

# **PARTS MANUAL**

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## **REACHSTACKER**

**R45-27IH, RS45-30CH,  
RS46-30IH, RS46-33CH,  
RS46-33IH, RS46-36CH  
(A222)**

**CUSTOMER EDITION**

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# ***HYSTER***



**SECTIONS**

<b>1</b>	<b>FRAME</b>
<b>2</b>	<b>ENGINE(S)</b>
<b>3</b>	<b>FUEL SYSTEM</b>
<b>4</b>	<b>ELECTRICAL SYSTEM</b>
<b>5</b>	<b>TRANSMISSION</b>
<b>6</b>	<b>DRIVE AXLE</b>
<b>7</b>	<b>STEERING SYSTEM</b>
<b>8</b>	<b>BRAKE SYSTEM</b>
<b>9</b>	<b>HYDRAULIC SYSTEM</b>
<b>10</b>	<b>BOOM</b>
<b>11</b>	<b>ROTATOR AND SPREADER</b>
<b>12</b>	<b>SPREADER ATTACHMENT</b>
<b>13</b>	<b>OPTIONS</b>
<b>14</b>	<b>NUMERICAL INDEX</b>

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**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
EPROM	Electrically Programmable Read Only Memory	UL Type GS	Gasoline-Powered Safety Rating
		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.

**HYSTER**  
UNIT CODE G160 EUROPE

06/2001

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**SECTIONS**

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

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

KEY:  
A: Diesel  
B: Gasoline and LPG

ITEM	PART NO.	DESCRIPTION	QTY	A	B
1	2022547	Transmission	1	1	1
2	2023329	Transmission	2	2	2
3	2064270	Case	4	4	4
4	2023418	Bearing Cap	1	1	1
5	206426	Washer	1	1	1
6	293692	Capscrew	2	2	2
7	2021390	Cover	4	4	4
8	1371856	Collar Pin	1	1	1
9	2021329	O-Ring	4	4	4
10	2021915	Plug	22	22	22
11	2021675	Housing	39	39	39
12	2021336	Pin	1	1	1
13	287880	Capscrew	1	1	1
14	292692	Lockwasher	1	1	1
15	2021345	Hydraulic Pump (See Figure 6-6)	8	8	8
16	214364	Gasket	1	1	1
17	286418	Capscrew	1	1	1
18	2021388	Washer	1	1	1
19	2021389	Temperature Switch	9	9	9
20	2021383	Breather	9	9	9
21	292515	Dipstick	2	2	2
22	139692	Capscrew	3	3	3
23	232527	Nut	3	3	3
24	292531	Capscrew	4	4	4
25	292683	Lockwasher	4	4	4
26	293637	Capscrew	1	1	1
27	296420	Washer	1	1	1
	996403	Transmission Kit (Include Item 7)			
	996405	Transmission Kit (Include Item 14)			

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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 book pages to the corresponding tab.

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See Service Manual for service procedures.  
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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 on 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 on Page 14-1 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. 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 D001H-2628**  
Indicates last serial number affected.
  - S/N D001H-2629** ⇒  
Indicates the first serial number affected.
  - S/N D001H-1553 ⇔ S/N D001H-3291**  
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.