

MODEL FILE 16 · V12 GRAND TOURING LINEAGE
FERRARI GTC4LUSSO

V12 4RM-S & V8 T · 2016–2020 · SHOOTING BRAKE

THE FAMILY IN BRIEF**TWO DIFFERENT CARS**

GTC4Lusso V12: 6,262 cc F140, 690 cv, 7-speed DCT, 4RM-S with the front PTU, rear steering, E-Diff, SCM-E. GTC4Lusso T: 3.9-litre F154 twin-turbo V8, rear drive only: no 4RM, no PTU: with rear steering retained. Tailor Made and 70th-anniversary cars are configurations, not mechanics; Lusso-based one-offs live in a provenance sub-file. The separation matters because the two cars carry fundamentally different long-term risk profiles: pricing the T with a PTU reserve is as wrong as pricing the V12 without one.

WHY IT MATTERS

The Lusso refined the FF concept rather than replacing it: the PTU stayed, joined by rear steering and an evolved 4RM strategy. The core question of every V12-Lusso purchase is therefore the same as on the FF: the health of the second gearbox at the front. The T removes exactly that question and swaps it for a turbo, charge-air and cooling programme: technically probably the easier long-term car, while the V12 remains the emotionally and commercially stronger engine.

THE PTU · V12 ONLY**THE CONFIRMED PATTERN**

The PTU failure mode is a confirmed field problem on the Lusso V12, at an apparently lower observed frequency than on early FFs: not eliminated. Specialists describe the same mechanism on both cars: loss of hydraulic oil inside the PTU, mixing of hydraulic and gear oil, falling pressure, loss of selector-fork actuation, 4WD failure, Manettino locked in Wet mode. No percentage is invented; “failures occur, reported less often than FF” is what the data supports. Plausible reasons (younger population, later production states, better awareness) are noted as exactly that: plausible, not proven.

REPAIRABILITY

The real progress is modular repair. Ferrari itself lists a PTU repair architecture for the Lusso: potentiometers kit P/N 299391, on/off valve kit 299392, complete hydraulic system kit 299393 (publicly listed around £8,016 ex VAT), rigid oil pipes kit 299394, complete wiring harness 866336. A 4WD warning is therefore never a replacement diagnosis: sensor, wiring, connector, valve, pressure, forks and internal leakage are diagnosed separately. Specialist rebuilds with reinforced fork assemblies exist for FF and Lusso alike; the claim that like-for-like repairs reproduce the same limited life is specialist engineering opinion, marked as such: not an OEM statement.

PTU HEALTH SCORE

The FF systematic carries over: A: upgraded specialist rebuild or later OEM repair, full documentation, current Ferrari PTU test, clean fluids. B: OEM unit, clean test, no symptoms. C: original unit, no symptoms, no recent deep diagnosis: penalised less hard than on an early FF given the lower observed rate. D: history unknown. E: 4WD warning, pressure deviation, contamination, fork or sensor faults. Fluids are the tell: hydraulic level falling without an external leak points at internal transfer: check level, gear-oil condition, colour, smell, metal. A documented quality rebuild is not a value penalty on this car: it is a better-quantified risk than “original, never touched”.

PTU TESTING

The Ferrari diagnostic test ranks highest: hydraulic pressures, fork positions, sensor plausibility, repeated engagement cycles, temperature behaviour, stored and intermittent faults: ideally run by an official dealer with results to Maranello (the public OEM procedure code stays an open field). The functional road test is never done on the motorway: low gears, moderate load, tight corners, several Manettino states, cold and warm: with a scan before and after. Both DCT and PTU services are recorded separately: this car carries two gearbox units, and “transmission serviced” is not a datum.

SHARED ZONES · V12 & T

DCT & DRIVELINE

The 7-speed Getrag DCT shares the FF/F12 record: seal and sensor cases, occasionally hesitant reverse-to-forward engagement. Cold and warm protocol; and remember the documented case of a simply unplugged gearbox connector taking gears offline: a missing gear is not automatically internal damage. Rear steering on BOTH variants: actuator, position sensor, calibration, geometry, faults: mandatory after any rear or suspension damage. Similar symptoms, different causes: a Lusso can feel odd through PTU (V12), rear steer, alignment, tyres or low voltage: no fast diagnosis.

ELECTRICS & BATTERY

Batteries fail even on regularly used cars, and low voltage confuses Manettino, DCT, 4RM, rear steer and ESC at once: battery first, then the scan. Manettino warnings that vanish overnight are a documented field phenomenon: not every warning is mechanical: but on the V12, a Manettino stuck in Wet always gets the PTU ruled out. Interior electronics (dual-cockpit, passenger display, cameras, rear entertainment, folding seats, cargo electronics) are tested item by item: more technology sits in the passenger compartment than on any earlier V12 GT.

CHASSIS & WEAR

Lussos are driven like the GTs they are: at higher mileages, bushings, joints, dampers and wheel bearings are normal wear points: control arms, ball joints, rear-steer joints, SCM shocks on the lift. Front lift where fitted: cold and warm cycles, hold, symmetry: high-cost, not high-frequency. CCM on both: faces, chips, oxidation, pads, diagnostic wear values: weighted up on high-mileage cars given the mass. Tyres: matched brand and model, homologation, DOT, inner edges: on the V12, rolling-circumference differences between axles are treated critically because the PTU lives with them.

BODY & CABIN

The panorama roof is a large, expensive bonded component: bonding, cracks, edge delamination, seals, water, headliner: no systemic failure series, pure cost exposure. The tailgate is shooting-brake-specific: powered latch, struts, loom, rear glass, wiper, demister, seals, moisture under the carpet. Sticky trim and dashboard leather age mildly compared with the 599/FF era: LOW/MEDIUM, hot-climate cars weighted up. Aluminium structure on accident review: front rails, cooling, pickups, rear floor, tailgate aperture: plus the PTU area on the V12.

VARIANT-SPECIFIC · LUSSO T

THE TURBO PROGRAMME

No PTU does not mean simple: DCT, rear steering, SCM, E-Diff and the full electronics remain. What replaces the PTU question is the F154 turbo programme: both turbos (cold: start, smoke, bearing and wastegate noise; warm: linear boost, no whistling, no hesitation, no reduced-power warnings; after heat soak: oil smell, smoke, leaks, boost faults), the charge-air system (intercoolers, hoses, clamps, oil residue, pressure leaks) and cooling that works harder than a naturally aspirated V12 (engine, turbo, intercooling, DCT circuits). Missing power, uneven boost or misfires under load include the charge-air-leak question. After front damage: radiators, intercoolers and boost plumbing: a charge-air pressure test is the sensible closure.

RECALLS · THE MATRIX

FOUR CAMPAIGNS

All verified September 2026, and a more substantial regulatory history than the car's robust reputation suggests. RC67 / 19V089: door-lock Bowden tension could leave doors unopenable from outside: MY2017–19 V12 and MY2018–19 T, 582 US cars: new locks, cables and routing, both doors: HIGH/CRITICAL for emergency egress. RC69 / 19V090: fuel vapor separator crack (replacement P/N 70006134): 2018–19 V12 and T: fuel smell and EVAP history checked: CRITICAL. RC65 / 19V006: Takata passenger inflator including specified Lusso T VINs: final non-ammonium-nitrate assembly: CRITICAL, VIN-specific. RC80 / 22V536: brake-reservoir cap venting, 2017–20 V12 and 2018–20 T: cap plus software: CRITICAL. Stored per campaign with VIN applicability: never one yes/no field.

SERVICE · COST DISCIPLINE

READING THE FILE

Both variants carried 7-year Genuine Maintenance; the deciding question is what happened after it ended: annual services, fluids, DCT, PTU on the V12 (recorded separately), coolant, brake fluid, plugs, software, recalls. Working ranges, not quotes (Sep 2026): annual €1,500–3,000 · major €3,000–8,000+ · V12: PTU minor OEM repair €2,000–10,000+ by fault · specialist PTU rebuild €10,000–15,000+ · full OEM PTU-level event €25,000–40,000+ · T: turbo periphery €2,000–6,000, major turbo event €5,000–15,000+, charge-air/cooling €2,000–8,000+ · both: DCT €5,000–20,000+ · rear steer €3,000–10,000+ · MagneRide €4,000–8,000+ · lift €2,000–8,000+ · CCM axle €7,000–15,000+.

BUYING NOTES · THE TWO CHECKS THAT MATTER

1 · WHICH CAR IS IT

The V12 is bought on its PTU file the way an FF is: health score, fluids, test results, repair documentation. The T is bought on its turbo and thermal file, with the platform's most notorious cost simply absent. Two risk profiles, two checklists, one body.

2 · CONFIDENCE DISCIPLINE

OEM or government confirmed: RC65, RC67, RC69, RC80, and Ferrari's modular PTU repair support (the part numbers themselves). Strong field pattern, V12 only: PTU internal hydraulic leakage and fork failure, less frequent than FF but documented. General field patterns: DCT sensors and seals, battery failures, transient Manettino warnings, bushing wear. T monitor items: turbo oil and coolant, charge-air leaks: no sufficient data for systemic turbo failure. Specialist re-engineering claims are carried as engineering opinion, not OEM fact.

MARKET POSITION · TWO MARKETS, TWO READINGS

STATUS

European and US bands to be set from the transaction dataset in this verification round. Structural readings: V12 values follow PTU documentation more than mileage; the T trades at a discount that overstates its technical risk: the calmer long-term car at the cheaper price; both price on the year-eight service question.

690 cv

F140 6.3 V12 with 4RM-S and PTU; Lusso T: 610 cv F154 V8, rear drive, no PTU

4

US campaigns on the family: doors, fuel separator, Takata, reservoir cap: a matrix, not a yes/no

299393

Ferrari's complete PTU hydraulic kit: the proof that a 4WD warning is not a unit-replacement diagnosis

Sources: Ferrari factory data for GTC4Lusso and Lusso T; NHTSA campaigns 19V089, 19V090, 19V006 and 22V536 verified September 2026; Ferrari/Maranello parts catalogue for PTU repair kits (299391–299394, 866336) as sourced; specialist rebuild programmes and field reports (FF/Lusso PTU mechanism) as sourced, engineering opinions marked as such. Cost figures are MI working ranges; market bands follow the verification round.