

MODEL FILE 13 · V12 GRAND TOURING LINEAGE

FERRARI F12

F140 V12 · 2012–2017 · BERLINETTA · TDF · F60 AMERICA

THE FAMILY IN BRIEF

VARIANTS

F12berlinetta: the series model. F12tdf: a genuine Special Series of 799 cars, technically its own tier. F60 America: ten F12-based open cars for US clients only. F12 TRS, SP America, SP275 RW Competizione and SP3JC (the last on F12tdf running gear): Ferrari Special Projects, coded via base platform, not as model variants. The 70th-anniversary liveries: Tailor Made configurations across five model lines (70 liveries, 350 cars in total), never an F12 special series of their own.

ENGINE & DRIVETRAIN

6,262 cc 65° F140 V12, 740 cv, 690 Nm, dry sump, front-mid-engined with rear transaxle: a 7-speed DCT with E-Diff and F1-Trac, SCM-E magnetorheological dampers, CCM, the Aero Bridge (123 kg downforce at 200 km/h, Cd 0.299 per factory data) and temperature-controlled active brake-cooling flaps. Timing by chains, not belts: generic service sites listing an F12 belt service are wrong and are ignored as data sources.

WHY IT MATTERS

The F12 is fundamentally a robust car with a superb engine: the risk sits in single, expensive mechatronic systems and in addition. The bad F12 is rarely a dying V12; it is six medium findings at once: a sweating DCT, an old battery, a poor hot start, two dampers beginning to leak, blooming rear vents, sticky trim and seven-year-old tyres: suddenly €20,000–40,000 of catch-up on a car that drives perfectly.

INSPECTION ZONES · WHERE AN F12 ACTUALLY AGES

HOT START

The most F12-specific extra step. A recurring field pattern: normal cold start, then after a hot run slow cranking or refusal, sometimes with parallel electronic warnings: typically traced to starter or solenoid heat soak, supply-path resistance, grounds, harness or a weak battery: coded as a field pattern with several possible causes, never one fixed cause. Protocol: full warm-up, shut down, 5–10 minutes heat soak, start and watch cranking speed and voltage drop, repeat after 10 more minutes. Slow warm cranking, no-crank, a darkening display or cascade faults: measure starter current draw, do not just budget a battery.

BATTERY & SCAN ORDER

The F12 is far more networked than a 599: DCT, E-Diff, F1-Trac, ESC, SCM, active brake cooling, digital cluster, wheel electronics, body modules. A weak battery can fake five defects at once: gearbox, BCM, cluster, infotainment, TPMS. The PPI order is therefore doctrine: stabilise voltage FIRST, then the full scan, then cold start, lift, road, hot restart, post-drive leak check, second scan. Modules are never shotgun-replaced on a warning.

DCT

The biggest mechanical cost block, and OEM-recognised territory: Ferrari Technical Information 2389 defines diagnosis and repair for F12berlinetta and tdf DCT faults including oil leaks, electrical faults and noise, on top of the earlier Level-2 procedures. That means leakage is a legitimate inspection category, not proof that gearboxes commonly fail. Use Ferrari's own leak method: document existing oil, clean, apply detection, 10 km test drive, re-inspect. Cold and warm shift protocol; sporadic sensor faults are a real early-car field pattern (often fixed under warranty), internal destruction is not common. And a market-intelligence rule: a documented factory DCT repair (reseal, Level 2, actuator, sensor) is neutral to positive: better than an untouched gearbox with a wet casing and old codes. Fields: original, resealed, Level-2, replaced, current leak status.

REAR MESH CORROSION

The most distinctive body pattern: paint blistering at the rear side mesh vents from galvanic contact between steel mesh fastenings, aluminium body and moisture: documented on real cars. Check both sides for bubbling, lifting, repaint edges, moisture, fasteners. On repaired cars, the question is not "was it painted" but "was the galvanic cause isolated": a cosmetic-only repaint can return. Fields: corrosion status, repair date, isolation measure, repaint-only versus root-cause repair.

ALUMINIUM BODY & AERO

A modern aluminium structure, not a carbon tub: accident review covers extrusions, cast nodes, suspension points, bonding, welds, rivets, sealant, panel replacement, alignment: and not every bodyshop is qualified for it. The Aero Bridge is functional aerodynamics, not styling: openings, channels, panel fit, blockage, symmetry, especially after front damage. The active brake-cooling flaps are a genuinely F12-specific item missing from generic checklists: presence, actuation, damage, blocked ducts, repairs. Front damage costs more than it looks: radiators, condensers, Aero Bridge interfaces, cooling flaps, CCM ducts, lift components all live there.

BRAKES

CCM judged as carbon: outer and inner faces, chips, oxidation, thermal distress, pads, caliper seals, lines, with Ferrari/Brembo wear methodology rather than disc thickness. RC80 makes the brake block complete: reservoir cap status, fluid level, leak traces, warning history, then repeated warm stops on the road test with a consistent pedal and no pulling.

SUSPENSION & LIFT

SCM-E dampers age: leakage, sweating, actuators, wiring, mode response: an age-related inspection, not an endemic failure (UK MOT data shows ordinary wear, no extreme F12-specific pattern). Weight and tyre width work the joints: ball joints, bushes, tie rods, bearings on the lift; clunks and corrections on the road. The front lift is a high-cost, age-relevant system with no evidence of systemic failure: cycle cold and warm, symmetry, leakage, ride-height sensing.

V12

The strength of the car: no convincing dataset for a series engine weakness, and contemporary specialist material describes the platform as exceptionally robust for a low-production supercar. True cold start with temperatures recorded: oil pressure, idle, misfires, smoke, chain and injector noise: the engine is mechanically present, and normal valvetrain or injector sound is not declared a failure. Engine mounts as an age check, not a known issue.

INTERIOR & CLUSTER

Sticky soft-touch surfaces are now a very real age pattern: wheel buttons, console, window switches, HVAC, trim: LOW technically, MEDIUM cosmetically, higher on a tdf. Leather: dashboard shrinkage, lifting A/B-pillar fabric, headliner, bolsters, weighted up on hot-climate cars. Cluster and TFTs: boot behaviour, flicker, freezes, reboots; infotainment logo-loops are documented ageing. A replacement cluster must be programmed and stores the mileage: without the previous reading, invoice and Ferrari programming documentation it becomes a provenance flag: on a tdf, a serious one.

TYRES & TPMS

UK MOT data shows tyres as the most common real F12 defect area: homologation, DOT age, inner and outer shoulders, repairs, cracks, flat spots, mismatched axles: on a 740 cv rear-driven car, age is safety-relevant regardless of tread. TPMS faults appear surprisingly often in the same data: all four sensors, battery age, correct display: LOW to MEDIUM, but real.

EXHAUST & MODIFICATIONS

F12s were modified often: Novitec, Capristo, IPE, Tubi, ECU tunes, decats. Check manifolds, cats, valves, heat shields, soot, rattles: and whether the original system comes with the car: nice on a berlinetta, genuinely relevant on a tdf. Severity: ECU tune MEDIUM/HIGH, cat delete HIGH for legality and resale, with a stronger originality penalty on the tdf. Aftermarket wheels and lowering springs join the audit on modified cars.

VARIANT-SPECIFIC · F12TDF

OWN TIER

A Special Series, not a package: 780 cv at 8,500 rpm, 705 Nm, 2.9 s to 100 km/h, 799 cars (factory data), different aero, wider front tyres, substantial weight reduction, more carbon, its own chassis calibration. Authenticity by build sheet: the actually fitted aero, bonnet, louvres, diffuser and trim must match, not just the VIN. Track use is likelier and not automatically bad: track evidence without documented brake and fluid maintenance is HIGH.

REAR STEERING

The Passo Corto Virtuale is the biggest added PPI block: rear-steer actuator, position sensors, calibration, actual wheel movement, fault memory. A rear-steer warning is HIGH to CRITICAL pending diagnosis, and after any accident the full geometry plus PCV calibration is redone. Alignment matters more than on any F12: factory printout, corner-to-corner wear, wheel centre, rear-steer zero.

VARIANT-SPECIFIC · F60 AMERICA & SPECIAL PROJECTS

F60 AMERICA

Ten cars, US clients only, NART-inspired livery, asymmetric red-black interior, first delivery January 2016 (factory data). Mechanically the F12 dataset plus the open-body programme: structure, windscreen, roof and weather equipment, bespoke panels, trim, badges, original livery. And a point often missed on ultra-rare collectibles: NHTSA 22V536 explicitly lists the 2016 F60 America: the brake-reservoir campaign applies even here.

SPECIAL PROJECTS

F12 TRS (F12berlinetta base), SP America, SP275 RW Competizione, and SP3JC on F12tdf chassis and drivetrain: one-offs audited as Special Projects: factory documentation, bespoke panels and glass, unique aero, component completeness, factory repair history. Nearly every body part is bespoke and potentially irreplaceable without Ferrari Special Projects. The 70th-anniversary cars are Tailor Made configurations: livery number and factory verification as data, no separate series.

RECALLS · THE MATRIX, NOT A YES/NO FIELD

FIVE CAMPAIGNS

All verified September 2026. RC80 / 22V536: brake-reservoir cap venting, F12berlinetta MY2013–17, F12tdf MY2017, F60 America MY2016: new cap, on some models plus instrument software: CRITICAL. RC63 / 18V040: Takata passenger inflator, certain MY2013 cars in hot-humid US zones. RC65 / 19V006: Takata passenger inflator, MY2014–17 including tdf. RC57 / 15V433: improperly assembled driver airbag, defined 2015 production (December 2014 to April 2015). RC70 / 19V411: airbag ECU failure, F12 MY2015–17 and tdf MY2016 within defined production: airbags and pretensioners could fail to deploy. Each campaign is stored as its own field with VIN applicability verified, plus regulatory region: never one RECALLS_DONE = YES.

SERVICE · THE ORDER OF THINGS

READING THE FILE

Seven-year Genuine Maintenance was live in this generation; what happened AFTER it ended is where the first service gaps appear. Document annual services, fluids, plugs, software campaigns, recalls. Low mileage inverts here as elsewhere: a 4,000 km car is not automatically better than a 30,000 km one: battery history, tyre DOT, DCT seals, hot start, dampers and trim decide. Standing still is not preservation.

COST DISCIPLINE · MI WORKING RANGES

WORKING RANGES

Working ranges, not quotes (Sep 2026): annual service €1,500–3,000 · larger service €3,000–7,000+ · battery €400–1,000+ · hot-start/starter repair €1,500–5,000+ · DCT minor leak/seal €2,000–6,000 · significant DCT repair €8,000–20,000+ · replacement-level DCT event €20,000–40,000+ · MagneRide pair €3,000–7,000+ · front lift €2,000–8,000+ · suspension joints €1,500–5,000 · rear-vent root-cause repair €2,000–6,000+ · sticky-trim refinishing €1,500–5,000+ · cluster and electronics €1,000–5,000+ · tyre set €1,500–2,500+ · CCM axle €7,000–15,000+ · complete CCM event €15,000–30,000+. tdf, F60 and Special Projects parts: OEM quote and rarity multiplier.

BUYING NOTES · THE TWO CHECKS THAT MATTER

1 · THE SIX MEDIUM THINGS

Buy the addition, not the anecdote: the expensive F12 is the sum of DCT seepage, battery, hot start, dampers, vents, trim and tyres: each quantifiable, together the negotiation. The V12 is almost never the problem; on a tdf, a healthy, calibrated, accident-free chassis outranks routine service costs by an order of magnitude.

2 · CONFIDENCE DISCIPLINE

OEM or government confirmed: RC57, RC63, RC65, RC70, RC80, plus TI 2389/2330 for DCT. Strong field patterns: rear-vent corrosion, hot-start cases, low-voltage electronics, sticky buttons, cluster and infotainment ageing, DCT sensor and leak cases, suspension ageing. Not to be called common: catastrophic F140 failure, chain failure, systemic DCT internals, CCM, E-Diff or rear-steer failure.

MARKET POSITION · TWO MARKETS, TWO READINGS

STATUS

European and US bands to be set from the transaction dataset in this verification round. The recall matrix and catch-up status price the berlinetta; originality and PCV health stratify the tdf; provenance carries F60 and the Special Projects.

740 cv

F140 6.3 V12, chains not belts; tdf 780 cv at 8,500 rpm

799 + 10

tdf production cap and F60 America build, factory-confirmed

5

US safety campaigns on the family: stored as a matrix, never as one yes/no

Sources: Ferrari factory data for F12berlinetta, tdf, F60 America and Special Projects; NHTSA campaigns 22V536, 18V040, 19V006, 15V433 and 19V411 verified September 2026 with model-year mapping; Ferrari TI 2389/2330 (DCT procedures), UK MOT statistics and repair-data patterns as sourced. Cost figures are MI working ranges; market bands follow the verification round.