NEW HOLLAND

E485B

Workshop
Manual

NEW HOLLAND
CONSTRUCTION
BUILT AROUND YOU

MidWestTech | New Holland E485B Crawler Excavator Service Manual | Publication 87475...

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MANUAL INDEX



SAFETY PRECAUTIONS

Page

Section 1 GENERALITIES **S1**
Section 2 SAFETY PRECAUTIONS **S2**
Section 3 SAFETY PLATES **S3**



OPERATIONAL PRINCIPLE

Section 1 GENERAL
Group 1 Specifications T1-1



Section 2 SYSTEM
Group 1 Mechatro control system T2-1
Group 2 Hydraulic System T2-2
Group 3 Electrical System T2-3



Section 3 COMPONENT OPERATION
Group 1 Hydraulic Pump Assy T3-1
Group 2 Pilot Valve T3-2
Group 3 Control Valve T3-3
Group 4 Swing Device T3-4
Group 5 Travel Device T3-5
Group 6 Swivel Joint T3-6
Group 7 Cylinders T3-7
Group 8 Air Conditioner system T3-8



OPERATIONAL PERFORMANCE TEST

Section 4 OPERATIONAL PERFORMANCE TEST
Group 1 Introduction T4-1
Group 2 Standard Performances T4-2
Group 3 Test Procedures T4-3
Group 4 Mechatro Controller T4-4



TROUBLESHOOTING

Section 5 TROUBLESHOOTING
Group 1 Troubleshooting (by error codes) T5-1
Group 2 Troubleshooting (by trouble) T5-2

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REPAIR INSTRUCTIONS



Section 1 GENERAL INFORMATION

Group 1	Precautions for Disassembly and Assembly	W1-1
Group 2	Tightening Torque	W1-2



Section 2 UPPERSTRUCTURE

Group 1	Upperstructure	W2-1
Group 2	Pump Device	W2-2
Group 3	Control Valve	W2-3
Group 4	Swing Device	W2-4
Group 5	Pilot Valve	W2-5



Section 3 UNDERCARRIAGE

Group 1	Swing Bearing	W3-1
Group 2	Travel Device	W3-2
Group 3	Swivel Joint	W3-3
Group 4	Track Adjuster	W3-4
Group 5	Front Idler	W3-5
Group 6	Upper and Lower Roller	W3-6
Group 7	Tracks	W3-7



Section 4 FRONT ATTACHMENT

Group 1	Front attachment	W4-1



Section 5 ENGINE

Group 1	General	W5-1
Group 2	Standard Value	W5-2
Group 3	Parts to be prepared	W5-3
Group 4	Engine assembly/disassembly	W5-4
Group 5	Fuel System	W5-5
Group 6	Emission Control	W5-6
Group 7	Electrical	W5-7
Group 8	Intake	W5-8
Group 9	Engine Mechanical	W5-9
Group 10	Exhaust	W5-10
Group 11	Cooling	W5-11
Group 12	Lubrication	W5-12
Group 13	Starting and Charging	W5-13
Group 14	Turbocharger	W5-14
Group 15	Failure Diagnosis for each Engine Status	W5-15
Group 16	Engine Diagnosis Code	W5-16

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Table 12

Error code	**B023**		
Trouble	Boom down pressure sensor's wiring is disconnecting.		
Judging condition	The input voltage from boom down pressure sensor is 0.1 V or less.		
Symptom	The boom down operability becomes poor.		
Control in the event of failure	Set proportional valve output rate of P1 and P2 pumps to 0 mA. (Hydraulic pump emergency mode) Set output of P1 unload proportional valve to 0 mA. (Valve emergency mode)		
Returned in normal condition	It returns automatically in normal condition.		
Service diagnosis checking screen	Screen No.	5	B-2 BOOM LOWER
	Screen No.		
	Screen No.		

Checking object		Checking contents and remedy
1	• Boom down pressure sensor SE-4	When B023 is cancelled and other error occurs after exchanging the connector with other sensor. Check sensor unit for possible failure. If failure found, replace it.
2	• Wiring between boom down pressure sensor and controller CN-127F CN-101F	When B023 is displayed after the connector is exchanged with other sensor. Check wiring for possible failure according to the wiring checking procedure and repair it if necessary.
3	• Mechatro controller	Check that the error is corrected after replacement of controller.

Table 13

Error code	**B024**		
Trouble	Boom down pressure sensor's power source is shortcut.		
Judging condition	The input voltage from boom down pressure sensor is 4.7 V or more.		
Symptom	The boom down operability becomes poor.		
Control in the event of failure	Set proportional valve output rate of P1 and P2 pumps to 0 mA. (Hydraulic pump emergency mode) Set output of P1 unload proportional valve to 0 mA. (Valve emergency mode)		
Returned in normal condition	It returns automatically in normal condition.		
Service diagnosis checking screen	Screen No.	5	B-2 BOOM LOWER
	Screen No.		
	Screen No.		

Checking object		Checking contents and remedy
1	• Boom down pressure sensor SE-4	When B024 is cancelled and other error occurs by turning starter switch on after exchanging the connector with other sensor. Check sensor unit for possible failure. If failure found, replace it.
2	• Wiring between boom down pressure sensor and controller CN-127F CN-101F	When B024 is displayed after turning the starter switch on after the connector is exchanged with other sensor. Check wiring for possible failure according to the wiring checking procedure and repair it if necessary.
3	• Mechatro controller	Check that the error is corrected after replacement of controller.

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Installation of counterweight

NOTE: *approx. weight of counterweight: 10150 kg (22381 lbs)*

1. Attach lifting tools (**2**) to eye-bolts (**3**) of counterweight.

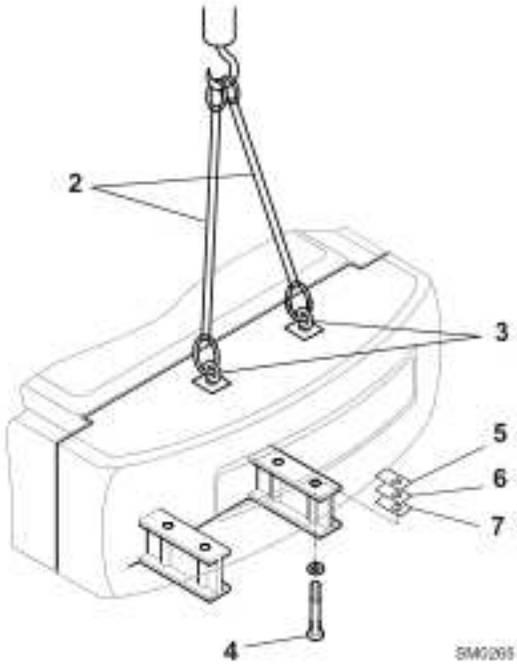
2. Install shim (**5**), (**6**), (**7**) onto the frame as it was.

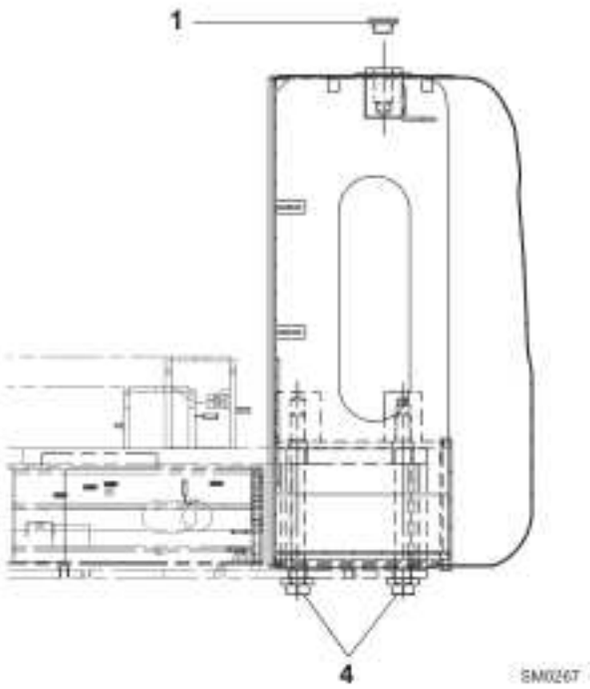
3. Lift counterweight and install it onto the frame.

4. Install bolts M42 (**4**) and washers to counterweight and tighten temporarily.
   : 65 mm

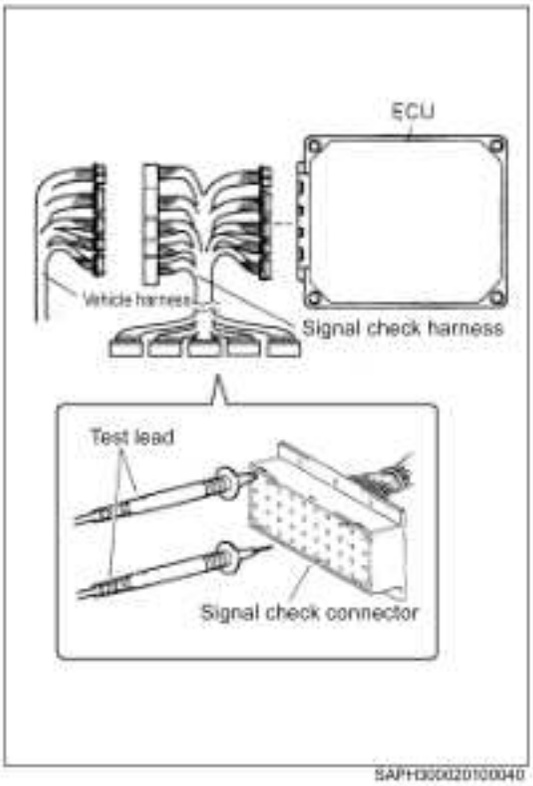
5. Remove wire rope.
   Tighten the bolts (**4**) with a power wrench and torque wrench.
   : 65 mm
   : 3920 ± 20 Nm (2891 ± 14 lbf·ft)

6. Remove eye-bolts (**3**) and install plugs (**1**) onto the counterweight.





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3. Connection of signal check harness

(1) To prevent damage to the ECU connector and to improve accessibility, connect the signal check harness and put a testing rod on the signal check connector of the signal check harness for meaurement.

a. Disconnect the connector from the ECU.

⚠ **CAUTION** • **Do not break the locking tab of the connector.**

b. Connect the signal check harness to the machine harness and the ECU.
Signal check harness
(for common rail fuel injection system)
Part No.
380100048

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Arm cylinder disassembly

Be sure to thoroughly read all the precautions for disassembly/assembly work on page W1-1-1 before starting the disassembly procedure.

The disassembly procedure below starts on the premise that the hydraulic lines and the line securing bands have been removed.

NOTE: *arm cylinder mass: 584 kg (1288 lbs)*

1. Lift and securely place the cylinder on a workbench using a crane. Be sure that the cylinder is placed horizontally. Drain hydraulic oil from the cylinder.

2. Fully extend cylinder rod (**11**). Secure the rod end using a crane. Remove socket bolts (**8**) from cylinder head (**7**).
   : 14 mm

IMPORTANT: *be sure to pull cylinder rod (**11**) straight so as not to damage the sliding surfaces.*

3. Pull out cylinder head (**7**) from cylinder tube (**12**) by tapping with a plastic hammer.

4. Remove set screw (**21**) and loosen nut (**20**).
   : 14 mm



5. Loosen the piston (**15**) using the tool (**A**) then, remove the piston from cylinder rod.
   - Special tool (**A**): (XXXXXXXX)



6. Remove back up ring (**14**), O-ring (**19**), rings (**16**), wear rings (**17**) and O-ring (**18**), from the piston (**15**).

7. Remove cushion bearing (**13**) from cylinder rod (**11**).

8. Remove cylinder head (**7**) from cylinder rod (**11**).

9. Remove O-Rings (**10**) and (**22**), backup rings (**9**) and (**2**) from cylinder head (**7**), then remove wiper ring (**1**), seal (**3**), seal (**4**), snap ring (**6**), and bushing (**5**).

10. If necessary, using a screw driver, remove stopper (**24**) and cushion bearing (**23**) from cylinder rod (**11**).

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