

PARTS MANUAL

**H80-H90-H100-H110-H120FT
(U005)**

CUSTOMER EDITION

HYSTER

SECTIONS

1	FRAME
2	ENGINE ASSEMBLY - DIESEL
3	ENGINE ASSEMBLY - GM
4	ENGINE ASSEMBLY-KUBOTA LPG
5	FUEL SYSTEM
6	ELECTRICAL SYSTEM
7	TRANSMISSION
8	DRIVE AXLE
9	STEERING SYSTEM
10	BRAKE SYSTEM
11	HYDRAULIC SYSTEM
12	MAST-TWO STAGE LIMITED FREE-LIFT
13	MAST-TWO STAGE FULL FREE-LIFT
14	MAST-THREE STAGE FULL FREE-LIFT
15	OPTIONS
16	FIELD CONVERSION KITS
17	NUMERICAL INDEX

This Parts Manual is divided into 17 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	
ACCUMULATOR	15-53
ADD-ON OPTION KITS	16-7
AIR FILTER	
4.3L LPG	5-14
AIR FILTER ASSEMBLY	
KUBOTA DIESEL - 3.6L, 3.8L	5-13
KUBOTA LPG - 3.8L	5-12
AIR INTAKE	
KUBOTA DIESEL - 3.6L	5-2
KUBOTA DIESEL - 3.8L	5-4
AIR INTAKE AND FILTER	
KUBOTA 3.8L LPG	5-10
PSI 4.3L LPG	5-8
AIR INTAKE AND FILTER SYSTEM	
GM 4.3L GASOLINE AND LPG - PSI 4.3L GASOLINE	5-6
ALTERNATOR	
SEALED - KUBOTA 3.8L DIESEL/LPG	6-40
SEALED - GM 4.3L GASOLINE AND LPG	6-41
ALTERNATOR AND MOUNTING	
GM 4.3L GASOLINE AND LPG	6-42
ALTERNATOR AND PULLEY	
KUBOTA DIESEL	2-107
ANTI-STALL	
WITH MANUAL HYDRAULIC VALVE - GAS, LPG AND 3.6L DIESEL	11-28
ARMREST ASSEMBLY	
MINI-LEVER MODULES - SEMI-SUSPENSION SEAT WITH HIP RESTRAINTS	1-66
MINI-LEVER MODULES - FULL SUSPENSION SEAT	1-68
AUXILIARY HOSES	11-64
B	
BACK-UP ALARM	15-48
BATTERY CABLE	
FUSED-STANDARD ALTERNATOR - KUBOTA 3.6L DIESEL, 3.8L DIESEL/LPG	6-34
BATTERY CABLES	
GM 4.3L GASOLINE AND LPG	6-36
KUBOTA 3.8L DIESEL/LPG	6-30
BATTERY DISCONNECT	
GM 4.3L GS AND LPS	6-38
KUBOTA 3.8L DIESEL/LPG - SAFETY OPTION	6-32
BRAKE COOLING SYSTEM	
SINGLE AND DUAL PEDAL - DANA WET BRAKE	10-10
BRAKE LINKAGE	
DUAL PEDAL - WET BRAKE	10-6
SINGLE PEDAL - WET BRAKE	10-2
BRAKE MASTER CYLINDER ASSEMBLY	10-14
BREATHER AND SEPARATOR PIPES	
KUBOTA DIESEL - 3.8L	2-86

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
C	
CAB ASSEMBLY WITH STEEL DOORS	
FAN ASSEMBLY	1-46
HEADLINER ASSEMBLY	1-44
WITH AIR CONDITIONING - SHEET 1 OF 3	1-22
WITH AIR CONDITIONING - SHEET 2 OF 3	1-24
WITH AIR CONDITIONING - SHEET 3 OF 3	1-26
WITH AIR CONDITIONING - WINDOWS AND WIPERS-ADHESIVE SEALED FRONT WINDOW	1-28
WITH AIR CONDITIONING - LEFT HAND DOOR	1-30
WITH AIR CONDITIONING - RIGHT HAND DOOR LATCH COMPONENTS	1-32
WITH AIR CONDITIONING - RIGHT HAND DOOR HEATER COMPONENTS	1-34
WITH AIR CONDITIONING - CONDENSER AND ATTACHING PARTS (SHEET 1 OF 2)	1-36
WITH AIR CONDITIONING - DRYER AND ATTACHING PARTS (SHEET 2 OF 2)	1-38
WITH AIR CONDITIONING - CONDENSER ASSEMBLY	1-40
WITH AIR CONDITIONING - AIR CONDITIONER HEATER	1-42
WITHOUT AIR CONDITIONING - SHEET 1 OF 3	1-8
WITHOUT AIR CONDITIONING - SHEET 2 OF 3	1-10
WITHOUT AIR CONDITIONING - SHEET 3 OF 3	1-12
WITHOUT AIR CONDITIONING - WINDOWS AND WIPERS-MECHANICALLY SEALED FRONT WINDOW	1-14
WITHOUT AIR CONDITIONING - LEFT HAND DOOR	1-16
WITHOUT AIR CONDITIONING - RIGHT HAND DOOR LATCH COMPONENTS	1-18
WITHOUT AIR CONDITIONING - RIGHT HAND DOOR HEATER COMPONENTS	1-20
CAMSHAFT AND IDLE GEAR SHAFT	
KUBOTA DIESEL - 3.6L	2-74
KUBOTA DIESEL - 3.8L	2-75
CAMSHAFT AND OIL PAN	
GM 4.3L GASOLINE AND LPG	3-44
CARRIAGE	
STANDARD - TWO STAGE LIMITED FREE LIFT	12-18
THREE STAGE FULL FREE LIFT	14-34
TWO STAGE FULL FREE LIFT	13-28
CARRIAGE LOCKOUT ROD	
CHARGE PUMP ASSEMBLY	7-36
COMPRESSOR ASSEMBLY AND ATTACHING PARTS	
WITH CAB AND AIR CONDITIONING	2-42
CONTROL MODULE	
DIESEL INTERFACE - KUBOTA V3800	6-43
CONTROL VALVE ASSEMBLY	
ELECTRONIC CONTROL - THREE FUNCTION	11-38
ELECTRONIC CONTROL - FOUR FUNCTION	11-40
ELECTRONIC CONTROL - THREE AND FOUR FUNCTION-WITH VARIABLE DISPLACEMENT PUMP	11-42
CONTROL VALVE LOCKOUT GROUP	
MANUAL CONTROL VALVE	11-26
COOLING	
GASOLINE AND LPG - SHORT WHEEL BASE WITH EXTERNAL OIL COOLER	3-8
GASOLINE AND LPG - SHORT WHEEL BASE WITHOUT EXTERNAL OIL COOLER	3-10
GASOLINE AND LPG - LONG WHEEL BASE WITH EXTERNAL COOLER	3-12

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
KUBOTA DIESEL - WITH EXTERNAL OIL COOLER	2-12
KUBOTA DIESEL - WITHOUT EXTERNAL OIL COOLER WITH SHORT WHEELBASE	2-16
KUBOTA LPG - WITH EXTERNAL OIL COOLER	4-2
KUBOTA LPG - WITHOUT EXTERNAL OIL COOLER WITH SHORT WHEELBASE	4-4
COUNTERWEIGHT	1-4
COVER BEARING CASE	
KUBOTA DIESEL - 3.6L, 3.8L	2-65
COWL ELECTRICAL	
ELECTRO-HYDRAULIC	6-8
MANUAL HYDRAULIC	6-6
COWL MOUNT	1-70
CRANKSHAFT PULLEY	
GM 4.3L GASOLINE AND LPG	3-36
CYLINDER BLOCK	
GM 4.3L GASOLINE AND LPG	3-42
KUBOTA DIESEL - 3.6L	2-66
KUBOTA DIESEL - 3.8L	2-68
CYLINDER HEAD	
GM 4.3L GASOLINE AND LPG	3-40
KUBOTA DIESEL - 3.6L	2-50
KUBOTA DIESEL - 3.8L	2-51
CYLINDER HEAD COVER	
KUBOTA DIESEL - 3.6L	2-46
KUBOTA DIESEL - 3.8L	2-48
D	
DIESEL PARTICULATE FILTER	
ATTACHING PARTS - KUBOTA 3.8L DIESEL	2-38
MUFFLER ASSEMBLY - KUBOTA 3.8L DIESEL	2-40
DIFFERENTIAL ASSEMBLY	
WET BRAKE (NMHG)	8-24
DIPSTICK	
KUBOTA DIESEL - 3.6L, 3.8L	2-76
DIRECTIONAL CONTROL	16-6
DISTRIBUTOR AND COIL	
GM 4.3L GASOLINE AND LPG	3-52
DISTRIBUTOR ASSEMBLY	
GM 4.3L LPG AND GASOLINE	6-46
DPF DISPLAY	
3.8L KUBOTA DIESEL	6-44
DRIVE AXLE AND ATTACHING PARTS	
WET BRAKE - DANA	8-2
WET BRAKE (NMHG)	8-12
DRIVE AXLE ASSEMBLY	
WET BRAKE (DANA) - HOUSING AND HUB	8-4
WET BRAKE (DANA) - DIFFERENTIAL	8-6
WET BRAKE (DANA) - BRAKE ASSEMBLY	8-10
WET BRAKE (NMHG) - RIGHT AND LEFT HAND HUBS	8-14
WET BRAKE (NMHG) - BRAKES AND DIFFERENTIAL	8-18

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
WET BRAKE (NMHG) - INPUT PINION CARRIER	8-22
DRIVE WHEELS AND TIRES	
DUAL TREAD	8-31
SINGLE TREAD	8-28
DUAL MIRRORS	
WITH CAB	15-51
E	
EGR COOLER	
KUBOTA DIESEL - 3.8L	2-96
EGR VALVE	
KUBOTA DIESEL - 3.8L	2-95
ELECTRICAL MOUNTING PLATE AND LIFTING EYE	
GM 4.3L GASOLINE	3-32
GM 4.3L LPG	3-30
ELECTRICAL SYSTEM	
RIGHT HAND CHASSIS	6-4
ELECTRONIC CONTROL VALVE	
LIFT SECTION - WITH VARIABLE DISPLACEMENT PUMP	11-48
OUTLET SECTION - WITH VARIABLE DISPLACEMENT PUMP	11-60
TILT SECTION - WITH VARIABLE DISPLACEMENT PUMP	11-52
TRANSITION SECTION - WITH VARIABLE DISPLACEMENT PUMP	11-46
ENGINE AND ATTACHING PARTS	
KUBOTA 3.8L SI LPG	4-14
ENGINE ASSEMBLY	
ALTERNATOR AND PULLEY - KUBOTA 3.8L SI LPG	4-44
CAMSHAFT AND IDLE GEAR SHAFT - KUBOTA 3.8L SI LPG	4-37
CYLINDER HEAD - KUBOTA 3.8L SI LPG	4-23
CYLINDER HEAD COVER - KUBOTA 3.8L SI LPG	4-22
DIPSTICK AND GUIDE - KUBOTA 3.8L SI LPG	4-34
ELECTRONIC CONTROL MODULE - KUBOTA 3.8L SI LPG	4-47
EXHAUST MANIFOLD - KUBOTA 3.8L SI LPG	4-33
FAN DRIVE AND MOUNTING - KUBOTA 3.8L SI LPG	4-28
GEAR CASE - KUBOTA 3.8L SI LPG	4-20
IGNITION COIL - KUBOTA 3.8L SI LPG	4-41
INJECTION PUMP COVER - KUBOTA 3.8L SI LPG	4-40
INTAKE MANIFOLD AND THROTTLE BODY - KUBOTA 3.8L SI LPG	4-26
MAIN BEARING CASE - KUBOTA 3.8L SI LPG	4-36
OIL COOLER - KUBOTA 3.8L SI LPG	4-35
OIL PAN - KUBOTA 3.8L SI LPG	4-19
PISTON AND CRANKSHAFT - KUBOTA 3.8L SI LPG	4-38
SHORT BLOCK - KUBOTA 3.8L SI LPG	4-18
STARTER - KUBOTA 3.8L SI LPG	4-46
SUPPLY PUMP COVER - KUBOTA 3.8L SI LPG	4-42
THERMOSTAT AND HOUSING - KUBOTA 3.8L SI LPG	4-30
VALVE AND ROCKER ARM - KUBOTA 3.8L SI LPG	4-24
WATER PUMP - KUBOTA 3.8L SI LPG	4-32
ENGINE CONTROL MODULE AND SENSORS	
GM 4.3L LPG	6-47

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
GM 4.3L GASOLINE	6-48
ENGINE ELECTRICAL SYSTEM	
GM 4.3L - WITH SEALED ALTERNATOR	6-28
GM 4.3L GASOLINE	6-26
GM 4.3L LPG	6-24
KUBOTA 3.6L DIESEL	6-10
KUBOTA 3.8L DIESEL - WITH STANDARD ALTERNATOR HARNESS	6-16
KUBOTA 3.8L DIESEL - WITH SEALED ALTERNATOR HARNESS	6-18
KUBOTA 3.8L LPG - WITH STANDARD ALTERNATOR HARNESS	6-20
KUBOTA 3.8L LPG - WITH SEALED ALTERNATOR HARNESS	6-22
ENGINE MOUNT	4-16
ENGINE MOUNTING	
GM 4.3L, GASOLINE AND LPG	3-22
ENGINE WIRE HARNESS AND ATTACHING PARTS	
KUBOTA 3.6L DIESEL	6-12
KUBOTA 3.6L DIESEL - WITH ELECTRONIC THROTTLE	6-14
ENGINE WITH ENGINE MOUNT AND TORQUE CONVERTER	
3.6L KUBOTA DIESEL	2-4
3.8L KUBOTA DIESEL	2-6
E-THROTTLE LINKAGE	
KUBOTA 3.6L DIESEL	5-24
EXHAUST MANIFOLD	
KUBOTA DIESEL - 3.6L	2-60
KUBOTA DIESEL - 3.8L	2-61
EXHAUST MANIFOLDS	
GM 4.3L LPG AND GASOLINE	3-37
EXHAUST SYSTEM	
COUNTERWEIGHT EXHAUST LWB - 3.6L	2-22
COUNTERWEIGHT EXHAUST LWB - 3.8L WITH DPF	2-32
COUNTERWEIGHT EXHAUST SWB - 3.6L	2-26
COUNTERWEIGHT EXHAUST SWB - 3.8L WITH DPF	2-30
GM 4.3L, GASOLINE AND LPG	3-18
KUBOTA 3.8L LPG - COUNTERWEIGHT	4-8
KUBOTA 3.8L LPG - OVERHEAD LONG WHEELBASE	4-10
KUBOTA 3.8L LPG - OVERHEAD SHORT WHEELBASE	4-12
OVERHEAD EXHAUST LWB - 3.6L	2-24
OVERHEAD EXHAUST LWB - 3.8L WITH DPF	2-36
OVERHEAD EXHAUST SWB - 3.6L	2-28
OVERHEAD EXHAUST SWB - 3.8L WITH DPF	2-34
EXHAUST WRAPS	
GM 4.3L GASOLINE AND LPG	3-20
F	
FAN ASSEMBLY	
GM 4.3L GASOLINE AND LPG	3-26
FAN MOUNT ASSEMBLY	
GM 4.3L LPG AND GASOLINE	3-24
FAN PULLEY	
KUBOTA DIESEL - 3.6L, 3.8L	2-45

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
FAN SHROUD WITH RADIATOR SCREEN	
GASOLINE AND LPG - SHORT WHEEL BASE	3-17
LONG WHEEL BASE - DIESEL	2-20
SHORT WHEEL BASE - DIESEL	2-19
FAN SHROUD WITHOUT RADIATOR SCREEN	
GASOLINE AND LPG - SHORT WHEEL BASE	3-16
SHORT WHEEL BASE - DIESEL	2-18
FENDER EXTENSIONS	1-78
FIRE EXTINGUISHER	15-52
FLOOR PLATES AND COVERS	
SHEET 1 OF 2	1-74
SHEET 2 OF 2	1-76
FLYWHEEL AND HOUSING	
GM 4.3L GASOLINE AND LPG	3-28
KUBOTA 3.8L LPG	4-17
KUBOTA DIESEL - 3.6L, 3.8L	2-44
FORKS	
POLISHED FORK WITH FULL BOTTOM TAPER - CLASS III AND CLASS IV	1-86
STANDARD TAPER CLASS III AND CLASS IV	1-84
FORKS WITH LATCH	
POLISHED FULL BOTTOM TAPER - OPTIONAL EQUIPMENT	1-89
STANDARD TAPER - OPTIONAL EQUIPMENT	1-87
FORWARD CLUTCH	
SINGLE SPEED TRANSMISSION	7-16
FORWARD CLUTCH, HIGH	
DUAL SPEED TRANSMISSION	7-30
FORWARD CLUTCH, LOW	
DUAL SPEED TRANSMISSION	7-28
FREE LIFT CYLINDER	
THREE STAGE FULL FREE LIFT	14-24
TWO STAGE FULL FREE LIFT	13-18
FUEL CAP	
GASOLINE AND DIESEL	5-30
FUEL FILTER	
KUBOTA DIESEL - 3.6L	2-102
FUEL INJECTION PUMP	
KUBOTA DIESEL - 3.8L	2-91
FUEL PUMP	
KUBOTA DIESEL - 3.6L	2-101
FUEL PUMP AND SENDER	
GM 4.3L GASOLINE	5-34
FUEL RAIL	
KUBOTA DIESEL - 3.8L	2-92
FUEL SENDING UNIT	
KUBOTA DIESEL - 3.6L	5-28
FUEL SYSTEM	
3.8L LPG - WITH LOW FUEL SENSOR	5-44
3.8L LPG - W/O LOW FUEL SENSOR	5-46
GM 4.3L - GASOLINE	5-31

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
GM 4.3L - LPG	5-36
KUBOTA DIESEL - 3.8L	5-26
FULL SUSPENSION SEAT	
ATTACHING PARTS-NOT INCLUDED WITH SEAT - SHEET 4 OF 4	1-64
MANUAL AND ELECTRO-HYDRAULIC — SWIVEL AND NON SWIVEL - SHEET 1 OF 4	1-58
RECLINER AND DAMPER KITS - SHEET 2 OF 4	1-60
SERVICE KITS FOR NON SWIVEL AND SWIVEL - SHEET 3 OF 4	1-62
G	
GEAR CASE	
KUBOTA DIESEL - 3.6L	2-62
KUBOTA DIESEL - 3.8L	2-64
GEAR PUMP	11-14
GOVERNOR	
KUBOTA DIESEL - 3.6L	2-104
GOVERNOR ACTUATOR AND PLUG	
KUBOTA DIESEL - 3.6L	2-106
H	
HAND LEVERS	
FOUR FUNCTION - WITH DETENTED LEVERS	11-22
FOUR FUNCTION - WITHOUT DETENTED LEVERS	11-24
THREE FUNCTION - WITH DETENTED LEVERS	11-18
THREE FUNCTION - WITHOUT DETENTED LEVERS	11-20
HEADER HOSE	
THREE STAGE FULL FREE LIFT	14-28
TWO STAGE FULL FREE LIFT	13-22
TWO STAGE LIMITED FREE LIFT	12-14
HEADER HOSE AUX. TUBE EXTENSIONS WITH QUICK DISCONNECTS	
THREE STAGE FULL FREE-LIFT - STANDARD CARRIAGE	15-24
THREE STAGE FULL FREE-LIFT - INTEGRAL SIDE-SHIFT CARRIAGE	15-32
TWO STAGE FULL FREE- LIFT - STANDARD CARRIAGE	15-20
TWO STAGE FULL FREE-LIFT - INTEGRAL SIDE-SHIFT CARRIAGE	15-30
TWO STAGE LIMITED FREE-LIFT - STANDARD CARRIAGE	15-16
TWO STAGE LIMITED FREE-LIFT - INTEGRAL SIDE-SHIFT CARRIAGE	15-28
HEADER HOSE AUXILIARY TUBE EXTENSIONS	
THREE STAGE FULL FREE LIFT - STANDARD CARRIAGE	14-32
THREE STAGE FULL FREE- LIFT - INTEGRAL SIDE-SHIFT CARRIAGE WITHOUT QUICK DISCONNECTS	15-8
THREE STAGE FULL FREE- LIFT - ATTACHMENT CARRIAGE WITHOUT QUICK DISCONNECTS	15-14
TWO STAGE FULL FREE LIFT - STANDARD CARRIAGE	13-26
TWO STAGE FULL FREE- LIFT - INTEGRAL SIDE-SHIFT CARRIAGE WITHOUT QUICK DISCONNECTS	15-7
TWO STAGE FULL FREE- LIFT - ATTACHMENT CARRIAGE WITHOUT QUICK DISCONNECTS	15-12
TWO STAGE LIMITED FREE LIFT - STANDARD CARRIAGE	12-16
TWO STAGE LIMITED FREE-LIFT - INTEGRAL SIDE-SHIFT CARRIAGE WITHOUT QUICK DISCONNECTS	15-6
TWO STAGE LIMITED FREE-LIFT - ATTACHMENT CARRIAGE WITHOUT QUICK DISCONNECTS	15-10

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
HEATER HOSES	
GM 4.3L GASOLINE	1-50
GM 4.3L LPG	1-48
KUBOTA DIESEL	1-53
KUBOTA LPG	1-52
HOOD ASSEMBLY	1-72
HOSE GROUPS	
HYDRAULIC CONTROL VALVE (MANUAL)	
AUXILIARY ONE AND TWO SECTION - THREE AND FOUR FUNCTION	11-34
LIFT AND TILT - THREE AND FOUR FUNCTION	11-32
OUTLET SECTION - THREE AND FOUR FUNCTION	11-36
THREE AND FOUR FUNCTION	11-30
HYDRAULIC FAN DRIVE	
4.3L GASOLINE AND LPG - LWB	3-4
4.3L GASOLINE AND LPG - SWB	3-6
KUBOTA 3.8L DIESEL/LPG - LWB	2-8
KUBOTA 3.8L DIESEL/LPG - SWB	2-10
WITH VARIABLE DISPLACEMENT PUMP	11-8
HYDRAULIC FAN DRIVE MANIFOLD	11-10
HYDRAULIC FILTER	11-12
HYDRAULIC SUPPLY AND RETURN	11-2
WITH VARIABLE DISPLACEMENT PUMP	11-4
I	
IMPACT SENSOR	6-56
INJECTION PIPE	
KUBOTA DIESEL - 3.8L	2-93
INJECTION PUMP	
KUBOTA DIESEL - 3.6L	2-98
INJECTION PUMP HOUSING	
KUBOTA DIESEL - 3.6L	2-97
INJECTOR BODY	
KUBOTA 3.6L DIESEL	2-100
INJECTOR HARNESS	
KUBOTA DIESEL - 3.8L	2-94
INLET AND EXHAUST VALVES	
KUBOTA DIESEL - 3.8L	2-55
INLET MANIFOLD	
KUBOTA DIESEL - 3.6L	2-56
KUBOTA DIESEL - 3.8L	2-58
INNER MAST	
THREE STAGE FULL FREE-LIFT	14-10
INNER MAST AND FREE-LIFT	
THREE STAGE FULL FREE-LIFT	14-12
INSTRUMENT CLUSTER	6-58
INTAKE AIR FUEL MODULE	
GM 4.3L GASOLINE	3-50
INTEGRAL SIDE-SHIFT CARRIAGE ASSEMBLY	
CHAIN ANCHOR GROUPS	15-46

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
THREE STAGE FULL FREE LIFT	15-42
TWO STAGE FULL FREE LIFT	15-38
TWO STAGE LIMITED FREE-LIFT	15-34
INTERMEDIATE MAST	
THREE STAGE FULL FREE LIFT	14-6
L	
LABELS	
CONTROL LEVER LENS - MANUAL HYDRAULICS	1-96
EXTERIOR	1-92
INTERIOR	1-94
LIFTING EYES	
GASOLINE AND DIESEL	15-54
LIGHTS	
WORK, REAR DRIVE, AND BRAKE/TAIL - WITH OVERHEAD GUARD	6-64
WORK, REAR DRIVE, AND BRAKE/TAIL - WITH CAB	6-66
LOAD BACKREST EXTENSION	1-82
LOAD WEIGH ELECTRICAL	6-62
LPG CONVERTER	
GM 4.3L	5-41
LPG LOCK OFF	
GM 4.3L	5-42
LPG REGULATOR AND MIXER	
GM 4.3L	5-40
LPG TANK BRACKET	
SWING OUT	5-48
SWING OUT, DROP DOWN	5-50
M	
MAIN LIFT	
THREE STAGE FULL FREE-LIFT	14-16
MAIN LIFT CYLINDER	
THREE STAGE FULL FREE LIFT	14-20
TWO STAGE FULL FREE LIFT - H80-90FT	13-10
TWO STAGE FULL FREE LIFT - H100-120FT	13-14
TWO STAGE LIMITED FREE LIFT - H80-90FT	12-10
TWO STAGE LIMITED FREE LIFT - H100-120FT	12-12
MANUAL HYDRAULIC CONTROLS AND CONTROL VALVES	16-7
MAST	
TWO STAGE FULL FREE LIFT - OUTER MAST AND MAIN LIFT	13-2
TWO STAGE FULL FREE LIFT - INNER MAST AND FREE LIFT	13-6
TWO STAGE LIMITED FREE LIFT - OUTER MAST AND MAIN LIFT	12-2
TWO STAGE LIMITED FREE LIFT - INNER MAST	12-6
MAST TILT SENSOR	6-59
MINI LEVER MODULE LABELS	
ELECTRO-HYDRAULIC CONTROL FUNCTIONS	1-98
MINI-LEVER CONTROLS	
WITH ARMREST - THREE FUNCTION	6-68
WITH ARMREST - FOUR FUNCTION	6-70

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
MINI-LEVER HYDRAULIC CONTROLS AND CONTROL VALVES	16-6
MIRROR	
WITHOUT CAB	15-50
MUD GUARDS	1-80
N	
NON SUSPENSION SEAT	
WITHOUT ELECTRONIC CONTROLS	1-54
NOZZLE HOLDER AND GLOW PLUG	
KUBOTA DIESEL - 3.6L	2-99
O	
OIL COOLER	
KUBOTA DIESEL - 3.6L	2-82
KUBOTA DIESEL - 3.8L	2-83
OIL PAN	
KUBOTA DIESEL - 3.6L, 3.8L	2-77
OIL PUMP	
GM 4.3L GASOLINE AND LPG	3-54
OIL SEPARATOR	
KUBOTA DIESEL - 3.8L	2-87
OUTER MAST	
THREE STAGE FULL FREE-LIFT	14-2
OVERHEAD GUARD	1-6
P	
PARK BRAKE ASSEMBLY	
MANUAL WITH ONE CABLE - NMHG	10-18
MANUAL WITH TWO CABLES - DANA	10-16
PISTON AND CRANKSHAFT	
KUBOTA DIESEL - 3.6L	2-70
KUBOTA DIESEL - 3.8L	2-72
POWER DISTRIBUTION MODULE	6-50
PRE-CLEANER AND MOUNT	
DIESEL	5-15
DIESEL ENGINE - WITH AIR CONDITIONING	5-16
PULLEY AND TENSIONER	
GM 4.3L GASOLINE AND LPG	3-34
R	
RADIATOR ASSEMBLY	
GM 4.3L - WITH EXTERNAL OIL COOLER	3-14
KUBOTA DIESEL	2-14
KUBOTA 3.8L LPG	4-6
REAR DRIVE HANDLE	15-2
RED SEAT BELT	16-6
RELAY	
KUBOTA DIESEL	6-52
REMOTE KEY SWITCH	6-60

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
REVERSE CLUTCH	
DUAL SPEED TRANSMISSION	7-32
SINGLE SPEED TRANSMISSION	7-18
ROCKER ARM ASSEMBLY	
WITH INLET AND EXHAUST VALVES - KUBOTA DIESEL (3.6L)	2-52
ROCKER ARM SHAFT	
KUBOTA DIESEL - 3.8L	2-54
S	
SEAT BELT SWITCH ADAPTER	6-61
SEMI SUSPENSION SEAT	
MANUAL AND ELECTRO-HYDRAULIC	1-56
SENSORS	
KUBOTA DIESEL - 3.8L	2-108
SOUND ABATEMENT	
WITH CAB	1-90
SPARK PLUGS AND WIRES	
GM 4.3L GASOLINE AND LPG	6-53
START OPTIONS	16-2
STARTER	
GM 4.3L LPG AND GASOLINE	6-54
KUBOTA DIESEL - 3.6L, 3.8L	2-109
STEER AXLE	9-12
STEER CYLINDER	9-16
STEER WHEELS AND TIRES	9-18
STEERING COLUMN AND ATTACHING PARTS	9-2
STEERING COLUMN ASSEMBLY	
DIESEL	9-6
GASOLINE AND LPG	9-4
STEERING CONTROL UNIT	9-8
STEERING HOSES	9-10
STROBE LIGHT	
LED	15-4
SWIVEL SEATS	16-2
T	
THERMOSTAT AND WATER OUTLET HOUSING	
GM 4.3L LPG	3-38
GM 4.3L GASOLINE	3-39
THROTTLE BODY	
GM 4.3L - GASOLINE	5-38
GM 4.3L - LPG	5-39
THROTTLE CABLE ASSEMBLY	
KUBOTA DIESEL - 3.6L	5-22
THROTTLE PEDAL ASSEMBLY AND ATTACHING PARTS	
MONOTROL PEDAL	5-20
STANDARD PEDAL	5-18
TILT HOSES	11-68
TILT CYLINDER AND MAST INSTALLATION	11-70

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
TILT CYLINDERS	11-72
TORQUE CONVERTER	
GM 4.3L LPG	7-8
KUBOTA 3.8L LPG	7-9
TRANSMISSION	
DUAL SPEED - SHEET 1 OF 3	7-20
DUAL SPEED - SHEET 2 OF 3	7-22
DUAL SPEED - SHEET 3 OF 3	7-24
SINGLE SPEED - SHEET 1 OF 3	7-11
SINGLE SPEED - SHEET 2 OF 3	7-12
SINGLE SPEED - SHEET 3 OF 3	7-14
TRANSMISSION CONTROL VALVE ASSEMBLY	7-34
TRANSMISSION COOLING LINES	
WITH EXTERNAL OIL COOLER - GASOLINE, LPG AND DIESEL	7-6
WITHOUT EXTERNAL OIL COOLER - DIESEL	7-2
WITHOUT EXTERNAL OIL COOLER - GASOLINE AND LPG	7-4
TRANSMISSION HARNESS GROUP	
WITH AND WITHOUT BRAKE TEMP	6-72
TRANSMISSION MOUNT	7-10
TURBO INLET PIPE	
KUBOTA DIESEL - 3.8L	2-88
TURBOCHARGER	
KUBOTA DIESEL - 3.6L	2-84
KUBOTA DIESEL - 3.8L	2-85
TURBOCHARGER OIL PLUMBING	
KUBOTA DIESEL - 3.6L	2-89
KUBOTA DIESEL - 3.8L	2-90
V	
VALVE ASSEMBLY	
AUXILIARY ONE SECTION - ELECTRONIC CONTROL VALVE-THREE AND FOUR FUNCTION	11-54
AUXILIARY TWO SECTION - ELECTRONIC CONTROL VALVE-FOUR FUNCTION	11-56
ELECTRO HYDRAULIC POPPET VALVE - THREE AND FOUR FUNCTION	11-62
LIFT AND LOWER - ELECTRONIC CONTROL VALVE-THREE AND FOUR FUNCTION	11-44
OUTLET SECTION - ELECTRONIC CONTROL VALVE-THREE AND FOUR FUNCTION	11-58
TILT SECTION - ELECTRONIC CONTROL VALVE-THREE AND FOUR FUNCTION	11-50
VALVE COVER AND INLET MANIFOLD	
GM 4.3L GASOLINE AND LPG	3-48
VARIABLE DISPLACEMENT PUMP	
ASSEMBLY	11-17
VARIABLE DISPLACEMENT PUMP AND ADAPTOR	11-16
VENT LINE GROUP	
WITH STANDARD CONTROL VALVE	11-66
WITH VARIABLE DISPLACEMENT CONTROL VALVE	11-67
W	
WATER BYPASS	
GM 4.3L GASOLINE	3-56

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
WATER PUMP	
KUBOTA DIESEL - 3.6L	2-79
KUBOTA DIESEL - 3.8L	2-81
WATER PUMP FLANGE AND THERMOSTAT	
KUBOTA DIESEL - 3.6L	2-78
KUBOTA DIESEL - 3.8L	2-80
WET BRAKE ASSEMBLY	
NMHG	8-26
WET BRAKE BOOSTER SUPPLY AND RETURN	
NMHG	10-12
WIDE TREAD AND DUAL TREAD TIRES	16-2
WIRE HARNESS	
ADAPTER - LOW FUEL PRESSURE	6-73
AIR CONDITIONER	6-74
ALTERNATOR TO BATTERY DISCONNECT SWITCH - KUBOTA 3.8L DIESEL/LPG	6-147
ALTERNATOR TO BATTERY DISCONNECT SWITCH - KUBOTA 3.8L LPG	6-149
ALTERNATOR TO STARTER - KUBOTA 3.8L DIESEL/LPG	6-142
COWL - MANUAL HYDRAULICS WITH MONOTROL PEDAL	6-124
COWL - MANUAL HYDRAULICS WITH FORWARD/REVERSE	6-128
COWL - ELECTRO-HYDRAULICS WITH MONOTROL PEDAL	6-132
COWL - ELECTRO-HYDRAULICS WITH FORWARD/REVERSE	6-136
DPF DISPLAY	6-156
ENGINE - GM 4.3L LPG	6-78
ENGINE - KUBOTA 3.8L DIESEL	6-82
ENGINE - KUBOTA DIESEL (3.6L)	6-88
ENGINE - KUBOTA 3.8L SI LPG	6-92
ENGINE WITH ELECTRONIC THROTTLE - KUBOTA DIESEL 3.6L	6-96
LIGHTS - WITH OVERHEAD GUARD	6-140
RH CHASSIS - GM 4.3L GAS/LPG AND KUBOTA 3.8L DIESEL/LPG	6-100
RH CHASSIS - KUBOTA DIESEL (3.6L)	6-112
RH CHASSIS WITH SEAT BELT SEQUENCE MODULE - GM 4.3L GAS/LPG AND KUBOTA 3.8L DIESEL/ LPG	6-106
RH CHASSIS WITH SEAT BELT SEQUENCE MODULE - KUBOTA DIESEL (3.6L)	6-118
SEALED ALTERNATOR - GM 4.3L GASOLINE AND LPG	6-144
SEALED ALTERNATOR - KUBOTA 3.8L LPG	6-146
TRANSMISSION - SINGLE SPEED	6-158
TRANSMISSION - DUAL SPEED	6-162
TRANSMISSION WITH BRAKE TEMP - SINGLE SPEED	6-166
TRANSMISSION WITH BRAKE TEMP - TWO SPEED	6-170
TYPE S ALTERNATOR	6-154
WIRE HARNESS FOUR FUNCTION	
ELECTRONIC CONTROL VALVE - WITH VARIABLE DISPLACEMENT PUMP	6-152
WIRE HARNESS THREE FUNCTION	
ELECTRONIC CONTROL VALVE - WITH VARIABLE DISPLACEMENT PUMP	6-150

ABBREVIATIONS QUICK REFERENCE SHEET

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

TERM	DEFINITION	TERM	DEFINITION
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 P.....	

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
			14	13	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