

They'd Unplugged Everything Except the Sensor

Three components live under that seat, and the yellow connector is not the one you are looking for.

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SUMMARY

A shop had reset, unplugged, and cleared codes trying to kill an airbag light on an older Nissan Pathfinder's occupant detection system, with no success. AirPro Brand Specialist Brandon Terry established that the connector they had been unplugging belonged to the seat back airbag, then walked the technician through the three components that actually make up the system.



INSIDE THE CABIN WITH THE SCAN TOOL CONNECTED; THE OCCUPANT DETECTION PARTS SIT UNDER THE PASSENGER SEAT

AT A GLANCE

SERVICE	Passenger Seat ODS Calibration
VEHICLE	Older Nissan Pathfinder
PRESENTING PROBLEM	Airbag light for the occupant seat sensor; code would not clear
ALREADY ATTEMPTED BY THE SHOP	Reset, unplug and replug, clearing from within the module, review of the manufacturer's pinpoint test
AIRPRO BRAND SPECIALIST	Brandon Terry
CALL DURATION	Under 6 minutes
KEY FINDING	The connector the shop had been unplugging serves the seat back airbag, not the occupant detection system
SYSTEM COMPOSITION	One control unit plus two weight sensors, all located under the passenger seat
OUTCOME	Correct components identified, a repeatable check sequence agreed, and a documented report for the customer conversation

What They'd Already Tried

The shop called me on a diagnostic scan for an older Pathfinder carrying an airbag light for the occupant seat sensor.

They had not been idle about it. They had tried resetting it. They had unplugged and replugged. They had gone into the module itself and cleared the code from there. None of it stuck.

They had also read the manufacturer's pinpoint test, which told them to check the wiring, and then, depending on what they found, either repair the wire or replace the module.

So the technician got me on the line and said something I wish more people said: he wanted a second opinion on the process. Not on the diagnosis. On whether he was going about it the right way.

That is a good instinct, and in this case it was the right one, because he was not.

The Yellow Connector

He described what he had unplugged. There was a small yellow two-pin connector under the seat, and he had disconnected and reconnected that one, reasoning that yellow meant airbag.

Yellow does mean airbag. It is the color convention for supplemental restraint wiring generally, and on that basis his reasoning was sound.

But it does not tell you which airbag component. The yellow connector he had found belongs to the seat back airbag, the one in the side of the seat itself. It has nothing to do with the occupant detection system.

So every attempt he had made had been performed on the wrong part. The code was not clearing because nothing he touched had any bearing on the circuit throwing it.

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What Is Actually Under There

This is where the call became useful, and it was not clever diagnosis. It was just knowing what is physically down there.

There are three components in the occupant detection system on this vehicle, all under the passenger seat.

The control unit. A small black box, roughly three inches square, about the size of a cigarette pack or a deck of cards, was mounted on the frame of the seat. He had actually seen this one and described it back to me, so we knew we were talking about the same thing.

Two weight sensors. Small ninety-degree sensors mounted on the inside seat rail, each with its own plug. These are the parts that actually measure the weight in the seat.

He had not seen those two. And he was honest about why: he had not been looking for them. You cannot check a component you do not know exists, and nothing in the fault description points you to a specific piece of hardware and tells you where it lives.

Three components, all under the passenger seat. A control unit on the seat frame, and two weight sensors on the inside seat rail, each with its own plug.

That is the whole value of this call. Not a diagnosis, but an inventory.

Why the Code Doesn't Narrow It Down

He asked which of the three he should focus on. Fair question, and the answer was all of them.

The code sitting on that vehicle was essentially an abnormal voltage reading for the system as a whole. It does not say which component is misbehaving. It could be either weight sensor, or it could be the control unit, and the fault reads the same way regardless.

With a broad code like that, the check has to be equally broad. Unplug and reseal all three, and inspect the wiring going to each of them. Between the wiring and the three components, that is genuinely the extent of what can be checked on this system. There is no deeper test that isolates it further.

What I've Seen on These

He asked whether these are known to fail on older vehicles, which is exactly the question worth asking before anybody buys a part.

They are. I ran into a lot of these when I was working at a dealership. The sensors and the control module both, going out fairly frequently on that platform. It is a common enough failure that on an older vehicle it should be near the front of your mind rather than the back.

That does not mean the parts are bad on this particular Pathfinder. It means that if a full reseal does not clear the fault, replacement is a realistic outcome rather than a last resort, and the shop can have that conversation with the customer early instead of after two more visits.

On every AirPro assist, a US-based Brand Specialist runs the procedure alongside the shop's technician and confirms the result against the OEM position statement.

The Part Nobody Can Resolve

The technician raised something that has nothing to do with the vehicle and everything to do with the job.

Sometimes an owner is straightforward and says the light has been on for a long time. Sometimes the same owner says it was not on until after the car was wrecked.

He sees it both ways, and he was frank that you often cannot tell which one you are dealing with.

I could not give him a better answer than agreeing with him, because there is not one. Without a pre-repair scan on this vehicle establishing what came in the door, an intermittent airbag light on an older car with a known failure pattern is genuinely ambiguous. Anybody who tells you they can resolve that from the fault data alone is guessing.

What you can do is document carefully from the point you take custody, which is the next part.

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The Plan, and the Paperwork

We agreed the sequence: unplug all three components, disconnect the battery, reassemble everything, reconnect the battery, start it up, and attempt the clear.

If it clears, it was a connection. If it does not clear, then the components under that seat are the next step: the control unit and the two sensors.

Then I told him what he would get from me: the report written up with the code on it, a description of what that code means, and the substance of what we had just talked through.

He told me exactly why that mattered, and it is the reason this five-minute call was worth making. He wanted to be sure what he was seeing was the same thing I was seeing, so that when the vehicle went back to the customer he could explain it.

That is the deliverable. Not the fix, but the ability to have an accurate conversation with the person paying for it.

BRANDON'S NOTES

What I'd Tell Another Shop

- 01 Yellow tells you it is restraint wiring. It does not tell you which component.** There is more than one yellow connector under a seat, and only some of them relate to occupant detection.
- 02 Know the parts count before you start unplugging.** On this system it is three: a control unit and two weight sensors. If you have touched one of them, you have checked a third of the system.
- 03 The weight sensors are on the inside seat rail and easy to miss.** Small, ninety degrees, one plug each. They are not hard to find once you know they are there.
- 04 A broad code needs a broad check.** An abnormal voltage fault for the whole system does not point at a part. Reseat and inspect all of them rather than picking one.
- 05 On older vehicles, treat these components as plausible failures rather than unlikely ones.** They have a known track record.
- 06 You often cannot prove whether an airbag light is pre-existing.** Without a pre-repair scan, an intermittent fault on an older vehicle with a common failure mode is genuinely ambiguous, and saying so is more defensible than guessing.
- 07 Ask for the process, not just the answer.** This technician asked whether he was going about it correctly rather than what the answer was. That question is what found the wrong connector.



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