

GMK 3060 C E4 / T4f Cummins Engine 1000-hour Maintenance Kit Part Number 04241475



Manitowoc Crane Care congratulates you for making the purchase of this maintenance kit. Good maintenance at the right time will make a difference in the daily reliability and long-term life of your GMK.

We offer this guide to help you utilize this kit efficiently.

Should you have any feedback or questions regarding this maintenance kit, please contact Manitowoc Crane Care.

The 1000-hour kit basically follows the 12-month maintenance plan (M12) as shown in chapter 5 of the Maintenance manual. Please refer to the given Maintenance manual (**3 302 574**) for specific details and requirements.

Please note that there may appear to be some discrepancies with the part numbers given in the Maintenance manual compared to those in the kit. The kit contains the latest recommendations, where any discrepancies are a function of our continuous improvement program. For example, superseded part numbers may be for Engineering Design changes, improved technology, more cost-effective solutions or a different supply chain.

Consider additional maintenance items when completing, Y2, Y3, Y5, Y6 or Y10 intervals, such as transmission oil and filter, hoist inspection, slewing sensor, cable drums etc. – please refer to the Maintenance manual for more details

5.2.6 Mai

Maintenance plan M 12

M 12

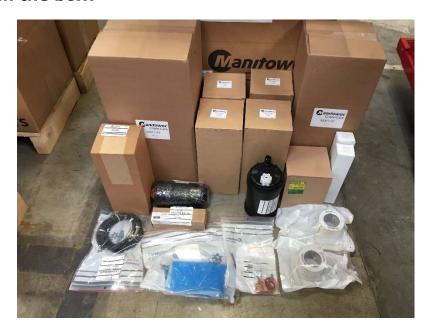
Maintenance work on the CARRIER: every 12 months / after 20,000 - 25,000 km (12,430 - 15,530 mi)	
Engine	
- Notes; IIII Engine manufacturer's documentation	⊪ p. 7 - 15
- Have the radiator checked/cleaned	⊪ p. 7 - 26
Exhaust system with exhaust emission control	
- Having the AdBlue system checked	⊪ p. 7 - 43
- Having the soot particle filter system checked	⊪ p. 7 - 44
Transmission	
- Check the oil level	⊪ p. 7 - 47
Axle lines	
- Axle centre drives - changing the oil	⊪ p. 7 - 53
- Final drives - Changing the oil	⊪ p. 7 - 56
Suspension	
- Pressure accumulator - checking the gas pressure	⊪ p. 7 - 74
Steering	
- Pressure accumulator - checking the gas pressure	⊪ p. 7 - 77
Compressed air system	
 Replacing the filter cartridge of the compressed air drier 	⊪ p. 7 - 81
Hydraulic system	
- Changing the ventilation filter	⊪ p. 7 - 86
- Taking oil samples:	⊪ p. 7 - 88
depending on the oil sample test results:	7 00
- Changing the hydraulic oil	IIII p. 7 - 93
- Changing the hydraulic oil filter	⊪ . p. 7 - 98
Air-conditioning system	
Checking the entire air-conditioning system	IIII p. 7 - 114
- Check V-belt/V-belt tension	⊪ p. 7 - 116
- Changing the pollen filter	⊪ p. 7 - 118
Other maintenance work	
- Lubricating the cab door	⊪ p. 7 - 129
 Lubricating the connecting and socket pins 	⊪ p. 7 - 130
- Renewing the corrosion protection	⊪ p. 7 - 131

211 9017

M 12

Maintenance work on the SUPERSTRUCTURE: Every twelve months/after 1 000 oper. hrs.	
THE STATE CONTROL THE STATE OF	
Hoists	
- Changing the oil/checking the oil	⊪ p. 8 - 12
Slewing gear	
- Changing the oil/checking the oil - Slewing gear transmission	⊪ p. 8 - 19
- Changing the oil/checking the oil - Slewing gear brake	⊪ p. 8 - 21
Slewing bearing	
- Lubricating the locking of turntable	⊪ p. 8 - 32
Hydraulic system	
- Pressure accumulator - checking the gas pressure	⊪ p. 8 - 34
- Changing oil filter 3	⊪ p. 8 - 35
Main boom	
- Checking the locking system	⊪ p. 8 - 44
Hook blocks	
- Greasing	⊪ p. 8 - 65
Air-conditioning system	
- Checking the entire air-conditioning system	⊪ p. 8 - 69
Other maintenance work	
- Lubricating the crane cab door	⊪ p. 8 - 74
- Lubricating the step	⊪ p. 8 - 75
- Lubricating the connecting and socket pins	⊪ p. 8 - 76
- Renewing the corrosion protection	⊪ p. 8 - 77

1. What's in the box?



List of contents

A104130	Filter, engine oil	1
03134850	Filter	4
03142356	Filter element	1
03142357	Filter element	1
03142360	Ventilation filter element	2
03326193	Filter, ac unit	1
04286260	Air dryer filter	1
90001159	Filter	1
90001160	Filter	1
90020446	Filter kit	1
90024700	Fuel filter, engine secondary	1
90026681	Fuel filter, engine primary	1

00117125	Sealing ring (slewing gear)	1
00117132	Sealing ring (slewing gear)	1
00117134	Seal (axle center drives, final drives)	7
00117145	Seal (axle center drives)	1
00117151	Seal (axle center drives)	3
01371208	Seal (axle center drives)	3
03046046	O ring (slewing gear)	1
03326049	Seal kit (hydraulic oil filter 3 & 4)	2
04155708	O ring (transmission)	1
04181265	Sealing ring (axle final drives)	6
9414101343	Seal (oil pan drain plug)	1

2. The Filters

1x A104130 Engine oil filter





 $4x\ 03134850$ Hydraulic oil filter 1 and 2





1x 03142356 Hydraulic oil filter 3





1x 03142357 Hydraulic oil filter 4





2x 03142360 hydraulic oil tank ventilation filter





1x 03326193 Chassis cab pollen filter





1x 04286260 Air Dryer filter with oil coalescer





1x 90001159 Primary engine air filter





1x 90001160 Secondary engine air filter





1x 90020466 DEF (Ad Blue) filter kit





1x 90024700 Secondary fuel filter 2





1x 90026681 Primary fuel filter 1





3. The Seals

(see contents list for usage)



4. Additional maintenance items (not in the kit)

Oil condition analysis:

As part of the annual maintenance, you should take a sample from the hydraulic system (7.13.5) to determine the condition of the hydraulic oil. We recommend our oil analysis kit, which is available under part number 03141012. The kit contains: an oil sample bottle, oil description form (to be completed) and return envelope. The price of this kit includes laboratory analysis of the sample and report that will be sent to your email address.



Oils and Greases

Many oils and greases will be available locally to you, we strongly recommend that the specifications given in chapter 6 of the Maintenance manual be followed when selecting any local equivalents.

These oils and greases have no equivalent and should be ordered from Manitowoc Crane Care as required:

- Sliding surface boom grease
 - 400 gr. cartridge for spray gun 03329071
 - 10 kg can **01373458**
 - 25 kg bucket **02314698**
- > Cylinder rod corrosion protection (400ml spray) 01929824
- ➤ Boom pinning bolt grease (400g cartridge) **03313195**
- > Suspension lubricant (1-liter bottle) **02310863**
- > Turntable bearing gear teeth adhesive grease (400ml spray) S-01032-63
- ➤ Central lub. system, cardan shafts etc. high graphite, wide temperature Universal grease (1kg can) **04163374**

Suspension pressure accumulators

To perform the check of nitrogen pressure in the accumulators as explained in 7.10.4, 7.11.3 and 8.6.3 of the Maintenance manual, Manitowoc Crane Care offers a test kit P/No 02257617 (gas bottle adapter and pressure regulator also required). Reference service bulletin SB D15-022 GMK suspension hydraulic accumulators.

Maintenance video

You may also find our video outlining some simple maintenance procedures useful, under the following link:

https://www.manitowoccranes.com/en/Resources/videos/2016/Grove-GMKpreventive-maintenance

Maintenance App

When planning your routine crane maintenance, consider utilizing our GMK Maintenance App.

- Freely accessible giving all details for current GMK production models
- Individual maintenance plans by interval or engine hours / mileage
- Including a description of the relevant tasks from the maintenance manual



Visit our dedicated website: https://eu100.manitowoc.com/GMKMaintenance/
Read the Quick Start Guide for using the App:

