

Mack / Volvo Surveillance Panel Meeting

December 19, 2022

David Brass (chair)

Agenda

- Mack T-11 Parts and Referencing Needs
- Volvo T-13 New Engine Block Introduction
 - Volvo T-13 Reference Oil Coordinated Reference

Mack T-11 Parts and Referencing Needs

Mack T-11/T-12 Hardware

Current Parts Batches

	Mack T-11	Remaining Quantity	Remaining Kits	Mack T-12
Top Ring	W	102	18	X
2 nd Ring	W	6	1	X (limiting part)
Oil Ring	W	342	57	X
Piston Crown	E (limiting part)	3	0	FsubE
Rod Bearing	Y	132	22	Y
Main Bearing	P	37	37	P
Liner	W	2186	364	W
Skirt	B	1992	332	B
Kits left at TEI As of Nov 30th	0			16

- Mack T-11 current parts batch has run out at TEI
- Prefer not to use up current Mack T-12 kits in Mack T-11 as these are needed to reach next Mack T-12 reference cycle
- Do the labs have Mack T-11 kits in inventory?

Mack T-11/T-12 Hardware

- Surveillance Panel agreed to a coordinated reference on the new batch of parts on next reference cycle **in Q2-Q3 2023** for Mack T-12. As there are no longer Mack T-11 parts available at TEI we might not be able to wait until then to qualify parts.

Future Parts Batch (excluding parts in current kits)

	Mack T-11/T-12	Parts Available for this kit combination (before Rejects)	Projected Good Parts	Projected Available Kits
Top Ring	Y	2120	2120?	353
2 nd Ring	Y	2000	1860	310
Oil Ring	Y	2000	1920	320
Piston Crown	F (subgroup TBD)	1862 (sub A excluded)	1824	304 (limiting part)
Rod Bearing	Z	2000	1900	316
Main Bearing	Q	450 kits	360 kits	360
Liner	W	2090	1881	313
Skirt	B	1992	1892	315

- The piston crown batch needs to still be confirmed. Currently only the FsubE crowns have been cleared for testing based on Oil Consumption testing. Testing of other subgroups is still needed.

Mack T-11 Reference Status

Stand status based on LTMS:

	Lab A	Lab B	Lab G
Referenced	Stand 7 Referenced on 11/11/22 Stand 15 Referenced on 7/22/22	Stand 3 Referenced on 8/29/22	Stand 2 Referenced on 10/2/22
Not Referenced			Stand 3 Expired on 5/27/22

Motion (Passed by Surveillance Panel Vote)

- If Mack T-11 parts (WWWEYPWB) run out before Mack T-12 coordinated reference, recommend using new batch (YYFZQWB) where FsubE piston crowns are used until we can confirm Oil Consumption performance of rest of Piston Crown subgroups. This new batch of parts should be referenced by each lab introducing it, followed by a meeting of the SP to confirm performance of the parts. TMC shall adjust the reference periods in order to have no net gain or loss of reference period time.

Volvo T-13 New Engine Blocks

Volvo T-13 Reference Status

Reference Oil Quantities:

- TMC 823 is almost out (1 drum at TMC, ~1 drum at each lab)
- TMC 823-1 (29 drums received by TMC)
 - **Active labs to begin a reference on 823-1 by the beginning of April 2023 (accepted motion from 10/6/22 Meeting)**

Stand status based on LTMS:

	Lab A	Lab B	Lab D	Lab G
Referenced	Stand 2 Referenced (expires 4/23/23)		Stand 2 Referenced (expires 3/13/23)	Stand 2 referenced (expires 5/3/23)
	Stand 6 Referenced (expires 8/5/23)			Stand 3 Referenced (expires 8/16/23)
Not Referenced	Stand 4 (expired 8/31/22)	1 stand unreferenced (expired 9/4/22)	Stand 1 (expired 5/30/22)	Stand 1 (expired 9/7/22)

Introduction on New Volvo T-13 Engine Blocks

- Lab B has inquired about the introduction of the new engine blocks
- Lab B stand is currently not referenced
- We are about to go through a reference oil change. It would be beneficial to see the performance of TMC 823 with the new engine block before the transition to TMC 823-1.
- How will this reference on TMC 823 affect Lab B participation in the coordinated reference of TMC 823-1?

- **Lab B has decided to reference on old engine block with TMC 823.**
- **Lab B will participate in the coordinated reference of 823-1 to start before April 2023.**