SERVICE MANUAL

E26B SR / E29B SR

Mini Excavator

Part number 84563189B
English
April 2014

NEW HOLLAND CONSTRUCTION

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Hydraulic systems - General specification

Hydraulic circuits and component models

For the hydraulic circuit diagram, refer to **Hydraulic systems - Hydraulic schematic frame 01 - Standard specification (35.000)** of supporting data that is provided at the end of this manual.

Standard specification			E26B SR
No.	Name		Model No.
1	Pump assy.		AP2D12LV3RS7
2	Control valve		EV310053
3	Swing motor		MSG-27P-10E-17
4	Travel motor		MSG-18V9-220F-2
5	Boom cylinder	Canopy	ø65-ø40-480
		Cab	ø65-ø40-457
6	Arm cylinder		ø65-ø40-460
7	Bucket cylinder		ø55-ø35-417
8	Swing cylinder		ø75-ø45-385
9	Dozer blade cylinder		ø80-ø45-120
10	Rotary control valve		1096000
11	Attachment control valve		PV48M2042
12	Travel control valve		PVD6P4001
13	Solenoid valve		2KWE5G-30/G12WS-249A
14	Dozer control valve		PV6P
15	Shuttle valve		
16	Auxiliary control valve		
17	Return filter (element)		
18	Suction strainer		
19	In-line filter		Y-457400
20	Check valve		Y-2389
21	Lock valves		
22	Selector valve		
23	Oil coolant		
24	Hydraulic oil tank		
25	Relief valve		

NOTE: *This is for reference only, because the model number might be changed due to improvement.*

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Hydraulic swivel - Service instruction

Maintenance standards

Check Procedures and Remedy

Check interval	Place checked	Check procedure	Remedy
2000 h	Seals which prevent external leakage of hydraulic oil	Check if oil is leaking out	Replace the O-rings if there is leakage.
4000 h Disassemble and check whether there is leakage or not	All seal parts	–	Replace all seal parts.
	All sliding portion	Check for abnormal wear, defects, corrosion, etc. due to seizing, foreign material being caught, etc.	Replace all seal parts. Recondition in accordance with the service limit.
When disassembling due to trouble	All parts.	Check for abnormal wear, defects, corrosion, etc. due to seizing, foreign material being caught, etc.	Restore in accordance with the service limits. Replace the seal kit. Recondition in accordance with the service limits. Regarding the seal kit

Parts service limit

Body and shaft

Part	Judgment criteria	Remedy
Seal parts and sliding portion	Wearing of surface treated with induction hardening, and coming off of surface due to seizing, foreign material getting caught, etc.	Replace
Body and shaft sliding portion other than seals	Abnormal wear or defects by **0.1 mm** (**0.0039 in**) deep or deeper due to seizing or foreign material getting caught, etc.	Replace
	Defects less than **0.1 mm** (**0.0039 in**) deep	Repair with an oil stone
Portions which slide against the thrust ring.	Wearing by **0.5 mm** (**0.0197 in**) or more, or abnormal wear	Replace
	Wear less than **0.5 mm** (**0.0197 in**)	Repair so that is smooth
	Defects due to seizing or foreign material getting caught, etc. which are within the wear limit of **0.5 mm** (**0.0197 in**) and within repairable level	Repair so that is smooth

Flange and thrust ring

Part	Judgment criteria	Remedy
Portions of flange which slide against the shaft end	Wearing by **0.5 mm** (**0.0197 in**) or more, or abnormal wear	Replace
	Wear less than **0.5 mm** (**0.0197 in**)	Repair so that is smooth
Thrust ring	Defects due to seizing or foreign material getting caught, etc. which are within the wear limit of **0.5 mm** (**0.0197 in**) and within repairable level	Repair so that is smooth

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E29B SR

Sec.	Piece		Standard dimensions		Clearance x adjusted with shim (total of both sides)			Remedy	Pin length	
			No.	Dimensions	Standard value	Standard value for repair	Serviceability limit		No.	Dimensions
A-A	Boom	Boom	L1	159.6 - 159.8 mm (6.28 - 6.29 in)	0.2 - 0.7 mm (0.01 - 0.03 in)	1.0 mm (0.04 in)	1.5 mm (0.06 in)	Adjusted with shim	PL1	27 mm (1.06 in)
		Swing Bracket		160 - 160.2 mm (6.30 - 6.31 in)						
B-B	Boom cylinder (Bottom side)	Boom cylinder	L2	54.5 - 55 mm (2.15 - 2.17 in)	0.1 - 0.5 mm (0.00 - 0.02 in)				PL2	249 mm (9.8 in)
		Swing Bracket		56 - 58 mm (2.20 - 2.28 in)						
C-C	Boom cylinder (Rod side)	Boom cylinder	L3	54.5 - 55 mm (2.15 - 2.17 in)	0.5 - 0.9 mm (0.02 - 0.04 in)				PL3	138 mm (5.43 in)
		Boom		56 - 57 mm (2.20 - 2.24 in)						
D-D	Arm cylinder (Bottom side)	Arm cylinder	L4	54.5 - 55 mm (2.15 - 2.17 in)	0.1 - 0.5 mm (0.00 - 0.02 in)				PL4	145 mm (5.71 in)
		Boom		56 - 57 mm (2.20 - 2.24 in)						

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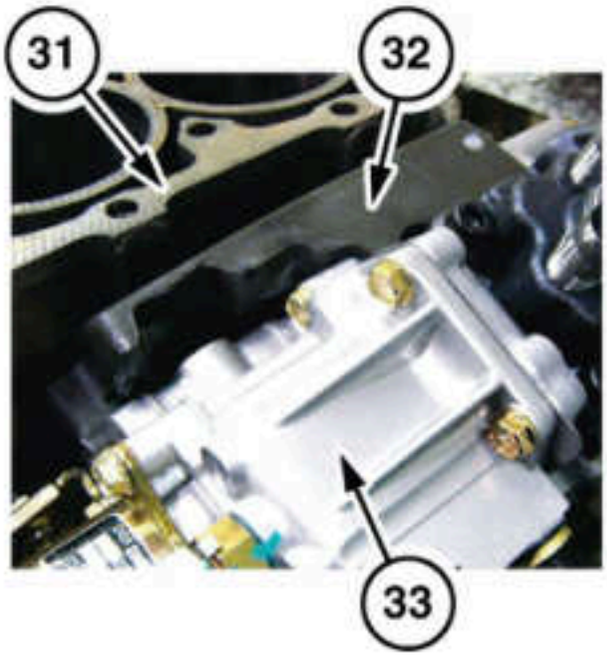
Point 3

Disassembly

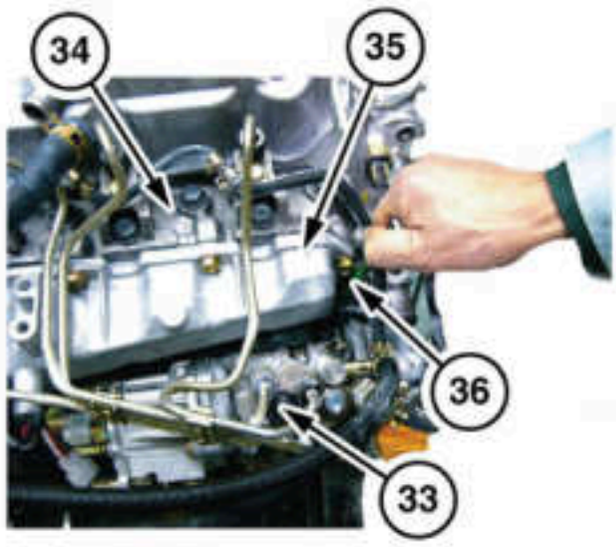
There is an acoustic material part to name as fuel pump spacer **(32)** between the fuel pump **(33)** and the cylinder block **(31)**. Loosen fuel pump mounting screws with a closed wrench **(36)** while disassembling the fuel pump.

NOTE: *An intake manifold may obstruct the disassembly of the fuel pump **(33)** by the engine model. Remove the fuel pump after removing the intake manifold **(35)** first.*

34. Cylinder head



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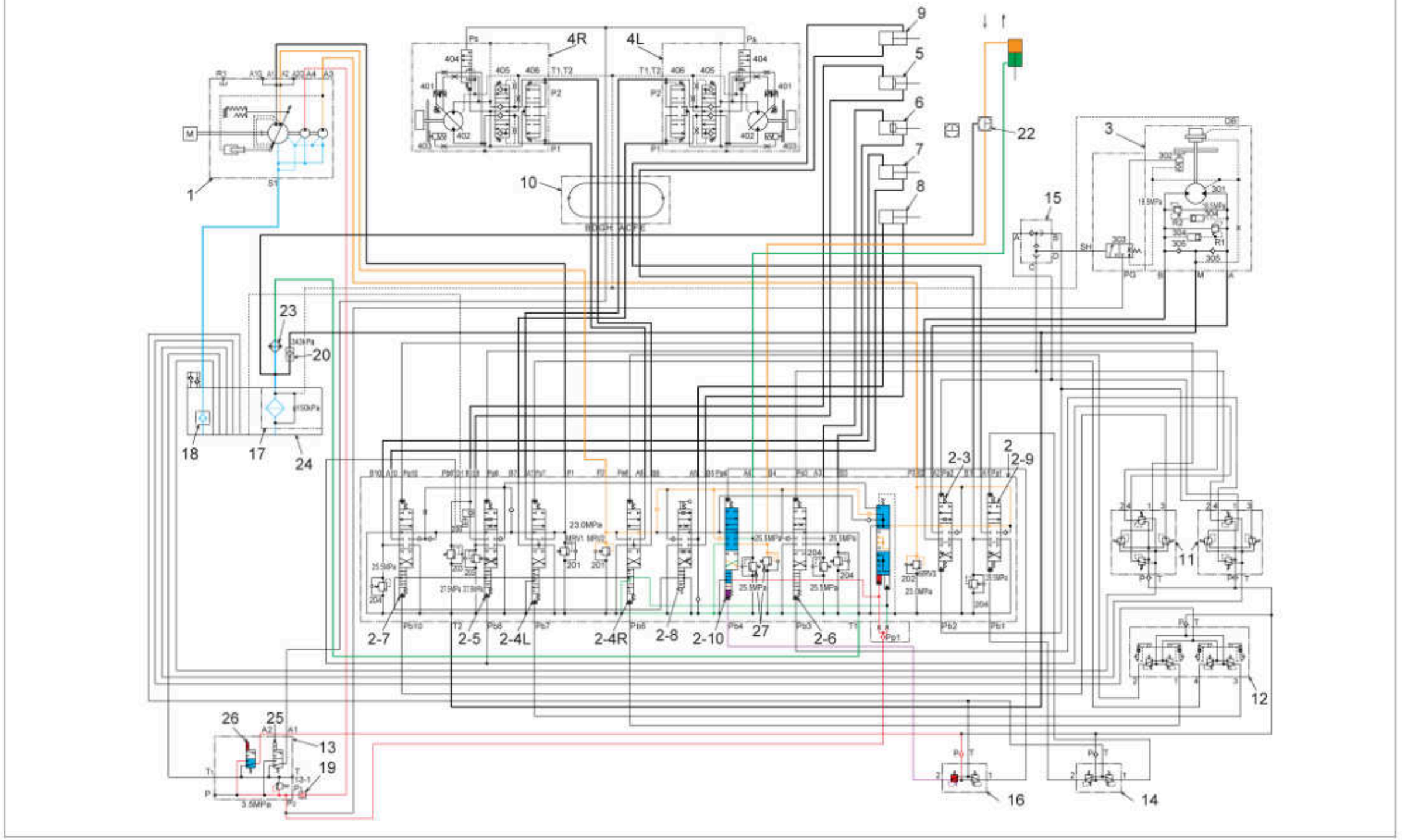


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Reassemble

When installing a fuel pump on the gear case, put a fuel pump spacer between the cylinder blocks, and install it.

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