PRE-TUNE CHECKLIST

Everything that should be true before the first datalog. If any box can't be checked, fix it first: a tune can't correct a mechanical problem.

MECHANICAL

- ☐ Compression or leak-down test done, cylinders within spec
- ☐ No oil, coolant, or fuel leaks
- ☐ Timing belt or chain condition known; service done if unknown
- ☐ Cooling system bled, fans working, thermostat correct
- ☐ Clutch and driveline healthy for the power target

FUEL

- ☐ Pump, lines, and regulator sized for the power target and fuel type
- ☐ Fuel pressure gauge or sensor installed and readable
- ☐ Injector make, size, and characterization data on hand
- ☐ Fresh fuel of the type you'll actually run; ethanol content known if flex

IGNITION AND SENSORS

- ☐ Plugs gapped for boost and in good condition
- ☐ Coils and wiring checked; no misfires at idle
- ☐ Crank / cam trigger set up and timing verified with a timing light
- ☐ IAT, CLT, MAP, and TPS reading correctly in the software

WIDEBAND (REQUIRED)

- [ ] Wideband sensor installed in the correct position
- [ ] Controller powered and warmed up before logging
- [ ] Wideband logged in the ECU, not just shown on a gauge
- [ ] Free-air calibration done if your controller needs it

BOOST AND SAFETY

- [ ] Smoke test passed — no boost or vacuum leaks
- [ ] Wastegate spring and boost control plumbing confirmed
- [ ] Fire extinguisher in the car
- [ ] Testing only on a dyno, track, or closed course

FILES

- [ ] Current map saved and backed up
- [ ] Firmware and software versions written down
- [ ] A short idle and drive log ready to send

Ignition House · hello@ignitionhouse.co · General guidance only. Follow your ECU manufacturer's documentation, and get qualified help for anything you're unsure about.