PARTS MANUAL

H50CT
(A274)

CUSTOMER EDITION

HYSTER

4014303
12/2015

©2015 HYSTER COMPANY

SECTIONS

1	FRAME
2	ENGINE ASSEMBLY - MAZDA
3	ENGINE ASSEMBLY - YANMAR
4	FUEL SYSTEM
5	ELECTRICAL SYSTEM
6	TRANSMISSION
7	DRIVE AXLE
8	STEERING SYSTEM
9	BRAKE SYSTEM
10	HYDRAULIC SYSTEM
11	MAST-THREE STAGE FULL FREE-LIFT
12	OPTIONS
13	FIELD CONVERSION KITS
14	NUMERICAL INDEX

This Parts Manual is divided into 14 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

TABLE OF CONTENTS

DESCRIPTION	PAGE
A	
ADD ON TELEMETRY KITS	13-2
AIR FILTER ASSEMBLY	
LPG AND DIESEL	4-6
AIR INTAKE SYSTEM	
MAZDA 2.0L AND 2.2L LPG	4-2
YANMAR DIESEL	4-4
ALTERNATOR AND MOUNTING	
YANMAR DIESEL	5-15
ASSEMBLED ENGINE	
MAZDA 2.0L AND 2.2L LPG - EMISSION COMPLIANT ENGINES	2-4
AUDIBLE BACKUP ALARM	12-3
AUXILIARY EXTENSION TUBES	
THREE STAGE FULL FREE LIFT	11-36
B	
BATTERY AND CABLES	5-6
BRAKE ASSEMBLY	9-2
BRAKE PEDAL LINKAGE	9-4
C	
CAMSHAFT AND DRIVE GEAR	
YANMAR - 2.6L DIESEL	3-16
CAMSHAFT AND VALVES	
MAZDA 2.0L AND 2.2L LPG - EMISSION COMPLIANT ENGINES	2-24
CARRIAGE	
THREE STAGE FULL FREE-LIFT	11-34
CENTER SECTION	7-6
CONTROL VALVE LOCKOUT GROUP	
MANUAL CONTROL VALVE	10-20
COOLING SYSTEM	
MAZDA 2.0L AND 2.2L LPG	2-32
YANMAR - 2.6L DIESEL	3-28
COUNTER/REVERSE CLUTCH	
SINGLE SPEED TRANSMISSION	6-24
COUNTERWEIGHT	1-2
COWL MOUNT	1-26
CRANKSHAFT AND PISTONS	
MAZDA 2.0L AND 2.2L LPG - EMISSION COMPLIANT ENGINES	2-12
YANMAR - 2.6L DIESEL	3-18
CYLINDER BLOCK	
MAZDA 2.0L AND 2.2L LPG - EMISSION COMPLIANT ENGINES	2-8
YANMAR - 2.6L DIESEL	3-8
CYLINDER HEAD	
YANMAR - 2.6L DIESEL	3-4
CYLINDER HEAD AND COVER	
MAZDA 2.0L AND 2.2L LPG - EMISSION COMPLIANT ENGINES	2-6
D	
DISPLAY CLUSTER	5-18

©2015 HYSTER COMPANY

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
DRIVE AXLE ASSEMBLY	7-2
DRIVE TIRE AND WHEEL	
MONARCH - NARROW TREAD	7-9
MONARCH - WIDE TREAD	7-10
TRELLEBORG - NARROW TREAD	7-8
E	
ELECTRICAL ARRANGEMENT	5-2
ELECTRONIC PRESSURE REGULATOR ASSEMBLY	
MAZDA 2.0L AND 2.2L LPG - EMISSION COMPLIANT ENGINES (→ 2/2012)	4-18
MAZDA 2.0L AND 2.2L LPG (2/2012 →)	4-20
ELECTRONIC PRESSURE REGULATOR KIT	
MAZDA 2.0L AND 2.2L LPG	4-22
EMISSION CONTROL SYSTEM	
MAZDA 2.0L AND 2.2L LPG - EMISSION COMPLIANT ENGINES	2-20
ENGINE CONTROL MODULE	
MAZDA 2.0L AND 2.2L LPG	5-9
ENGINE COOLING SYSTEM	
MAZDA 2.0L AND 2.2L LPG - EMISSION COMPLIANT ENGINES	2-18
ENGINE ELECTRICAL COMPONENTS	
MAZDA 2.0L AND 2.2L LPG - EMISSION COMPLIANT ENGINES	5-4
ENGINE ELECTRICAL SYSTEM	
YANMAR DIESEL	5-12
ENGINE MOUNTING	
MAZDA 2.0L AND 2.2L LPG	2-2
YANMAR - 2.6L DIESEL	3-2
EXHAUST MANIFOLD	
MAZDA 2.0L AND 2.2L LPG - EMISSION COMPLIANT ENGINES	2-16
EXHAUST SYSTEM	
YANMAR - 2.6L DIESEL	3-30
EXHAUST SYSTEM WITH CATALYTIC CONVERTER	
MAZDA 2.0L AND 2.2L LPG	2-28
MAZDA 2.0L AND 2.2L LPG - LATIN AMERICAN SERIES	2-30
F	
FAN ASSEMBLY	
YANMAR - 2.6L DIESEL	3-26
FENDER EXTENSIONS	
WIDE TREAD	1-25
FIRE EXTINGUISHER	12-4
FLOORPLATES AND COVERS	1-22
FLYWHEEL AND HOUSING	
YANMAR - 2.6L DIESEL	3-24
FLYWHEEL AND HOUSING ASSEMBLY	
MAZDA 2.0L AND 2.2L LPG	2-26
FORKS	
OPTIONAL (→ 10/2013)	1-31
OPTIONAL (10/2013 →)	1-32
STANDARD	1-30

©2015 HYSTER COMPANY

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
FREE LIFT CYLINDER ASSEMBLY	
THREE STAGE FULL FREE LIFT	11-22
FUEL FILTER	
YANMAR DIESEL	4-30
FUEL INJECTION	
YANMAR DIESEL	4-32
FUEL SYSTEM	
MAZDA 2.0L AND 2.2L LPG - EMISSION COMPLIANT ENGINES	4-13
YANMAR DIESEL	4-28
FUEL SYSTEM HOSES AND ATTACHING PARTS	
MAZDA 2.0L AND 2.2L LPG - EMISSION COMPLIANT ENGINES	4-14
FUEL SYSTEM SENSORS	
MAZDA 2.0L AND 2.2L LPG - EMISSION COMPLIANT ENGINES	5-8
FUEL TANK COVERS	
LATIN AMERICAN SERIES	4-12
FULL SUSPENSION SEAT	
RECLINER AND DAMPER KITS - SHEET 2 OF 3	1-18
SERVICE KITS FOR NON-SWIVEL - SHEET 3 OF 3	1-20
SHEET 1 OF 3	1-14
FUSE BOX	
POWER DISTRIBUTION MODULE	5-10
G	
GEAR HOUSING	
YANMAR - 2.6L DIESEL	3-12
GEAR PUMP ASSEMBLY	10-8
H	
HAND LEVERS	
2 AND 3 FUNCTION	10-12
4 FUNCTION	10-14
HEADER HOSE AND ATTACHING PARTS	
3 AND 4 FUNCTION (→ 1/2013)	11-26
3 AND 4 FUNCTION (1/2013 →)	11-30
3 FUNCTION ONLY	11-24
HOOD	1-8
HYDRAULIC CONTROL VALVE	
MANUAL - THREE FUNCTION	10-16
HYDRAULIC CONTROL VALVE (MANUAL)	
FOUR FUNCTION	10-18
HYDRAULIC FILTER	10-10
HYDRAULIC HOSES	
STEERING	10-4
TILT, HOIST AND AUXILIARY	10-6
HYDRAULIC SUPPLY AND RETURN	10-2
I	
INPUT/FORWARD CLUTCH	
SINGLE SPEED TRANSMISSION	6-22

©2015 HYSTER COMPANY

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
INTAKE AND EXHAUST MANIFOLD	
YANMAR - 2.6L DIESEL	3-10
INTAKE MANIFOLD	
MAZDA 2.0L AND 2.2L LPG - EMISSION COMPLIANT ENGINES	2-14
INTEGRAL SIDE-SHIFT CARRIAGE	
THREE STAGE FULL FREE-LIFT	12-6
INTEGRAL SIDE-SHIFT CYLINDER	12-10
INTEGRAL SIDE-SHIFT HYDRAULIC HOSES	
THREE STAGE FULL FREE-LIFT	12-8
L	
LABELS	
HYDRAULIC CONTROL LABELS - CONTROL LEVER	1-38
SHEET 1 OF 2	1-34
SHEET 2 OF 2	1-36
LIGHTS	
STOP, TAIL, TURN, BACKUP, AND STROBE - WITH OVERHEAD GUARD	5-16
LOAD BACKREST EXTENSION	1-28
LPG FUEL TANK AND MOUNTING	
WITH FABRIC STRAP	4-8
WITH STEEL STRAP	4-10
LUBRICATION SYSTEM	
YANMAR - 2.6L DIESEL	3-22
M	
MAIN LIFT CYLINDER ASSEMBLY	
THREE STAGE FULL FREE LIFT	11-18
MAST ASSEMBLY	
INNER MAST AND FREE-LIFT	11-14
INTERMEDIATE MAST AND MAIN LIFT (→ S/N A274V02189J)	11-6
INTERMEDIATE MAST AND MAIN LIFT (S/N A274V02190J →)	11-10
OUTER MAST (→ S/N A274V02189J)	11-2
OUTER MAST (S/N A274V02190J →)	11-4
MIRRORS	12-2
MIXER AND THROTTLE BODY ASSEMBLY	
MAZDA 2.0L AND 2.2L LPG - EMISSION COMPLIANT ENGINES	4-16
N	
NON-SUSPENSION SEAT	
WITHOUT ELECTRONIC CONTROLS	1-10
WITHOUT ELECTRONIC CONTROLS - OPTIONAL	1-12
O	
OIL PAN	
YANMAR - 2.6L DIESEL	3-14
OIL PUMP AND FILTER	
MAZDA 2.0L AND 2.2L LPG - EMISSION COMPLIANT ENGINES	2-22
OVERHEAD GUARD	1-6

©2015 HYSTER COMPANY

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
P	
PARK BRAKE	9-6
R	
RAIN TOP	1-4
S	
STATOR SUPPORT HOUSING	6-20
STEER TIRE AND WHEEL	
MONARCH - NARROW TREAD	8-14
TRELLEBORG - NARROW TREAD	8-13
STEERING AXLE AND ATTACHING PARTS	8-10
STEERING COLUMN ASSEMBLY	
ISOLATED - DIESEL	8-8
NON-ISOLATED - LPG	8-6
STEERING CONTROL UNIT	10-28
STEERING CYLINDER	8-12
STEERING WHEEL AND COLUMN	
ISOLATED - DIESEL	8-4
NON-ISOLATED - LPG	8-2
T	
THROTTLE CABLE LINKAGE	
YANMAR DIESEL	4-34
THROTTLE PEDAL AND ATTACHING PARTS	
→ S/N A274V02477K	4-24
THROTTLE PEDAL ASSEMBLY	
STANDARD PEDAL (S/N A274V02478K →)	4-26
TILT CYLINDER AND MAST INSTALLATION	10-30
TILT CYLINDER ASSEMBLY	10-32
TIMING GEAR COVER AND OIL PAN	
MAZDA 2.0L AND 2.2L LPG - EMISSION COMPLIANT ENGINES	2-10
TORQUE CONVERTER	6-7
TORQUE CONVERTER HOUSING AND ATTACHING PARTS	
SINGLE SPEED, ALUMINUM CHAIN DRIVE	6-14
SINGLE SPEED, GEAR DRIVE	6-8
TRANSMISSION COOLING	
MAZDA 2.0L AND 2.2L LPG	6-2
YANMAR DIESEL	6-4
TRANSMISSION HOUSING AND ASSEMBLY	
SINGLE SPEED, ALUMINUM CHAIN DRIVE	6-16
SINGLE SPEED, GEAR DRIVE	6-10
TRANSMISSION MOUNT	
SINGLE SPEED	6-6
V	
VALVE ASSEMBLY, AUXILIARY	
MANUAL CONTROL VALVE - THREE AND FOUR FUNCTION	10-24
VALVE ASSEMBLY, LIFT AND TILT	
MANUAL CONTROL VALVE - THREE AND FOUR FUNCTION	10-22

©2015 HYSTER COMPANY

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
VALVE ASSEMBLY, OUTLET SECTION	
MANUAL CONTROL VALVE - THREE AND FOUR FUNCTION	10-26
W	
WATER PUMP	
YANMAR - 2.6L DIESEL	3-20
WIRE HARNESS	
ADAPTER - LOW FUEL PRESSURE	5-40
LIGHTS	5-47
LIGHTS WITH REVERSE ACTIVATED REAR WORK LIGHTS	5-50
POWERTRAIN-MAZDA 2.0L AND 2.2L - SHEET 1 OF 2	5-20
POWERTRAIN-MAZDA 2.0L AND 2.2L - SHEET 2 OF 2	5-24
RH CHASSIS - SHEET 1 OF 2 (→ S/N A274V01843J)	5-28
RH CHASSIS - SHEET 2 OF 2 (→ S/N A274V01843J)	5-30
RH CHASSIS - SHEET 1 OF 2 (S/N A274V01844J →)	5-32
RH CHASSIS - SHEET 2 OF 2 (S/N A274V01844J →)	5-34
RH CHASSIS WITH SEAT BELT SEQUENCE MODULE - SHEET 1 OF 2	5-36
RH CHASSIS WITH SEAT BELT SEQUENCE MODULE - SHEET 2 OF 2	5-38
YANMAR 2.6L DIESEL - POWERTRAIN	5-42
YANMAR 2.6L DIESEL - FUSED ALTERNATOR	5-46

©2015 HYSTER COMPANY

ABBREVIATIONS QUICK REFERENCE SHEET

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

TERM	DEFINITION
Amp	Amperes
AR	As Required
BDI	Battery Discharge Indicators
BWI	Brush Wear Indicator
CE	Communicator End
CRE	Corrosive Environment
D/B	Date Break
dbA	Decibel "A" Scale
DE	Drive End
ECH	Empty Container Handler
ECH-3	Empty Container Handler - 3 High Stacking
ECH-4	Empty Container Handler - 4 High Stacking
ECH-5	Empty Container Handler - 5 High Stacking
ECH-6	Empty Container Handler - 6 High Stacking
ECH-7	Empty Container Handler - 7 High Stacking
ECM	Electronic Control Module
ECN	Engineering Change Notice
EEPROM	Electrically Erasable Programmable Read Only Memory
EPA	US Environmental Protection Agency
EPROM	Electrically Programmable Read Only Memory

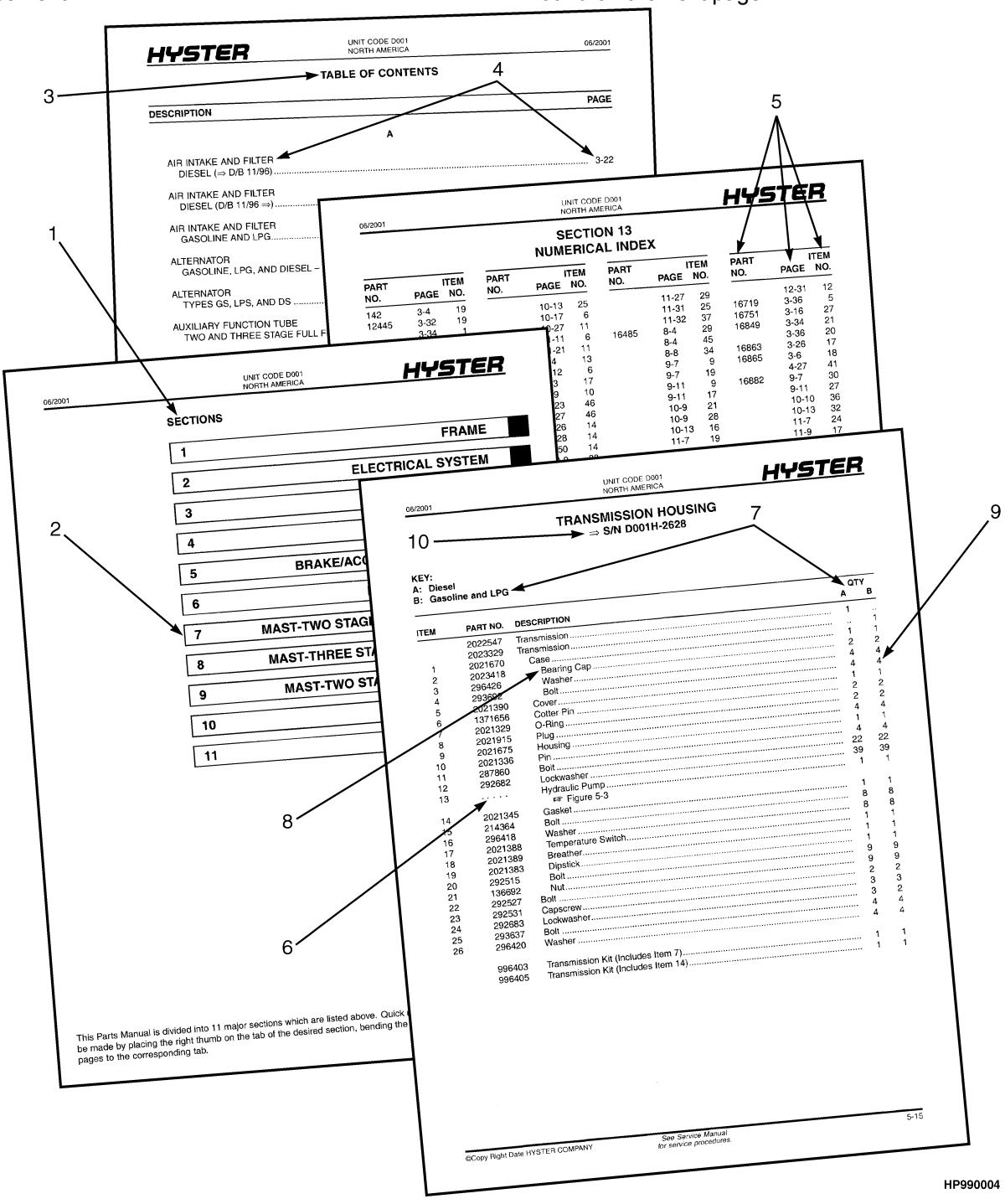
TERM	DEFINITION
FRE	Freezer Environment
in.	inches
LPG	Liquefied Petroleum Gas
MAP	Manifold Absolute Pressure
mm	millimeters
MSTS	Microprocessor Spark Timing System
NPT	National Pipe Threads
O/S	Oversize
PTO	Power Take Off
RPM	Revolutions per Minute
S/N	Serial Number
TMM	Truck Management Module
UL Type D	Diesel-Powered Safety Rating
UL Type DS	Diesel-Powered Safety Rating
UL Type E	Battery-Powered Safety Rating
UL Type EE	Battery-Powered Safety Rating
UL Type ES	Battery-Powered Safety Rating
UL Type G	Gasoline-Powered Safety Rating
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

©2015 HYSTER COMPANY

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.



©2015 HYSTER COMPANY

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 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. 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.

©2015 HYSTER COMPANY

IDENTIFICATION OF TRUCK SERIAL NUMBERS

X OOO X OOOO X

(1) (2) (3) (4) (5)

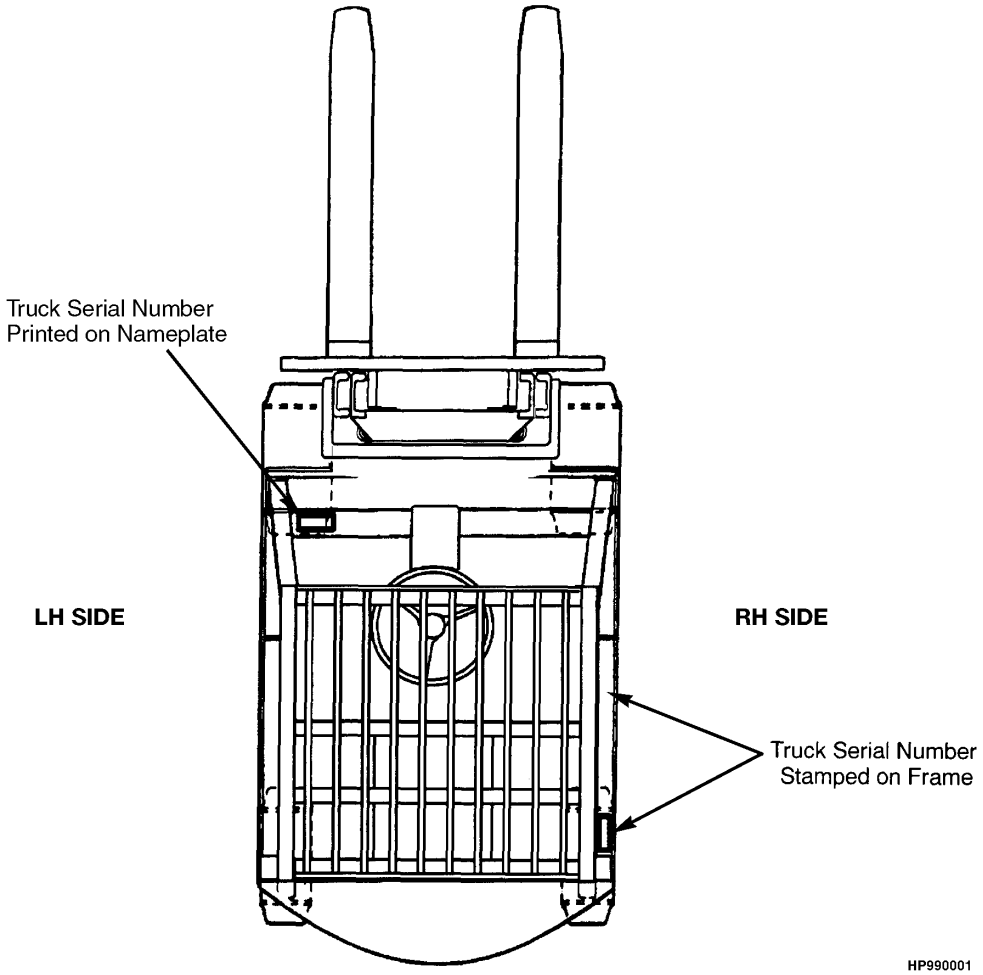
(1) and (2) The first letter and three numbers indicate the truck unit code.

(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.

©2015 HYSTER COMPANY

IDENTIFICATION OF MAST SERIAL NUMBERS

X OOO X OOOO

(1) (2) (3) (4)

OOOO

(5)

(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).

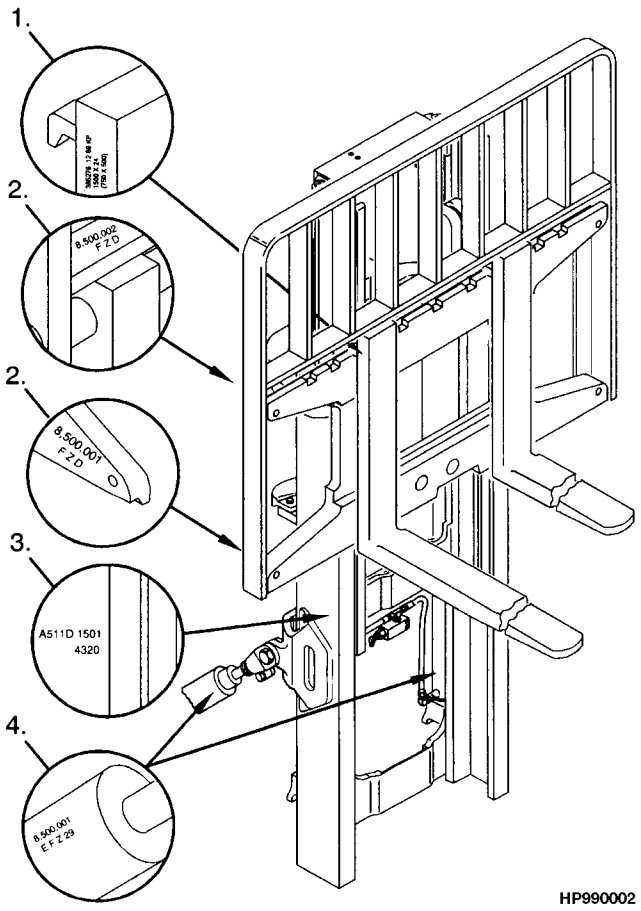
For pending production sequence numbers contact your local dealer for Hyster lift trucks.

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.



IDENTIFICATION OF ATTACHMENT AND SIDE-SHIFT CARRIAGE SERIAL NUMBERS

X OOO X OOOO

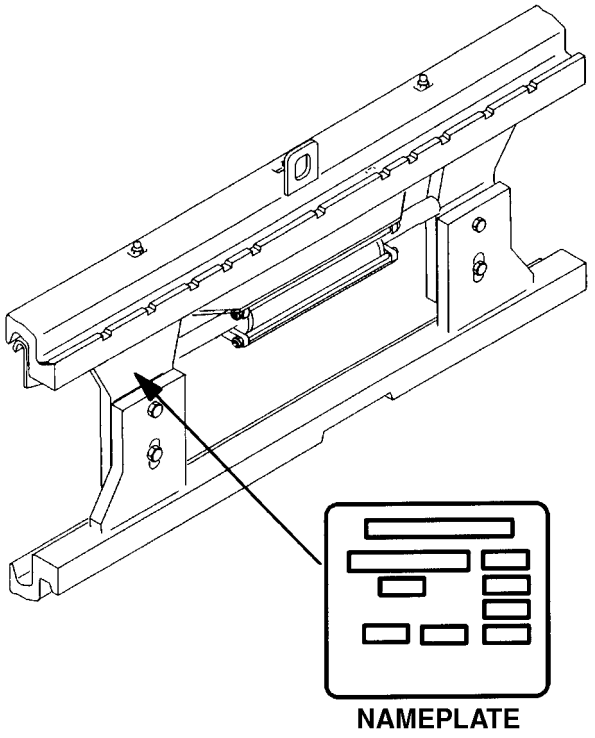
(1) (2) (3) (4)

(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.



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.

©2015 HYSTER COMPANY

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.

PUBLICATION	HYSTER PART NUMBER
Operating Manual	4014302
Service Manual (Complete)	4014304
Parts Manual	4014303

©2015 HYSTER COMPANY

NOTES

©2015 HYSTER COMPANY

1 FRAME