

# **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-Scope 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-Spaced Access
- 6 Repair Authorization Ledgers
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