

TEJ PARKER
Blacklist Specialist

Symptoms, Causes & Prevention

What the car is telling you, why it happens and how to avoid it.

FITMENT Fitment is confirmed in the car filter on the site, never by this document. Naming a topic or a brand is not confirming it fits your car.

Holed a piston

also: furou o pistao, pistao furado, furo de pistao, fundiu o motor, abriu um ovo, derreteu pistao

- A holed or melted piston is almost always a lean mixture under load — not bad luck.
- The chain is: fuel that cannot keep up, or a map that assumes an octane you did not put in, and then knock nobody was watching for.
- Prevention is boring and it works: a wideband, a datalog, the fuel the map was written for, and fuel system capacity before more boost.

Threw a rod

also: jogou a biela, quebrou biela, quebrou a biela, partiu biela, partiu a biela, abriu o bloco

- A rod lets go when torque, RPM or knock go past what the factory part was designed for.
- The honest fix is not a stronger rod on its own — it is an honest ceiling. Decide the number first, then build the bottom end for it, then map to it.
- Forged rods, studs and the right ring gap are the step you take when the block asks, not as decoration.

Killed the turbo

also: turbo morreu, turbo fazendo barulho, quebrou o turbo, turbo failure

- Turbos die three ways: oil (feed, drain or heat), surge, or over-speeding past the compressor map.
- Check the oil feed and the drain before you blame the turbo. A restrictor missing, a drain with a kink, or shutting a hot engine down without a spool-down kills cartridges quietly.
- We carry Garrett, EFR, AirWerks, BorgWarner, KKK, IHI, Mitsubishi, Holset and BMTS — but I would rather find why the last one died than sell you the next one.



Clutch slipping

also: *embreagem patina, clutch slip, patina em quinta, embraiagem a patinar*

- Clutch slip after a map means the torque went past what the disc can hold. It usually shows first in the top gears at full throttle.
- The answer is a clutch rated for the torque you now make — Performance Clutches run Stage 1 to 4 — and on an automatic or DCT, a TCU tune with it.
- A race disc in a daily is a different kind of unpleasant. Match the stage to how you actually drive.

Broke a driveshaft

also: *quebrou eixo, axle snap, partiu o pino*

- Axles break on launch, not on the dyno. Sticky tyre plus launch control plus a driveline designed for factory torque is the recipe.
- Upgraded shafts help. A launch limiter that is honest about the tyre helps more.

DSG in limp mode

also: *modo de emergencia, caixa cortou, gearbox limp, caixa em emergencia, caixa entrou em emergencia, entrou em emergencia*

- Limp mode on a DSG or DCT is the gearbox protecting itself from torque it was not told about, from tired ATF, or from heat.
- TCU tune, fresh fluid, and a cooler if the car sees track. In that order.

Brake pedal to the floor

also: *pedal do freio foi ao fundo, pedal do travao, pedal vai ao fundo, travao vai ao fundo, travao ao fundo, freio vai ao fundo*

- A long pedal after a few hard laps is fade: the pad past its temperature window, or the fluid boiling in the caliper.
- Three things in order: fluid with a high dry boiling point, a pad whose window matches the use, and a healthy disc. Braided lines stop the hose swelling and give the pedal back its edge — HEL is the line we carry.
- If it comes back after a cooldown it was fluid. If the pedal is firm but the car will not stop, it was the pad.

Understeer

also: *understeer, empurrando na curva, nao entra na curva*

- Understeer is the front giving up first. Before touching springs, check tyre pressures hot, then front camber, then how much front grip the setup is actually asking for.
- A rear anti-roll bar, or less rear compliance, moves balance without making the car horrible on the road. Ultra Racing and Hardrace are what we carry for that.



Oversteer

also: oversteer, rodou, snap oversteer, perdeu a traseira

- A rear that leaves all at once is usually a cold tyre, a differential doing something abrupt, or bump travel running out.
- Look at pressures and at the diff before you look at power.

Car will not start

also: brickou a ecu, ecu morta, nao liga depois do mapa, ecu brick

- An ECU that will not wake up after a flash is almost always a write that went wrong with no backup.
- Bench flashing and a clone of the original file are the insurance. Ask for the stock file before anyone touches the car — it is yours.

Overheating

also: motor a aquecer, motor esta a aquecer, sobreaquec, aquecer no transito, aquecendo, temperatura alta

- Heat is usually the first thing a mapped car runs out of, long before it runs out of turbo.
- Water, oil and intake temperature are three separate problems. Fix the one the log is showing, not the one that is easiest to buy.
- Mishimoto and Koyorad for radiators and intercoolers, HEL for oil coolers — and on track, cooling goes in before more boost, not after.

White smoke

also: fumaca branca, fumega branco, fumegar branco, deitando fumaca, deita fumo, white smoke

- The colour of the smoke is the diagnosis, so start there. White and sweet, that is coolant: head gasket, head, or in some engines the oil cooler. White and thin that clears in a minute on a cold morning is just steam and means nothing.
- Blue is oil getting into the chamber: rings, valve stem seals, or on a turbo car the turbo seals — a turbo that smokes blue on overrun is usually the shaft seals, not the engine.
- Black is too much fuel: leaking injector, a MAF or MAP reading wrong, or a map that was never finished. Black smoke on a mapped car is a reason to stop boosting it until the log is read.
- Whatever the colour, check the oil for coolant and the coolant for oil before you buy a single part. That is a five minute check that decides the whole job.

Lost power

also: carro ficou mole, sem forca, lost power, ficou fraco

- Most of the time it is one of four: a boost leak, a tired diverter or wastegate, intake temperature climbing, or the ECU pulling timing because it is hearing knock.
- A datalog answers it in one pull. Guessing costs more than the log does.