

Fleet Registry — Data Quality Report

Date: 2026-06-08 **Source:** tracksolid.devices (the single registry of record) **Prepared for:** Fireside leadership / fleet operations **Scope:** 181 tracking devices → **80 physical vehicles** after de-duplicating the GPS-tracker + dashcam pairs that share a number plate.

1. Executive summary

The fleet registry is **operationally usable but materially incomplete**, and the gaps concentrate in exactly the fields the business needs to run field-service KPIs: driver identity, driver contact, vehicle type, and device pairing.

Theme	Headline	Business impact
Driver contact	97% of records have no driver phone (175 / 181)	Dispatch and escalation can't reach the driver from our own systems
Driver identity	23% have no driver name (41 / 181)	Trips, speeding and idle time can't be attributed to a person — no accountability
Vehicle type	22% have no model (40 / 181)	We can't cleanly separate ticket-closing service cars from cranes / bikes
Device pairing	29% of vehicles (23 / 80) are missing a tracker or a camera	Blind spots: 6 vehicles have no GPS at all ; 16 have no dashcam evidence
Unidentified hardware	41 device rows carry no plate ; 19 of those are fully blank	Hardware we are paying to track but cannot tie to a vehicle, driver or city

Root cause is upstream, not in our database. Almost every gap is a field that was never entered in the **Tracksolid Pro portal** at provisioning time — our pipeline faithfully stores whatever the portal holds. This is a **data-entry discipline** problem at vehicle onboarding, plus an **incomplete driver/plate import** that is still pending (the 144-device CSV).

2. The fleet, de-duplicated

After collapsing tracker+camera pairs to one row per number plate:

Segment	Vehicles	Detail
Field service (closes customer tickets)	~62	Probox ×57, Van, Vezel, Mazda, + a few UG/other cars
Specialist (cranes, bikes, pick-ups — <i>not</i> immediate tickets)	~17	Crane ×3, Motorbike ×8, Pick-Up ×~6
Ambiguous (type conflicts — see §3)	2	KCY 080X, KCZ 223P
Total physical vehicles	80	from 181 devices
Unassigned spare devices (no plate)	41 rows	cannot be counted as vehicles

3. Findings by severity

● Critical — operational blind spots

C1. 6 vehicles have a dashcam but NO GPS tracker — they are invisible on the live fleet map and contribute no trips/mileage. KCN 496A · KCQ 215F · KCU 237Z · KDM 306S · KDN 759G · KCZ 199P

C2. 16 vehicles have a GPS tracker but NO dashcam — no video evidence for incidents, disputes, or safety review. Concentrated in the **specialist fleet** (all 8 motorbikes, the Uganda vehicles) plus several Proboxes.

C3. 41 device rows (23%) carry no number plate — they cannot be tied to a vehicle, driver, or city. **19 of these are entirely blank** (no plate, no model, no driver, status “unknown”) — hardware we track but cannot identify at all.

● High — accountability & classification gaps

H1. 97% of records have no driver phone (175 / 181). Only 6 drivers are contactable from our data.

H2. 23% have no driver name (41 / 181). Behaviour analytics (speeding, idle, harsh events) cannot be attributed.

H3. 22% have no vehicle model (40 / 181) — this is the field that drives the field-service vs specialist split. Until it’s populated, ~22% of the fleet can only be classified by guessing from the device name.

H4. Plate data-entry inconsistencies corrupting the vehicle count: - **KDS 453Y is entered twice** — KDS 453Y (tracker) and KDS 453 Y (camera, stray space). One vehicle, counted as two. - **KCC 199P vs KCZ 199P** — both pick-ups, both driver *Mbuvi Kioko*, one tracker + one camera. Almost certainly **one vehicle mis-keyed under two plates**.

H5. Two plates disagree with themselves — the tracker and dashcam on the *same plate* report different vehicle types:

Plate	Tracker says	Camera says	Driver
KCY 080X	Pick-Up	Probox	Lawrence Kijogi
KCZ 223P	Pick-Up	Probox	Felix Muema

● Medium — analytics reliability

M1. assigned_city is unreliable. 4 vehicles have their two devices assigned to *different cities* (e.g. KDC 490Q: Mombasa vs Nairobi; KCY 838X: Mombasa vs Voi). The field appears **derived from the Track-solid account** the device sits in, not the vehicle’s actual base — so **regional (Nairobi / Mombasa / Kampala) reporting is suspect**.

M2. Placeholder / non-person driver names pollute driver-level analytics: Garage (×4), UG (×2), Management_Mazda (×2), Parked (×1). These are slots, not people.

M3. One driver, multiple plates — 5 cases (Garage, Gideon Kiprono, Kelvin Wambugu, Mbuvi Kioko, UG). Some are the duplicate-plate issues above; the rest need confirmation of whether a driver genuinely rotates vehicles.

● Low — asset-register completeness (low operational impact today)

L1. vehicle_brand is 99% empty (179 / 181) and **vin is 100% empty** (181 / 181). Not currently used in any KPI, but would be needed for a formal asset/insurance register.

4. Completeness scorecard (device-level, 181 rows)

Field	Populated	Missing	% missing
Number plate	140	41	23%
Vehicle model	141	40	22%
Driver name	140	41	23%
Driver phone	6	175	97%
SIM	155	26	14%
Assigned city	152	29	16%
Vehicle brand	2	179	99%
VIN	0	181	100%

5. Recommended actions

#	Action	Owner	Effort	Fixes
1	Run the pending driver/plate CSV import (144 devices with names + plates already prepared)	Engineering	Low — one command	H1, H2, H3 (large chunk)
2	Mandate model + driver + phone at vehicle onboarding in the Track-solid Pro portal; make them required fields in the process	Operations	Process change	Root cause of most gaps
3	Resolve the 4 specific record issues in §3 (KDS 453Y dup, KCC/KCZ 199P, KCY 080X, KCZ 223P)	Operations to confirm, Engineering to correct	Low	H4, H5
4	Audit the 22 vehicles missing a tracker or camera (§3 C1/C2) — install missing hardware or confirm intentional	Field ops	Medium	C1, C2
5	Identify the 19 fully-blank devices — match serial → vehicle, or decommission	Field ops	Medium	C3
6	Stop trusting assigned_city for regional reporting until it's set per-vehicle rather than inherited from the account	Engineering + Ops	Medium	M1
7	Replace placeholder driver names with real assignments or a clear “unassigned” convention	Operations	Low	M2, M3

Quick wins: Actions 1 and 3 are low-effort and would clear the majority of the High-severity gaps immediately.

6. Method & reproducibility

All figures derived from a single read-only scan of `tracksolid.devices`. De-duplication keys on a normalised plate (`UPPER(REPLACE(vehicle_number,' ',''))`) so spacing variants collapse. Tracker = device types GT06E / X3 / AT4; camera = JC400P. The scan script and the proposed `tracksolid.v_vehicles` de-duplicated view are tracked in the repository; re-running the scan after each remediation step will show progress against this baseline.