



Subject: Mechatronic Transmission Module (MTM) Update – Endurant HD and PACCAR TX-12

Document Number: TAIB-1001

Date: July 1, 2022

Updated: February 19, 2024

Issue Description/Change:

An updated MTM is to be released to production and service. Changes include updated solenoids, internal harness, and the addition of an oil temperature sensor. Additionally, remanufactured MTMs were released to be used with warranty claims associated to PS-393 MTM Type repairs.

Transmission Model	Original MTM Part Number	Original Service Kit Number	New MTM Part Number	New Service Kit Number
Endurant HD	A-10000715	K-4355 (obsolete) K-4355R (obsolete)	A-10004231	K-4614R ¹
	A-10004202	NA	NA	
Endurant HD (Warranty) ²	-	-	A-10000715 (R) ² wo/LCA	K-4355W ²
Endurant HD (PACCAR)	A-10000715	K-4355-PAC (obsolete) K-4355R-PAC (obsolete)	A-10004231	K-4614R-PAC ¹ (E74-1022R)
Endurant HD (PACCAR) (Warranty) ²	-	-	A-10000715 (R) ² wo/LCA	K-4355W-PAC ²
PACCAR TX-12	A-10002594	K-4356-PAC (obsolete) K-4356R-PAC (obsolete)	A-10004383	K-4615R-PAC ¹ (E74-1023R)
PACCAR TX-12 (Warranty) ²	-	-	A-10002594 (R) ² wo/LCA	K-4356W-PAC ²

¹Kit contains a new component until further notice.

²Kit to be used with warranty claims associated to PS-393 MTM Type repairs, does not include LCA.

MTM Part Number	MTM Type
A-10000715	PS-393
A-10002594	
A-10004202	
A-10004231	PS-496
A-10004383	

Affected Models/Population:

- Endurant HD:
 - Navistar, Volvo, DTNA – SOP November 2022
 - Kenworth, Peterbilt – SOP January 2023
- PACCAR TX-12 – SOP January 2023

Field Service Strategy:

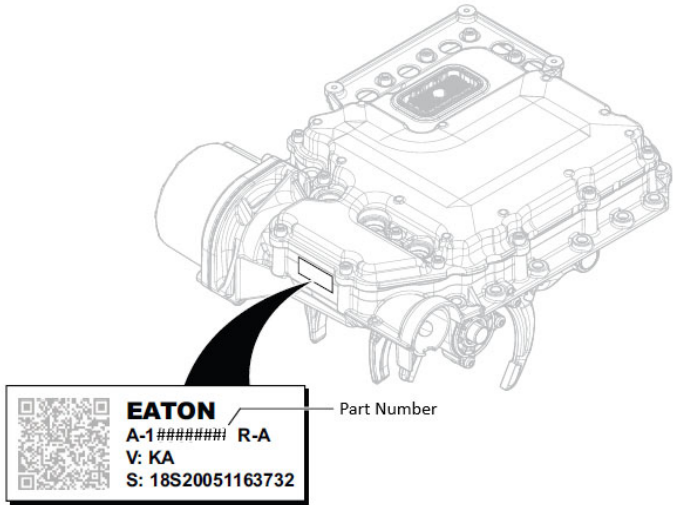
- Transmission Control Module (TCM) Software:
 - Endurant HD
 - TCM software 5516042 or greater is required
 - Navistar, Volvo, DTNA – SOP Q3 2022
 - Kenworth, Peterbilt – SOP Q4 2022
 - PACCAR TX-12
 - TCM software 5516045 (2399316) or greater is required
 - Note:** DAVIE4 Toolset Version – 6.10.81 and Content Version – 23.05 is required to update software and change MTM Type.
 - Configuration parameter added to TCM software – MTM Type with the following settings:
 - PS-393 (Original)
 - PS-496 (New)
 - When TCM software is updated to 5516042 or greater on original equipment units the MTM Type is set to PS-393.
- Service Manual (TRSM0950):
 - If an original equipment MTM (PS-393) is replaced with an updated MTM (PS-496), the MTM Type configuration must be changed in the TCM with ServiceRanger.
 - Updated [MTM Service Procedure](#) (Configure MTM Type) includes recording MTM part number, identifying MTM Type, updating software (if necessary) and configuring MTM Type in TCM.
 - Special Instructions section, at the beginning of the procedure, includes a **NOTICE** for EHD-xxF112C-N transmission models with TCM Software 5516034 to contact Eaton Cummins Automated Transmission Technologies at +1-800-826-4357 for further diagnostic instructions.

- Troubleshooting Guide (TRTS0950):
 - Updated solenoid and position sensor fault isolation procedures with the following information:
 - Updated 74-Way connector pin locations
 - Updated solenoid resistance values
 - Added Fault Code 212 SPN 177 Transmission Oil Temperature.
 - Electrical FMIs only
 - DM53 (Service tool only)
 - No degraded mode
 - Updated the following fault codes to support troubleshooting of a mis-configured MTM Type in the TCM:

Fault Code	SPN	FMI	Fault Code Description
200	629	14	TCM Operation 1
275	4219	5	Rail B Position
295	4220	8	Rail C Position
315	5941	8	Rail D Position
320	5942	8	Rail E Position
596	5901	5	Rail B Fore Solenoid (A5)

- Procedures include instructions on how to identify MTM Type using MTM part number installed on transmission:

MTM Part Number	MTM Type
A-10000715	PS-393
A-10002594	
A-10004202	
A-10004231	PS-496
A-10004383	



MTM Type Configuration in ServiceRanger:

- 1. Key on
- 2. Connect ServiceRanger
- 3. Go To “Configuration”
- 4. Select “Advanced”

