CX460
CRAWLER EXCAVATOR

Service Manual

Cre 9-53350GB

CASE

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CX460 Crawler Excavators
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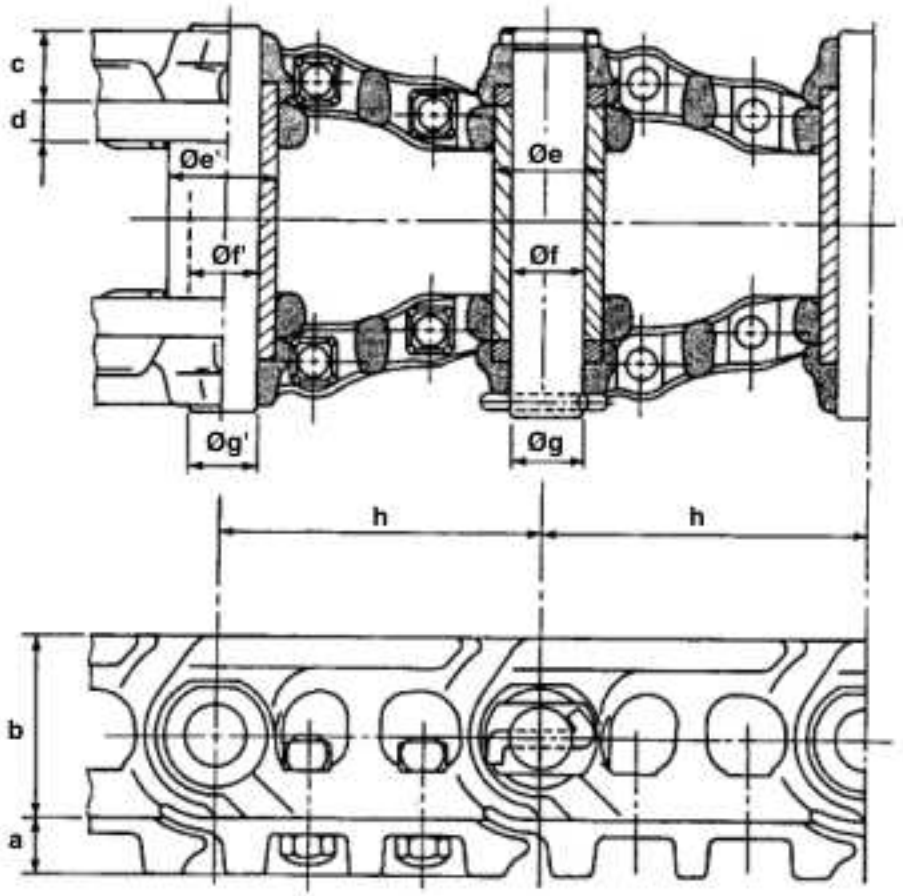
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October 2002

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Track



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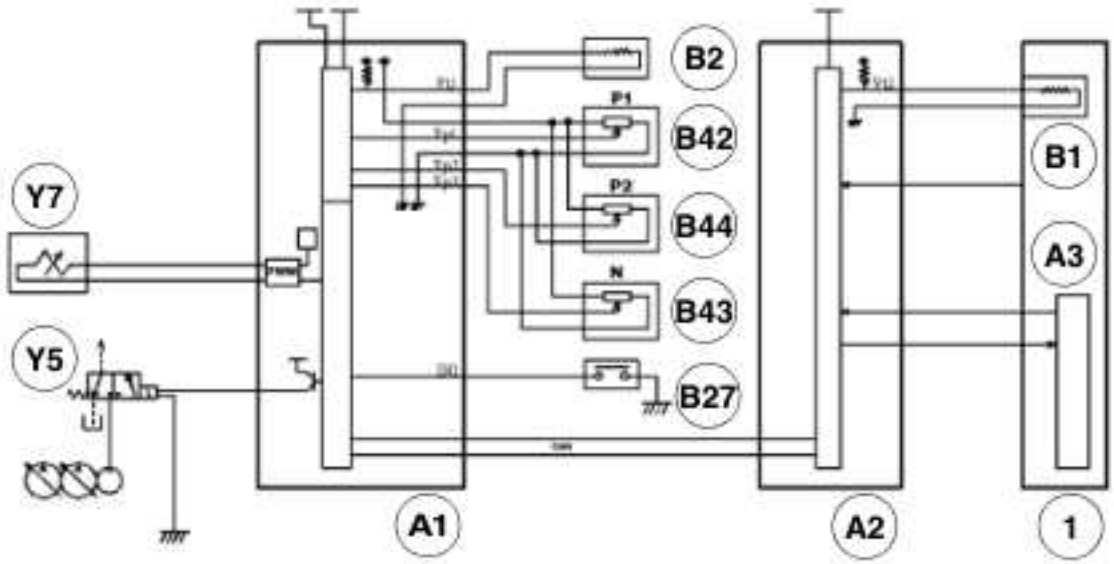
Mark		Dimension (mm)	Mark		Dimension (mm)
a	Standard	52	Ø e (ring)	Standard	73.33
	Limit	32		Limit	68.23
b	Standard	129	Ø f (ring)	Standard	49.2
	Limit	121		Limit	51.7
c	Standard	47	Ø g (shaft)	Standard	48.5
	Limit	45.5		Limit	45.1
d	Standard	28	h	Standard	228.6
	Limit	26.5		Limit	---
			Ø e' (bushing)	Standard	73.33
				Limit	68.23
			Ø f' (bushing)	Standard	49.5
				Limit	52.4
			Ø g' (shaft)	Standard	48.8
				Limit	44.9

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Auto mode checking

1) Circuit configuration



CSD1N537

1 Engine
A1 Computer
A2 Engine controller
A3 Electronic acceleration
B1 Coolant temperature sensor
B2 Hydraulic oil temperature sensor
B27 Travel pilot pressure switch
B42 Pump pressure sensor (P1)
B43 Pressure sensor (nega-cont)
B44 Pump pressure sensor (P2) (yellow band)
Y5 Power-up solenoid valve (yellow band)
Y7 Main pump proportional solenoid

2) Description

1. If the auto mode is selected, 2 modes, SA and LA, are available.
2. When the auto mode is selected, the LA mode is engaged and then it automatically changes to SA or LA mode depending on the work conditions.
3. If the coolant temperature is less than 50°C or the oil temperature is less than 25°C, auto mode checking does not work and the LA mode is selected. When the coolant temperature is greater than 50°C and the oil temperature is greater than 25°C, auto mode checking starts and continues to function even if the coolant and oil temperatures reduce.
4. During auto mode checking, if the travel pilot pressure switch (B27) is activated, the change of mode does not take place. (If the travel pilot pressure switch (B27) is activated in SA mode, the SA mode remains, and if the travel pilot pressure switch (B27) is activated in LA mode, the LA mode remains).

			CX330 - CX350	CX460
SA mode	Engine rpm (MAX)	rpm	1850 ± 10	1800 ± 10
	Current	mA	570 (S + 80)	465 (S + 60)
	Hydraulic power boost	---	Automatic	Automatic
LA mode	Engine rpm (MAX)	rpm	1750 ± 10	1800 ± 10
	Current (equal to mode S)	mA	490	405
	Hydraulic power boost	---	Automatic	Automatic

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<table>
<tr><th>Items to measure and methods of measurement</th><th colspan="4">Criterion and remedy</th></tr>
<tr><td rowspan="2">4. Negative braking force
When the assembling is complete, measure the torque at start of rotation by placing a torque wrench at the end of the output shaft.</td><td>Table 6. Items and what to be inspected</td><td>Standard values</td><td>Allowable values</td><td>Remedy</td></tr>
<tr><td>Brake torque</td><td>902 Nm
(92.0 kgf.m)</td><td>814 Nm
(83.0 kgf.m)</td><td>Separator plate
Friction plate
Spring
Replace all of the above</td></tr>
<tr><td>5. Shaft
Use a roughness gauge and measure the extent of wear on the seal of the shaft.
6. Bearing
Replace bearings.</td><td colspan="4">Usable up to 0.05 mm of wear with steps.
Attention! Replace the oil seal (26) also when replacing the shaft.
Attention! The thickness of the shim (33) needs to be adjusted when replacing the shaft.
The bearings (30 and 31) need to be replaced before the hour meter records 10,000 hours of operation.
Attention! Replace the inner and the outer race also when replacing the bearings.
Attention! The thickness of the shim (33) needs to be adjusted when replacing the bearings.</td></tr>
<tr><td>7. Spline
Replace parts when the wear of the spline exceeds the allowable limit.</td><td colspan="4">The spline is reusable up to the 0.3 mm of wear with steps at the contact surface.</td></tr>
<tr><td>8. Overload relief valve section
The pressure check and the adjustment of the overload relief section cannot be done unless the applicable test bench is available.</td><td colspan="4">Replace as a subassembly every 10,000 hours according to the main machine's hour meter.</td></tr>
</table>

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