SERVICE MANUAL

VM117, VM137

EN - 9813/3300 - ISSUE 1 - 09/2015

This manual contains original instructions, verified by the manufacturer (or their authorized representative).

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Foreword

The Operator's Manual

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You and others can be killed or seriously injured if you operate or maintain the machine without first studying the Operator's Manual. You must understand and follow the instructions in the Operator's Manual. If you do not understand anything, ask your employer or JCB dealer to explain it.

Do not operate the machine without an Operator's Manual, or if there is anything on the machine you do not understand.

Treat the Operator's Manual as part of the machine. Keep it clean and in good condition. Replace the Operator's Manual immediately if it is lost, damaged or becomes unreadable.

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03 - Safety

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06 - Body and Framework

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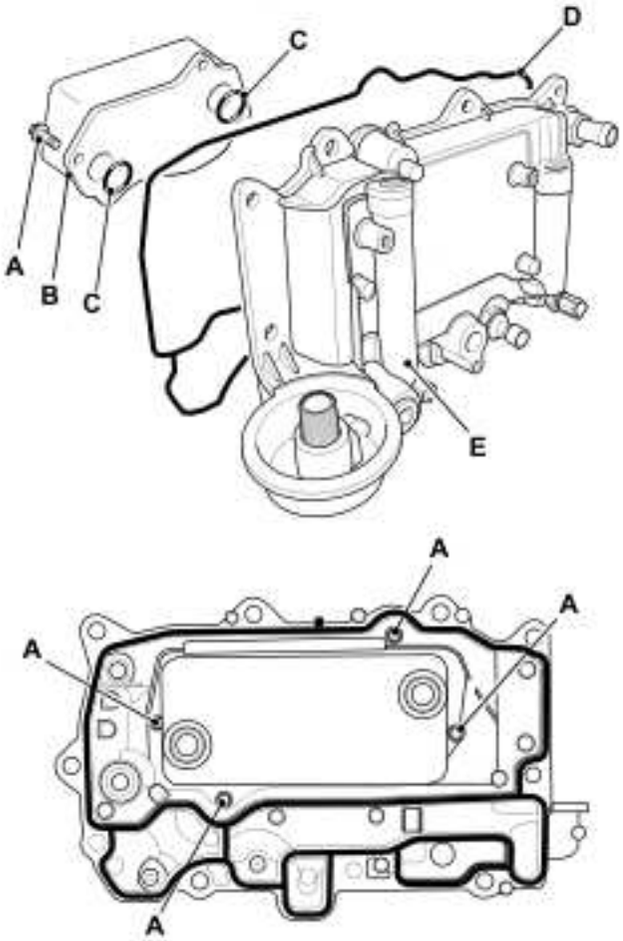
Disassemble and Assemble

Dismantling of the oil cooler and oil filter head assembly is not necessary unless the oil cooler matrix or the seals are faulty.

Disassemble

1. Remove the four fixing bolts and lift off the oil cooler matrix.
2. Remove and discard the two sealing O-rings.
3. Remove the sealing gasket.

Figure 151.



A	Fixing bolts
B	Oil cooler matrix
C	O-rings
D	Sealing gasket
E	Oil cooler housing

Inspect

1. Refer to Oil Cooler - Check Condition.

   Refer to: Engine > Oil Cooler > General > Check (Condition) (Page 15-222).

Assemble

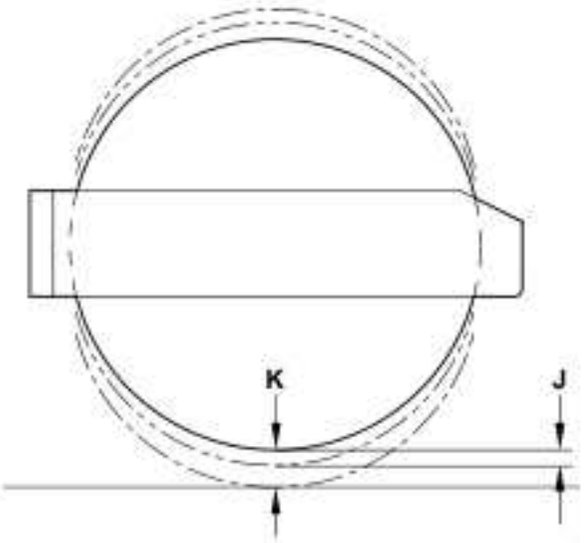
1. Locate the new O-rings. Install the oil cooler matrix. Tighten the bolts to the correct torque value.
2. Install the sealing gasket to the oil cooler housing.

Table 59. Torque Values

Item	Nm
A	23

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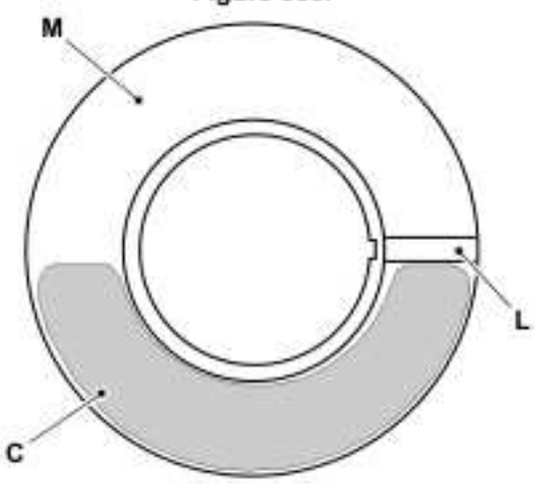
Figure 332.



J Amplitude
K Height of machine lifts itself

The amplitude is changed by the use of overturning weights.

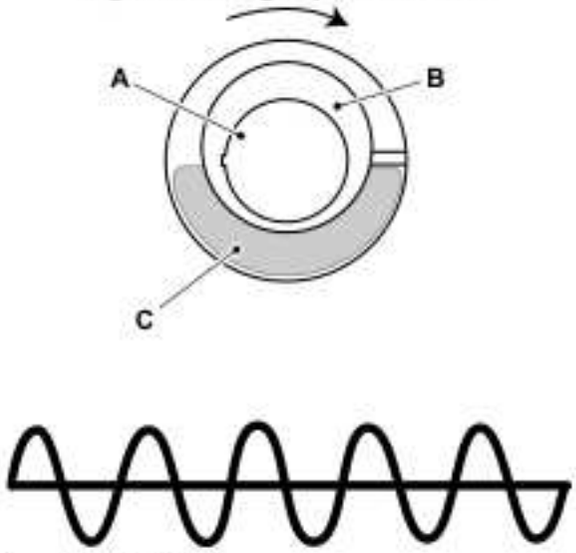
Figure 333.



C Overturning weight
L End stop
M Hollow area

When the vibration system is engaged it is possible to hear a loud noise made by the initial movement of the overturning weight. The weight is free to move in the hollow area and will touch one side of the end stop when the exciter shaft is turned. Take care not to confuse this noise with a fault in the vibration system.

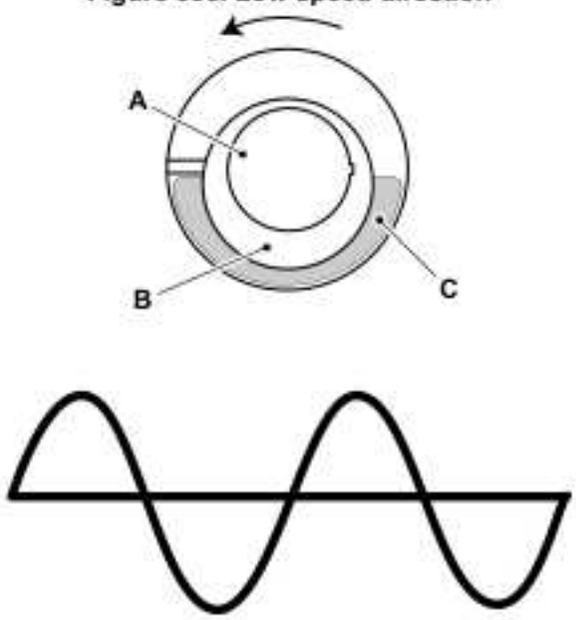
Figure 334. High speed direction



A Exciter shaft
B Eccentric weight
C Overturning weight

In the high speed direction the overturning weights are on the opposite side to the eccentric weight on the exciter shaft and reduce the vibration created by the eccentric weight. Low amplitude and high frequency is created.

Figure 335. Low speed direction

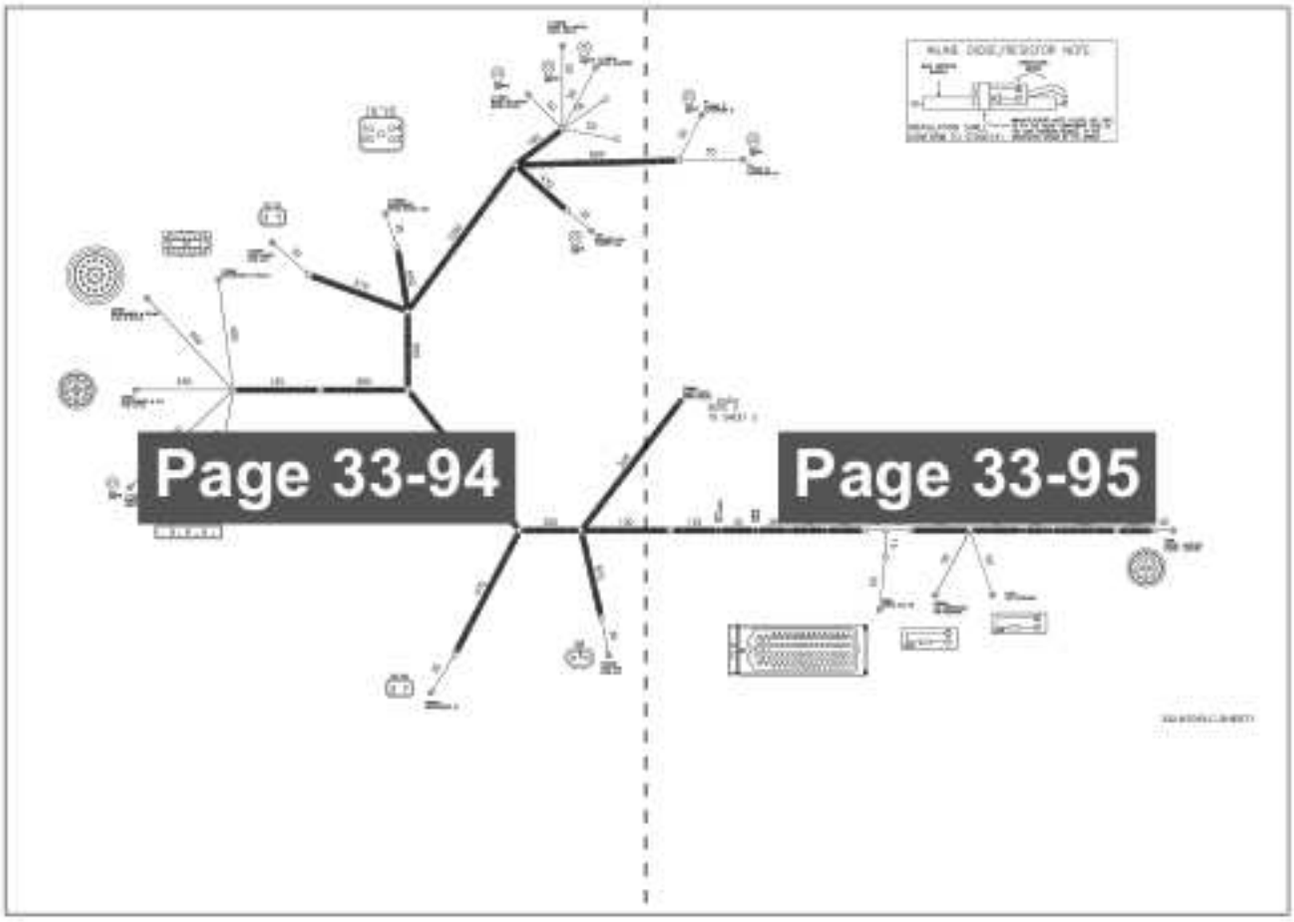


A Exciter shaft
B Eccentric Weight
C Overturning weight

In the low speed direction the overturning weights are on the same side as the eccentric weight on the exciter shaft and amplify the vibration created by the eccentric weight. High amplitude and low frequency is created.

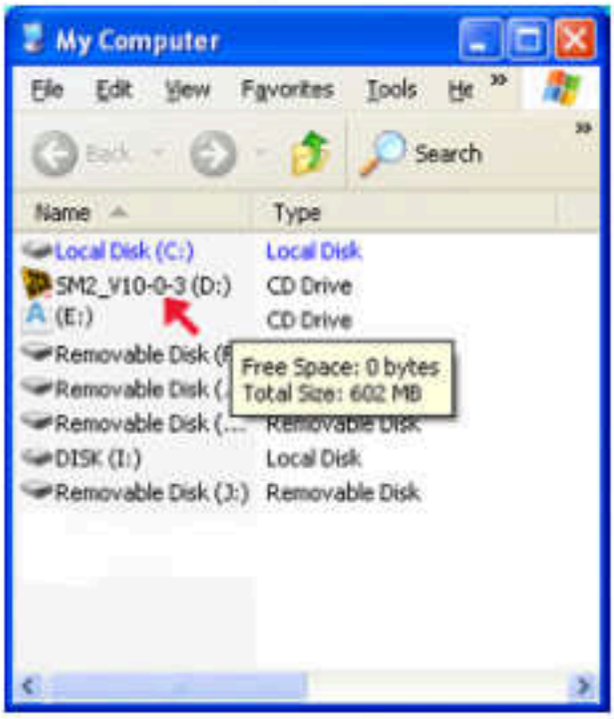
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Figure 447. Basic KB Motor Schematic



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Figure 568.



4. Select and open the "Setup.exe" application.
5. A new window "JCB Servicemaster Setup" will appear on the screen.
   5.1. Click the "Install V10.0.3" option to start the setup application. Refer to Figure 569.

Figure 569.



6. A new window "Select Setup Language" will appear on the screen. Refer to Figure 570.
   6.1. Use the drop down option to select the suitable language.
   6.2. Click the "OK" option to confirm selected language.

Figure 570.



7. A warning message window will appear on the screen. Refer to Figure 571.
   7.1. Click the "OK" option.

Figure 571.



8. A new window "JCB Servicemaster Installation Wizard" will appear on the screen. Refer to Figure 572.
   8.1. Click the "Next" option to proceed.

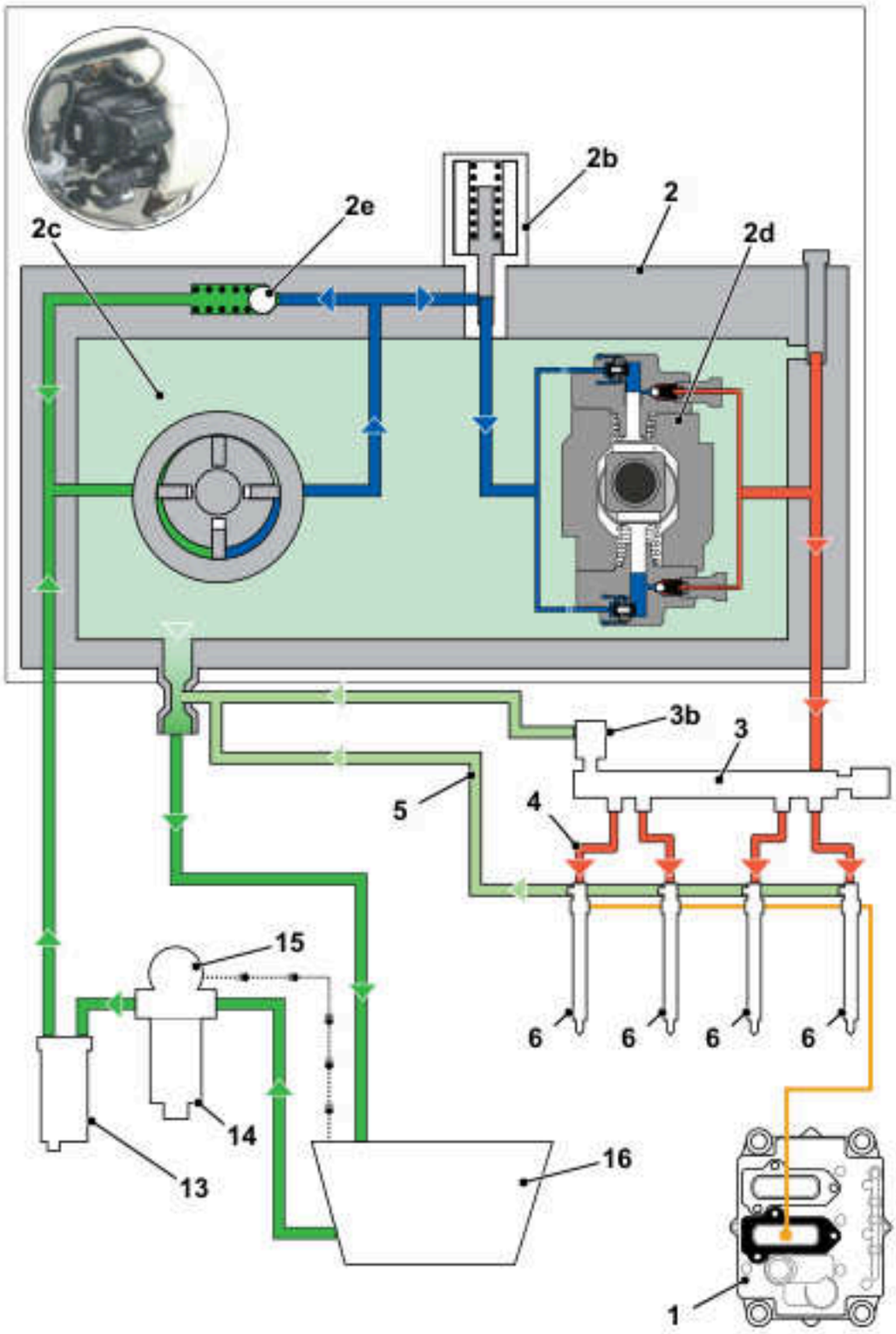
Figure 572.



9. Put "User Name" and "Organization" details into the "Customer Registration" screen. Refer to Figure 573.
   9.1. Click the "Next" option when you inserted details.

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Figure 200.



1	ECM	**2c**	Fuel high pressure pump (transfer section)
2	Fuel high pressure pump	**2d**	Fuel high pressure pump (high pressure section)
2b	IMV		

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