



« 1993 Mark VIII Table of Contents »

«Group 01: BODY»

«Section 01-20B: Restraints, Passive--Supplemental Air Bag System»

«DIAGNOSIS AND TESTING»

Print Diagnostic Routine

DIAGNOSTIC TROUBLE CODE 34

Driver Side Air Bag Circuit Low Resistance or Shorted

Normal Operation

The diagnostic monitor measures the resistance across Pin 10 (Circuit 615, GY/W) and Pin 11 (Circuit 614, GY/O) every time the ignition switch is turned to the ON position. Normal resistance across these circuits is between 1.5 ohm and 2.0 ohms. This resistance comes from the air bag itself (approximately 1.0 ohm) and the clockspring windings (0.25 to 0.5 ohm per winding, two windings in all). If the resistance across these two circuits is less than 0.7 ohm, the diagnostic monitor will flash code 34.

NOTE:

The connectors for the air bag and the clockspring have metal spring clips that act as shorting bars. These shorting bars are built into the plastic hardshell connectors. The shorting bars are designed to short Circuits 614 and 615 together when the connectors are not mated. **DO NOT attempt to remove the air bag shorting bar and measure the resistance of the air bag.**

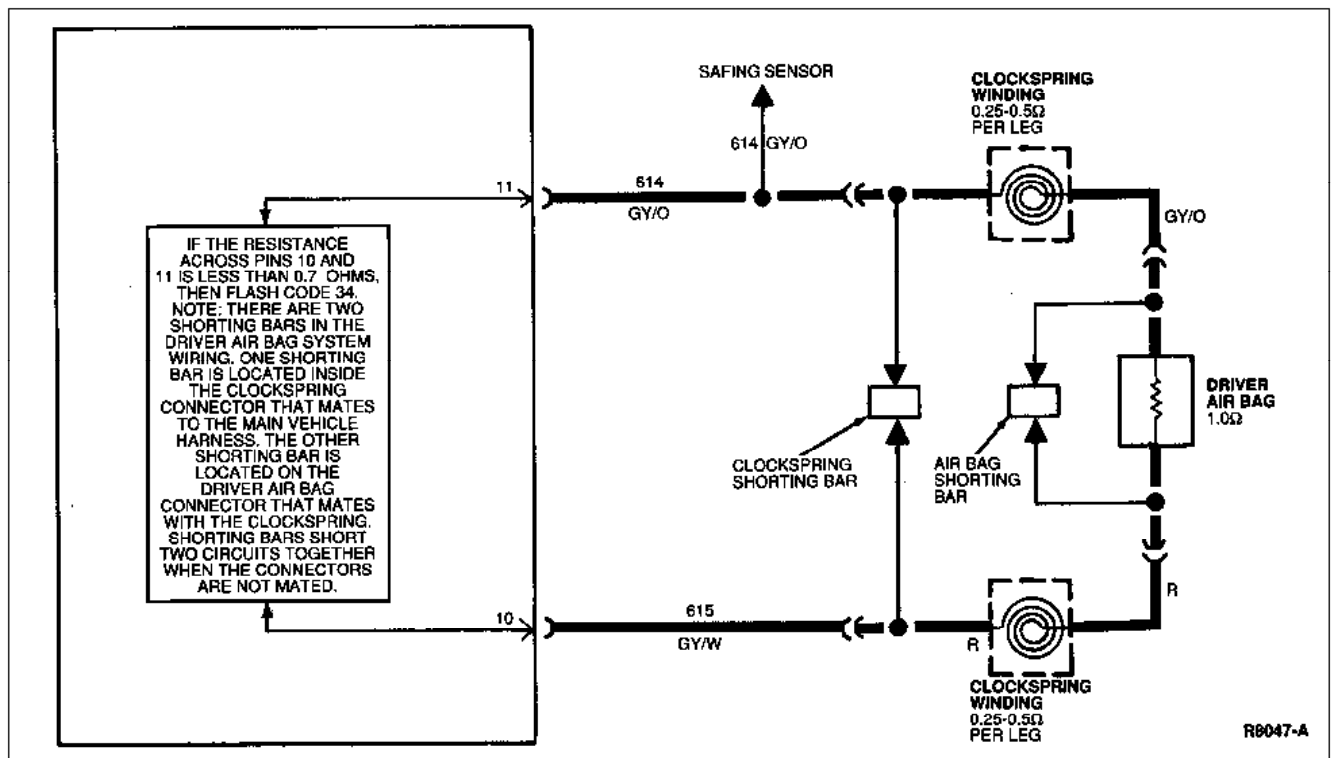
The clockspring shorting bar may be removed to measure the clockspring resistance. Use extreme care when reinstalling the shorting bar to ensure it is installed correctly.

Possible Causes

Low resistance across Pins 10 and 11 can be caused by:

1. **A poorly mated air bag clockspring connector** may not push the shorting bars back into their fully retracted positions.
2. **A damaged shorting bar** may short Circuits 614 and 615 together.
3. **A short in the clockspring windings** between Circuits 614 and 615.
4. **A short across the air bag terminals within the air bag.** DO NOT attempt a direct resistance measurement of the air bag. Follow the diagnostic procedures to determine if the air bag resistance is lower than normal.

Electrical Schematic--Diagnostic Trouble Code 34



- ➔ 34-1: VERIFY CONDITION
- ➔ 34-2: MEASURE RESISTANCE
- ➔ 34-3: CHECK FOR CODE 34
- ➔ 34-4: MEASURE RESISTANCE



« 1993 Mark VIII Table of Contents»

«Group 01: BODY»

«Section 01-20B: Restraints, Passive--Supplemental Air Bag System»

«DIAGNOSIS AND TESTING»

Print Diagnostic Routine

Pre-Diagnostic Information

DIAGNOSTIC TROUBLE CODE 34

34-1 VERIFY CONDITION

- Turn key to ON.
- Count diagnostic trouble code.
- **Is code 34 flashing?**

Yes

GO to «34-2».

No

Read the normal operation description for this diagnostic trouble code. EXAMINE the diagnostic trouble code schematic and look for areas where intermittent conditions would occur (connectors, splices, crimps, etc.).
DO NOT proceed with Pinpoint Test until the code is flashing!
Failure to do so will result in needless replacement of the air bag system components and repeat service.



« 1993 Mark VIII Table of Contents »

«Group 01: BODY»

«Section 01-20B: Restraints, Passive--Supplemental Air Bag System»

«DIAGNOSIS AND TESTING»

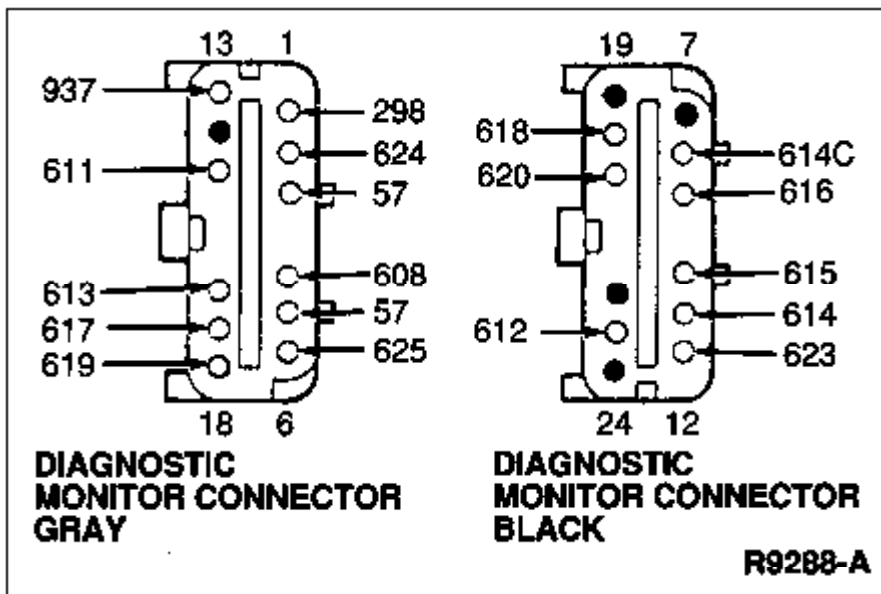
Print Diagnostic Routine

Pre-Diagnostic Information

DIAGNOSTIC TROUBLE CODE 34

34-2 MEASURE RESISTANCE

- Deactivate system. Leave driver side air bag harness connector empty. (DO NOT install air bag simulator).
- Disconnect diagnostic monitor.
- Remove plastic locking wedge from black harness connector.
- Measure resistance across Pin 11 (Circuit 614, GY/O) and Pin 10 (Circuit 615, GY/W).
- Is resistance across Pins 10 and 11 infinite (open)?



Yes

GO to «34-3».

No

GO to «34-4».



« 1993 Mark VIII Table of Contents »

«Group 01: BODY»

«Section 01-20B: Restraints, Passive--Supplemental Air Bag System»

«DIAGNOSIS AND TESTING»

Print Diagnostic Routine

Pre-Diagnostic Information

DIAGNOSTIC TROUBLE CODE 34

34-3 CHECK FOR CODE 34

- Install air bag simulator onto clockspring connector at steering wheel.
- Reconnect diagnostic monitor.
- Turn ignition switch from OFF to RUN.
- Wait 30 seconds.
- **Is code 34 flashing?**

Yes

VERIFY air bag simulator resistance is 2.0 ohms \pm 0.2 ohm. If OK, REPLACE diagnostic monitor. RECONNECT system. VERIFY air bag indicator. REACTIVATE system.

No

EXAMINE shorting bar on driver side air bag connector for proper function. REPLACE driver side air bag if shorting bar is normal. RECONNECT system. VERIFY system. REACTIVATE system.

NOTE:

Examine clockspring to main harness connector as an example of normal shorting bar.



« 1993 Mark VIII Table of Contents »

«Group 01: BODY»

«Section 01-20B: Restraints, Passive--Supplemental Air Bag System»

«DIAGNOSIS AND TESTING»

Print Diagnostic Routine

Pre-Diagnostic Information

DIAGNOSTIC TROUBLE CODE 34

34-4 MEASURE RESISTANCE

- Disconnect clockspring at base of the steering column where it mates with main vehicle harness.
- Measure resistance across Pin 11 (Circuit 614, GY/O) and Pin 10 (Circuit 615, GY/W).
- **Is resistance across Pins 10 and 11 infinite (open)?**

Yes

EXAMINE shorting bar in clockspring main harness connector for proper function.

NOTE:

Examine driver side air bag connector as an example of a normal shorting bar. REPLACE clockspring if shorting bar is normal. RECONNECT system. VERIFY system. REACTIVATE system.

No

LOCATE and SERVICE short across Circuits 614 and 615 in wiring harness. INSPECT diagnostic monitor harness connector and clockspring harness connector for shorted terminals. RECONNECT system. VERIFY air bag indicator. REACTIVATE system.
