MODEL FILE 84 · GORDON MURRAY AUTOMOTIVE · HYPERCAR · HALO PROTOCOL

GMA T.50

COSWORTH GMA V12 · 663 PS · 12,100 RPM · FAN AERO · 100 CARS · 2022–

THE CAR IN BRIEF

THE MODEL

GMA's actual flagship: 100 cars — with the T.50s NIKI LAUDA (25 cars, track-only) deliberately kept OUT of this file, per the dossier: own engine state, own gearbox, different aero and chassis — it gets its own file in the register plan. Two figure precisions: output is 663 PS (654 bhp) at 11,500 rpm — rising to ≈690 PS with ram induction — not 670: and GMA's factory DRY weight is 986 kg (the dossier's 997 kg appears in period reporting as a running-order figure — the register carries the factory dry number). The rest: 3.9 Cosworth GMA V12, 12,100 rpm, Xtrac 6-speed manual, rear drive, carbon monocoque, CENTRAL DRIVING POSITION with three seats. Fields: BUILD_NUMBER, CENTRAL_DRIVING_POSITION.

POSITION · AGAINST THE T.33

The register's classification: ENGINEERING SHOWCASE – MONITOR LONG-TERM. Where the T.33 is the usable grand tourer, the T.50 pursues without compromise the aim of being the most driver-focused road car ever: central seat, the active fan-aero system, an even lighter monocoque, the higher-revving engine (12,100 vs 11,100 rpm), and still more radical lightweighting. The technical PPI builds largely on FILE 83 (T.33) — same engine family, same Xtrac lineage, same electronics philosophy, same service world — and adds one chapter that is entirely its own: the fan.

POWERTRAIN · THE T.33 REFERENCE

THE COSWORTH GMA V12

Already regarded as one of the most extraordinary series engines ever built: 178 kg engine weight · 12,100 rpm · minimal rotating mass · ≈28,400 rpm PER SECOND of rev pickup · naturally aspirated, no hybridisation, no turbochargers. To date NO known systemic engine damage — and the T.33's GMA.2 is this engine's development, so the family's proving compounds across both files. The Xtrac manual: motorsport origin, no known weaknesses. Both: MONITORING, per the young-fleet discipline.

MONOCOQUE, CHASSIS & ELECTRONICS

Even more radical than the T.33: the complete monocoque INCLUDING the carbon body weighs under 150 kg. PPI: delamination, crash structure, underbody, suspension pickups — and the FAN DUCTS, which belong to the structural walk on this car. Chassis: lightweight above all, no known weaknesses — bearings, dampers, measurement, pickups. Electronics: the same philosophy as the T.33 — as little as possible, as few assistance systems as possible, high mechanical directness: the potential fault complexity drops accordingly.

THE FAN · THE CAR'S OWN CHAPTER

FAN AERODYNAMICS

The largest technical difference, and the file's own focus: the famous 400 mm rear fan actively extracts air from beneath the car and supports different aero programmes by drive mode — Gordon Murray reviving the principle of his Brabham BT46B. The PPI adds, on top of the T.33 protocol: fan motor, fan bearings, drive, air ducts, aero modes, flap control, sensors, software. To date NO known field failures — and the dossier's long-term verdict is adopted as doctrine: the fan system is the car's UNIQUE FEATURE and will long-term be the most important area to watch for reliability, maintenance and parts supply. Fields: FAN_AERO_SYSTEM, FAN_MOTOR_STATUS, AERO_MODE_OPERATION.

FACTORY ACTIONS & OWNERSHIP

THE RECORD

No documented recall programmes, and no reliable systemic problems known — the cars have only recently reached customers, and the fleet of 100 is too small for field statistics: stated exactly so, nothing invented. The watch list: long-term behaviour of the fan system · the active-aero software · parts supply · chassis wear. Supplier advantage as on the T.33: Cosworth, Xtrac, AP Racing.

SERVICE, GERMANY & INDIVIDUALISATION

The aftersales is the T.33's, shared: Global Service Centres (announced from launch for the UK, USA, Japan and Abu Dhabi), FLYING TECHNICIANS for all other markets, works support, personal customer care — and Germany belongs to the regional network: normal maintenance does NOT require England, complex work runs in coordination with the works. GMA's stated aim carries over: a long-term supportable car with deliberately calculable maintenance. Individualisation as on the T.33 — seat fitting, individual colours, Special Vehicles — so provenance and configuration will outweigh technical differences between cars: the future buying priorities per the dossier: carbon structure → FAN SYSTEM → works service → original configuration → software → engine → gearbox. Halo protocol: no bands — and the baseline recorded today is the file every future owner pays for.

100

Cars — with the 25 T.50s Niki Lauda deliberately outside this file: its own protocol follows

178

Kilograms of V12 — 12,100 rpm, ≈28,400 rpm/s pickup: no known systemic damage, and MONITORING

400

Millimetres of fan: the car's unique feature — and its most important long-term watch point

Sources: GMA factory data (T.50 100 cars, central three-seat position, 3.9 Cosworth GMA V12 663 PS/654 bhp at 11,500 rpm — ≈690 PS with ram induction — 12,100 rpm, 178 kg engine, ≈28,400 rpm/s; Xtrac 6MT; monocoque incl. body <150 kg, 986 kg dry per factory sheet — dossier figures 670 PS/997 kg corrected against it; 400 mm fan system, BT46B lineage; T.50s Niki Lauda 25 cars, track-only, separate file per register plan; service network from launch — UK/USA/Japan/Abu Dhabi centres, flying technicians, Germany in the regional network); no documented recalls and no reliable field data as of September 2026 — MONITORING per register discipline. No bands per halo protocol — single files decide.