

# Connected solutions

SiteConnect

March 2023

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#### **Introduction to Connected Services**

#### SiteWatch for customer, SiteConnect for dealer







- Fleet monitoring & tracking
- Fleet security
- Productivity reports
- Fuel reports
- Alarms
- Engine data



# SiteConnect

Set of connected services available to dealer to support customer machines

#### eTim Service Portal

- Machine history report
- Interactive maintenance plan
- MyFleet Dashboard
- Proactive breakdown support



#### **Telematics Service Portal (TSP)**

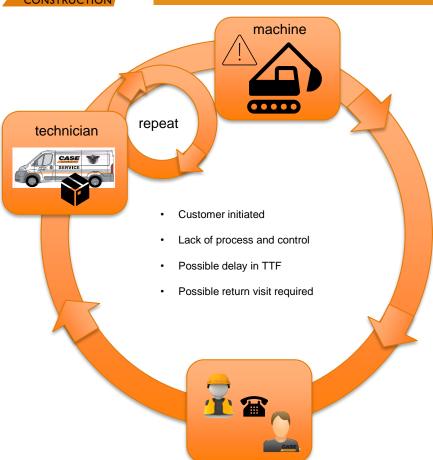
Portal to manage telematics activations







## **Shift from Reactive to Proactive Approach**







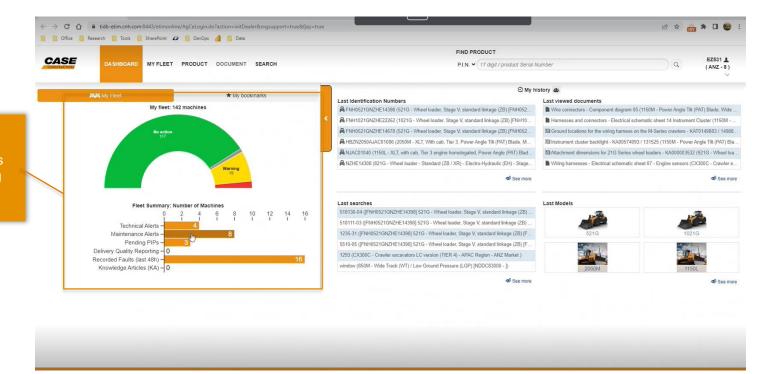
## Connected Services eTim





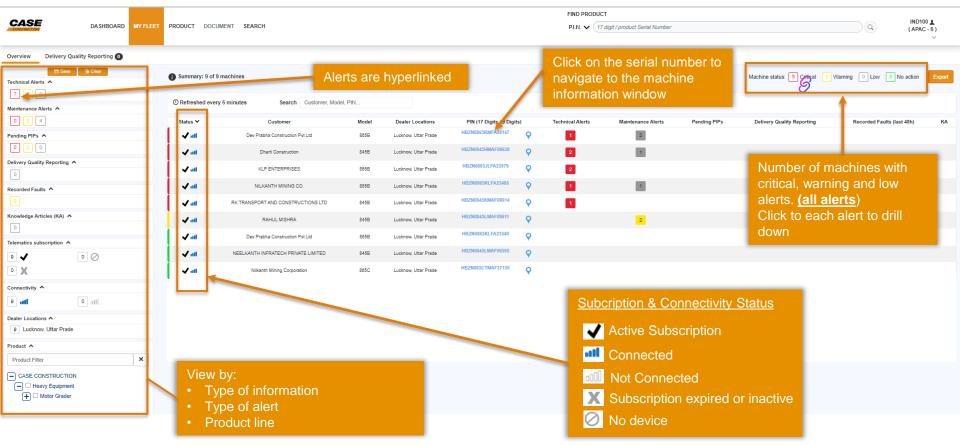
#### Dashboard

- Summary of the fleet status
- Navigate further by clicking on the screen



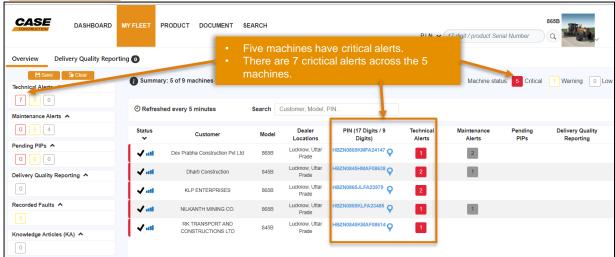


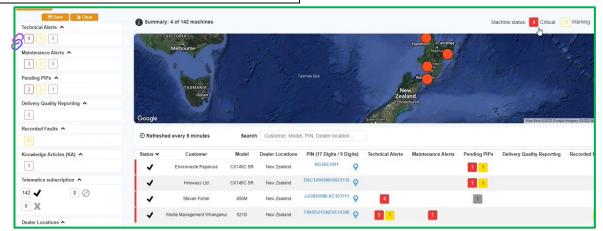
#### My Fleet





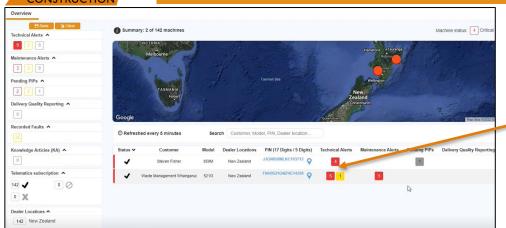
## My Fleet





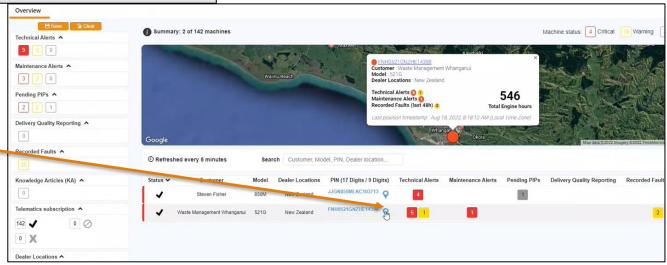


#### My Fleet – Technical Alert Drill Down



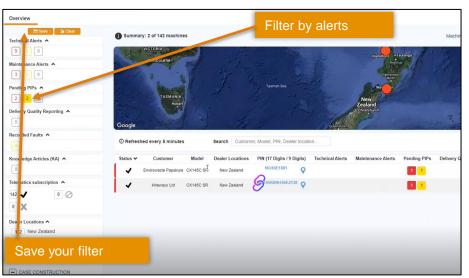
- 9 technical alerts caused by 2 machines
- One machine has 6 technical alerts, 2 faults recorded in last 48 hours and machine also overdue for maintenance
- Potential opportunity for one technician to combine both machines for service, & PIP
- Map allows to look at machines in the surrounding areas for alerts, mts, PIP's and proactively call the customer (with parts)

- Click on the 'zoom in' icon to get additional information like engine hours.
- In future will also provide warranty status, telematic subscription status





#### My Fleet -Search options









#### eTIM SmartView



DASHBOARD

MY FLEET PRODUCT

DOCUMENT

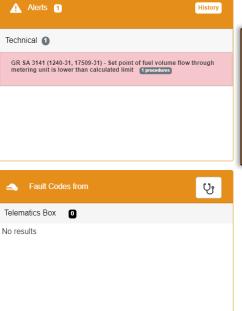
SEARCH



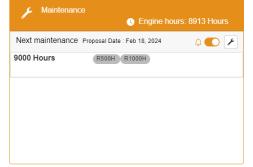
IND100 1 (APAC - 6)

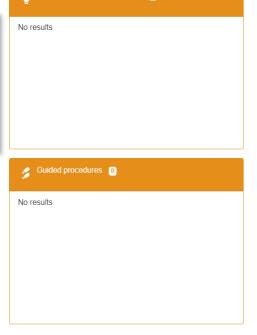
Heavy Equipment | Motor Grader | 800B | 865B - 865B Grader tork converter India market - HBZN0865KMFA24147











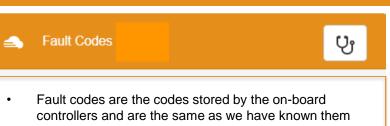
Highlighted Knowledge Articles



## SiteConnect SmartView - Difference between Technical Alerts & Fault Codes

#### ⚠ Alerts 1 History

- Technical alert is a key element of the connected data
- Fault codes are analysed by technical corner team and if they are going to affect machine behaviour and function, then a technical alert notification is pushed to dealers along with guided procedures. This is to ensure proactive intervention by dealer to fix the machine before it breaks down.
- For ex; turbo protection for cold start (8631.14) may get recorded several times as fault codes, however it will not generate a technical alert. No value to dealer/customer
- Multiple fault codes could be a result of one root cause in which case technical corner will push just one technical alert with guided procedure.
- Provides recommendation on how to get started with diagnosis. When clicked gives a brief description which is handwritten by technical experts.
- Links to the guided procedure for resolving the alert.
- Notification for receiving technical alerts by email can be enabled through eTIM



- historically.
- Not all fault codes will create a technical alert. Only critical fault codes that can affect machine functionality will generate a technical alert notification.
- Fault codes recorded in the last 48 hours appear under the 'My Fleet' alerts. Clicking on the stethoscope in the fault codes box will
- provide the fault code history for last 30 days.
- All alerts (fault codes, technical alerts, maintenance and PIP's are categorised as:

Severity: Critical Warning



## SiteConnect SmartView - Difference between Technical Alerts & Fault Codes



Product Improvement Programs 2



The basis for severity of an alert for PIP's are:

Grey: Targeted PIP.

Yellow: Next service PIP's.

Red: Mandatory/ Safety/ Regulatory PIP's.



- Maintenance interval is designated generally for every 500 hours, but can vary depending on model and whether its heavy or light equipment
- The basis for severity of an alert for maintenance is:

Grey: 100 hours before the threshold or 1 month prior to deadline

Yellow: 24 hours before that threshold to 24 hours passed that threshold or 3 days prior to deadline

Red: remaining time up to 100 hours after the threshold or +3 days past deadline.



#### eTIM SmartView



DASHBOARD

MY FLEET PRODUCT



SEARCH



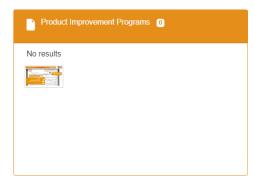
IND100 1 ( APAC - 6 )

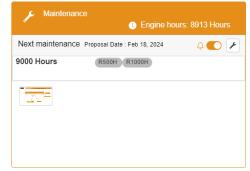
Heavy Equipment | Motor Grader | 800B | 865B - 865B Grader tork converter India market - HBZN0865KMFA24147







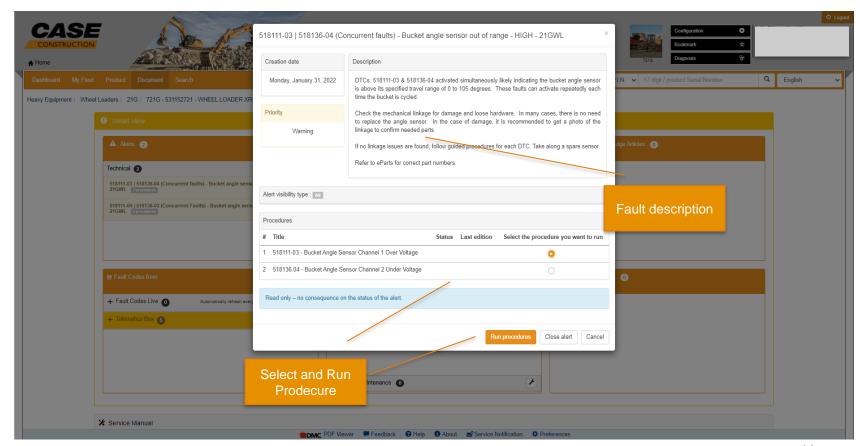




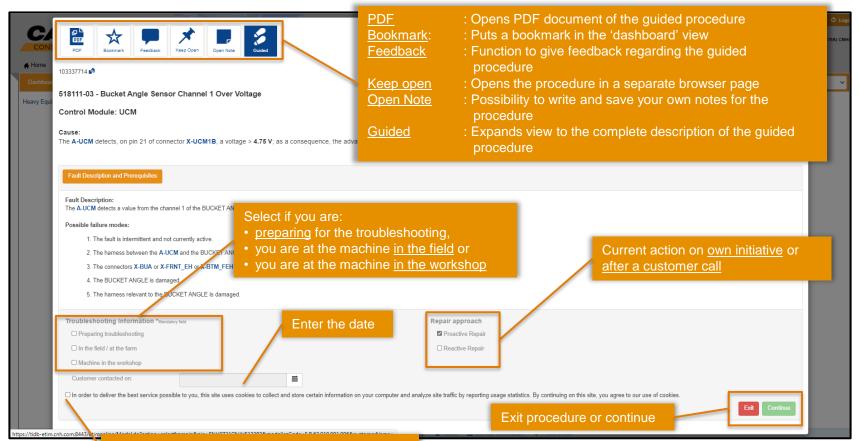




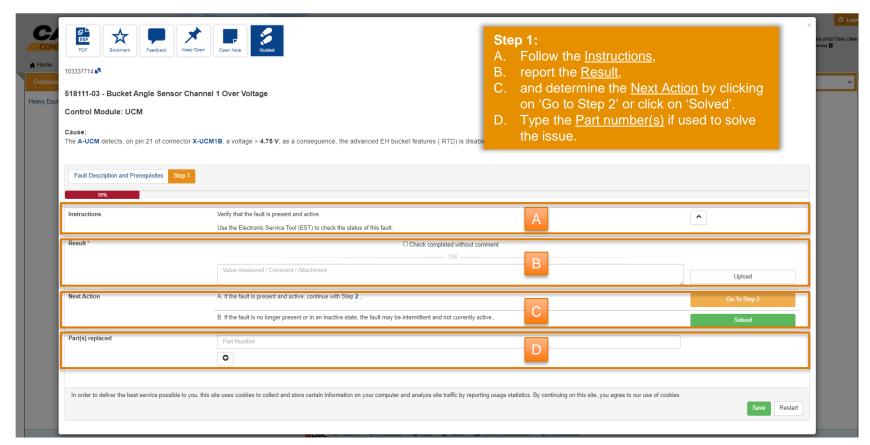








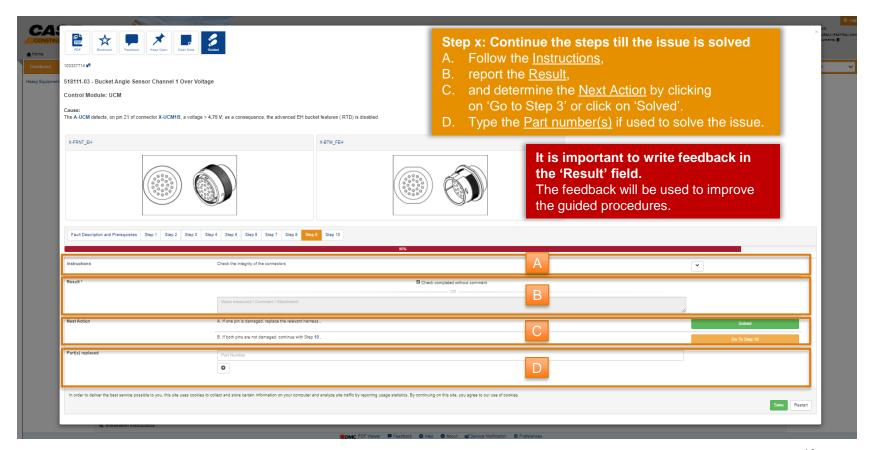






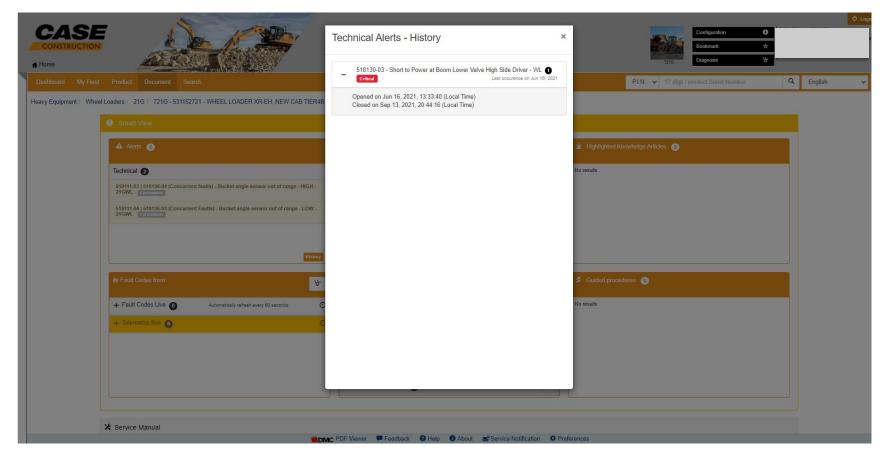






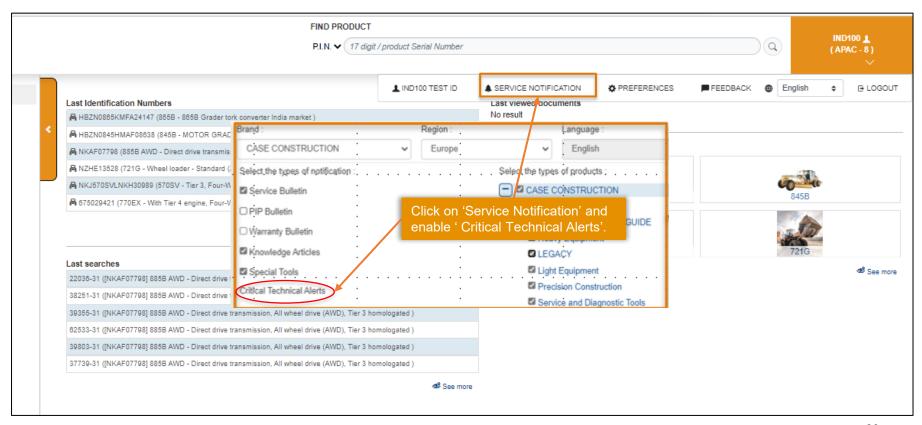


## eTim - Smartview - Technical alerts history

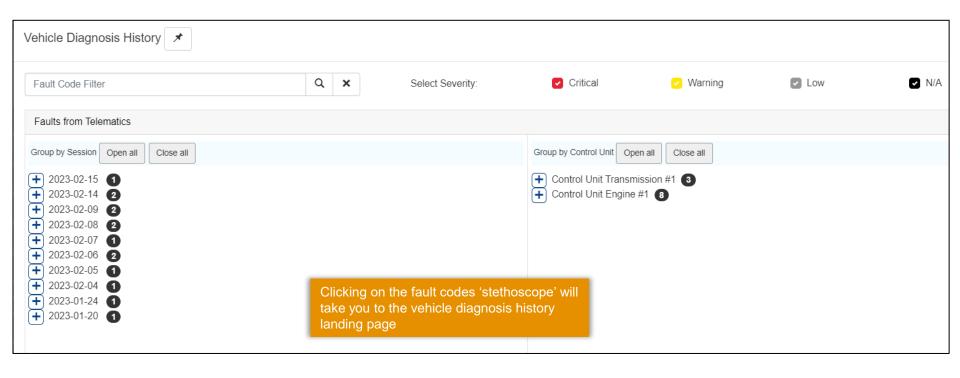




#### eTim - Enabling Technical alerts notification

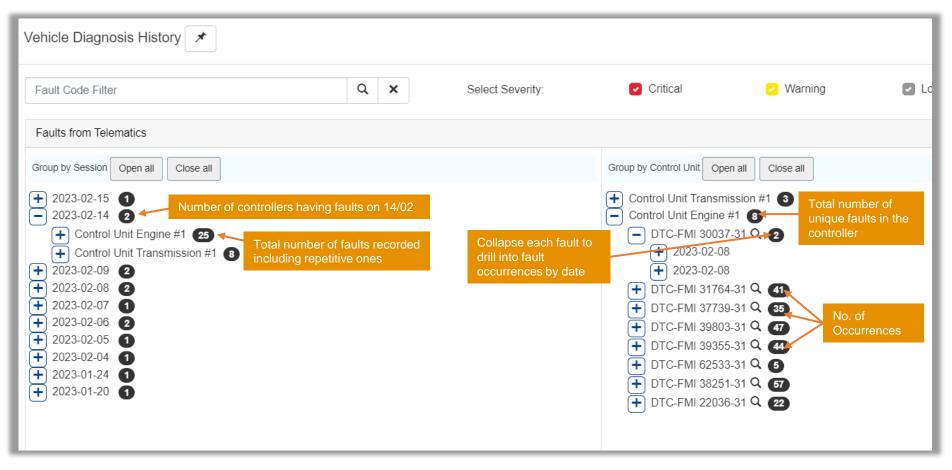




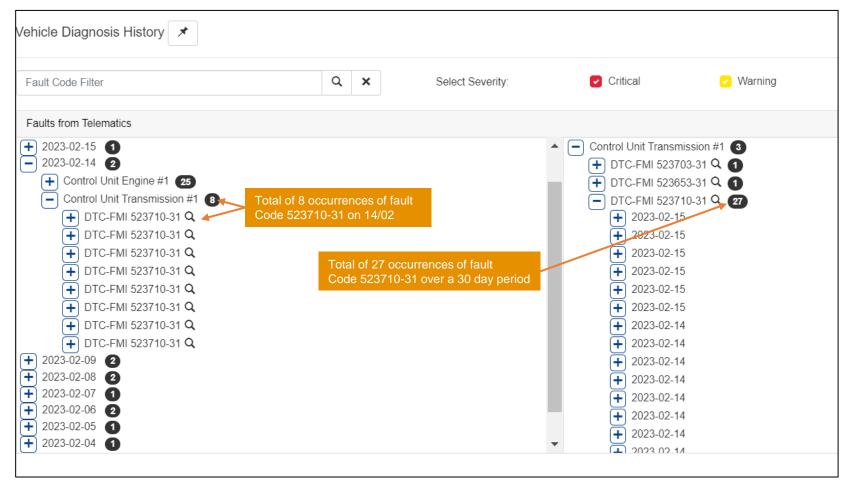




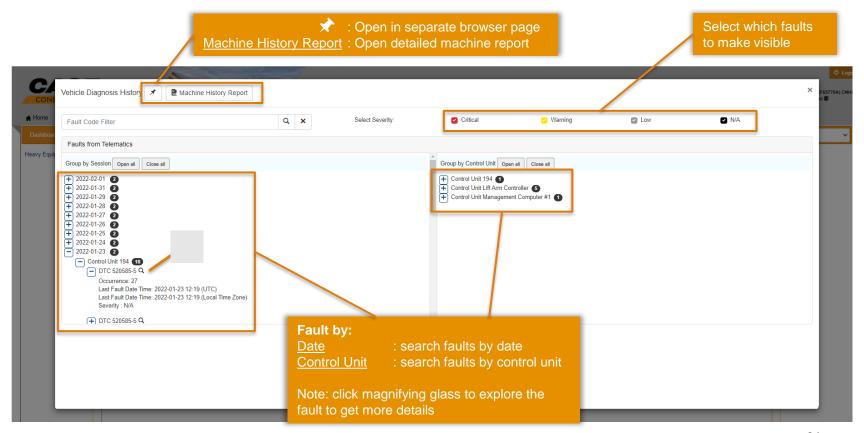
#### eTIM Fault Codes



#### eTIM Fault Codes

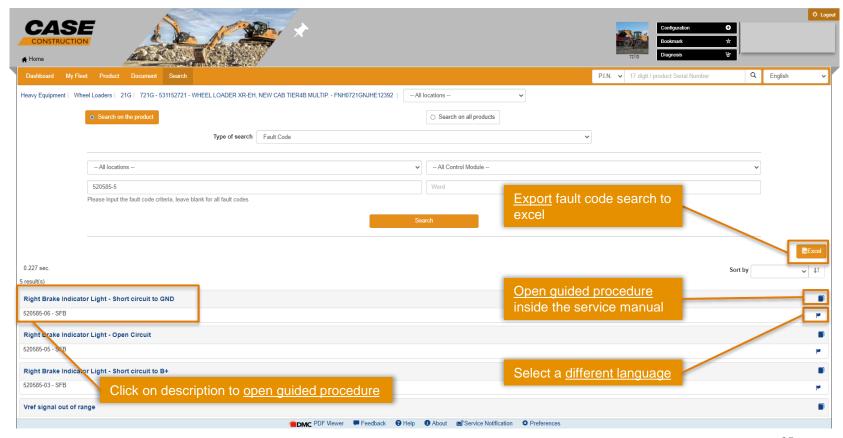


#### eTim - Fault Codes: Filter & Search



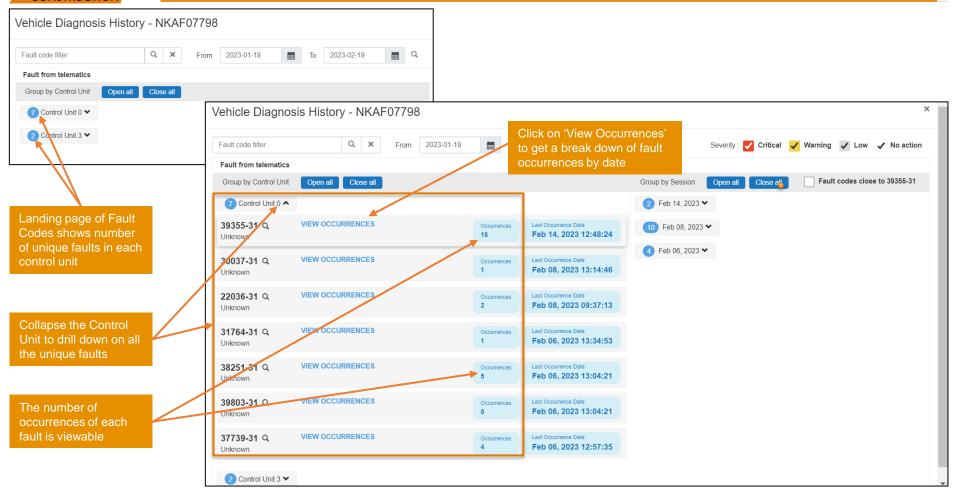


#### eTim - Explore fault code



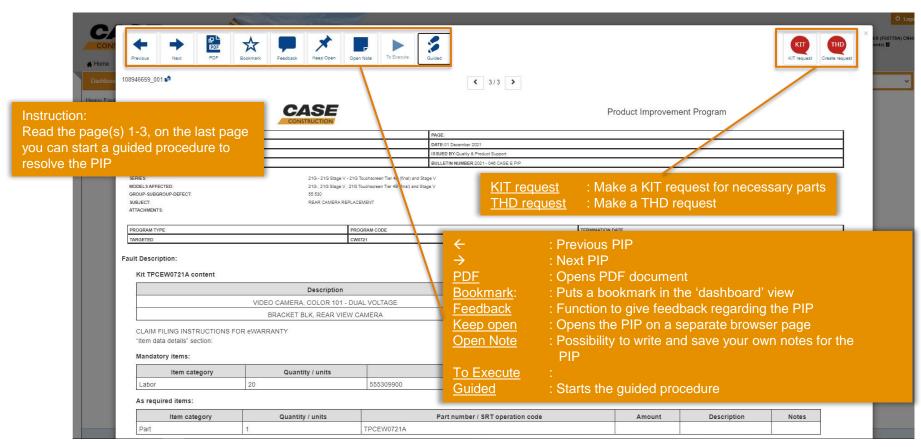


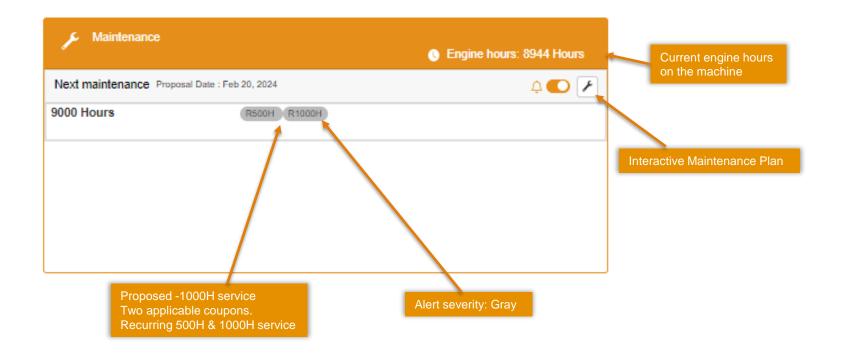
#### eTIM Fault Codes – Future Look



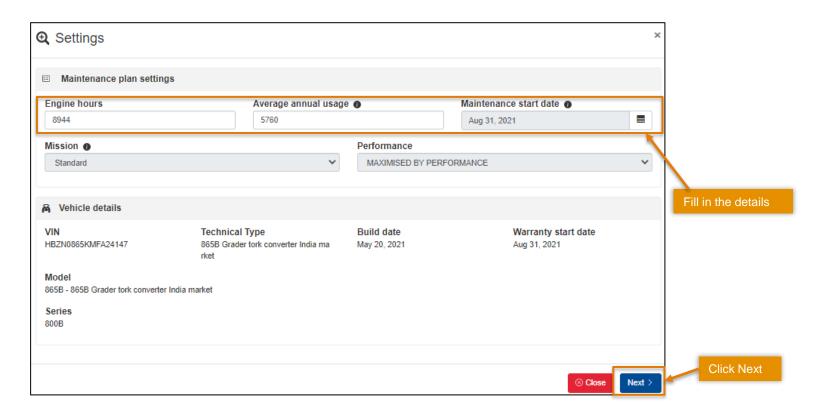


#### eTim - Smartview - PIP



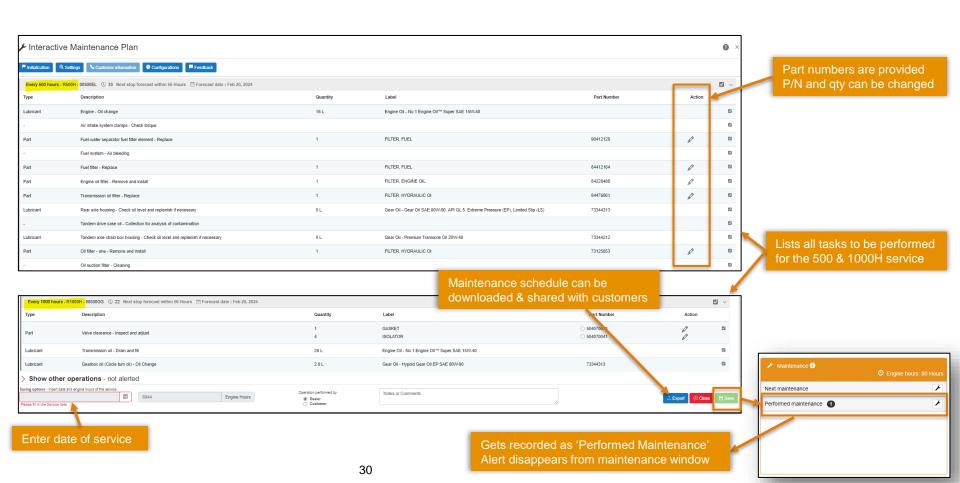








#### eTim - Interactive Maintenance Plan



#### eTim - Smartview - Maintenance

PDF document : Service interval

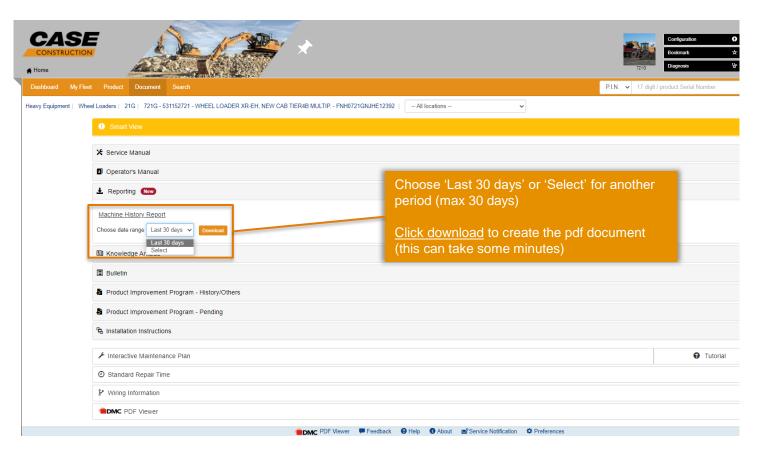
#### R500H - 00500EL01 - Every 500 hours 33 Work Unit

Selection	Type	Description	Label	Part Number	Quantity	ок
x	Lubricant	Engine - Oil change	Engine Oil - No.1 Engine Oil™ Super SAE 15W-40		16 L	
х	-	Air intake system clamps - Check torque				
х	Part	Fuel-water separator fuel filter element - Replace	FILTER, FUEL	90412128	1	_
x	-	Fuel system - Air bleeding			1	+
x	Part	Fuel filter - Replace	FILTER, FUEL	84412164	1	1
x	Part	Engine oil filter - Remove and install	FILTER, ENGINE OIL	84228488	1	_
x	Part	Transmission oil filter - Replace	FILTER, HYDRAULIC OI	84476801	1	$^{\dagger}$
x	Lubricant	Rear axle housing - Check oil level and replenish if necessary	Gear Oil - Gear Oil SAE 80W-90, API GL 5, Extreme Pressure (EP), Limited Slip (LS)	73344313	0 L	
х	-	Tandem drive case oil - Collection for analysis of contamination				T
x	Lubricant	Tandem axle chain box housing - Check oil level and replenish if necessary	Gear Oil - Premium Transaxle Oil 20W- 40	73344212	0 L	

	Signature
IND100	
Date: 02/20/2023, 14:56:48	



#### eTim – Smartview – Machine History Report





#### eTim - Machine History Report

Indicators for quick overview

Overview of:

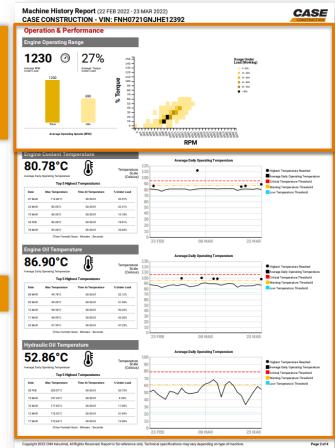
- Ratio between idle/working
- Fuel usage

Machine History Report (22 FEB 2022 - 23 MAR 2022) CASE CASE CONSTRUCTION - VIN: FNH0721GNJHE12392 Model: 721G 8082.70 <sup>(1)</sup> 39% 32% 🍰 Type : Heavy Equipment Last Telemetry Update: 23 MAR 2022 Subscription Activation: 04 NOV 2021 Subscription Expiration : 04 NOV 2023 Purchase Date: 30 JUN 2018 Base Warrenty Start: 08 JAN 2019 Base Warrenty Expiration: 07 JAN 2020 STATUS SUMMARY: 11 Faults (last 48h) 3 Technical Alerts 5 PIP Alerts Utilization 6.65 7.24 4.75 4.71 4.80 6.85 4.86 5.88 6.98 6.28 Daily Fuel Burned & Rate Per Hour Total Fuel Burned (Liters) Total Average Fuel Rate / Hour (Liters) Off

Average load while working.

Note: a high % means the engine is working in average closer to the machine's maximum capacity

Graph of important temperatures





## eTim - Machine History Report

Machine History Report (22 FEB 2022 - 23 MAR 2022)

Graph of important temperatures

Overview of:

- PIPs
- Technical alerts



CASE CONSTRUCTION - VIN: FNH0721GNJHE12392 Comments Page 4 of 4 Copyright 2022 CNH Industrial, All Rights Reserved. Report is for reference only. Technical specifications may vary depending on type of machine.

CASE



# End

# Backup



October 25th, 2013 Footer 36



### **SiteWatch vs SiteConnect**

#### Differences



Tracks machine USAGE to maximize MACHINE EFFICIENCY

- Productivity tracking
- Operational and efficiency reports
- Security functions / Alarms
- Fleet monitoring & location tracking
- Payload report (WL)
- Tyre pressure monitoring system (WL)





eTim

Set of **connected services** allowing the **dealer** to monitor machines and promptly **take necessary actions** 

Lower machine TCO and maximise the UPTIME

A dashboard enables the dealer to monitor all machines and is able to notice machine health threats. It allows the dealer to be proactive.

A guided procedure helps the dealer to resolve failures by predefined steps to fix problems. Shorter time to fix.

An interactive maintenance plan alerts the dealer for a next service. Opportunity to sell parts, and/or plan a timely service interval. Increases uptime.

A vehicle history report supports the dealer with information about the machine usage. It helps to understand failures. Can be used to advise a customer about the machine usage.

Perform remote analysis when machine has a P&CM modem. The technician can arrive more prepared to a machine. Shorter machine down time, increase of 'first time fix' rate.

Helps to reduce Total Cost of Ownership for a customer.

Lower TCO = a happy customer

= more machines sales

= more parts sales

= more customers

