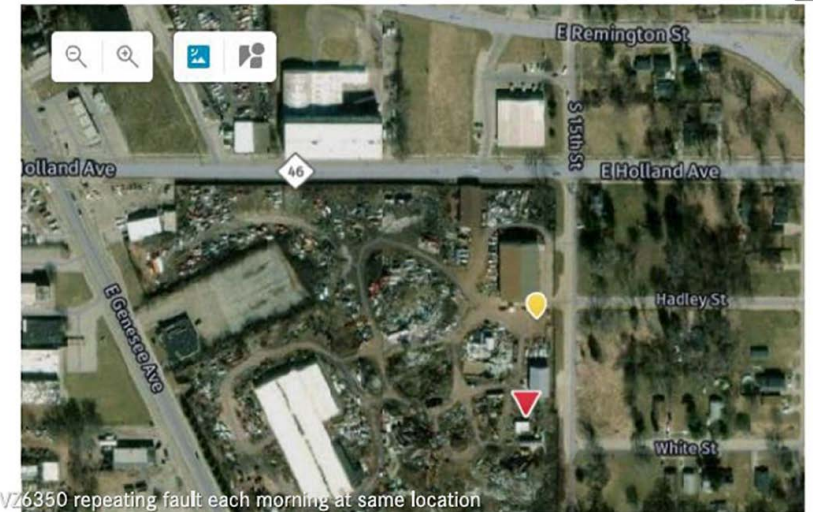


TCM Fault 520970/7 – Clutch Unable to Open Fully



Issue Description	Nuisance occurrences of TCM fault 520970/7 Clutch Unable to Open Fully
Production Resolution	<p>Potentially related to startup sequence, air leaks → low air pressure during clutch/CPCA startup activation sequence</p> <p>MY2026 TCM software (R25.1) increases threshold from 5.0 bar (72.5 psi) to 5.5 bar (80 psi) for startup sequence</p>
Field Action	<p>TBD. DDC Engineering access to customer vehicles to validate MY26 TCM software</p> <ul style="list-style-type: none"> Fleet vehicle was brought to DDC for investigation – found leaking check valve on DT 12 aux air tank (adding checks to troubleshooting) <p>Currently monitoring:</p> <ul style="list-style-type: none"> 1 instance of 520970/7 was set on Nov 10 Requesting DiagnosticLink log file to be sent for review of fault data (Koch)
Identification	TCM software R23.1 shows to be more sensitive due to high clutch opening at startup
Reference Documentation	TechLit troubleshooting should be followed for fault
Additional Information	



VZ6350 repeating fault each morning at same location

Date	Time	Code	Message
11/10/2025	08:00:00	520970/7	Clutch assembly: abnormal at startup
11/10/2025	08:00:00	520970/7	Clutch assembly: abnormal at startup
11/10/2025	08:00:00	520970/7	Clutch assembly: abnormal at startup
11/10/2025	08:00:00	520970/7	Clutch assembly: abnormal at startup
11/10/2025	08:00:00	520970/7	Clutch assembly: abnormal at startup
11/10/2025	08:00:00	520970/7	Clutch assembly: abnormal at startup
11/10/2025	08:00:00	520970/7	Clutch assembly: abnormal at startup
11/10/2025	08:00:00	520970/7	Clutch assembly: abnormal at startup
11/10/2025	08:00:00	520970/7	Clutch assembly: abnormal at startup
11/10/2025	08:00:00	520970/7	Clutch assembly: abnormal at startup

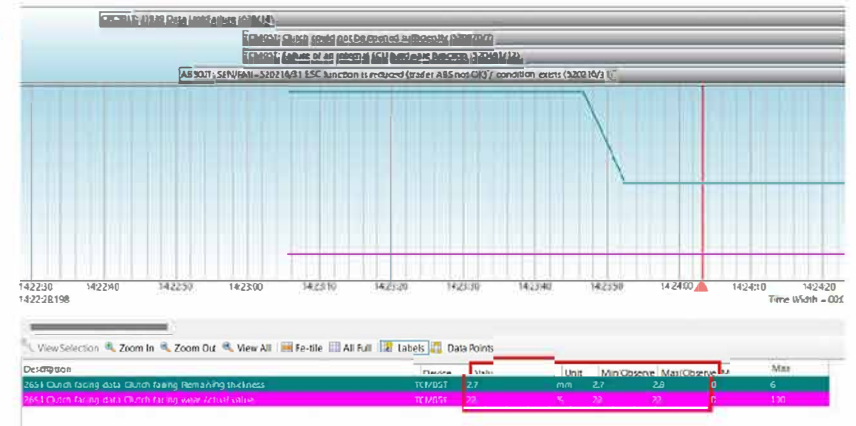
Fault history prior to update

TCM05 Clutch Wear Data

Feature AMTcc/TCM05 released in 2023 brings clutch wear data available in DL8

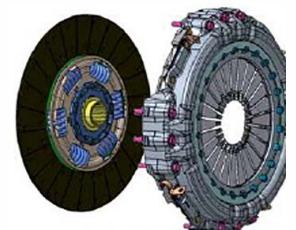
Description TCM05/non-self adjusting single plate clutch records values of clutch wear/friction facing thickness

- Can currently be viewed in DiagnosticLink
- DTNA needs to do some server work to parse DL8 summary log files to extract data for maintenance/analytics use
- Encourage conversation re: Maintenance System future improvements



DiagnosticLink view of wear values

DL8 Clutch Wear Data	TCM051	TCM052
TCM051: Clutch Facing Rema (W/Wh thickness)	2.7	2.7
TCM052: Clutch Facing Wear (W/Wh value)	30	30



DL8 Identification

DT12 single plate clutch