

Approved by (department acronym, name) KED Stephan Pettersson Issued by (department acronym name phone) KED Mikael Östlund 82203 Document type INSTRUCTION Title MTBF & MTBO Marine IFN File name KE-16-0057_MTBF_MTBO_Marine_IFN Date Info class 2016-05-19 Internal Issue Page 2 1(2)

To (department acronym name)

For information (department acronym name)

MTBF & MTBO

Applies only if the following requirements are met:

- Only for products mounted according to Scania installation requirements and with an approved installation report issued
- Only valid if Scania original parts are used
- Inspections must be done according to inspection intervals following the instructions in Scania Operators Manual (OPM)
- The inspection interval must not be exceeded
- Scania LDF oil are used, or the oil fulfil the quality requirements described in the OPM
- Fuel specification according to OPM
- Coolant specification according to OPM
- Operating altitude accordance to Scania Data handbook

Following conditions will affect the maintenance intervals and the expected overhaul interval for the engine:

- Extended operation at low idle
- Minimum cool down periods after high load factor operation
- Operating the engine beyond the guidelines for the engine rating
- Operating the engine at loads that are greater than the rated load
- Operating the engine at speeds that are greater than the rated speed
- Use of the engine for an application that is not approved

The need for an overhaul is generally indicated by:

- Increased fuel consumption and reduced power
- Increased oil consumption
- Increased levels of noise and vibrations

A marine engine's published MTBF or MTBO does not mean that every marine engine will operate the number of hours or years listed without requiring part replacements and/or unscheduled repair events. Noncompliance with Scania's instructions as per the above mentioned requirements may necessitate repair or replacement of engine parts and accessories earlier than the published MTBF or MTBO. The MTBF and the MTBO periods specified in this document are only estimates and does not reflect the warranty period. For marine engine warranty, the conditions of warranty is set forth in the "Supplementary Provisions to General Conditions – Scania Engines" and "General Conditions of Delivery and Warranty - Scania Engines (Duplicate of Orgalime S2012 - Brussels, March 2012)" contained in the Scania Global Warranty Manual (as amended from time to time).



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Marine IFN - PDE

	MTBF	MTBO 20 000h	Comments
01 Engine			
Turbo charger	15 000		
Cylinder head		20 000*	*Control/replace at major overhaul
Exhaust valves		20 000	
Intake valves		20 000	
Piston		20 000	
Piston rings		20 000	
Cylinder liners		20 000	
O-rings cylinder liners		20 000	
Connecting rod bearing*		20 000*	*Control/replace at major overhaul
Crankshaft bearings*		20 000*	*Control/replace at major overhaul
Oil pump		20 000	
Roller tappet*		20 000*	*Control/replace at major overhaul
Crank shaft seals*		20 000*	*Control/replace at major overhaul
Crankshaft damper		20 000	
Intermediate timing		20 000	
gear roller bearing			
02 Cooling system			
Coolant pump**	10 000		**Check at valve-, injector adjustment
Coolant hose**		20 000	**Check at valve-, injector adjustment
Charge air cooler**		20 000	**Check at valve-, injector adjustment
Heat exchanger		20 000	
Poly V-belt***	Max 5 000		***Check at maintenance
Idler roller Poly V-belt**	10 000		**Check at valve-, injector adjustment
Belt tensioner Poly V- belt**	10 000		**Check at valve-, injector adjustment
Sea water pump	10 000		
03 Fuel System			
Injectors	7 500		
Overflow valve	10 000		
Feed pump		20 000	
16 Electrical system			
Alternator	10 000		
Starter	10 000		