The Radar Code That Wasn't Asking for a Calibration

Twenty-two codes cleared, one left standing, and a straight answer before the shop spent an afternoon on the highway.

RICKY MCFARLAND · BRAND SPECIALIST, AIRPRO DIAGNOSTICS

SUMMARY

A Ford Explorer came out of a side-impact repair with twenty-two fault codes. AirPro Brand Specialist Ricky McFarland cleared all but one: a front radar fault that was not a calibration request but an internal module code. He told the shop plainly that the dynamic calibration might not fix it, and why, before they committed a technician to a highway drive.



A SIDE-IMPACT REPAIR: THE FRONT RADAR FAULT CAME FROM THE REPAIR PROCESS, NOT THE COLLISION

AT A GLANCE

SERVICE	Dynamic Forward Radar Calibration
VEHICLE	2022 Ford Explorer
REPAIR CONTEXT	Side-impact repair; front bumper removed and reinstalled several times while chasing a wiring fault
PRESENTING PROBLEM	Twenty-two codes on arrival; one front radar code returning after clearing
AIRPRO BRAND SPECIALIST	Ricky McFarland
KEY DISTINCTION	The remaining code was an internal control module fault, not an alignment or calibration request
EXPECTATION SET	Shop told before the drive that the calibration might not clear it, and that attempting it was the way to find out
OUTCOME	Dynamic calibration set up and launched with the shop fully informed of the likely result

The Situation

A 2022 Explorer came to me carrying twenty-two fault codes after a side-impact repair.

I cleared them and worked through what came back. Twenty-one stayed gone. One did not: a control module code on the front radar.

That is the point in a job where it matters a great deal what kind of code you are looking at, because the two possibilities lead to completely different afternoons.

What Kind of Code Is It

A front radar can throw a fault that is essentially a request. It is telling you it is out of alignment, and it wants to be calibrated. Run the procedure and it goes away.

A front radar can also throw a fault that is a report. It is telling you something is wrong inside it. No calibration will clear that, because calibrating a module does not repair a module.

Calibrating a module does not repair a module.

This one was the second kind. There was no alignment code. It was an internal control module fault.

So I told the technician exactly that, before we did anything else: we can try to calibrate it, but I do not know that it will calibrate. It could be an internal problem with the radar. I did not want him surprised.

Saying It Out Loud First

I want to explain why I do that, because it costs me nothing to just run the procedure and let the result speak.

A dynamic radar calibration on this vehicle means somebody drives it above thirty miles an hour, on a road that supports that, until the message on the dash clears. On this job it meant a technician getting on the highway. That is a person out of the shop for a stretch, on a repair that is already finished in every other respect.

Telling somebody the likely outcome before they spend the time is not pessimism.

If it works, great. If it does not and nobody warned them, then that time is a surprise, the shop is further behind than they thought, and they are wondering whether we knew.

Telling somebody the likely outcome before they spend the time is not pessimism. It is the difference between a shop planning around a result and being ambushed by one.

I also said the honest version of the uncertainty: I would not tell him it definitely would not work. Once we calibrate it, we will know. That is genuinely the fastest way to find out, and it was worth trying.

How It Got There

While we were setting up, the technician filled in the history, and it explained a lot.

The vehicle had not been hit in the front at all. It was a side impact. Nothing about the collision should have involved the front radar.

But they had taken the front bumper off and put it back on several times while chasing a wiring problem.

The history. A side impact, not a front hit. The front bumper came off and went back on several times while the shop chased a wiring problem.

I said what I thought, which is that removing a bumper repeatedly should not by itself upset the radar, unless it got unplugged somewhere in the process.

He did not hedge. They might well have unplugged it, because that is exactly what they were doing back there: chasing a wire.

That does not tell you the module is damaged. But it does tell you the radar had a much more eventful few weeks than a side-impact repair would suggest, and it moves an internal fault from surprising to plausible.

Setting It Up

The shop handed the drive to a second technician, so I went through it again with him rather than assuming the first conversation had been passed along.

I unblanked the screen on the tool so he could watch what I was doing and see the calibration mode go in, rather than take my word for it. He could then see for himself when it finished.

He connected the tool to his hotspot. I confirmed the vehicle was running, put it into calibration mode, and sent him out: above thirty miles an hour until the dash message clears. He said he would take the highway, which was the right call.

The drive. Vehicle running, calibration mode set, above thirty miles an hour until the dash message clears.

What This Is Really About

There is nothing exotic in this job. Nobody found a bent bracket or a cable hanging behind a grille.

What the shop got was ten minutes of somebody reading the fault properly and saying what it meant. Twenty-one codes went away. The one that stayed was correctly identified as a different kind of problem than the one everybody assumes when they see a radar fault after a repair.

The alternative version of this call is that I say nothing, run the calibration, the technician drives the highway, the code is still there when he gets back, and now the shop has lost the time and gained no information they can act on.

They got the same attempt, and they got it with the context.

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.

RICKY'S NOTES

What I'd Tell Another Shop

01 **Read what kind of radar code you have.** An alignment fault is a request for calibration. An internal control module fault is a report about the module. Only one of them is fixed by driving the car.

02 **A calibration does not repair hardware.** If the module is reporting an internal problem, the procedure is a test, not a treatment.

03 **Removing a bumper does not usually disturb a radar. Unplugging one does.** If the bumper came off repeatedly for other work, ask what got disconnected while it was off.

04 **A fault in an area that was never hit deserves a history.** This vehicle was struck on the side. The front radar's problem came from the repair process, not the collision.

05 **Ask for the likely outcome before you commit the labor.** A dynamic calibration costs a technician and a highway. Knowing the odds beforehand lets you schedule around it.

06 **Brief whoever actually drives it.** If the drive is handed to a second person, they should hear the procedure directly rather than second-hand.

07 **Watch the screen.** If the Brand Specialist can unblank the tool, ask them to. You should be able to see the calibration go in and see when it finishes.



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