

# **PARTS MANUAL**

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**H13.00XM, H14.00XM, H16.00XM-6,  
H10.00XM-12EC, H12.00XM-12EC  
(G019)**

**CUSTOMER EDITION**

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# ***HYSTER***



**SECTIONS**

<b>1</b>	<b>FRAME</b>
<b>2</b>	<b>ENGINE ASSEMBLY - DIESEL</b>
<b>3</b>	<b>ENGINE ASSEMBLY - LPG</b>
<b>4</b>	<b>FUEL SYSTEM</b>
<b>5</b>	<b>ELECTRICAL SYSTEM</b>
<b>6</b>	<b>TRANSMISSION</b>
<b>7</b>	<b>DRIVE AXLE</b>
<b>8</b>	<b>STEERING SYSTEM</b>
<b>9</b>	<b>BRAKE SYSTEM</b>
<b>10</b>	<b>HYDRAULIC SYSTEM</b>
<b>11</b>	<b>MAST-TWO STAGE LIMITED FREE-LIFT</b>
<b>12</b>	<b>MAST-THREE STAGE FULL FREE-LIFT</b>
<b>13</b>	<b>ATTACHMENTS</b>
<b>14</b>	<b>OPTIONS</b>
<b>15</b>	<b>NUMERICAL INDEX</b>

This Parts Manual is divided into 15 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.



**TABLE OF CONTENTS**

DESCRIPTION	PAGE
<b>A</b>	
ACCESSORY DRIVE BELT AND TENSIONER .....	3-6
ACCESSORY HOLE COVER .....	3-7
ACCUMULATOR CHARGE VALVE .....	9-38
AIR CLEANER ASSEMBLY .....	4-14
AIR COMPRESSOR .....	2-8
AIR COMPRESSOR COOLANT PLUMBING .....	2-11
AIR COMPRESSOR INLET CONNECTION .....	3-10
AIR COMPRESSOR MOUNTING .....	2-10
AIR CONDITIONER	
CLIMATE CONTROL CAB - MCC .....	1-160
AIR CONDITIONER ASSEMBLY	
WITH TWO-FAN CONDENSER SYSTEM - MCC (S/N G019E02165F →) .....	1-102
AIR CONDITIONER SYSTEM	
CLIMATE CONTROL CAB - MCC .....	1-158
WITH TWO-FAN CONDENSER SYSTEM - MCC (S/N G019E02165F →) .....	1-100
AIR CONDITIONER SYSTEM ASSEMBLY	
WITH TWO-FAN CONDENSER SYSTEM - MCC (S/N G019E02165F →) .....	1-94
AIR CONDITIONING COMPRESSOR AND ATTACHING PARTS	
DIESEL ENGINE - MCC .....	1-74
LPG ENGINE - MCC .....	1-76
AIR DRYER ASSEMBLY .....	9-32
AIR DRYER SYSTEM	
DIESEL ENGINE - DRY BRAKE .....	9-28
LPG ENGINE - DRY BRAKE .....	9-30
AIR DUCT	
LOUVER, CLIMATE CONTROL CAB .....	1-152
AIR DUCT ASSEMBLY	
AIR CONDITIONING - WITH TWO-FAN CONDENSER SYSTEM, MCC (S/N G019E02165F →) .....	1-104
HEATER - WITH TWO-FAN CONDENSER SYSTEM, MCC (S/N G019E02165F →) .....	1-88
AIR HEATER .....	2-12
AIR INTAKE CONNECTION .....	2-14
AIR INTAKE HOSE	
→ S/N G019E02271F (DRY BRAKES) → S/N G019E02152F (WET BRAKES) .....	2-15
AIR INTAKE MANIFOLD .....	2-16
AIR INTAKE SYSTEM	
DIESEL - DRY BRAKE .....	4-10
DIESEL - WET BRAKE .....	4-12
LPG .....	4-8
AIR TRANSFER CONNECTION .....	2-17
ALARM .....	14-5
ALTERNATOR AND MOUNTING	
CUMMINS DIESEL (→ S/N G019E02271F (DRY BRAKES)) (→ S/N G019E02152F (WET BRAKES)) .....	5-36
CUMMINS DIESEL (S/N G019E02272F → (DRY BRAKES)) (S/N G019E02153F → (WET BRAKES)) .....	5-38
CUMMINS LPG .....	5-39
ALTERNATOR SUPPORT AND WATER INLET	
→ S/N G019E02152F (WET BRAKES) → S/N G019E02271F (DRY BRAKES) .....	2-18

## TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
S/N G019E02153F → (WET BRAKES) S/N G019E02272F → (DRY BRAKES) .....	2-19
ARMREST ASSEMBLY .....	1-147
AUXILIARY PUMP DRIVE .....	6-4
AXLE HOUSING AND ATTACHING PARTS .....	7-2
<b>B</b>	
BATTERY DISCONNECT .....	5-12
BELT TENSIONER .....	2-20
BRAKE ACCUMULATOR .....	9-36
BRAKE AND INCHING PEDAL LINKAGE .....	9-40
BRAKE ASSEMBLY	
DRY BRAKE .....	9-18
WET BRAKE .....	9-16
BRAKE VALVE	
DRY BRAKE .....	9-26
WET BRAKE .....	9-24
<b>C</b>	
CAB AND TILT CYLINDER MOUNTING .....	1-58
CAB ASSEMBLY	
CLIMATE CONTROL CAB .....	1-162
CAB ATTACHING PARTS .....	1-14
CAB DOOR	
LEFT HAND (→ S/N G019E02399G (CLOSED CAB WITH INSULATION))	
(→ S/N G019E02401G (CLOSED CAB WITH AIR CONDITIONING AND INSULATION))	
(→ S/N G019E02407G (CLOSED CAB WITH HEATER)) .....	1-28
LEFT HAND (S/N G019E02400G → (CLOSED CAB WITH INSULATION))	
(S/N G019E02402G → (CLOSED CAB WITH AIR CONDITIONING AND INSULATION))	
(S/N G019E02408G → (CLOSED CAB WITH HEATER)) .....	1-32
RIGHT HAND (→ S/N G019E02407G (CLOSED CAB WITH HEATER))	
(→ S/N G019E02399G (CLOSED CAB WITH INSULATION))	
(→ S/N G019E02401G (CLOSED CAB WITH AIR CONDITIONING AND INSULATION)) .....	1-20
RIGHT HAND (S/N G019E02408G → (CLOSED CAB WITH HEATER))	
(S/N G019E02400G → (CLOSED CAB WITH INSULATION))	
(S/N G019E02402G → (CLOSED CAB WITH AIR CONDITIONING AND INSULATION)) .....	1-24
CAB DOOR ATTACHING PARTS .....	1-18
CAB ELECTRONIC CONTROLS AND PANELS .....	1-54
CAB FLOORMATS .....	1-35
CAB RECIRCULATING FAN .....	1-50
CAB SOUND REDUCTION .....	1-165
CAB SUNSHADES .....	1-46
CAB TILT PUMP ASSEMBLY	
ELECTRIC .....	1-65
CAB WINDOWS INSTALLATION .....	1-38
CAM FOLLOWER COVER .....	3-13
CAMSHAFT .....	2-21
CARRIAGE	
FOUR, FIVE, AND SIX FUNCTION .....	11-24
FOUR, FIVE, AND SIX FUNCTION .....	12-18

**TABLE OF CONTENTS (continued)**

<b>DESCRIPTION</b>	<b>PAGE</b>
INDIVIDUAL FORK POSITIONER (FOUR FUNCTION) .....	11-28
INDIVIDUAL FORK POSITIONER (FOUR FUNCTION) .....	12-22
SIMULTANEOUS FORK POSITIONER .....	11-32
SIMULTANEOUS FORK POSITIONER (THREE FUNCTION) .....	12-24
THREE FUNCTION .....	11-36
THREE FUNCTION .....	12-16
CHARGE PUMP AND FILTER ASSEMBLY .....	6-6
CLIMATE CONTROL SYSTEM	
MCC .....	1-156
COMPRESSOR ASSEMBLY	
WITH TWO-FAN CONDENSER SYSTEM - MCC (S/N G019E02165F →) .....	1-78
CONDENSER	
TWO-FAN SYSTEM - MCC (S/N G019E02165F →) .....	1-98
CONDENSER AND ATTACHING PARTS	
THREE-FAN SYSTEM - AURORA .....	1-70
CONDENSER ASSEMBLY	
THREE-FAN SYSTEM - AURORA .....	1-72
CONDENSER SYSTEM	
TWO-FAN SYSTEM - MCC (S/N G019E02165F →) .....	1-96
CONNECTING RODS AND PISTONS	
→ S/N G019E02152F (WET BRAKES) → S/N G019E02271F (DRY BRAKES) .....	2-22
S/N G019E02153F → (WET BRAKES) S/N G019E02272F → (DRY BRAKES) .....	2-24
CONTAINER ATTACHMENT INSTALLATION .....	14-12
CONTROL PANEL	
AIR CONDITIONER .....	5-22
HEATER .....	5-20
CONTROL PANEL ASSEMBLY	
WITH TWO-FAN CONDENSER SYSTEM - MCC (S/N G019E02165F →) .....	1-106
COOLANT HEATER STARTING AID .....	2-26
COOLING SYSTEM .....	2-4
COUNTERWEIGHT AND OPTIONAL LIFTING EYES .....	1-10
CRANKCASE BREATHER .....	2-27
CRANKSHAFT AND BEARINGS	
→ S/N G019E02152F (WET BRAKES) → S/N G019E02271F (DRY BRAKES) .....	2-28
S/N G019E02153F → (WET BRAKES) S/N G019E02272F → (DRY BRAKES) .....	2-30
CRANKSHAFT AND MAIN BEARINGS .....	3-18
CYLINDER BLOCK	
→ S/N G019E02152F (WET BRAKES) → S/N G019E02271F (DRY BRAKES) .....	2-32
S/N G019E02153F → (WET BRAKES) S/N G019E02272F → (DRY BRAKES) .....	2-34
CYLINDER HEAD .....	2-36
<b>D</b>	
DASH AND AIR DUCT ASSEMBLY .....	1-16
DC-DC CONVERTER AND ATTACHING PARTS .....	5-15
DELUXE SUSPENSION SEAT .....	1-114
DIFFERENTIAL AND CARRIER	
DRY BRAKE .....	7-8
WET BRAKE .....	7-4
DIRECTIONAL CONTROL VALVE .....	13-2

**TABLE OF CONTENTS (continued)**

<b>DESCRIPTION</b>	<b>PAGE</b>
DIRECTIONAL MARKER .....	14-2
DRAIN VALVE	
DRY BRAKE .....	9-22
DRIVE GEAR .....	6-12
DRIVE PLATE .....	6-14
DRIVE TIRES AND WHEELS	
BRIDGESTONE .....	7-19
MICHELIN .....	7-20
TRELLEBORG - SOLID TIRE .....	7-18
TRELLEBORG .....	7-21
DRY BRAKE SYSTEM .....	9-12
<b>E</b>	
ELECTRIC HORN .....	5-133
ELECTRIC PUMP .....	1-68
ELECTRICAL SYSTEM	
DIESEL ENGINE .....	5-4
LPG ENGINE .....	5-8
ELECTRONIC LEVER ASSEMBLY .....	10-38
WITH CLAMP ATTACHMENT .....	10-40
END CAP PARTS	
LIFT SECTION .....	10-24
ENGINE ASSEMBLY .....	2-38
ENGINE BLOCK HEATER .....	2-84
ENGINE CONTROL MODULE .....	2-40
ENGINE CONTROL SYSTEM	
CUMMINS DIESEL (→ S/N G019E02152F (WET BRAKES)) (→ S/N G019E02271F (DRY BRAKES)) .....	5-28
CUMMINS DIESEL (S/N G019E02153F → (WET BRAKES)) (S/N G019E02272F → (DRY BRAKES)) .....	5-30
CUMMINS LPG .....	5-32
ENGINE COOLANT VENT .....	2-42
ENGINE IGNITION SYSTEM	
CUMMINS LPG .....	5-42
ENGINE MOUNT .....	2-43
ENGINE OIL COOLER .....	2-44
ETR MODULE WIRING .....	2-45
EXHAUST GAS SENSOR PLUMBING .....	3-32
EXHAUST MANIFOLD .....	2-46
EXHAUST OUTLET CONNECTION .....	3-34
EXHAUST SYSTEM .....	2-6
EXTERIOR MIRRORS .....	1-17
<b>F</b>	
FAN DRIVE .....	3-35
FAN DRIVE AND MOUNTING .....	2-48
FLOORPLATES .....	1-4
FLYWHEEL .....	3-36
FLYWHEEL AND MOUNTING .....	2-50



**TABLE OF CONTENTS (continued)**

DESCRIPTION	PAGE
FLYWHEEL HOUSING	
→ S/N G019E02152F (WET BRAKES) → S/N G019E02271F (DRY BRAKES) .....	2-51
S/N G019E02153F → (WET BRAKES) S/N G019E02272F → (DRY BRAKES) → S/N 73037048 (ENGINE)	
.....	2-52
S/N G019E02153F → (WET BRAKES) S/N G019E02272F → (DRY BRAKES) S/N 73037049 → (ENGINE)	
.....	2-54
FORK .....	11-38
FORK POSITIONING CYLINDER .....	13-4
FORWARD CLUTCH	
→ S/N G019E02448H .....	6-16
S/N G019E02449H → .....	6-18
FREE-LIFT CYLINDER .....	12-12
FRONT FENDER LIGHTS .....	14-3
FRONT GEAR COVER .....	2-56
FRONT GEAR COVER AND HOUSING .....	3-40
FRONT GEAR TRAIN ACCESSORY DRIVE .....	3-42
FUEL CONTROL MODULE	
CUMMINS LPG .....	4-24
FUEL FILTER	
CUMMINS DIESEL .....	4-34
CUMMINS LPG .....	4-27
FUEL FILTER PLUMBING	
CUMMINS DIESEL .....	4-33
FUEL INJECTION PUMP	
CUMMINS DIESEL .....	4-30
FUEL INJECTOR	
CUMMINS DIESEL .....	4-32
FUEL INJECTOR PLUMBING	
CUMMINS DIESEL .....	4-28
FUEL INLET FITTING	
CUMMINS DIESEL .....	4-35
FUEL RAIL SYSTEM	
CUMMINS DIESEL (→ S/N G019E02152F (WET BRAKES)) (→ S/N G019E02271F (DRY BRAKES))	
.....	4-36
CUMMINS DIESEL (S/N G019E02153F → (WET BRAKES)) (S/N G019E02272F → (DRY BRAKES))	
.....	4-38
FUEL SYSTEM	
DIESEL .....	4-6
LPG .....	4-2
FUEL SYSTEM ACCESSORIES	
CUMMINS LPG .....	4-20
<b>G</b>	
GEAR CLUTCH INSTALLATION .....	6-20
<b>H</b>	
HAND PUMP .....	1-66
HANDHOLD AND UNDERFLOOR COVER	
OPEN CAB .....	1-36

**TABLE OF CONTENTS (continued)**

<b>DESCRIPTION</b>	<b>PAGE</b>
HEADER HOSE	
EMPTY CONTAINER HANDLER .....	14-18
TWO STAGE - LIMITED FREE-LIFT (→ S/N G019E02519H) .....	11-16
TWO STAGE - LIMITED FREE-LIFT (S/N G019E02520H →) .....	11-20
HEATED TOP WINDOW	
CLIMATE CONTROL CAB .....	14-14
HEATER AND AIR CONDITIONER ASSEMBLY	
WITH THREE-FAN CONDENSER SYSTEM - AURORA .....	1-84
HEATER AND AIR CONDITIONER MOUNTING	
WITH THREE-FAN CONDENSER SYSTEM - MCC .....	1-80
HEATER AND AIR DUCT	
WITH TWO-FAN CONDENSER SYSTEM - MCC .....	1-86
HEATER ASSEMBLY	
WITH THREE-FAN CONDENSER SYSTEM .....	1-82
WITH TWO-FAN CONDENSER SYSTEM - MCC (S/N G019E02165F →) .....	1-90
HEATER HOSES	
DIESEL ENGINE .....	1-108
LPG ENGINE .....	1-110
HEATER SYSTEM	
WITH TWO-FAN CONDENSER SYSTEM - MCC (S/N G019E02165F →) .....	1-92
HEATING AND AIR CONDITIONING SYSTEM FILTER .....	1-93
HOODS AND COVERS	
H10.00XM-12EC .....	1-8
H13.00XM, H14.00XM, H16.00XM-6, H12.00XM-12EC .....	1-6
HUB AND SHAFT ASSEMBLY	
DRY BRAKE .....	7-14
WET BRAKE .....	7-12
HYDRAULIC CONTROL AND TWISTLOCK	
H10.00XM-12EC, H12.00XM-12EC .....	1-56
HYDRAULIC CONTROL VALVE AND ATTACHING PARTS	
SHEET 1 OF 2 .....	10-18
SHEET 2 OF 2 .....	10-20
HYDRAULIC CONTROL VALVE ASSEMBLY .....	10-14
HYDRAULIC CONTROLS	
JOYSTICK .....	10-29
LEVERS .....	10-26
HYDRAULIC GEAR PUMP	
DIESEL ENGINE - WET BRAKE .....	9-35
LPG ENGINE - WET BRAKE .....	9-34
HYDRAULIC PUMP .....	10-30
HYDRAULIC SUPPLY AND RETURN	
SHEET 1 OF 3 .....	10-2
SHEET 2 OF 3 .....	10-6
SHEET 3 OF 3 .....	10-8
HYDRAULIC TANK AND ATTACHING PARTS	
→ S/N G019E02270F .....	10-10
S/N G019E02271F → .....	10-12

**TABLE OF CONTENTS (continued)**

DESCRIPTION	PAGE
<b>I</b>	
INDICATOR DISPLAY AND CONTROLS .....	1-52
INNER MAST .....	11-6
INSULATION MATS AND AIR DUCT	
CLIMATE CONTROL CAB .....	1-150
INTAKE MANIFOLD .....	3-44
<b>J</b>	
JOYSTICK ASSEMBLY	
SUSPENSION HOOKS .....	5-26
TWISTLOCKS .....	5-24
<b>L</b>	
LABELS	
HYDRAULIC CONTROL - JOYSTICK .....	1-145
HYDRAULIC CONTROL - LEVERS .....	1-146
MAIN .....	1-142
LIFT .....	11-8
LIFT ACCUMULATOR AND ATTACHING PARTS .....	10-33
LIFT ACCUMULATOR ASSEMBLY .....	10-32
LIFT CYLINDER	
EMPTY CONTAINER HANDLER .....	11-12
NON-EMPTY CONTAINER HANDLER .....	11-14
LIFTING BRACKET .....	3-46
LIFTING BRACKETS AND MOUNTING	
→ S/N G019E02271F (DRY BRAKES) → S/N G019E02152F (WET BRAKES) .....	2-57
S/N G019E02272F → (DRY BRAKES) S/N G019E02153F → (WET BRAKES) .....	2-58
LIFTING EYES .....	14-16
LIGHT SWITCHES .....	5-14
LIGHTS	
WORK - HALOGEN .....	14-21
WORK - HID .....	14-22
LOAD BACKREST .....	1-164
LOW CLUTCH	
→ S/N G019E02448H .....	6-24
S/N G019E02449H → .....	6-26
LUBRICATING OIL PUMP .....	2-60
<b>M</b>	
MAIN LIFT CYLINDER .....	12-11
MAIN WINDOW ASSEMBLY .....	1-40
MAST ASSEMBLY	
SHEET 1 OF 3 .....	12-4
SHEET 2 OF 3 .....	12-6
SHEET 3 OF 3 .....	12-8
MAST INSTALLATION .....	11-2
MAST WORKLIGHTS	
TWO AND THREE STAGE MAST .....	14-8
MONOTROL PEDAL ASSEMBLY .....	4-16

## TABLE OF CONTENTS (continued)

DESCRIPTION	PAGE
<b>O</b>	
OIL FILLER .....	2-61
OIL FILTER .....	2-62
OIL LEVEL GAUGE .....	2-63
OIL PAN .....	2-64
OIL PUMP .....	3-52
OUTER MAST .....	11-4
OUTPUT FLANGE .....	6-28
OUTPUT SHAFT	
→ S/N G019E02448H .....	6-30
S/N G019E02449H → .....	6-32
OVERHEAD GUARD	
WIRE MESH .....	1-12
<b>P</b>	
PARK BRAKE	
WET BRAKE .....	7-16
PARK BRAKE SOLENOID VALVE .....	9-2
PILOT VALVE ASSEMBLY .....	10-22
PISTON AND CONNECTING ROD .....	3-54
PIVOT ARM ASSEMBLY .....	1-140
<b>R</b>	
RADIATOR ASSEMBLY	
AKG .....	2-88
AKG .....	3-80
MODINE .....	2-86
MODINE .....	3-78
RADIO CONSOLE AND ATTACHING PARTS .....	1-166
REAR DUCT AND CONSOLE .....	1-48
REAR GEAR HOUSING .....	2-66
REAR WORK LIGHTS .....	14-10
RELAYS AND FUSES .....	5-16
REMOTE FUEL FILTER	
CUMMINS DIESEL (→ S/N G019E02152F (WET BRAKES)) (→ S/N G019E02271F (DRY BRAKES))	
.....	4-21
CUMMINS DIESEL (S/N G019E02153F → (WET BRAKES)) (S/N G019E02272F → (DRY BRAKES))	
.....	4-22
REVERSE AND SECOND CLUTCH .....	6-34
REVERSE IDLER SHAFT .....	6-22
ROCKER LEVERS .....	2-68
<b>S</b>	
SEAT ASSEMBLY	
CLIMATE CONTROL CAB .....	1-154
WITH FABRIC COVER (→ 3/2010) .....	1-128
WITH FABRIC COVER (3/2010 →) .....	1-132
WITH VINYL COVER .....	1-136
SEAT SUSPENSION ASSEMBLY	
AIR .....	1-118

**TABLE OF CONTENTS (continued)**

<b>DESCRIPTION</b>	<b>PAGE</b>
MECHANICAL .....	1-122
SEAT SUSPENSION MOUNTING .....	1-125
SECOND 12V SOCKET OPTION	
CLIMATE CONTROL CAB .....	5-132
SIDE-SHIFT CARRIAGE	
DUAL FUNCTION WITH FORK POSITIONER - TWO STAGE LIMITED FREE-LIFT .....	13-6
FOUR, FIVE, AND SIX FUNCTION - THREE STAGE FULL FREE-LIFT .....	13-10
FOUR, FIVE, AND SIX FUNCTION - TWO STAGE LIMITED FREE-LIFT .....	13-14
INDIVIDUAL FORK POSITIONER (FIVE FUNCTION) - THREE STAGE FULL FREE-LIFT .....	13-18
INDIVIDUAL FORK POSITIONER (FIVE FUNCTION) - TWO STAGE LIMITED FREE-LIFT .....	13-22
SIMULTANEOUS FORK POSITIONER (FOUR FUNCTION) - THREE STAGE FULL FREE-LIFT .....	13-26
SIMULTANEOUS FORK POSITIONER (FOUR FUNCTION) - TWO STAGE LIMITED FREE-LIFT .....	13-30
THREE FUNCTION - THREE STAGE FULL FREE-LIFT .....	13-34
THREE FUNCTION - TWO STAGE LIMITED FREE-LIFT .....	13-36
SIDE-SHIFT CYLINDER	
DUAL FUNCTION WITH FORK POSITIONER .....	13-38
THREE STAGE FULL FREE-LIFT .....	13-40
TWO STAGE LIMITED FREE-LIFT .....	13-42
SOUND REDUCTION .....	14-11
STANDARD PIN CARRIAGE	
(THREE STAGE) - (FOUR, FIVE, AND SIX FUNCTION) .....	12-20
STARTER MOTOR	
CUMMINS DIESEL .....	5-34
CUMMINS LPG .....	5-35
STEER AXLE .....	8-2
STEER COLUMN ASSEMBLY .....	8-12
STEER CYLINDER .....	8-6
STEER TIRES AND WHEELS	
BRIDGESTONE .....	8-9
MICHELIN .....	8-10
TRELLEBORG - SOLID TIRE .....	8-8
TRELLEBORG .....	8-11
STEERING COLUMN .....	8-14
STEERING HAND PUMP ASSEMBLY .....	8-16
STROBE LIGHT .....	14-6
SUSPENSION KIT ASSEMBLY .....	1-116
<b>T</b>	
TAIL LIGHT ASSEMBLY .....	14-4
THERMOSTAT .....	2-70
THERMOSTAT HOUSING .....	3-59
THIRD CLUTCH .....	6-36
THROTTLE PEDAL LINKAGE .....	4-18
TILT CYLINDER	
CAB .....	1-62
TILT CYLINDER AND ATTACHING PARTS .....	10-36
TILT CYLINDER ASSEMBLY .....	10-34
TILT PLATFORM ASSEMBLY .....	1-64
TORQUE CONVERTER ASSEMBLY .....	6-38

**TABLE OF CONTENTS (continued)**

<b>DESCRIPTION</b>	<b>PAGE</b>
TORQUE CONVERTER COOLER PLUGS .....	2-71
TORQUE CONVERTER HOUSING AND ATTACHING PARTS .....	6-40
TRAINING SEAT .....	1-112
TRANSMISSION CASE .....	6-42
TRANSMISSION CONTROL VALVE .....	6-8
TRANSMISSION MOUNT AND ATTACHING PARTS	
DIESEL ENGINE .....	6-46
LPG ENGINE .....	6-44
TURBINE SHAFT AND STATOR SUPPORT .....	6-48
TURBOCHARGER .....	2-72
TURBOCHARGER ASSEMBLY .....	3-66
TURBOCHARGER COMPRESSOR OUTLET CONNECTION .....	3-62
TURBOCHARGER PLUMBING	
→ S/N G019E02271F (DRY BRAKES) → S/N G019E02152F (WET BRAKES) .....	2-73
S/N G019E02272F → (DRY BRAKES) S/N G019E02153F → (WET BRAKES) .....	2-74
<b>U</b>	
UNIVERSAL SHAFT .....	6-2
<b>V</b>	
VALVE COVER .....	2-76
VALVE TAPPET .....	3-70
VALVE TAPPETS .....	2-77
VIBRATION DAMPER	
→ S/N G019E02152F (WET BRAKES) → S/N G019E02271F (DRY BRAKES) .....	2-78
S/N G019E02153F → (WET BRAKES) S/N G019E02272F → (DRY BRAKES) .....	2-79
<b>W</b>	
WATER INLET CONNECTION .....	3-74
WATER OUTLET CONNECTION .....	2-80
WATER PUMP .....	2-81
WATER PUMP DRIVE .....	2-82
WET BRAKE SYSTEM	
DIESEL ENGINE .....	9-8
LPG ENGINE .....	9-4
WINDOW WIPER SYSTEM	
REAR AND ROOF WIPER KITS - AND FRONT WIPER OPTIONS .....	1-44
WASHER BOTTLE KIT .....	1-42
WIRE HARNESS	
AIR DRYER .....	5-111
ARMREST - OPEN CAB .....	5-116
ARMREST - CLOSED CAB .....	5-118
BACK-UP ALARM .....	5-95
BRAKE TEMPERATURE .....	5-94
CAB LIGHTS .....	5-98
CAB SIDE CONSOLE - SHEET 1 OF 3 .....	5-78
CAB SIDE CONSOLE - SHEET 2 OF 3 .....	5-82
CAB SIDE CONSOLE - SHEET 3 OF 3 .....	5-86
CAB TILT .....	5-114
CAB UNDERFLOOR .....	5-112

**TABLE OF CONTENTS (continued)**

<b>DESCRIPTION</b>	<b>PAGE</b>
CHASSIS, DIESEL (H10.00XM-12EC, H12.00XM-12EC) - SHEET 1 OF 2 .....	5-70
CHASSIS, DIESEL (H10.00XM-12EC, H12.00XM-12EC) - SHEET 2 OF 2 .....	5-74
CHASSIS, DIESEL (H13.00XM, H16.00XM, H16.00XM-6) - SHEET 1 OF 2 .....	5-62
CHASSIS, DIESEL (H13.00XM, H16.00XM, H16.00XM-6) - SHEET 2 OF 2 .....	5-66
CHASSIS, LPG (H10.00XM-12EC, H12.00XM-12EC) - SHEET 1 OF 2 .....	5-54
CHASSIS, LPG (H10.00XM-12EC, H12.00XM-12EC) - SHEET 2 OF 2 .....	5-58
CHASSIS, LPG (H13.00XM, H14.00XM, H16.00XM-6) - SHEET 1 OF 2 .....	5-44
CHASSIS, LPG (H13.00XM, H14.00XM, H16.00XM-6) - SHEET 2 OF 2 .....	5-48
CLOSED CAB .....	5-88
EMPTY CONTAINER HANDLER ATTACHMENT .....	5-125
FRONT END .....	5-127
FRONT END EQUIPMENT .....	5-124
FRONT LIGHTS, EC4 - WITH FRONT FENDER LIGHTS .....	5-102
FRONT LIGHTS, EC4 .....	5-103
FRONT LIGHTS, NON-EC4 - WITH FRONT FENDER AND MAST WORKLIGHTS .....	5-100
FRONT LIGHTS, NON-EC4 .....	5-104
HYDRAULIC OIL TEMPERATURE .....	5-126
MAST LIGHT EXTENSION - RIGHT HAND .....	5-107
MAST LIGHT EXTENSION - LEFT HAND .....	5-108
MAST WORKLIGHT EXTENSION .....	5-106
OPEN CAB .....	5-92
REAR DRIVE LIGHT EXTENSION .....	5-96
REAR WIPER .....	5-120
REAR WORK LIGHTS .....	5-109
SHIFT LEVER .....	5-130
STEERING COLUMN .....	5-122
STROBE LIGHT .....	5-110
TAIL LIGHTS .....	5-131
TWO STAGE LIMITED FREE-LIFT .....	5-129
WINDOW WASH PUMPS .....	5-134

**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.

The diagram illustrates the layout of the parts manual with the following sections and callouts:

- 1:** Points to the 'SECTIONS' table.
- 2:** Points to the 'MAST-TWO STAGE LIMITED' section in the 'SECTIONS' table.
- 3:** Points to the 'TABLE OF CONTENTS' header.
- 4:** Points to the 'DESCRIPTION' and 'PAGE' columns in the 'TABLE OF CONTENTS' table.
- 5:** Points to the 'NUMERICAL INDEX' table.
- 6:** Points to the 'DESCRIPTION' column in the 'TRANSMISSION HOUSING' table.
- 7:** Points to the 'TRANSMISSION HOUSING' header.
- 8:** Points to the 'ITEM' column in the 'TRANSMISSION HOUSING' table.
- 9:** Points to the 'QTY' columns in the 'TRANSMISSION HOUSING' table.
- 10:** Points to the 'TRANSMISSION HOUSING' table.

**TABLE OF CONTENTS**

DESCRIPTION	PAGE
ACCELERATOR/MONOTROL PEDAL.....	5-2
BACKUP ALARM .....	
BATTERY CONNECTOR .....	
BRAKE ASSEMBLY .....	
BRAKE MASTER CYLINDER .....	
BRAKE PEDAL LINKAGE .....	
CARRIAGE .....	
THREE STAGE FULL .....	
TWO STAGE FULL .....	
TWO STAGE LIMITED .....	
CONTROL VALVE .....	
COUNTERWEIGHT .....	
DASH DISPLAY .....	
DC-DC CONVERTER .....	

**SECTION 11 NUMERICAL INDEX**

PART NO.	PG	ITEM	PART NO.	PG	ITEM	PART NO.	PG	ITEM
138	5-9	31	5-17	42	16481	6-25	3	6-7
139	5-13	31	7-13	8	6-25	4	16882	9-7
12921	3-12	10	1-3	6	6-26	53	16883	6-25
14269	5-5	8	1-4	45	6-26	65	16982	7-5
			5-9	16	10-3	16		8-5
			5-13	16	6-26	48		9-5
			42	16	6-11	3	16989	6-25
			34	23	16484	6-11	9	7-5
			13	42		6-13	101	8-5
			10	34		6-25	7	9-5
			11	13		6-25	8	6-25
			21	10		6-25	11	17061
			27	23		6-25	20	3-9
				21		9-7	7	17151
				27				3-11
								6-25
								22

**TRANSMISSION HOUSING (= S/N G160-2628)**

KEY:  
A: Diesel  
B: Gasoline and LPG

ITEM	PART NO.	DESCRIPTION	QTY	A	B
		Transmission.....	1	-	-
	2022547	Transmission.....	1	1	1
	2023329	Transmission.....	2	2	2
	2064470	Case.....	4	4	4
1	2023418	Bearing Cap.....	1	1	1
2	296426	Washer.....	2	2	2
3	293692	Capscrew.....	2	2	2
4	2021390	Cover.....	4	4	4
5	1371656	Collar Pin.....	1	1	1
6	2021329	O-Ring.....	4	4	4
7	2021915	Plug.....	22	22	22
8	2021675	Housing.....	39	39	39
9	2021336	Pin.....	1	1	1
10	287860	Capscrew.....	1	1	1
11	292682	Lockwasher.....	8	8	8
12		Hydraulic Pump (see Figure 6-6).....	8	8	8
13		Gasket.....	1	1	1
14	2021345	Capscrew.....	1	1	1
15	214364	Washer.....	1	1	1
16	296418	Temperature Switch.....	9	9	9
17	2021388	Breather.....	9	9	9
18	2021389	Dipstick.....	2	2	2
19	2021383	Capscrew.....	3	3	3
20	292515	Nut.....	3	2	2
21	136692	Capscrew.....	4	4	4
22	292527	Capscrew.....	4	4	4
23	292531	Lockwasher.....	4	4	4
24	292683	Lockwasher.....	1	1	1
25	293637	Capscrew.....	1	1	1
26	296420	Washer.....	1	1	1
	996403	Transmission Kit (Include Item 7).....			
	996405	Transmission Kit (Include Item 14).....			

This Parts Manual is divided into 11 major sections which are listed above. Quick reference can be made by placing the right thumb on the tab of the desired section, bending the bottom edge of the cover to the corresponding tab.

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HP990135

## 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 15-1) 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:

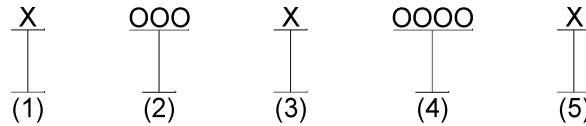
- **D/B 3/00**  
Indicates that a change occurred sometime within that month for the item affected.
- D/B 3/00** →  
Indicates that a change occurred sometime within that month for the item affected.
- D/B 3/00** ↔ **D/B 4/00**  
Indicates a range of production dates of the item affected.

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

### ORDERING PARTS:

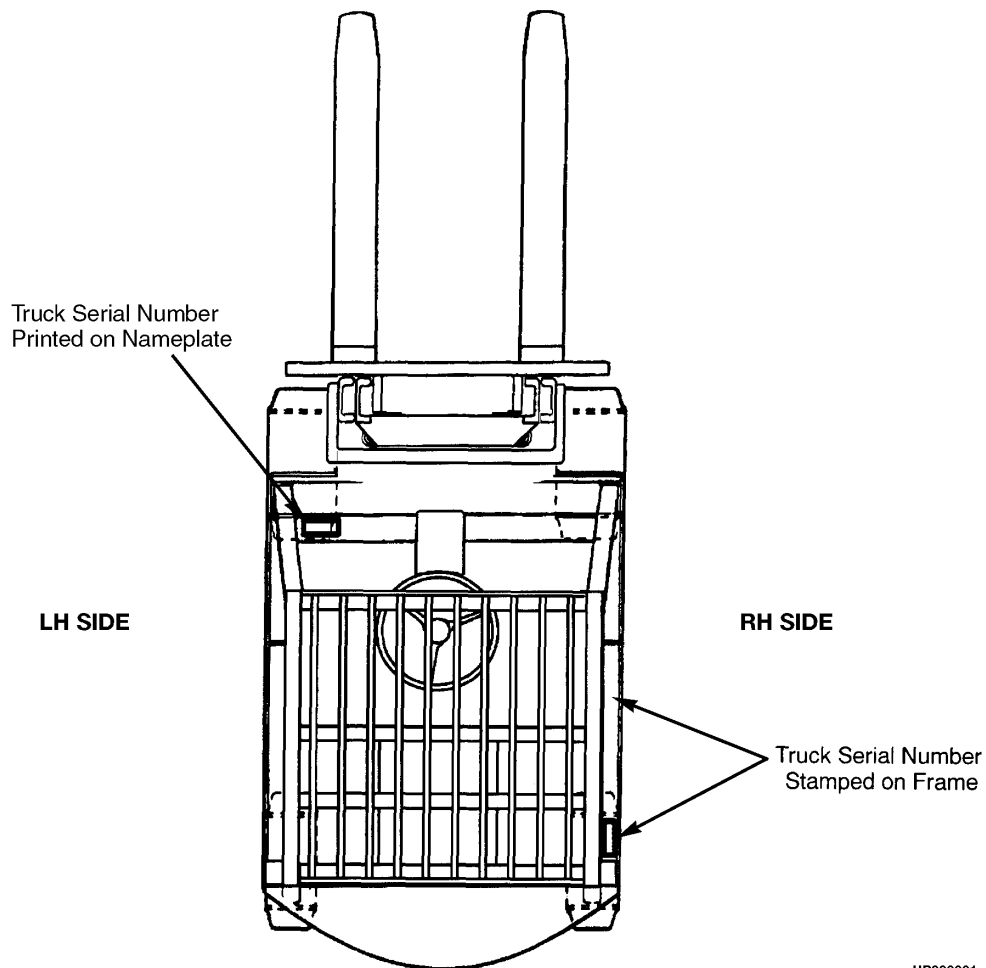
When ordering replacement parts, give the unit serial number, part number, name of part and quantity required.

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.



**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.

<b>PUBLICATION</b>	<b>HYSTER PART NUMBER</b>
Operating Manual.....	1659419
Service Manual (Complete).....	1660398
Parts Manual.....	1660387