on the control unit connector. Connect a voltmeter between the terminals 5 (+) and 2 (–) on fender-mounted amplifiers or between terminals 4 (+) and 2 (–) on coil mounted amplifiers. While operating the starter, there should be an oscillating voltage (pulses between 0 and 8 volts (DC), average of 2.8 volts). If no faults are found, the amplifier is faulty and should be replaced. If there is no pulse, proceed to the next step.
9. **Check the Hall sensor signal to the EZK control unit.** Peel back the rubber boot on the EZK control unit connector. Connect a voltmeter between terminal 24 (+) and 20 (–). See Fig. 17. Turn the ignition on and slowly turn the engine over by hand. The voltage should oscillate between 0.4 volts (DC) (or less) and 3.0 volts (or higher). If no faults are found, the EZK control unit is probably faulty and should be replaced. If any faults are found, proceed to the next step.

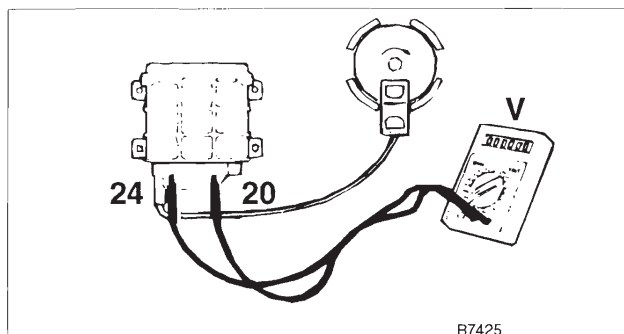


Fig. 17. Voltmeter being used to check Hall sensor operation at EZK control unit.

CAUTION

Turn the engine over only in the direction of normal rotation. Otherwise damage to the timing chain and its components may result. To determine normal rotation, put the car in gear and rock the car forward, noting the rotation of the ignition rotor, the flywheel, or a belt-driven component. As an alternative, briefly operate the starter.

NOTE

The engine can be turned over using a wrench on the crankshaft pulley.

10. **Check for voltage to the Hall sensor.** Working from the rear of the EZK control unit connector, connect a voltmeter between terminal 4 (+) and 10 (–). See Fig. 18. With the ignition on, there should be battery voltage. If no faults are found, the Hall sensor is faulty and should be replaced. If voltage is not present, the EZK control unit is faulty.

NOTE

On all 1986-1988 cars, the Hall sensor is in the distributor. On 1989 and later cars, the Hall sensor is mounted behind the crankshaft pulley. Hall sensor replacement procedures are described below.

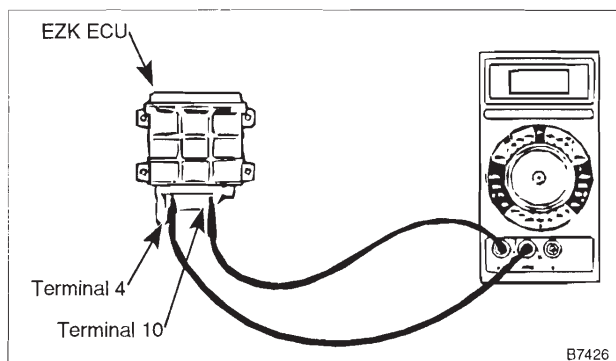


Fig. 18. Voltmeter being used to check for voltage supply to Hall sensor from EZK control unit.

NOTE

If on 1986 and 1987 models, all electrical checks are as specified but the car still does not start, check the ignition pulse amplifier on the main fuse relay panel. See Fig. 12 above. This relay-like amplifier is designed to "amplify" the tachometer signal for more reliable control of electronic components affected by the ignition system (LH fuel injection, fuel pump control, etc.). To check the amplifier, simply remove it from its socket. Then using a jumper wire, jumper the fuse/relay panel sockets corresponding to relay terminals TD-I and TD-O. Try to start the engine. If the engine now runs, replace the pulse amplifier.