



Volvo/Mack CPD Report

T8/T11/T12/T13

Volvo/Mack CPD Report Contents

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T-11/T-12 New Parts Batches

- TEI has received all of the new liners, top rings, and skirts to last until the end of the test (Estimated 2026).
- 1,036 of the 2,750 batch F crowns are in stock. Will receive the rest in mid to late June.
- 815 new 2nd and oil rings are in stock (Batch X).



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Plan for Upcoming Batches

- The new 2nd and oil rings will last until the current batch top rings, rod bearings and main bearings run out.
- We will then switch to the final batches of all parts.
- We are still not able to get rod and main bearings made in batches. PNB parts are available. (Might change)



Volvo/Mack Batch E Crowns

- There are 135 (22 kits) batch “E” crowns remaining.
- Use the rest or go to the new batch now?
- If we decide to not use the remaining “E” crowns, the quantities will be thrown off relative to other batched parts.



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T-8/T-11/T-12 New Parts Batches

Round One of New Batches (Now)

Part Name	Old Batch	New Batch
Liner	V	W
Second Ring	W	X
Oil Ring	W	X
Top Ring		X
Rod Bearing		P
Main Bearing		Y
Piston Crown		E
Piston Skirt		B

*Assuming we use the rest of the "E" Crowns



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T-8/T-11/T-12 New Parts Batches

Round Two of New Batches - ~ 110 Kits (2-3 years) From Now

Part Name	Old Batch	New Batch
Liner	W	
Second Ring	X	Y/PNB
Oil Ring	X	Y/PNB
Top Ring	X	Y
Rod Bearing	P	PNB
Main Bearing	Y	PNB
Piston Crown	F	
Piston Skirt	B	



Volvo/Mack Kit Parts Inventory

Volvo/Mack Critical Parts Inventory										
Part Description	Test Type	Part Number	Batch/Date	Qty/Kit	In Stock	Lifetime Supply?	Reject Percentage	Projected Good Parts	Projected Kits	Years Remaining (Past 12 Months)
Cylinder Liner	T8, T11, T12	509GC471	W	6	2980	YES	3%	2891	482	9.8
			V	6	0		-	-	-	-
Piston Crown	T11, T12	240GC5125M	E	6	135	YES	2%	132	22	9.6
			F	6	2750		2%	2695	449	
Piston Assembly (crown and skirt)	T8	215SB232A	N/A	6	18	----	----	----	----	----
Piston Skirt	T-12	240GC590 BM	B	6	2964	YES	5%	2816	469	9.6
Top Ring	T8,T11,T12	25501524	Y	6	2150	YES	5%	2043	340	6.9
			X	6	813		5%	772	129	2.6
2nd Ring	T8, T11, T12	349GC3108	W	6	153	NO	5%	145	-	-
			X	6	815		5%	774	129	2.6
Oil Ring	T8, T11, T12	350GC343	W	6	153	NO	5%	145	-	-
			X	6	815		5%	774	129	2.6
Connecting Rod Bearing (sets)	T11, T12	20705743	Y	6	846	NO	20%	677	113	2.3
Main Bearing	T11, T12	25503508	P	1	144	NO	10%	130	130	2.6
Liner	T13		B	6	456	21334768	3%	442	74	0.9



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T-11/T-12 2nd and Oil Rings

- 815 ring sets were bought from the Volvo/Mack PDC's with the same date code (Batch X).

2nd Ring Comparison

Batch	Total Width - (inch)	Lap Width - (inch)	Face Taper - °	Gap (in)
X (New)	0.0897	0.0106	2.2304	0.0184
W (Old)	0.0894	0.0108	1.6700	0.0185

Oil Ring Comparison

Batch	Total Width - (inch)	Top Rail Width - (inch)	Bottom Rail Width - (inch)	Gap Between Rails - (inch)	Peak Difference - (Micro-inch)	Gap (in)
X (New)	0.1333	0.0144	0.0144	0.1044	1.4523	0.0169
W (Old)	0.1322	0.0134	0.0134	0.1054	1.1879	0.0163



Volvo/Mack T-11/T-12 Liners

- TEI has received all of the batch “W” liners that were ordered.
- The surface finish measurements are comparable to Batch “V”.

	T-12 Liners - Batch V vs W						
	Average of Ra	Average of Rk	Average of MR1	Average of MR2	Average of Rpk	Average of Rvk	Average of VO
Batch V	17.1	46.7	7.5	84.0	17.0	38.8	0.0107
Batch W	16.4	41.7	6.5	81.9	12.2	40.1	0.0092



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T-11/T-12 Covert Connecting Rods

- TEI is currently out of T-11/T-12 Covert rods.
- Estimated ship date on the new rods is June 16th.



Volvo/Mack Other Updates

- No T-8 news.
- Approximately one year's worth of batch "B" liners are left.



Volvo/Mack Miscellaneous Parts Inventory

Miscellaneous Parts Inventory

Test Type	Part Description	Part Number	In Stock
T8	Injection Pump "calibrated"	313GC5212P16X	0
	Injector Nozzle	736GB343P2X	22
T11	EGR Cooler	19GBX52	18
	Injection Nozzle	736GB411M2	24
	Modine Intercooler	5424-03928031	1
	Turbo Small	631GC5145M3 316686-S400	9
T12	EGR Cooler	28GB519	0
	Injection Nozzle	736GB419M3	23
	Modine Intercooler	5424-1A166566D	2
	Turbo Small	631GC5176CM7	9
T11 and T12	Camshaft Kit	57GC2209A	0
	Cylinder Head - Low Swirl	732GB3499M	2
	Electronic Actuator	9MS42	1
	Engine - Bare Block	239GB5551M	0
	Engine - Basic Engine	86SB3536N	1
	Exhaust Manifold Assembly (front and rear)	M10104GC5164M	3
	Fuel Injector Line	HL69-151	16
	Fuel Injector Line	HL69-152	12
	Full Flow Oil Filter	485GB3236	0
	High Temperature Hose	3101632M	238
	Intake Manifold Assembly	M10105GCX4332/5212	1
	Lifter Assembly	72GC373A	0
	Machine Elbow	454GC5236	20
	Oil Cooler End Caps	TEI-T12OCEC	1
	Oil Filter Housing	27GB528M2	0
	Oil Pump Assembly - Low Flow - 9-tooth internal gears	315GC465BM	6
	Connecting Rod	367GC4243M2	0
	Covert Connecting Rods	20706148N	864
	Short EGR Exhaust Probe	TEGR0005	3
	Turbo Gasket	TEIEX201064AM	48
Turbo Large	3801847R	1	
Venturi	762GBX433SS		



Questions ?

