



# SERVICE/MAINTENANCE MANUAL

This manual has been prepared for and is considered part of -

**8500-1/8500E-1**

Model Number

**XXXXXRef**

Serial Number

This Manual is Divided into the following Sections:

	<b>SAFETY SECTION</b>
<b>SECTION 1</b>	<b>REFERENCE MATERIALS</b>
<b>SECTION 2</b>	<b>TEST PROCEDURES</b>
<b>SECTION 3</b>	<b>GENERAL</b>
<b>SECTION 4</b>	<b>POWER TRAIN</b>
<b>SECTION 5</b>	<b>HYDRAULIC SYSTEM</b>
<b>SECTION 6</b>	<b>HOIST SYSTEM</b>
<b>SECTION 7</b>	<b>BOOM HOIST SYSTEM</b>
<b>SECTION 8</b>	<b>SWING SYSTEM</b>
<b>SECTION 9</b>	<b>TRAVEL SYSTEM</b>
<b>SECTION 10</b>	<b>ELECTRICAL SYSTEM</b>
<b>SECTION 11</b>	<b>AIR CONDITIONER</b>
<b>SECTION 12</b>	<b>TRANSLIFTER SYSTEM</b>
<b>SECTION 13</b>	<b>TROUBLESHOOTING</b>

## NOTICE

The serial number of the crane is the only method the Manitowoc Crane Care Lattice Team has of providing you with correct parts and service information.

**Always furnish serial number of crane and its attachments** when ordering parts or discussing service problems with your Manitowoc distributor or the Manitowoc Crane Care Lattice Team.



## **WARNING**

### To prevent death or serious injury:

- Avoid unsafe operation and maintenance.  
Crane and attachments must be operated and maintained by trained and experienced personnel. Manitowoc is not responsible for qualifying these personnel.
- Do not operate or work on crane or attachments without first reading and understanding instructions contained in Operator Information Manual and Service Manual supplied with crane and applicable attachments.
- Store Operator Information Manual and Service Manual in operator's cab.

If Operator Information Manual or Service Manual is missing from cab, contact your Manitowoc distributor for a new one.

***THE ORIGINAL LANGUAGE OF THIS PUBLICATION IS ENGLISH***

	TABLE OF CONTENTS	
	SAFETY	
1.	REFERENCE MATERIALS	1
2.	MAINTENANCE STANDARDS TEST PROCEDURES	2
3.	GENERAL WORK STANDARD	3
4.	POWER TRAIN	4
5.	HYDRAULIC SYSTEM	5
6.	HOIST SYSTEM	6
7.	BOOM HOIST SYSTEM	7
8.	SWING SYSTEM	8
9.	TRAVEL SYSTEM	9
10.	ELECTRIC SYSTEM	10
11.	AIR CONDITIONER	11
12.	TRANSLIFTER SYSTEM	12
13.	TROUBLESHOOTING	13

Reference Only

# SAFETY

## 1. REFERENCE MATERIALS

1.1	8500-1 SPECIFICATION.....	1-1
1.1.1	CRANE OUTSIDE DIMENSION.....	1-1
1.1.2	CRANE SPECIFICATION, PERFORMANCE.....	1-2
1.1.3	CRANE WORKING RANGES.....	1-4
1.2	8500-1 DIMENSION, WEIGHT OF EACH COMPONENT.....	1-7
1.2.1	BASE MACHINE.....	1-7
1.2.2	COUNTERWEIGHT WITH SELF REMOVAL DEVICE.....	1-9
1.2.3	ATTACHMENT.....	1-10
1.3	8500-1 CLAMSHELL RATED LOADS (OPTION).....	1-12
1.4	8500-1 SWING AND TRAVEL STABILITY.....	1-15
1.5	8500-1 TRAVEL ALLOWABLE SLOPE ANGLE.....	1-18
1.5.1	CRANE ATTACHMENT INSTALLED : BOOM INSERT CONFIGURATION.....	1-18
1.6	8500E-1 SPECIFICATION.....	1-24
1.6.1	CRANE OUTSIDE DIMENSION.....	1-24
1.6.2	CRANE SPECIFICATION, PERFORMANCE.....	1-26
1.6.3	CRANE WORKING RANGES.....	1-28
1.7	8500E-1 DIMENSION, WEIGHT OF EACH COMPONENT.....	1-31
1.7.1	BASE MACHINE.....	1-31
1.7.2	COUNTERWEIGHT.....	1-33
1.7.3	COUNTERWEIGHT WITH SELF REMOVAL DEVICE (OPTION).....	1-34
1.7.4	ATTACHMENT.....	1-35
1.8	8500E-1 CLAMSHELL RATED LOADS (OPTION).....	1-38
1.9	8500E-1 SWING AND TRAVEL STABILITY.....	1-41
1.10	8500E-1 TRAVEL ALLOWABLE SLOPE ANGLE.....	1-46
1.10.1	CRANE ATTACHMENT INSTALLED : BOOM INSERT CONFIGURATION.....	1-46
1.11	ENGINE MAIN SPECIFICATION.....	1-52

## 2. MAINTENANCE STANDARDS TEST PROCEDURES

2.1	MAINTENANCE STANDARD.....	2-1
2.1.1	PIN, BUSHING, SPRING, LINING AND SHEAVE.....	2-1
2.1.2	TRAVEL DEVICE.....	2-8
2.2	PERFORMANCE STANDARD AND TEST PROCEDURE.....	2-15
2.2.1	OPERATING SPEED.....	2-17
2.2.2	HYDRAULIC PRESSURE.....	2-18
2.2.3	SWING BEARING.....	2-22

### 3. GENERAL WORK STANDARD

3.1	STANDARD TIGHTENING TORQUE .....	3-1
3.1.1	TIGHTENING TORQUE OF CAP SCREWS AND NUTS .....	3-1
3.1.2	TIGHTENING TORQUE OF HYDRAULIC FITTINGS.....	3-5
3.2	STANDARD PARTS .....	3-7
3.2.1	BOLT .....	3-7
3.2.2	O-RING .....	3-8
3.2.3	BACK-UP RING .....	3-9
3.2.4	BITE TYPE FITTING .....	3-10
3.3	CONVERSION TABLE.....	3-12
3.3.1	UNIT CONVERSION.....	3-12
3.3.2	MILLIMETER : INCH CONVERSION TABLE .....	3-13
3.3.3	METER AND FOOT CONVERSION TABLE .....	3-15
3.3.4	GRADE CONVERSION TABLE .....	3-16
3.3.5	UNIT WEIGHT TABLE .....	3-17
3.3.6	SYSTEM INTERNATIONAL (SI) UNIT CONVERSION TABLE .....	3-18

### 4. POWER TRAIN

4.1	APPARATUS AND COMPONENTS LOCATION .....	4-3
4.2	ENGINE.....	4-6
4.2.1	REMOVAL OF THE ENGINE.....	4-6
4.2.2	REPAIR AND MAINTENANCE OF THE ENGINE.....	4-9
4.2.3	INSTALLATION OF THE ENGINE .....	4-10
4.3	PUMP DRIVE ASSEMBLY .....	4-14
4.3.1	CONSTRUCTION OF THE POWER DIVIDER.....	4-15
4.3.2	CONSTRUCTION OF THE COUPLING.....	4-20
4.3.3	REMOVAL OF EACH PUMP .....	4-21
4.3.4	REMOVAL OF THE POWER DIVIDER .....	4-22
4.3.5	REMOVAL OF THE COUPLING.....	4-23
4.3.6	DISASSEMBLING THE POWER DIVIDER.....	4-24
4.3.7	CHECK AND REPAIR OF THE POWER DIVIDER.....	4-26
4.3.8	ASSEMBLING THE POWER DIVIDER .....	4-27
4.3.9	INSTALLATION OF THE COUPLING .....	4-28
4.3.10	INSTALLATION OF EACH PUMP.....	4-29
4.4	ASSEMBLY AND DISASSEMBLY OF RADIATOR.....	4-30
4.4.1	CONSTRUCTION OF THE RADIATOR .....	4-30
4.4.2	REPLACEMENT ORDER OF RADIATOR CORE .....	4-31
4.5	DEF/AdBlue® SCR SYSTEM .....	4-32
4.5.1	DEF/AdBlue® TANK .....	4-37
4.5.2	INDUCEMENT CONTROL SYSTEM .....	4-40

## 5. HYDRAULIC SYSTEM

5.1	LOCATION OF MAIN HYDRAULIC COMPONENTS.....	5-2
5.1.1	COMPONENTS LOCATION ON THE HYDRAULIC SCHEMATIC.....	5-2
5.1.2	HYDRAULIC COMPONENTS LIST.....	5-7
5.1.3	LAYOUT OF HYDRAULIC COMPONENTS.....	5-11
5.2	CONSTRUCTION AND FUNCTION.....	5-18
5.2.1	OIL FLOW FROM No.1 AND No.2 PUMPS.....	5-18
5.2.2	OIL FLOW FROM No.3 PUMP.....	5-20
5.2.3	OIL FLOW FROM No.4 AND No.5 PUMPS (FRONT, REAR DRUM BRAKE COOLING).....	5-22
5.2.4	OIL FLOW FROM No.6 PUMP.....	5-24
5.2.5	OIL FLOW FROM No.7 PUMP.....	5-28
5.3	VALVE.....	5-36

## 6. HOIST SYSTEM

6.1	APPARATUS AND LOCATION OF COMPONENTS.....	6-2
6.2	CONSTRUCTION AND FUNCTION.....	6-6
6.2.1	HYDRAULIC SCHEMATIC.....	6-6
6.2.2	LIFTING A LOAD.....	6-8
6.2.3	HOLDING A HOISTED LOAD.....	6-10
6.2.4	LOWERING A LOAD (POWER LOWERING).....	6-12
6.2.5	FREE FALL OPERATION.....	6-14
6.2.6	G WINCH MODE LIFTING.....	6-22
6.2.7	G WINCH MODE LOWERING.....	6-23
6.3	WINCH.....	6-24
6.3.1	WINCH INSTALLATION.....	6-24
6.3.2	WINCH ASSEMBLY.....	6-25
6.3.3	REDUCTION UNIT ASSEMBLY.....	6-26
6.3.4	ADJUSTMENT OF DRUM LOCK.....	6-28
6.4	BRAKE PEDAL.....	6-30
6.4.1	ASSEMBLY DRAWING.....	6-30
6.4.2	ADJUSTING THE BRAKE PEDAL.....	6-32
6.4.3	BLEEDING AIR FROM BRAKE CIRCUIT.....	6-33

## 7. BOOM HOIST SYSTEM

7.1	APPARATUS AND COMPONENTS LOCATION.....	7-2
7.2	CONSTRUCTION AND FUNCTION.....	7-4
7.2.1	HYDRAULIC SCHEMATIC.....	7-4
7.2.2	RAISING BOOM.....	7-5
7.2.3	NEUTRAL (HOLDING BOOM).....	7-6

7.2.4	LOWERING BOOM .....	7-7
7.3	BOOM HOIST WINCH.....	7-9
7.3.1	BOOM HOIST WINCH INSTALLATION .....	7-9
7.3.2	REDUCTION UNIT ASSEMBLY .....	7-10
7.3.3	BOOM DRUM LOCK ASSEMBLY.....	7-12
7.3.4	ADJUSTMENT OF BOOM DRUM LOCK .....	7-13
<b>8.</b>	<b>SWING SYSTEM</b>	
8.1	APPARATUS AND COMPONENTS LOCATION .....	8-1
8.2	CONSTRUCTION AND FUNCTION.....	8-3
8.2.1	HYDRAULIC SCHEMATIC.....	8-3
8.2.2	SWING (NEUTRAL FREE).....	8-5
8.2.3	STOPPING (NEUTRAL FREE).....	8-6
8.2.4	SWING (NEUTRAL FREE/BRAKE MODE SELECT).....	8-7
8.2.5	STOPPING (NEUTRAL FREE/BRAKE MODE SELECT).....	8-9
8.3	CONSTRUCTION OF THE SWING SYSTEM.....	8-11
8.3.1	SWING REDUCTION UNIT .....	8-11
8.3.2	REDUCTION UNIT ASSEMBLY .....	8-12
8.3.3	SWING BEARING.....	8-13
8.3.4	SWING LOCK .....	8-14
<b>9.</b>	<b>TRAVEL SYSTEM</b>	
9.1	APPARATUS AND COMPONENTS LOCATION .....	9-1
9.2	CONSTRUCTION AND FUNCTION.....	9-2
9.2.1	HYDRAULIC SCHEMATIC.....	9-2
9.2.2	TRAVELING (RIGHT SIDE FORWARD).....	9-3
9.2.3	STOPPING.....	9-4
9.3	CRAWLER.....	9-5
9.3.1	DRIVE ASSEMBLY.....	9-5
9.3.2	MOTOR AND REDUCTION UNIT .....	9-6
9.3.3	ADJUSTMENT OF SHOE .....	9-9
<b>10.</b>	<b>ELECTRIC SYSTEM</b>	
10.1	ELECTRICAL .....	10-3
10.1.1	ELECTRICAL WIRING SCHEMATIC.....	10-3
10.1.2	CONNECTOR LAYOUT .....	10-24
10.1.3	LOCATION AND USE OF FUSE .....	10-162
10.1.4	WIPER CONTROL RELAY .....	10-167
10.1.5	PRESSURE SWITCH (FOR TRAVEL MOTION DETECT) .....	10-168
10.1.6	PRESSURE SWITCH (FOOT BRAKE).....	10-169



10.1.7	PRESSURE SENSOR.....	10-170
10.1.8	INCLINATION SENSOR.....	10-173
10.1.9	BUZZER UNIT .....	10-174
10.1.10	RELAY BOX .....	10-175
10.1.11	RELAY BOX .....	10-186
10.1.12	LOAD DETECTOR (CRANE).....	10-189
10.1.13	ANGLE SENSOR.....	10-190
10.1.14	HOW TO CHECK THE FAILURE CONTENTS .....	10-192
10.1.15	WARNING DISPLAY CONDITION.....	10-196
10.1.16	ENGINE ECU.....	10-207
10.2	LOAD SAFETY DEVICE .....	10-210
10.2.1	CONFIGURATION OF SCREENS.....	10-211
10.2.2	SYSTEM DAIGRAM.....	10-212
10.2.3	MONITOR DISPLAY.....	10-213
10.2.4	DETAIL OF ML CONTROLLER .....	10-220
10.2.5	SHIFTING TO MAINTENANCE SCREEN .....	10-233
10.2.6	INPUT / OUTPUT SIGNAL.....	10-235
10.2.7	ML FUNCTION SETTING.....	10-244
10.2.8	DATA COPY, FORMAT .....	10-246
10.2.9	LANGUAGE, UNIT SETTING.....	10-250
10.2.10	ML ADJUSTMENT (NORMAL).....	10-251
10.2.11	ML ADJUSTMENT (TEMPORARY).....	10-274
10.2.12	OPERATION PROGRESS .....	10-275
10.2.13	VERSION INFORMATION .....	10-278
10.2.14	FAILURE HISTORY.....	10-279
10.2.15	ADJUSTMENT DATA.....	10-282
10.2.16	DOWNLOAD ML PROGRAM.....	10-288
10.2.17	DOWNLOAD OF MONITOR PROGRAM .....	10-290
10.3	MAIN CONTROLLER.....	10-295
10.3.1	ARRANGEMENT OF MAIN CONTROLLER.....	10-295
10.3.2	COMPOSITION OF SYSTEM .....	10-296
10.3.3	FUNCTION OF MAIN CONTROLLER.....	10-297
10.3.4	MAIN CONTROLLER 1, 2 (HARDWARE).....	10-333
10.3.5	SPECIFICATIONS OF MAIN CONTROLLER INPUT/OUTPUT .....	10-334
10.3.6	ARRANGEMENT OF MAIN CONTROLLER CONNECTOR PIN .....	10-348
10.3.7	ADJUSTMENT OF MAIN CONTROLLER .....	10-364
10.3.8	CONTROLLER MALFUNCTION EMERGENCY MEASURES.....	10-369

## 11. AIR CONDITIONER

11.1	NAME OF THE AIR CONDITIONER PARTS .....	11-1
11.2	ELECTRIC WIRING DIAGRAM .....	11-7
11.3	PARTS ILLUSTRATION .....	11-8
11.4	DISASSEMBLY AND ASSEMBLY OF THE UNIT .....	11-10
11.4.1	REMOVAL OF THE BLOWER UNIT .....	11-10
11.4.2	REPLACING THE BLOWER MOTOR .....	11-11
11.4.3	REPLACING THE BLOWER CONTROLLER.....	11-11
11.4.4	REMOVAL OF THE HEATER CORE .....	11-11
11.4.5	REMOVAL OF THE AIR CON. UNIT CASE-FRONT, REAR AND LOWER.....	11-12
11.4.6	REPLACING THE EVAPORATOR AND EXPANSION VALVE .....	11-13
11.4.7	INSTALLATION OF EVAPORATOR SENSOR.....	11-13
11.4.8	REPLACING THE MOTOR ACTUATOR.....	11-14
11.5	FAULT DETECTION FROM THE CONTROL PANEL INDICATION .....	11-15
11.5.1	GENERAL .....	11-15
11.5.2	FAULT IN THE INPUT AND OUTPUT CIRCUIT OF THE MOTOR ACTUATOR.....	11-15
11.5.3	FAULT IN THE THERMISTOR SENSOR CIRCUIT .....	11-16
11.6	BASIC SYSTEM OF HVAC .....	11-17
11.7	RECHARGING OF THE COOLANT.....	11-23
11.7.1	CAUTION AT WORK.....	11-23
11.7.2	WORK PROCEDURE.....	11-25
11.7.3	RECHARGING PROCEDURE.....	11-27
11.8	TROUBLESHOOTING.....	11-32

## 12. TRANSLIFTER SYSTEM

12.1	APPARATUS AND COMPONENTS LOCATION .....	12-1
12.2	CONSTRUCTION AND FUNCTION.....	12-2
12.2.1	HYDRAULIC SCHEMATIC.....	12-2
12.2.2	RAISING THE TRANSLIFTER.....	12-3
12.2.3	LOWERING THE TRANSLIFTER .....	12-4
12.3	REMOTE CONTROL SWITCH BOX.....	12-5

## 13. TROUBLESHOOTING

13.1	ENGINE.....	13-1
13.2	WINCH SYSTEM.....	13-3
13.3	SWING SYSTEM.....	13-8
13.4	TRAVELING SYSTEM.....	13-11

# SAFETY

## SAFETY INFORMATION

Most accidents, which occur during operation, are due to neglect of precautionary measures and safety rules. Sufficient care should be taken to avoid these accidents.

Erroneous operation, lubrication or maintenance services are very dangerous and may cause injury or death of personnel.

Thus, precautionary measures, or notes, written in this manual should be read and understood by personnel before starting each task.

Operation, inspection, and maintenance should be carefully carried out, and safety must be given the first priority.

Messages of safety are indicated with caution marks.

The safety information contained in this manual is intended only general safety information.

Messages of safety appear in this manual and on the machine.

All messages of safety are identified by the words "DANGER", "WARNING" and "CAUTION".

These words mean the following :



Indicates an imminently hazardous situation which, if not avoided, will result in a loss of life or serious injuries.



Indicates a potentially hazardous situation which, if not avoided, could result in a loss of life or serious injuries.



Indicates a potentially hazardous situation which, if not avoided, may result in a minor or moderate injuries.

It may also be used to alert against possible damage to the machine and its components.

**Note**

Supplementary explanation.

It is very difficult for us to forecast every danger that may occur during operation.

However, safety can be ensured by operating this machine according to methods recommended by Manitowoc.

While operating machine, be sure to perform work with great care, so as to not damage the machine, or let accidents occur.

Please continue studying this manual until proper operation is completely understood.

## **EXPLANATION OF WARNING LABELS IN THE MACHINE**

Since the warning labels are installed in the machine and indicated with the three stages in the same way as the warning description, confirm the positions and contents of all warning labels first.

Put them to the practical use to secure safety when operating, checking and performing maintenance.

## **HANDLING OF WARNING LABELS IN THE MACHINE**

1. When the warning label is damaged or stained, order it to the designated service shop.
2. Do not remove the warning labels.
3. When the surface of the warning label is soiled and difficult to be seen, wipe it cleanly.

Reference Only

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