

PARTS MANUAL

**FORTIS®
H135FT, H155FT
(J006)**

CUSTOMER EDITION

HYSTER

SECTIONS

1	FRAME
2	ENGINE ASSEMBLY
3	FUEL SYSTEM
4	ELECTRICAL SYSTEM
5	TRANSMISSION
6	DRIVE AXLE
7	STEERING SYSTEM
8	BRAKE SYSTEM
9	HYDRAULIC SYSTEM
10	MAST-TWO STAGE LIMITED FREE-LIFT
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	
ACCUMULATOR	12-10
ADD ON TELEMETRY KITS	13-8
ADD-ON OPTION KITS	13-3
AIR FILTER	3-10
AIR INTAKE	
CUMMINS QSB 3.3L DIESEL	3-8
GM 4.3L GASOLINE AND LPG - GFI OPTION	3-4
GM 4.3L GASOLINE AND LPG - PSI OPTION (S/N J006V04255K →)	3-6
AIR INTAKE MANIFOLD	
CUMMINS QSB 3.3L DIESEL	2-112
ALTERNATOR AND MOUNTING	
CUMMINS QSB 3.3L DIESEL	4-34
GM 4.3L LPG - PSI OPTION (S/N J006V04255K →)	4-29
ARMREST ASSEMBLY	
MINI-LEVER MODULES (S/N J006V02754H → INC. 02721)	1-64
ASSEMBLED ENGINE	
GM 4.3L GASOLINE AND LPG (GFI OPTION) - SHEET 1 OF 3	2-26
GM 4.3L GASOLINE AND LPG (GFI OPTION) - SHEET 2 OF 3	2-30
GM 4.3L GASOLINE AND LPG (GFI OPTION) - SHEET 3 OF 3	2-34
ATTACHMENT CARRIAGE	
VALVE AND HOSES (S/N A613V04806K →) (S/N A614V02744K →)	12-36
WITH FORK POSITIONER AND BACKREST (S/N A613V04806K →) (S/N A614V02744K →)	12-32
ATTACHMENT MOUNTING KITS	13-2
AUXILIARY FUNCTION HOSES	10-26
AUXILIARY ONE AND TWO SECTIONS	
MANUAL CONTROL VALVE - THREE AND FOUR FUNCTION	9-30
AUXILIARY ONE SECTION	
ELECTRONIC CONTROL VALVE - THREE AND FOUR FUNCTION (→ 6/2009)	9-50
ELECTRONIC CONTROLLER - THREE AND FOUR FUNCTION (6/2009 →)	9-52
AUXILIARY TUBE EXTENSION KITS	13-5
AUXILIARY TUBE EXTENSIONS	
THREE STAGE FULL FREE-LIFT - WITHOUT QUICK DISCONNECT FITTINGS (S/N A614V02262H →)	11-28
THREE STAGE FULL FREE-LIFT - MANUAL HYDRAULICS WITH QUICK DISCONNECT FITTINGS (S/N A614V02262H →)	11-30
THREE STAGE FULL FREE-LIFT - E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (S/N A614V02262H →)	11-32
THREE STAGE FULL FREE LIFT WITH SIDE SHIFT FORK POSITIONER CARRIAGE - WITHOUT QUICK DISCONNECT FITTINGS (S/N A614V02262H →)	11-34
THREE STAGE FULL FREE LIFT WITH SIDE SHIFT FORK POSITIONER CARRIAGE - MANUAL HYDRAULICS WITH QUICK DISCONNECT FITTINGS (S/N A614V02262H →)	11-36
THREE STAGE FULL FREE LIFT WITH SIDE SHIFT FORK POSITIONER CARRIAGE - E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (S/N A614V02262H →)	11-38
TWO STAGE LIMITED FREE-LIFT - WITHOUT QUICK DISCONNECT FITTINGS (S/N A613V03307H →)	10-20
TWO STAGE LIMITED FREE-LIFT - MANUAL HYDRAULICS WITH QUICK DISCONNECT FITTINGS (S/N A613V03307H →)	10-22

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
TWO STAGE LIMITED FREE-LIFT - E-HYDRAULICS WITH QUICK DISCONNECT FITTINGS (S/N A613V03307H →)	10-24
AUXILIARY TWO SECTION	
ELECTRONIC CONTROL VALVE - FOUR FUNCTION (→ 6/2009)	9-54
ELECTRONIC CONTROL VALVE - FOUR FUNCTION (6/2009 →)	9-56
B	
BACKREST	
WITH FORK POSITIONER (S/N A613V04806K →) (S/N A614V02744K →)	12-42
BACK-UP ALARM	12-6
BATTERY AND CONTROL CABLE DISCONNECT SWITCH	4-16
BATTERY CABLES	
CUMMINS QSB 3.3L DIESEL	4-12
GM 4.3L GASOLINE AND LPG	4-14
BRAKE AND INCHING PEDAL CONVERSION	13-2
BRAKE COOLING SYSTEM	
SINGLE AND DUAL PEDAL	8-22
BRAKE PEDAL LINKAGE AND MASTER CYLINDER	
DUAL PEDAL (→ S/N J006V03275H INC. 03282-03283)	8-10
DUAL PEDAL - WET BRAKE (S/N J006V03276H → EXC. 03282-03283)	8-14
SINGLE PEDAL (→ S/N J006V03275H INC. 03282-03283)	8-2
SINGLE PEDAL - WET BRAKE (S/N J006V03276H → EXC. 03282-03283)	8-6
C	
CAB	
ATTACHING PARTS - SHEET 1 OF 2	1-26
ATTACHING PARTS - SHEET 2 OF 2	1-28
HEATER AND HOSES - CUMMINS QSB 3.3L DIESEL	1-38
HEATER AND HOSES - GM 4.3L GASOLINE AND LPG	1-40
LEFT HAND DOOR ASSEMBLY	1-34
MAIN ASSEMBLY	1-24
RIGHT HAND DOOR ASSEMBLY	1-36
WINDOW WIPER SYSTEM	1-32
WINDOWS	1-30
CAMSHAFT	
CUMMINS QSB 3.3L DIESEL	2-95
CAMSHAFT AND OIL PAN	
GM 4.3L GASOLINE AND LPG - GFI OPTION	2-54
GM 4.3L GASOLINE AND LPG - PSI OPTION (S/N J006V04255K →)	2-58
CARRIAGE	
THREE STAGE FULL FREE-LIFT - HOOK TYPE	11-20
THREE STAGE FULL FREE-LIFT - PIN TYPE	11-22
TWO STAGE LIMITED FREE-LIFT - HOOK TYPE	10-12
TWO STAGE LIMITED FREE-LIFT - PIN TYPE	10-14
CARRIER ASSEMBLY	
S/N A613V04806K → S/N A614V02744K →	12-40
CHARGE PUMP	5-44
COIL ASSEMBLY	
GM 4.3L GASOLINE AND LPG	2-73

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
COMPARTMENT PLATFORM	1-16
CONTROL VALVE	
THREE SPEED TRANSMISSION	5-26
TWO SPEED TRANSMISSION	5-42
CONTROL VALVE AND STEERING UNIT ASSEMBLY	
ELECTRO-HYDRAULIC - THREE FUNCTION (6/2009 →)	9-38
ELECTRO-HYDRAULIC - FOUR FUNCTION (6/2009 →)	9-42
ELECTRONIC CONTROL - THREE FUNCTION (→ 6/2009)	9-36
ELECTRONIC CONTROL - FOUR FUNCTION (→ 6/2009)	9-40
MANUAL CONTROL - THREE FUNCTION	9-24
MANUAL CONTROL - FOUR FUNCTION	9-26
CONTROL VALVE LOCKOUT GROUP	
MANUAL CONTROL VALVE	9-22
COOLANT HOSES	
GM 4.3L LPG WITH CAB - PSI	3-41
COOLING	
CUMMINS QSB 3.3L	2-16
COOLING SYSTEM	
GM 4.3L GASOLINE AND LPG	2-12
COUNTERWEIGHTS AND FENDERS	1-22
COWL ELECTRICAL	
ELECTRIC HYDRAULIC	4-8
MANUAL HYDRAULIC	4-10
COWL MOUNT	1-18
CRANKCASE BREATHER	
CUMMINS QSB 3.3L DIESEL	2-104
CRANKSHAFT	
CUMMINS QSB 3.3L DIESEL	2-102
CRANKSHAFT PULLEY	
GM 4.3L GASOLINE AND LPG - PSI OPTION (S/N J006V04255K →)	2-44
CYLINDER BLOCK	
CUMMINS QSB 3.3L DIESEL	2-78
GM 4.3L GASOLINE AND LPG	2-50
CYLINDER HEAD	
CUMMINS QSB 3.3L DIESEL	2-80
GM 4.3L GASOLINE AND LPG	2-48
D	
DIFFERENTIAL	6-6
DIPSTICK AND BREATHER	9-8
DISTRIBUTOR AND COIL	
GM 4.3L GASOLINE AND LPG - PSI OPTION	2-74
DISTRIBUTOR ASSEMBLY	
GM 4.3L GASOLINE AND LPG	4-28
DRIVE AXLE AND ATTACHING PARTS	
WET BRAKE	6-3
DRIVE AXLE HOUSING AND HUB	6-4
DRIVE TIRE AND WHEEL	6-2

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
DUAL MIRRORS	
WITH CAB	12-8
WITH OVERHEAD GUARD	12-9
E	
E-HYDRAULIC CONTROL CONVERSION KITS	
ELECTRICAL MOUNTING PLATE	
GM 4.3L LPG - PSI OPTION (S/N J006V04255K →)	2-20
ELECTRICAL MOUNTING PLATE AND LIFTING EYE	
GM 4.3L GASOLINE - PSI OPTION	2-22
ELECTRICAL SYSTEM	
RIGHT HAND CHASSIS - GM 4.3L GASOLINE AND LPG	4-4
RIGHT HAND CHASSIS - CUMMINS QSB 3.3L DIESEL	4-6
ELECTRO HYDRAULIC POPPET VALVE	
ELECTRONIC CONTROL VALVE - THREE AND FOUR FUNCTION	9-48
ELECTRONIC CONTROL LEVERS	
MINI-LEVER MODULE (FOUR FUNCTION) (→ S/N J006V02753H EXC. 02721)	4-58
MINI-LEVER MODULES (THREE FUNCTION) (→ S/N J006V02753H EXC. 02721)	4-56
ELECTRONIC CONTROL MODULE AND SENSORS	
CUMMINS QSB 3.3L DIESEL	4-50
ELECTRONIC MINI LEVER LABELS	
DUAL FUNCTION	1-74
SINGLE FUNCTION	1-72
ENGINE CONTROL MODULE AND SENSORS	
GM 4.3L LPG - PSI OPTION (S/N J006V04255K →)	4-25
GM 4.3L GASOLINE - PSI OPTION	4-26
ENGINE ELECTRICAL SYSTEM	
CUMMINS QSB 3.3L DIESEL	4-38
CUMMINS QSB 3.3L DIESEL - UL TYPE DS	4-42
GM 4.3L GASOLINE AND LPG - PSI OPTION	4-22
GM 4.3L, GASOLINE AND LPG - GFI OPTION	4-20
ENGINE MOUNTING	
CUMMINS QSB 3.3L DIESEL	2-75
GM 4.3L GASOLINE AND LPG	2-18
EXHAUST MANIFOLD	
CUMMINS QSB 3.3L DIESEL	2-110
EXHAUST MANIFOLDS	
GM 4.3L GASOLINE AND LPG - PSI OPTION (S/N J006V04255K →)	2-45
EXHAUST SYSTEM	
CUMMINS QSB 3.3L	2-4
GM 4.3L GASOLINE AND LPG - GFI OPTION	2-6
GM 4.3L GASOLINE AND LPG - PSI OPTION (S/N J006V04255K →)	2-10
F	
FAN ASSEMBLY	
CUMMINS QSB 3.3L DIESEL	2-76
GM 4.3L LPG AND GASOLINE - PSI OPTION (S/N J006V04255K →)	2-40
FAN MOUNT ASSEMBLY	
GM 4.3L GASOLINE AND LPG - GFI OPTION	2-36

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
GM 4.3L LPG AND GASOLINE - PSI OPTION (S/N J006V04255K →)	2-38
FIRE EXTINGUISHER	
WITH CAB	12-4
WITH OVERHEAD GUARD	12-5
FLOORPLATES AND COVERS	1-14
FLYWHEEL AND HOUSING	
CUMMINS QSB 3.3L DIESEL	2-84
GM 4.3L GASOLINE AND LPG	2-24
FORK POSITIONER ASSEMBLY	
→ S/N A613V04805K → S/N A614V02743K	12-18
S/N A613V04806K → S/N A614V02744K →	12-38
FORK POSITIONER CYLINDER	
→ S/N A613V04805K → S/N A614V02743K	12-20
FORKS	
PIN TYPE	1-78
STANDARD TAPER - CLASS IV	1-76
FORWARD CLUTCH HIGH AND OUTPUT SHAFT	
THREE SPEED TRANSMISSION - FWD2	5-22
FORWARD CLUTCH LOW	
TWO SPEED TRANSMISSION	5-40
FORWARD CLUTCH LOW AND SECOND SHAFT	
THREE SPEED TRANSMISSION - FWD1, RANGE2	5-20
FREE-LIFT	
THREE STAGE FULL FREE-LIFT	11-16
FREE-LIFT CYLINDER	
THREE STAGE FULL FREE-LIFT	11-18
FUEL CAP	
DIESEL	3-46
FUEL FILTER	
CUMMINS QSB 3.3L DIESEL	3-54
FUEL FILTER PLUMBING	
CUMMINS QSB 3.3L DIESEL	3-52
FUEL INJECTION PUMP	
CUMMINS QSB 3.3L DIESEL	3-47
FUEL INJECTOR AND INJECTOR PLUMBING	
CUMMINS QSB 3.3L DIESEL	3-48
FUEL PUMP PLUMBING	
CUMMINS QSB 3.3L DIESEL	3-50
FUEL SENDING UNIT	
GM 4.3L GASOLINE - PSI OPTION	3-24
FUEL SUPPLY SYSTEM	
GM 4.3L GASOLINE - GFI OPTION	3-12
GM 4.3L LPG - PSI OPTION (S/N J006V04255K →)	3-20
GM 4.3L LPG WITH OVERHEAD GUARD OR PCV DOOR CAB - GFI OPTION (→ S/N J006V04254K)	
.....	3-18
GM 4.3L LPG WITH STEEL DOOR CAB - GFI OPTION (→ S/N J006V04254K)	3-14
FUEL SYSTEM	
CUMMINS QSB 3.3L DIESEL	3-44
GM 4.3L GASOLINE - PSI OPTION	3-22

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
FULL SUSPENSION SEAT	
MANUAL AND ELECTRO-HYDRAULIC — SWIVEL AND NON SWIVEL - SHEET 1 OF 3 (S/N J006V02754H → INC. 02721)	1-56
SHEET 2 OF 3 (S/N J006V02754H → INC. 02721)	1-60
WITH AND WITHOUT ELECTRONIC CONTROLS (→ S/N J006V02753H EXC. 02721)	1-52
FULL SUSPENSION SWIVEL SEAT	
WITH AND WITHOUT ELECTRONIC CONTROLS (→ S/N J006V02753H EXC. 02721)	1-54
FUSE BOX	
GM 4.3L LPG - PSI OPTION (S/N J006V04255K →)	4-32
G	
GEAR PUMP	9-12
GEAR PUMP ASSEMBLY	9-10
GM LPG REGULATOR DRAIN KIT	12-12
H	
HAND LEVERS	
FOUR FUNCTION - WITH DETENTED LEVERS	9-18
FOUR FUNCTION - WITHOUT DETENTED LEVERS	9-20
THREE FUNCTION - WITH DETENTED LEVERS	9-14
THREE FUNCTION - WITHOUT DETENTED LEVERS	9-16
HANG-ON SIDE-SHIFT CARRIAGE	
WITH FORK POSITIONER AND BACKREST	12-16
HANG-ON SIDE-SHIFT CARRIAGE AND HOSES	
WITH BACKREST AND FORK POSITIONER (S/N A613V04806K →) (S/N A614V02744K →)	12-30
WITHOUT BACKREST AND FORK POSITIONER (S/N A613V03724J →) (S/N A614V02455J →)	12-26
HEADER HOSE CONVERSION KITS	
HEADER HOSES AND AUXILIARY TUBE	
THREE STAGE FULL FREE-LIFT	11-24
TWO STAGE LIMITED FREE-LIFT	10-16
HEATER	1-42
HEATER CONTROL	1-44
HOIST HOSE AND ATTACHING PARTS	9-69
HOOD ASSEMBLY	1-4
HYDRAULIC CONTROL CONVERSIONS	
HYDRAULIC FILTER	9-6
HYDRAULIC SUPPLY AND RETURN	9-2
I	
IMPACT SENSOR	4-68
INNER MAST	
THREE STAGE FULL FREE-LIFT	11-6
TWO STAGE LIMITED FREE-LIFT	10-4
INSTRUMENT CLUSTER	4-18
INTAKE AIR FUEL MODULE	
GM 4.3L GASOLINE - PSI OPTION	2-68
INTERIOR PANELS AND COVERS	1-6
INTERMEDIATE MAST	
THREE STAGE FULL FREE-LIFT	11-4

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
L	
LABELS	
EXTERIOR	1-68
HYDRAULIC CONTROL LABELS - CONTROL LEVER	1-82
INTERIOR	1-70
LIFTING BRACKET	
CUMMINS QSB 3.3L DIESEL	2-77
LIFTING EYE	12-14
LIGHT CONVERSION KITS	13-7
LIGHTS	
BRAKE, TAIL, BACKUP, SIDE, TURN SIGNALS, WORK, STROBE - WITH CAB	4-44
BRAKE, TAIL, BACKUP, SIDE, TURN SIGNALS, WORK, STROBE - WITH OVERHEAD GUARD	4-46
LOAD BACKREST EXTENSION	1-80
LOAD WEIGH ELECTRICAL	4-66
LPG CONVERTER	
GM 4.3L LPG - PSI OPTION (S/N J006V04255K →)	3-39
LPG LOCK OFF	
GM 4.3L - PSI OPTION (S/N J006V04255K →)	3-40
LPG REGULATOR	
GM 4.3L - GFI OPTION (→ S/N J006V04254K)	3-36
LPG REGULATOR AND MIXER	
GM 4.3L - PSI OPTION (S/N J006V04255K →)	3-38
M	
MAIN LIFT	
THREE STAGE FULL FREE-LIFT	11-8
TWO STAGE LIMITED FREE-LIFT	10-6
MAIN LIFT CYLINDER	
TWO STAGE LIMITED FREE-LIFT	10-10
MAIN LIFT CYLINDERS	
THREE STAGE FULL FREE-LIFT	11-12
MAST ELECTRICAL	4-64
MID INLET SECTION	
MANUAL AND ELECTRONIC CONTROL VALVE - THREE AND FOUR FUNCTION	9-28
MINI LEVER MODULE LABELS	
HYDRAULIC CONTROL FUNCTIONS	1-66
MINI-LEVER CONTROLS	
WITH ARMREST - THREE FUNCTION (S/N J006V02754H → INC. 02721)	4-60
WITH ARMREST - FOUR FUNCTION (S/N J006V02754H → INC. 02721)	4-62
MISCELLANEOUS CONVERSION KITS	13-4
MONOTROL PEDAL ASSEMBLY	3-58
N	
NON SUSPENSION SEAT	
WITH HIP RESTRAINT (→ S/N J006V02753H EXC. 02721)	1-46
WITHOUT ELECTRONIC CONTROLS (S/N J006V02754H → INC. 02721)	1-48
WITHOUT ELECTRONIC CONTROLS - OPTIONAL	1-50

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
O	
OIL FILLER ARRANGEMENT	
CUMMINS QSB 3.3L DIESEL	2-94
OIL FILTER AND COOLER	
CUMMINS QSB 3.3L DIESEL	2-90
OIL LEVEL GAUGE	
CUMMINS QSB 3.3L DIESEL	2-116
OIL PAN	
CUMMINS QSB 3.3L DIESEL	2-88
OIL PUMP	
GM 4.3L GASOLINE AND LPG	2-70
OIL PUMP AND FRONT GEAR COVER	
CUMMINS QSB 3.3L DIESEL	2-92
OUTER MAST	
THREE STAGE FULL FREE-LIFT	11-2
TWO STAGE LIMITED FREE-LIFT	10-2
OUTLET SECTION	
ELECTRONIC CONTROL VALVE - THREE AND FOUR FUNCTION WITHOUT ANTI-STALL SOLENOID (→ 6/2009)	9-58
ELECTRONIC CONTROL VALVE - THREE AND FOUR FUNCTION WITH ANTI-STALL SOLENOID (6/2009 →)	9-60
MANUAL CONTROL VALVE - THREE AND FOUR FUNCTION	9-34
OUTPUT SHAFT	
TWO SPEED TRANSMISSION	5-38
OVERHEAD GUARD	1-20
P	
PARK BRAKE ASSEMBLY	
→ S/N J006V04253J	8-18
S/N J006V04254K →	8-20
PISTON AND CONNECTING ROD	
CUMMINS QSB 3.3L DIESEL	2-100
POWER DISTRIBUTION MODULE	4-70
PULLEY AND TENSIONER	
GM 4.3L GASOLINE AND LPG - PSI OPTION (S/N J006V04255K →)	2-42
PUMP DRIVE	5-46
R	
RADIATOR MOUNTING	
CUMMINS QSB 3.3L DIESEL	2-14
REPLACEMENT KITS	13-8
REVERSE CLUTCH	
TWO SPEED TRANSMISSION	5-36
REVERSE CLUTCH AND FIRST SHAFT	
THREE SPEED TRANSMISSION - REV1, RANGE 1	5-24
ROCKER ARM SHAFT	
CUMMINS QSB 3.3L DIESEL	2-98

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
S	
SEALED ALTERNATOR AND MOUNTING	
CUMMINS QSB 3.3L DIESEL	4-36
SEAT ATTACHING PARTS	
NOT INCLUDED WITH SEAT - SHEET 3 OF 3 (S/N J006V02754H → INC. 02721)	1-62
SEAT CONVERSION KITS	13-3
SEAT PAN AND COVERS	1-8
SIDE-SHIFT ASSEMBLY	
→ S/N A613V04805K → S/N A614V02743K	12-22
WITHOUT FORK POSITIONER (S/N A613V03724J →) (S/N A614V02455J →)	12-28
SIDE-SHIFT CYLINDER	
→ S/N A613V04805K → S/N A614V02743K	12-24
WITH AND WITHOUT FORK POSITIONER (S/N A613V04806K →) (S/N A614V02744K →)	12-34
SINGLE AND DUAL LPG TANK BRACKETS	3-42
SOUND ABATEMENT	
DIESEL	1-12
GASOLINE AND LPG	1-10
SPARK PLUGS AND WIRES	
GM 4.3L GASOLINE AND LPG - PSI OPTION (S/N J006V04255K →)	4-24
STARTER	
GM 4.3L	4-30
STARTER MOTOR	
CUMMINS QSB 3.3L DIESEL	4-48
STARTING AID	
CUMMINS QSB 3.3L DIESEL	2-114
STEER AXLE	
→ S/N J006V03188H	7-12
S/N J006V03189H →	7-16
STEER COLUMN AND ATTACHING PARTS	
DIESEL	7-3
GASOLINE AND LPG	7-2
STEER CYLINDER	
→ S/N J006V03188H	7-19
S/N J006V03189H →	7-20
STEER TIRE AND WHEEL	7-21
STEERING COLUMN ASSEMBLY	
GASOLINE AND LPG	7-4
ISOLATED, DIESEL	7-6
STEERING CONTROL UNIT	7-8
STEERING LINES	7-10
STROBE LIGHT	
LED	12-2
T	
THERMOSTAT	
CUMMINS QSB 3.3L DIESEL	2-82
THERMOSTAT AND WATER OUTLET HOUSING	
GM 4.3L LPG - PSI OPTION (S/N J006V04255K →)	2-46
GM 4.3L GASOLINE - PSI OPTION	2-47

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
THROTTLE BODY	
GM 4.3L LPG - PSI OPTION (S/N J006V04255K →)	3-34
GM 4.3L GASOLINE - PSI OPTION	3-28
THROTTLE BODY ASSEMBLY	
GM 4.3L LPG (→ S/N J006V02542H)	3-30
GM 4.3L LPG - GFI OPTION (S/N J006V02543H ↔ S/N J006V04254K)	3-32
THROTTLE BODY ASSEMBLY AND FUEL RAIL	
GM 4.3L GASOLINE - GFI OPTION	3-26
THROTTLE PEDAL AND ATTACHING PARTS	3-56
TILT CYLINDER AND MAST INSTALLATION	9-62
TILT CYLINDERS	9-64
TILT HYDRAULICS	9-66
TILT SECTION	
ELECTRONIC CONTROL VALVE - THREE AND FOUR FUNCTION	9-46
TORQUE CONVERTER	
CUMMINS QSB 3.3L DIESEL	5-6
GM 4.3L GASOLINE AND LPG	5-4
TRANSMISSION ASSEMBLY	
THREE SPEED - SHEET 1 OF 2 (→ S/N J006V02222G)	5-12
THREE SPEED - SHEET 2 OF 2 (→ S/N J006V02222G)	5-14
THREE SPEED - SHEET 1 OF 2 (S/N J006V02223G →)	5-16
THREE SPEED - SHEET 2 OF 2 (S/N J006V02223G →)	5-18
TWO SPEED - SHEET 1 OF 2 (→ S/N J006V02109G)	5-28
TWO SPEED - SHEET 2 OF 2 (→ S/N J006V02109G)	5-30
TWO SPEED - SHEET 1 OF 2 (S/N J006V02110G →)	5-32
TWO SPEED - SHEET 2 OF 2 (S/N J006V02110G →)	5-34
TRANSMISSION COOLING	
WITH EXTERNAL OIL COOLER (→ S/N J006V01829F)	5-8
WITH EXTERNAL OIL COOLER (S/N J006V01830F →)	5-10
TRANSMISSION ELECTRICAL SYSTEM	
THREE SPEED TRANSMISSION	4-54
TWO SPEED TRANSMISSION	4-52
TRANSMISSION MOUNT	5-2
TURBOCHARGER	
CUMMINS QSB 3.3L DIESEL	2-106
TURBOCHARGER PLUMBING	
CUMMINS QSB 3.3L DIESEL	2-108
V	
VALVE ASSEMBLY	
LIFT AND TILT MANUAL CONTROL VALVE - THREE AND FOUR FUNCTION	9-32
VALVE ASSEMBLY, LIFT AND LOWER	
ELECTRONIC CONTROL VALVE - THREE AND FOUR FUNCTION	9-44
VALVE COVER	
CUMMINS QSB 3.3L DIESEL	2-96
VALVE COVER AND INLET MANIFOLD	
GM 4.3L GASOLINE AND LPG - GFI OPTION	2-62
GM 4.3L GASOLINE AND LPG - PSI OPTION (S/N J006V04255K →)	2-66
VENT LINES	9-68

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
VIBRATION DAMPER	
CUMMINS QSB 3.3L DIESEL	2-115
W	
WATER BYPASS	
GM 4.3L GASOLINE - PSI OPTION	2-72
WATER OUTLET CONNECTION	
CUMMINS QSB 3.3L DIESEL	2-117
WATER PUMP AND PULLEY	
CUMMINS QSB 3.3L DIESEL	2-86
WATER SEPARATOR	
CUMMINS QSB 3.3L DIESEL	3-55
WET BRAKE ASSEMBLY	6-8
WIRE HARNESS	
ALTERNATOR - CUMMINS QSB 3.3L DIESEL	4-150
COWL WITH MONOTROL PEDAL - WITH HYDRAULIC PUMP SOLENOID	4-134
COWL WITH MONOTROL PEDAL - WITH RETURN TO SET TILT / WITH HYDRAULIC PUMP SOLENOID	4-146
ELECTRONIC CONTROL VALVE - THREE FUNCTION	4-162
ELECTRONIC CONTROL VALVE - FOUR FUNCTION	4-164
ENGINE - GM 4.3L LPG (→ S/N J006V02542H)	4-72
ENGINE - GM 4.3L GASOLINE (→ S/N J006V02542H)	4-84
ENGINE - CUMMINS QSB 3.3L DIESEL	4-92
LEFT HAND CHASSIS - GM 4.3L GASOLINE (→ S/N J006V02542H)	4-124
LEFT HAND CHASSIS - GM 4.3L GASOLINE (SERIES 2010) (S/N J006V02543H →)	4-126
LEFT HAND CHASSIS - GM 4.3L LPG (→ S/N J006V02542H)	4-128
LEFT HAND CHASSIS - GM 4.3L LPG (2010 SERIES)(WITH PREMIUM LOW FUEL SENSOR) (S/N J006V02543H →)	4-130
LEFT HAND CHASSIS - GM 4.3L LPG (2010 SERIES)(WITHOUT PREMIUM LOW FUEL SENSOR) (S/N J006V02543H →)	4-132
LIGHTS WITH OVERHEAD GUARD	4-166
LOW FUEL SENSOR	4-170
REAR - GM 4.3L GASOLINE AND LPG	4-120
REAR - CUMMINS QSB 3.3L DIESEL	4-122
RIGHT HAND CHASSIS - GM 4.3L GASOLINE AND LPG (→ S/N J006V03418H)	4-94
RIGHT HAND CHASSIS - GM 4.3L GASOLINE AND LPG (S/N J006V03419H →)	4-100
RIGHT HAND CHASSIS - CUMMINS QSB 3.3L DIESEL (→ S/N J006V03362H)	4-106
RIGHT HAND CHASSIS - CUMMINS QSB 3.3L DIESEL (S/N J006V03363H →)	4-112
SEALED ALTERNATOR - CUMMINS QSB 3.3L DIESEL	4-152
SEAT JUMPER (→ S/N J006V03362H)	4-118
TRANSMISSION - THREE SPEED	4-156
TRANSMISSION - TWO SPEED	4-160
WORK LIGHT JUMPER - WITH TWO STAGE MASTS	4-168
WIRE HARNESS (COWL)	
WITH FORWARD AND REVERSE LEVER - WITH HYDRAULIC PUMP SOLENOID, WITHOUT LOCKOUT	4-138
WITH FORWARD AND REVERSE LEVER - WITH HYDRAULIC PUMP SOLENOID, WITH LOCKOUT	4-142

TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
WIRE HARNESS (ENGINE)	
GM 4.3L GASOLINE (GFI OPTION) - WITH CATALYTIC CONVERTER (S/N J006V02543H →)	4-88
GM 4.3L LPG (GFI OPTION) - 2010 SERIES (S/N J006V02543H ↔ S/N J006V04254K)	4-76
GM 4.3L, LPG - PSI OPTION (S/N J006V04255K →)	4-80

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 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		
12445	3-32	19	10-17	6		11-31	25	16719	3-36	5	
	3-34	1	10-27	11		11-32	37	16751	3-16	27	
			11	11		8-4	29	16849	3-34	21	
			11	6	16485	8-4	45		3-38	20	
			12	13		8-4	45	16863	3-28	17	
			14	6		8-8	34	16865	3-6	18	
			12	6		9-7	9		4-27	41	
			3	17		9-7	19	16882	9-7	30	
			9	10		9-11	9		9-11	27	
			23	46		9-11	17		10-10	36	
			27	46		10-9	21		10-13	32	
			26	14		10-9	28		11-7	24	
			28	14		10-13	16		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
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	1	1
15	2021345	⇒ Figure 5-3	1	1
16	214364	Gasket	8	8
17	296418	Bolt	1	1
18	2021388	Washer	1	1
19	2021389	Temperature Switch	1	1
20	2021383	Breather	9	9
21	292515	Dipstick	9	9
22	136692	Bolt	2	2
23	292527	Nut	3	3
24	292531	Bolt	3	2
25	292583	Capscrew	4	4
26	293637	Lockwasher	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.

© 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 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.