

FERRARI SF90 STRADALE / SPIDER / XX

PRE-PURCHASE PROTOCOL · BUYER CHECKS · SPECIALIST PPI · RED FLAGS

Compiled from public sources, the Ferrari SF90 family, its Model File and specialist review · Personal use only · v2.1

WHAT THIS CHECKLIST IS, AND WHAT IT IS NOT

This checklist is written for enthusiasts who want a base of knowledge: enough context to follow what a PPI specialist tells them, to read an inspection report a dealer hands over, and to understand what is being discussed in videos and forums. It does not replace the diagnosis or judgement of a qualified specialist or workshop, and it is not a tool for saving the cost of one. If you are not deeply familiar with these cars technically and are unsure about a vehicle's condition, our standing recommendation is simple: commission and pay a qualified PPI specialist of your choice, whether an official dealership, a marque specialist, or an experienced supercar specialist who knows the brand. The checklist gives you context; the specialist gives you the verdict.

A · BUYER CHECK · PROVENANCE & PAPERWORK

- ☐ Owner chronology coherent; long-term ownership with documented, HV-qualified maintenance is the strongest positive indicator on this platform.
- ☐ Service file judged by content: services, fluids including HV and inverter/eAxe coolant, DCT work, hybrid inspections, software updates, campaigns.
- ☐ Recalls, CRITICAL: RC86 / 23V698 turbo oil pipes (kit 70007937) and RC84 / 23V136 passenger seat. VIN applicability, completion in the Ferrari record, invoices.
- ☐ International campaign status: market-specific actions exist (Japanese software and HV-cell campaigns, Campaign 466). Check the individual VIN with Ferrari, especially on imported cars.
- ☐ Hybrid / HV warranty status: factory, power and extended coverage, HV-battery replacement entitlement, transferability, last official inspection.
- ☐ Modification history in writing: ECU, boost or hybrid software, exhaust, OPF, spacers, springs, aero. On this car, powertrain software weighs HIGH to CRITICAL.
- ☐ Assetto Fiorano / XX: every package or Special Series item verified against the build sheet: dampers, titanium springs and exhaust, carbon aero, wheels, livery; XX additionally allocation and originality.
- ☐ Accident history: ask the HV-enclosure and front-eAxe question directly; a "small front-end damage" can involve the electric front axle.
- ☐ Ex-rental or commercial history established with documents, not geography.
- ☐ Market positioning completed: variant, package, coverage status and originality weighted before any visit.

B · BUYER CHECK · AT THE CAR

- ☐ 12 V system before activation: voltage, age, type, maintainer history; note wake-up behaviour and undervoltage fault history.
- ☐ Take over with sufficient charge; walk all four modes: eDrive (engine off where conditions allow, clean electric drive), Hybrid (clean start-stop), Performance, Qualify (no reduced-power warnings).
- ☐ Reverse test, cold and warm: R engages immediately via the front motors, no E4WD or hybrid warning, no judder or delay. There is no mechanical reverse to fall back on.
- ☐ Deliberate combustion cold start: the car starts electrically by default; force the V8 cold and judge idle, misfires, smoke, noises, smells.
- ☐ Charging test: OEM cable, port, lock, contacts, moisture; then a real 10–20 minute charge with power and SOC rising, no aborts.
- ☐ DCT cold: D engagement, crawl, 1-2 and 2-1, manoeuvring. Warm: stop-and-go, full-temperature shifts, paddles, downshifts, restart after heat soak.
- ☐ E4WD feel: a tight curve under moderate torque with no vibration, clicking, pulsing or asymmetrical drive; then firmer acceleration where safe.
- ☐ Brakes: pedal consistency, regeneration-to-friction transition, straight braking; CCM surfaces, edges, inner faces, pads, caliper discoloration; fresh pads on used discs noted.
- ☐ Tyres and wheels: spec 255/35 and 315/30 ZR20, DOT, tread per zone, heat cycles, repairs, TPMS; AF: correct Ferrari-specific Cup 2; carbon or forged wheels for damage and repairs.
- ☐ Underbody: HV-battery protection and front-eAxe area for impacts, deformation, scrapes, fresh or replaced panels, wrong jacking points.
- ☐ Active aero: shut-off Gurney cycles, alignment, actuator behaviour, repair traces; XX: fixed wing, mounts and carbon aero inspected as originality items.
- ☐ Spider / XX Spider roof: two full cycles cold, one or two warm (about 14 s): locks, decklid, rear glass, seals, alignment, water marks, noises.
- ☐ Road test: full temperature, all modes, lift cycles, then 10–15 minutes heat soak, restart, and a scan after the test.

FERRARI SF90 STRADALE / SPIDER / XX

PRE-PURCHASE PROTOCOL · BUYER CHECKS · SPECIALIST PPI · RED FLAGS

Compiled from public sources, the Ferrari SF90 family, its Model File and specialist review · Personal use only · v2.1

C · SPECIALIST PPI SCOPE (MINIMUM)

- ☐ Ferrari-level full-system scan BEFORE the road test and again AFTER road test and heat soak; without Ferrari-capable diagnostics the PPI is to be marked as limited.
- ☐ HV battery: state of health, cell-voltage spread, isolation resistance, temperature spread, overtemperature and reduced-power events, replacement history, software level.
- ☐ Front eAxe: both motors, inverter, torque-vectoring and E4WD faults, wheel-speed plausibility, cooling circuit, isolation.
- ☐ Undervoltage discipline: stabilise the 12 V supply, clear, fully re-activate, scan again; only then judge remaining faults.
- ☐ DCT diagnostics per the OEM leak-inspection zones (TI 2612 includes the SF90): pressures, adaptations, temperature history, documented repairs.
- ☐ Cooling: all circuits separately, as Ferrari's own PDI does: engine, HV battery, inverter/front eAxe; pressure test, gradients, pumps, fans.
- ☐ Turbo oil-supply area explicitly documented (RC86 zone): pipes, connections, heat shields, oil traces, cleaning traces.
- ☐ Brake-by-wire and ABS diagnostics, regeneration faults; CCM judged as carbon, with TI 2770 part history (776901/776900 discs, 70005267/68 pads) where invoices allow.
- ☐ Software levels across all domains and outstanding campaigns, US and international, in the Ferrari record.
- ☐ Structure: paint depth on metal, carbon by inspection and build spec; HV enclosure and front-eAxe mounting areas explicitly.
- ☐ Track condition score (weighted up for AF, expected for XX): tyre heat cycles, CCM and pad state, caliper heat, underbody abrasion, wheel chips, alignment values, tow-hook marks, fluid-change frequency.
- ☐ Typical full specialist PPI cost, rounded orientation by market (2026): ≈€900–1,600 / ≈£800–1,400 / ≈\$1,000–1,800. Indications, not conversions; obtain current local quotes.

"The SF90 inverts the old hierarchy: high-voltage integrity first, cylinders last. A car that cannot demonstrate its electrical health cannot be priced."

Deep dive: Supercar Models Paper 07 · Model File 07 · Owner's Intelligence series.

D · PRICE & INVESTIGATION ITEMS

Not every defect makes a bad car: the question is whether a problem is known, quantifiable and priced in. These are costs and questions, not verdicts.

- ☐ Old software level or open update backlog: remediation before delivery, then a completed item.
- ☐ Weak 12 V battery or long standing periods: stabilise, clear, re-test; battery health and fault history decide.
- ☐ A documented, properly executed DCT or hybrid repair: not negative in itself; read invoices and diagnosis path.
- ☐ CCM pads or discs due: quantifiable; use the TI 2770 part history and quotes, then price.
- ☐ RC86 or RC84 open: resolve before purchase with written Ferrari confirmation.
- ☐ Missing AF or XX items: primarily a value adjustment, and a provenance question on an XX.
- ☐ Disclosed, documented modifications: a value and warranty question; the undisclosed kind escalates.
- ☐ Negotiate from market position and quantified defects, not assumed dealer margin.

E · RED FLAGS · WALK-AWAY OR ESCALATION

- Impact traces in the HV-battery or front-eAxe zone without a Ferrari HV-qualified inspection: no purchase sign-off.
- Turbo oil-pipe campaign open with no realistic path to resolution.
- Reverse unavailable or erratic together with hybrid or eAxe fault codes.
- Unexplained isolation faults, reduced-power or HV fault history.
- Evidence of undisclosed powertrain, boost or hybrid tuning.
- Fire, oil-leak or overheating history without documentation.
- Undocumented structural accident or questionable repair.
- Mileage discrepancies or diagnostics cleared just before viewing.
- A car whose problems cannot be named, quantified and priced: the one category that cannot be negotiated.

F · FIRST WEEK OF OWNERSHIP

- ☐ Battery maintainer from night one; complete one full, observed charge cycle early.
- ☐ Insurance and storage confirmed; purchase file, PPI report and photo baseline archived. Spiders: exercise the roof.
- ☐ Options, not requirements: a tracker appropriate to value and insurer expectations, and a dash cam.