

**GMK 3060L Cummins E5  
1000-hour Maintenance Kit  
Part Number 04299742**



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 Maniowoc Crane Care.

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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 (**3 302 779**) 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 For example, superseded part numbers may be for Engineering Design changes, improved technology, more cost-effective solutions or a different supply chain.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**

**Maintenance plan M 12**

**M 12**

<b>Maintenance work on the CARRIER: every twelve months / after 20,000 – 25,000 km (12,430 – 15,530 mi)</b>	
<b>Engine</b> – Notes; <i>Engine manufacturer's documentation</i> – Having the radiator checked/cleaned	p. 7 - 15 p. 7 - 26
<b>Exhaust system with exhaust emission control</b> – Having the AdBlue system checked – Having the soot particle filter system checked	p. 7 - 43 p. 7 - 44
<b>Transmission</b> – Checking the oil level	p. 7 - 47
<b>Axle lines</b> – Axle centre drives – Changing the oil – Final drives – Changing the oil	p. 7 - 53 p. 7 - 56
<b>Suspension</b> – Pressure accumulator – Checking the gas pressure	p. 7 - 74
<b>Steering</b> – Pressure accumulator – Checking the gas pressure	p. 7 - 77
<b>Compressed air system</b> – Replacing the filter cartridge of the compressed air drier	p. 7 - 81
<b>Hydraulic system</b> – Changing the ventilation filter – Taking oil samples: depending on the oil sample test results: – Changing the hydraulic oil – Changing the hydraulic oil filter – Checking the hand pump in the driver's cab – Checking the hand pump for emergency operation	p. 7 - 86 p. 7 - 88 p. 7 - 93 p. 7 - 98 p. 7 - 101 p. 7 - 102
<b>Air-conditioning system</b> – Checking the entire air-conditioning system – Checking the V-belt/V-belt tension – Changing the pollen filter	p. 7 - 116 p. 7 - 118 p. 7 - 120
<b>Other maintenance work</b> – Lubricating the cab door – Lubricating the connecting and socket pins – Renewing the corrosion protection	p. 7 - 131 p. 7 - 132 p. 7 - 133

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**M 12**

<b>Maintenance work on the SUPERSTRUCTURE: every twelve months / after 1,000 oper. hrs.</b>	
<b>Hoists</b> – Changing the oil/checking the oil – Having an inspection of the hoist performed	<p>▣▣▣ p. 8 - 11</p> <p>▣▣▣ p. 8 - 13</p>
<b>Slewing gear</b> – Changing the oil/checking the oil	▣▣▣ p. 8 - 19
<b>Slewing bearing</b> – Lubricating the locking of turntable	▣▣▣ p. 8 - 30
<b>Hydraulic system</b> – Pressure accumulator – Checking the gas pressure – Changing oil filter 3 – Having the oil cooler fins cleaned	<p>▣▣▣ p. 8 - 32</p> <p>▣▣▣ p. 8 - 33</p> <p>▣▣▣ p. 8 - 33</p>
<b>Main boom</b> – Checking/lubricating the telescoping cylinder – Checking the locking system	<p>▣▣▣ p. 8 - 44</p> <p>▣▣▣ p. 8 - 50</p>
<b>Hook blocks</b> – Lubrication	▣▣▣ p. 8 - 71
<b>Air-conditioning system</b> – Checking the entire air-conditioning system	▣▣▣ p. 8 - 75
<b>Other maintenance work</b> – Lubricating the crane cab door – Lubricating the stair tread – Lubricating the connecting and socket pins – Renewing the corrosion protection	<p>▣▣▣ p. 8 - 80</p> <p>▣▣▣ p. 8 - 81</p> <p>▣▣▣ p. 8 - 82</p> <p>▣▣▣ p. 8 - 83</p>

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## 1. What's in the box?



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#### Filters

03134850	Hydraulic oil filter 1 & 2	4
03142356	Hydraulic oil filter 3	1
03142357	Hydraulic oil filter 4	1
03142360	Ventilation filter element	2
03326193	Chassis cab pollen filter	1
04286260	Air dryer filter	1

#### Engine

04286387	Engine main air filter	1
04286388	Engine back-up air filter	1
04257086	Engine oil filter E5	1
04241348	Engine oil drain plug & seal E5	1
04286215	Fuel filter E5	1

#### Seals

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
03326049	Seal kit (hydraulic oil filter 3 & 4)	2
04155708	O ring transmission oil level	1
04181265	Sealing ring (axle final drives)	6

## 2. The Filters

4x 03134850 Hydraulic oil filter 1 and 2



1x 03142356 Hydraulic oil filter 3



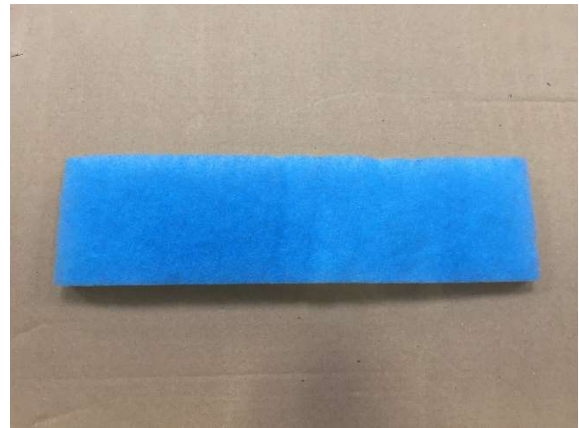
1x 03142357 Hydraulic oil filter 4



2x 03142360 hydraulic oil tank ventilation filter



1x 03326193 Chassis cab pollen filter



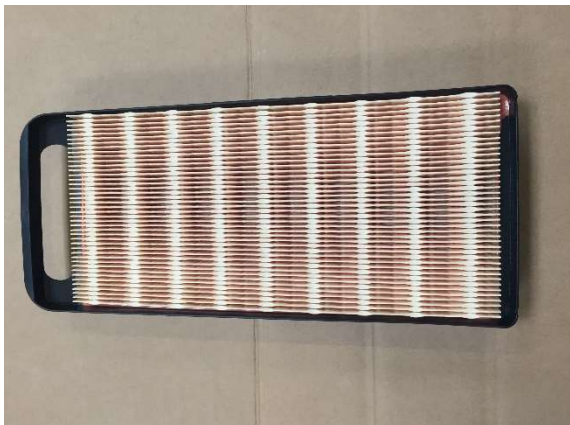
1x 04286260 Air Dryer filter with oil coalescer



1x 04286387 Engine main air filter



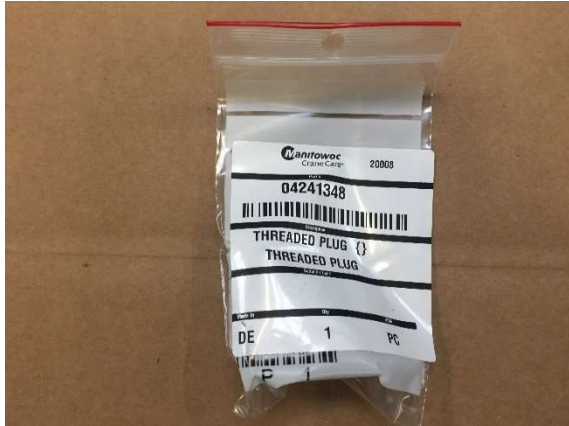
1x 04286388 Engine back-up air filter



1x 04257086 Engine oil filter



1x 04241348 Engine oil drain plug



1x 04286215 Engine fuel filter



### 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.



##### DEF (Ad-Blue) Filter:

GMK 3060L E5: 1x 04164837



##### 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

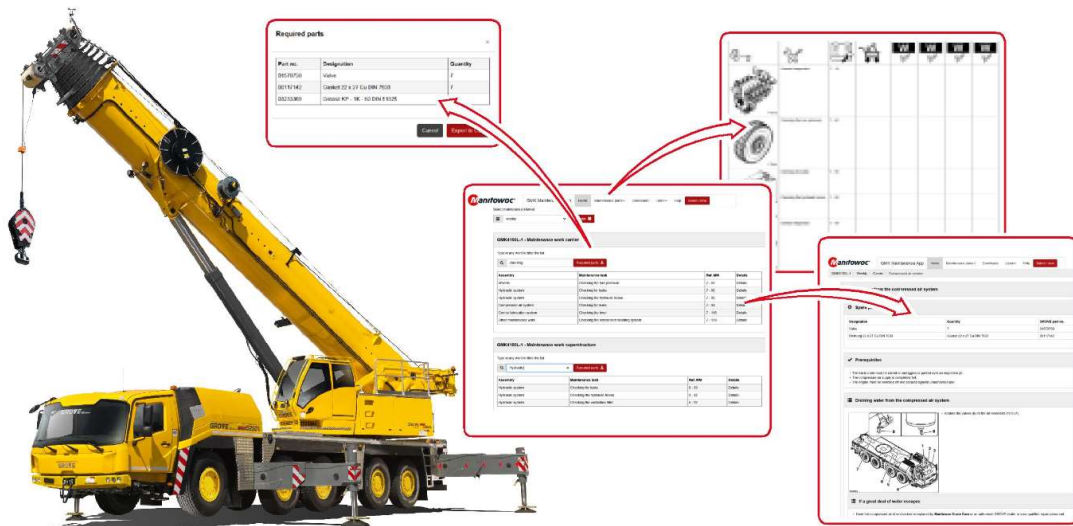
You may also find our video outlining some simple maintenance procedures useful, under the following link:

<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:

