SERVICE MANUAL

E215B
E215BLC
(HS Engine)

Print No. 87731204

NEW HOLLAND CONSTRUCTION

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1. OUTLINE

TABLE OF CONTENTS

1.1 GENERAL PRECAUTIONS FOR MAKING REPAIRS 1-3
1.1.1 PREPARATION BEFORE DISASSEMBLING 1-3
1.1.2 SAFETY WHEN DISASSEMBLING AND ASSEMBLING 1-3
1.1.3 DISASSEMBLING AND ASSEMBLING HYDRAULIC EQUIPMENT 1-3
1.1.4 ELECTRICAL EQUIPMENT 1-4
1.1.5 HYDRAULIC PARTS 1-5
1.1.6 WELD REPAIR 1-5
1.1.7 ENVIRONMENTAL ISSUES 1-5
1.2 INTERNATIONAL UNIT SYSTEM 1-6

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2. SPECIFICATIONS

TABLE OF CONTENTS

2.1 NAME OF COMPONENTS 2-3
2.2 GENERAL DIMENSIONS 2-4
2.2.1 E215B/E215BLC
[5.65m (18ft-6in) Boom+2.94m (9ft-8in) Standard Arm+0.80m³ (1.05cu•yd) Bucket Shoe] 2-4
2.2.2 E215B/E215BLC
[5.65m (18ft-6in)+2.4m (7ft-10in) Short Arm+0.93m³ (1.22cu•yd) Bucket Shoe] 2-4
2.2.3 E215B/E215BLC
[5.65m (18ft-6in) Boom+3.5m (11ft-6in) Long Arm+0.70m³ (0.92cu•yd) Bucket Shoe] 2-5
2.3 WEIGHT OF COMPONENTS 2-6
2.4 TRANSPOTATION 2-8
2.4.1 OVERALL DIMENSIONS OF MACHINE ON A TRAILER 2-8
2.4.2 DIMENSIONS OF ATTACHMENT 2-9
2.5 SPECIFICATIONS AND PERFORMANCE 2-11
2.5.1 SPEED AND CLIMBING CAPABILITY 2-11
2.5.2 ENGINE 2-11
2.5.3 HYDRAULIC COMPONENTS 2-11
2.5.4 WEIGHT 2-11
2.6 TYPE OF CRAWLER 2-12
2.7 TYPE OF BUCKET 2-12
2.8 COMBINATIONS OF ATTACHMENT 2-13
2.9 ENGINE SPECIFICATIONS 2-14
2.9.1 SPECIFICATIONS 2-14
2.9.2 ENGINE CHARACTERISTIC CURVE (HINO J05E-TG) 2-15

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3. ATTACHMENT DIMENSIONS

TABLE OF CONTENTS

3.1 BOOM 3-3
3.1.1 BOOM DIMENSIONAL DRAWING 3-3
3.1.2 BOOM MAINTENANCE STANDARD 3-4
3.2 ARM 3-6
3.2.1 ARM DIMENSIONAL DRAWING 3-6
3.2.2 ARM MAINTENANCE STANDARD 3-7
3.3 BUCKET 3-10
3.3.1 BUCKET DIMENSIONAL DRAWING 3-10
3.3.2 BUCKET DIMENSIONAL TABLE 3-10
3.3.3 LUG SECTION DIMENSIONAL DRAWING 3-11
3.3.4 BOSS SECTION DIMENSIONAL DRAWING 3-12

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3.3.3 LUG SECTION DIMENSIONAL DRAWING

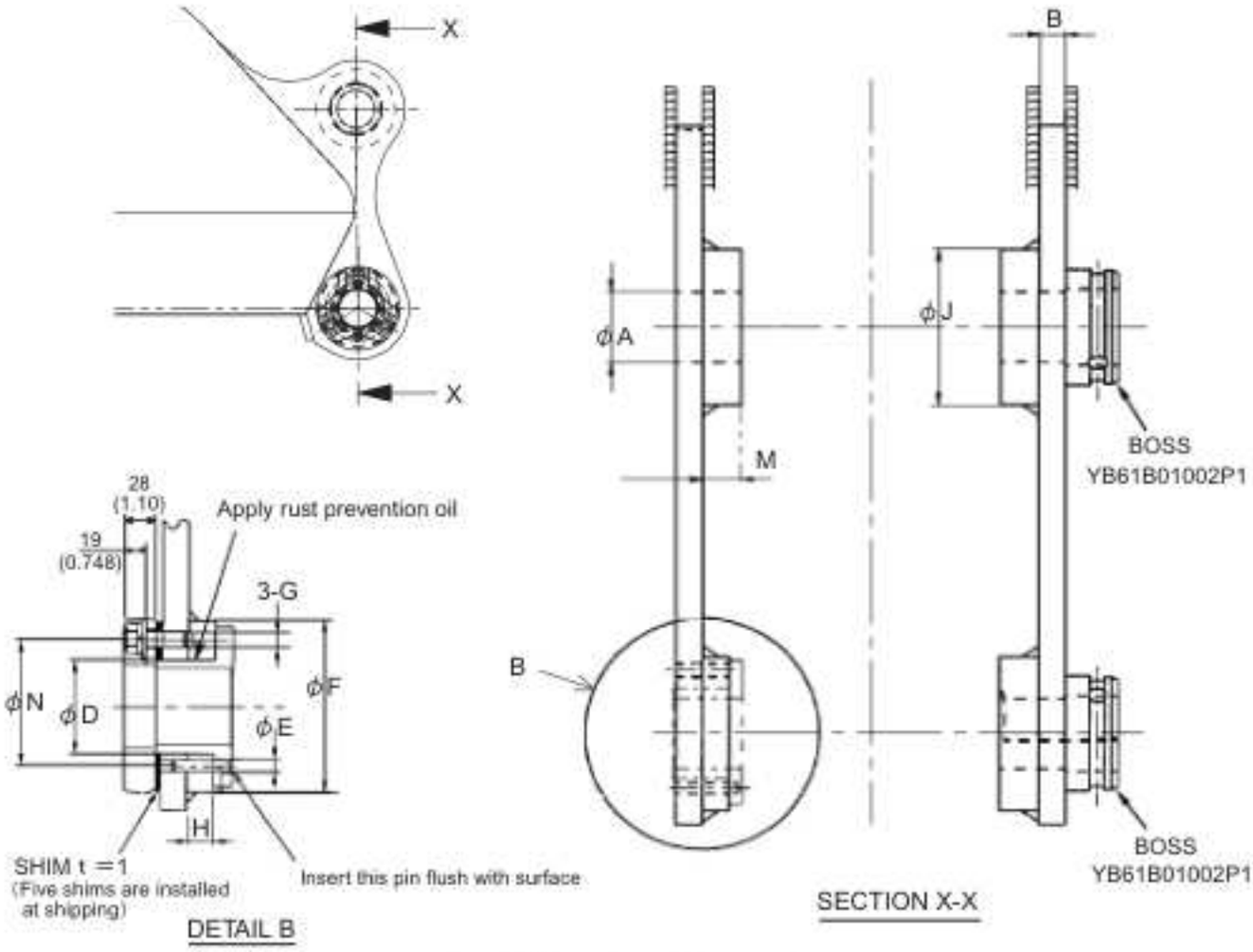


Fig. 3-8 Dimension of lug section

Unit : mm (ft-in)

Type of bucket	Capacity of bucket m^3 (cu-yd)	Part No. of bucket	Pin hole dia. A	Lug plate thickness B	Hole dia. D	Spring pin dia. E	Boss outer dia. F	Screw dia. G	Boss width. H	Boss outer dia. J	Boss width. M	Screw hole P.C.D N
Hoe bucket	[STD] 0.80 (1.05)	YN61B00316F1	φ80 (3.15")	25 (0.984")	φ95 (3.74")	φ13 (0.512")	φ160 (7.09")	M16	25 (0.984")	φ170 (6.69")	36 (1.42")	140 (5.51")
	0.51 (0.67)	YN61B00287F1										
	0.70 (0.92)	YN61B00286F1										
	0.93 (1.21)	YN61B00288F1										

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(2) Hydraulic circuit diagram

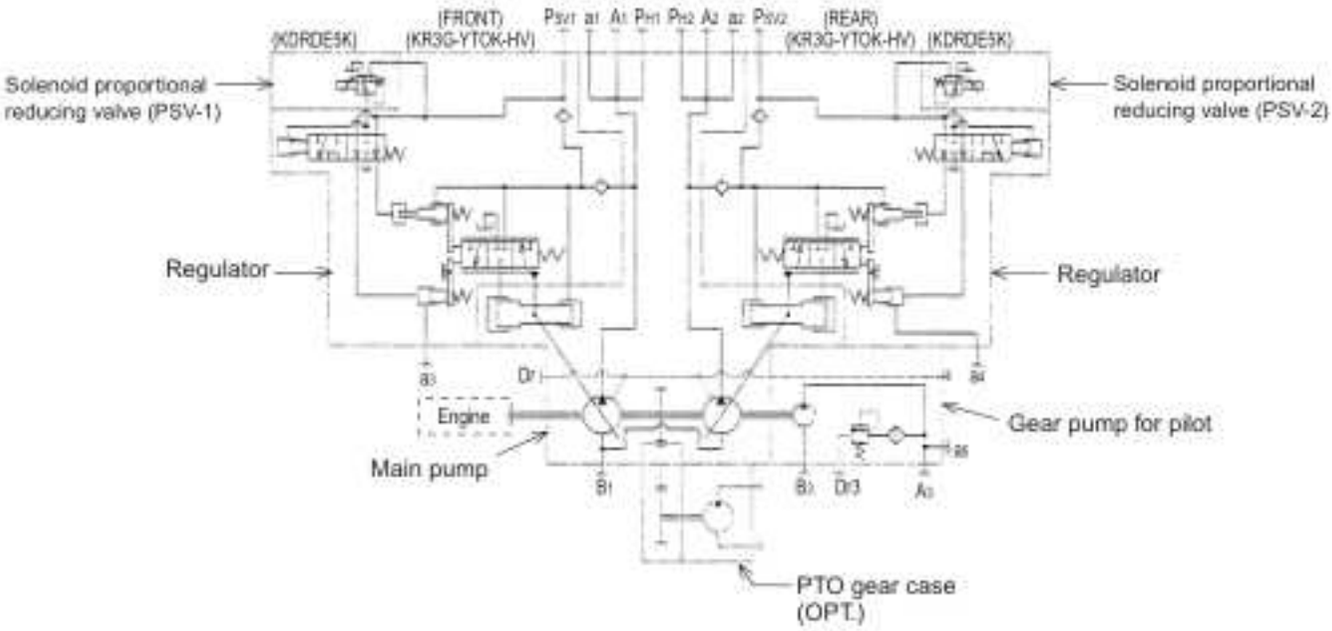


Fig. 24-2 Hydraulic circuit diagram of pump

(3) Specifications

Item			Main pump	Gear pump
Parts No.		Pump assy	YN10V00036F1	—
		Single Pump	YN10V00043F1	YN10V00014F3
Pump model			K3V112DTP1K9R-YT0K-HV	ZX10LGRZ2-07G
Max.displacement capacity		cm^3	110 X 2	10
Revolution	Rated	min^{-1}(Clockwise seen from shaft end)	2000	←
Pressure	Rated	MPa (psi)	34.3 (4980)	5.0 (725)
	ATT boost pressure		37.8 (5480)	
Max. flow		L/min (gal/min)	220 (58) X 2 at 7.8MPa (1130 psi)	21 (5.5)
Max. input horse power		kW (PS)	114 (155)	3.4 (4.6)
Max. input torque		N·m (lbf·ft)	544 (401)	14.7 (10.8)
Regulator		Part No.	YN10V01009F1	
		Model	KR3G-YTOK-HV	
		Control function	Electric flow control, positive flow control, total power control at emergency mode and power shift control	
		Others	With solenoid proportional reducing valve (KDRDE5K-31/30C50)	
Weight		kg (lb)	141 (310)	

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Table46-99

Error code	R184			
Trouble	Safety lock lever relay error			
Judging condition	The mechatro controller output line to safety lock lever relay is short-circuited with the power source.			
Symptom	Safety lock lever timer does not actuate.			
Control in the event of failure	Relay output is stopped.			
Returned in normal condition	When the power is OFF			
Service diagnosis checking screen	Screen No.	4	K-4 LOCK LEVER	
	Screen No.			
	Screen No.			
Checking object			Checking contents and remedy	
1	• Safety lock lever relay R-26		When error R184 is cancelled after removing of safety lock lever relay, check relay unit for failure, replace it with new one if failed. When resistance between relays (1) and (2) is 0 Ω, it is in abnormal condition. 	
2	• Wiring between safety lock lever relay and controller CN-109F, CN2-2 • Fuse & relay box E-1		When R184 is left displayed with the relay removed Check that no power 24V is produced on relay (-) line according to the wiring checking procedure and replace it if necessary. When no failure found after checking on wiring and R184 is left displayed. Replace fuse/relay box.	
3	• Mechatro controller		Check that the error is corrected after replacement of controller.	

Table46-100

Error code	R214			
Trouble	Safety relay error			
Judging condition	The mechatro controller output line to safety relay is short-circuited with the power source.			
Symptom	Safety relay does not actuate.			
Control in the event of failure	Relay output is stopped.			
Returned in normal condition	When the power is OFF			
Service diagnosis checking screen	Screen No.	4	K-2 SAFETY RLY	
	Screen No.			
	Screen No.			
Checking object			Checking contents and remedy	
1	• Safety lock lever relay R-26		When error R214 is cancelled after removing of safety relay, check relay unit for failure, replace it with new one if failed. When resistance between relays (1) and (2) is 0 Ω, it is in abnormal condition. 	
2	• Wiring between safety lock lever relay and controller CN-109F, CN2-2 • Fuse & relay box E-1		When R214 is left displayed with the relay removed Check that no power 24V is produced on relay (-) line according to the wiring checking procedure and replace it if necessary. When no failure found after checking on wiring and R214 is left displayed. Replace fuse/relay box.	
3	• Mechatro controller		Check that the error is corrected after replacement of controller.	

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(1) Assembling spindle

1) Set spindle (101) on work bench.

2) Fit outer ring of taper roller bearing (149) into the center hole of spindle.

3) Place piston (161) in the cylinder hole of spindle.

4) Place steel balls (162) in piston hole.



Note

Apply grease to the steel ball to fix on the piston hole to be sure the steel ball does not drop out of the piston during assembly which will be carried out later.

5) Attach L side of pivot (167) to the left side in the picture.

6) Insert shaft (102).



Note

Apply grease to spline of shaft and slowly insert it taking care not to damage the lip of oil seal.

(2) Assembling rotary section

1) Apply grease to the sliding surface of swash plate (103) and pivot.

2) Tilt the swash plate and place it in spindle.



Note

- Make sure that the speed is changed in High and Low smoothly while blowing air through the drilled hole after assembling the swash plate in.
- Apply clean hydraulic oil to the sliding surface of swash plate.

3) Turn work bench sideways.

4) Set cylinder block (104), piston (105), spring (114), thrust ball (108) and retainer plate (107) and insert it in the shaft.



Note

- Apply clean hydraulic oil to the sliding surface of cylinder block, piston, thrust ball and shoe (106).
- On inserting cylinder block assembly in the shaft, fix the reduction unit side of shaft first and the insertion can be performed smoothly.

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33.2.2.3.11 Disassembling P2 unload spool

(1) Loosen socket bolts (273), and remove spring cover (202) of P2 unload spool and O-ring (261).

(2) Draw out the assembly which is consist of P2 unload spool (310), spring seat (331), spring (327, 329), stopper (336) and bolt (333) from casing A (101).

CAUTION

When drawing out the spool assy, use care so as not to score casing A (101).

(3) Fix the P2 unload spool assy with vise via a protective plate (aluminum plate etc.) and remove bolt (333). Then remove spring seat (331), spring (327, 329) and stopper (336) from P2 unload spool (310).



Fig. 33-167 Removing P2 unload spring cover (202)



Fig. 33-168 Drawing out P2 unload spool assy (310)

33.2.2.3.12 Removing spool covers

(1) Travel, boom, bucket, arm 1, arm 2 and option
Loosen socket bolts (273) and remove spool cover (205) and O-ring (264).

(2) Swing
Loosen socket bolts (273) and remove spool cover (206) and O-ring (264), (266). Do not disassemble spool cover (206) further unless there is special reason.



Fig. 33-169 Removing spool cover (205),(206)

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