

AI-Enabled **Hub** for All Your Fleet Technology

Bringing together data from various sources and making sense of it to provide actionable insights for smarter, automated fleet management.



ROI Impact Summary (past 180 days in Rosenberg)



How much time are we saving with vehicle health reports?

200

vehicle health reports were used by technicians

4,000

avg. mins saved for technicians

How much are we reducing the risk of costly return visits?

86%

reduction in repeat maintenance visits

\$287K

downtime savings (Rosenberg)

How efficient are we saving with smart workflow automations?

912

remote diagnostics vehicle checks with Pitstop as a central hub

52

mins per day per person saved using Pitstop's automated workflows between Samsara and TMT

Pitstop's Proprietary AI Solutions

2 patents pending

Machine Learning

Predictive Maintenance

By analyzing historical maintenance records, sensor data, and usage patterns, Pitstop predicts vehicle failures with over 94% accuracy.

Root Cause Detection

Pitstop continuously monitors fault code data for anomalies that deviate from normal patterns, pin pointing the root cause of the issues. This is done by analyzing the subsystems impacted, trigger frequencies over time and OEM troubleshooting guides.

Generative AI

ChatGPT Descriptions for faults

This generative feature enables fleet managers & technicians to fill in the blanks with helpful insights for vague descriptions, quickly understanding and addressing issues with confidence.

Accurate reporting with work orders

Work orders are invoices created by technicians which can vary in format and detail depending on whos filling it out. This AI tool will scan any invoice (including written) digitize it, and most importantly fill out any empty fields. VMRS codes are a prime example.



P2149 - Fuel Injector Group 'B'

Vehicle: **WF69KRG** Current Mileage: 87,238.0 miles

Major



Mark as Complete

Details

Description

Fuel Injector Group 'B' Supply Voltage Circuit/Open

[Learn more](#)

Explanation

The fault code P2149 indicates a Fuel Injector Group 'B' Supply Voltage Circuit/Open issue. This fault code is related to the fuel injector circuit in a specific group of injectors. Possible vehicle components related to this code could include faulty wiring, a malfunctioning fuel injector, or a problem with the engine control module. To address this issue, you may need to inspect the fuel injector harness for any damage, check the fuel injector electrical connections for proper functioning, and test the fuel injector's resistance. Additionally, it is recommended to verify the signals from the engine control module to pinpoint the exact cause of the open circuit and address it accordingly.

Powered by ChatGPT

Suggested Action

This issue could potentially be problematic. Please communicate with the driver to inquire about the vehicle.

Pitstop Findings



Brand/Service	PM # Hours Last Service	INSPE DATE	LAST SERVICE UNIT	PM # Hours Last Service	PM # Hours Last Service	INSPE DATE
	18029	7-24	7-18-23	616-5	12211	4-5
83		6-24	10-2-23	617-4	12312	2
89		7-24	8-16-23	618-5	9121	2
95T		5-24	9-30-23	619-6	11344	15
67		7-24	10-2-23	620-3	10547	15
394		4-24	5-5-23	621-5	10355	15
480		12-23	7-10-23	622-8	12312	14
15989		7-24	9-21-23	623-1	10759	14
18182		7-24	8-10-23	624-1	10945	8
17446		7-24	7-10-23	625-1	11186	4
171		4-24	8-7-23	626-2	10192	5
121		4-24	8-12-23	627-4	11425	4
17725		4-24	7-10-23	628-8	10305	5
115		2-24	8-11-23	629-8	10544	5
249		12-23	8-11-23	630-1	12333	4
208		1-24	7-11-23	631-4	10216	4
446		6-24	7-11-23	632-1	2468	4



Overloaded with Tasks

- Managing DVIRs
- Managing Shop Workload, Parts, Work Orders etc.
- Multitasking on Samsara, TMT, Teams, Telegram

Manual Data Entry

Workflows are on whiteboard/paper

- Managing PMs
- Inspection Checklist
- Sticky notes for DVIR Mechanics

Repair Process

Scan tool was only be plugged in when engine light was on. This was one of the main causes for repeated service visits.

How many of my vehicles are ready for use?

How many fault codes do I need to worry about?

Are we behind on our PM schedules?

Use Case #1

Have all Key Metrics in One Place

The dashboard displays the following key metrics:

- Vehicle Availability:** 91.49% (43 units) Running, 4.26% (2 units) Down, 4.26% (2 units) Repair in Progress.
- Fault Codes & Insights:** Critical: 4, Major: 26, Minor: 115.
- PMs (Preventive Maintenance):** 0 Overdue (100%+), 2 Due Soon (80-99%).
- DVIR (Driver Vehicle Inspection Report):** 46 Vehicles Safe, 0 Vehicles Unsafe, 0 Resolved.

The vehicle list below shows details for two assets:

Unit ID - Vehicles	Engine Light	Issues	Latest DVIR	Next PM	Status	Notes	Health Report
71.0111 714,008.9 miles 17,625.0 engine hours View Details			Safe Defects: 0 View DVIR	85% In 2699 miles Due soon	Running	Note vehicle condition, issues, driver feedback, or any details...	
71.0134 385,081.1 miles 14,171.0 engine			Safe Defects: 0	44% In 1161 miles		Note vehicle condition, issues, driver feedback, or any details...	

Is this asset safe to continue driving?

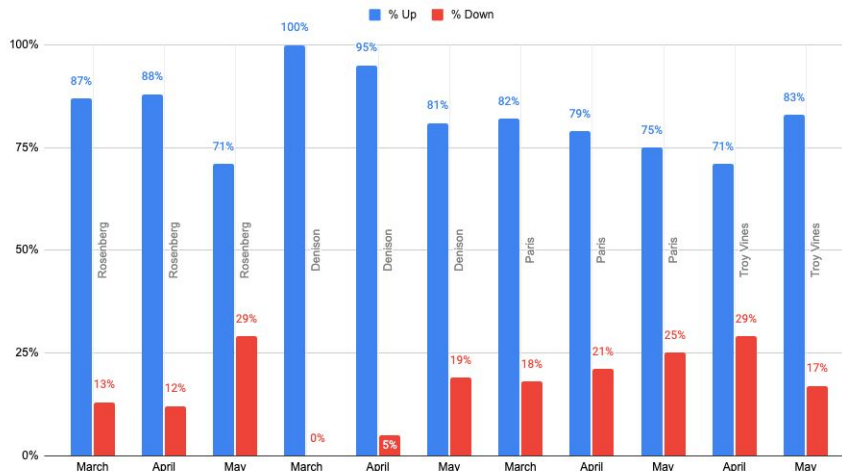
Is this asset being put in use right now?

Use Case #2

Vehicle Availability Reporting

Users can easily mark vehicles as running or out of service on Pitstop. The list of vehicles that are out of service can then be automatically sent to the dispatch team.

Vehicle Availability for March & April



Vehicle Availability - Paris

RK Hall | Jun 23 2024, 9:00 PM CDT - Jun 24 2024, 9:00 PM CDT

Device Name	Attribute: Vehicle Availability	Tags
70.0015	Up	Paris, Asphalt Plants
70.0030	Up	Paris, Earthwave
70.0031	Up	Paris, Earthwave
70.0032	Up	Paris, Earthwave
70.0033	Up	Paris, Earthwave
70.0034	Up	Paris, Earthwave
70.0041	Up	Paris, Earthwave
70.0042	Up	Paris, Earthwave
70.0043	Up	Paris, Earthwave
70.0044	Up	Paris, Earthwave
71.0102	Down	Paris, Earthwave

Use Case #3

A Hub Between
Samsara & TMT

Users can easily view DVIR/defects on Pitstop and create work orders directly from defects into TMT, eliminating manual effort. Once the mechanic closes the work order, it gets completed on Samsara via Pitstop.

DVIR (Click on Safe, Unsafe or Resolved below to filter by)



163 7 9

Vehicles Safe Vehicles Unsafe Resolved

Driver Vehicle Inspection Reports - Vehicle #38.2039

UNSAFE ▾

Inspection Type: Post-Trip

Created By: Jordan Curtis

Vehicle ID: 38.2039

Odometer: 186995450

Location: Rustin - ADA plant

Mechanic Notes: N/A

Vehicle Defects

Mark all as resolved (3) ⓘ

Create Work Order From Defects (3) ⓘ

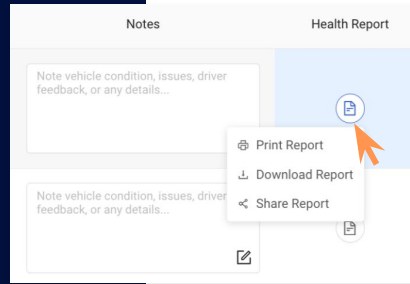
Create TMT Work Order From Defects (3) ⓘ

<input checked="" type="checkbox"/>	Defect	Added On ↕	Driver Notes	Mechanic Notes	
<input checked="" type="checkbox"/>	Windshield Clean, Intact	June 11th 2024 12:08 PM	Is cracked		Unresolved ▾
<input checked="" type="checkbox"/>	Other	June 11th 2024 12:08 PM	Needs chute		Unresolved ▾

Use Case #4

Make Shop Visits More Efficient

Shops are now leveraging Pitstop's vehicle health report when fixing vehicles. This has improved the quality of repairs and reduced the time needed to diagnose issues.



Vehicle Health Report

Report Date: Jun 26th 2024

Unit ID: 38.2547 VIN: 5KKMAVDV8HPJH3473 Odometer: 104586.71 miles

Asset: WESTERN STAR 4700 2017 Engine Hours: 14973.95 hours

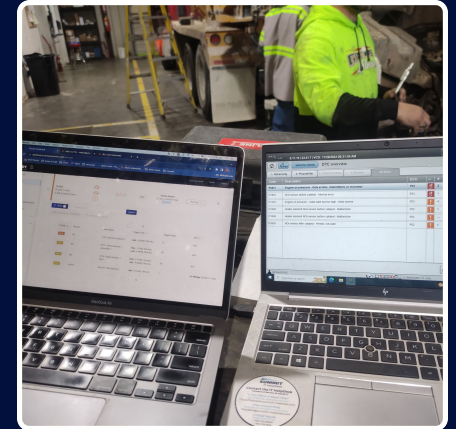
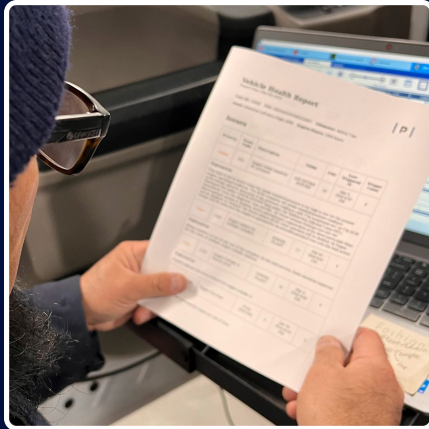
Issues

Priority	Fault Code	Description	VMRS	FMI	Last Triggered At	Trigger Count
Critical	5444	Engine crankcase breather oil separator speed	POWER PLANT	1	Jun 24, 2024 3:50 PM	230
Explanation Crankcase breather, also known as crankcase oil separator or crankcase ventilation, cleans the oil mist from the engine crankcase.						
Minor	5488	Aftertreatment 1 diesel exhaust fluid line heater 5 state	EXHAUST SYSTEM	4	Jun 24, 2024 3:49 PM	5

DVIR Defects

Status	Defects	Location	Type	Created By	Added On
Unsafe	Engine light on dash / Luz "Check Engine" en el tablero prendida	Plant 13 Moore Bar	Post-Trip	Tom Hernandez	Jun 21, 2024 9:50 AM
Driver Notes: Check engine light on					
Unsafe	Brake system - brakes, parking brake / Sistema de frenos - frenos, freno de estacionamiento	Plant 13 Moore Bar	Post-Trip	Tom Hernandez	Jun 21, 2024 9:50 AM
Driver Notes: Low air alarm not working					

User Feedback from Summit Materials



"Until you showed us the platform in person, I was not convinced but now my mechanics love the vehicle health reports"

Michael - Summit, Denison

"I like the Pitstop alerts better than the Samsara ones because the descriptions have more details. This helps me diagnose the problems efficiently."

Jeremy - Summit, Paris

"I want to have all important information in ONE PLACE. Its hard to go on Samsara, TMT, Teams etc. on a daily basis."

Manuel - Summit, Rosenberg