**Jaguar XJ8 – Code P0411 Diagnosis**

**1. Inspect air injection (AIR) system for leaking or broken hoses from the AIR pump to the AIR control valve.

2. Inspect vacuum lines from the AIR control valve, AIR solenoid, to the AIR vacuum reservoir.

3. Inspect exhaust pipes for blockage. Start at the control valve and inspect all the way to the exhaust manifolds. It may require running a bore scope in the pipes.

4. Test for electrical operation of the AIR pump, AIR solenoid, and AIR control valve.

5. Verify correct connection of AIR pressure sensor.

6. If the system is working correctly, perform engine control unit software update per JTB00189 or JTB00139.**