SERVICE MANUAL

E265B
EXCAVATOR

Print No. 87495895A

NEW HOLLAND
CONSTRUCTION

MidWestTech | New Holland E265B Excavator Service Manual | Publication 87495895A

Order the manual at mid-west-tech.com >

SK260-8 TABLE OF CONTENTS

SPECIFICATIONS SECTION

0-SAFETY

0.1 GENERAL SAFETY INFORMATION 0-2
0.2 SAFETY PRECAUTIONS 0-3

1-OUTLINE

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

2-SPECIFICATIONS

2.1 NAME OF COMPONENTS 2-3
2.2 GENERAL DIMENSIONS 2-4
2.2.1 SK260–8 [6.02m (19ft-9in) Boom+2.98m (9ft-9in) Standard Arm+1.0m^3 (1.3cu•yd) Bucket Shoe] 2-4
2.2.2 SK260–8 [6.02m (19t-9in) Boom+3.66m (12ft-0in) Long Arm+0.81m^3 (1.06cu•yd) Bucket Shoe] 2-4
2.3 WEIGHT OF COMPONENTS 2-5
2.4 TRANSPORTATION 2-7
2.4.1 OVERALL DIMENSIONS OF MACHINE ON A TRAILER 2-7
2.4.2 DIMENSIONS OF ATTACHMENT 2-8
2.5 SPECIFICATIONS AND PERFORMANCE 2-10
2.5.1 SPEED AND CLIMBING CAPABILITY 2-10
2.5.2 ENGINE 2-10
2.5.3 HYDRAULIC COMPONENTS 2-10
2.5.4 WEIGHT 2-10
2.6 TYPE OF CRAWLER 2-11
2.7 COMBINATIONS OF ATTACHMENT 2-12
2.8 ENGINE SPECIFICATIONS 2-13
2.8.1 SPECIFICATIONS 2-13

Order the manual at mid-west-tech.com >

3-ATTACHMENT DIMENSIONS

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 AND PIN 3-10
3.3.1 BUCKET AND PIN DIMENSIONAL DRAWING 3-10
3.3.2 BUCKET AND PIN DIMENSIONAL TABLE 3-11

MAINTENANCE SECTION

11-TOOLS

11.1 STANDARD TORQUE SPECIFICATIONS FOR CAPSCREWS AND NUTS 11-3
11.2 SCREW SIZE 11-5
11.2.1 CAPSCREW (BOLT) 11-5
11.2.2 CAPSCREW (SOCKET BOLT) 11-5
11.2.3 SOCKET SET SCREW 11-5
11.3 TORQUE SPECIFICATIONS FOR HOSE AND FITTINGS 11-6
11.3.1 JOINT (O-RING TYPE) 11-6
11.3.2 HYDRAULIC HOSE (30° FLARE TYPE) 11-6
11.3.3 JOINT (ORS TYPE) 11-6
11.3.4 SPLIT FLANGE 11-6
11.4 TORQUE SPECIFICATIONS FOR NUTS AND SLEEVES 11-7
11.5 PLUG 11-8
11.5.1 PLUG FOR HYDRAULIC PIPE JOINT 11-8
11.5.2 PLUG FOR HYDRAULIC EQUIPMENT 11-9
11.6 SPECIAL SPANNER FOR TUBE 11-11
11.7 SPECIAL TOOLS 11-12
11.8 APPLICATION OF SCREW LOCKING COMPOUND AND SEALING COMPOUND 11-14
11.9 SUCTION STOPPER 11-15
11.9.1 COMPONENTS 11-15
11.9.2 DIMENSION 11-15
11.9.3 APPLICABLE MODEL 11-15
11.10 COUNTER WEIGHT LIFTING JIG 11-16
111.10 UPPER FRAME LIFTING JIG 11-17
11.11 ENGINE TURNOVER STAND 11-18
11.13 TRACK SPRING SET JIG 11-19

MidWestTech | New Holland E265B Excavator Service Manual | Publication 87495895A Order the manual at mid-west-tech.com >

12-STANDARD MAINTENANCE TIMETABLE

12.1 STANDARD WORKING TIME TABLE FOR THE MAINTENANCE OF EXCAVATOR....12-4

13-MAINTENANCE STANDARD AND TEST PROCEDURE

13.1 HOW TO USE THE MAINTENANCE STANDARD....13-3
13.2 PERFORMANCE INSPECTION STANDARD TABLE....13-4
13.3 MEASUREMENT OF ENGINE SPEED....13-6
13.3.1 MEASUREMENT OF ENGINE SPEED....13-6
13.4 MEASUREMENT OF HYDRAULIC PRESSURE....13-7
13.4.1 PREPARING TO MEASURE HYDRAULIC PRESSURE....13-7
13.4.2 PLACE TO INSTALL PRESSURE GAUGE....13-7
13.4.3 PRESSURE ADJUSTMENT POSITION....13-8
13.4.4 PROCEDURE FOR ADJUSTING RELIEF VALVE....13-10
13.5 MEASURING TRAVEL PERFORMANCES....13-12
13.5.1 TRAVEL SPEED....13-12
13.5.2 DEVIATION OF TRAVEL....13-12
13.5.3 PERFORMANCES OF PARKING BRAKE....13-13
13.5.4 DRAIN RATE OF TRAVEL MOTOR....13-14
13.6 MEASURING SWING PERFORMANCES....13-15
13.6.1 SWING SPEED....13-15
13.6.2 PERFORMANCE OF SWING BRAKE....13-15
13.6.3 PERFORMANCE OF SWING PARKING BRAKE....13-16
13.6.4 DRAIN RATE OF SWING MOTOR....13-17
13.7 MEASURING ATTACHMENT OPERATING PERFORMANCES....13-18
13.7.1 OPERATING TIME OF CYLINDERS....13-18
13.7.2 CYLINDER LEAK CHECK....13-19
13.8 MEASURING PERFORMANCES OF SWING BEARING....13-20
13.9 MECHATRO CONTROLLER....13-21
13.9.1 ENGINE CONTROL INPUT / OUTPUT....13-21
13.9.2 ENGINE CONTROL....13-22
13.9.3 ADJUSTMENT OF MECHATRO CONTROLLER OUTPUT (A-B-C ADJUSTMENT)....13-24
13.9.4 OPERATIONS IN THE EVENT OF A MECHATRO CONTROLLER FAILURE....13-29

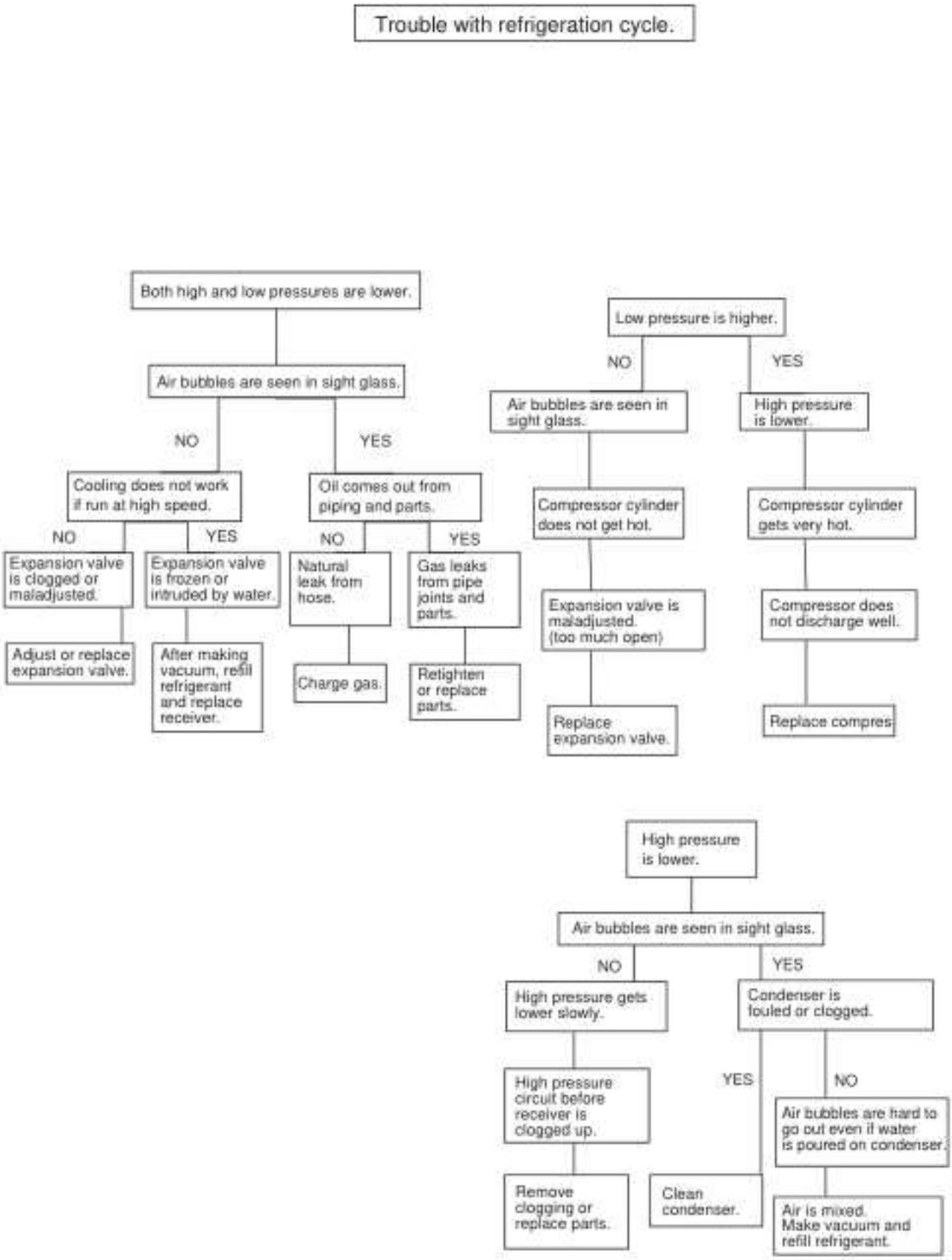
Order the manual at mid-west-tech.com >

2.8 ENGINE SPECIFICATIONS

2.8.1 SPECIFICATIONS

Applicable machine		E265B		
Engine model		CNH UK F4HE9684*J1		
Type		Water-cooled, 4 cycle 6 cylinder common rail direct injection type diesel engine with inter cooler turbo-charger		
Number of cylinder×Bore×Stroke	mm (in)	6 × 104 × 132 (4.09 × 5.19)		
Total displacement	L (cu•in)	6.7 (408.85)		
Compression ratio		18.0		
Rated output	kW (hp) at rpm^{-1}	142 (190) at 2 100		
Maximum torque	N•m (lb•ft) at rpm^{-1}	810 (697) at 1 400		
High idling	rpm^{-1}	2 268 ± 50		
Low idling	rpm^{-1}	800 ± 25		
Injection starting pressure	MPa (psi)	50 (7 250)		
Thermostat action	Start C (°F)	381 (177)		
Firing order		1 - 5 - 3 - 6 - 2 - 4		
Fuel injection timing		0°		
Valve clearance		Valve clearance	Open	Close
	Intake valve	0.25 mm at cool	15°before top dead point	30°after bottom dead point
	Exhaust valve	0.50 mm at cool	56°before bottom dead point	16°after top dead point
Starter capacity	V × kW	24 × 4.0		
Generator capacity (Alternator)	V × A	24 × 70		
Cooling fan drive method		ø762 (30") × suction type 9 blades, V-belt drive, pulley ratio Crank / Fan= 1.02		
Engine oil quantity	L (gal)	Full level 15.5 (4.0) Low level 9.2 (2.4) Total 18.3 (5) - with filter		
Dry weight	kg (lbs)	580 (1,280)		
Allowable inclination (Limited by E/G lubrication)		Front / Rear and Right / Left : 35°		
Dimension (L×W×H)	mm (in)	1 134 × 690 × 1 031 (3ft-8.6in × 2ft-2.5in × 3ft-4.6in)		
Rotating direction		Counterclockwise seeing from flywheel side		

MidWestTech | New Holland E265B Excavator Service Manual | Publication 87495895A Order the manual at mid-west-tech.com >



MidWestTech | New Holland E265B Excavator Service Manual | Publication 87495895A Order the manual at mid-west-tech.com >

Table46-51

Error code	C034		
Trouble	Boom head pressure sensor's power source is shortcut.		
Judging condition	The input voltage from boom head pressure sensor is 4.7V or more.		
Symptom	Indication load value of High-reach crane becomes abnormal.		
Control in the event of failure	Normal control		
Returned in normal condition	It returns automatically in normal condition.		
Service diagnosis checking screen	Screen No.	7	C-3 BOOM-HEAD
	Screen No.		
	Screen No.		
Checking object			Checking contents and remedy
1	• Boom head pressure sensor SE-24		When C034 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 head pressure sensor and controller CN-706F CN-104F		When C034 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.

Table46-52

Error code	C043		
Trouble	Boom rod pressure sensor's wiring is disconnected.		
Judging condition	The input voltage from boom rod pressure sensor is 0.1V or less.		
Symptom	Indication load value of High-reach crane becomes abnormal.		
Control in the event of failure	Normal control		
Returned in normal condition	It returns automatically in normal condition.		
Service diagnosis checking screen	Screen No.	7	C-4 BOOM-ROD
	Screen No.		
	Screen No.		
Checking object			Checking contents and remedy
1	• Boom rod pressure sensor SE-25		When C043 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 rod pressure sensor and controller CN-705F CN-104F		When C043 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.

MidWestTech | New Holland E265B Excavator Service Manual | Publication 87495895A Order the manual at mid-west-tech.com >

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 assembly, use care so as not to score casing A (101).

(3) Fix the P2 unload spool assembly 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. 33-169 Removing P2 unload spring cover (202)



Fig. 33-170 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. 33-171 Removing spool cover (205),(206)

MidWestTech | New Holland E265B Excavator Service Manual | Publication 87495895A Order the manual at mid-west-tech.com >