

# **PARTS MANUAL**

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**W45ZHD  
(A419)**

**CUSTOMER EDITION**

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***HYSTER***



**SECTIONS**

<b>1</b>	<b>FRAME/DRIVE UNIT</b>
<b>2</b>	<b>ELECTRICAL SYSTEM</b>
<b>3</b>	<b>STEER HANDLE/BRAKE SYSTEM</b>
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<b>5</b>	<b>HYDRAULIC SYSTEM</b>
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This Parts Manual is divided into 7 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.



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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
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.

**HYSTER** UNIT CODE D001 NORTH AMERICA 06/2001

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- 7 MAST-TWO STAG
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**TRANSMISSION HOUSING** ⇒ S/N D001H-2628

KEY:  
A: Diesel  
B: Gasoline and LPG

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
1	202547	Transmission	1	1
2	2023329	Transmission	1	1
3	2021670	Case	2	2
4	2023418	Bearing Cap	4	4
5	296429	Washer	4	4
6	293947	Bolt	1	1
7	2021390	Cover	2	2
8	1371656	Colter Pin	4	4
9	2021915	O-Ring	1	1
10	2021329	Plug	4	4
11	2021675	Housing	22	22
12	2021336	Pin	39	39
13	287860	Lockwasher	1	1
14	292682	Hydraulic Pump ⇒ Figure 5-3	1	1
15	2021345	Gasket	1	1
16	214364	Bolt	8	8
17	296418	Washer	1	1
18	2021388	Temperature Switch	1	1
19	2021389	Breather	9	9
20	2021383	Dipstick	9	9
21	292515	Bolt	2	2
22	136692	Nut	3	3
23	292527	Bolt	3	2
24	292531	Capscrew	4	4
25	292583	Lockwasher	4	4
26	293637	Bolt	4	4
	296420	Washer	1	1
	996403	Transmission Kit (Includes Item 7)	1	1
	996405	Transmission Kit (Includes Item 14)	1	1

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

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HP990004

## 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 7-1) 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.

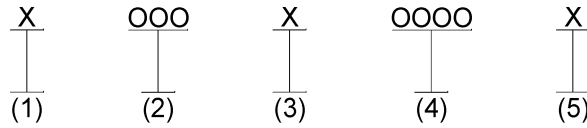
Contact your local dealer for Hyster lift trucks for serial number information for items with a ECN or a date break.

### ORDERING PARTS:

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

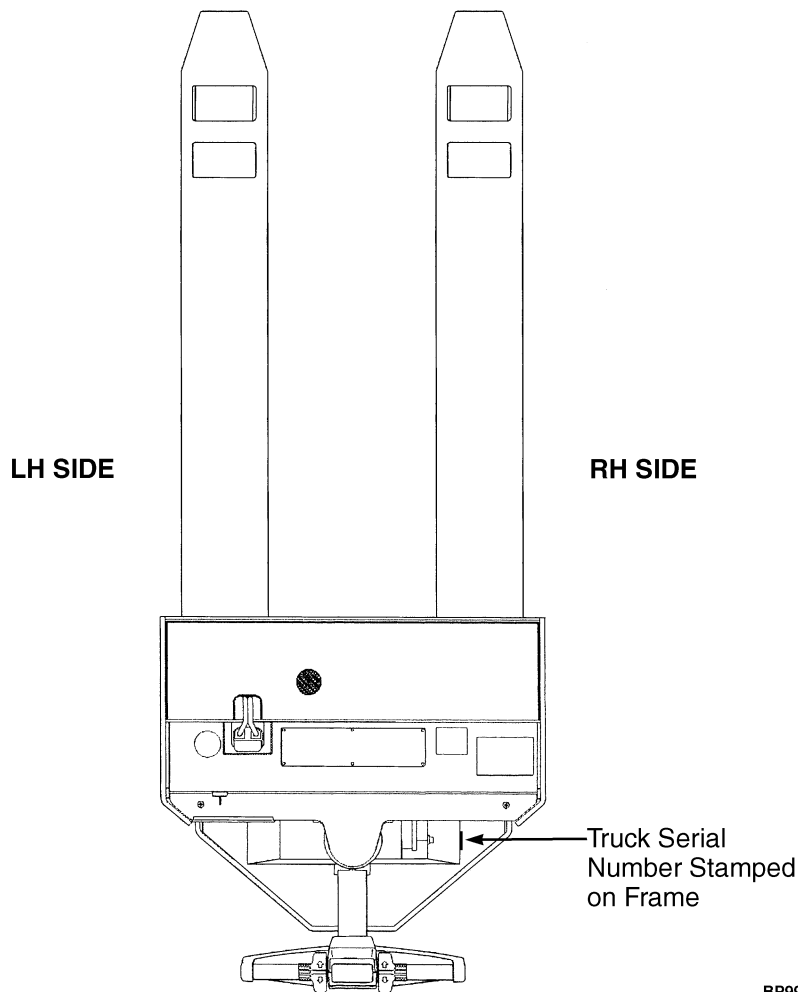
For any further information on parts, service, or ordering, consult your local dealer for Hyster lift trucks.

## 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.



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.

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<b>PUBLICATION</b>	<b>HYSTER PART NUMBER</b>
Operating Manual.....	4068464
Service Manual (Complete).....	4068817
Parts Manual.....	4099877



1

FRAME/DRIVE UNIT

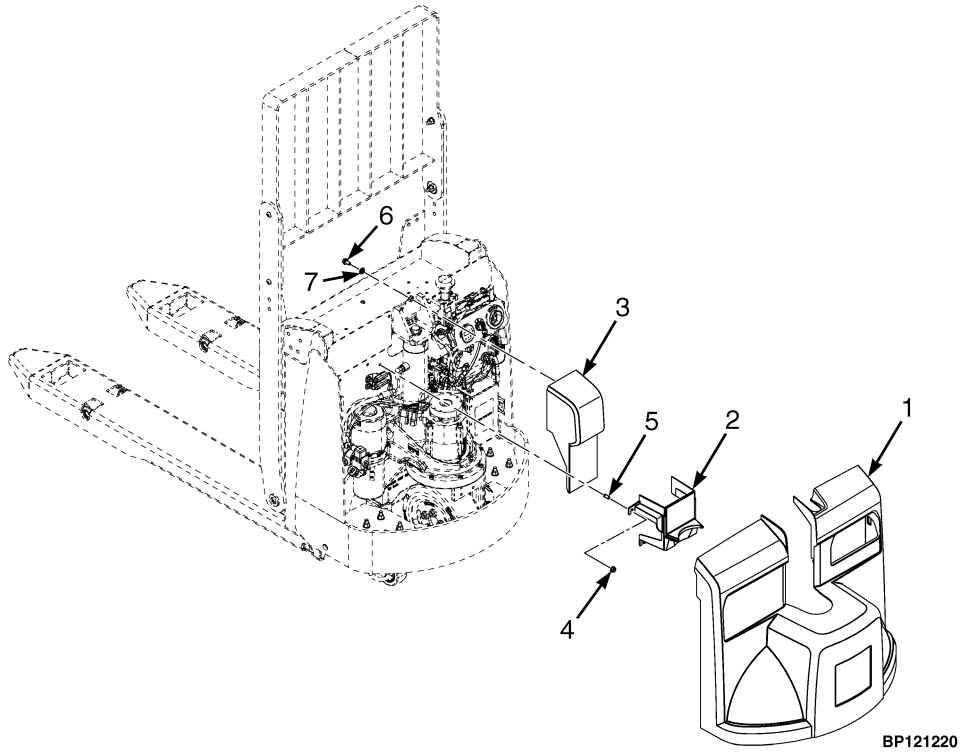


**SECTION 1  
FRAME/DRIVE UNIT**

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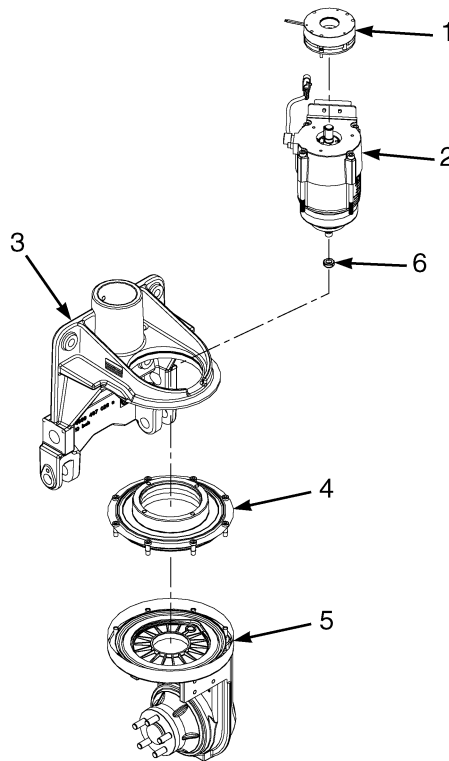


## COVERS (FIGURE 1-1)



ITEM	PART NO.	DESCRIPTION	QTY
1	4078175	Cover (Main) .....	1
2	4037293	Cover (Center Main) .....	1
3	4037294	Cover (Center Top) .....	1
4	1502543	Nut .....	3
5	4033024	Stud .....	3
6	369242	Capscrew .....	1
7	4140498	Washer .....	1

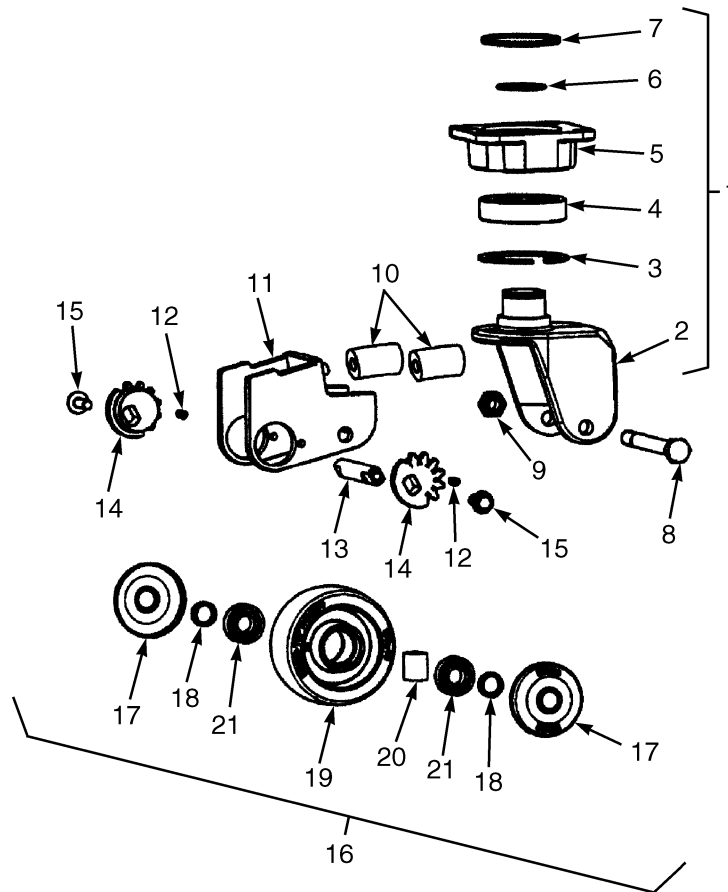
**MASTER DRIVE UNIT ASSEMBLY (FIGURE 1-2)**



BP160130

ITEM	PART NO.	DESCRIPTION	QTY
	4626898	Master Drive Unit Assembly .....	1
1	4135433	Brake Assy .....	1
1	4035947	Brake .....	1
1	4135063	Cap .....	1
1	4135062	Gasket .....	1
2	.....	Traction Motor Assembly .....	1
2	4135058	Motor , Traction .....	1
2	4121845	Sensor , Speed .....	1
2	4035946	Nut .....	1
3	.....	Carrier Assy .....	1
3	4134442	Frame .....	1
3	4134443	O-Ring .....	1
4	4073947	Bearing (Turntable) .....	1
4	4123900	Bearing .....	1
4	4150713	Capscrew .....	24
5	4073948	Gearbox .....	1
5	4150714	Snap Ring .....	1
5	4135061	Housing Assembly .....	1
5	4100217	Housing Cover .....	1
5	4035933	Snap Ring .....	1
5	4035934	O-Ring .....	1
5	380719	Breather Valve .....	1
5	4072706	Plate .....	1
6	4135432	Pinion Assembly .....	1
6	4100216	Pinion , Drive .....	1

## CASTER WHEEL ASSEMBLY (FIGURE 1-3) SEALED



HP121344

**CASTER WHEEL ASSEMBLY  
SEALED**

ITEM	PART NO.	DESCRIPTION	QTY
	4006485	Caster Wheel Assembly .....	2
1	4024053	Support .....	1
2	.....	Fork .....	1
3	.....	Snap Ring .....	1
4	.....	Bearing .....	1
5	.....	Plate .....	1
6	.....	Snap Ring .....	1
7	.....	Cap .....	1
8	293658	Capscrew .....	1
9	2099287	Locknut .....	1
10	4024052	Bumper Assy (Includes Spring) .....	1
11	.....	Fork .....	1
12	4010120	Pin .....	2
13	.....	Axle Shaft .....	1
14	4010119	Adjuster .....	2
15	4010126	Screw .....	2
16	4024051	Wheel Assy .....	1
17	4010127	Guard .....	2
18	.....	Axle Shaft .....	2
19	2047199	Wheel Assy .....	1
19	2047200	Wheel .....	1
20	2047201	Tube .....	1
21	2047202	Bearing .....	2
	<b>a</b> 296027	Capscrew .....	8
	<b>a</b> 1460477	Nut .....	8

**FOOTNOTES:****a** Not Illustrated, Caster Mounting