

Module Programming Checklist

9 things to confirm before a programming event

Most failed flashes are not caused by the tool. They are caused by two or three things on this list that got skipped because the shop was moving fast. **Five minutes here saves the hour on the other side.**

- 1 Power, not just a charger**
 Connect a proper maintainer or supply and hold voltage inside the range the OEM procedure specifies for the whole event. A charger that cycles is not the same thing. If voltage drops mid write, you can lose the module.
- 2 Confirm the connection before you start**
 Wired beats wireless every time. Check the internet is up, the device is talking, and nothing is set to sleep. A dropped connection halfway through a write is the most common way a good job goes bad.
- 3 Set the vehicle the way the procedure expects**
 Correct ignition position. Accessories, lights and HVAC off. Doors and hood as called for. Some modules refuse to write if the vehicle is not in the exact state. Some start and then fail.
- 4 Confirm the module actually needs programming**
 Diagnose first. Programming does not fix a wiring fault, a connector issue or a mechanical problem, and flashing a module that did not need it can open a repair you did not have when the car came in.
- 5 Capture and save a pre scan**
 You want a record of exactly what the vehicle looked like before you touched it. It protects the conversation with the customer and tells you which codes were yours.
- 6 Verify part number and calibration against the VIN**
 Confirm you have the right file for this specific vehicle before you begin. Close is not close enough, and a build date or option code can change which programming or calibration applies.
- 7 Block the time and the bay**
 Check how long the procedure should take and do not start one you cannot finish. A flash abandoned because the tech went home is a flash that failed.
- 8 Know the recovery path before you need it**
 If it fails mid write, do not cycle the key and do not disconnect. Know who you are calling and have the number in front of you. Most interrupted events are recoverable if the next move is the right one.
- 9 Post scan, verify and document**
 Confirm the write completed, clear what needs clearing, run any relearn the procedure calls for, and road test if it applies. Save the post scan next to the pre scan.

The three that matter most

Items 1, 2 and 4 account for most of what goes wrong. If your techs only remember three things, make it those.

THE SHORT VERSION

Power, connection, and confirming the module actually needs it. Get those **three** right and the rest is procedure.