

# **PARTS MANUAL**

---

**C1.0 - C1.3 - C1.3 LWB [V30ZMU]  
(B463)**

CUSTOMER EDITION

---

***HYSTER***



**SECTIONS**

<b>1</b>	<b>FRAME</b>
<b>2</b>	<b>ELECTRICAL SYSTEM</b>
<b>3</b>	<b>DRIVE UNIT</b>
<b>4</b>	<b>LOAD WHEEL</b>
<b>5</b>	<b>HYDRAULIC SYSTEM</b>
<b>6</b>	<b>MAST-TWO STAGE TRI-FORM</b>
<b>7</b>	<b>MAST-THREE STAGE TRI-FORM</b>
<b>8</b>	<b>OPERATOR COMPARTMENT</b>
<b>9</b>	<b>TRILATERAL ATTACHMENT</b>
<b>10</b>	<b>ACCESSORIES</b>
<b>11</b>	<b>NUMERICAL INDEX</b>

This Parts Manual is divided into 11 major sections which are listed above. Quick reference to these sections can be made by placing the right thumb on the tab of the desired section, bending the book back and thumbing the pages to the corresponding tab.



**Thanks very much for your reading,  
Want to get more information,  
Please click here, Then get the complete  
manual**

**JustClickHere** 

**NOTE:**

**If there is no response to click on the link above,  
please download the PDF document first, and then  
click on it.**

**Have any questions please write to me:  
[admin@servicemanualperfect.com](mailto:admin@servicemanualperfect.com)**

**TABLE OF CONTENTS**

<b>DESCRIPTION</b>	<b>PAGE</b>
<b>A</b>	
ADDITIONAL FAN	
OPTION .....	2-16
ALTIMETER .....	2-18
ATTACHMENT	
CYLINDER .....	9-12
MAST .....	9-4
NOSE .....	9-14
PANTOGRAPH .....	9-22
ATTACHMENT COVERS .....	9-2
<b>B</b>	
BATTERY AND REAR COVERS .....	1-8
BATTERY COMPARTMENT	
C1.0 - FRAME 1 (→ 8/2007) .....	1-10
C1.0 - FRAME 1 (9/2007 →) .....	1-12
C1.3 - V30ZMU - FRAME 2 (→ 8/2007) .....	1-16
C1.3 - V30ZMU - FRAME 2 (9/2007 ↔ 2/2010) .....	1-18
C1.3 - V30ZMU - FRAME 2 (3/2010 →) .....	1-22
C1.3 LWB - V30ZMU - FRAME 3 (→ 8/2007) .....	1-26
C1.3 LWB - V30ZMU - FRAME 3 (9/2007 ↔ 2/2010) .....	1-28
C1.3 LWB - V30ZMU - FRAME 3 (3/2010 →) .....	1-30
BATTERY TRAY	
C1.0 - OPTION .....	10-10
C1.3 - C1.3 LWB - V30ZMU - OPTION .....	10-12
<b>C</b>	
CAB BEARING MARKING .....	8-8
CABIN OPTIONS	
→ S/N B463T01555E .....	8-10
S/N B463T01556E → .....	8-14
CONSOLE ADAPTER	
OPTION .....	10-8
COVERS AND BARRIERS .....	8-4
<b>D</b>	
DRIVE MOTOR .....	3-10
DRIVE UNIT .....	3-2
<b>E</b>	
ELECTRIC PANEL	
DOUBLE PEDAL .....	8-86
SINGLE PEDAL .....	8-90
ELECTRICAL ARRANGEMENT	
→ S/N B463T01555E .....	8-94
S/N B463T01556E → .....	8-98
→ S/N B463T01609F .....	8-102
S/N B463T01610F → .....	8-106
POWER CABLES .....	2-10

## TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
ELECTRICAL PANEL	
→ S/N B463T01544E .....	2-2
S/N B463T01545E → .....	2-6
ELECTROMAGNETIC BRAKE .....	3-12
EMERGENCY LOWERING DEVICE	
C1.0 - C1.3 - C1.3 LWB .....	8-19
V30ZMU (→ S/N B463T01520D) .....	8-17
V30ZMU (S/N B463T01521D →) .....	8-18
ENCODER SUPPORT .....	9-17
<b>F</b>	
FORKS .....	9-30
FRAME .....	1-2
FRONT ROLLERS GUIDE	
OPTION .....	1-36
<b>H</b>	
HIGH PERFORMANCE LOWERING VALVE	
OPTION .....	5-10
HYDRAULIC GROUP .....	5-2
HYDRAULIC HOSES	
FORK POSITIONER - OPTION .....	9-28
MAST .....	9-10
PANTOGRAPH .....	9-26
HYDRAULIC STABILIZERS	
OPTION .....	1-6
<b>L</b>	
LABELS	
ATTACHMENT .....	9-36
FRAME - SHEET 1 OF 2 .....	1-38
FRAME - SHEET 2 OF 2 .....	1-40
MAST .....	6-16
MAST .....	7-14
OPERATOR COMPARTMENT .....	8-110
STEERING CONSOLE .....	8-112
LAP TOP	
OPTION .....	10-6
LIFT MOTOR AND PUMP .....	5-6
LOAD WHEELS .....	4-2
<b>M</b>	
MAIN MANIFOLD .....	5-8
MANIFOLD	
AUXILIARY LIFT AND TRAVERSE .....	9-8
PANTOGRAPH AND ROTATE .....	9-18
TILTING AND FORKS POSITION - OPTION .....	9-20
MANIFOLD STABILIZERS	
OPTION .....	5-13
MAST .....	6-2

**TABLE OF CONTENTS (continued)**

<b>DESCRIPTION</b>	<b>PAGE</b>
MAST BEARING MARKING .....	6-6
MECHANICAL STABILIZERS	
ADJUSTABLES - OPTION .....	1-5
NO ADJUSTABLES - OPTION .....	1-4
<b>O</b>	
OPERATOR CABIN .....	8-2
<b>R</b>	
REDUCTION UNIT	
GK30 .....	3-4
GK40 .....	3-6
<b>S</b>	
SEAT	
FORWARD CONSOLE .....	8-46
SIDE GATES	
C1.0 - C1.3 - C1.3 LWB (→ 11/2007) .....	8-24
C1.0 - C1.3 - C1.3 LWB (12/2007 →) .....	8-28
V30ZMU (→ 11/2007) .....	8-20
V30ZMU (12/2007 →) .....	8-22
SIDE ROLLERS GUIDE	
OPTION .....	1-34
STEERING CONSOLE	
FORWARD CONSOLE - SHEET 1 OF 3 .....	8-32
FORWARD CONSOLE - SHEET 2 OF 3 (→ 8/2014) .....	8-34
FORWARD CONSOLE - SHEET 2 OF 3 (9/2014 →) .....	8-38
FORWARD CONSOLE - SHEET 3 OF 3 .....	8-42
SIDE SEAT CONSOLE - SHEET 1 OF 7 .....	8-50
SIDE SEAT CONSOLE - SHEET 2 OF 7 (→ S/N B463T01662F) .....	8-52
SIDE SEAT CONSOLE - SHEET 2 OF 7 (S/N B463T01663F →) .....	8-56
SIDE SEAT CONSOLE - SHEET 3 OF 7 - OPTION .....	8-60
SIDE SEAT CONSOLE - SHEET 4 OF 7 (→ 11/2009) .....	8-64
SIDE SEAT CONSOLE - SHEET 4 OF 7 (12/2009 →) .....	8-68
SIDE SEAT CONSOLE - SHEET 5 OF 7 - OPTION .....	8-72
SIDE SEAT CONSOLE - SHEET 6 OF 7 .....	8-76
SIDE SEAT CONSOLE - SHEET 7 OF 7 .....	8-80
STEERING MOTOR	
FOR MODELS WITH GK30 .....	3-14
FOR MODELS WITH GK40 .....	3-16
<b>T</b>	
TELEMETRY	
OPTION .....	2-21
TELEMETRY LABEL	
OPTION .....	2-23
<b>V</b>	
VALVE REPAIR KIT	
ROTOR .....	9-25



**TABLE OF CONTENTS (continued)**

---

<b>DESCRIPTION</b>	<b>PAGE</b>
<b>W</b>	
WHEELS PROTECTION	
OPTION .....	1-37
WIRE DRIVER	
C1.0 - C1.3 - C1.3 LWB - OPTION .....	10-4
V30ZMU - OPTION .....	10-2
WIRE HARESS	
TELEMETRY OPTION .....	2-26
WIRE HARNESS .....	9-34

---

**ABBREVIATIONS QUICK REFERENCE SHEET**

Listed below are abbreviations used in parts manuals to denote the following expressions:

<b>TERM</b>	<b>DEFINITION</b>	<b>TERM</b>	<b>DEFINITION</b>
Amp	Amperes	FRE	Freezer Environment
AR	As Required	in.	inches
BDI	Battery Discharge Indicators	LPG	Liquefied Petroleum Gas
BWI	Brush Wear Indicator	MAP	Manifold Absolute Pressure
CE	Communicator End	mm	millimeters
CRE	Corrosive Environment	MSTS	Microprocessor Spark Timing System
D/B	Date Break	NPT	National Pipe Threads
dbA	Decibel "A" Scale	O/S	Oversize
DE	Drive End	PTO	Power Take Off
ECH	Empty Container Handler	RPM	Revolutions per Minute
ECH-3	Empty Container Handler - 3 High Stacking	S/N	Serial Number
ECH-4	Empty Container Handler - 4 High Stacking	TMM	Truck Management Module
ECH-5	Empty Container Handler - 5 High Stacking	UL Type D	Diesel-Powered Safety Rating
ECH-6	Empty Container Handler - 6 High Stacking	UL Type DS	Diesel-Powered Safety Rating
ECH-7	Empty Container Handler - 7 High Stacking	UL Type E	Battery-Powered Safety Rating
ECM	Electronic Control Module	UL Type EE	Battery-Powered Safety Rating
ECN	Engineering Change Notice	UL Type ES	Battery-Powered Safety Rating
EEPROM	Electrically Erasable Programmable Read Only Memory	UL Type G	Gasoline-Powered Safety Rating
EPA	US Environmental Protection Agency	UL Type GS	Gasoline-Powered Safety Rating
EPROM	Electrically Programmable Read Only Memory	UL Type LP	Gas-Powered Safety Rating
		UL Type LPS	LP Gas-Powered Safety Rating
		U/S	Undersize
		UL	Underwriters Laboratory
		V	Volts

## HOW TO USE THE ILLUSTRATED PARTS MANUAL

This parts manual describes and illustrates assemblies, subassemblies, and detail parts needed for service replacement.

The different constructions are indicated by keys and footnotes. The callouts correspond to descriptions found on the next page.

**1** SECTION 11 NUMERICAL INDEX

PART NO.	PG	ITEM	PART NO.	PG	ITEM	PART NO.	PG	ITEM
138	5-9	31	5-17	42	16481	6-25	3	6-7
	5-13	31	7-13	8		6-25	4	16882
	5-9	32	1-3	6		6-26	53	16883
	5-13	32	1-4	45		6-26	65	16882
	3-12	10	5-9	16		10-3	16	8-5
	5-5	8	5-13	16		6-26	48	9-5
						6-11	3	16989
						6-11	9	17051
						6-13	101	8-5
						6-25	7	9-5
						6-25	8	17061
						6-25	11	17151
						6-25	20	3-11
						9-7	7	17775
								6-25
								22

**2** SECTIONS

1	ELEC
2	ST
3	ST
4	ST
5	BRAKE/ACCEL
6	HYD
7	MAST-TWO STAGE LI
8	MAST-THREE STAGE
9	MAST-TWO STAGE
10	NI
11	NI

**3** TABLE OF CONTENTS

DESCRIPTION	PAGE
ACCELERATOR/MONOTROL PEDAL	5-2
BACKUP ALARM	
BATTERY CONNECTOR	
BATTERY ROLLER AN	
BRAKE ASSEMBLY	
BRAKE MASTER CYLIN	
BRAKE PEDAL LINKAG	
CARRIAGE	
THREE STAGE FULL	
TWO STAGE FULL FF	
TWO STAGE LIMITED	
CONTROL VALVE	
COUNTERWEIGHT	
DASH DISPLAY	
DC-DC CONVERTER	

**4** SECTION 11 NUMERICAL INDEX

**5** TRANSMISSION HOUSING (⇒ S/N G160-2628)

**6** KEY:

A: Diesel  
B: Gasoline and LPG

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
		Transmission	1	1
	2022547	Transmission	1	1
	2023329	Transmission	2	2
	2064470	Case	4	4
1	2023418	Bearing Cap	1	1
2	296426	Washer	2	2
3	293692	Capscrew	2	2
4	2021390	Cover	4	4
5	1371656	Cotter Pin	1	1
6	2021329	O-Ring	4	4
7	2021915	Plug	22	22
8	2021675	Housing	39	39
9	2021336	Pin	1	1
10	287860	Capscrew	1	1
11	292682	Lockwasher	8	8
12		Hydraulic Pump (see Figure 6-6)	8	8
13		Gasket	1	1
14	2021345	Capscrew	1	1
15	214364	Washer	1	1
16	296418	Temperature Switch	1	1
17	2021388	Breather	9	9
18	2021389	Dipstick	9	9
19	2021383	Capscrew	2	2
20	292515	Nut	3	3
21	136692	Capscrew	3	2
22	292527	Capscrew	4	4
23	292531	Lockwasher	4	4
24	292693	Capscrew	1	1
25	293637	Capscrew	1	1
26	296420	Washer	1	1
	996403	Transmission Kit (Include Item 7)		
	996405	Transmission Kit (Include Item 14)		

**7** TRANSMISSION HOUSING (⇒ S/N G160-2628)

**8** SECTION 11 NUMERICAL INDEX

**9** TRANSMISSION HOUSING (⇒ S/N G160-2628)

**10** TRANSMISSION HOUSING (⇒ S/N G160-2628)

This Parts Manual is divided into 11 major sections which are listed above. Quick reference can be made by placing the right thumb on the tab of the desired section, bending the bottom edge of the manual, and turning the pages to the corresponding tab.

©2001 HYSTER COMPANY See Service Manual for service procedures. 3-15

HP990135

## HOW TO FIND THE DESIRED PART NUMBER

### WHEN THE PART NUMBER AND THE NEXT HIGHER ASSEMBLY IS NOT KNOWN:

1. Determine the function and application of the part required. Turn to the Sections Page. Choose the general area of reference most likely to include the part.
2. Turn to the section you chose. Use the Section Table of Contents to determine the assembly which would normally contain the part required. Then locate the part on the assembly breakdown page.

### WHEN THE PART NUMBER IS NOT KNOWN AND THE NEXT HIGHER ASSEMBLY IS KNOWN:

3. Determine the assembly the required part is used on. Turn to the Table of Contents (Page i).
4. Locate the assembly the required part is used on and turn to the page indicated for that assembly. Then locate the part on the assembly breakdown page.

### WHEN THE PART NUMBER IS KNOWN:

5. Use the Numerical Index (Page 11-1) to find the part number. Turn to the page listed and locate the part as indicated by the item number.

### GENERAL:

The assembly breakdowns include part numbers, descriptions, quantities required, keys and footnotes to help in selecting correct parts.

6. Parts Supersession Information. Part numbers that have this history will be displayed in the parts list in the order that they were superseded (from oldest to newest). The superseded part numbers will be shown with a line through them.

Five periods in the PART NO. column (. . . . .) indicate that the part is either *Not Serviced Separately* or there is a reference to another figure. A figure reference is denoted by a pointing hand followed by a figure number in the DESCRIPTION column (☞ Figure 10)

7. Keys are used to show two or more similar assemblies, RH and LH assembly parts, etc. Select the appropriate key, "A", "B", "C", "D", or "E" and the corresponding quantity column to find the required parts. Two periods in the QTY column (..) indicate that the part is not used for that assembly.
8. Indented descriptions under the DESCRIPTION column are used to indicate assemblies and

subparts of assemblies. In the example on the previous page, *BEARING CAP* (Item 2) is a subpart of the major assembly *CASE*.

9. Quantities shown are for one assembly. The quantities of the subpart *BEARING CAP* are indicated as two and two. This means two per *CASE* assembly.
10. Serial number breaks identify the most current parts information and are shown as follows:
  - **S/N D001H2628**  
Indicates last serial number affected.
  - S/N D001H2629** →  
Indicates the first serial number affected.
  - S/N D001H1553** ↔ **S/N D001H3291**  
Indicates a range of serial numbers affected.

ECN numbers for pending serial numbers are shown to allow for the inclusion of the most current parts information and are identified as follows:

→ **S/N Pending Per ECN 63243**

Indicates a pending serial number for last unit affected.

**S/N Pending Per ECN 63243** →

Indicates a pending serial number for first unit affected.

Date breaks are used to indicate when a change occurred but a subsequent serial number break was not recorded. This is an arbitrary date usually based on the ECN release and are identified as follows:

→ **D/B 3/00**

Indicates that a change occurred sometime within that month for the item affected.

**D/B 3/00** →

Indicates that a change occurred sometime within that month for the item affected.

**D/B 3/00** ↔ **D/B 4/00**

Indicates a range of production dates of the item affected.

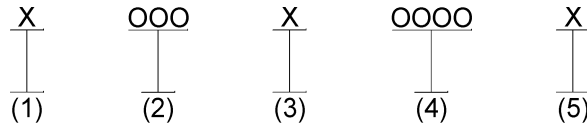
Contact your local dealer for Hyster lift trucks for serial number information for items with a ECN or a date break.

### ORDERING PARTS:

When ordering replacement parts, give the unit serial number, part number, name of part and quantity required.

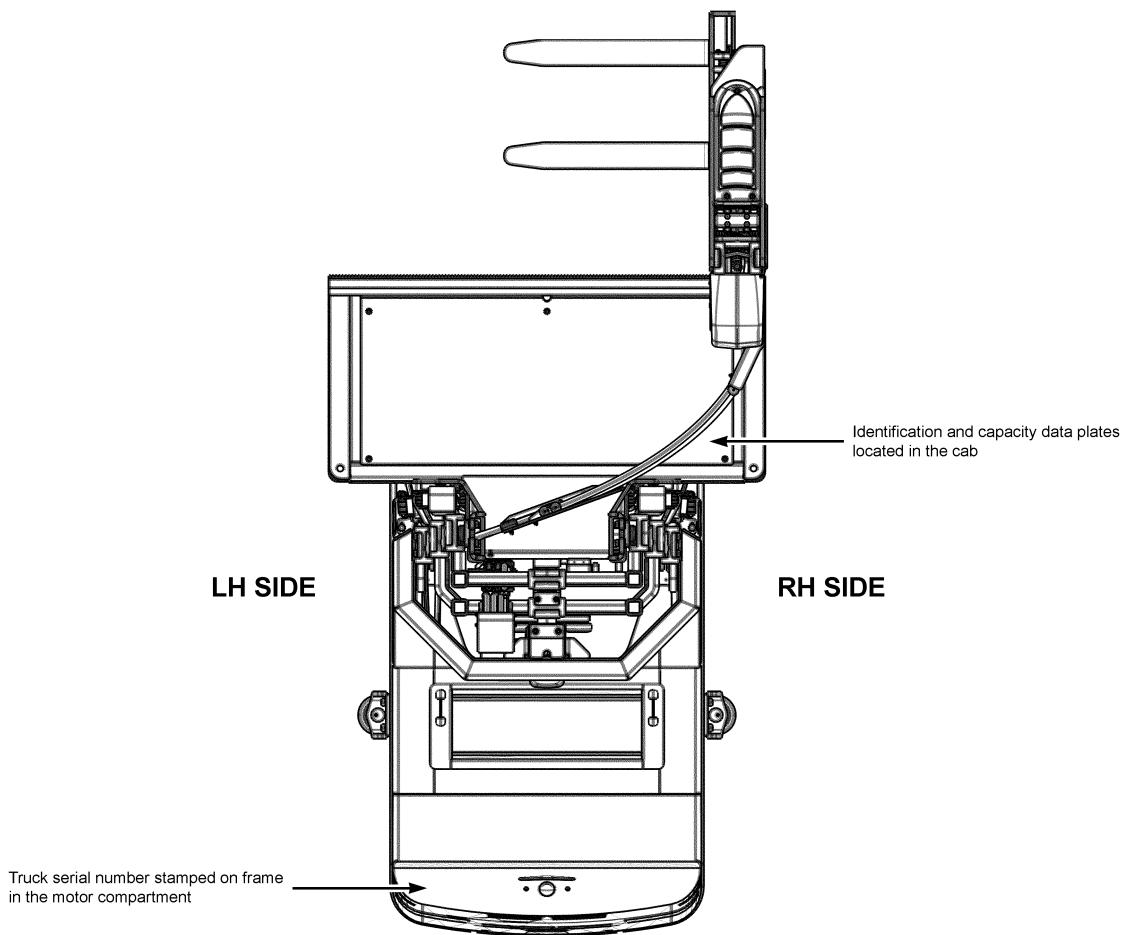
For any further information on parts, service, or ordering, consult your local dealer for Hyster lift trucks.

## IDENTIFICATION OF TRUCK SERIAL NUMBERS



- (1) and (2) The first letter and three numbers indicate the truck unit code.
- (3) The second letter indicates the plant of manufacture.
- (4) The four or five digit number indicates the production sequence number of the truck.
- (5) The final letter indicates the year of manufacture starting with "A" in 1957, 1980, and 2003. The letters "I", "O", and "Q" will not be used.

For pending serial numbers contact your local dealer for Hyster lift trucks.



BP990020

Parts referred to in this book as right or left hand parts are in accordance with the illustration above.

**PUBLICATIONS**

Every new lift truck is provided with an OPERATING MANUAL. This manual has information that the operator must know for inspection and operation of the lift truck.

SERVICE MAINTENANCE MANUALS, which provide service and overhaul procedures, and PARTS

MANUALS with complete replacement part identification, are available at a nominal fee from your Hyster dealer to assist users in effectively maintaining Hyster lift trucks in a safe, useful condition. See the list below for information on ordering specific publications for this model lift truck.

---

<b>PUBLICATION</b>	<b>HYSTER PART NUMBER</b>
Operating Manual (North America) .....	1607841
Operating Manual (Europe) .....	1607841
Service Manual (Complete) (North America) .....	1607841
Service Manual (Complete) (Europe) .....	1600734
Parts Manual.....	1596190



**1**

**FRAME**

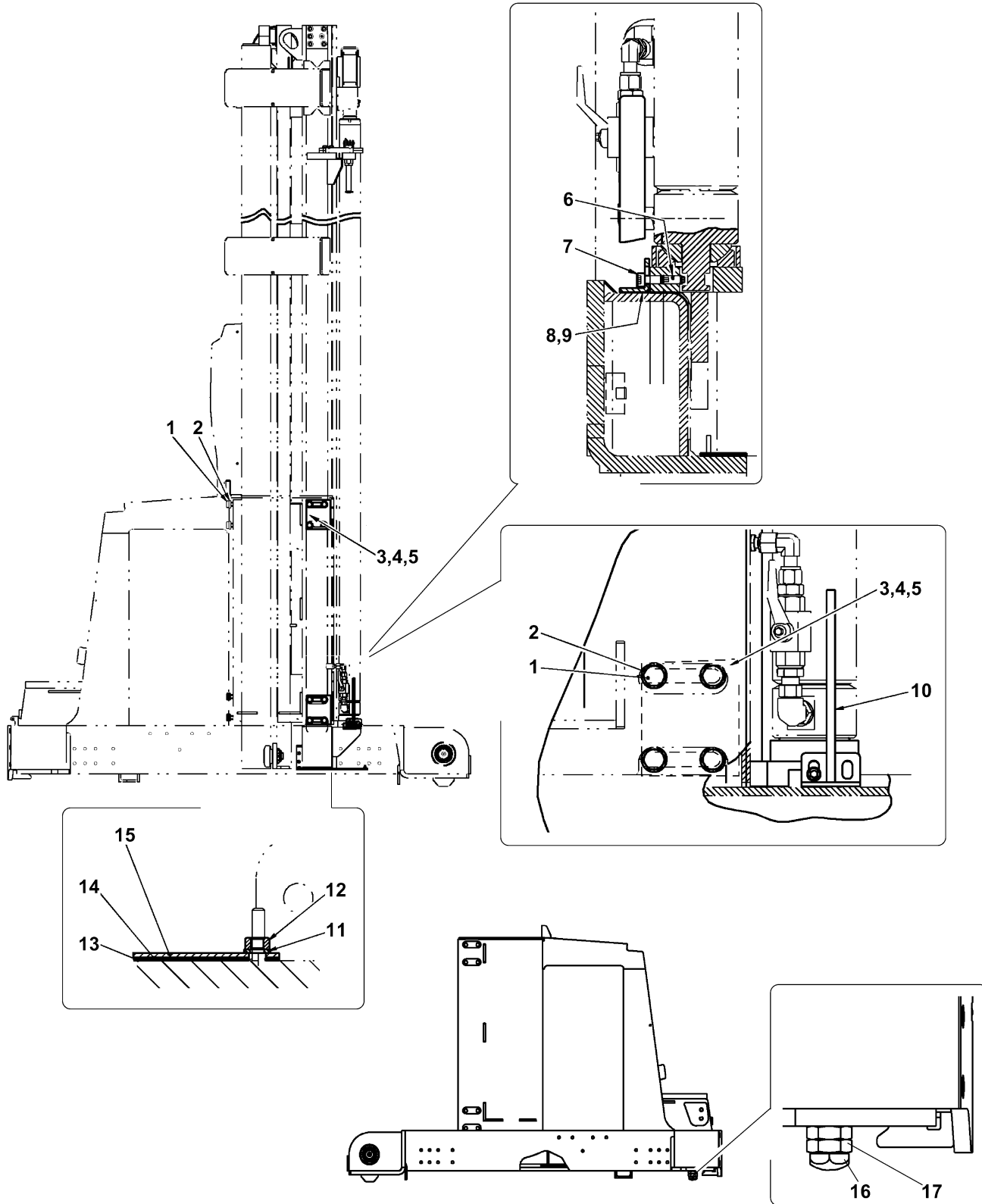




**SECTION 1**  
**FRAME**

<b>DESCRIPTION</b>	<b>PAGE</b>
BATTERY AND REAR COVERS .....	1-8
BATTERY COMPARTMENT	
C1.0 - FRAME 1 (→ 8/2007) .....	1-10
C1.0 - FRAME 1 (9/2007 →) .....	1-12
C1.3 - V30ZMU - FRAME 2 (→ 8/2007) .....	1-16
C1.3 - V30ZMU - FRAME 2 (9/2007 ↔ 2/2010) .....	1-18
C1.3 - V30ZMU - FRAME 2 (3/2010 →) .....	1-22
C1.3 LWB - V30ZMU - FRAME 3 (→ 8/2007) .....	1-26
C1.3 LWB - V30ZMU - FRAME 3 (9/2007 ↔ 2/2010) .....	1-28
C1.3 LWB - V30ZMU - FRAME 3 (3/2010 →) .....	1-30
FRAME .....	1-2
FRONT ROLLERS GUIDE	
OPTION .....	1-36
HYDRAULIC STABILIZERS	
OPTION .....	1-6
LABELS	
FRAME - SHEET 1 OF 2 .....	1-38
FRAME - SHEET 2 OF 2 .....	1-40
MECHANICAL STABILIZERS	
ADJUSTABLES - OPTION .....	1-5
NO ADJUSTABLES - OPTION .....	1-4
SIDE ROLLERS GUIDE	
OPTION .....	1-34
WHEELS PROTECTION	
OPTION .....	1-37

## FRAME (FIGURE 1-1)



BP120372

**FRAME**

ITEM	PART NO.	DESCRIPTION	QTY
1	293685	Capscrew .....	24
2	320165	Washer .....	24
3	1611705	Shim (0.5mm) .....	AR
4	1611706	Shim (1mm) .....	AR
5	1611707	Shim (2mm) .....	AR
6	302211	Setscrew .....	2
7	296024	Capscrew .....	2
8	1535735	Plate (0.5mm) .....	2
9	1535736	Plate (1mm) .....	2
10	1622604	Cylinder Rotation Lock .....	2
11	<del>4093489</del> 320156	Washer .....	4
12	292653	Nut .....	4
13	1611701	Shim (0.5mm) .....	AR
14	1611702	Shim (1mm) .....	AR
15	1611703	Shim (2mm) .....	AR
16	2795867	Screw .....	2
17	296140	Nut .....	2