XJ 6 Series III 4.2 - Cold Start EFI Overfueling

Brian Pel

At the request of several list members, I am posting the text of the Jaguar Canada technical service bulletin which outlines the capacitor "fix" for cold start overfueling problems.

JAGUAR CANADA INC.

TECHNICAL SERVICE BULLETIN REFERENCE B-001 VOL V

MODEL XJ6 SERIES III 4.2

SUBJECT: AIR FLOW METER

It has been established that the cause of some 4.2 Series III engines misfiring and issuing black smoke from the exhaust when the car is accelerated or driven way with the engine in either a cold or part warm state, is due to overfuelling. This is produced by continuous triggering of the acceleration enrichment circuit during the warm up period (Note: There is no acceleration enrichment above 75*C).

The acceleration enrichment circuit can malfunction in this matter due to either poor or dirty connections on the airflow meter plug/socket connection.

Should this problem be reported, dealer should check and ensure that the air flow meter socket connections are clean and have good continuity.

Should dealers find that these actions do not resolve the overfuelling problems; the following Service Fix should be implemented.

A 100 Micro Farad, 25 Volt Electrolytic Capacitor should be soldered across terminals 6 and 8 of the Air Flow Meter harness multiplug ensuring that the negative lead of the capacitor is connected to terminal 6 and the positive lead of the capacitor is connected to terminal 8.

100 Micro Farad 25 Volt Electrolytic Capacitors are readily available from most reputable radio/electronic dealers.

SERVICE FIX PROCEDURE:

1. Disconnect the battery.
2. Remove the air flow meter harness multiplug.
3. Displace the rubber grommet from the multiplug, exposing the multiplug terminals.
4. Using a suitable implement such as a small electrical screwdriver, insert from the mating face side of the multiplug and release the retaining tong on terminals 6 and 8, and displace the terminals from the multiplug.

5. To enable fitment of the capacitor to terminals 6 and 8, as detailed in Fig 1, it may be necessary with some types of capacitor to lengthen the existing capacitor wires. Wires of a similar gauge should be soldered to the existing wires, if additional length is required.
6. Route the capacitor wires through the harness grommet and solder to [unreadable text] of terminal 6 negative and 8 positive, ensuring polarity is maintained. (as shown in Fig 1).
7. Relocate and secure terminals 6 and 8 into the multiplug.
8. Replace rubber grommet and reconnect multiplug to air flow meter.
9. Secure the capacitor to the harness, either using suitable tape or a plastic ratchet strap.
10. Reconnect battery and check vehicle operation from cold start.

[Figure 1 not reproduced - simple drawing of harness multiplug]

Alex Cannara

Alex notes the following:

- use 30 to 100 microfarad capacitor [100 preferable]
- band or negative lead towards the front of car
- capacitor wires are soldered to the wires on either side of the middle wire
- spray the soldered connections with clear plastic spray paint to protect from moisture

Image of installed capacitor.