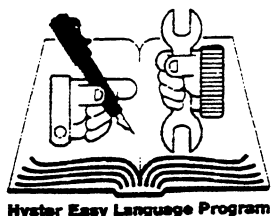




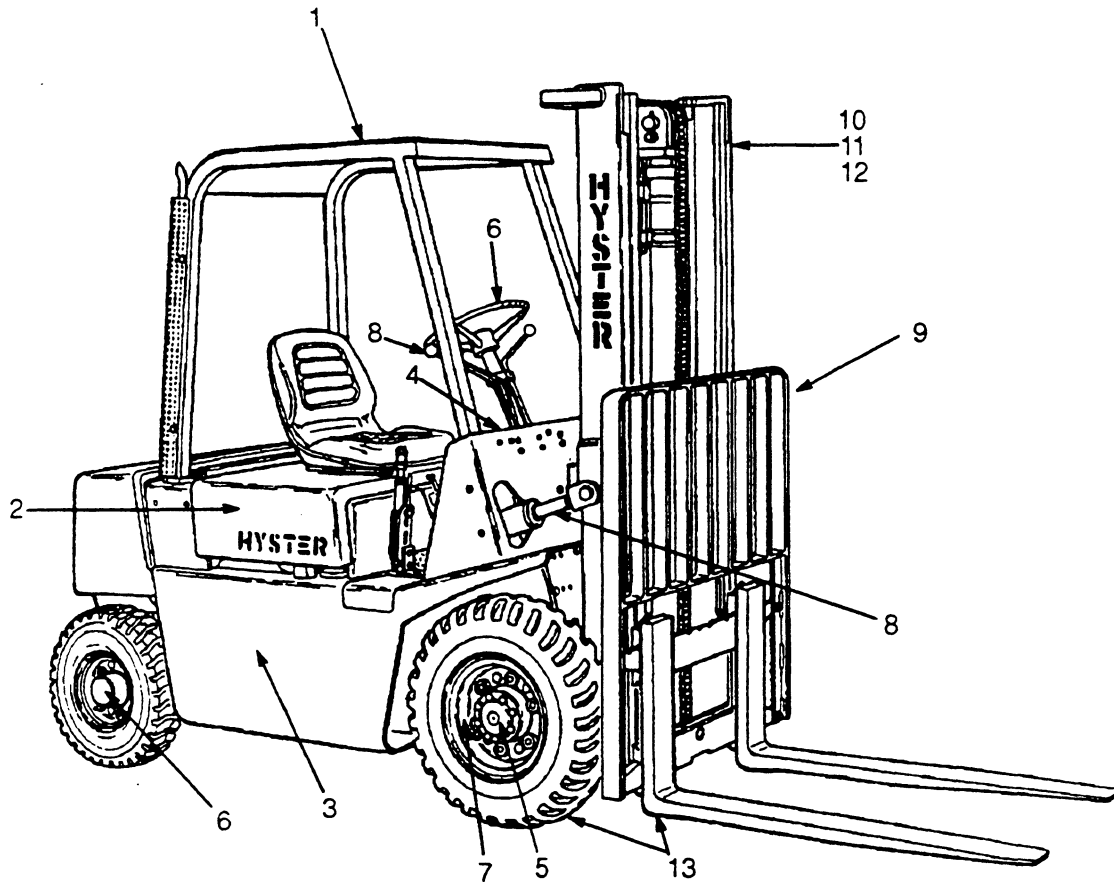
PARTS MANUAL

**CHALLENGER
H40-50-60XL
H2.00-2.50-3.00XL
(A177)**



CUSTOMER EDITION

INDEX-ILLUSTRATED



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INDEX-MASTER

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

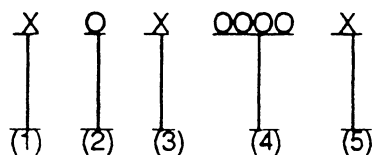
JustClickHere 

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**

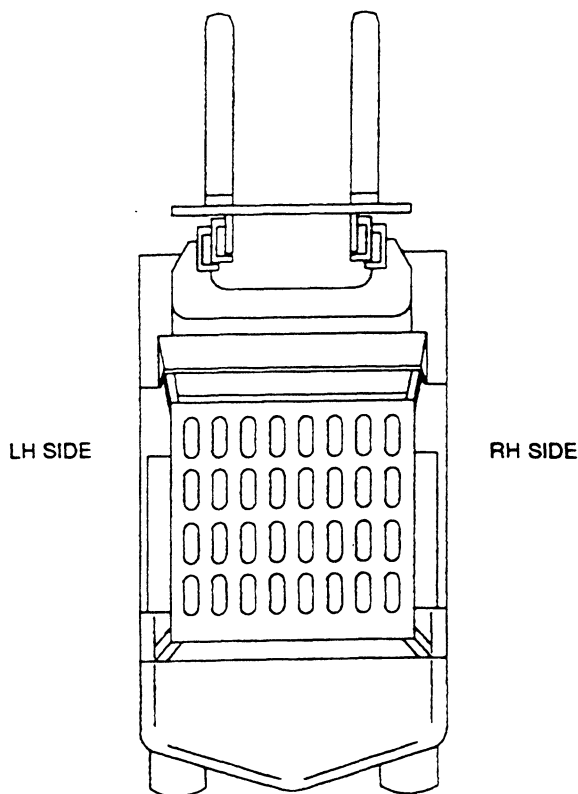
IDENTIFICATION-UNIT UNIT S/N



- (1) & (2) The first letter and number denote the design series and model of the unit
- (3) The second letter denotes the Plant at which the unit was manufactured
- (4) The number series denotes the serial number of the unit
- (5) The final letter denotes the year of manufacture starting with "A" in 1957 and 1980 The letters "I", "O", and "Q" will not be used

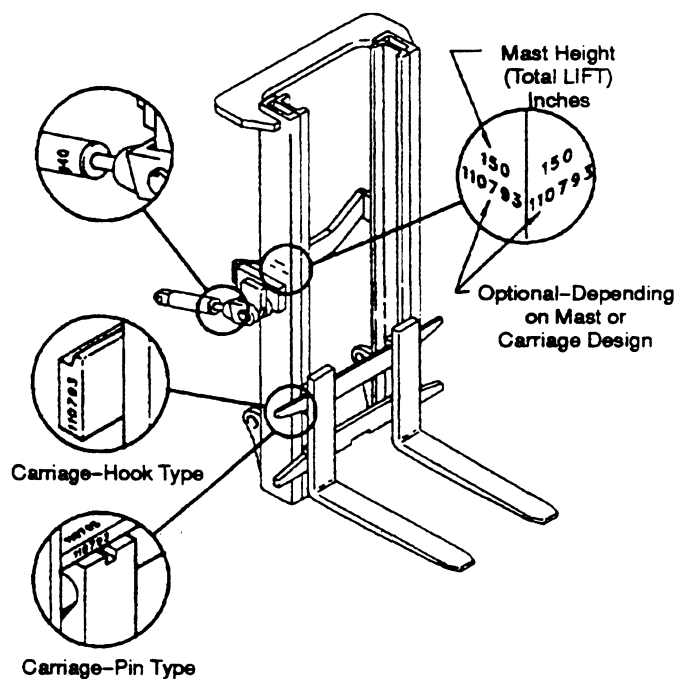
For pending serial numbers contact your local Hyster Dealer

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



LIFT EQUIPMENT IDENTIFICATION

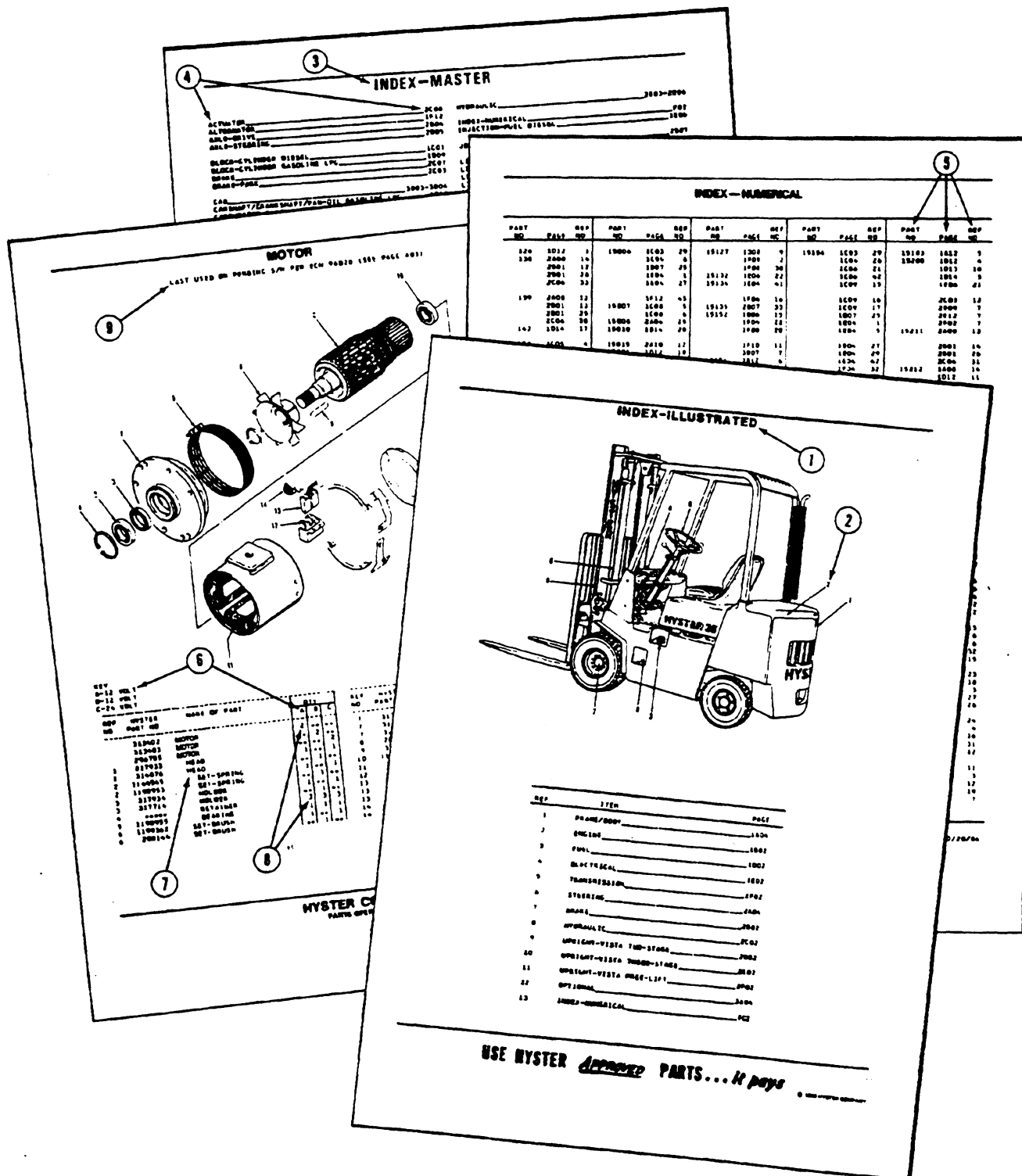
1. Mast group numbers and total lift heights are stamped on the right hand outer mast approximately four feet from the bottom of the load arm. The group numbers include the inner and outer masts, lift cylinder, lift chain and bleeder hoses or pipes.
2. The carriage and tilt cylinder numbers are located as shown. Lift cylinder numbers are stamped on the cylinder shell near the bleeder screw or on the chain anchor. Load arm part number, capacity rating, plant code letter and date of manufacture are stamped approximately six inches below the top RH side of load arms. Always refer to these group and part numbers when ordering service parts.



HOW TO USE THE ILLUSTRATED PARTS MANUAL

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

It also includes all parts peculiar to trucks built in overseas plants. These parts are indicated by keys, symbols and footnotes.





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

1. **USE:** Determine the function and application of the part required. Turn to the Illustrated Index page immediately behind the front cover, and , select the most appropriate area.
2. Use the Division Index to determine the assembly which would normally contain the part required. Proceed then to 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 Master Index page immediately following the Illustrated Index.
4. Locate the assembly the required part is used on and turn to the page indicated for that assembly. Proceed then to locate the part on the assembly breakdown page.

WHEN THE PART NUMBER IS KNOWN;

5. Use the Numerical Index to find the part number. Turn to the page listed and locate the part as indicated by the reference number.

GENERAL:

The Assembly Breakdowns include part numbers, description, quantities required, keys and footnotes to help in selecting the correct parts.

6. Keys are used to show effective serial numbers for two or more similar assemblies, RH and LH assembly parts, etc. Select the appropriate key, "A", "B", "C", or "D" and the corresponding quantity column to find the required parts.
7. Indented descriptions under "Name of Part" are used to indicate subparts of assemblies. A major assembly is not indented. Parts under the first, second, or third indent are sub-parts of the major assembly shown above them.
8. Quantities shown are for one assembly. Note that two assemblies are shown, but the quantities of the subparts are indicated as three and three. This means three per assembly.
9. Engineering Change Notice (ECN) numbers for pending serial numbers are shown to allow for the inclusion of the most current parts information. Contact your local Dealer for Hyster Lift Trucks for serial number information listed by ECN number.

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.

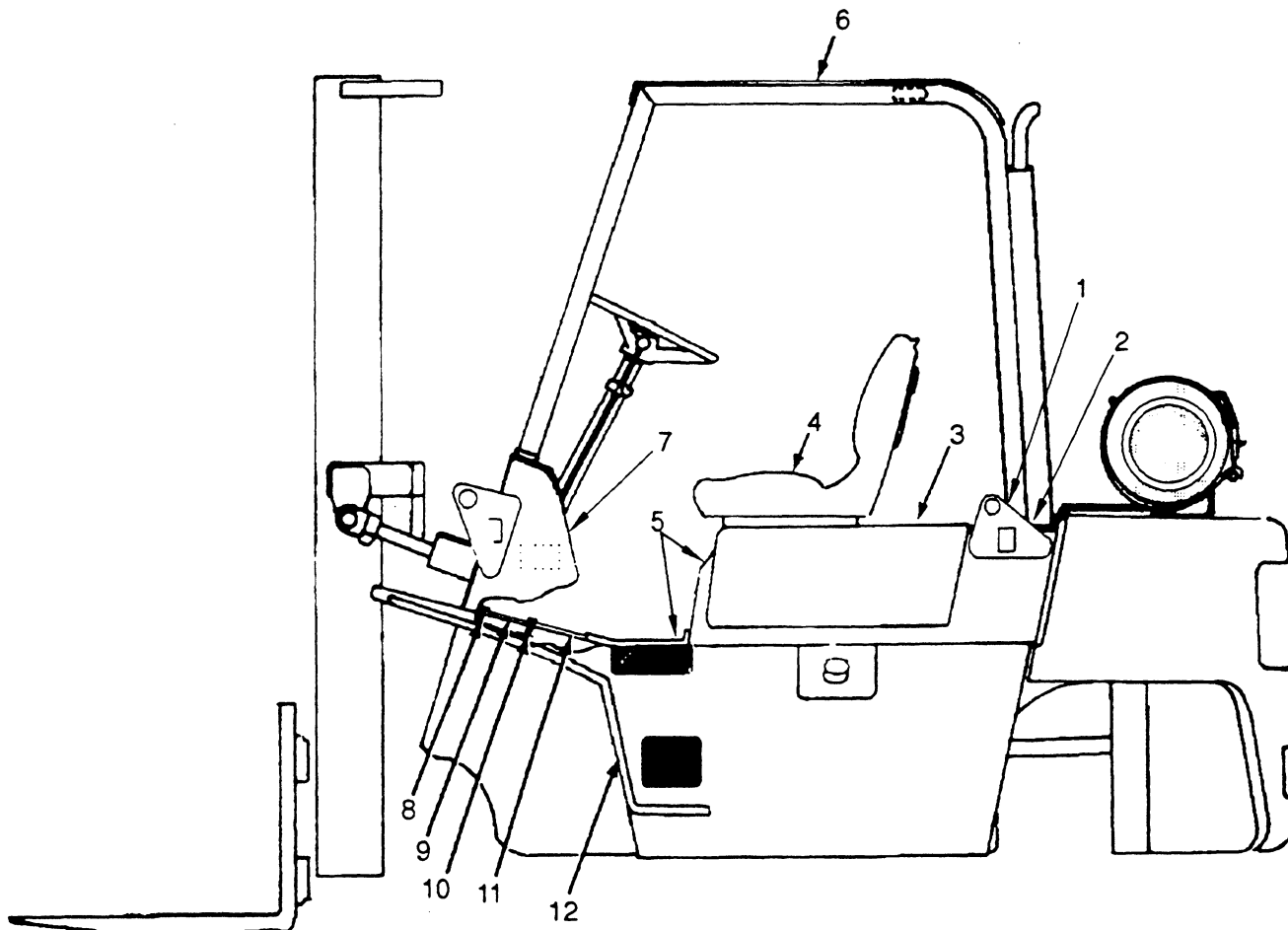


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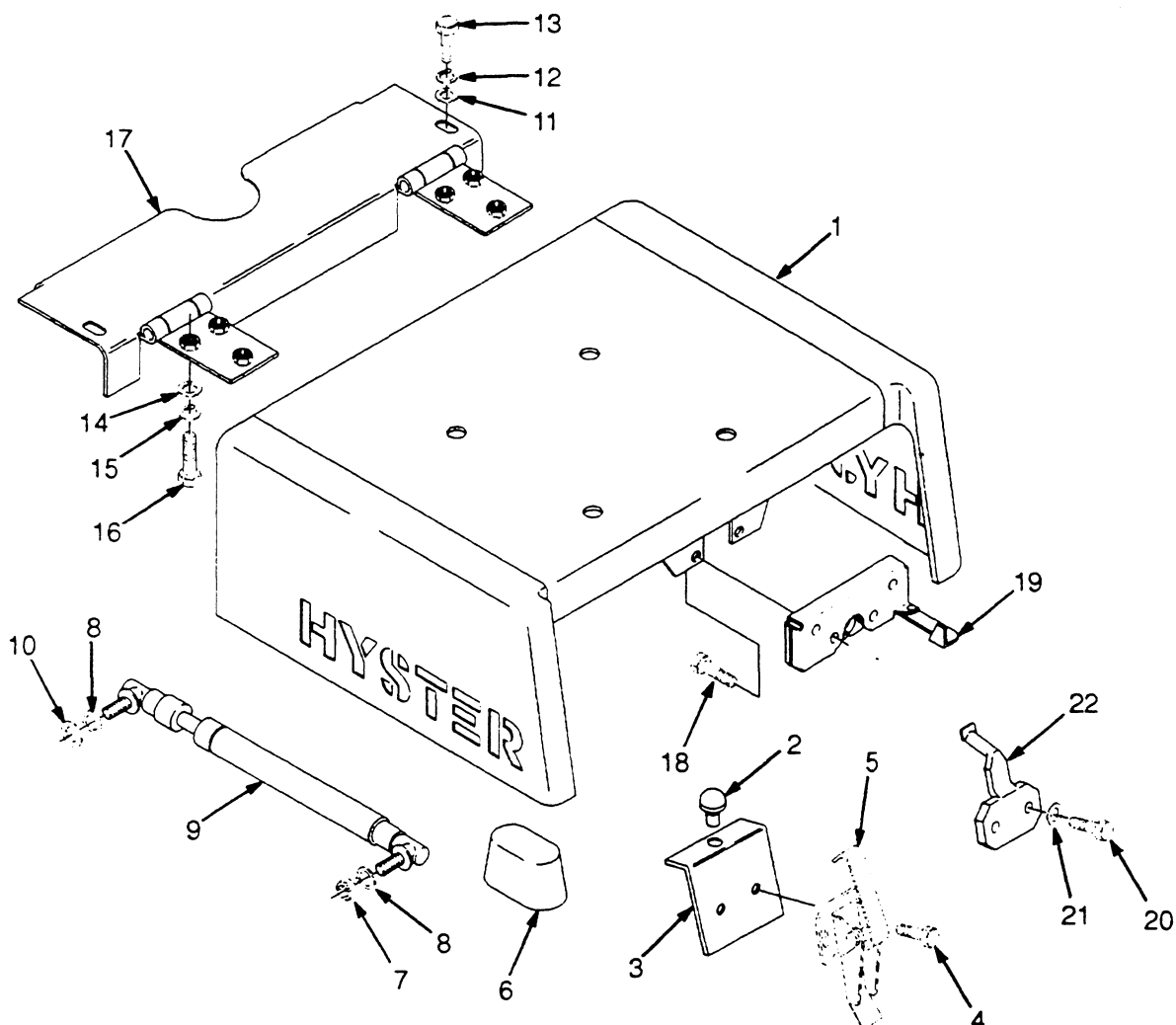
Counterweight	12
Cowl/Plates-Floor	10
Extension-Load Backrest	13
Hood/Linkage	11
Labels/Paint	16-17
Publications	18-19
Seat	14-15

COWL/PLATES-FLOOR

REF	PART NO.	NAME OF PART	QTY
1	\$1303637	Grommet	11
2	292528	Capscrew	4
2	292683	Lockwasher	4
2	216877	Nut	2
3	.....	Hood	1
		See Page 11	
4	.....	Seat	1
		See Pages 14-15	
5	313822	Plate-Floor	1
5	% 364867	Plate-Floor	2
6	306790	Guard-Overhead	1
6	* 301014	Guard-Overhead Tall	2
6	+1314332	Guard-Overhead	1
7	308112	Anchor-Tilt LH	1
7	308111	Anchor-Tilt RH	1
8	329067	Screw	5

REF	PART NO.	NAME OF PART	QTY
9	306180	Plate-Floor	1
9	@% 373813	Plate-Floor	1
10	177590	Pin	1
10	320157	Washer	2
10	137122	Spring	1
10	15212	Pin	3
11	313815	Plate	1
12	329051	Fender-RH	1
12	329052	Fender-LH	1

- * Used With Suspension Seat 377906 Europe
- \$ Standard Exhaust
- % With Operator Restraint First Used On A177B-15541
- @ Monotrol First Used On S/N A177B-15483
- + First Used On A177B-29781

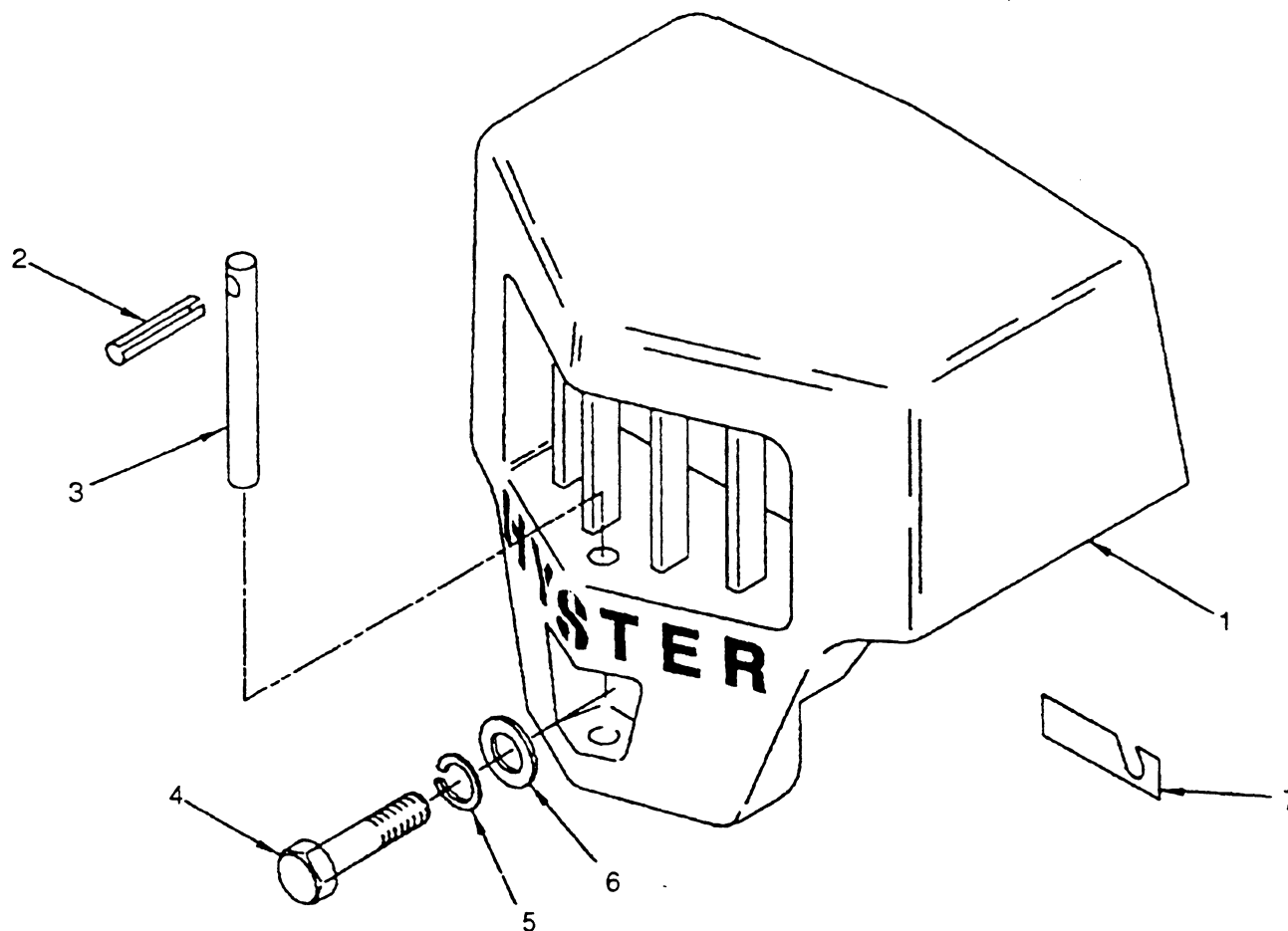
HOOD/LINKAGE

REF	PART NO.	NAME OF PART	QTY
1	@ 309765	Hood	1
1	\$ 353004	Hood	1
1	% 364863	Hood	1
1	+1331121	Hood	1
2	* 309698	Bumper	1
3	* 309768	Bracket	1
4	* 309637	Screw	2
5	* 313864	Latch	1
6	309780	Bumper	2
7	303117	Nut	1
8	292681	Lockwasher	2
9	353021	Spring-Gas	1
10	320157	Washer	2
11	292682	Lockwasher	4
12	320159	Washer	4
13	292514	Capscrew	4
14	1300117	Lockwasher	6
15	292681	Lockwasher	6
16	136681	Capscrew-Metric	6

REF	PART NO.	NAME OF PART	QTY
17	@ 309177	Hinge	1
17	& 352995	Hinge	1
17	# 371068	Hinge	1
17	328388	Lubricant	AR
18	% 199563	Capscrew	4
19	% 364857	Latch	1
20	% 302334	Capscrew	2
21	320160	Washer	2
22	% 364861	Striker	1

@ Last Used On S/N A177B-14109
 & Used On S/N A177B-14110 Thru A177B-14621
 \$ Used On S/N A177B-14110 Thru A177B-15440
 # First Used On S/N A177B-14622
 * Last Used On S/N A177B-15440
 % With Operator Restraint First Used
 On S/N A177B-15441
 + First Used On S/N A177B-27906

COUNTERWEIGHT



KEY

A-H40XL (H2.00XL)

B-H50XL (H2.50XL)

C-H60XL (H3.00XL)

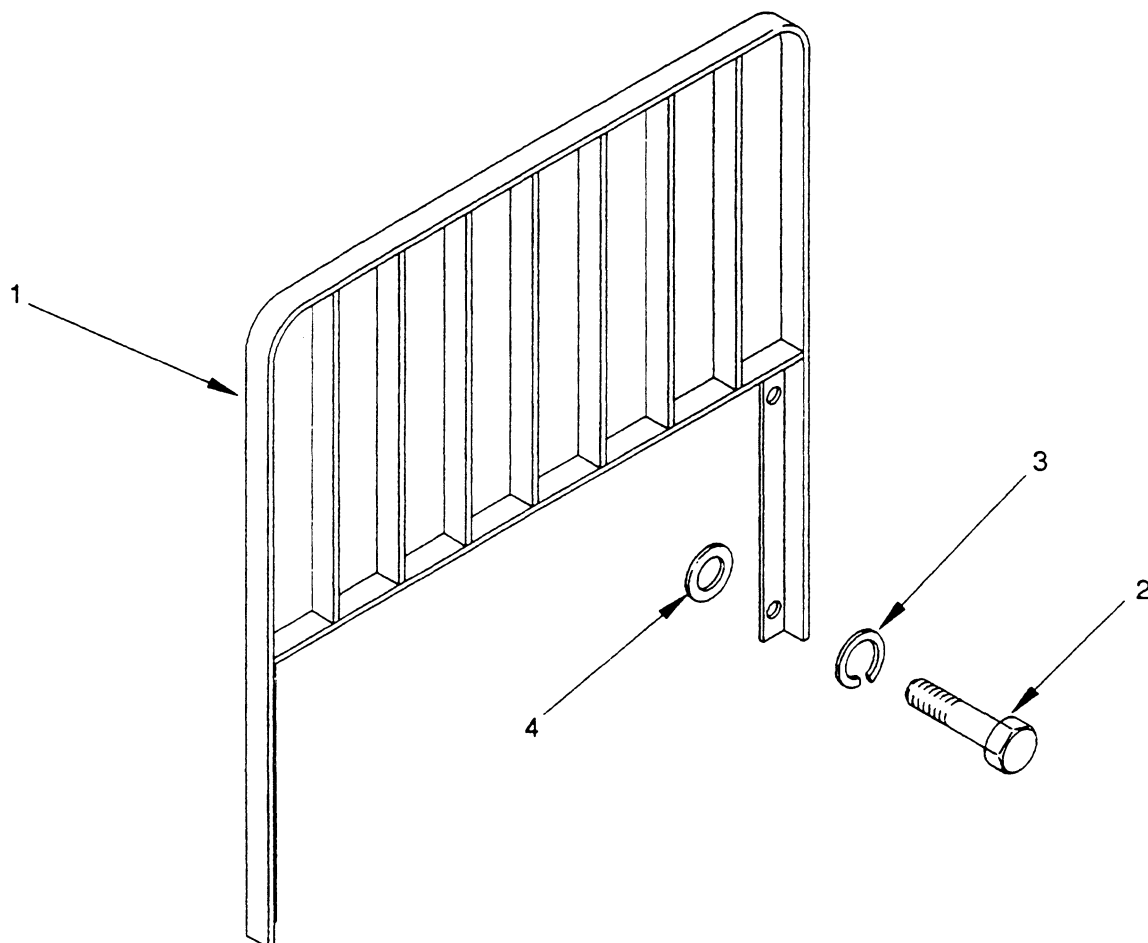
REF	PART NO.	NAME OF PART	QTY
			A B C
1	362947	Counterweight	1
1	362948	Counterweight	1
1	362949	Counterweight .....	.. 1 ..
2	302492	Pin	1 1 1
3	300761	Pin	1 1 1
4	292583	Capscrew	2
4	309707	Capscrew	2 2 ..

REF	PART NO.	NAME OF PART	QTY
			A B C
4	+ 292593	Capscrew .....	.. 2 ..
5	292687	Lockwasher	2 2 2
6	300750	Washer	2 2 2
7	332759	Shim	ARARAR

+ First Used On S/N A177B-4049

EXTENSION-LOAD

1066 MM WIDE



KEY

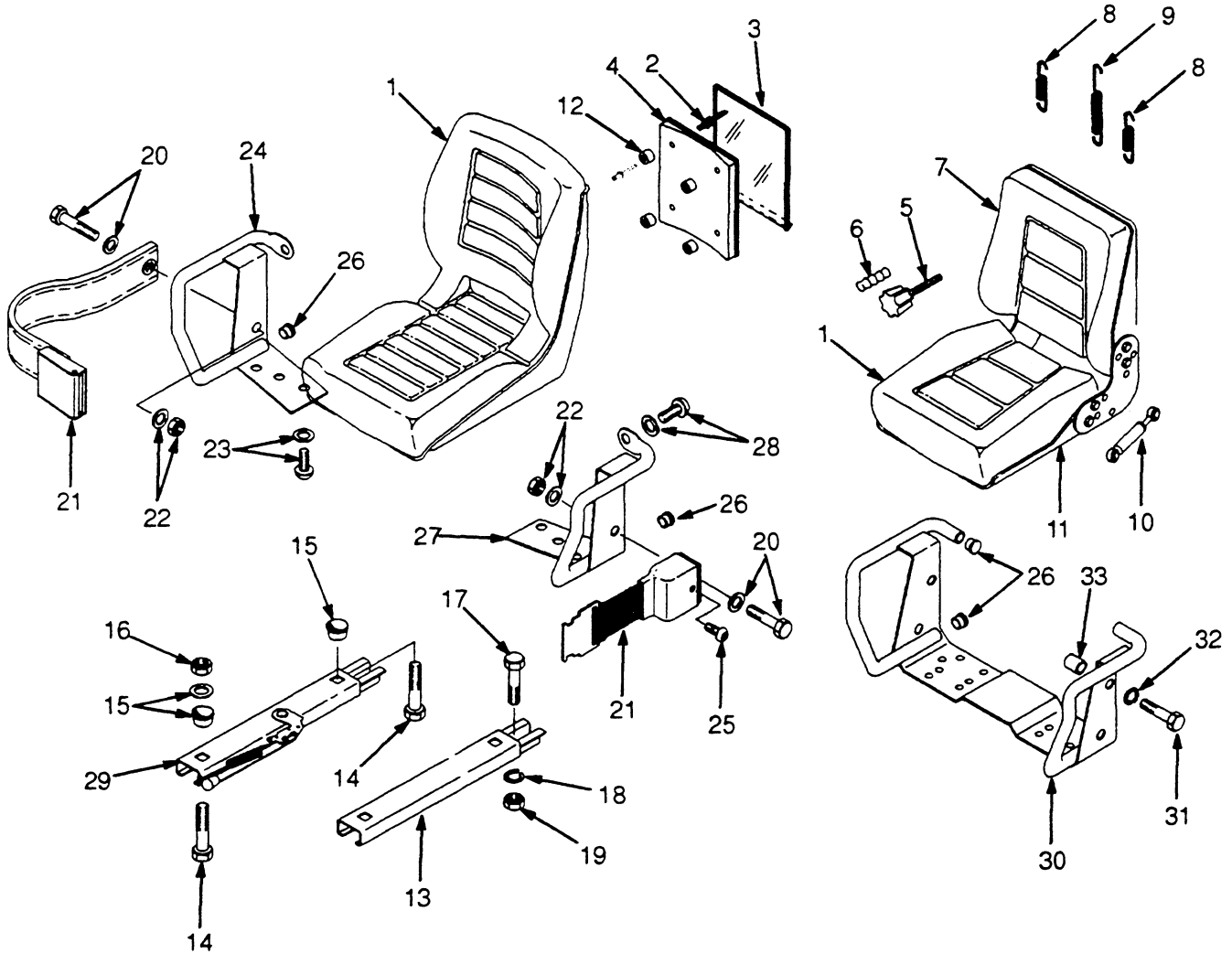
A-H40-50XL (H2.00-2.50XL)

B-H60XL (H3.00XL)

REF	PART NO.	NAME OF PART	QTY
REF			A B
1	300990	Extension-42 IN	1 ..
1	315620	Extension-42 IN .....	.. 1
2	292528	Capscrew	4 4
3	292683	Lockwasher	4 ..

REF	PART NO.	NAME OF PART	QTY
REF			A B
3	296423	Washer .....	.. 4
4	320162	Washer	4 ..
4	221771	Washer .....	.. 4

SEAT





SEAT

KEY

A-Standard
B-Suspension

REF	PART NO.	NAME OF PART	QTY	
			A	B
1	377901	Seat	1	..
1	+ 377908	Seat	1	..
2	* 377906	Seat .....	..	1
2	222029	Rivet	4	..
2	222030	Rivet .....	..	4
3	335991	Cover-Information	1	1
4	335988	Base-Information	1	1
4	335989	Base-Information .....	..	1
5	326365	Spindle-Adjusting .....	..	2
6	326362	Knob-Lever .....	..	1
7	326361	Cushion-Back .....	..	1
8	326364	Spring-Coil .....	..	2
9	326363	Spring-Tension .....	..	1
10	326978	Absorber-Shock .....	..	1
11	326360	Cushion-Seat .....	..	1
12	1326337	Bar .....	..	4
13	269448	Rail-Seat	1	1
14	18731	Capscrew	4	..
14	% 364914	Capscrew	4	..
14	18727	Capscrew .....	..	4
15	221733	Washer-Flat	4	..
15	% 221733	Washer-Flat	2	..
15	204114	Spacer	4	..
16	145639	Locknut .....	..	4
17	16374	Capscrew	4	4

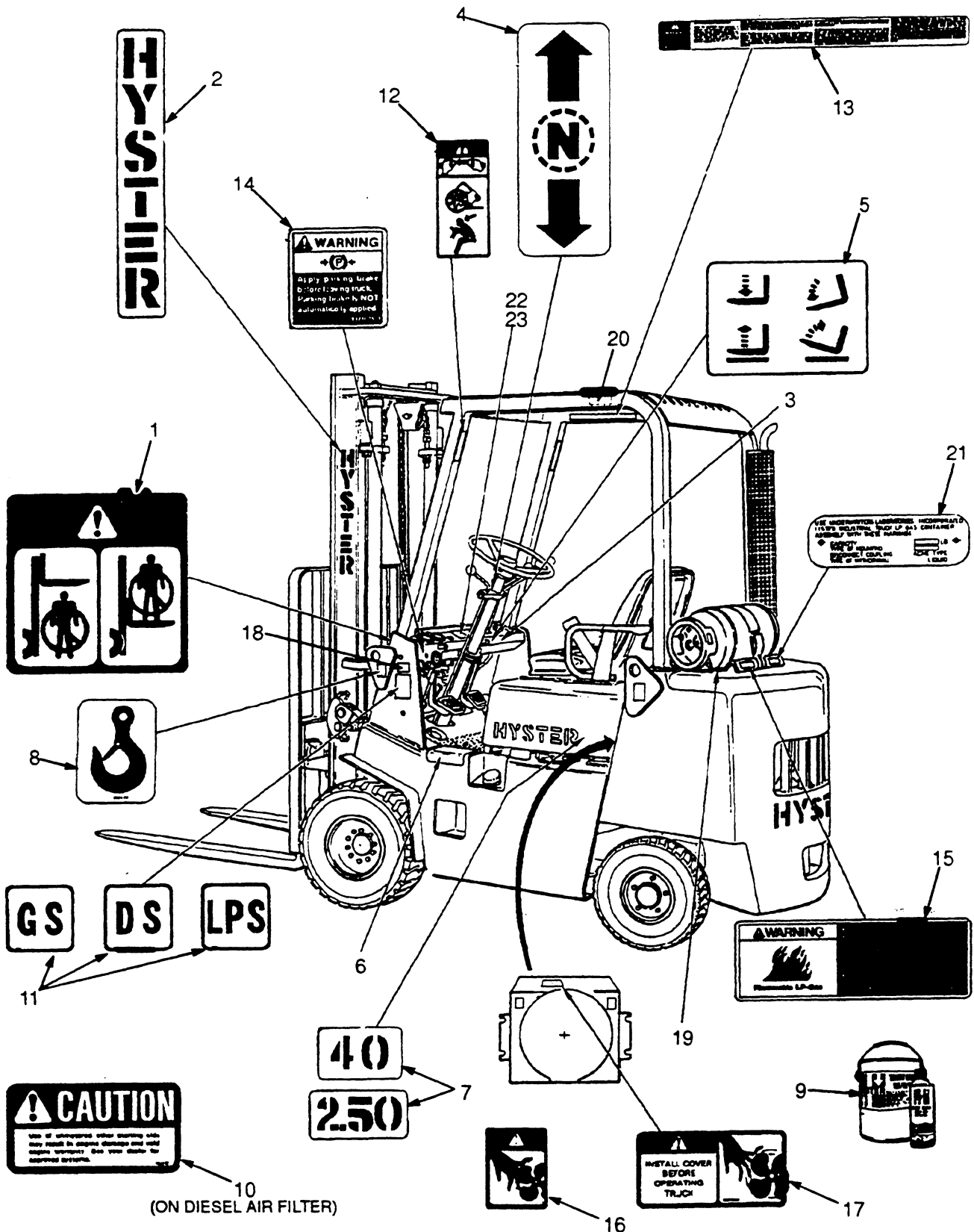
REF	PART NO.	NAME OF PART	QTY	
			A	B
18	15175	Washer	4	4
19	145639	Locknut	4	4
20	% 379199	Capscrew-Special	2	2
20	% 379697	Washer-Special	2	2
21	% 364843	Belt	1	1
22	% 379697	Washer-Special	2	2
22	% 379698	Nut-Special	2	2
23	% 18726	Capscrew	4	..
23	% 18515	Washer	4	..
24	% 364807	Restraint-RH	1	..
25	% 379650	Screw-Special	1	1
26	% 364854	Plug	2	4
27	% 364808	Restraint-LH	2	..
28	% 379197	Capscrew-Special	2	..
28	% 379198	Washer-Special	2	..
29	269449	Rail-Seat	1	1
30	364847	Restraint .....	..	1
31	379674	Capscrew-Special	2	2
32	379675	Washer-Special .....	..	2
33	364848	Spacer .....	..	2

* Overhead Guard 301014 Must Be Used With This Seat

% With Operator Restraint First Used On S/N A177B-15541

+ Optional Cloth

LABELS/PAINT





LABELS/PAINT

REF	PART NO.	NAME OF PART	QTY
1	356154	Label-Safety	2
2	&% 270859	Label-Hyster	2
2	\$% 369859	Label-Hyster	2
2	&# 313506	Label-Hyster	2
2	\$# 369858	Label-Hyster	2
3	*	Label	1
4	309684	Label-Fwd/Rev	1
5	309094	Label-Lift/Tilt	1
5	\$\$ 369573	Label-Lift/Tilt	1
6	309782	Tread-Slip Resistant	2
7	318936	Label	2
7	318937	Label	2
7	318938	Label	2
7	++ 369853	Label-2.00	2
7	++ 369854	Label-2.50	2
7	++ 369855	Label-3.00	2
8	316448	Label-Lift Eye	4
9	+ 317226	Paint-Yellow 1 Gal	AR
9	+ 317225	Paint-Yellow Spray	AR
9	+ 316844	Paint-Red Spray	AR
9	+@@ 336593	Paint-Black Spray	AR
9	+@@ 336594	Paint-Black 1 Gal	AR
9	@ 328626	Paint-Black Spray	AR
10	194172	Label-Caution	1
11	154065	Label-GS	2
11	154066	Label-LPS	2
11	154067	Label-DS	2
12	%% 364918	Label-Operator Restraint	2
12	## 386077	Label-Tipover Warning	2
13	%% 379888	Label-Safety Warning	1
13	## 386079	Label-Safety Warning	1
14	1316477	Label-Park Brake Warning	1

Note: Truck Is To Be Painted Yellow With The Following Exceptions:
Satin Finish Black
Steer Column (Above Support Bracket)
Column Support Bracket
Hydraulic Control Levers
Overhead Guard
Carriage
Mast (Including Cylinders, Tilt Cylinder Rod
End Tubes, Hose Reels, Brackets, And Any
Parts Attaching To The Mast)
Shifting Lever And Bracket
Radiator And Shroud
Hi-temp Black
Overhead Exhaust Pipe
Overhead Exhaust Shield

REF	PART NO.	NAME OF PART	QTY
15	1304071	Label-LP Flammable Gas	1
16	1300094	Label-Fan Warning	2
17	1300119	Label-Fan Warning	1
18	389692	Label-Patents And Trademarks	1
19	1304067	Plate-LP Fuel Tank	1
20	1304061	Plate-Overhead Guard Impact	1
20	196693	Adhesive-Foam	1
21	329029	Label-LP Tank Identifier	1
21	170658	Rivet	2
22	389688	Nameplate-Cover	1
22	16899	Rivet	4
23	.....	Label-Nameplate	1

+ Unleaded
@ Hi-temp
@@ Satin Finish
* See Chart Below
& Yellow Mast
\$ Black Mast
++ Metric
% Standard And Three-Stage Mast 5062mm
199.5 Inch Vista Three-Stage 4750mm 187.0
Inch-5010mm 197.0 Inch Vista Two-Stage
4100mm 161.5 Inch-4260mm 167.5 Inch
Three-Stage Mast 4562mm 179.5 Inch
Vista Three-Stage 4000mm 157.5 Inch 4710
185.5 Inch Vista Two-Stage 3100mm 122.0
Inch-3760mm 148.0 Inch Vista Free-Lift
2800mm 110 Inch-3760mm 148.0 Inch
Without Operator Restraint
%% With Operator Restraint First Used
On S/N A177B-15541
\$\$ First Used On S/N A177B-22143

Red
Forks
Fuel Cap
Counterweight Letters

Not Painted
Engine, Information Case,
Seat And Seat Rails, Cylinder Rods,
Slip Resistant Tread, Parking Brake,
Labels And Information Plates, Battery,
Pedal Pads, Hydraulic Breather Cap,
Steering Wheel, Key Switch,
Tires, Mast Chains And Hoses,
Instruments, Instrument Panel
Lever Knobs

328610	328614	328613	328612	328611	309730	309731	309732	309733	309734
\$\$\$370250	\$\$\$370251	\$\$\$370252	\$\$\$370253	\$\$\$370254	\$\$\$370255	\$\$\$370256	\$\$\$370257	\$\$\$370258	\$\$\$370259



PUBLICATIONS

Every new lift truck is provided with at least three publications. These publications are the PARTS MANUAL, the OPERATING MANUAL, and the section of the SERVICE MANUAL called Periodic Maintenance.

The OPERATING MANUAL must always be available

on every lift truck. This manual has information that the operator must know for inspection and operation of the lift truck. The section Periodic Maintenance has a recommended schedule of service intervals and the procedures for servicing the lift truck.

PUBLICATION	HYSTER PART NUMBER
Operating Manual	
English (U.S.)	897259
English (Non-U.S.)	897147
Spanish	853441
French	853428
German	853440
Dutch	853427
Swedish	853493
Danish	853617
Italian	853616
Portugese	853618
Service Manual (complete)	599883
The Frame (100 SRM 137)	910165
The Isuzu C240 Engine (600 SRM 70)	899768
The Mazda M4-121G Engine (600 SRM 66)	899767
The Gasoline Carburetor (900 SRM 129)	910168
The LPG System (900 SRM 15)	899772
The Single-Speed Powershift Transmission - Description and Operation (1300 SRM 75)	899773
Repairs (1300 SRM 8)	910170
The Single-Speed Powershift Transmission - Description and Operation (1300 SRM 255)	899323
Repairs (1300 SRM 256)	899324
The Drive Axle (1400 SRM 85)	910171
The Steering Control Unit (1600 SRM 54)	910076
The Steering Control Unit (1600 SRM 257)	910458
The Steering Axle (1600 SRM 10)	899775
The Brake System (1800 SRM 157)	910174
The Hydraulic System and Gear Pump Assembly (1900 SRM 130)	899780
The Main Control Valve (2000 SRM 77)	899782
The Tilt Cylinders (2100 SRM 103)	910102
The Electrical System, Mazda (2200 SRM 132)	899791
The Electrical System, Isuzu (2200 SRM 134)	899792
Electrical Gauges, Meters and Senders (2200 SRM 143)	910110
Electrical Warning Devices (2200 SRM 144)	910111
Vista Masts - Description (4000 SRM 222)	899237
Vista Masts - Repair (4000 SRM 223)	910435
Lift Cylinders (4000 SRM 135)	910119
Periodic Maintenance (8000 SRM 259)	910757
Capacities and Specifications (8000 SRM 48)	899803
Diagrams (8000 SRM 45)	899802
Inch (SAE) and Metric Fasteners (8000 SRM 231)	910442