

HomePlanet Vehicles

**Presence-Anchored Automotive Safety, Diagnostics &
Failure-Prediction Platform**

Binder Volume — Timestamp-Ready Concept & Claim Framework

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1. Executive Summary

Defines HomePlanet Vehicles, its owner-first safety mission, and the gap in current dealer-centric diagnostics.

2. System Architecture Overview

Vehicle node hardware, mobile app, encrypted cloud ledger, VIN binding, and offline buffering.

3. Presence-Anchored Telemetry Ledger

Continuous cryptographic logging, immutable audit trails, and structural event detection.

4. Pre-Failure Prediction Engine

Trend analysis, wear modeling, multi-signal fusion, and probability scoring.

5. Mechanical Intrusion Detection Layer (MID-L)

Foreign object inference, vibration harmonics, oil debris signals, guided inspections.

6. Module State Reconstruction Layer (MSRL)

ECU replay, gateway failures, blank-code analysis, voltage corruption.

7. Idle & Low-Speed Safety Layer

Parking hazards, brake creep, heat soak, EV anomalies.

8. Authority-Scoped Sharing (SELF Model)

Owner control, shop sessions, insurance windows, teen profiles.

9. Repair Authorization & Proof Ledger

Spend caps, parts serialization, test-drive capture, warranty exports.

10. Mechanic Workflow Integration

QR intake, health snapshots, tear-down guidance, borescope capture.

11. Fleet, Insurance & Commercial Uses

Municipal fleets, delivery vehicles, RVs, lemon-law defense.

12. Regulatory & Compliance Considerations

Privacy, OTA logging, jurisdictional exports.

13. Pilot Program & Deployment Plan

Independent shop rollout, beta fleets, consumer kits.

14. Competitive Differentiation

Presence ledger vs snapshot tools, owner-first vs dealer-siloed.

15. Diagrams List

Topology maps, data flow charts, authority trees, repair lifecycle.

16. Claim Buckets Overview

- 1 Presence-Anchored Vehicle Telemetry
- 2 Pre-Failure Prediction Systems
- 3 Mechanical Intrusion Detection
- 4 Module State Reconstruction
- 5 Authority-Scoped Access
- 6 Repair Authorization Ledgers
- 7 Low-Speed Safety Layers
- 8 Fleet & Commercial Systems
- 9 Dealer-Tier Replay Without Dealer Control
- 10 Insurance & Legal Evidence Packs