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PINPOINT TEST B: EVO ACTUATOR DIAGNOSIS

B1 CODE "6" ACTIVATED: EVO ACTUATOR VALVE CHECK (short to ground or an open circuit)

- Turn ignition switch to OFF position.
- Verify harness connection on the EVO actuator valve on power steering pump is properly seated.
- Check connector condition on actuator.
- **Is connector properly seated?**

Yes

GO to [«B2»](#).

No

Make proper connection, GO to [«A2»](#) .

Damaged or broken

REPLACE actuator.



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B2 CHECK RESISTANCE ACROSS ACTUATOR VALVE

- Ignition switch in OFF position.
- Locate the control module in luggage compartment. (Refer to «[Removal](#)».)
- Using an ohmmeter, measure resistance across Pin 13 and Pin 14 of harness connector. Resistance should be 7-18 ohms. If the resistance is greater than 1000 ohms, the circuit is open.

Resistance is over 1000 ohms

GO to «[B3](#)».

Resistance is over 18 ohms

GO to «[B4](#)».

Resistance is less than 18 ohms

GO to «[B3](#)».



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B3 **CHECK CONTINUITY OF WIRING**

- Ignition switch in OFF position.
- Disconnect EVO harness connector from EVO actuator valve located on power steering pump.
- Test continuity of Circuits 330 and 353 from the actuator connector to the 14-pin EVO control module connector.
- Refer to Component Location Schematic and System Schematic.

- **Is there continuity?**

Yes

GO to «[B4](#)».

No

SERVICE wires as necessary. GO to «[A1](#)» .



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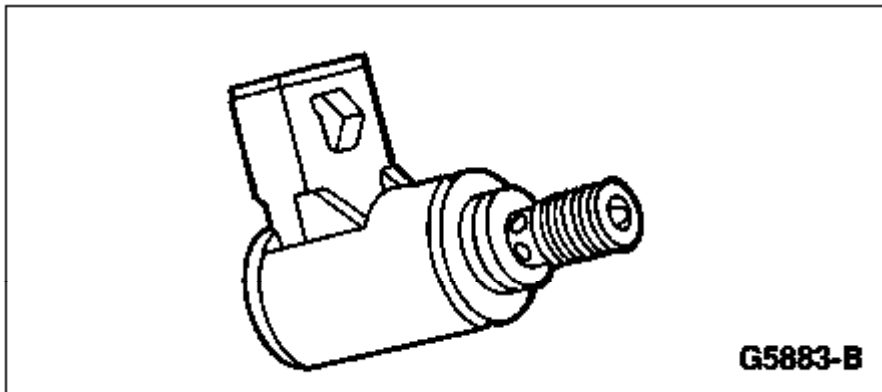
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PINPOINT TEST B: EVO ACTUATOR DIAGNOSIS

B4 CHECK EVO ACTUATOR VALVE RESISTANCE

- Disconnect EVO harness connector from EVO actuator valve located on power steering pump.
- Using an ohmmeter, measure resistance across the two actuator valve connector pins.
- Is resistance 5 to 20 ohms?



No

REPLACE EVO valve.

Yes

GO to «**B5**».



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B5 CHECK WIRE HARNESS FOR SHORT TO GROUND

- Ignition switch in OFF position.
- EVO harness disconnected from EVO actuator valve.
- Disconnect EVO control module from the 14-pin connector in luggage compartment. (Refer to [«Removal»](#) .)

- **Is module connected?**

No

GO to [«B6»](#).

Yes

GO to [«B9»](#).



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B6 **CHECK WIRE HARNESS FOR SHORT TO GROUND**

- Using an ohmmeter, measure resistance between Pin 5 (ground) and Pin 13 of harness connector.

Resistance is over 1000 ohms

GO to «[B7](#)».

Resistance is less than 10 ohms

SERVICE Harness. GO to «[B7](#)».



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B7 CHECK WIRE HARNESS FOR SHORT TO GROUND (Cont'd)

- Using an ohmmeter, measure resistance between Pin 5 (ground) and Pin 14 of harness connector.

Resistance is less than 10 ohms

SERVICE Harness.

Resistance is over 1000 ohms

GO to «B8».



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B8 **CHECK HARNESS FOR SHORT TO B +**

- Ignition switch in RUN position.
- EVO harness disconnected from EVO actuator valve on power steering pump.
- Using a voltmeter, measure the voltage across
 - Pin 13 and Pin 5
 - Pin 14 and Pin 5
- **Is voltage greater than 5 volts?**

Yes

SERVICE wires. GO to [«A1»](#) .

No

GO to [«B9»](#) .



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B9 CHECK FOR SHORT ACROSS CIRCUITS 330 AND 353

- Ignition switch in OFF position.
- EVO harness disconnected from EVO actuator valve on power steering pump.
- EVO control module disconnected from 14-pin harness connector.
- Using an ohmmeter, measure resistance across Pin 13 and Pin 14 on harness connector.

Resistance is less than 10 ohms (short)

SERVICE wires. GO to [«A1»](#).

Resistance is over 1000 ohms

REPLACE EVO control module.
