Shop Manual

CEBM002602

KOMATSU®

SA12V140Z-1 SERIES

DIESEL ENGINE

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August 2000

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CONTENTS

01	GENERAL	01-1
11	STRUCTURE AND FUNCTION	11-1
12	TESTING, ADJUSTING AND TROUBLESHOOTING	12-1
13	DISASSEMBLY AND ASSEMBLY	13-1
14	MAINTENANCE STANDARD	14-1
15	REPAIR AND REPLACEMENT OF PARTS	15-1

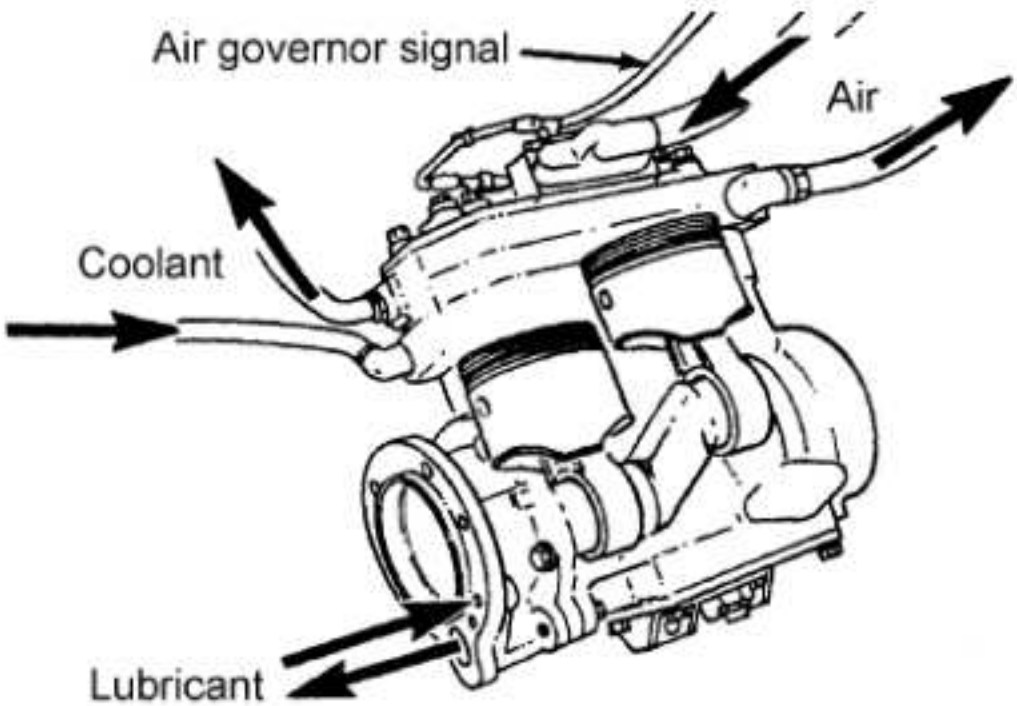
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FLOW DIAGRAM 11-31
FUEL INJECTION PUMP 11-32
Specifications 11-32
RIGHT BANK PIPING 11-33
LEFT BANK PIPING 11-34
FUEL INJECTION NOZZLE 11-35
Specifications 11-35
FUEL FILTER 11-36
Specifications 11-36
COOLING SYSTEM 11-37
THERMOSTAT HOUSING FLOW 11-38
COOLING FAN BELT 11-39
WATER PUMP 11-40
Specifications 11-40
COOLING FAN 11-41
CORROSION RESISTOR 11-42
Specifications 11-42
ACCESSORY 11-43
AIR COMPRESSOR 11-43
Specifications 11-44
Unloader valve 11-44
ELECTRICAL SYSTEM 11-45
ALTERNATOR MOUNTING 11-45
ALTERNATOR WITH REGULATOR 11-46
STARTING MOTOR 11-47
ELECTRICAL INTAKE AIR HEATER 11-48
Specifications 11-48

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330M 12-39
WA800/WA900. 12-39
ALTERNATOR BELT 12-39
CHECKING BELT TENSION 12-39
ADJUSTING BELT TENSION 12-40
DRIVE BELT TENSION 12-40

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Specifications

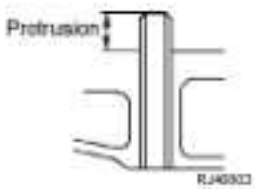
- Type: Water cooled, two cylinder
- Unloader valve method: intake valve, open type
- Cylinder O.D. x stroke: 92.08 x 50.8 mm
- Discharge volume: 1352 cc/rev
- Weight: 33.5 kg

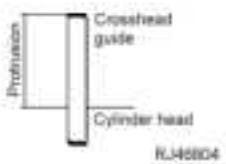
Unloader valve

- Governor controlled
- Max 125 psi

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Unit: mm

<table>
<tr><th>Symbol</th><th>Inspection item</th><th>Judgement standards</th><th>Remedy</th></tr>
<tr><td rowspan="2">G</td><td rowspan="2"></td><td>• Check if head has become concave
• Check for cracks or pitting of valve seat contact surface
• Airtightness test
• Check for play in cotter pin when new cotter pin is inserted in cotter groove.
• Check for uneven wear or curvature of valve stem</td><td>Replace</td></tr>
<tr><td>• Check for hollow in tip of valve stem</td><td>Correct</td></tr>
<tr><td>H</td><td>Outside diameter of valve stem</td><td>• Outside diameter
<table><tr><th>Valve</th><th>Standard size</th><th>Standard value</th><th>Repair limit</th></tr><tr><td>Intake valve</td><td>10</td><td>9.940 – 9.955</td><td>–</td></tr><tr><td>Exhaust valve</td><td>10</td><td>9.911 – 9.926</td><td>–</td></tr></table></td><td>Replace</td></tr>
<tr><td>E</td><td>Sinking of valve (both intake and exhaust)</td><td><table><tr><th>Value</th><th>Standard size</th><th>Standard value</th><th>Repair limit</th></tr><tr><td>Intake valve</td><td>10</td><td>9.989 – 10.011</td><td>–</td></tr><tr><td>Exhaust valve</td><td>10</td><td>9.989 – 10.011</td><td>–</td></tr></table></td><td rowspan="3">Replace</td></tr>
<tr><td>J</td><td>Protrusion of valve guide</td><td>

Permissible range: 23 ± 0.2</td></tr>
<tr><td>K</td><td>Outside diameter of cross head guide</td><td><table><tr><th>Standard size</th><th>Standard value</th><th>Repair limit</th></tr><tr><td>11</td><td>11.000 – 11.011</td><td>10.95</td></tr></table></td></tr>
<tr><td>L</td><td>Protrusion of cross head guide</td><td>

Permissible range: 49 ± 0.25</td><td>Correct</td></tr>
</table>

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