

# **PARTS MANUAL**

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**J45-70XN  
(A276)**

**CUSTOMER EDITION**

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***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>STEERING SYSTEM</b>
<b>5</b>	<b>BRAKE/ACCELERATOR SYSTEM</b>
<b>6</b>	<b>HYDRAULIC SYSTEM</b>
<b>7</b>	<b>MAST-TWO STAGE LIMITED FREE-LIFT</b>
<b>8</b>	<b>MAST-THREE STAGE FULL FREE-LIFT</b>
<b>9</b>	<b>MAST-TWO STAGE FULL FREE-LIFT</b>
<b>10</b>	<b>OPTIONS</b>
<b>11</b>	<b>FIELD CONVERSION KITS</b>
<b>12</b>	<b>NUMERICAL INDEX</b>

This Parts Manual is divided into 12 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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**TABLE OF CONTENTS**

DESCRIPTION	PAGE
<b>A</b>	
ACCELERATOR PEDAL ASSEMBLY (MONOTROL) .....	5-3
ACCELERATOR PEDAL ASSEMBLY (STANDARD) .....	5-2
ACCUMULATOR	
THREE STAGE FULL FREE LIFT - F508-F563 .....	8-70
ADD ON OPTIONS	
ADD ON TELEMETRY KITS .....	11-14
ADD-ON OPTION KITS .....	11-14
ARMREST SLIDER ASSEMBLY	
→ 9/2010 .....	1-102
9/2010 → .....	1-104
AUXILIARY HOSES	
WITH ELECTRO-HYDRAULIC VALVE .....	10-48
WITH MANUAL-HYDRAULIC VALVE .....	10-50
AUXILIARY KEY SWITCH .....	2-10
AUXILIARY PLUG AND WIRE HARNESS .....	2-12
AUXILIARY QUICK DISCONNECT MANIFOLD AND HOSES	
THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST) DUAL AUXILIARY WITH E- HYDRAULICS - THREE AND FOUR FUNCTION .....	10-92
THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST) SINGLE AUXILIARY WITH E- HYDRAULICS - THREE FUNCTION .....	10-88
THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST) SINGLE AUXILIARY WITH INTEGRAL SIDE-SHIFT AND E-HYDRAULICS - FOUR FUNCTION .....	10-90
TWO STAGE LIMITED FREE LIFT (F507/F562 SERIES MAST (DUAL AUXILIARY WITH E- HYDRAULICS)) - THREE AND FOUR FUNCTION .....	10-86
TWO STAGE LIMITED FREE LIFT (F507/F562 SERIES MAST (SINGLE AUXILIARY WITH E- HYDRAULICS)) - THREE FUNCTION .....	10-82
TWO STAGE LIMITED FREE LIFT (F507/F562 SERIES MAST (SINGLE AUXILIARY WITH INTEGRAL SIDE-SHIFT AND E-HYDRAULICS)) - FOUR FUNCTION .....	10-84
AUXILIARY TUBE EXTENSION KITS .....	11-12
AUXILIARY TUBE EXTENSIONS	
TWO AND THREE STAGE FULL FREE-LIFT (→ S/N D509V02103H) (→ S/N D508V27242H) (→ S/N D563V11350H) (→ S/N D564V02121H) .....	10-66
TWO AND THREE STAGE FULL FREE-LIFT (S/N D508V27243H →) (S/N D563V11351H →) (S/N D509V02103H →) (S/N D564V02122H →) .....	10-68
TWO AND THREE STAGE FULL FREE-LIFT - E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (S/N D508V27243H →) (S/N D509V02103H →) (S/N D563V11351H →) (S/N D564V02122H →) .....	10-70
TWO STAGE LIMITED FREE-LIFT (→ S/N D507V02972H) (→ S/N D562V02053H) .....	10-52
TWO STAGE LIMITED FREE-LIFT - WITHOUT QUICK DISCONNECT FITTINGS (S/N D562V02054H →) (S/N D507V02973H →) .....	10-54
TWO STAGE LIMITED FREE-LIFT - MANUAL HYDRAULICS WITH QUICK DISCONNECT FITTINGS (S/N D507V02973H →) (S/N D562V02054H →) .....	10-56
TWO STAGE LIMITED FREE-LIFT - E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (S/N D507V02973H →) (S/N D562V02054H →) .....	10-58
TWO STAGE LIMITED FREE-LIFT - WITH ISS CARRIAGE AND WITHOUT QUICK DISCONNECT FITTINGS (S/N D507V02973H →) (S/N D562V02054H →) .....	10-60
TWO STAGE LIMITED FREE-LIFT - WITH ISS CARRIAGE AND MANUAL HYDRAULICS WITH QUICK DISCONNECT FITTINGS (S/N D507V02973H →) (S/N D562V02054H →) .....	10-62

## TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
TWO STAGE LIMITED FREE-LIFT - WITH ISS CARRIAGE AND E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (→ S/N D507V02972H) (→ S/N D562V02053H) .....	10-64
<b>AUXILIARY TUBES</b>	
THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST) - MANUAL AND E-HYDRAULICS VALVE WITH QUICK DISCONNECT .....	10-78
THREE STAGE FULL FREE-LIFT (F508/F563 SERIES MAST) - MANUAL AND E-HYDRAULICS VALVE WITHOUT QUICK DISCONNECT .....	10-80
TWO STAGE LIMITED FREE LIFT (F507/F562 SERIES MAST - WITH MANUAL AND E-HYDRAULICS VALVE WITHOUT QUICK DISCONNECT .....	10-74
TWO STAGE LIMITED FREE LIFT (F507/F562 SERIES MAST - MANUAL AND E-HYDRAULIC VALVE WITH QUICK DISCONNECT .....	10-76
<b>B</b>	
BACK-UP ALARM KIT .....	11-15
<b>BATTERY CONNECTOR AND CABLE ASSEMBLY</b>	
WITH FAST CONNECT RAPID CHARGE OPTION (10/2013 →) .....	2-62
WITH RAPID CHARGE OPTION (→ 11/2014) .....	2-60
WITHOUT RAPID CHARGE OPTION .....	2-58
BATTERY REMOVAL .....	1-28
BATTERY RETENTION AND SPACERS .....	1-30
BRAKE ASSEMBLY .....	3-26
BRAKE PEDAL LINKAGE .....	5-4
<b>C</b>	
<b>CAB</b>	
DOOR INSTALLATION (→ 3/2009) .....	1-52
DOOR INSTALLATION (3/2009 →) .....	1-54
FRONT PANEL AND WIPER (→ 10/2013) .....	1-42
FRONT PANEL AND WIPER (10/2013 →) .....	1-44
FRONT PANEL ASSEMBLY .....	1-48
FRONT WIPER ASSEMBLY .....	1-50
FULL STEEL .....	1-40
FUSE ASSEMBLY .....	1-46
LEFT HAND DOOR ASSEMBLY - WITH VERTICAL BATTERY REMOVAL .....	1-56
LEFT HAND DOOR ASSEMBLY - WITH HORIZONTAL BATTERY REMOVAL .....	1-58
REAR PANEL AND WIPER ATTACHMENT (→ 10/2013) .....	1-82
REAR PANEL AND WIPER ATTACHMENT (10/2013 →) .....	1-84
REAR PANEL ASSEMBLY .....	1-86
RIGHT HAND DOOR ASSEMBLY - WITH HORIZONTAL BATTERY REMOVAL .....	1-62
RIGHT HAND DOOR ASSEMBLY - WITH VERTICAL BATTERY REMOVAL .....	1-64
ROOF PANEL ASSEMBLY .....	1-80
TOP PANEL AND ROOF LINER (→ 3/2009) .....	1-74
TOP PANEL AND ROOF LINER (3/2009 →) .....	1-76
TOP PANEL ASSEMBLY .....	1-78
WINDOW - LH DOOR .....	1-60
WINDOW - RH DOOR .....	1-66
<b>CAB HEATER</b>	
SHEET 1 OF 2 .....	1-70
SHEET 2 OF 2 .....	1-72

**TABLE OF CONTENTS (continued)**

<b>DESCRIPTION</b>	<b>PAGE</b>
CAB HEATER AND ATTACHING PARTS .....	1-68
CAB KITS .....	11-15
CARRIAGE	
THREE STAGE FULL FREE-LIFT - D508/D563 .....	8-28
THREE STAGE FULL FREE-LIFT - F508/F563 .....	8-68
TWO STAGE FULL FREE-LIFT .....	9-44
TWO STAGE LIMITED FREE-LIFT - D507/D562 .....	7-18
TWO STAGE LIMITED FREE-LIFT - F507-F562 .....	7-34
CONTACTOR	
UL-E WITHOUT OUTDOOR PROTECTION .....	2-54
UL-EE WITH OUTDOOR PROTECTION .....	2-56
CONTACTOR AND FUSE ASSEMBLY	
W/ OUTDOOR PROTECTION .....	2-48
CONTACTOR AND FUSE ASSEMBLY	
UL-E .....	2-50
UL-EE .....	2-52
CONTROL PANEL	
PUMP (→ S/N A276B03242K (LONG WHEEL BASE)) (→ S/N A276B03248K (SHORT WHEEL BASE)) .....	2-22
PUMP - WITH INTEGRATED HEATSINK (S/N A276B03243K ↔ 11/2014 (LONG WHEEL BASE)) (S/N A276B03249K ↔ 11/2014 (SHORT WHEEL BASE)) .....	2-24
TRACTION MOTOR (→ S/N A276B03242K (LONG WHEEL BASE)) (→ S/N A276B03248K (SHORT WHEEL BASE)) .....	2-28
TRACTION MOTOR - WITH INTEGRATED HEATSINK (S/N A276B03243K ↔ 11/2014 (LONG WHEEL BASE)) (S/N A276B03249K ↔ 11/2014 (SHORT WHEEL BASE)) .....	2-30
CONTROL PANEL AND ATTACHING PART	
PUMP - STANDARD AND ENHANCED PERFORMANCE (11/2014 →) .....	2-26
CONTROL PANEL AND ATTACHING PARTS	
TRACTION (11/2014 →) .....	2-34
CONTROL PANELS	
→ 11/2014 .....	2-18
11/2014 → .....	2-20
COUNTERWEIGHT .....	1-18
<b>D</b>	
DC-DC CONVERTER .....	10-6
DISC BRAKE ASSEMBLY .....	3-34
DISPLAY .....	2-16
DOME LIGHT .....	10-8
DRIP SHIELDS AND STATIC STRAP .....	1-23
DRIVE TIRE AND WHEEL .....	3-35
<b>E</b>	
ELECTRICAL ARRANGEMENT	
→ 10/2013 .....	2-4
10/2013 → .....	2-6
<b>F</b>	
FENDER .....	1-24



## TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
FENDER EXTENSIONS AND MUD GUARDS	
10/2013 → .....	1-26
FLOOR PLATES AND COVERS .....	1-20
FORK POSITIONER ASSEMBLY .....	10-40
FORKS .....	1-108
FORKS WITH LATCH	
OPTIONAL .....	1-110
FREE-LIFT	
THREE STAGE FULL FREE-LIFT - D508/D563 .....	8-20
TWO STAGE FULL FREE- LIFT - E509-E564 .....	9-34
TWO STAGE FULL FREE-LIFT - D509-D564 .....	9-12
FREE-LIFT CYLINDER	
THREE STAGE FULL FREE-LIFT - F508-F563 .....	8-60
TWO STAGE FULL FREE- LIFT - E509-E564 .....	9-37
FREE-LIFT CYLINDER AND ATTACHING PARTS	
THREE STAGE FULL FREE-LIFT - F508-F563 .....	8-50
FREE-LIFT CYLINDERS	
THREE STAGE FULL FREE-LIFT - D508/D563 .....	8-24
TWO STAGE FULL FREE-LIFT - D509-D564 .....	9-16
<b>H</b>	
HEADER HOSE AND ATTACHING PARTS	
TWO STAGE LIMITED FREE-LIFT - F507-F562 .....	7-30
HEADER HOSE CONVERSION KITS	
HEADER HOSES	
THREE STAGE FULL FREE-LIFT - D508/D563 (→ S/N D508V27872H) (→ S/N D563V11658H) .....	8-30
THREE STAGE FULL FREE-LIFT - D508/D563 (S/N D508V27873H →) (S/N D563V11659H →) .....	8-34
TWO STAGE FULL FREE-LIFT - D509-D564 .....	9-20
TWO STAGE FULL FREE-LIFT - E509-E564 .....	9-40
TWO STAGE LIMITED FREE-LIFT - D507/D562 .....	7-14
HEADER HOSES AND ATTACHING PARTS	
THREE STAGE FULL FREE-LIFT - F508-F563 .....	8-64
HOOD .....	1-4
WITH FAST CONNECT RAPID CHARGE OPTION (10/2013 →) .....	1-10
WITH RAPID CHARGE OPTION (→ 10/2013) .....	1-6
WITH RAPID CHARGE OPTION (10/2013 →) .....	1-8
HUB HOUSING (LEFT AND RIGHT HAND) .....	3-8
HYDRAULIC CONTROL CONVERSIONS .....	11-13
HYDRAULIC CONTROL VALVE AND ATTACHING PARTS	
ELECTRONIC - THREE AND FOUR FUNCTION .....	6-40
MANUAL - THREE AND FOUR FUNCTION .....	6-32
HYDRAULIC CONTROL VALVE ASSEMBLY	
ELECTRONIC - THREE AND FOUR FUNCTION .....	6-42
MANUAL - THREE AND FOUR FUNCTION .....	6-34
HYDRAULIC FILTER HOUSING .....	6-16
HYDRAULIC HOSES	
HOIST, TILT AND MAST .....	6-8
PARKING BRAKE VALVE .....	6-10
STEER AXLE .....	6-6

**TABLE OF CONTENTS (continued)**

<b>DESCRIPTION</b>	<b>PAGE</b>
STEERING .....	6-4
SUPPLY AND RETURN .....	6-2
HYDRAULIC PUMP	
19 CC .....	6-18
HYDRAULIC PUMP AND MOTOR ASSEMBLY	
72/80 VOLT .....	6-14
HYDRAULIC PUMP MOTOR	
72/80 VOLT .....	6-20
WITH OUTDOOR PROTECTION (10/2013 →) .....	6-24
HYDRAULIC TANK AND ATTACHING PARTS .....	6-12
<b>I</b>	
IMPACT SENSOR .....	10-10
INNER MAST	
THREE STAGE FULL FREE-LIFT - F508-F563 .....	8-46
THREE STAGE FULL FREE-LIFT - D508/D563 .....	8-10
TWO STAGE FULL FREE- LIFT - E509-E564 .....	9-26
TWO STAGE FULL FREE-LIFT - D509-D564 .....	9-4
TWO STAGE LIMITED FREE LIFT - F507-F562 .....	7-22
TWO STAGE LIMITED FREE-LIFT - D507/D562 .....	7-4
INTEGRAL SIDE-SHIFT	
FORK POSITIONER - THREE STAGE FULL FREE-LIFT (D508/D563) .....	10-32
FORK POSITIONER (F507-F562) - TWO STAGE LIMITED FREE-LIFT .....	10-34
FORK POSITIONER (F508-F563) - THREE STAGE FULL FREE-LIFT .....	10-36
HYDRAULIC HOSES - THREE STAGE FULL FREE-LIFT (D508/D563) .....	10-43
HYDRAULIC HOSES - TWO STAGE FULL FREE-LIFT .....	10-44
INTEGRAL SIDE-SHIFT CARRIAGE	
THREE STAGE FULL FREE-LIFT - D508/D563 .....	10-26
THREE STAGE FULL FREE-LIFT - F508/F563 .....	10-28
TWO STAGE FULL FREE-LIFT - D509/E509 AND D564/E564 .....	10-30
TWO STAGE LIMITED FREE-LIFT - D507/D562 .....	10-22
TWO STAGE LIMITED FREE-LIFT - F507/F562 .....	10-24
INTEGRAL SIDE-SHIFT CYLINDER .....	10-38
INTEGRAL SIDE-SHIFT HYDRAULIC HOSES	
THREE STAGE FULL FREE LIFT - F508/F563 .....	10-46
TWO STAGE LIMITED FREE-LIFT - D507/D562 .....	10-42
TWO STAGE LIMITED FREE-LIFT - F507/F562 .....	10-45
INTERMEDIATE MAST	
THREE STAGE FULL FREE-LIFT - F508-F563 .....	8-42
THREE STAGE FULL FREE-LIFT - D508/D563 .....	8-6
<b>L</b>	
LABELS	
EXTERIOR .....	1-32
HYDRAULIC CONTROL FUNCTIONS .....	1-36
INTERIOR .....	1-34
LIGHTS	
STOP, TAIL, BACK-UP, AND STROBE - WITH OVERHEAD GUARD .....	2-14
LOAD BACKREST EXTENSION .....	1-106

## TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
<b>M</b>	
MAIN LIFT	
THREE STAGE FULL FREE-LIFT - D508/D563 .....	8-12
TWO STAGE FULL FREE- LIFT - E509-E564 .....	9-28
TWO STAGE FULL FREE-LIFT - D509-D564 .....	9-6
TWO STAGE LIMITED FREE LIFT - F507-F562 .....	7-24
TWO STAGE LIMITED FREE-LIFT - D507/D562 .....	7-6
MAIN LIFT CYLINDER	
LEFT HAND - TWO STAGE FULL FREE-LIFT (D509-D564) .....	9-10
RIGHT HAND - TWO STAGE FULL FREE-LIFT (D509-D564) .....	9-8
THREE STAGE FULL FREE-LIFT - F508-F563 .....	8-56
THREE STAGE FULL FREE-LIFT - D508/D563 .....	8-16
TWO STAGE LIMITED FREE LIFT - F507-F562 .....	7-26
TWO STAGE LIMITED FREE-LIFT - D507/D562 .....	7-10
MAIN LIFT CYLINDER - LH	
TWO STAGE FULL FREE- LIFT - E509-E564 .....	9-32
MAIN LIFT CYLINDER - RH	
TWO STAGE FULL FREE- LIFT - E509-E564 .....	9-30
MAIN LIFT CYLINDER AND ATTACHING PARTS	
THREE STAGE FULL FREE-LIFT - F508-F563 .....	8-54
MANUAL CONTROL LEVERS .....	6-28
MANUAL LEVER KITS	
MASTER CYLINDER .....	5-6
MINI-LEVER CONTROLS	
3 FUNCTION .....	2-66
4 FUNCTION .....	2-70
MIRROR (PANORAMIC) .....	10-18
MIRROR (STANDARD) .....	10-16
MISCELLANEOUS CONVERSION KITS .....	11-13
<b>N</b>	
NON SUSPENSION SEAT	
ASSEMBLY .....	1-94
WITHOUT ELECTRONIC CONTROLS - WITH BOLT IN SENSOR .....	1-88
WITHOUT ELECTRONIC CONTROLS - WITH SNAP IN SENSOR .....	1-90
WITHOUT ELECTRONIC CONTROLS - WITH SNAP IN SENSOR .....	1-92
<b>O</b>	
OPERATOR COMPARTMENT .....	1-12
OUTER MAST	
THREE STAGE FULL FREE LIFT - F508-F563 .....	8-38
THREE STAGE FULL FREE-LIFT - D508/D563 .....	8-2
TWO STAGE FULL FREE LIFT - E509-E564 .....	9-24
TWO STAGE FULL FREE-LIFT - D509-D564 .....	9-2
TWO STAGE LIMITED FREE-LIFT - D507/D562 .....	7-2
TWO STAGE LIMITED FREE-LIFT - F507-F562 .....	7-20
OVERHEAD GUARD .....	1-38

**TABLE OF CONTENTS (continued)**

DESCRIPTION	PAGE
<b>P</b>	
PARK BRAKE ACTUATOR	
→ S/N A276B04867M .....	3-28
S/N A276B04868M → .....	3-30
PARK BRAKE RELEASE .....	5-8
PARKING BRAKE VALVE .....	5-10
POWER CABLES	
→ S/N A276B03242K (LONG WHEEL BASE) → S/N A276B03248K (SHORT WHEEL BASE) .....	2-36
WITH INTEGRATED HEATSINK (S/N A276B03243K ↔ 11/2014 (LONG WHEEL BASE)) (S/N A276B03249K ↔ 11/2014 (SHORT WHEEL BASE)) .....	2-40
WITH INTEGRATED HEATSINK (11/2014 →) .....	2-44
<b>R</b>	
REAR DRIVE HANDLE .....	10-14
REAR DRIVE HANDLE KITS .....	11-15
<b>S</b>	
SEATS	
FULL SUSPENSION - SHEET 1 OF 2 .....	1-96
FULL SUSPENSION - SHEET 2 OF 2 .....	1-100
SERVICE BRAKE ACTUATOR .....	3-32
SIDE PANELS	
→ 10/2013 .....	1-14
10/2013 → .....	1-16
SPUR GEAR SET .....	3-10
STEER PUMP ASSEMBLY	
→ S/N A276B05510M .....	4-16
S/N A276B05511M → .....	4-18
STEER TIRE AND WHEEL .....	4-6
STEERING ACCUMULATOR	
→ S/N A276B05510M .....	4-20
STEERING AXLE .....	4-2
STEERING COLUMN ASSEMBLY	
FIXED (→ 10/2013) .....	4-11
FIXED (10/2013 →) .....	4-12
TELESCOPIC (→ 10/2013) .....	4-14
TELESCOPIC (10/2013 →) .....	4-15
STEERING CYLINDER .....	4-4
STEERING WHEEL AND COLUMN	
FIXED .....	4-7
TELESCOPIC .....	4-9
<b>T</b>	
TILT CYLINDER AND MAST INSTALLATION	
WITH BOOTS (10/2013 →) .....	6-50
WITHOUT BOOTS .....	6-48
TILT CYLINDERS	
J45-50XN .....	6-52
J60-70XN .....	6-54
TILT SENSOR GROUP .....	2-64

## TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
TRACTION MOTOR	
80 VOLT (→ S/N A276B04867M) .....	3-12
80 VOLT (S/N A276B04868M →) .....	3-14
TRACTION MOTOR HOUSING	
LEFT HAND (→ S/N A276B04867M) .....	3-16
LEFT HAND (S/N A276B04868M →) .....	3-18
RIGHT HAND (→ S/N A276B04867M) .....	3-20
RIGHT HAND (S/N A276B04868M →) .....	3-22
TRACTION SPEED LIMITER	
STANDARD AND INTEGRAL SIDE-SHIFT CARRIAGES .....	10-20
TRANSAXLE AND ATTACHING PARTS	
→ S/N A276B04867M .....	3-2
S/N A276B04868M → .....	3-4
TRANSAXLE ASSEMBLY	
→ S/N A276B04867M .....	3-6
S/N A276B04868M → .....	3-7
TRANSAXLE OUTPUT ASSEMBLY .....	3-11
TRANSAXLE SEAL GROUP	
OUTDOOR PROTECTION OPTION (S/N A276B04868M →) .....	3-24
<b>V</b>	
VALVE ASSEMBLY	
INLET SECTION - MANUAL AND ELECTRONIC .....	6-46
LIFT, TILT, AND AUXILIARY - MANUAL HYDRAULIC .....	6-38
LIFT, TILT, AND AUXILIARY - ELECTRIC HYDRAULIC .....	6-44
<b>W</b>	
WIRE HARNESS	
BACK-UP ALARM STROBE - WITHOUT CONVERTER .....	2-173
EMERGENCY DISCONNECT .....	2-183
FAN ADAPTOR .....	2-187
FAN ADAPTOR - ALTERNATE PART .....	2-190
FAST CONNECT RAPID CHARGE (10/2013 →) .....	2-192
FRONT LIGHT SWITCH - WITH OUTDOOR PROTECTION .....	2-167
FRONT SWITCH .....	10-13
FRONT WIPER - WITHOUT OUTDOOR PROTECTION PACKAGE .....	2-176
FRONT WIPER - WITH OUTDOOR PROTECTION PACKAGE .....	2-178
HEATER - 80V .....	2-184
INTERFACE FRONT/REAR LIGHTS .....	10-12
LEFT HAND FRONT SWITCH .....	2-152
LH LIGHTS WITH OVERHEAD GUARD - WITHOUT TURN SIGNALS .....	2-147
LH LIGHTS WITH OVERHEAD GUARD - WITHOUT TURN SIGNALS .....	2-150
MAIN LIGHTS CHASSIS (→ S/N A276B03242K (LONG WHEEL BASE)) (→ S/N A276B03248K (SHORT WHEEL BASE)) .....	2-137
MAIN LIGHTS CHASSIS (S/N A276B03243K → (LONG WHEEL BASE)) (S/N A276B03249K → (SHORT WHEEL BASE)) .....	2-140
MAIN LIGHTS CHASSIS WITH OUTDOOR PROTECTION PACKAGE (10/2013 →) .....	2-144
MAIN WITH ELECTRO-HYDRAULICS - SHEET 1 OF 2 (→ S/N A276B03242K (LONG WHEEL BASE)) (→ S/N A276B03248K (SHORT WHEEL BASE)) .....	2-106

**TABLE OF CONTENTS (continued)**

DESCRIPTION	PAGE
MAIN WITH ELECTRO-HYDRAULICS - SHEET 2 OF 2 (→ S/N A276B03242K (LONG WHEEL BASE)) (→ S/N A276B03248K (SHORT WHEEL BASE)) .....	2-110
MAIN WITH ELECTRO-HYDRAULICS - SHEET 1 OF 2 (S/N A276B03243K → (LONG WHEEL BASE)) (S/N A276B03249K → (SHORT WHEEL BASE)) .....	2-114
MAIN WITH ELECTRO-HYDRAULICS - SHEET 2 OF 2 (S/N A276B03243K → (LONG WHEEL BASE)) (S/N A276B03249K → (SHORT WHEEL BASE)) .....	2-118
MAIN WITH ELECTRO-HYDRAULICS - SHEET 1 OF 2 (S/N A276B04637L →) .....	2-122
MAIN WITH ELECTRO-HYDRAULICS - SHEET 2 OF 2 (S/N A276B04637L →) .....	2-126
MAIN WITH ELECTRO-HYDRAULICS WITH OUTDOOR PROTECTION - SHEET 1 OF 2 (S/N A276B04637L →) .....	2-130
MAIN WITH ELECTRO-HYDRAULICS WITH OUTDOOR PROTECTION - SHEET 2 OF 2 (S/N A276B04637L →) .....	2-134
MAIN WITH MANUAL HYDRAULICS - SHEET 1 OF 2 (→ S/N A276B03242K (LBW)) (→ S/N A276B03248K (SWB)) .....	2-74
MAIN WITH MANUAL HYDRAULICS - SHEET 2 OF 2 (→ S/N A276B03242K (LWB)) (→ S/N A276B03248K (SWB)) .....	2-78
MAIN WITH MANUAL HYDRAULICS - SHEET 1 OF 2 (S/N A276B03249K → (SHORT WHEEL BASE)) (S/N A276B03243K → (LONG WHEEL BASE)) (→ 10/2013) .....	2-82
MAIN WITH MANUAL HYDRAULICS - SHEET 2 OF 2 (S/N A276B03243K → (LONG WHEEL BASE)) (S/N A276B03249K → (SHORT WHEEL BASE)) .....	2-86
MAIN WITH MANUAL HYDRAULICS - SHEET 1 OF 2 (S/N A276B04637L →) .....	2-90
MAIN WITH MANUAL HYDRAULICS - SHEET 2 OF 2 (S/N A276B04637L →) .....	2-94
MAIN WITH MANUAL HYDRAULICS WITH OUTDOOR PROTECTION - SHEET 1 OF 2 (S/N A276B04637L →) .....	2-98
MAIN WITH MANUAL HYDRAULICS WITH OUTDOOR PROTECTION - SHEET 2 OF 2 (S/N A276B04637L →) .....	2-102
MANUAL INTERLOCK .....	2-186
REAR WIPER - WITHOUT OUTDOOR PROTECTION PACKAGE .....	2-174
REAR WIPER - WITH OUTDOOR PROTECTION PACKAGE .....	2-175
RH LIGHT WITH FREEZER DISPLAY - WITH TURN SIGNAL (→ 10/2013) .....	2-156
RH LIGHT WITH FREEZER DISPLAY - WITH TURN SIGNAL (10/2013 →) .....	2-158
RH LIGHT WITH FREEZER DISPLAY - LOW MOUNT WITH TURN SIGNALS (→ 10/2013) .....	2-164
RH LIGHT WITH FREEZER DISPLAY - LOW MOUNT WITH TURN SIGNALS (10/2013 →) .....	2-166
RH LIGHT WITH STANDARD DISPLAY - WITHOUT TURN SIGNALS (→ 10/2013) .....	2-153
RH LIGHT WITH STANDARD DISPLAY - WITHOUT TURN SIGNALS (10/2013 →) .....	2-154
RH LIGHT WITH STANDARD DISPLAY - LOW MOUNT WITHOUT TURN SIGNALS (→ 10/2013) .....	2-160
RH LIGHT WITH STANDARD DISPLAY - LOW MOUNT WITHOUT TURN SIGNALS (10/2013 →) .....	2-162
SEAT - MANUAL HYDRAULICS .....	2-168
SEAT - E-HYDRAULIC .....	2-170
SEAT WITH E-HYDRAULICS - WITH SEAT BELT SEQUENCE MODULE .....	2-172
SEAT WITH MANUAL HYDRAULICS - WITH SEAT BELT SEQUENCE MODULE .....	2-169
STEERING COLUMN .....	2-180
SYNCHRONOUS STEERING .....	2-182

**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

**TABLE OF CONTENTS**

DESCRIPTION	PAGE
AIR INTAKE AND FILTER DIESEL (→ D/B 11/98)	3-22
AIR INTAKE AND FILTER DIESEL (D/B 11/96 →)	
AIR INTAKE AND FILTER GASOLINE AND LPG	
ALTERNATOR GASOLINE, LPG, AND DIESEL	
ALTERNATOR TYPES GS, LPS, AND DS	
AUXILIARY FUNCTION TUBE TWO AND THREE STAGE FULL F	

**SECTION 13 NUMERICAL INDEX**

PART NO.	PAGE NO.	ITEM NO.	PART NO.	PAGE NO.	ITEM NO.	PART NO.	PAGE NO.	ITEM NO.	PART NO.	PAGE NO.	ITEM NO.
142	3-4	19	10-13	25	11-27	29	12-31	12	16719	3-36	5
12445	3-32	19	10-17	6	11-31	25	16751	3-16	16849	3-34	21
	3-34	1	10-27	11	11-32	37	16849	3-36	16849	3-36	20
			11-11	6	8-4	29	16863	3-28	16863	3-28	17
			11-21	11	8-4	45	16865	3-6	16865	3-6	18
			12	6	9-7	9	16882	4-27	16882	4-27	41
			3	17	9-7	19		9-7		9-7	30
			9	10	9-11	9		9-11		9-11	27
			23	46	9-11	17		10-10		10-10	36
			27	46	10-9	21		10-13		10-13	32
			26	14	10-9	28		11-7		11-7	24
			28	14	10-13	16		11-9		11-9	17
			50	14	11-7	19					

**SECTIONS**

- 1
- 2
- 3
- 4
- 5 BRAKE/ACC
- 6
- 7 MAST-TWO STAG
- 8 MAST-THREE ST
- 9 MAST-TWO ST
- 10
- 11

**TRANSMISSION HOUSING**  
S/N D001H-2628

**KEY:**  
A: Diesel  
B: Gasoline and LPG

ITEM	PART NO.	DESCRIPTION	QTY	
			A	B
		Transmission	1	1
	2022547	Transmission	1	1
	2023329	Case	2	2
1	2021670	Bearing Cap	4	4
2	2023418	Washer	1	1
3	296429	Bolt	2	2
4	293947	Cover	2	2
5	2021390	Colter Pin	4	4
6	1371656	O-Ring	1	1
7	2021329	Plug	4	4
8	2021915	Housing	22	22
9	2021675	Pin	39	39
10	2021336	Bolt	1	1
11	287860	Lockwasher	1	1
12	292682	Hydraulic Pump	1	1
13		Figure 5-3	8	8
14	2021345	Gasket	1	1
15	214364	Bolt	1	1
16	296418	Washer	1	1
17	2021388	Temperature Switch	1	1
18	2021389	Breather	9	9
19	2021383	Dipstick	9	9
20	292515	Bolt	2	2
21	136692	Nut	3	3
22	292527	Bolt	3	2
23	292531	Capscrew	4	4
24	292583	Lockwasher	4	4
25	293637	Bolt	1	1
26	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.

© Copy Right Date HYSTER COMPANY See Service Manual for service procedures. 5-15



## 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 12-1) 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:

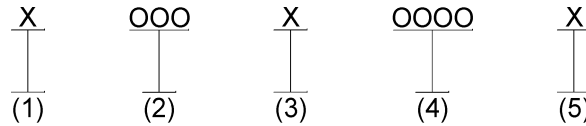
- **D/B 3/00**  
Indicates that a change occurred sometime within that month for the item affected.
- D/B 3/00** →  
Indicates that a change occurred sometime within that month for the item affected.
- D/B 3/00** ↔ **D/B 4/00**  
Indicates a range of production dates of the item affected.

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

### ORDERING PARTS:

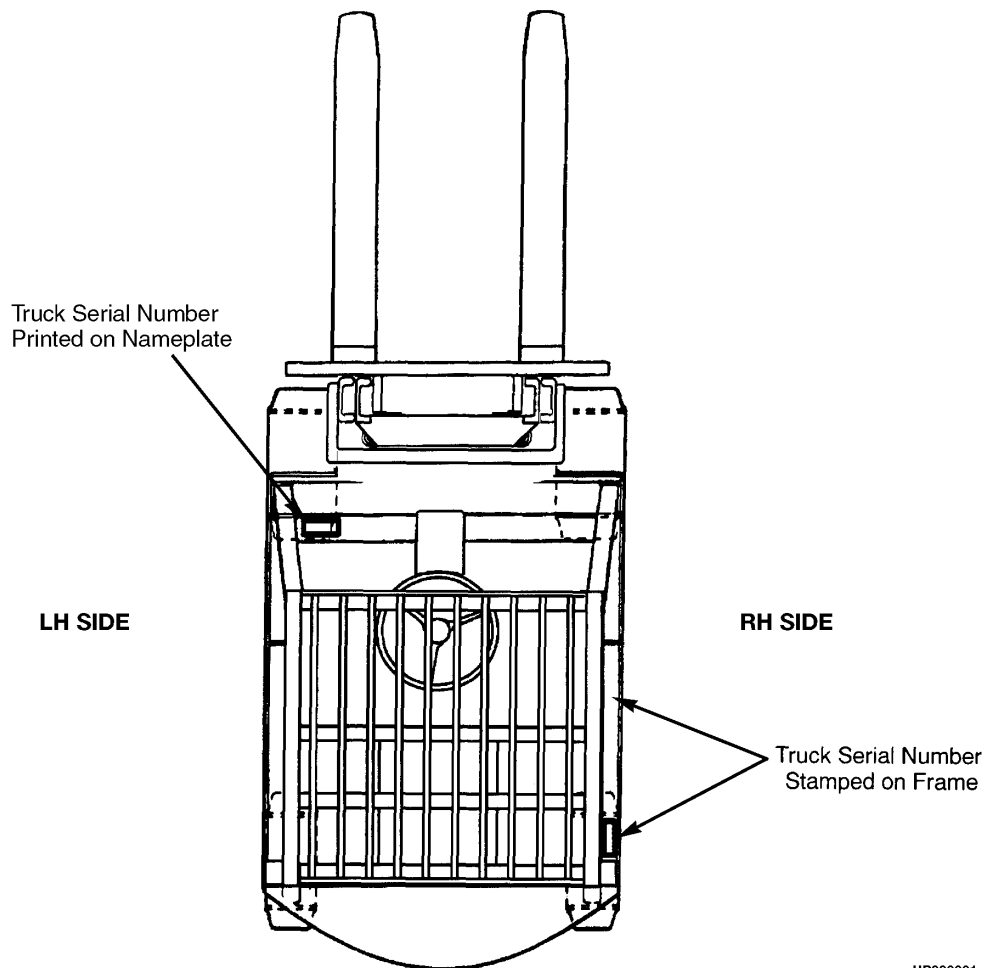
When ordering replacement parts, give the unit serial number, part number, name of part and quantity required.

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.

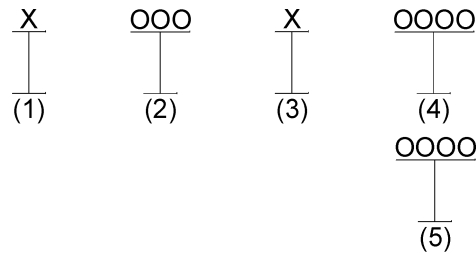
For pending serial numbers contact your local dealer for Hyster lift trucks.



HP990001

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

## IDENTIFICATION OF MAST SERIAL NUMBERS



- (1) and (2) The first letter and number indicates the mast 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 mast.
- (5) Carriage travel in millimeters stamped just below the serial number.

Mast Group identification consists of mast unit code (1) and (2) plus carriage travel (5).

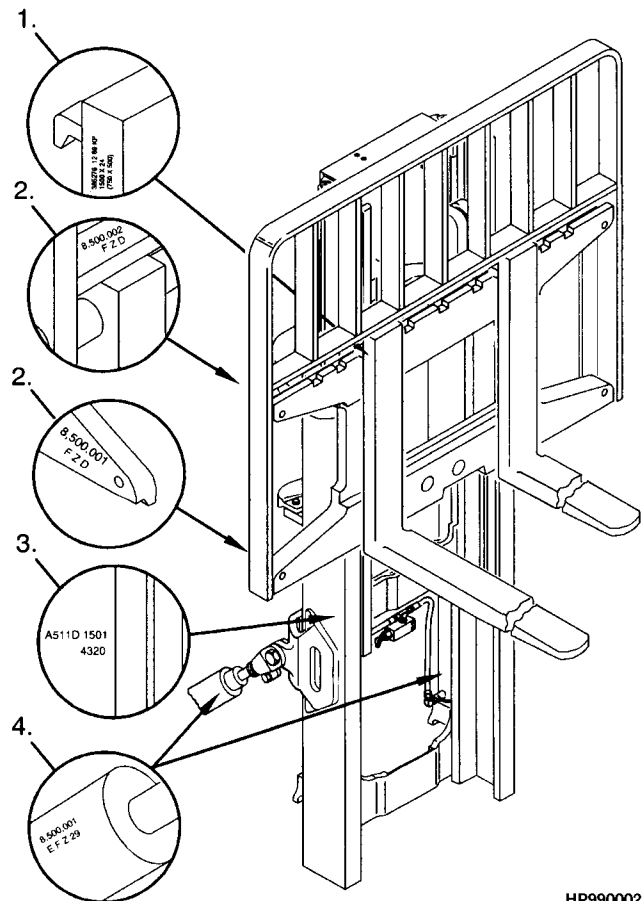
For pending production sequence numbers contact your local dealer for Hyster lift trucks.

## LIFT EQUIPMENT IDENTIFICATION

1. Fork part number, capacity rating, plant code letter, and date of manufacture are stamped approximately six inches below the top of most forks.
2. The carriage group number is stamped on the right hand side of the top crossmember (pin type) or on the back of the right hand end of the bottom crossmember (hook type). A date code has two letters in line with or below the carriage group number.
3. The mast identification number has a unit code, a letter indicating the plant of manufacture, and a serial number. Underneath the production sequence number is a four digit number that indicates the carriage travel in millimeters.
4. Tilt and lift cylinder group numbers are stamped on the cylinder shell.

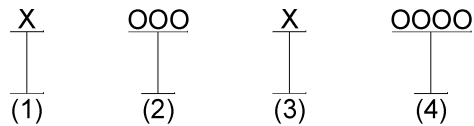
Always refer to the group, serial, or part number when ordering service parts.

Modification of masts and carriages by SPED (Special Products Engineering Department) are identified by a model prefix code beginning with the letter "S". contact your dealer for Hyster lift trucks for information on these assemblies.

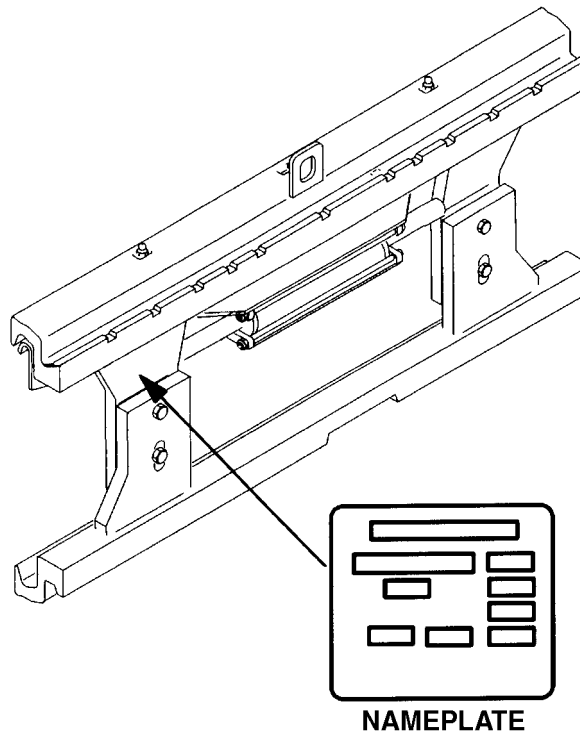


HP990002

## IDENTIFICATION OF ATTACHMENT AND SIDE-SHIFT CARRIAGE SERIAL NUMBERS



- (1) and (2) The first letter and three numbers indicate the attachment unit code.
- (3) The second letter indicates the plant of manufacture.
- (4) The four or five digit number indicates the production sequence number.
- For pending production sequence numbers contact your local dealer for Hyster lift trucks.



HP990003

Side-shift carriages and attachments have nameplates. Use the serial number found on the nameplate to identify the attachment.

Always refer to the group, serial, or part number when ordering service parts.

Modifications of attachments and side-shift carriages by SPED (Special Products Engineering Department) are identified by a model prefix code beginning with the letter "S". Contact your dealer for Hyster lift trucks for information on these assemblies.