

Code 13 is a short to ground. There are a couple possibilities:

1. short to ground in the wiring.
2. internal short to ground in the clockspring.
3. internal short to ground in the safing sensor (driver side 1/4 panel).
4. internal short to ground with one or more crash sensors.
5. internal short to case ground in the airbag.

Basically, Pin 11 of the airbag diagnostic monitor encountered a low voltage reading and threw a code 13, which causes the diagnostic monitor's internal thermal fuse to blow. You will need a new diagnostic monitor or find a replacement thermal fuse and carefully remove the old and resolder the new thermal fuse to the board. I do not know of many that have done so, but it has been done. They don't make diagnostic monitors anymore for a Fox, so unless you find one NOS you're stuck with a used one. You will need an airbag simulator to properly service the airbag circuit. The 90-92 uses a 105-00008 airbag simulator (or an OTC 7954), and the 93 uses a 105-00010 airbag simulator (or an OTC 7956).

Important: Do not install a replacement diagnostic monitor until the rest of the airbag circuit has been serviced and any shorts to ground have been corrected, or the same short to ground will blow the replacement diagnostic monitor's thermal fuse as well.

Airbag Trouble Code 13 Diagnostic

13-1 Verify condition

- Turn key to ON.
- Count diagnostic trouble code.
- Is code 13 present?

Yes = Go to 13-2.

No = Check the airbag circuit wiring for any breaks or pinched wires, or loose connections.

13-2 Deactivate system

Important: Do not replace the airbag diagnostic monitor with code 13 present until any and all short to grounds have been corrected, or the replacement airbag diagnostic monitor will blow its internal thermal fuse as well.

- Deactivate the system.
- Verify system.
- Is code 13 still present?

Yes = Go to 13-5.

No = Go to 13-3

13-3 Check airbag and clockspring

- Check the airbag and clockspring wiring for any breaks, pinched wires, or loose connections.
- Are any of the wires damaged?

Yes = Replace any components with damaged wiring and re-verify the system to make sure code 13 is no longer present. If no codes are present, replace the airbag diagnostic monitor.

No = Go to 13-4.

13-4 Verify short in airbag

Important: Use a handheld digital ohmmeter with less than a 10MA short-circuit current on the lowest resistance scale (2000 ohm setting). Failure to use a meter of this type may cause personal injury due to an accidental deployment of the airbag.

- Remove the airbag.
- Make sure the shorting bar inside the airbag connector is present and in contact with both terminals.
- Measure the resistance between either of the two terminals in the airbag connector and the metal case of the airbag assembly.

Is the resistance reading infinite (open)?

Yes = Replace the clockspring and re-verify system to make sure code 13 is no longer present. If no codes are present, replace the airbag diagnostic monitor.

No = Replace the airbag and re-verify system to make sure code 13 is no longer present. If no codes are present, replace the airbag diagnostic monitor.

13-5 Install airbag simulator

- Remove airbag.
- Disconnect the clockspring connector from the main harness.
- Connect an airbag simulator to the main harness in place of the clockspring.
- Verify system.
- Is code 13 still present?

Yes = Go to 13-6.

No = Replace the clockspring.

13-6 Remove airbag simulator

- Remove airbag simulator from main harness connector.
- Verify system.

Is code 13 still present?

Yes = Go to 13-7.

No = Repair short to ground in circuit 615 (grey/yellow) and re-verify system to make sure code 13 is no longer present. If no codes are present, replace the airbag diagnostic monitor.

13-7 Check for shorted wiring

- Turn key to OFF.
- Disconnect the airbag diagnostic monitor.
- Measure the resistance from the airbag diagnostic monitor Pins 11, 17, 18, and 19, to ground.

Pin 11 (circuit 614 grey/orange) = Infinite (open)

Pin 17 (circuit 617 pink/orange) = Normal resistance should read 1180 ohms +/- 20 ohms.

Pin 18 (circuit 618 pink/white) = Normal resistance should read 1180 ohms +/- 20 ohms.

Pin 19 (circuit 621 white/yellow) = Normal resistance should read 1180 ohms +/- 20 ohms.

- Are any circuits shorted to ground?

Yes = If Pin 11 was shorted to ground, go to 13-8. If Pins 17, 18, or 19 are shorted to ground, go to 13-10.

No = Replace the airbag diagnostic monitor and re-verify system to make sure code 13 is no longer present. If no codes are present, replace the airbag diagnostic monitor.

13-8 Check LH safing sensor circuit

- Disconnect the safing sensor connector.
- Verify system.
- Is code 13 present?

Yes = Repair short to ground in circuit 614 (grey/orange) and re-verify system to make sure code 13 is no longer present. If no codes are present, replace the airbag diagnostic monitor.

No = Go to 13-9.

13-9 Verify short to ground in LH safing sensor

- Measure the resistance from the safing sensor connector circuit 614 (grey/orange) to ground.
- Is the resistance reading less than 10 ohms?

Yes = Replace the LH safing sensor.

No = Go to 13-10.

13-10 Check short to ground in primary crash sensors

- If Pin 17 was shorted to ground, disconnect the passenger side crash sensor. (circuit 617 pink/orange)
- If pin 18 was shorted to ground, disconnect the center crash sensor. (circuit 619 pink/white)
- If Pin 19 was shorted to ground, disconnect the driver side crash sensor. (circuit 621 white/yellow)
- Measure the resistance between both terminals of the disconnected crash sensor.
- Is the resistance reading less than 750 ohms?

Yes = Replace the disconnected sensor.

No = Repair the short to ground in circuit 617 (pink/orange), circuit 619 (pink/white), or circuit 621 (white/yellow) and re-verify system to make sure code 13 is no longer present. If no codes are present, replace the airbag diagnostic monitor.