SERVICE MANUAL

E215B
E215BLC
(HS Engine)

Print No. 87731203

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

Book Code No. **S5YN0118E01**

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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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3.3.4 BOSS SECTION DIMENSIONAL DRAWING

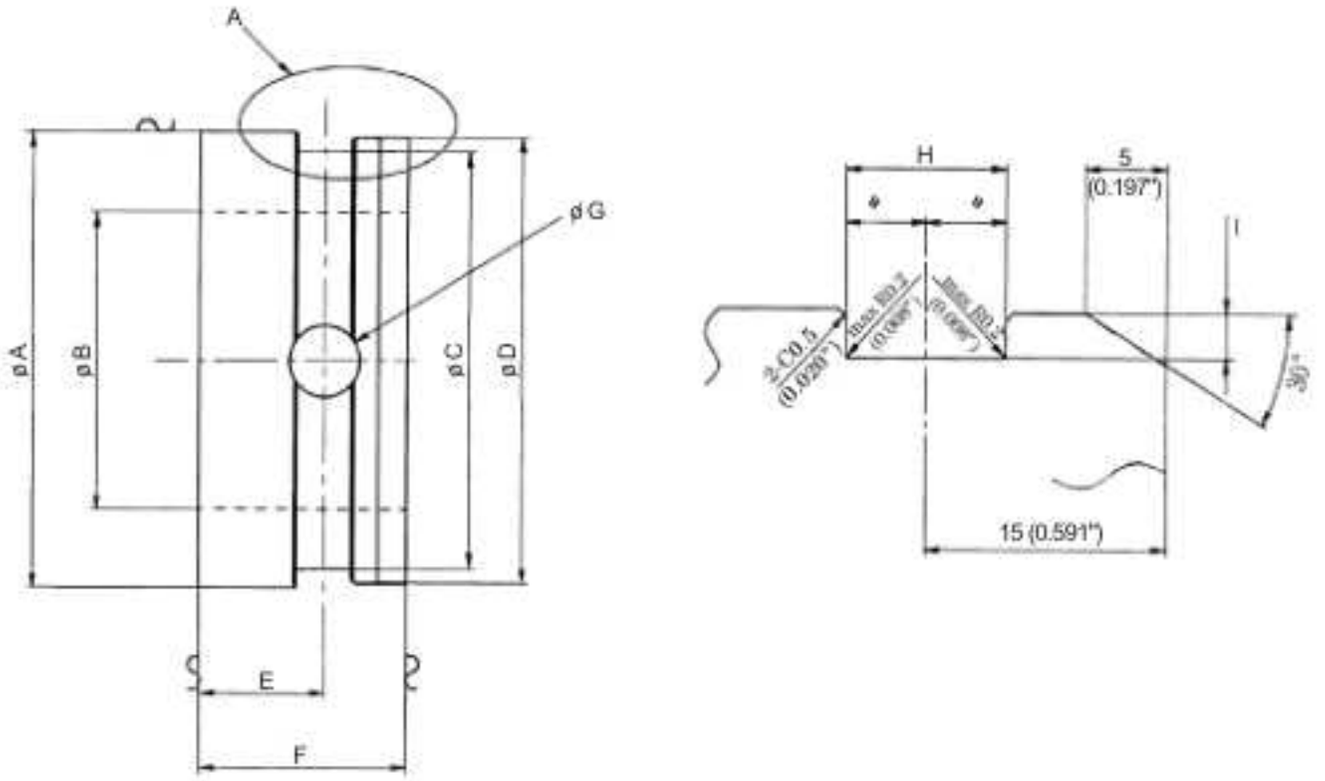


Fig. 3-9 Dimension of boss section

Unit : mm (ft-in)

Type of bucket	Capacity of bucket m³ (cu•yd)	Part No. of bucket	Part No. of boss	øA	øB	øC	øD	E	F	øG	H	I
Hoe bucket	[STD] 0.80 (1.05)	YN61B00316F1	YB61B01002P1	114.3 (4.50")	84 (3.31")	105.5 (4.15")	111.5 (4.39")	23 (0.91")	38 (1.50")	17 (0.669")	13 (0.512")	2.5 (0.098")
	0.51 (0.67)	YN61B00287F1										
	0.70(0.92)	YN61B00286F1										
	0.93(1.21)	YN61B00288F1										

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Table46-77

Error code	G043 When cranking is executed for five seconds or more, this error code might be displayed. In case that the engine does not start, check by the table of "Section 47.3 Engine related Troubleshooting". Execute the following check when the error code G043 is displayed after starting the engine.		
Trouble	Mechatro controller direct input speed sensor and received data from engine controller are disconnected.		
Judging condition	Voltage of alternator is 12V or more, and speed sensor and receipt data from engine controller indicate excess low engine rpm.		
Symptom	Engine speed down may cause extension by abrupt loading.		
Control in the event of failure	Enter 0 rpm for engine speed. Enter 0 for ESS power shift command.		
Returned in normal condition	It returns automatically in normal condition.		
Service diagnosis checking screen	Screen No.	2	G-3 MEAS 1 (for mechatro controller)
	Screen No.	2	G-3 MEAS 2 (receive from engine controller)
	Screen No.		

	Checking object	Checking contents and remedy
1	• Engine speed sensor SE-13	Measure the resistance between terminals of speed sensor. Normal value: 1.6−2.0k Ω
2	• Wiring between engine speed sensor and controller CN-136F CN-106F	Check wiring for possible failure according to the wiring checking procedure and repair it if necessary.
3	• Wiring between ECU engine speed sensor and controller pressure sensor and controller	Check wiring for possible failure according to the wiring checking procedure and repair it if necessary.
4	• Mechatro controller	Check that the error is corrected after replacement of controller. (Controller is broken by only applying power to grounding of signal.)
5	• Engine controller	Check that the error is corrected after replacement of controller.

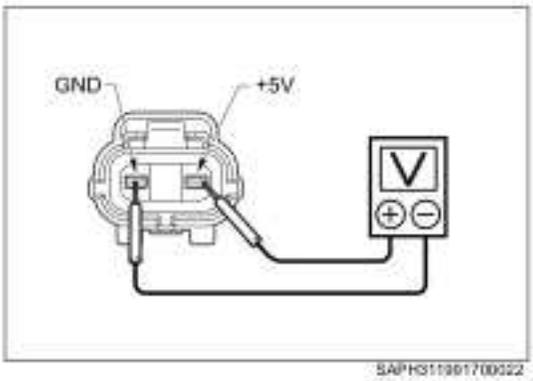
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Boost pressure sensor malfunction (DTC code P0108, P0237)

JP311991709010I1

DTC	P0108	Boost pressure sensor circuit high input
DTC	P0237	Boost pressure sensor circuit low input

1	Measurement of voltage between sensor terminals



SAPHS119917000322

1. Set the starter key to "OFF" and connect the signal check harness.
2. Disconnect the connector of the boost pressure sensor.
3. Set the starter key to "ON" and measure voltage between the +5V terminal and the GND terminal of the boost pressure sensor connector (at unit harness side).

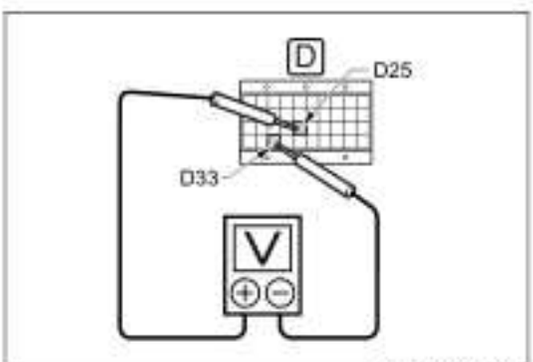
Standard value : 5 ± 0.5 V

NG → [2] Go to measurement of voltage between terminals.

OK

[3] Go to measurement of voltage between terminals.

2	Measurement of voltage between terminals



SAPHS119917000323

1. Measure the voltage between terminal D25 and terminal D33 of the signal check harness.

Standard value : 5 ± 0.5 V

NG → Engine ECU failure, ECU connector failure

OK

Harness failure

(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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