

PARTS MANUAL

CHALLENGER

H300XL, H330XL, H360XL

H330XL-EC

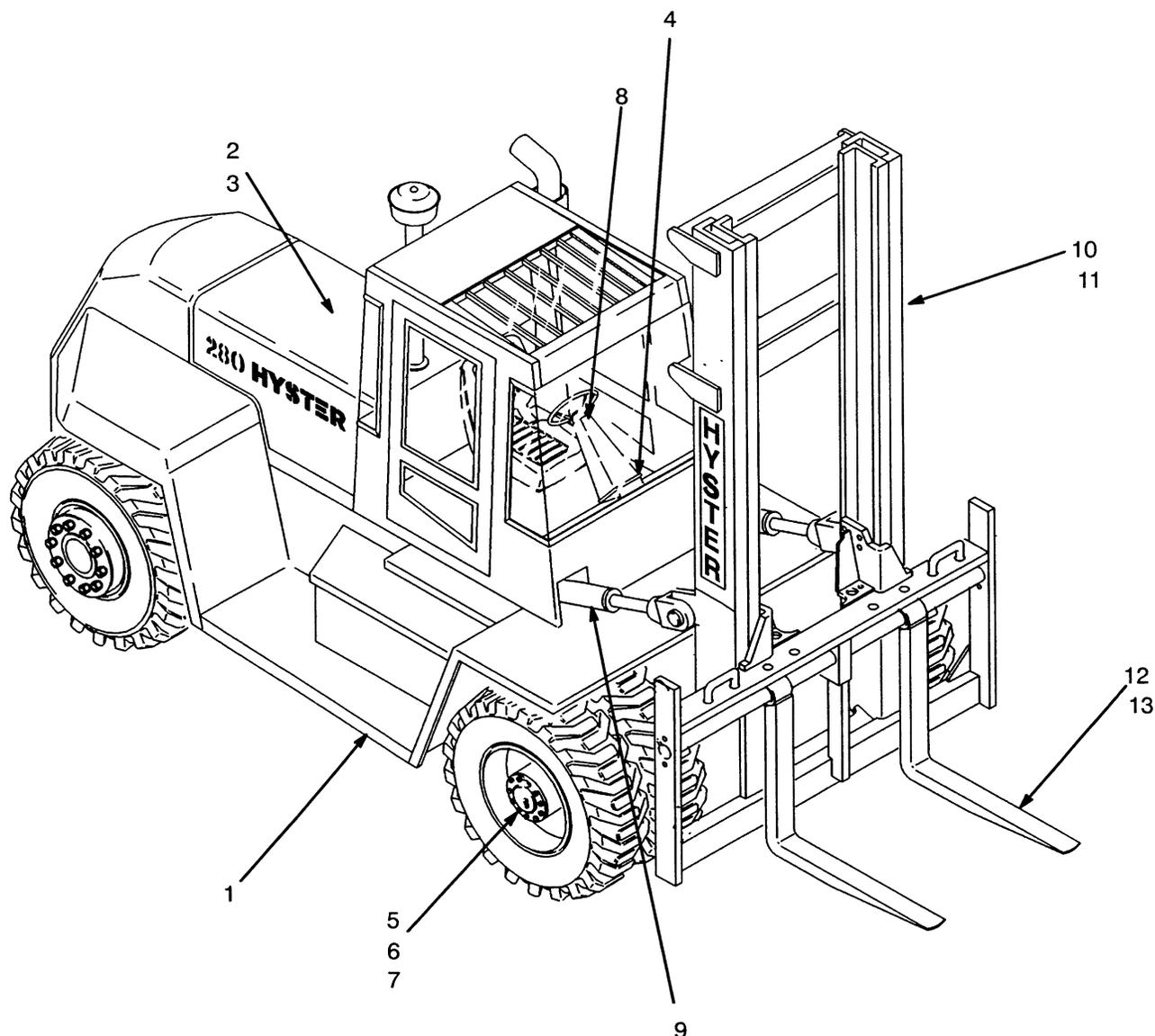
H360XL-EC

(D19)

CUSTOMER EDITION

HYSTER

ILLUSTRATED CONTENTS



1	FRAME	Page 1
2	ENGINE	Page 35
3	FUEL	Page 119
4	ELECTRICAL	Page 175
5	BRAKE	Page 213
6	TRANSMISSION	Page 251
8	STEERING	Page 295
9	HYDRAULIC	Page 303
10	VISTA 2-STG NFL MAST	Page 341
11	A781 3-STG FFL MAST	Page 359
12	OPTIONAL	Page 385
13	EMPTY CONTAINER HANDLER	Page 413
14	NUMERICAL INDEX	Page 433

TABLE OF CONTENTS

<u>DESCRIPTION</u>	<u>PAGE</u>
A	
AIR COMPRESSOR (Figure 119) LAST USED ON ENGINE S/N U563738X	Page 226
AIR COMPRESSOR (Figure 120) USED ON ENGINE S/N U563739X UP TO UNIT S/N D19D-1756 INCLUDING 1758 EXCEPT 1753	Page 228
AIR COMPRESSOR (Figure 121) UP TO ENGINE S/N U593028 UNIT S/N D19D-1757 INCLUDING 1753 EXCEPT 1758	Page 230
AIR COMPRESSOR (Figure 122) USED ON ENGINE S/N U593029 THRU U607097	Page 232
AIR COMPRESSOR (Figure 123) FIRST USED ON ENGINE S/N U607098 AND UNIT S/N D19D-2377	Page 234
AIR COMPRESSOR (Figure 124) 366 LPG ENGINE	Page 236
AIR DUCTS (Figure 56) DIESEL TURBO	Page 104
AIR FILTER (Figure 75) LPG	Page 144
AIR FILTER (Figure 81) DIESEL TURBO WITHOUT LOW EMISSIONS	Page 156
AIR FILTER (Figure 82) DIESEL TURBO WITH LOW EMISSIONS FIRST USED ON S/N D19D-2377	Page 158
AIR FILTER (Figure 74) DIESEL NON-TURBO	Page 142
AIR SYSTEM (Figure 219)	Page 422
AIR TANK (Figure 114) LAST USED ON S/N D19D-1521	Page 220
AIR TANK (Figure 115) FIRST USED ON S/N D19D-1522	Page 221

TABLE OF CONTENTS

<u>DESCRIPTION</u>	<u>PAGE</u>
A (Continued)	
AIR TANK (Figure 116) WITH AUTOSHIFT FIRST USED ON S/N D19D-12439	Page 222
ALTERNATOR (Figure 100) DIESEL-LAST USED ON S/N D19D-1796	Page 194
ALTERNATOR (Figure 101) LPG DIESEL-FIRST USED ON S/N D19D-1797	Page 196
ALTERNATOR (Figure 99) DIESEL-LAST USED ON S/N D19D-1796	Page 192
ALTERNATOR MOUNTING (Figure 102) DIESEL WITHOUT LOW EMISSIONS	Page 198
ALTERNATOR MOUNTING (Figure 103) DIESEL WITH LOW EMISSIONS FIRST USED ON S/N D19D-2377	Page 200
ALTERNATOR MOUNTING (Figure 104) LPG	Page 202
ATTACHING PARTS (Figure 127) PARK BRAKE LAST USED ON S/N D19D-1521	Page 241
ATTACHING PARTS (Figure 128) PARK BRAKE FIRST USED ON S/N D19D-1522	Page 242
AUXILIARY DRIVE GEAR (Figure 35) DIESEL LAST USED ON S/N D19D-1756 ALSO 1758 EXCEPT 1753	Page 70
AUXILIARY DRIVE GEAR (Figure 36) DIESEL FIRST USED ON S/N D19D-1757 ALSO 1753 EXCEPT 1758	Page 72

B

BACK-UP ALARM (Figure 214)	Page 412
BRAKE CHAMBER (Figure 130)	Page 246

TABLE OF CONTENTS

<u>DESCRIPTION</u>	<u>PAGE</u>
B (Continued)	
BRAKE LINE WITH AUTOSHIFT (Figure 117) FIRST USED ON S/N D19D-12439	Page 223
BRAKE LINES (Figure 112) LAST USED ON S/N D19D-1521	Page 216
BRAKE LINES (Figure 113) LPG DIESEL-FIRST USED ON S/N D19D-1522	Page 218
BRAKE SYSTEM (Figure 129)	Page 244
C	
CARBURETOR LPG (Figure 71)	Page 138
CARRIAGE (Figure 183)	Page 354
CARRIAGE (Figure 192) 3 STG FFL WITH SIDESHIFT AND FORK POSITIONER	Page 374
CARRIAGE HYDRAULICS (Figure 193) 3 STG FFL WITH SIDESHIFT AND FORK POSITIONER	Page 376
CHARGE PUMP (Figure 147)	Page 278
CLUTCH (Figure 142) FORWARD AND LOW	Page 270
CLUTCH (Figure 143) REVERSE AND SECOND	Page 272
CLUTCH (Figure 144) THIRD	Page 274
COMPRESSOR MOUNTING (Figure 125) LPG	Page 238
CONTAINER HANDLING ATTACHMENT (Figure 215)	Page 414

TABLE OF CONTENTS

<u>DESCRIPTION</u>	<u>PAGE</u>
C (Continued)	
CONTROL VALVE (Figure 149)	Page 282
CONTROL VALVE (Figure 165) TWO FUNCTION	Page 314
CONTROL VALVE (Figure 168) THREE FUNCTION	Page 320
CONTROL VALVE (Figure 170) FOUR FUNCTION	Page 324
CONTROL VALVE (Figure 172) FIVE FUNCTION	Page 330
COOLING (Figure 21) DIESEL TURBO AND NON-TURBO	Page 44
COOLING (Figure 22) LPG	Page 46
COUNTERWEIGHT (Figure 14)	Page 28
CRANKSHAFT & PISTON (Figure 28) DIESEL NON-TURBO	Page 56
CRANKSHAFT & PISTON (Figure 29) DIESEL TURBO WITH AND WITHOUT LOW EMISSIONS	Page 58
CYLINDER BLOCK (Figure 58) LPG	Page 108
CYLINDER BLOCK (Figure 25) DIESEL NON TURBO	Page 50
CYLINDER BLOCK (Figure 26) DIESEL TURBO WITHOUT LOW EMISSIONS	Page 52
CYLINDER BLOCK (Figure 27) DIESEL TURBO WITH LOW EMISSIONS FIRST USED ON S/N D19D-2377	Page 54
CYLINDER HEAD AND VALVES (Figure 59) LPG	Page 110

TABLE OF CONTENTS

<u>DESCRIPTION</u>	<u>PAGE</u>
C (Continued)	
CYLINDER HEAD (Figure 30) DIESEL NON-TURBO	Page 60
CYLINDER HEAD (Figure 31) DIESEL TURBO WITHOUT LOW EMISSIONS	Page 62
CYLINDER HEAD (Figure 32) DIESEL TURBO WITH EMISSIONS FIRST USED ON S/N D19D-2377	Page 64

D

DIFFERENTIAL (Figure 152) LAST USED ON S/N D19D-1619-NON-EC AND EC-3 LAST USED ON S/N D19D-1965-EC4	Page 288
DIFFERENTIAL (Figure 154) FIRST USED ON S/N D19D-1620-NON EC AND EC-3 FIRST USED ON S/N D19D-1966-EC 4	Page 292
DISTRIBUTOR (Figure 98) LPG	Page 190
DRIVE AXLE (Figure 151)	Page 286
DRIVE AXLE (Figure 153) EMPTY CONTAINER HANDLER - 4 FIRST USED ON S/N D19D-1966	Page 290

E

ELECTRICAL CONTROLS (Figure 221)	Page 426
ELECTRICAL (Figure 93) DIESEL WITH AUTOSHIFT FIRST USED ON S/N D19D-12439	Page 180
ELECTRICAL SYSTEM (Figure 222)	Page 428

TABLE OF CONTENTS

DESCRIPTION **PAGE**

E (Continued)

ELECTRICAL SYSTEM (Figure 92)
DIESEL WITHOUT AUTOSHIFT Page 178

ELECTRICAL SYSTEM (Figure 95)
LPG WITHOUT AUTOSHIFT Page 184

ENDBEAM (Figure 216) Page 416

EXHAUST (Figure 18)
DIESEL NON-TURBO Page 39

EXHAUST (Figure 19)
DIESEL TURBO Page 40

EXHAUST (Figure 20)
LPG Page 42

EXTENSION (Figure 220) Page 424

F

FAN (Figure 15) Page 30

FIRE EXTINGUISHER (Figure 213) Page 411

FLOODLIGHTS (Figure 212) Page 410

FLOORPLATES AND COVERS (Figure 7) Page 14

FLYWHEEL (Figure 23)
DIESEL Page 48

FLYWHEEL (Figure 24)
LPG Page 49

FORK (Figure 204) Page 396

FORK (Figure 206)
HOOK TYPE QUICK DISCONNECT Page 398

TABLE OF CONTENTS

<u>DESCRIPTION</u>	<u>PAGE</u>
F (Continued)	
FORK POSITIONER CYLINDER (Figure 194)	Page 378
FORK POSITIONER VALVE (Figure 196)	Page 380
FREE-LIFT CYLINDER (Figure 191) THREE-STAGE FULL FREE-LIFT MAST	Page 372
FREE-LIFT (Figure 190) THREE-STAGE FULL FREE-LIFT MAST	Page 370
FUEL FILTER (Figure 80) DIESEL TURBO WITH LOW EMISSIONS FIRST USED ON S/N D19D-2377	Page 154
FUEL INJECTION (Figure 76) DIESEL TURBO WITHOUT LOW EMISSIONS	Page 146
FUEL INJECTION (Figure 77) DIESEL TURBO WITH LOW EMISSIONS FIRST USED ON S/N D19D-2377	Page 148
FUEL INJECTION (Figure 65) DIESEL WITHOUT LOW EMISSIONS	Page 126
FUEL INTAKE (Figure 63) DIESEL	Page 122
FUEL PRE-FILTER (Figure 64) DIESEL	Page 124
FUEL TANK (Figure 69) LPG	Page 134
H	
HEADER HOSE (Figure 184)	Page 356
HEADER HOSE (Figure 197) (THREE AND FOUR FUNCTION) THREE-STAGE FULL FREE-LIFT MAST	Page 382
HEADER HOSE (Figure 208) (FIVE FUNCTION) DUAL FUNCTION SIDE SHIFT FORK POSITIONER	Page 402

TABLE OF CONTENTS

<u>DESCRIPTION</u>	<u>PAGE</u>
H (Continued)	
HEATER CONTROL (Figure 8)	Page 16
HEATER (Figure 5) DIESEL	Page 10
HEATER (Figure 6) LPG	Page 12
HOOD (Figure 12) WITHOUT LOW EMISSIONS	Page 24
HOOD (Figure 13) WITH LOW EMISSIONS FIRST USED ON S/N D19D-2377	Page 26
HYDRAULIC CYLINDER (Figure 202) DUAL FUNCTION PIN TYPE OR QUICK DISCONNECT FIRST USED ON S/N PENDING PER ECN 63257	Page 394
HYDRAULIC HOSES (Figure 217)	Page 418
HYDRAULIC PUMP (Figure 163)	Page 310
HYDRAULIC SYSTEM (Figure 160) DIESEL AND LPG NON-EC	Page 304
HYDRAULIC SYSTEM (Figure 161) EMPTY CONTAINER HANDLER	Page 306
HYDRAULIC SYSTEM (Figure 218)	Page 420
HYDRAULIC TANK (Figure 162)	Page 308
I	
IDLER SHAFT (Figure 145)	Page 276
INNER MAST (Figure 178)	Page 344
INNER MAST (Figure 187) THREE-STAGE FULL FREE-LIFT MAST	Page 364

TABLE OF CONTENTS

<u>DESCRIPTION</u>	<u>PAGE</u>
I (Continued)	
INSTRUMENT PANEL (Figure 94) DIESEL	Page 182
INSTRUMENT PANEL (Figure 97) LPG	Page 188
INTAKE MANIFOLD (Figure 60) LPG	Page 112
INTERMEDIATE MAST (Figure 186) THREE-STAGE FULL FREE-LIFT MAST	Page 362
L	
LABELS (Figure 11)	Page 22
LIFT CYLINDER (Figure 180) LAST USED ON S/N D19D-2025	Page 348
LIFT CYLINDER (Figure 181) NON-EC FIRST USED ON S/N D19D-2026	Page 350
LIFT CYLINDER (Figure 182) EMPTY CONTAINER HANDLER 3 AND 4	Page 352
LIFT (Figure 179)	Page 346
LIFT PUMP (Figure 67)	Page 130
LIGHTS (Figure 211)	Page 408
LIGHTS (Figure 224)	Page 432
LOW PRESSURE SYSTEM (Figure 78) DIESEL TURBO WITHOUT LOW EMISSIONS	Page 150
LOW PRESSURE SYSTEM (Figure 79) DIESEL TURBO WITH LOW EMISSIONS FIRST USED ON S/N D19D-2377	Page 152

TABLE OF CONTENTS

DESCRIPTION	PAGE
L (Continued)	
LOW PRESSURE SYSTEM (Figure 66) DIESEL WITHOUT LOW EMISSIONS	Page 128
LPG CONVERTER (Figure 73)	Page 141
LPG FUEL SYSTEM (Figure 70)	Page 136
LPG LOCK-OFF FILTER (Figure 72)	Page 140
LPG TANK MOUNTING (Figure 68)	Page 132
LUBRICANT SYSTEM (Figure 57) DIESEL TURBO	Page 106
M	
MAIN LIFT CYLINDER (Figure 189) THREE-STAGE FULL FREE-LIFT MAST	Page 368
MAIN LIFT (Figure 188) THREE-STAGE FULL FREE-LIFT MAST	Page 366
MANIFOLDS (Figure 48) DIESEL NON-TURBO	Page 91
MANIFOLDS (Figure 49) DIESEL TURBO WITHOUT LOW EMISSIONS	Page 92
MANIFOLDS (Figure 50) DIESEL TURBO WITH EMISSIONS	Page 93
MODULATOR VALVE (Figure 148)	Page 280
MONOTROL PEDAL (Figure 150)	Page 284

TABLE OF CONTENTS

<u>DESCRIPTION</u>	<u>PAGE</u>
0	
OIL FILTER (Figure 43) DIESEL NON-TURBO LAST USED ON S/N D19D-1756 INCLUDING 1758 EXCEPT 1753	Page 86
OIL FILTER (Figure 44) DIESEL NON-TURBO FIRST USED ON S/N D19D-1757 INCLUDING 1753 EXCEPT 1758 . . .	Page 87
OIL FILTER (Figure 45) DIESEL TURBO WITHOUT LOW EMISSIONS UP TO ENGINE S/N U647451C	Page 88
OIL FILTER (Figure 46) DIESEL TURBO WITHOUT LOW EMISSIONS ENGINE S/N U647452C AND UP	Page 89
OIL FILTER (Figure 47) DIESEL TURBO WITH LOW EMISSIONS	Page 90
OIL PAN (Figure 38) DIESEL TURBO WITHOUT LOW EMISSIONS	Page 76
OIL PAN (Figure 39) DIESEL TURBO WITH LOW EMISSIONS	Page 78
OIL PAN (Figure 37) DIESEL NON-TURBO	Page 74
OIL PUMP AND PAN (Figure 61) LPG	Page 114
OPERATOR COMPARTMENT (Figure 1) WITHOUT CAB	Page 2
OPERATOR COMPARTMENT (Figure 2) WITH CAB	Page 4
OPERATOR COMPARTMENT (Figure 3) WITH CAB	Page 6
OPERATOR COMPARTMENT (Figure 4) WITH CAB	Page 8
OUTER MAST (Figure 177)	Page 342

TABLE OF CONTENTS

<u>DESCRIPTION</u>	<u>PAGE</u>
O (Continued)	
OUTER MAST (Figure 185) THREE-STAGE FULL FREE-LIFT MAST	Page 360
OUTPUT GEAR (Figure 146)	Page 277
P	
PARK BRAKE VALVE (Figure 132) LAST USED ON S/N D19D-1521	Page 248
PARK BRAKE VALVE (Figure 133) FIRST USED ON S/N D19D-1522	Page 249
PIN FORK (Figure 205)	Page 397
PNEUMATIC SOLENOID VALVE (Figure 118) FIRST USED ON S/N D19D-12439	Page 224
POWERTRAIN MOUNT (Figure 17)	Page 38
PUMP DRIVE GEARS (Figure 141)	Page 268
R	
RANGE CONTROL (Figure 135) WITHOUT AUTOSHIFT	Page 256
RANGE CONTROL (Figure 136) WITH AUTOSHIFT TRANSMISSION S/N T050M-6089 USED ON S/N D19D-2439 THROUGH S/N D19D-2720	Page 258
RANGE CONTROL (Figure 137) WITH AUTOSHIFT TRANSMISSION S/N T050M-6089 USED ON S/N D19D-2721 THRU S/N PENDING PER ECN 63481	Page 260
RANGE CONTROL (Figure 138) WITH AUTOSHIFT FIRST USED ON S/N PENDING PER ECN 63481	Page 262

TABLE OF CONTENTS

<u>DESCRIPTION</u>	<u>PAGE</u>
R (Continued)	
ROTATING BEACON (Figure 210)	Page 405
S	
SELECTOR VALVE (Figure 203) FIRST USED ON S/N PENDING PER ECN 63257	Page 395
SEMI-SUSPENSION SEAT (Figure 10)	Page 20
SIDESHIFT CARRIAGE (Figure 198) 2 STAGE NFL	Page 386
SIDESHIFT CARRIAGE (Figure 199) 3 STAGE FFL	Page 388
SIDESHIFT CARRIAGE (Figure 201) DUAL FUNCTION PIN TYPE OR QUICK DISCONNECT FIRST USED ON S/N PENDING PER ECN 63257	Page 392
SIDESHIFT CYLINDER (Figure 195)	Page 379
SIDESHIFT CYLINDER (Figure 200)	Page 390
SIDESHIFT CYLINDER (Figure 223)	Page 430
STARTER (Figure 105) DIESEL	Page 204
STARTER (Figure 96) FIRST USED ON S/N D19E-2654	Page 186
STEERING AXLE (Figure 158)	Page 300
STEERING CONTROL UNIT (Figure 156)	Page 298
STEERING CYLINDER (Figure 159)	Page 302
STEERING (Figure 155)	Page 296

TABLE OF CONTENTS

<u>DESCRIPTION</u>	<u>PAGE</u>
S (Continued)	
STROBE LIGHT (Figure 209)	Page 404
SUSPENSION SEAT (Figure 9)	Page 18
T	
THROTTLE LINKAGE (Figure 83) DIESEL-NON EMISSIONS	Page 160
THROTTLE LINKAGE (Figure 84) DIESEL-WITH LOW EMISSIONS FIRST USED ON S/N D19D-2377	Page 161
THROTTLE LINKAGE (Figure 85) NON-EMISSION DIESEL AND LPG WITH AUTOSHIFT FIRST USED ON S/N D19D-12439	Page 162
THROTTLE LINKAGE (Figure 86) LOW-EMISSION DIESEL WITH AUTOSHIFT FIRST USED ON S/N D19D-12439	Page 164
THROTTLE LINKAGE (Figure 87) LPG	Page 166
THROTTLE PEDAL (Figure 88) FORWARD/REVERSE LEVER	Page 167
THROTTLE PEDAL (Figure 89) MONOTROL PEDAL	Page 168
THROTTLE PEDAL (Figure 90) MONOTROL PEDAL WITH AUTOSHIFT FIRST USED ON S/N D19D-12439	Page 170
THROTTLE PEDAL (Figure 91) FORWARD/REVERSE LEVER WITH AUTOSHIFT FIRST USED ON S/N D19D-12439	Page 172
TILT CYLINDER ATTACHING PARTS (Figure 173)	Page 332
TILT CYLINDER (Figure 174) TWO STAGE NFL	Page 334

TABLE OF CONTENTS

<u>DESCRIPTION</u>	<u>PAGE</u>
T (Continued)	
TILT CYLINDER (Figure 175) THREE STAGE FFL	Page 338
TILT LOCK VALVE (Figure 176)	Page 340
TIMING GEAR (Figure 33) DIESEL NON TURBO	Page 66
TIMING GEAR (Figure 34) DIESEL TURBO WITH AND WITHOUT LOW EMISSIONS	Page 68
TIRE & WHEEL (Figure 207)	Page 400
TRANSMISSION (Figure 140) FIRST USED ON S/N D19D-2439 TRANSMISSION S/N T050M-6089	Page 266
TRANSMISSION ATTACHING PARTS (Figure 134)	Page 254
TRANSMISSION (Figure 139) LAST USED ON TRANSMISSION S/N T050M-6088 LAST USED ON S/N D19D-2438	Page 264
TREADLE VALVE (Figure 126)	Page 240
TREADLE VALVE (Figure 131)	Page 247
TURBOCHARGER (Figure 54) DIESEL TUBO	Page 100
TURBOCHARGER (Figure 55) DIESEL TURBO FIRST USED ON S/N D19D-2377	Page 102
V	
VALVE ATTACHING PARTS (Figure 166) THREE FUNCTION	Page 316
VALVE ATTACHING PARTS (Figure 167) DUAL FUNCTION SIDESHIFT FIRST USED ON S/N PENDING PER ECN 63257	Page 318

TABLE OF CONTENTS

DESCRIPTION **PAGE**

V (Continued)

VALVE ATTACHING PARTS (Figure 169)
FOUR FUNCTION Page 322

VALVE ATTACHING PARTS (Figure 171)
FIVE FUNCTION Page 328

VALVE ATTACHING PARTS(Figure 164)
TWO FUNCTION Page 312

VALVE BLOCK (Figure 157) Page 299

VALVE COVER (Figure 40)
DIESEL NON-TURBO Page 80

VALVE COVER (Figure 41)
DIESEL TURBO WITHOUT LOW EMISSION Page 82

VALVE COVER (Figure 42)
DIESEL TURBO WITH EMISSIONS
FIRST USED ON S/N D19D-2377 Page 84

W

WATER PUMP (Figure 51)
DIESEL
LAST USED ON S/N D19D-1756 ALSO 1758 EXCEPT 1753 Page 94

WATER PUMP (Figure 52)
DIESEL
FIRST USED ON S/N D19D-1757 ALSO 1753 EXCEPT 1758 Page 96

WATER PUMP (Figure 53)
DIESEL TURBO WITH LOW EMISSIONS
FIRST USED ON S/N D19D-2377 Page 98

WATER PUMP (Figure 62)
LPG Page 116

WINDSHIELD WASHER (Figure 16) Page 32

WIRE HARNESS (Figure 106)
CONTROL PANEL
FIRST USED ON S/N PENDING PER ECN 63257 Page 205

TABLE OF CONTENTS

<u>DESCRIPTION</u>	<u>PAGE</u>
W (Continued)	
WIRE HARNESS (Figure 107) ENGINE COMPARTMENT FIRST USED ON S/N D19D-12439	Page 206
WIRE HARNESS (Figure 108) CONTROLLER AUTOSHIFT FIRST USED ON S/N D19D-12439	Page 207
WIRE HARNESS (Figure 109) SHIFTER AUTOSHIFT FIRST USED ON S/N D19D-12439	Page 208
WIRE HARNESS (Figure 110) MONOTROL FIRST USED ON S/N D19D-12439	Page 209
WIRE HARNESS (Figure 111) OPERATOR COMPARTMENT WITH OPTIONAL ROTATING BEACON	Page 210

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, symbols and footnotes.

HYSTER SERIAL CODE D177-U.S.

3 → **DESCRIPTION** → **TABLE OF CONTENTS** → **PAGE NO.**

STEERING CONTROL UNIT (Figure 173)
LAST USED ON S/N PENDING PER ECN 59650-27 Page 316

STEERING CONTROL UNIT (Figure 173)
LAST USED ON S/N PENDING PER ECN 59650-27 Page 316

HYSTER 496 SERIAL CODE D177

NUMERICAL INDEX

PART NO	PAGE NO	REF NO	PART NO	REF NO						
126	171	14	14386	209	39	149	43	8	303	15
142	175	17					97	15223	367	19
							31	15225	305	29
							35	15227	305	39
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							97			
							98			
							99			
							100			

HYSTER SERIAL CODE D177-U.S.

1 → **ILLUSTRATED CONTENTS**

REF	SECTION
1	Frame
2	Engine
3	Fuel System
4	Electrical System
5	Transmission
6	Steering System
7	Brake System
8	Hydraulic System
9	Two Stage Limited
10	Three Stage Full Ff
11	Two Stage Full Fre
12	Optional
13	Numerical Index

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Page 441
SERIAL CODE D177-U.S.

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9 → **CARRIAGE (Figure 233)**
TWO STAGE FFL
SIX ROLLER

LAST USED ON S/N PENDING PER ECN 98765

KEY:
A: H48-810M
B: H60-810M

REF	PART NO.	NAME OF PART	QTY
a		Carrige Assy	1
1	1345239	Carrige	1
1	1345240	Carrige	1
1	1345264	Shaft	1
2 b	1345218	Load Roller	6
2 c	1395172	Load Roller ("A" Standard)	4
2	1345219	Load Roller ("B" 0.78 mm)	6
2	1345220	Load Roller ("C" 1.52 mm)	6
3	12961	Snap Ring	6
4	1345283	Shim	6
		ARAR	

REF	PART NO.	NAME OF PART	QTY
5	366118	Spacer	2
6	1369345	Chain Anchor	2
6	1369344	Chain Anchor	2
7	317735	Pin	2
8	131358	Snap Ring	2
9	323161	Pin	4
10	15200	Cotter Pin	2

a or Table Above
b Last Used On S/N Pending ECN 72449
c First Used On S/N Pending ECN 72449

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See Service Manual for service procedures

10/20/1987

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 illustrated index page immediately behind the front cover. Choose the general area of reference most likely to include the part.
2. Find the page number for the reference number you choose and turn to that page. Use the division index 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 Master Index immediately following the Illustrated Index.
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 at the back of the manual to find the part number. Turn to the figure 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.

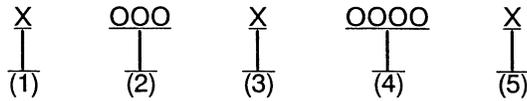
6. Keys are used to show effective serial numbers for two or more similar assemblies, RH and LH assembly parts, etc. Select the appropriate key, "A", "B", "C" or "D" and the corresponding quantity column to find the required parts.
7. Indented descriptions under "Name of Part" are used to indicate assemblies and sub-parts of assemblies. In the example, *LOAD ROLLER* (Item 2) is a subpart of the major assembly *CARRIAGE*.
8. Quantities shown are for one assembly. The quantities of the subpart *LOAD ROLLER* are indicated as six and six. This means six per *CARRIAGE* 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.
10. Additional fork lengths are available. Contact your dealer for Hyster lift trucks.

ORDERING PARTS:

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

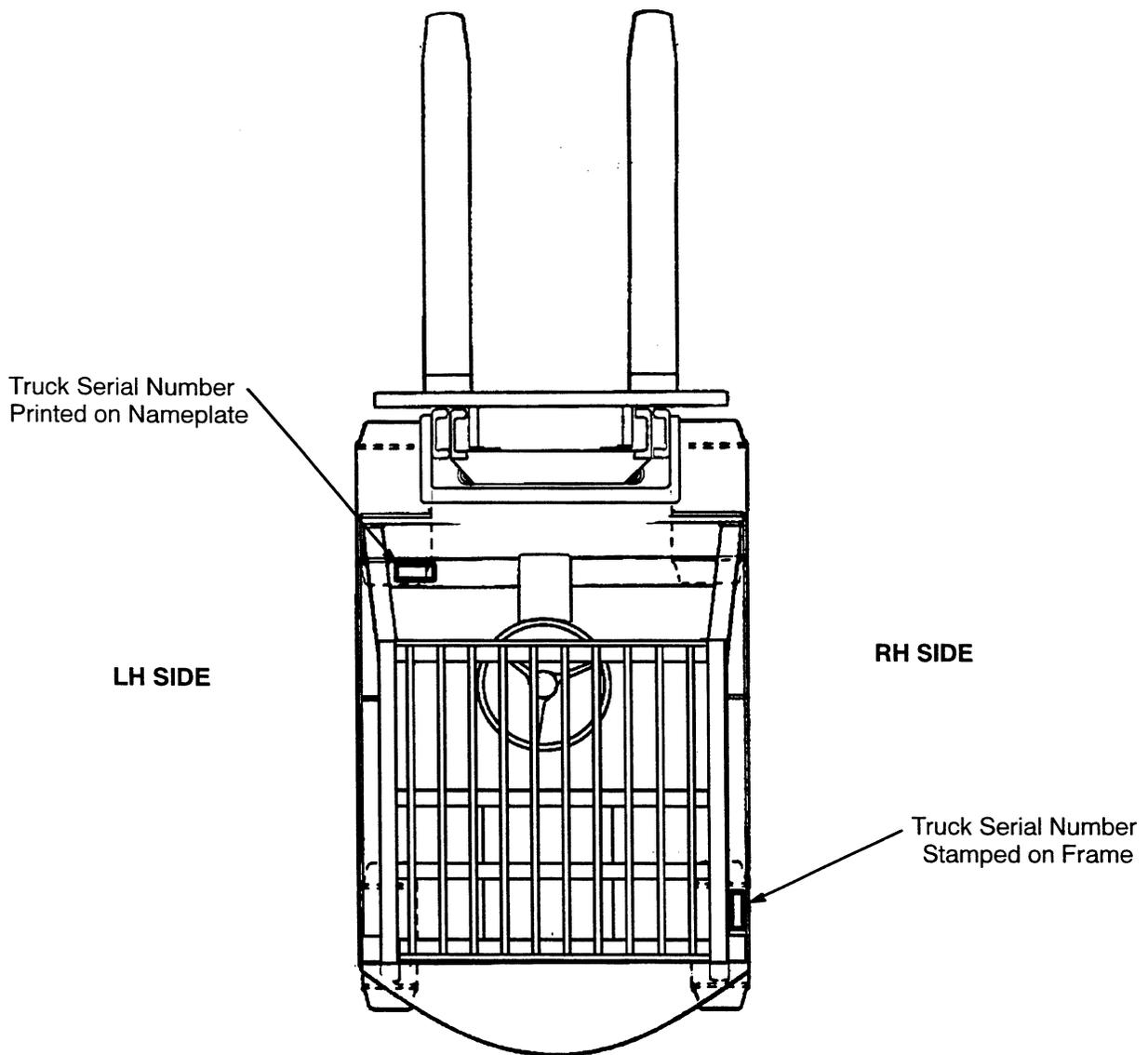
For any further information on parts, service, or ordering, consult your local dealer for Hyster lift trucks.

IDENTIFICATION OF TRUCK SERIAL NUMBERS



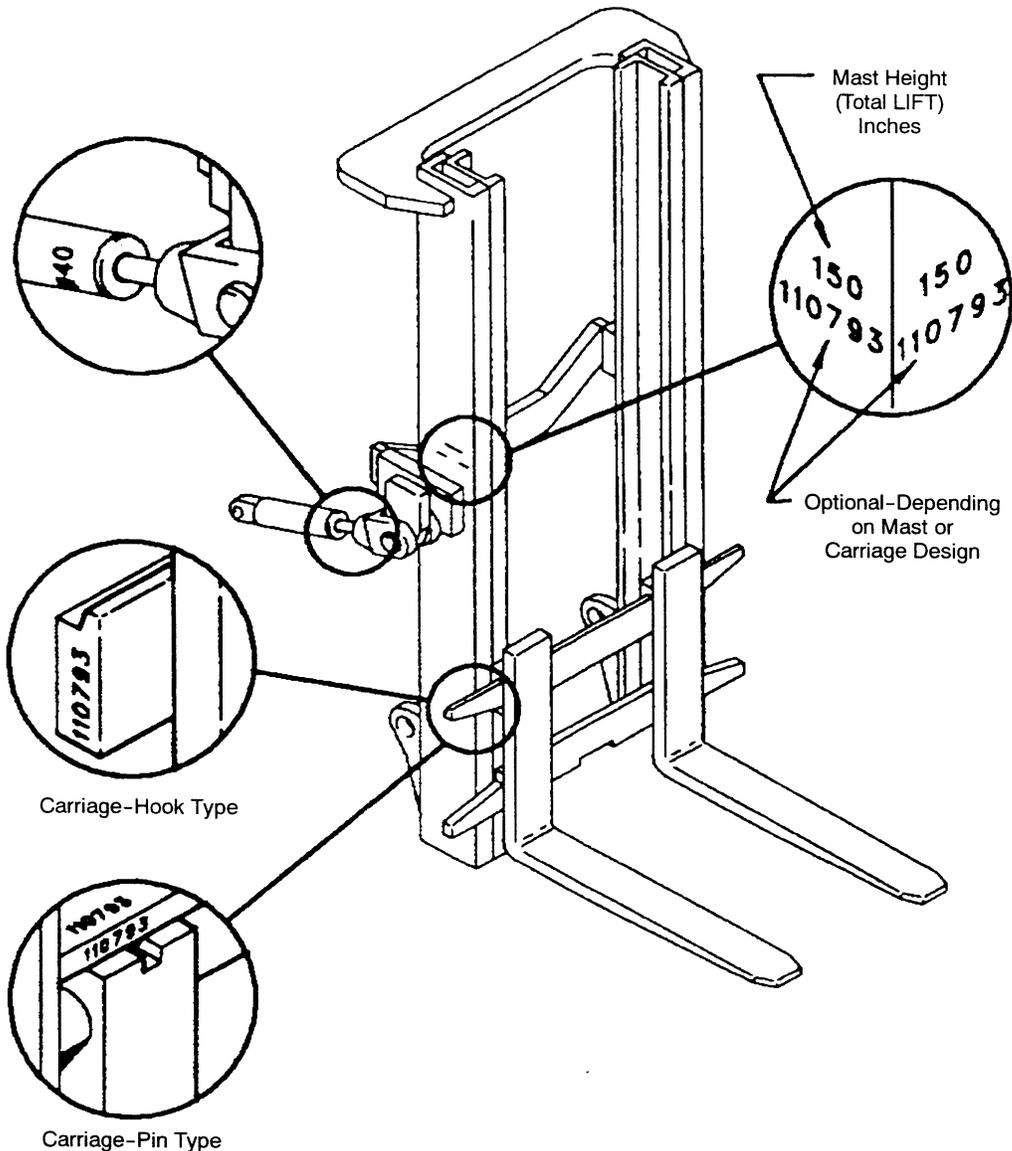
- (1) & (2) The first letter and three numbers indicate the truck model code.
- (3) The second letter indicates the plant of manufacture.
- (4) The four or five digit number series indicates the serial number of the truck.
- (5) The final letter indicates the year of manufacture starting with "A" in 1957 and 1980. The letters "I", "O", and "Q" will not be used.

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



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

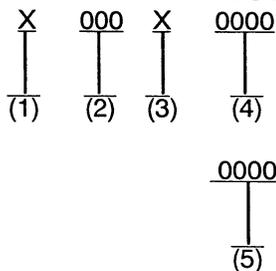
IDENTIFICATION OF MAST SERIAL NUMBERS (UP TO 1993)



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.

IDENTIFICATION OF MAST SERIAL NUMBERS (1994 AND UP)



- (1) & (2) The first letter and number indicates the mast model code.
- (3) The second letter indicates the plant of manufacture.
- (4) The four or five digit number series indicates the serial number of the mast.
- (5) Lift Height in Millimeters stamped just below the serial number

Mast Group Identification consists of mast unit code (1) & (2) plus lift height (5).

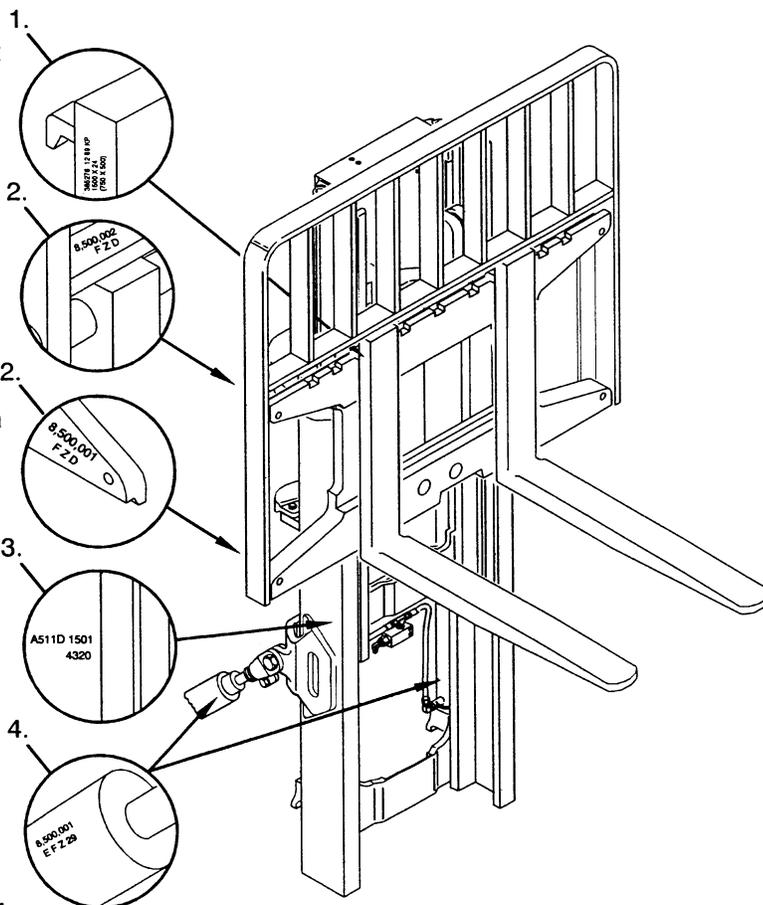
For pending serial numbers contact your local dealer for Hyster lift trucks.

LIFT EQUIPMENT IDENTIFICATION

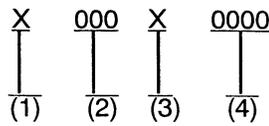
1. Fork part number, capacity rating, plant code letter and date of manufacture are stamped approximately six inches below the top of most forks.
2. The carriage group number is stamped on the right hand side of the top crossmember (pin type) or on the back of the right hand end of the bottom crossmember (hook type). A date code has two letters in line with or below the carriage group number.
3. The mast identification number has a model code, a letter indicating the plant of manufacture, and a serial number. Underneath the serial number is a four digit number that indicates the total lift height for the mast in millimeters.
4. Tilt and lift cylinder group numbers are stamped on the cylinder shell.

Always refer to the group, serial or part number when ordering service parts.

Modification of masts and carriages by SPED (Special Products Engineering Department) are identified by a model prefix code beginning with the letter "S". Contact your dealer for Hyster lift trucks for information on these assemblies.

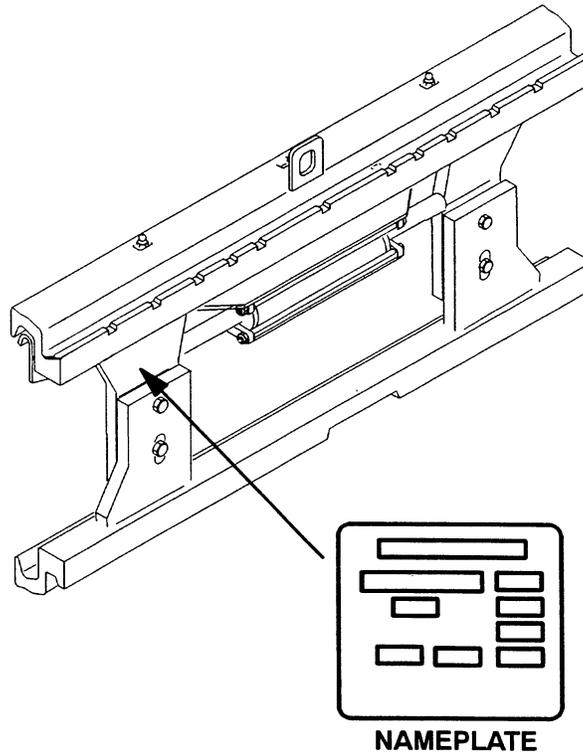


IDENTIFICATION OF ATTACHMENT AND SIDE-SHIFT CARRIAGE SERIAL NUMBERS



- (1) & (2) The first letter and three numbers indicate the attachment model code.
- (3) The second letter indicates the plant of manufacture.
- (4) The four or five digit number series indicates the serial number.

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



Side-Shift Carriages and Attachments have nameplates. Use the serial number found on the nameplate to identify the attachment.

Always refer to the group, serial or part number when ordering service parts.

Modifications of attachments and side-shift carriages by SPED (Special Products Engineering Department) are identified by a model prefix code beginning with the letter "S". Contact your dealer for Hyster lift trucks for information on these assemblies.

ABBREVIATIONS QUICK REFERENCE SHEET

Listed Below Are Abbreviations Used In Parts Manuals To Denote The Following Expressions:

2-STG	Two Stage Mast
3-STG	Three Stage Mast
4-STG	Four Stage Mast
Amp	Amperes
AR	As Required
BCS	Box Car Special
BWI	Brush Wear Indicator
CE	Commutator End
CRE	Corrosive Environment
dbA	Decibel "A" Scale
DE	Drive End
EC or ECH	Empty Container Handler Europe Empty Container Handler U.S.
EC-3 ECH-3	Empty Container Handler-3 High Stacking
EC-4 ECH-4	Empty Container Handler-4 High Stacking
EC-5 ECH-5	Empty Container Handler-5 High Stacking
EC-6 ECH-6	Empty Container Handler-6 High Stacking
EC-7 ECH-7	Empty Container Handler-7 High Stacking
ECM	Electronic Control Module
ECN	Engineering Change Notice
EEPROM	Electrically Erasable Programmable Read Only Memory
EPROM	Electrically Programmable Read Only Memory
FFL	Full Free Lift
FLT	Fork Lift Truck
FRE	Freezer Environment
in.	inches
LFL	Limited Free Lift
LPG	Liquified Petroleum Gas
MAP	Manifold Absolute Pressure
mm	millimeters
MSTS	Microprocessor Spark Timing System

NC	Normally Closed
NDE	Not Drive End (Commutator End)
NFL	No Free Lift
NI	Not Illustrated
NO	Normally Open
NPT	National Pipe Threads
NS	Neutral Start
O/S	Oversize
OC	Oil Clutch Transmission
PS	Powershift Transmission
PTO	Power Take Off
RPM	Revolutions per Minute
S/N	Serial Number
SFL	Semi-Free Lift
TMM	Truck Management Module
Type D	UL Type D, Diesel-Powered Safety Rating
Type DS	UL Type DS, Diesel-Powered Safety Rating
Type E	UL Type E, Battery Powered Safety Rating
Type EE	UL Type EE, Battery-Powered Safety Rating
Type ES	UL Type ES, Battery-Powered Safety Rating
Type G	UL Type G, Gasoline-Powered Safety Rating
Type GS	UL Type GS, Gasoline-Powered Safety Rating
Type LP	UL Type LP, LP Gas-Powered Safety Rating
Type LPS	UL Type LPS, LP Gas-Powered Safety Rating
U/S	Undersize
UL	Underwriters Laboratory
UK	United Kingdom
U.S.	United States
V	Volts
Xmsn	Transmission

PUBLICATIONS

Every new lift truck is provided with at least two publications. These publications are 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.

Other manuals, publications and programs are available from your Dealer For Hyster Lift Trucks to Help you operate and maintain your lift truck professionally. See the list that follows for reference to items for lift trucks in this PARTS MANUAL.

Operating Manual	897342
Service Manual (Complete)	897373
Parts Manual	897597

FRAME

COUNTERWEIGHT (Figure 14) Page 28

FAN (Figure 15) Page 30

FLOORPLATES AND COVERS (Figure 7) Page 14

HEATER CONTROL (Figure 8) Page 16

HEATER (Figure 5)
DIESEL Page 10

HEATER (Figure 6)
LPG Page 12

HOOD (Figure 12)
WITHOUT LOW EMISSIONS Page 24

HOOD (Figure 13)
WITH LOW EMISSIONS
FIRST USED ON S/N D19D-2377 Page 26

LABELS (Figure 11) Page 22

OPERATOR COMPARTMENT (Figure 1)
WITHOUT CAB Page 2

OPERATOR COMPARTMENT (Figure 2)
WITH CAB Page 4

OPERATOR COMPARTMENT (Figure 3)
WITH CAB Page 6

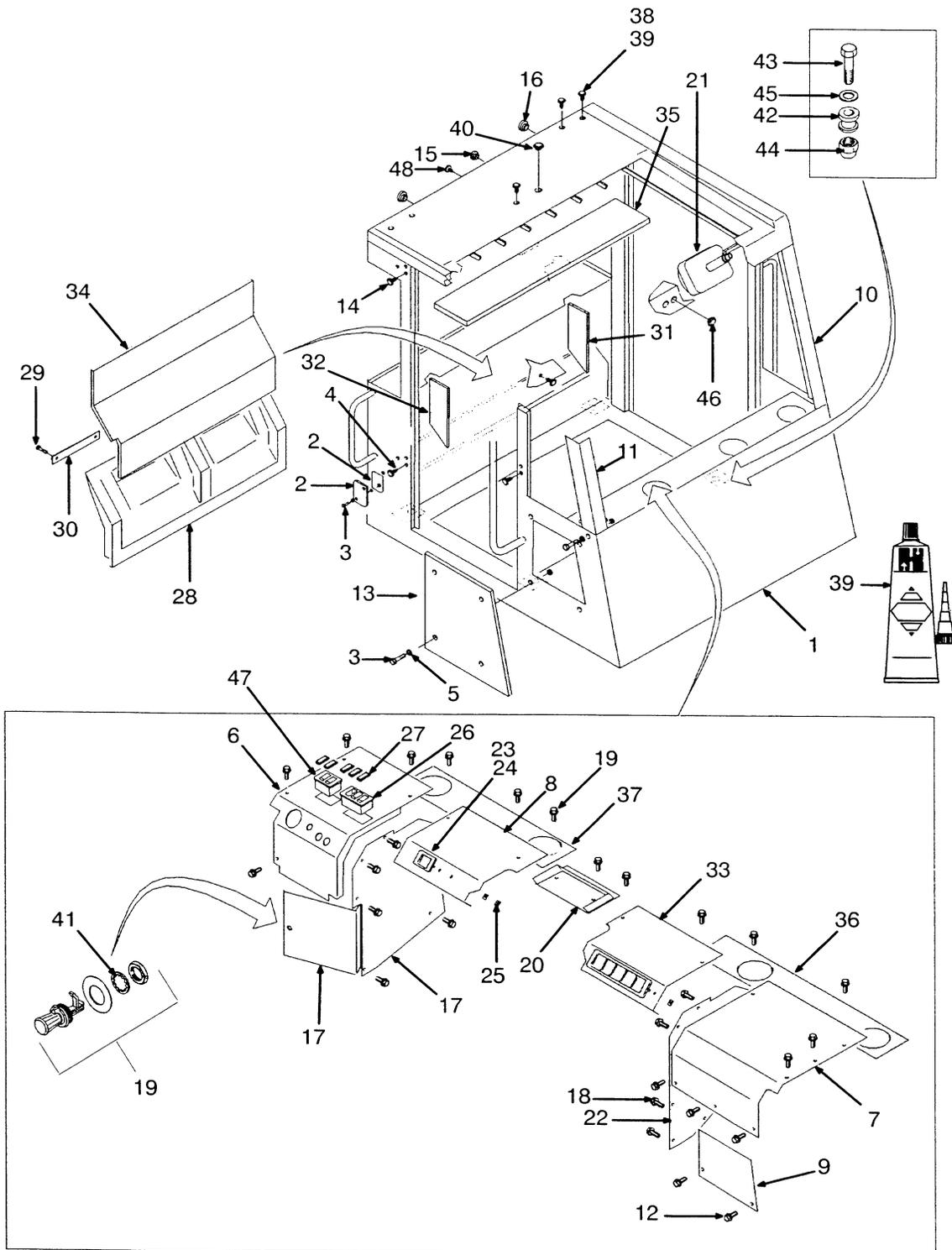
OPERATOR COMPARTMENT (Figure 4)
WITH CAB Page 8

SEMI-SUSPENSION SEAT (Figure 10) Page 20

SUSPENSION SEAT (Figure 9) Page 18

WINDSHIELD WASHER (Figure 16) Page 32

OPERATOR COMPARTMENT (FIGURE 1) WITHOUT CAB



**OPERATOR COMPARTMENT
WITHOUT CAB**

KEY:

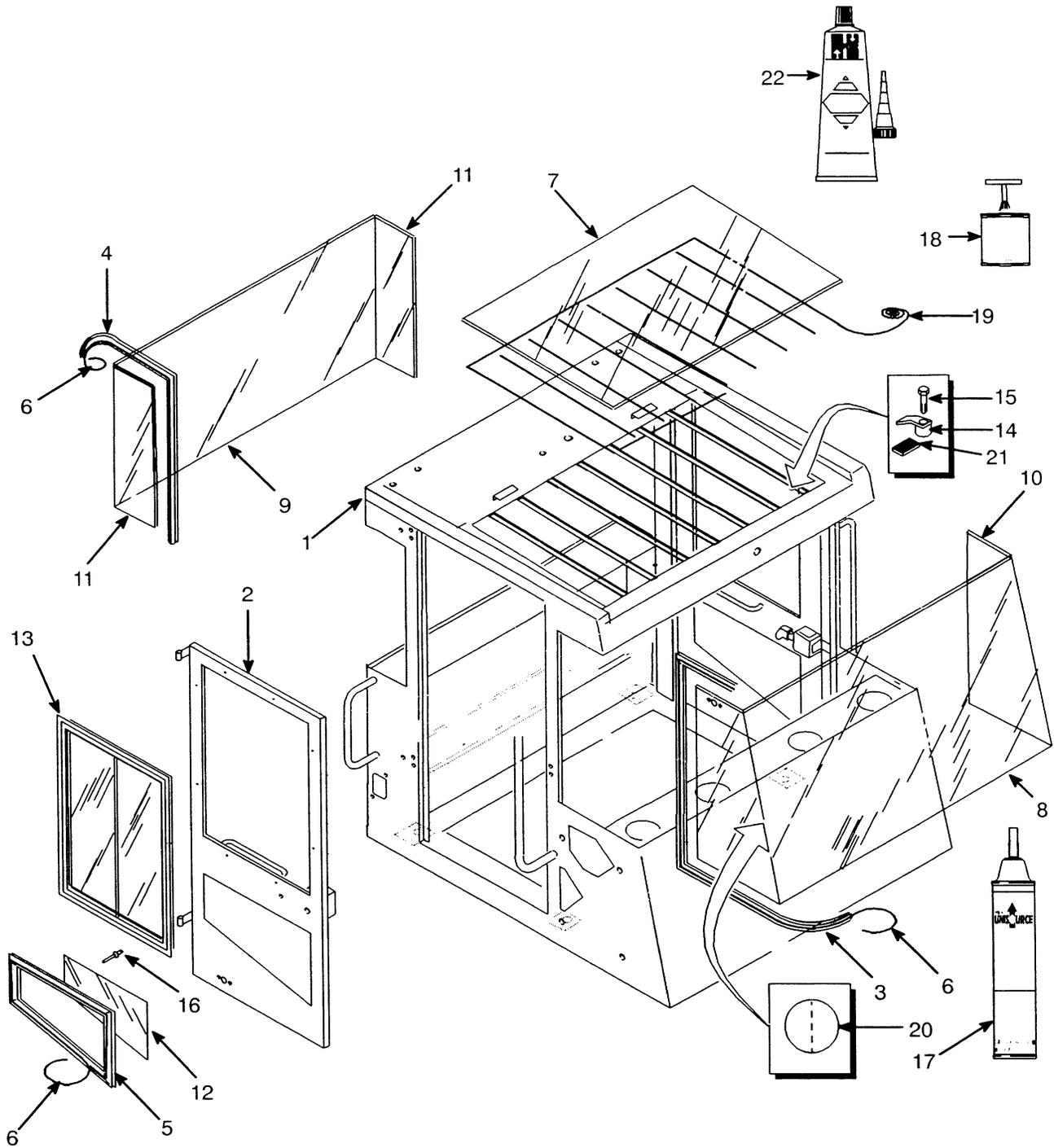
A: Last Used On S/N D19E-2261

B: First Used On S/N D19E-2262

C: LPG Only

REF	PART NO.	NAME OF PART	QTY			REF	PART NO.	NAME OF PART	QTY		
			A	B	C				A	B	C
1	1346423	Operator Compartment	1	..	..	25	1301414	Nut	4	4	4
1	e	1375944	Operator Compartment	..	..	26	376947	Frame	1	1	1
1	f	1462733	Operator Compartment	..	..	27	376949	Cover	5	5	1
1	e	894828	Operator Compartment	..	..	28	1342664	Sound Liner	2	2	1
1	f	1462734	Operator Compartment	..	..	29	329067	Screw	2	2	1
2	1301066	Plate	2	..	..	30	1301297	Plate	1	1	1
3	1330574	Capscrew	12	..	..	31	1301263	Sound Liner	1	1	1
4	136687	Nut	12	..	..	32	1301264	Sound Liner	1	1	1
5	292680	Lockwasher	1	..	..	33	1301089	Plate	1	1	1
6	c	1325598	Cover, LH	1	..	34	1325623	Sound Liner	1	1	1
6	d	1359659	Cover, LH	1	1	35	1325624	Sound Liner	1	1	1
7	1325597	Cover, RH	1	1	1	36	1301292	Gasket, RH	1	1	1
8	b	1325599	Plate	1	1	37	1301293	Gasket, LH	1	1	1
8	a	1325616	Cover	1	1	38	1307737	Fastener	4	4	4
9	1325600	Plate	1	..	..	39	280472	Sealant	AR	AR	AR
10	1301196	Angle, LH	1	..	..	40	1311217	Plug	2	2	2
11	1346452	Angle, RH	1	..	..	41	1311287	Washer	1	1	1
12	1301177	Screw	2	..	..	42	1325519	Mount	4	4	4
13	1301195	Plate	1	..	..	43	292538	Capscrew	4	4	4
14	1301288	Fastener	16	..	..	44	300937	Nut	4	4	4
15	1311217	Plug	4	..	..	45	300939	Washer	4	4	4
16	1307737	Fastener	2	..	..	46	1311346	Fastener	2	..	..
17	1311388	Door	1	1	1	47	376948	Frame	2	2	2
18	1301177	Screw	31	31	31	48	1304971	Fastener	2	2	2
19	1311288	Latch	1	1	1	a	ECH-3 & 4				
20	1301189	Plate	1	1	1	b	Non-EC				
21	1301286	Mirror	2	2	2	c	Last Used On S/N D19D-1521				
22	1301255	Panel	1	1	1	d	First Used On S/N D19D-1522				
23	1301208	Label	1	1	1	e	With Empty Container Handler				
24	1301209	Label	1	1	1	f	Without Empty Container Handler				

OPERATOR COMPARTMENT (FIGURE 2) WITH CAB



**OPERATOR COMPARTMENT
WITH CAB**

KEY:

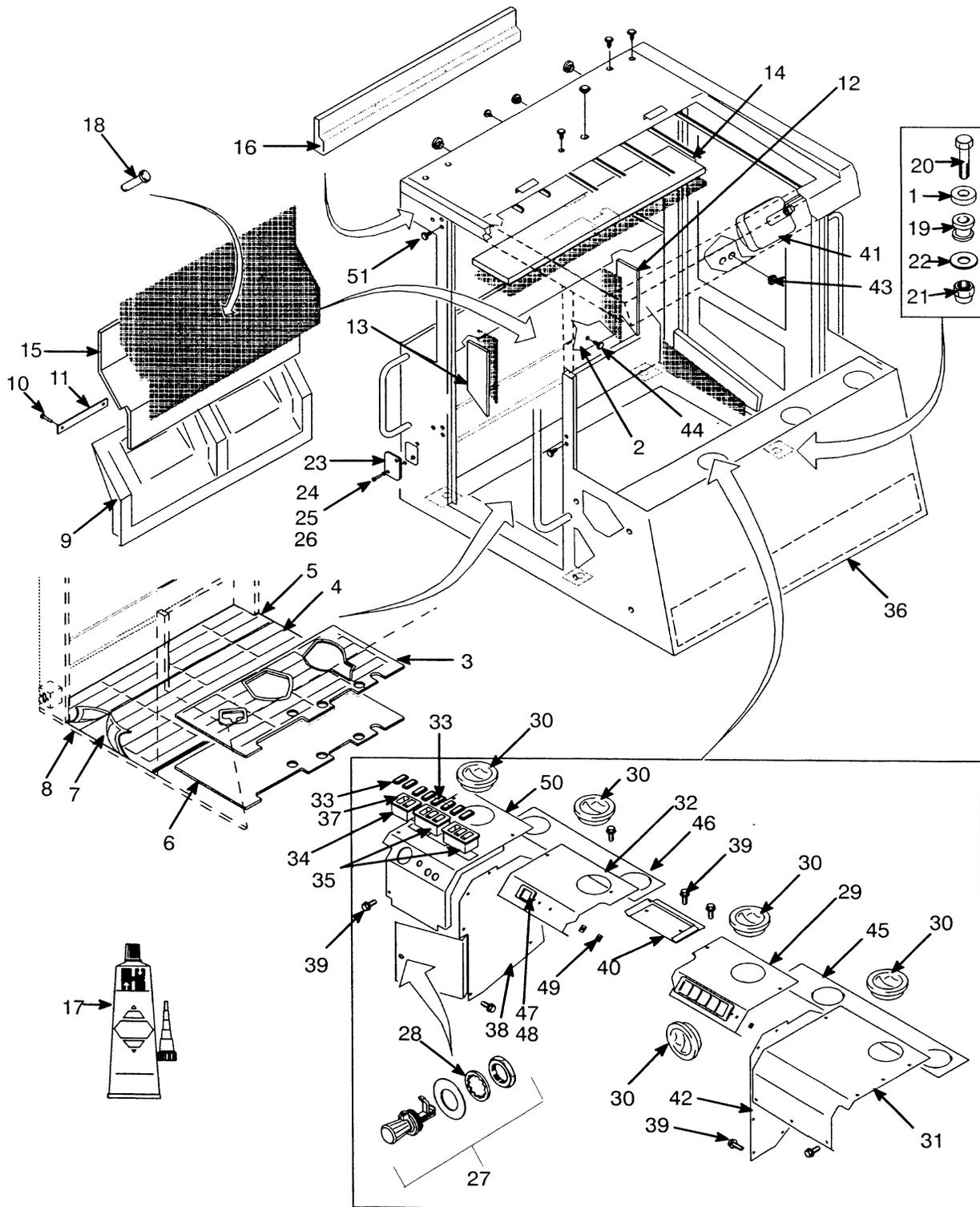
A: Last Used On S/N D19E-2261

B: First Used On S/N D19E-2262

REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
1	d 1346423	Compartment (w/o Noise Reduction)	1	..	13	a 1324088	Adhesive	1	..
1	d 1378447	Compartment (w/o Noise Reduction)	..	1	13	a 1311303	Window, LH	1	..
1	e 1462541	Compartment (w/o Noise Reduction)	..	1	13	a 1324761	Glass (Stationary)	1	..
1	cd 894823	Compartment .....	..	1	13	a 1324762	Glass (Sliding)	1	..
1	ce 1462542	Compartment .....	..	1	13	a 1324765	Strip	1	..
1	d 1346460	Compartment (With Noise Reduction)	1	..	13	a 1324084	Latch	1	..
1	d 1375947	Compartment (With Noise Reduction)	..	1	13	a 1324767	Seal	1	..
1	e 1463263	Compartment (With Noise Reduction)	..	1	13	a 1324088	Adhesive	1	..
2	1300995	Door, LH	1	..	13	b 1375984	Window, RH	1	1
2	1377726	Door, LH .....	..	1	13	b 1377703	Glass (Sliding)	1	1
2	1300996	Door, RH	1	..	13	b 1377704	Glass (Stationary)	1	1
2	1377727	Door, RH .....	..	1	13	b 1377702	Latch	1	1
3	1346426	Window Seal	1	1	13	b 1377271	Screws	4	4
4	376064	Window Seal	1	1	13	b 1375985	Window, LH	1	1
5	376867	Window Seal, LH	1	1	13	b 1377703	Glass (Sliding)	1	1
5	376868	Window Seal, RH	1	1	13	b 1377704	Glass (Stationary)	1	1
6	376922	Lock Strip	ARAR		13	b 1377702	Latch	1	1
7	1346422	Window	1	1	13	b 1377271	Screw	4	4
8	1301371	Glass	1	..	13	a 1324765	Strip	1	..
8	1346424	Glass .....	..	1	13	a 1324084	Latch	1	..
8	1463773	Glass .....	..	1	14	1301184	Plate	1	1
9	1301372	Glass	1	1	15	302244	Screw	1	1
10	1301373	Glass	2	..	16	265817	Rivet	16	16
10	1346425	Glass .....	..	2	17	3047334	Glue	ARAR	
11	1301374	Glass	2	2	18	365337	Primer	ARAR	
12	1301375	Glass	2	2	19	318352	Strip	ARAR	
13	a 1311302	Window, RH	1	..	20	376840	Spacer	2	AR
13	a 1324761	Glass (Stationary)	1	..	21	1342660	Pad	4	2
13	a 1324762	Glass (Sliding)	1	..	22	288394	Sealant	ARAR	
13	a 1324767	Seal	1	..					

- a** Last Used On S/N D19D-1755
- b** First Used On S/N D19D-1756
- c** LPG Only
- d** With Empty Container Handler
- e** Without Empty Container Handler

OPERATOR COMPARTMENT (FIGURE 3) WITH CAB



**OPERATOR COMPARTMENT
WITH CAB**

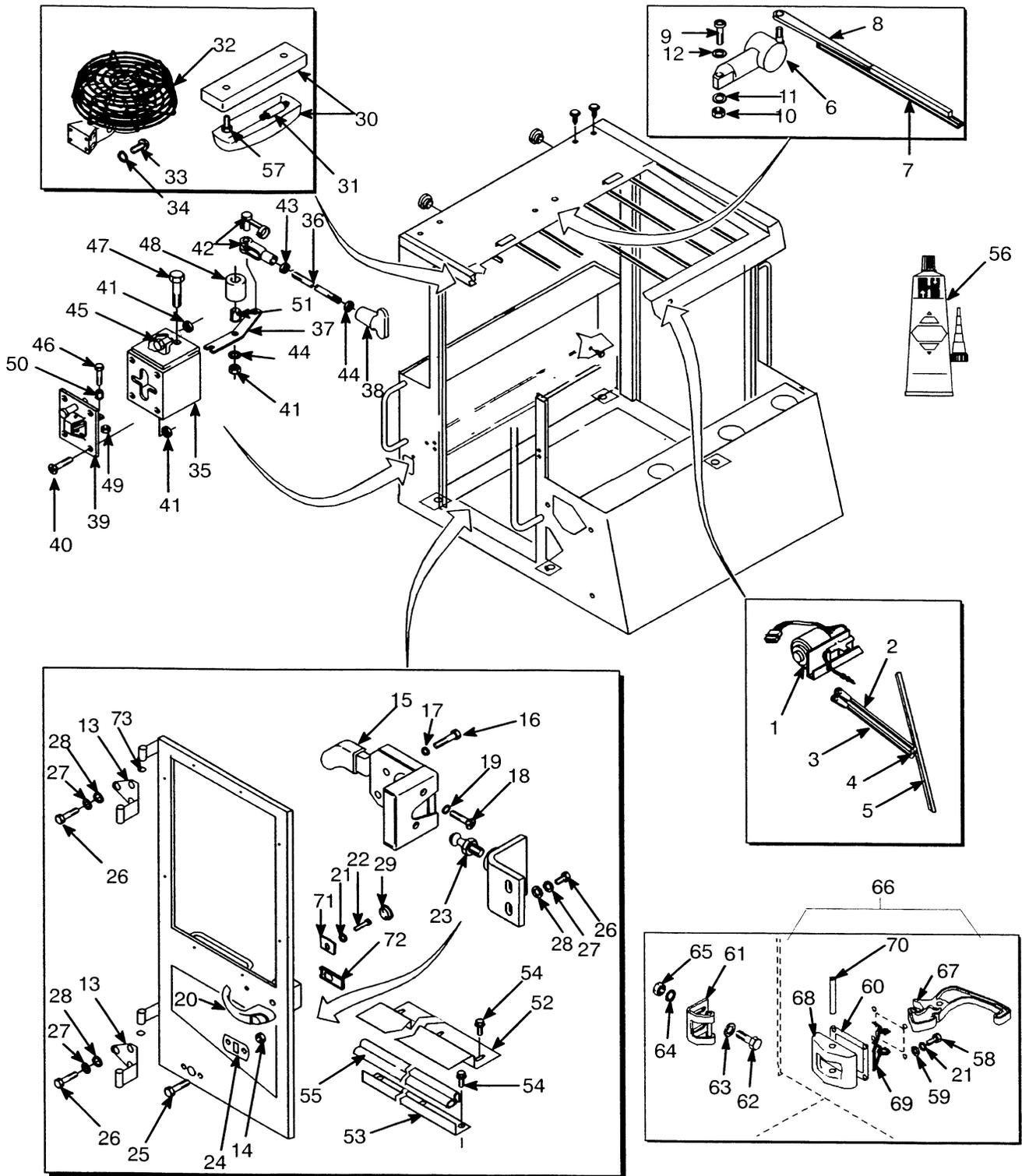
KEY:

A: Last Used On S/N D19E-2261

B: First Used On S/N D19E-2262

REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
1	1463548	Spacer	4		25	136687	Nut	12	..
2	a 1301260	Sound Liner, RH	1	..	26	292680	Lockwasher	12	4
2	a 1301261	Sound Liner, LH	1	..	27	1311288	Latch	1	1
2	b 1311432	Sound Liner, RH	1	..	28	1311287	Washer	2	2
2	b 1311433	Sound Liner, LH	1	..	29	1301088	Cover	1	1
2	a 1377730	Sound Liner, RH	1	..	30	376276	Nozzle	5	5
2	b 1377728	Sound Liner, RH	1	..	31	1325550	Cover, RH	1	1
2	a 1377731	Sound Liner, LH	1	..	32	1301109	Plate	1	..
2	b 1377729	Sound Liner, LH	1	..	32	1325617	Plate (EC3 & EC4)	1	1
3	1325619	Floor Mat	1	1	32	1325583	Plate (Non-EC)	1	1
4	1325620	Floor Mat	1	1	32	e 894417	Plate (Non-EC) .....	..	1
5	1325731	Floor Mat	1	1	32	e 894419	Plate (EC3 & EC4) .....	..	1
5	e 1460962	Floor Mat	1	1	33	376949	Cover	5	5
6	1325621	Barrier	1	1	34	376948	Frame	1	1
6	e 1456552	Barrier	1	1	35	376947	Frame	2	2
7	1325622	Barrier	1	1	36	1301746	Sound Liner	1	1
8	1325730	Barrier	1	1	37	228376	Button	6	6
9	1342664	Sound Liner	2	2	38	1311388	Door	1	1
10	329067	Screw	2	2	39	1301177	Screw	31	31
11	1301297	Plate	1	1	40	1301189	Plate	1	1
12	a 1336985	Sound Liner, RH	1	1	41	1301286	Mirror	2	2
12	b 1336986	Sound Liner, RH	1	1	42	1301255	Panel	1	1
13	a 1301263	Sound Liner, LH	1	1	43	1311217	Plug	2	2
13	b 1311430	Sound Liner, LH	1	1	44	1307737	Fastener	4	4
14	a 1325624	Sound Liner	1	1	45	1301292	Gasket, RH	1	1
14	b 1325726	Sound Liner	1	1	46	1301293	Gasket, LH	1	1
15	a 1325623	Sound Liner	1	1	47	1301208	Label	1	1
15	b 1325729	Sound Liner	1	1	48	1301209	Label	1	1
16	1301746	Sound Liner	1	1	49	1301414	Nut	4	4
17	288394	Sealant	ARAR		50	c 1325329	Cover	1	..
18	b 280644	Button	6	6	50	d 1359658	Cover, LH	1	1
19	1325519	Mount	4	4	51	302244	Screw	4	4
20	292538	Capscrew	4	4					
21	300937	Nut	4	4	a	Without Noise Reduction			
22	300939	Washer	4	4	b	With Noise Reduction			
23	1301066	Plate	2	..	c	Last Used On S/N D19D-1521			
24	353144	Capscrew	12	..	d	First Used On S/N D19D-1522			
					e	With Autoshift First Used On S/N D19D-12439			

OPERATOR COMPARTMENT (FIGURE 4) WITH CAB



**OPERATOR COMPARTMENT
WITH CAB**

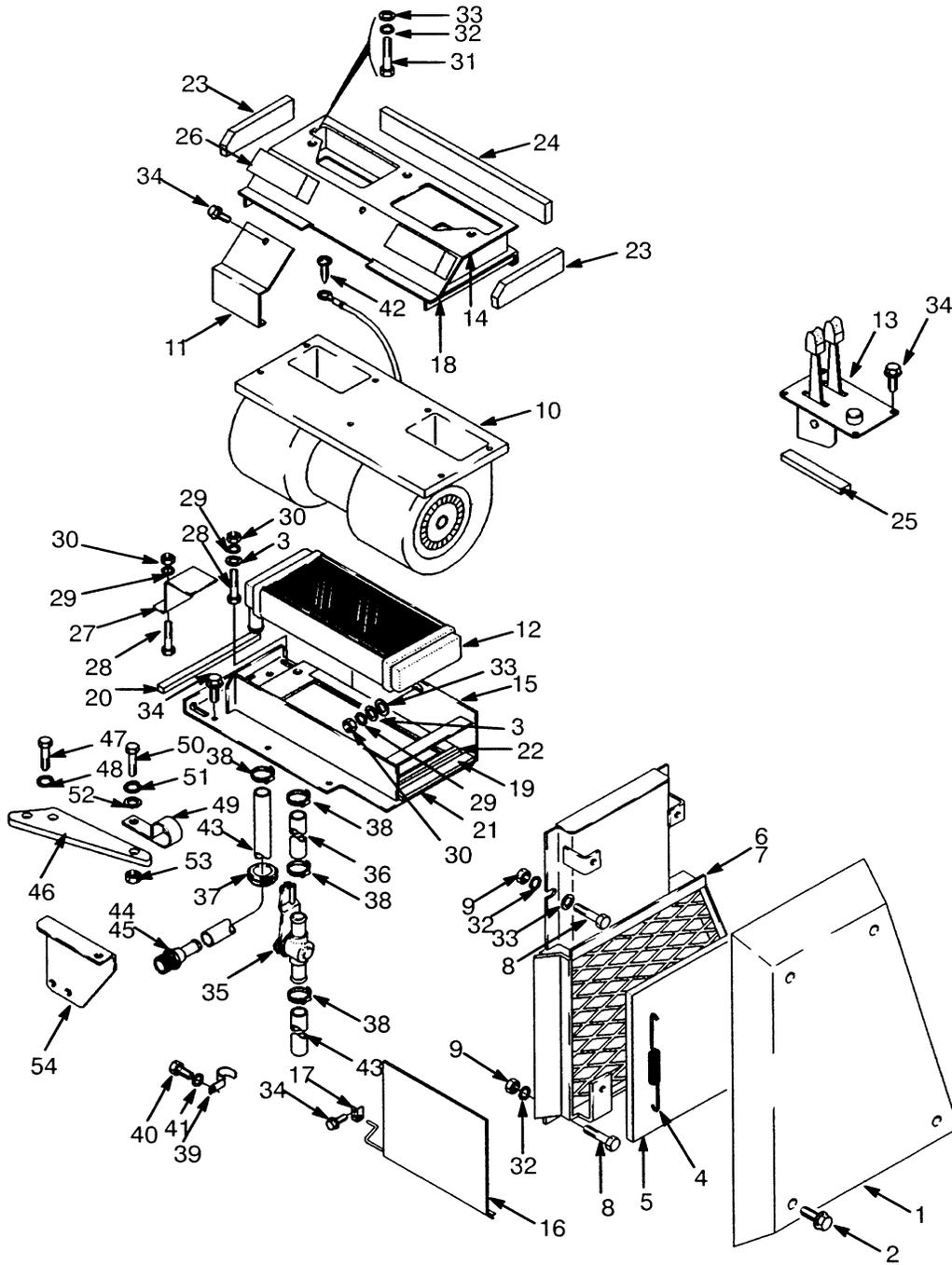
KEY:

A: Last Used On S/N D19E-2261

B: First Used On S/N D19E-2262

REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
1	334228	Wiper Motor	2	2	35	376972	Bracket	2	..
2	334234	Guide	2	2	36	376971	Link	2	..
3	334233	Wiper arm	2	2	37	376968	Link	2	..
4	334229	Bracket	2	2	38	1479124	Knob	2	..
5	334230	Kit-wiper	1	1	39	1479125	Retainer	2	..
6	1321911	Wiper Motor	1	1	40	296472	Screw	8	..
7	376953	Wiper Blade	1	1	41	302399	Nut	16	..
8	376954	Arm	1	1	42	1479126	Rod End	2	..
9	302248	Screw	1	1	43	292668	Nut	4	..
10	292668	Nut	1	1	44	320156	Washer	2	..
11	292679	Lockwasher	1	1	45	292501	Capscrew	6	..
12	320155	Washer	1	1	46	302248	Capscrew	2	..
13	1300978	Hinge, LH	2	..	47	292505	Capscrew	2	..
13	1300979	Hinge, RH	2	..	48	376970	Spacer	2	..
14	302399	Nut	4	..	49	302398	Nut	2	..
15	1309824	Door Handle, LH	1	1	50	1301026	Spacer	2	..
15	1312450	Door Handle, RH	1	1	51	1301027	Spacer	2	..
16	302248	Screw	4	4	52	1325567	Bracket	2	2
17	292679	Lockwasher	4	4	53	1325576	Bracket	2	2
18	296464	Screw	4	4	54	309637	Screw	12	12
19	296396	Washer	4	4	55	1343205	Seal	2	2
20	1319177	Handle	2	2	56	288394	Sealant	ARAR	
20	1360777	Key	1	1	57	302236	Screw	2	2
21	292680	Lockwasher	2	10	58	292500	Hex Head Bolt .....	..	8
22	302256	Screw	2	2	59	320156	Washer .....	..	8
23	365344	Bolt	2	2	60	1369496	Seal .....	..	2
24	1479123	Plate	2	..	61	1393748	Striker Plate .....	..	2
25	353144	Capscrew	4	..	62	292513	Hex Head Bolt .....	..	4
26	1301705	Capscrew	16	..	63	320159	Washer .....	..	4
27	1301707	Washer	16	..	64	292682	Lockwasher .....	..	4
28	1301706	Lockwasher	16	..	65	136692	Nut .....	..	4
29	309666	Plug	2	2	66	1374428	Latch Assy .....	..	2
30	1301254	Dome Light	1	1	67	1356943	Latch .....	..	1
31	1301256	Bulb	2	2	68	1356948	Bracket .....	..	1
32	.....	Fan	1	1	69	1358734	Spring .....	..	1
		☞ (Figure 15)			70	226774	Pin .....	..	1
33	16750	Screw	4	4	71	816377	Seal .....	..	2
34	15152	Lockwasher	4	4	72	816378	Seal .....	..	2
					73	1301700	Ring	4	4

HEATER (FIGURE 5) DIESEL

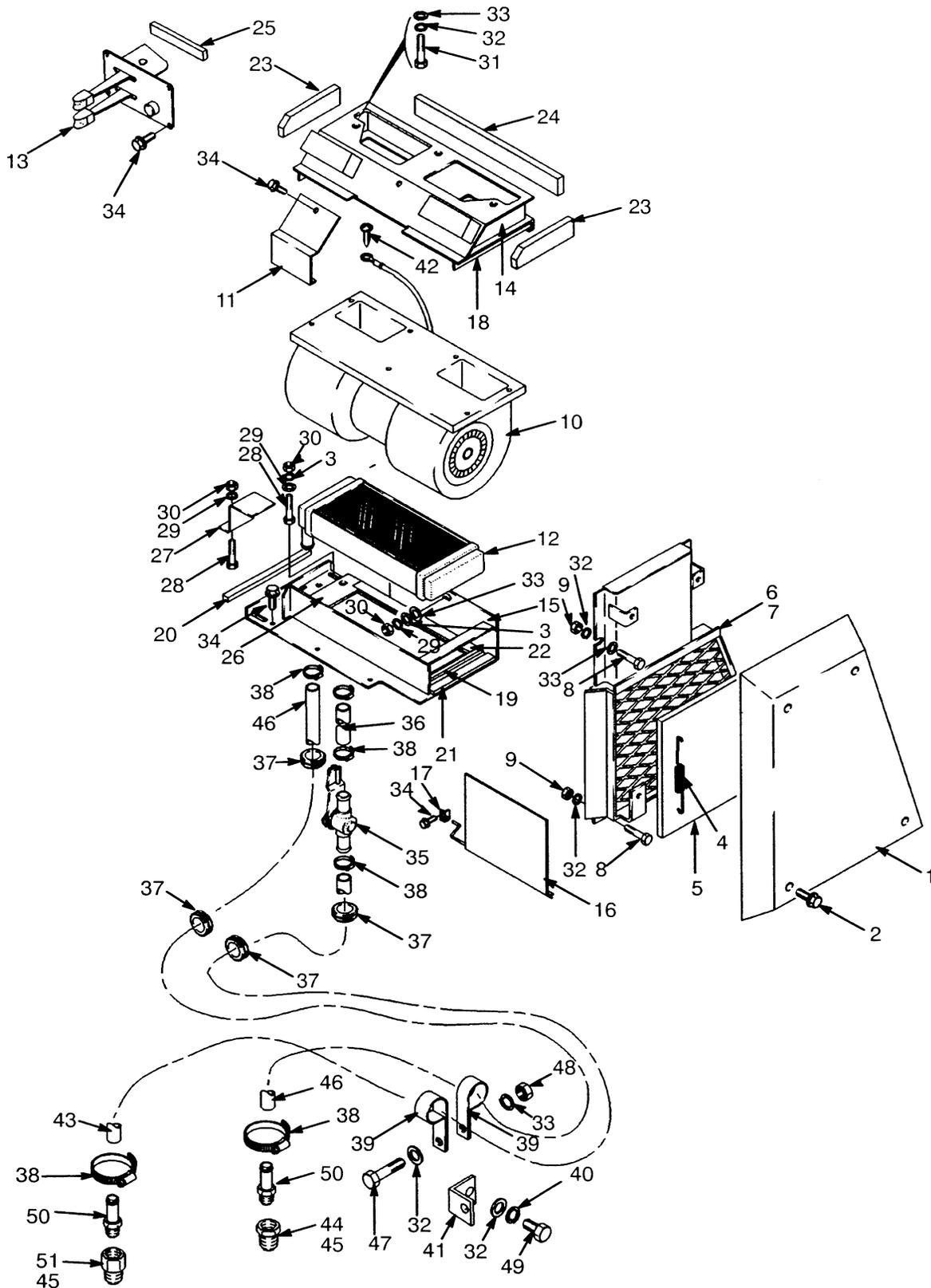


**HEATER
DIESEL**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1301326	Cover	1	26	1301399	Foam	2
2	1301708	Screw	4	27	1301400	Clamp	1
3	320156	Washer	3	28	292501	Capscrew	2
4	1301323	Spring	2	29	292680	Lockwasher	3
5	1301127	Filter	1	30	136687	Nut	3
6	280472	Sealant	AR	31	287851	Capscrew	3
7	1301310	Intake	1	32	292681	Lockwasher	7
8	136681	Capscrew	4	33	320157	Washer	6
9	239503	Nut	4	34	1301177	Screw	11
10	1311272	Blower Assy	1	35	1301001	Valve	1
10	1368150	Blower	1	36	1301598	Hose	1
10	1453030	Resistor	1	37	279752	Grommet	4
11	1301389	Retainer	1	38	130845	Clamp	6
12	376137	Core	1	39	18901	Clamp	1
13	.....	Control	1	40	302244	Screw	1
		☞ (Figure 8)		41	292679	Lockwasher	1
14	1301393	Flange	1	42	1301284	Screw	1
15	1325585	Support	1	43	125303	Hose	2
16	1325548	Damper	1	44	16156	Fitting	1
17	1301121	Bracket	2	45	246108	Thread Sealant	AR
18	1311273	Gasket	1	46	1301642	Bracket	1
19	1301395	Foam	1	47	292513	Capscrew	2
20	1301396	Foam	1	48	292682	Lockwasher	2
21	1301397	Foam	1	49	198678	Clamp	2
22	1301398	Foam	2	50	136749	Capscrew	2
23	1301404	Foam	4	51	292681	Lockwasher	2
24	1301405	Foam	1	52	320157	Washer	4
25	1301589	Foam	1	53	239503	Nut	2
				54	1309524	Bracket	1

HEATER (FIGURE 6)

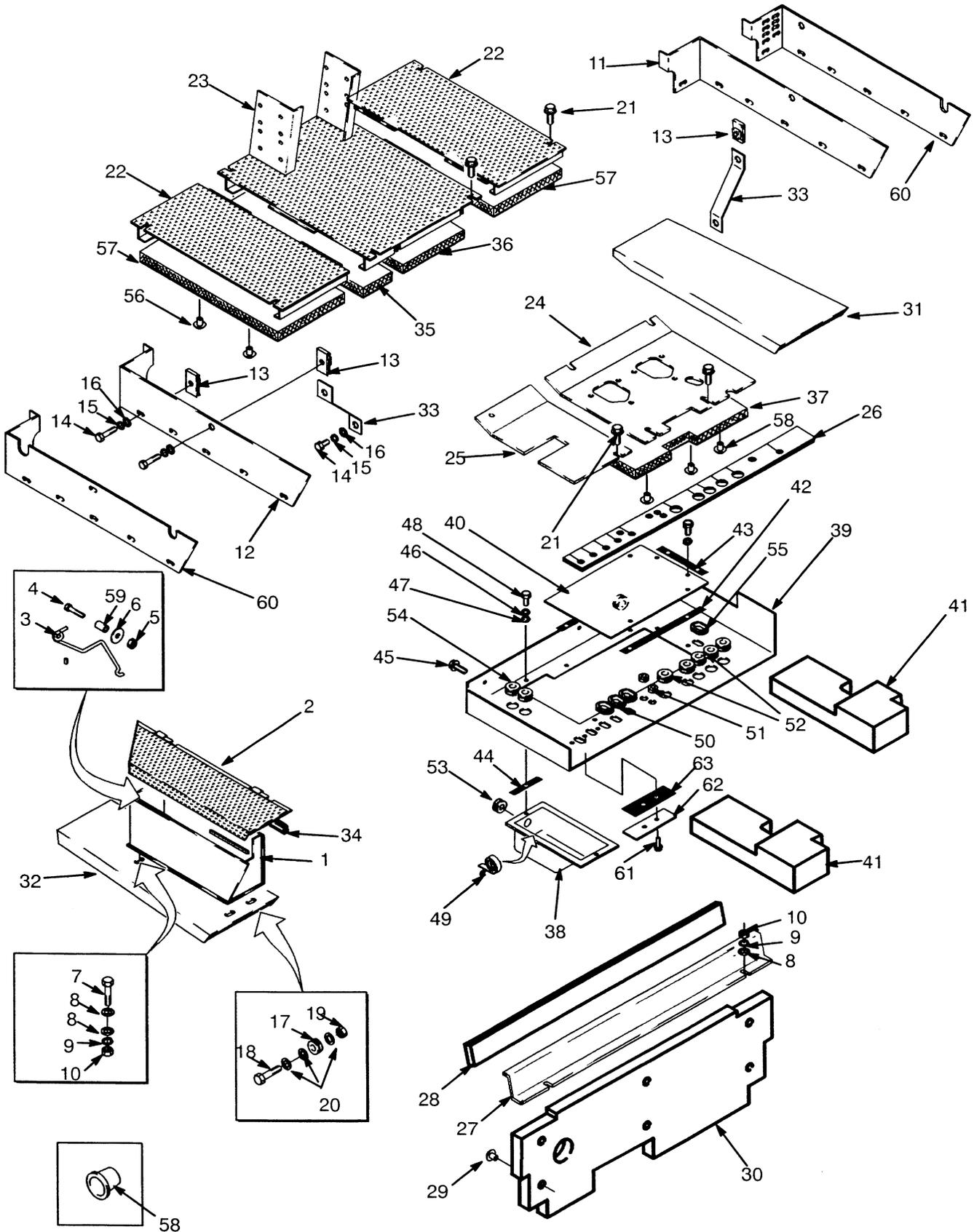
LPG



**HEATER
LPG**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1301326	Cover	1	28	292501	Capscrew	2
2	1301708	Screw	4	29	292680	Lockwasher	3
3	320156	Washer	3	30	136687	Nut	3
4	1301323	Spring	2	31	287851	Capscrew	3
5	1301127	Filter	1	32	292681	Lockwasher	7
6	280472	Sealant	AR	33	320157	Washer	6
7	1301310	Intake	1	34	1301177	Screw	11
8	136681	Capscrew	4	35	1301001	Valve	1
9	239503	Nut	4	36	1301598	Hose	1
10	1311272	Blower Assy	1	37	279752	Grommet	4
10	1368150	Blower	1	38	130845	Clamp	6
10	1453030	Resistor	1	39	198678	Clamp	2
11	1301389	Retainer	1	40	292882	Washer	1
12	376137	Core	1	41	1301642	Bracket	1
13	.....	Control	1	42	1301284	Screw	1
		☞ (Figure 8)		43	a 169593	Hose	1
14	1301393	Flange	1	43	b 123798	Hose	1
15	1325585	Support	1	44	12845	Fitting	1
16	1325548	Damper	1	45	246108	Thread Sealant	AR
17	1301121	Bracket	2	46	a 134131	Hose	1
18	1311273	Gasket	1	46	b 125303	Hose	1
19	1301395	Foam	1	47	136749	Capscrew	1
20	1301396	Foam	1	48	239503	Nut	2
21	1301397	Foam	1	49	292513	Capscrew	1
22	1301398	Foam	2	50	127852	Fitting	2
23	1301404	Foam	4	51	16344	Fitting	1
24	1301405	Foam	1				
25	1301589	Foam	1				
26	1301399	Foam	1	a	With Cab		
27	1301400	Clamp	1	b	Without Cab		

FLOORPLATES AND COVERS (FIGURE 7)

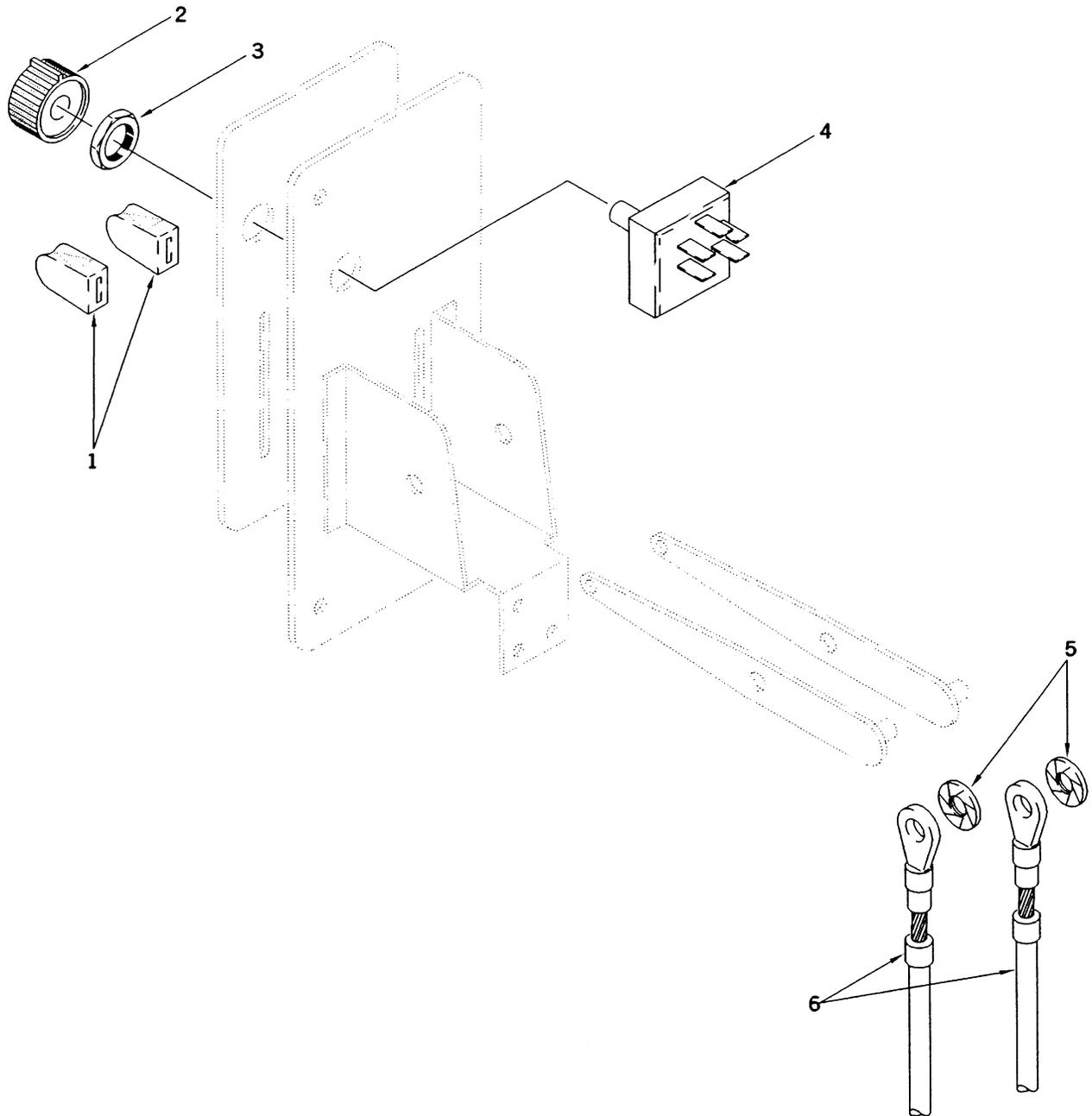


FLOORPLATES AND COVERS

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1336327	Battery Box	1	33	1319176	Brace (Up To 9/99)	2
2	f 1357424	Battery Cover	1	34	375295	Trim	2
2	1357425	Battery Cover (Optional)	1	35	b 1336671	Foam	1
2	g 1458554	Batter Cover	1	36	b 1336672	Foam	1
3	1319189	Spring	1	37	b 1336670	Foam	1
4	287816	Capscrew	2	38	b 1332915	Box	1
5	313805	Nut	1	39	b 1334521	Plate	1
6	1335832	Washer	1	40	b 1332917	Plate	1
7	287854	Capscrew	4	41	b 1334523	Foam	2
8	320160	Washer	10	42	b 1325398	Foam	2
9	292682	Lockwasher	6	43	b 1325399	Foam	1
10	136692	Nut	6	44	b 1333750	Foam	2
11	f 1325555	Cover, LH	1	45	b 329067	Screw	3
11	g 1458947	Cover, LH	1	46	b 320157	Washer	2
12	f 376801	Cover, RH	1	47	b 292681	Washer	8
12	g 1458940	Cover, RH	1	48	b 136749	Capscrew	8
13	376397	Retainer	12	49	b 186504	Tape	AR
14	18497	Capscrew	12	50	b 228342	Grommet	2
15	292681	Lockwasher	12	51	b 236890	Grommet	2
16	320158	Washer	12	52	b 392238	Grommet	5
17	216735	Grommet	14	53	b 1465553	Grommet	2
18	246001	Capscrew	14	54	b 279752	Grommet	2
19	300937	Nut	14	55	b 187791	Grommet	1
20	320162	Washer	42	56	b 280644	Button	14
21	329067	Screw	14	57	b 1325737	Foam	2
22	a 1325557	Floorplate	2	58	b 1151313	Plug	2
22	b 1336668	Floorplate	2	59	b 1335831	Bushing	1
23	a 1465376	Floorplate	1	60	c 894621	Cover, LH	1
23	1465375	Floorplate (Optional)	1	60	c 894622	Cover, RH	1
23	b 1465403	Floorplate	1	61	b 309637	Screw	2
23	1465406	Floorplate	1	62	b 1333752	Plate	1
24	a 1325551	Floorplate	1	63	b 1333753	Foam	1
24	b 1336669	Floorplate	1				
25	1301179	Floorplate	1				
26	1336982	Seal	1				
27	376999	Plate	1				
28	1451330	Foam	1				
29	d 228376	Button	6				
30	d 1359715	Foam	1				
30	e 1453259	Foam	1				
31	f 1357401	Board, LH	1				
31	g 1458552	Board, LH	1				
31	c 894863	Board (LH)	1				
32	f 1357398	Board, RH	1				
32	g 1458551	Board, RH	1				

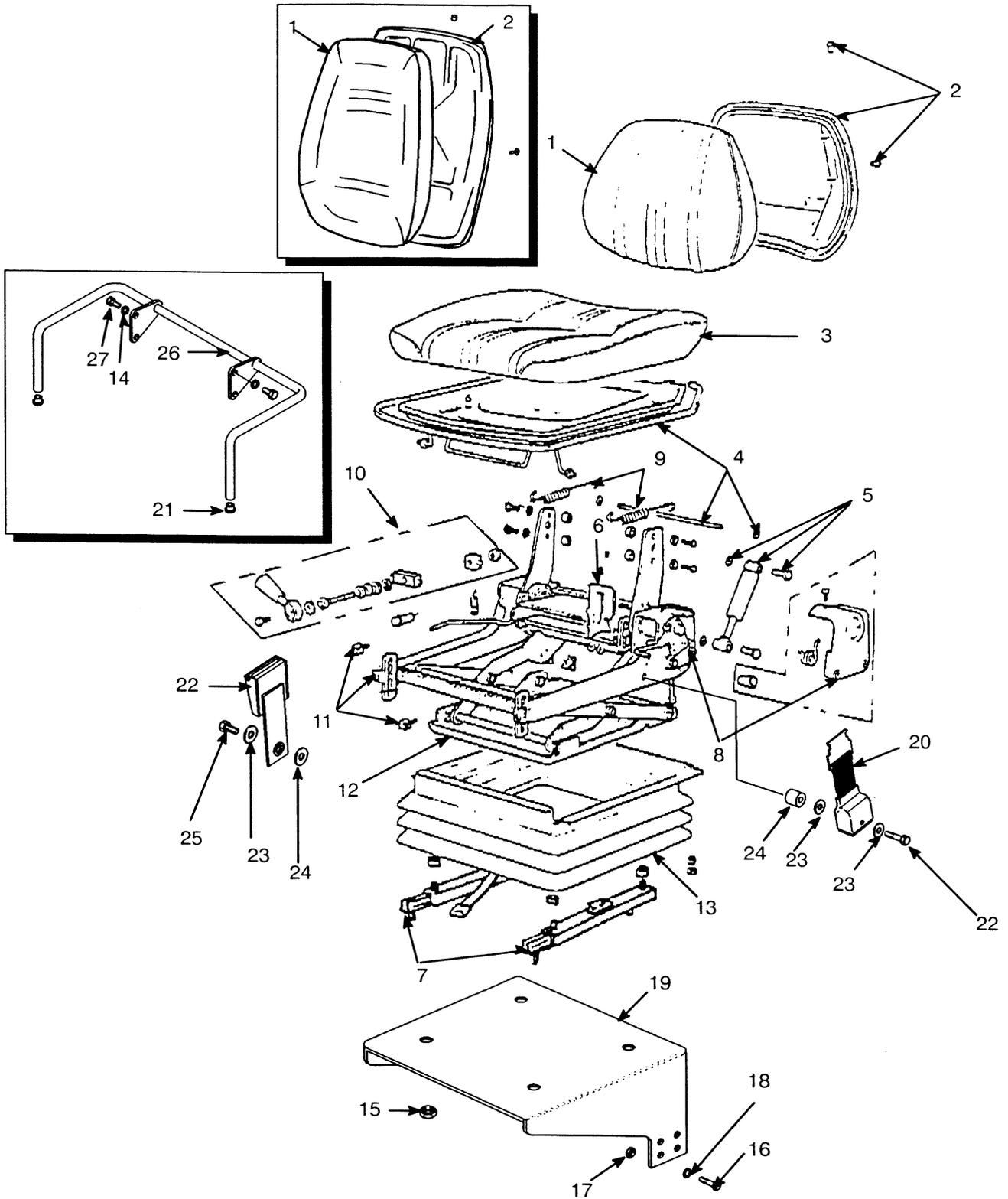
- a** Without Noise Reduction
- b** With Noise Reduction
- c** LPG Only
- d** Last Used On S/N D019E-2244
- e** First Used On S/N D019E-2245
- f** Last Used On S/N D019E-2426
- g** First Used On S/N D019E-2427

HEATER CONTROL (FIGURE 8)



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1301020	Heater Control	1	4	1313735	Switch	1
1	1313733	Knob	2	5	1313736	Nut	2
2	1313734	Knob	1	6	1313737	Cable	2
3	1313744	Nut	1				

SUSPENSION SEAT (Figure 9)



SUSPENSION SEAT

KEY

A: Vinyl Cover

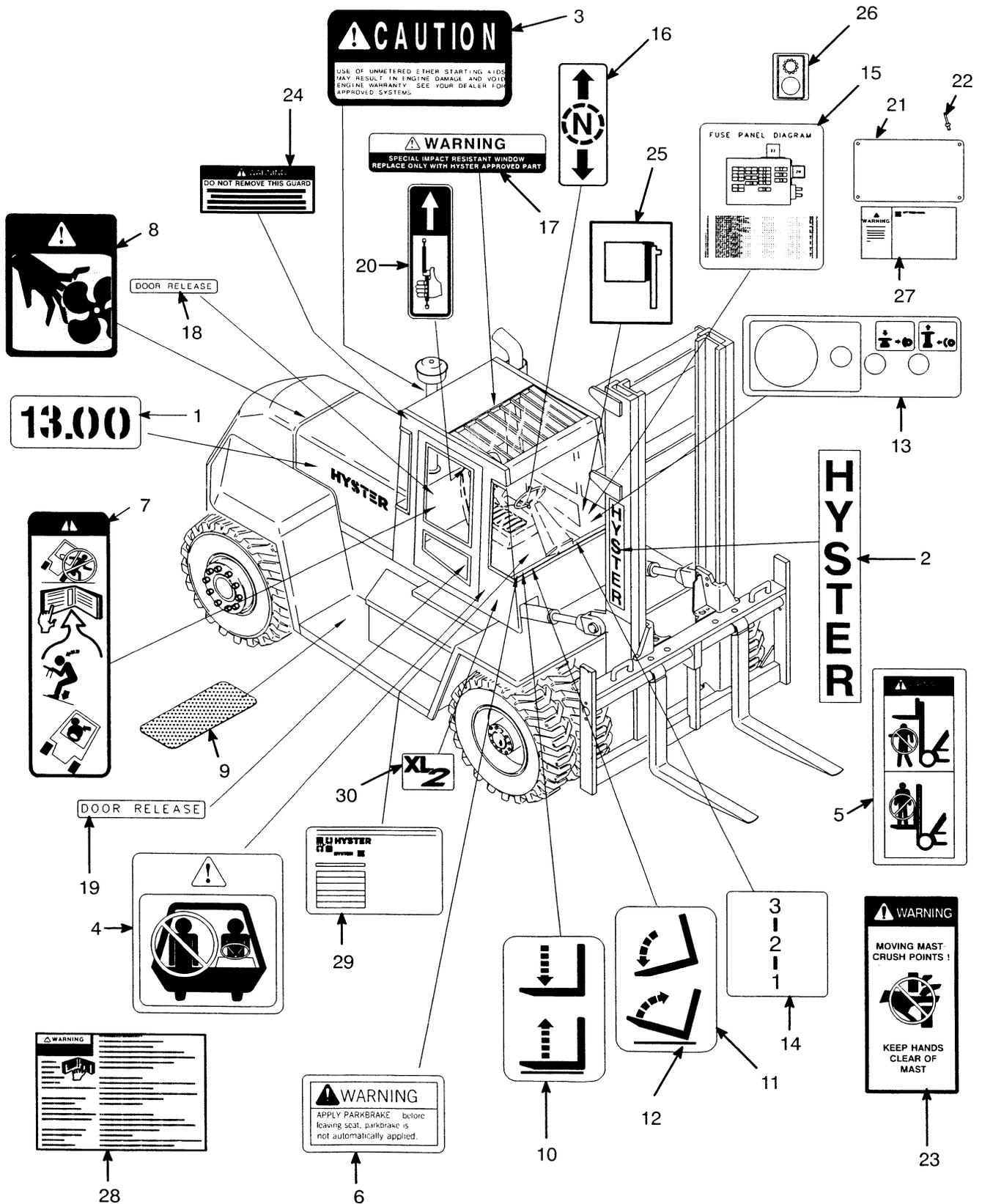
B: Fabric Cover

REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
	1325356	Seat	1	..	11	1334467	Kit-Bumper	1	1
a	1453799	Seat	1	..	12	1335575	Kit-Suspension Assembly ..	1	1
	356821	Seat .....	..	1	13	1325346	Kit-Suspension Cover	1	1
a	1453798	Seat .....	..	1	14	379675	Washer	4	4
1	1335576	Back Cushion	1	..	15	313828	Nut	4	4
1	a 1454003	Back Cushion	1	..	16	287854	Capscrew	8	8
1	359767	Back Cushion	1	..	17	136692	Nut	8	8
1	a 1454002	Back Cushion	1	..	18	292682	Lockwasher	8	8
2	1334458	Pan (Back Cushion)	1	1	19	1465381	Seat Pan	1	1
2	a 1454004	Pan (Back Cushion)	1	1	20	1374750	Seat Belt	1	1
3	1335578	Seat Cushion	1	..	21	1311409	Plug	2	2
3	1334470	Seat Cushion	1	..	22	1323115	Capscrew	1	1
4	1334461	Pan (Seat Cushion)	1	1	23	1323117	Washer	4	4
5	1335579	Damper	1	..	24	385516	Spacer	1	1
5	1334463	Damper	1	..	25	1323116	Capscrew	1	1
6	1334465	Indicator	1	1	26	1311371	Hip Restraint	1	1
7	1334468	Seat Rail	1	1	27	385514	Capscrew	4	4
8	1334464	Kit-Recliner	1	1					
9	1334466	Kit-Height Adjuster	1	1					
10	1334462	Kit-Weight Adjuster	1	1	a	With High Back			

SEMI-SUSPENSION SEAT

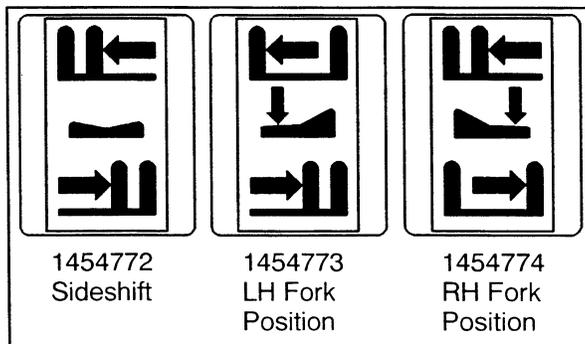
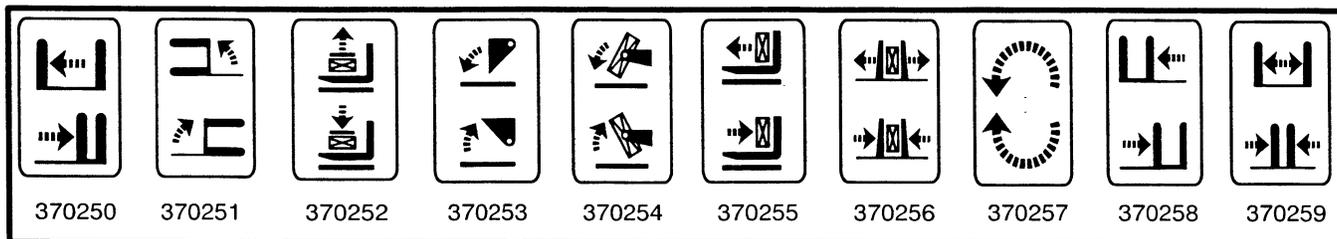
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1345826	Seat	1	16	1300107	Rod	1
1	326364	Spring	2	17	383116	Seat Rail, RH	1
2	326363	Spring	1	18	287854	Capscrew	8
3	326978	Shock Absorber	1	19	136692	Nut	8
4	326362	Knob	1	20	292682	Lockwasher	8
5	326365	Spindle	1	21	1465381	Seat Pan	1
6	326361	Back Cushion	1	22	379199	Capscrew	2
7	326360	Seat Cushion	1	23	379697	Washer	4
8	145639	Locknut	8	24	1374750	Seat Belt	1
9	18727	Capscrew	4	25	379698	Nut	2
10	335553	Seat Rail, LH	1	26	364854	Plug	4
11	18497	Capscrew	4	27	364848	Spacer	2
12	1326337	Spacer	4	28	379675	Washer	2
13	335989	Base	1	29	379674	Capscrew	2
14	335991	Information Cover	1	30	364847	Hip Restraint	1
15	222030	Rivet	4				

LABELS (FIGURE 11)

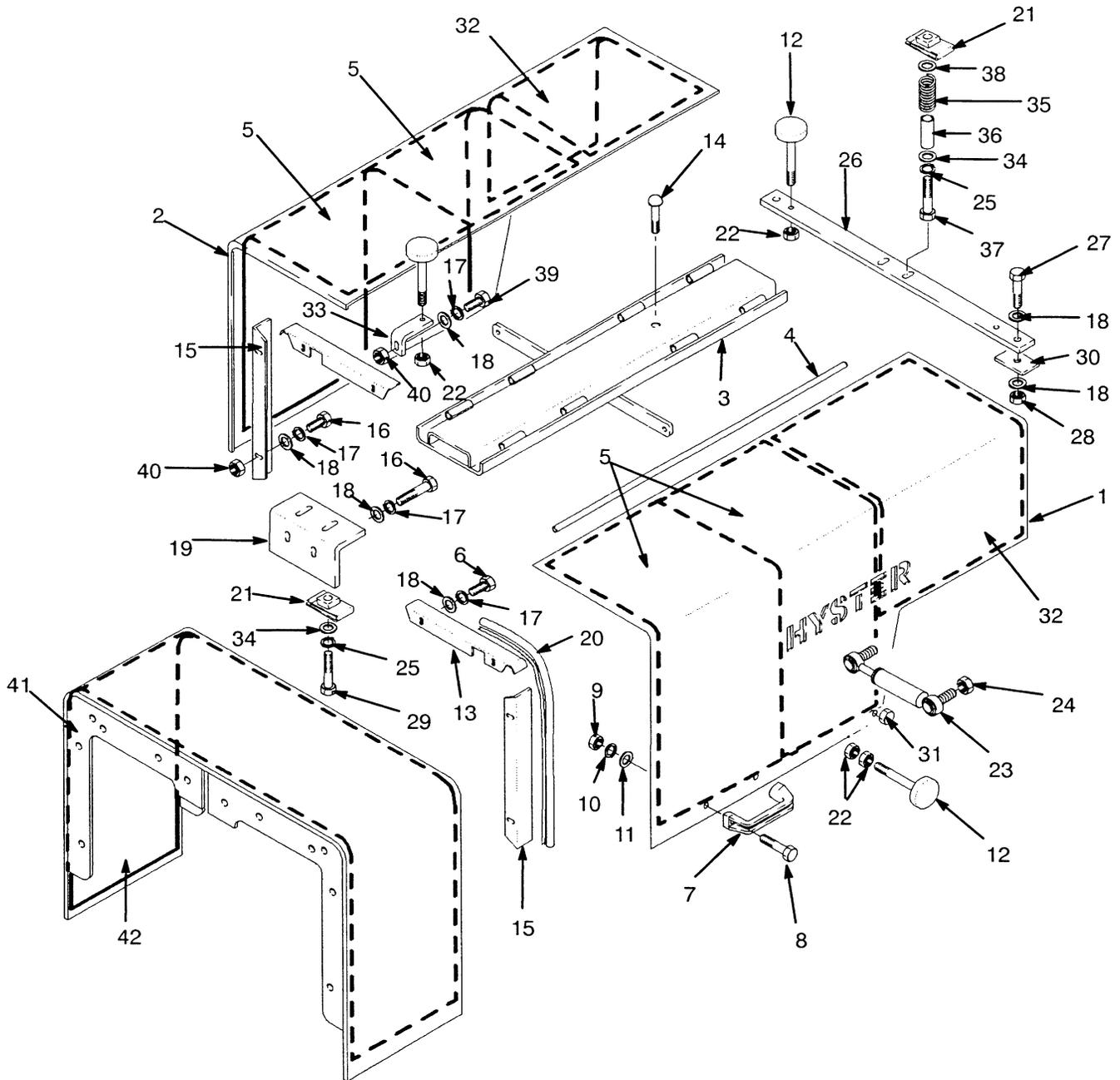


LABELS

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1303476	Label 300	2	19 ^k	1451416	Label-Door Release (w/Cab) (Located Above Door Release)	2
1	1303477	Label 330	2	20	1311423	Label-Gas Spring	1
1	1303478	Label 360	2	21	389688	Cover (Nameplate)	1
1	1326815	Label 330-EC	2	22	166818	Rivet	4
1	1326816	Label 360-EC	2	23	1346893	Label-Mast Warning	1
2	1347855	Label-Hyster	2	24	1338738	Label-Impact Resistance	1
3	2034459	Label-Ether Caution	2	25	1330576	Label-Container Attachment (Empty Container Handler)	1
4	1330920	Label-No Riders	2	26 ^g	894423	Label-Xmsn Warning Light	1
5	1335126	Label-Mast Warning	2			(Not Illustrated)	
6 ^a	1303494	Label-Park Brake	1	27	1381125	Label-Nameplate	1
6 ^b	1335146	Label-Park Brake	1	28	1336605	Label-With Operator Restraint	1
7 ^a	1335143	Label-Operator Warning	2	29	389692	Label-Trademark	1
7 ^b	1330917	Label-Operator Warning	2	30	1359706	Label-XL2	2
8	1345939	Label-Fan	2	^a		Without Operator Restraint	
9	239423	Slip Resistant Tread	2	^b		With Operator Restraint	
10	1301411	Label-Lift	1	^c		Last Used On S/N D19D-1521	
11	1301410	Label-Tilt	1	^d		First Used On S/N D19D-1522	
12 ^e	.....	Label-Auxiliary Function	1	^e		Select From Chart Below	
13 ^c	1316540	Label-Air Brake	1	^g		First Used On S/N D19D-2377	
13 ^d	1347860	Label-Air Brake	1	^h		Last Used On S/N D19E-2261	
14	1301413	Label-Gear Selection	1	^k		First Used On S/N D19E-2262	
15 ⁿ	1325613	Label-Fuses	1	ⁿ		Last Used On S/N D019-2653	
15 ^o	1458323	Label-Fuses	1	^o		First Used On S/N D019-2654	
16	1301412	Label-Forward and Reverse	1				
17	1308050	Label-Impact Resistant Window .	1				
18 ^g	377618	Label-Door Release (w/Cab)	2				
19 ^h	1301744	Label-Door Release (w/Cab)	2				



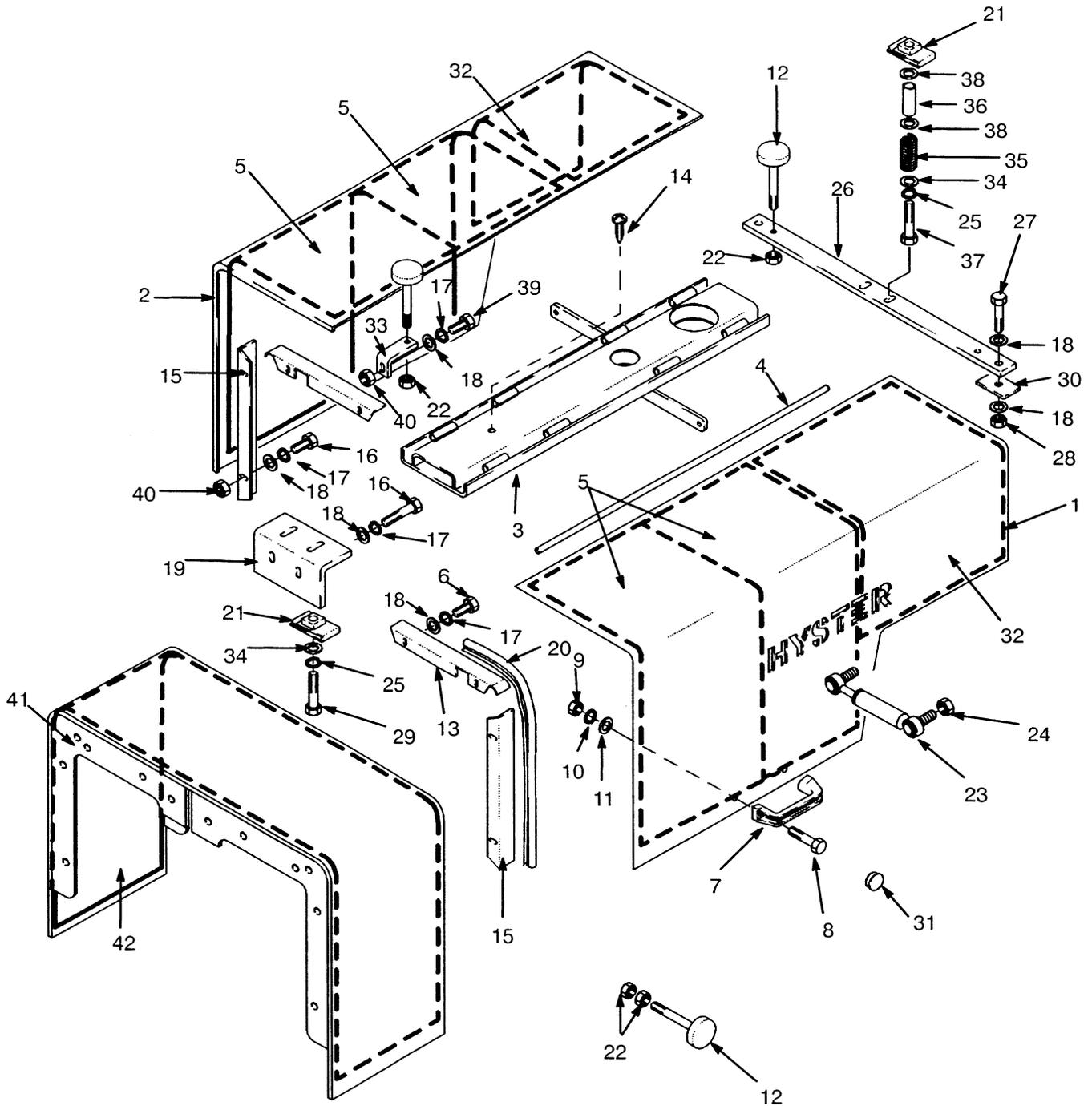
HOOD (FIGURE 12) WITHOUT LOW EMISSIONS



**HOOD
WITHOUT LOW EMISSIONS**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	a	1325336 Hood, LH	1	22	15055	Nut	8
1	b	1382762 Hood, LH	1	23	376300	Spring	2
2	a	1325338 Hood, RH	1	24	239503	Nut	4
2	b	1382758 Hood, RH	1	25	292681	Lockwasher	4
3		1357225 Channel (Non-Turbo And LPG)	1	26	387353	Crossmember	1
3		1377573 Channel (Turbo)	1	27	293639	Capscrew	2
4		376410 Rod	2	28	316826	Nut	2
5		376441 Sound Liner	4	29	18498	Capscrew	2
6		367251 Stop Screw	8	30	376402	Washer	2
7		362030 Handle	2	31	309666	Hole Plug	2
8		292501 Capscrew	4	32	376442	Sound Liner	2
9		136687 Nut	4	33	376567	Bracket	2
10		292680 Lockwasher	4	34	320157	Washer	4
11		320156 Washer	4	35	1301702	Spring	2
12		367251 Screw	6	36	1301703	Spacer	2
13		376447 Bracket, LH	1	36	894480	Spacer (LPG)	2
13		376448 Bracket, RH	1	37	18516	Capscrew	2
14		1311346 Fastener	1	37	18508	Capscrew (LPG)	2
15		1303281 Bracket, LH	1	38	296422	Washer	4
15		1303282 Bracket, RH	1	39	287860	Capscrew	4
16		136985 Capscrew	20	40	136692	Nut	12
17		292682 Lockwasher	24	41	387348	Plate	1
18		296421 Flatwasher	40	42	387356	Sound Liner	2
19		376400 Bracket	1				
20		300088 Seal	1	a	Last Used On S/N D19D-1722		
21		376397 Retainer	4	b	First Used On S/N D19D-1723		

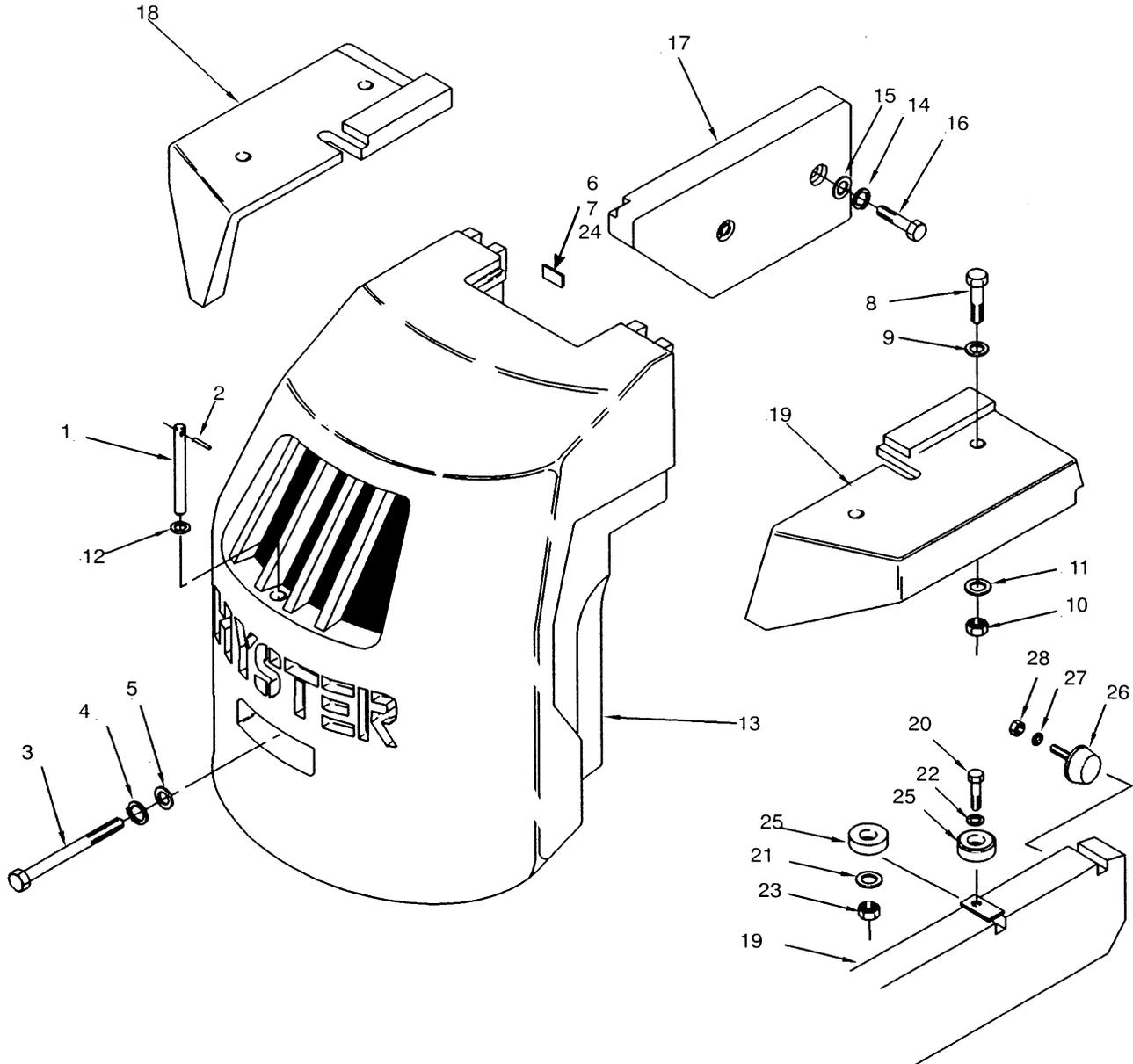
HOOD (FIGURE 13) WITH LOW EMISSIONS FIRST USED ON S/N D19D-2377



HOOD
WITH LOW EMISSIONS
FIRST USED ON S/N D19D-2377

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1382762	Hood, LH	1	22	15055	Nut	8
2	1382758	Hood, RH	1	23	376300	Spring	2
3	1455867	Channel	1	24	239503	Nut	4
4	376410	Rod	2	25	292681	Lockwasher	4
5	376441	Sound Liner	4	26	387353	Crossmember	1
6	367251	Stop Screw	8	27	293639	Capscrew	2
7	362030	Handle	2	28	316826	Nut	2
8	292501	Capscrew	4	29	18498	Capscrew	2
9	136687	Nut	4	30	376402	Washer	2
10	292680	Lockwasher	4	31	309666	Hole Plug	2
11	320156	Washer	4	32	376442	Sound Liner	2
12	367251	Screw	6	33	376567	Bracket	2
13	376447	Bracket, LH	1	34	320157	Washer	4
13	376448	Bracket, RH	1	35	1301702	Spring	2
14	1311346	Fastener	1	36	1301703	Spacer	2
15	1303281	Bracket, LH	1	37	18516	Capscrew	2
15	1303282	Bracket, RH	1	38	296422	Washer	4
16	136985	Capscrew	20	39	287860	Capscrew	4
17	292682	Lockwasher	24	40	136692	Nut	12
18	296421	Flatwasher	40	41	387348	Plate	1
19	376400	Bracket	1	42	387356	Sound Liner	2
20	300088	Seal	1				
21	376397	Retainer	4				

COUNTERWEIGHT (FIGURE 14)



COUNTERWEIGHT

KEY:

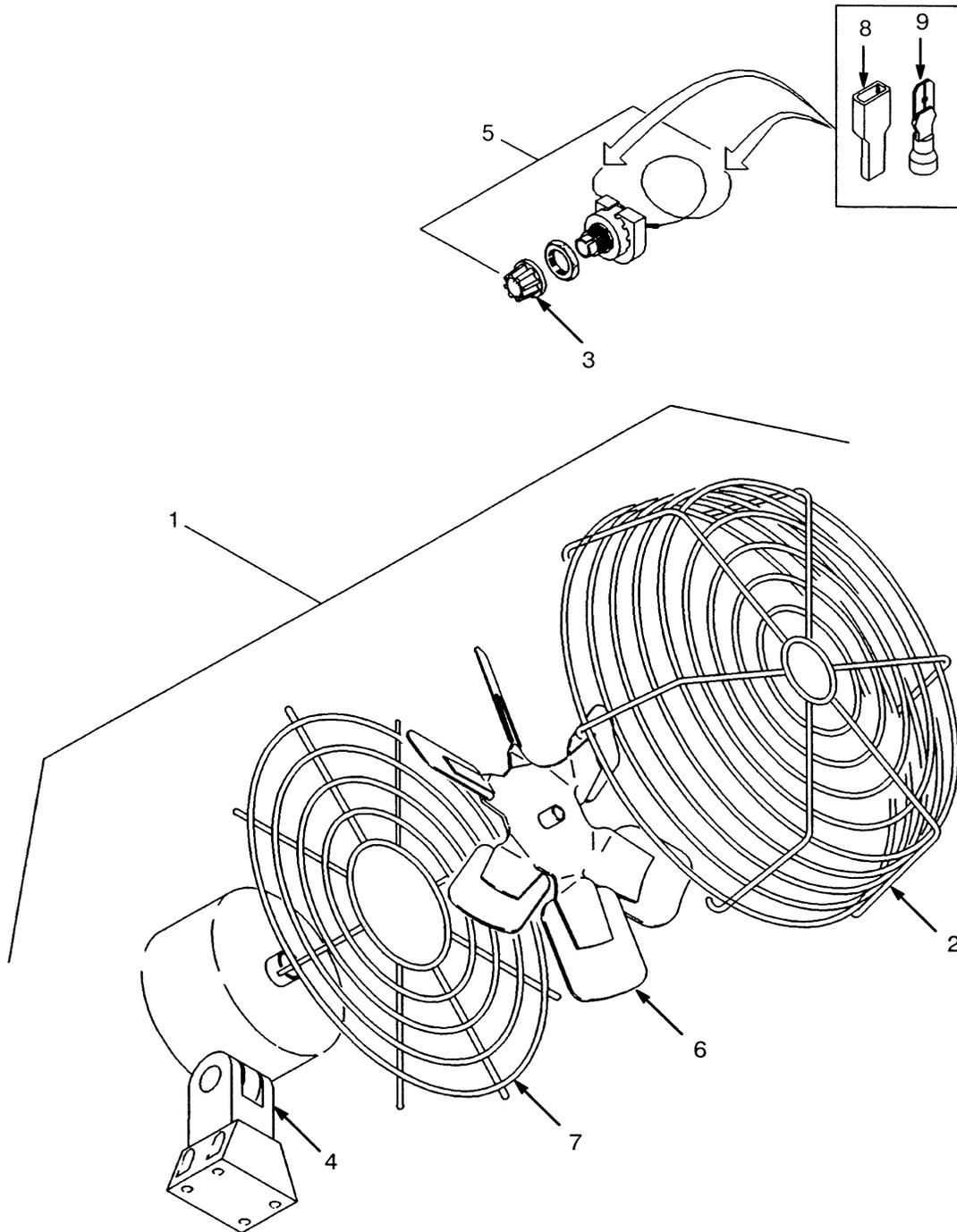
- A: H300XL
- B: H330XL
- C: H360XL
- D: H360XL-EC

REF	PART NO.	NAME OF PART	QTY			
			A	B	C	D
1	376318	Pin	1	1	1	1
2	1458191	Pin	1	1	1	1
3	c 376319	Capscrew	1	1	..	..
3	d 1453470	Capscrew	1	1	..	..
3	c 1303274	Capscrew .....	..	1	1	
3	d 1453469	Capscrew .....	..	1	1	
4	c 149531	Washer	1	1	1	1
4	d 221786	Washer	2	2	2	2
5	c 15168	Washer	1	1	1	1
5	d 15170	Washer	1	1	1	1
6	352909	Plate	AR	AR	AR	AR
7	280472	Sealant	AR	AR	AR	AR
8	292598	Capscrew	8	8	8	8
9	296431	Washer	4	4	4	4
10	316829	Nut	4	4	4	4
11	1301086	Washer	4	4	4	4
12	15189	Washer	1	1	1	1
13	376245	Counterweight	1	1	..	..
13	387358	Counterweight .....	..	1	1	
14	15166	Lockwasher .....	..	4	4	
15	38556	Flatwasher .....	..	4	4	
16	18678	Capscrew .....	..	4	4	
17	1359712	Counterweight	2	2	2	
18	1303271	Fender, RH	1	1	1	1

REF	PART NO.	NAME OF PART	QTY			
			A	B	C	D
18	1303272	Fender, LH	1	1	1	1
19	a 1331561	Fender, RH .....	..	..	..	1
19	b 816136	Fender, RH .....	..	..	..	1
19	a 1331562	Fender, LH .....	..	..	..	1
19	b 816137	Fender, LH .....	..	..	..	1
20	a 292566	Capscrew .....	..	..	..	4
20	b 293696	Capscrew .....	..	..	..	4
21	a 292685	Lockwasher .....	..	..	..	4
21	b 816138	Lockwasher .....	..	..	..	4
22	1331575	Washer .....	..	..	..	4
23	a 292600	Nut .....	..	..	..	4
23	b 316828	Nut .....	..	..	..	4
24	816043	Shim	AR	AR	AR	AR
25	b 1373270	Isolator .....	..	..	..	4
26	b 816231	Stop .....	..	..	..	4
27	b 216877	Nut .....	..	..	..	4
28	b 296130	Nut .....	..	..	..	4

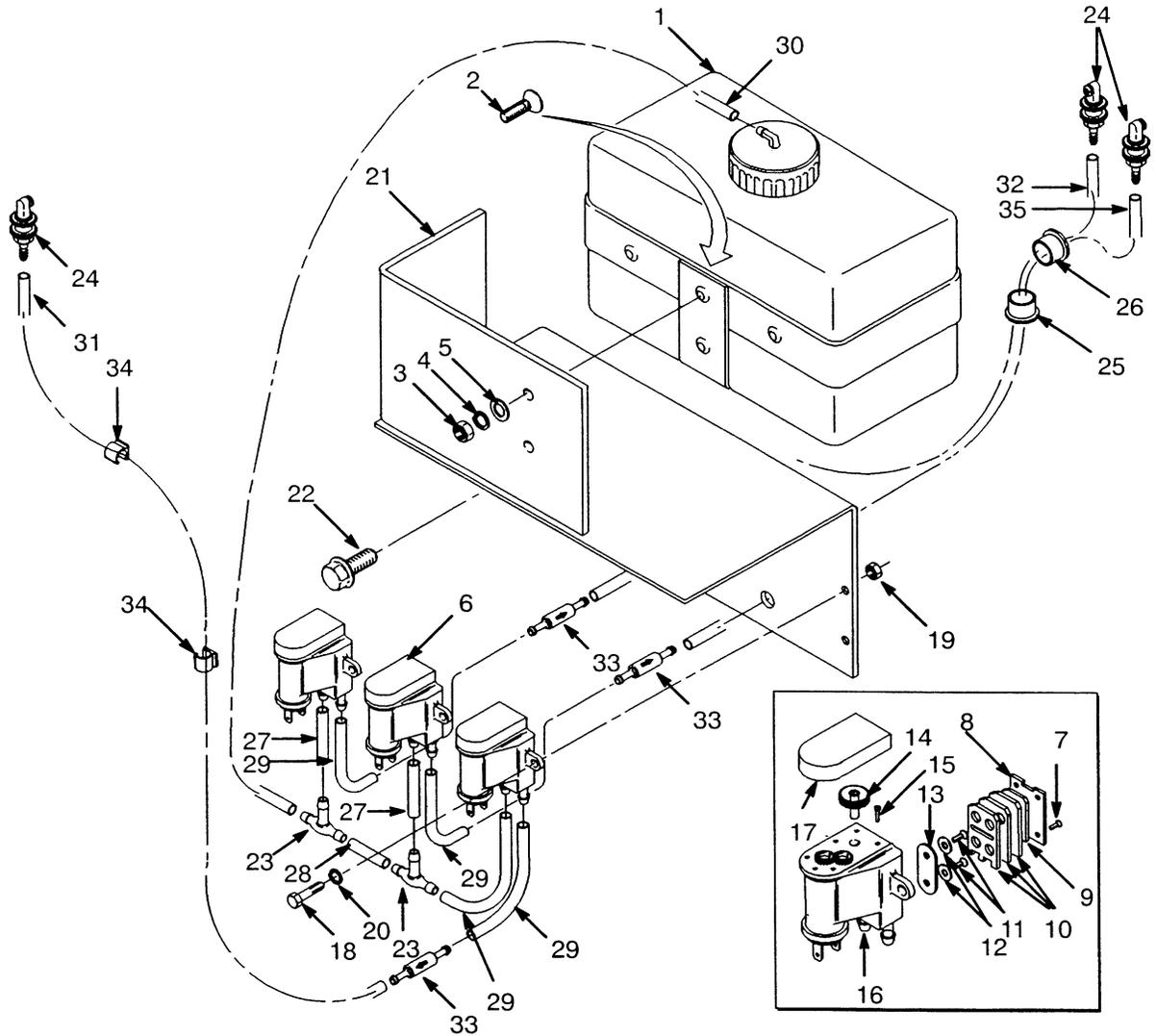
- a** Last Used On S/N D019E-1931
- b** First Used On S/N D019E-1932
- c** Last Used On S/N D019D-2422
- d** First Used On S/N D019D-2423

FAN (FIGURE 15)



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1311213	Fan	1	6	.....	Fan	1
2	Guard (Front)	1	7	.....	Guard (Rear)	1
3	Knob	1	8	181045	Connector	1
4	Motor	1	9	134810	Connector	1
5	Switch	1				

WINDSHIELD WASHER (FIGURE 16)



WINDSHIELD WASHER

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1311267	Reservoir	1	21	1325604	Bracket	1
2	296472	Screw	2	22	329067	Screw	2
3	136687	Nut	2	23	1311260	Fitting	2
4	292680	Lockwasher	2	24	1301686	Nozzle	3
5	197068	Washer	2	25	286901	Bushing	1
6	1301684	Pump	3	26	1301424	Bushing	1
7	.....	Screw	4	27	1311295	Hose	2
8	.....	Plate	1	28	1311296	Hose	1
9	.....	Shim	1	29	1311297	Hose	4
10	.....	Plate	3	30	1326772	Hose	1
11	.....	Screw	2	31 a	86520	Hose	1
12	.....	Pad	2	31 b	1467588	Hose	1
13	.....	Membrane	1	32	1311300	Hose	1
14	.....	Gear	1	33	1301685	Valve	3
15	.....	Screw	2	34	1301727	Adhesive Clamp	2
16	.....	Motor	1	35 b	1467586	Hose	1
17	.....	Cap	1				
18	302036	Screw	6	a	Last Used On S/N Pending Per ECN 99744-16		
19	292668	Nut	6	b	First Used On S/N Pending Per ECN 99744-16		
20	292679	Lockwasher	6				

ENGINE

AIR DUCTS (Figure 56)
DIESEL TURBO Page 104

AUXILIARY DRIVE GEAR (Figure 35)
DIESEL
LAST USED ON S/N D19D-1756 ALSO 1758 EXCEPT 1753 Page 70

AUXILIARY DRIVE GEAR (Figure 36)
DIESEL
FIRST USED ON S/N D19D-1757 ALSO 1753 EXCEPT 1758 Page 72

COOLING (Figure 21)
DIESEL TURBO AND NON-TURBO Page 44

COOLING (Figure 22)
LPG Page 46

CRANKSHAFT & PISTON (Figure 28)
DIESEL NON-TURBO Page 56

CRANKSHAFT & PISTON (Figure 29)
DIESEL TURBO WITH AND WITHOUT LOW EMISSIONS
..... Page 58

CYLINDER BLOCK (Figure 58)
LPG Page 108

CYLINDER BLOCK (Figure 25)
DIESEL NON TURBO Page 50

CYLINDER BLOCK (Figure 26)
DIESEL TURBO WITHOUT LOW EMISSIONS Page 52

CYLINDER BLOCK (Figure 27)
DIESEL TURBO WITH LOW EMISSIONS
FIRST USED ON S/N D19D-2377 Page 54

CYLINDER HEAD AND VALVES (Figure 59)
LPG Page 110

CYLINDER HEAD (Figure 30)
DIESEL NON-TURBO Page 60

CYLINDER HEAD (Figure 31)
DIESEL TURBO WITHOUT LOW EMISSIONS Page 62

CYLINDER HEAD (Figure 32)
DIESEL TURBO WITH EMISSIONS
FIRST USED ON S/N D19D-2377 Page 64

EXHAUST (Figure 18)
DIESEL NON-TURBO Page 39

ENGINE (CONTINUED)

EXHAUST (Figure 19) DIESEL TURBO	Page 40
EXHAUST (Figure 20) LPG	Page 42
FLYWHEEL (Figure 23) DIESEL	Page 48
FLYWHEEL (Figure 24) LPG	Page 49
INTAKE MANIFOLD (Figure 60) LPG	Page 112
LUBRICANT SYSTEM (Figure 57) DIESEL TURBO	Page 106
MANIFOLDS (Figure 48) DIESEL NON-TURBO	Page 91
MANIFOLDS (Figure 49) DIESEL TURBO WITHOUT LOW EMISSIONS	Page 92
MANIFOLDS (Figure 50) DIESEL TURBO WITH EMISSIONS	Page 93
OIL FILTER (Figure 43) DIESEL NON-TURBO LAST USED ON S/N D19D-1756 INCLUDING 1758 EXCEPT 1753	Page 86
OIL FILTER (Figure 44) DIESEL NON-TURBO FIRST USED ON S/N D19D-1757 INCLUDING 1753 EXCEPT 1758 ...	Page 87
OIL FILTER (Figure 45) DIESEL TURBO WITHOUT LOW EMISSIONS UP TO ENGINE S/N U647451C	Page 88
OIL FILTER (Figure 46) DIESEL TURBO WITHOUT LOW EMISSIONS ENGINE S/N U647452C AND UP	Page 89
OIL FILTER (Figure 47) DIESEL TURBO WITH LOW EMISSIONS	Page 90
OIL PAN (Figure 38) DIESEL TURBO WITHOUT LOW EMISSIONS	Page 76
OIL PAN (Figure 39) DIESEL TURBO WITH LOW EMISSIONS	Page 78

ENGINE (CONTINUED)

OIL PAN (Figure 37)
DIESEL NON-TURBO Page 74

OIL PUMP AND PAN (Figure 61)
LPG Page 114

POWERTRAIN MOUNT (Figure 17) Page 38

TIMING GEAR (Figure 33)
DIESEL NON TURBO Page 66

TIMING GEAR (Figure 34)
DIESEL TURBO WITH AND WITHOUT LOW EMISSIONS Page 68

TURBOCHARGER (Figure 54)
DIESEL TUBO Page 100

TURBOCHARGER (Figure 55)
DIESEL TURBO
FIRST USED ON S/N D19D-2377 Page 102

VALVE COVER (Figure 40)
DIESEL NON-TURBO Page 80

VALVE COVER (Figure 41)
DIESEL TURBO WITHOUT LOW EMISSION Page 82

VALVE COVER (Figure 42)
DIESEL TURBO WITH EMISSIONS
FIRST USED ON S/N D19D-2377 Page 84

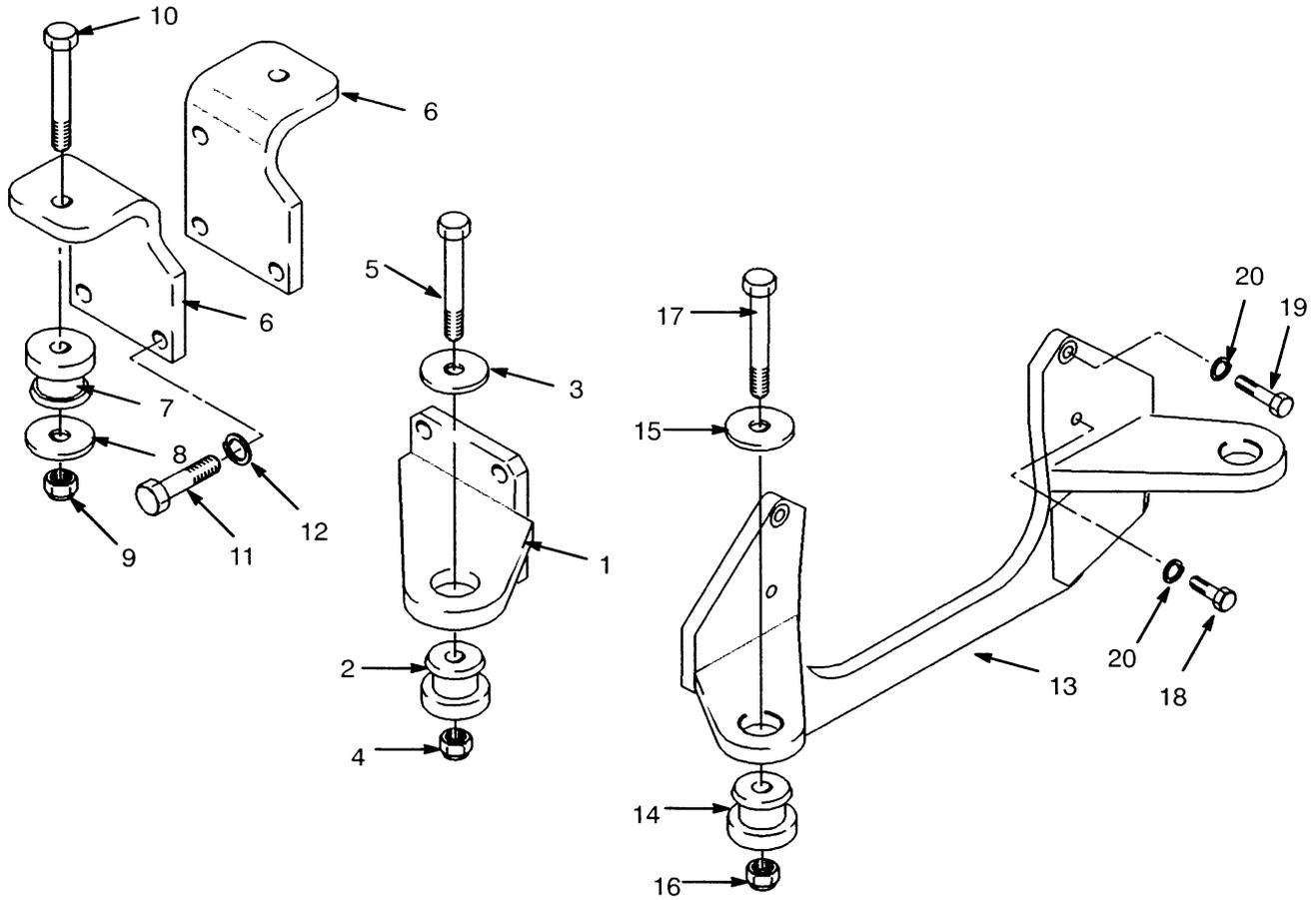
WATER PUMP (Figure 51)
DIESEL
LAST USED ON S/N D19D-1756 ALSO 1758 EXCEPT 1753 Page 94

WATER PUMP (Figure 52)
DIESEL
FIRST USED ON S/N D19D-1757 ALSO 1753 EXCEPT 1758 Page 96

WATER PUMP (Figure 53)
DIESEL TURBO WITH LOW EMISSIONS
FIRST USED ON S/N D19D-2377 Page 98

WATER PUMP (Figure 62)
LPG Page 116

POWERTRAIN MOUNT (FIGURE 17)

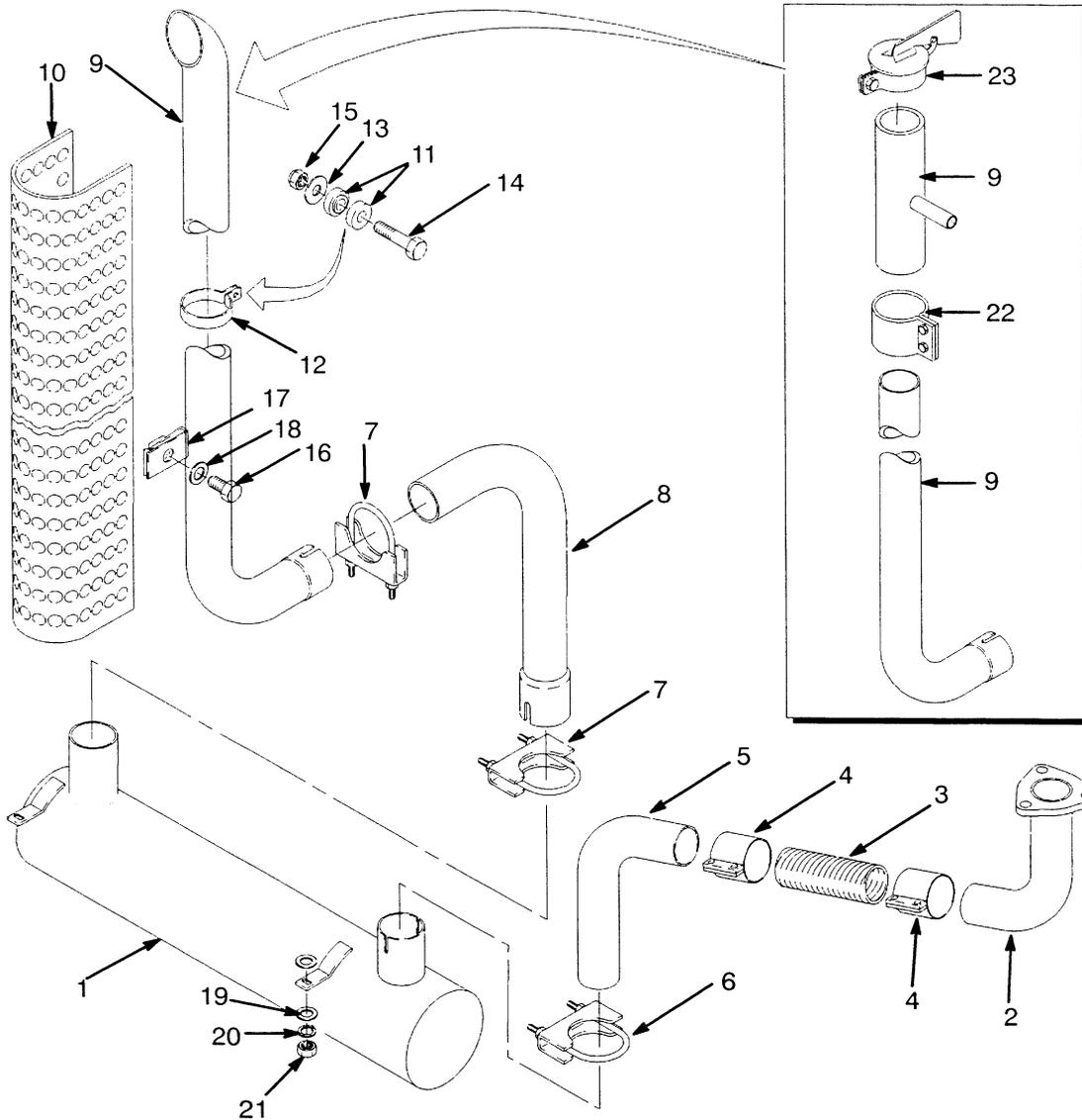


KEY

- A Diesel Engine**
- B LPG Engine**

REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
1	a	1301605 Mount	2	..	11	292581 Capscrew	6	..	
1	b	1394108 Mount	2	..	12	292687 Lockwasher	6	..	
2	a	173307 Mount	2	..	13	1452406 Engine Mount	1	..	
2	b	1393708 Isolator	2	..	14	a	173307 Motor Mount	2	..
3		1452404 Washer	2	..	14	b	1393708 Isolator	2	..
4		221357 Nut	2	..	15		1452404 Washer	2	..
5	a	18608 Bolt	2	..	16		221357 Nut	2	..
5	b	18612 Bolt	2	..	17	a	18611 Capscrew	2	..
6		1327682 Plate	2	..	17	b	18612 Capscrew	2	..
7	a	376981 Mount	2	..	18		131136 Capscrew	3	..
7	b	1393707 Isolator	2	..	19		163180 Capscrew	1	..
8	a	159368 Washer	2	..	20		15157 Washer	4	..
8	b	1452404 Washer	2	..		a	Last Used On S/N D19D-2310 Includes 2312, 2313, 2314, 2318, Except S/N 2316,		
9	a	221358 Locknut	2	..		b	First Used On S/N D19D-2311 Includes 2316 Except S/N 2312, 2313, 2314, 2318		
9	b	221357 Locknut	2	..					
10	a	18628 Capscrew	2	..					
10	b	18612 Bolt	2	..					

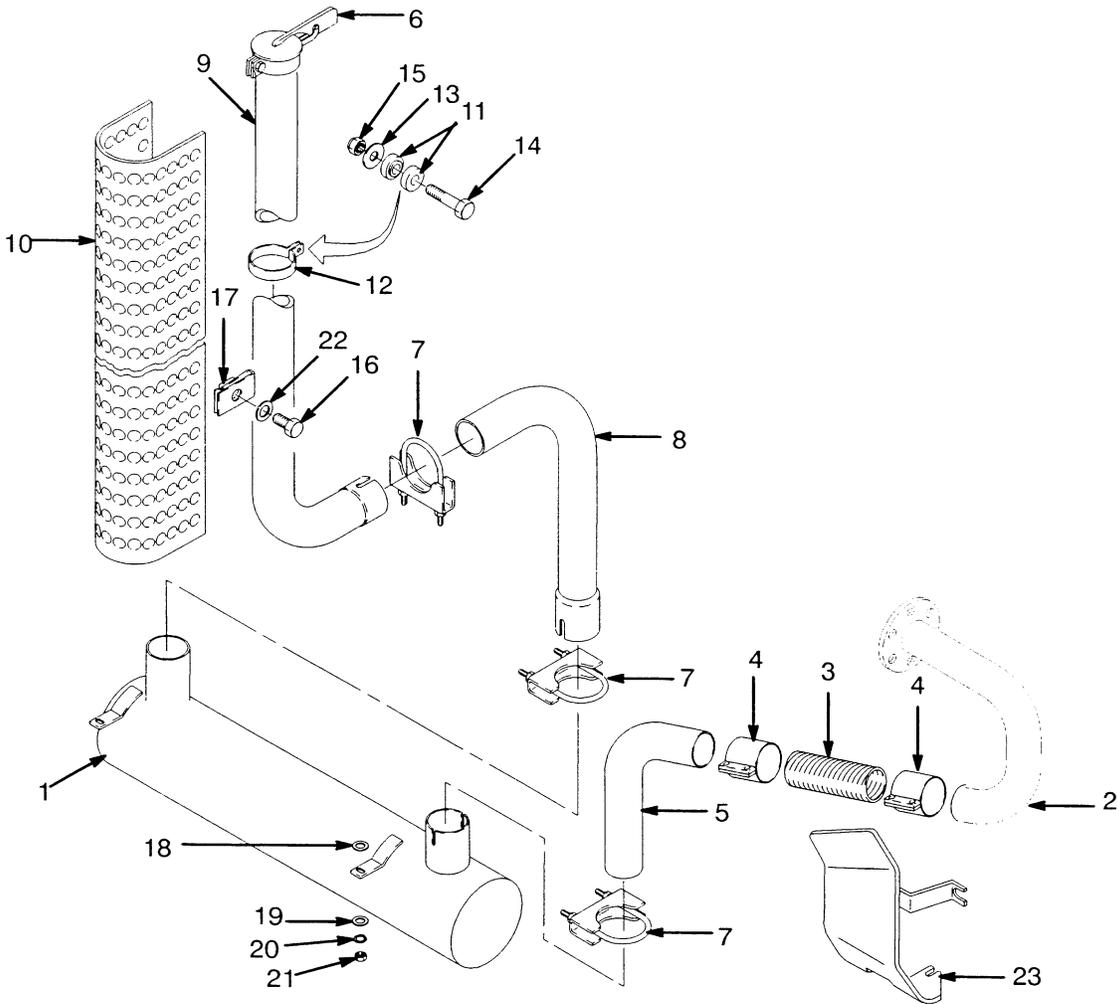
**EXHAUST (FIGURE 18)
DIESEL NON-TURBO**



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1327706	Muffler	1	14	16815	Capscrew	2
2	376271	Exhaust Pipe	1	15	145641	Nut	2
3	1301586	Tube	1	16	16374	Capscrew	3
4	270825	Clamp	2	17	376397	Retainer	3
5	376270	Exhaust Pipe	1	18	18515	Washer	3
6	30372	Clamp	1	19	320159	Washer	2
7	30374	Clamp	2	20	292682	Lockwasher	2
8	1327702	Exhaust Pipe	1	21	136692	Nut	2
9 a	1325553	Overhead Exhaust Pipe	1	22 b	270825	Clamp	1
9 b	1358337	Overhead Exhaust Pipe	1	23 b	1361200	Cap	1
10	1377561	Shield	1				
11	223216	Bushing	4				
12	376255	Clamp	2				
13	15176	Washer	2				

a Non Aspirated
b Aspirated

EXHAUST (FIGURE 19) DIESEL TURBO

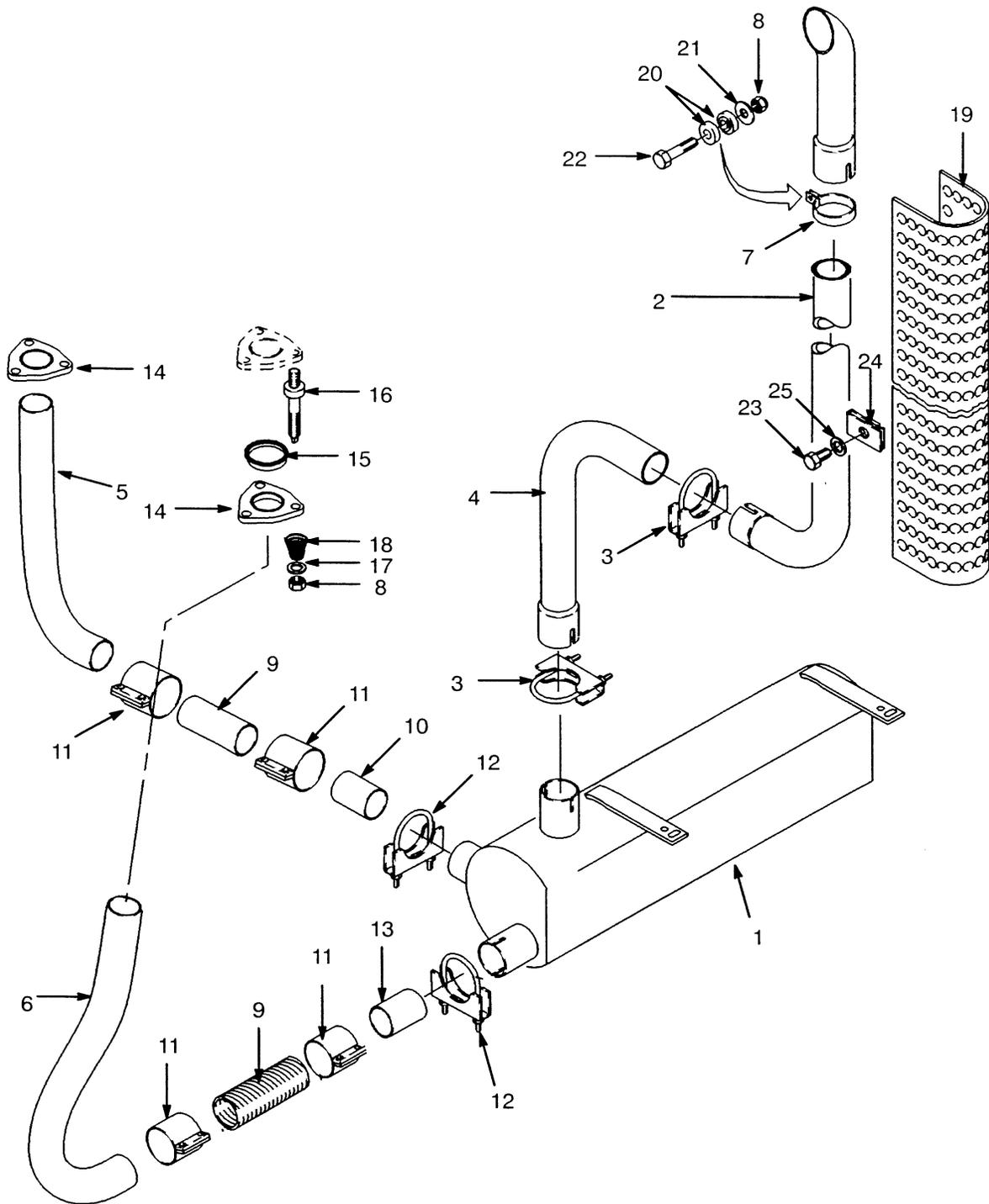


REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1377556	Muffler	1	12	1377560	Clamp	2
2	1377558	Exhaust Pipe	1	13	15176	Washer	2
2 ^a	1451856	Exhaust Pipe w/Emissions	1	14	16815	Capscrew	2
3	1377562	Tube	1	15	145641	Nut	2
4	270826	Clamp	2	16	16374	Capscrew	3
5	1377559	Exhaust Pipe	1	17	376397	Retainer	3
6	1361200	Cap (Aspirated)	1	18	15178	Washer	3
7	30375	Clamp	3	19	320159	Washer	2
8	1377589	Exhaust Pipe	1	20	292682	Lockwasher	2
9	1377590	Overhead Exhaust Pipe (Non-Aspirated)	1	21	136692	Nut	2
9	1377601	Overhead Exhaust Pipe (Aspirated)	1	22	18515	Washer	3
10	1377561	Shield	1	23	1457151	Heat Shield	1
11	223216	Bushing	4				

^a First Used On S/N D19D-2377-05

EXHAUST (FIGURE 20)

LPG



**EXHAUST
LPG**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	894452	Muffler	1	14	894454	Flange	2
2	894467	Pipe-Stack	1	15	894526	Seal	2
3	30374	Clamp	3	16	894527	Stud	6
4	894468	Exhaust Pipe	1	17	320160	Washer	6
5	894471	Exhaust Pipe L.H.	1	18	1380803	Spring	6
6	894472	Exhaust Pipe R.H.	1	19	1377561	Exhaust Shield	1
7	376255	Clamp	2	20	223216	Step Bushing	4
8	145641	Nut	8	21	15176	Washer	2
9	894459	Flex Tube	2	22	16815	Capscrew	2
10	894470	Exhaust Pipe	1	23	16374	Capscrew	3
11	270825	Clamp	4	24	376397	Retainer Nut	3
12	30372	Clamp	2	25	18515	Washer	3
13	894469	Exhaust Pipe	1				

COOLING
DIESEL TURBO AND NON-TURBO

KEY:

A: Without Low Emissions

B: With Low Emissions

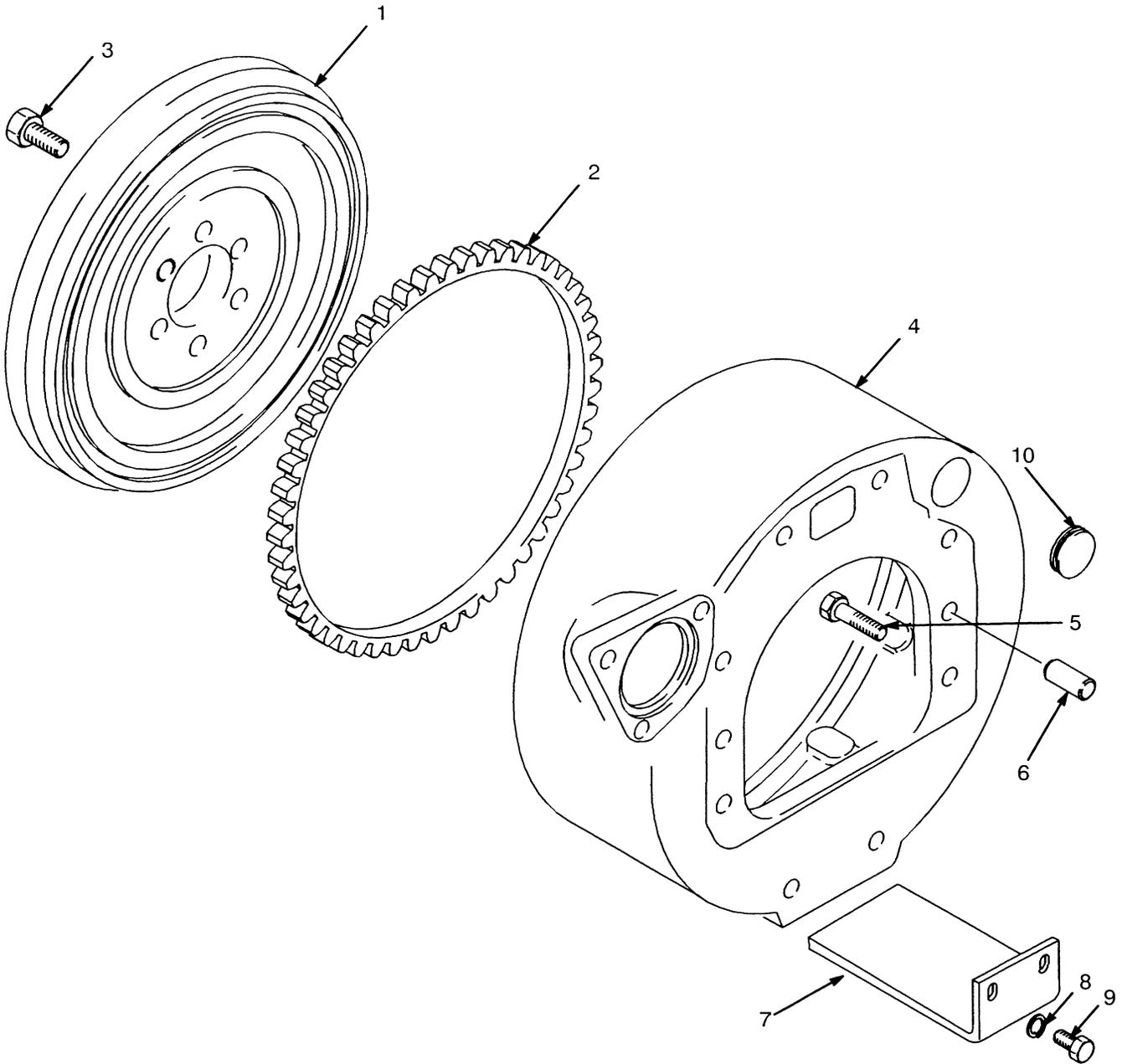
REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
1	a	376478 Radiator	1	1	27	261780 Seal	AR	AR	AR
1	b	1377551 Radiator	1	1	28	c	1318935 Housing	1	..
2	a	376479 Shroud	1	..	28	bce	1451609 Housing .....	..	1
2	b	1377552 Shroud .....	..	1	29	eb	1454155 Stud .....	..	4
3		178899 Radiator Cap	1	1	30	eb	1454156 Nut .....	..	4
4		344432 Reservoir	1	1	31	c	1307913 Screw	4	..
5		1301442 Bracket	1	1	31	ce	1306365 Screw .....	..	4
6		339735 Hose	1	1	32	ch	1318937 Pulley	1	..
7		345453 Outlet	1	1	32	b	1451611 Pulley .....	..	1
8		345454 Cap	1	1	33		1306368 Capscrew	4	4
9		336550 Bushing	1	1	34	b	1377907 Spacer	1	..
10		376876 Hose	1	1	34	bh	1394111 Spacer .....	..	1
11		376772 Hose	1	1	35	b	1377592 Fan Pusher-20 in.	1	1
12		340204 Strap	1	1	35	a	1303376 Fan Pusher-19 in.	1	..
13		12815 Drain Valve	1	1	36	ad	1311360 Fan Extension-20 in.	1	1
14		119236 Clamp	4	4	36	hb	1394110 Fan Extension-20 in. ....	..	1
15		124119 Screw	2	2	36	g	1454154 Fan Extension-20 in. ....	..	1
16		268225 Belt	1	1	37	ad	293623 Capscrew	4	4
16	b	1455265 Belt	1	..	38	ad	292681 Lockwasher	4	4
17		157233 Screw	12	12	39	ad	320157 Flatwasher	4	4
18		216735 Grommet	2	2					
19		287837 Capscrew	2	2					
20		320162 Washer	6	6					
21		300937 Nut	2	2					
22		353310 Clamp	2	2					
23		376480 Tube	1	1					
24		376649 Isolator	1	1					
25		1301441 Plate	2	2					
26	a	376018 Fan-Puller 19 in.	1	..					
26	a	1303263 Fan (Optional) 19 in.	1	..					
26	bf	1377554 Fan-Puller 20 in.	1	1					
26	g	833694 Fan-Puller 20in.	1	1					
27		1301314 Seal	2	2					

- a Non-Turbo Engine
- b Turbo Engine
- c Included With Engine
- d Pusher Fan
- e First Used On S/N D19D-2377
- f Last Used On S/N Pending Per ECN 73006-08
- g First Used On S/N Pending Per ECN 73006-08
- h Used On S/N D19D-2377 Thru S/N Pending Per ECN 73006-08

COOLING
LPG

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	894633	Radiator	1	20	320162	Washer	6
2	894634	Shroud	1	21	300937	Nut	2
3	178899	Radiator Cap	1	22	353310	Clamp	2
4	344432	Reservoir	1	23	1302957	Tube	1
5	894639	Bracket	1	24	376649	Isolator	1
6	339735	Hose	1	25	894640	Plate	2
7	345453	Outlet	1	26	894643	Fan	1
8	345454	Cap	1	27	894629	Seal	2
9	336550	Bushing	1	28	1301727	Clamp	2
10	894638	Hose	1	29	137852	Clamp	1
11	191492	Hose	1	30	261162	Tape	AR
12	340204	Strap	1	31	894630	Liner Top Rear	1
13	12815	Drain Valve	1	32	894642	Pulley	1
14	119236	Clamp	4	33	129563	Clamp	3
15	124119	Screw	2	34	287831	Capscrew	4
16	3000495	Belt	2	35	894641	Hose	1
17	139589	Screw	12	36	157233	Screw	6
18	216735	Grommet	2	37	320157	Flatwasher	4
19	287837	Capscrew	2	38	1303390	Tape	1

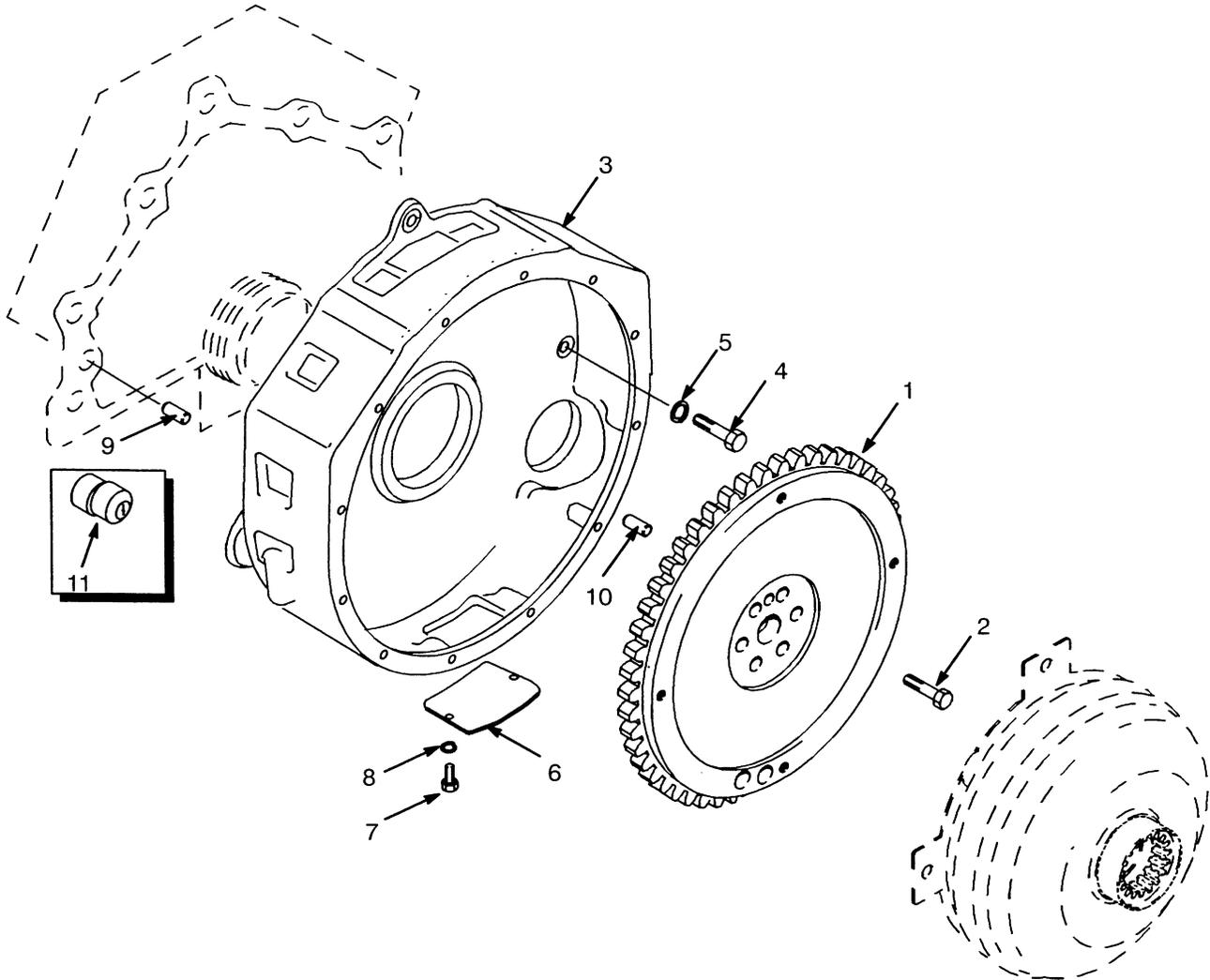
FLYWHEEL (FIGURE 23) DIESEL



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1327699	Flywheel	1	7	376117	Dust Cover	1
2	146049	Ring Gear	1	8	15134	Lockwasher	2
3	93260	Capscrew	6	9	16870	Capscrew	2
4 a	376116	Housing	1	10 a	1301609	Plug	2
4 b	894931	Housing	1	10 b	894956	Plug	1
5	293629	Capscrew	6				
5	251099	Adhesive	AR	a		Last Used On S/N D19D-12438	
6	186420	Dowel Pin	2	b		First Used On S/N D19D-12439	

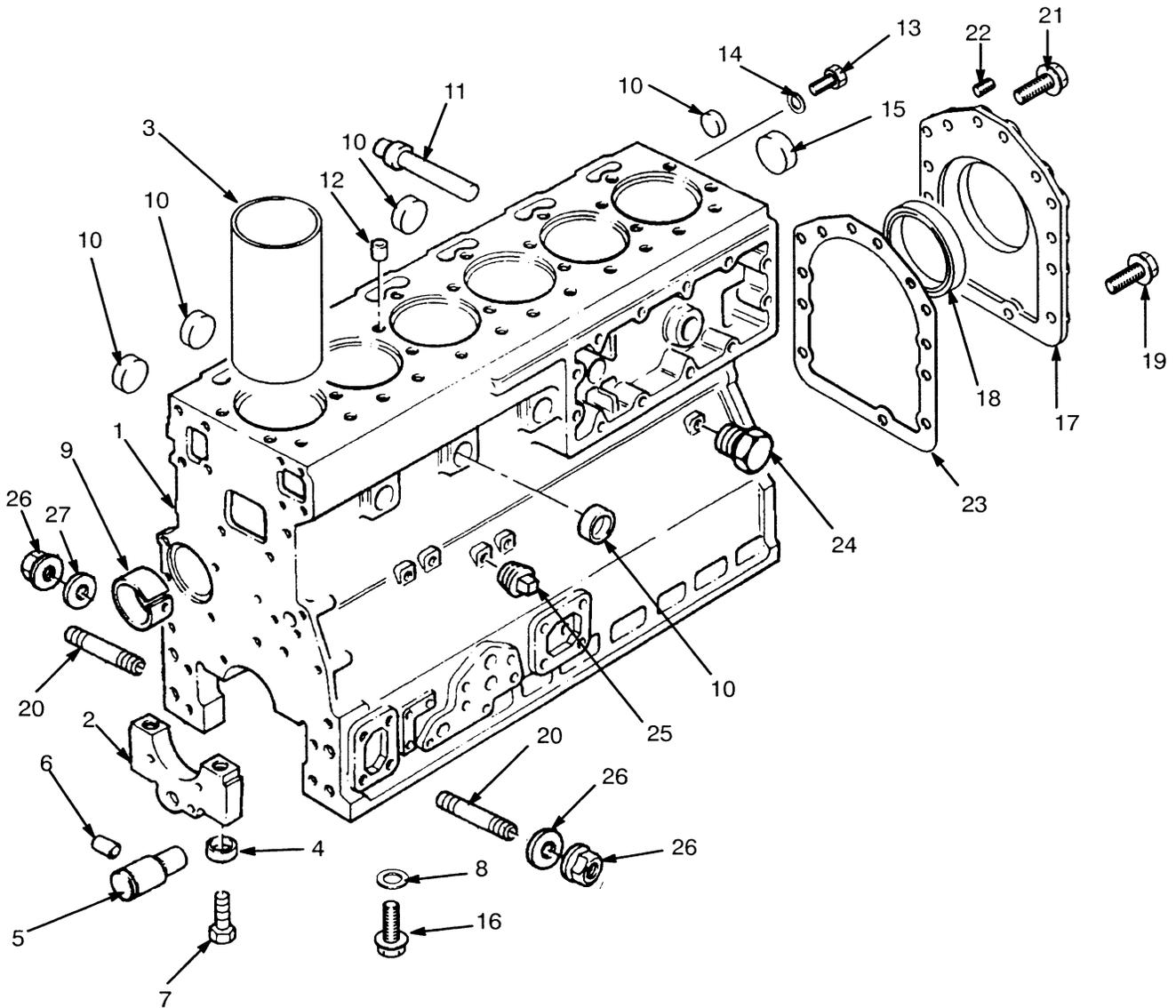
FLYWHEEL (FIGURE 24)

LPG



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1 a	894544	Flywheel Assembly	1	7	16374	Capscrew	2
1 b	894880	Fly Wheel	1	8	15155	Washer	2
1 a	143061	Ring Gear	1	9	1301609	Plug	1
1 b	894879	Ring Gear	1	10	375571	Dowel	2
2	221533	Capscrew	6	11	270329	Dowel-Eccentric	2
3	894517	Housing	1				
4	16805	Capscrew	7	a	Last Used On S/N Pending Per ECN 63263-05		
5	15156	Washer	7	b	First Used On S/N Pending Per ECN 63263-05		
6	158753	Plate	1				

CYLINDER BLOCK (FIGURE 25) DIESEL NON TURBO

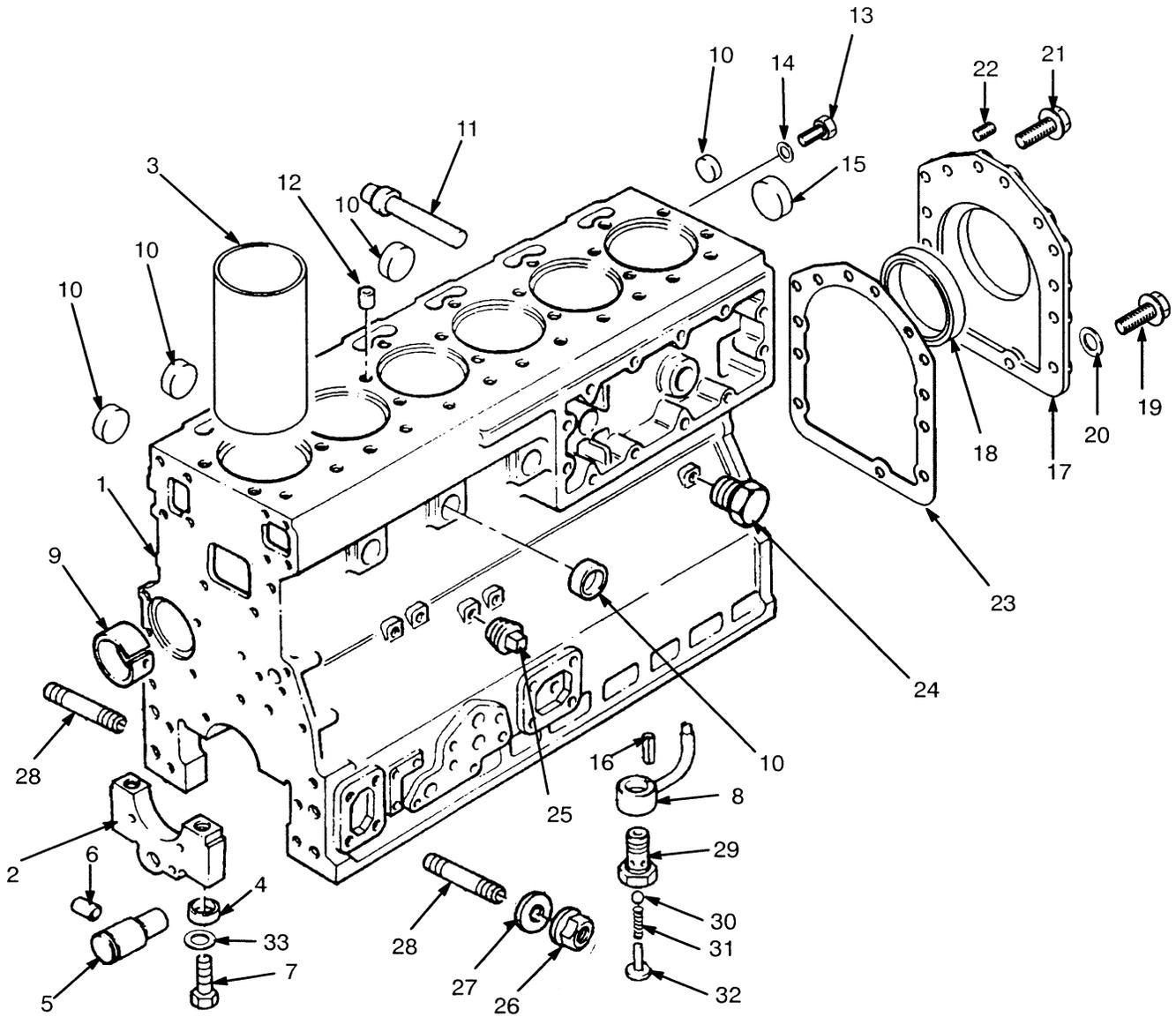


**CYLINDER BLOCK
DIESEL NON TURBO**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
a	376001	Engine	1	18	350397	Seal	1
b	1376008	Engine w/o Sound Reduction	1	19	1382061	Screw	2
b	1376009	Engine w/Sound Reduction	1	20	1319060	Stud	8
1	1382565	Cylinder Block	1	21	386459	Screw	12
2	.....	Bearing Cup	5	22	158139	Dowel Pin	2
3	1305696	Cylinder Liner	6	23 c	350397	Gasket	1
4	99576	Thimble	14	24	245800	Plug	1
5	1380755	Shaft	1	25	15483	Fitting	2
6	1380253	Pin	1	26	1380266	Nut	8
7	16794	Capscrew	14	27	1380264	Washer	8
8	152605	Spacer	6				
9	257603	Bushing	1	a	Last Used On S/N D19D-1756 Also 1758 Except 1753		
10	980727	Plug	17	b	First Used On S/N D19D-1757 Also 1753 Except 1758		
11	365854	Plug	1	c	Included In Bottom Gasket Kit 1379738		
12	992393	Plug	1				
13	161385	Plug	1				
14	984632	Washer	1				
15	1305697	Plug	1				
16	16794	Capscrew	6				
17	1369077	Housing	1				

Note: Service 376001 Up To S/N U573633Y With
(2) Screws 1369081 And (2) Washers 328043

CYLINDER BLOCK (FIGURE 26) DIESEL TURBO WITHOUT LOW EMISSIONS

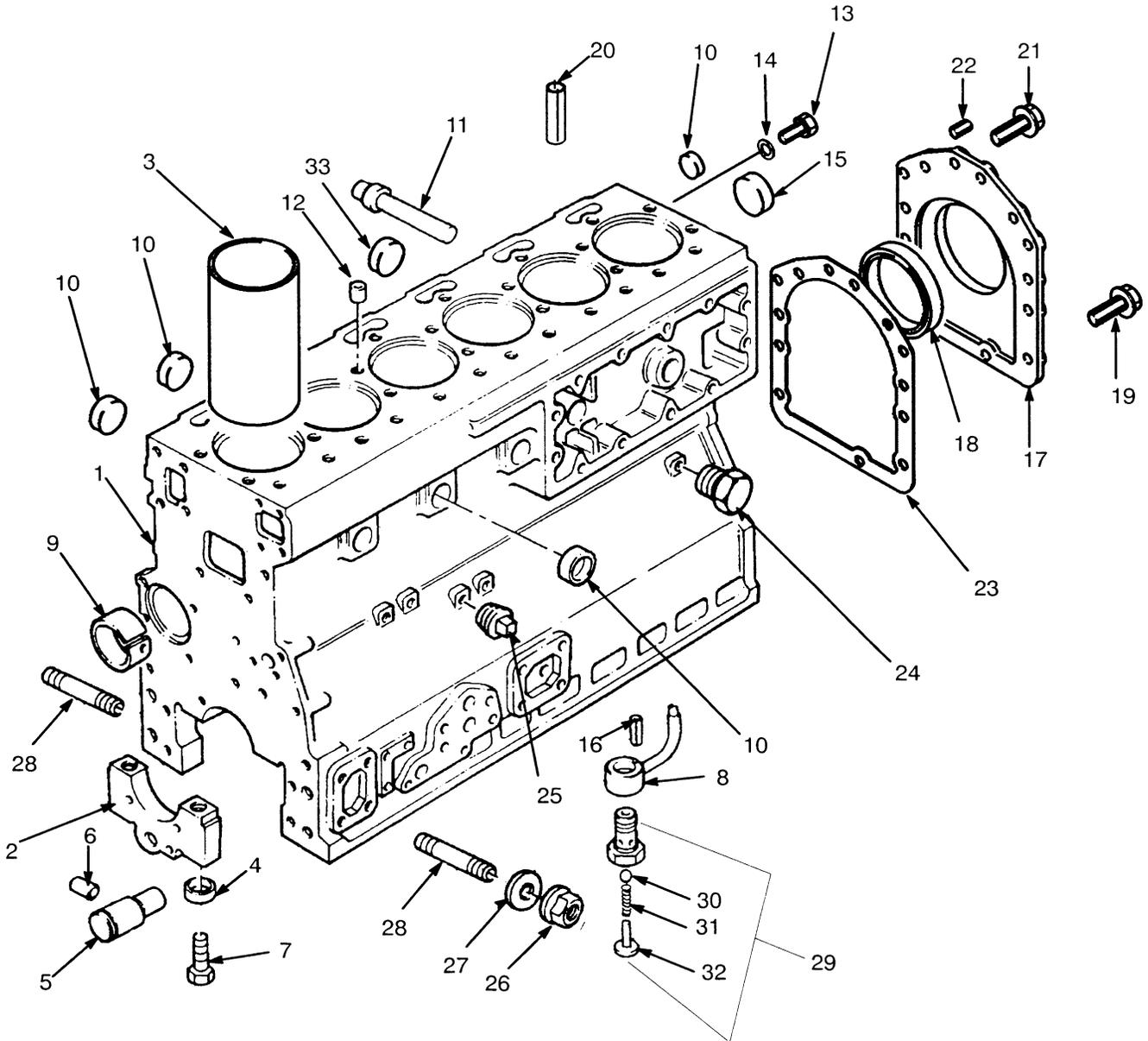


**CYLINDER BLOCK
DIESEL TURBO WITHOUT LOW EMISSIONS**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1377550	Engine	1	18	350397	Seal	1
1	1382060	Cylinder Block	1	19	1369081	Screw	2
2	.....	Bearing Cup	5	20	328043	Washer	2
3	1305696	Cylinder Liner	6	21	386459	Screw	12
4	99576	Thimble	14	22	158139	Dowel	2
5	1380755	Shaft	1	23 ^a	1379734	Gasket	1
6	1380253	Pin	1	24	369485	Plug	1
7	16794	Capscrew	14	25	15483	Fitting	2
8	361271	Jet	6	26	1380266	Nut	8
9	257603	Bushing	1	27	1380264	Washer	8
10	980727	Plug	17	28	1319060	Stud	8
11	365854	Plug	1	29	1311054	Valve	6
12	992393	Plug	1	30	1311055	Ball	1
13	161385	Plug	1	31	1311056	Spring	1
14	984632	Washer	1	32	1311057	Retainer	1
15	1305697	Plug	1	33	301836	Washer	14
16	1311058	Dowel	6				
17	1369077	Housing	1				

^a Included In Bottom Gasket Kit 1379738

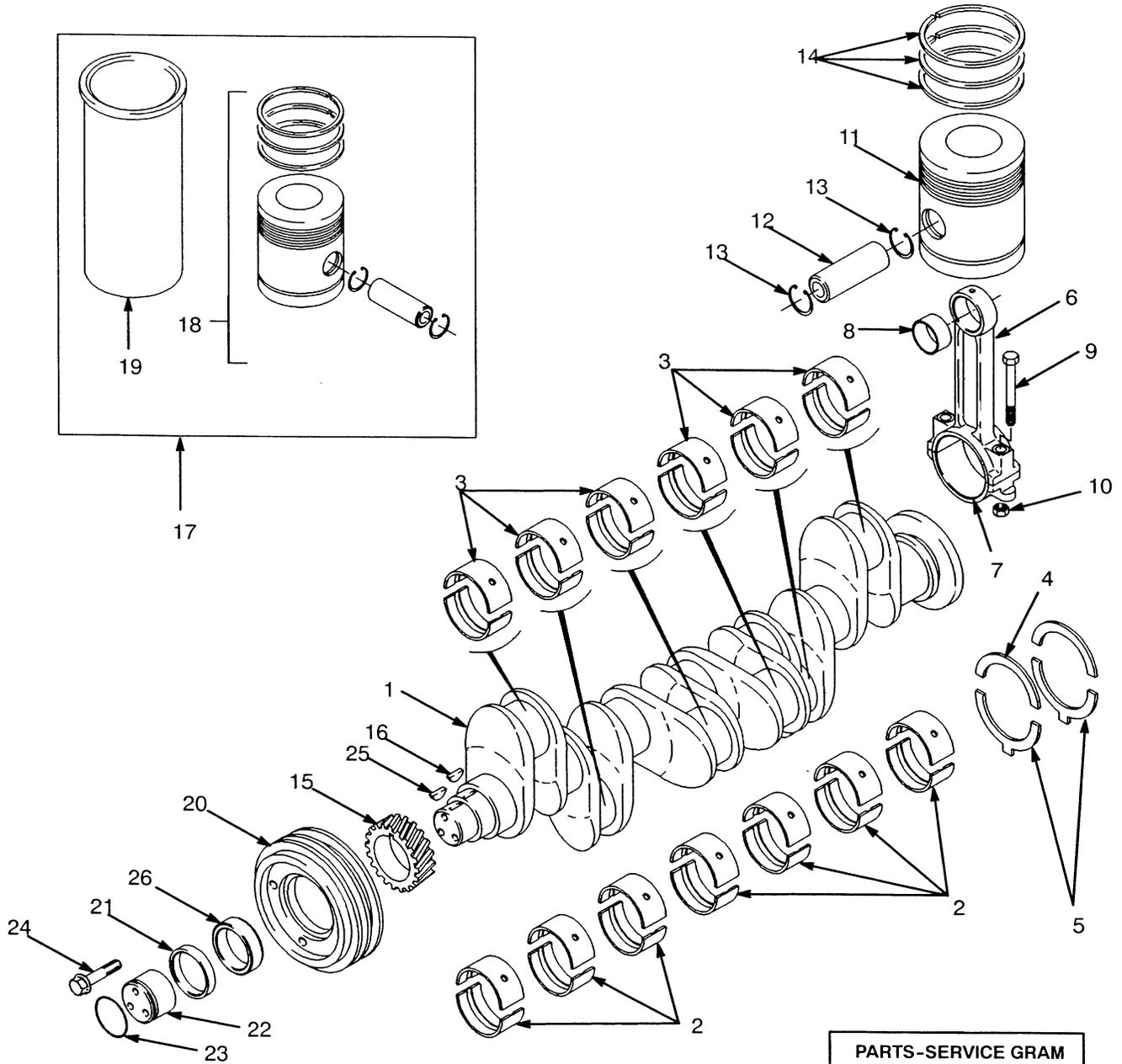
CYLINDER BLOCK (FIGURE 27) DIESEL TURBO WITH LOW EMISSIONS FIRST USED ON S/N D19D-2377



**CYLINDER BLOCK
DIESEL TURBO WITH LOW EMISSIONS
FIRST USED ON S/N D19D-2377**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1395975	Engine	1	18	350397	Seal	1
1	b	..... Cylinder Block	1	19	1382061	Screw	2
2	b	..... Bearing Cup	5	20	1451627	Dowel	2
3	b	1451624 Cylinder Liner	6	21	386459	Screw	12
4	b	99576 Thimble	14	22	158139	Dowel	2
5	b	1380755 Shaft	1	23	a 1379734	Gasket	1
6	b	1380253 Pin	1	24	245800	Plug	1
7	b	16794 Capscrew	14	25	15483	Fitting	2
8		361271 Jet	6	26	1380266	Nut	8
9	b	1451625 Bushing	1	27	1380264	Washer	8
10	b	385531 Plug	12	28	1319060	Stud	8
11	b	365854 Plug	1	29	b 1311054	Valve	6
12	b	992393 Plug	1	30	b 1311055	Ball	1
13	b	161385 Plug	1	31	b 1311056	Spring	1
14	b	984632 Washer	1	32	b 1311057	Retainer	1
15	b	1388387 Plug	1	33	b 161383	Plug	1
16		1311058 Dowel	6		a	Included In Bottom Gasket Kit 1453064	
17		1369077 Housing Assy	1		b	Included In Cylinder Block Kit 1452861	

CRANKSHAFT & PISTON (FIGURE 28) DIESEL NON-TURBO



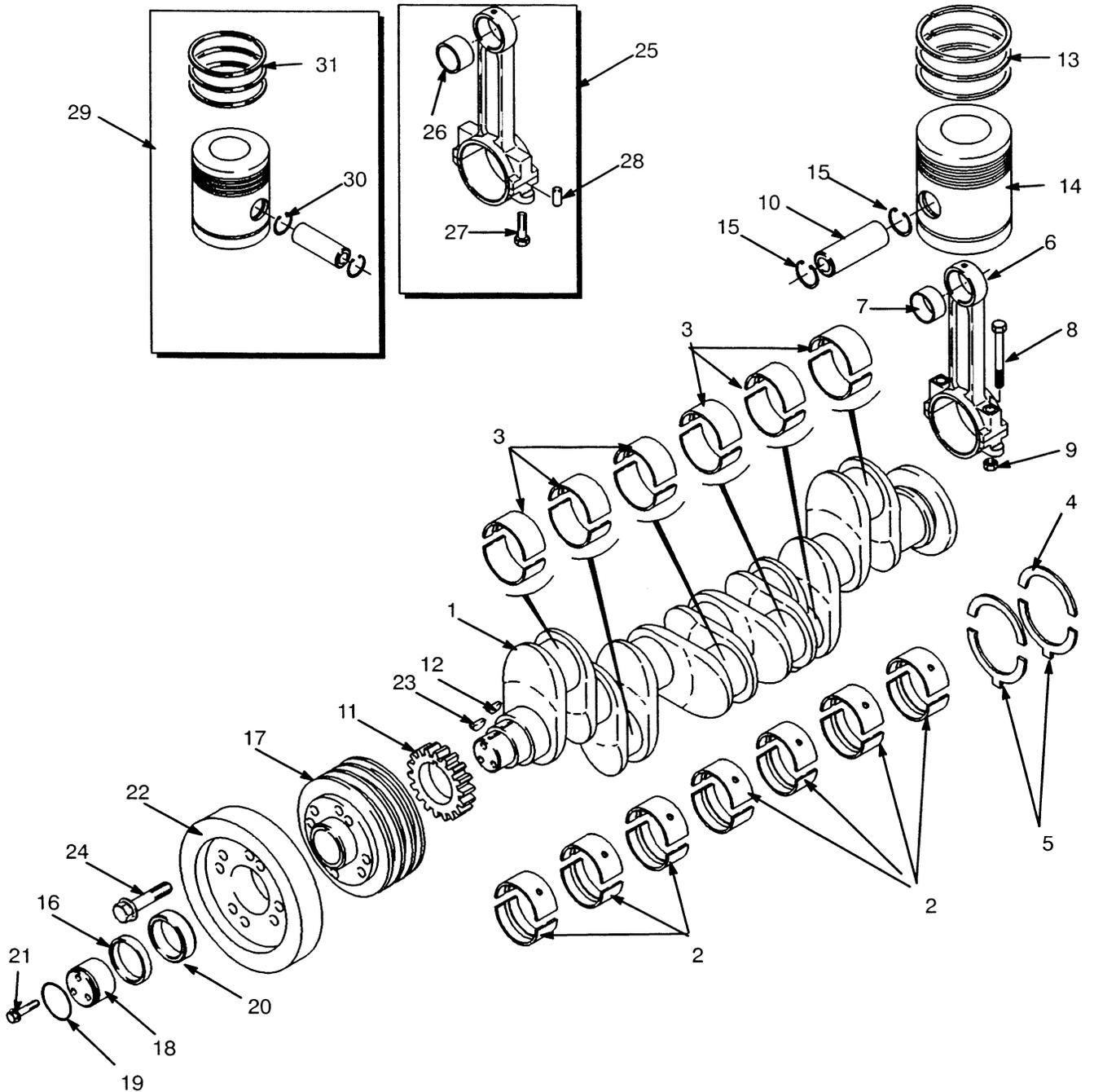
PARTS-SERVICE GRAM	
Item	Gram
11	A-A-18 (E)

CRANKSHAFT & PISTON

DIESEL NON-TURBO

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
a	376001	Engine	1	11	.....	Kit-Piston	6
b	1376008	Engine (w/o Sound Reduction) ...	1	12	.....	Pin	1
b	1376009	Engine (w/Sound Reduction)	1	13	992003	Snap Ring	2
1 a	303741	Crankshaft	1	14	1309832	Kit-Piston Ring	6
1 b	1318906	Crankshaft	1	15	1305706	Gear	1
2	1318910	Bearing Set	1	16	99610	Woodruff Key	1
2	1318907	Main Bearing (0.25 mm)	1	17 a	1319062	Kit-Cylinder	6
2	1318908	Main Bearing (0.50 mm)	1	18 a	1319063	Kit-Piston & Ring	1
2	1318909	Main Bearing (0.76 mm)	1	19	1305696	Liner	1
3	159865	Bearing Set (Standard)	1	20 a	1318960	Pulley	1
3	159866	Bearing Set (0.25 mm)	1	20 b	1380267	Pulley	1
3	159867	Bearing Set (0.50 mm)	1	21	302711	Locking Ring	1
3	159868	Bearing Set (0.76 mm)	1	22	301791	Thrust Block	1
4	842799	Washer (Standard)	2	23	302712	O-Ring	1
4	161296	Washer (0.15 mm)	2	24	302713	Screw	3
5	842800	Washer (Standard)	2	25	59184	Woodruff Key	1
5	161297	Washer (0.15 mm)	2	26	1318961	Spacer	1
6	161440	Connecting Rod	6				
6	1458329	Thimble	2	a	Last Used On S/N D19D-1756 Also 1758 Except 1753		
7	.....	Cap	1	b	First Used On S/N D19D-1757 Also 1753 Except 1758		
8	99668	Bushing	1				
9	1306350	Bolt	2				
10	99663	Nut	2				

CRANKSHAFT & PISTON (FIGURE 29) DIESEL TURBO WITH AND WITHOUT LOW EMISSIONS



CRANKSHAFT & PISTON

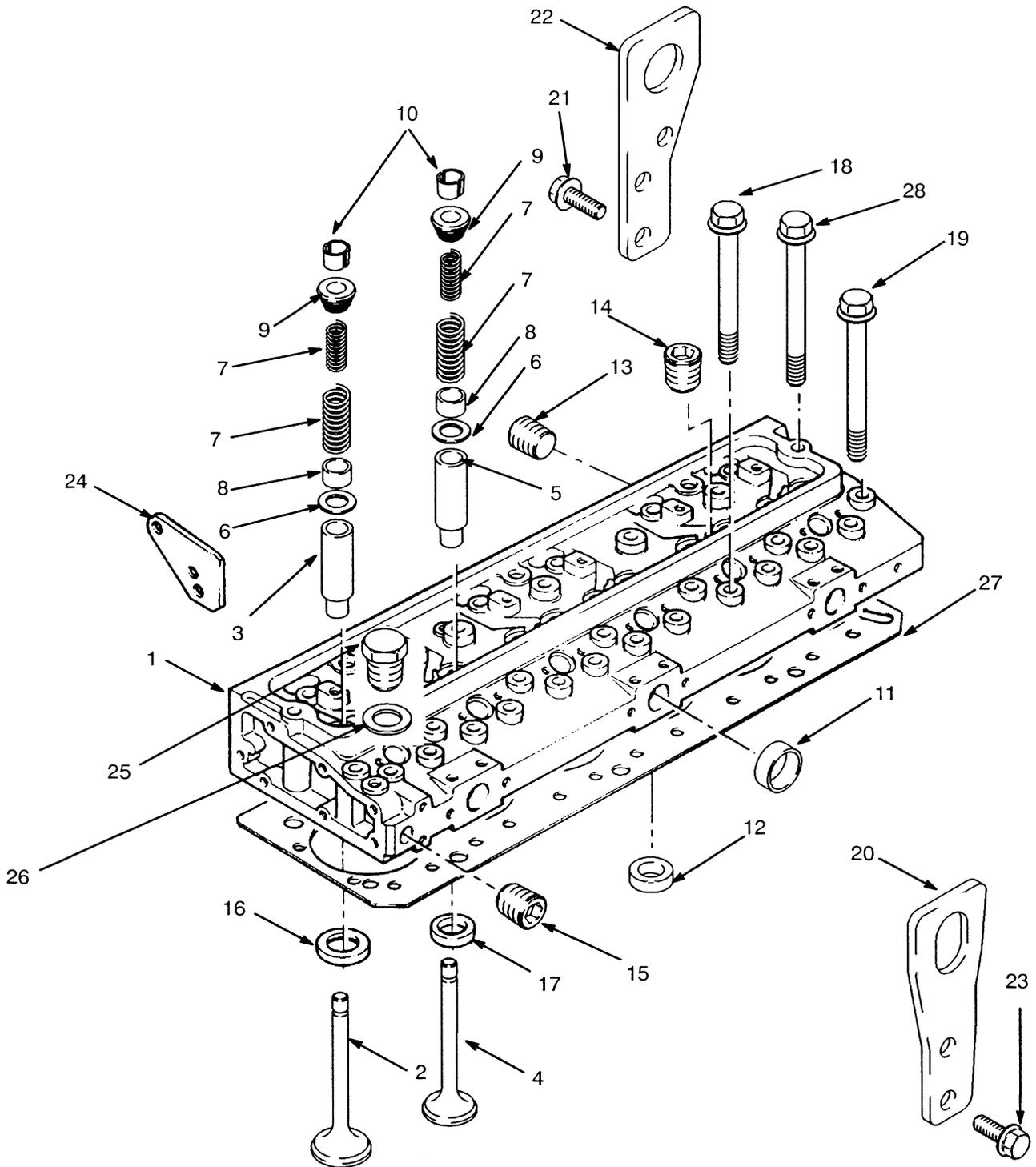
DIESEL TURBO WITH AND WITHOUT LOW EMISSIONS

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1377550	Engine Without Emissions	1	17	1382464	Pulley	1
c	1395975	Engine With Emissions	1	18	301791	Thrust Block	1
1	1382063	Crankshaft	1	19	302712	O-Ring	1
2	1318910	Bearing Set (Standard)	1	20	1318961	Spacer	1
2	1318907	Main Bearing (0.25 mm)	1	21	302713	Screw	3
2	1318908	Main Bearing (0.50 mm)	1	22	1382462	Damper	1
2	1318909	Main Bearing (0.76 mm)	1	23	59184	Woodruff Key	1
3	1382069	Bearing Set (Standard)	1	24	1382463	Screw	8
3	1382064	Bearing Set (0.25 mm)	1	25	cf 1451601	Kit-Connecting Rod	6
3	1382065	Bearing Set (0.50 mm)	1	26	c 1451602	Bushing	1
3	1382066	Bearing Set (0.76 mm)	1	27	c 1451603	Bolt	2
4	842799	Washer (Standard)	2	28	c 1451604	Dowel	2
4	161296	Washer (0.15 mm)	2	29	dc 1451605	Kit-Piston (H)	6
5	842800	Washer (Standard)	2	29	ec 1454242	Kit-Piston (L) Optional	6
5	161297	Washer (0.15 mm)	2	30	c 1451606	Snap Ring	2
6	a	Connecting Rod	6	31	c 1451607	Kit-Piston Ring	6
6	a 1458329	Thimble	2		a	Included in Connecting Rod Kit 1311519	
7	a 303748	Bushing	1		b	Included in Piston Kit 1382067	
8	a 1306350	Bolt	2		c	With Low Emissions, First Used On S/N D19D-2377	
9	a 99663	Nut	2		d	Use With Connecting Rod 1462978 Grade (H) White	
10	b	Pin	6		e	Use With Connecting Rod 1462979 Grade (L) Blue	
11	1305706	Gear	1		f	For Engine 1395975 Service With 1462978 or 1462979	
12	99610	Woodruff Key	1				
13	1391231	Piston Ring Set	6				
14	b	Piston	6				
15	b 139820	Snap Ring	2				
16	302711	Snap Ring	1				

**CYLINDER HEAD
DIESEL NON-TURBO**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY		
a	376001	Engine	1	16	b	1305709	Insert	6	
b	1376008	Engine w/o Sound Reduction	1	17	b	1305710	Insert	6	
b	1376009	Engine w/Sound Reduction	1	18		1370945	Capscrew	12	
1	1318900	Cylinder Head	1	19		1370944	Capscrew	18	
1	d	1460102	Cylinder Head	1	20		1306346	Plate	1
1	d	1454176	Dowel	2	21		1307910	Screw	2
2		1305711	Inlet Valve (Standard)	6	22		1306347	Plate	1
3		1305714	Valve Guide	6	23		1306371	Screw	2
4		371536	Exhaust Valve	6	24		1307915	Screw	2
5		1382073	Valve Guide	6	25		992025	Plug	1
6		99569	Washer	12	26		986475	Washer	1
7		1305716	Spring (Inner)	12	27	d	1451638	Gasket	1
7		1305715	Spring (Outer)	12	27	c	1318903	Gasket	1
8	c	187004	Seal	12	28		361336	Screw	2
9		1305717	Cap	12					
10		99571	Keeper	12	a	Last Used On S/N D19D-1756 Also 1758 Except 1753			
11		980727	Plug	3	b	First Used On S/N D19D-1757 Also 1753 Except 1758			
12		385533	Plug	6	c	Included In Top Gasket Kit 1369431			
13		1318904	Plug	1	d	First Used on Engine S/N U647521C			
14		15314	Fitting	6					
15		15962	Fitting	3					

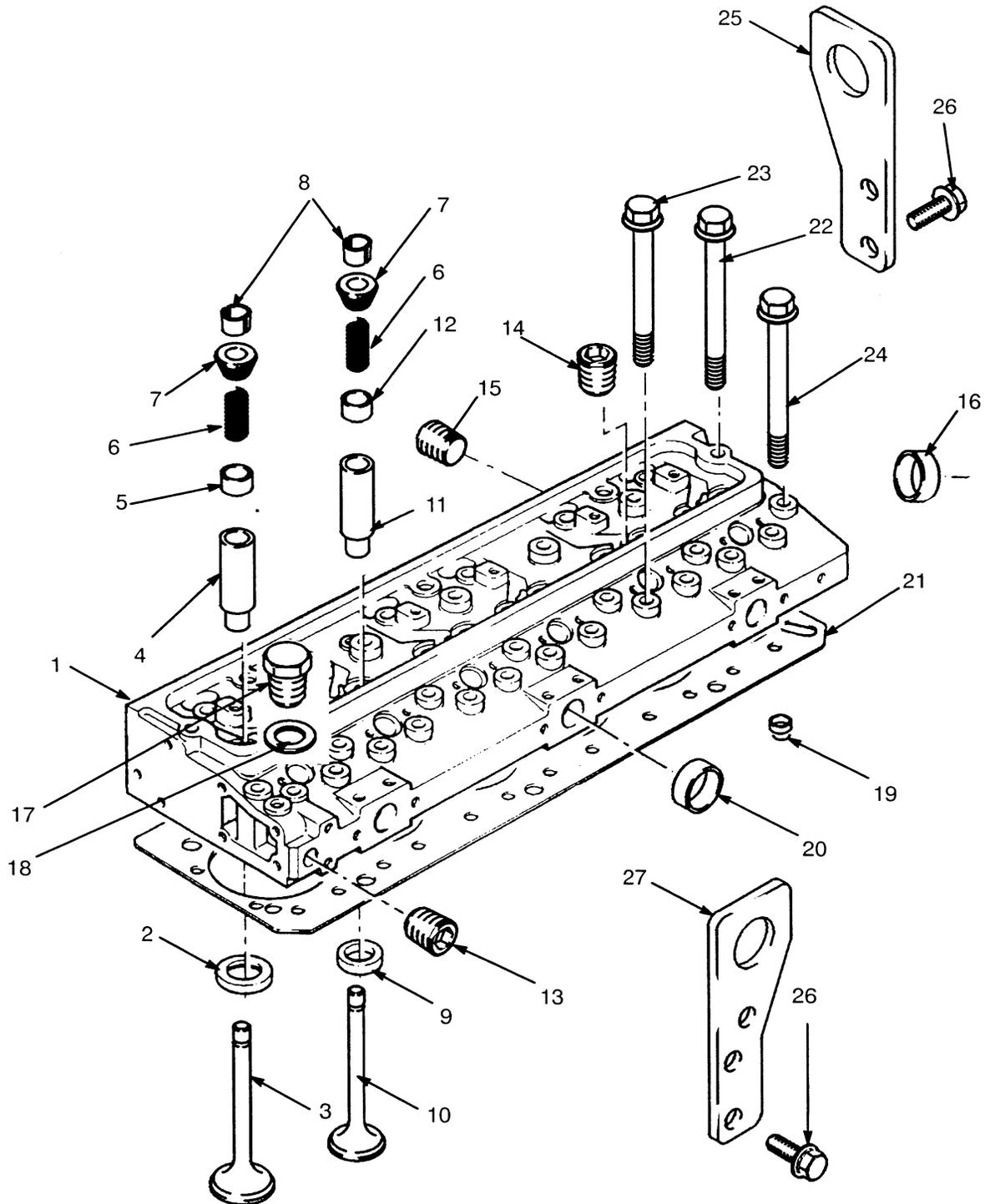
CYLINDER HEAD (FIGURE 31) DIESEL TURBO WITHOUT LOW EMISSIONS



**CYLINDER HEAD
DIESEL TURBO WITHOUT LOW EMISSIONS**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1377550	Engine Turbo	1	15	15303	Fitting	1
1	1382071	Cylinder Head	1	16	1382074	Insert	6
1 b	1460100	Cylinder Head	1	17	1382475	Insert	6
1 b	1454176	Dowel	2	18	1370945	Screw	12
2	1382072	Inlet Valve (Standard)	6	19	1370944	Screw	18
3	1382073	Valve Guide	6	20	1306346	Plate	1
4	371536	Exhaust Valve (Standard)	6	21	1307910	Screw	2
5	1305714	Valve Guide	6	22	1371730	Plate	1
6	99569	Washer	12	23	1306371	Screw	2
7	1305716	Spring (Inner)	12	24	1315750	Plate	1
7	1305715	Spring (Outer)	12	25	992025	Plug	1
8 a	187004	Seal	12	26	986475	Washer	1
9	1305717	Cap	12	27 a	1318903	Gasket	1
10	99571	Keeper	12	27 b	1451638	Gasket	1
11	980727	Plug	3	28	361336	Screw	2
12	385533	Plug	6				
13	1318904	Plug	1	a	Included In Top Gasket Kit 1369431		
14	15314	Fitting	6	b	First Used On Engine S/N U647452C		

CYLINDER HEAD (FIGURE 32) DIESEL TURBO WITH EMISSIONS FIRST USED ON S/N D19D-2377

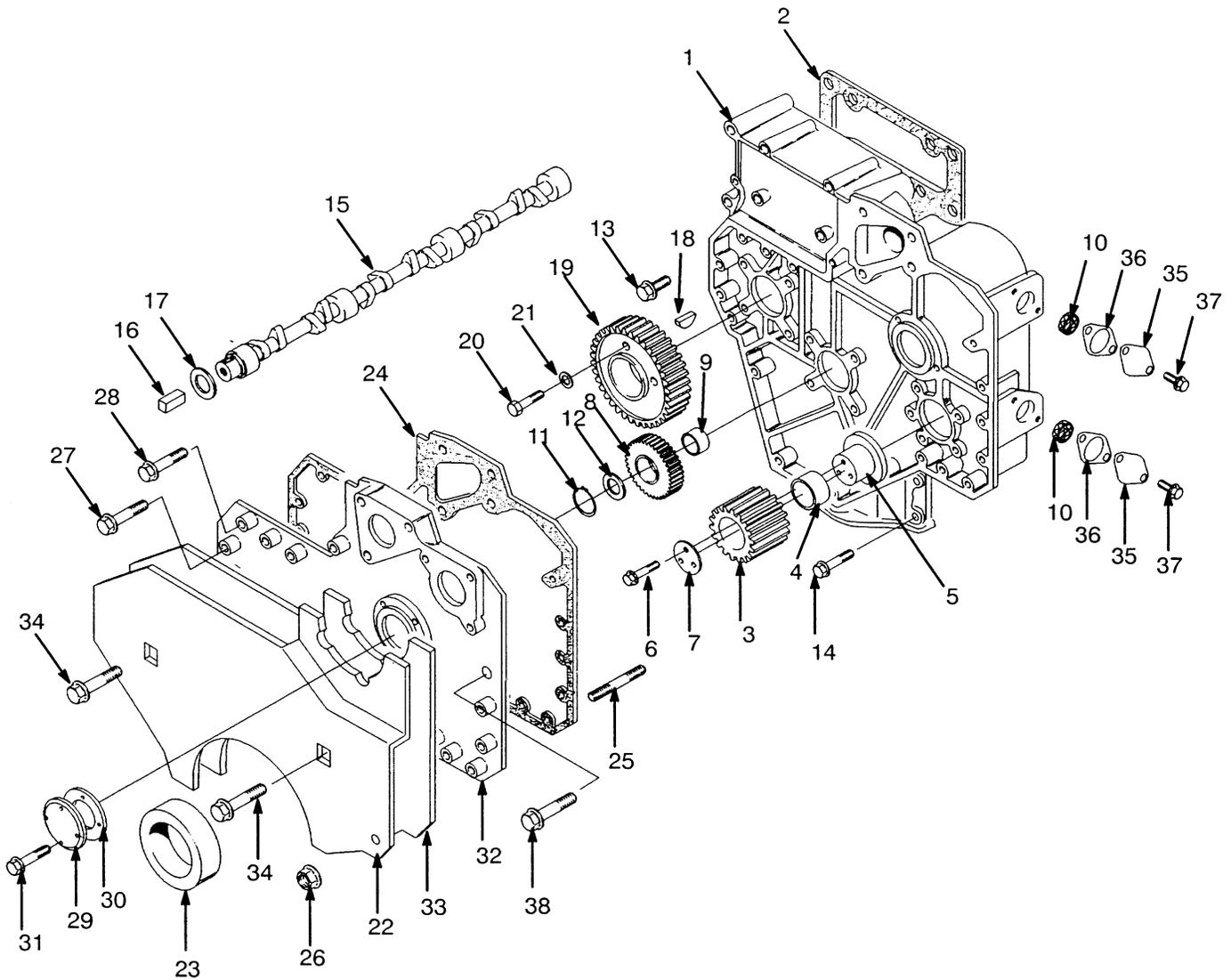


**CYLINDER HEAD
DIESEL TURBO WITH EMISSIONS
FIRST USED ON S/N D19D-2377**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1395975	Engine Turbo w/Emissions	1	15	1451637	Plug	1
1	1452862	Kit-Cylinder Head	1	16	385531	Plug	1
2	1451635	Insert	6	17	992025	Plug	1
3	1451641	Exhaust Valve	6	18	986475	Washer	1
4	1451640	Valve Guide	6	19	1454176	Dowel	2
5	1451630	Seal	6	20	980727	Plug	4
6	1451631	Spring	12	21 ^a	1451638	Head Gasket	1
7	1451633	Cap	12	22	361336	Screw	2
8	1451636	Keeper	24	23	1370945	Bolt	12
9	1451634	Insert	6	24	1370944	Bolt	18
10	1451639	Inlet Valve	6	25	1451772	Plate	1
11	1451629	Valve Guide	6	26	1307910	Screw	4
12	1451632	Seal	6	27	1451771	Plate	1
13	15962	Fitting	1				
14	15314	Fitting	6				

^a Included In Top Gasket Kit 1453063

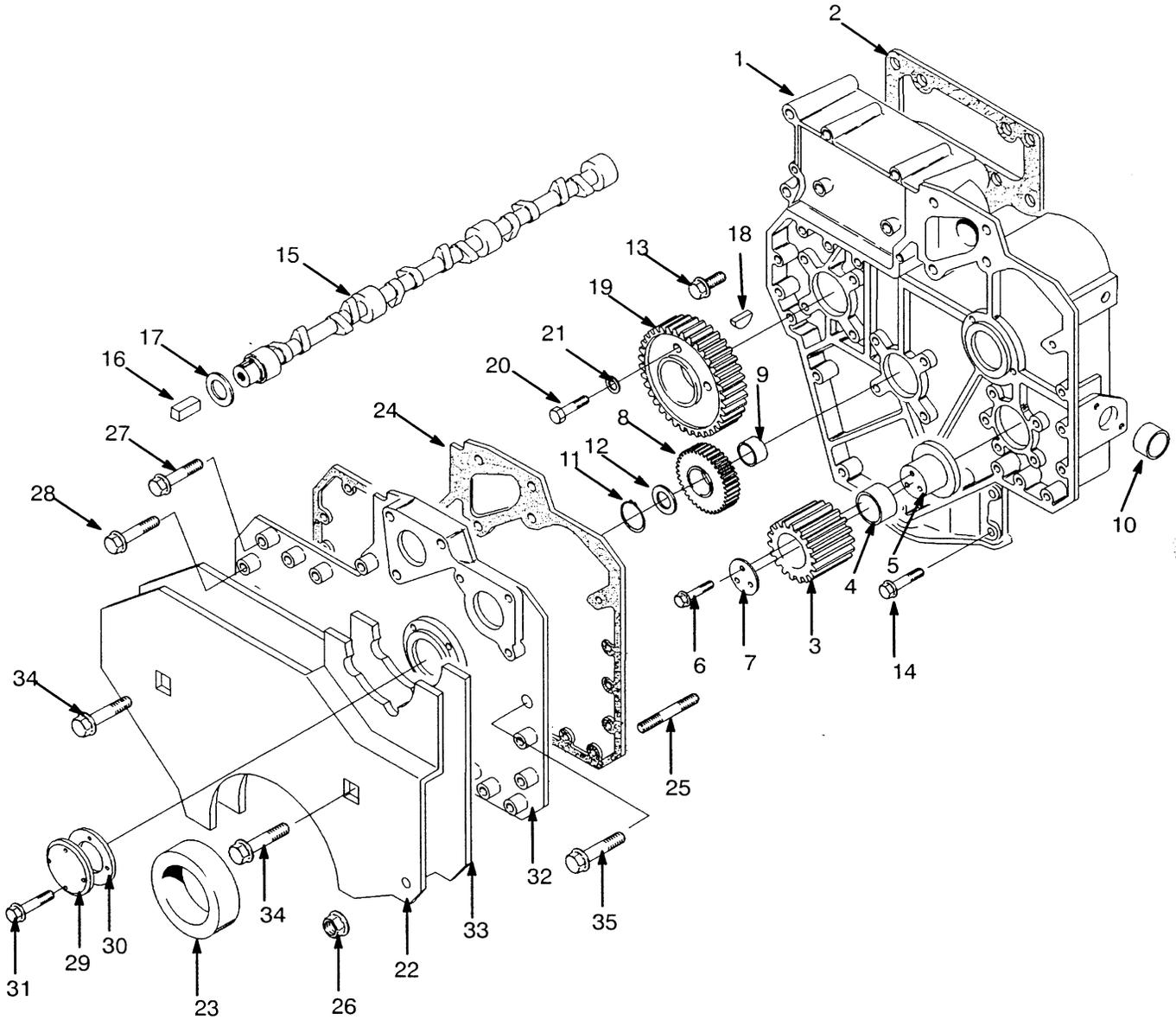
TIMING GEAR (FIGURE 33) DIESEL NON TURBO



**TIMING GEAR
DIESEL NON-TURBO**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	a	376001 Engine	1	22	b	1380242 Cover	1
	b	1376008 Engine w/o Sound Reduction	1	23		350399 Seal	1
	b	1376009 Engine w/Sound Reduction	1	24	a	1345788 Gasket	1
1	a	1369046 Case	1	24	bc	1382482 Gasket	1
1	b	1377906 Case	1	25		1306033 Stud	2
2	c	1345787 Gasket	1	26		1306359 Nut	2
3		1306030 Gear	1	27	a	386459 Screw	8
4		983484 Bushing	1	27	b	1306362 Screw	6
5		229875 Hub	1	28		1306357 Screw	6
6		1306356 Screw	3	29	a	1318918 Cover	1
7		1382479 Plate	1	29	b	1306034 Cover	1
8		1318916 Gear	1	30	c	1345790 Gasket	1
9		1306041 Bushing	1	31		1306360 Screw	4
10	b	1306185 Strainer	2	32	a	1306036 Shield	1
11		328047 Snap Ring	1	32	b	1371703 Shield	1
12		385847 Washer	1	33		1306037 Damper	1
13		386459 Screw	8	34		1306361 Screw	2
14		1306358 Screw	4	35	b	1306186 Plate	2
15		1382480 Camshaft	1	36	b	1380251 Gasket	2
16	a	224226 Pin	1	37	b	1307881 Screw	4
16	b	298096 Pin	1	38		1306354 Screw	1
17		303758 Washer	1		a	Last Used On S/N D19D-1756 Also 1758 Except 1753	
18		99610 Woodruff Key	1		b	First Used On S/N D19D-1757 Also 1753 Except 1758	
19		1382481 Gear	1		c	Included In Bottom Gasket Kit 1379738	
20	a	1306355 Screw	1				
20	b	1328565 Screw	1				
21		1306364 Washer	1				
22	a	1306031 Cover	1				

TIMING GEAR (FIGURE 34) DIESEL TURBO WITH AND WITHOUT LOW EMISSIONS



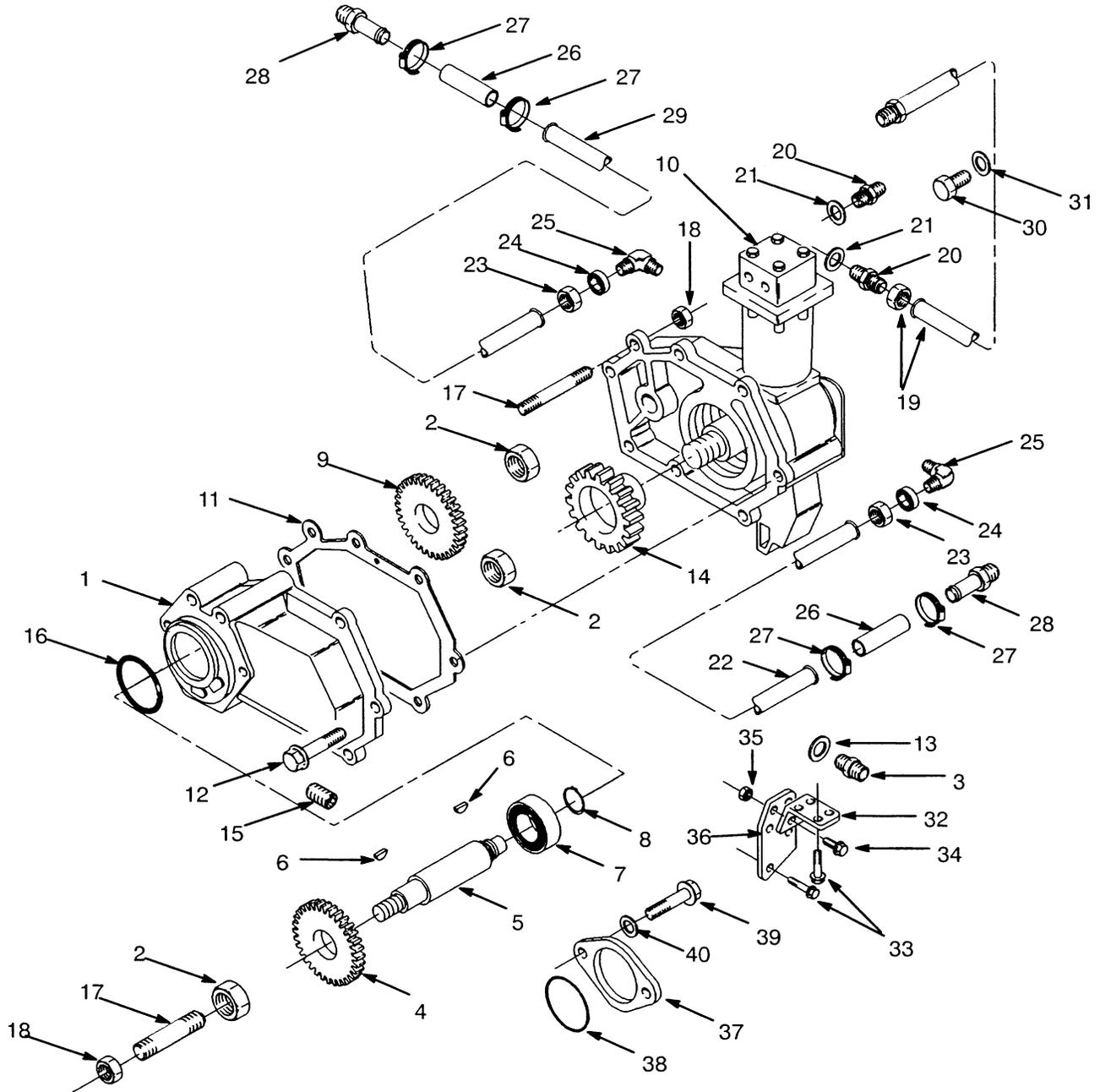
TIMING GEAR
DIESEL TURBO WITH AND WITHOUT LOW EMISSIONS

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	c 1377550	Engine Turbo	1	21	1306364	Washer	1
	b 1395975	Engine Turbo w/Emissions	1	22 c	1380242	Cover	1
1	c 1382478	Case	1	22 b	1451649	Cover	1
1	b 1451647	Case	1	23	350399	Seal	1
2	da 1345787	Gasket	1	24 da	1382482	Gasket	1
3	1306030	Gear	1	25	1306033	Stud	2
4	983484	Bushing	1	26	1306359	Nut	2
5	229875	Hub	1	27	1306357	Screw	6
6	1306356	Screw	3	28 c	1306362	Screw	6
7	c 982226	Plate	1	29 c	1306034	Cover	1
7	b 1382479	Plate	1	30 ca	1345790	Gasket	1
8	1318916	Gear	1	31 c	1306360	Screw	4
9	1306041	Bushing	1	32 c	1371703	Shield	1
10	c 1306182	Plug	2	32 b	1451650	Shield	1
11	328047	Snap Ring	1	33 c	1306037	Damper	1
12	385847	Washer	1	33 b	1451651	Damper	1
13	386459	Screw	8	34	1306361	Screw	2
14	1306358	Screw	5	35	1306354	Screw	2
15	c 1382480	Camshaft	1				
15	b 1451648	Camshaft	1	a	Included In Bottom Gasket Kit 1379738		
16	298096	Pin	1	b	With Low Emissions, First Used On S/N D19D-2377		
17	303758	Washer	1	c	Without Low Emissions		
18	99610	Woodruff Key	1	d	Included In Bottom Gasket Kit 1453064		
19	1382481	Gear	1				
20	1328565	Screw	1				

AUXILIARY DRIVE GEAR (FIGURE 35)

DIESEL

LAST USED ON S/N D19D-1756 ALSO 1758 EXCEPT 1753



AUXILIARY DRIVE GEAR

DIESEL

LAST USED ON S/N D19D-1756 ALSO 1758 EXCEPT 1753

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	376001	Engine	1	19	51455	Olive	2
1	a 1318969	Housing	1	20	1319028	Adapter	2
1	b 1382486	Housing	1	21	101985	Washer	2
2	1318970	Nut	3	22	1319030	Pipe	1
3	1319040	Adapter	2	23	224384	Nut	2
4	1318971	Gear	1	24	158160	Sleeve	2
5	1318972	Shaft	1	25	1319031	Elbow	2
6	9033	Woodruff Key	2	26	1319032	Hose	2
7	1318973	Bearing	1	27	130845	Clamp	4
8	361289	Snap Ring	1	28	1319033	Connector	2
9	1318974	Gear	1	29	1319034	Pipe	1
10	.....	Air Compressor	1	30	1306371	Screw	1
		 (Figure 119), (Figure 120)		31	1319035	Spacer	1
11	a 1345801	Gasket	1	32	1319036	Bracket	1
11	b 1382487	Gasket	1	33	1307910	Screw	6
12	1306358	Screw	3	34	1307913	Screw	2
13	992522	Washer	2	35	1307891	Nut	2
14	1319027	Gear	1	36	1319037	Bracket	1
15	15314	Fitting	1	37	1319038	Plate	1
16	a 1311603	O-Ring	1	38	1307902	Seal	1
16	b 1382488	O-Ring	1	39	1311074	Screw	2
17	1307901	Stud	6	40	1318306	Washer	2
18	1306359	Nut	6				
19	1319029	Pipe	1				
19	16193	Nut	2				

a Last Used On Engine S/N U563738X

b First Used On Engine S/N U563739X

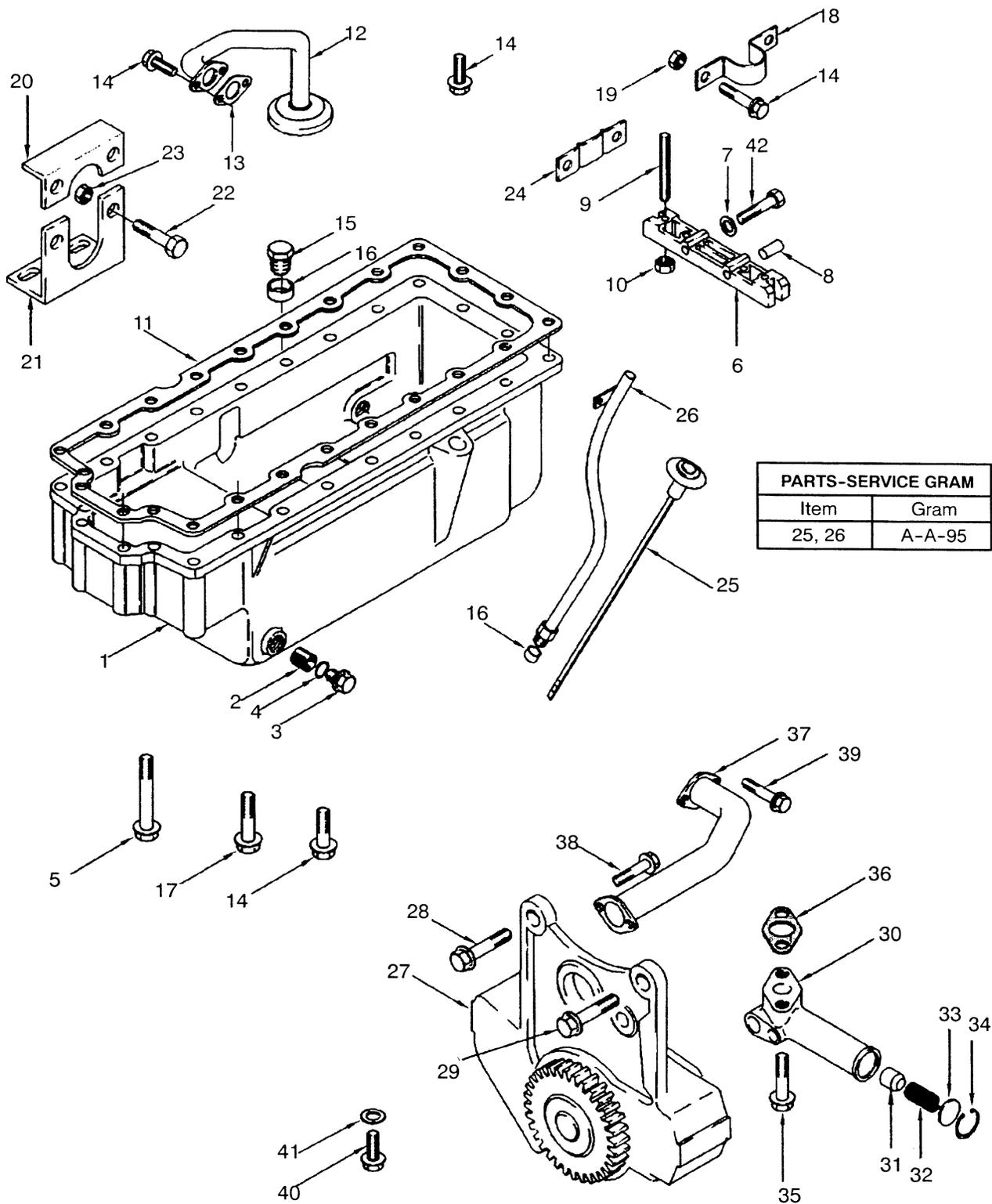
AUXILIARY DRIVE GEAR

DIESEL

FIRST USED ON S/N D19D-1757 ALSO 1753 EXCEPT 1758

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1376008	Engine w/o Sound Reduction	1	21	101985	Washer	2
	1376009	Engine w/Sound Reduction	1	22	c 1380207	Pipe	1
f	1377550	Engine Turbo w/o Emissions	1	22	d 1385675	Pipe	1
e	1395975	Engine Turbo w/Emissions	1	22	16193	Nut	2
1	1379774	Bracket	1	22	51455	Olive	2
2	1380206	Screw	4	23	981608	Fitting	1
3	1380205	Screw	3	24	f 983761	Fitting	1
4	1380201	O-Ring	1	25	1319033	Fitting	1
5	1380202	Bearing	1	26	a 1380208	Hose	1
6	1380200	Hub	1	26	b 1385678	Hose	1
7	1380203	Gear	1	27	130845	Clamp	4
8	f 1380204	Plate	1	28	f 302638	Fitting	1
8	e 1451747	Plate	1	29	1306219	Screw	1
9	1379773	Gear	1	30	1311074	Screw	2
10	.....	Compressor ☞ (Figure 121), (Figure 122)	1	31	f 1380213	Spacer	2
11	1380214	O-Ring	1	32	f 1380212	Bracket	1
12	1307881	Screw	3	33	f 1307910	Screw	2
13	f 1318306	Washer	2	34	f 1306362	Screw	2
14	1319038	Plate	1				
15	15314	Fitting	1	a	Last Used On Engine S/N YA70337U588585Y		
16	1458694	Stud	2	b	First Used On Engine S/N YA70337U588586Y		
17	1380210	Stud	2	c	Last Used On Engine S/N U588828Y		
18	1370949	Nut	3	d	First Used On Engine S/N U588829Y		
19	1380209	Hose	1	e	W/Emissions-First Used On S/N D19D-2377		
20	f 1319040	Fitting	1	f	Without Emissions		

OIL PAN (FIGURE 37) DIESEL NON-TURBO

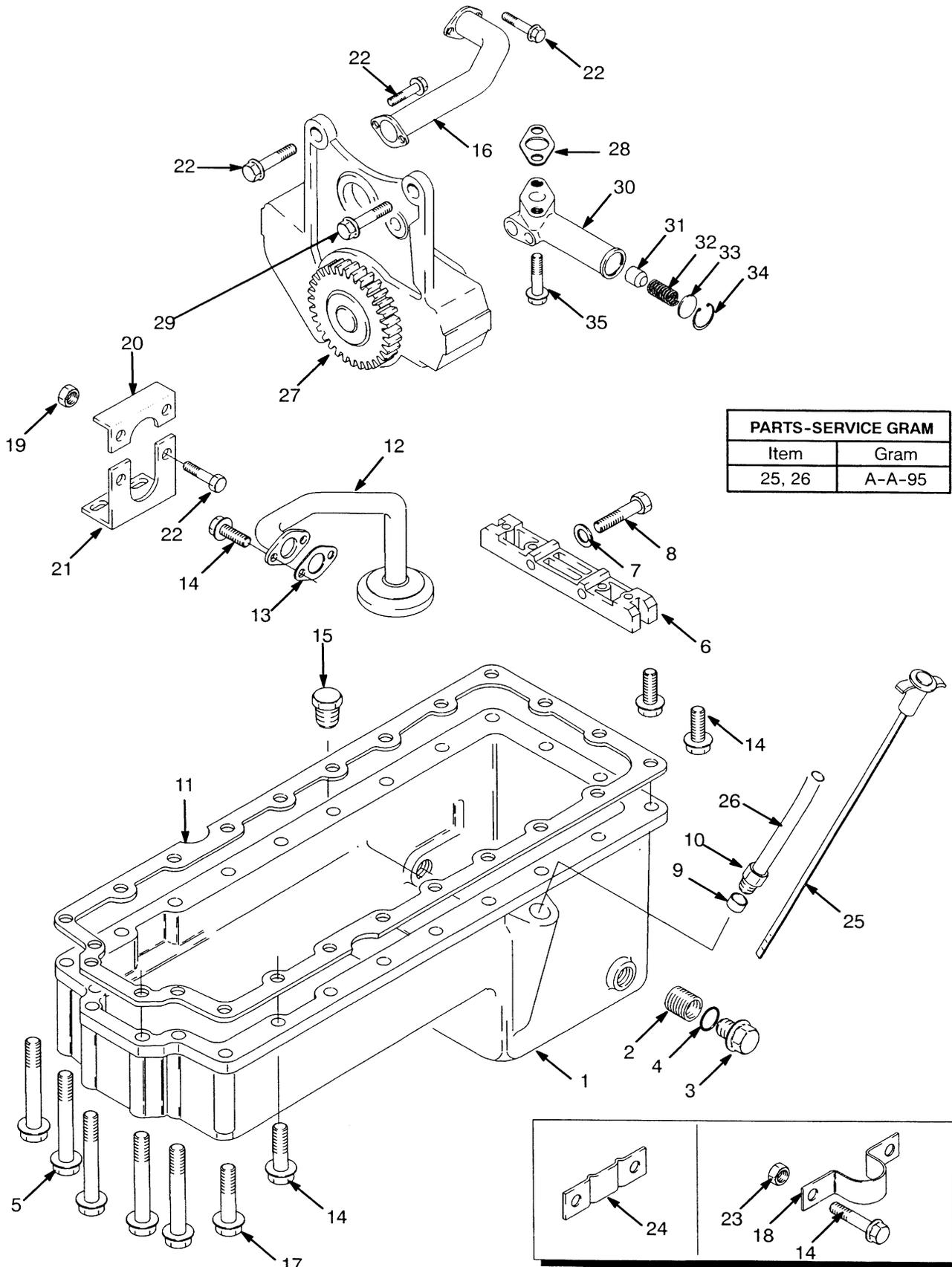


PARTS-SERVICE GRAM	
Item	Gram
25, 26	A-A-95

**OIL PAN
DIESEL NON-TURBO**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
a	376001	Engine	1	26 d	1311081	Tube	1
b	1376008	Engine w/o Sound Reduction ...	1	26 e	1385704	Tube	1
b	1376009	Engine w/Sound Reduction	1	27	1318919	Pump	1
1	1377720	Oil Pan	1	28	1306358	Screw	2
2	266465	Insert	2	29	1307881	Screw	1
3	377976	Plug	2	30	1318920	Valve	1
4	1306374	O-Ring	2	31	301749	Spool	1
5	1318940	Screw	5	32	301750	Spring	1
6	1450136	Bridge Piece	1	33	301751	Cap	1
7	144613	Washer	2	34	1306328	Snap Ring	1
8 c	99601	Gasket	2	35 a	1318921	Screw	2
9	1307876	Stud	2	35 b	1318968	Screw	2
10	1306359	Nut	2	36 ac	301752	Gasket	1
11 c	1345786	Gasket	1	37 a	1318922	Pipe	1
12	1318943	Pipe	1	37 b	1380259	Pipe	1
13 c	1351996	Gasket	1	38 a	1307898	Screw	2
14	386459	Screw	25	39 a	1306358	Screw	2
15	1377908	Plug	1	40 a	16372	Capscrew	6
16	1306143	Olive	2	41 a	152605	Spacer	6
17	1318945	Screw	1	42	1307875	Screw	2
18	1318946	Clip	1				
19	1306359	Nut	2	a	Last Used On S/N D19D-1756 Also 1758 Except 1753		
20	1318947	Bracket	1	b	First Used On S/N D19D-1757 Also 1753 Except 1758		
21	1318948	Bracket	1	c	Included In Bottom Gasket Kit 1379738		
22	1306358	Screw	2	d	Last Used On Engine S/N U588823Y		
23	1306359	Nut	2	e	First Used On Engine S/N U588824Y		
24	1318949	Plate	1				
25 d	1318950	Dipstick	1				
25 e	1385703	Dipstick	1				

OIL PAN (FIGURE 38) DIESEL TURBO WITHOUT LOW EMISSIONS



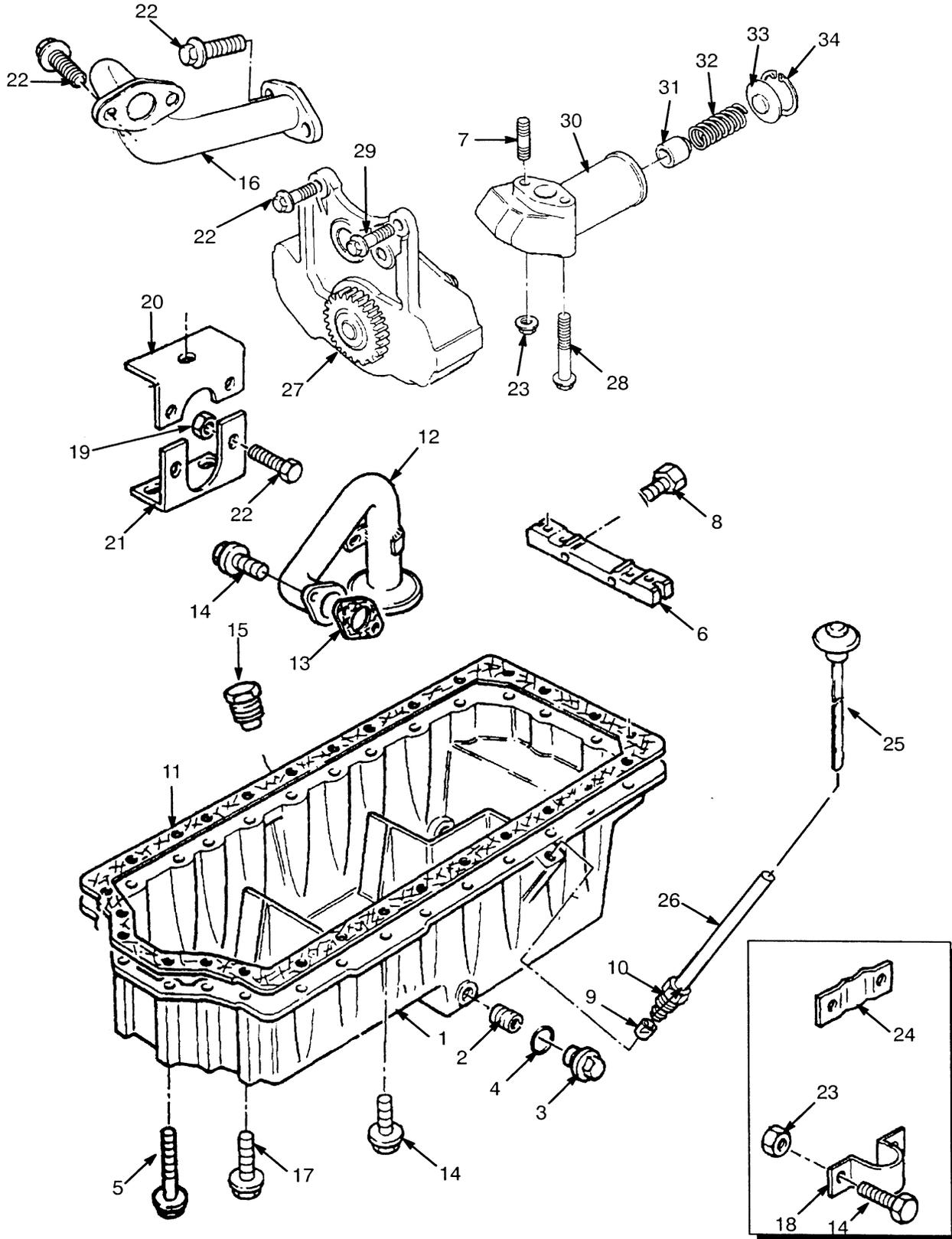
PARTS-SERVICE GRAM	
Item	Gram
25, 26	A-A-95

OIL PAN
DIESEL TURBO WITHOUT LOW EMISSIONS

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1377550	Engine Turbo	1	23	1306359	Nut	2
1	1377720	Oil Pan	1	24	1318949	Plate	1
2	266465	Insert	2	25 b	1318950	Dipstick	1
3	377976	Plug	2	25 c	1385703	Dipstick	1
4	1306374	O-Ring	2	26 b	1311081	Tube	1
5	1318940	Screw	5	26 c	1385704	Tube	1
6	1450136	Bridge Piece	1	27	1382484	Pump	1
7	328043	Washer	2	28 a	301752	Gasket	1
8	1307875	Screw	2	29	1307881	Screw	1
9	1306143	Sleeve	1	30	1318920	Valve	1
10	1318951	Nut	1	31	301749	Spool	1
11 a	1345786	Gasket	1	32	301750	Spring	1
12	1318943	Pipe	1	33	301751	Cap	1
13 a	1351996	Gasket	1	34	1306328	Snap Ring	1
14	386459	Screw	25	35	1318968	Screw	2
15	1377908	Plug	1				
16	1380259	Pipe	1				
17	1380261	Screw	1				
18	1318946	Clip	1				
19	1306359	Nut	2				
20	1318947	Bracket	1				
21	1318948	Bracket	1				
22	1306358	Screw	6				

- a** Included In Bottom Gasket Kit 1379738
- b** First Used On Engine S/N U588824Y, Must Replace Both Tube And Dipstick With New Tube And Dipstick.
- c** First Used On Engine S/N U588825Y

OIL PAN (FIGURE 39) DIESEL TURBO WITH LOW EMISSIONS

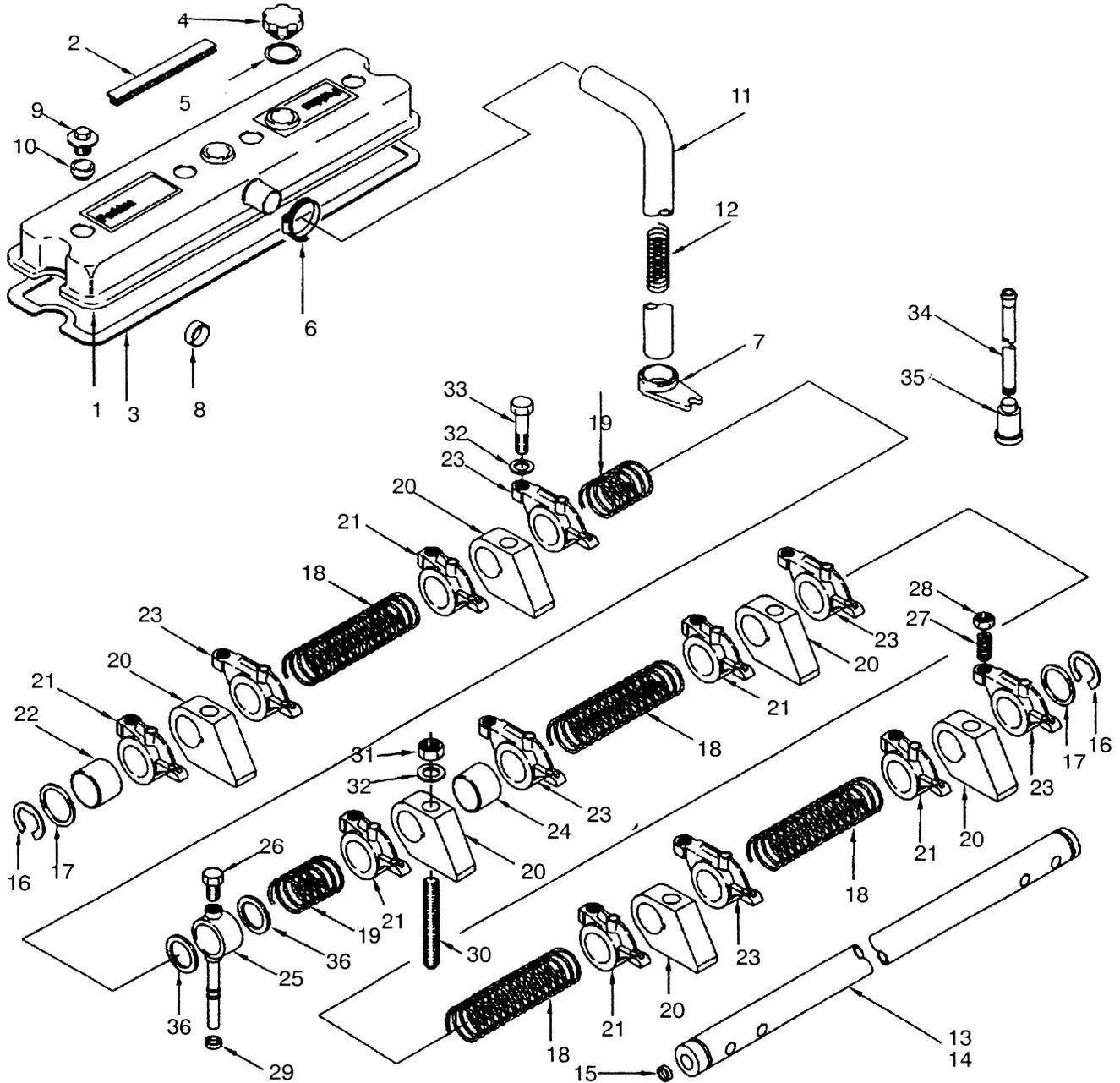


OIL PAN
DIESEL TURBO WITH LOW EMISSIONS

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1395975	Engine Turbo w/Emissions	1	19	1306359	Nut	2
1	1377720	Oil Pan	1	20	1318947	Bracket	1
2	266465	Insert	2	21	1318948	Bracket	1
3	377976	Plug	2	22	1306358	Screw	8
4	1306374	O-Ring	2	23	1306359	Nut	3
5	1318940	Screw	5	24	1318949	Plate	1
6	1450136	Bridge Piece	1	25	1385703	Dipstick	1
7	1307901	Stud	1	26	1385704	Tube	1
8	1307875	Screw	2	27	1382484	Pump	1
9	1306143	Sleeve	1	28	1318968	Screw	2
10	1318951	Nut	1	29	1307881	Screw	1
11	^a 1345786	Gasket	1	30	1318920	Valve	1
12	1318943	Pipe	1	31	301749	Spool	1
13	^a 1351996	Gasket	1	32	301750	Spring	1
14	386459	Screw	25	33	301751	Cap	1
15	1377908	Plug	1	34	1306328	Snap Ring	1
16	1380259	Pipe	1				
17	1380261	Screw	1				
18	1318946	Clip	1				

^a Included In Bottom Gasket Kit 1453064

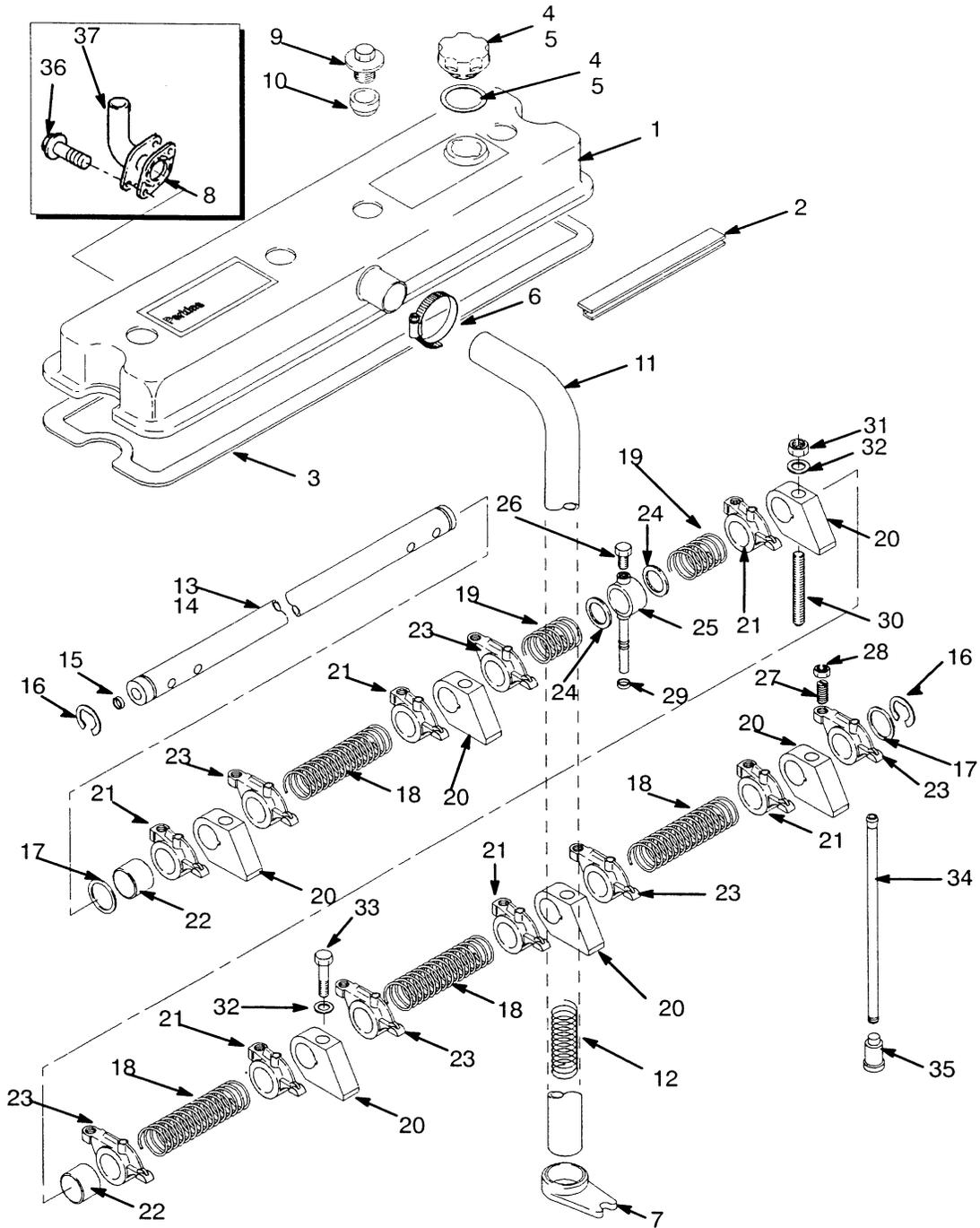
VALVE COVER (FIGURE 40) DIESEL NON-TURBO



**VALVE COVER
DIESEL NON-TURBO**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
a	376001	Engine	1	19	99723	Spring (Short)	2
b	1376008	Engine w/o Sound Reduction	1	20 a	1305722	Bracket	6
b	1376009	Engine w/Sound Reduction	1	20 b	1370947	Bracket	6
1 a	1318952	Valve Cover	1	21	1458331	Lever (RH)	6
1 b	1384985	Valve Cover	1	22	161454	Bushing	1
2 a	1318953	Seal	1	23	1458332	Lever (RH)	6
2 b	1380248	Seal	1	24	161454	Bushing	1
3 ac	1318954	Gasket	1	25 a	360815	Connector	1
3 b	1380249	Gasket	1	25 b	1374980	Connector	1
4 a	1306180	Cap	1	26 a	360816	Screw	1
5 a	1306181	Seal	1	26 b	1370948	Screw	1
6 a	130845	Clamp	1	27	1466859	Capscrew	12
6 b	1380250	Clamp	1	28	15026	Nut	12
7	301785	Bracket	1	29	158187	Sleeve	1
8 a	1306182	Plug	1	30	1306351	Stud	4
8 b	980727	Plug	1	31	1318914	Nut	4
9 a	1307888	Nut	4	32 a	1306352	Washer	6
9 b	1380763	Nut	4	33	1306353	Screw	2
10	1380245	Seal	4	34	99728	Push Rod	12
11	276022	Pipe	1	35	224248	Tappet	12
12	358506	Spring	1	36	367394	Shim	2
13 a	1318912	Shaft	1	a	Last Used On S/N D19D-1756 Including 1758 Except 1753 Last Used On Engine S/N U595032A		
13 b	1380258	Shaft	1	b	First Used On S/N D19D-1757 Including 1753 Except 1758 First Used On Engine S/N U595033A		
14	1318913	Shaft	1	c	Included In Top Gasket Kit 1369431		
15	990429	Plug	2				
16	99725	Snap Ring	2				
17	377945	Washer	2				
18	99722	Spring (long)	4				

VALVE COVER (FIGURE 41) DIESEL TURBO WITHOUT LOW EMISSION

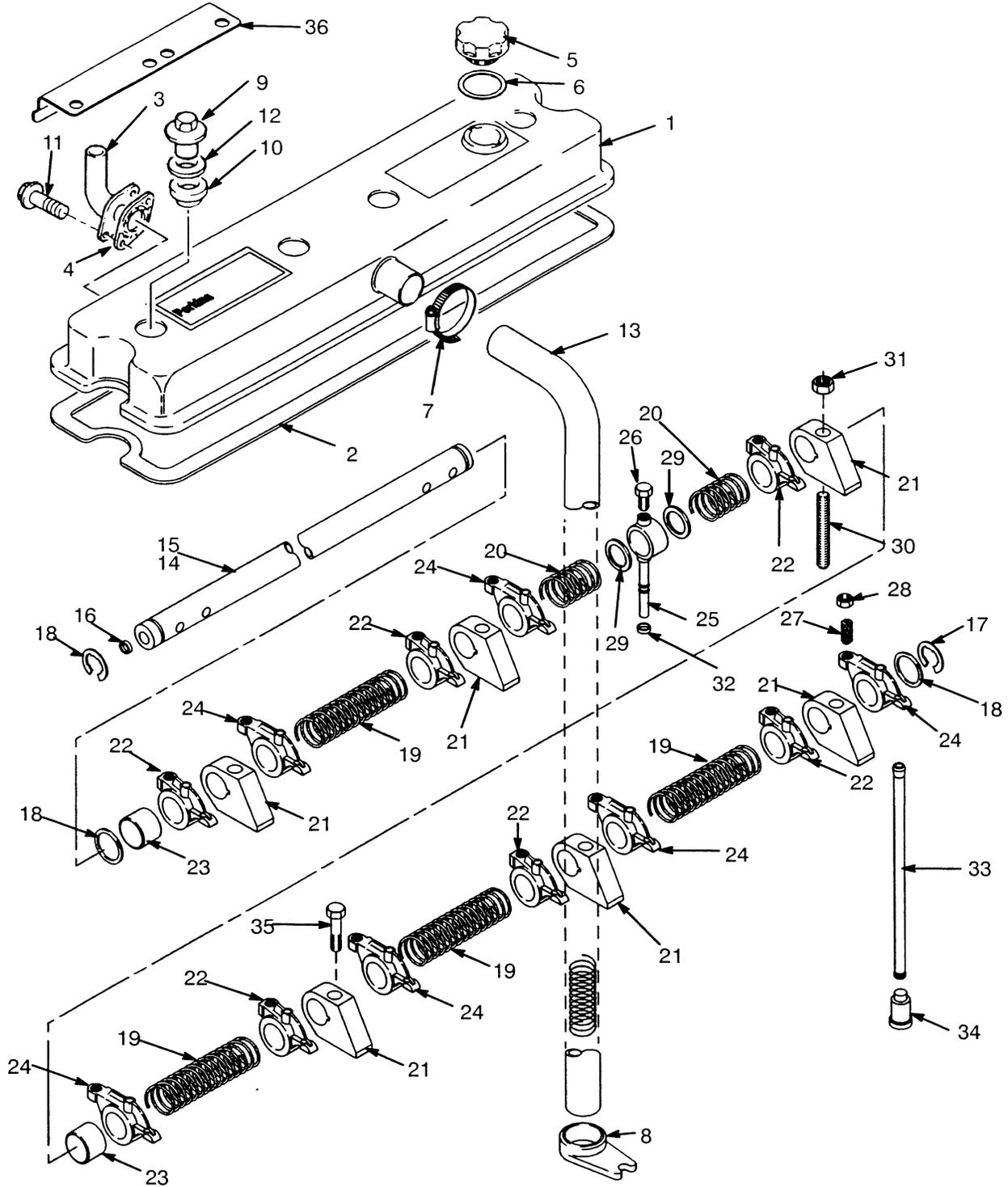


**VALVE COVER
DIESEL TURBO WITHOUT LOW EMISSIONS**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1377550	Engine	1	18	99722	Spring (Long)	4
1	b 1318952	Cover	1	19	99723	Spring (Short)	2
1	1384985	Valve Cover	1	20	1370947	Bracket	6
2	b 1318953	Seal	1	21	1305723	Lever (RH)	6
2	c 1380248	Seal	1	22	161454	Bushing	1
3	ab 1318954	Gasket	1	23	1305724	Lever (LH)	6
3	c 1380249	Gasket	1	24	b 367394	Shim	2
4	b 1306180	Cap	1	25	1374980	Connector	1
4	b 1306181	Seal	1	26	1370948	Screw	1
5	c 1380246	Cap	1	27	1466859	Screw	12
5	c 1380247	O-Ring	1	28	15026	Nut	12
6	130845	Clamp	1	29	158187	Sleeve	1
7	301785	Bracket	1	30	1306351	Stud	4
8	1345751	Gasket	1	31	1370949	Nut	4
9	1380244	Nut	4	32	1306352	Washer	6
10	d 301775	Bushing	4	33	1306353	Screw	2
10	d 1380245	Seal	4	34	99728	Push Rod	12
10	d 1371711	Shim	4	35	224248	Tappet	12
11	276022	Pipe	1	36	1307881	Screw	2
12	358506	Spring	1	37	1382459	Pipe	1
13	1380258	Shaft	1				
14	1318912	Shaft	1				
15	990429	Plug	2				
16	99725	Snap Ring	2				
17	377945	Washer	2				

- a** Included In Top Gasket Kit 1369431
- b** Last Used On Engine S/N U595032A
- c** First Used On Engine S/N U595033A
- d** Service 301775 With 1380245 and 1371711

VALVE COVER (FIGURE 42) DIESEL TURBO WITH EMISSIONS FIRST USED ON S/N D19D-2377



VALVE COVER

DIESEL TURBO WITH EMISSIONS

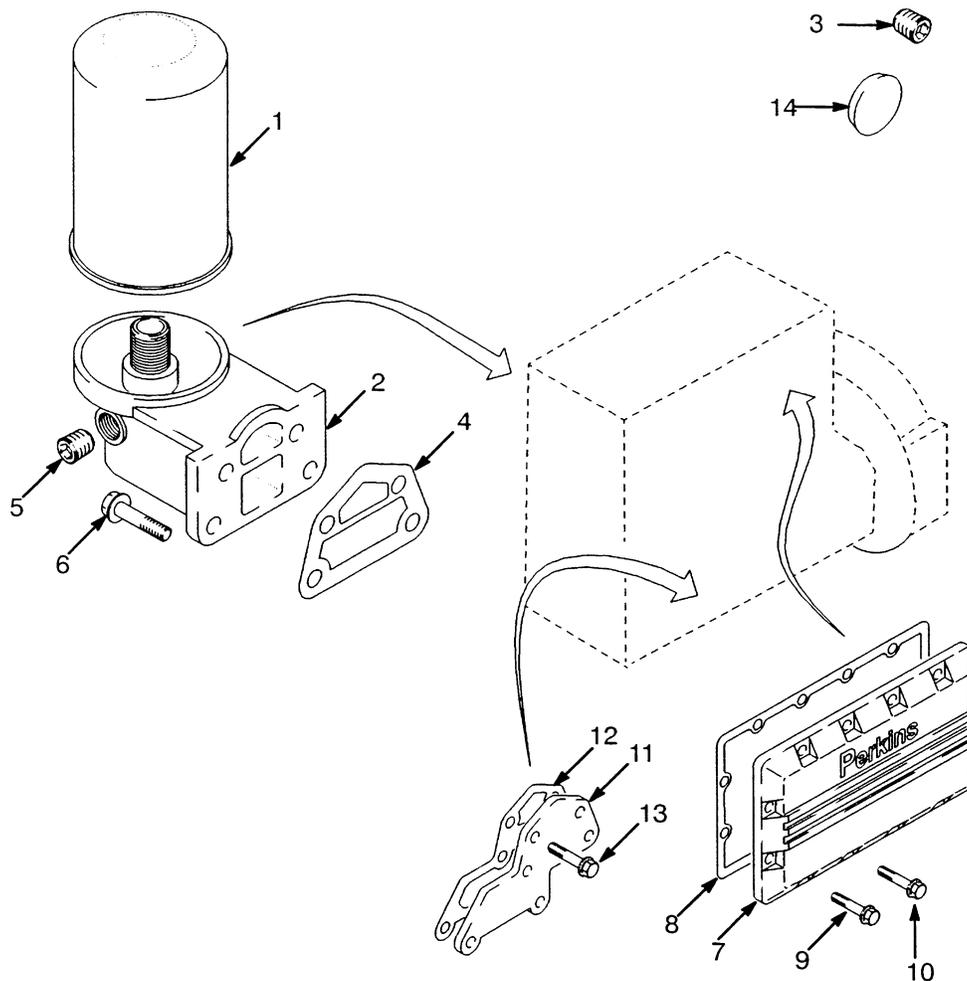
FIRST USED ON S/N D19D-2377

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1395975	Engine	1	19	99722	Spring (Long)	4
1	b 1451677	Valve Cover Assembly	1	20	99723	Spring (Short)	2
1	c 1467415	Valve Cover Assembly	1	21	1370947	Bracket	6
1	.....	Valve Cover	1	22	1451643	Lever (RH)	6
2	a 1451715	Gasket	1	23	1451644	Bushing	6
3	.....	Oil Pipe	1	24	1451645	Lever (LH)	6
4	.....	Gasket	1	25	1374980	Connector	1
5	1391246	Cap	1	26	1370948	Screw	1
5	.....	Cap	1	27	1466859	Capscrew	12
6	1380247	O-Ring	1	28	15026	Nut	12
7	1380250	Clip	1	29	367394	Shim	2
8	301785	Bracket	1	30	1306351	Stud	4
9	1380763	Nut	4	31	1370949	Nut	4
10	1380245	Seal	1	32	158187	Sleeve	1
11	1307881	Screw	2	33	99728	Push Rod	12
12	15125	Washer	4	34	224248	Tappet	12
13	276022	Pipe	1	35	1306353	Screw	2
14	1452863	Rocker Shaft Assy	1	36	1471326	Heat Shield	1
15	1452864	Shaft	1				
16	990429	Plug	2	a	Included In Top Gasket Kit 1453063		
17	99725	Snap Ring	2	b	Last Used On Engine S/N U708388D		
18	1451642	Washer	2	c	First Used On Engine S/N U708389D		

OIL FILTER (FIGURE 43)

DIESEL NON-TURBO

LAST USED ON S/N D19D-1756 INCLUDING 1758 EXCEPT 1753



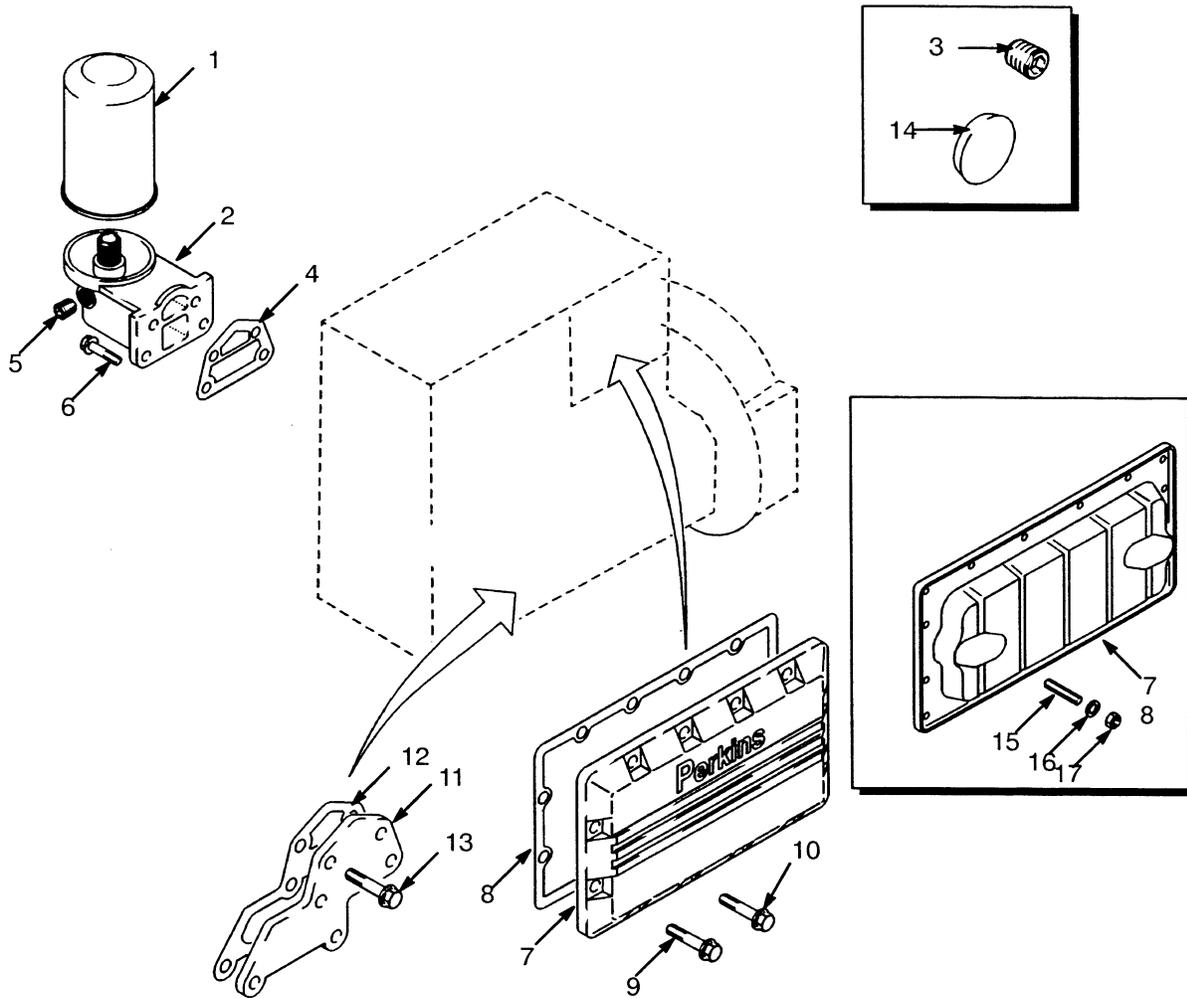
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	376001	Engine	1	9	1307894	Screw	2
1	1327905	Oil Filter	1	10	386459	Screw	10
2	1391245	Filter Head	1	11	1318958	Adapter	1
3	15314	Fitting	1	12 ^c	1345802	Gasket	1
4 ^c	1345800	Gasket	1	13	1306365	Screw	2
5	15483	Fitting	1	14	170748	Plug	1
6	1306368	Screw	4				
7	1318956	Cover	1				
8 ^c	1383623	Gasket	1				

^c Included In Bottom Gasket Kit 1379738

OIL FILTER (FIGURE 44)

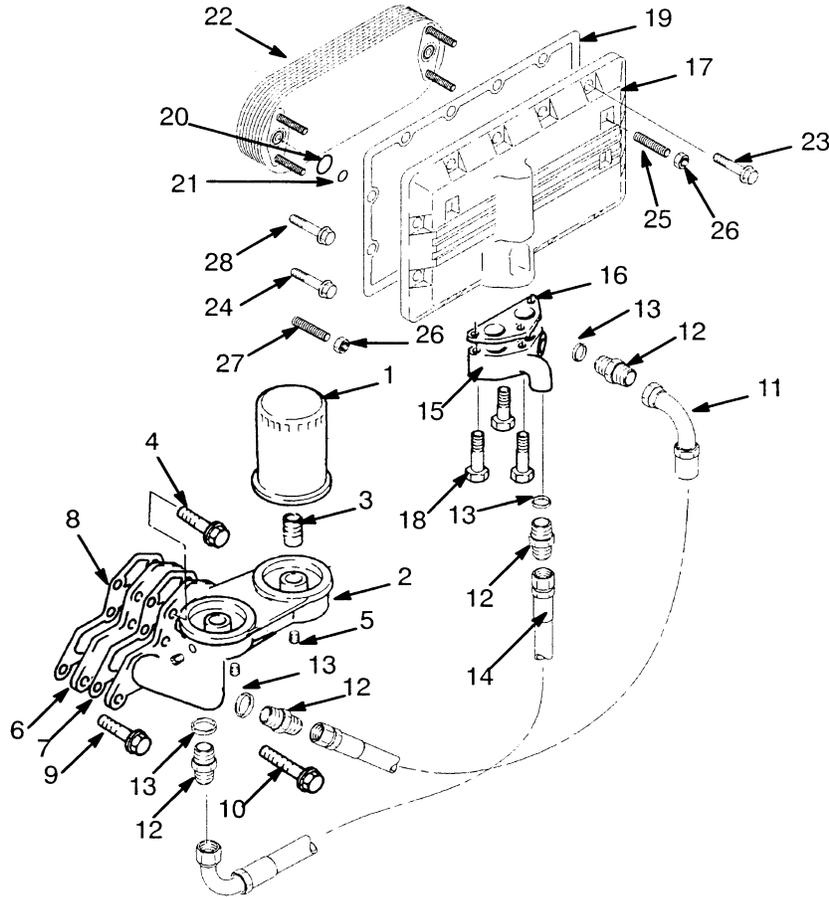
DIESEL NON-TURBO

FIRST USED ON S/N D19D-1757 INCLUDING 1753 EXCEPT 1758



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1376008	Engine w/o Sound Reduction	1	8	1460209	Loctite	AR
	1376009	Engine w/Sound Reduction	1	9	1307894	Screw	2
1	1327905	Oil Filter	1	10	386459	Screw	10
2	1391245	Filter Head	1	11	1318958	Adapter	1
3	15314	Fitting	1	12 ^c	1345802	Gasket	1
4 ^c	1345800	Gasket	1	13	1306365	Screw	2
5	15483	Fitting	1	14	170748	Plug	1
6	1306368	Screw	4	15	1306033	Stud	3
7	1318956	Cover	1	16	982256	Spacer	3
7	1453378	Cover	1	17	1306359	Nut	3
8 ^c	1383623	Gasket	1	^c Included In Bottom Gasket Kit 1379738			

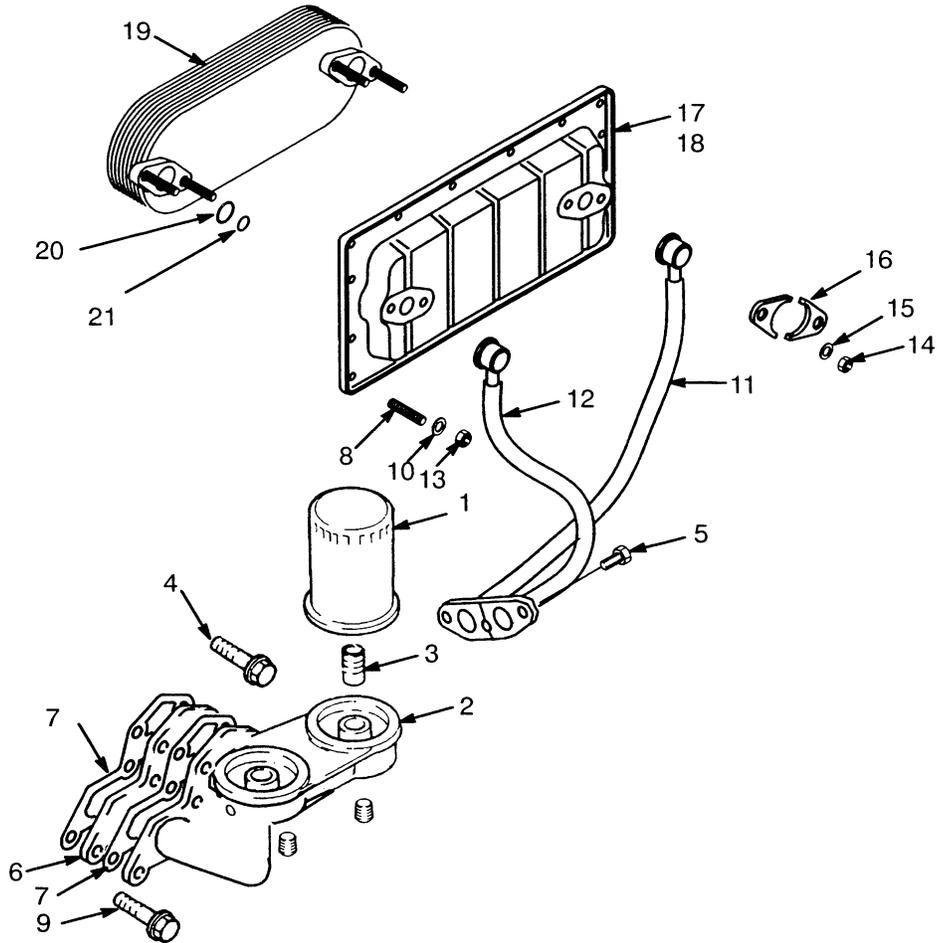
OIL FILTER (FIGURE 45) DIESEL TURBO WITHOUT LOW EMISSIONS UP TO ENGINE S/N U647451C



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1377550	Engine Turbo	1	16	1382961	Gasket	1
1	195852	Oil Filter	2	17	1383622	Housing	1
2	1382953	Filter Head	1	18	1318968	Screw	3
3	1382954	Connector	1	19	1383623	Gasket	1
4	1318963	Screw	4	20	1383621	O-Ring	2
5	15313	Fitting	3	21	1311094	O-Ring	1
6	1382955	Adapter	1	22	1383620	Oil Cooler	1
7 ^a	1345800	Gasket	1	23	1306362	Screw	8
8	1357098	Gasket	1	24	1315497	Screw	1
9	1306368	Screw	1	25	1383624	Stud	1
10	1307914	Screw	1	26	1306359	Nut	6
11	1382956	Pipe Oil	1	27	1384400	Stud	1
12	1382957	Connection	4	28	1307909	Screw	2
13	1382958	Washer	4				
14	1382959	Pipe Oil	1				
15	1382960	Adapter	1				

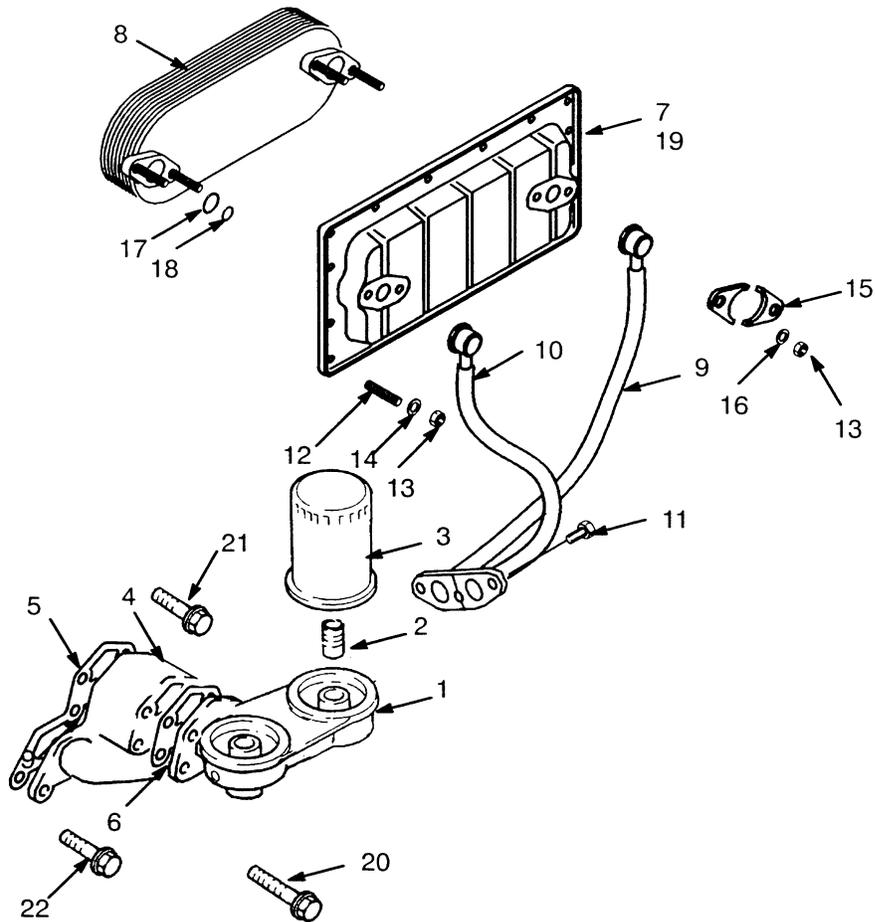
^a Included In Bottom Gasket Kit 1379738

OIL FILTER (FIGURE 46)
DIESEL TURBO WITHOUT LOW EMISSIONS
ENGINE S/N U647452C AND UP



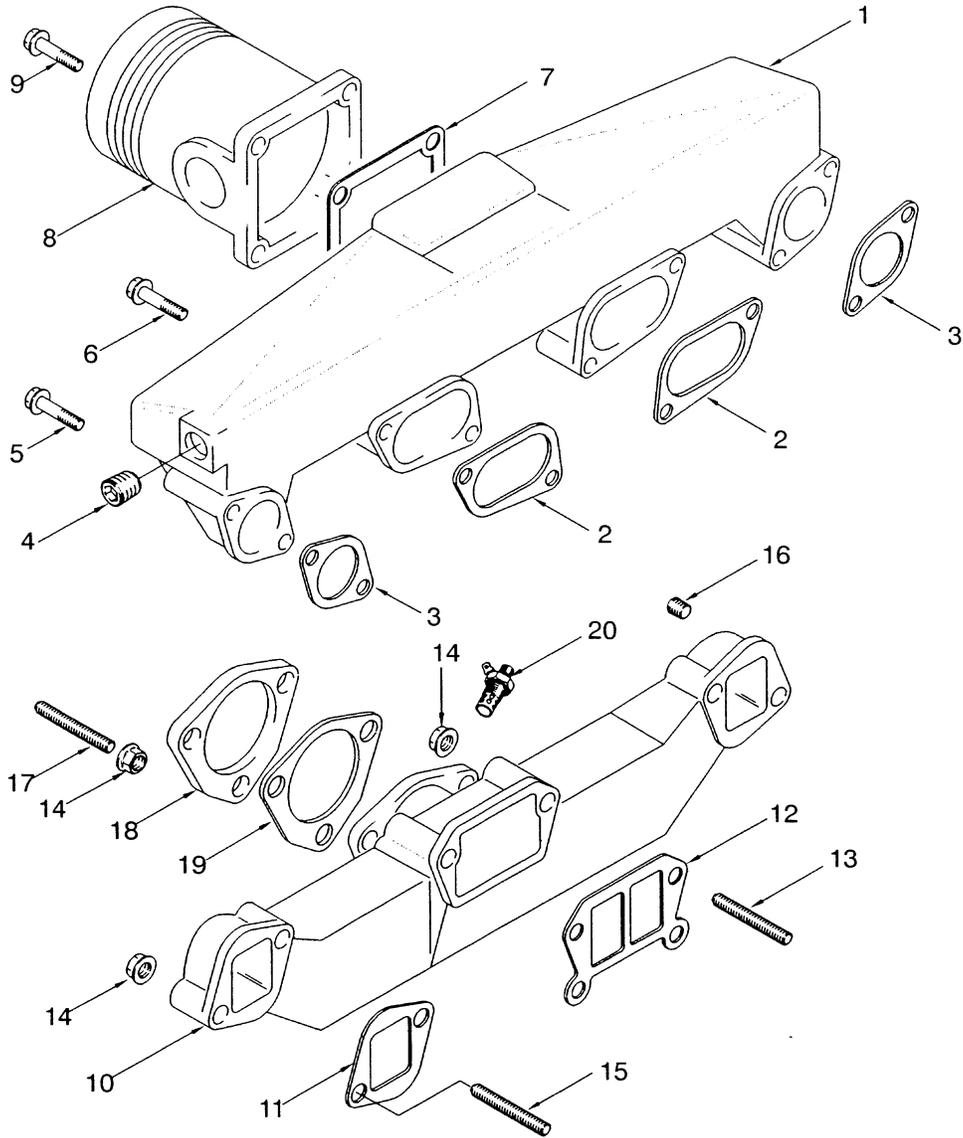
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1377550	Engine Turbo	1	11	1452841	Pipe Oil	1
1	195852	Oil Filter	2	12	1451724	Pipe Oil	1
2	1382953	Filter Head	1	13	1306358	Nut	3
3	1382954	Connector	1	14	1307891	Nut	4
4	1318963	Screw	4	15	1451725	Seal	4
5	1306358	Screw	2	16	1451729	Flange	4
6	1382955	Adapter	1	17	1451728	Housing	1
7	1345800	Gasket	2	18	1460209	Loctite	1
8	1306033	Stud	3	19	1460103	Oil Cooler	1
9	1306368	Screw	1	20	1451727	O-Ring	4
10	982256	Spacer	3	21	1451725	Seal	4

OIL FILTER (FIGURE 47) DIESEL TURBO WITH LOW EMISSIONS



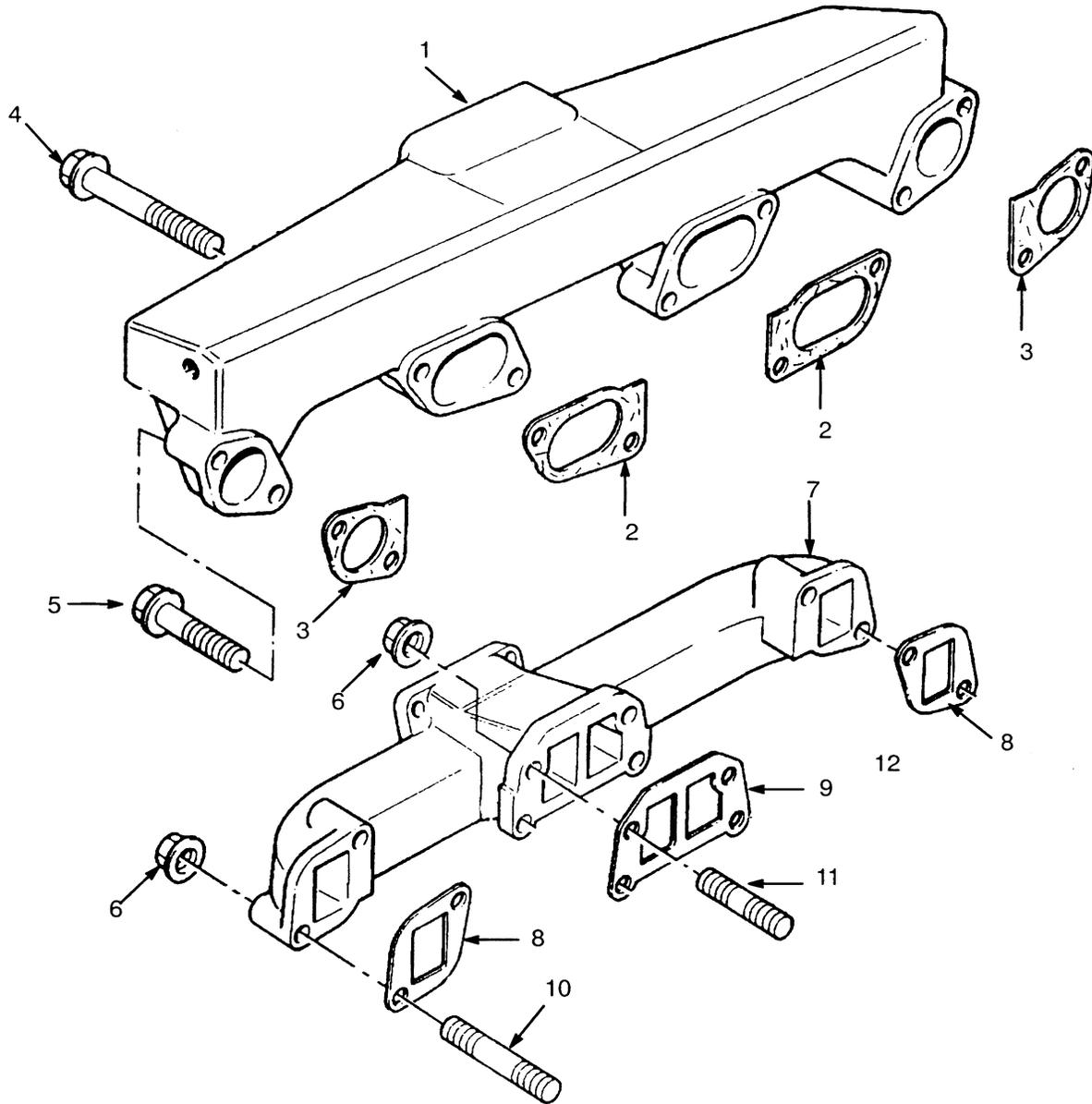
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1395975	Engine Turbo	1	13	1306359	Nut	7
1	1382953	Filter Head	1	14	982256	Spacer	3
2	1382954	Connector	1	15	1451729	Flange	4
3	195852	Oil Filter	2	16	^a 1451725	Seal	4
4	1451722	Adapter	1	17	^a 1451727	O-Ring	4
5	^a 1451723	Gasket	1	18	1311094	O-Ring	2
6	^a 1345800	Gasket	1	19	1460209	Loctite	1
7	1451728	Housing	1	20	1307913	Screw	1
8	1451726	Oil Cooler	1	21	1307881	Screw	13
9	1452841	Pipe Oil	1	22	1306368	Screw	1
10	1451724	Pipe Oil	1				
11	1306358	Screw	3				
12	1306033	Stud	3				
				^a	Included In Bottom Gasket Kit 1453064		

**MANIFOLDS (FIGURE 48)
DIESEL NON-TURBO**



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
a	376001	Engine	1	13	1319047	Stud	4
b	1376008	Engine w/o Sound Reduction	1	14 a	1306370	Nut	12
b	1376009	Engine w/Sound Reduction	1	14 b	1306370	Nut	9
1	1319041	Inlet Manifold	1	15	1307911	Stud	2
2 c	301806	Gasket	2	16	1318904	Plug	2
3 c	301805	Gasket	2	17	1459728	Stud	4
4	982155	Plug	1	18	1306224	Flange	1
5	1319042	Screw	6	19	1355319	Gasket	1
6	1319043	Screw	2	20	245885	Heater	1
7 c	1345793	Gasket	1	a	Last Used On S/N D19D-1756 Including 1758 Except 1753		
8	1319045	Connector	1	b	First Used On S/N D19D-1757 Including 1753 Except 1758		
9	1307910	Screw	4	c	Included In Top Gasket Kit 1369431		
10	1319046	Exhaust Manifold	1				
11 c	367338	Gasket	2				
12 c	303835	Gasket (Center)	1				

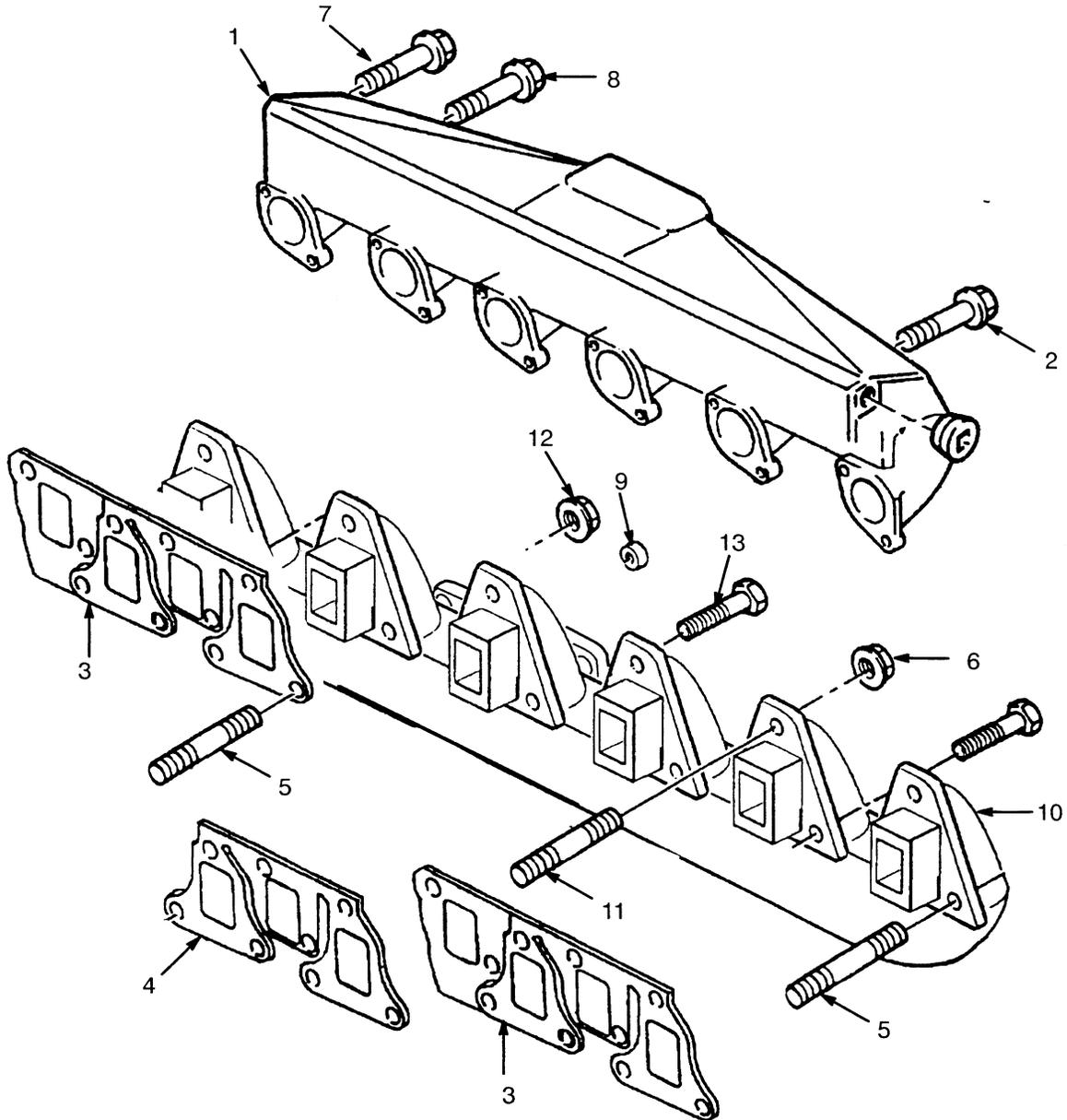
MANIFOLDS (FIGURE 49) DIESEL TURBO WITHOUT LOW EMISSIONS



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1377550	Engine Turbo	1	6	1306370	Nut	2
1	1319041	Inlet Manifold	1	7	1382467	Exhaust Manifold	1
2	^a 301806	Gasket	2	8	^a 367338	Gasket	2
3	^a 301805	Gasket	2	9	^a 1369073	Gasket (Center)	1
4	1319043	Screw	2	10	1460564	Stud	4
5	1319042	Screw	6	11	1382468	Stud	4

^a Included In Top Gasket Kit 1369431

**MANIFOLDS (FIGURE 50)
DIESEL TURBO WITH EMISSIONS**

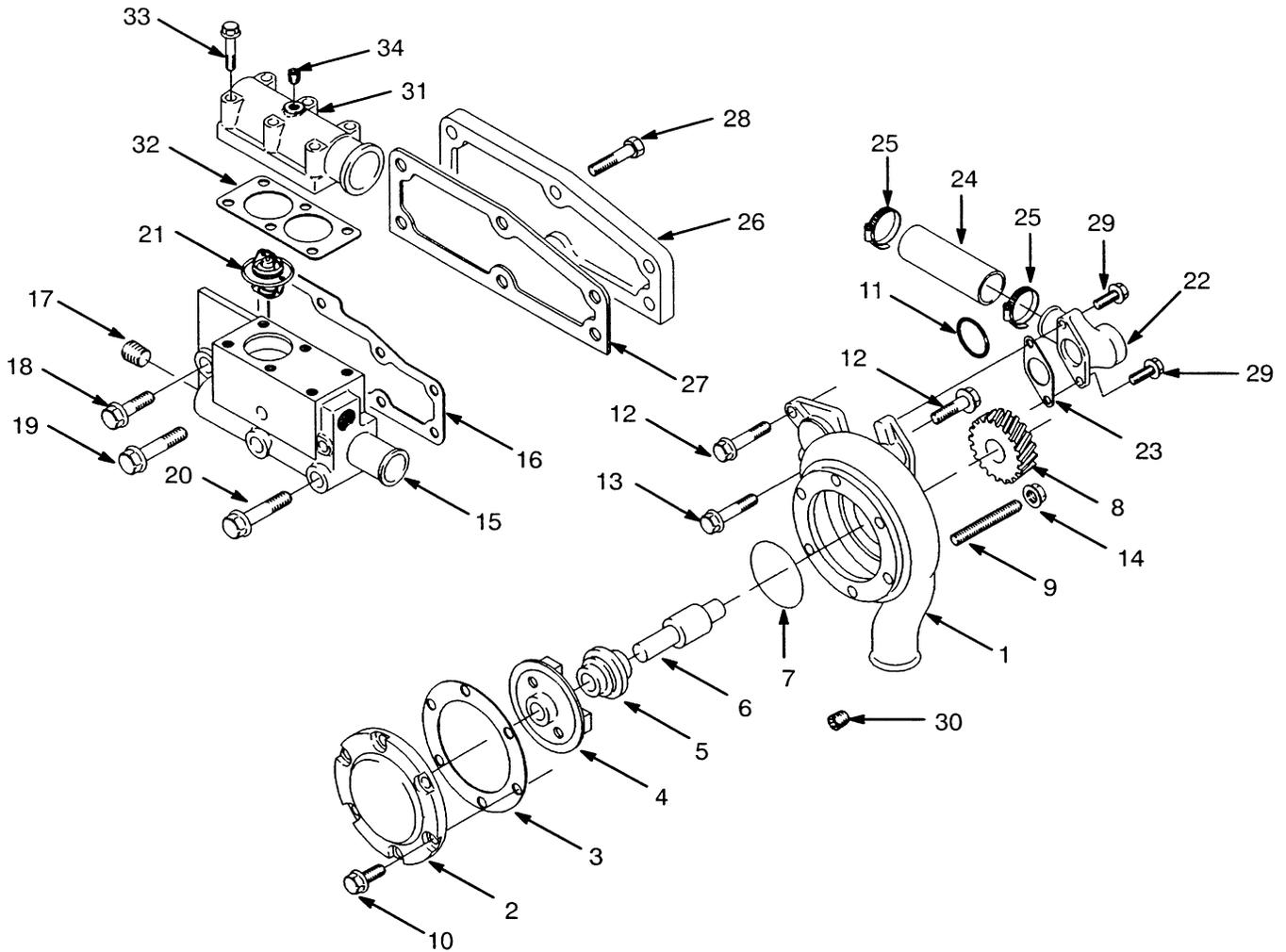


REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1395975	Engine Turbo	1	8	1451758	Screw	1
1	1451749	Induct Manifold	1	9	1453185	Ferrule	2
2	1452800	Screw	6	10	1451752	Exhaust Manifold	1
3	a 1451750	Gasket	2	11	1459731	Stud	5
4	a 1451751	Gasket	1	12	1454267	Nut	5
5	1451754	Stud	12	13	1453390	Screw	1
6	1451753	Nut	20				
7	1307908	Screw	5	a	Included In Top Gasket Kit 1453063		

WATER PUMP (FIGURE 51)

DIESEL

LAST USED ON S/N D19D-1756 ALSO 1758 EXCEPT 1753



WATER PUMP

DIESEL

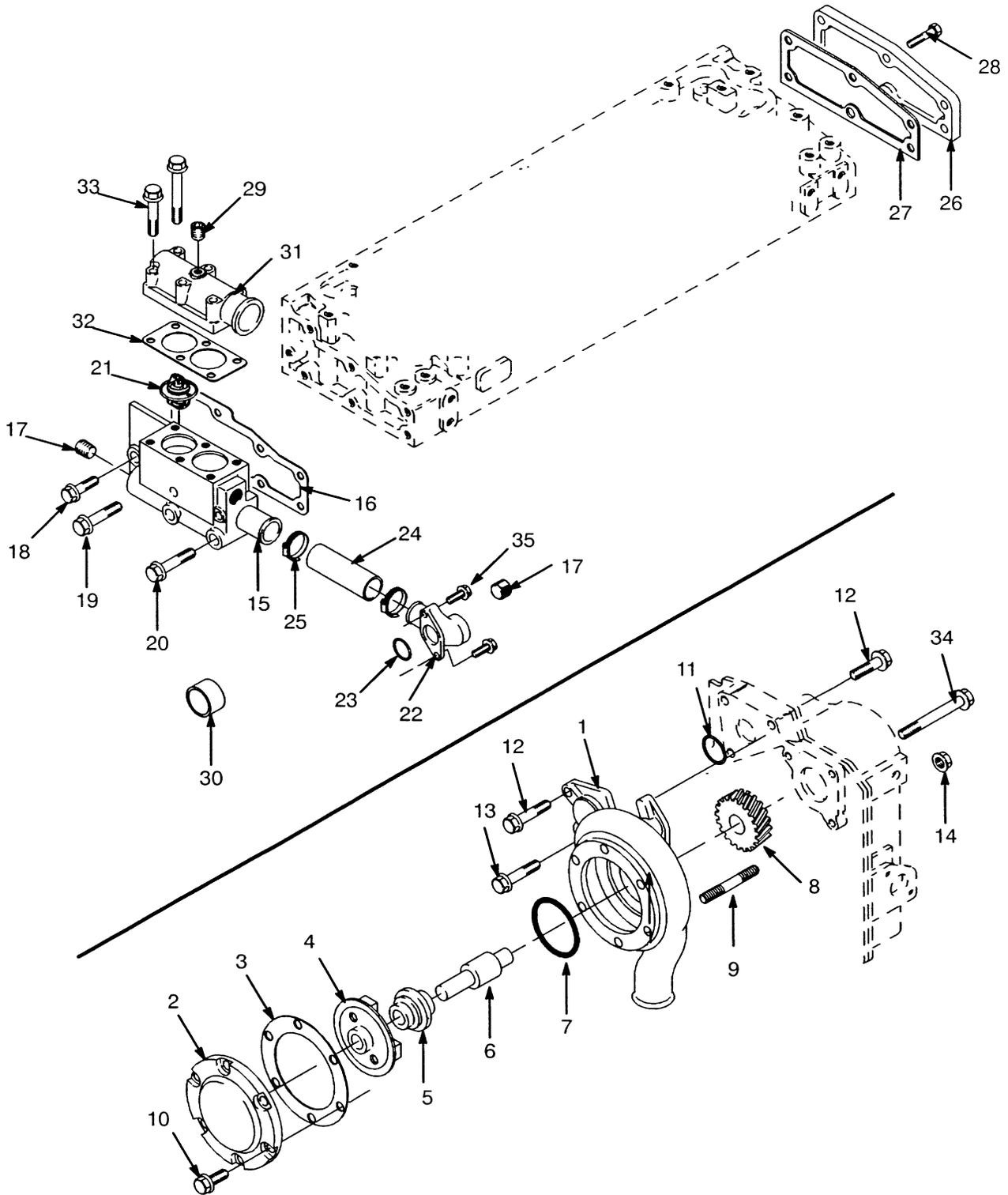
LAST USED ON S/N D19D-1756 ALSO 1758 EXCEPT 1753

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	376001	Engine	1	22	e 1306205	Connector	1
1	a 1338837	Water Pump	1	23	d 1345791	Gasket	1
1	.....	Body	1	24	1309831	Kit-Hose	1
2	1306201	Cover	1	25	119236	Clamp	2
3	b 1345785	Gasket	1	26	1306199	Plate	1
4	c	Impeller	1	27	d 1369074	Gasket	1
5	1307904	Seal	1	28	1307881	Screw	3
6	c	Shaft	1	29	1307913	Screw	2
7	1307902	Seal	1	30	1318964	Plug	1
8	1318967	Gear	1	31	f 1306208	Connector	1
9	1338838	Capscrew	3	32	d 1345792	Gasket	1
10	1307900	Screw	6	33	1318968	Screw	4
11	b 1466858	O-Ring	1	33	1307898	Screw	2
12	1306373	Screw	2	34	349378	Plug	1
13	1307895	Screw	1		a	Remanufactured Water Pump 3026190	
14	1306359	Nut	3		b	Included In Bottom Gasket Kit 1379738	
15	1318962	Housing	1		c	Included In Repair Kit 1319089	
16	d 1345798	Gasket	1		d	Included In Top Gasket Kit 1369431	
17	15962	Fitting	2		e	Service With 1454317 (Connector) And Gasket 1345756	
18	1307898	Screw	1		f	Service With 1450388 (Connector) And 1450389 (O-Ring)	
19	1318921	Screw	2				
20	1318963	Screw	2				
21	301793	Thermostat (180° F)	2				

WATER PUMP (FIGURE 52)

DIESEL

FIRST USED ON S/N D19D-1757 ALSO 1753 EXCEPT 1758

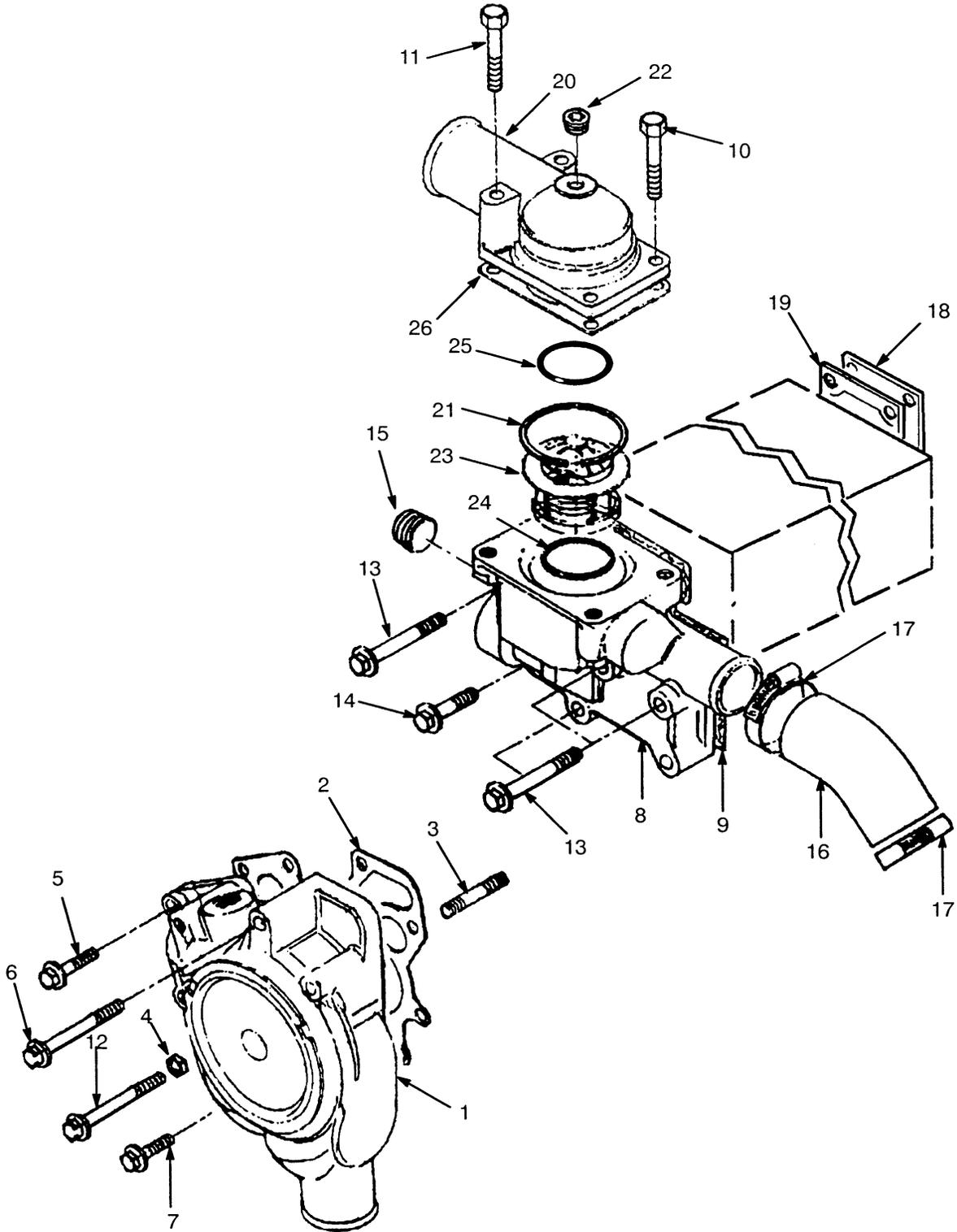


**WATER PUMP
 DIESEL**

FIRST USED ON S/N D19D-1757 ALSO 1753 EXCEPT 1758

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY	
	1376008	Engine w/o Sound Reduction	1	19	1318921	Screw	2	
	1376009	Engine w/Sound Reduction	1	20	1318963	Screw	2	
	1377550	Engine Turbo	1	21	301793	Thermostat (180 ° F)	2	
1	a	1457099	Water Pump	1	22	1454317	Connector	1
1		.....	Body	1	23	1454318	O-ring	1
2		.....	Cover	1	24	1309831	Kit-Hose	1
3	b	1345785	Gasket	1	25	119236	Clamp	2
4	b	.....	Impeller	1	26	1306199	Plate	1
5	b	1388376	Seal	1	27	c 1345760	Gasket	1
6	b	.....	Shaft	1	28	1307881	Screw	3
7	b	1307902	Seal	1	29	349378	Plug	1
8		1318967	Gear	1	30	1318964	Plug	1
9		1307901	Stud	3	31	1306208	Connector	1
10		1369041	Screw	6	32	c 1345792	Gasket	1
11	b	1466858	O-ring	1	33	1318968	Screw	6
12		1306373	Screw	2	34	1338838	Capscrew	3
13		1307895	Screw	1	35	1307913	Screw	2
14		1306359	Nut	3				
15		1318962	Housing	1				
16	c	1345798	Gasket	1	a	Remanufactured Water Pump 3026190R		
17		15962	Fitting	3	b	Included In Repair Kit 1380263		
18		1307898	Screw	3	c	Included In Top Gasket Kit 1369431		

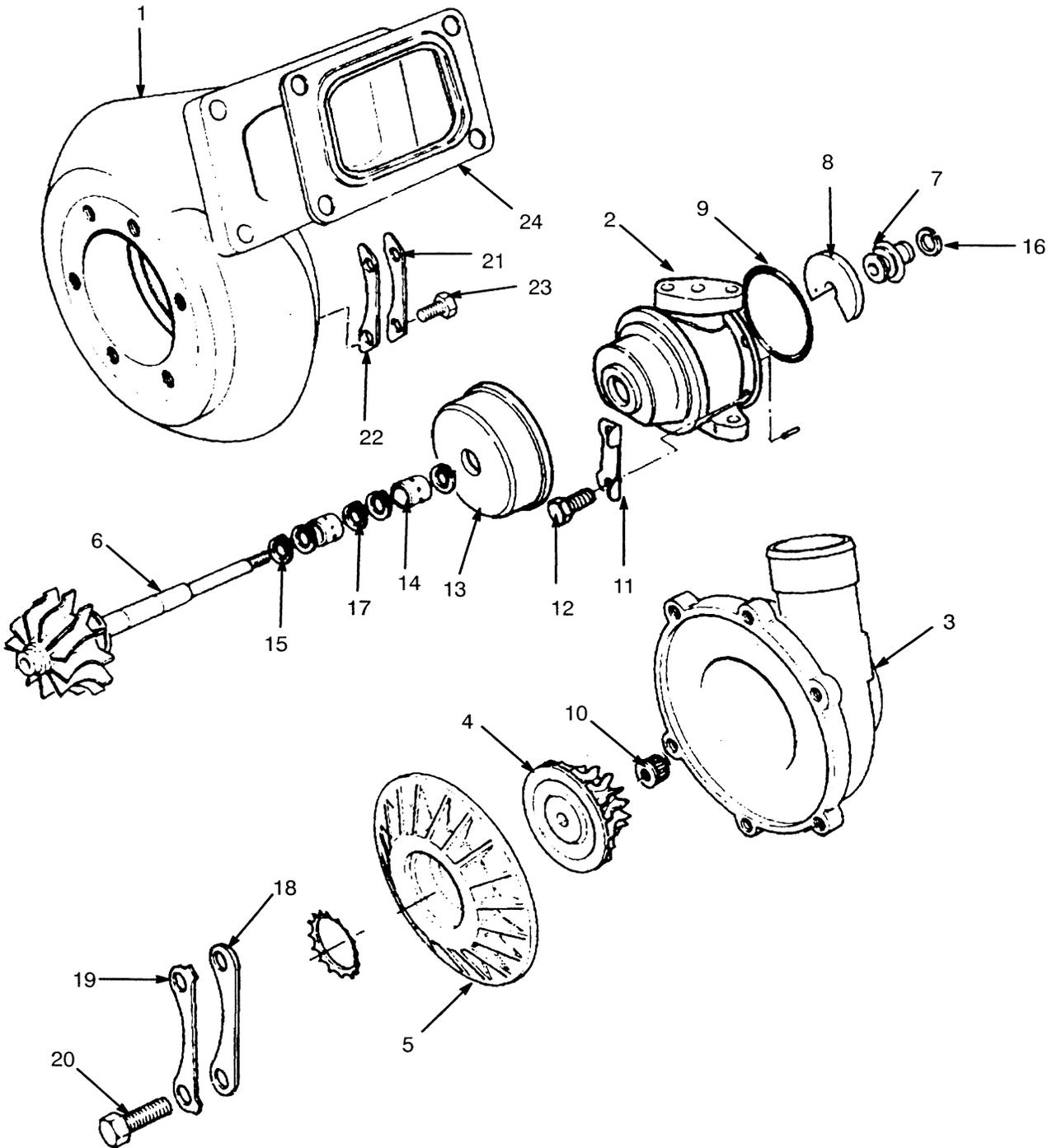
WATER PUMP (FIGURE 53) DIESEL TURBO WITH LOW EMISSIONS FIRST USED ON S/N D19D-2377



WATER PUMP
DIESEL TURBO WITH LOW EMISSIONS
FIRST USED ON S/N D19D-2377

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1395975	Engine Turbo	1	19	b 1451739	Gasket	1
1	a 1460454	Water Pump (Before 6/99)	1	20	c 1451741	Connector	1
1	f 1465895	Water Pump (6/99 And Up)	1	20	d 1465803	Connector Assy	1
2	ba 1451733	Gasket	1	20	e 1465937	Connector Assy	1
3	1451731	Stud	2	21	1465810	O-Ring	1
4	1306359	Nut	2	22	c 349378	Plug	1
5	1315497	Screw	1	22	d 1465811	Plug	1
6	1307908	Screw	4	23	1456745	Thermostat	1
7	1307894	Screw	3	23	d 1456745	Thermostat	1
8	1466329	Thermo Housing	1	23	e 1466053	Thermostat	1
9	b 1451735	Gasket	1	24	1451737	O-Ring	1
10	c 386459	Screw	2	24	d 1451737	O-Ring	1
10	d 1318968	Screw	2	25	c 1451738	Ring	1
11	c 1307881	Screw	6	25	d 1465812	Ring	1
11	d 1306358	Screw	2	26	1451742	Gasket	1
12	1318965	Screw	1				
13	1307898	Screw	5	a	Included In Repair Kit 1460560		
14	c 1318921	Screw	3	b	Included In Top Gasket Kit 1453063		
14	d 1318921	Screw	1	c	Last Used On Engine S/N U654221C		
15	15962	Plug	1	d	First Used On Engine S/N U654222C Thru U654243C		
16	1451736	Hose	1	e	First Used On Engine S/N U6545244C		
17	127045	Clip	2	f	Repair And Replace Gasket With Kit 1465896		
18	1456782	Cover	1				

TURBOCHARGER (FIGURE 54) DIESEL TUBO

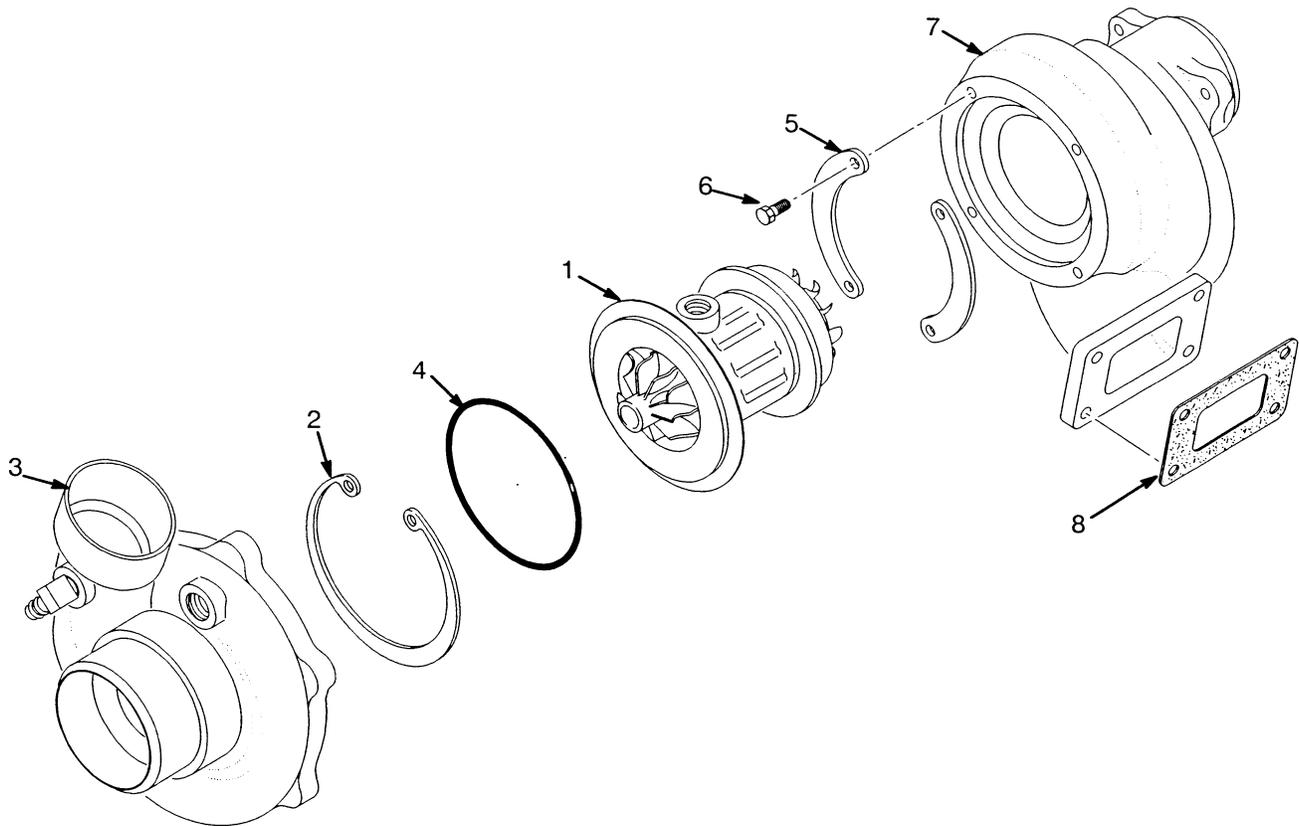


**TURBOCHARGER
DIESEL TURBO**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1377550	Engine Turbo	1	14	a 303830	Bearing	1
1	1382528	Turbocharger	1	15	a 349478	Ring	1
2	1382530	Housing Assembly	1	16	a 303827	Ring	1
3	1382531	Housing	1	17	a 303831	Snap Ring	4
4	1382532	Wheel	1	18	a 303808	Clamp	3
5	349479	Plate	1	19	a 303810	Tab Washer	3
6	303820	Shaft Assembly	1	20	a 303809	Set Screw	6
7	303828	Thrust Collar	1	21	a 303814	Tab Washer	3
8	a 303829	Thrust Bearing	1	22	a 303812	Clamp	3
9	a 303826	Ring	1	23	a 303809	Set Screw	6
10	a 303819	Nut	6	24	1357789	Gasket	1
11	a 303825	Tab Washer	2				
12	a 303824	Set Screw	4				
13	.....	Shroud	1				

a Included In Repair Kit 349480

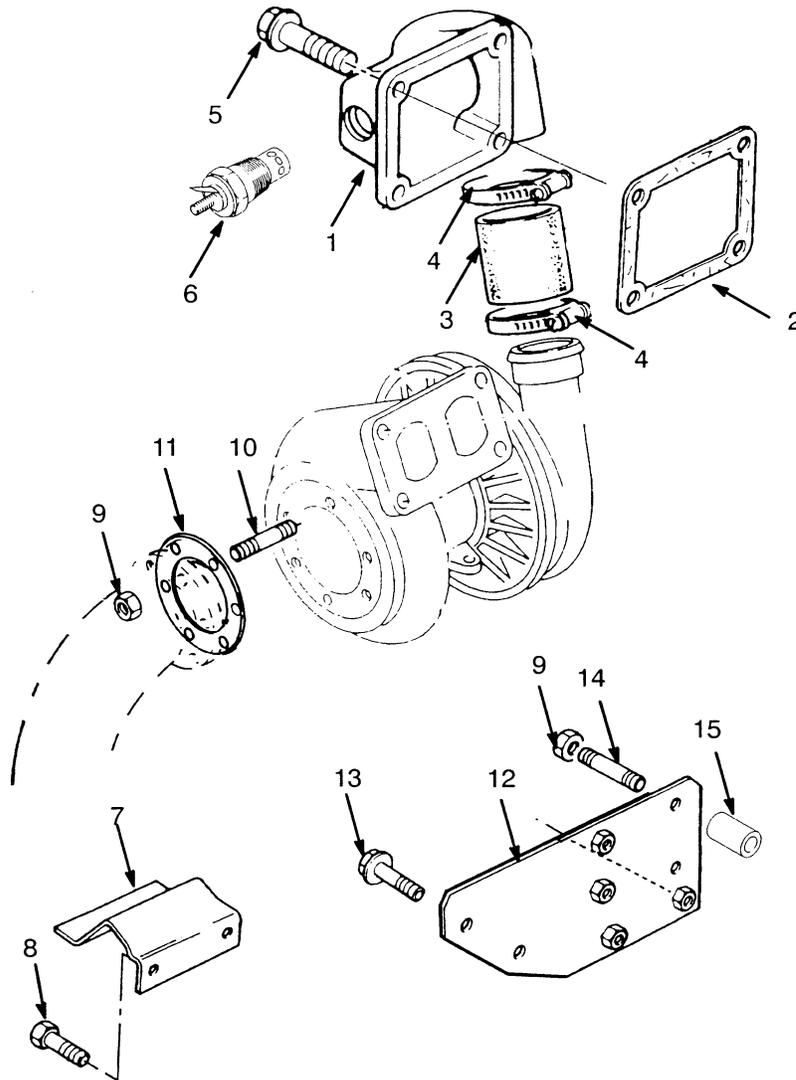
TURBOCHARGER (FIGURE 55) DIESEL TURBO FIRST USED ON S/N D19D-2377



TURBOCHARGER
DIESEL TURBO
FIRST USED ON S/N D19D-2377

<u>REF</u>	<u>PART NO.</u>	<u>NAME OF PART</u>	<u>QTY</u>	<u>REF</u>	<u>PART NO.</u>	<u>NAME OF PART</u>	<u>QTY</u>
	1395975	Engine Turbo	1	6	361298	Bolt	4
	1451759	Turbocharger	1	7	1467407	Housing	1
. 1	1467401	Housing	1	7	1467408	Wheel	1
. 2	1467402	Retaining Ring	1	7	1467409	Bolt	1
3	1467403	Housing	1	8	1451760	Gasket	1
3	1467404	Wheel	1				
. 4	1467405	O-Ring	1				

AIR DUCTS (FIGURE 56) DIESEL TURBO

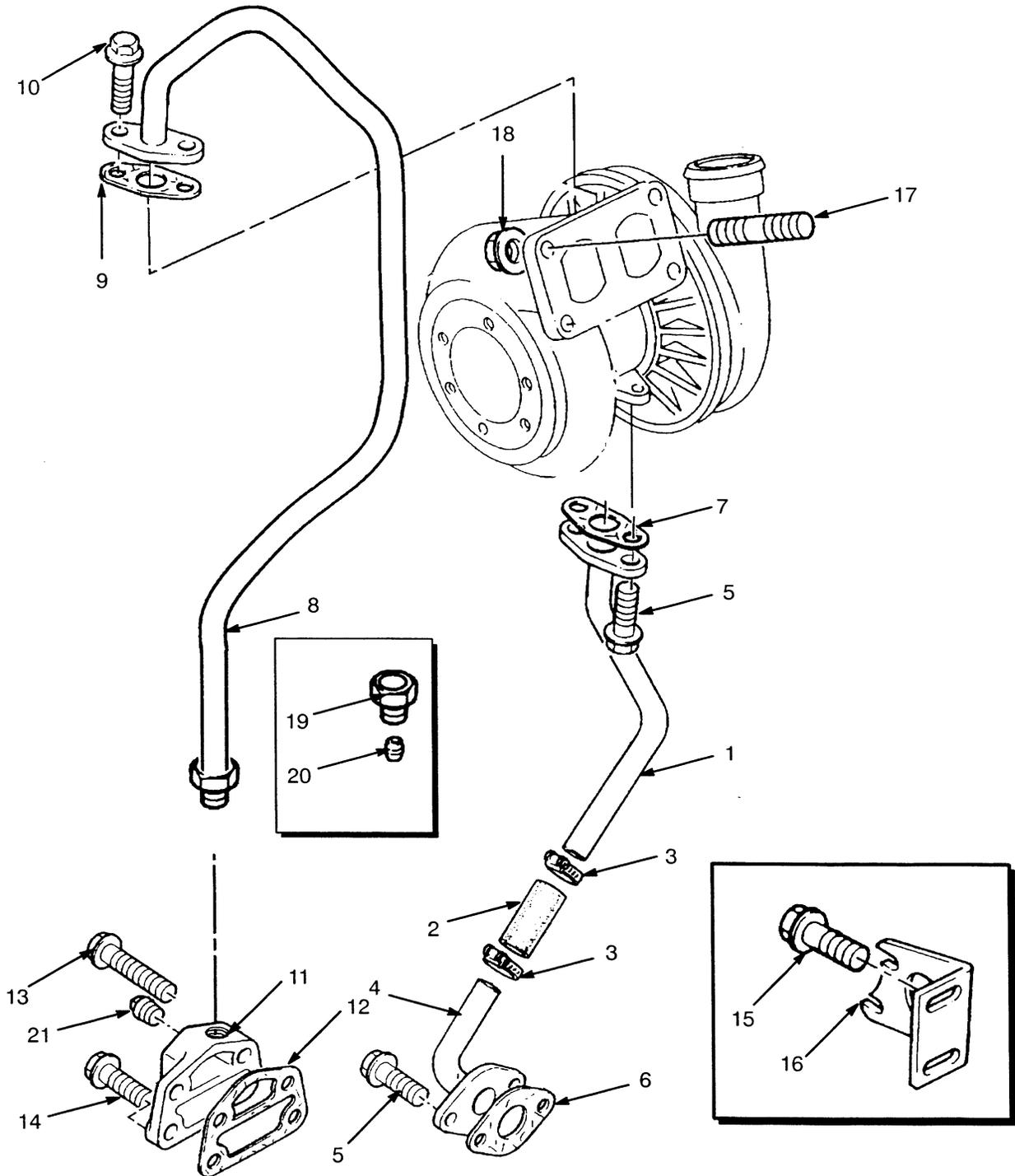


KEY:

- A** Without Emissions
- B** With Emissions

REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
1	1382534	Elbow	1	..	9	1460066	Nut .....	..	6
1	a 1451761	Elbow .....	..	1	10	1382471	Stud	6	6
2	c 1345793	Gasket	1	..	11	1382470	Gasket	1	1
2	ba 1451762	Gasket .....	..	1	12	1382526	Heat Shield	1	..
3	1454296	Hose	1	..	12	a 1451764	Heat Shield .....	..	1
3	a 1451763	Hose .....	..	1	13	1315497	Screw	2	..
4	119236	Clamp	2	2	13	a 1307886	Screw .....	..	3
5	1343174	Screw	4	..	14	1382527	Stud	2	..
5	a 1307897	Screw .....	..	4	15	303865	Spacer	1	..
6	245885	Intake Heater	1	1	a	First Used On S/N D19D-2377			
7	306751	Heat Shield	12	..	b	Included In Top Gasket Kit 1453063			
8	1307881	Screw	2	..	c	Included In Top Gasket Kit 1369431			
9	1382472	Nut	6	..					

LUBRICANT SYSTEM (FIGURE 57) DIESEL TURBO



LUBRICANT SYSTEM DIESEL TURBO

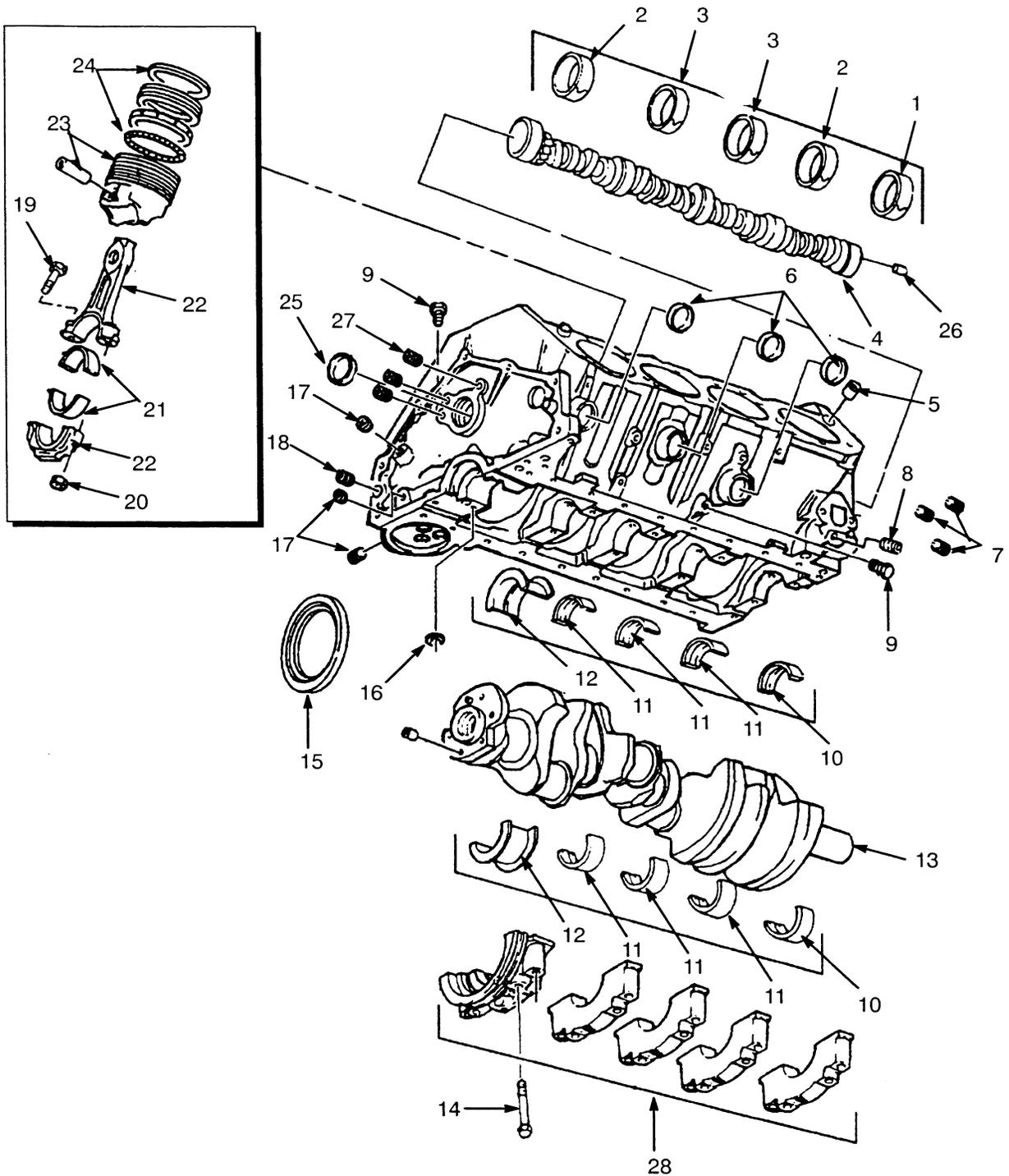
KEY:

- A** Without Emissions
- B** With Emissions

REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
1	1382536	Pipe Oil	1	..	12	1345800	Gasket	1	..
1	a 1451755	Pipe Oil .....	..	1	13	1382963	Screw	1	..
2	1466016	Hose	1	..	13	1369081	Screw .....	..	1
2	a 1451756	Hose .....	..	1	14	1307910	Screw	3	..
3	1380250	Clip Hose	2	..	15	1307881	Screw	2	..
3	130845	Clamp .....	..	2	16	1382538	Bracket	1	..
4	1382459	Pipe	1	..	17	1307877	Stud	6	..
4	a 1451719	Pipe .....	..	1	17	a 1307890	Stud .....	..	4
5	1307881	Screw	4	..	18	1306370	Nut	6	..
6	cb 1345751	Gasket	1	1	18	a 1451753	Nut .....	..	4
7	d 1357097	Gasket	1	1	19	224384	Nut .....	..	1
8	1382539	Pipe Oil	1	..	20	158160	Olive .....	..	1
8	a 1459453	Pipe Oil .....	..	1	21	1459454	Screw .....	..	1
9	1344924	Gasket	1	1	a First Used On S/N D19D-2377 b Included In Top Gasket Kit 1453063 c Included In Bottom Gasket Kit 1379738 d Included In Top Gasket Kit 1369431				
10	386459	Screw	2	4					
11	1311085	Adapter	1	..					
11	1459455	Adapter .....	..	1					

CYLINDER BLOCK (FIGURE 58)

LPG



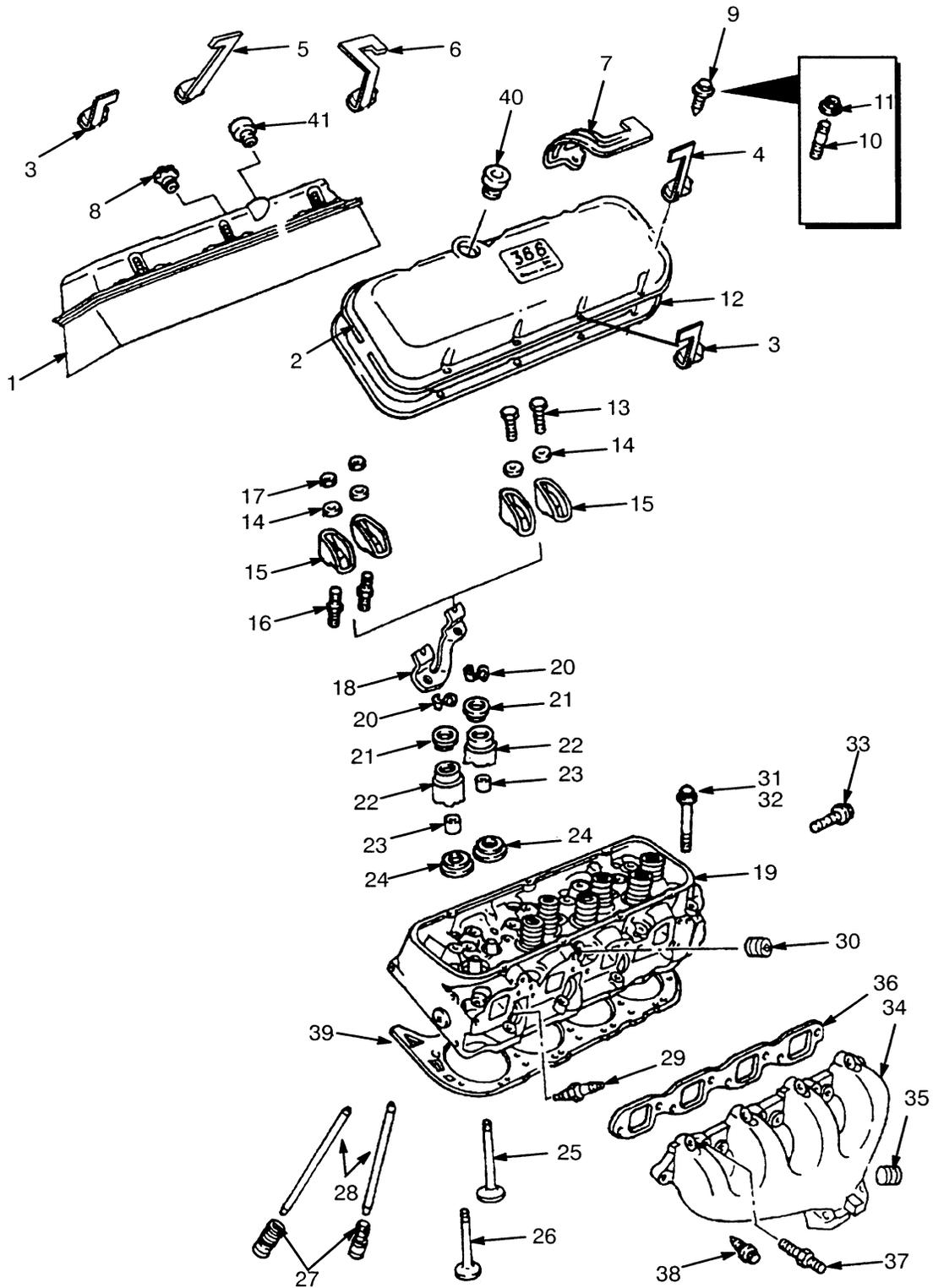
**CYLINDER BLOCK
LPG**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	^a	..... Engine Assy	1	17	1331341	Plug	3
1	1451220	Bearing	1	18	1335499	Pin	2
2	1451221	Bearing	2	19	1451234	Bolt	16
3	1451222	Bearing	2	20	1375954	Nut	16
4	1451034	Camshaft	1	21	1451232	Bearing Kit	8
5	1451223	Pin	4	22	1451233	Rod	8
6	159971	Plug	6	23	1451235	Piston (Std)	8
7	1451224	Plug	3	23	1451236	Piston (.005 O.S.)	8
8	1331341	Plug	3	24	1451237	Ring Set (Std)	8
9	274232	Plug	2	24	1451238	Ring Set (.005 O.S.)	8
10	1451225	Bearing Set	1	25	1451240	Plug	1
11	1451226	Bearing Set	3	26	1450941	Pin	1
12	1451227	Bearing Set	1	27	1335216	Plug	3
13	1451228	Crankshaft	1	28	.....	Bearing Cap	5
14	1451229	Bolt	10				
15	1451230	Seal	1				
16	1451231	Seal	1				

^a Assy Number Not Available

CYLINDER HEAD AND VALVES (FIGURE 59)

LPG



CYLINDER HEAD AND VALVES

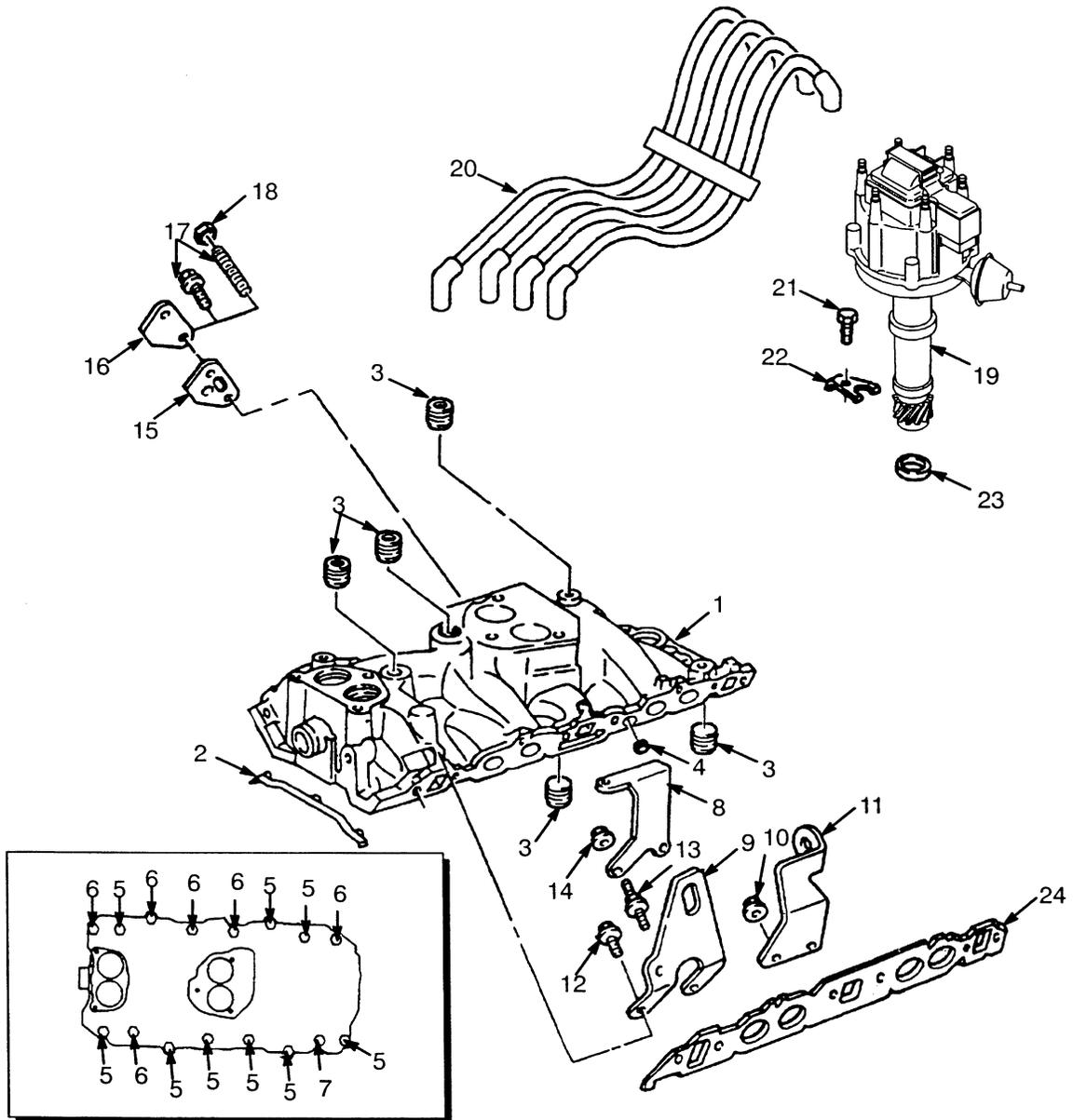
LPG

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	a	..... Engine Assy	1	25	1451272	Valve-Intake (.030 O.S.)	4
1	1451241	Cover LH	1	26	1451273	Valve-Exhaust (Std)	8
2	1451243	Cover RH	1	26	1451274	Valve-Exhaust (.0035 O.S.) ...	8
3	1451244	Support	5	26	1451275	Valve Exhaust (.0155 O.S.)	8
4	1451245	Support RH	1	26	1451276	Valve-Exhaust (.0305 O.S.) ...	8
5	1451246	Support LH	1	27	1335243	Lifter	16
6	1451247	Support LH	1	28	1451277	Rod-Exhaust	8
7	1451248	Support RH	1	28	1451278	Rod-Intake	8
8	244901	Arrester	1	29	1451269	Spark Plug	8
9	1451250	Bolt	14	30	14349	Plug	2
10	370155	Stud	AR	30	1451264	Sealant	AR
11	1451249	Nut	AR	31	1451262	Bolt	24
12	b	1451242 Gasket	2	32	1335479	Bolt	8
13	1451251	Bolt	16	33	1451263	Bolt	2
14	1451253	Ball	16	34	1451265	Manifold-RH	1
15	1451252	Arm Kit	16	34	1451266	Manifold-LH	1
16	1451279	Stud	16	35	894572	Plug-Exhaust RH	1
17	1451249	Nut	16	36	1451284	Gasket	2
18	1451255	Guide	8	37	1451267	Stud	15
19	1451261	Cylinder Head	2	38	1451268	Bolt	8
20	1451256	Key	32	39	b 1451288	Gasket	2
21	1451257	Cap	8	40	94724	Grommet	1
22	1451258	Spring	8	41	1451280	Oil Cap	1
23	b	1451287 Seal	8				
24	1451259	Rotator	8				
25	1451270	Valve-Intake (.003 O.S.)	4				
25	1451271	Valve-Intake (.015 O.S.)	4				

a Engine Assembly Not Available

b Included In Gasket Kit 1450953

INTAKE MANIFOLD (FIGURE 60) LPG

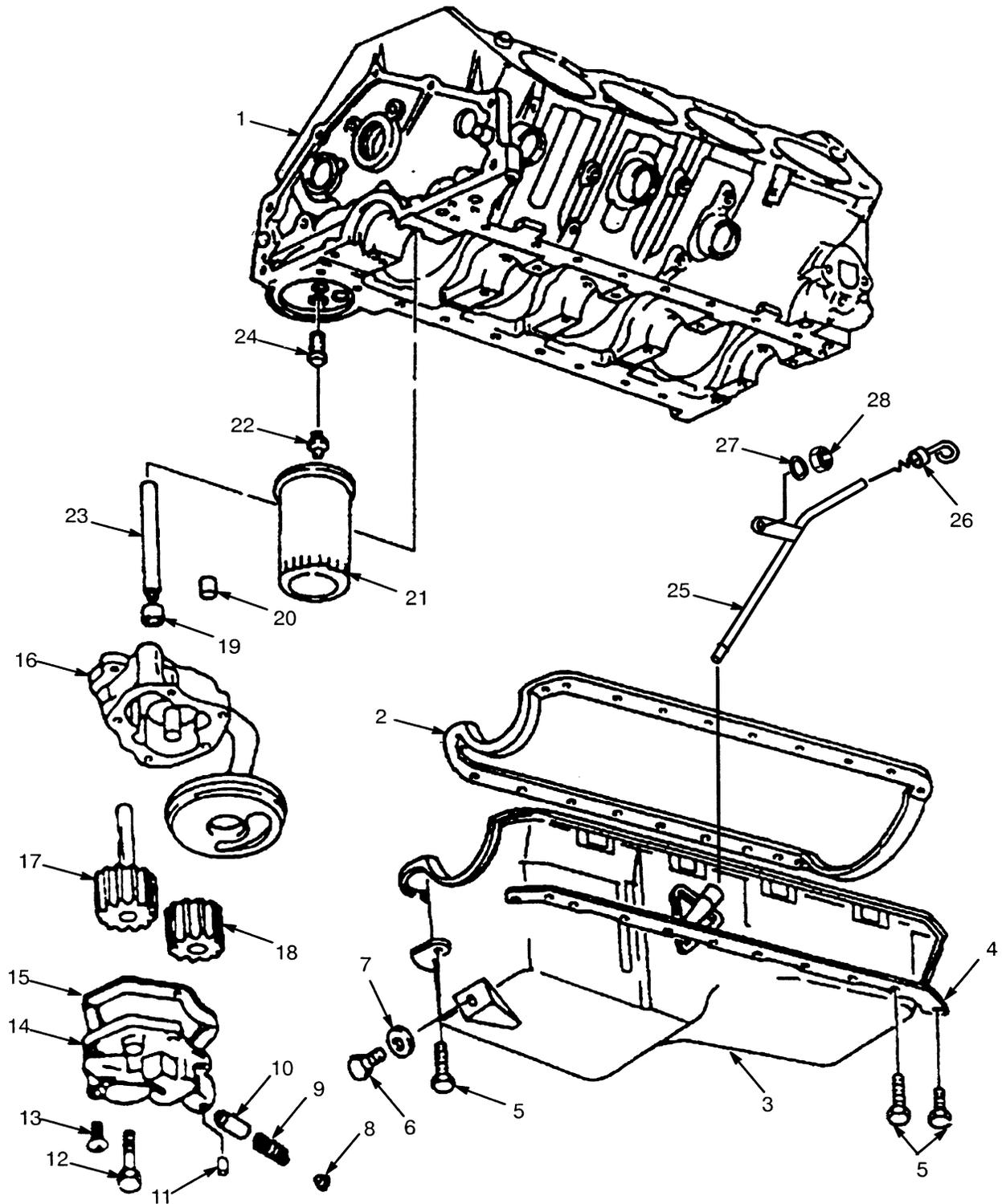


**INTAKE MANIFOLD
LPG**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	a	..... Engine Assy	1	16	1374112	Cover	1
1	1450948	Intake Manifold	1	17	388364	Stud	2
2	b	..... Gasket	1	17	221455	Bolt (Optional)	AR
3	1450949	Plug	5	18	1360178	Nut	2
4	1450950	Plug	4	19	894570	Distributor	1
5	1450947	Bolt	9	20	c	..... Spark Plug Wire Assy RH	1
6	388308	Bolt	6	20	c	..... Spark Plug Wire Assy LH	1
7	1450952	Bolt	1	21	1451213	Bolt	1
8	1450994	Bracket	1	22	1335497	Clamp	1
9	.....	Bracket	1	23	b	1334423 Gasket	1
10	1450990	Nut	1	24	b	..... Gasket Intake Manifold	1
11	1450996	Bracket	1		a	Engine Assembly Not Available	
12	388308	Bolt	6		b	Included In Gasket Kit 1450953	
13	1450947	Stud	8		c	Included In Kit 1471336	
14	.....	Nut	2				
15	894522	Gasket	1				

OIL PUMP AND PAN (FIGURE 61)

LPG



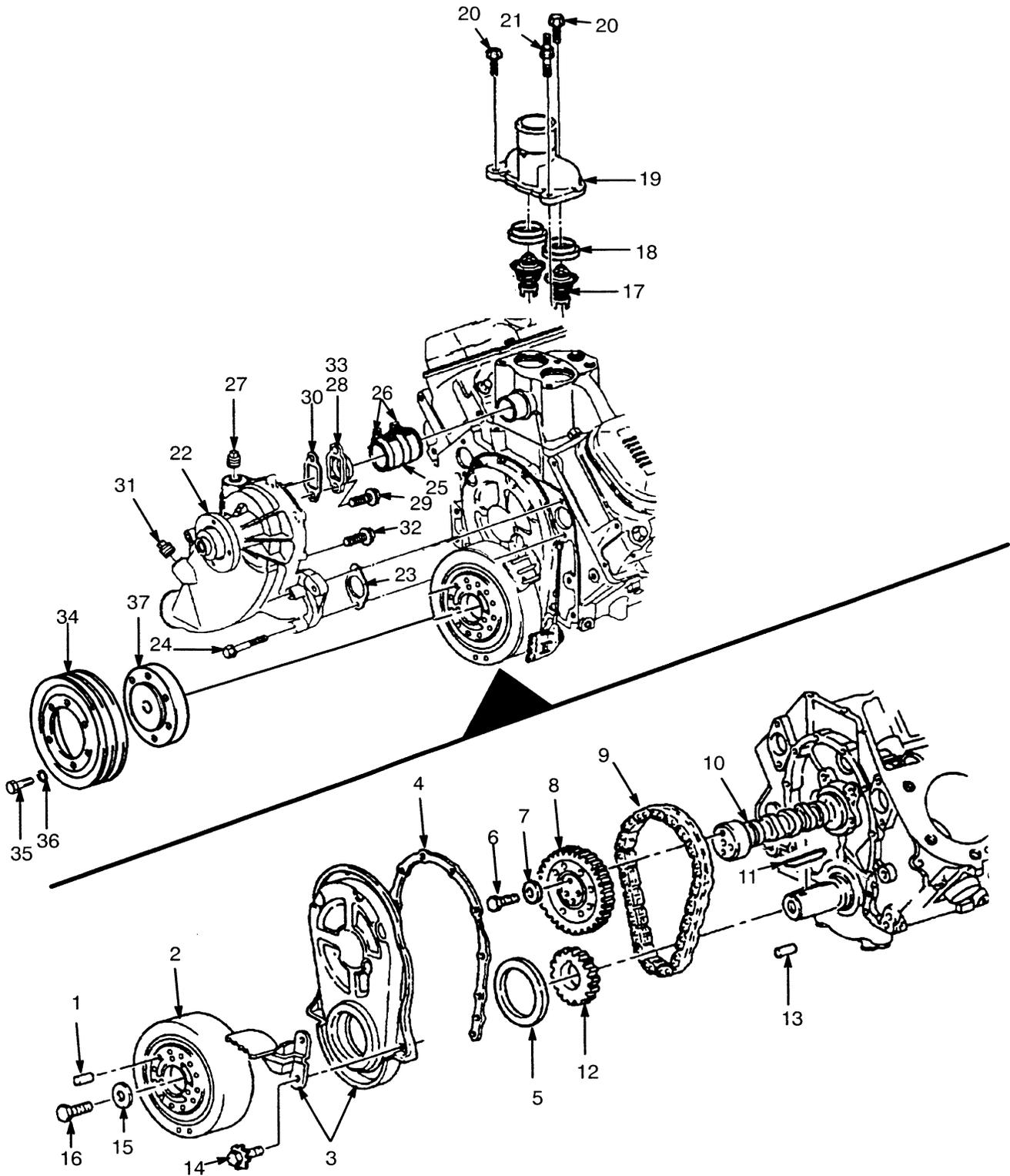
**OIL PUMP AND PAN
LPG**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	^a	Engine Assy	1	17		Gear	1
2	1450932	Gasket	1	18		Gear	1
3	1450933	Oil Pan	1	19	263795	Retainer	1
4		Reinforcement	1	20	1450941	Pin	1
5	1335217	Bolt	20	21	1450942	Oil Filter	1
6	381255	Plug	AR	22	159942	Fitting	1
7	388305	Gasket	1	23	1450943	Shaft	1
8	1450934	Retainer	1	24	1375952	Valve	2
9	1451292	Spring	1	25	894514	Tube	1
10	1450936	Valve	1	26	894513	Indicator (Oil Level)	1
11	1330453	Pin	1	27	221767	Washer	1
12	1450944	Bolt	1	28	15056	Nut	1
13	1333541	Bolt	5				
14	1450945	Cover	1				
15	1450939	Gasket	1				
16	1450940	Oil Pump	1				

^a Engine Assembly Not Available

WATER PUMP (FIGURE 62)

LPG



**WATER PUMP
LPG**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	^a	..... Engine Assy	1	20	1451046	Bolt	2
1	1338222	Pin	AR	21	1451047	Stud	1
2	1451028	Balancer	1	22	1451048	Water Pump Kit	1
3	1451029	Cover	1	23	1451050	Gasket	2
4	1451030	Gasket	1	24	1451049	Bolt	4
5	1451031	Seal	1	25	1451051	Hose	1
6	221453	Bolt	3	26	1451052	Clamp	1
7	221765	Washer	3	27	1451053	Plug	1
8	1451032	Sprocket	1	28	1451054	Adapter	1
9	1451033	Chain	1	29	1451213	Bolt	2
10	1451034	Camshaft	1	30	1451055	Gasket	1
11	1451035	Key	1	31	1451056	Plug	1
12	1451039	Sprocket	1	32	370169	Bolt	6
13	1450941	Pin	2	33	1451291	Sealer	AR
14	1451041	Bolt	6	34	894511	Pulley	1
15	1451290	Washer	1	35	221465	Capscrew	6
16	1451043	Bolt	1	36	15155	Washer	6
17	894568	Thermostat	2	37	894573	Spacer	1
18	1374110	Seal	2				
19	1451045	Water Outlet	1				
				^a	Engine Assembly Not Available		

FUEL

AIR FILTER (Figure 75)
LPG Page 144

AIR FILTER (Figure 81)
DIESEL TURBO WITHOUT LOW EMISSIONS Page 156

AIR FILTER (Figure 82)
DIESEL TURBO WITH LOW EMISSIONS
FIRST USED ON S/N D19D-2377 Page 158

AIR FILTER (Figure 74)
DIESEL NON-TURBO Page 142

CARBURETOR LPG (Figure 71) Page 138

FUEL FILTER (Figure 80)
DIESEL TURBO WITH LOW EMISSIONS
FIRST USED ON S/N D19D-2377 Page 154

FUEL INJECTION (Figure 76)
DIESEL TURBO WITHOUT LOW EMISSIONS Page 146

FUEL INJECTION (Figure 77)
DIESEL TURBO WITH LOW EMISSIONS
FIRST USED ON S/N D19D-2377 Page 148

FUEL INJECTION (Figure 65)
DIESEL WITHOUT LOW EMISSIONS Page 126

FUEL INTAKE (Figure 63)
DIESEL Page 122

FUEL PRE-FILTER (Figure 64)
DIESEL Page 124

FUEL TANK (Figure 69)
LPG Page 134

LIFT PUMP (Figure 67) Page 130

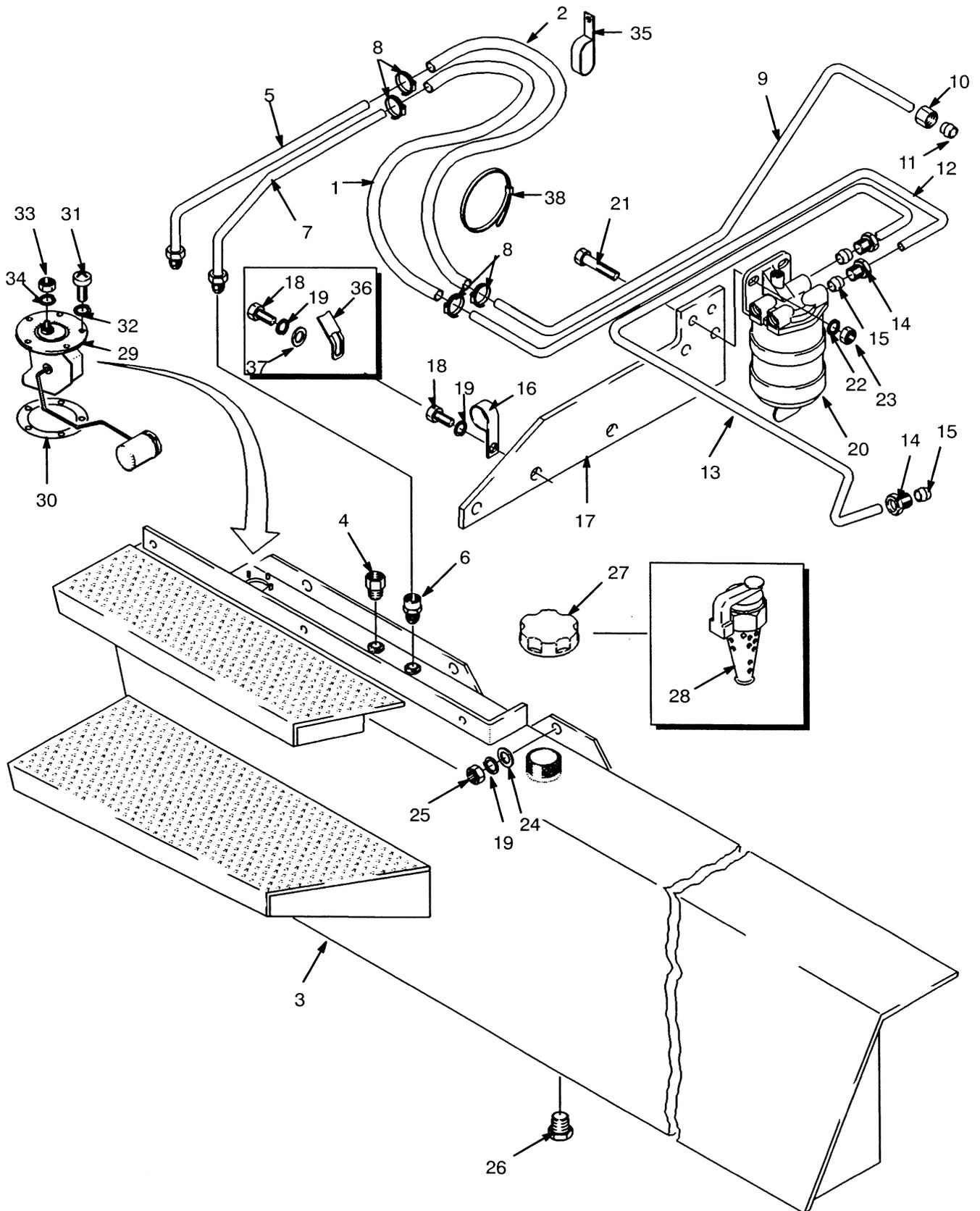
LOW PRESSURE SYSTEM (Figure 78)
DIESEL TURBO WITHOUT LOW EMISSIONS Page 150

LOW PRESSURE SYSTEM (Figure 79)
DIESEL TURBO WITH LOW EMISSIONS
FIRST USED ON S/N D19D-2377 Page 152

FUEL (CONTINUED)

LOW PRESSURE SYSTEM (Figure 66) DIESEL WITHOUT LOW EMISSIONS	Page 128
LPG CONVERTER (Figure 73)	Page 141
LPG FUEL SYSTEM (Figure 70)	Page 136
LPG LOCK-OFF FILTER (Figure 72)	Page 140
LPG TANK MOUNTING (Figure 68)	Page 132
THROTTLE LINKAGE (Figure 83) DIESEL-NON EMISSIONS	Page 160
THROTTLE LINKAGE (Figure 84) DIESEL-WITH LOW EMISSIONS FIRST USED ON S/N D19D-2377	Page 161
THROTTLE LINKAGE (Figure 85) NON-EMISSION DIESEL AND LPG WITH AUTOSHIFT FIRST USED ON S/N D19D-12439	Page 162
THROTTLE LINKAGE (Figure 86) LOW-EMISSION DIESEL WITH AUTOSHIFT FIRST USED ON S/N D19D-12439	Page 164
THROTTLE LINKAGE (Figure 87) LPG	Page 166
THROTTLE PEDAL (Figure 88) FORWARD/REVERSE LEVER	Page 167
THROTTLE PEDAL (Figure 89) MONOTROL PEDAL	Page 168
THROTTLE PEDAL (Figure 90) MONOTROL PEDAL WITH AUTOSHIFT FIRST USED ON S/N D19D-12439	Page 170
THROTTLE PEDAL (Figure 91) FORWARD/REVERSE LEVER WITH AUTOSHIFT FIRST USED ON S/N D19D-12439	Page 172

FUEL INTAKE (FIGURE 63) DIESEL

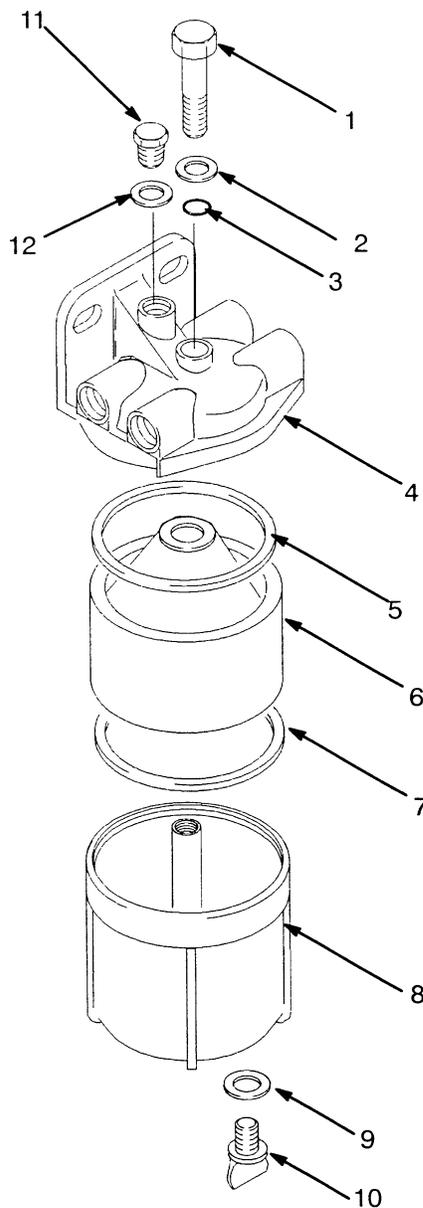


**FUEL INTAKE
DIESEL**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	387326	Hose	1	20	271047	Filter	1
2	387327	Hose	1	21	287860	Capscrew	2
3	1357430	Fuel Tank	1	22	292682	Lockwasher	2
3	1357431	Fuel Tank (Optional)	1	23	136692	Nut	2
4	16142	Fitting	1	24	320162	Washer	3
5	376316	Tube	1	25	216877	Nut	3
6	14326	Fitting	1	26	14388	Fitting	1
7	387313	Tube	1	26	35503	Plug (Optional)	1
8	168718	Clamp	4	27	298832	Fuel Cap	1
9 a	387312	Tube	1	27	311245	Gasket	1
9 b	1359711	Tube	1	28	63899	Protectoseal Cap	1
10	16118	Fitting	1	29	371257	Sender	1
11	16114	Fitting	1	30	111561	Gasket	1
12 a	1359710	Tube	1	31	16708	Screw	5
12 b	1377586	Tube	1	32	15931	Lockwasher	5
13 a	1359711	Tube	1	33	15002	Nut	1
13 b	1377587	Tube	1	34	15916	Washer	1
13 c	1452382	Tube w/Low Emissions	1	35 a	119074	Clamp	1
14	16100	Fitting	3	35 b	397676	Clamp	1
15	16177	Fitting	3	36	1350911	Clamp	1
16	387316	Clamp	1	37	15135	Washer	1
17 a	387317	Bracket	1	38	397676	Strap Clamp	1
17 b	1377585	Bracket	1				
18	292527	Capscrew	2	a	Last Used On S/N D19D-1834		
19	292683	Lockwasher	5	b	First Used On S/N D19D-1835		
				c	First Used On S/N D19D-2377		

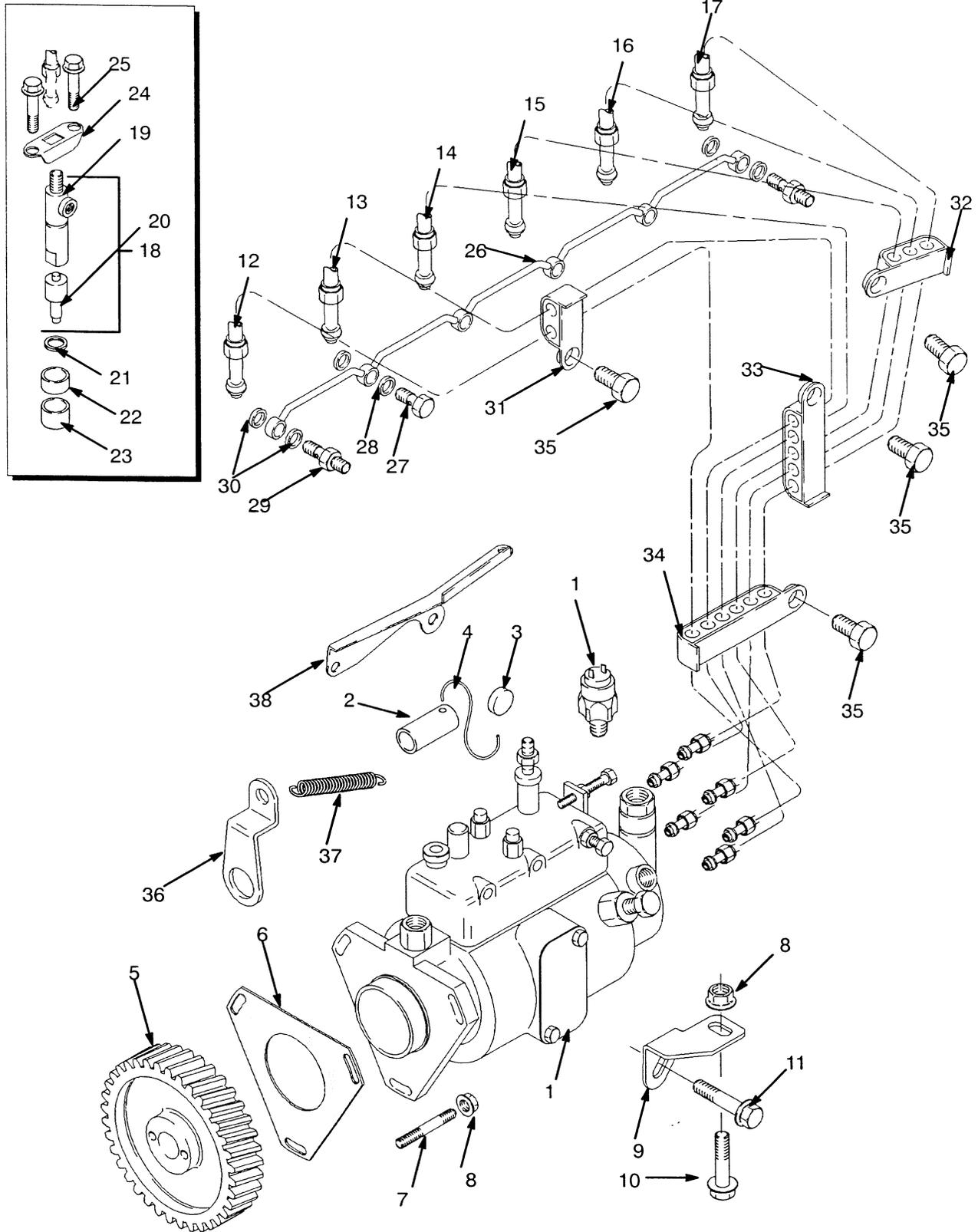
FUEL PRE-FILTER (FIGURE 64)

DIESEL



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	271047	Water Seperator	1	7	292782	Seal	1
1	256219	Bolt	1	8	271443	Base	1
2	272274	Washer	2	9	271449	Washer	1
3	168914	Seal	2	10	271448	Plug Drain	1
4	272273	Filter Head	1	11	170688	Plug	2
5	292781	Seal	1	12	256220	Washer	1
6	177407	Element	1				

FUEL INJECTION (FIGURE 65) DIESEL WITHOUT LOW EMISSIONS



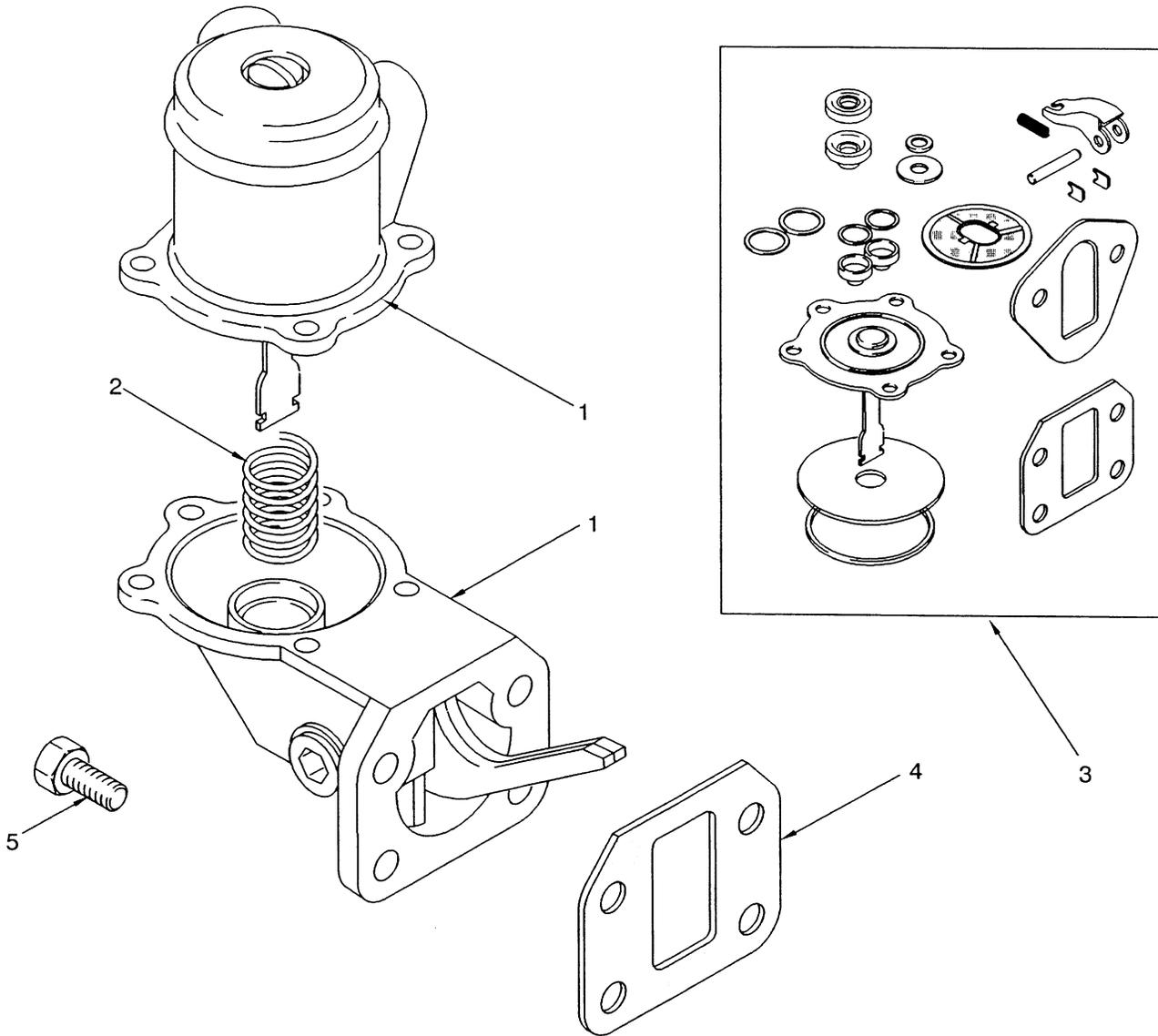
FUEL INJECTION
DIESEL WITHOUT LOW EMISSIONS

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
a	376001	Engine	1	21	d	99756 Washer	6
b	1376008	Engine w/o Sound Reduction	1	22	359144	Spacer	6
b	1376009	Engine w/Sound Reduction	1	23	d	359145 Seal	6
1	1334674	Injection Pump	1	24	1306135	Clamp	6
1	1306329	Solenoid	1	25	1306373	Screw	12
2	a	134958 Sleeve	1	26	1318931	Pipe	1
2	b	1311708 Sleeve	1	27	983340	Capscrew	5
3	151315	Seal	1	28	985567	Washer	10
4	151316	Lock Wire	1	29	983375	Fitting	2
5	1306049	Gear	1	30	985567	Washer	4
6	c	1371720 Gasket	1	31	1388385	Clip	1
7	1456726	Stud	3	32	1457771	Clip	1
8	1306359	Nut	4	33	1318933	Clip	1
9	1306125	Bracket	1	34	1318934	Clip	1
10	1306371	Screw	1	35	1306372	Screw	4
11	386459	Screw	1	36	1306334	Bracket	1
12	1318924	Pipe (1)	1	37	1315751	Spring	1
13	1318925	Pipe (2)	1	38	a	1315752 Bracket	1
14	1318926	Pipe (3)	1				
15	1318927	Pipe (4)	1	a	Last Used On S/N D19D-1756 Also 1758 Except 1753		
16	1318928	Pipe (5)	1	b	First Used On S/N D19D-1757 Also 1753 Except 1758		
17	1318929	Pipe (6)	1	c	Included In Bottom Gasket Kit 1379738		
18	1318930	Injector	6	d	Included In Top Gasket Kit 1369431		
19	1306133	Holder	1				
20	1306134	Nozzle	1				

**LOW PRESSURE SYSTEM
DIESEL WITHOUT LOW EMISSIONS**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
a	376001	Engine	1	21	16100	Fitting	2
b	1376008	Engine w/o Sound Reduction	1	22	167023	Sleeve	2
b	1376009	Engine w/Sound Reduction	1	23	1456528	Clip	2
1	.....	Lift Pump	1	24	1334617	Pipe (Return Line)	1
		☞ (Figure 67)		25	1311070	Nut	2
2	1319050	Filter	1	26	152608	Sleeve	2
3	1306331	Kit-Fuel Filter	2	27	1319057	Pipe	1
4	302720	Plug	2	28	152608	Sleeve	2
5	302721	Washer	2	29	152609	Nut	2
6	1319051	Bracket	1	30	982234	Connector	1
7	1307914	Screw	2	31	983346	Bolt	1
8	1307891	Nut	2	32	101985	Washer	2
9	1306371	Screw	2	33	1319058	Spacer	1
10	1319053	Pipe	1	34	15314	Fitting	1
11	16100	Fitting	2	35	15962	Fitting	1
12	167023	Sleeve	2	36	1319059	Pipe	1
13	386461	Clip	1	37	1308007	Fitting	2
14	1319054	Clip	1	38	1306337	Sleeve	2
15	386459	Screw	1	39	1306339	Clip	3
16	1306362	Screw	1				
17	1332831	Pipe	1	a	Last Used On S/N D19D-1756 Also 1758 Except 1753		
18	16100	Fitting	2	b	First Used On S/N D19D-1757 Also 1753 Except 1758		
19	16177	Fitting	2				
20	1319056	Pipe	1				

LIFT PUMP (FIGURE 67)



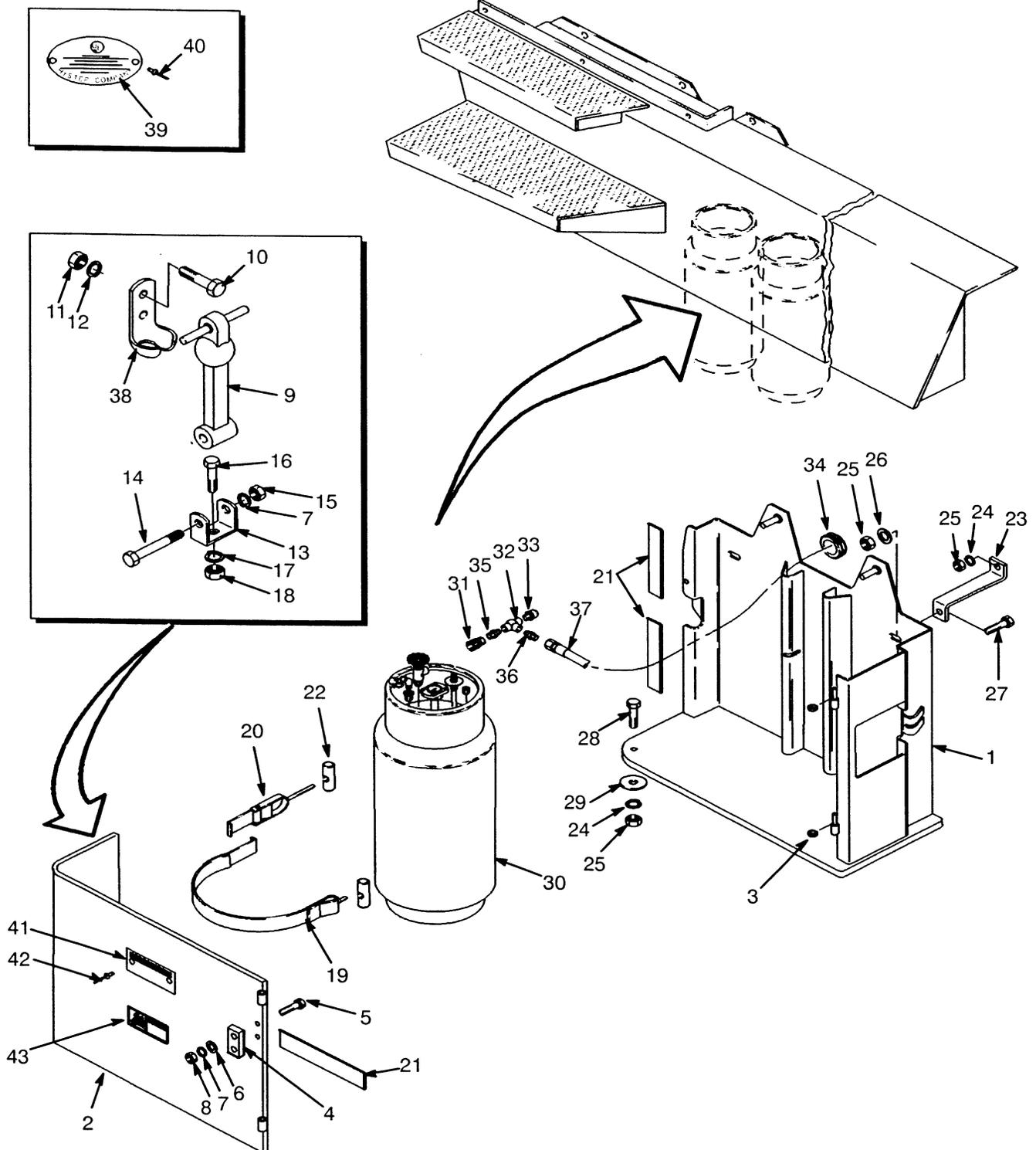
KEY:

- A** Without Low Emissions
- B** With Low Emissions (First Used On S/N D19D-2377)

REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
1	^a 1388388	Lift Pump	1	..	3	1451766	Kit-Repair	1	1
1	^b 1456339	Lift Pump	1	..	4	1388390	Gasket	1	1
1	1451765	Lift Pump .....	..	1	5	1306362	Screw	4	4
2	332256	Spring	1	..					
2	.....	Spring	1	1					
3	1388389	Kit-Repair	1	..					

- ^a Last Used On Date Code 11/94
- ^b First Used On Date Code 11/94

LPG TANK MOUNTING (FIGURE 68)

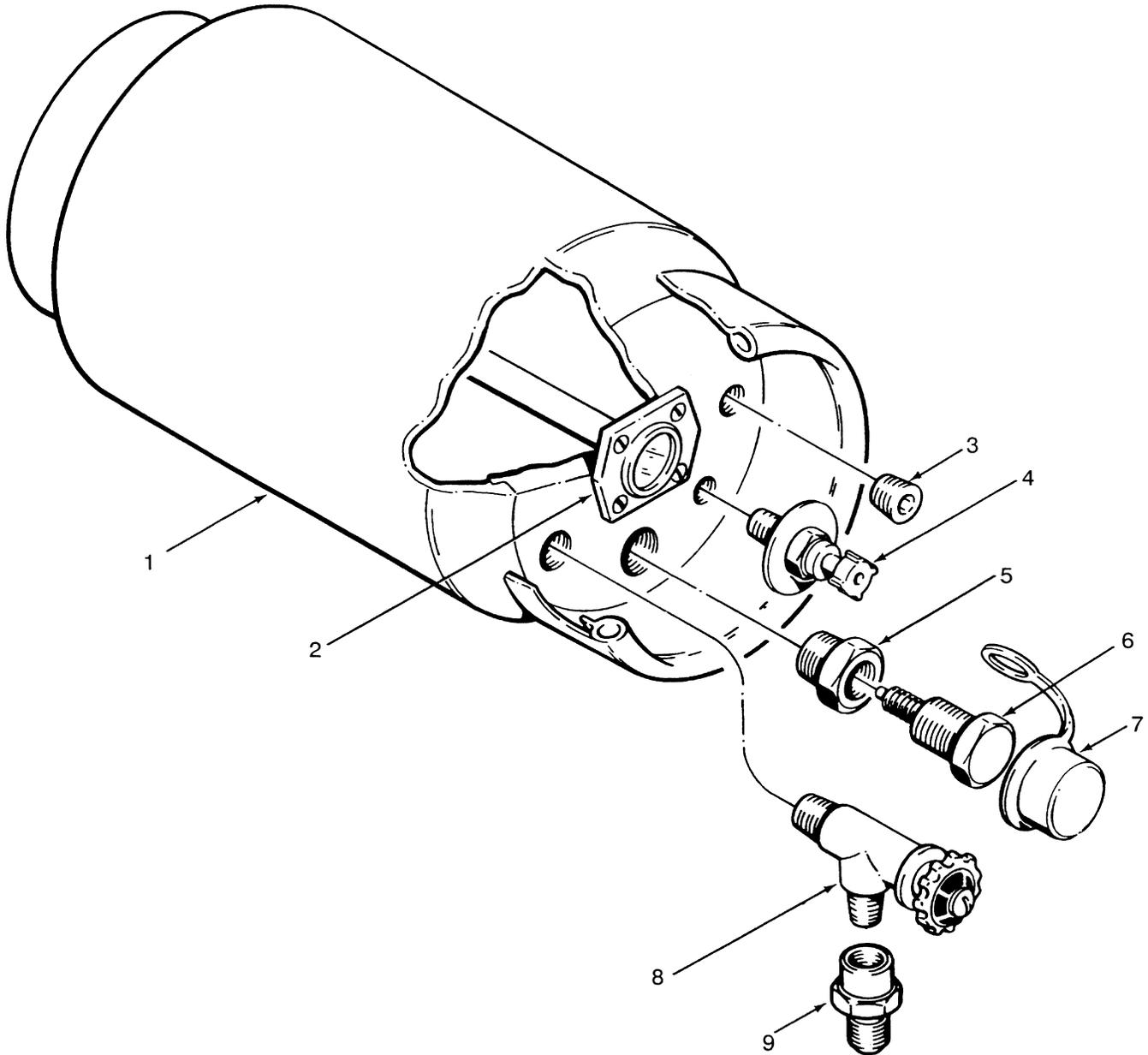


LPG TANK MOUNTING

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	894580	Bracket	1	23	1456937	Bracket	2
2	894584	Plate	1	24	292683	Washer	9
3	1301700	Ring	2	25	216877	Nut	8
4	1336038	Plate	1	26	320162	Washer	6
5	18465	Capscrew	2	27	292527	Capscrew	2
6	15127	Washer	2	28	292531	Capscrew	4
7	15154	Washer	2	29	300939	Washer	4
8	15054	Nut	2	30	125789	Fuel Tank	2
9	177989	Latch	1			☞ (Figure 69)	
10	220494	Screw	2	31	97999	Disconnect	1
11	15052	Nut	2	32	63111	Fitting	1
12	15152	Washer	2	33	101809	Relief Valve	1
13	177991	Bracket	1	34	279752	Grommet	1
14	18470	Capscrew	1	35	16271	Fitting	1
15	221341	Nut	1	36	16863	Fitting	1
16	16836	Capscrew	1	37	101804	Hose Assy	1
17	15155	Washer	1	38	1315918	Bracket	1
18	15055	Nut	1	39	179414	Inspection Plate	1
19	306008	Strap	2	40	166818	Rivet	2
20	196297	Latch	2	41	329029	Label-LP Tank Identifier	1
21	341788	Bumper	6	42	170658	Rivet	2
22	147294	Nut	4	43	1320264	Label-Flammable LP Gas	1

FUEL TANK (FIGURE 69)

LPG



REF	PART NO.	NAME OF PART	QTY
1	125789	Tank	1
2	a 344230	Float Gauge	1
2	b 197041	Float Gauge	1
3	15963	Fitting	1
4	197038	Gauge	1
4	c 344232	Diptube Gauge	1
5	344228	Adapter	1
6	200170	Relief Valve	1

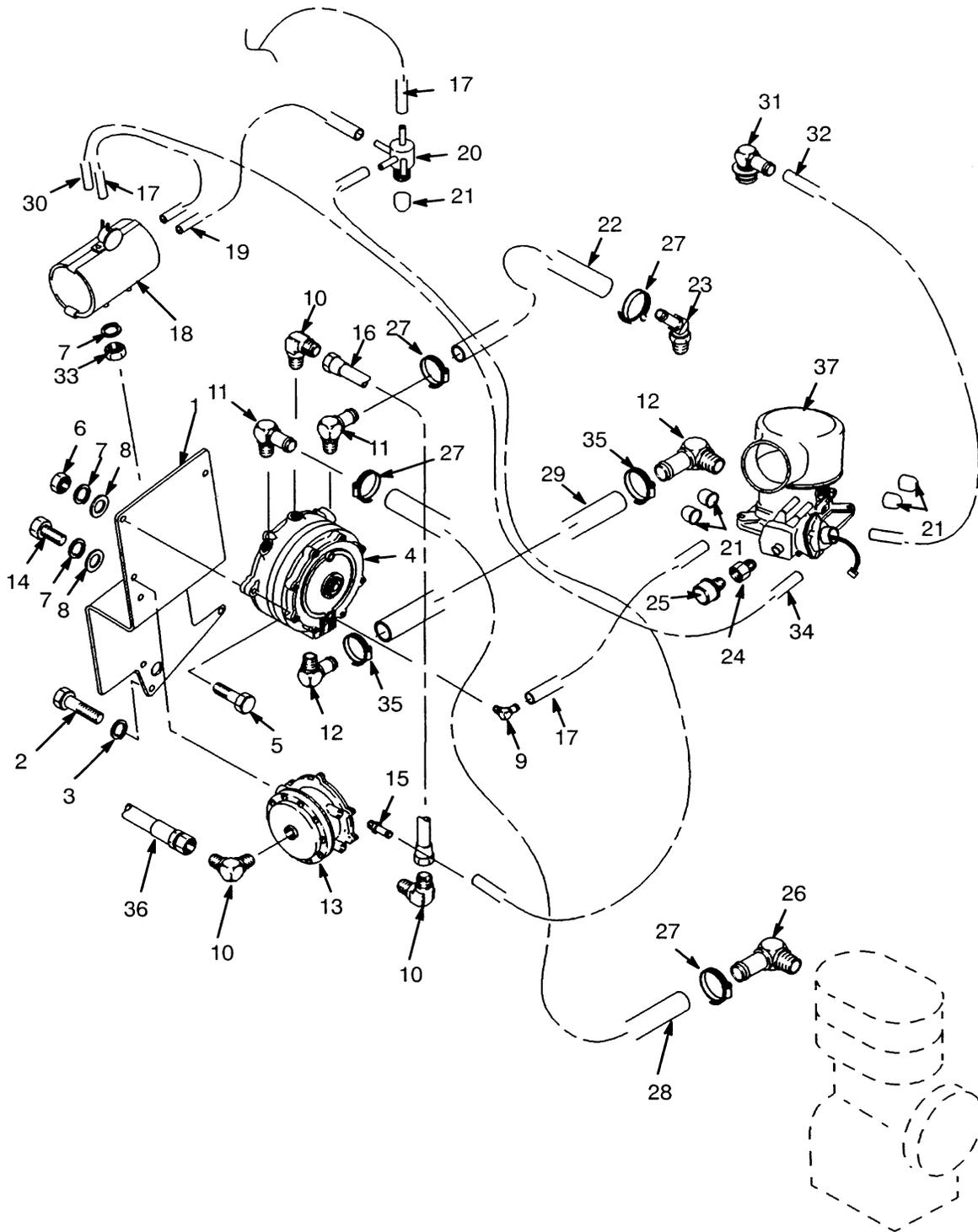
REF	PART NO.	NAME OF PART	QTY
7	200172	Rain Cap	1
8	233908	Valve	1
9	124010	Coupler	1

a Screw In Type

b Bolt On Type

c Optional With Removeable Dip Tube

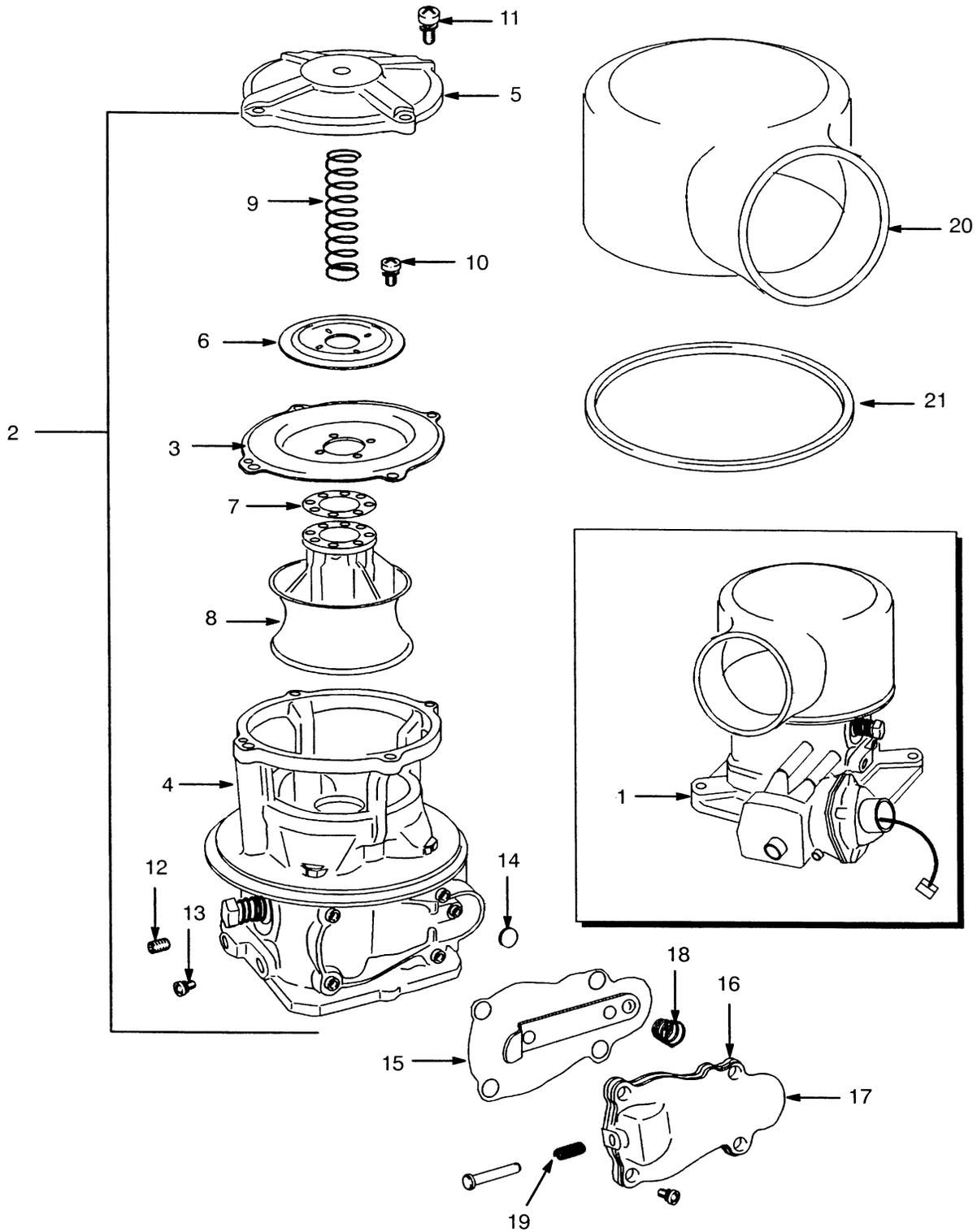
LPG FUEL SYSTEM (FIGURE 70)



LPG FUEL SYSTEM

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	894746	Bracket	1	19	372003	Hose	1
2	18557	Capscrew	3	20	894520	Fitting-Vacuum	1
3	15157	Washer	3	21	894742	Cap-Vacuum	5
4	258320	Convertor	1	22	350965	Hose	1
		☞ (Figure 73)		23	127852	Fitting	1
5	18470	Capscrew	2	24	12860	Fitting	1
6	15054	Nut	6	25	121452	Filter-Breather	1
7	15154	Washer	6	26	16155	Fitting	1
8	15127	Washer	4	27	130845	Clamp	4
9	17343	Fitting	1	28	151857	Hose	1
10	14358	Fitting	3	29	192406	Hose	1
11	125305	Fitting	2	30	377211	Hose	1
12	110177	Fitting	2	31	894521	PCV Valve	1
13	258321	Fuel Lock And Filter	1	32	85785	Hose	1
		☞ (Figure 72)		33	15000	Nut	2
14	18460	Capscrew	2	34	372008	Hose	1
15	16746	Fitting	1	35	127045	Clamp	2
16	894747	Tube Assembly	1	36	1319373	Hose Assembly	1
17	377210	Hose	3	37	894531	Carburetor	1
18	894749	Surge Tank	1			☞ (Figure 71)	

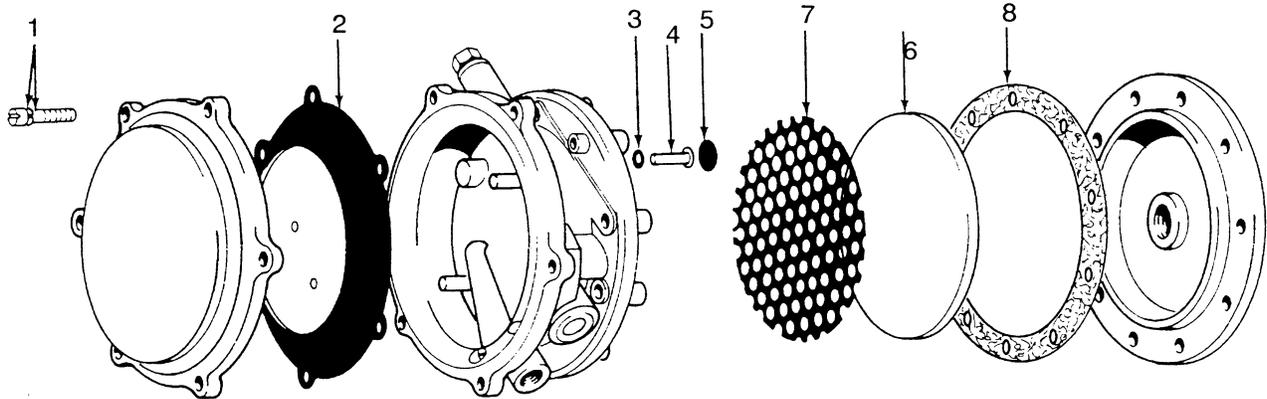
CARBURETOR LPG (FIGURE 71)



CARBURETOR LPG

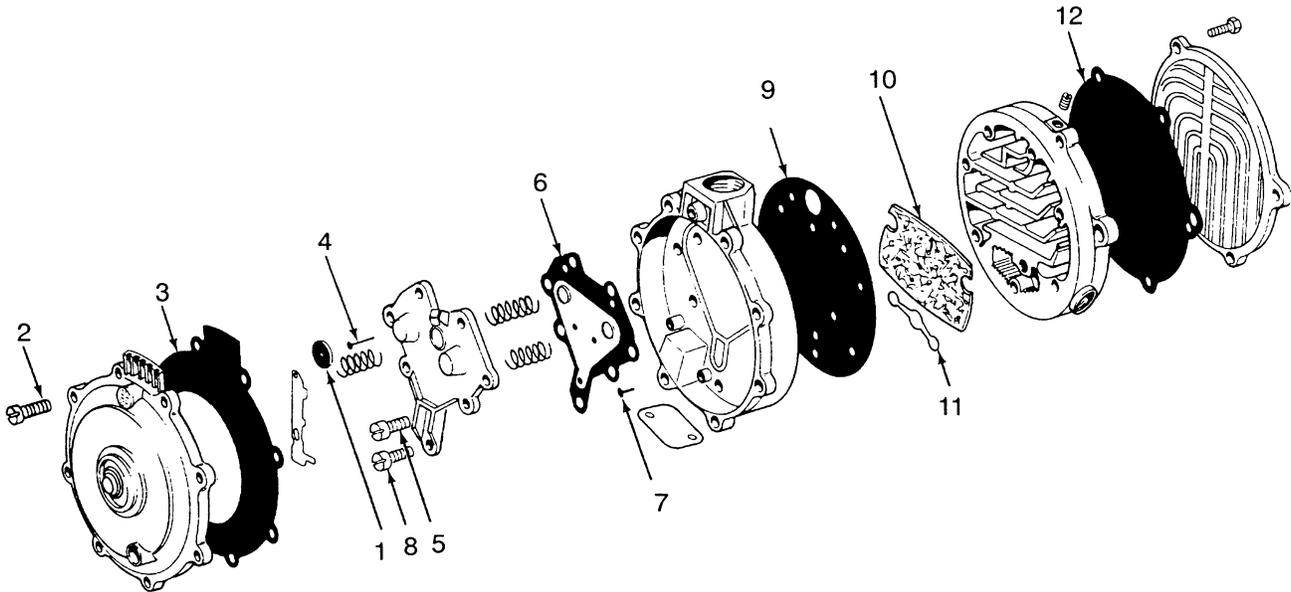
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	894531	Carburetor Assembly	1	7	1450630	Seal	1
1	1450619	Throttle Body	1	8	1450639	Air/Gas Valve Assy	1
1	1450620	Gasket	1	8	1450640	Valve (Gas Metering)	1
1	1450621	Stud	1	9	1450635	Spring	1
1	1450622	Washer	1	10	220283	Screw	4
2	1450623	Mixer Assembly	1	11	132473	Screw	4
3	1450628	Diaphragm	1	12	1357749	Plug	2
4	.....	Body	1	13	326926	Screw	1
4	323541	Fitting	3	14	1450638	Seat	1
4	1450629	Fitting	1	15	1450624	Diaphragm	1
4	1450632	Screw-Fill	1	16	1450631	Gasket	1
4	1450633	Screw	1	17	1450627	Cover	1
4	214117	Spring-Idle Screw	1	18	1450634	Spring	1
4	1450637	Seal	1	19	1450636	Spring	1
4	1450641	Washer	1	20	894532	Air Horn	1
5	1450626	Cover	1	21	261963	Gasket	1
6	.....	Back-Up Plate	1				

LPG LOCK-OFF FILTER (FIGURE 72)



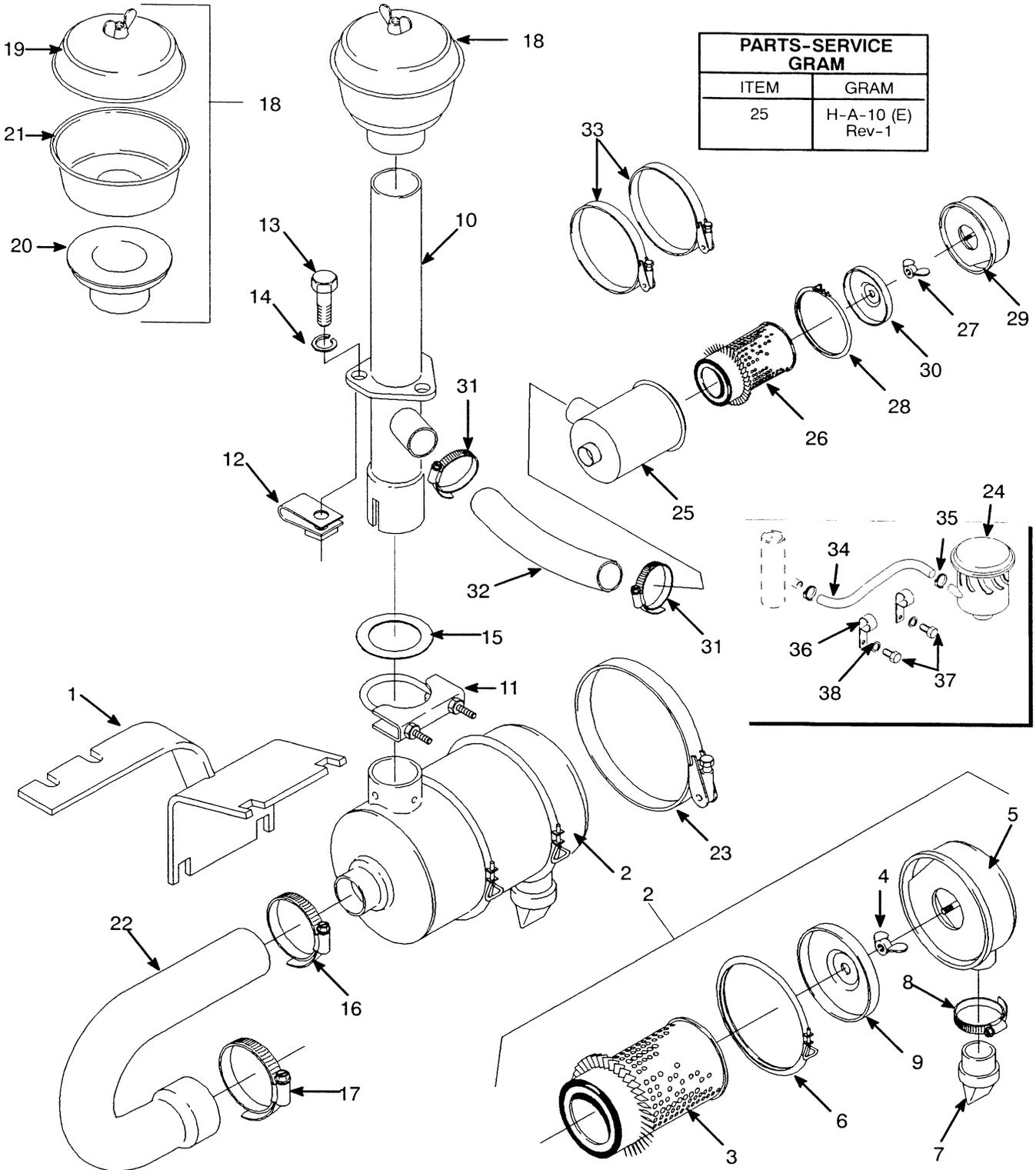
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	258321	Lock-Off Filter	1	4	.....	Screw	1
	263958	Repair Kit	1	5	.....	Valve Seat	1
1	.....	Screw	6	6	.....	Filter	1
1	.....	Washer	6	7	.....	Screen	1
2	.....	Diaphragm	1	8	.....	Gasket	1
3	.....	O-Ring	1				

LPG CONVERTER (FIGURE 73)



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	258320	Converter	1	6	.....	Diaphragm	1
	263950	Repair Kit	1	7	.....	Pin	1
1	.....	Washer	1	8	.....	Screw	1
2	.....	Screw	6	8	.....	Washer	1
2	.....	Washer	6	9	.....	Gasket	1
3	.....	Diaphragm	1	10	.....	Sponge	1
4	.....	Pin	1	11	.....	Seat	1
5	.....	Screw	1	12	.....	Gasket	1

AIR FILTER (FIGURE 74) DIESEL NON-TURBO

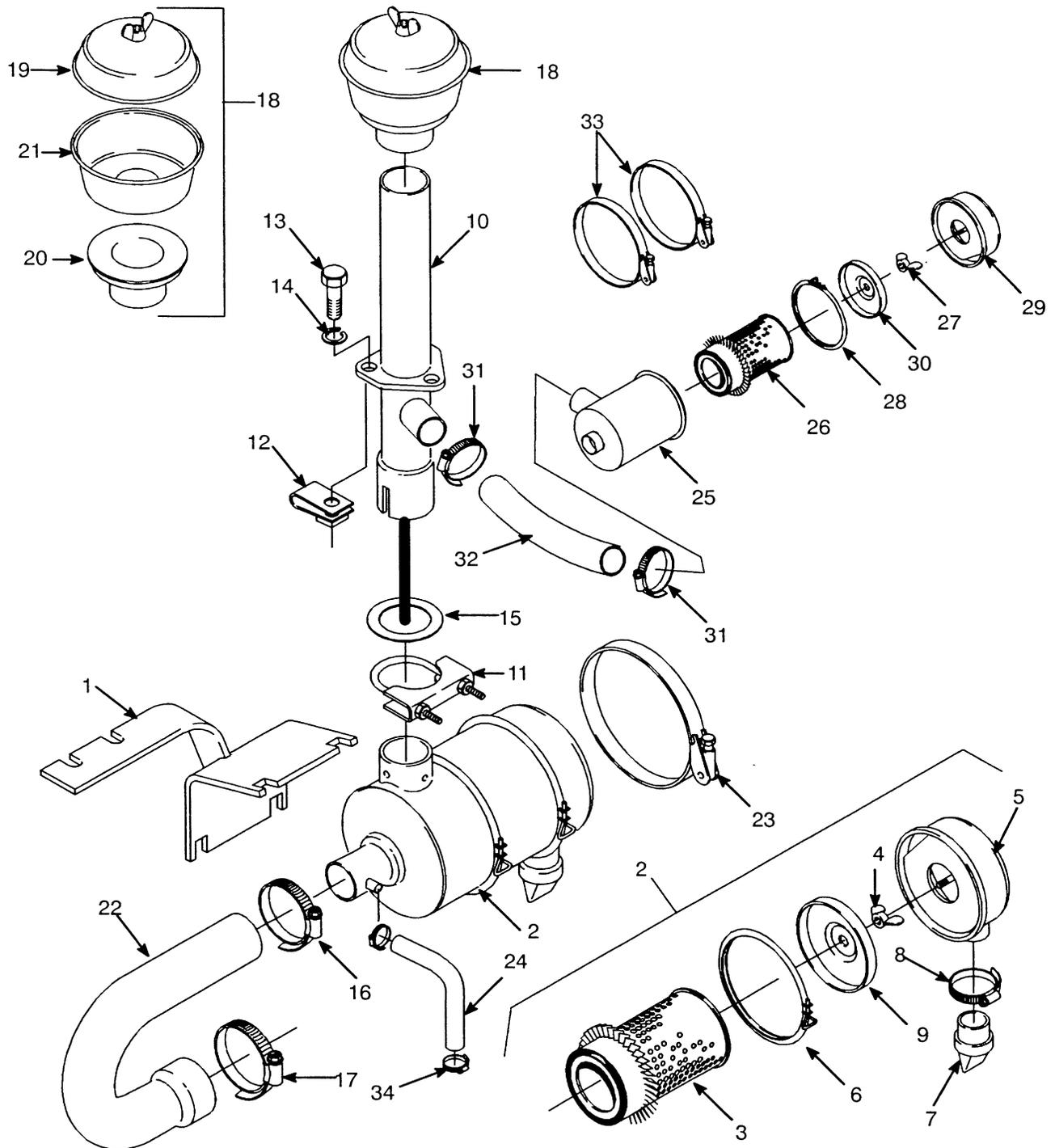


PARTS-SERVICE GRAM	
ITEM	GRAM
25	H-A-10 (E) Rev-1

**AIR FILTER
DIESEL NON-TURBO**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1347852	Bracket	1	21	328754	Body	1
2	1352666	Air Filter	1	22	1357228	Hose (Non-Aspirated)	1
3	97310	Air Filter	1	22	1357228	Hose (Aspirated)	1
4	125847	Nut	1	23	1301582	Clamp	2
5	262283	Cup	1	24	1358325	Pre Cleaner (Aspirated)	1
6	97313	Clamp	1	25	1352669	Air Filter	1
7	141276	Valve	1	26	1352670	Element	1
8	314538	Clamp	1	27	1360191	Nut	1
9	170682	Baffle	1	28	1360192	Clamp	1
10	1347856	Stack	1	29	1360193	Cup	1
11	30375	Clamp	1	30	1360194	Baffle	1
12	376397	Retainer	3	31	119236	Clamp	2
13	18497	Capscrew	3	32	1357230	Hose	1
14	292681	Lockwasher	3	33	227220	Clamp	2
15	1301535	Shim	AR	34	1361201	Hose (Aspirated)	1
16	115696	Clamp	1	35	127045	Clamp (Aspirated)	2
17	78286	Clamp	1	36	339530	Clamp (Aspirated)	2
18	1301167	Pre Cleaner (Non-Aspirated)	1	37	1301708	Screw (Aspirated)	2
19	328753	Cover	1	38	320157	Washer	2
20	1313904	Sleeve	1				

AIR FILTER (FIGURE 75) LPG

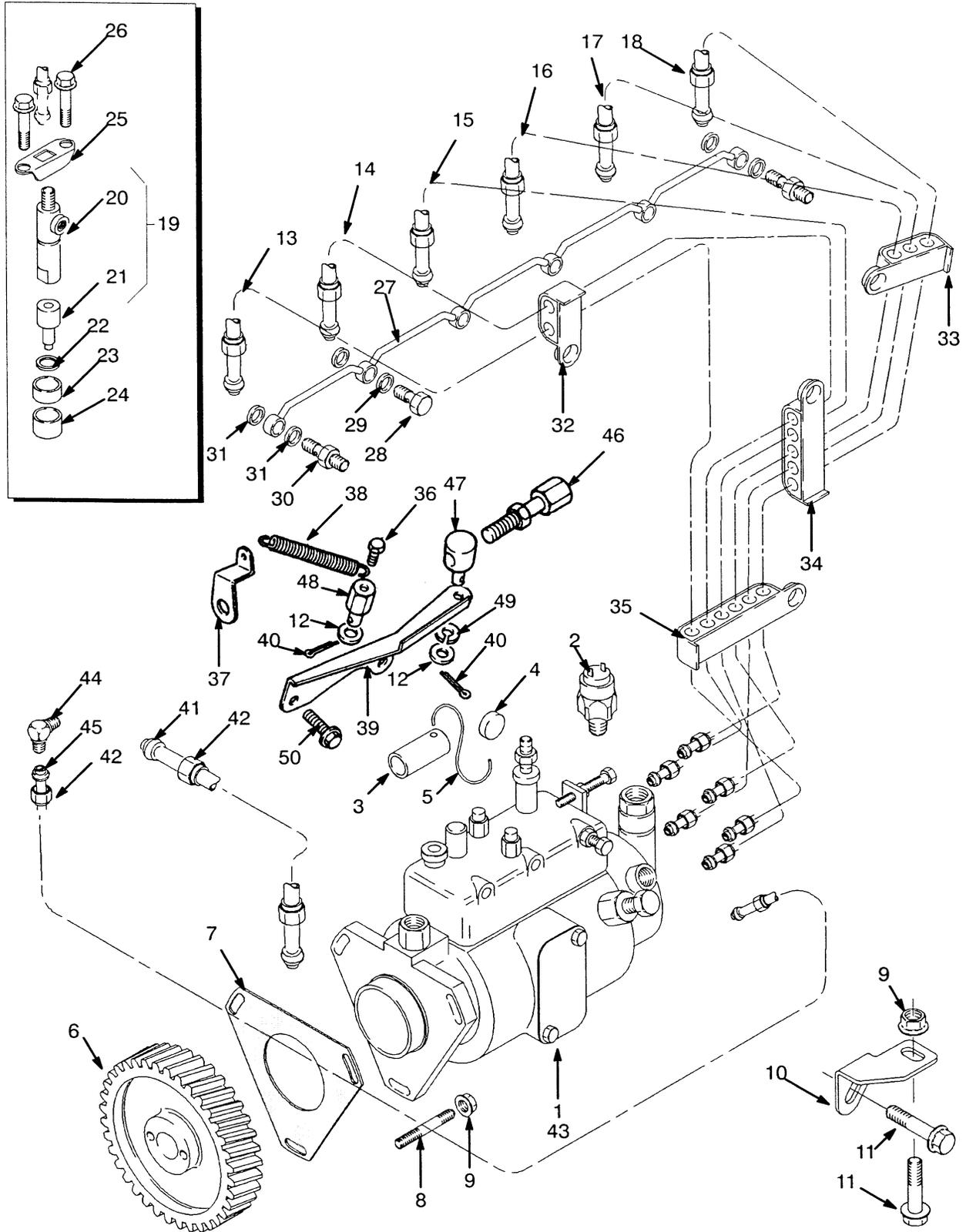


AIR FILTER

LPG

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1347852	Bracket	1	18	1301167	Pre Cleaner (Non-Aspirated)	1
2	1311219	Air Filter	1	19	328753	Cover	1
3	97310	Air Filter	1	20	1313904	Sleeve	1
4	125847	Nut	1	21	328754	Body	1
5	262283	Cup	1	22	894682	Hose	1
6	97313	Clamp	1	23	1301582	Clamp	2
7	141276	Valve	1	24	241976	Hose (Fire Arrester)	1
8	314538	Clamp	1	25	1352669	Air Filter	1
9	170682	Baffle	1	26	1352670	Element	1
10	1347856	Stack	1	27	1360191	Nut	1
11	30375	Clamp	1	28	1360192	Clamp	1
12	376397	Retainer	3	29	1360193	Cup	1
13	18497	Capscrew	3	30	1360194	Baffle	1
14	292681	Lockwasher	3	31	119236	Clamp	2
15	1301535	Shim	AR	32	1357230	Hose	1
16	115696	Clamp	1	33	227220	Clamp	2
17	78286	Clamp	1	34	127045	Clamp	2

FUEL INJECTION (FIGURE 76) DIESEL TURBO WITHOUT LOW EMISSIONS



FUEL INJECTION
DIESEL TURBO WITHOUT LOW EMISSIONS

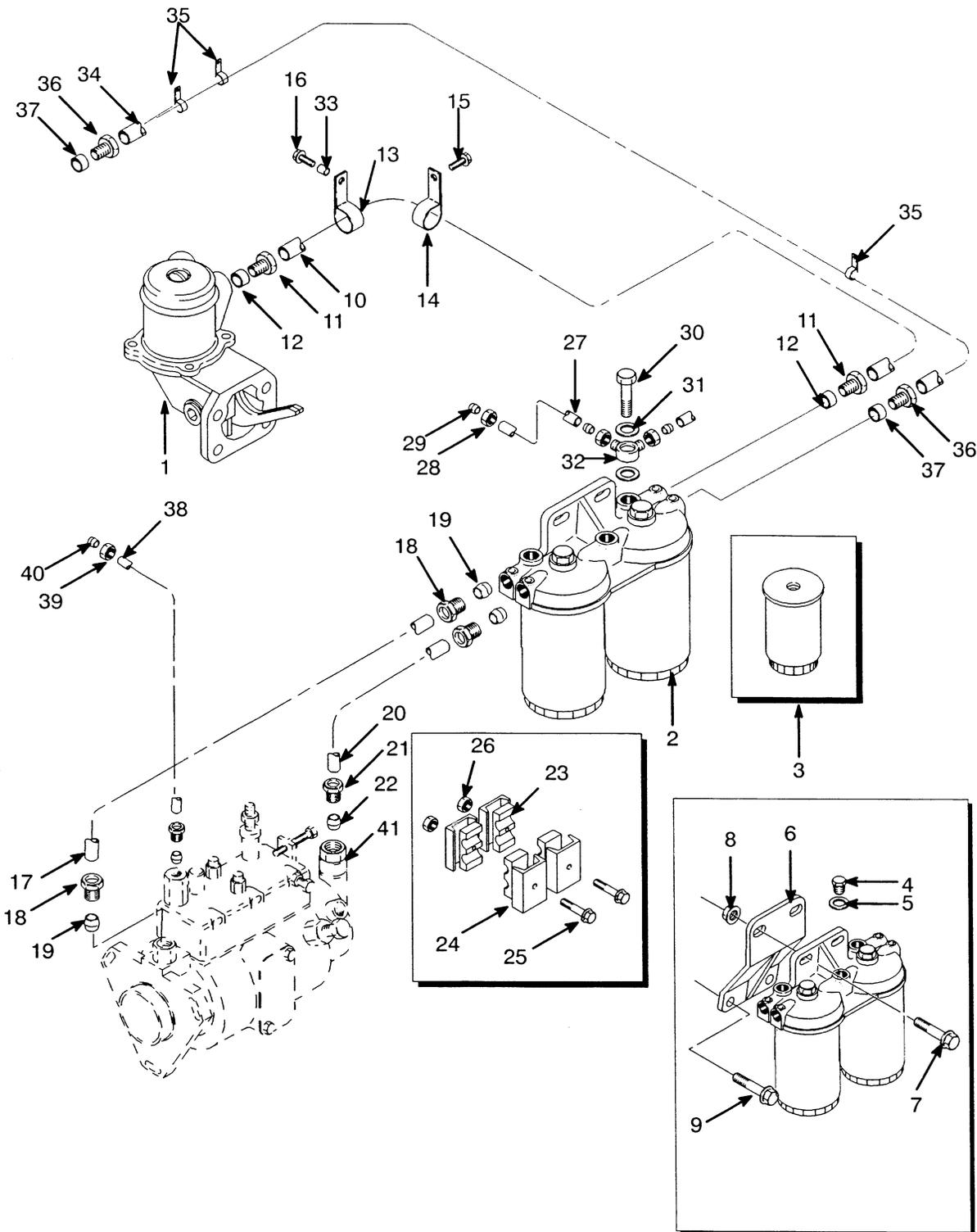
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1377550	Engine Turbo	1	27	1318931	Pipe	1
1	1382551	Injection Pump	1	28	983340	Capscrew	5
2	1306329	Solenoid	1	29	985567	Washer	8
3	1371708	Sleeve	1	30	983375	Fitting	2
4	151315	Seal	1	31	985567	Washer	4
5	151316	Lock Wire	1	32	1382454	Clip	1
6	1306049	Gear	1	33	1382455	Clip	1
7 ^a	1371720	Gasket	1	34	1382456	Clip	1
8	1456726	Stud	3	35	1382457	Clip	1
9	1306359	Nut	4	36	1311518	Screw	1
10	1306125	Bracket	1	37	1306334	Bracket	1
11	1306371	Screw	2	38	1315751	Spring	1
12	15132	Washer	2	39	1382545	Bracket	1
13	1382497	Pipe (1)	1	40	15200	Cotter Pin	2
14	1382498	Pipe (2)	1	41	1382553	Pipe Air	1
15	1382499	Pipe (3)	1	42	1311070	Nut	1
16	1382450	Pipe (4)	1	43	1382951	Kit Injection Pump	1
17	1382451	Pipe (5)	1	44	983761	Connection	1
18	1382452	Pipe (6)	1	45	152608	Olive	1
19	1323024	Injector	6	46	99784	Adapter	1
20	1382453	Holder	1	47	99782	Pin	1
21	1311067	Nozzle	1	48	1311517	Pin	1
22 ^b	99756	Washer	6	49	99783	Washer	1
23	359144	Spacer	6	50	1382546	Screw	2
24 ^b	359145	Seal	6				
25	1306135	Clamp	6	^a	Included In Bottom Gasket Kit 1379738		
26	1306373	Screw	12	^b	Included In Top Gasket Kit 1369431		

FUEL INJECTION
DIESEL TURBO WITH LOW EMISSIONS
FIRST USED ON S/N D19D-2377

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1395975	Engine Turbo	1	24	1451656	Sender	1
1	1460025	Injection Pump	1	25	1382454	Clip	3
2	1306329	Solenoid	1	26	1382455	Clip	1
2	1460572	O-Ring	1	27	1382456	Clip	1
3	1451655	Pipe Fuel	1	28	1382457	Clip	1
4	1311070	Nut	1	29	1453154	Lead	1
5	152608	Olive	1	30	1451676	Pipe Air	1
6	1456727	Gear	1	31	1311070	Nut	1
7	1307881	Screw	4	32	152608	Olive	1
8	1456726	Stud	3	33	1306338	Clip	1
9	1306359	Nut	4	34	16193	Nut	1
10	1451657	Pipe (1)	1	35	51455	Olive	1
11	1451659	Pipe (2)	1	36	983761	Connector	1
12	1451660	Pipe (3)	1	37	99779	Damper	1
13	1451661	Pipe (4)	1	38	99780	Plate	2
14	1451662	Pipe (5)	1	39	1307922	Screw	1
15	1451663	Pipe (6)	1	40	1307923	Nut	1
16	1451665	Injector	6	41	1460024	Cap	1
17	1451666	Holder	1	42	1306371	Screw	1
18	1451667	Nozzle	1	43	386459	Screw	1
19 ^a	1451669	Washer	6	44	1306359	Nut	1
20	1451670	Pipe	1	45	1453315	Bracket	1
21	1451672	Capscrew	5	46	1458327	Clip	1
22	1451673	Washer	10				
23	1451674	Fitting	2				

^a Included In Top Gasket Kit 1453063

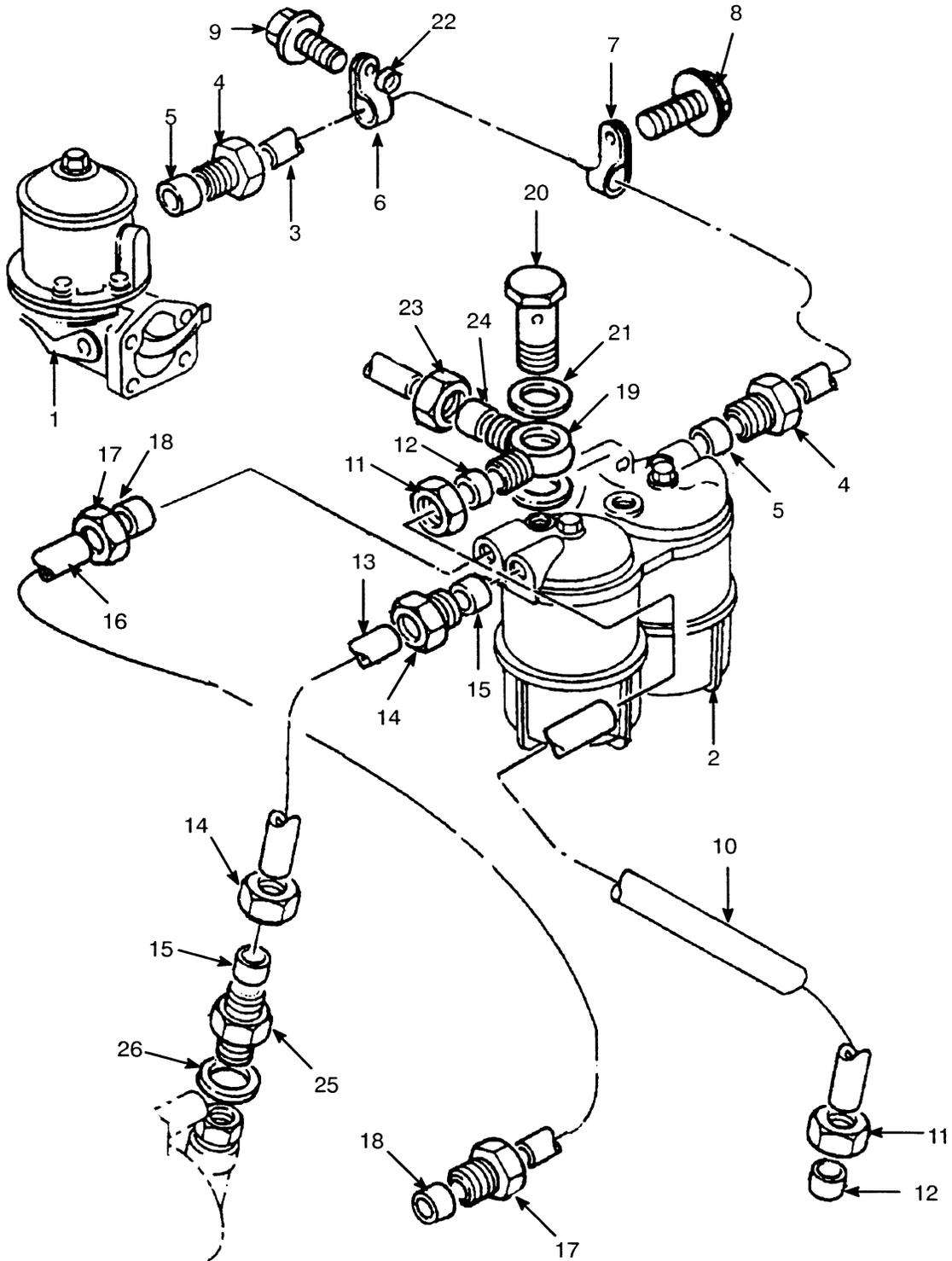
LOW PRESSURE SYSTEM (FIGURE 78) DIESEL TURBO WITHOUT LOW EMISSIONS



**LOW PRESSURE SYSTEM
DIESEL TURBO WITHOUT LOW EMISSIONS**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1377550	Engine Turbo	1	20	1382541	Pipe	1
1	.....	Lift Pump	1	21	16100	Fitting	2
		☞ (Figure 67)		22	167023	Sleeve	2
2	1319050	Filter	1	23	301821	Damper	4
3	1306331	Kit-Fuel Filter	2	24	99780	Plate	4
4	302720	Plug	2	25	1307922	Screw	2
5	302721	Washer	2	26	1307923	Nut	2
6	1319051	Bracket	1	27	1319057	Pipe	1
7	1307914	Screw	2	28	152609	Nut	2
8	1307891	Nut	2	29	152608	Sleeve	2
9	1306371	Screw	2	30	983346	Bolt	1
10	1319053	Pipe	1	31	101985	Washer	1
11	16100	Fitting	2	32	982234	Connector	1
12	167023	Sleeve	2	33	1319058	Spacer	1
13	386461	Clip	1	34	1319059	Pipe	1
14	1319054	Clip	1	35	1306339	Clip	3
15	386459	Screw	1	36	1308007	Nut	2
16	1306362	Screw	1	37	1306337	Sleeve	2
17	1382540	Pipe	1	38	1334617	Pipe (Return Line)	1
18	16100	Fitting	2	39	1311070	Nut	2
19	167023	Sleeve	2	40	152608	Sleeve	2
				41	1382542	Union	1

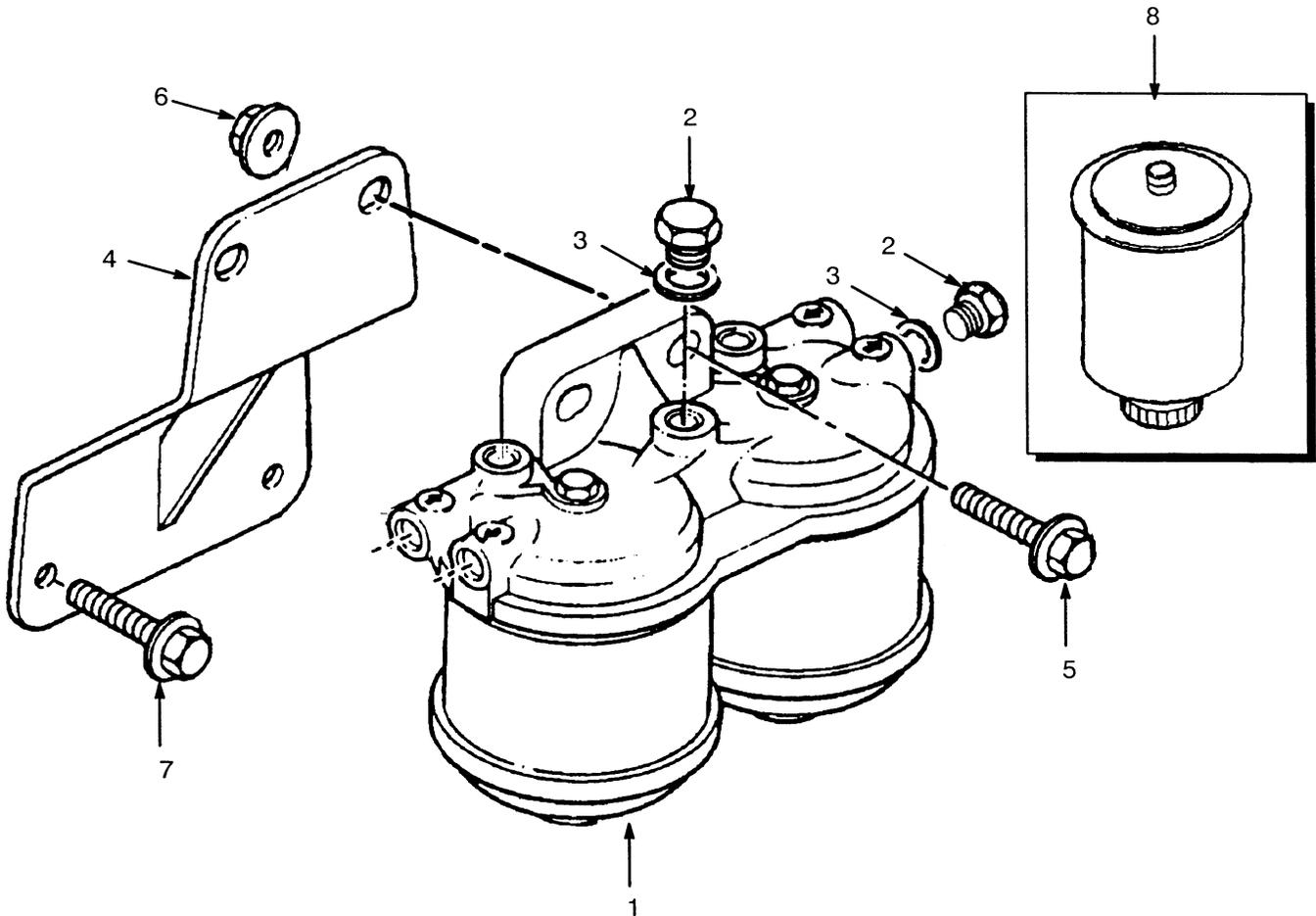
LOW PRESSURE SYSTEM (FIGURE 79) DIESEL TURBO WITH LOW EMISSIONS FIRST USED ON S/N D19D-2377



**LOW PRESSURE SYSTEM
 DIESEL TURBO WITH LOW EMISSIONS
 FIRST USED ON S/N D19D-2377**

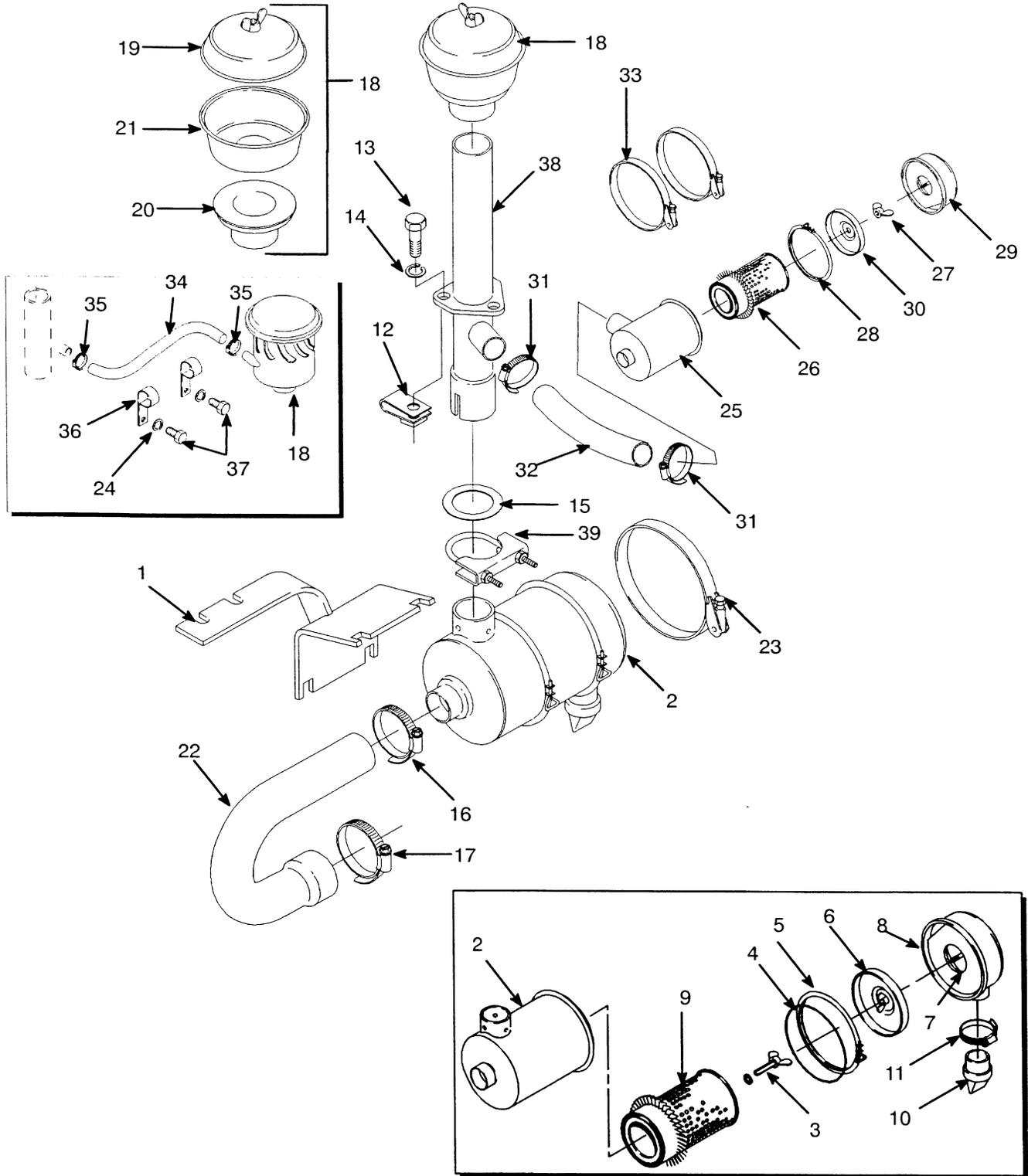
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1395975	Engine Turbo	1	12	152608	Sleeve	2
1	.....	Lift Pump	1	13	1451767	Pipe	1
		☞ (Figure 67)		14	16100	Fitting	2
2	.....	Fuel Filter	1	15	167023	Sleeve	2
		☞ (Figure 80)		16	1451768	Pipe	1
3	1319053	Pipe	1	17	16100	Fitting	2
4	16100	Fitting	2	18	167023	Sleeve	2
5	167023	Sleeve	2	19	1451770	Connector	1
6	386461	Clip	1	20	983346	Bolt	1
7	1319054	Clip	1	21	101985	Washer	2
8	386459	Screw	1	22	1319058	Spacer	1
9	1306362	Screw	1	23	16118	Nut	1
10	1451769	Pipe	1	24	16114	Sleeve	1
11	152609	Nut	2	25	1382542	Union	1
				26	1382543	Washer	1

FUEL FILTER (FIGURE 80) DIESEL TURBO WITH LOW EMISSIONS FIRST USED ON S/N D19D-2377



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1319050	Fuel Filter	1	5	1307914	Screw	2
2	302720	Plug	2	6	1307891	Nut	2
3	302721	Washer	2	7	1306371	Screw	2
4	1319051	Bracket	1	8	1306331	Element	2

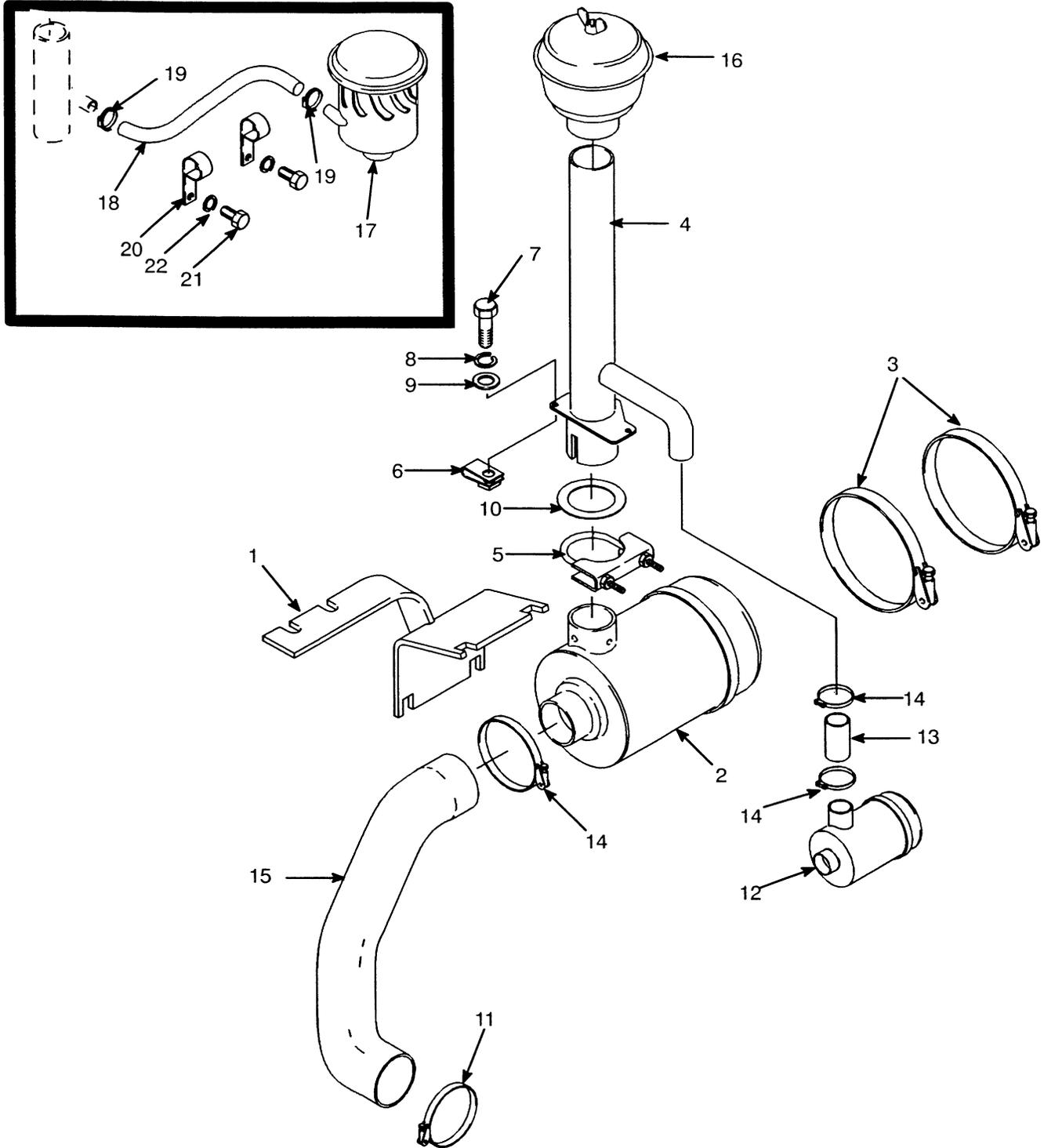
AIR FILTER (FIGURE 81) DIESEL TURBO WITHOUT LOW EMISSIONS



AIR FILTER
DIESEL TURBO WITHOUT LOW EMISSIONS

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1377564	Bracket	1	20	1377091	Sleeve	1
2	179967	Air Filter	1	21	147985	Body	1
3	214338	Bolt Assy	1	22	1377597	Hose	1
4	156961	O-Ring	1	23	162562	Clamp	2
5	156958	Clamp	1	24	320157	Washer	2
6	156960	Baffle Assy	1	25	1352669	Air Filter	1
7	169307	Spring	1	26	1352670	Element	1
8	169303	Cup Assy	1	27	1360191	Nut	1
9	156954	Element	1	28	1360192	Clamp	1
10	141276	Vacuator	1	29	1360193	Cup	1
11	314538	Clamp	1	30	1360194	Baffle	1
12	376397	Retainer	3	31	119236	Clamp	2
13	18497	Capscrew	3	32	1357230	Hose	1
14	292681	Lockwasher	3	33	227220	Clamp	2
15	1301535	Shim	AR	34	1361201	Hose (Aspirated)	1
16	115696	Clamp	1	35	127045	Clamp (Aspirated)	2
17	78286	Clamp	1	36	339530	Clamp (Aspirated)	2
18	1377588	Cleaner Assy (Aspirated)	1	37	1301708	Screw (Aspirated)	2
18	1377577	Cleaner (Non-Aspirated)	1	38	1377580	Stack	1
19	147983	Cover	1	39	131878	Clamp	1

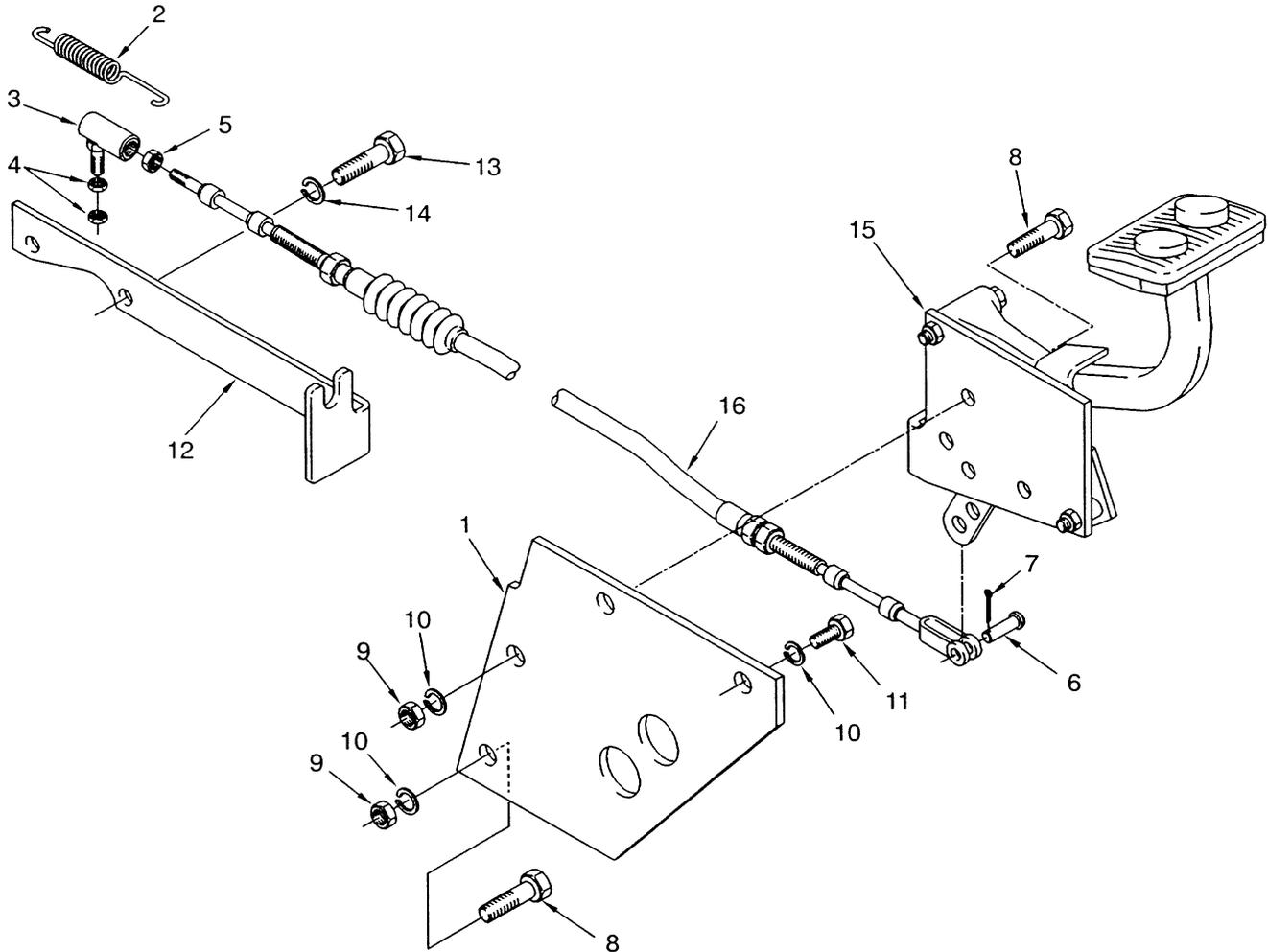
AIR FILTER (FIGURE 82) DIESEL TURBO WITH LOW EMISSIONS FIRST USED ON S/N D19D-2377



AIR FILTER
DIESEL TURBO WITH LOW EMISSIONS
FIRST USED ON S/N D19D-2377

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1455864	Bracket	1	14	227220	Clamp	3
2	1455855	Air Filter	1	15	1455877	Hose	1
3	162562	Clamp	2	16	1455856	Pre-Cleaner (Non-Aspirated) ...	1
4	1455861	Stack	1	16	147983	Cover Assy	1
5	1455926	Clamp	1	16	147985	Body	1
6	376397	Retainer	3	16	1458890	Sleeve	1
7	18497	Capscrew	3	16	1468891	Clamp	1
8	292681	Lockwasher	3	17	1455857	Pre-Cleaner Assy (Aspirated) ...	1
9	320157	Washer	3	18	1361201	Hose (Aspirated)	1
10	1301535	Shim	2	19	127045	Clamp (Aspirated)	2
11	115696	Clamp	1	20	339530	Clamp (Aspirated)	2
12	1352669	Air Filter	1	21	1301708	Screw (Aspirated)	2
12	119236	Clamp	2	22	320157	Washer	2
13	1455862	Hose	1				

THROTTLE LINKAGE (FIGURE 83) DIESEL-NON EMISSIONS

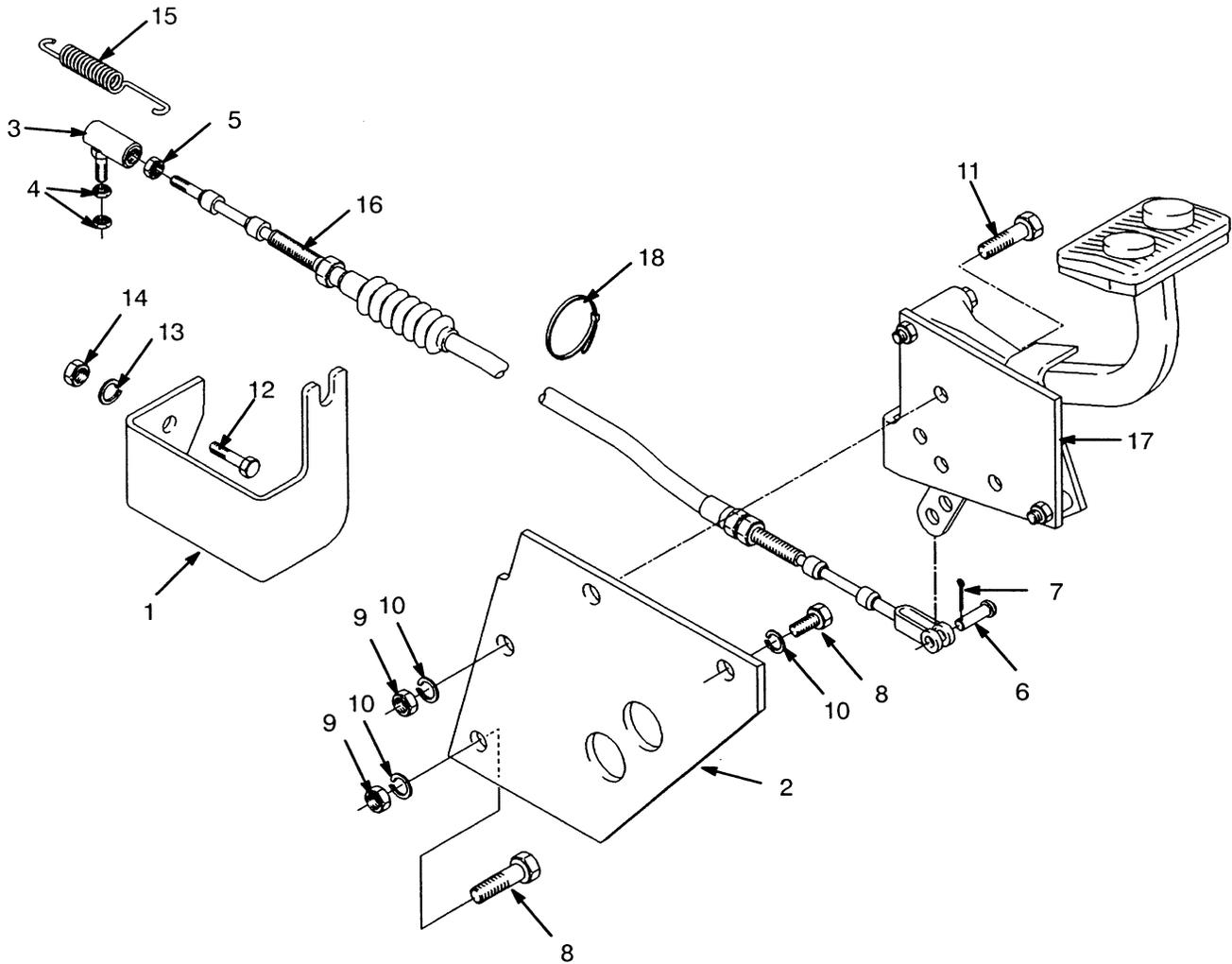


REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1301634	Plate	1	10	292682	Lockwasher	4
2	1337225	Spring	1	11	292514	Capscrew	2
3	161252	Ball Joint	1	12	1310616	Bracket (Non-Turbo)	1
4	15024	Nut	2	12	1377639	Bracket (Turbo)	1
5	15002	Nut	1	13	292500	Capscrew	2
6	162836	Rod End Pin	1	14	292680	Lockwasher	2
7	15212	Pin	1	15		Throttle Pedal	1
8	136985	Capscrew	2			(Figure 88) & (Figure 89)	
9	136692	Nut	2	16	1337772	Throttle Cable (93 in.)	1

THROTTLE LINKAGE (FIGURE 84)

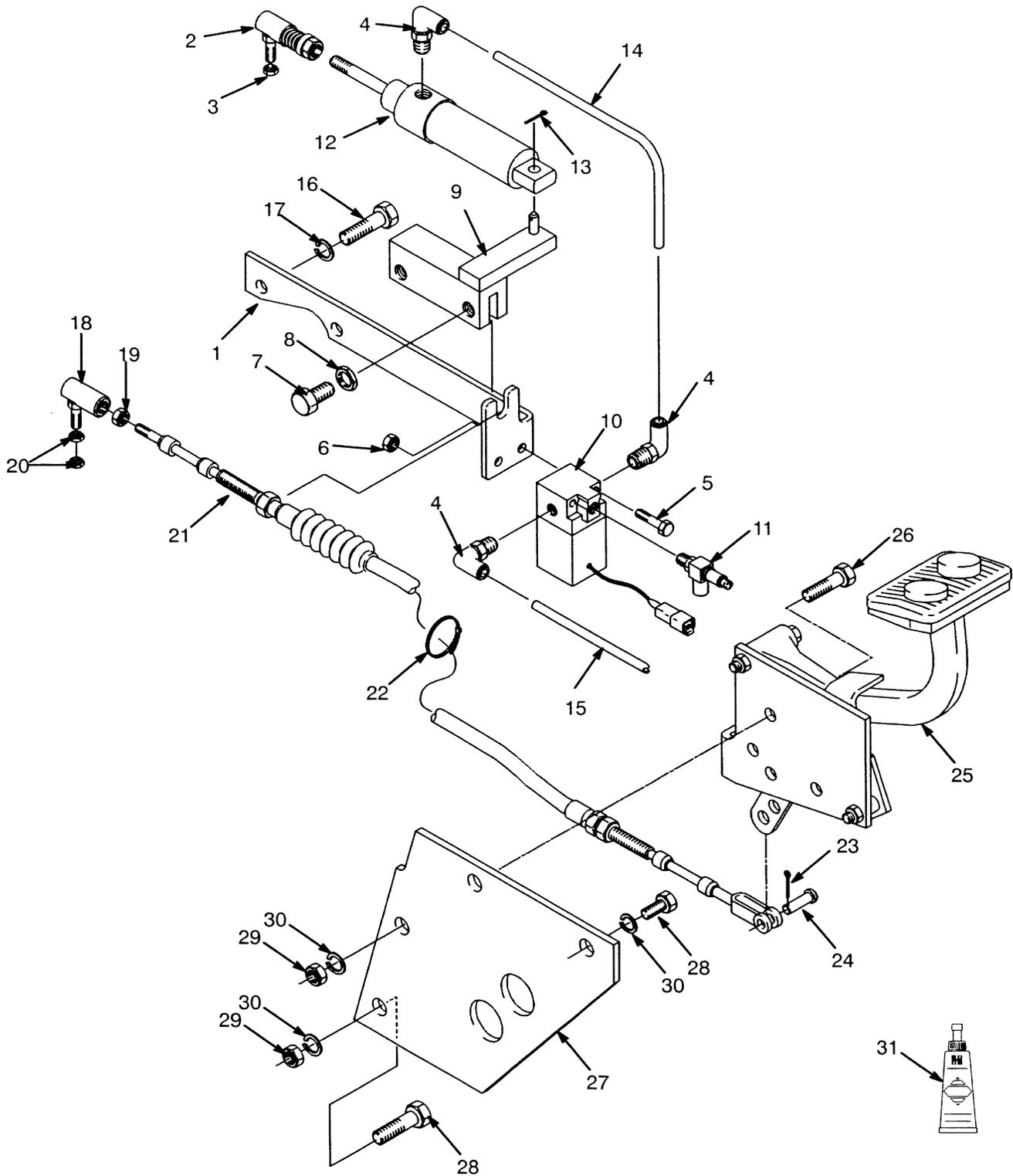
DIESEL-WITH LOW EMISSIONS

FIRST USED ON S/N D19D-2377



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1456340	Bracket-Cable	1	11	292514	Capscrew	2
2	833549	Plate	1	12	287816	Capscrew	2
3	161252	Ball Joint	1	13	292680	Washer	2
4	15024	Nut	2	14	136687	Nut	2
5	15002	Nut	1	15	1337225	Spring	1
6	162836	Rod End Pin	1	16	1337772	Throttle Cable (93 in.)	1
7	15212	Pin	1	17		Throttle Pedal	1
8	136985	Capscrew	2			(Figure 88) & (Figure 89)	
9	136692	Nut	2	18	397676	Clamp Strap	1
10	292682	Lockwasher	4				

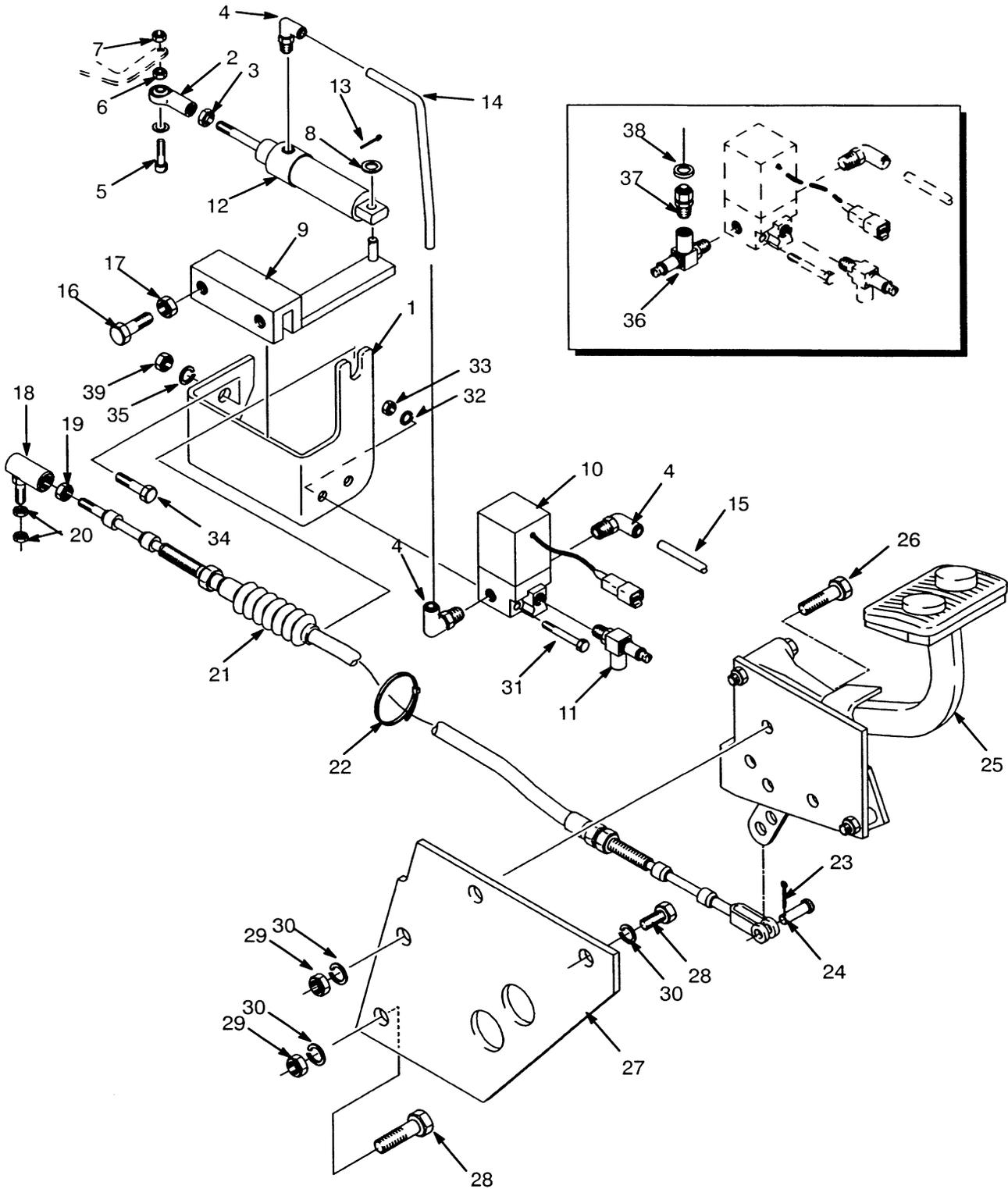
THROTTLE LINKAGE (FIGURE 85) NON-EMISSION DIESEL AND LPG WITH AUTOSHIFT FIRST USED ON S/N D19D-12439



THROTTLE LINKAGE
NON-EMISSION DIESEL AND LPG WITH AUTOSHIFT
FIRST USED ON S/N D19D-12439

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	894924	Bracket-Cable	1	17	292680	Washer	2
1	894925	Bracket-Cable (Turbo)	1	18	161252	Ball Joint	1
2	139024	Ball Joint	1	19	15002	Nut	1
3	15024	Nut	2	20	15024	Nut	2
4	1301433	Fitting	3	21	1337772	Throttle Cable (93 in.)	1
5	815596	Capscrew	2	21	894668	Throttle Cable (LPG)	1
6	815597	Nut	2	22	397676	Clamp Strap	1
7	136681	Capscrew	2	23	15212	Pin	1
8	292682	Washer	2	24	162836	Rod End Pin	1
9	894441	Bracket	1	25	....	Throttle Pedal	1
10	894444	Solenoid Valve	1			☞ (Figure 91), (Figure 90)	
11	894445	Flow Control	1	26	292514	Capscrew	2
12	894446	Air Cylinder	1	27	1301634	Plate	1
13	15200	Pin	1	28	136985	Capscrew	2
14	255124	Tube	1	29	136692	Nut	2
15	125574	Tube	1	30	292682	Lockwasher	4
16	292500	Capscrew	2	31	246108	Thread Sealant	AR

THROTTLE LINKAGE (FIGURE 86) LOW-EMISSION DIESEL WITH AUTOSHIFT FIRST USED ON S/N D19D-12439



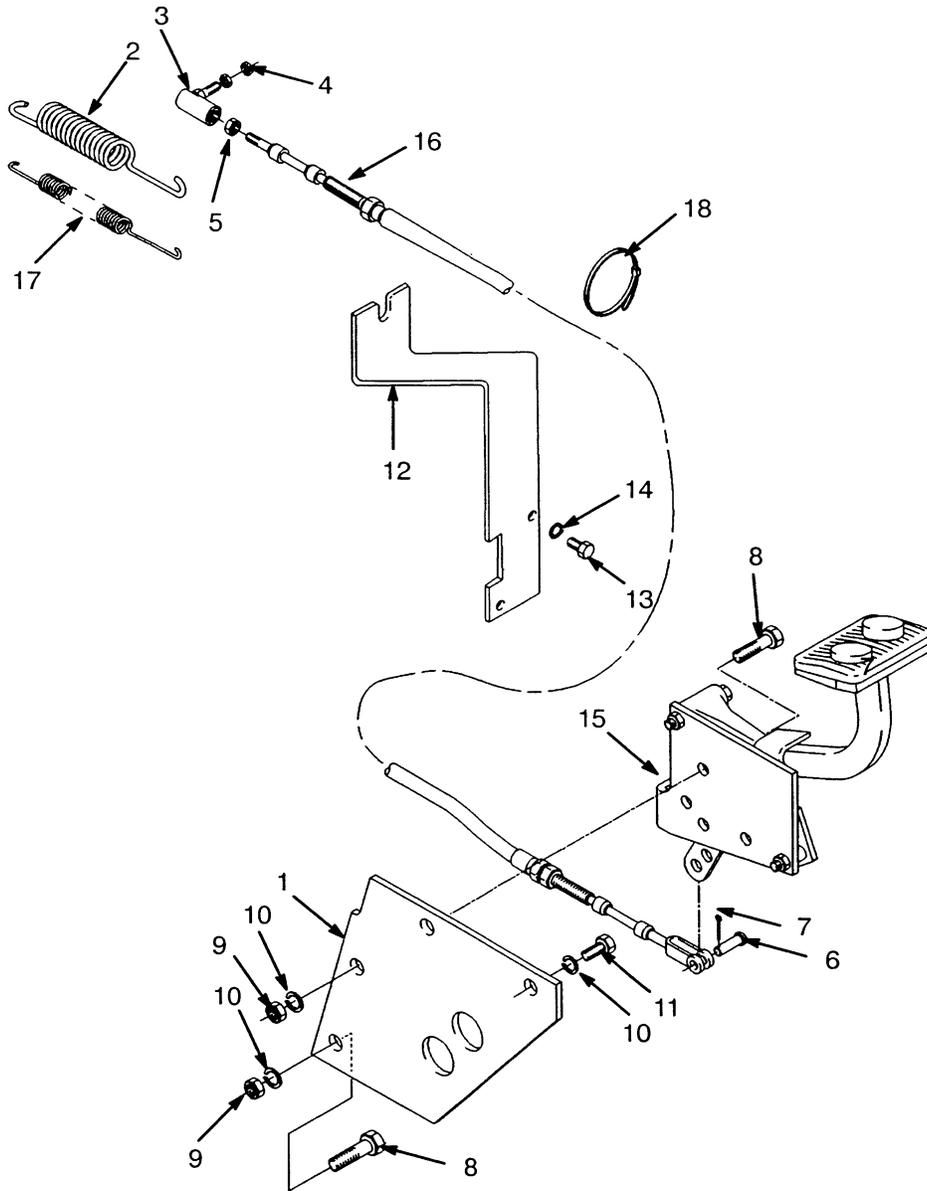
THROTTLE LINKAGE
LOW-EMISSION DIESEL WITH AUTOSHIFT
FIRST USED ON S/N D19D-12439

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1456340	Bracket-Cable	1	22	397676	Clamp Strap	1
2	1456286	Rod End	1	23	15212	Pin	1
3	15024	Nut	2	24	162836	Rod End Pin	1
4 ^a	1301433	Fitting	3	25	.....	Throttle Pedal	1
4 ^b	1301433	Fitting	2			☞ (Figure 90), (Figure 91)	
5	894438	Capscrew	1	26	292514	Capscrew	2
6	222085	Washer	1	27	1301634	Plate	1
7	264141	Nut	1	28	136985	Capscrew	2
8	18500	Washer	1	29	136692	Nut	2
9	1456287	Bracket	1	30	292682	Lockwasher	4
10	894444	Solenoid Valve	1	31	815596	Capscrew	2
11	894445	Flow Control	1	32	292678	Washer	2
12	894446	Air Cylinder	1	33	815597	Nut	2
13	15200	Pin	1	34	287816	Capscrew	2
14	255124	Tube	1	35	292680	Washer	2
15	125574	Tube	1	36 ^b	894445	Flow Control	1
16	136749	Capscrew	2	37 ^b	1359661	Fitting	1
17	239503	Nut	2	38 ^b	1301431	Button Release	1
18	161252	Ball Joint	1	39	136687	Nut	2
19	15002	Nut	1				
20	15024	Nut	2				
21	1337772	Throttle Cable (93 in.)	1				

^a Last Used On S/N D19D-2691
^b First Used On S/N D19D-2692

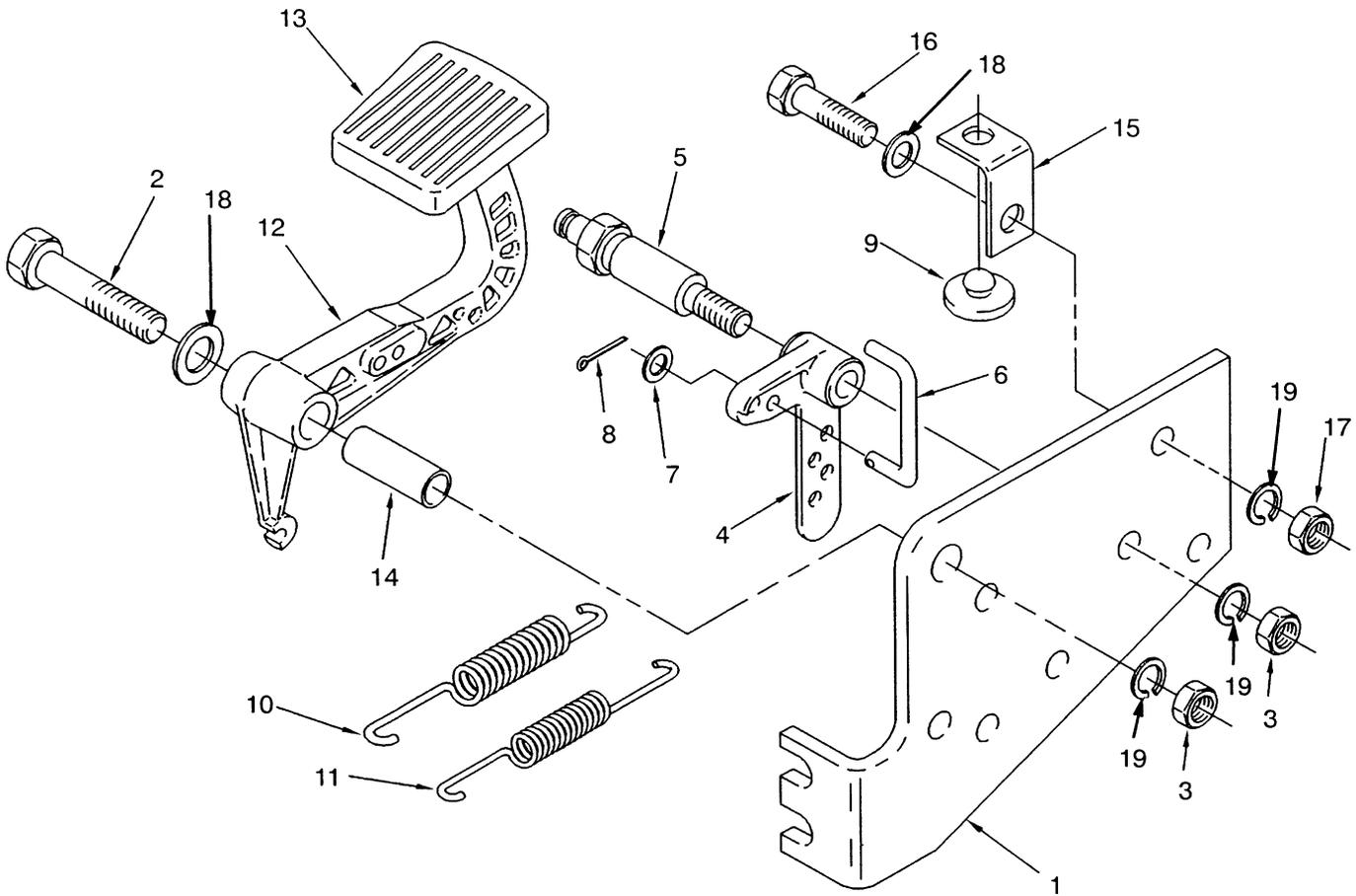
THROTTLE LINKAGE (FIGURE 87)

LPG



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1301634	Plate	1	11	292514	Capscrew	2
2	894659	Spring	1	12	894660	Bracket	1
3	161252	Ball Joint	1	13	292500	Capscrew	2
4	15024	Nut	2	14	292680	Lockwasher	2
5	15002	Nut	1	15		Throttle Pedal	1
6	162836	Rod End Pin	1			(Figure 88) & (Figure 89),	
7	15212	Pin	1	16	894668	Throttle Cable	1
8	136985	Capscrew	2	17	894658	Spring	1
9	136692	Nut	2	18	397676	Strap Clamp	1
10	292682	Lockwasher	4				

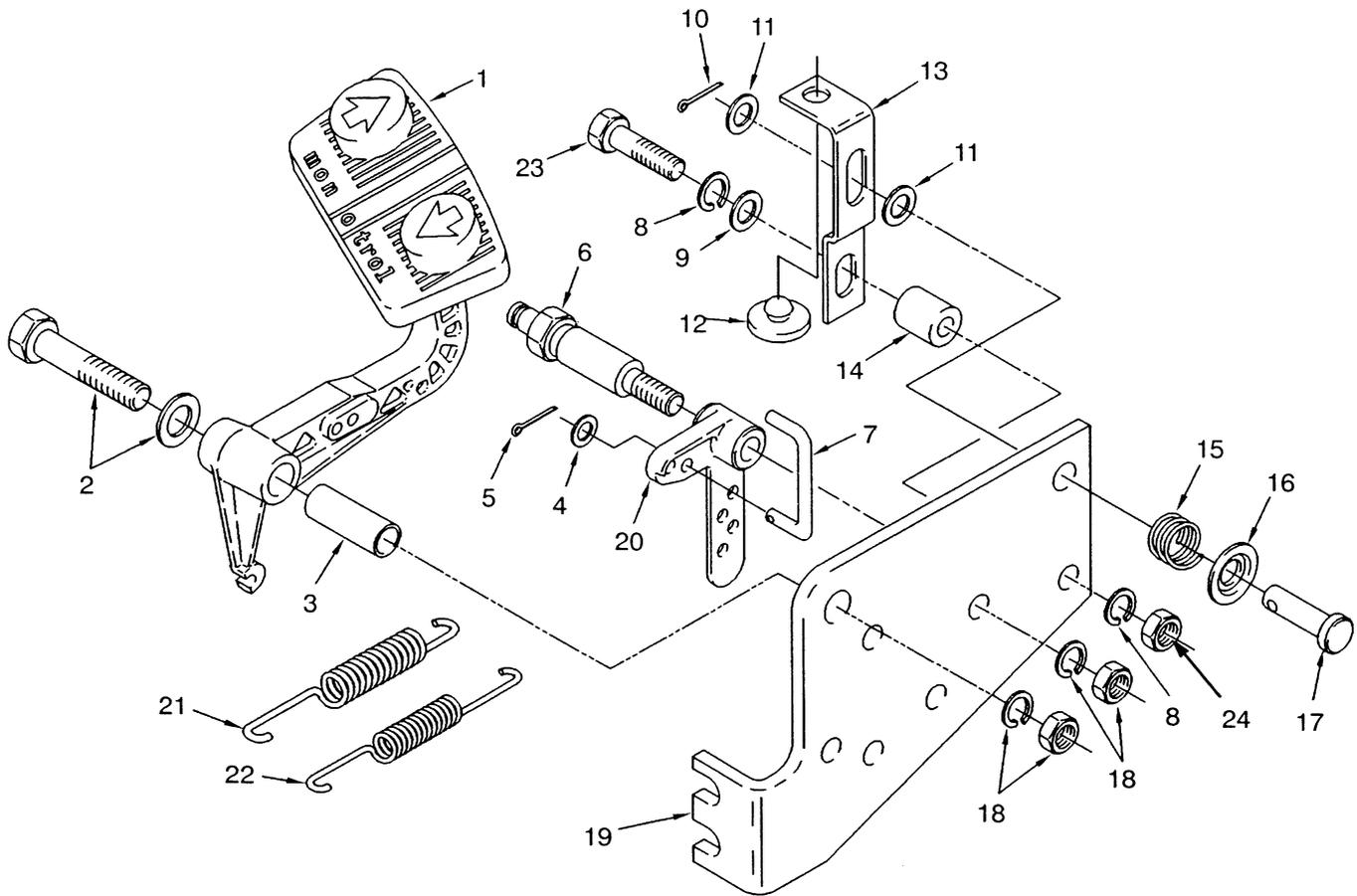
**THROTTLE PEDAL (FIGURE 88)
FORWARD/REVERSE LEVER**



KEY:
A: Diesel
B: LPG

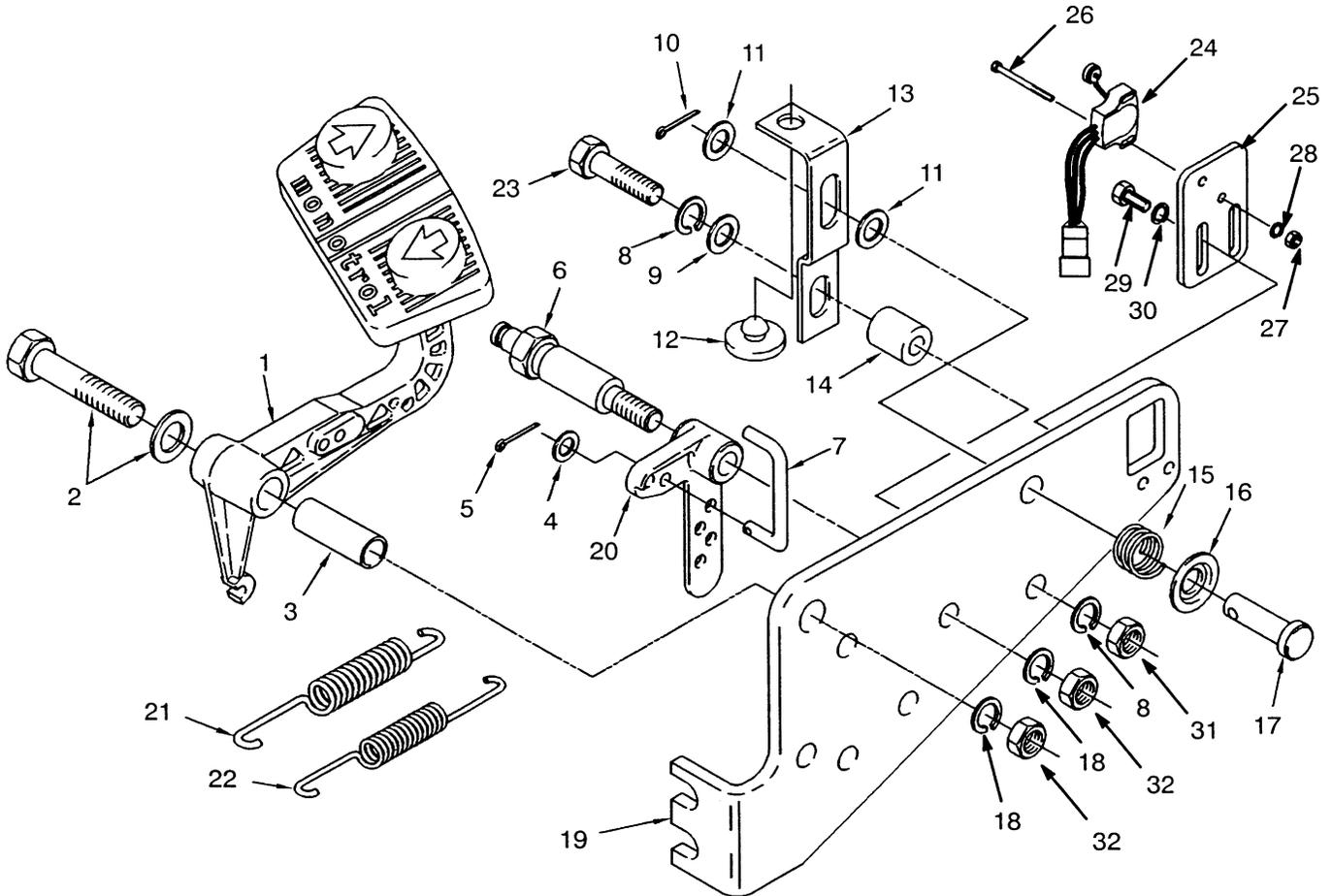
REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
1	352482	Bracket	1	..	10	353142	Spring	1	1
1	894671	Bracket .....	..	1	11	353143	Spring	1	1
2	292521	Capscrew	1	1	12	352499	Pedal	1	1
3	136692	Nut	2	2	13	352885	Pedal Pad	1	1
4	353164	Crank	1	1	14	325708	Tube	1	1
5	352485	Shaft	1	1	15	353159	Bracket	1	1
6	353129	Rod	1	1	16	287854	Capscrew	1	1
7	320156	Washer	1	1	17	296128	Nut	1	1
8	15200	Cotter Pin	1	1	18	320160	Washer	2	2
9	353195	Bumper	1	1	19	292682	Lockwasher	3	3

THROTTLE PEDAL (FIGURE 89) MONOTROL PEDAL



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	.....	Monotrol Pedal	1	14	353453	Mount	1
2	292523	Capscrew	1	15	353172	Spring	1
2	320160	Washer	1	16	353230	Cap	1
3	353141	Tube	1	17	142	Pin	1
4	320156	Washer	1	18	292682	Lockwasher	2
5	15200	Cotter Pin	1	18	136692	Nut	2
6	352485	Shaft	1	19	352482	Bracket (Diesel)	1
7	353129	Rod	1	19	894671	Bracket (LPG)	1
8	292681	Lockwasher	2	20	353164	Crank	1
9	320158	Washer	1	21	353142	Spring	1
10	15212	Pin	1	22	353143	Spring	1
11	320160	Washer	2	23	287851	Capscrew	1
12	353195	Bumper	1	24	239503	Nut	1
13	352950	Bracket	1				

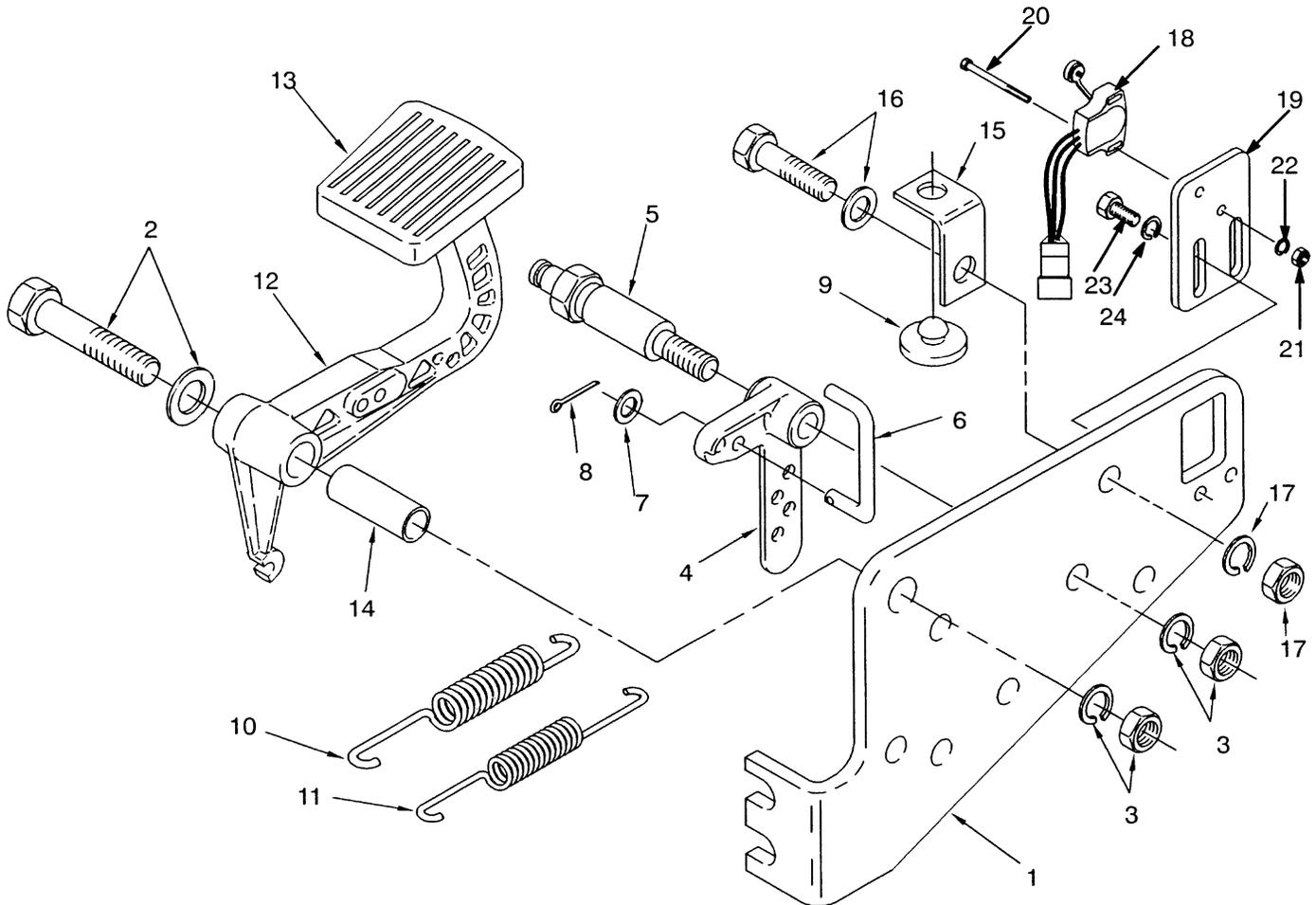
THROTTLE PEDAL (FIGURE 90) MONOTROL PEDAL WITH AUTOSHIFT FIRST USED ON S/N D19D-12439



**THROTTLE PEDAL
MONOTROL PEDAL WITH AUTOSHIFT**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	353398	Monotrol Pedal	1	17	142	Pin	1
2	292523	Capscrew	1	18	292682	Lockwasher	2
2	320160	Washer	1	19	894425	Bracket (Diesel)	1
3	353141	Tube	1	19	894426	Bracket (LPG)	1
4	320156	Washer	1	20	353164	Crank	1
5	15200	Cotter Pin	1	21	353142	Spring	1
6	352485	Shaft	1	22	353143	Spring	1
7	353129	Rod	1	23	287851	Capscrew	1
8	292681	Lockwasher	2	24	894427	Accelerator Position Sensor	1
9	320158	Washer	1	25	894424	Mounting Plate	1
10	15212	Pin	1	26	220456	Screw	2
11	320160	Washer	2	27	15049	Nut	2
12	353195	Bumper	1	28	15151	Washer	2
13	352950	Bracket	1	29	302271	Screw	2
14	353453	Mount	1	30	320157	Washer	2
15	353172	Spring	1	31	239503	Nut	1
16	353230	Cap	1	32	136692	Nut	2

THROTTLE PEDAL (FIGURE 91) FORWARD/REVERSE LEVER WITH AUTOSHIFT FIRST USED ON S/N D19D-12439



**THROTTLE PEDAL
 FORWARD/REVERSE LEVER WITH AUTOSHIFT
 FIRST USED ON S/N D19D-12439**

**KEY:
 A: Diesel
 B: LPG**

REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
1	894425	Bracket	1	..	13	352885	Pedal Pad	1	1
1	894426	Bracket .....	..	1	14	325708	Tube	1	1
2	320160	Washer	1	1	15	353159	Bracket	1	1
2	292521	Capscrew	1	1	16	287854	Capscrew	1	1
3	292682	Lockwasher	2	2	16	320160	Washer	1	1
3	136692	Nut	2	2	17	292682	Lockwasher	1	1
4	353164	Crank	1	1	17	296128	Nut	1	1
5	352485	Shaft	1	1	18	894427	Accelerator Position Sensor ..	1	..
6	353129	Rod	1	1	19	894424	Mounting Plate	1	..
7	320156	Washer	1	1	20	220456	Screw	2	..
8	15200	Cotter Pin	1	1	21	15049	Nut	2	..
9	353195	Bumper	1	1	22	15151	Washer	2	..
10	353142	Spring	1	1	23	302271	Screw	2	..
11	353143	Spring	1	1	24	320157	Washer	2	..
12	352499	Pedal	1	1					

ELECTRICAL SYSTEM

ALTERNATOR (Figure 100)
DIESEL-LAST USED ON S/N D19D-1796 Page 194

ALTERNATOR (Figure 101)
LPG
DIESEL-FIRST USED ON S/N D19D-1797 Page 196

ALTERNATOR (Figure 99)
DIESEL-LAST USED ON S/N D19D-1796 Page 192

ALTERNATOR MOUNTING (Figure 102)
DIESEL WITHOUT LOW EMISSIONS Page 198

ALTERNATOR MOUNTING (Figure 103)
DIESEL WITH LOW EMISSIONS
FIRST USED ON S/N D19D-2377 Page 200

ALTERNATOR MOUNTING (Figure 104)
LPG Page 202

DISTRIBUTOR (Figure 98)
LPG Page 190

ELECTRICAL (Figure 93)
DIESEL WITH AUTOSHIFT
FIRST USED ON S/N D19D-12439 Page 180

ELECTRICAL SYSTEM (Figure 92)
DIESEL WITHOUT AUTOSHIFT Page 178

ELECTRICAL SYSTEM (Figure 95)
LPG WITHOUT AUTOSHIFT Page 184

INSTRUMENT PANEL (Figure 94)
DIESEL Page 182

INSTRUMENT PANEL (Figure 97)
LPG Page 188

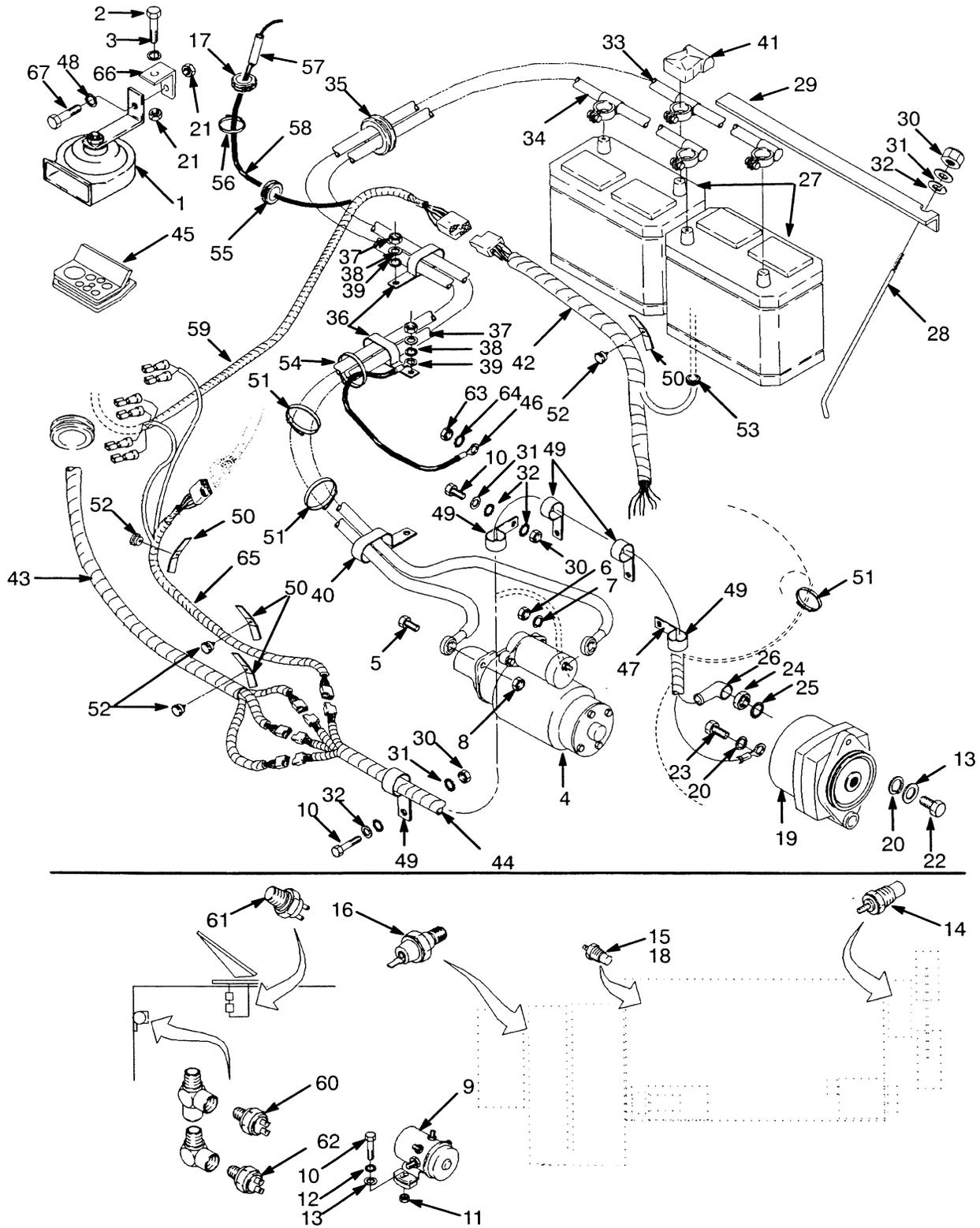
STARTER (Figure 105)
DIESEL Page 204

STARTER (Figure 96)
FIRST USED ON S/N D19E-2654 Page 186

ELECTRICAL SYSTEM
(Continued)

WIRE HARNESS (Figure 106) CONTROL PANEL FIRST USED ON S/N PENDING PER ECN 63257	Page 205
WIRE HARNESS (Figure 107) ENGINE COMPARTMENT FIRST USED ON S/N D19D-12439	Page 206
WIRE HARNESS (Figure 108) CONTROLLER AUTOSHIFT FIRST USED ON S/N D19D-12439	Page 207
WIRE HARNESS (Figure 109) SHIFTER AUTOSHIFT FIRST USED ON S/N D19D-12439	Page 208
WIRE HARNESS (Figure 110) MONOTROL FIRST USED ON S/N D19D-12439	Page 209
WIRE HARNESS (Figure 111) OPERATOR COMPARTMENT WITH OPTIONAL ROTATING BEACON	Page 210

ELECTRICAL SYSTEM (FIGURE 92) DIESEL WITHOUT AUTOSHIFT

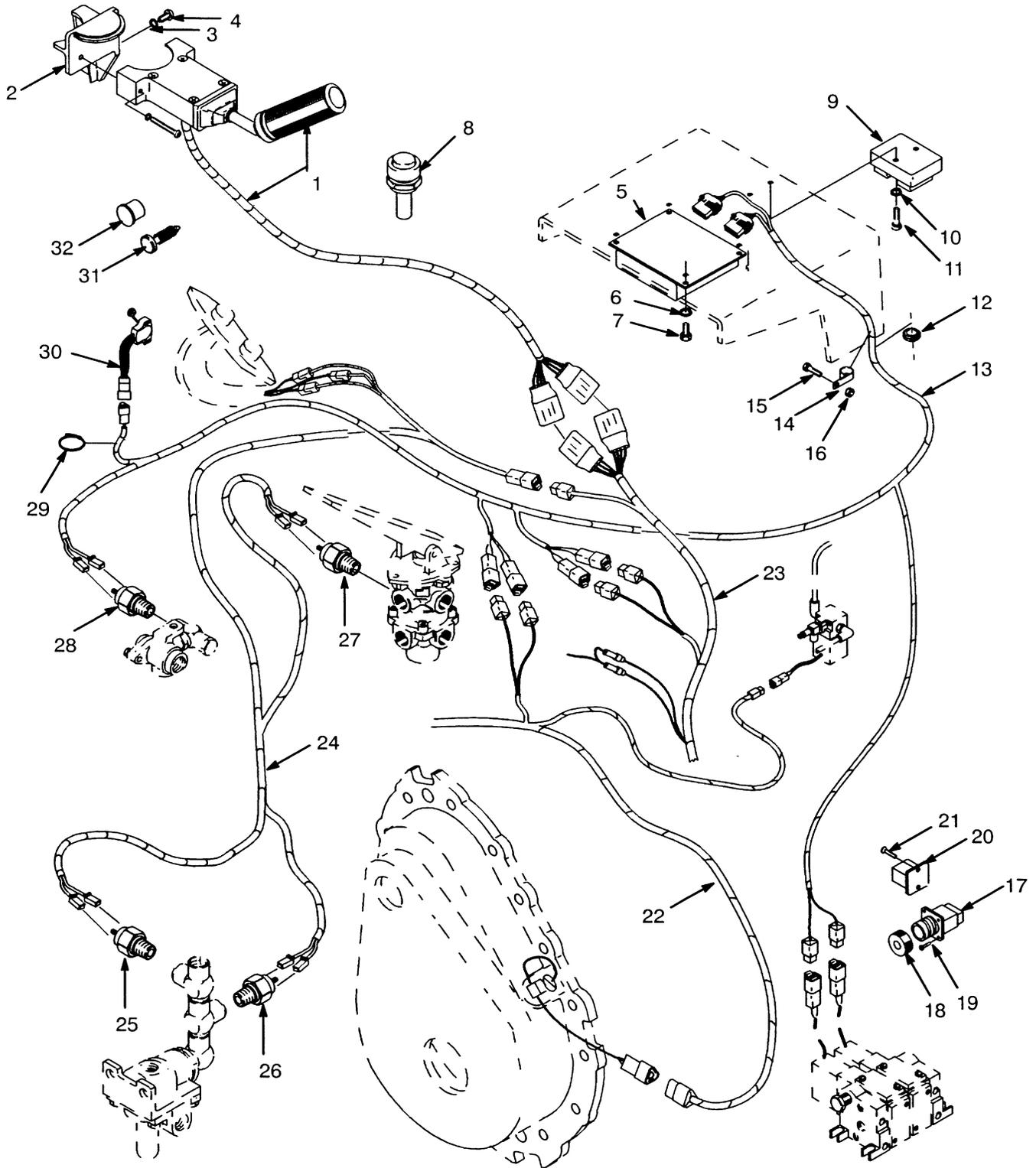


ELECTRICAL SYSTEM DIESEL WITHOUT AUTOSHIFT

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1383778	Horn	1	37	136692	Nut	4
2	136681	Capscrew	1	38	320159	Washer	5
3	292681	Lockwasher	1	39	292682	Lockwasher	4
4	.....	Starter ☞ (Figure 105)	1	40	1350911	Clamp	1
5	16805	Capscrew	3	41	257241	Cover	2
5	15156	Lockwasher	3	42	^c 1325610	Harness-Module	1
6	292668	Nut	1	43	1451306	Harness-Operator Compartment	1
7	292679	Lockwasher	1	44	^d 1451304	Harness-Eng. Compartment	1
8	136692	Nut	1	44	^e 1452412	Harness-Eng Compartment	1
9	116102	Solenoid	1	45	1301640	Seal	1
10	287816	Screw	2	46	150179	Wire	1
11	136687	Nut	2	47	101625	Clamp	1
12	292680	Lockwasher	2	48	320157	Washer	2
13	320157	Washer	4	49	1345023	Clamp	8
14	1319175	Temperature Sender	1	50	1301593	Clamp	9
15	190252	Oil Pressure Switch	1	51	137852	Clamp	8
16	114662	Temperature Sender (Transmission)	1	52	340044	Gripnail	9
17	102990	Grommet	1	53	^b 1301424	Bushing	1
18	246108	Thread Sealant	AR	54	397676	Strap Clamp	12
19	.....	Alternator ☞ (Figure 99) And (Figure 100)	1	55	^b 1300757	Grommet	2
20	292681	Lockwasher	2	56	^b 137852	Clamp	2
21	239503	Nut	2	57	^b 181046	Connector	4
22	136749	Capscrew	1	58	^b 1311268	Wire	1
23	136681	Capscrew	1	59	^c 1334515	Harness	1
24	136687	Nut	1	60	^c 1301647	Park Brake Switch (NC)	1
25	296359	Washer	1	61	^c 1301648	Inching Brake Switch	1
26	157065	Cover	1	62	^c 1301299	Park Brake Switch (NO)	1
27	305522	Battery (Wet)	2	63	239503	Nut	2
27	^a 305681	Battery (Dry)	2	64	^c 296380	Washer	2
28	309124	Link	3	65	1301747	Harness-Fwd/Rev Shift	1
29	1301406	Retainer	1	66	1325379	Bracket	1
30	136687	Nut	3	67	136681	Capscrew	1
31	292680	Lockwasher	3				
32	320156	Washer	3				
33	1303438	Battery Cable (Negative)	1				
34	1303437	Battery Cable (Positive)	1				
35	1347854	Grommet	1				
36	1350914	Clamp	3				

- ^a Optional
- ^b With Cab
- ^c Monotrol Pedal
- ^d Last Used On S/N D19D-2376
- ^e First Used On S/N D19D-2377

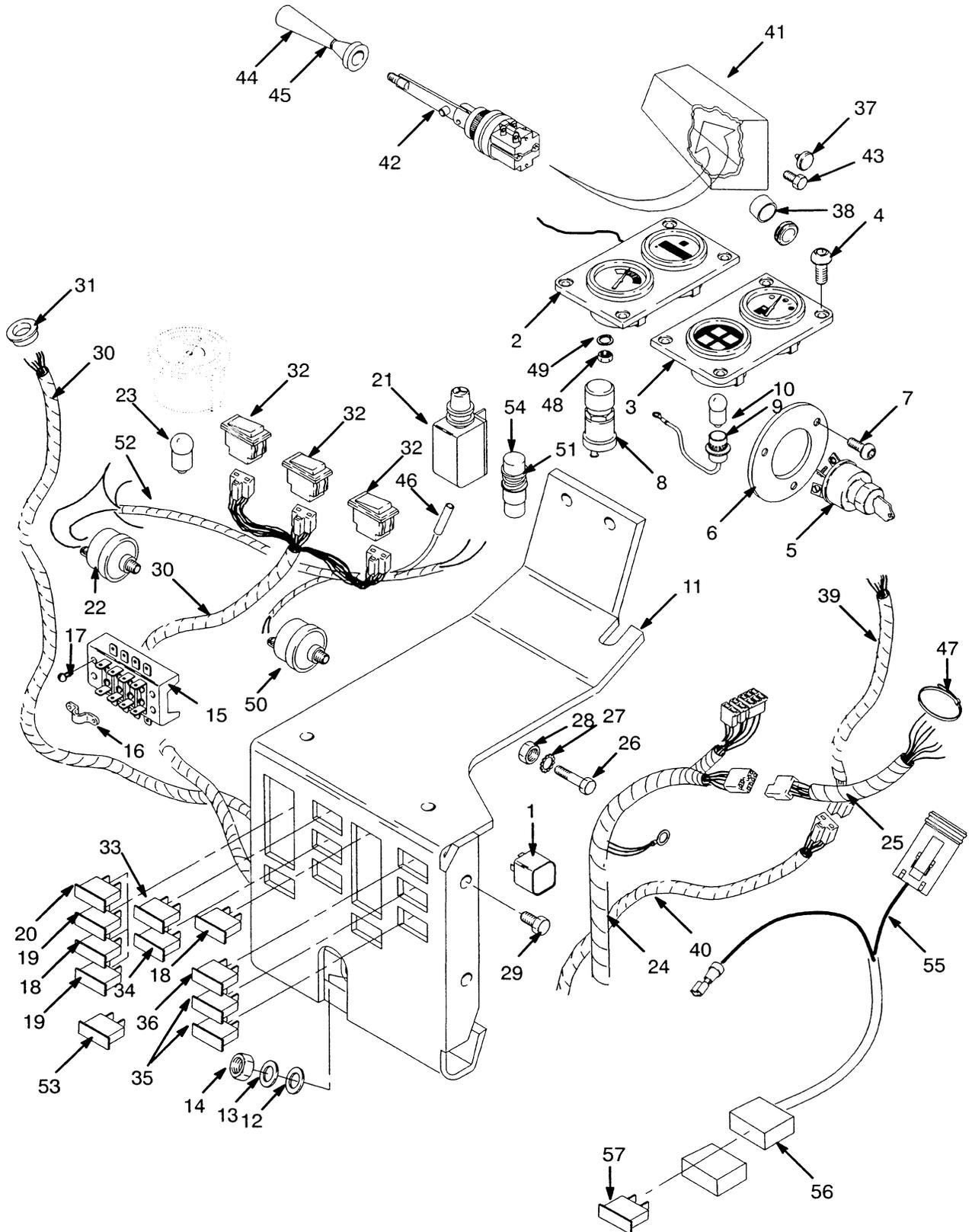
ELECTRICAL (FIGURE 93) DIESEL WITH AUTOSHIFT FIRST USED ON S/N D19D-12439



ELECTRICAL
DIESEL WITH AUTOSHIFT
FIRST USED ON S/N D19D-12439

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	a 894411	Gear Selector	1	21	b 1301284	Screw	2
1	b 894410	Gear Selector	1	22		Wire Harness (Engine)	1
2	1455928	Bracket	1			☞ (Figure 107)	
3	292681	Lockwasher	2	23		Wire Harness (Shifter)	1
4	1324996	Capscrew	2			☞ (Figure 109)	
5	c 2037435	Controller	1	24	a	Wire Harness (Monotrol)	1
5	d 2038103	Controller	1			☞ (Figure 110)	
6	309637	Screw	2	25	a 1301299	Low Pressure Switch	1
7	292680	Washer	2	26	a 1301647	Low Pressure Switch	1
8	1325331	Lamp Assy	1	27	a 1301648	Low Pressure Switch	1
9	894932	Controller By-Pass	1	28	1301299	Low Pressure Switch	1
10	15154	Washer	2	29	397676	Clamp	1
11	227113	Screw	2	30		Accelerator Sensor	1
12	94351	Grommet	1			☞ (Figure 90), (Figure 91)	
13		Wire Harness (Controller)	1	31	a 1307737	Fastener	2
		☞ (Figure 108)		32	a 1331037	Plug	1
14	1301721	Clamp	1				
15	287854	Capscrew	1	a		Monotrol	
16	136692	Nut	1	b		Forward/Reverse	
17	1455929	Receptacle	1	c		Last Used On S/N Pending Per ECN 63271	
18	894974	Cap	1	d		First Used On S/N Pending Per ECN 63271	
19	227163	Screw	4				
20	b 1301233	Relay	1				

INSTRUMENT PANEL (FIGURE 94) DIESEL



**INSTRUMENT PANEL
DIESEL**

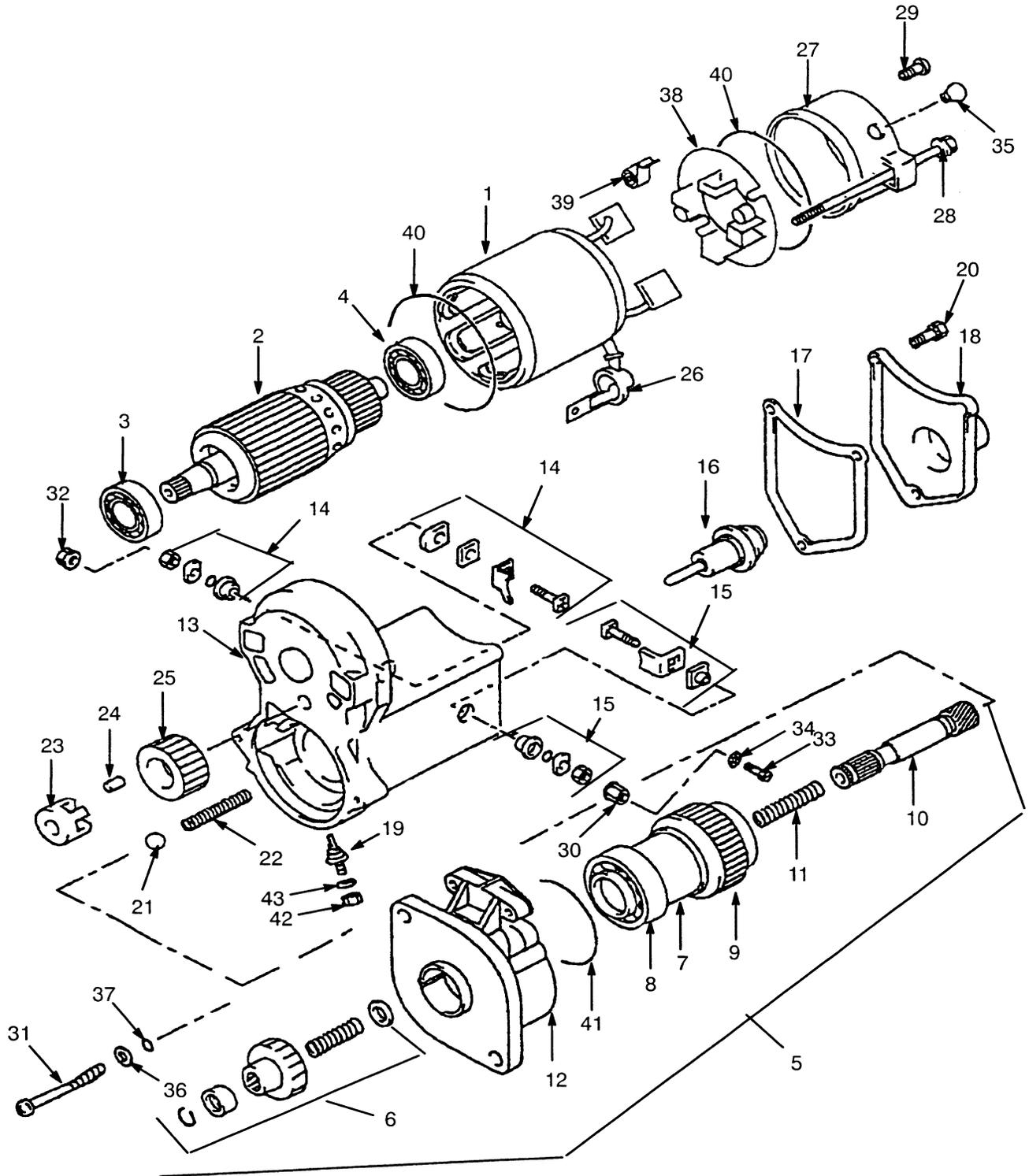
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1301233	Relay	1	31	a 1301424	Bushing	3
2	1324313	Instrument Cluster (LH)	1	32	a 1301612	Switch	3
2	1312473	Bezel	1	32	a 1301150	Switch	1
2	1312337	Hourmeter	1	32	a 1323993	Socket	1
2	1329414	Temperature Gauge	1	32	a 1326355	Bulb	1
2	1320001	Bulb	1	32	a 1301675	Lens	1
2	1317394	Socket	1	33	a 370646	Fuse (5 Amp.)	1
2	1312339	Gasket	1	34	a 370648	Fuse(20 Amp.)	1
2	1312340	Bracket	1	35	1301282	Circuit Breaker	2
3	1301645	Instrument Cluster (RH)	1	35	1301282	Circuit Breaker	1
3	1312473	Bezel	1	36	1301283	Circuit Breaker	1
3	1312344	Gauge	1	37	b 1307737	Fastener	2
3	1320001	Bulb	1	38	b 1307736	Plug	1
3	1317394	Socket	1	39	c 1301563	Harness	1
3	1312339	Gasket	1	40	c 1301747	Harness	1
3	1312340	Bracket	1	41	c 1301690	Housing	1
4	1330574	Capscrew	8	42	c 1324744	Switch	1
5	379902	Ignition Switch	1	42	c 1335051	Contact Block	1
5	1337197	Key Set	1	43	c 302069	Screw	2
6	1301739	Plate	1	44	c 289143	Handle	1
7	379650	Screw	3	45	c 289166	Dust Cover	1
8	370776	Switch	1	46	1311403	Wire	1
9	1342662	Light Socket	2	47	137852	Clamp	2
10	169786	Bulb	2	48	15049	Nut	1
11	e 1301235	Panel	1	49	16743	Washer	1
11	f 1458373	Panel	1	50	1331530	Switch	1
12	320157	Washer	2	51	1325331	Lamp	1
13	320156	Washer	2	52	1336344	Harness	1
14	136687	Nut	2	53	381846	Fuse & Holder	1
15	1301296	Block	1	54	1377187	Lens	1
16	1301704	Jumper	1	55	d 1385513	Harness Rotating Beacon	1
17	1301284	Screw	2	56	d 381846	Fuse Socket	1
18	370647	Fuse (10 Amp.)	2	57	d 370647	Fuse-10 Amp	1
19	370646	Fuse (5 Amp.)	2				
20	370648	Fuse (20 Amp.)	1				
21	1301295	Alarm	1				
22	1331530	Switch	1				
23	169786	Bulb	1				
24	2037934	Harness	1				
25	1301341	Harness	1				
26	176640	Capscrew	3				
27	296380	Lockwasher	5				
28	239503	Nut	3				
29	1301284	Screw	4				
30	a 1325611	Harness	1				

- a With Cab
- b Monotrol Pedal
- c Forward/Reverse Lever
- d Optional
- e Last Used On S/ N D19D-2653
- f First Used On S/ N D19D-2654

ELECTRICAL SYSTEM LPG WITHOUT AUTOSHIFT

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1383778	Horn	1	38 d	18557	Capscrew	2
2	136681	Capscrew	3	38 e	18558	Capscrew	2
3	292681	Lockwasher	2	39 d	15157	Washer	2
4	1301640	Seal	1	39 e	292679	Washer	1
5 a	1334515	Harness-Monotrol	1	40 d	15039	Nut	2
6 d	1451305	Harness Engine Compartment	1	40 e	292668	Nut	1
6 e	894886	Harness Engine Compartment	1	41 d	15156	Washer	1
7 b	137852	Clamp	1	41 e	292681	Washer	1
8 b	1300757	Grommet	2	42 d	15083	Nut	1
9	1347854	Grommet	1	42 e	239503	Nut	1
10	305522	Battery	1	43	116102	Switch-Solenoid	1
11	309124	Link	1	44	320157	Washer	4
12	894872	Hold-Down	1	45	292501	Capscrew	1
13	136687	Nut	4	46	287816	Capscrew	1
14	292680	Washer	3	47	1345023	Clamp	4
15	320156	Washer	3	48	397676	Strap Clamp	4
16	257241	Boot	2	49	137852	Strap Clamp	1
17	894875	Battery Cable (Positive)	1	50	320159	Washer	3
18 d	894703	Battery Cable (Negative)	1	51	292513	Screw	2
18 e	894885	Battery Cable (Negative)	1	52	894876	Shield	1
19 a	1301647	Park Brake Switch	1	53 d	16836	Screw	2
20 a	1301299	Park Brake Switch	1	53 e	16874	Screw	2
21 a	1301648	Inching Brake Switch	1	54	177946	Washer	2
22 b	181046	Connector	1	55	1319190	Temperature Sender	1
23 b	1311268	Wire Assembly	1	56	12843	Fitting	1
24 c	1301747	Harness	1	57	190252	Pressure Switch-NC	1
25	1325610	Harness-Module	1	58	1319175	Temperature Sender	1
26	1451306	Harness-Operator Compartment	1	59	114312	Clamp	1
27	894706	Harness-Governor	1	60	1350914	Strap	3
28	15000	Nut	2	61	136692	Nut	3
29	15154	Washer	2	62	1301593	Clamp	3
30	306725	Governor	1	63	340044	Grip Nail	3
31	320158	Washer	2	64	150179	Wire Assembly	1
32	292682	Washer	4	65	296380	Washer	2
33	.....	Alternator	1	66	239503	Nut	2
		☞ (Figure 101)		67 b	1301424	Bushing	1
34	126358	Pulley-Fan	1	a		Monotrol Pedal	
35	1310277	Pulley	1	b		With Cab	
36	157065	Boot	1	c		Forward/Reverse Switch	
37 d	894566	Starter	1	d		Last Used On S/ N D19D-2653	
37 e	894878	Starter	1	e		First Used On S/ N D19D-2654	
		☞ (Figure 96)					

STARTER (FIGURE 96) FIRST USED ON S/N D19E-2654

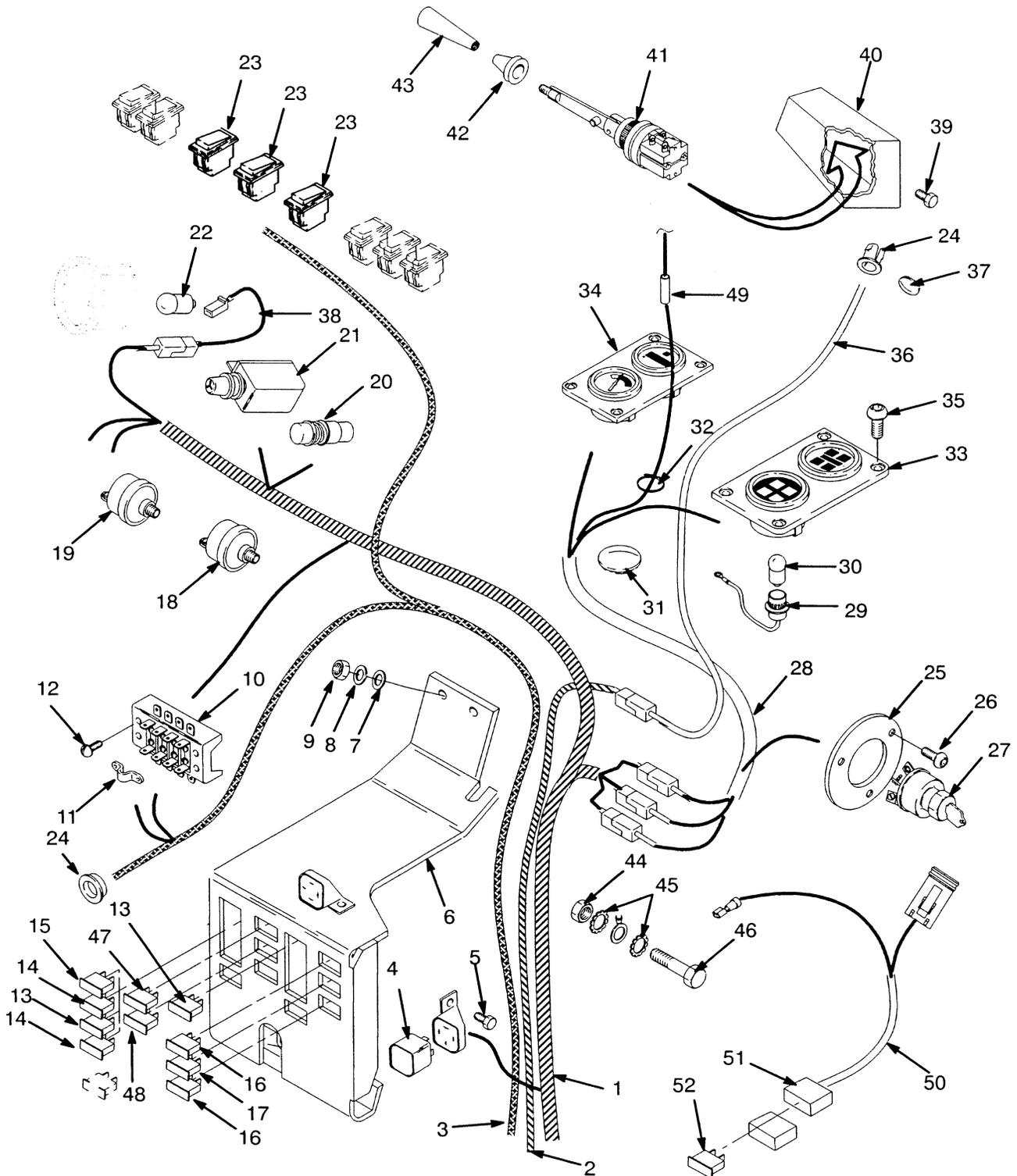


STARTER
FIRST USED ON S/N D19E-2654

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	894878	Starter	1	21	1453890	Ball	1
1	1390149	Yoke Assy	1	22	2037996	Return Spring	1
1	.....	Brush	4	23	1390157	Retainer	1
2	1465634	Armature Assy	1	24	324634	Roller	5
3	1453889	Ball Bearing	1	25	1390156	Pinion	1
3	1390169	Ball Bearing (Optional)	1	26	1390173	Cover	1
4	1390168	Ball Bearing	1	27	1465642	Frame	1
5	1465635	Clutch Sub Assy	1	28	1390161	Bolt	2
6	.....	Kit-Pinion	1	29	1390162	Screw	2
7	.....	Kit Clutch	1	30	1390165	Nut	1
8	.....	Bearing	1	31	1390160	Screw	2
9	.....	Ball Bearing	1	32	1390172	Nut	1
10	.....	Shaft	1	33	1390166	Bolt-Slotted Hex	1
11	.....	Spring	1	34	1391244	Washer	1
12	.....	Housing Assy	1	35	1390171	Cover	1
13	1465639	Switch Assy	1	36	1390163	Washer	2
14	1453550	Starter Kit	1	37	1390164	O-Ring	2
15	1453551	Kit-Terminal C	1	38	1390155	Brush Holder Assy	1
16	1391238	Plunger Assy	1	39	1390159	Spring	4
17	1391239	Gasket-Switch A	1	40	1390170	O-Ring	2
18	1391240	Cover-Solenoid	1	41	1459303	Seal	1
19	1465640	Terminal Bolt Sub Assy	1	42	1465643	Nut	1
20	1465641	Bolt	1	43	1465644	Lockwasher	1

INSTRUMENT PANEL (FIGURE 97)

LPG

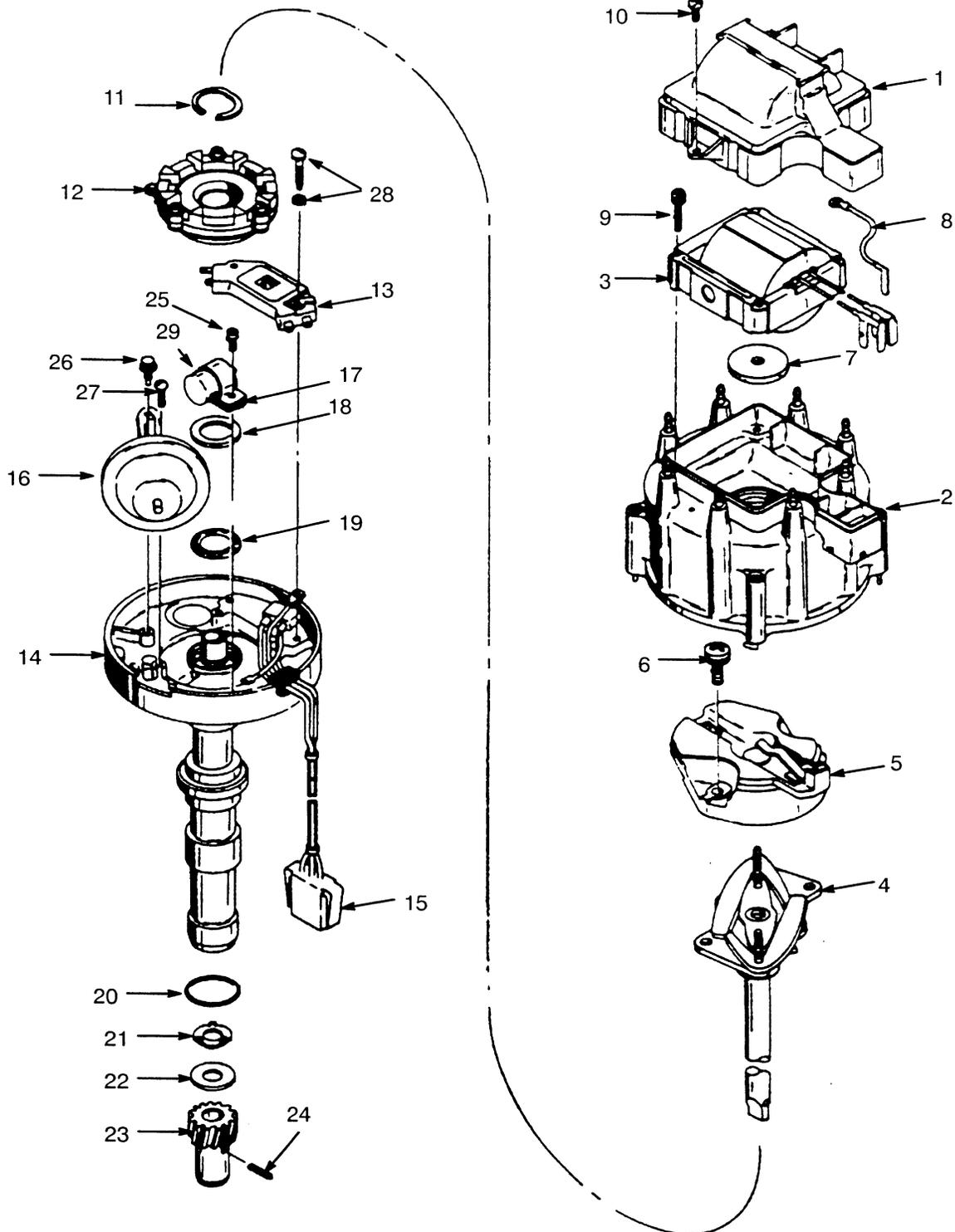


INSTRUMENT PANEL
LPG

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1360661	Harness-Operator Compartment .	1	31	350498	Plug	1
2	c 1301747	Harness	1	32	137852	Strap	1
3	a 1325611	Harness	1	33	370473	Instrument Cluster (RH)	1
4	1301233	Horn Relay	1	33	1312474	Bezel	1
5	1301284	Screw	1	33	1312345	Light Cluster	1
6	d 1301235	Fuse Panel	1	34	1324313	Instrument Cluster (LH)	1
6	e 1458373	Fuse Panel	1	34	1312473	Bezel	1
7	320157	Washer	2	34	1312337	Hour Meter	1
8	320156	Washer	2	34	1329414	Temp. Gauge	1
9	136687	Nut	2	35	1330574	Screw	8
10	1301296	Terminal Block	1	36	c 1301563	Harness	1
11	1301704	Jumper	1	37	b 1307736	Plug	1
12	1301284	Screw	2	38	1336344	Harness-Brake Ind.	1
13	370647	Fuse-10 Amp.	2	39	c 302069	Screw	2
14	370646	Fuse-5 Amp.	2	40	c 1301690	Housing	1
15	370648	Fuse-20 Amp.	1	41	c 1324744	Switch	1
16	a 1301283	Breaker-10 Amp.	2	42	c 289166	Dust Cover	1
17	a 1301282	Breaker-5 Amp.	1	43	c 289143	Handle	1
18	1301647	Switch-Pressure	1	44	239503	Nut	1
19	1331530	Switch-Pressure	1	45	296380	Washer	2
20	1325331	Lamp Assembly	1	46	176640	Capscrew	1
21	1301295	Alarm	1	47	a 370646	Fuse-10 Amp.	1
22	169786	Bulb-12V	1	48	a 370648	Fuse-20 Amp.	1
23	a 1301612	Switch Assembly	3	49	181046	Connector	1
23	a 1301150	Switch	1	50	f 1385513	Harness Rotating Beacon	1
23	a 1323993	Socket	1	51	f 381846	Fuse Socket	1
23	a 1326355	Bulb	1	52	f 370647	Fuse-10 Amp	1
23	a 1301675	Lens	1				
24	a 1301424	Bushing	1				
25	1301739	Plate	1	a	with Cab		
26	379650	Screw	3	b	Monotrol Pedal		
27	379902	Ignition Switch	1	c	Forward/Reverse Lever		
28	c 1301341	Harness	1	d	Last Used On S/ N D19D-2653		
29	1342662	Socket Assembly	1	e	First Used On S/ N D19D-2654		
30	169786	Bulb-12V	1	f	Optional		

DISTRIBUTOR (FIGURE 98)

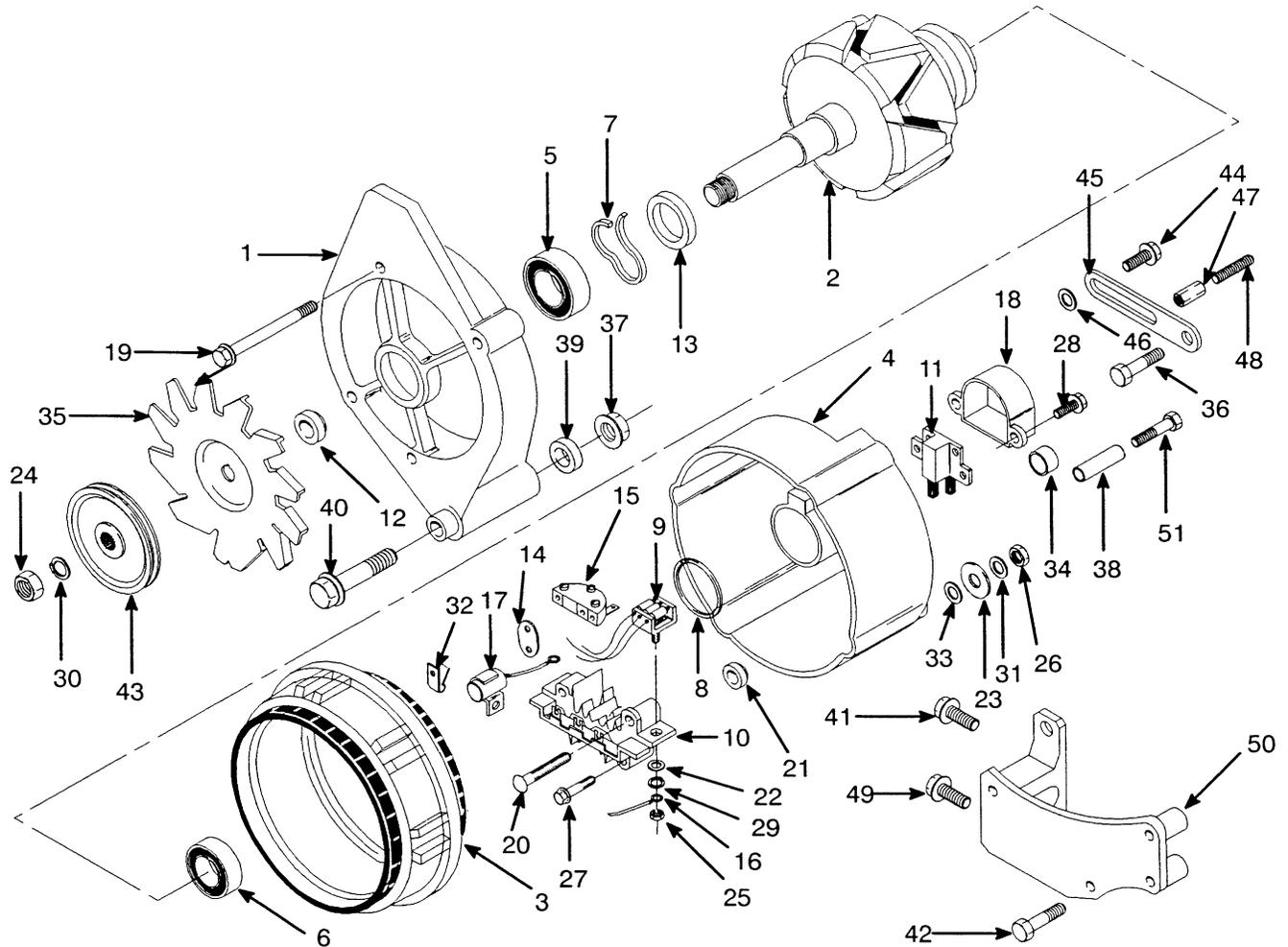
LPG



DISTRIBUTOR LPG

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	366098	Distributor	1	15	274373	Wire Harness	1
1	274363	Cover	1	16	894571	Vacuum Advance	1
2	274369	Cap	1	17	271495	Bracket-Vacuum Advance	1
2	274370	Brush	1	18	271670	Felt Washer	1
3	274366	Coil	1	19	166216	Seal	1
4	366097	Shaft	1	20	1334411	O-Ring	1
5	281846	Rotor	1	21	274403	Tang Washer	1
6	271494	Screw	2	22	274402	Thrust Washer	1
7	274368	Seal	1	23	274401	Gear	1
8	288032	Ground Wire	1	24	19870	Pin	1
9	274367	Screw	4	25	271666	Screw	1
10	271666	Screw	1	26	220302	Screw	1
11	271668	Retainer	1	27	1329030	Screw	1
12	274374	Plate	1	28	271497	Screw And Washer	2
13	271496	Module	1	29	271499	Capacitor	1
14	274400	Housing	1				

ALTERNATOR (FIGURE 99) DIESEL-LAST USED ON S/N D19D-1796

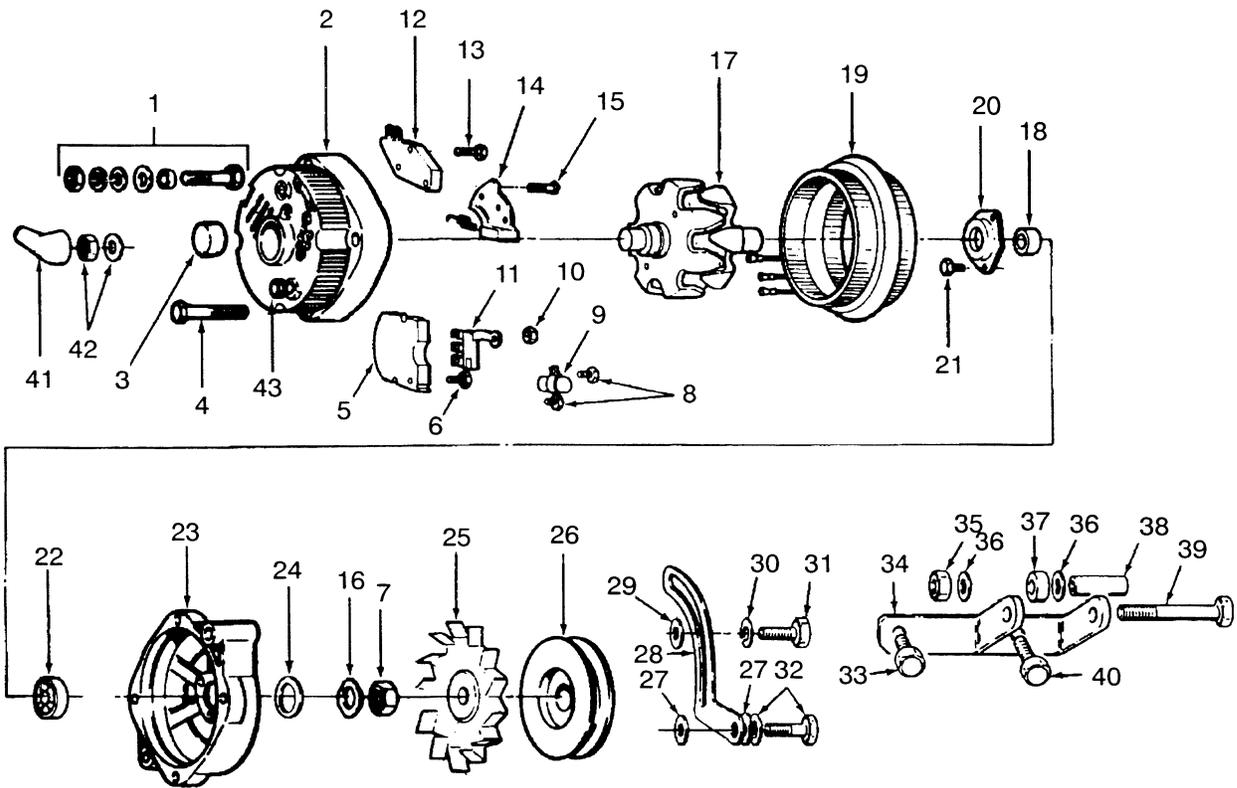


ALTERNATOR
DIESEL-LAST USED ON S/N D19D-1796

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	b 385656	Alternator	1	30	246943	Lockwasher	1
1	.....	Housing (Front)	1	31	387490	Washer	1
2	386069	Rotor	1	32	387491	Clamp	2
3	386070	Stator	1	33	382642	Washer	2
4	.....	Housing	1	34	133481	Tubing	1
5	248128	Bearing	1	35	126358	Fan	1
6	386071	Bearing	1	36	1307910	Screw	1
7	248129	Retainer	1	37 a	1307907	Nut	1
8	226577	Retainer (Rear)	1	38	1306216	Sleeve	1
9	382639	Diode	1	38	1345014	Sleeve	1
10	386073	Diode	1	39 a	1457876	Spacer	1
11	386074	Brush	1	40 a	1307906	Screw	1
12	386400	Spacer	1	40 a	292523	Screw	1
13	386401	Spacer	1	41 a	1306365	Screw	2
14	386402	Terminal	1	42 a	1318968	Screw	4
15	386403	Terminal	1	43 a	1310277	Pulley	1
16	386404	Cable	1	44 a	1306358	Screw	1
17	386405	Capacitor	1	45 a	1306214	Lever	1
18	386406	Voltage Regulator	1	46 a	296418	Washer	1
19	387493	Bolt	4	47 a	1454316	Nut	1
20	387494	Bolt	1	48 a	1307911	Stud	1
21	386407	Insulator	1	49 a	1307898	Screw	2
22	197067	Washer	1	50 a	1306212	Bracket	1
23	387489	Washer	1	50 a	1345008	Bracket	1
24	248147	Nut	1	51 a	1307908	Screw	1
25	15052	Nut	1				
26	387492	Nut	1				
27	387487	Screw	2				
28	387488	Screw	10	a	Included With Engine 376001		
29	15152	Lockwasher	1	b	Remanufactured Alternator 3029189 R		

ALTERNATOR (FIGURE 100) DIESEL-LAST USED ON S/N D19D-1796

PARTS-SERVICE GRAM	
Item	Gram
Alternator	F-D-1 (E)

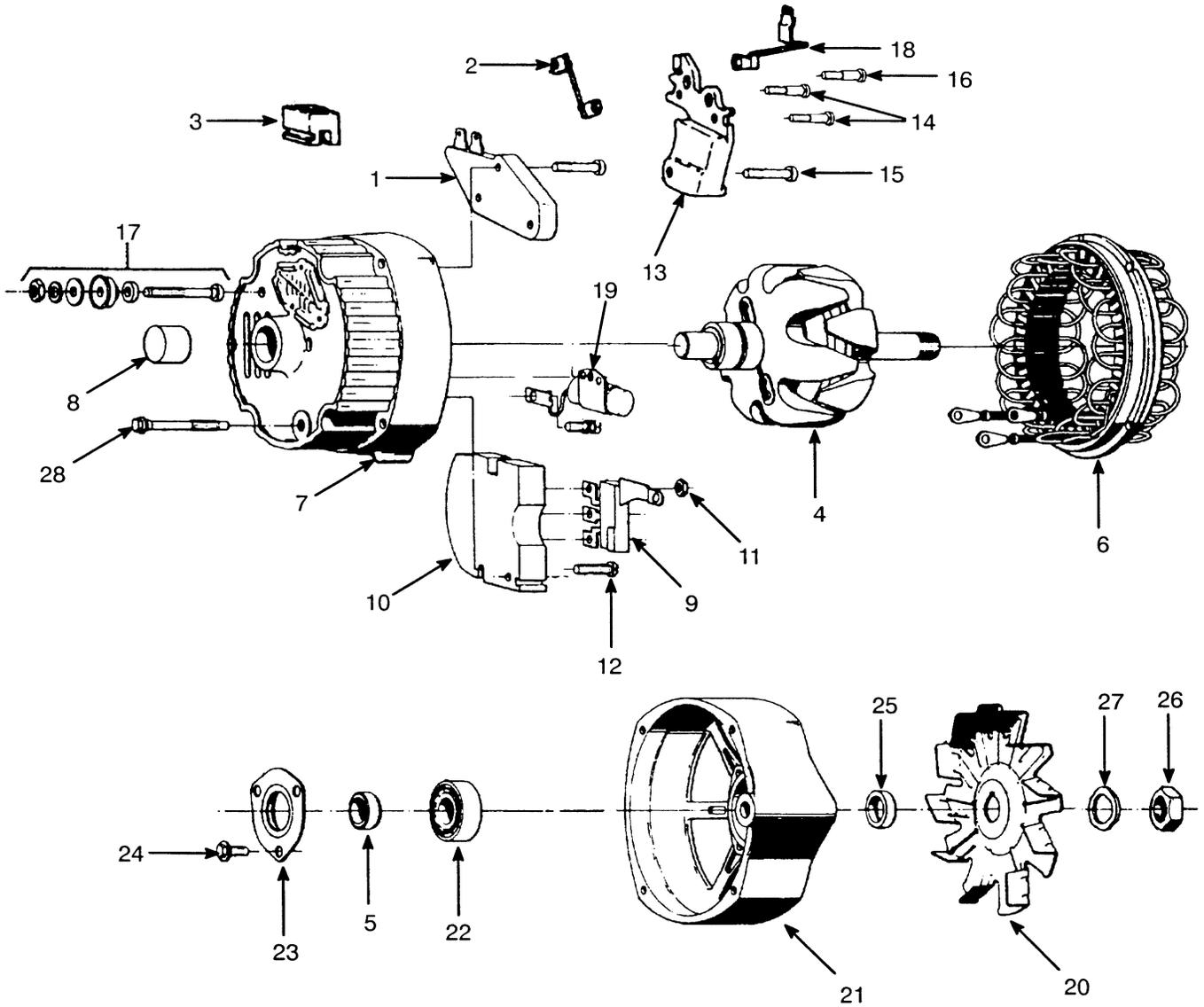


ALTERNATOR
DIESEL-LAST USED ON S/N D19D-1796

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	339599	Alternator	1	24	322177	Collar	1
1	310081	Kit-Battery Terminal	1	25	126358	Fan	1
2	343038	Frame (CE)	1	26	208483	Pulley	1
3	128838	Bearing	1	27	18515	Washer	2
4	128852	Bolt	4	28	1326931	Strap	1
5	343031	Rectifier	1	29	18515	Washer	1
6	343032	Screw	1	30	15155	Washer	1
7	55580	Nut	1	31	136749	Capscrew	1
8	198410	Screw	2	32	18498	Capscrew	1
9	198401	Capacitor	1	32	15155	Washer	1
9	....	Bracket	1	33	196898	Capscrew	1
10	15039	Nut	3	34	179920	Bracket	1
11	343040	Diode	1	35	139743	Locknut	1
12	290303	Voltage Regulator	1	36	261379	Washer	2
13	343042	Screw	1	37	189338	Spacer	1
14	343041	Brush	1	38	305100	Sleeve	1
14	334970	Spring	2	39	18546	Capscrew	1
15	268356	Screw	2	40	197853	Screw	1
16	128835	Washer	1	41	157065	Cover	1
17	343046	Rotor	1	42	136687	Nut	1
18	343029	Collar	1	42	15915	Lockwasher	1
19	343039	Stator	1	43	136681	Capscrew	1
20	202003	Retainer	1	43	15155	Washer	1
21	344234	Screw	3				
22	290509	Bearing	1				
23	343033	Frame (DE)	1				

Remanufactured Alternator 3012611R

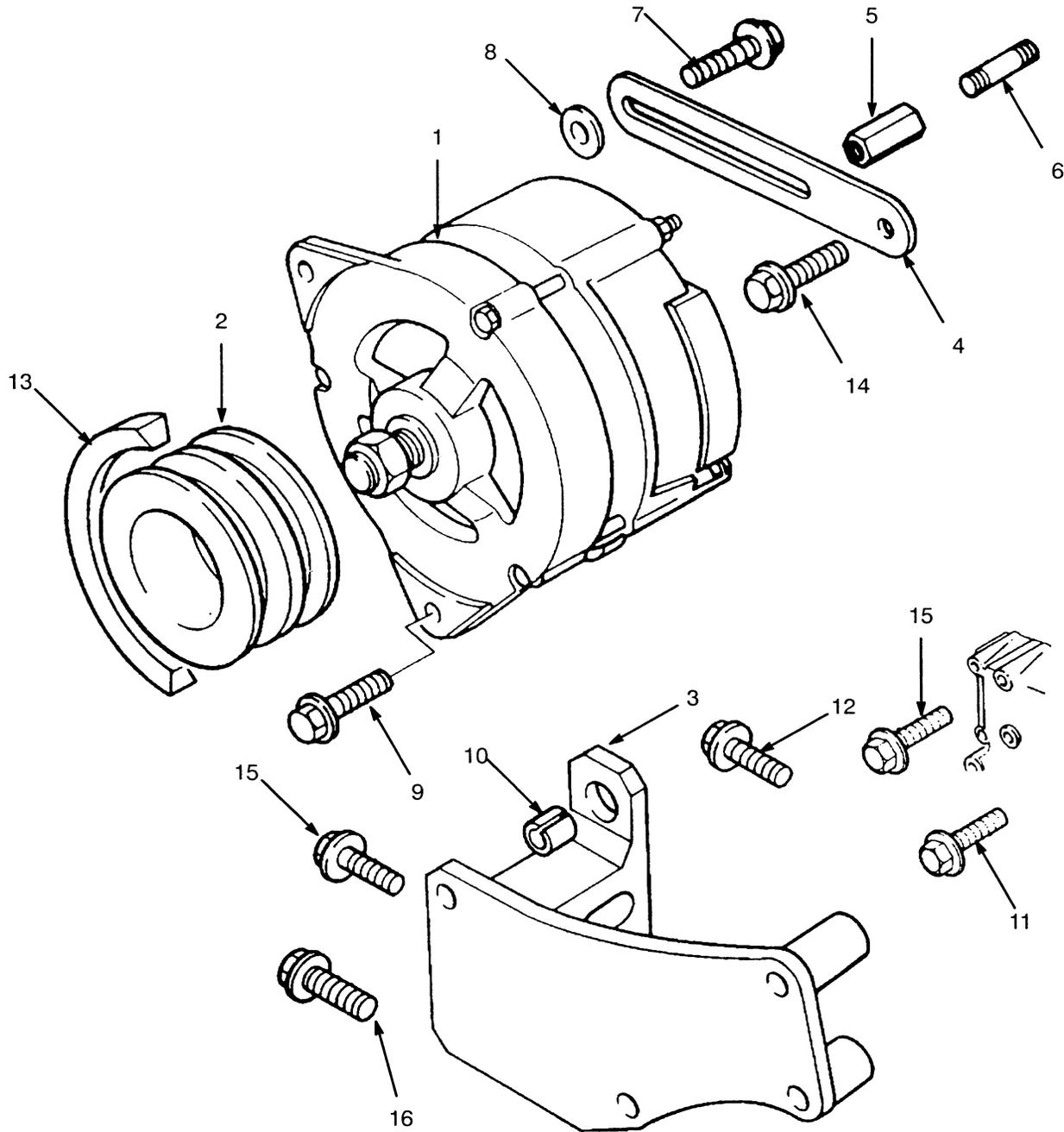
ALTERNATOR (FIGURE 101) LPG DIESEL-FIRST USED ON S/N D19D-1797



ALTERNATOR
LPG
DIESEL-FIRST USED ON S/N D19D-1797

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1358911	Alternator	1	14	268356	Screw (Brush)	2
1	290303	Regulator	1	15	290369	Screw (Brush Holder)	1
2	1377067	Resistor	1	16	290370	Screw (Brush Holder)	1
3	274648	Boot	1	17	310081	Kit-Terminal	1
4	1377047	Rotor	1	18	344233	Terminal Relay	1
5	343029	Collar (DE)	1	19	1377052	Capacitor	1
6	1377048	Stator	1	20	1377051	Fan	1
7	310085	Frame (CE)	1	21	1377049	Frame	1
8	290508	Bearing (CE)	1	22	290509	Ball Bearing	1
9	223095	Diode Trio	1	23	1377053	Plate	1
10	343031	Rectifier Bridge	1	24	344234	Screw (Retaining Plate)	3
11	1344274	Nut	3	25	310088	Collar (DE)	1
12	343032	Screw & Washer	1	26	55580	Nut	1
13	290300	Brush Holder	1	27	128835	Lock Washer	1
13	1377050	Brush Spring	2	28	128852	Bolt	4

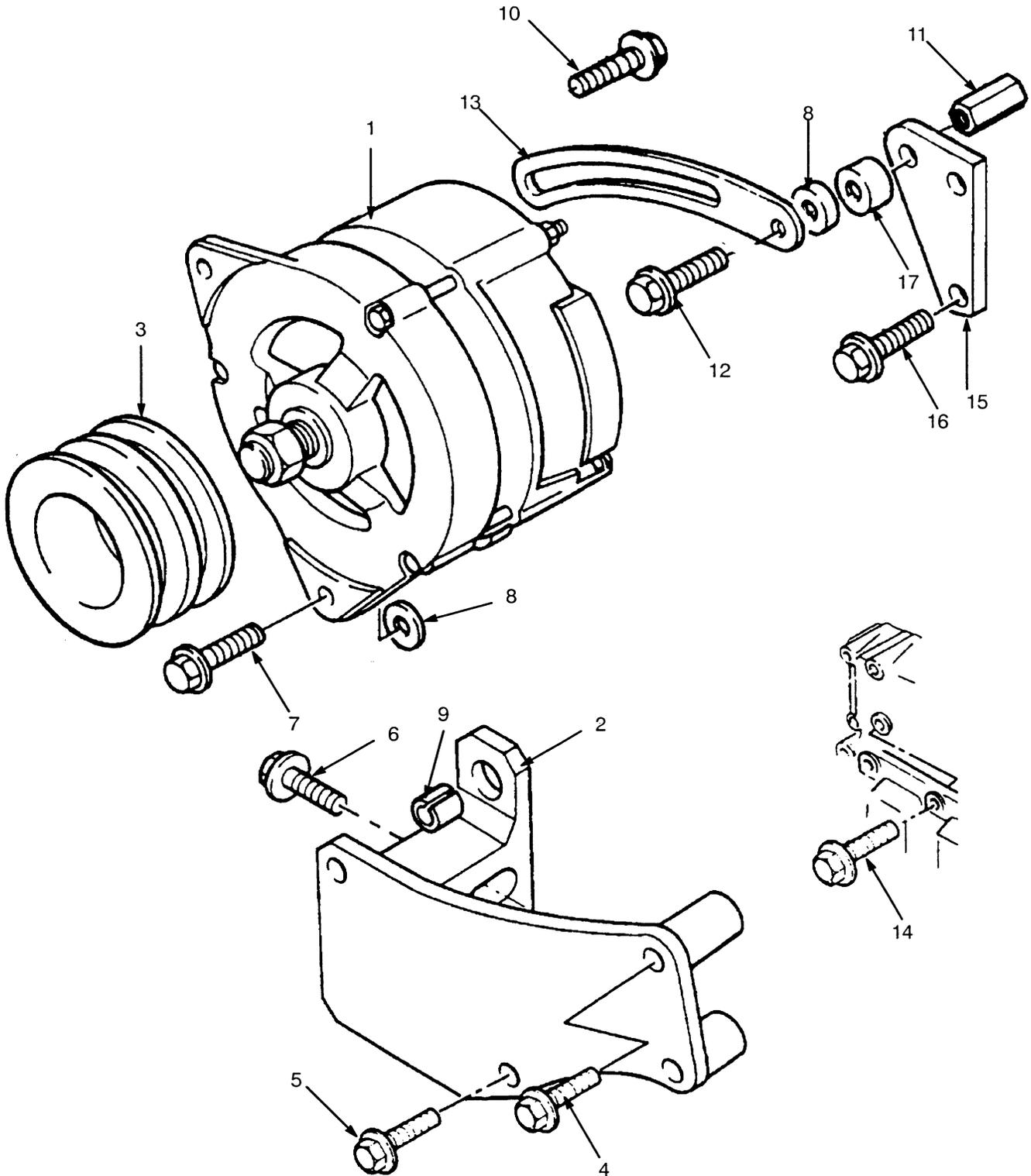
ALTERNATOR MOUNTING (FIGURE 102) DIESEL WITHOUT LOW EMISSIONS



**ALTERNATOR MOUNTING
 DIESEL WITHOUT LOW EMISSIONS**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	.....	Alternator	1	9	1308030	Screw	1
		☞ (Figure 99) Thru (Figure 101)		10	1345014	Sleeve	1
2	1310277	Pulley	1	11	1306358	Screw	1
3	1456744	Bracket	1	12	1307908	Screw	1
4	1306214	Lever	1	13	.....	Belt	1
5	1454316	Nut -Adjusting	1	14	1307910	Screw	1
6	1307911	Stud	1	15	1307914	Screw	2
7	1306353	Screw	1	16	1318968	Screw	1
8	296418	Washer	1				

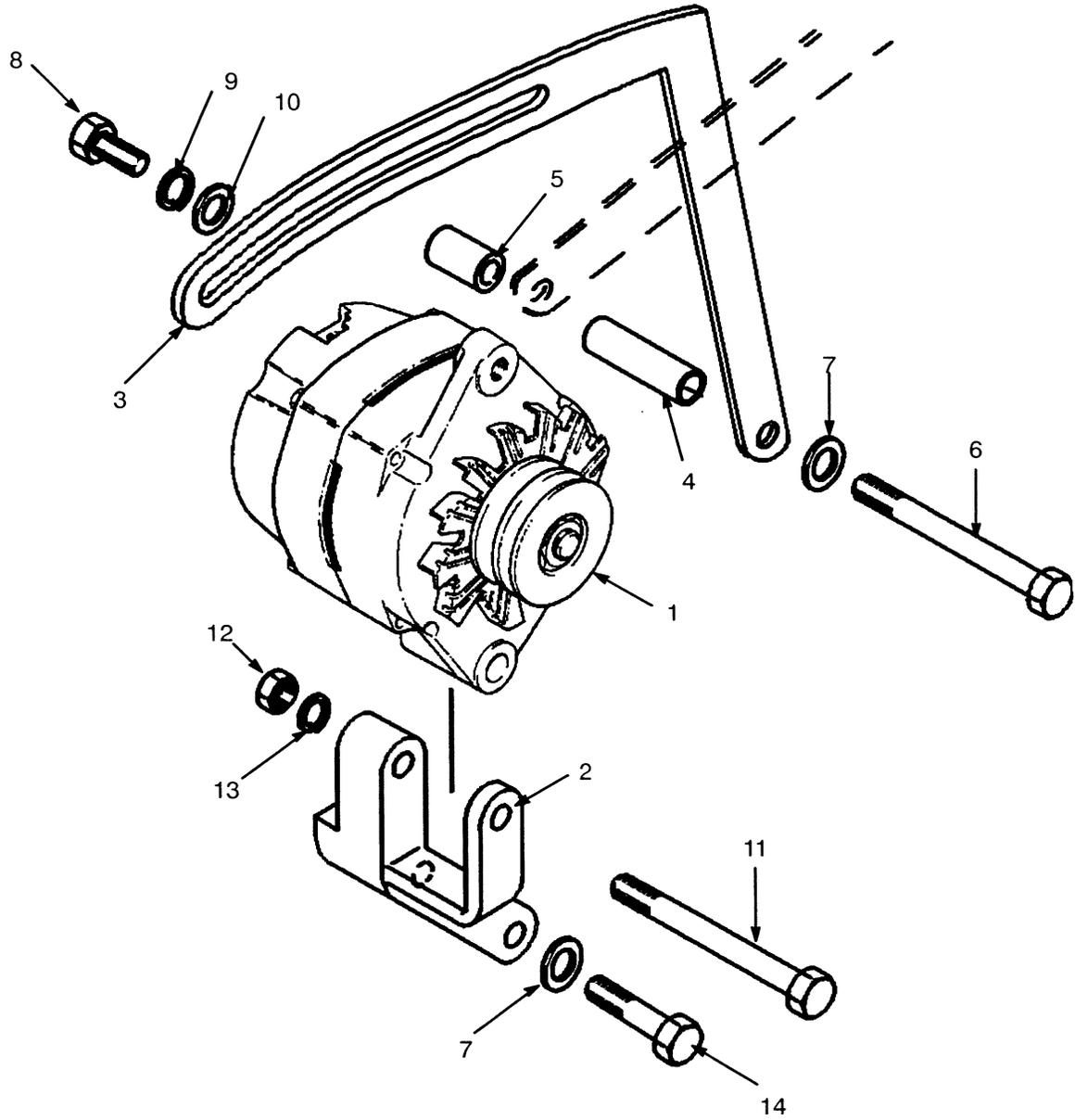
ALTERNATOR MOUNTING (FIGURE 103) DIESEL WITH LOW EMISSIONS FIRST USED ON S/N D19D-2377



**ALTERNATOR MOUNTING
DIESEL WITH LOW EMISSIONS
FIRST USED ON S/N D19D-2377**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	.....	Alternator	1	9	1345014	Sleeve	1
		☞ (Figure 101)		10	386459	Screw	1
2	1310277	Pulley	1	11	1451745	Nut	1
3	1456744	Bracket	1	12	1382963	Screw	1
4	1307908	Screw	1	13	1451743	Lever	1
5	1315497	Screw	2	14	1306362	Screw	1
6	1307914	Screw	2	15	1451746	Lever	1
7	292523	Screw	1	16	1306357	Screw	1
8	1318306	Washer	2	17	1451744	Spacer	1

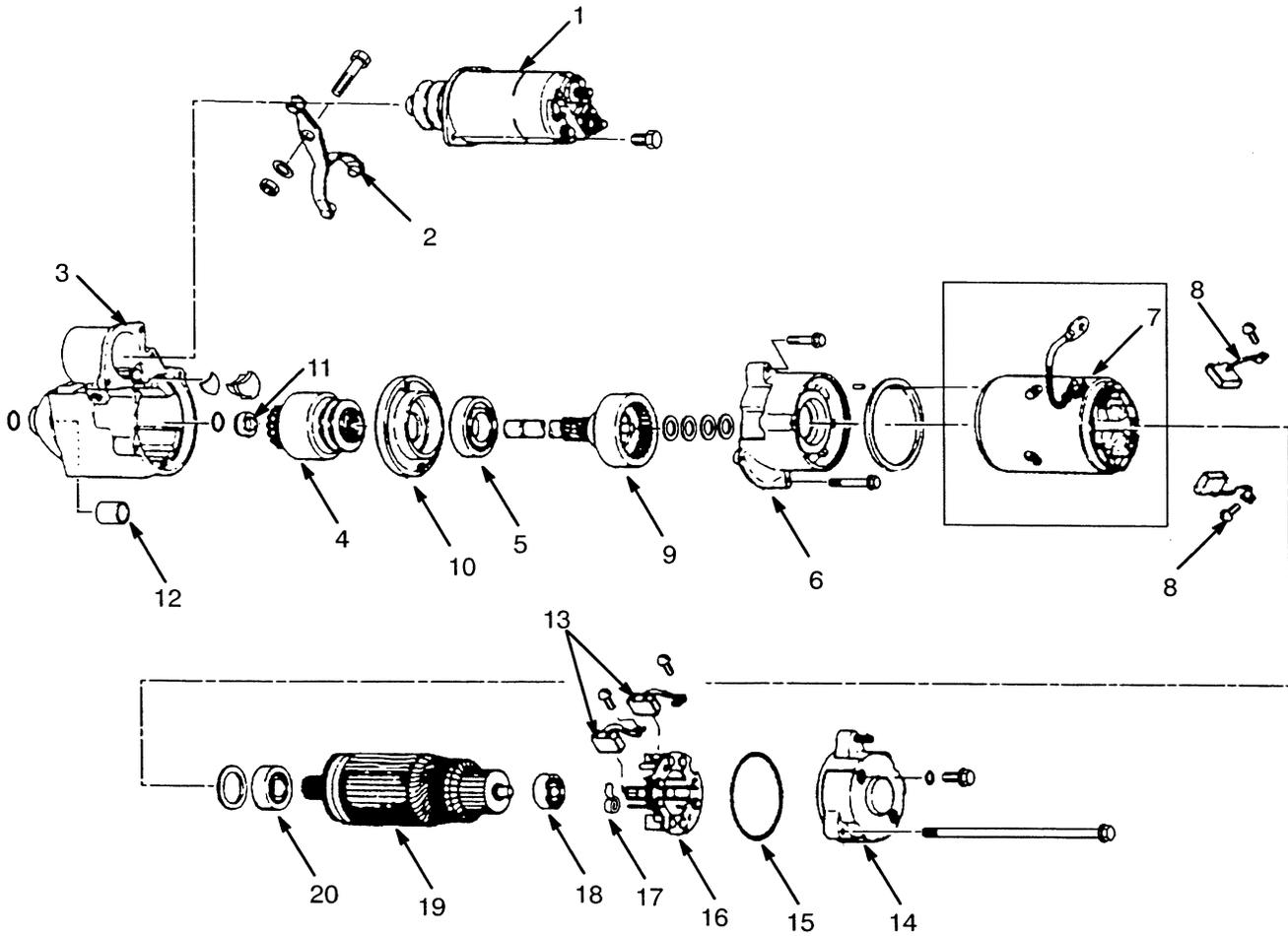
ALTERNATOR MOUNTING (FIGURE 104) LPG



**ALTERNATOR MOUNTING
 LPG**

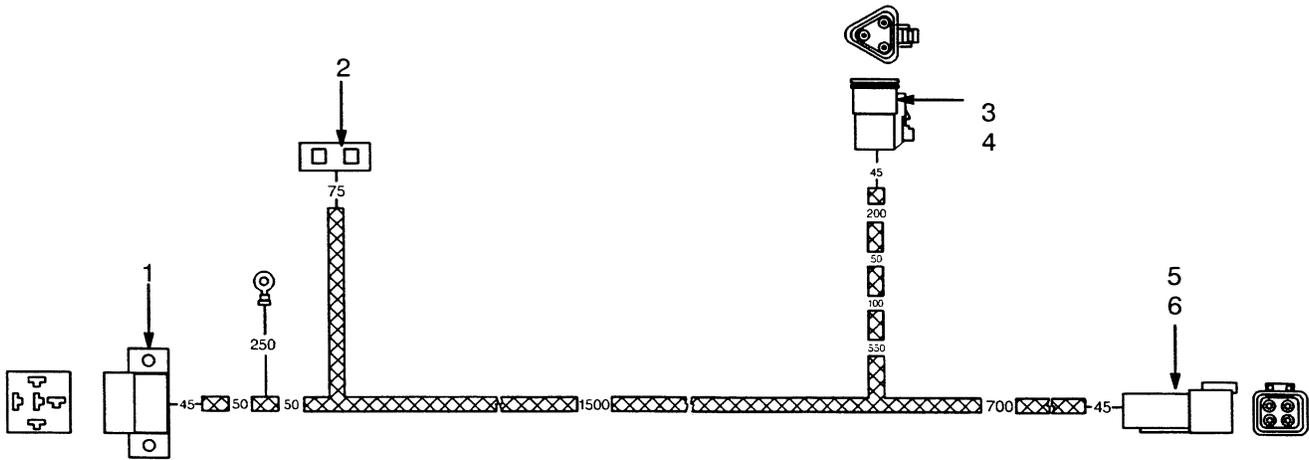
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	....	Alternator	1	11	292525	Capscrew	1
		☞ (Figure 101)		12	136692	Nut	1
2	a 894558	Adjuster Strap	1	13	292682	Washer	1
2	b 894883	Adjustment Strap	1	14	18565	Capscrew	1
3	894549	Bracket	1				
4	894560	Spacer	1	a	Last Used On S/N D19D-2478		
5	894561	Spacer	1	b	First Used On S/N D19D-2479		
6	18574	Capscrew	1		Service Note: Service Adjustment strap 894558, Spacer 894560 and Capscrew 18574 With 894883 And 894561		
7	15157	Washer	2				
8	136749	Capscrew	1				
9	292681	Washer	1				
10	320158	Washer	1				

STARTER (FIGURE 105) DIESEL



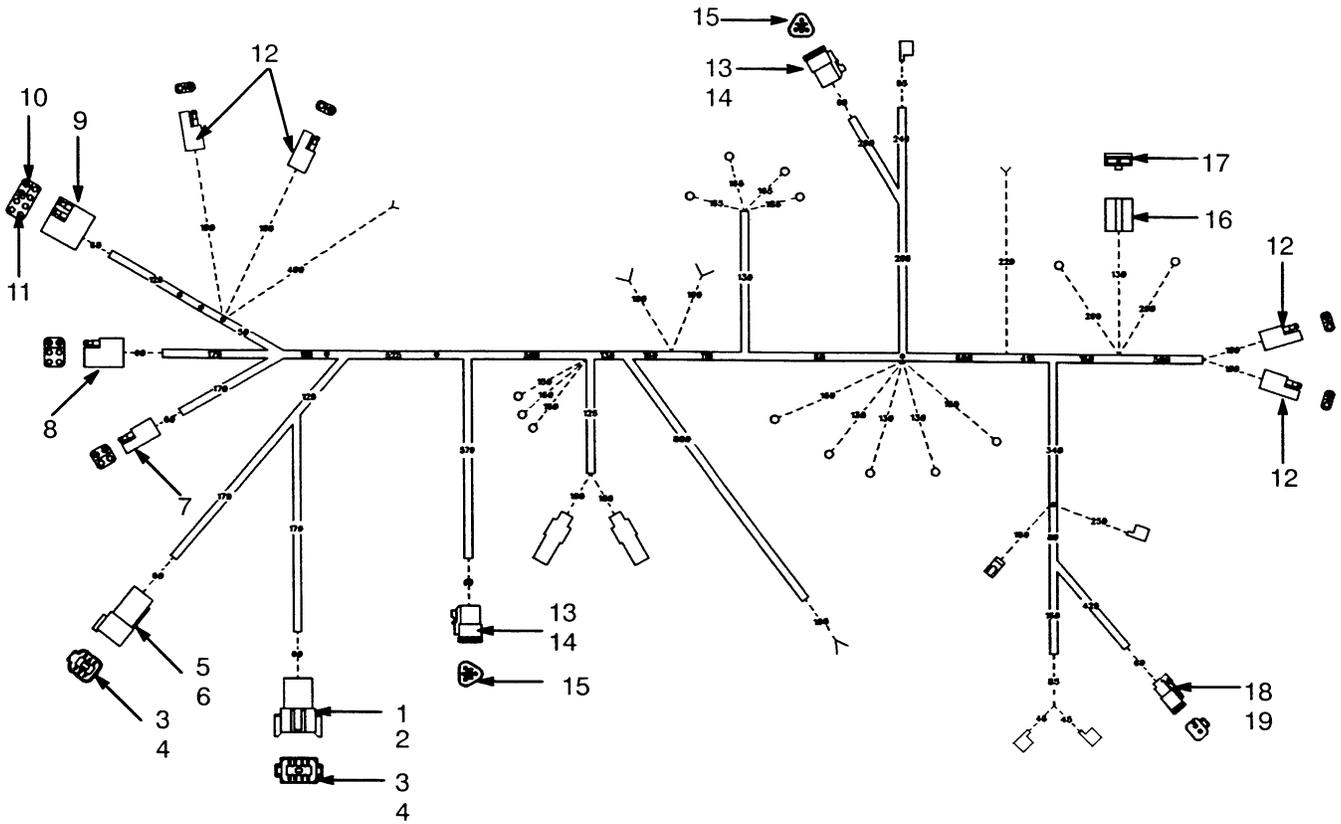
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1313394	Starter	1	11	1343198	Collar	1
1	1343187	Solenoid	1	12	1343192	Bushing	1
2	1343197	Shift Lever	1	13	1343190	Brush Set	1
3	1343169	Housing	1	14	1343700	End Cover	1
4	1343769	Drive	1	15	1343706	O-Ring	1
5	1343196	Bearing Support	1	16	1343189	Brush Holder	1
6	1343702	Housing	1	17	1343193	Spring	1
7	1343705	Field Coil Set	1	18	1343195	Bearing	1
8	1343191	Brush Set	1	19	1343199	Armature	1
9	1343701	Shaft	1	20	1343194	Bearing	1
10	1343703	Plate	1				

WIRE HARNESS (FIGURE 106)
CONTROL PANEL
FIRST USED ON S/N PENDING PER ECN 63257



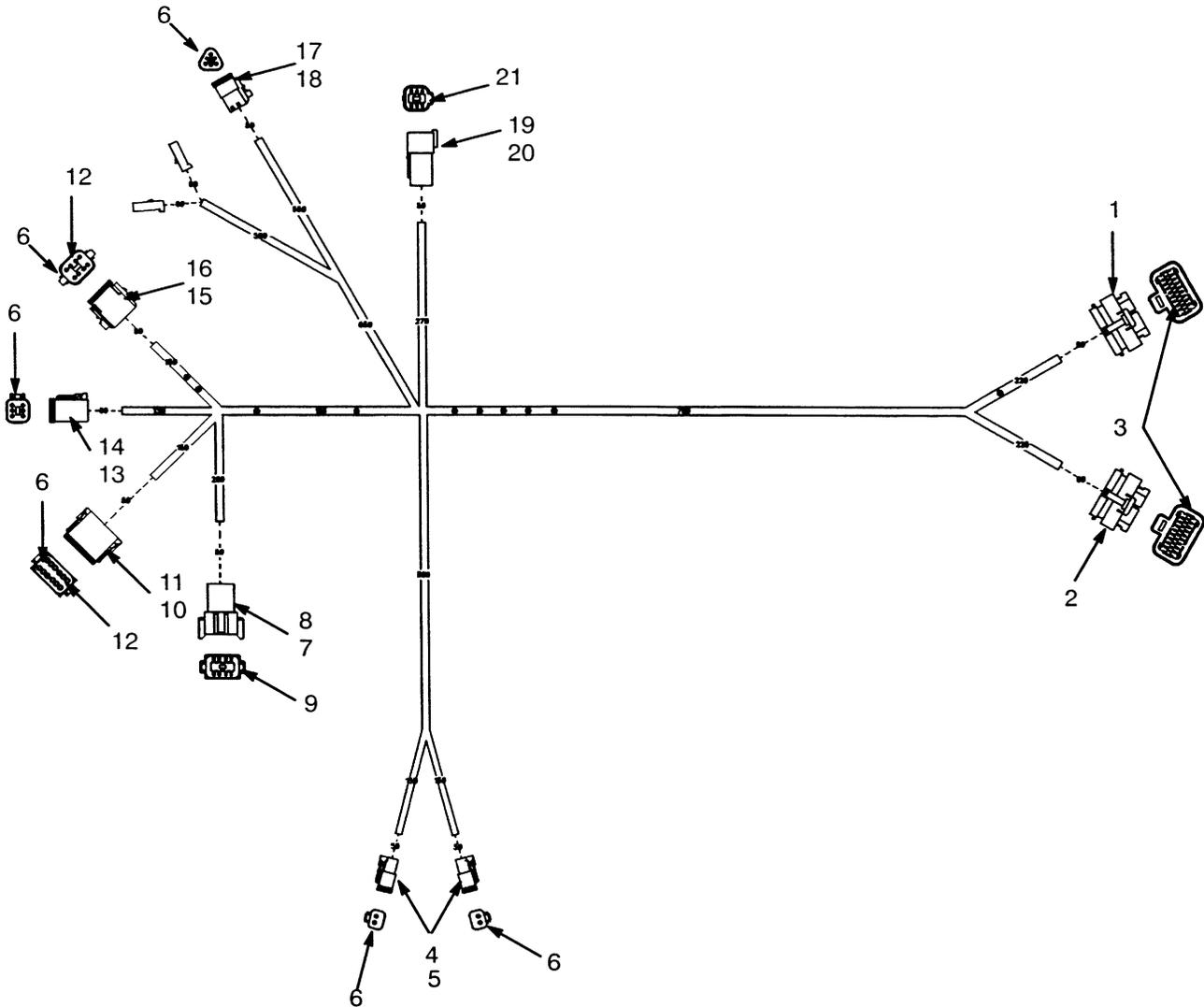
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1454954	Wire Harness	1	4	1330426	Secondary Lock	1
1	1301229	Connector (Relay)	1	5	1330411	Connector (Mast Harness)	1
2	381846	Fuse Holder	1	6	1330416	Secondary Lock	1
3	1330420	Connector (Handle Switch)	1				

WIRE HARNESS (FIGURE 107) ENGINE COMPARTMENT FIRST USED ON S/N D19D-12439



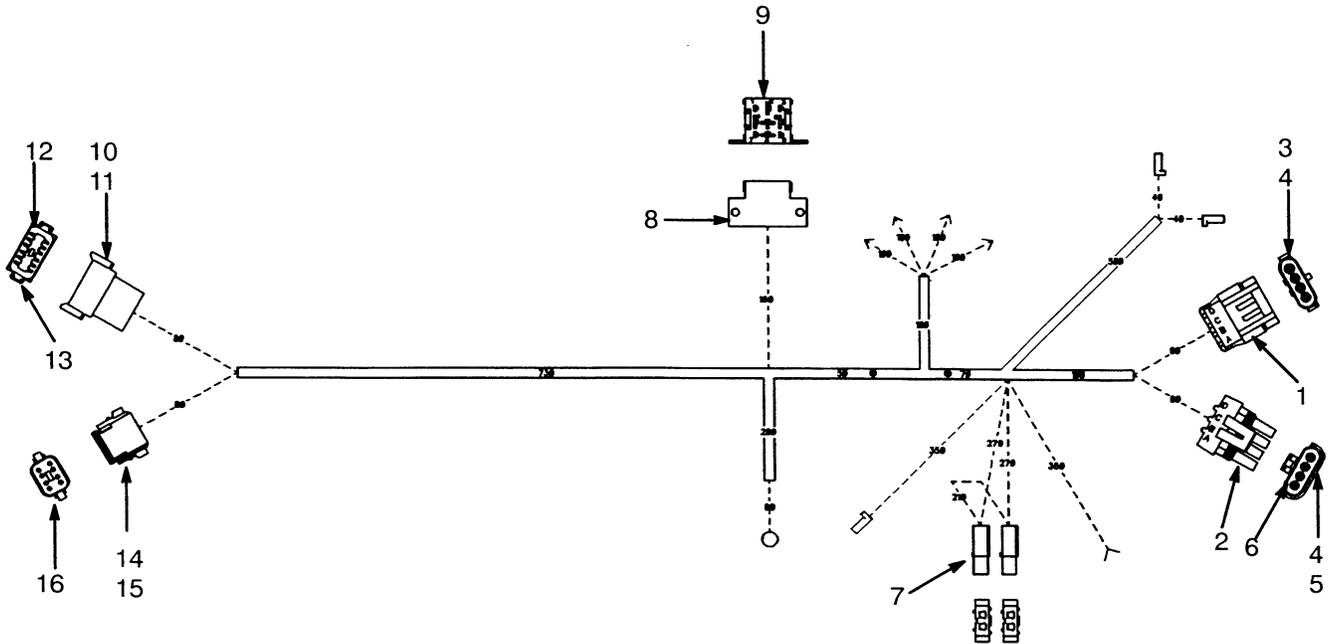
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	894975	Wire Harness	1	10	198011	Electrical Fitting (Male)	2
1	1330413	Connector (Controller Harness)	1	11	198013	Electrical Fitting (Female)	4
2	1330418	Lock	1	12	164431	Connector Body	4
3	1330439	Plug	2	13	1330420	Connector Plug	2
4	1330437	Pin	12	14	1330426	Lock	2
5	1330412	Connector (Controller Harness)	1	15	1330438	Socket	2
6	1330417	Plug	1	16	245996	Connector Body	1
7	164433	Connector Body (Male)	1	17	134812	Blade	2
8	164436	Connector Body (Female)	1	18	1330419	Plug	1
9	190270	Connector Body (Female)	1	19	1330424	Lock	1

WIRE HARNESS (FIGURE 108)
CONTROLLER AUTOSHIFT
FIRST USED ON S/N D19D-12439



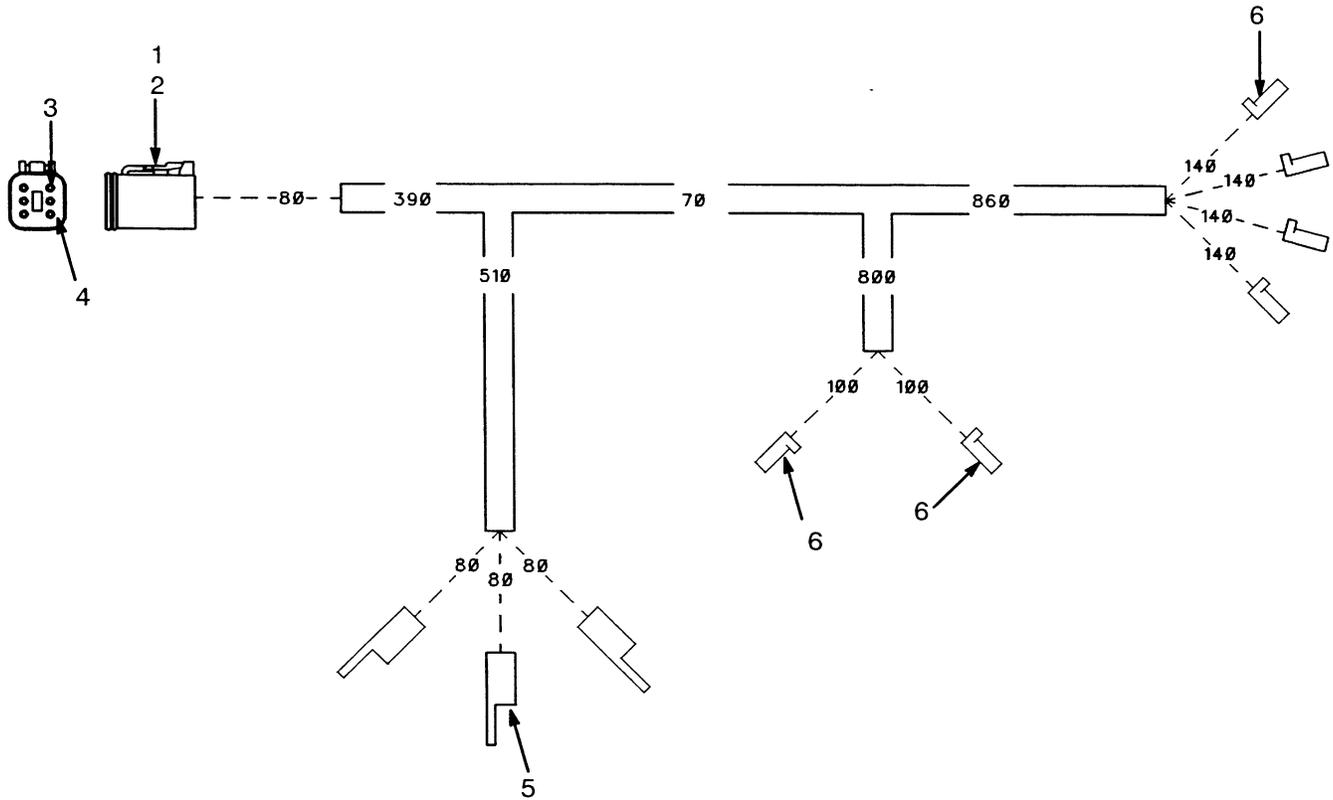
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	894929	Wire Harness	1	11	1351069	Lock	1
1	2035275	Connector (Controller)	1	12	1330439	Plug	6
2	1456118	Connector (Controller)	1	13	1330422	Connector (Sensor Harness) ...	1
3	2035276	Socket	1	14	1330429	Lock	1
4	1330419	Connector (Solenoid)	2	15	1330423	Connector (Engine Compartment) ...	1
5	1330424	Lock	2	16	1330429	Lock	1
6	1330438	Socket	28	17	1330420	Connector (Throttle Sensor)	1
7	1330413	Connector (Shifter Harness)	1	18	1330426	Lock	1
8	1330418	Lock	1	19	1330412	Connector (Monotrol Harness) ..	1
9	1330437	Pin	13	20	1330417	Lock	1
10	1351068	Connector (Shifter Harness)	1	21	1330437	Pin	13

WIRE HARNESS (FIGURE 109) SHIFTER AUTOSHIFT FIRST USED ON S/N D19D-12439



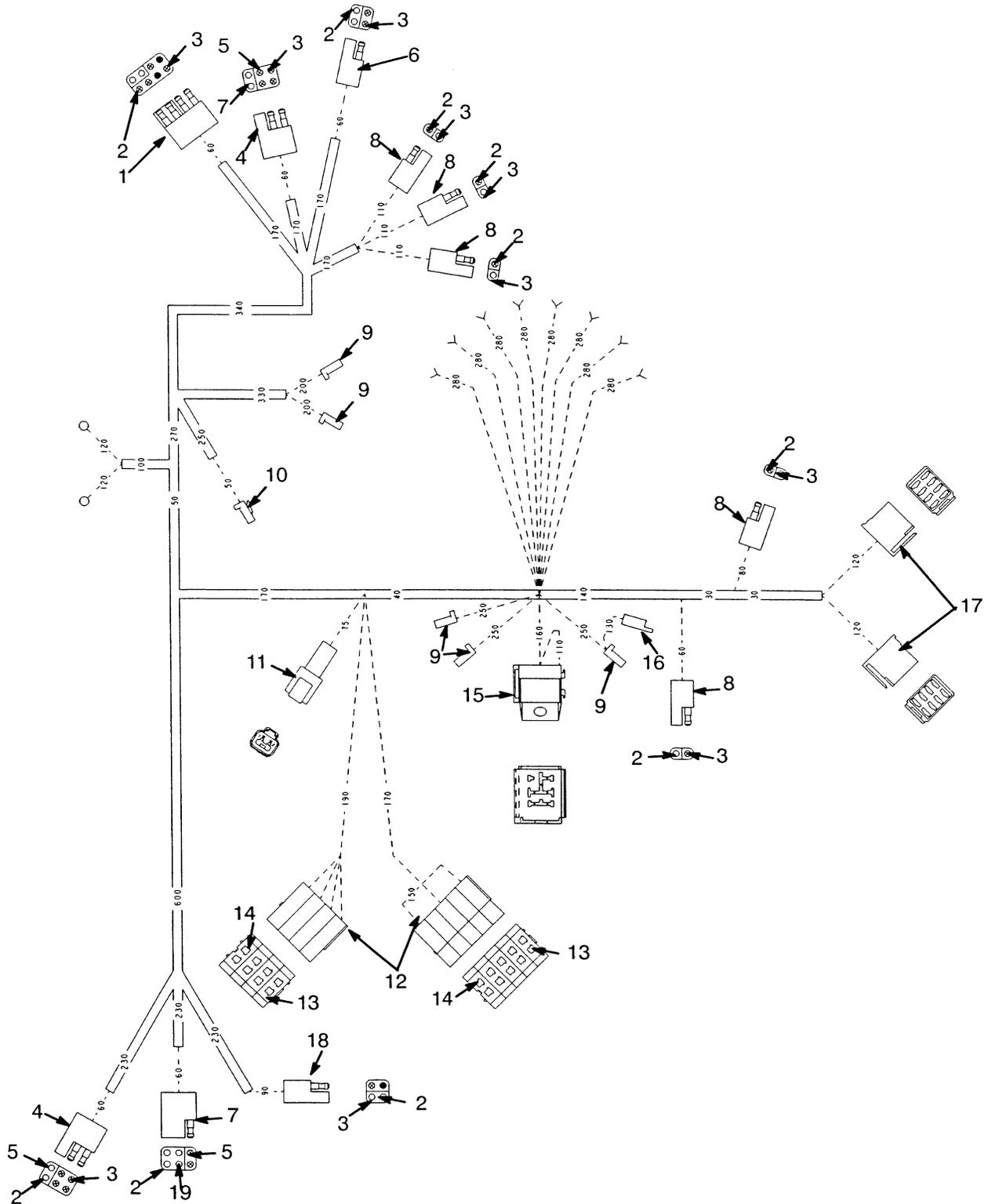
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	894934	Wire Harness	1	9	1331233	Blade	4
1	1383803	Connector (Shifter)	1	10	1352602	Connector (Controller Harness)	1
2	1383804	Connector (Shifter)	1	11	1352603	Lock	1
3	1334999	Pin	4	12	1330439	Plug	3
4	1323579	Seal	7	13	1330437	Pin	9
5	1336173	Socket	3	14	1330423	Connector (Controller Harness)	1
6	1327164	Plug	1	15	1330429	Lock	1
7	381846	Fuse Holder	2	16	1330438	Socket	8
8	1301229	Connector Module	1				

WIRE HARNESS (FIGURE 110)
MONOTROL
FIRST USED ON S/N D19D-12439



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	894927	Wire Harness	1	4	1330438	Terminal	5
1	1330422	Connector (Autoshift Harness) ..	1	5	181045	Connector Body	3
2	1330428	Lock	1	6	181046	Connector Body	6
3	1330439	Plug	1				

WIRE HARNESS (FIGURE 111) OPERATOR COMPARTMENT WITH OPTIONAL ROTATING BEACON



**WIRE HARNESS
OPERATOR COMPARTMENT
WITH OPTIONAL ROTATING BEACON**

<u>REF</u>	<u>PART NO.</u>	<u>NAME OF PART</u>	<u>QTY</u>	<u>REF</u>	<u>PART NO.</u>	<u>NAME OF PART</u>	<u>QTY</u>
	2037934	Wire Harness	1	10	277446	Connector	1
1	190269	Connector Body	1	11	1330409	Connector Body	1
2	198013	Fitting	16	12	381846	Connector	9
3	198011	Fitting	18	13	381847	Fitting	11
4	164435	Connector Body	2	14	1300231	Fitting	7
5	198014	Fitting	3	15	1347224	Relay Socket	1
6	164433	Connector Body	2	16	181045	Connector	1
7	164436	Connector Body	1	17	1301154	Socket Housing	2
8	164431	Connector	5	18	192529	Connector	1
9	181046	Connector	5	19	198012	Fitting	4

BRAKE

AIR COMPRESSOR (Figure 119)
LAST USED ON ENGINE S/N U563738X Page 226

AIR COMPRESSOR (Figure 120)
USED ON ENGINE S/N U563739X
UP TO UNIT S/N D19D-1756 INCLUDING 1758 EXCEPT 1753 Page 228

AIR COMPRESSOR (Figure 121)
UP TO ENGINE S/N U593028
UNIT S/N D19D-1757 INCLUDING 1753 EXCEPT 1758 Page 230

AIR COMPRESSOR (Figure 122)
USED ON ENGINE S/N U593029 THRU U607097 Page 232

AIR COMPRESSOR (Figure 123)
FIRST USED ON ENGINE S/N U607098
AND UNIT S/N D19D-2377 Page 234

AIR COMPRESSOR (Figure 124)
366 LPG ENGINE Page 236

AIR TANK (Figure 114)
LAST USED ON S/N D19D-1521 Page 220

AIR TANK (Figure 115)
FIRST USED ON S/N D19D-1522 Page 221

AIR TANK (Figure 116)
WITH AUTOSHIFT
FIRST USED ON S/N D19D-12439 Page 222

ATTACHING PARTS (Figure 127)
PARK BRAKE
LAST USED ON S/N D19D-1521 Page 241

ATTACHING PARTS (Figure 128)
PARK BRAKE
FIRST USED ON S/N D19D-1522 Page 242

BRAKE CHAMBER (Figure 130) Page 246

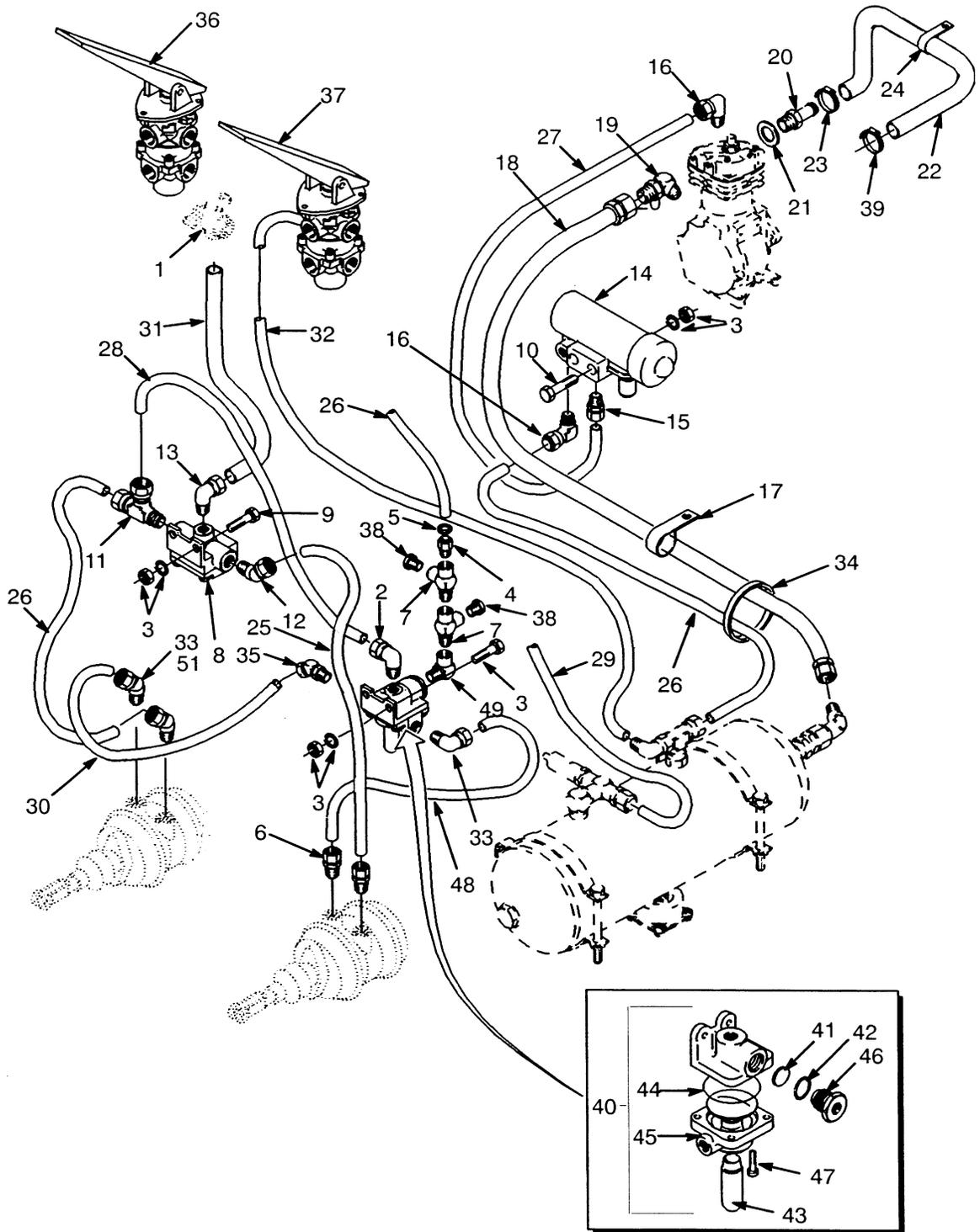
BRAKE LINE WITH AUTOSHIFT (Figure 117)
FIRST USED ON S/N D19D-12439 Page 223

BRAKE LINES (Figure 112)
LAST USED ON S/N D19D-1521 Page 216

BRAKE (Continued)

BRAKE LINES (Figure 113) LPG DIESEL-FIRST USED ON S/N D19D-1522	Page 218
BRAKE SYSTEM (Figure 129)	Page 244
COMPRESSOR MOUNTING (Figure 125) LPG	Page 238
PARK BRAKE VALVE (Figure 132) LAST USED ON S/N D19D-1521	Page 248
PARK BRAKE VALVE (Figure 133) FIRST USED ON S/N D19D-1522	Page 249
PNEUMATIC SOLENOID VALVE (Figure 118) FIRST USED ON S/N D19D-12439	Page 224
TREADLE VALVE (Figure 126)	Page 240
TREADLE VALVE (Figure 131)	Page 247

BRAKE LINES (FIGURE 112) LAST USED ON S/N D19D-1521



BRAKE LINES

LAST USED ON S/N D19D-1521

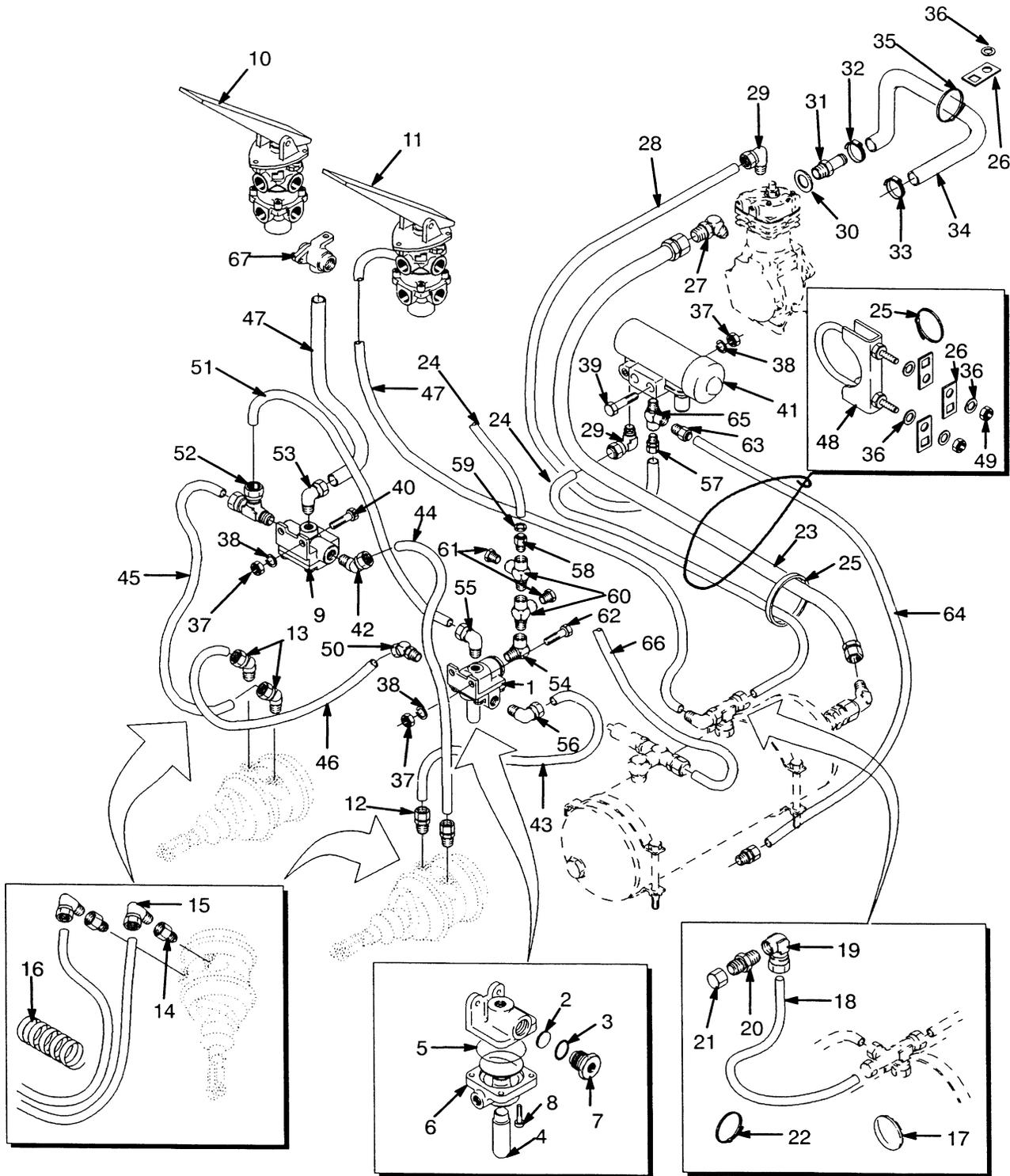
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1		Check Valve ☞ (Figure 126)	1	30	b 1326750	Tube	1
2	1331034	Fitting	1	30	b 358458	Tube	1
3	176640	Capscrew	6	31	c 1332947	Tube	1
3	239503	Nut	8	31	d 322794	Tube	1
3	292681	Lockwasher	8	31	b 1303463	Tube	1
4	1301430	Fitting	1	32	c 1332947	Tube	1
5	1301435	Button	1	32	d 322794	Tube	1
6	b 1326757	Fitting	2	32	b 1323885	Tube	1
7	17216	Fitting	2	33	1309503	Fitting	2
8	251974	Release Valve	1	34	137852	Clamp	2
8	1302305	Kit-Repair	1	35	b 1326757	Fitting	4
9	136749	Capscrew	2	36		Treadle Valve ☞ (Figure 126)	1
10	292512	Capscrew	2	37		Treadle Valve ☞ (Figure 126)	1
11	1301545	Fitting	1	38	16187	Fitting	2
12	1311375	Fitting	1	39	119236	Clamp	4
13	1301544	Fitting	1	40	1331033	Check Valve	1
14	355750	Governor	1	41	1322339	Diaphragm	1
15	1301537	Fitting	1	42	1322322	O-Ring	1
16	1301542	Fitting	2	43	1322342	Silencer	1
17	128408	Clamp	1	44	1322337	Seal	1
18	1346958	Hose	1	45	1322338	Diaphragm	1
19	14550	Fitting	1	46	16848	Screw	4
20	1352671	Fitting	1	47	1322340	Cap	1
21	992522	Washer	1	48	a 217979	Tube	1
22	1352668	Hose	1	49	17314	Fitting	1
23	127045	Clamp	1	51	b 1326756	Fitting	4
24	1345023	Clamp	5				
24	320157	Washer	1				
24	129563	Clamp	1				
25	a 255156	Tube	1				
25	b 1323884	Tube	1				
26	1303463	Tube	2				
27	322793	Tube	1				
28	355597	Tube	1				
29	266535	Tube	1				
30	b 1303464	Tube	1				

- a H300-330XL
- b H360XL-EC
- c With Sound Reduction
- d Without Sound Reduction

BRAKE LINES (FIGURE 113)

LPG

DIESEL-FIRST USED ON S/N D19D-1522



BRAKE LINES

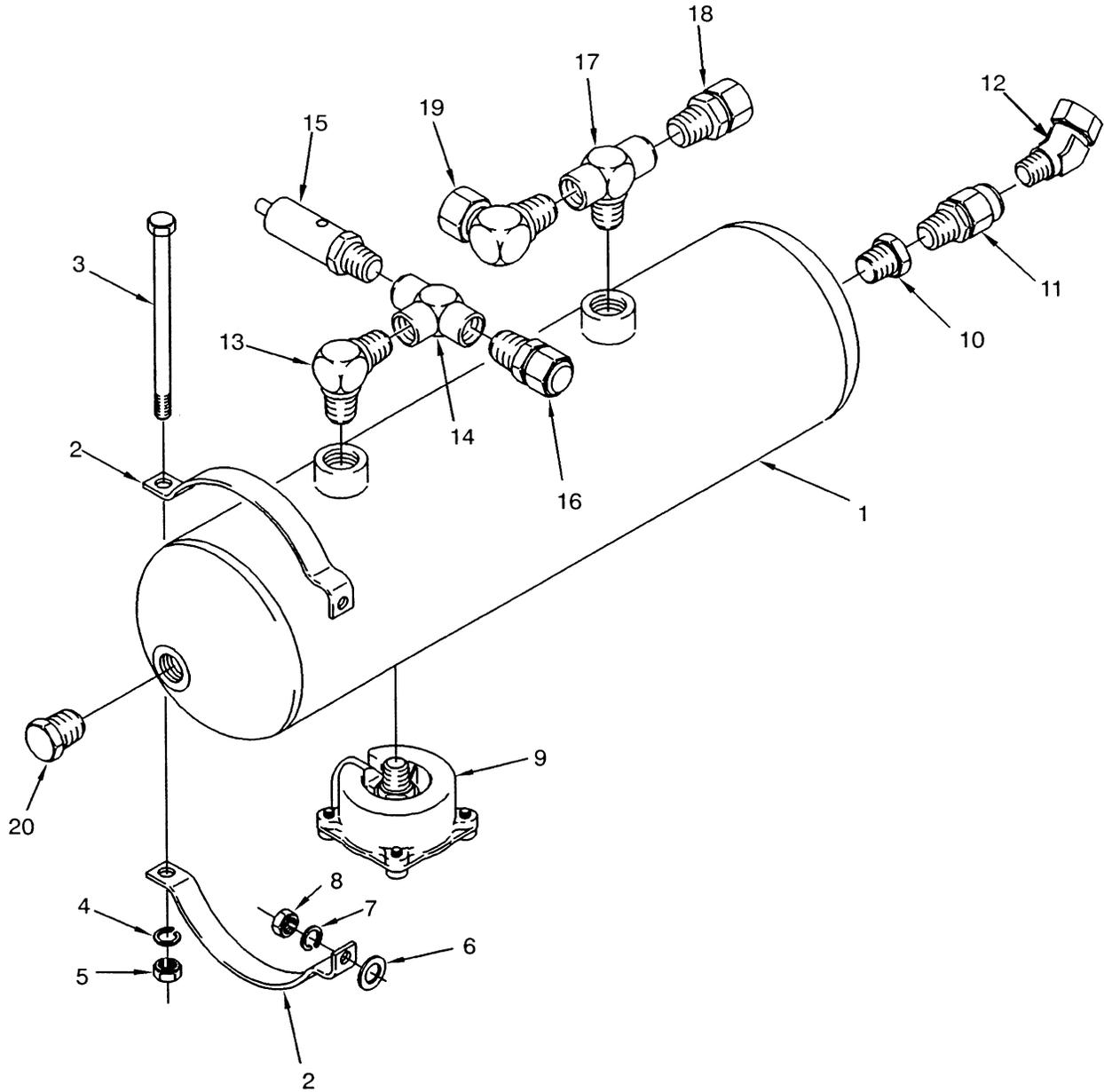
LPG

DIESEL-FIRST USED ON S/N D19D-1522

KEY:
A: Diesel
B: LPG

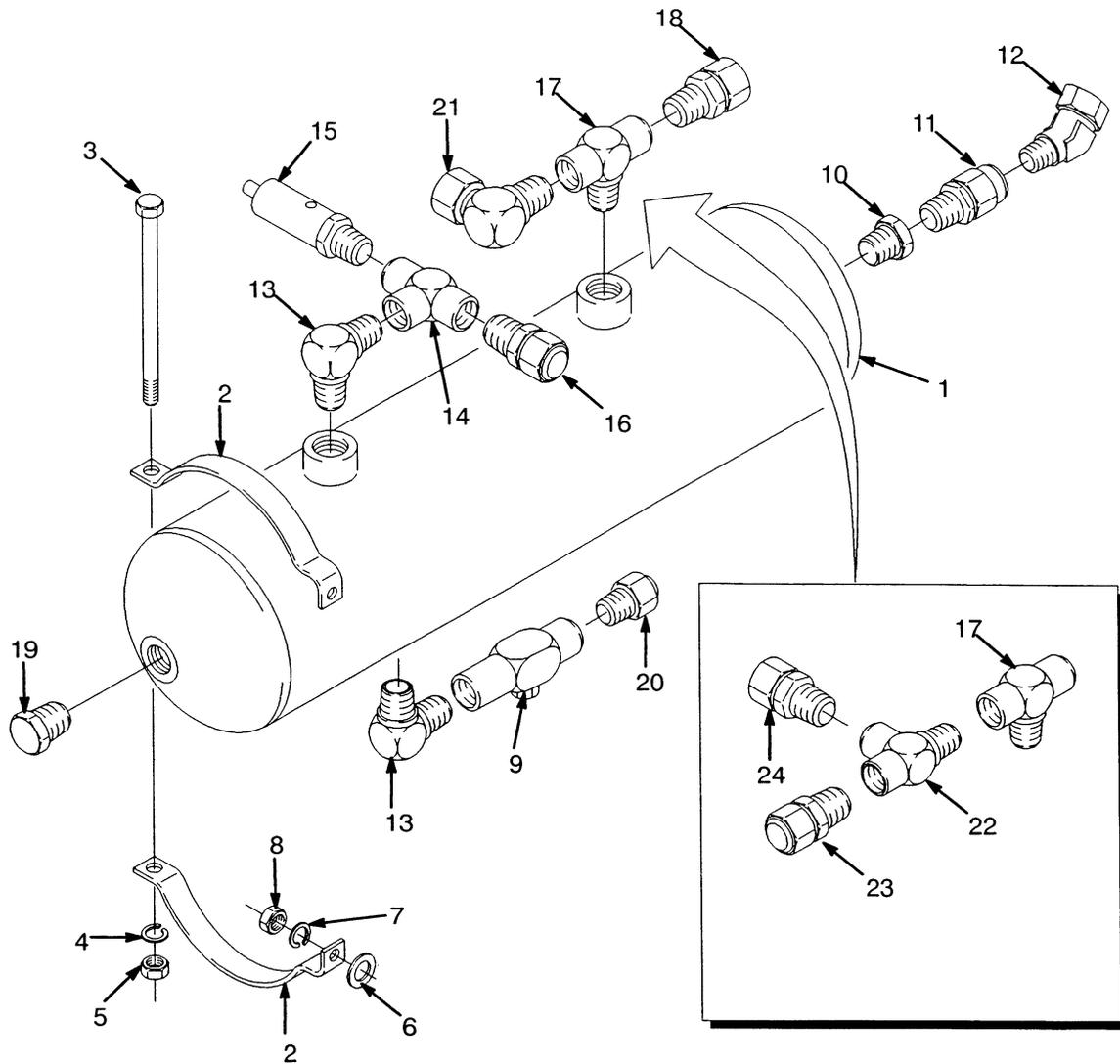
REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
1	1331033	Release Valve	1	1	38	292681	Washer	13	11
2	1322339	Diaphragm	1	1	39	292512	Capscrew	2	..
3	1322322	O-Ring	1	1	40	136749	Capscrew	4	4
4	1322342	Silencer	1	1	41	355750	Governor	1	..
5	1322337	Seal	1	1	42	1311375	Fitting	1	1
6	1322338	Diaphragm	1	1	43	a 217979	Tube	1	1
7	1322340	Cap	11	..	43	b 1323885	Tube	1	..
8	16848	Screw	4	4	44	a 255156	Tube	1	1
9	251974	Release Valve	1	1	44	b 1323884	Tube	1	..
9	1302305	Kit-Repair	1	1	45	a 266535	Tube	1	1
10	....	Treadle Valve (Brake)	1	1	45	b 358458	Tube	1	..
		☞ (Figure 131)			46	a 1303464	Tube	1	1
11	....	Treadle Valve (Inching)	1	1	46	b 1326750	Tube	1	..
		☞ (Figure 131)			47	c 1332947	Tube	2	..
12	a 1301539	Fitting	2	2	47	d 322794	Tube	2	2
13	a 1326757	Fitting	2	2	48	30368	Clamp	1	1
14	b 12831	Fitting	4	..	49	15055	Nut	4	4
15	b 1326756	Fitting	4	..	50	1326757	Fitting	1	1
16	b 1326763	Spring Guard	2	..	51	355597	Tube	1	1
17	b 1358738	Plug	2	..	52	1301545	Fitting	1	1
18	e 1303463	Tube	1	..	53	1301544	Fitting	1	1
19	e 1326756	Fitting	1	..	54	17314	Fitting	1	1
20	e 14676	Fitting	1	..	55	1331034	Fitting	1	1
21	e 16693	Fitting	1	..	56	1309503	Fitting	1	1
22	e 137852	Strap Clamp	2	..	57	16186	Fitting	1	1
23	1346958	Air Hose	1	..	58	1301430	Fitting	1	1
23	894793	Air Hose .....	..	1	59	1301435	Release Button	1	1
24	1303463	Tube	1	..	60	17216	Fitting	2	2
24	217964	Tube .....	..	1	61	16187	Fitting	2	2
25	137852	Clamp	2	2	62	176640	Capscrew	7	7
26	129563	Clamp	3	3	63	1359661	Fitting	1	1
27	14550	Fitting	1	..	64	255115	Tube	1	..
27	17306	Fitting .....	..	1	64	145858	Tube .....	..	1
28	322793	Tube	1	..	65	1301537	Fitting	1	..
29	1301542	Fitting	2	..	66	266535	Tube	1	1
29	1301537	Fitting .....	..	1	67	....	Shuttle Valve	1	1
30	992522	Washer	1	1			☞ (Figure 126)		
31	1352671	Fitting	1	1					
32	127045	Clamp	1	1	a	H300XL-H330XL And H330XL-ECH			
33	119236	Clamp	1	1	b	H360XL-ECH			
34	1352668	Hose	1	1	c	Non-EC with Sound Reduction			
35	1345023	Strap	4	4	d	Non-EC without Sound Reduction			
36	320157	Washer	4	4	e	ECH			
37	239503	Nut	13	11					

AIR TANK (FIGURE 114) LAST USED ON S/N D19D-1521



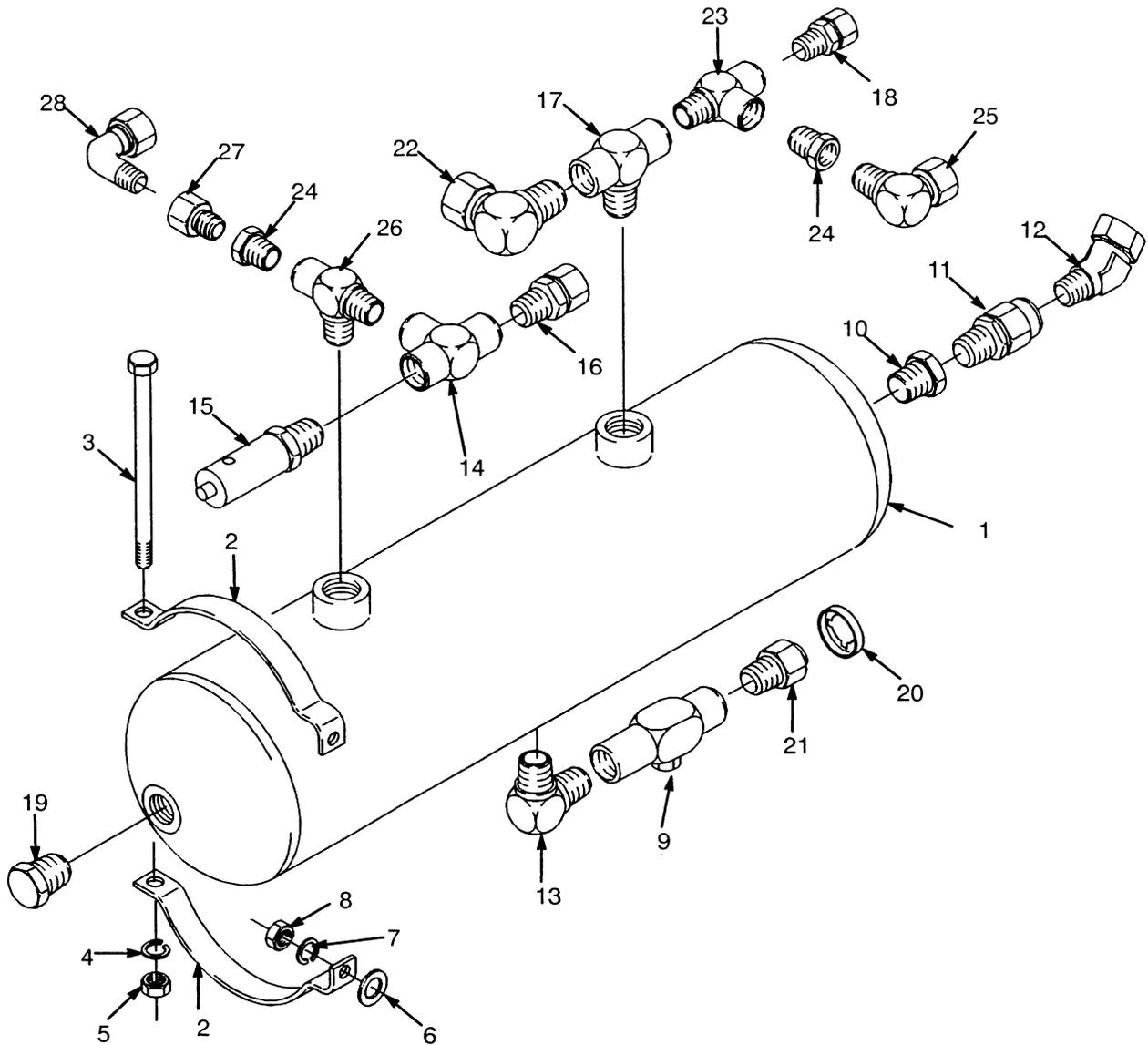
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	295197	Air Tank	1	11	281190	Check Valve	1
2	319049	Bracket	4	12	1303469	Fitting	1
3	17258	Capscrew	2	13	17144	Fitting	1
4	15156	Washer	2	14	63111	Fitting	1
5	15056	Nut	2	15	319050	Valve	1
6	320161	Washer	4	16	1301538	Fitting	1
7	292682	Lockwasher	4	17	17665	Fitting	1
8	136692	Nut	4	18	1301539	Fitting	1
9	173357	Drain Valve	1	19	1301544	Fitting	1
9	249564	Kit-Repair	1	20	14388	Fitting	1
10	100792	Fitting	1				

AIR TANK (FIGURE 115)
FIRST USED ON S/N D19D-1522



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	295197	Air Tank	1	14	63111	Fitting	1
2	319049	Bracket	4	15	319050	Relief Valve	1
3	17258	Capscrew	2	16	1301538	Fitting	1
4	15156	Washer	2	17	17665	Fitting	1
5	15056	Nut	2	18	1301539	Fitting	1
6	320161	Washer	4	19	15963	Fitting	1
7	292682	Washer	4	20	1359661	Fitting	1
8	136692	Nut	4	21	1301544	Fitting	1
9	128398	Drain Valve	1	22	a 154452	Fitting	1
10	100792	Fitting	1	23	a 1301539	Fitting	1
11	281190	Valve	1	24	a 1301541	Fitting	1
12	17344	Fitting	1				
13	17144	Fitting	2				
				a		Empty Container Handler Only	

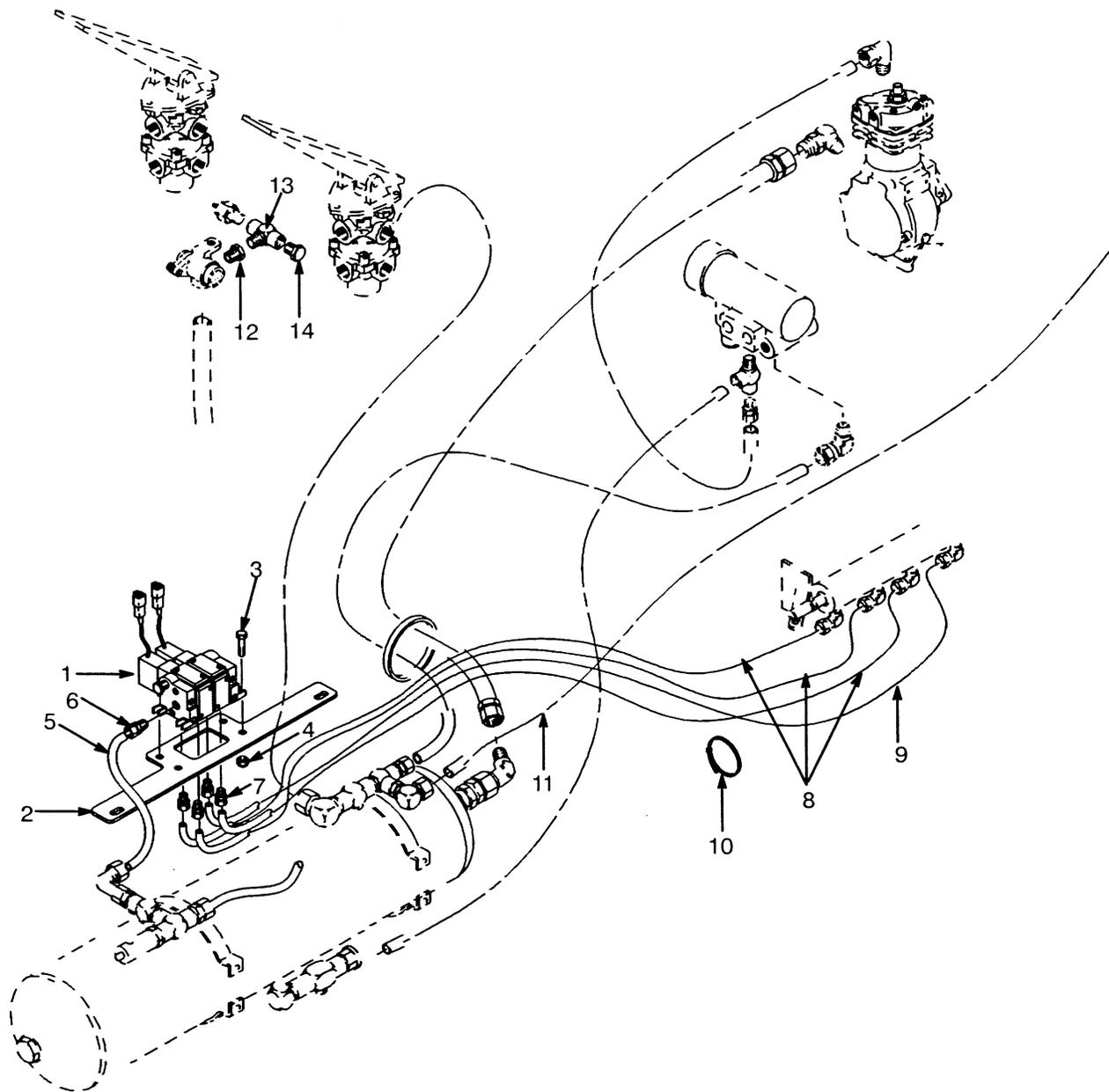
AIR TANK (FIGURE 116) WITH AUTOSHIFT FIRST USED ON S/N D19D-12439



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	295197	Air Tank	1	15	319050	Relief Valve	1
2	319049	Bracket	4	16	1301538	Fitting	1
3	17258	Capscrew	2	17	17665	Fitting	1
4	15156	Washer	2	18	1301539	Fitting	1
5	15056	Nut	2	19	15963	Fitting	1
6	320161	Washer	4	20	1301434	Button	1
7	292682	Washer	4	21	1359661	Fitting	1
8	136692	Nut	4	22	1301544	Fitting	1
9	128398	Drain Valve	1	23	154452	Fitting	1
10	100792	Fitting	1	24	63108	Fitting	2
11	281190	Valve	1	25	1301428	Fitting	1
12	17344	Fitting	1	26	17672	Fitting	1
13	17144	Fitting	2	27	12855	Fitting	1
14	63111	Fitting	1	28	1331034	Fitting	1

BRAKE LINE WITH AUTOSHIFT (FIGURE 117)

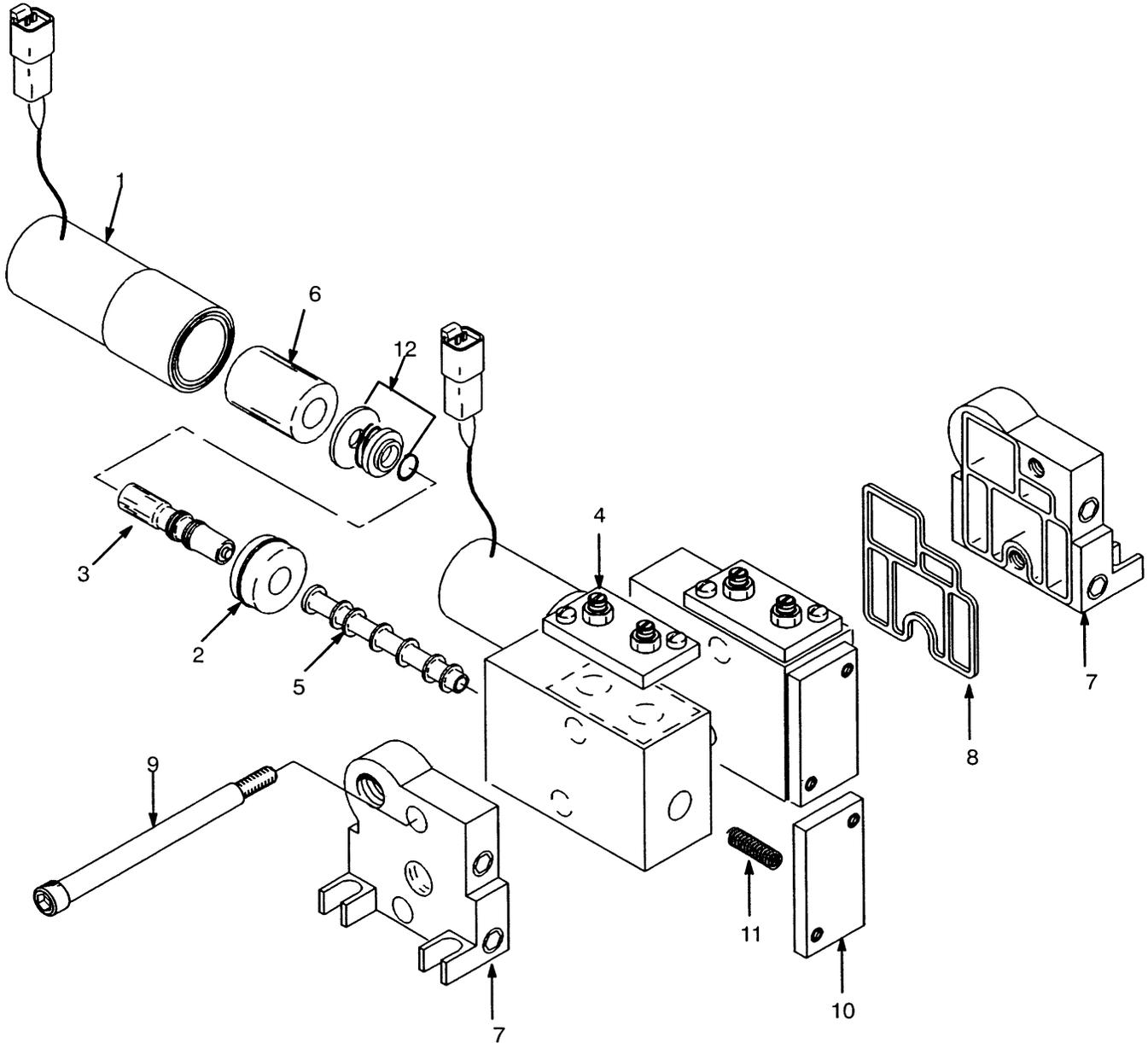
FIRST USED ON S/N D19D-12439



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	894946	Solenoid	1	8	1456027	Tube	3
2	894945	Bracket	1	9	128216	Tube	1
3	287816	Capscrew	4	10	137852	Clamp	3
4	302399	Nut	4	11	1456109	Tube	1
5	1456028	Tube	1	12	12843	Fitting	1
6	1301538	Fitting	1	13	16199	Fitting	1
7	1359661	Fitting	4	14	14349	Fitting	1

PNEUMATIC SOLENOID VALVE (FIGURE 118)

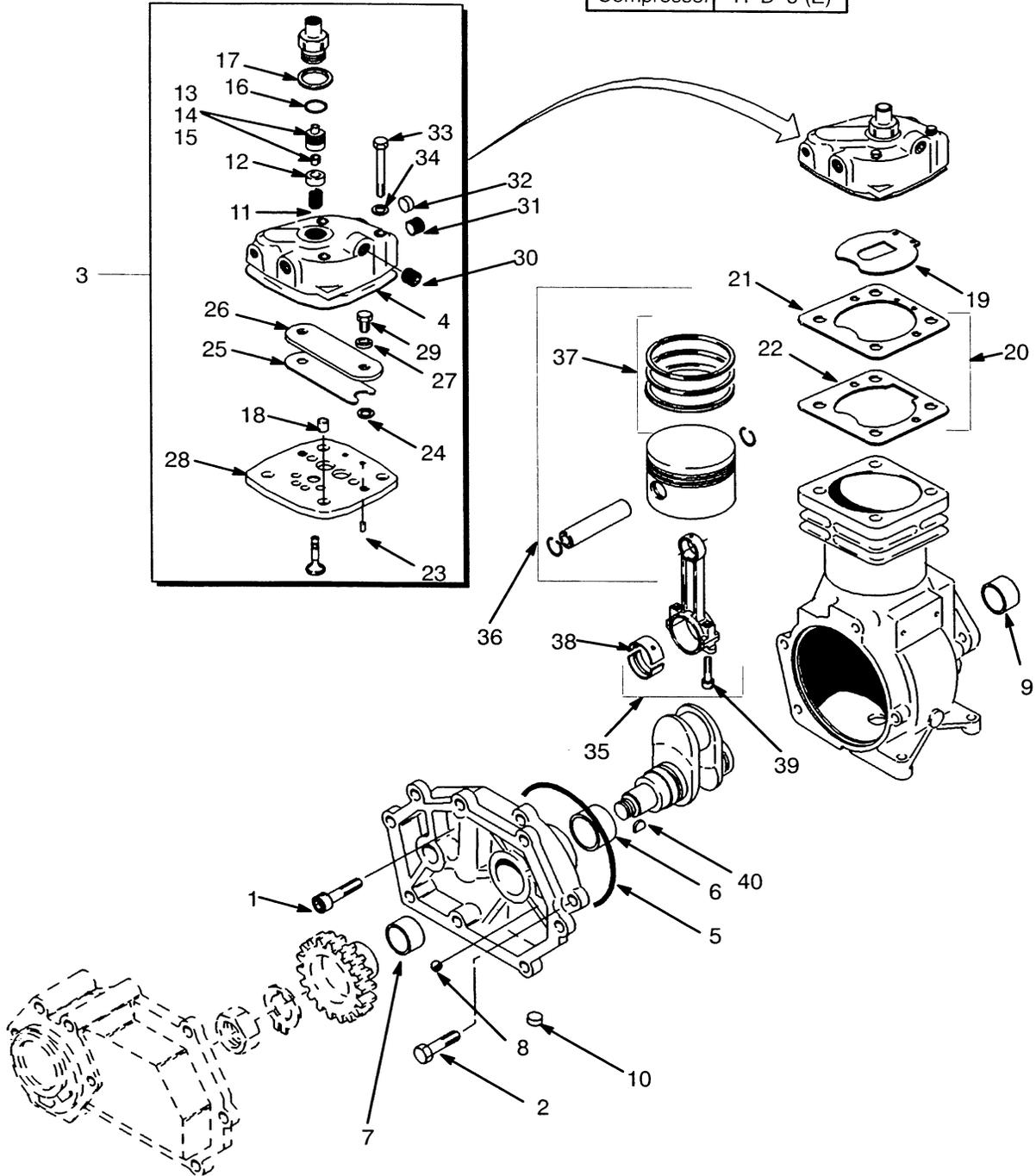
FIRST USED ON S/N D19D-12439



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	894946	Solenoid	1	7	1456823	End Plate Kit	1
1	1456819	Valve	2	7	1456826	Mounting Screw	2
2	1456824	Piston Assy	1	8	1456827	Pressure Seal	2
3	1456825	Cartridge Assy	1	9	1457279	Tie Rod	4
4	1456820	Cover Assy	1	10	1457284	Spring Retainer Assy	2
5	1456821	Repair Kit	2	11	1457296	Spring	1
5	1456829	Spool	1	12	1457275	Muffler	1
6	1456822	Coil	2				

AIR COMPRESSOR (FIGURE 119) LAST USED ON ENGINE S/N U563738X

PARTS-SERVICE GRAM	
Item	Gram
Compressor	H-D-5 (E)

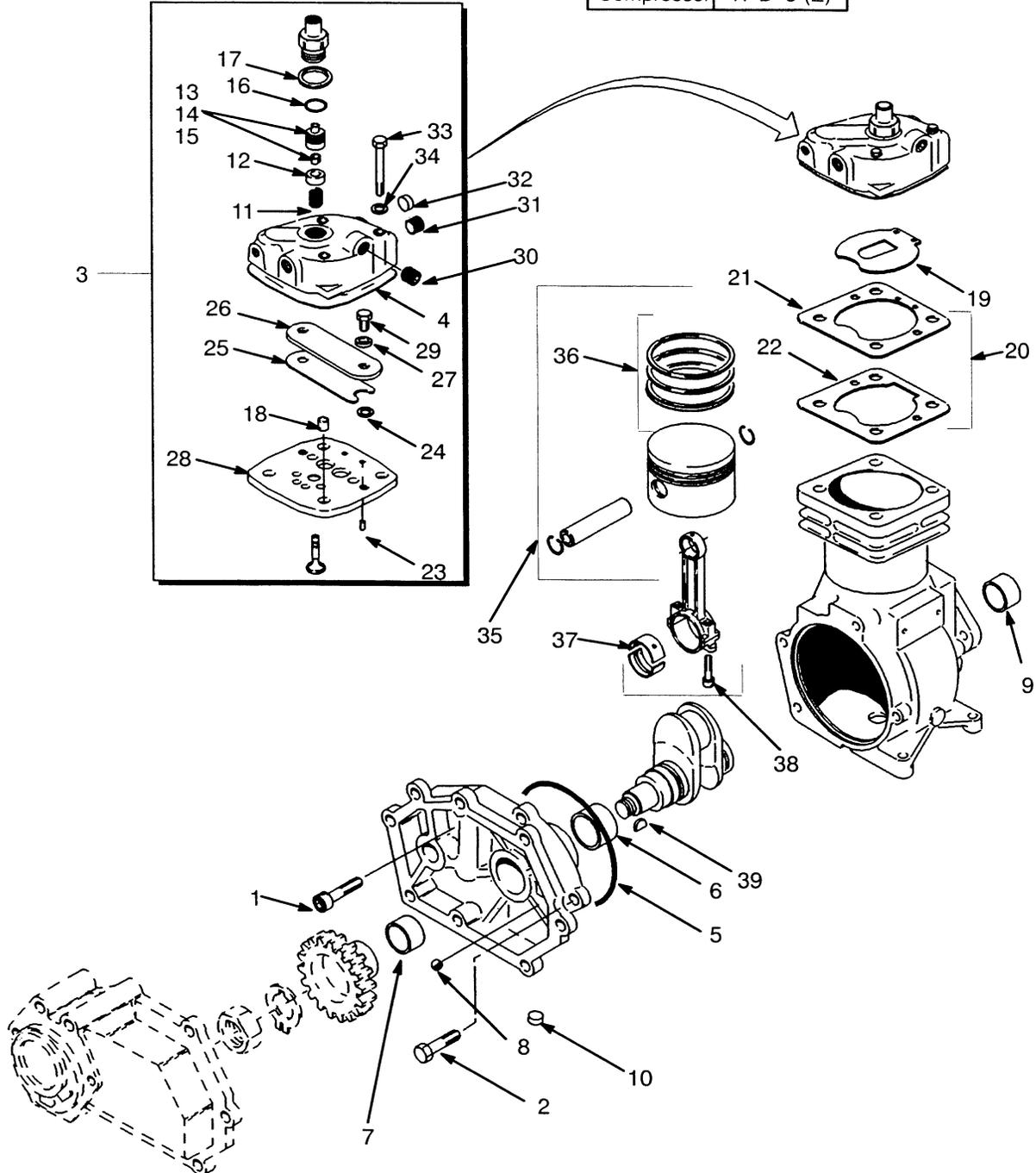


AIR COMPRESSOR
LAST USED ON ENGINE S/N U563738X

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1318324	Air Compressor	1	22 b	1350667	Gasket	1
1	1329417	Screw	3	23	.....	Pin	2
2	1329418	Capscrew	1	24 a	.....	Disk	1
3	1329419	Cylinder Head	1	25	.....	Valve Disk	1
4	1329420	Gasket	1	26 a	.....	Plate	1
5 a	.....	O-Ring	1	27 a	.....	Sleeve	2
6 a	.....	Bushing	1	28 a	.....	Plate	1
7 a	.....	Bushing	1	29	.....	Capscrew	2
8	.....	Ball	1	30	.....	Plug	1
9 a	.....	Bushing	1	31	.....	Plug	2
10 a	.....	Plug	2	32	.....	Plug	1
11	.....	Seat	1	33	1329425	Screw	4
12	.....	Bushing	1	34	.....	Washer	4
13 a	.....	Spring	1	35	1329426	Piston Rod	1
14	.....	Guide	1	36	1382494	Piston	1
15 a	.....	Collar	2	37	1329428	Kit-Piston Ring	1
16 a	.....	O-Ring	1	38 a	.....	Bearing Set	1
17	.....	Washer	1	39 a	.....	Bolt	2
18	.....	Pin2	1	40	.....	Woodruff Key	1
19 a	.....	Disk	1				
20	.....	Kit-Gasket	1	a	Included In Repair Kit 1382033		
21 b	1350666	Gasket	1	b	Included In Gasket Kit 1350665		

AIR COMPRESSOR (FIGURE 120) USED ON ENGINE S/N U563739X UP TO UNIT S/N D19D-1756 INCLUDING 1758 EXCEPT 1753

PARTS-SERVICE GRAM	
Item	Gram
Compressor	H-D-5 (E)

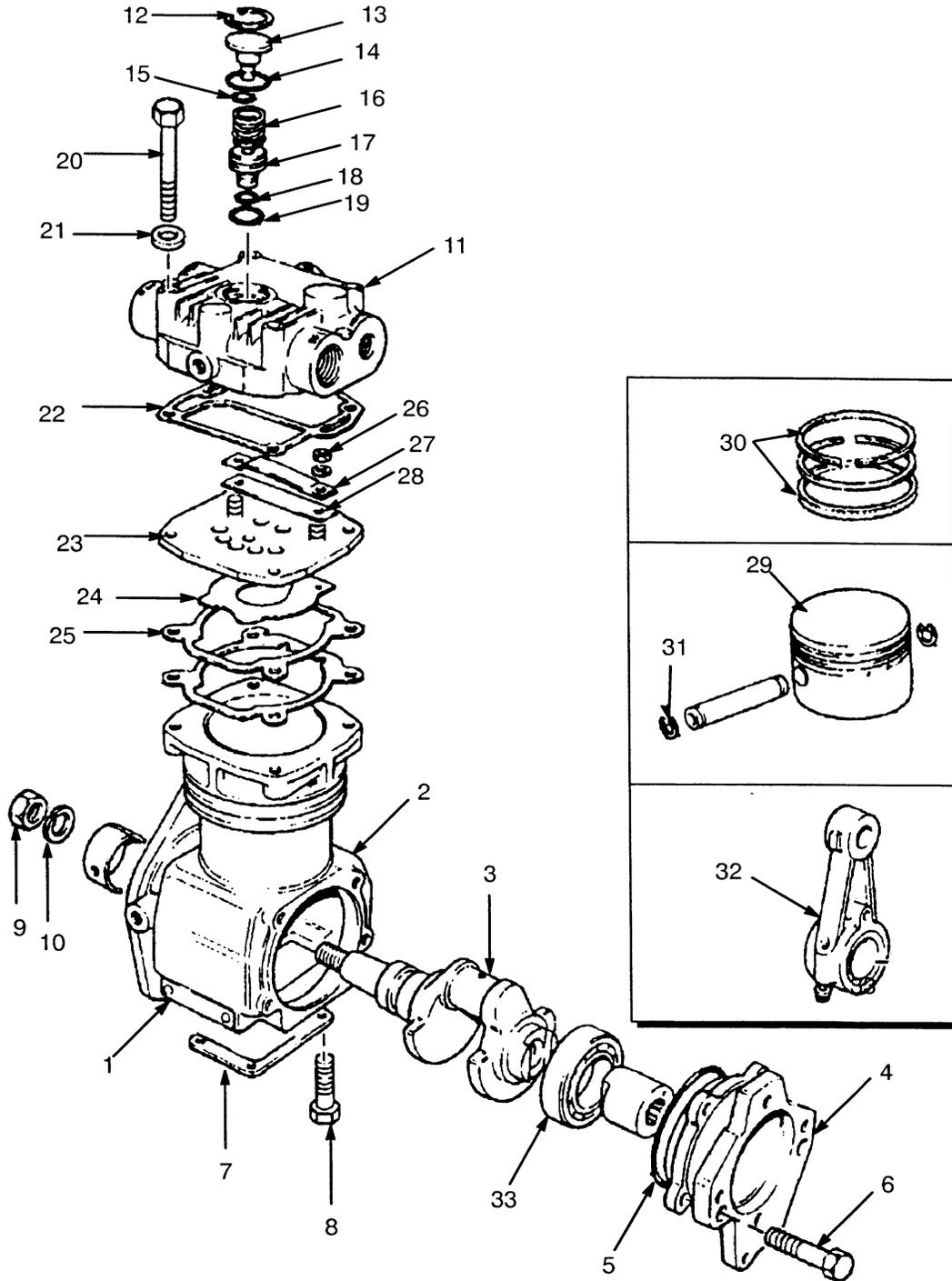


AIR COMPRESSOR
USED ON ENGINE S/N U563739X
UP TO UNIT S/N D19D-1756 INCLUDING 1758 EXCEPT 1753

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1382485	Air Compressor	1	21 ^a	1350666	Gasket	1
1	1329417	Screw	3	22 ^a	1350667	Gasket	1
2	1329418	Capscrew	1	23	.....	Pin	2
3	1329419	Cylinder Head	1	24	.....	Disk	1
4	1329420	Gasket	1	25	.....	Valve Disk	1
5	1382490	O-Ring	1	26	.....	Plate	1
6	.....	Bushing	1	27	.....	Sleeve	2
7	.....	Bushing	1	28	1382492	Plate	1
8	.....	Ball	1	29	.....	Capscrew	2
9	.....	Bushing	1	30	.....	Plug	1
10	1382491	Plug	2	31	.....	Plug	2
11	.....	Seat	1	32	.....	Plug	1
12	.....	Bushing	1	33	.....	Screw	4
13	.....	Spring	1	34	.....	Washer	4
14	.....	Guide	1	35	1382494	Piston	1
15	.....	Collar	2	36	1329428	Kit-Piston Ring	1
16	.....	O-Ring	1	37	1382493	Bearing	1
17	.....	Washer	1	38	.....	Bolt	2
18	.....	Pin	2	39	.....	Woodruff Key	1
19	.....	Disk	1				
20	.....	Kit-Gasket	1				

^a Included In Gasket Kit 1350665

AIR COMPRESSOR (FIGURE 121) UP TO ENGINE S/N U593028 UNIT S/N D19D-1757 INCLUDING 1753 EXCEPT 1758

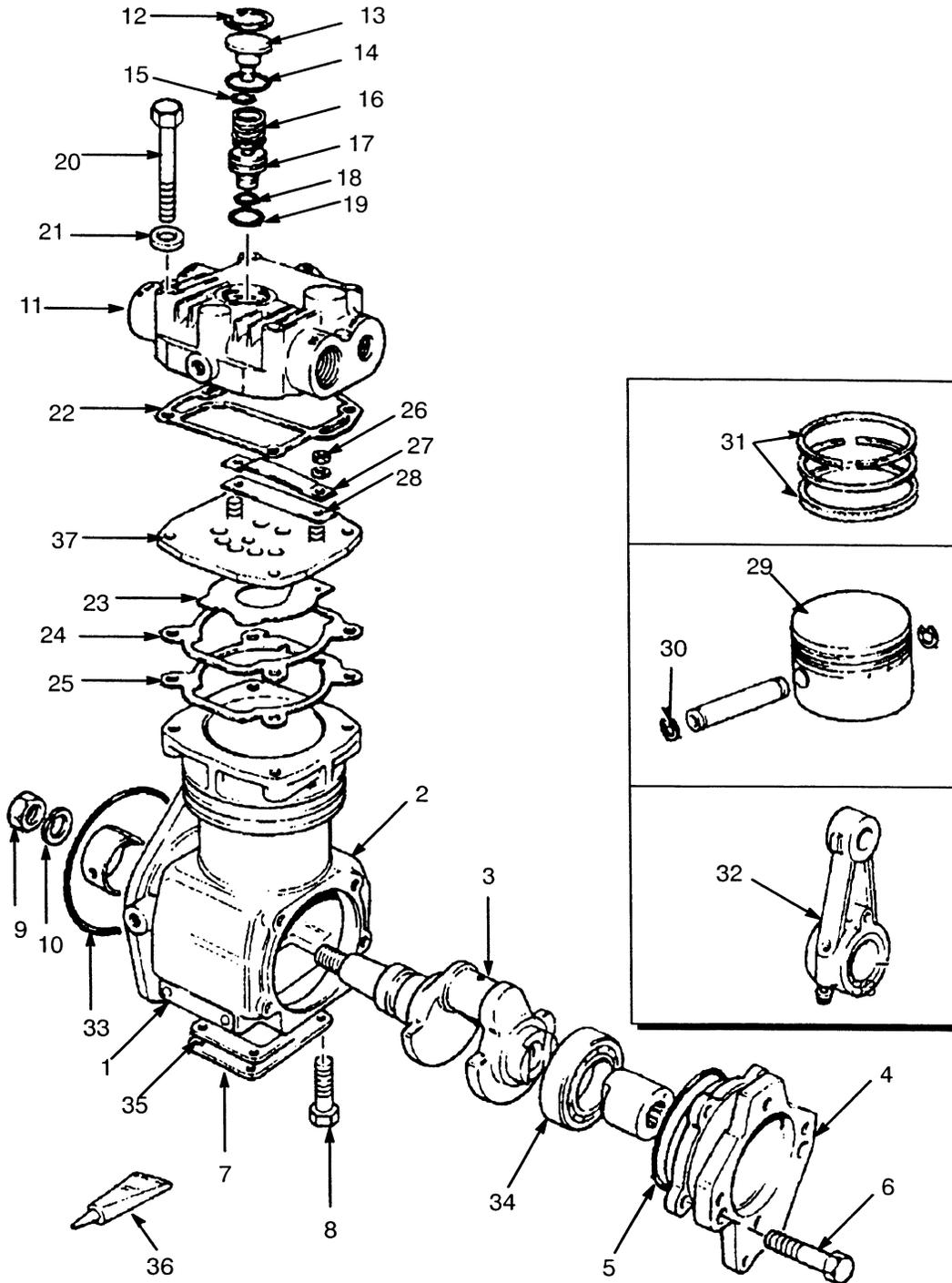


AIR COMPRESSOR
UP TO ENGINE S/N U593028
UNIT S/N D19D-1757 INCLUDING 1753 EXCEPT 1758

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	^a 1379772	Compressor	1	21	1380233	Washer	4
2	1380215	Housing	1	22	1380234	Gasket	1
3	.....	Crankshaft	1	23	1380235	Plate	1
4	1380217	Cover	1	24	1380236	Gasket-Head	1
5	1380217	O-Ring	1	25	1380237	Gasket-Head	1
6	1380218	Screw	4	26	.....	Nut	1
7	1380219	Cover	1	27	.....	Valve	1
8	1380220	Screw	4	28	.....	Valve	1
9	1380221	Nut	1	29	1380238	Piston Assy	1
10	1380222	Washer	1	29	.....	Piston	1
11	^a 1380223	Cylinder Head	1	29	.....	Pin	1
12	1380224	Snap Ring	1	30	1385683	Kit-Piston Ring	1
13	1380225	Cap	1	31	.....	Snap Ring	2
14	1380226	O-Ring	1	32	1380239	Connecting Rod Assy	1
15	1380227	O-Ring	1	32	.....	Connecting rod	1
16	1380228	Spring	1	32	.....	Bearing	1
17	1380229	Plunger	1	33	.....	Ball Bearing	1
18	1380230	O-Ring	1				
19	1380231	O-Ring	1				
20	1380232	Bolt	4				

^a Service With Cylinder Head Kit 1385680

AIR COMPRESSOR (FIGURE 122) USED ON ENGINE S/N U593029 THRU U607097

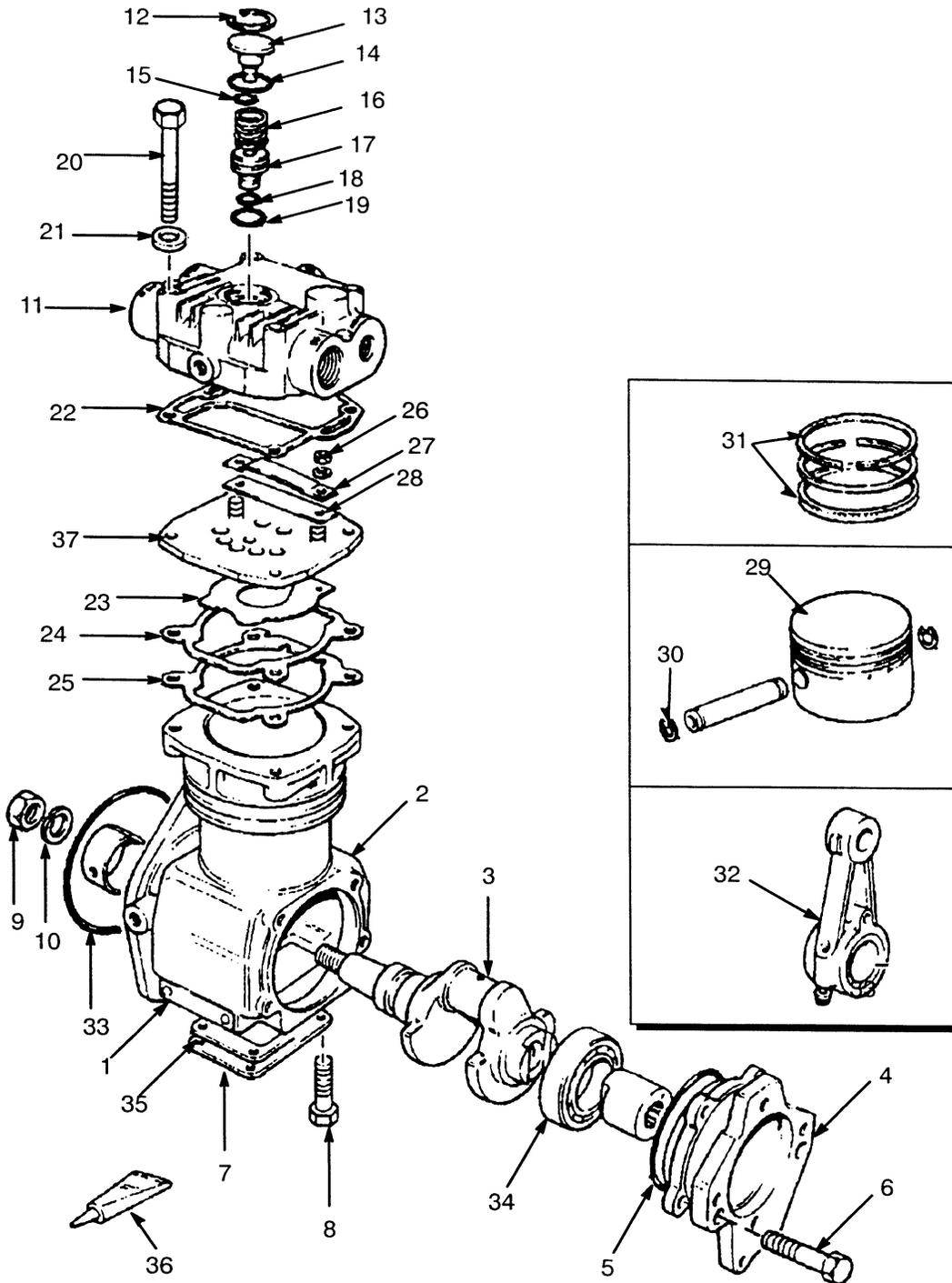


AIR COMPRESSOR
USED ON ENGINE S/N U593029 THRU U607097

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1385674	Compressor	1	24	abc	Gasket-Head	1
2		Housing	1	25	abc	Gasket-Head	1
3		Crankshaft	1	26	b	Nut	1
4		Cover	1	27	b	Valve	1
5	a	O-Ring	1	28	b	Valve	1
6		Screw	4	29	1385682	Kit-Piston	1
7		Cover	1	29		Piston	1
8		Screw	4	29		Pin	1
9		Nut	1	30		Snap Ring	2
10		Washer	1	31	1385683	Kit-Piston Ring	1
11	c	Cylinder Head	1	32	1385684	Kit-Connecting Rod	1
12	a	Snap Ring	1	32		Connecting rod	1
13	a	Cap	1	32		Bearing	1
14	a	O-Ring	1	33	a	O-Ring	1
15	a	O-Ring	1	34	385895	Ball Bearing	1
16	a	Spring	1	35	abc	Gasket	1
17	a	Plunger	1	36	a	Grease	1
18	a	O-Ring	1	37		Plate	1
19	a	O-Ring	1				
20		Bolt	4				
21	a	Washer	4				
22	ac	Gasket	1				
23	b	Valve Inlet	1				

a	Included In Gasket Kit 1385679
b	Included In Valve Kit 1385681
c	Service With Cylinder Head Kit 1385680

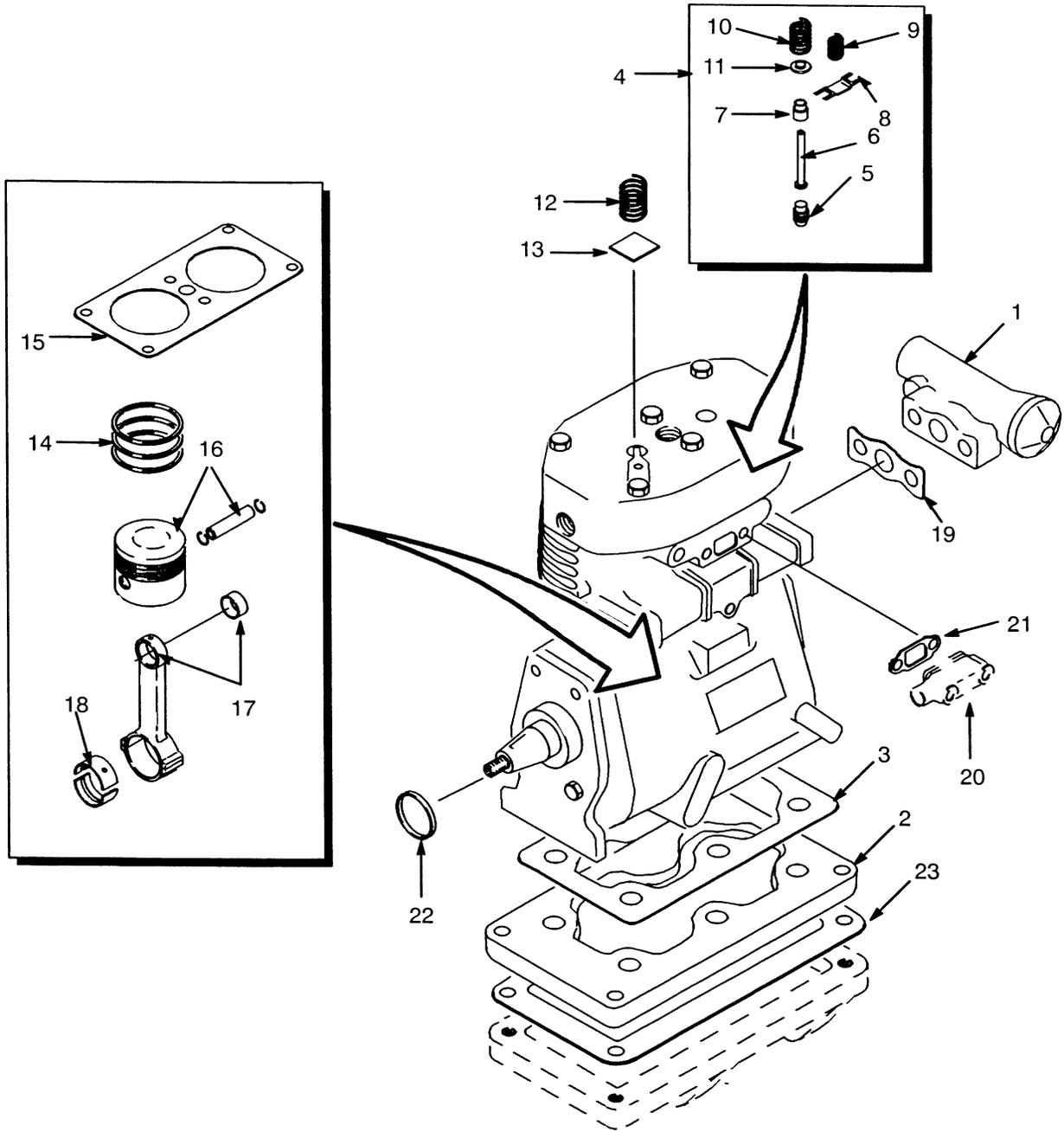
AIR COMPRESSOR (FIGURE 123) FIRST USED ON ENGINE S/N U607098 AND UNIT S/N D19D-2377



AIR COMPRESSOR
FIRST USED ON ENGINE S/N U607098
AND UNIT D19D-2377

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1391791	Compressor	1	24	abc	Gasket-Head	1
2		Housing	1	25	abc	Gasket-Head	1
3		Crankshaft	1	26	b	Nut	1
4		Cover	1	27	b	Valve	1
5	a	O-Ring	1	28	b	Valve	1
6		Screw	4	29	1385682	Kit-Piston	1
7		Cover	1	29		Piston	1
8		Screw	4	29		Pin	1
9		Nut	1	30		Snap Ring	2
10		Washer	1	31	1385683	Kit-Piston Ring	1
11	c	Cylinder Head	1	32	1385684	Kit-Connecting Rod	1
12	a	Snap Ring	1	32		Connecting rod	1
13	a	Cap	1	32		Bearing	1
14	a	O-Ring	1	33	a	O-Ring	1
15	a	O-Ring	1	34	385895	Ball Bearing	1
16	a	Spring	1	35	abc	Gasket	1
17	a	Plunger	1	36	a	Grease	1
18	a	O-Ring	1	37	a	Plate	1
19	a	O-Ring	1				
20		Bolt	4		a	Included In Gasket Kit 1385679	
21	a	Washer	4		b	Included In Valve Kit 1385681	
22	a	Gasket	1		c	Service With Cylinder Head Kit 1454306	
23	b	Valve Inlet	1				

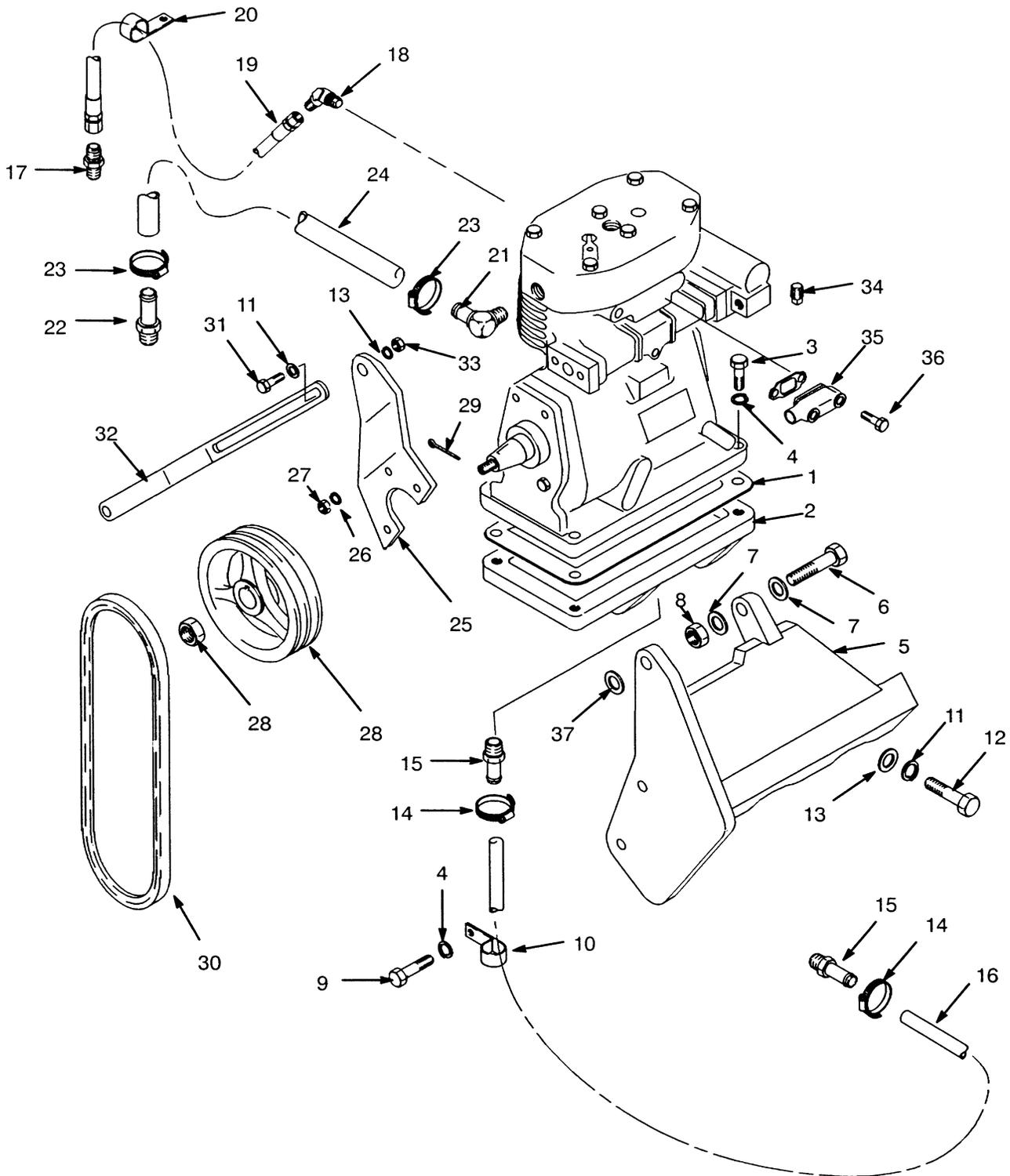
AIR COMPRESSOR (FIGURE 124) 366 LPG ENGINE



**AIR COMPRESSOR
366 LPG ENGINE**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY	
a	894515	Compressor	1	14	1452097	Piston Ring Set (0.020 O.S.) ...	1	
	24236	Nut	1	14	1452098	Piston Ring Set (0.030 O.S.) ...	1	
	17253	Key	1	15	bc	1452081	Head Gasket	1
	362812	Ball Bearing	1	16	1452099	Piston & Pin Kit (Std.)	1	
	362807	Thrust Washer	1	16	1452100	Piston & Pin Kit (0.010 O.S.) ...	1	
	1455254	Crankshaft Bearing	1	16	1452101	Piston & Pin Kit (0.020 O.S.) ...	1	
1	385251	Governor	1	16	1452102	Piston & Pin Kit (0.030 O.S.) ...	1	
2	1452110	Adaptor	1	17	1452103	Connecting Rod Kit	1	
3	b	1452925	Gasket	18	1452104	Insert Set (Std)	1	
4	b	1452077	Uploader Kit	18	1452105	Insert Set (0.010 O.S.)	1	
5	1452082	Piston	2	18	1452106	Insert Set (0.020 O.S.)	1	
6	1452086	Plunger	2	18	1452107	Insert Set (0.030 O.S.)	1	
7	1452085	Guide	2	19	bc	235796	Gasket	1
8	1452087	Saddle Spring	1	20	200445	Breather	1	
9	Saddle	1	21	bc	1452080	Gasket	1
10	1452084	Spring	1	22	151557	Oil Seal	1	
11	1452083	Seat	1	23	b	235811	Gasket	1
12	b	235832	Spring-Inlet Valve	1				
13	b	235831	Inlet Valve	1	a	Remanufactured Compressor 1452074		
13	b	235830	Inlet Valve Guide	1	b	Included In Maintenance Kit 1452076		
14	1452088	Piston Ring Set (Std.)	1	c	Include In Gasket Kit 1452096			
14	1452079	Piston Ring Set (0.010 O.S.) ...	1					

COMPRESSOR MOUNTING (FIGURE 125) LPG



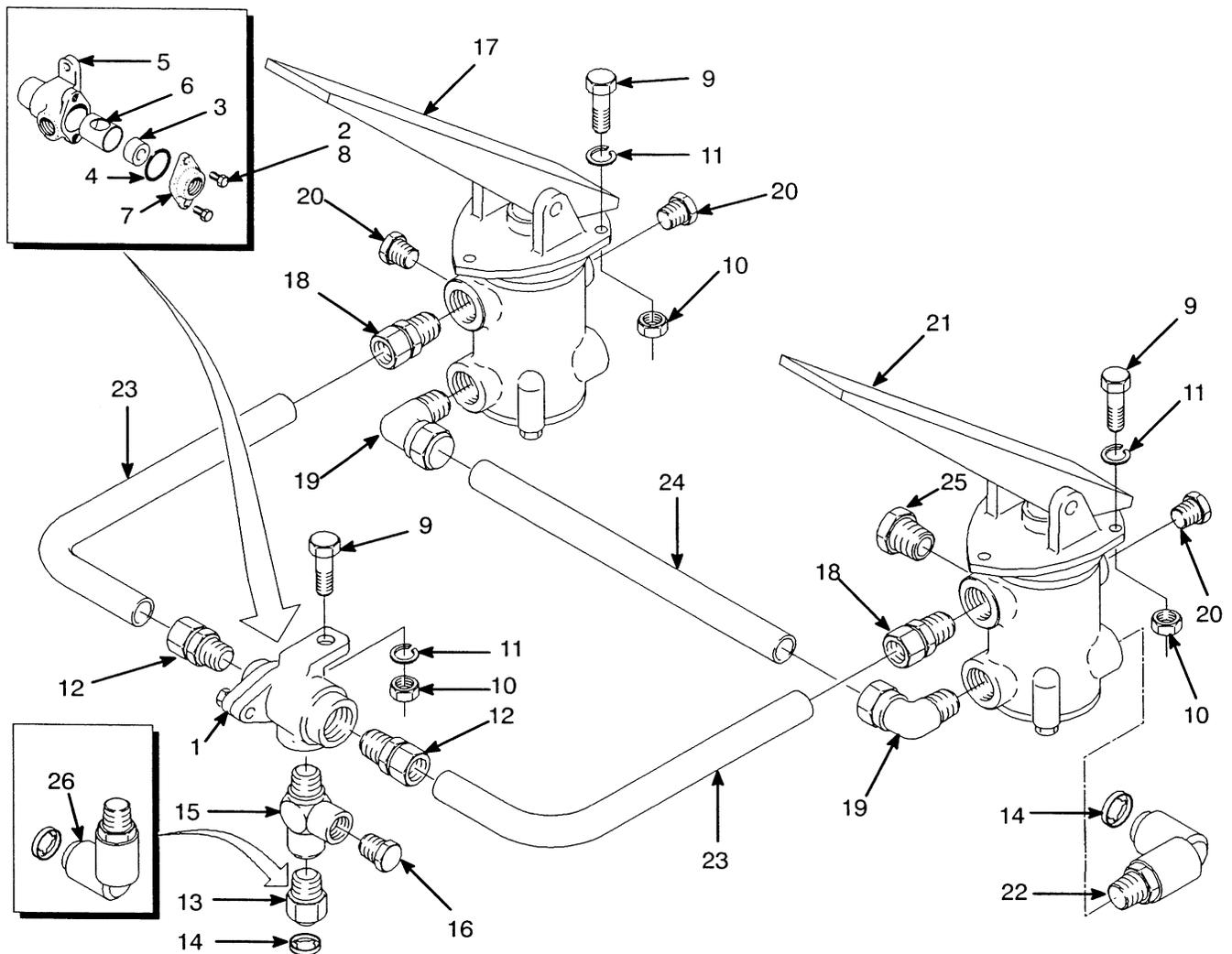
**COMPRESSOR MOUNTING
LPG**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	894515	Compressor	1	23	130845	Clamp	2
1	.....	Cover	1	24	1479119	Hose-Heater	1
2	894516	Bracket	1	25	894519	Bracket	1
3	18557	Capscrew	4	26	18515	Washer	3
4	15157	Washer	6	27	222666	Nut	3
5	894550	Bracket	1	28	155510	Pulley	1
6	292564	Capscrew	2	28	.....	Nut	1
7	320166	Washer	4	29	15224	Pin	1
8	316828	Nut	2	30	155442	Belt	1
9	131137	Capscrew	2	31	16828	Capscrew	1
10	153070	Clamp	1	32 a	894559	Adjustment Strap	1
11	15176	Washer	3	32 b	894881	Adjustment Strap	1
12	16816	Capscrew	2	33	15056	Nut	1
13	15156	Washer	3	34	200445	Breather	1
14	166857	Clamp	2	35	894574	Adapter Fitting	1
15	16764	Fitting	2	36	16835	Capscrew	2
16	110279	Hose	1	37	894575	Shim	1
17	14668	Fitting	1				
18	14538	Fitting	1				
19	894557	Hose	1				
20	128408	Clamp	1				
21	16155	Fitting	1				
22	138710	Fitting	1				

a Last Used On S/N D19D-2478
b First Used On S/N D19D-2479

Service Note: Service Strap 894559 And Spacer 894561 With Strap 894881

TREADLE VALVE (FIGURE 126)

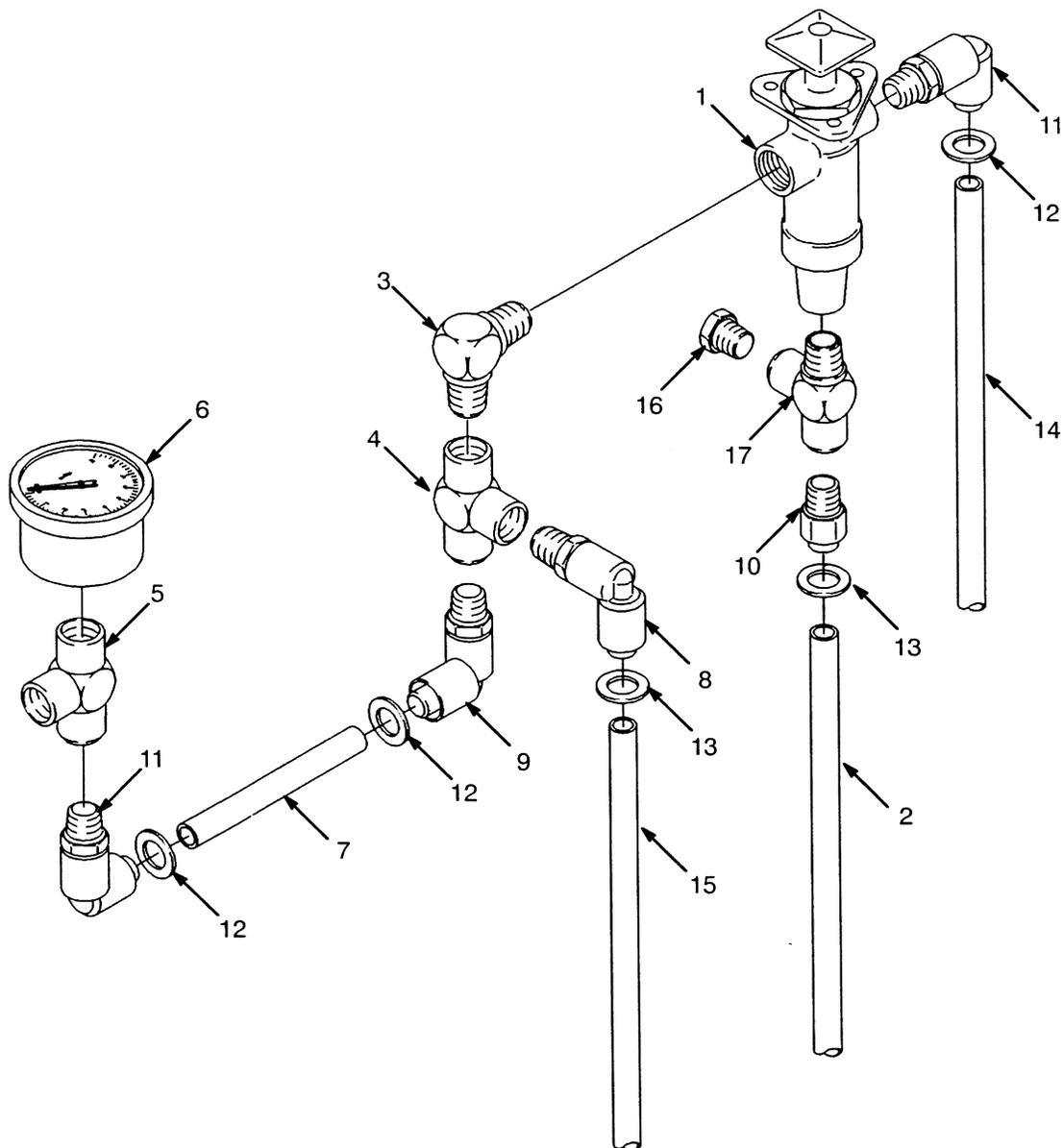


REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1326100	Check Valve	1	17		Treadle Valve	1
2	1322343	Washer	1			(Figure 131)	
3	1322344	Shuttle Valve	1	18	1301540	Fitting	2
4	1322322	O-Ring	1	19	1301543	Fitting	2
5	1322346	Body	1	20	^c 14387	Fitting	4
6	1322347	Guide	1	21		Treadle Valve	1
7	1322348	Cap	1			(Figure 131)	
8	1322349	Screw	2	22	1331047	Fitting	1
9	176640	Capscrew	7	23	322792	Tube	2
10	239503	Nut	7	24	1301689	Tube	1
11	292681	Lockwasher	7	25	^b 12844	Fitting	1
12	1301539	Fitting	2	26	^c 1301544	Fitting	1
13	1331048	Fitting	1				
13	^a 1325380	Fitting	1				
14	1331049	Button	2				
15	154452	Fitting	1				
16	14386	Fitting	1				
				^a		With Noise Reduction	
				^b		Monotrol Pedal	
				^c		Forward/Reverse Lever	

ATTACHING PARTS (FIGURE 127)

PARK BRAKE

LAST USED ON S/N D19D-1521



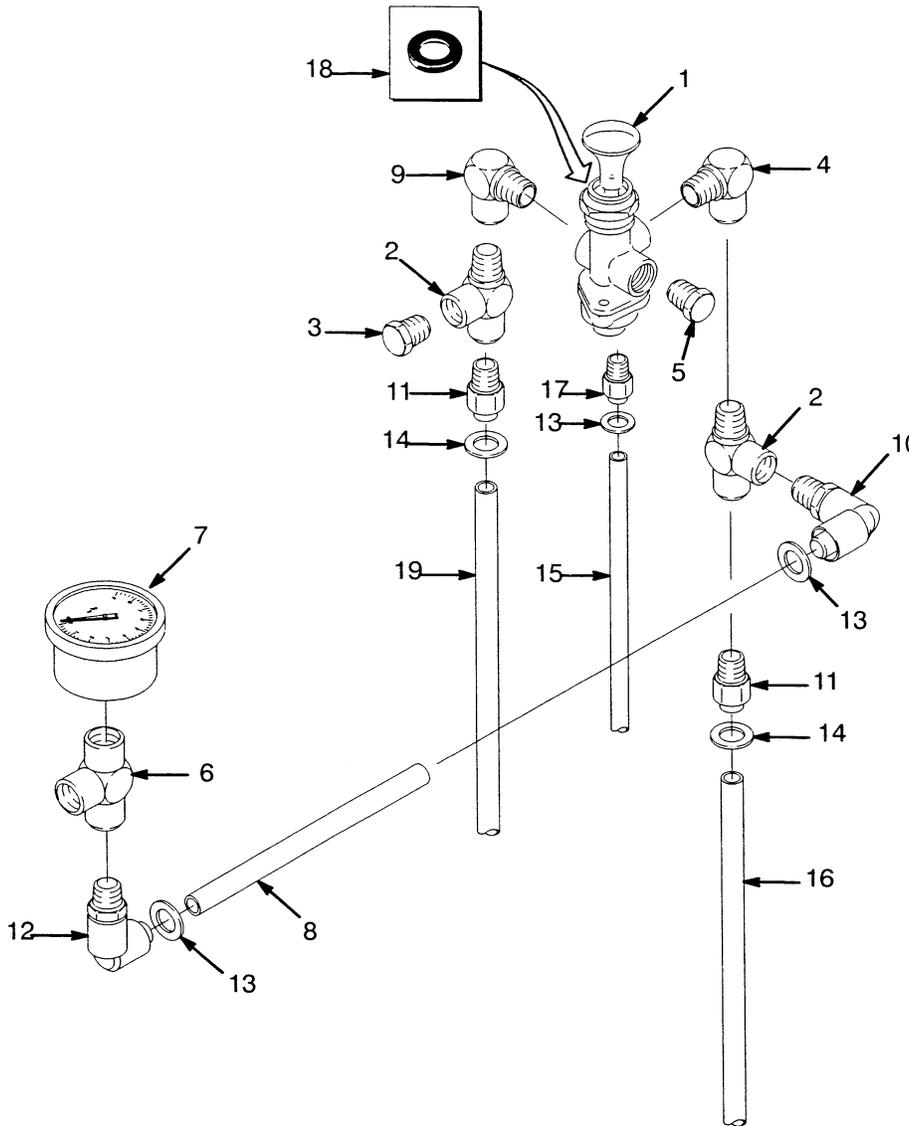
REF	PART NO.	NAME OF PART	QTY
1		Park Brake Valve ☞ (Figure 132)	1
2	358458	Tube	1
3	16841	Fitting	1
4	63111	Fitting	1
5	12838	Fitting	1
6	1311376	Gauge	1
7	1301550	Tube	1
8	1301429	Fitting	1

REF	PART NO.	NAME OF PART	QTY
9	1301428	Fitting	1
10	1301430	Fitting	1
11	1301433	Fitting	2
12	1301434	Button	3
13	1301435	Button	2
14	217977	Tube	1
15	217977	Tube	1
16	16187	Fitting	1
17	17216	Fitting	1

ATTACHING PARTS (FIGURE 128)

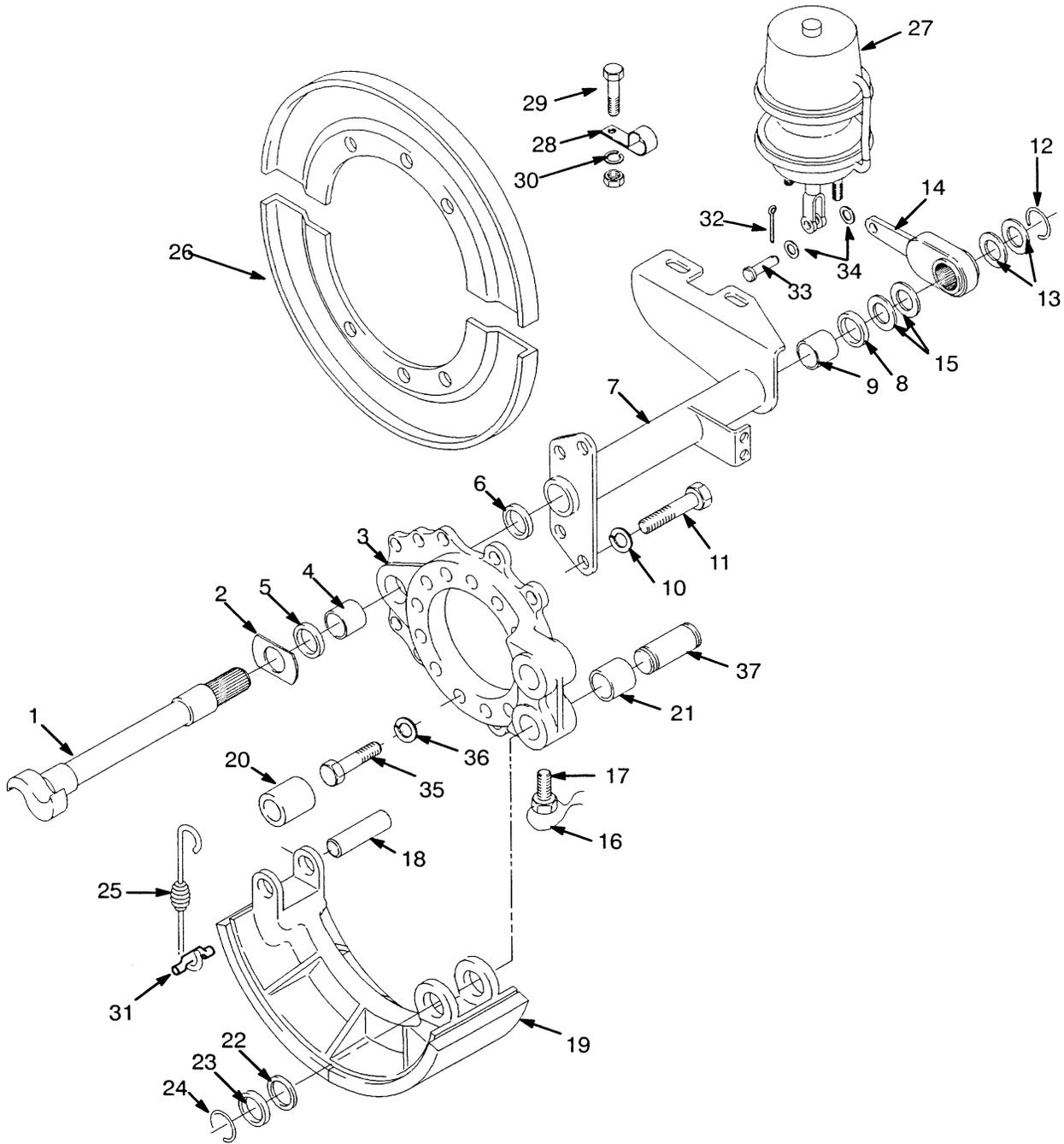
PARK BRAKE

FIRST USED ON S/N D19D-1522



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1		Park Brake Valve	1	10	1301428	Fitting	1
		(Figure 133)		11	1301433	Fitting	2
2	17216	Fitting	2	12	1301433	Fitting	1
3	16187	Fitting	1	13	1301434	Button	3
4	17736	Fitting	1	14	1301435	Button	2
5	14385	Fitting	1	15	139728	Tube	1
6	12838	Fitting	1	16	217977	Tube	1
7	1311376	Gauge	1	17	1359661	Fitting	1
8	139727	Tube	1	18	1357237	Wiper	1
9	17314	Fitting	1	19	358458	Tube	1

BRAKE SYSTEM (FIGURE 129)



BRAKE SYSTEM

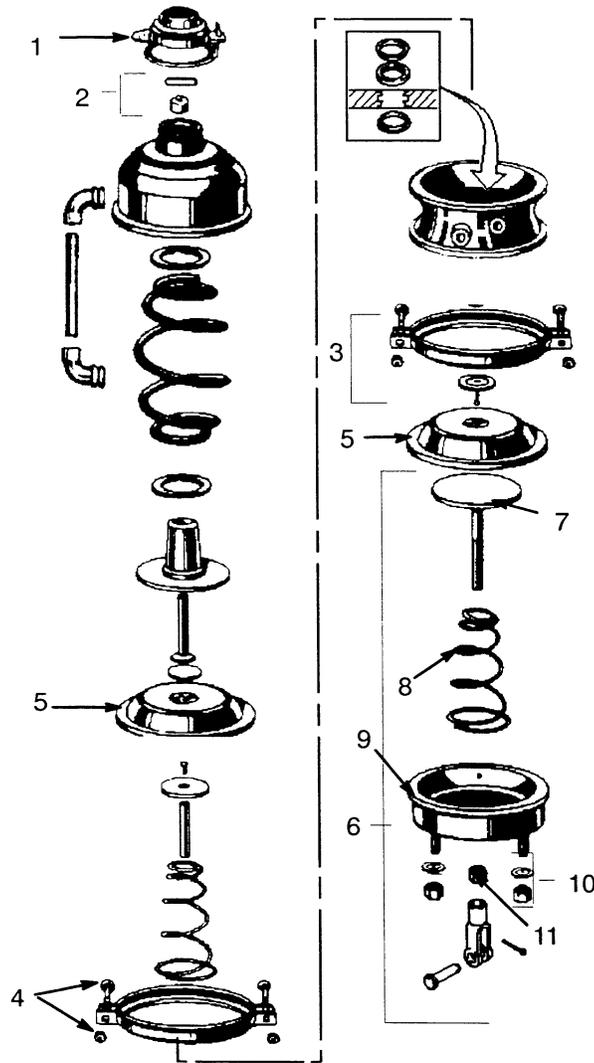
KEY:

A: Non-EC and EC-3

B: EC-4

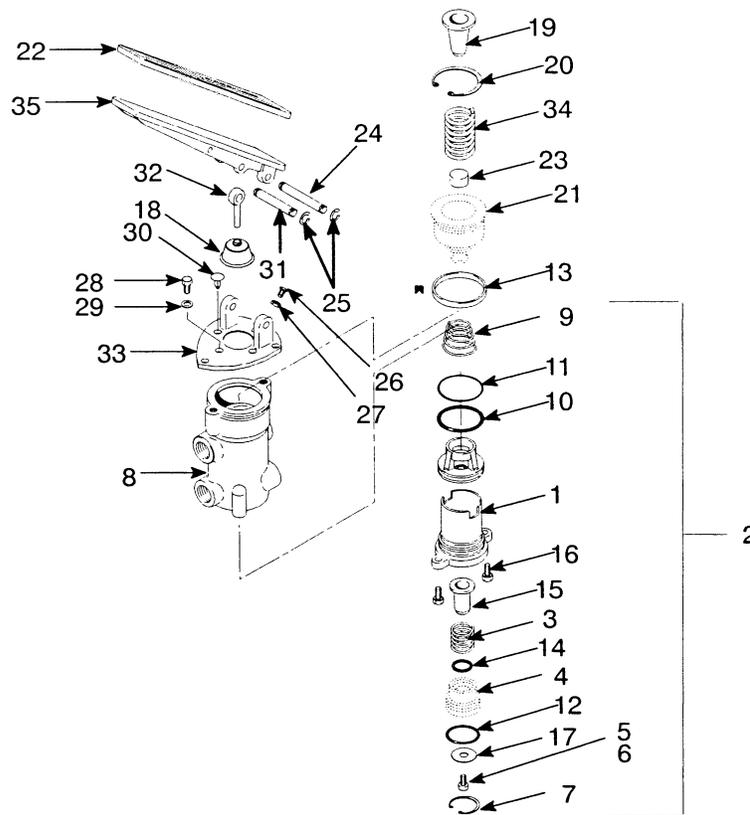
REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
1	1312608	Camshaft, LH	1	..	19	1377888	Brakeshoe Assy	1	1
1	1329703	Camshaft, LH	..	1	19	1354439	Lining Kit	1	1
1	1312609	Camshaft, RH	1	..	19	200591	Rivet	ARAR	
1	1329704	Camshaft, RH	..	1	20	1329710	Roller	2	2
2	1455057	Washer	2	2	21	321703	Bushing	2	2
3	1329705	Spider	2	2	22	97656	Felt	8	8
4	^a 97647	Bushing	1	1	23	97657	Retainer	8	10
5	^a 301986	Seal	1	1	24	99037	Snap Ring	8	8
6	1374086	O-Ring	2	2	25	1316322	Return Spring	2	2
7	1333923	Bracket, RH	1	..	26	1346960	Kit-Dust Shield	1	1
7	1329707	Bracket, RH	..	1	27	1374594	Brake Chamber	2	..
7	1333924	Bracket, LH	1	..	27	1329714	Brake Chamber	..	2
7	1329708	Bracket, LH	..	1			(Figure 130)		
8	301986	Seal	1	1	28	1312614	Clamp	2	2
9	97647	Bushing	1	1	29	16597	Capscrew	4	4
10	88587	Washer	8	8	30	15160	Washer	4	4
11	200454	Capscrew	8	8	31	1316384	Adapter	4	4
12	122400	Snap Ring	2	2	32	15223	Cotter Pin	4	4
13	1374588	Washer	2	2	33	321719	Pin	4	4
14	1455058	Slack Adjuster	2	2	34	15160	Washer	4	4
15	322428	Washer	4	4	35	166425	Capscrew	12	12
16	296734	Lock Wire	4	4	36	125428	Washer	12	12
17	200465	Capscrew	4	4	37	321298	Pin	2	2
18	1315648	Pin	4	4					
19	1374591	Brakeshoe & Lining Assy	4	4	^a	Included in Kit-Brake Camshaft 1382967			

BRAKE CHAMBER (FIGURE 130)



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1329714	Brake Chamber	2	6	1309068	Kit-Non-Pressure Chamber	1
1	1309059	End Cap	1	7	199725	Piston and Rod	1
2	1332780	Kit-Breather (Roller)	1	8	263922	Spring	1
3	199728	Clamp	1	9	1309071	Non-Pressure Chamber	1
4	1309065	Kit-Hardware	1	10	1309427	Kit-Nut	1
5	1309067	Diaphragm	1	11	15030	Nut	1

TREADLE VALVE (FIGURE 131)



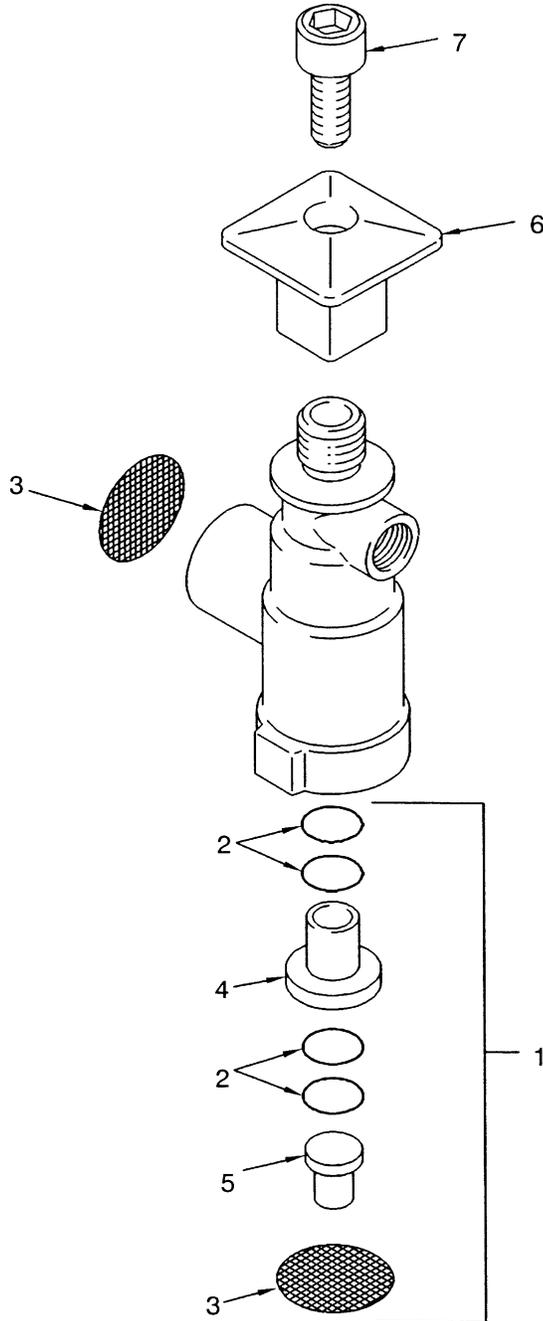
KEY:

- A: Brake Pedal, RH
- B: Inching Pedal, LH

REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
	352013	Treadle Valve	1	..	18	a	Boot	1	1
	1327751	Treadle Valve	..	1	19	1331014	Cup	1	1
1	357426	Valve	1	1	20	a	O-Ring	1	1
2	128795	Cartridge	1	1	21	a	O-Ring	1	1
2	.....	Body	..	1	22	166129	Cover	..	1
3	.....	Spring	1	1	23	a	Stop	1	1
4	.....	Guide	1	1	24	128779	Pin	1	1
5	220283	Screw	1	1	25	12898	Snap Ring	2	2
6	222080	Washer	1	1	26	16836	Capscrew	1	1
7	135189	Snap Ring	1	1	27	15001	Nut	1	1
8	.....	Body	1	1	28	18479	Capscrew	1	1
9	1312814	Spring	1	1	29	15918	Washer	1	1
10	18460	Capscrew	2	2	30	.....	Plug	1	1
11	1332078	Snap Ring	1	..	31	128777	Pin	1	1
11	1342839	Snap Ring	..	1	32	1331015	Push Rod	1	1
12	1331018	Piston	1	1	33	1331017	Plate	1	1
13	a	U-Cup	1	1	34	1309403	Spring	1	..
14	a	U-Cup	1	1	34	1332084	Spring	..	1
15	a	Seat	1	1	35	1334267	Treadle	..	1
16	a	O-Ring	1	1					
17	a	Disc	1	1					
					a	Included In Repair Kit 357427			

PARK BRAKE VALVE (FIGURE 132)

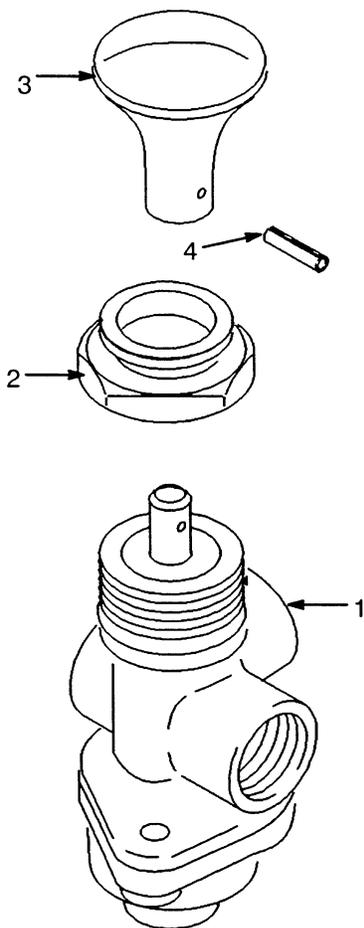
LAST USED ON S/N D19D-1521



PARTS-SERVICE GRAM	
ITEM	GRAM
160268	H-A-10 (E)

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	160268	Park Brake Valve	1	4		Tube	1
1	165719	Kit-Repair	1	5		Poppet	1
2		O-Ring	4	6	165702	Button	1
3		Screen	2	7	165703	Screw	1

PARK BRAKE VALVE (FIGURE 133)
FIRST USED ON S/N D19D-1522



PARTS-SERVICE GRAM	
ITEM	GRAM
1357437	H-A-25

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1357437	Park Brake Valve	1	2	1365264	Nut	1
1	1365266	Control Valve	1	3	1365265	Button	1
1	1377882	Repair-Kit	1	4	1365275	Pin	1

TRANSMISSION

CHARGE PUMP (Figure 147) Page 278

CLUTCH (Figure 142)
FORWARD AND LOW Page 270

CLUTCH (Figure 143)
REVERSE AND SECOND Page 272

CLUTCH (Figure 144)
THIRD Page 274

CONTROL VALVE (Figure 149) Page 282

DIFFERENTIAL (Figure 152)
LAST USED ON S/N D19D-1619-NON-EC AND EC-3
LAST USED ON S/N D19D-1965-EC4 Page 288

DIFFERENTIAL (Figure 154)
FIRST USED ON S/N D19D-1620-NON EC AND EC-3
FIRST USED ON S/N D19D-1966-EC 4 Page 292

DRIVE AXLE (Figure 151) Page 286

DRIVE AXLE (Figure 153)
EMPTY CONTAINER HANDLER - 4
FIRST USED ON S/N D19D-1966 Page 290

IDLER SHAFT (Figure 145) Page 276

MODULATOR VALVE (Figure 148) Page 280

MONOTROL PEDAL (Figure 150) Page 284

OUTPUT GEAR (Figure 146) Page 277

PUMP DRIVE GEARS (Figure 141) Page 268

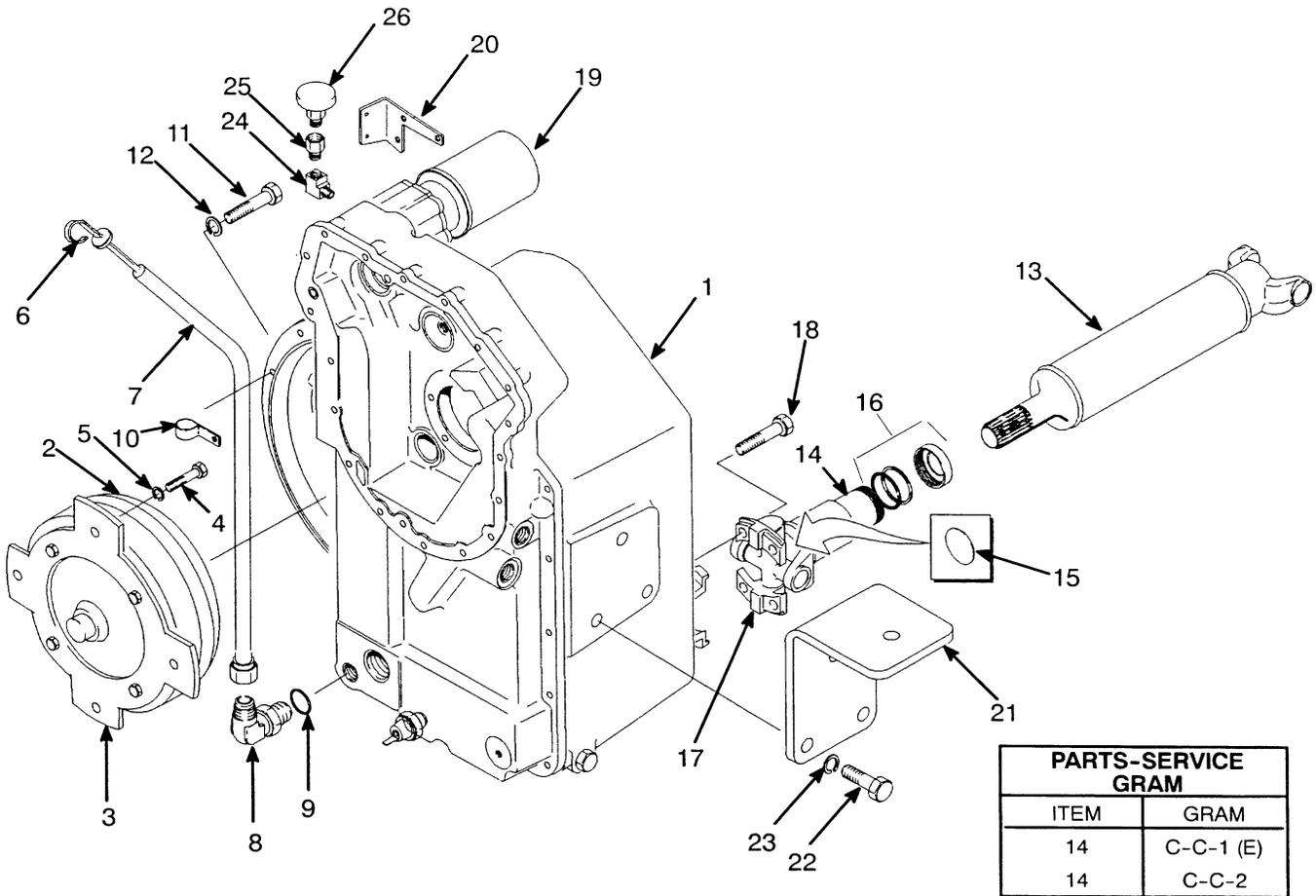
RANGE CONTROL (Figure 135)
WITHOUT AUTOSHIFT Page 256

RANGE CONTROL (Figure 136)
WITH AUTOSHIFT
TRANSMISSION S/N T050M-6089
USED ON S/N D19D-2439 THROUGH S/N D19D-2720 Page 258

TRANSMISSION (Continued)

RANGE CONTROL (Figure 137) WITH AUTOSHIFT TRANSMISSION S/N T050M-6089 USED ON S/N D19D-2721 THRU S/N PENDING PER ECN 63481	Page 260
RANGE CONTROL (Figure 138) WITH AUTOSHIFT FIRST USED ON S/N PENDING PER ECN 63481	Page 262
TRANSMISSION (Figure 140) FIRST USED ON S/N D19D-2439 TRANSMISSION S/N T050M-6089	Page 266
TRANSMISSION ATTACHING PARTS (Figure 134)	Page 254
TRANSMISSION (Figure 139) LAST USED ON TRANSMISSION S/N T050M-6088 LAST USED ON S/N D19D-2438	Page 264

TRANSMISSION ATTACHING PARTS (FIGURE 134)



PARTS-SERVICE GRAM	
ITEM	GRAM
14	C-C-1 (E)
14	C-C-2

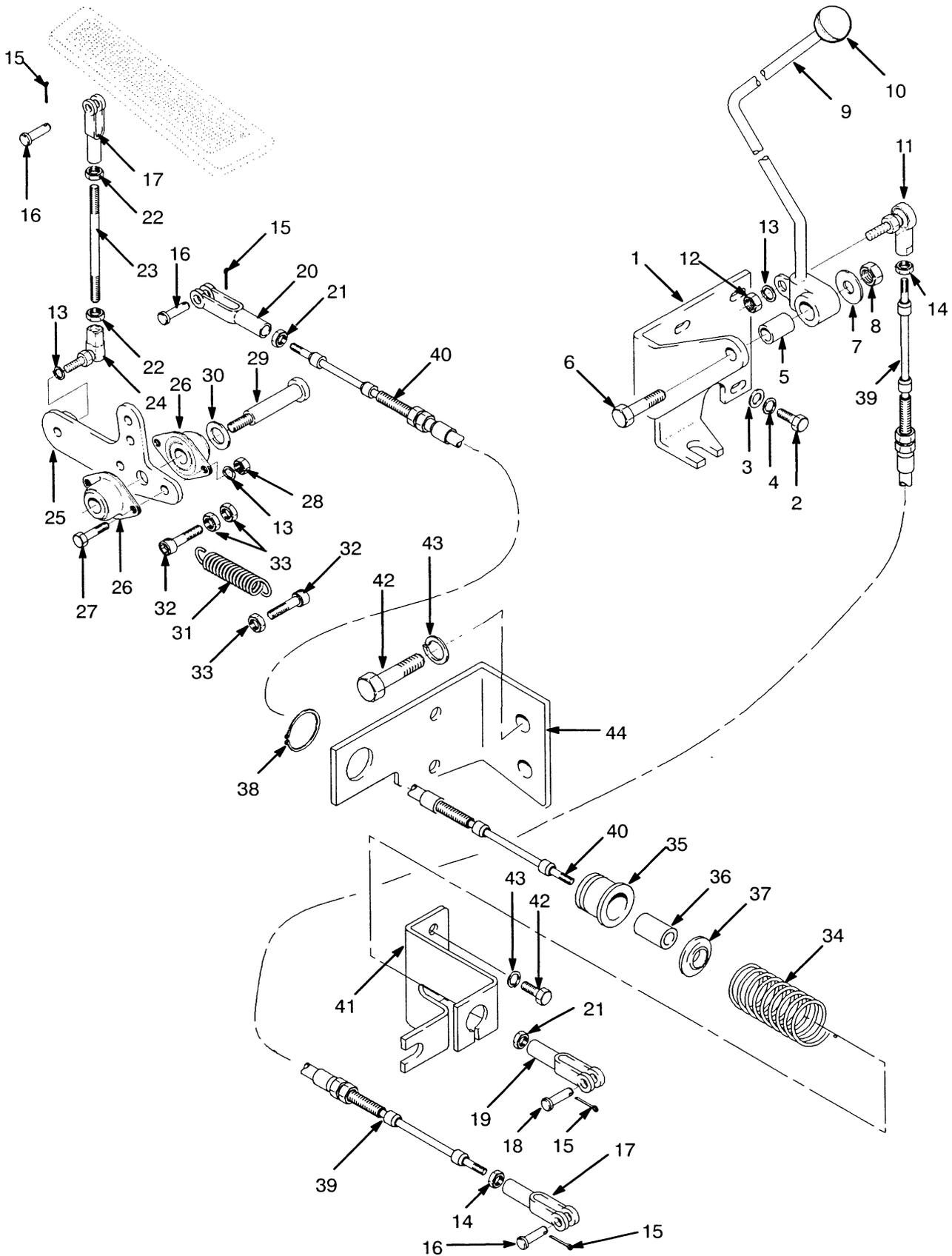
REF	PART NO.	NAME OF PART	QTY
1	....	Transmission	1
		☞ (Figure 139)	
2	1327681	Torque Converter	1
2	894497	Torque Converter (L.P.G.)	1
3	1327656	Drive Plate	1
4	15942	Bolt	8
5	221767	Lockwasher	8
6	1455631	Dipstick	1
7	1327691	Tube	1
8	184761	Fitting	1
9	16486	O-Ring	1
10	88194	Clamp	1
11	16828	Capscrew	11
12	15156	Lockwasher	12
13 a	387240	Universal Shaft	1
13 b	1360967	Universal Shaft	1
14 a	1312823	Yoke	1
14 b	....	Yoke	1

REF	PART NO.	NAME OF PART	QTY
15 a	1312824	Plug	1
16 a	1312825	Cap	1
16 b	1367556	Cap	1
17	1312827	Kit-Cross	2
18	221507	Capscrew	8
19	1315621	Filter	1
20	1327705	Bracket	1
21	1327682	Bracket	2
22	292581	Capscrew	6
23	292687	Lockwasher	6
24	1327821	Fitting	1
25	12855	Fitting	1
26	1343562	Breather	1

a Last Used On S/N D19D-1619

b First Used On S/N D19D-1620

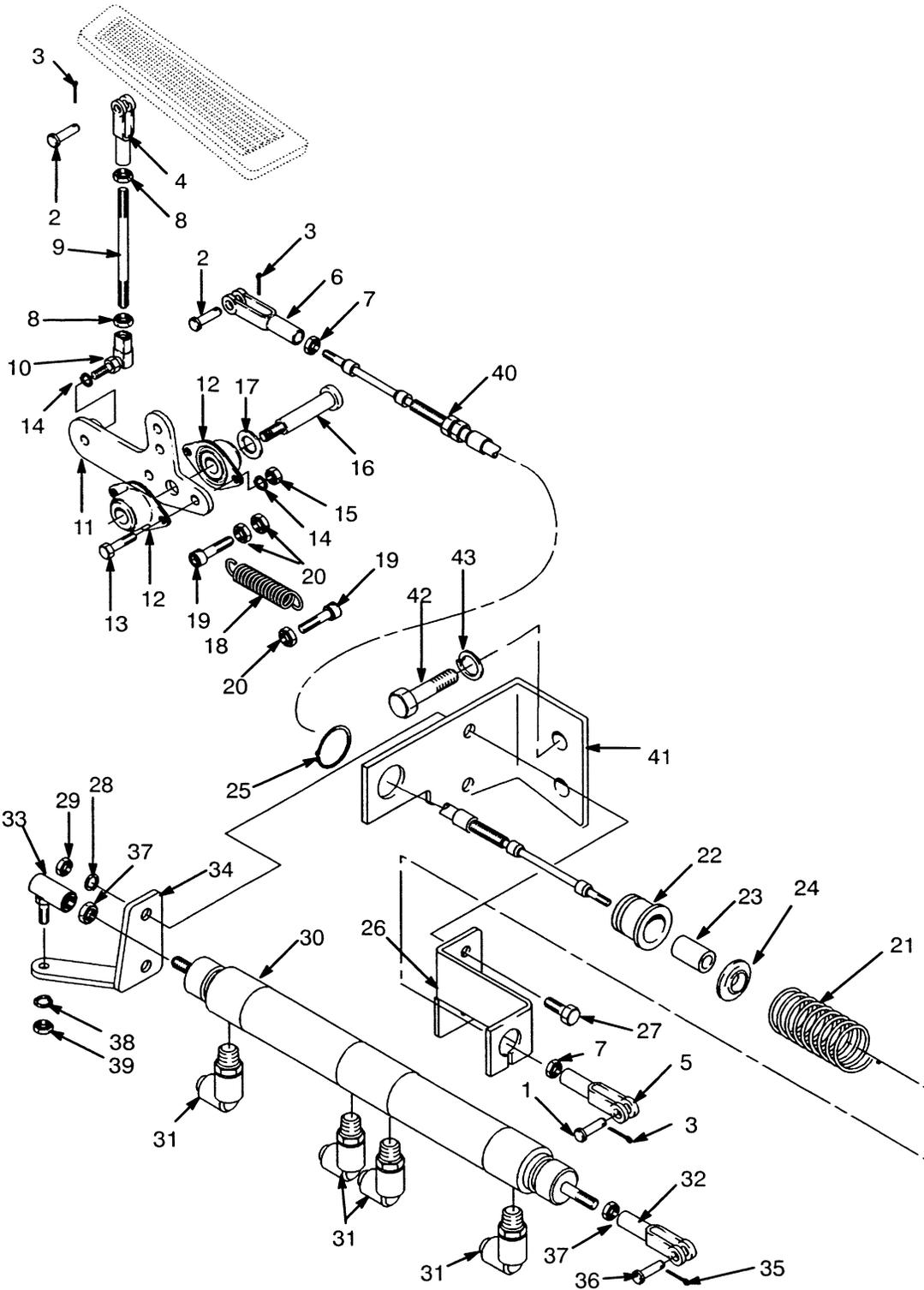
RANGE CONTROL (FIGURE 135) WITHOUT AUTOSHIFT



**RANGE CONTROL
WITHOUT AUTOSHIFT**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1301175	Bracket	1	23	1301038	Link	1
2	136681	Capscrew	3	24	139012	Ball Joint	1
3	320158	Washer	3	25	1301203	Crank	1
4	292681	Lockwasher	3	26	313860	Bearing	2
5	1301164	Spacer	1	27	221420	Capscrew	2
6	293635	Capscrew	1	28	221703	Nut	2
7	15177	Washer	1	29	340213	Screw	1
8	316826	Nut	1	30	320161	Flatwasher	1
9	1301211	Lever	1	31	1301041	Spring	1
10	308993	Knob	1	32	296011	Capscrew	2
11	357263	Ball Joint	1	33	329069	Nut	3
12	15004	Nut	1	34	1327703	Spring	1
13	15154	Lockwasher	4	35	1327746	Bushing	1
14	15024	Nut	2	36	1327747	Guide	1
15	15201	Pin	4	37	1327748	Sleeve	1
16	126	Rod End Pin	3	38	213100	Snap Ring	1
17	125	Rod End	2	39	1303455	Cable	1
18	309109	Rod End Pin	1	40	1346972	Cable	1
19	161617	Rod End	1	41	1327709	Bracket	1
20	314809	Rod End	1	42	136985	Capscrew	4
21	15002	Nut	2	43	292682	Lockwasher	4
22	15004	Nut	2	44	1327708	Bracket	1

RANGE CONTROL (FIGURE 136) WITH AUTOSHIFT TRANSMISSION S/N T050M-6089 USED ON S/N D19D-2439 THROUGH S/N D19D-2720



**RANGE CONTROL
WITH AUTOSHIFT
TRANSMISSION S/N T050M-6089
USED ON S/N D19D-2439 THROUGH S/N D19D-2720**

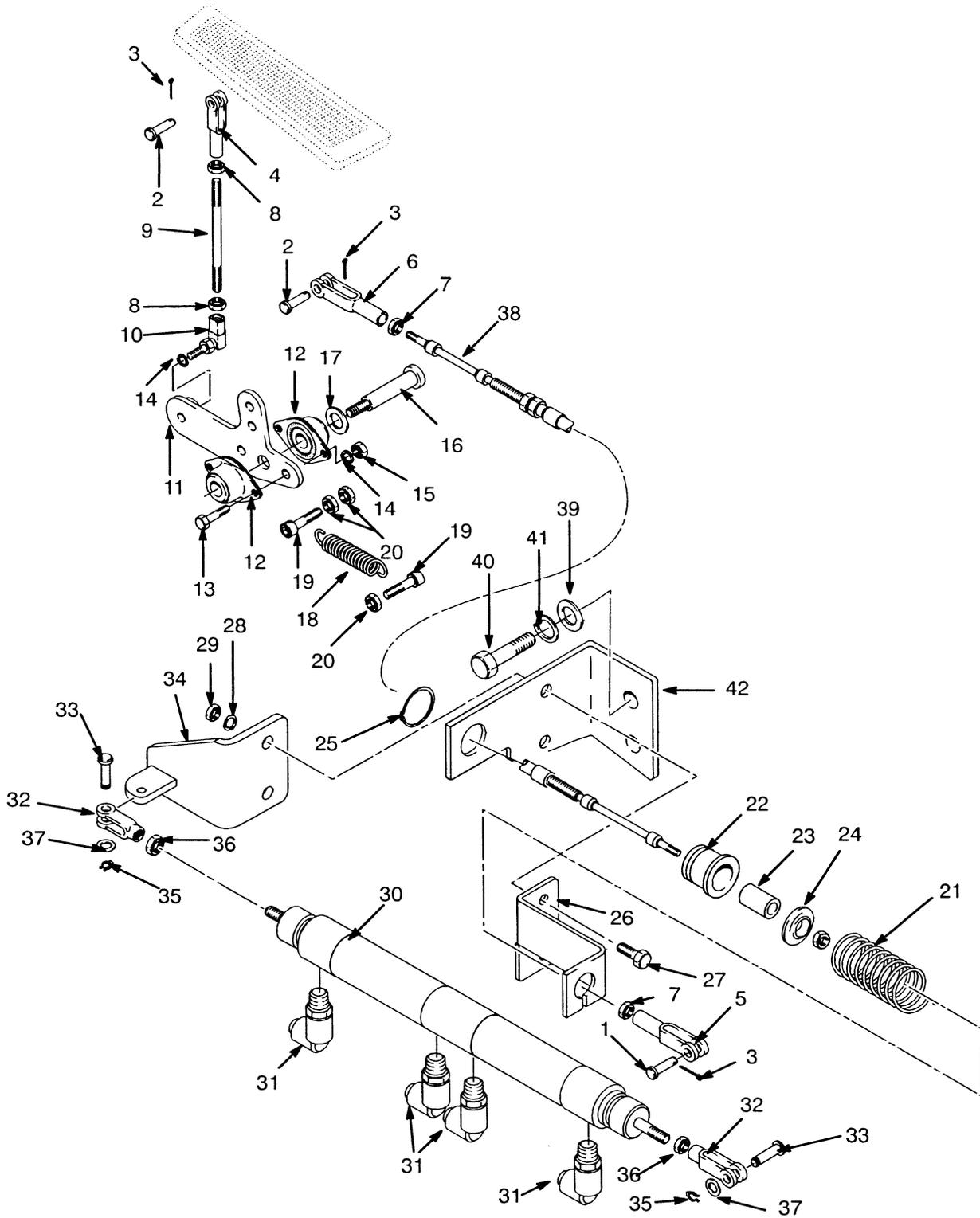
<u>REF</u>	<u>PART NO.</u>	<u>NAME OF PART</u>	<u>QTY</u>	<u>REF</u>	<u>PART NO.</u>	<u>NAME OF PART</u>	<u>QTY</u>
1	309109	Pin	1	22	1327746	Bushing	1
2	126	Pin	2	23	1327747	Guide	1
3	15201	Pin	3	24	1327748	Sleeve	1
4	125	Rod End	1	25	213100	Snap Ring	1
5	161617	Rod End	1	26	894416	Bracket	1
6	314809	Rod End	1	27	292515	Capscrew	2
7	15002	Nut	2	28	292682	Washer	2
8	15004	Nut	2	29	136692	Nut	2
9	1301038	Link	1	30	894950	Cylinder	1
10	139012	Ball Joint	1	31	1301433	Fitting	4
11	1301203	Crank	1	32	894949	Clevis	1
12	313860	Bearing	2	33	139012	Ball Joint	1
13	221420	Capscrew	2	34	894951	Bracket	1
14	15154	Washer	3	35	3039895	Pin	1
15	221703	Nut	2	36	1198539	Pin	1
16	340213	Screw	1	37	15024	Nut	2
17	320161	Washer	1	38	15154	Washer	1
18	1301041	Spring	1	39	221704	Nut	1
19	296011	Capscrew	2	40	1346972	Cable	1
20	329069	Nut	3	41	1327708	Bracket	1
21	1327703	Spring	1	42	136985	Capscrew	4
				43	292682	Lockwasher	4

RANGE CONTROL (FIGURE 137)

WITH AUTOSHIFT

TRANSMISSION S/N T050M-6089

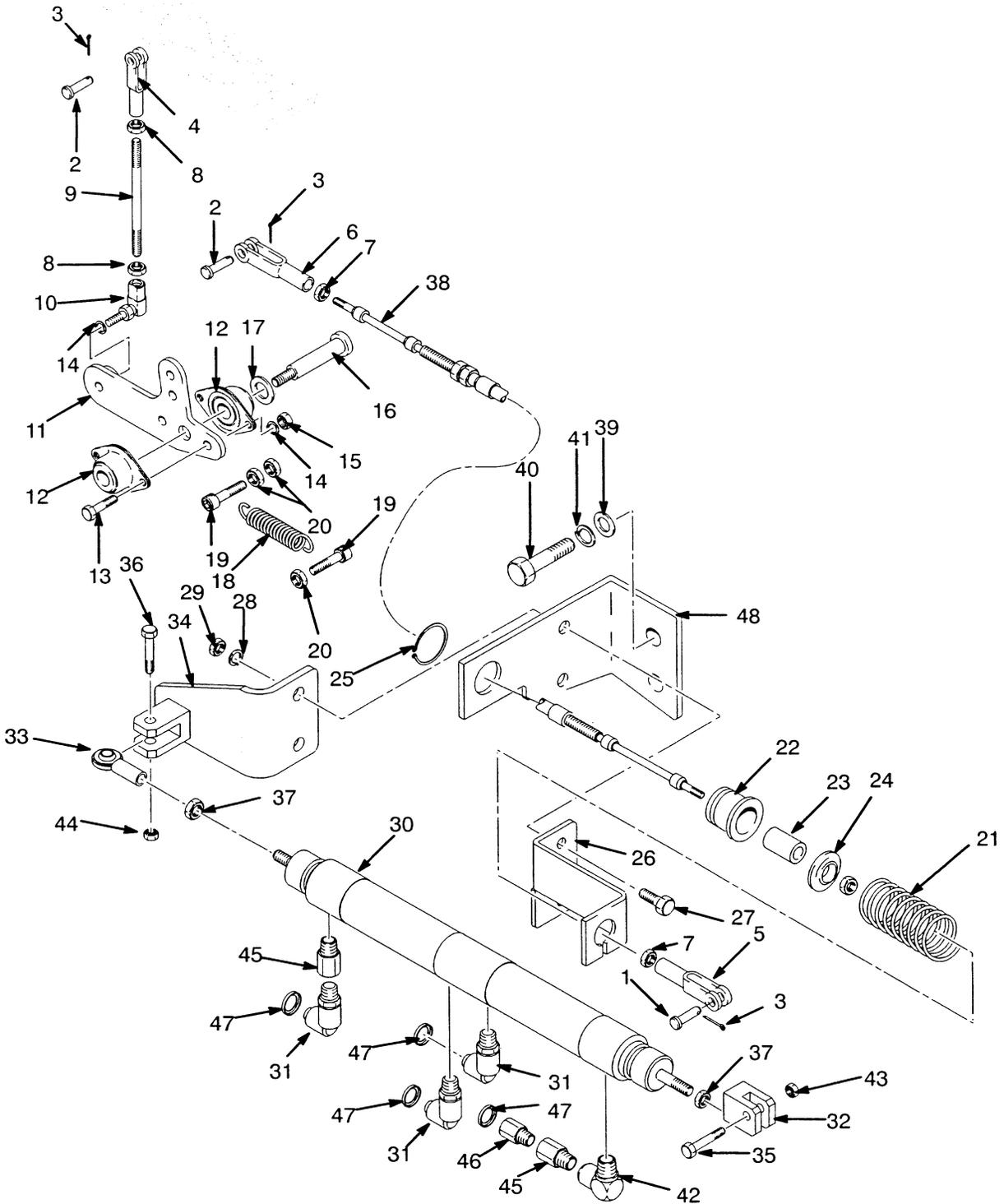
USED ON S/N D19D-2721 THRU S/N PENDING PER ECN 63481



**RANGE CONTROL
WITH AUTOSHIFT
TRANSMISSION S/N T050M-6089
USED ON S/N D19D-2721 THRU S/N PENDING PER ECN 63481**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	309109	Pin	1	22	1327746	Bushing	1
2	126	Pin	2	23	1327747	Guide	1
3	15201	Pin	3	24	1327748	Sleeve	1
4	125	Rod End	1	25	213100	Snap Ring	1
5	161617	Rod End	1	26	894416	Bracket	1
6	314809	Rod End	1	27	292515	Capscrew	2
7	15002	Nut	2	28	292682	Washer	2
8	15004	Nut	2	29	136692	Nut	2
9	1301038	Link	1	30	894950	Cylinder	1
10	139012	Ball Joint	1	31	1301433	Fitting	4
11	1301203	Crank	1	32	894949	Clevis	2
12	313860	Bearing	2	33	2037089	Pin-Clevis	2
13	221420	Capscrew	2	34	2037088	Bracket	1
14	15154	Washer	3	35	2037090	Retaing Ring	2
15	221703	Nut	2	36	15024	Nut	2
16	340213	Screw	1	37	15127	Washer	2
17	320161	Washer	1	38	1346972	Cable	1
18	1301041	Spring	1	39	320158	Washer	4
19	296011	Capscrew	2	40	136985	Capscrew	4
20	329069	Nut	3	41	292682	Lockwasher	4
21	1327703	Spring	1	42	1327708	Bracket	1

RANGE CONTROL (Figure 138) WITH AUTOSHIFT FIRST USED ON S/N PENDING PER ECN 63481



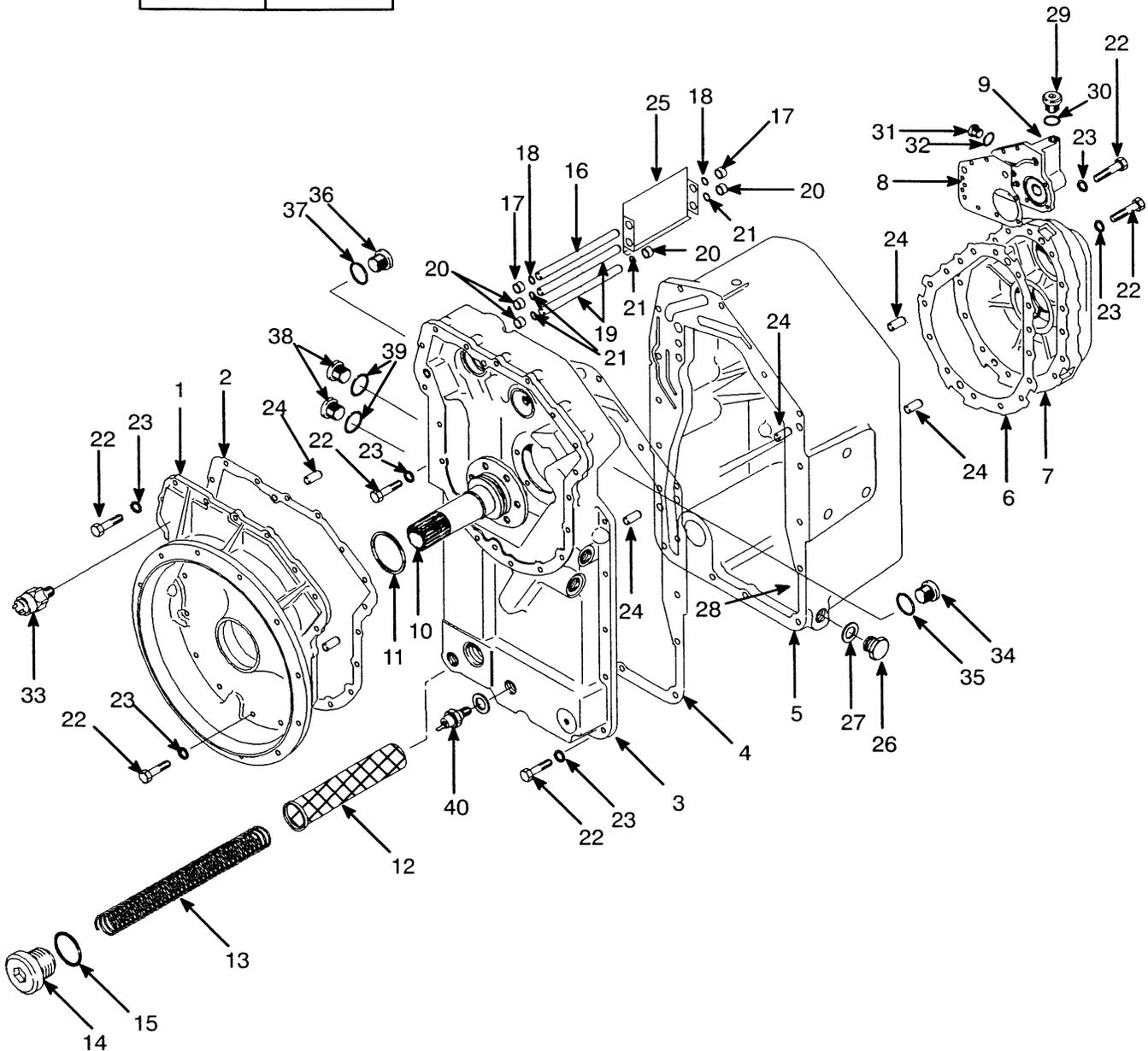
**RANGE CONTROL
WITH AUTOSHIFT
FIRST USED ON S/N PENDING PER ECN 63481**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	309109	Pin	1	25	213100	Circlip	1
2	126	Pin	2	26	894416	Bracket	1
3	15201	Pin	3	27	287860	Hex Head Bolt	2
4	125	Rod End	1	28	292682	Washer	2
5	161617	Rod End	1	29	292655	Nut	2
6	314809	Rod End	1	30	1470910	Cylinder	1
7	15002	Nut	2	31	1301433	Fitting	3
8	15004	Nut	2	32	1470911	Clevis	1
9	1301038	Link	1	33	1470912	Rod End	1
10	139012	Ball Joint	1	34	1470913	Bracket	1
11	1301203	Crank	1	35	1470916	Clevis Pin	1
12	313860	Bearing	2	36	1470912	Clevis Pin	1
13	221420	Hex Head Bolt	2	37	15025	Nut	2
14	15154	Washer	3	38	1346972	Cable	1
15	221703	Nut	2	39	320158	Washer	4
16	340213	Screw	1	40	136681	Hex Head Bolt	4
17	320161	Washer	1	41	292681	Lockwasher	4
18	1301041	Spring	1	42	16151	Fitting	1
19	296011	Hex Head Bolt	2	43	15106	Nut	1
20	329069	Nut	3	44	15107	Nut	1
21	1327703	Spring	1	45	1471320	Fitting	2
22	1327746	Bush	1	46	1359661	Fitting	1
23	1327747	Guide	1	47	1301434	Button	4
24	1327748	Sleeve	1	48	1327708	Bracket	1

TRANSMISSION (FIGURE 139)

LAST USED ON TRANSMISSION S/N T050M-6088
LAST USED ON S/N D19D-2438

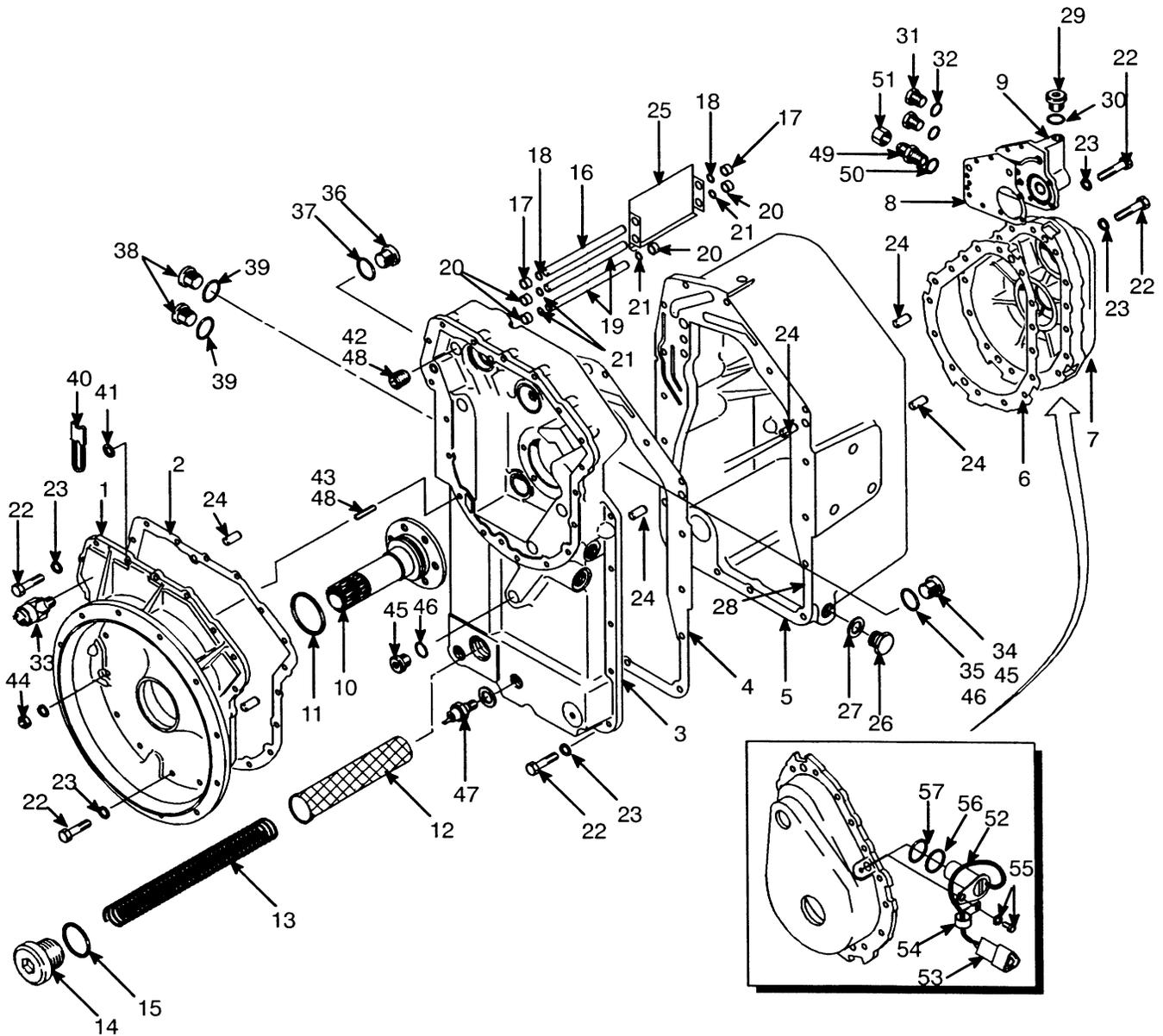
PARTS-SERVICE GRAM	
ITEM	GRAM
3	C-B-110



TRANSMISSION
LAST USED ON TRANSMISSION S/N T050M-6088
LAST USED ON S/N D19D-2438

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1327662	Transmission	1	22	287860	Capscrew	65
1	1327619	Housing	1	23	292682	Lockwasher	65
2	fa 1327657	Gasket	1	24	186420	Pin	6
3	b 1327621	Cover	1	25	1327803	Baffle	1
3	dc 1365940	Cover	1	26	14595	Plug	1
3	e 1450618	Cover	1	27	16484	O-Ring	1
4	abf 1327658	Gasket	1	28	334560	Magnet	1
4	acf 1365942	Gasket	1	29	235691	Fitting	1
5	b 1327615	Housing	1	30	16484	O-Ring	1
5	c 1365938	Housing	1	31	14591	Fitting	3
6	af 1327659	Gasket	1	32	16481	O-Ring	1
7	1327595	Cover	1	33	1323146	Oil Pressure Switch	1
8	af 1327660	Gasket	1	34	222444	Fitting	1
9	1327620	Manifold	1	35	16486	O-Ring	1
10	1327692	Support	1	36	233683	Fitting	1
11	af 1327710	Seal	1	37	16487	O-Ring	1
12	1327694	Screen	1	38	233693	Fitting	2
13	1327695	Spring	1	39	16485	O-Ring	1
14	188210	Fitting	1	40	114662	Temperature Sender	1
15	16983	O-Ring	1				
16	1327575	Tube	1	a	Included In Seal Kit 1365941 Last Used On S/N T050M-5063		
17	1327683	Spacer	2	b	Last Used On Xmsn S/N T050M-2389		
18	af 192293	O-Ring	2	c	First Used On Xmsn S/N T050M-2390		
19	1327624	Tube	2	d	Last Used On S/N T050M-5063		
20	1327671	Spacer	4	e	First Used On S/N T050M-5064		
21	af 87300	O-Ring	4	f	Included In Seal Kit 1450828 First Used On S/N T050M-5064		

TRANSMISSION (FIGURE 140) FIRST USED ON S/N D19D-2439 TRANSMISSION S/N T050M-6089

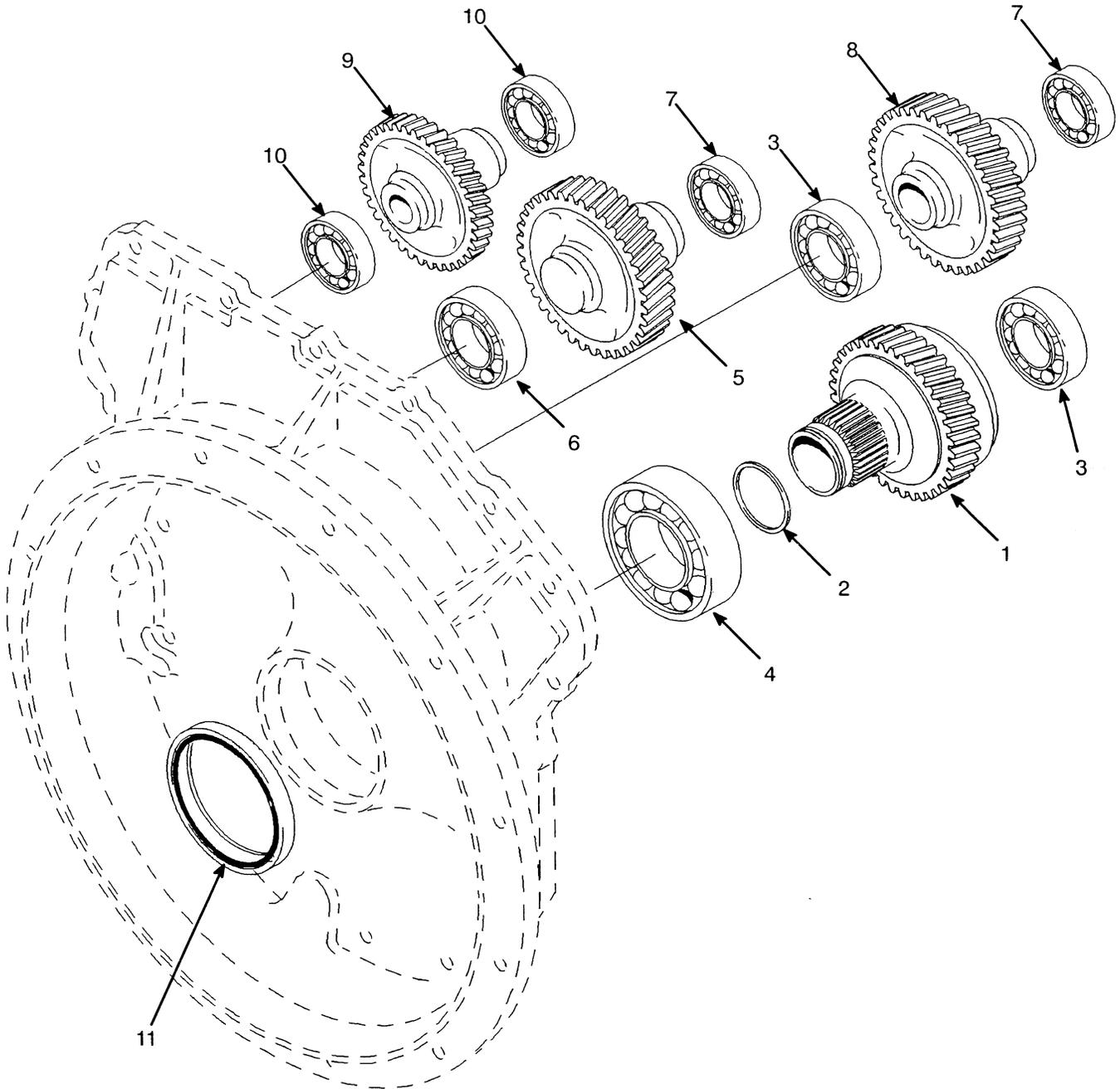


TRANSMISSION

FIRST USED ON S/N D19D-2439
TRANSMISSION S/N T050M-6089

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
c	894954	Transmission	1	31	14591	Fitting	2
	894956	Plug	1	32	16481	O-Ring	1
d	1456346	Transmission	1	33	1323146	Pressure Switch	1
1	1327619	Housing	1	34	222444	Fitting	1
2	a 1327657	Gasket	1	35	16486	O-Ring	1
3	ca 1450618	Cover	1	36	233683	Fitting	1
3	d 1456345	Cover	1	37	16487	O-Ring	1
4	a 1365942	Gasket	1	38	233693	Fitting	2
5	1365938	Housing	1	39	16485	O-Ring	1
6	a 1327659	Gasket	1	40	1345023	Strap	2
7	894953	Cover	1	41	320159	Washer	2
7	894956	Plug	1	42	a 15963	Fitting	4
8	a 1327660	Gasket	1	43	a 1365943	Stud	1
9	1327620	Manifold	1	44	a 136692	Nut	1
10	1327692	Support	1	45	a 222444	Fitting	2
11	a 1327710	Seal	1	46	a 16486	O-Ring	2
12	1327694	Screen	1	47	1322627	Temp Warning Switch	1
13	1327695	Spring	1	48	a 264159	Adhesive	AR
14	188210	Fitting	1	49	16538	Fitting	1
15	16983	O-Ring	1	50	16481	O-Ring	1
16	1327575	Tube	1	51	16923	Fitting	1
17	1327683	Spacer	2	52	b 894958	Sensor	1
18	a 192293	O-Ring	2	53	b 1330410	Connector	1
19	1327624	Tube	2	53	b 1330415	Lock	1
20	1327671	Spacer	4	54	b 177599	Clamp	1
21	a 87300	O-Ring	4	55	b 292500	Capscrew	1
22	a 287860	Capscrew	64	55	b 292680	Washer	1
23	292682	Lockwasher	67	56	b 223625	Back-up Ring	1
24	186420	Pin	6	57	b 39349	O-Ring	1
25	1327803	Baffle	1				
26	14595	Plug	1	a	Included In Seal Kit 1450828		
27	16484	O-Ring	1	b	With Autoshift		
28	334560	Magnet	1	c	Last Used On S/N T050M 6788		
29	235691	Fitting	1	d	First Used On S/N T050M 6789		
30	16484	O-Ring	1				

PUMP DRIVE GEARS (FIGURE 141)



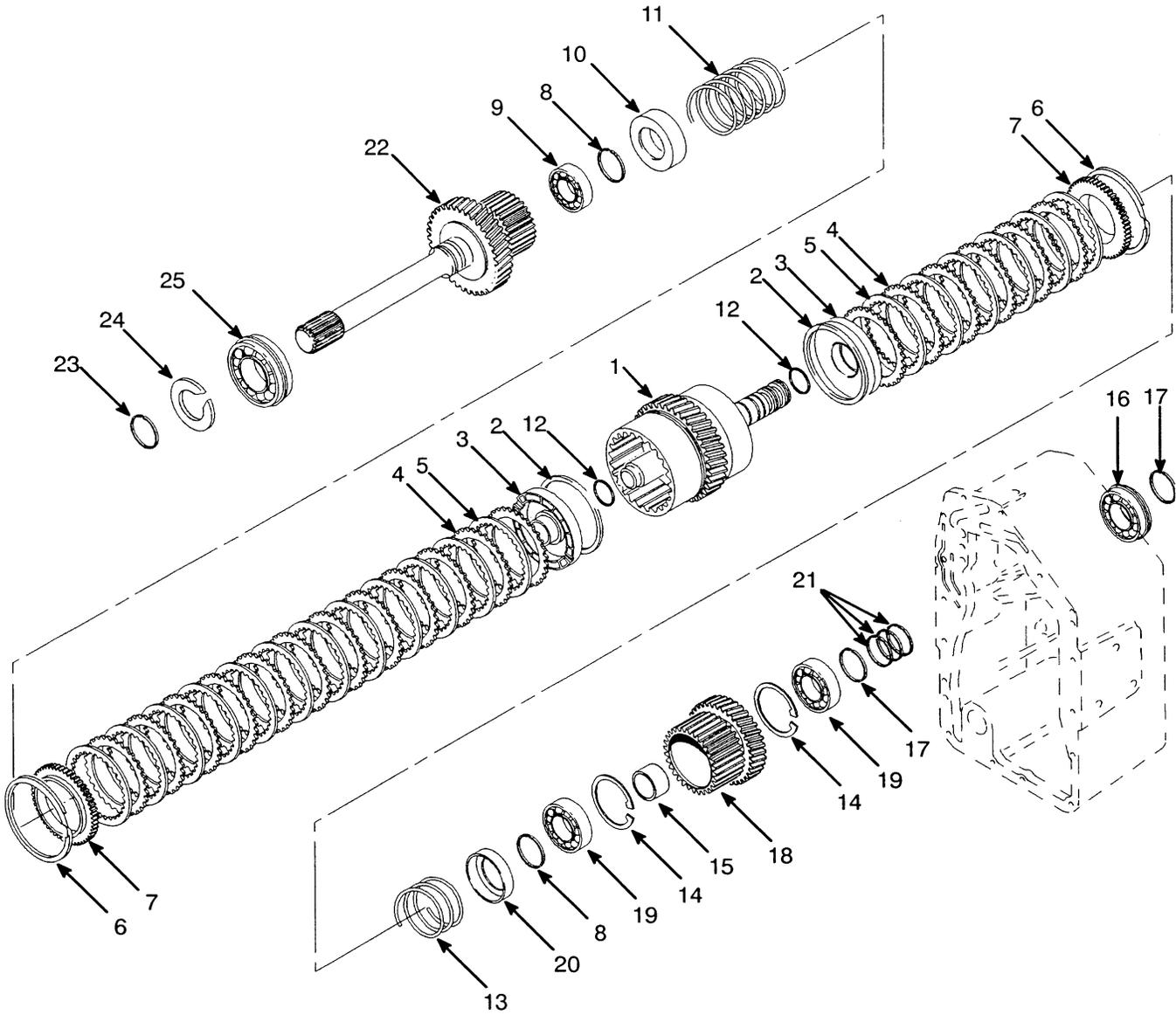
REF	PART NO.	NAME OF PART	QTY
1	1327611	Input Gear (P.T.O.)	1
2	^a 1327663	O-Ring	1
3	43211	Bearing	2
4	43215	Bearing	1
5	1327598	Idler Gear (P.T.O.)	1
6	43209	Bearing	1
7	44309	Bearing	2

REF	PART NO.	NAME OF PART	QTY
8	1327596	Output Gear (P.T.O.)	1
9	1327606	Charge Pump Gear (P.T.O.)	1
10	44307	Bearing	2
11	^a 1327696	Seal	1

^a Included In Seal Kit 1365941

CLUTCH (FIGURE 142) FORWARD AND LOW

PARTS-SERVICE GRAM	
ITEM	GRAM
4	C-B-11 (E)



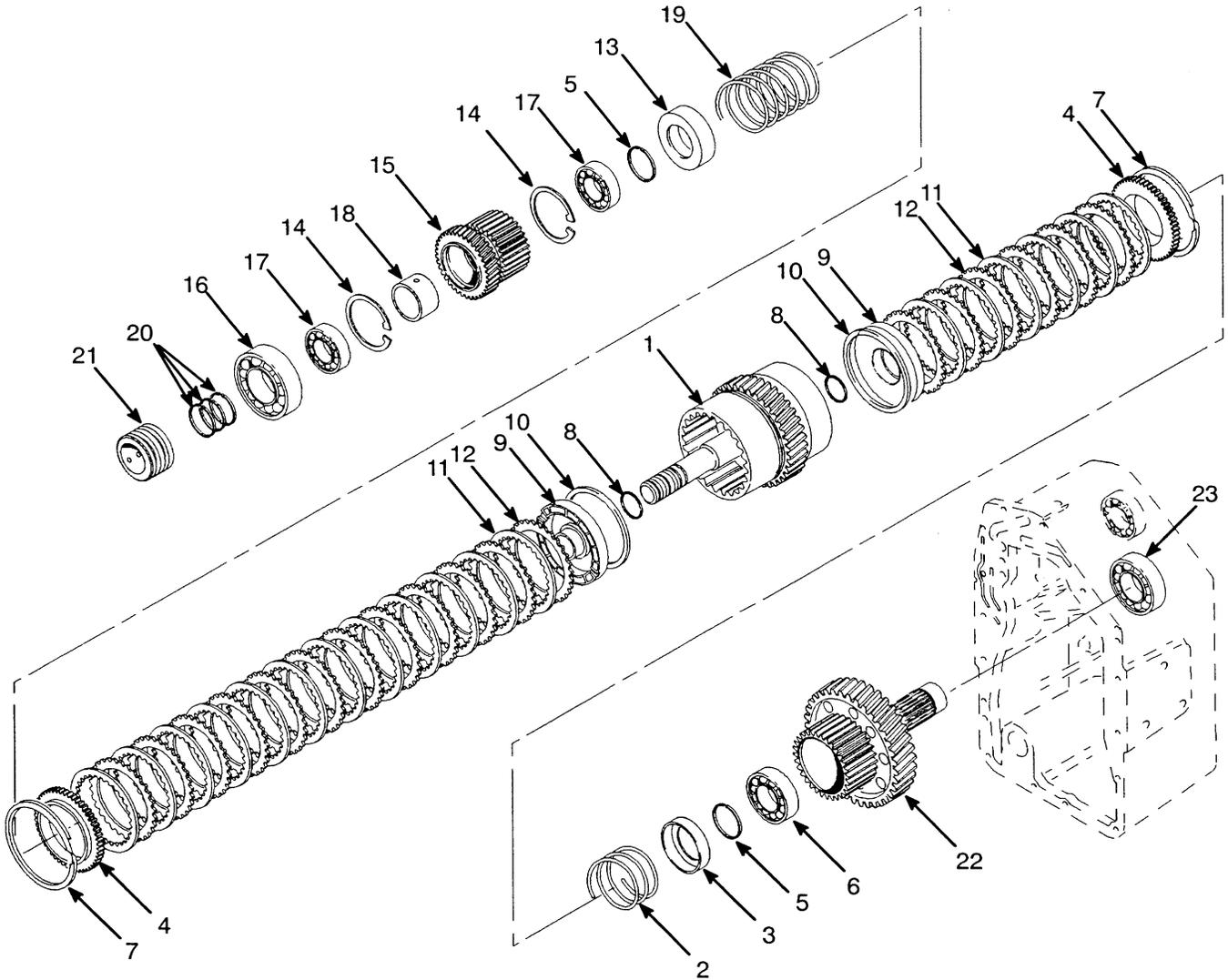
**CLUTCH
FORWARD AND LOW**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1327664	Clutch Pack	1	14	58911	Snap Ring	2
1	1327667	Shaft	1	15	1327651	Spacer	1
2 ^a	334402	Seal	2	16	124682	Bearing	1
3	1327582	Piston	2	17	346675	Snap Ring	2
4	334417	Separator Plate	18	18	1327591	Gear (Low)	1
5	1469300	Friction Plate	18	19	124642	Bearing	2
6	334475	Snap Ring	2	20	1327602	Cup	1
7	334442	Pressure Plate	2	21 ^a	346677	Seal	3
8	334480	Snap Ring	2	22	1327583	Input Shaft	1
9	44308	Bearing	1	23 ^a	1327653	Seal	1
10	1327601	Cup	1	24	41459	Snap Ring	1
11	1327603	Spring	1	25	124744	Bearing	1
12 ^a	346795	O-Ring	2				
13	346671	Spring	1				

^a Included In Seal Kit 1365941

CLUTCH (FIGURE 143) REVERSE AND SECOND

PARTS-SERVICE GRAM	
ITEM	GRAM
12	C-B-11 (E)



**CLUTCH
REVERSE AND SECOND**

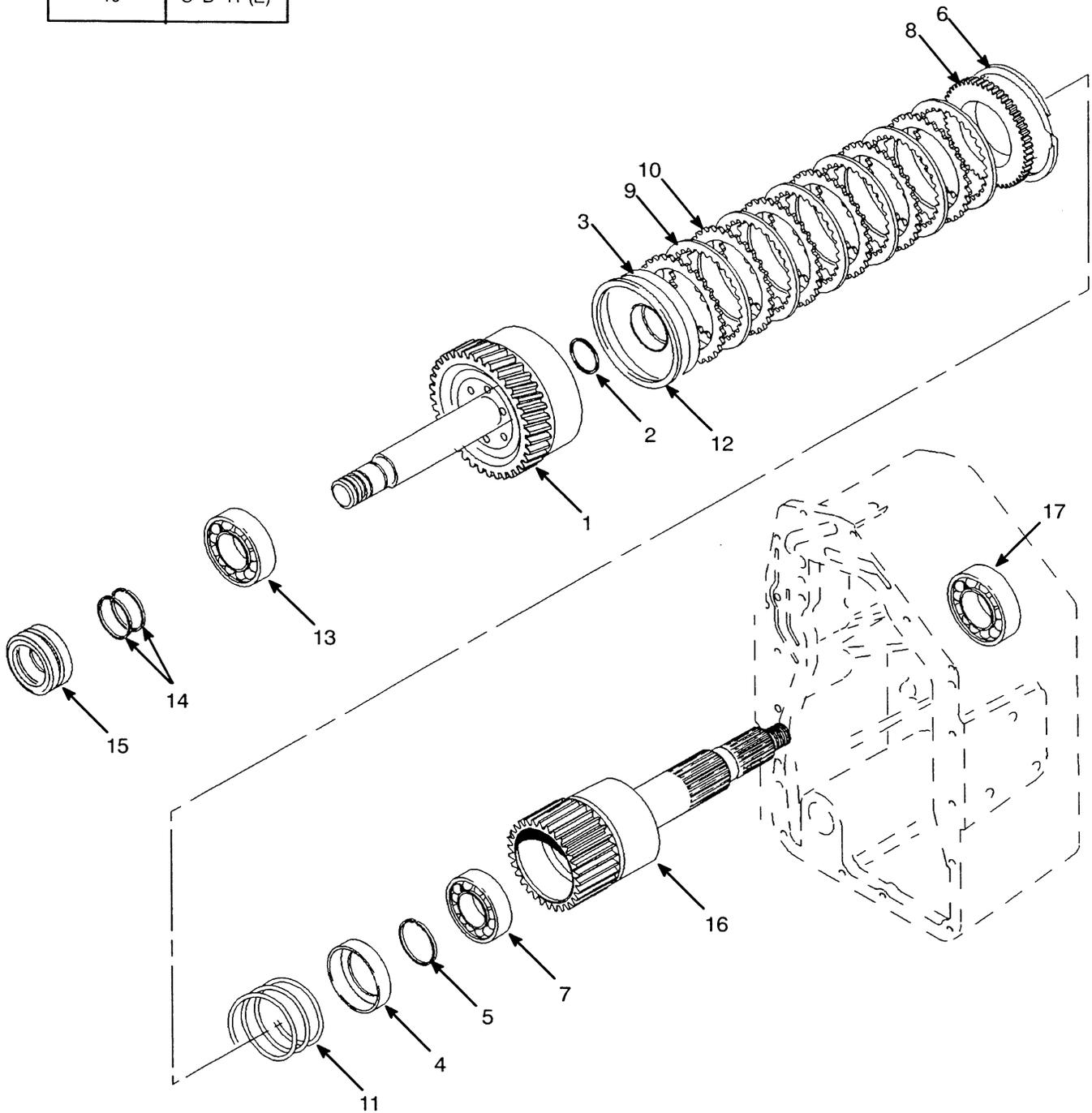
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1327665	Clutch Pack	1	14	12894	Snap Ring	2
1	1327668	Shaft	1	15	1327608	Gear (Reverse)	1
2	346671	Spring	1	16	43308	Bearing	1
3	1327602	Cup	1	17	124606	Bearing	2
4	334442	Pressure Plate	2	18	1327650	Spacer	1
5	334480	Snap Ring	2	19	1327603	Spring	1
6	43307	Bearing	1	20	a 346677	Seal	3
7	334475	Snap Ring	2	21	b 1327605	Bushing	1
8	a 346795	O-Ring	2	22	1327588	Shaft	1
9	1327582	Piston	2	23	41310	Bearing	1
10	a 334402	Seal	2				
11	1469300	Friction Plate	18				
12	334417	Separator Plate	18				
13	1327601	Cup	1				

a Included In Seal Kit 1365941

b Last Used On Transmission S/N T050-6788

CLUTCH (FIGURE 144) THIRD

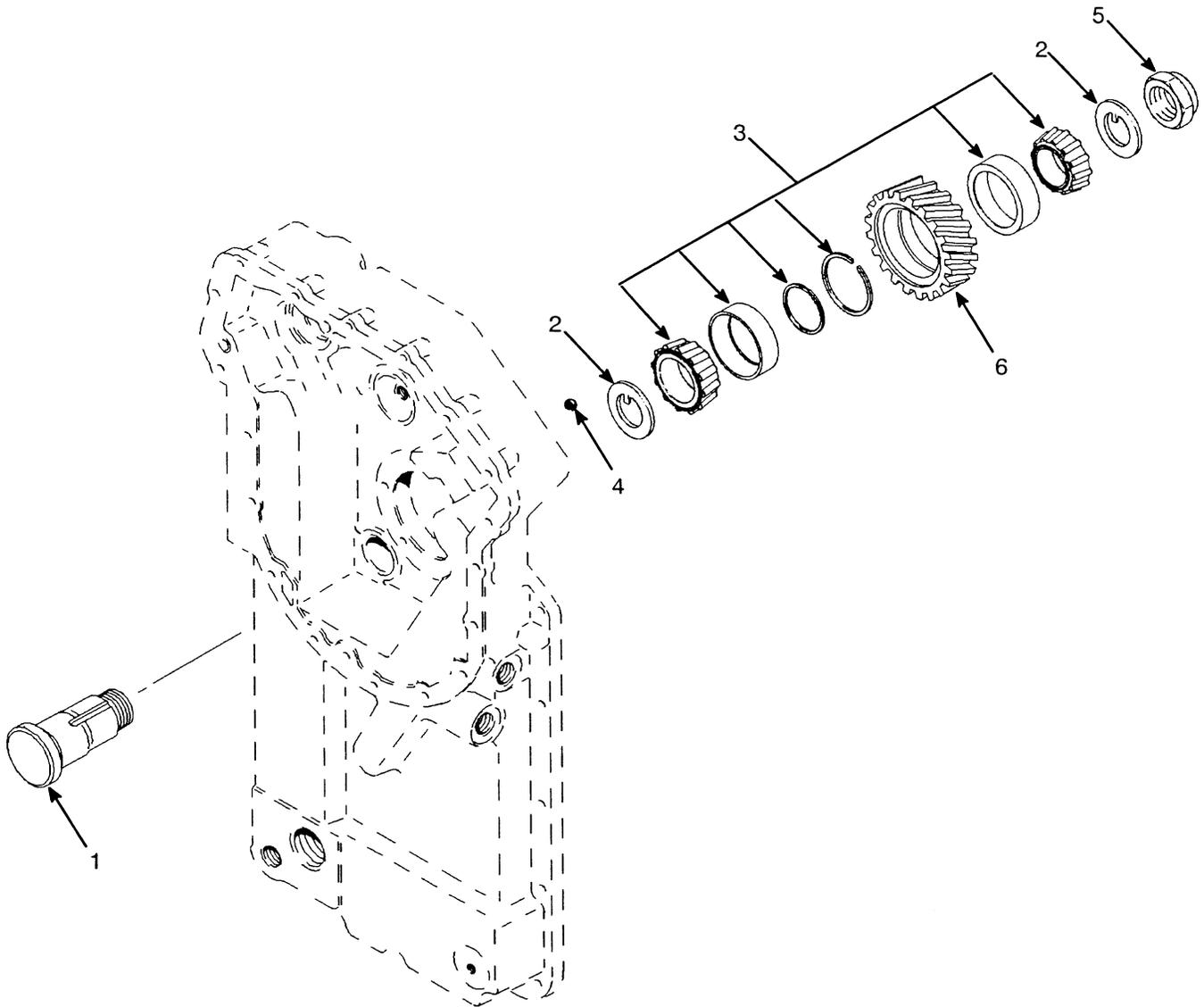
PARTS-SERVICE GRAM	
ITEM	GRAM
10	C-B-11 (E)



**CLUTCH
THIRD**

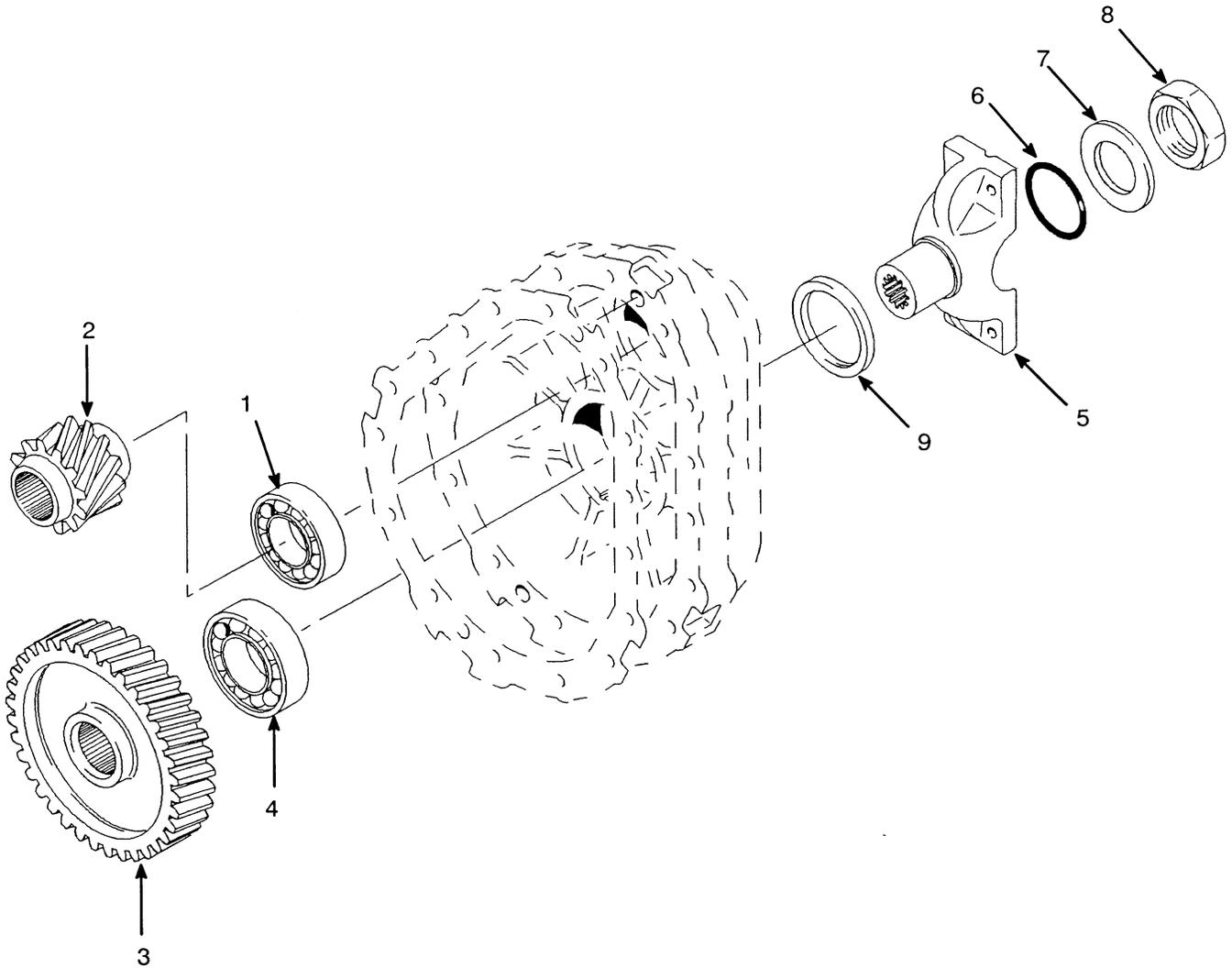
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1327666	Clutch Pack	1	11	346671	Spring	1
1	1327670	Shaft	1	12 a	334402	Seal	1
2 a	346795	O-Ring	1	13	43308	Bearing	1
3	1327582	Piston	1	14 a	346677	Seal	2
4	1327602	Cup	1	15 b	346716	Bushing	1
5	334480	Snap Ring	1	16	1327587	Shaft	1
6	334475	Snap Ring	1	17	43212	Bearing	1
7	43208	Bearing	1				
8	334442	Pressure Plate	1	a	Included In Seal Kit 1365941		
9	1469300	Friction Plate	6	b	Last Used On S/N T050-6788		
10	334417	Separator Plate	6				

IDLER SHAFT (FIGURE 145)



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1327745	Shaft	1	4	55280	Ball	1
2	1327652	Washer	2	5	1327732	Nut	1
3	1327711	Bearing	1	6	1327590	Gear	1

OUTPUT GEAR (FIGURE 146)

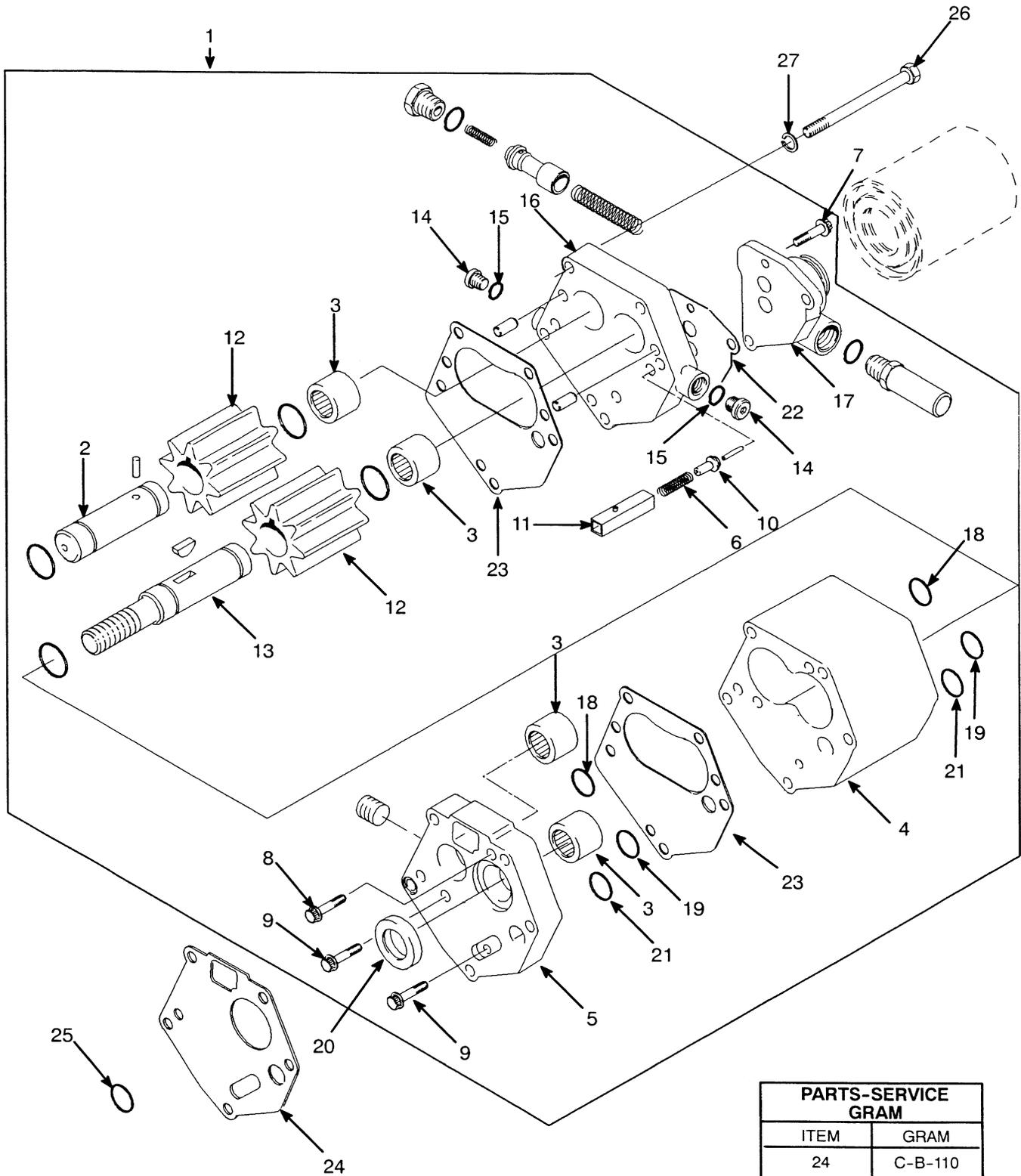


REF	PART NO.	NAME OF PART	QTY
1	43308	Bearing	1
2	1327593	Gear (Second)	1
3	1327592	Output Gear	1
4	43310	Bearing	1
5	1327616	Yoke (Output)	1
6 ^a	60835	O-Ring	1

REF	PART NO.	NAME OF PART	QTY
7	15128	Flatwasher	1
8 ^a	1327697	Nut	1
9 ^a	44479	Seal	1

^a Included In Seal Kit 1365941

CHARGE PUMP (FIGURE 147)



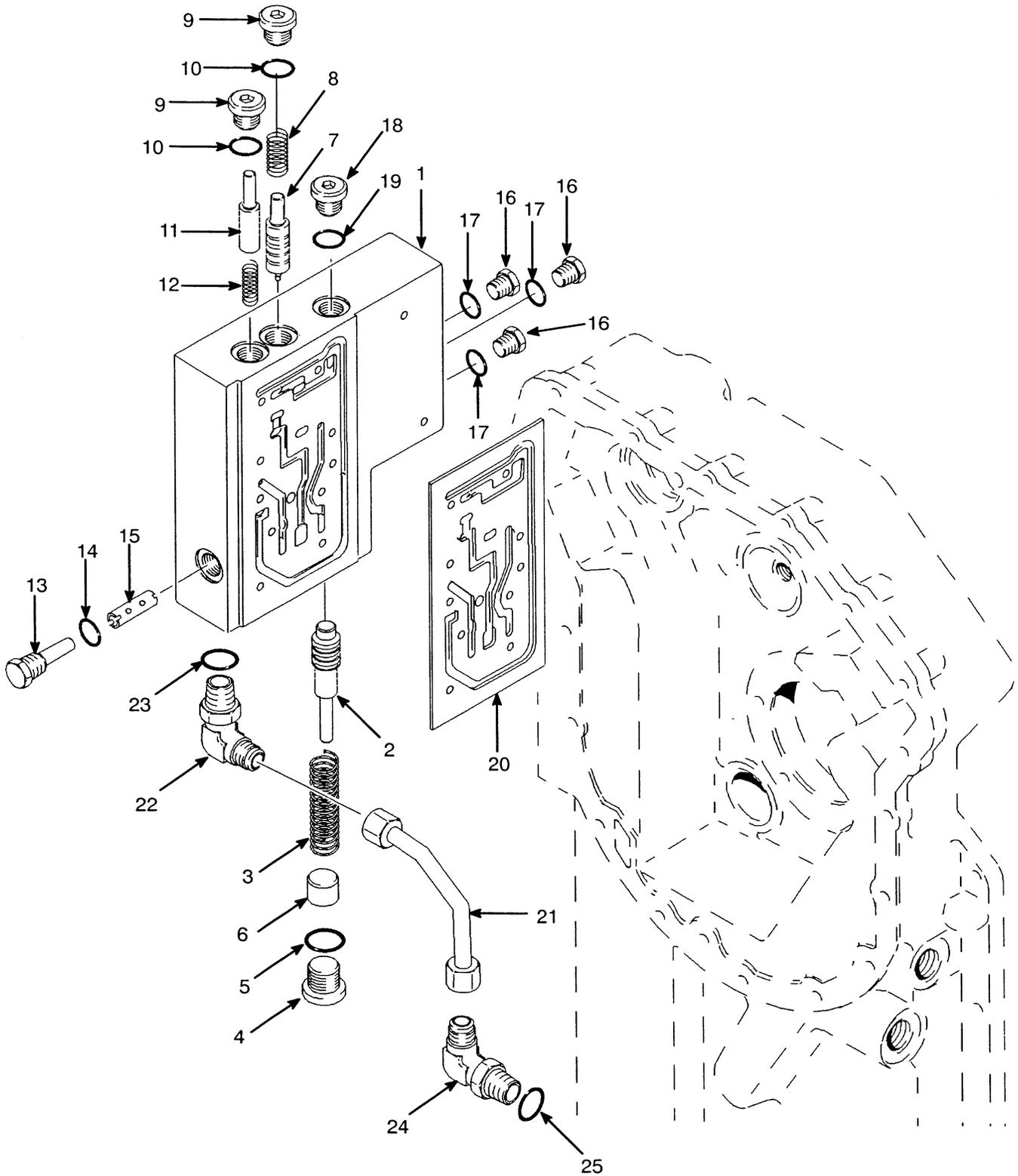
PARTS-SERVICE GRAM	
ITEM	GRAM
24	C-B-110

CHARGE PUMP

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1327612	Charge Pump	1	21	a	O-Ring	2
2	....	Idler Shaft	1	22	a	Gasket	1
3	....	Bearing	4	23	ac	1363008 Shim-Purple .0015 in.	2
4	....	Housing	1	23	ac	1363009 Shim-Orange .0010 in.	2
5	....	Housing	1	24	db	1327661 Gasket	1
6	....	Spring	1	24	e	1450488 Gasket	1
7	....	Screw	1	25	fb	87281 O-Ring	1
8	....	Screw	1	26		18580 Capscrew	5
9	....	Screw	2	27		15157 Lockwasher	5
10	....	Plunger	1				
11	....	Housing	1				
12	....	Gear	2				
13	....	Drive Shaft	1				
14	134436	Fitting	2				
15	16482	O-Ring	1				
16	....	Housing	1				
17	1354770	Filter Head	1				
18	a	O-Ring	2				
19	a	O-Ring	2				
20	a	Seal	1				

- a Included In Seal Kit 1357035
- b Included In Seal Kit 1357865
- c Shims Removed From Pump Need To Be Replaced By The Same Color Shims.
- d Last Used On S/N T050M-5064
- e First Used On S/N T050M-5064
- f Included In Seal Kit 1450828 First Used On S/N T050M-5064

MODULATOR VALVE (FIGURE 148)



MODULATOR VALVE

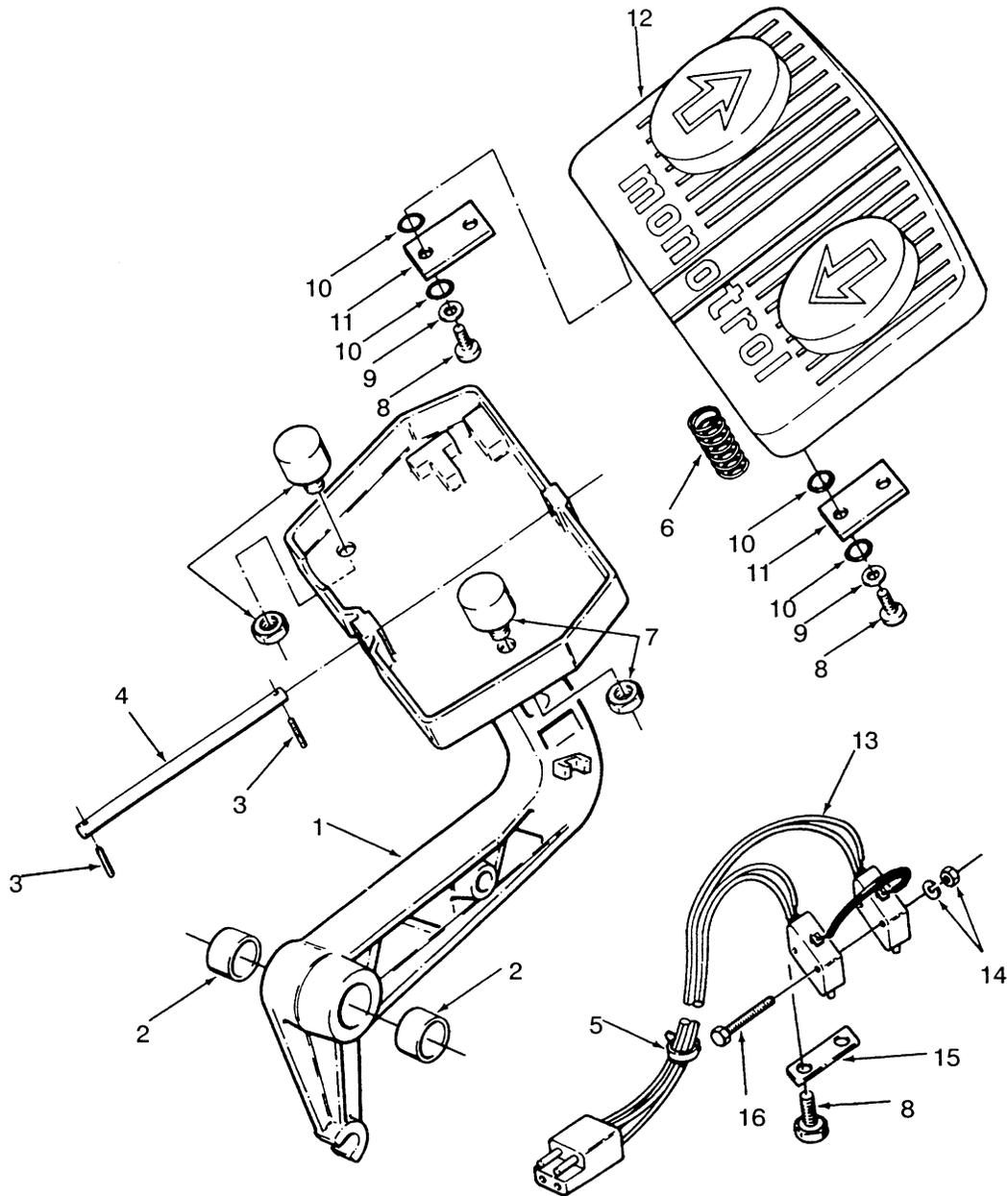
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	b 1327649	Modulator Valve	1	14	a 16484	O-Ring	1
1	c 1452258	Modulator Valve	1	15	1327644	Spool (Check)	1
2	346788	Spool (Accumulator)	1	16	14591	Fitting	3
3	346636	Spring	1	17	16481	O-Ring	1
4	200659	Fitting	1	18	233693	Fitting	1
5	16982	O-Ring	1	19	16485	O-Ring	1
6	346848	Spacer	1	20	a 1327646	Gasket	1
7	b 346634	Spool (Trimmer)	1	21	1327655	Tube	1
7	c 1452262	Spool (Trimmer)	1	22	16558	Fitting	1
8	346805	Spring	1	23	16483	O-Ring	1
9	235691	Fitting	2	24	222400	Fitting	1
10	16484	O-Ring	1	25	16485	O-Ring	1
11	b 334542	Spool (Dump)	1	a Included In Seal Kit 1357866 b Last Used On transmission S/N T050M-6248 c First Used On Transmission SS/N T050M-6249			
11	c 1455641	Spool (Dump)	1				
12	334543	Spring	1				
13	1327643	Plug	1				

CONTROL VALVE

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1327625	Control Valve	1	23	1327641	Spacer	1
2	1327628	Spool (Range)	1	24	1390609	Solenoid Valve	2
3	^a 1327630	Retainer	1	24	1452597	Coil	1
4	^a 334500	Seal	1	24	1452596	Cartridge	1
5	16925	Fitting	1	24	1393160	Kit-Seal	1
6	16541	Fitting	1	25	222442	Fitting	4
7	16484	O-Ring	1	26	16481	O-Ring	1
8	21278	Ball	1	27	14591	Fitting	2
9	1327811	Spring	1	28	16481	O-Ring	1
10	1327633	Spool (Inching)	1	29	1327743	Insert	1
11	334543	Spring	1	30	^a 1327645	Gasket	1
12	1327634	Spring	1	31	1327647	Capscrew	5
13	1327635	Plunger	1	32	1307994	Capscrew	3
14	1327636	Spring	1	33	136703	Capscrew	2
15	1327742	Plug	1	34	136704	Capscrew	2
16	^a 95721	O-Ring	1	35	320157	Flatwasher	14
17	^a 16486	O-Ring	1	36	239503	Nut	2
18	^a 1327638	Seal	1	37	292681	Lockwasher	2
19	1327639	Spool	2	38	16556	Fitting	1
20	1327640	Spring	1	38	16481	O-Ring	1
21	233693	Fitting	1	39	16923	Fitting	1
22	16485	O-Ring	1				

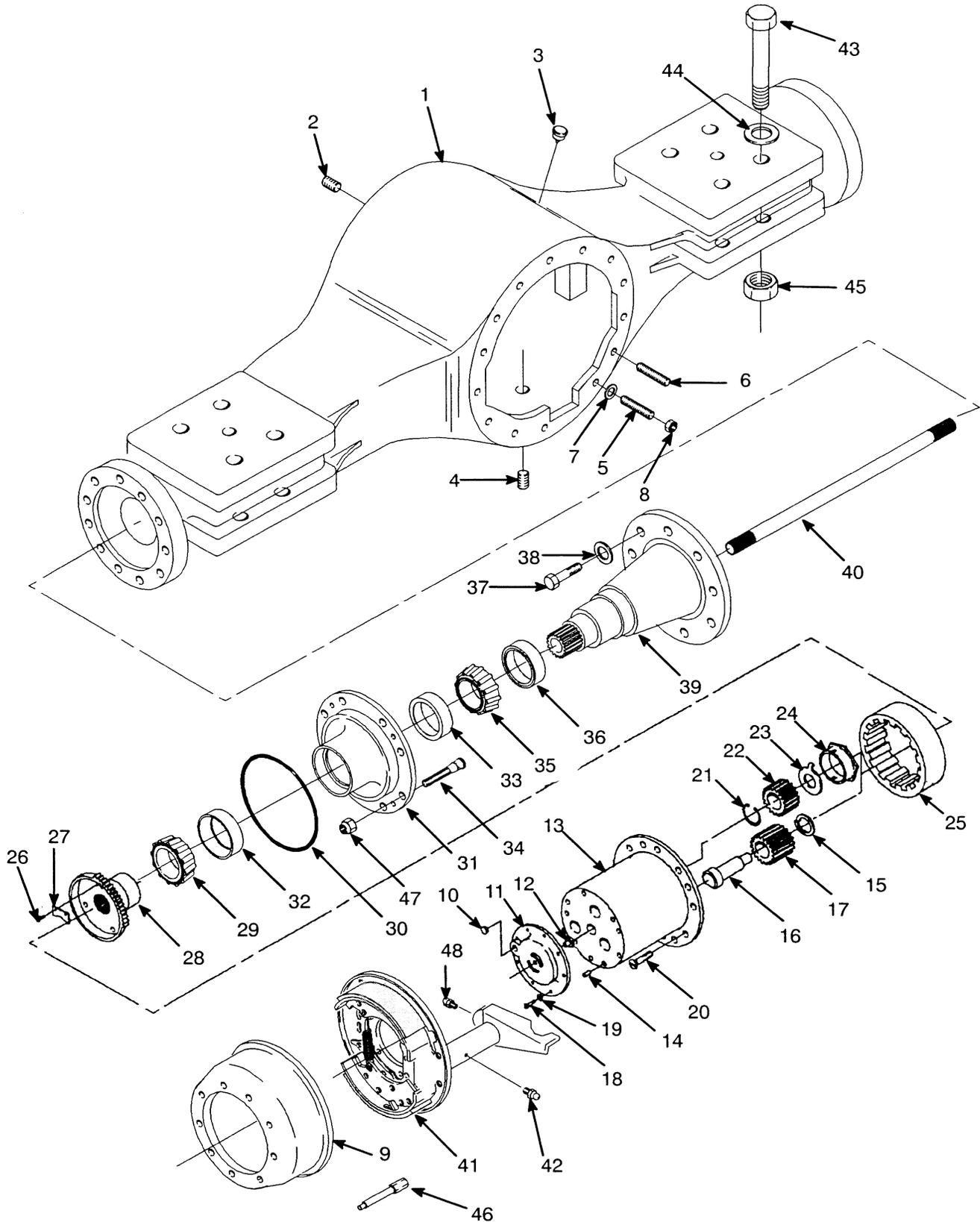
^a Included In Seal Kit 1357866

MONOTROL PEDAL (FIGURE 150)



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	353398	Pedal	1	8	352969	Screw	6
1	353397	Pedal	1	9	353448	Washer	4
2	135685	Bushing	2	10	57568	O-Ring	8
3	220932	Screw	2	11	359207	Plate	2
3	360387	Loctite	AR	12	353175	Pedal Pad	1
4	353154	Pin	1	13	353220	Switch	1
5	114312	Strap Clamp	3	14	53162	Lockwasher	2
6	353168	Spring	1	14	16865	Nut	2
7	353422	Magnet	2	15	353165	Retainer	1
7	353432	Jam Nut	2	16	220434	Screw	2

DRIVE AXLE (FIGURE 151)



DRIVE AXLE

KEY:

A: EC-4 (Last Used On S/N D19D-1965)

B: NON-EC & EC-3 (Last Used On S/N D19D-1619)

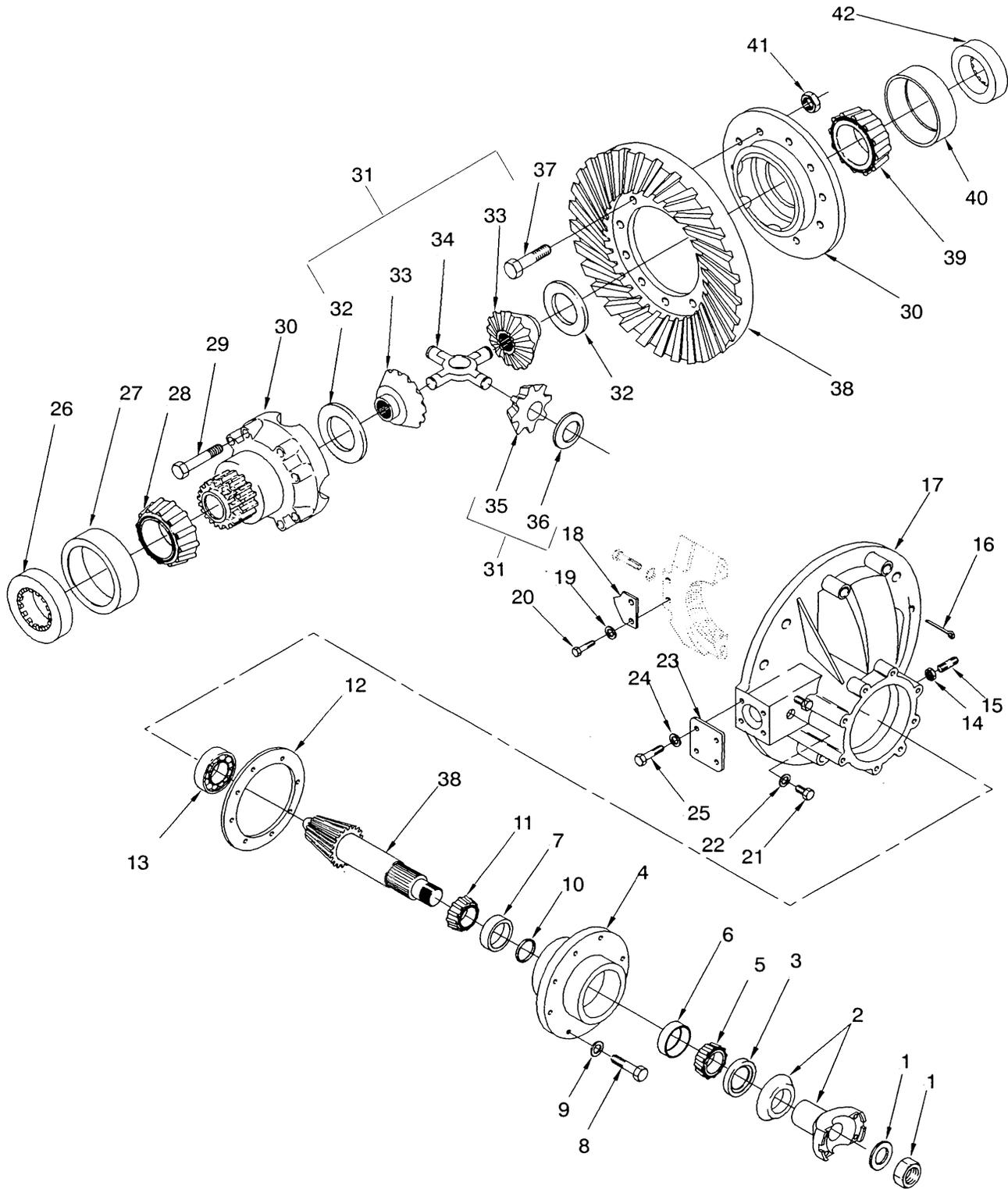
C: NON-EC & EC-3 (Used On S/N D19D-1620 Thru S/N D19D-1781)

D: NON-EC & EC-3 (First Used On S/N D19D-1782)

REF	PART NO.	NAME OF PART	QTY				REF	PART NO.	NAME OF PART	QTY			
			A	B	C	D				A	B	C	D
	1309568	Drive Axle	1	..	..	..	20	1313869	Screw	10	10	10	10
	387080	Drive Axle	1	..	..	..	21	1316041	Snap Ring	2	2	2	2
	1360969	Drive Axle	..	1	..	..	22	1329694	Sun Gear	2	2	2	2
	1376020	Drive Axle	..	..	1	..	23	1316045	Thrust Washer	2	2	2	2
a	1452781	Drive Axle	..	..	1	..	24	1316042	Nut	2	2	2	2
	....	Differential	1	1	..	..	25	1316312	Ring Gear	2	2	2	2
		☞ (Figure 152)					26	199567	Capscrew	4	4	4	4
	....	Differential	..	1	1	..	27	1316043	Lock	2	2	2	2
		☞ (Figure 154)					28	1316313	Hub (Ring Gear)	2	2	2	2
1	1329691	Housing	1	..	..	..	29	170379	Bearing Cone	2	2	2	2
1	1315649	Housing	..	1	..	..	30	1312805	O-Ring	2	2	2	2
1	1374586	Housing	..	1	..	..	31	1316047	Wheel Hub	2	2	2	2
1	1380786	Housing	..	..	1	..	32	170380	Bearing Cup	1	1	1	1
2	15316	Fitting	1	1	1	1	33	132462	Bearing Cup	1	1	1	1
3	200445	Breather	1	1	1	1	34	1312806	Stud	20	20	20	20
4	321293	Plug	1	1	1	1	35	1316314	Bearing Cone	2	2	2	2
5	304242	Stud (Short)	8	8	..	..	36	1312807	Oil Seal	2	2	2	2
5	214195	Stud (Short)	..	..	8	..	37	1316049	Capscrew	26	26	26	26
5	1347588	Screw	..	8	..	..	38	268980	Washer	26	26	26	26
6	1316039	Stud (Long)	4	4	..	..	39	1316316	Spindle	2	2	2	2
6	1380784	Stud (Long)	..	..	4	..	40	1329700	Axle Shaft (RH)	1	..	..	..
7	221771	Washer	12	12	..	..	40	1316317	Axle Shaft (RH)	..	1	1	..
7	86007	Washer	..	12	12	..	40	1329701	Axle Shaft (LH)	1	..	..	..
8	221355	Nut	12	12	..	..	40	1316318	Axle Shaft (LH)	..	1	1	..
8	358099	Nut	..	12	12	..	40	1374598	Axle Shaft (LH)	..	..	..	1
9	1316306	Brake Drum	2	2	2	2	40	1374599	Axle Shaft (RH)	..	..	..	1
10	321293	Plug	2	2	2	2	41	....	Brake	2	2	..	..
11	1316307	Cover	2	2	2	2		☞ (Figure 129)					
12	1303551	Thrust Button	1	1	2	1	42	16001	Lube Fitting	2	2	2	..
13	1374596	Spider Assy	1	1	1	1	43	1323889	Capscrew	8	8	8	8
13	1329693	Spider	..	2	..	..	44	221780	Washer	16	16	16	..
13	1377887	Spider	2	2	..	2	45	221720	Nut	8	8	8	..
14	1316040	Pin	3	3	3	3	46	1303417	Valve Extension	2	2	2	..
15	1316044	Thrust Washer	3	3	3	3	47	376026	Nut	20	20	20	..
16	1316309	Shaft	3	3	3	3	48	16015	Lube Fitting	2	2	2	..
17	1316310	Pinion Gear	3	3	3	3							
18	16815	Capscrew	12	12	12	12	a	Turbo-DSL with Low Emissions First Used On D19D-2377					
19	221767	Washer	12	12	12	12							

DIFFERENTIAL (FIGURE 152)

LAST USED ON S/N D19D-1619-NON-EC AND EC-3
LAST USED ON S/N D19D-1965-EC4



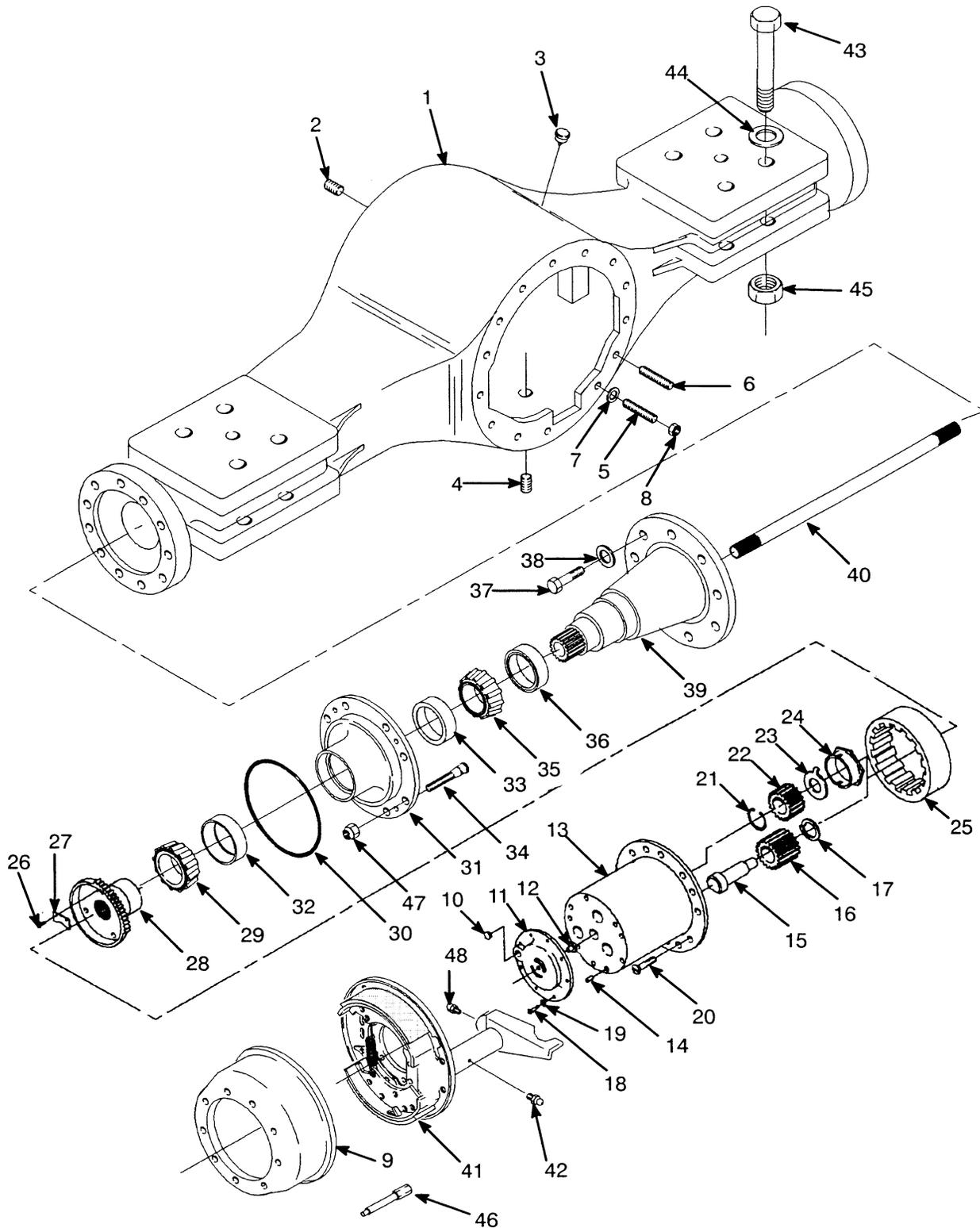
DIFFERENTIAL

LAST USED ON S/N D19D-1619-NON-EC AND EC-3

LAST USED ON S/N D19D-1965-EC4

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1328924	Carrier	1	21	1312620	Capscrew	1
1	1357208	Nut	1	22	1313885	Washer	1
1	287719	Flatwasher	1	23	1312637	Cover	1
2	1312633	Yoke	1	24	1328919	Washer	4
2	1328921	Yoke	1	25	1459565	Capscrew	4
2	1312634	Deflector	1	26	1312638	Ring	1
3	366057	Seal	1	27	1313887	Bearing Cup	1
4	1312635	Cage	1	28	1313888	Bearing Cone	1
5	1313876	Bearing Cone	1	29 ^a	1373928	Bolt	12
6	230419	Bearing Cup	1	30	1459763	Case (2 Pieces)	1
7	200972	Bearing Cup	1	31	1328917	Kit-Differential	1
8	293647	Capscrew	8	32	1313889	Washer	2
9	88587	Washer	8	33	1312640	Side Gear	2
10	378289	Kit-Spacer	1	34	1312641	Spider	1
11	143004	Bearing Cone	1	35	1312642	Pinion	4
12	1313883	Kit-Shim	1	36	1313890	Washer	4
13	1313884	Bearing	1	37	1302735	Bolt	12
14	1312616	Nut	1	38	1312643	Gear and Pinion	1
15	1312617	Screw	1	39	230376	Bearing Cone	1
16	1312618	Drain Plug	1	40	286199	Bearing Cup	1
17	1312636	Carrier	1	41 ^a	1312624	Nut	12
18	1312619	Lockplate	1	42	1312645	Ring	1
19	1313879	Washer	2				
20	293613	Capscrew	2	^a	1459767	Hardware Kit	

DRIVE AXLE (FIGURE 153) EMPTY CONTAINER HANDLER - 4 FIRST USED ON S/N D19D-1966

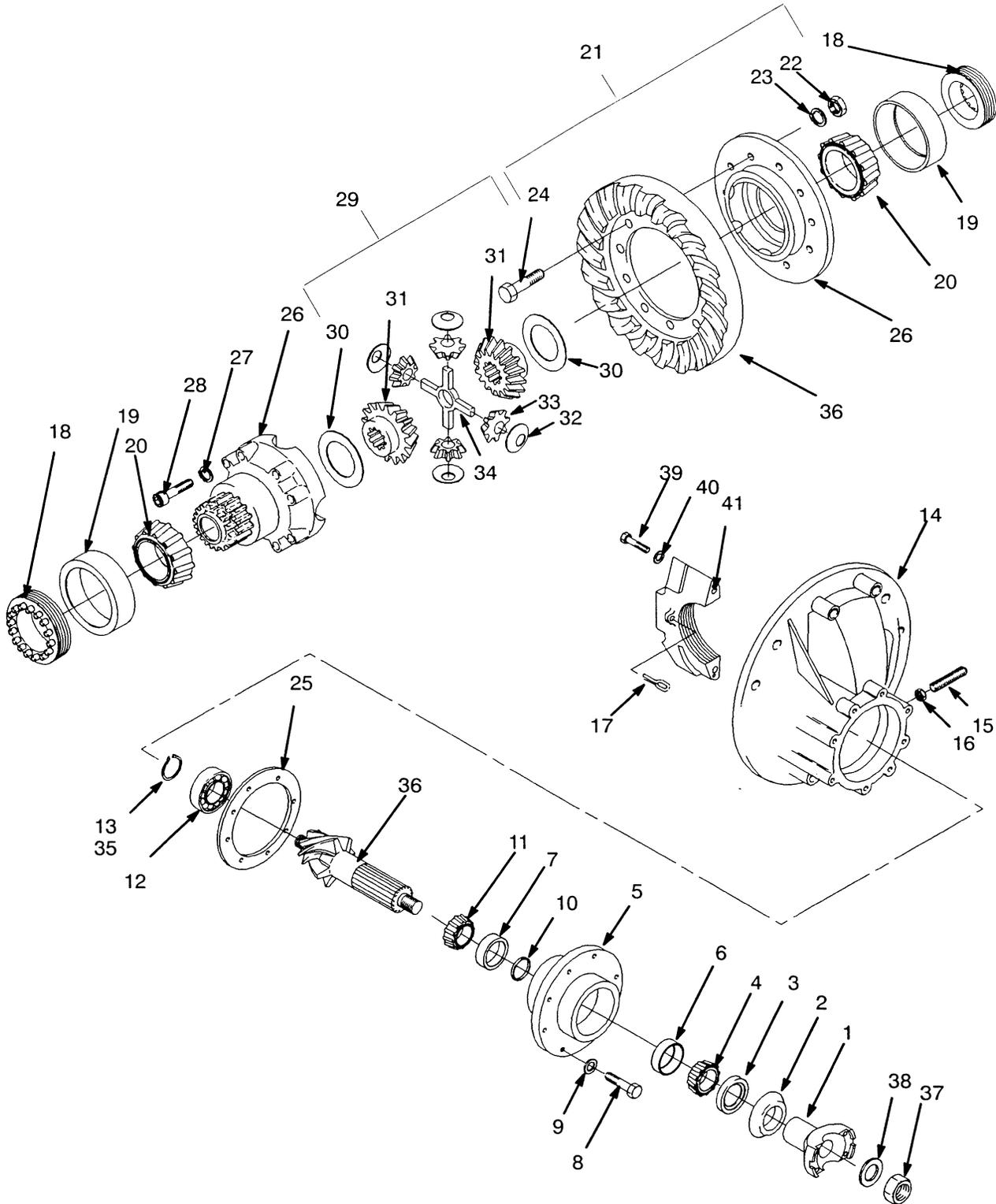


DRIVE AXLE
EMPTY CONTAINER HANDLER - 4
FIRST USED ON S/N D19D-1966

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
a	1366710	Drive Axle	1	26	199567	Capscrew	4
b	1452779	Drive Axle	1	27	1316043	Lock	2
	.....	Differential	1	28	1316313	Hub (Ring Gear)	2
		☞ (Figure 154)		29	170379	Bearing Cone	2
1	1385718	Housing	1	30	1312805	O-Ring	2
2	15316	Fitting	1	31	1316047	Wheel Hub	2
3	200445	Breather	1	32	170380	Bearing Cup	1
4	321293	Plug	1	33	132462	Bearing Cup	1
5	214195	Stud (Short)	8	34	1312806	Stud	20
6	1380784	Stud (Long)	8	35	1316314	Bearing Cone	2
7	86007	Washer	12	36	1312807	Oil Seal	2
8	358099	Nut	12	37	1316049	Capscrew	26
9	1316306	Brake Drum	2	38	268980	Washer	26
10	321293	Plug	2	39	1316316	Spindle	2
11	1316307	Cover	2	40	1385716	Axle Shaft (RH)	1
12	1303551	Thrust Button	1	40	1385717	Axle Shaft (LH)	1
13	1374596	Spider Assy	1	41	.....	Brake	2
13	1377887	Spider	2			☞ (Figure 129)	
14	1316040	Pin	3	42	16001	Lube Fitting	2
15	1316309	Shaft	3	43	376350	Capscrew	8
16	1316310	Pinion Gear	3	43	1323889	Capscrew	8
17	1316044	Thrust Washer	3	44	221780	Washer	16
18	16815	Capscrew	12	45	221720	Nut	8
19	221767	Washer	12	46	1303417	Valve Extension	2
20	1385715	Screw	10	47	376026	Nut	20
21	1316041	Snap Ring	2	48	16015	Lube Fitting	2
22	1329694	Sun Gear	2				
23	1316045	Thrust Washer	2	a		Non-Emissions	
24	1316042	Nut	2	b		Turbo DSL-with Emissions First Used On S/N	
25	1316312	Ring Gear	2			D19D-2377	

DIFFERENTIAL (FIGURE 154)

FIRST USED ON S/N D19D-1620-NON EC AND EC-3
FIRST USED ON S/N D19D-1966-EC 4



DIFFERENTIAL

FIRST USED ON S/N D19D-1620-NON EC AND EC-3

FIRST USED ON S/N D19D-1966-EC-4

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
a	1455814	Differential and Carrier	1	24	1374551	Bolt	12
b	1452990	Differential and Carrier	1	25	1347813	Kit-Shim	1
1	1374088	Yoke	1	26	1380273	Case (2 Pieces)	1
2	1374089	Deflector	1	27	88587	Washer	16
3	1374090	Seal	1	28	1347831	Bolt	16
4	1347774	Bearing Cone	1	29	1380274	Kit-Differential	1
5	1380779	Cage	1	30	1380797	Washer	4
6	200972	Bearing Cup	1	31	1380776	Side Gear	2
7	30062	Bearing Cup	1	32	200982	Washer	4
8	1347819	Capscrew	8	33	1347835	Pinion	4
9	1450861	Washer	8	34	1374558	Spider	1
10	1347800	Kit-Spacer	1	35	280472	Adhesive	1
11	1347812	Bearing Cone	1	36 a	1374559	Gear And Pinion	1
12	1374094	Bearing	1	36 b	1452991	Gear And Pinion	1
13	1374095	Snap Ring	1	37	1357734	Nut	1
14	1380798	Carrier	1	38	1312083	Washer	1
15	1374097	Screw	1	39	293716	Capscrew	4
16	1312616	Nut	1	40	1347770	Washer	4
17	86008	Cotter Pin	1	41	1380777	Ball	4
18	1347839	Ring	2				
19	1475420	Bearing Cup	2	a	Non-Emissions		
20	1475421	Bearing Cone	2	b	Turbo DSL with Emissions First Used On S/N D19D-2377		
21	1347822	Kit-Bolt	1				
22	1374550	Nut	12				
23	125428	Washer	12				

STEERING

STEERING AXLE (Figure 158) Page 300

STEERING CONTROL UNIT (Figure 156) Page 298

STEERING CYLINDER (Figure 159) Page 302

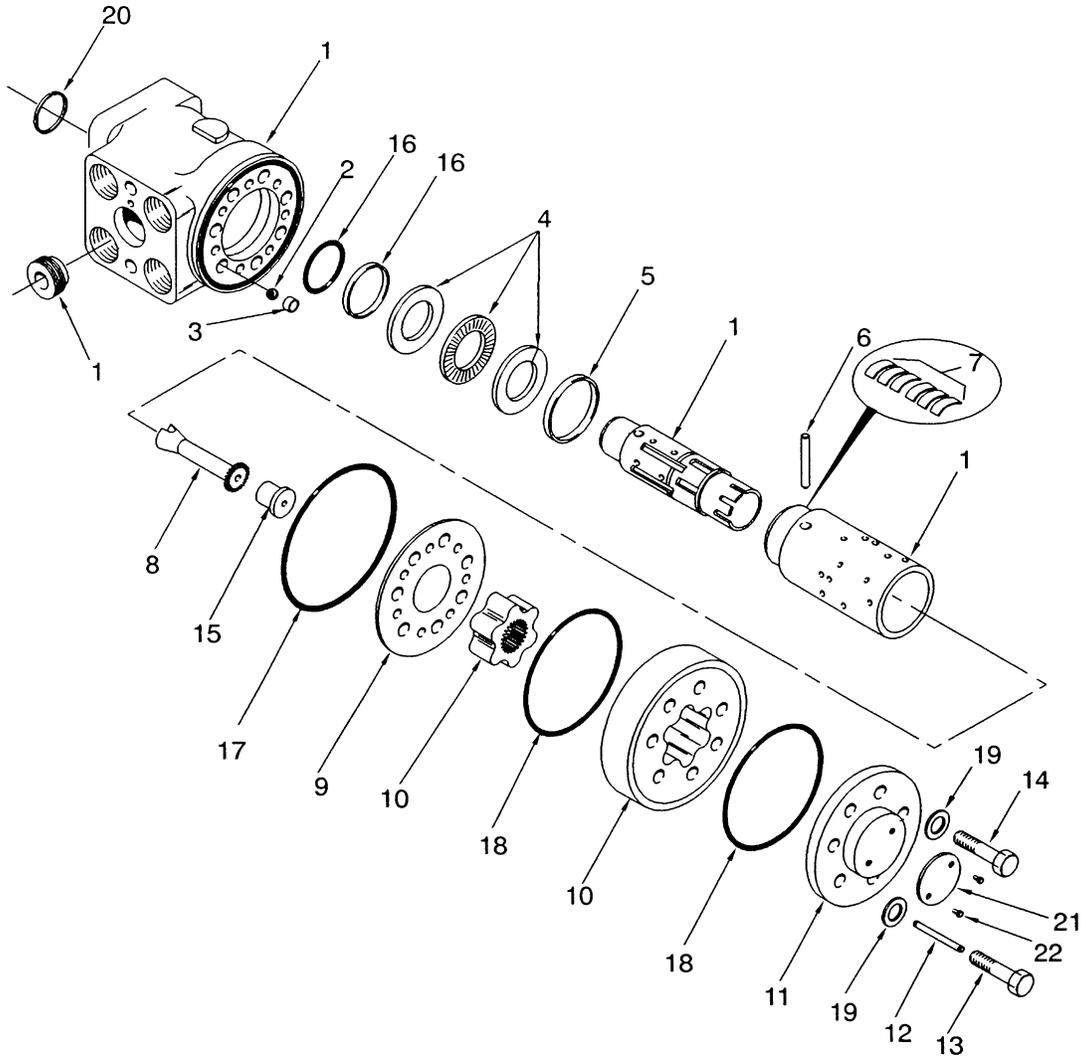
STEERING (Figure 155) Page 296

VALVE BLOCK (Figure 157) Page 299

STEERING

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	....	Steering Control Unit ☞ (Figure 156)	1	24	1301426	Bracket	1
2	1311366	Valve Block	1	25	379674	Capscrew	2
3	1301422	Steering Column	1	26	375629	Washer	2
3	362816	Terminal	1	27	313828	Nut	2
3	345423	Nut	1	28	1301425	Spring	1
4	16597	Capscrew	1	29	1325564	Plate	1
5	16815	Capscrew	3	30	136681	Capscrew	8
6	292682	Lockwasher	4	31	320158	Washer	8
7	2005059	Grommet	1	32	292681	Lockwasher	8
8	362255	Grommet (Optional)	1	33	1300165	Spacer	3
9	376504	Bracket	1	34	1301676	Plate	1
10	216735	Grommet	4	35	353144	Capscrew	4
11	376505	Spacer	4	36 c	352955	Steering Wheel	1
12	369242	Capscrew	4	36 d	1327895	Steering Wheel	1
13	1300117	Washer	4	37	371666	Horn Button	1
14	376510	Pod	1	38 a	1326808	Capscrew	2
14 b	894406	Pod	1	39 a	296360	Washer	2
15	292529	Capscrew	2	40 a	329069	Nut	2
16	379697	Washer	2	41	1307737	Fastener	1
17	216877	Nut	2	42	1307736	Plug	1
18	293782	Washer	2				
19	376506	Spacer	2	a		Empty Container Handler	
20	324896	Latch	1	b		With Autoshift	
21	1301437	Spring	1	c		Last Used On D19E-2478	
22	133683	Pin	1	d		First Used On D19E-2479	
23	15212	Pin	1				

STEERING CONTROL UNIT (FIGURE 156)



REF	PART NO.	NAME OF PART	QTY
	1301348	Steering Control Unit	1
1		Housing	1
2	345408	Ball	1
3	345409	Bushing	1
4	345410	Bearing Set	1
5	345411	Ring	1
6	345412	Pin	1
7	345413	Spring Set	1
8	1355326	Shaft	1
9	1357026	Plate	1
10	1315778	Wheel	1
11	345424	Cover	1
12	345418	Pin	1
13	1315779	Screw	1
14	1315780	Screw	6
15	1315781	Spacer	1
16 ab	1384429	Seal	1

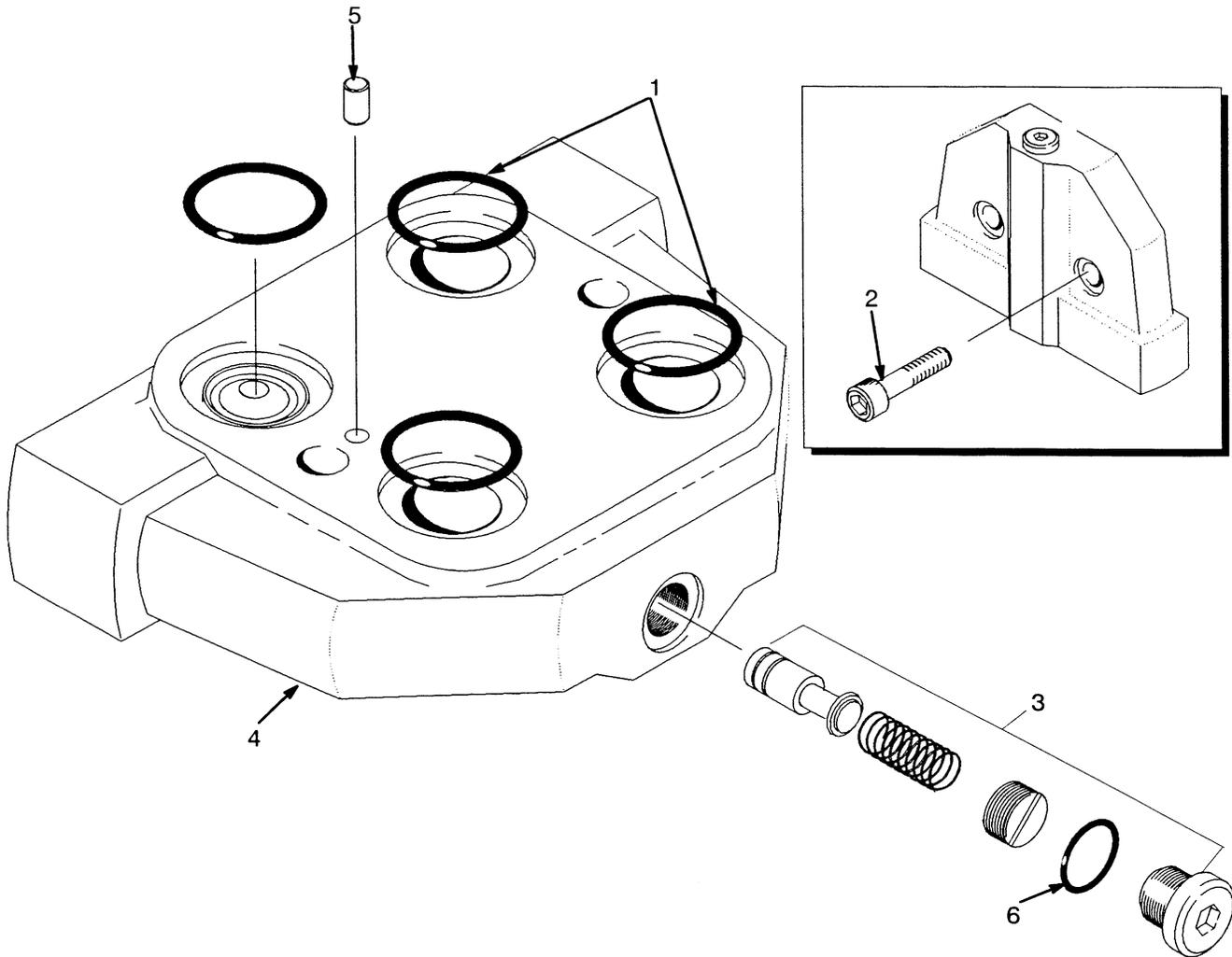
REF	PART NO.	NAME OF PART	QTY
16 ab		O-Ring	1
16 ab		Ring	1
16 ac	2032230	Seal	1
17 a		O-Ring	1
18 a		O-Ring	2
19 a		Washer	7
20 a		Ring	1
21		Nameplate	1
22		Screw	2

a Included In Seal Kit 2032229

b Last Used On Steering Control Unit Date
Code 96/13

c First Used On Steering Control Unit Date
Code 96/14

VALVE BLOCK (FIGURE 157)



REF	PART NO.	NAME OF PART	QTY
	1311366	Valve Block	1
1	^a 265732	O-Ring	4
2	^a	Screw	2
3	366063	Valve	1

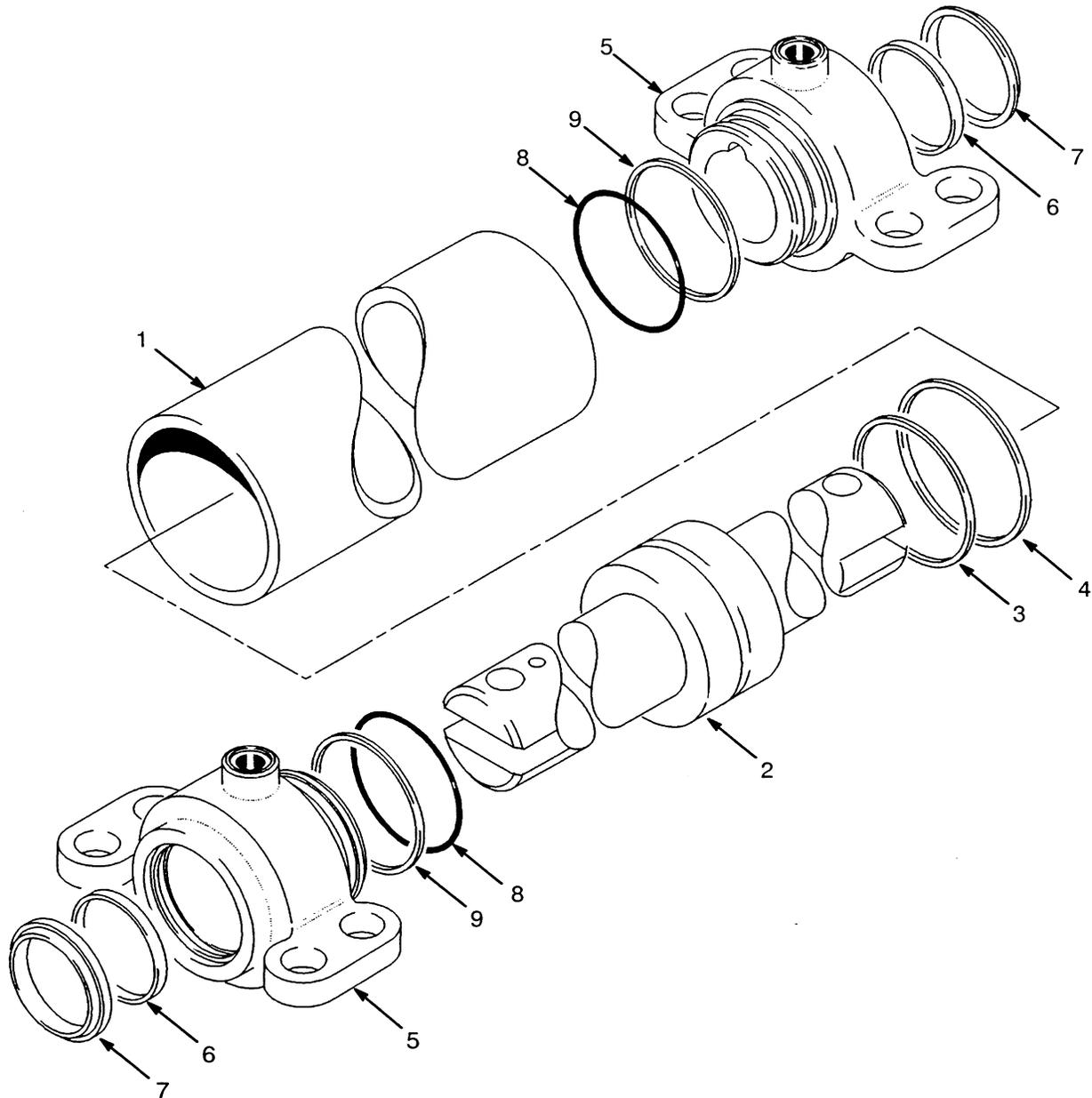
REF	PART NO.	NAME OF PART	QTY
4	. . . .	Housing	1
5	366064	Pin	1
6	366065	Seal	1

^a Included In Seal Kit 366066

STEERING AXLE

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	387229	Hub	2	27	69029	Hub Cap	2
2	1311407	Stud	10	28	1385647	Pin	2
3	186412	Bearing Cup	1	29	270854	Oil Seal	8
4	30100	Bearing Cup	1	30	387118	Spindle (LH)	1
5	387225	Wear Sleeve	2	31	387119	Spindle (RH)	1
6	158609	Hub Cap	2	32	293708	Capscrew	8
7	15255	Cotter Pin	2	33	292687	Lockwasher	8
8	1313375	Nut	2	34	1339904	Axle	1
9	1313374	Washer	2	35	387078	Tie Rod	2
10	15158	Lockwasher	6	35	1455061	Tie Rod Assy (Optional)	2
11	18588	Capscrew	6	36	192814	Bushing	2
12	247093	Bearing Cone	2	37	183611	Capscrew	4
13	247827	Bearing Cap	2	38	195566	Anchor	4
14	164639	Wear Sleeve	1	39	288394	Sealant	AR
15	30189	Bearing Cup	1	40	.....	Steering Cylinder	1
16	247097	Shim (.005 in)	AR			☞ (Figure 159)	
16	247098	Shim (.007 in)	AR	41	16568	Fitting	1
16	247099	Shim (.020 in)	AR	41	16484	O-Ring	1
17	44542	Oil Seal	2	42	16559	Fitting	1
18	247041	Oil Seal	2	42	16484	O-Ring	1
19	186415	Bearing Cone	2	43	131193	Seal Ring	1
20	30107	Bearing Cone	2	44	131190	Shim (.005 in)	AR
21	44547	Oil Seal	2	44	131191	Shim (.035 in)	AR
22	200972	Bearing Cup	2	45	1335873	Bushing	2
23	143004	Bearing Cone	2	46	1335870	Flange	2
24	129498	Oil Seal	2	47	376026	Nut	20
24	129499	Wear Sleeve	2	48	16279	Capscrew	2
25	13963	Lube Fitting	6	49	15162	Washer	2
26	1385648	Pin	2				

STEERING CYLINDER (FIGURE 159)



REF	PART NO.	NAME OF PART	QTY
	376091	Steering Cylinder	1
1	376087	Shell	1
2 a	376090	Rod	1
2	376088	Piston	1
2	376089	Rod	1
3 b	247125	Quadrant Ring	1
4 b	1380886	Seal	1
5	376086	Cap	2

REF	PART NO.	NAME OF PART	QTY
6 b	816581	Seal	2
7 b	816579	Rod Wiper	2
8 b	46629	O-Ring	2
9 b	270330	Back-Up Ring	2
a	One Piece Construction (Optional)		
b	Included In Seal Kit 1311358		

HYDRAULIC

CONTROL VALVE (Figure 165)
TWO FUNCTION Page 314

CONTROL VALVE (Figure 168)
THREE FUNCTION Page 320

CONTROL VALVE (Figure 170)
FOUR FUNCTION Page 324

CONTROL VALVE (Figure 172)
FIVE FUNCTION Page 330

HYDRAULIC PUMP (Figure 163) Page 310

HYDRAULIC SYSTEM (Figure 160)
DIESEL AND LPG NON-EC Page 304

HYDRAULIC SYSTEM (Figure 161)
EMPTY CONTAINER HANDLER Page 306

HYDRAULIC TANK (Figure 162) Page 308

TILT CYLINDER ATTACHING PARTS (Figure 173) Page 332

TILT CYLINDER (Figure 174)
TWO STAGE NFL Page 334

TILT CYLINDER (Figure 175)
THREE STAGE FFL Page 338

TILT LOCK VALVE (Figure 176) Page 340

VALVE ATTACHING PARTS (Figure 166)
THREE FUNCTION Page 316

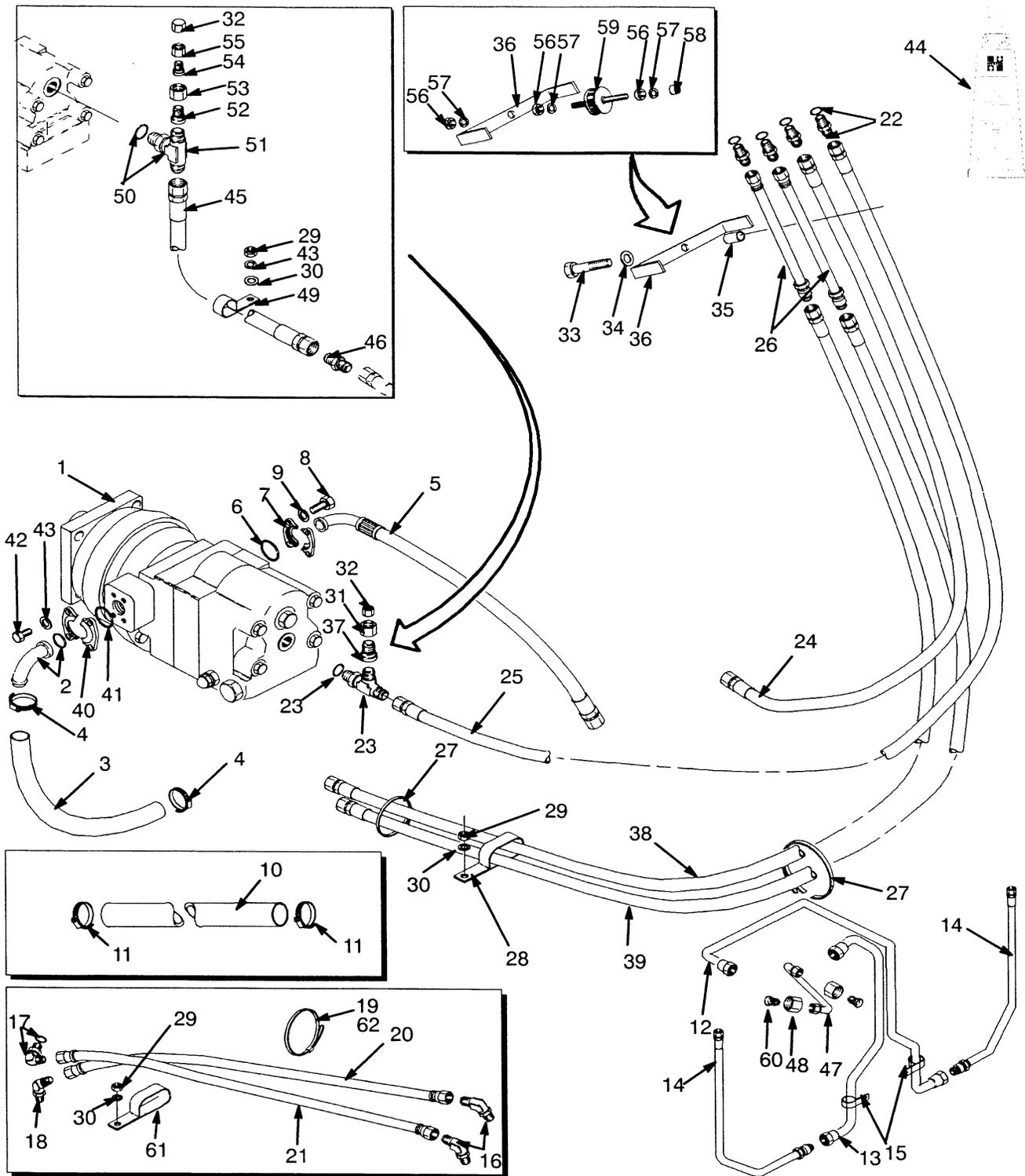
VALVE ATTACHING PARTS (Figure 167)
DUAL FUNCTION SIDESHIFT
FIRST USED ON S/N PENDING PER ECN 63257 Page 318

VALVE ATTACHING PARTS (Figure 169)
FOUR FUNCTION Page 322

VALVE ATTACHING PARTS (Figure 171)
FIVE FUNCTION Page 328

VALVE ATTACHING PARTS(Figure 164)
TWO FUNCTION Page 312

HYDRAULIC SYSTEM (FIGURE 160) DIESEL AND LPG NON-EC



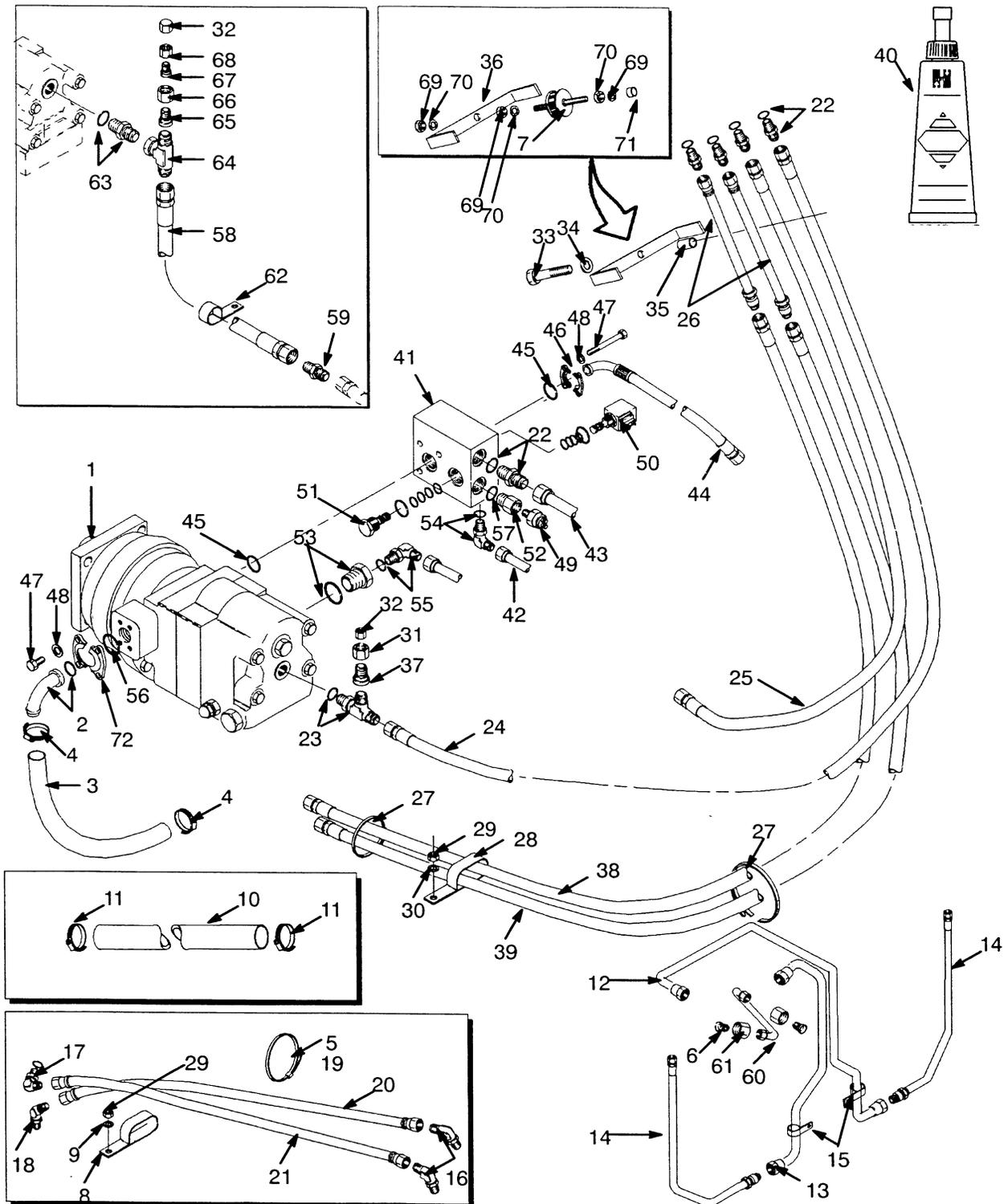
HYDRAULIC SYSTEM DIESEL AND LPG NON-EC

KEY:
A: Diesel
B: LPG

REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
1	.....	Hydraulic Pump ☞ (Figure 163)	1	1	32	a 16923	Fitting	1	1
2	222590	Fitting	1	..	32	b 167261	Fitting	1	..
2	894504	Fitting .....	..	1	33	a 136704	Capscrew	1	1
3	816373	Hose	1	1	34	a 292681	Lockwasher	1	1
4	112989	Clamp	2	2	35	a 1301585	Spacer	1	1
5	1303431	Hose	1	1	36	1332941	Clamp	1	1
6	199917	O-Ring	1	1	37	a 14491	Fitting	1	1
7	222531	Fitting	2	2	38	1303440	Hose	1	1
8	18588	Capscrew	8	8	38	1326813	Hose (Optional)	1	1
9	15158	Lockwasher	8	8	39	1303441	Hose	1	1
10	1301668	Hose	1	1	39	1326814	Hose (Optional)	1	1
11	127045	Clamp	2	2	40	17764	Fitting	2	2
12	c 1367826	Tube	1	..	41	198518	O-Ring	1	1
12	d 1385602	Tube	1	1	42	18558	Capscrew	4	4
13	c 1367825	Tube	1	..	43	15157	Washer	4	4
13	d 1385601	Tube	1	1	44	280472	Sealant	ARAR	
14	1301325	Hose	2	2	45	b 1301534	Hose	1	..
15	183779	Clamp	2	2	45	b 1301671	Hose (Optional)	1	..
16	16570	Fitting (Xmsn)	2	2	46	b 17635	Fitting	2	..
16	16485	O-Ring	1	1	47	1325366	Tube	1	1
17	111331	Fitting (Xmsn)	1	1	48	17780	Fitting	2	2
17	16485	O-Ring	1	1	49	b 258590	Clamp	1	..
18	112471	Fitting (Xmsn)	1	1	50	b 167260	Fitting	1	..
18	16485	O-Ring	1	1	51	b 139922	Fitting	1	..
19	129563	Strap Clamp	1	1	52	b 17054	Fitting	1	..
20	1327818	Hose (Xmsn)	1	..	53	b 17783	Fitting	1	..
20	1327818	Hose (Xmsn) .....	..	1	54	b 14494	Fitting	1	..
21	1327819	Hose (Xmsn)	1	1	55	b 17779	Fitting	1	..
22	16541	Fitting	4	4	56	b 239503	Nut	3	..
22	16484	O-Ring	1	1	57	b 292681	Washer	3	..
23	a 14586	Fitting	1	1	58	b 1334491	Spacer	1	..
23	16485	O-Ring	1	1	59	b 1332940	Mount	1	..
24	a 1303432	Hose	1	1	59	b 1332907	Mount (Optional)	1	..
24	a 1326812	Hose(Optional)	1	1	60	167261	Fitting	2	2
24	b 198693	Hose	1	..	61	1350914	Clamp	1	1
25	1313356	Hose	1	1	62	397676	Strap Clamp	2	2
26	1332942	Hose	2	2					
26	1332943	Hose (Optional)	2	2					
27	323864	Clamp	2	2					
28	177303	Clamp	3	3					
29	136692	Nut	4	4					
30	292682	Lockwasher	4	4					
31	a 222365	Fitting	1	1					

a Without Noise Reduction
b With Noise Reduction
c Last Used On S/N D19D-2127 (Diesel)
d First Used On S/N D19D-2128 (Diesel)

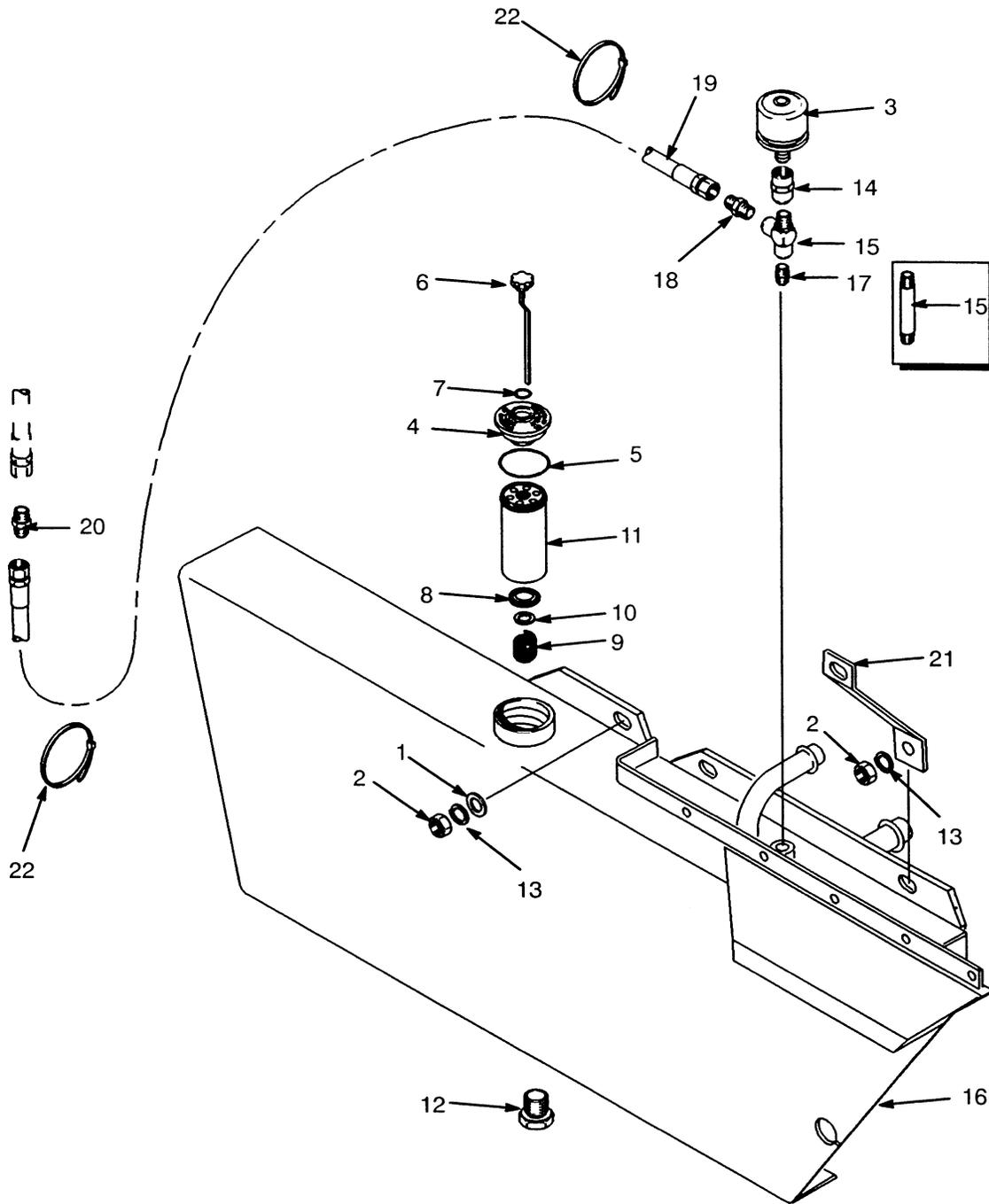
HYDRAULIC SYSTEM (FIGURE 161) EMPTY CONTAINER HANDLER



HYDRAULIC SYSTEM EMPTY CONTAINER HANDLER

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	....	Hydraulic Pump ☞ (Figure 163)	1	38	1326813	Hose (Optional)	1
2	222590	Fitting	1	39	1303441	Hose	1
2	18909	O-Ring	1	39	1326814	Hose (Optional)	1
3	1301327	Hose	1	40	280472	Sealant	AR
4	112989	Clamp	2	41	1323862	Valve Body	1
5	397676	Strap Clamp	2	42	1323863	Tube	1
6	17780	Fitting	2	42 c	1395982	Tube	1
7 b	1332940	Mount	1	43	1323864	Tube	1
7 b	1332907	Mount (Optional)	1	43 c	1395983	Tube	1
8	1350914	Clamp	1	44	1303431	Hose	1
9	320159	Washer	2	45	199917	O-Ring	2
10	1301668	Hose	1	46	17764	Adapter	2
11	127045	Clamp	2	47	18574	Capscrew	4
12	1326775	Tube (EC-4)	1	48	15157	Washer	4
12	1367826	Tube (EC-3)	1	49	1323865	Switch	1
13	1367825	Tube (EC-3)	1	50	1323866	Valve	1
13	1326774	Tube (EC-4)	1	50	323488	Kit-seal	1
14	1301325	Hose	2	51	1323867	Valve	1
15	183779	Clamp	2	51	323488	Kit-seal	1
16	16570	Fitting	2	52	1323869	Fitting	1
16	16485	O-Ring	1	53	1323870	Fitting	1
17	111331	Fitting	1	54	16568	Fitting	1
17	16485	O-Ring	1	54	16485	O-Ring	1
18	112471	Fitting	1	55	17224	Fitting	1
18	16485	O-Ring	1	55	16484	O-Ring	1
19	129563	Strap Clamp	1	56	199971	O-Ring	1
20	1327818	Hose	1	57	16484	O-Ring	1
21	1327819	Hose	1	58 b	1301534	Hose	1
22	16541	Fitting	4	58 b	1301671	Hose (Optional)	1
22	16484	O-Ring	1	59	167261	Fitting	2
23 b	14586	Fitting	1	59 b	17635	Fitting	2
23	16485	O-Ring	1	60	1325366	Tube	1
24 a	1303432	Hose	1	61 b	167260	Fitting	1
24 a	1326812	Hose (Optional)	1	62 b	258590	Clamp	1
24 b	198693	Hose	1	63 b	139922	Fitting	1
25	1313356	Hose	1	63	16485	O-Ring	1
26	1332942	Hose (Optional)	2	64 b	17054	Fitting	1
26 b	1332943	Hose	2	65 b	17783	Fitting	1
27	323864	Clamp	2	66 b	14494	Fitting	1
28	177303	Clamp	3	67 b	17779	Fitting	1
29	136692	Nut	4	68 b	167261	Fitting	1
30	292682	Lockwasher	4	69 b	239503	Nut	3
31 a	222365	Fitting	1	70 b	292681	Washer	3
32	16923	Fitting	1	71 b	1334491	Spacer	1
33 a	136704	Capscrew	1	72	222531	Fitting	1
34 a	292681	Lockwasher	1				
35 a	1301585	Spacer	1	a	Without Noise Reduction		
36	1332941	Clamp	1	b	With Noise Reduction		
37 a	14491	Fitting	1	c	With Low Emission First Used On S/N D19D-2377		
38	1303440	Hose	1				

HYDRAULIC TANK (FIGURE 162)

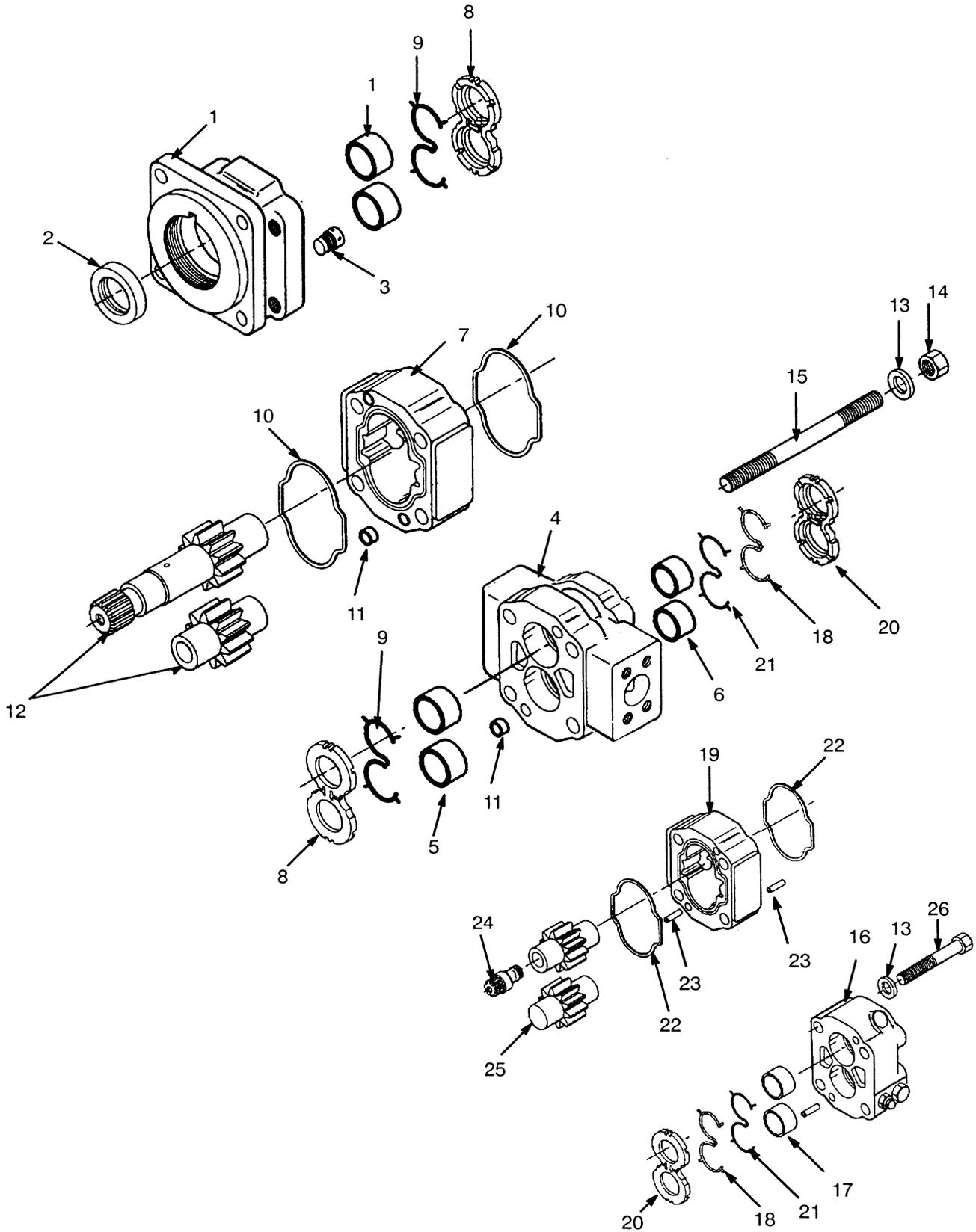


HYDRAULIC TANK

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	320162	Washer	3	14	12829	Fitting	1
2	216877	Nut	3	15 a	15382	Fitting	1
3	353302	Breather	1	15 b	15383	Fitting	1
4	190787	Filter Head	1	16	1357427	Hydraulic Tank	1
5	39742	O-Ring	1	16	1357428	Hydraulic Tank (Optional)	1
6	348368	Dipstick Assy	1	17 b	156696	Fitting	1
6	348362	Dipstick Blade	1	18 b	17345	Fitting	1
6	218612	Cap	1	19 b	283453	Hose	1
6	244272	Screw	1	20 b	14692	Fitting	1
7	16487	O-Ring	1	21 b	1319176	Brace	1
8	181941	Seal	1	22 b	323864	Strap	2
9	190784	Spring	1				
10	190785	Washer	1				
11	376066	Filter	1				
12	14388	Fitting	1				
13	292683	Lockwasher	3				

a Last Used On S/N D19D-2025
b First Used On S/N D19D-2026

HYDRAULIC PUMP (FIGURE 163)



HYDRAULIC PUMP

KEY:

A: Empty Container Handler Without Low Emissions

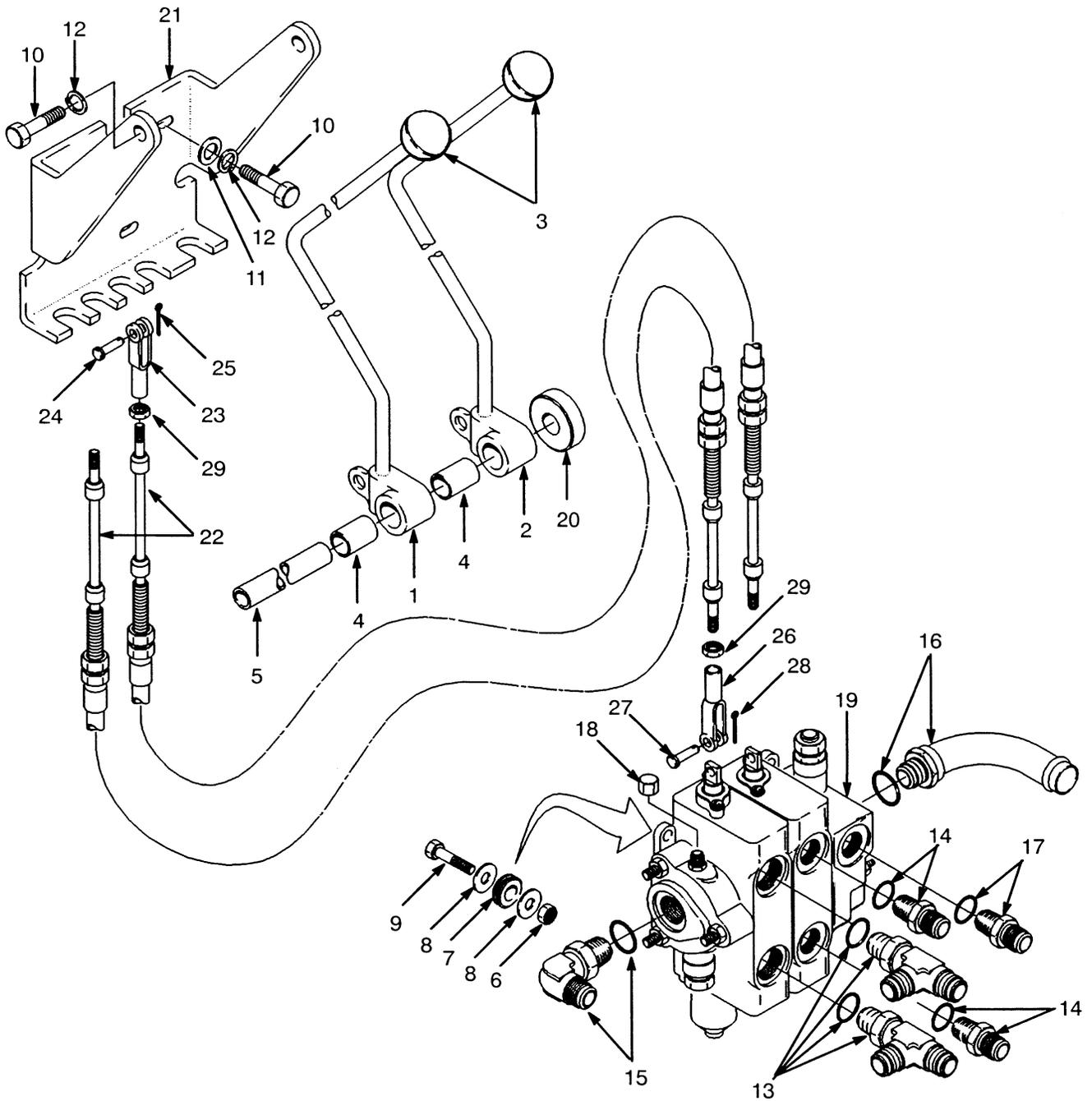
B: Non-EC Without Low Emissions

C: Empty Container Handler With Low Emissions First Used On S/N D19D-2377

D: Non-EC With Low Emissions First Used On S/N D19D-2377

REF	PART NO.	NAME OF PART	QTY				REF	PART NO.	NAME OF PART	QTY			
			A	B	C	D				A	B	C	D
	1326762	Hydraulic Pump	1	..	..	..	12	.....	Gear Set (Diesel)	..	1	1	
	1312821	Kit-Seal	1	..	..	..	13	176167	Washer	8	8	8	8
	376206	Hydraulic Pump (Diesel)	..	1	..	..	14	15060	Nut	4	4	4	4
	894502	Hydraulic Pump (LPG)	..	1	..	..	15	1311795	Stud	4	4	4	4
	1312820	Kit-Seal	1	..	..	..	16	1331523	Housing (End-Port)	1	..	..	..
	1395979	Hydraulic Pump	..	1	..	..	16	1311785	Housing (Priority Port)	1	..	1	..
	1395977	Hydraulic Pump	..	..	1	..	16	372109	Housing Assy (End Port)	..	1	..	..
	1453843	Kit-Seal	..	1	..	..	17	1327501	Bushing	..	2	..	..
1	1311780	Cover (Shift-End)	1	1	1	1	18	1311793	Seal	1	1	..	..
1	.....	Bushing	..	1	1	..	18	b 1453775	Back-Up Seal	..	1	1	..
2	ba 1331521	Seal	1	1	1	1	19	1311788	Housing (Gear)	1	1	..	..
3	176159	Plug	1	1	..	..	19	372110	Housing (Gear)	..	1	1	..
4	1311781	Cover (Port-End)	1	1	1	1	20	1466398	Kit-Thrust Plate	2	2	2	2
5	1360875	Bushing	2	2	2	2	21	a 372112	Seal	2	2	..	..
6	1360876	Bushing	2	2	2	2	21	b 1453776	Seal-Channel	..	2	2	..
7	1311787	Housing-Gear	1	1	..	..	22	ba 176173	Seal	2	2	2	2
7	1453778	Housing Gear	..	1	1	..	23	1151722	Dowel Pin	4	4	4	4
8	1311782	Thrust Plate	2	2	..	..	24	1311786	Connector	1	1	1	1
8	1453777	Thrust Plate	..	2	2	..	25	1314295	Gear Set	1	1	..	..
9	ba 1311791	Seal	2	2	2	2	25	.....	Gear Set	..	1	1	..
10	ba 1311792	Seal	2	2	2	2	26	1311794	Screw	4	4	4	4
11	1311783	Dowel Pin	8	8	8	8							
12	1311784	Gear Set (Diesel)	1	1	..	..	a	Included In Seal Kit 1312821 & 1312820					
12	1450254	Gear Set (LPG)	1	..	..	..	b	Included In Seal Kit 1453843					

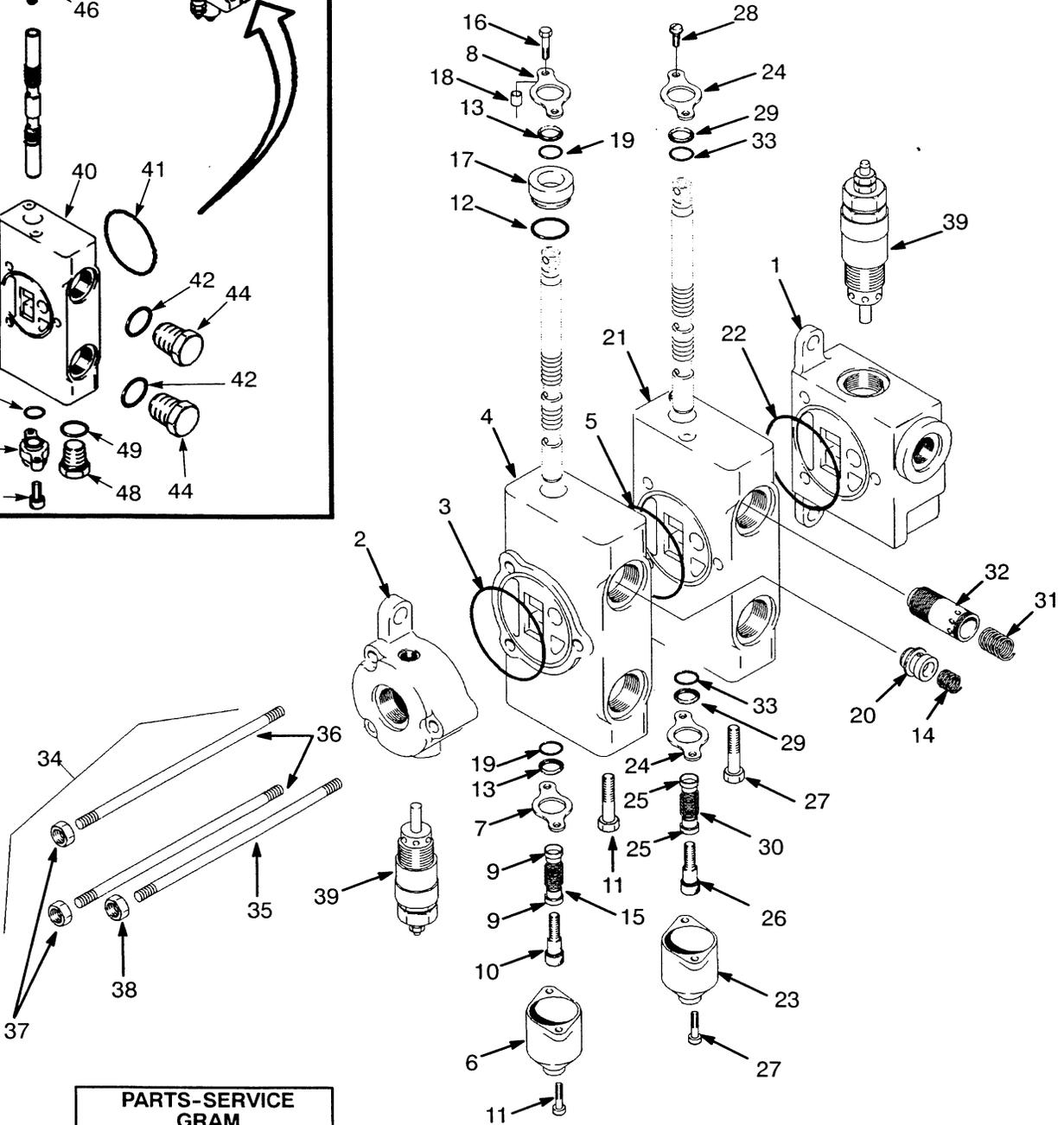
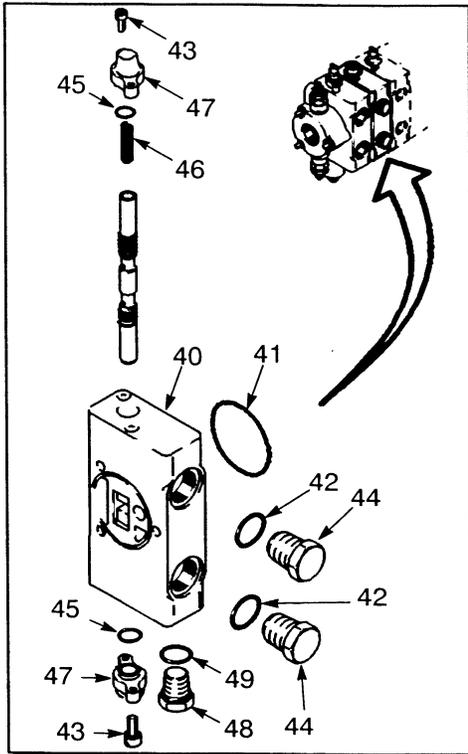
VALVE ATTACHING PARTS(FIGURE 164) TWO FUNCTION



**VALVE ATTACHING PARTS
TWO FUNCTION**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1300988	Lever	1	15	16487	O-Ring	1
2	1300989	Lever	1	16	362011	Fitting	1
3	308993	Knob	2	16	16487	O-Ring	1
4	1328699	Bushing	2	17	16541	Fitting	1
5	1301726	Shaft	1	17	16484	O-Ring	1
6 a	221354	Locknut	4	18	16923	Fitting	1
6 b	221354	Locknut	3	19	....	Control Valve	1
7 a	339969	Grommet	4			☞ (Figure 165)	
7 b	339969	Grommet	3	20	1309475	Collar	1
8 a	15178	Washer	8	21	1301129	Bracket	1
8 b	15178	Washer	6	22	1316806	Cable	2
9 a	16813	Capscrew	4	23	1316807	Rod End	1
9 b	16813	Capscrew	3	24	126	Rod End Pin	2
10	1328930	Capscrew	5	25	15200	Cotter Pin	2
11	320158	Washer	3	26	138	Rod End	2
12	292681	Lockwasher	5	27	139	Rod End Pin	2
13	16971	Fitting	2	28	15212	Cotter Pin	2
13	16486	O-Ring	1	29	15025	Nut	4
14	16909	Fitting	2				
14	16485	O-Ring	1	a	Last Used On S/N D19D-2127		
15	16571	Fitting	1	b	First Used On S/N D19D-2128		

CONTROL VALVE (FIGURE 165) TWO FUNCTION



PARTS-SERVICE GRAM	
ITEM	GRAM
Control Valve	JD-58

**CONTROL VALVE
TWO FUNCTION**

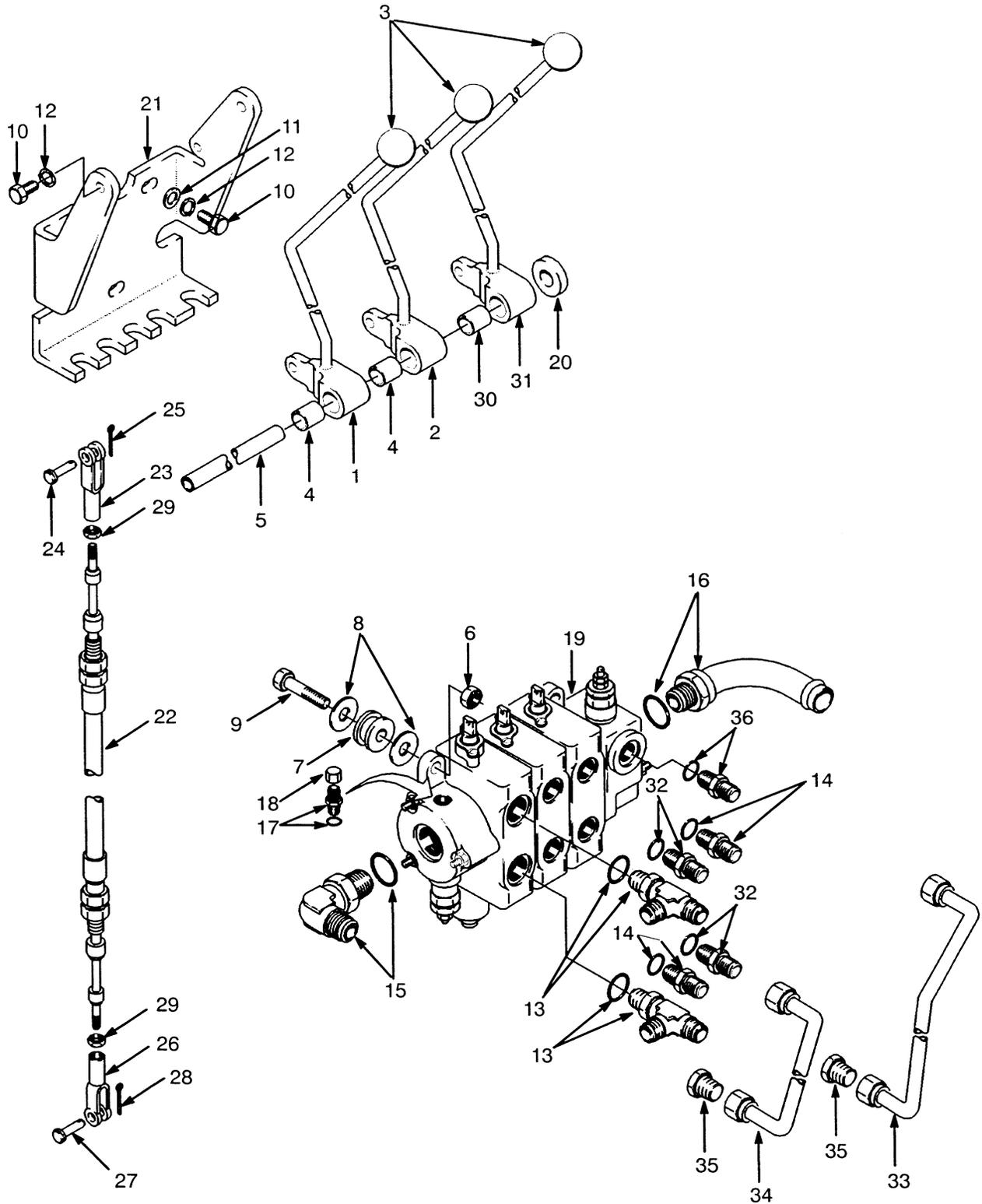
KEY:

A: Last Used On S/N D19D-2127

B: First Used On S/N D19D-2128

REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
	1301528	Control Valve	1	..	27	16328	Capscrew	2	2
	1385611	Control Valve .....	..	1	28	16706	Screw	2	2
1	1320980	Outlet Section	1	1	29	1393703	Wiper	2	2
2	1320981	Inlet Section	1	1	30	300723	Spring	1	1
3	1320982	O-Ring	1	1	31	1320988	Spring	1	..
4	1320976	Hoist Spool Section	1	1	31	1320994	Spring .....	..	1
5	1320982	O-Ring	1	1	32	1320989	Poppet	1	..
6	274426	Cap	1	1	32	1320998	Poppet .....	..	1
7	77451	Plate	1	1	33	1393704	Lip Seal	2	2
8	1320992	Plate	1	1	34	1320999	Kit-Tie Rod	1	..
9	274427	Seat	2	2	34	1321377	Kit-Tie Rod .....	..	1
10	274548	Capscrew	1	1	35	1321376	Tie Rod	1	..
11	16328	Capscrew	2	2	35	1321383	Tie Rod .....	..	1
12	1455596	O-Ring	1	1	36	1321375	Tie Rod	2	..
13	1393703	Wiper	2	2	36	1321382	Tie Rod .....	..	2
14	1320994	Spring	1	1	37	1320986	Nut	4	4
15	1320991	Spring	1	1	38	1320983	Nut	2	2
16	1320995	Capscrew	2	2	39	1320979	Relief Valve	2	2
17	1320996	Spacer	1	1	39	1321381	Kit-Seal	1	1
18	1320997	Spacer	2	2	40	1385616	Control Section .....	..	1
19	1393704	Lip Seal	2	2	41	1320982	O-Ring .....	..	1
20	1320998	Poppet	1	1	42	16485	O-Ring .....	..	2
21	1320978	Tilt Spool Section	1	..	43	1455595	Capscrew .....	..	4
21	1391638	Tilt Spool Section .....	..	1	44	188486	Plug .....	..	2
22	1320982	O-Ring	1	1	45	1455596	O-Ring .....	..	2
23	274426	Cap	1	1	46	1391645	Spring .....	..	1
24	77451	Plate	2	2	47	1455594	Cap .....	..	2
25	274427	Seat	2	2	48	1391644	Plug .....	..	1
26	274548	Capscrew	1	1	49	1391643	O-Ring .....	..	1

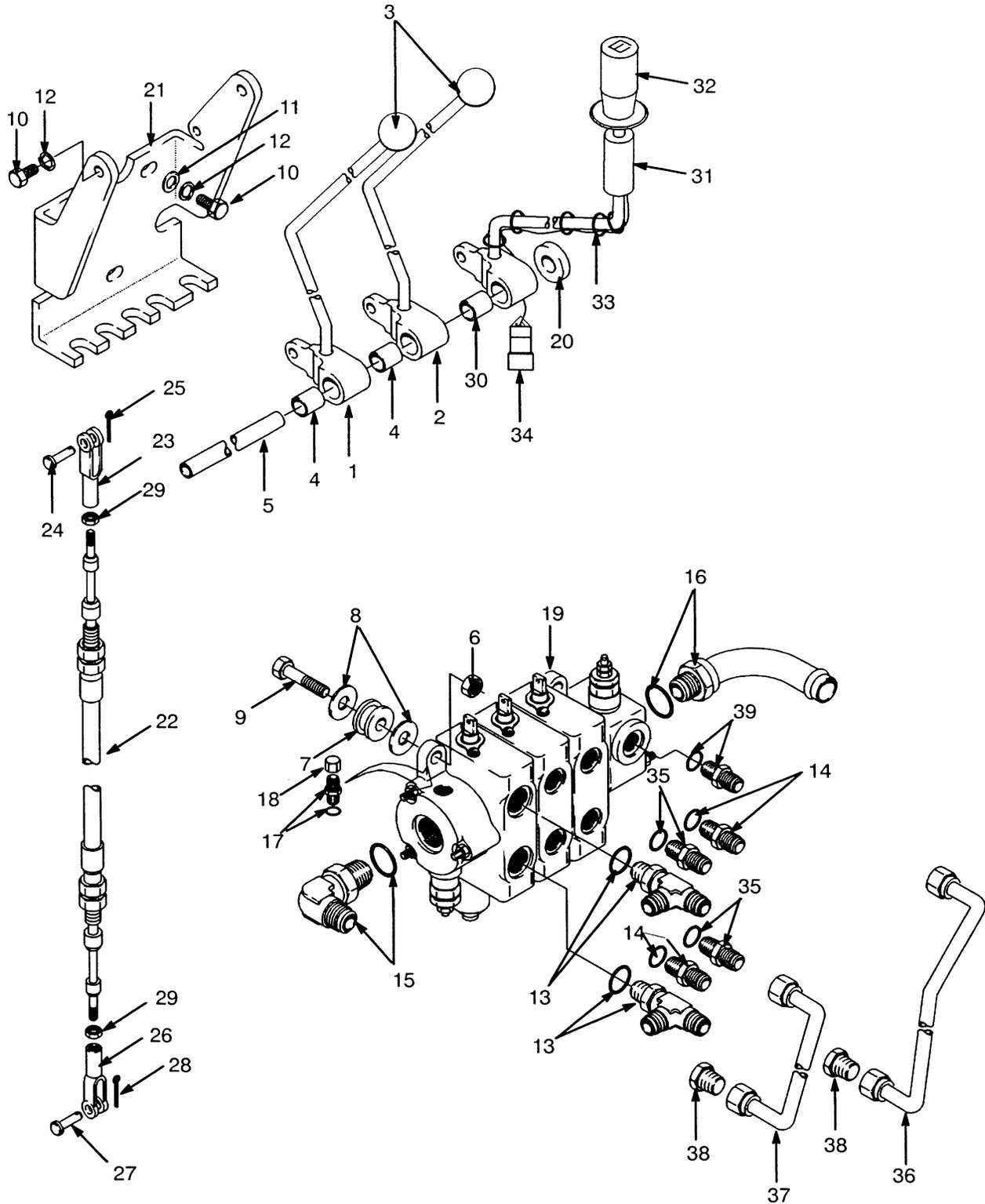
VALVE ATTACHING PARTS (FIGURE 166) THREE FUNCTION



**VALVE ATTACHING PARTS
THREE FUNCTION**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1300988	Lever	1	17	16481	O-Ring	1
2	1300989	Lever	1	18	16923	Fitting	1
3	308993	Knob	3	19	.....	Control Valve	1
4	1328699	Bushing	2			☞ (Figure 168)	
5	1301726	Pivot Shaft	1	20	1309475	Collar	1
6 a	221354	Locknut	4	21	1301129	Bracket	1
6 b	221354	Locknut	3	22	1316806	Cable	3
7 a	339969	Grommet	4	23	1316807	Rod End	3
7 b	339969	Grommet	3	24	126	Rod End Pin	3
8 a	15178	Washer	8	25	15200	Cotter Pin	3
8 b	15178	Washer	6	26	138	Rod End	3
9 a	16813	Capscrew	4	27	139	Rod End Pin	3
9 b	16813	Capscrew	3	28	15212	Cotter Pin	3
10	1328930	Capscrew	5	29	15025	Nut	6
11	320158	Washer	3	30	1328699	Bushing	1
12	292681	Lockwasher	5	31	1300990	Lever	1
13	16971	Fitting	2	32	16909	Fitting	2
13	16486	O-Ring	1	32	16486	O-Ring	1
14	16909	Fitting	2	33	1301416	Tube	1
14	16485	O-Ring	1	34	1301417	Tube	1
15	16571	Fitting	1	35	17321	Fitting	2
15	16487	O-Ring	1	36	16541	Fitting	1
16	362011	Fitting	1	36	16484	O-Ring	1
16	16487	O-Ring	1				
17	16538	Fitting	1	a	Last Used On S/N D19D-2127		
				b	First Used On S/N D19D-2128		

VALVE ATTACHING PARTS (FIGURE 167) DUAL FUNCTION SIDESHIFT FIRST USED ON S/N PENDING PER ECN 63257

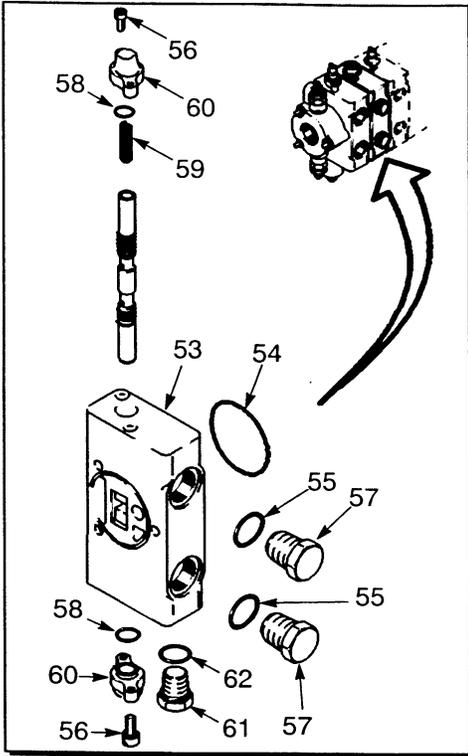


VALVE ATTACHING PARTS
DUAL FUNCTION SIDESHIFT
FIRST USED ON S/N PENDING PER ECN 63257

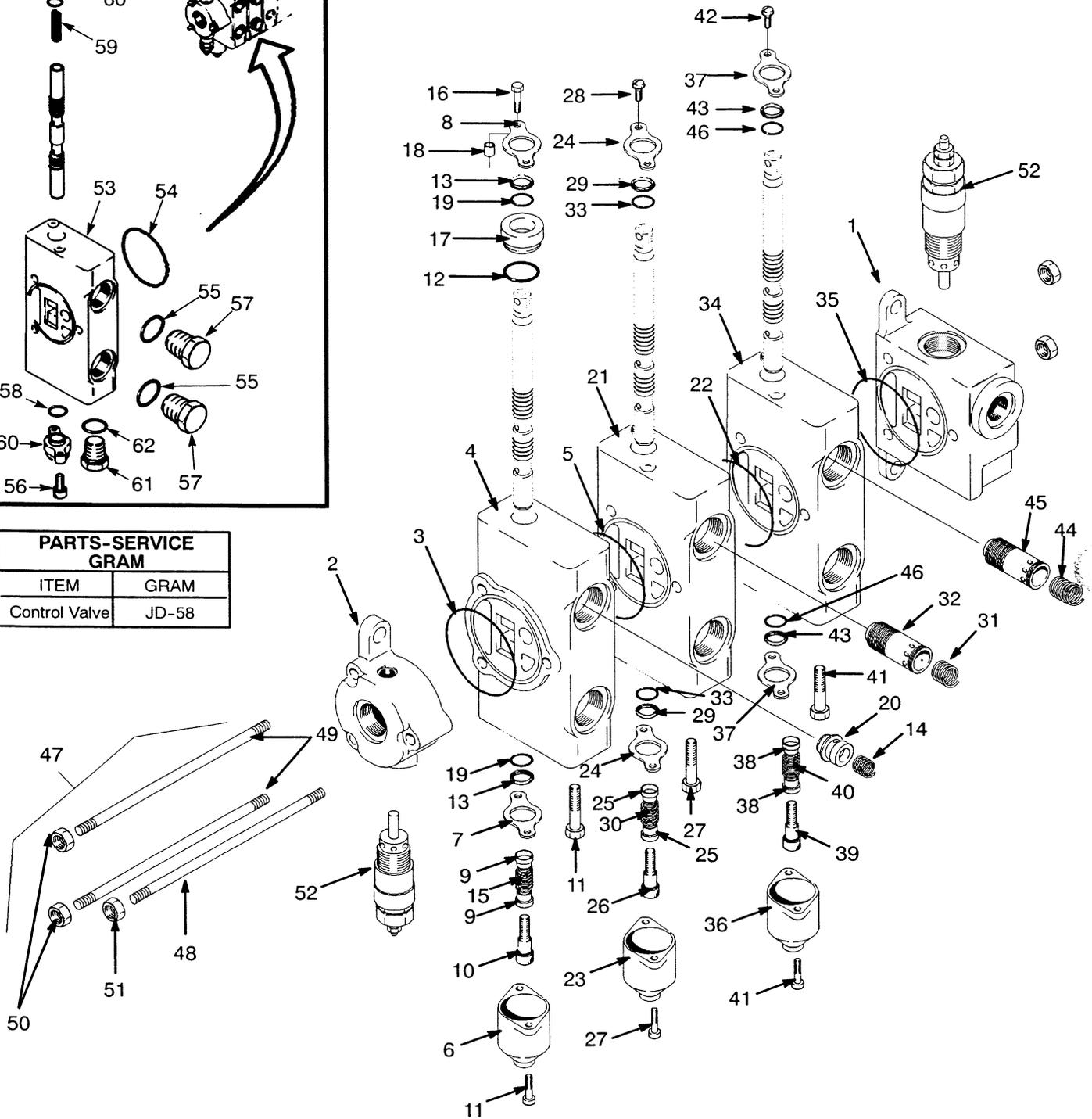
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1300988	Lever	1	20	1309475	Collar	1
2	1300989	Lever	1	21	1301129	Bracket	1
3	308993	Knob	2	22	1316806	Cable	3
4	1328699	Bushing	2	23	1316807	Rod End	3
5	1301726	Pivot Shaft	1	24	126	Rod End Pin	3
6	221354	Locknut	3	25	15200	Cotter Pin	3
7	339969	Grommet	3	26	138	Rod End	3
8	15178	Washer	6	27	139	Rod End Pin	3
9	16813	Capscrew	3	28	15212	Cotter Pin	3
10	1328930	Capscrew	5	29	15025	Nut	6
11	320158	Washer	3	30	1328699	Bushing	1
12	292681	Lockwasher	5	31	1454506	Electric Handle Lever Assy	1
13	16971	Fitting	2	31	1454507	Handle Lever	1
13	16486	O-Ring	1	32	1326699	Handle	1
14	16909	Fitting	2	33	114312	Strap	5
14	16485	O-Ring	1	34	1330410	Connector	1
15	16571	Fitting	1	35	16909	Fitting	2
15	16487	O-Ring	1	35	16486	O-Ring	1
16	362011	Fitting	1	36	1301416	Tube	1
16	16487	O-Ring	1	37	1301417	Tube	1
17	16538	Fitting	1	38	17321	Fitting	2
17	16481	O-Ring	1	39	16541	Fitting	1
18	16923	Fitting	1	39	16484	O-Ring	1
19	....	Control Valve	1				

☞ (Figure 168)

CONTROL VALVE (FIGURE 168) THREE FUNCTION



PARTS-SERVICE GRAM	
ITEM	GRAM
Control Valve	JD-58



**CONTROL VALVE
THREE FUNCTION**

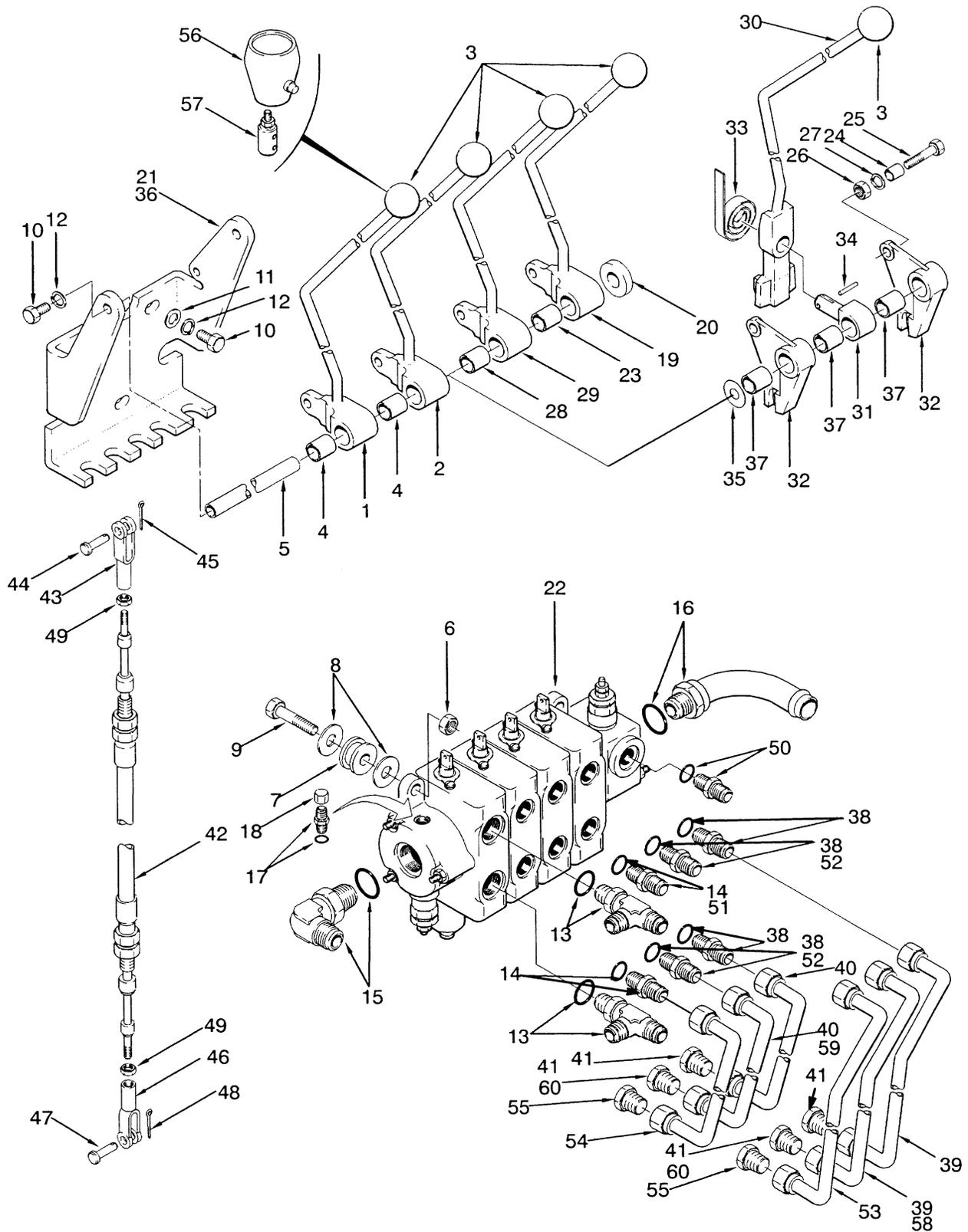
KEY:

A: Last Used On S/N D19D-2127

B: First Used On S/N D19D-2128

REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
	1301529	Control Valve	1	..	33	1393704	O-Ring	2	2
	1385612	Control Valve .....	..	1	34	1320977	Auxiliary Spool Section	1	..
1	1320980	Outlet Section	1	1	34	1391639	Auxiliary Spool Section .....	..	1
2	1320981	Inlet Section	1	1	35	1320982	O-Ring	1	1
3	1320982	O-Ring	1	1	36	274426	Cap	1	1
4	1320976	Hoist Spool Section	1	1	37	77451	Plate	2	2
5	1320982	O-Ring	1	1	38	274427	Seat	2	2
6	274426	Cap	1	1	39	274548	Capscrew	1	1
7	77541	Screw	1	1	40	1320991	Spring	1	1
8	1320992	Plate	1	1	41	16328	Capscrew	2	2
9	274427	Seat	2	2	42	16706	Screw	2	2
10	274548	Capscrew	1	1	43	1393703	Wiper	2	2
11	16328	Capscrew	2	2	44	1320988	Spring	1	..
12	1455596	O-Ring	1	1	44	1320994	Spring .....	..	1
13	1393703	Wiper	2	2	45	1320989	Poppet	1	..
14	1320994	Spring	1	1	45	1320998	Poppet .....	..	1
15	1320991	Spring	1	1	46	1393704	Lip Seal	2	2
16	1320995	Capscrew	2	2	47	1321377	Kit-Tie Rod	1	..
17	1320996	Spacer	1	1	47	1385619	Kit-Tie Rod .....	..	1
18	1320997	Spacer	2	2	48	1321383	Tie Rod	1	..
19	1393704	Lip Seal	2	2	48	1321380	Tie Rod .....	..	1
20	1320998	Poppet	1	1	49	1321382	Tie Rod	2	..
21	1320978	Tilt Spool Section	1	..	49	1321379	Tie Rod .....	..	2
21	1391638	Tilt Spool Section .....	..	1	50	1320986	Nut	4	4
22	1320982	O-Ring	1	1	51	1320983	Nut	2	2
23	274426	Cap	1	1	52	1320979	Relief Valve	2	2
24	77451	Plate	2	2	52	1321381	Kit-Seal	1	1
25	274427	Seat	2	2	53	1385616	Control Section .....	..	1
26	274548	Capscrew	1	1	54	1320982	O-Ring .....	..	1
27	16328	Capscrew	2	2	55	16485	O-Ring .....	..	2
28	16706	Screw	2	2	56	1455595	Capscrew .....	..	4
29	1393703	Wiper	2	2	57	188486	Plug .....	..	2
30	300723	Spring	1	1	58	1455596	O-Ring .....	..	2
31	1320988	Spring	1	..	59	1391645	Spring .....	..	1
31	1320994	Spring .....	..	1	60	1455594	Cap .....	..	2
32	1320989	Poppet	1	..	61	1391644	Plug .....	..	1
32	1320998	Poppet .....	..	1	62	1391643	O-Ring .....	..	1

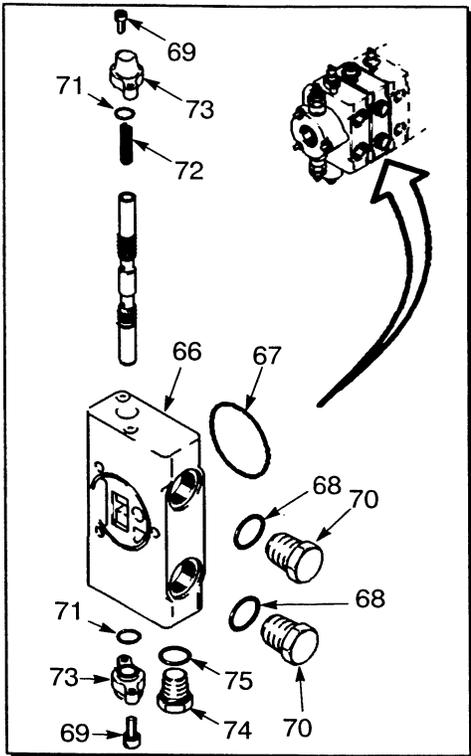
VALVE ATTACHING PARTS (FIGURE 169) FOUR FUNCTION



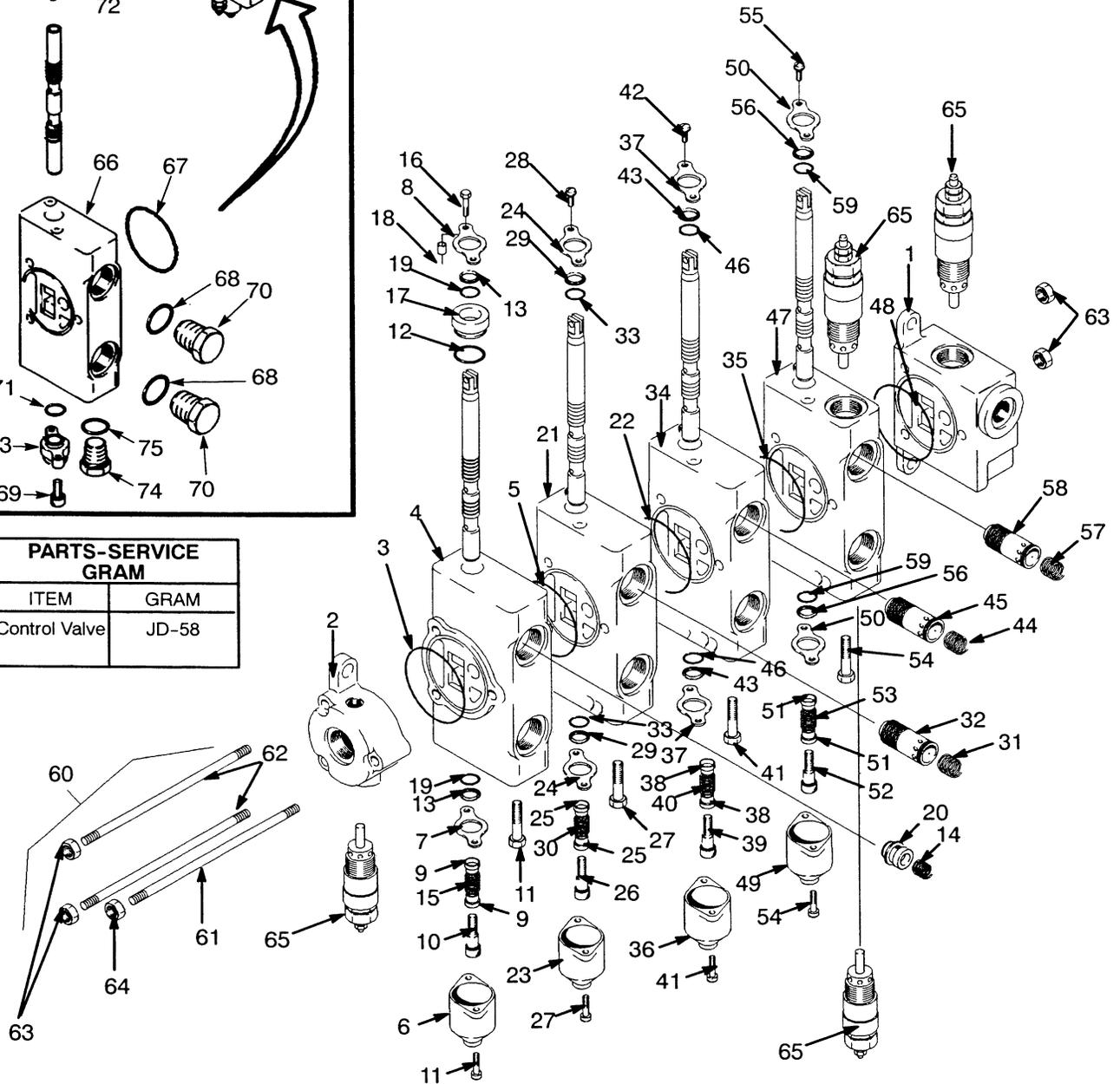
**VALVE/ATTACHING PARTS
FOUR FUNCTION**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1300988	Lever	1	32	c 1301122	Lever	2
1	a 1326761	Lever	1	33	c 175861	Spring	1
2	1300989	Lever	1	34	c 302428	Pin	1
3	308993	Knob	4	35	c 1309479	Shim (.020 in)	AR
4	1328699	Bushing	2	35	c 1328696	Shim (.010 in)	AR
5	1301726	Shaft	1	36	c 1301133	Bracket	1
6	e 221354	Locknut	4	37	c 1328697	Bushing	3
6	f 221354	Locknut	3	38	d 16909	Fitting	4
7	e 339969	Grommet	4	38	d 16485	O-Ring	1
7	f 339969	Grommet	3	39	d 1301416	Tube	2
8	e 15178	Washer	8	40	d 1301417	Tube	2
8	f 15178	Washer	6	41	d 17321	Fitting	4
9	e 16813	Capscrew	4	42	1316806	Cable	4
9	f 16813	Capscrew	3	43	1316807	Rod End	4
10	1328930	Capscrew	5	44	126	Rod End Pin	4
11	320158	Washer	3	45	15200	Cotter Pin	4
12	292681	Lockwasher	5	46	138	Rod End	4
13	16971	Fitting	2	47	139	Rod End Pin	4
13	16486	O-Ring	1	48	15212	Cotter Pin	4
14	16909	Fitting	2	49	15025	Nut	8
14	16485	O-Ring	1	50	16541	Fitting	1
15	16571	Fitting	1	50	16484	O-Ring	1
15	16487	O-Ring	1	51	a 16541	Fitting	2
16	362011	Fitting	1	51	16484	O-Ring	1
16	16487	O-Ring	1	52	a 201783	Fitting	2
17	16538	Fitting	1	52	a 16484	O-Ring	1
17	16481	O-Ring	1	53	a 1301416	Tube	1
18	16923	Fitting	1	54	a 1301417	Tube	1
19	b 1300991	Lever	1	55	a 17321	Fitting	2
20	b 1309475	Collar	1	56	a 1300050	Knob	2
21	b 1301129	Bracket	1	57	a 389045	Adapter	1
22	.....	Control Valve	1	58	a 1326809	Tube	1
		☞ (Figure 170)		59	a 1326810	Tube	1
23	b 1328699	Bushing	1	60	a 16935	Fitting	2
24	c 1300999	Spacer	1	60	a 17321	Fitting	2
25	c 293604	Capscrew	1				
26	c 136687	Nut	1	a		Empty Container Handler	
27	c 292680	Lockwasher	1	b		Without Clamp Attachment	
28	1328699	Bushing	1	c		With Clamp Attachment	
29	1300990	Lever	1	d		Non-EC	
30	c 1300993	Lever	1	e		Last Used On S/N D19D-2127	
31	c 306113	Selector Pin	1	f		First Used On S/N D19D-2128	

CONTROL VALVE (FIGURE 170) FOUR FUNCTION



PARTS-SERVICE GRAM	
ITEM	GRAM
Control Valve	JD-58



**CONTROL VALVE
FOUR FUNCTION**

KEY:

A: Last Used On S/N D19D-2127

B: First Used On S/N D19D-2128

REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
	a	1301530 Control Valve	1	..	34	a	1391639 Auxiliary Spool Section .....	..	2
	a	1385613 Control Valve .....	..	1	34	b	1320977 Auxiliary Spool Section	1	..
	b	1330604 Control Valve	1	..	34	b	1391639 Auxiliary Spool Section .....	..	1
	b	1385615 Control Valve .....	..	1	35		1320982 O-Ring	1	1
1		1320980 Outlet Section	1	1	36		274426 Cap	1	1
2		1320981 Inlet Section	1	1	37		77451 Plate	2	2
3		1320982 O-Ring	1	1	38		274427 Seat	2	2
4		1320976 Hoist Spool Section	1	1	39		274548 Capscrew	1	1
5		1320982 O-Ring	1	1	40		1320991 Spring	1	1
6		274426 Cap	1	1	41		16328 Capscrew	2	2
7		77451 Plate	1	1	42		16706 Screw	2	2
8		1320992 Plate	1	1	43		1393703 Wiper	2	2
9		274427 Seat	2	2	44		1320988 Spring	1	..
10		274548 Capscrew	1	1	44		1320994 Spring .....	..	1
11		16328 Capscrew	2	2	45		1320989 Poppet	1	..
12		1455596 O-Ring	1	1	45		1320998 Poppet .....	..	1
13		1393703 Wiper	2	2	46		1393704 Lip Seal	2	2
14		1320994 Spring	1	1	47	b	1334946 Auxiliary Spool Section	1	1
15		1320991 Spring	1	1	48	b	1320982 O-Ring	1	1
16		1320995 Capscrew	2	2	49	b	274426 Cap	1	1
17		1320996 Spacer	1	1	50	b	77451 Plate	2	2
18		1320997 Spacer	2	2	51	b	274427 Seat	2	2
19		1393704 Lip Seal	2	2	52	b	274548 Capscrew	1	1
20		1320998 Poppet	1	1	53	b	274428 Spring	1	..
21	a	1320978 Tilt Spool Section	1	..	53	b	300723 Spring .....	..	1
21	a	1391638 Tilt Spool Section .....	..	1	54	b	16328 Capscrew	2	2
21	b	1334945 Tilt Spool Section	1	1	55	b	16706 Screw	2	2
22		1320982 O-Ring	1	1	56	b	1393703 Wiper	2	2
23		274426 Cap	1	1	57	b	1320988 Spring	1	1
24		77451 Plate	2	2	58	b	1335247 Poppet	1	1
25		274427 Seat	2	2	59	b	1393704 Lip Seal	2	2
26		274548 Capscrew	1	1	60		1385619 Kit-Tie Rod	1	..
27		16328 Capscrew	2	2	60		1320975 Kit-Tie Rod .....	..	1
28		16706 Screw	2	2	61		1321380 Tie Rod	1	..
29		1393703 Wiper	2	2	61		1320985 Tie Rod .....	..	1
30		300723 Spring	1	1	62		1321379 Tie Rod	2	..
31	a	1320988 Spring	1	..	62		1320984 Tie Rod .....	..	2
31	b	1320994 Spring .....	..	1		a	Non-EC		
32	a	1320989 Poppet	1	..		b	Empty Container Handler		
32	b	1320998 Poppet	1	1					
33		1320990 O-Ring	2	2					
34	a	1320977 Auxiliary Spool Section	2	..					

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CONTROL VALVE FOUR FUNCTION

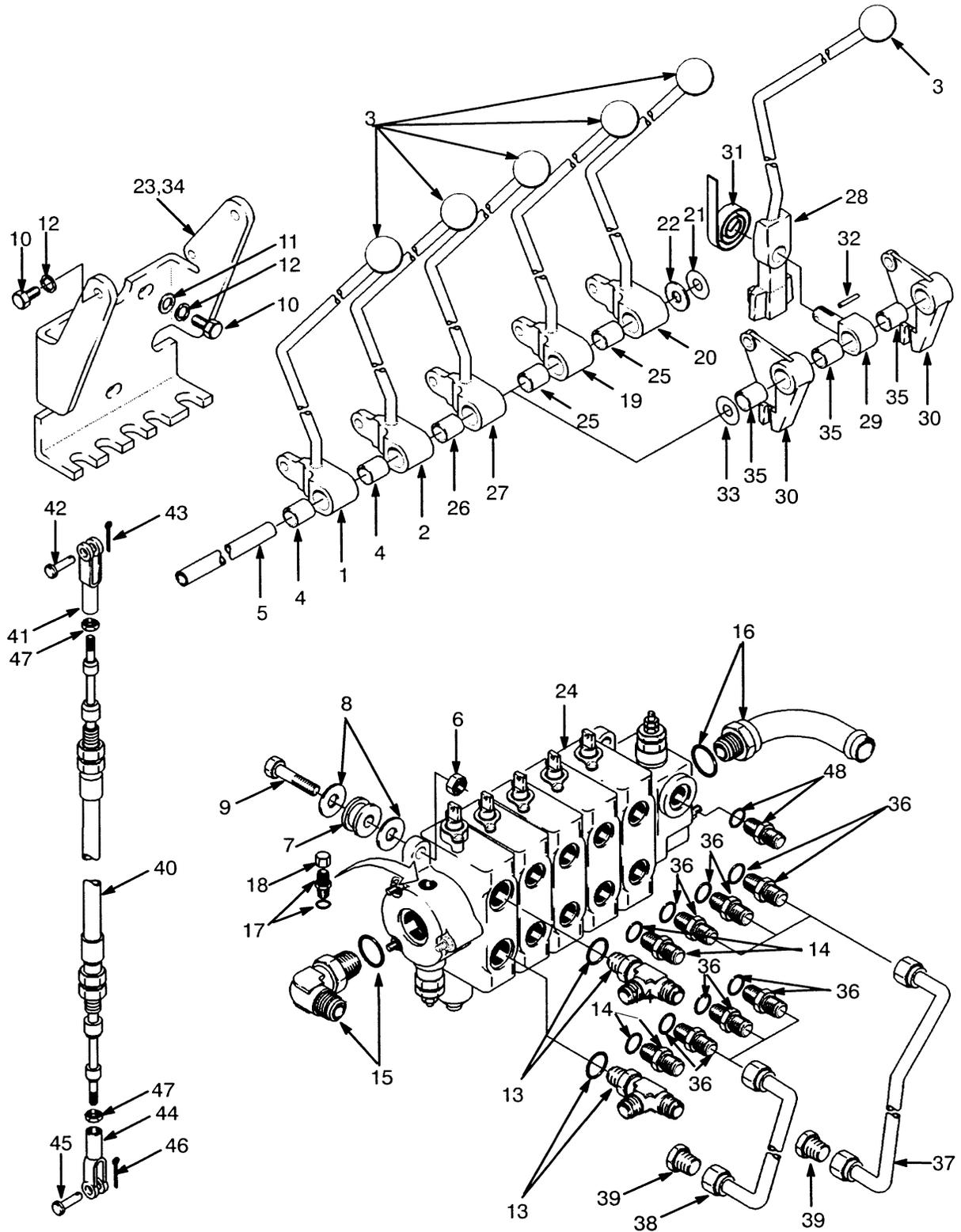
KEY:

A: Last Used On S/N D19D-2127

B: First Used On S/N D19D-2128

REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
63	1320986	Nut	4	4	71	1455596	O-Ring .....	..	2
64	1320983	Nut	2	2	72	1391645	Spring .....	..	1
65	1320979	Relief Valve	4	4	73	1455594	Cap .....	..	2
65	1321381	Kit-Seal	1	1	74	1391644	Plug .....	..	1
66	1385616	Control Section .....	..	1	75	1391643	O-Ring .....	..	1
67	1320982	O-Ring .....	..	1					
68	16485	O-Ring .....	..	2					
69	1455595	Capscrew .....	..	4	a	Non-EC			
70	188486	Plug .....	..	2	b	Empty Container Handler			

VALVE ATTACHING PARTS (FIGURE 171) FIVE FUNCTION

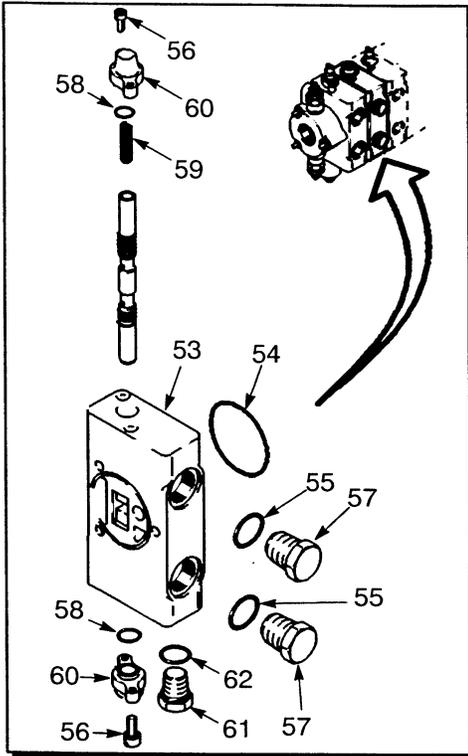


VALVE ATTACHING PARTS

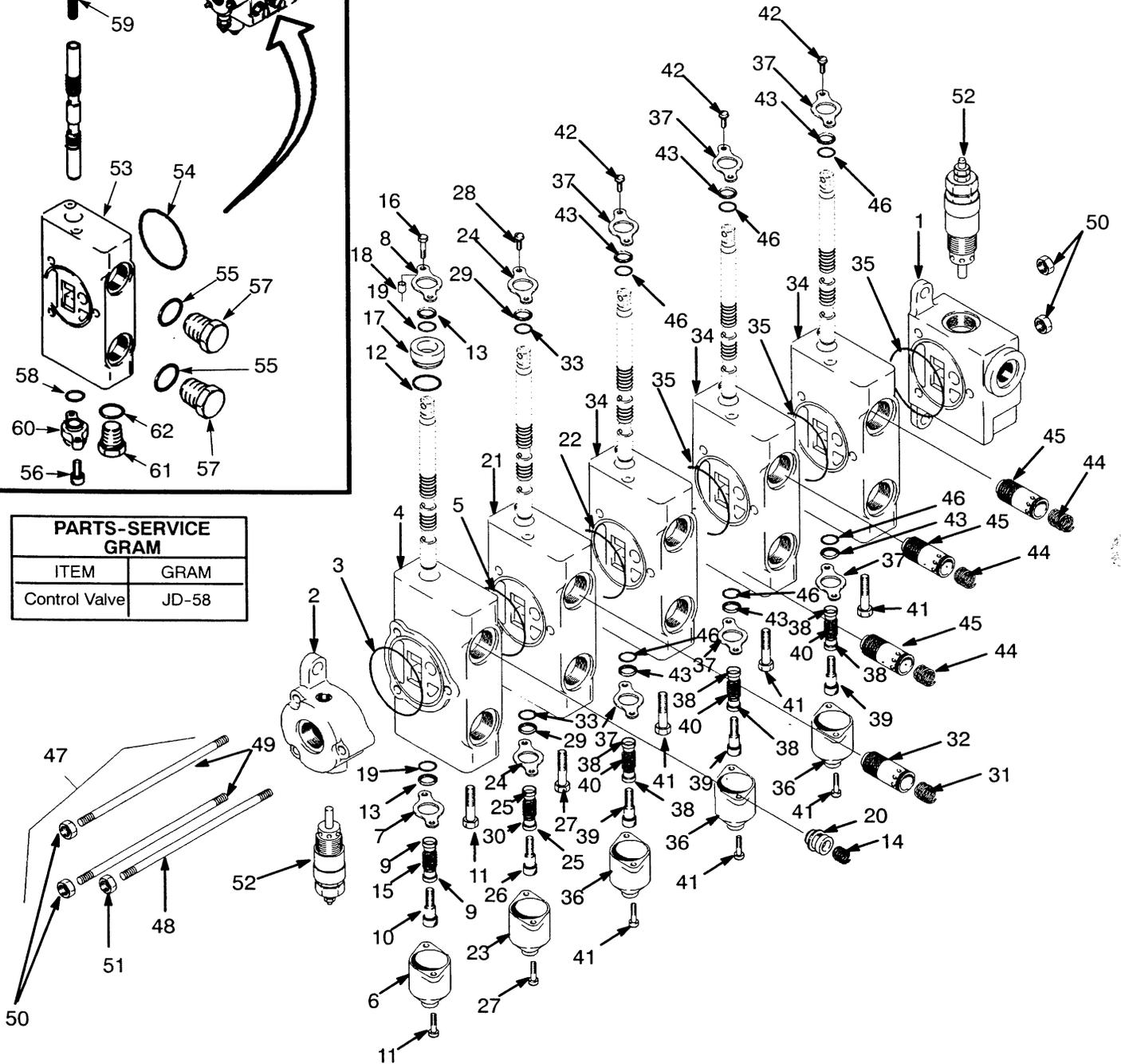
FIVE FUNCTION

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1300988	Lever	1	25	a 1328699	Bushing	2
2	1300989	Lever	1	26	1328699	Bushing	1
3	308993	Knob	5	27	1300990	Lever	1
4	1328699	Bushing	2	28	b 1300993	Lever	1
5	1301726	Shaft	1	29	b 306113	Selector Pin	1
6	c 221354	Locknut	4	30	b 1301122	Lever	2
6	d 221354	Locknut	3	31	b 175861	Spring	1
7	c 339969	Grommet	4	32	b 302428	Pin	1
7	d 339969	Grommet	3	33	b 1309479	Shim (.020 in)	AR
8	c 15178	Washer	8	33	a 1328696	Shim (.010 in)	AR
8	d 15178	Washer	6	34	b 1301133	Bracket	1
9	c 16813	Capscrew	4	35	b 1328697	Bushing	3
9	d 16813	Capscrew	3	36	16909	Fitting	6
10	1328930	Capscrew	5	36	16486	O-Ring	1
11	320158	Washer	3	37	1301416	Tube	3
12	292681	Lockwasher	5	38	1301417	Tube	3
13	16971	Fitting	2	39	17321	Fitting	6
13	16486	O-Ring	1	40	1316806	Cable	5
14	16909	Fitting	2	41	1316807	Rod End	5
14	16485	O-Ring	1	42	126	Rod End Pin	5
15	16571	Fitting	1	43	15200	Cotter Pin	5
15	16487	O-Ring	1	44	138	Rod End	5
16	362011	Fitting	1	45	139	Rod End Pin	5
16	16487	O-Ring	1	46	15212	Cotter Pin	5
17	16538	Fitting	1	47	15025	Nut	10
17	16481	O-Ring	1	48	16541	Fitting	1
18	16923	Fitting	1	48	16484	O-Ring	1
19	a 1300991	Lever	1				
20	a 1300992	Lever	1	a	Without Clamp Attachment		
21	a 1309479	Shim (.020 in)	AR	b	With Clamp Attachment		
21	a 1328696	Shim (.010 in)	AR	c	Last Used On S/N D19D-2127		
22	a 320162	Washer	AR	d	First Used On S/N D19D-2128		
23	a 1301129	Bracket	1				
24	.....	Control Valve	1				
		☞ (Figure 172)					

CONTROL VALVE (FIGURE 172) FIVE FUNCTION



PARTS-SERVICE GRAM	
ITEM	GRAM
Control Valve	JD-58



CONTROL VALVE FIVE FUNCTION

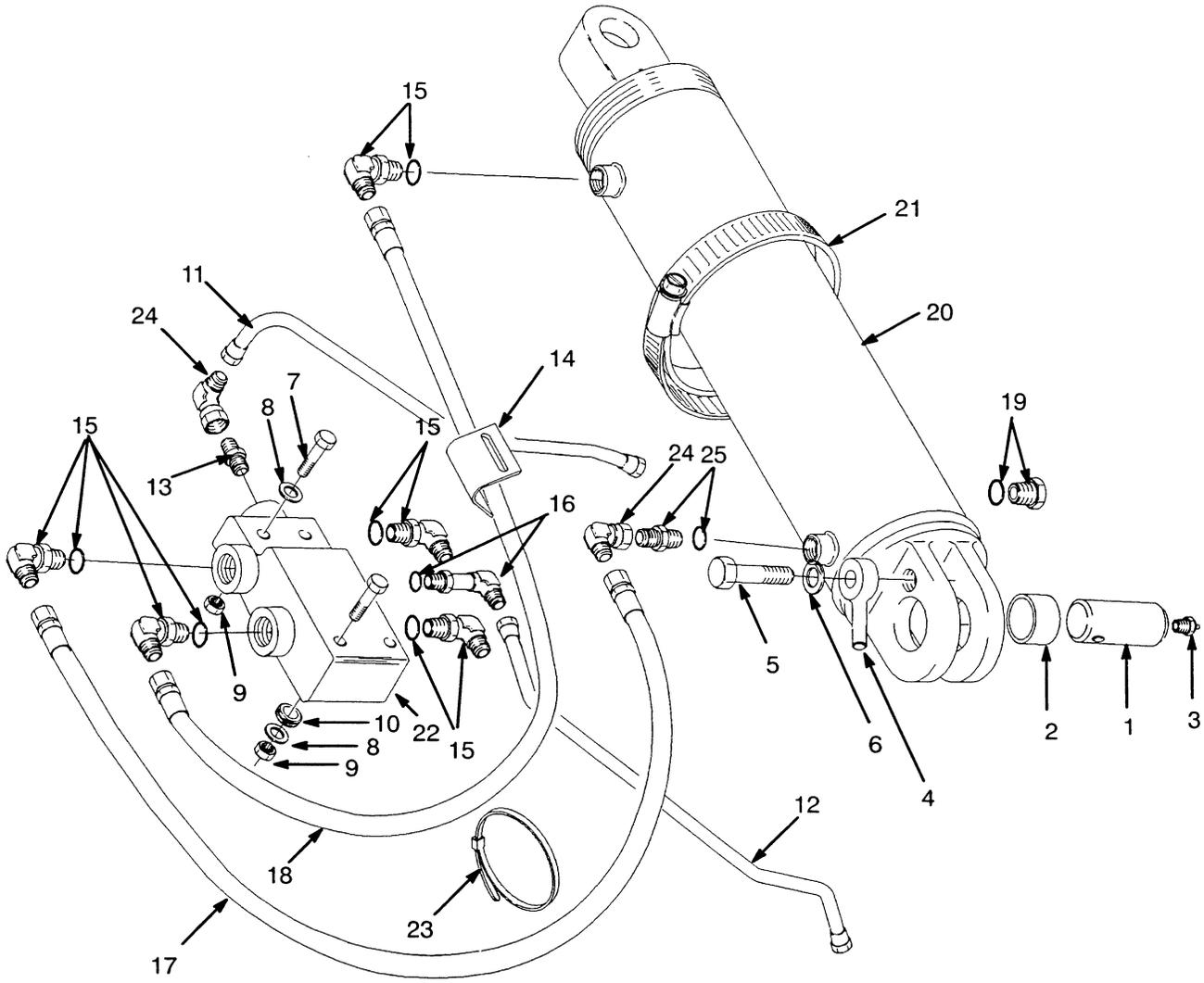
KEY:

A: Last Used On S/N D19D-2127

B: First Used On S/N D19D-2128

REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
	1301531	Control Valve	1	..	33	1393704	O-Ring	2	2
	1385614	Control Valve .....	..	1	34	1320977	Auxiliary Spool Section	3	..
1	1320980	Outlet Section	1	1	34	1391639	Auxiliary Spool Section .....	..	3
2	1320981	Inlet Section	1	1	35	1320982	O-Ring	1	1
3	1320982	O-Ring	1	1	36	274426	Cap	1	1
4	1320976	Hoist Spool Section	1	1	37	77451	Plate	2	2
5	1320982	O-Ring	1	1	38	274427	Seat	2	2
6	274426	Cap	1	1	39	274548	Capscrew	1	1
7	77451	Plate	1	1	40	1320991	Spring	1	1
8	1320992	Plate	1	1	41	16328	Capscrew	2	2
9	274427	Seat	2	2	42	16706	Screw	2	2
10	274548	Capscrew	1	1	43	1393703	Wiper	2	2
11	16328	Capscrew	2	2	44	1320988	Spring	1	..
12	1455596	O-Ring	1	1	44	1320994	Spring .....	..	1
13	1393703	Wiper	2	2	45	1320989	Poppet	1	..
14	1320994	Spring	1	1	45	1320998	Poppet .....	..	1
15	1320991	Spring	1	1	46	1393704	Lip Seal	2	2
16	1320995	Capscrew	2	2	47	1320975	Kit-Tie Rod	1	..
17	1320996	Spacer	1	1	47	1385619	Kit-Tie Rod .....	..	1
18	1320997	Spacer	2	2	48	1320985	Tie Rod	1	..
19	1393704	Lip Seal	2	2	48	1377237	Tie Rod .....	..	1
20	1320998	Poppet	1	1	49	1320984	Tie Rod	2	..
21	1320978	Tilt Spool Section	1	..	49	1377238	Tie Rod .....	..	2
21	1391638	Tilt Spool Section .....	..	1	50	1320983	Nut	4	4
22	1320982	O-Ring	1	1	51	1320986	Nut	2	2
23	274426	Cap	1	1	52	1320979	Relief Valve	2	2
24	77451	Plate	2	2	52	1321381	Kit-Seal	1	1
25	274427	Seat	2	2	53	1385616	Control Section .....	..	1
26	274548	Capscrew	1	1	54	1320982	O-Ring .....	..	1
27	16328	Capscrew	2	2	55	16485	O-Ring .....	..	2
28	16706	Screw	2	2	56	1455595	Capscrew .....	..	4
29	1393703	Wiper	2	2	57	188486	Plug .....	..	2
30	300723	Spring	1	1	58	1455596	O-Ring .....	..	2
31	1320988	Spring	1	..	59	1391645	Spring .....	..	1
31	1320994	Spring .....	..	1	60	1455594	Cap .....	..	2
32	1320989	Poppet	1	..	61	1391644	Plug .....	..	1
32	1320998	Poppet .....	..	1	62	1391643	O-Ring .....	..	1

TILT CYLINDER ATTACHING PARTS (FIGURE 173)

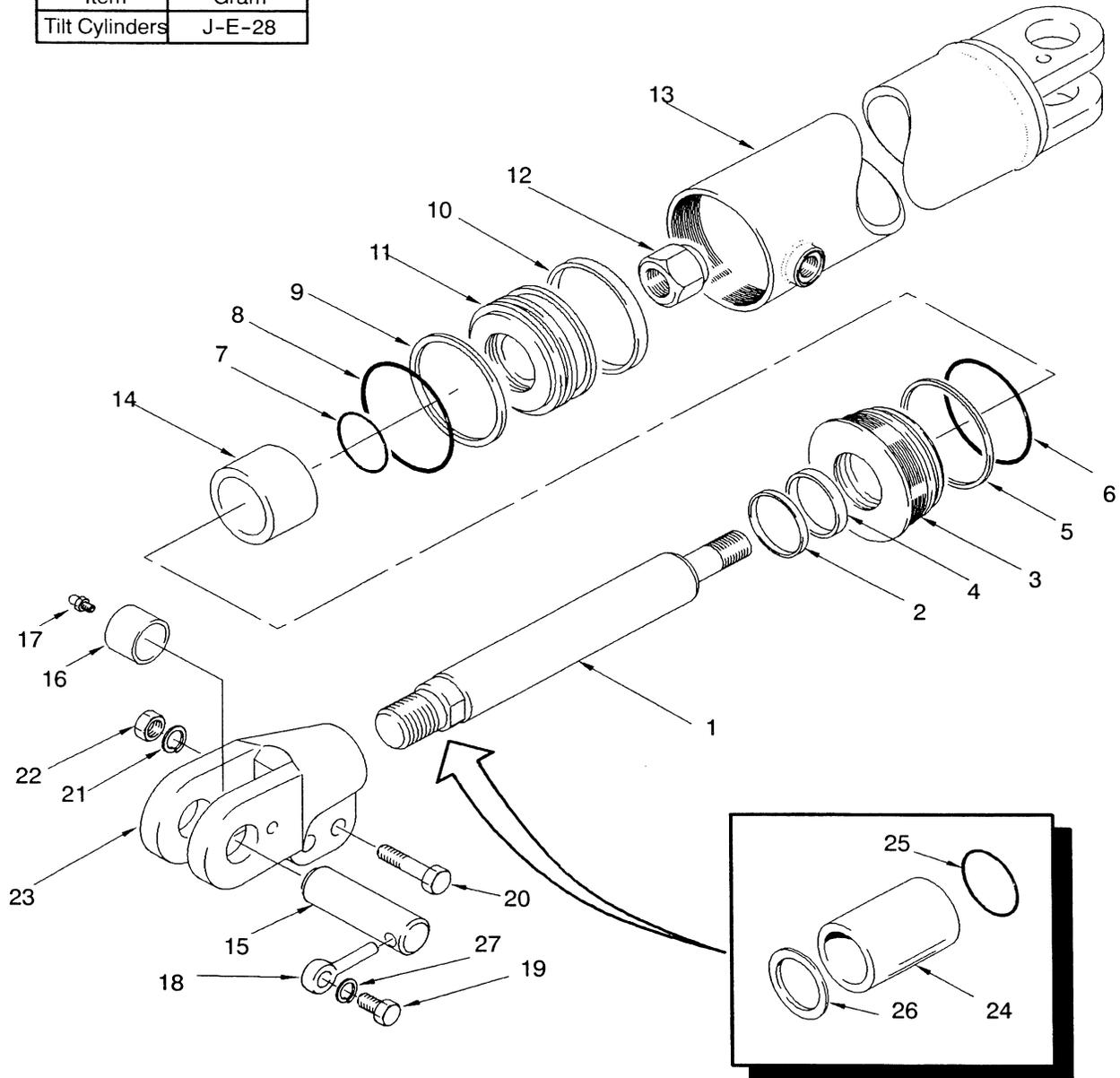


TILT CYLINDER ATTACHING PARTS

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1347862	Pin	2	16	169592	Fitting	1
2	376051	Bushing	2	16	16484	O-Ring	1
3	16006	Lube Fitting	2	17	313979	Hose	2
4	1347861	Anchor	2	18	357869	Hose	2
5	292560	Capscrew	2	19	14595	Fitting	2
6	292685	Lockwasher	2	19	16484	O-Ring	1
7	136704	Capscrew	2	20	....	Tilt Cylinder	2
8	320158	Washer	2			☞ (Figure 174)	
9	313828	Nut	2	21	144157	Clamp	2
10	1301346	Grommet	3	22	....	Tilt Lock Valve	1
11	a 1313351	Tube	1			☞ (Figure 176)	
11	bc 1332944	Tube	1	23	129563	Clamp	1
11	bd 1385603	Tube	1	24	b 16989	Fitting	2
12	c 1313350	Tube	1	25	16541	Fitting	2
12	d 1385604	Tube	1	25	16484	O-Ring	1
13	a 305110	Fitting	1			a Without Noise Reduction	
14	87911	Clamp	2			b With Noise Reduction	
15	16559	Fitting	8			c Last Used On S/N D19D-2127	
15	16484	O-Ring	1			d First Used On S/N D19D-2128	

TILT CYLINDER (FIGURE 174) TWO STAGE NFL

PARTS-SERVICE GRAM	
Item	Gram
Tilt Cylinders	J-E-28



TILT CYLINDER

NON-EC 15° FWD-12° BACK					
Tilt Cylinder	Rod Ref. 1	Plug Ref. 3	Shell Ref.13	Spacer Ref. 14	Rod End Ref. 23
a1347869 b2013403 c2013803 d2037398	a387243 b2013407 c2013809 d2015375	a387244 b2013361 c2013361 d2013361	a1347872 b2013366 c2013366 d2013366	.....	c1347863 d1382936
NON-EC 20.5° FWD-7° BACK					
a1347869 b2013403 c2013803 d2037398	a387243 b2013407 c2013809 d2015375	a387244 b2013361 c2013361 d2013361	a1347872 b2013366 c2013366 d2013366	.....	c1347863 d1382937
NON-EC 5° FWD-12° BACK & H330XL-EC 5° FWD-5° BACK					
a1347870 b2013404 c2013804 d2015363	a387243 b2013407 c2013809 d2015376	a387244 b2013361 c2013361 d2013361	a1347872 b2013366 c2013366 d2013366	c1303443 d2015381	c1347863 d1382936
H330XL-EC 3° FWD-5° BACK					
2035802	2015376	2013361	2013366	1458007	1382936
H360XL-EC 5° FWD & 5° BACK					
a1347871 b 2013405 c2013805 d 2015364	a387243 b2013407 c2013809 d2015377	a387244 b2013361 c2013361 d2013361	a1347872 b2013366 c2013366 d2013366	c1331581 d2015381	c1347864 d1382936
H300-360XL NON-EC 5° FWD-12° BACK					
d2032001	d2015375	d2013361	d2013366	d1303443	d1382936
360XL-EC 3° FWD-5° BACK					
1458005	2015377	2013361	2013366	1478007	1382936

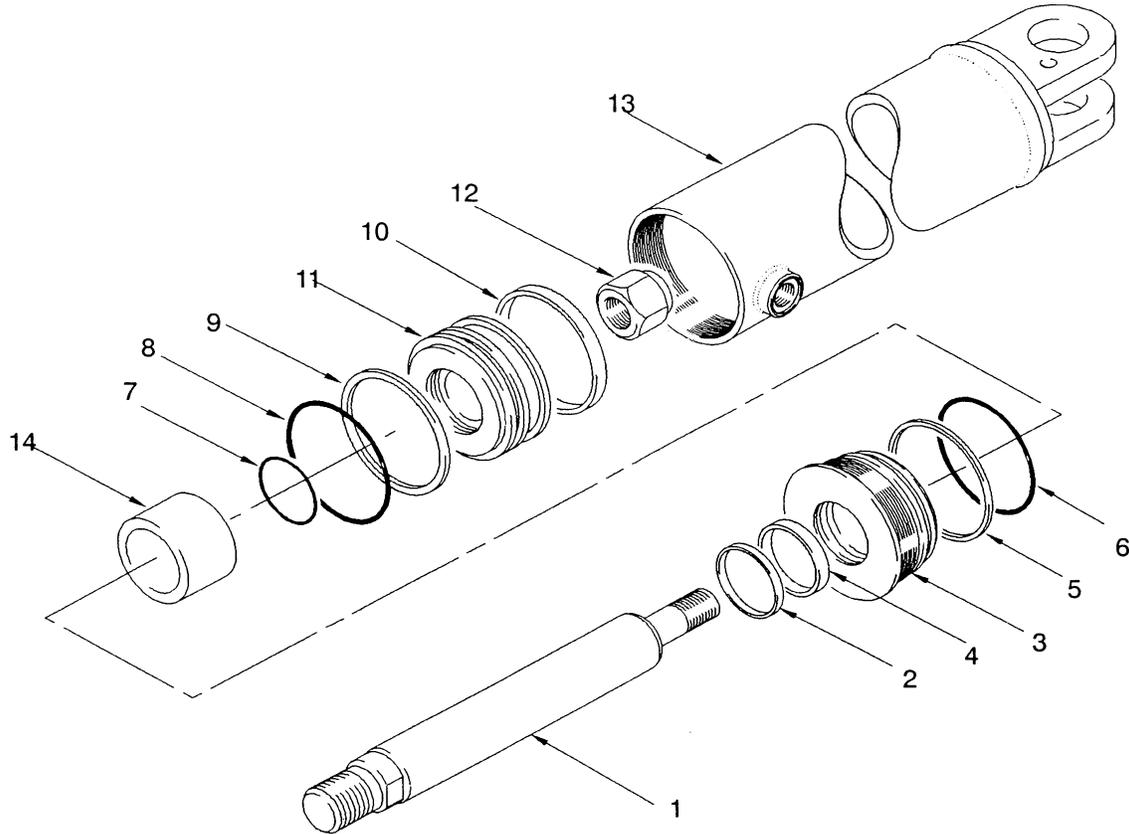
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	f	.....	Piston Rod	1	11	387248	Piston
2	e	816578	Rod Wiper	1	12	221377	Locknut
3	f	.....	Plug	1	13	f	.....
4	e	816580	Seal	1	14	f	.....
5	e	146803	Back-Up Ring	1	15	1347862	Pin
6	e	55289	O-Ring	1	16	376051	Bushing
7	e	198518	O-Ring	1	17	16015	Lube Fitting
8	e	15890	O-Ring	1	18	1347861	Anchor
9	e	1380890	Seal Ring	1	19	292560	Capscrew
10	e	387247	Ring	1	20	292538	Capscrew
					21	292683	Lockwasher
					22	216877	Nut

CONTINUED ON NEXT PAGE

TILT CYLINDER

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
23	f	..... Rod End	2	27	292683	Lockwasher	2
24	ag	1326755 Spacer	2	a		Last Used On S/N D19D-1614	
24	bg	2013415 Spacer	2	b		Used On S/N D19D-1615 Thru D19D-1657	
24	ah	1325382 Spacer	2	c		Used On S/N D19D-1658 Thru D19D-1846 (EC) & D19D-1854 (Non-EC)	
24	bh	2013414 Spacer	2	d		First Used On S/N D19D-1847 (EC) & D19D-1855 (Non-EC)	
25	g	15870 O-Ring	2	e		Included In Seal Kit 387325	
26	g	1326764 Shim	AR	f		 Table On Previous Page	
				g		H330XL-EC	
				h		H360XL-ECH	

TILT CYLINDER (FIGURE 175) THREE STAGE FFL

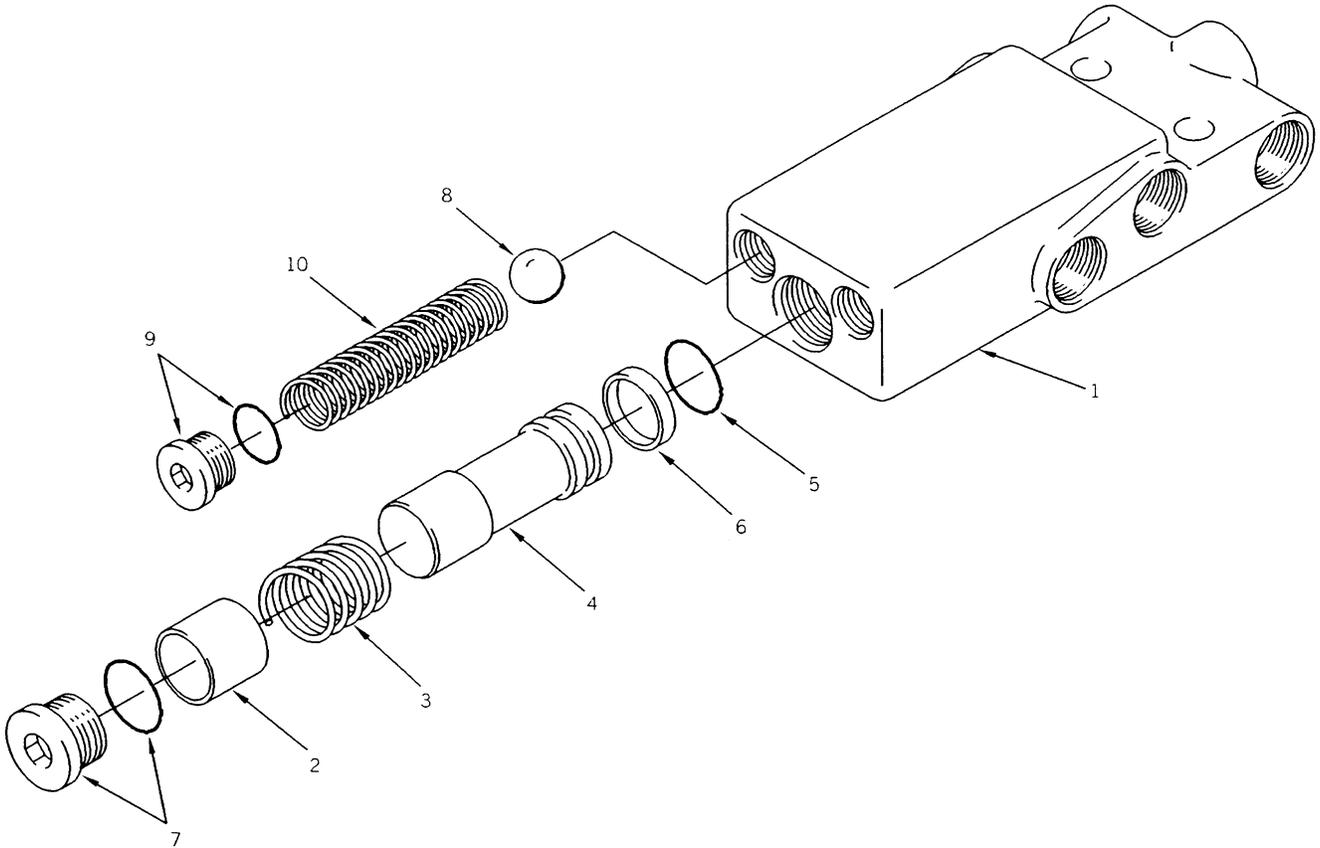


**TILT CYLINDER
THREE STAGE FFL**

NON-EC 5° FWD-6° BACK			
Tilt Cylinder	Rod Ref. 1	Shell Ref.13	Spacer Ref. 14
1454508	1455623	2013366	1392601

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY		
1	a	.....	Piston Rod	1	10	b 387247	Ring	1	
2	b	816578	Rod Wiper	1	11	387248	Piston	1	
3		2013361	Plug	1	12	221377	Locknut	1	
4	b	816580	Seal	1	13	a	.....	Shell	1
5	b	146803	Back-Up Ring	1	14	a	.....	Spacer	1
6	b	55289	O-Ring	1		a	☞	Table Above	
7	b	198518	O-Ring	1		b		Included In Seal Kit 387325	
8	b	15890	O-Ring	1					
9	b	1380890	Seal Ring	1					

TILT LOCK VALVE (FIGURE 176)



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	317801	Tilt Lock Valve	1	7	235691	Fitting	1
1	317802	Body	1	7	16484	O-Ring	1
2	305104	Pin	1	8	5586	Ball	2
3	276963	Spring	1	9	134436	Fitting	2
4	294863	Spool	1	9	16482	O-Ring	1
5	87300	O-Ring	1	10	112468	Spring	2
6	98594	Back-up Ring	1				

VISTA TWO-STAGE MAST

CARRIAGE (Figure 183) Page 354

HEADER HOSE (Figure 184) Page 356

INNER MAST (Figure 178) Page 344

LIFT CYLINDER (Figure 180)
LAST USED ON S/N D19D-2025 Page 348

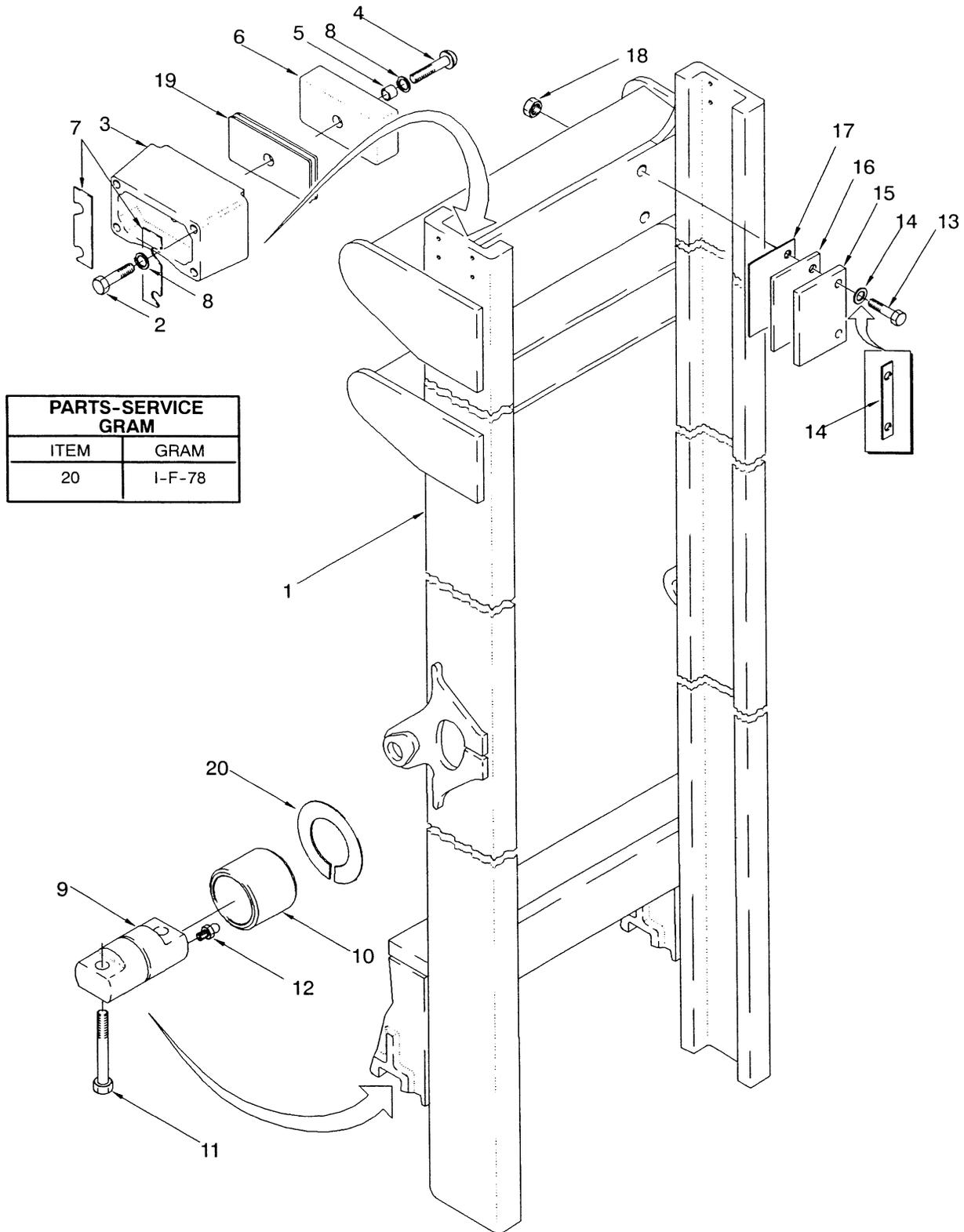
LIFT CYLINDER (Figure 181)
NON-EC
FIRST USED ON S/N D19D-2026 Page 350

LIFT CYLINDER (Figure 182)
EMPTY CONTAINER HANDLER 3 AND 4 Page 352

LIFT (Figure 179) Page 346

OUTER MAST (Figure 177) Page 342

OUTER MAST (FIGURE 177)



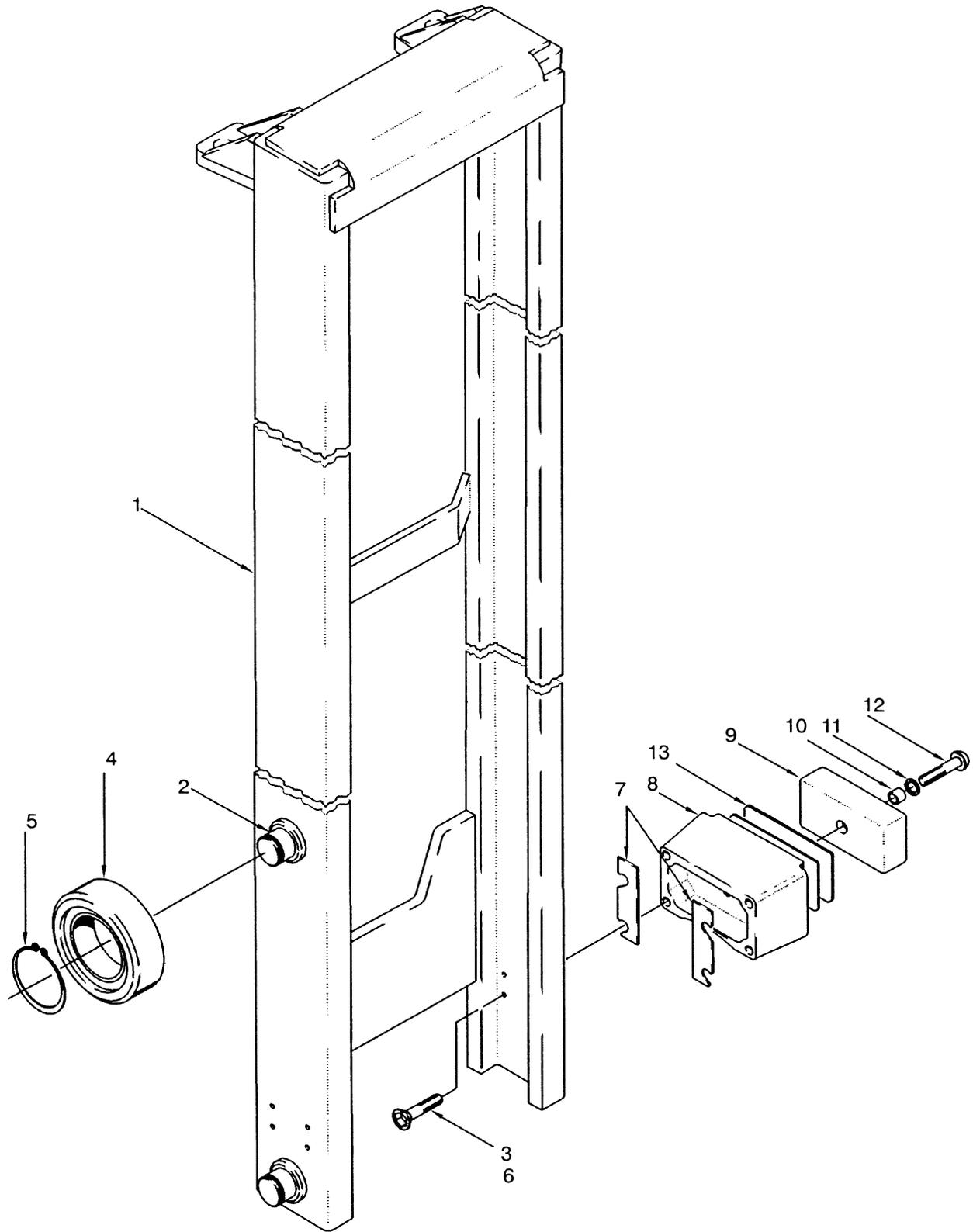
PARTS-SERVICE GRAM	
ITEM	GRAM
20	I-F-78

OUTER MAST

REF NO	NAME OF PART	LIFT HEIGHT TO BOTTOM OF FORKS						
		144.0 inch	179.5 inch	209.0 inch	240.5 inch	260.3 inch	272.4 inch	390.0 inch
		PART NO.						
		NON-ECH					ECH-3	ECH-4
	Mast	e1303361 f1385953	e 1303362 f1385954	e 1303363 f1385955	e 1303364 f1385956	e1303365 f1385957	k1358721 m1460189	k1323847 m1460190
1	Outer Mast	1303345	1303346	1303347	1303348	1334583	k1358713 m1460198	k1323837 m1460136

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
a	.....	Mast	1	14	1347851	Plate	2
1 a	.....	Outer Mast	1	15	1346892	Wear Plate	2
2	221506	Capscrew	8	16	1346973	Shim (.060 in)	AR
3	1301018	Bracket	2	17	1346974	Shim (.12 in)	AR
4	376203	Capscrew	2	18	300937	Nut	4
5	1301016	Spacer	2	19	1301014	Shim (.050 in)	AR
6	1335179	Block	2	20	1359101	Shim (.12 in)	AR
7	1310592	Shim (.031 in)	AR	a	☞ Table Above		
8	15156	Lockwasher	10	e	Last Used On S/N D19D-2025		
9 g	376053	Pin	2	f	First Used On S/N D19D-2026		
9 h	1385549	Pin	2	g	Last Used On S/N D19D-2168		
10	376038	Bushing	2	h	First Used On S/N D19D-2169		
11	1326777	Capscrew	4	k	Last Used On S/N D19D-2680		
12	16015	Lube Fitting	2	m	First Used On S/N D19D-2681		
13	292529	Capscrew	4				

INNER MAST (FIGURE 178)



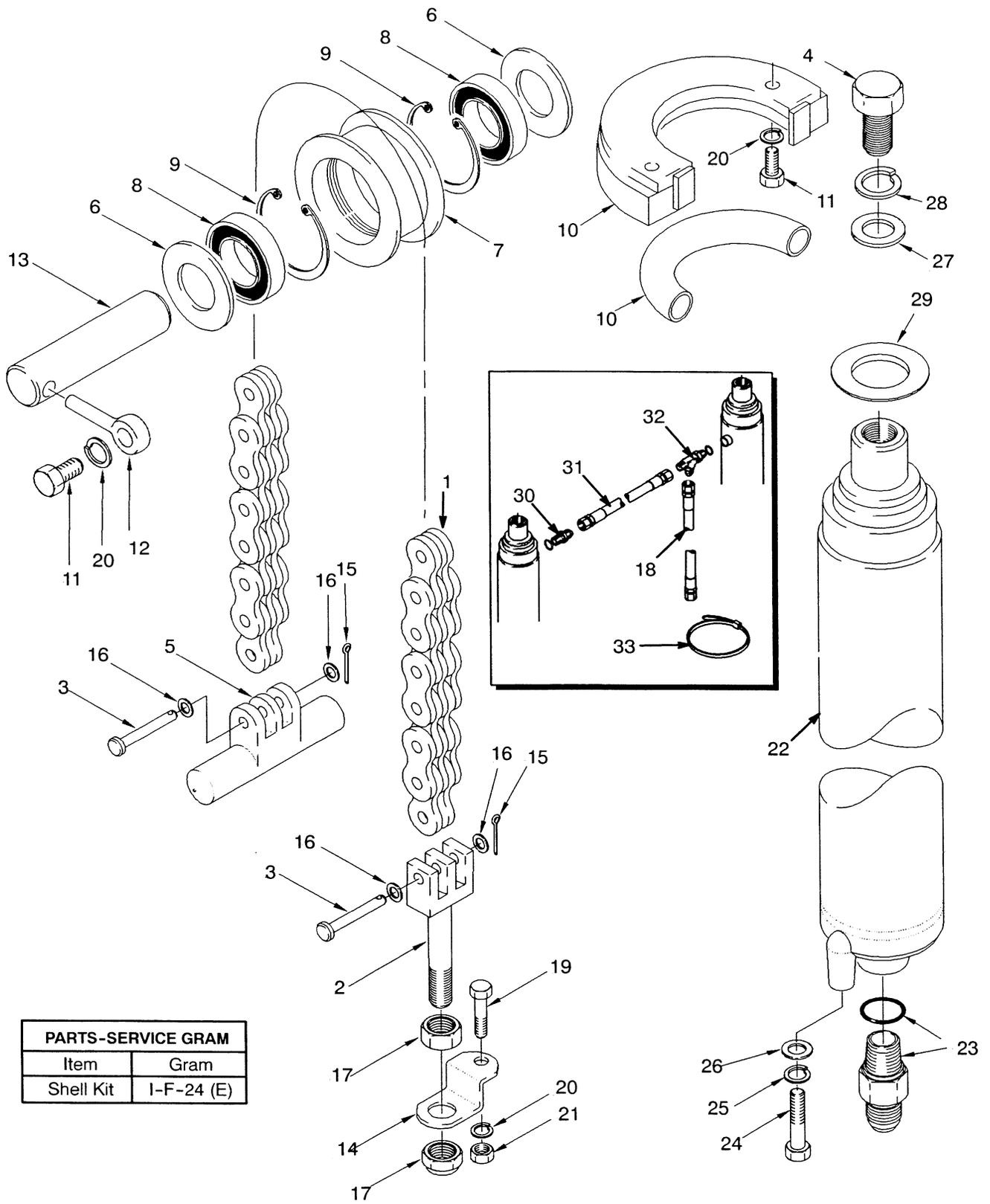
INNER MAST

REF NO	NAME OF PART	LIFT HEIGHT TO BOTTOM OF FORKS						
		144.0 inch	179.5 inch	209.0 inch	240.5 inch	260.3 inch	272.4 inch	390.0 inch
		PART NO.						
		NON-ECH					ECH-3	ECH-4
	Mast	^e 1303361 ^f 1385953	^e 1303362 ^f 1385954	^e 1303363 ^f 1385955	^e 1303364 ^f 1385956	^e 1303365 ^f 1385957	^g 1358721 1460189	^g 1323847 1460190
1	Inner Mast	1303311	1303312	1303313	1303314	1303315	^g 1358746 ^h 1460197	^g 1323848 ^h 1460137

REF	PART NO.	NAME OF PART	QTY
	^a	Mast	1
1	^a	Inner Mast	1
2	1313357	Stubshaft	4
3	220159	Capscrew	8
4	1313358	Load Roller	4
5	58918	Snap Ring	4
6	321197	Thread Adhesive	AR
7	1310592	Shim (.030 in)	AR
8	1301018	Bracket	2
9	1335179	Block	2

REF	PART NO.	NAME OF PART	QTY
10	1301016	Spacer	2
11	15156	Lockwasher	2
12	376203	Capscrew	2
13	1301014	Shim (.050 in)	AR
	^a	☞ Table Above	
	^e	Last Used On S/N D19D-2025	
	^f	First Used On S/N D19D-2026	
	^g	Last Used On S/N D19D-2680	
	^h	First Used On S/N D19D-2681	

LIFT (FIGURE 179)



PARTS-SERVICE GRAM	
Item	Gram
Shell Kit	I-F-24 (E)

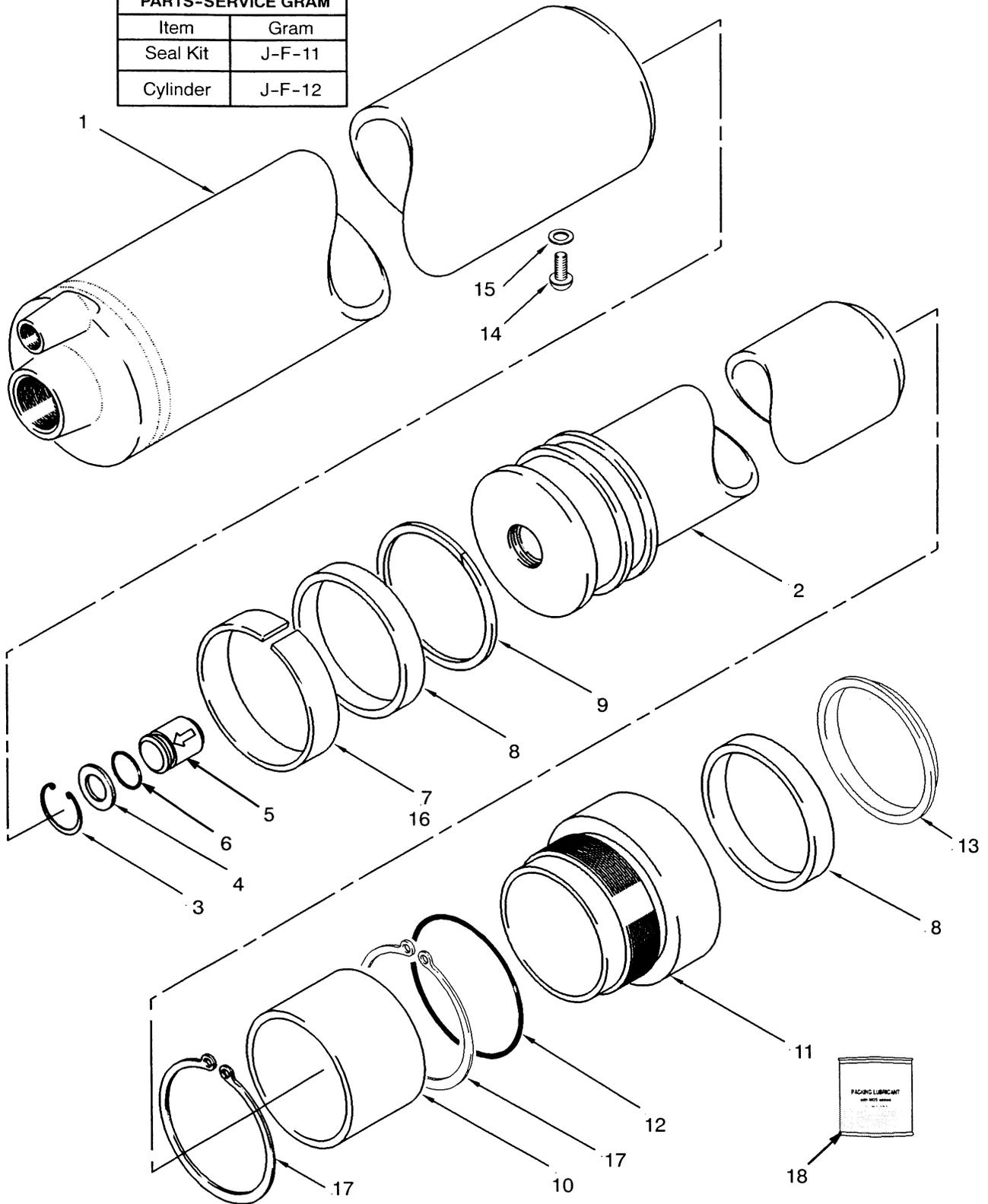
LIFT

REF NO	NAME OF PART	LIFT HEIGHT TO BOTTOM OF FORKS						
		144.0 inch	179.5 inch	209.0 inch	240.5 inch	260.3 inch	272.4 inch	390.0 inch
		PART NO.						
		NON-ECH					ECH-3	ECH-4
	Mast	e1303361 f1385953	e 1303362 f1385954	e 1303363 f1385955	e 1303364 f1385956	e1303365 f1385957	g1358721 h1460189	g 1323847 h1460190
1	Lift Chain	1303366	1303367	1303368	1303369	1303370	g1358714 h1460135	g1323839 h1460134
34	Hose	88300	123045	252388	159369	116046	....	....

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
a	....	Mast	1			(Figure 180), (Figure 181) (Figure 182)	
1 a	....	Lift Chain	2	23 b	346971	Lowering Control Valve	1
2	267827	Chain Anchor	2	23 c	376681	Lowering Control Valve	1
3	1303383	Pin	4	24	136985	Capscrew	2
4	292580	Capscrew	2	25	292682	Lockwasher	2
5	267829	Chain Anchor	2	26	1303391	Washer	2
6	267837	Washer	4	27	15181	Washer	2
7	1328695	Sheave	2	28	292687	Lockwasher	2
8	267830	Bearing	4	29	192830	Shim (.050 in)	AR
9	46692	Snap Ring	2	30 bf	131460	Fitting	2
10 c	1334497	Retainer	2	30	16483	O-Ring	1
10 d	1334500	Hose	2	31 bf	73470	Hose	1
11	292528	Capscrew	6	32 bf	17062	Fitting	1
11 b	292529	Capscrew	4	33 bf	273775	Strap Clamp	2
12	82270	Eyebolt	2				
13	1303372	Pin	2	a		Table Above	
14	132829	Lock Plate	2	b		Non-EC	
15	15244	Cotter Pin	4	c		Empty Container Handler-4	
16	15146	Washer	4	d		Empty Container Handler-3	
17	221725	Nut	4	e		Last Used On S/N D19D-2025	
18 abf	....	Hose	1	f		First Used On S/N D19D-2026	
19	292531	Capscrew	2	g		Last Used On S/N D19D-2680	
20 a	292683	Lockwasher	8	h		First Used On S/N D19D-2681	
20 b	292683	Lockwasher	4				
21	216877	Nut	2				
22	....	Lift Cylinder	2				

LIFT CYLINDER (FIGURE 180) LAST USED ON S/N D19D-2025

PARTS-SERVICE GRAM	
Item	Gram
Seal Kit	J-F-11
Cylinder	J-F-12



LIFT CYLINDER
LAST USED ON S/N D19D-2025

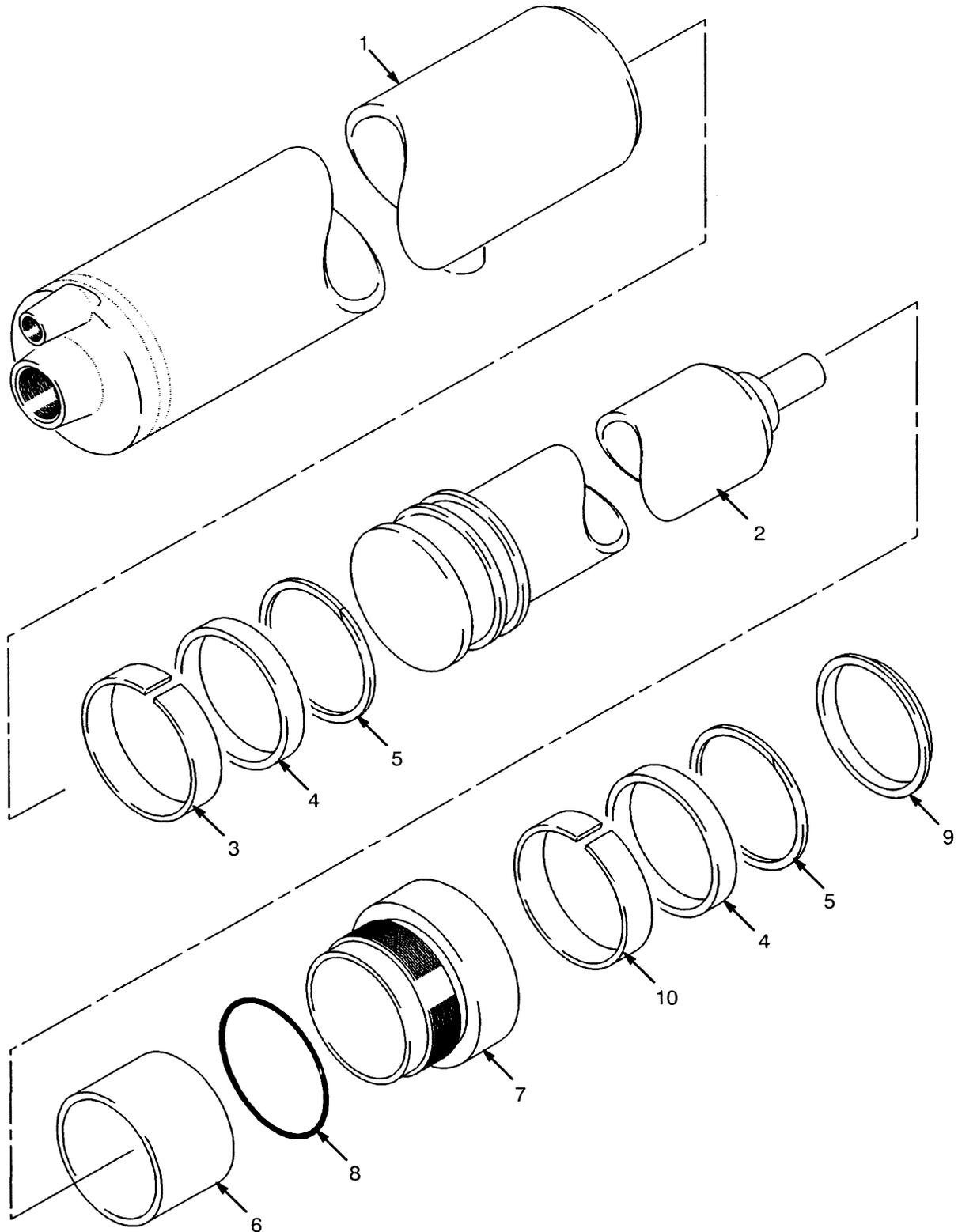
REF NO	NAME OF PART	LIFT HEIGHT TO BOTTOM OF FORKS						
		144.0 inch	179.5 inch	209.0 inch	240.5 inch	260.3 inch	272.4 inch	390.0 inch
		PART NO.						
		NON-ECH					ECH-3	ECH-4
	Lift Cylinder	1334555	1334556	1334557	1334558	1334559	1358715	1345705
1	Shell	387262	387263	387264	387265	387266	1358717	1313379
2	Rod	387281	387282	387283	387284	387285	1358718	1345702

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
a		Lift Cylinder	2	11 g	1323845	Retainer	1
1 a		Shell	1	12 ef	362102	O-Ring	1
2 a		Rod	1	13 f	815620	Wiper	1
2	387280	Piston	1	13 eg	1313386	Wiper	1
2	67551	Snap Ring	1	14	18701	Capscrew	1
3	187388	Snap Ring	1	15	190887	Seal	1
4	637635	Washer	1	16 f	318067	Wear Ring	1
5	257913	Valve	1	17 g	1323892	Snap Ring	2
6 f	39348	O-Ring	1	18	186061	Packing Lube	AR
7 ef	636954	Wear Ring	2				
8 f	637166	Seal	2	a		☞ Table Above	
8 g	1323844	Seal	1	e		Included In Seal Kit 1335188 For Empty Container Handler	
9 f	638224	Ring	2	f		Included In Seal Kit 1334571-Non-EC	
10	387286	Spacer	1	g		Empty Container Handler	
10 g	1313362	Guide	1				
11	1328946	Retainer	1				

LIFT CYLINDER (FIGURE 181)

NON-EC

FIRST USED ON S/N D19D-2026

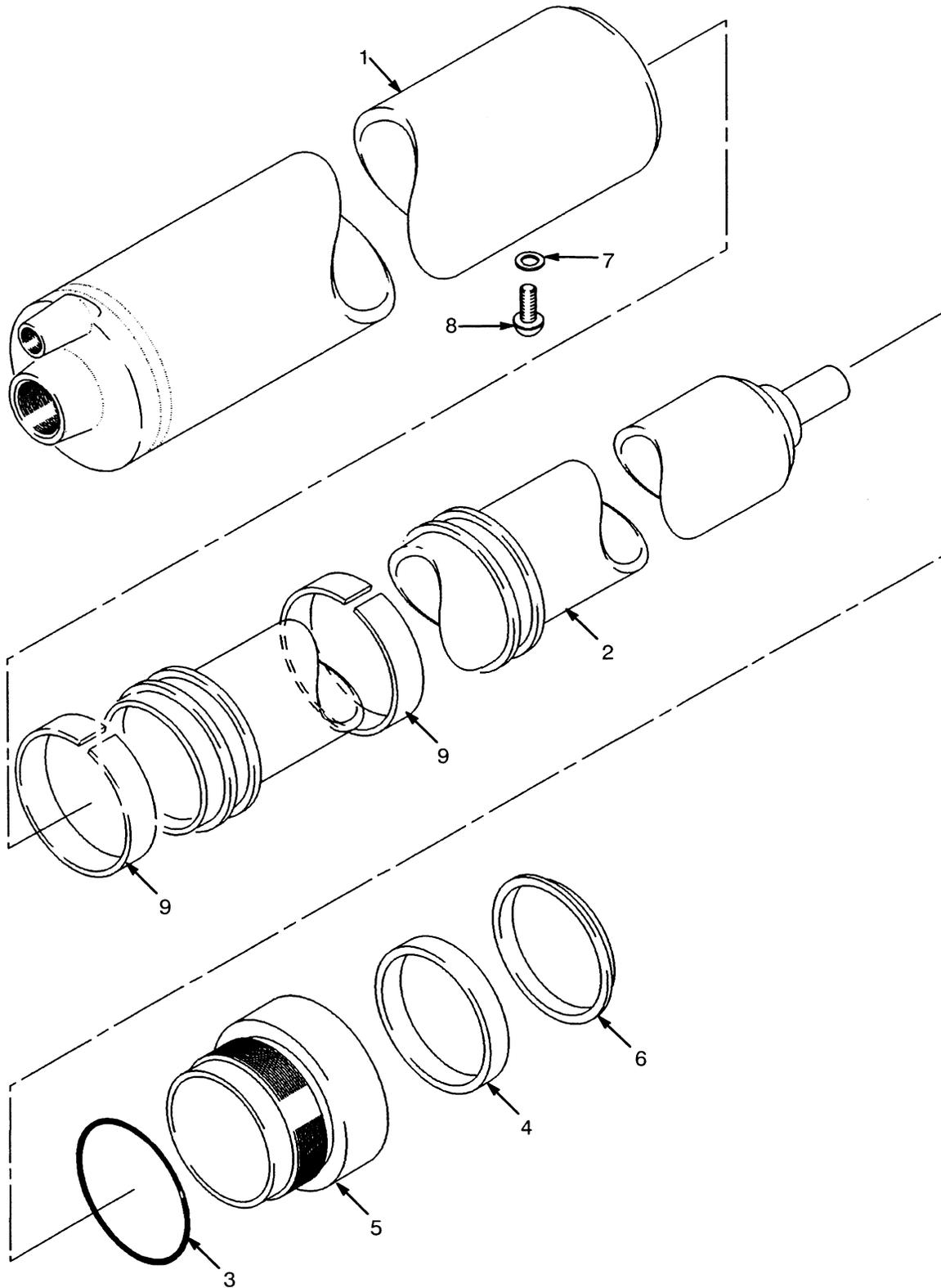


**LIFT CYLINDER
NON-EC
FIRST USED ON S/N D19D-2026**

REF NO	NAME OF PART	LIFT HEIGHT TO BOTTOM OF FORKS				
		144.0 inch	179.5 inch	209.0 inch	240.5 inch	260.3 inch
	Lift Cylinder	1385928	1385929	1385930	1385931	1385932
1	Shell	1385934	1385935	1385936	1385937	1385938
2	Rod	1385884	1385885	1385886	1385887	1385888

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
a	....	Lift Cylinder	2	7	1328946	Retainer	1
1 a	....	Shell	1	8 b	362102	O-Ring	1
2 a	....	Rod	1	9 b	815620	Wiper	1
3 b	636954	Wear Ring	1	10 b	318067	Wear Ring	1
4 b	637166	Seal	2				
5 b	638224	Seal	2	a	☞	Table Above	
6	387286	Spacer	1	b		Included In Seal Kit 1385958	

LIFT CYLINDER (FIGURE 182) EMPTY CONTAINER HANDLER 3 AND 4



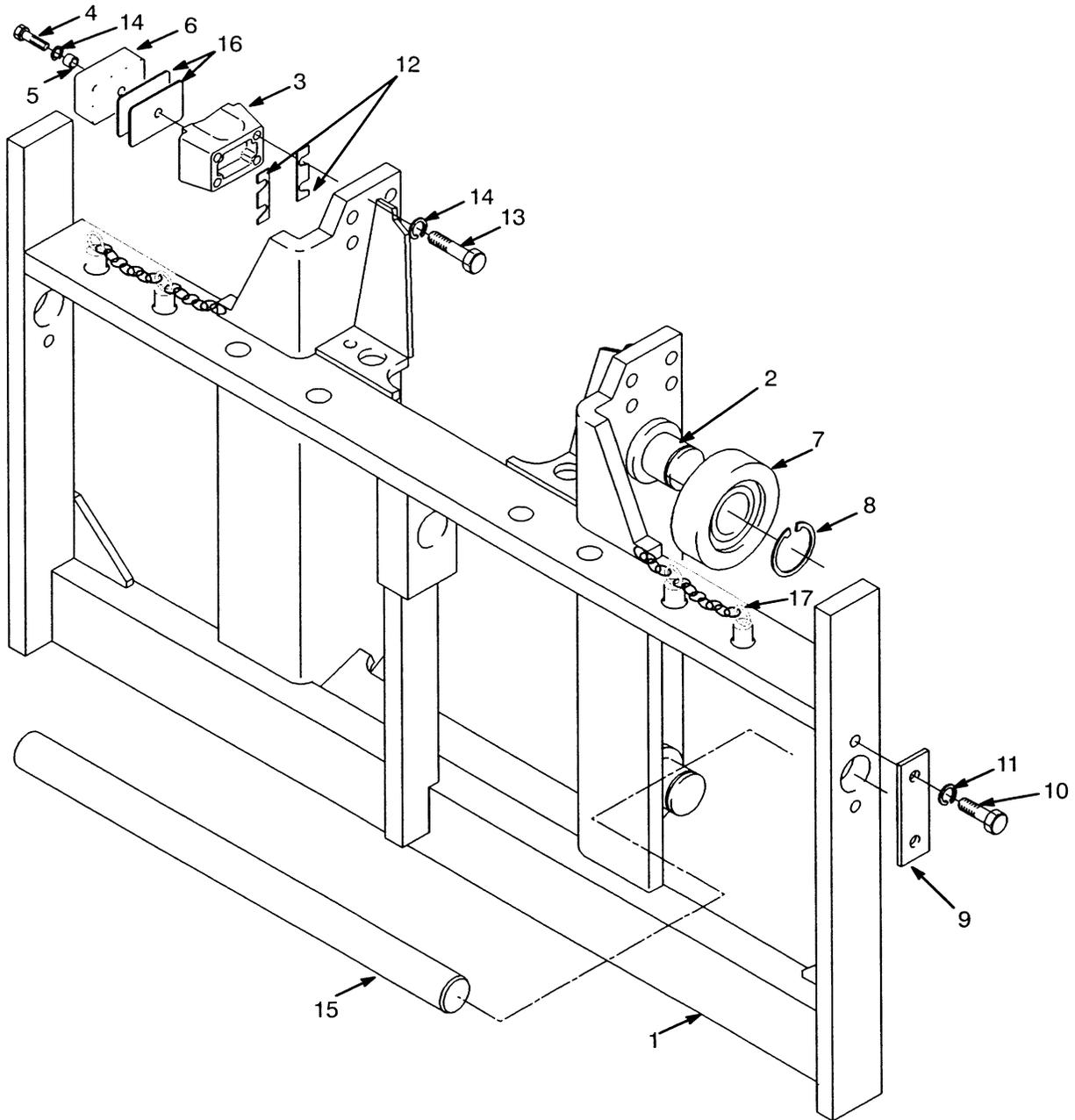
**LIFT CYLINDER
EMPTY CONTAINER HANDLER 3 AND 4**

REF NO	NAME OF PAR	LIFT HEIGHT TO BOTTOM OF FORKS	
		272.4 inch	390.0 inch
	Lift Cylinder	c 1358715 d 1460133	c 1345705 d 1460132
1	Shell	c 1358717 d 1460180	c 1313379 d 1460179
2	Rod	c 1358718 d 1460184	c 1345702 d 1460183

REF	PART NO.	NAME OF PART	QTY
a	.....	Lift Cylinder	2
1 a	.....	Shell	1
2 a	.....	Rod	1
3 b	362102	O-Ring	1
4 b	1323844	Rod Seal	1
5	1323845	Retainer	1
6 b	1313386	Rod Wiper	1
7 b	190887	Seal	1

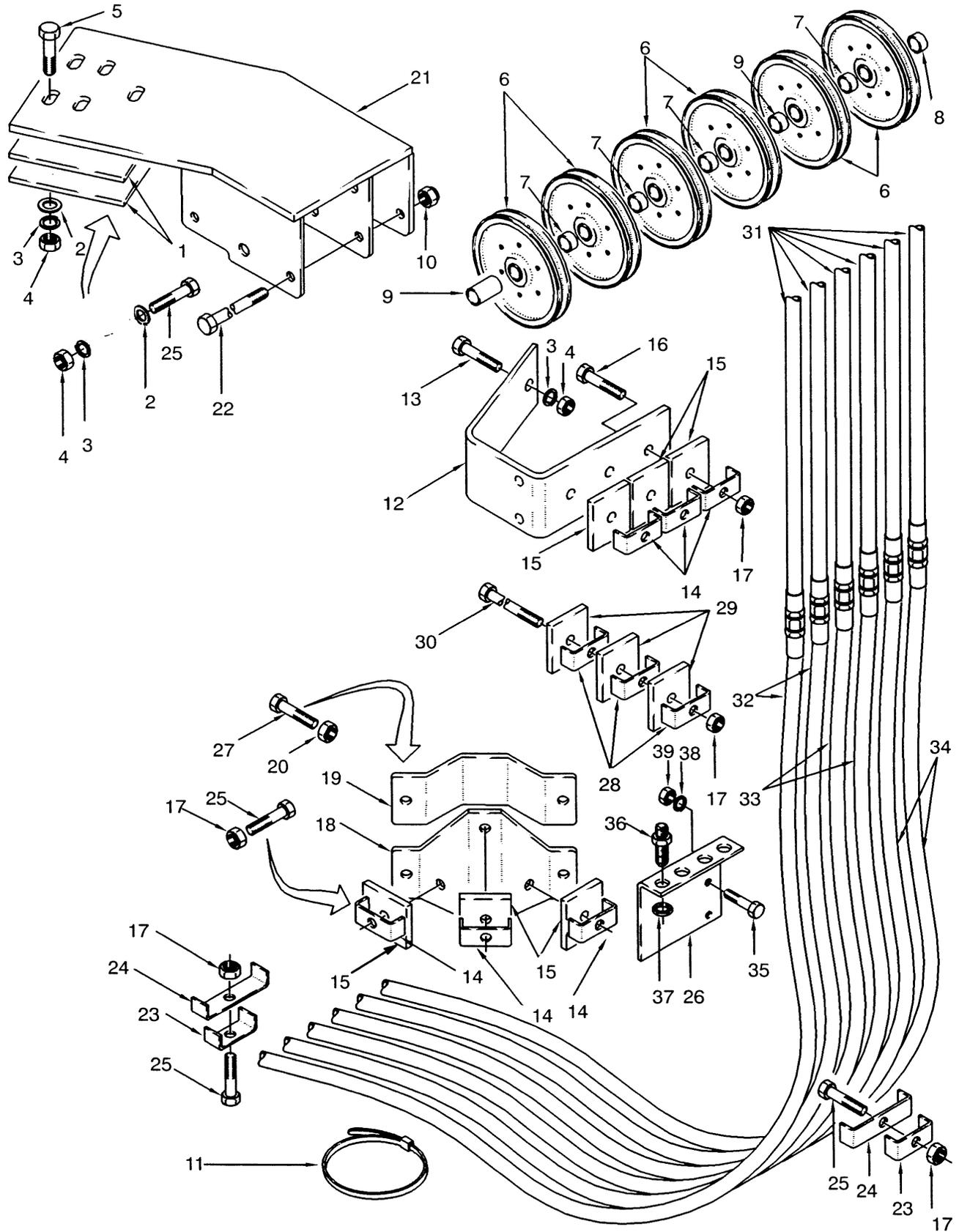
REF	PART NO.	NAME OF PART	QTY
8	18701	Capscrew	1
9 b	636954	Wear Ring	2
a		☞ Table Above	
b		Included In Seal Kit 1335188	
c		Last Used On S/N D19D-2680	
d		First Used On S/N D19D-2681	

CARRIAGE (FIGURE 183)



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1303279	Carriage	1	9	376776	Plate	2
1	1303251	Frame	1	10	293647	Capscrew	4
2	1313357	Stubshaft	4	11	292683	Lockwasher	4
3	1301018	Bracket	4	12	1310592	Shim	AR
4	376203	Capscrew	4	13	221510	Capscrew	16
5	1301016	Spacer	4	14	15156	Lockwasher	20
6	1335179	Block	4	15	1303261	Pin	2
7	1313358	Load Roller	4	16	1301014	Shim	AR
8	58918	Snap Ring	4	17	1334581	Pin	2

HEADER HOSE (FIGURE 184)



HEADER HOSE

REF NO	NAME OF PART	LIFT HEIGHT TO BOTTOM OF FORKS				
		144.0 in.	179.5 in.	209.0 in.	240.5 in.	260.3 in.
		PART NO.				
28	Clamp	.....	.....	254950	254950	254950
29	Plate	.....	.....	138929	138929	138929
30	Capscrew	.....	.....	292533	292533	292533
30	Capscrew	.....	.....	292538	292538	292538
30	Capscrew	.....	.....	287814	287814	287814
31	Hose	1307367	1311337	1311339	1311340	1311341
32	Hose	1311342	1311344	1311344	1311344	1311344
33	Hose	1307375	1311345	1311345	1311345	1311345
34	Hose	1311343	1307367	1307367	1307367	1307367

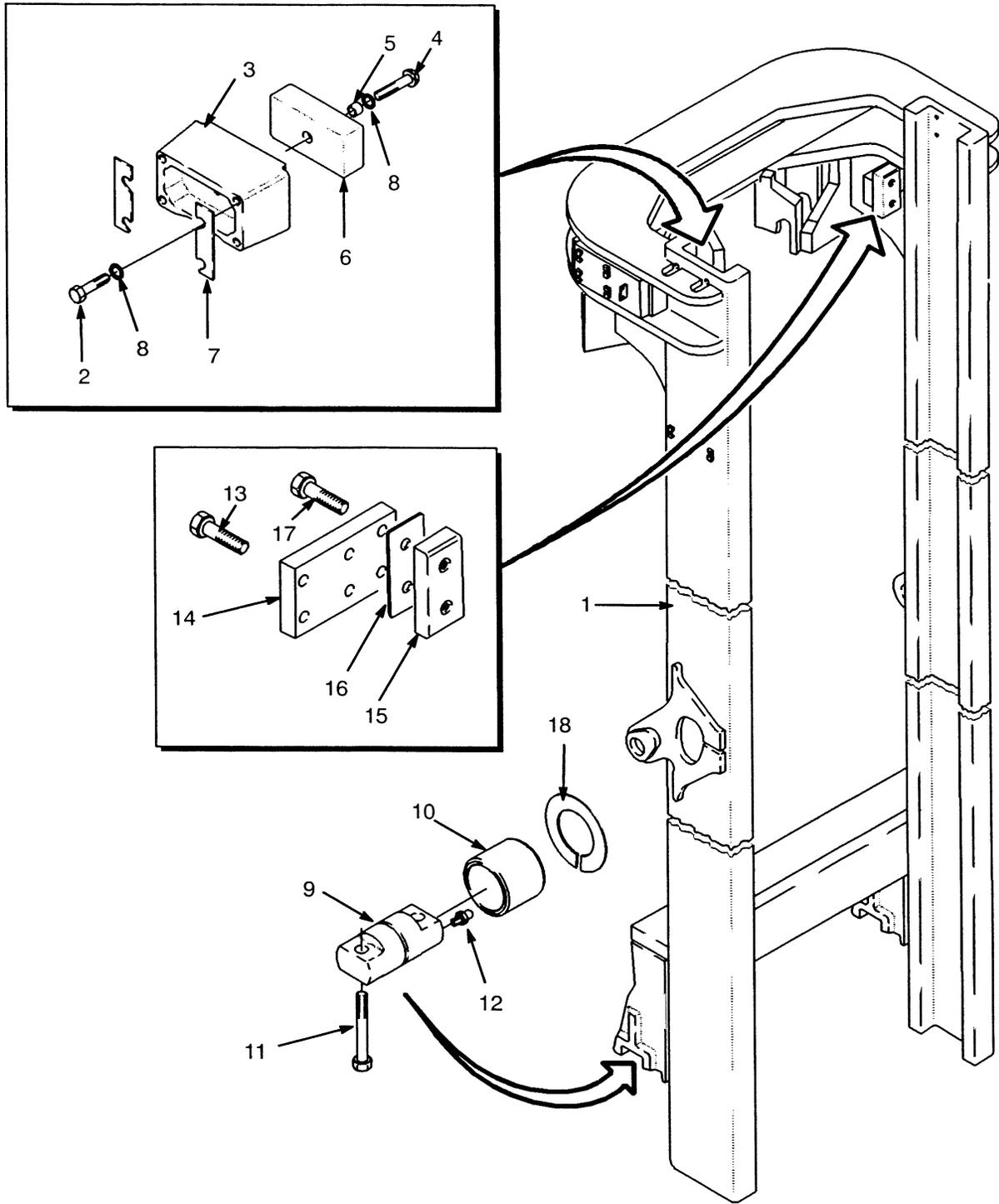
Key:
A: Three Function
B: Four Function
C: Five Function

REF	PART NO.	NAME OF PART	QTY			REF	PART NO.	NAME OF PART	QTY		
			A	B	C				A	B	C
1	1301571	Plate	2	2	2	23	254950	Clamp	2	..	..
2	320162	Washer	4	4	4	24	1310637	Clamp	2	2	2
3	292683	Lockwasher	6	6	6	25	292529	Capscrew	2	6	7
4	216877	Nut	6	6	6	26	1311208	Bracket	1	..	..
5	292533	Capscrew	3	3	3	26	1311363	Bracket	1	..	..
6	189451	Sheave	2	4	6	26	1311362	Bracket .....	..	1	..
7	280610	Spacer	1	2	4	27	292522	Capscrew	2	2	2
8	1301650	Spacer	1	1	1	28	a	.... Clamp	1	2	3
9	1311264	Spacer	1	1	2	29	a	.... Plate	1	2	3
9	1301659	Spacer	1	..	..	30	a	.... Capscrew	1	..	..
10	221357	Nut	3	3	3	30	a	.... Capscrew	1	..	..
11	273775	Clamp	2	2	2	30	a	.... Capscrew .....	..	1	..
12	1310612	Bracket	1	1	1	31	a	.... Hose	2	4	6
13	292528	Capscrew	2	2	2	32	a	.... Hose	2	2	2
14	254950	Clamp	2	4	6	33	a	.... Hose	2	2	..
15	138929	Plate	2	4	6	34	a	.... Hose .....	..	2	..
16	292531	Capscrew	1	3	3	35		136985 Capscrew	2	2	2
17	300937	Nut	4	9	11	36		16448 Fitting	2	4	6
18	1310608	Bracket	1	1	1	37		14761 Nut	2	4	6
19	1310609	Bracket	1	1	1	38		292589 Capscrew	2	2	2
20	316826	Nut	2	2	2	39		136692 Nut	2	2	2
21	1352663	Bracket	1	..	..				
21	1352661	Bracket	1	1	1						
22	18613	Capscrew	1	..	..				
22	1311265	Capscrew	3	3	3	a		☞ Table Above			

**MAST
A781
THREE-STAGE FULL FREE-LIFT**

CARRIAGE (Figure 192) 3 STG FFL WITH SIDESHIFT AND FORK POSITIONER	Page 374
CARRIAGE HYDRAULICS (Figure 193) 3 STG FFL WITH SIDESHIFT AND FORK POSITIONER	Page 376
FORK POSITIONER CYLINDER (Figure 194)	Page 378
FORK POSITIONER VALVE (Figure 196)	Page 380
FREE-LIFT CYLINDER (Figure 191) THREE-STAGE FULL FREE-LIFT MAST	Page 372
FREE-LIFT (Figure 190) THREE-STAGE FULL FREE-LIFT MAST	Page 370
HEADER HOSE (Figure 197) (THREE AND FOUR FUNCTION) THREE-STAGE FULL FREE-LIFT MAST	Page 382
INNER MAST (Figure 187) THREE-STAGE FULL FREE-LIFT MAST	Page 364
INTERMEDIATE MAST (Figure 186) THREE-STAGE FULL FREE-LIFT MAST	Page 362
MAIN LIFT CYLINDER (Figure 189) THREE-STAGE FULL FREE-LIFT MAST	Page 368
MAIN LIFT (Figure 188) THREE-STAGE FULL FREE-LIFT MAST	Page 366
OUTER MAST (Figure 185) THREE-STAGE FULL FREE-LIFT MAST	Page 360
SIDESHIFT CYLINDER (Figure 195)	Page 379

OUTER MAST (FIGURE 185) THREE-STAGE FULL FREE-LIFT MAST

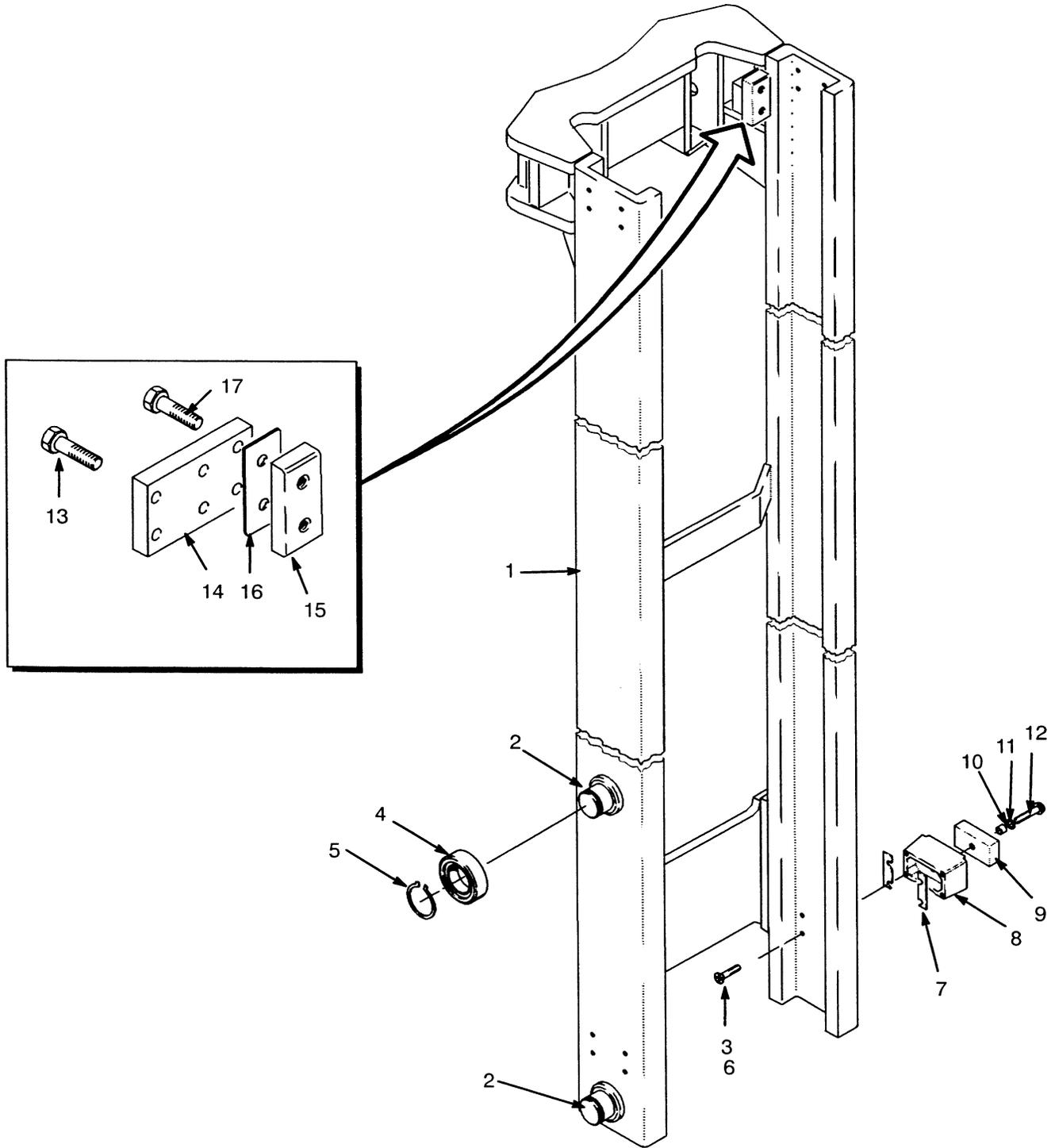


**OUTER MAST
THREE-STAGE FULL FREE-LIFT MAST**

REF NO	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3656 mm 144.0 inch	4908 mm 193.0 inch	6096 mm 240.0 inch
	Mast Group Number	A781 3656	A781 4908	A781 6096
	Mast	1453234	1453233	1453232
1	Outer Mast	1452177	1452176	1452115

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
a	.....	Mast	1	11	1326777	Capscrew	4
1	a	Outer Mast	1	12	16015	Lube Fitting	2
2	221508	Capscrew	8	13	221560	Capscrew	4
3	1301018	Bracket	2	14	1453413	Plate	2
4	376203	Capscrew	2	15	342017	Wear Plate	2
5	1301016	Spacer	2	16	342032	Shim	AR
6	1335179	Block	2	17	16807	Capscrew	8
7	1310592	Shim (.031 in)	AR	18	1359101	Shim (.12 in)	AR
8	15156	Lockwasher	10	a	☞	Table	
9	1385549	Pin	2				
10	376038	Bushing	2				

INTERMEDIATE MAST (FIGURE 186) THREE-STAGE FULL FREE-LIFT MAST

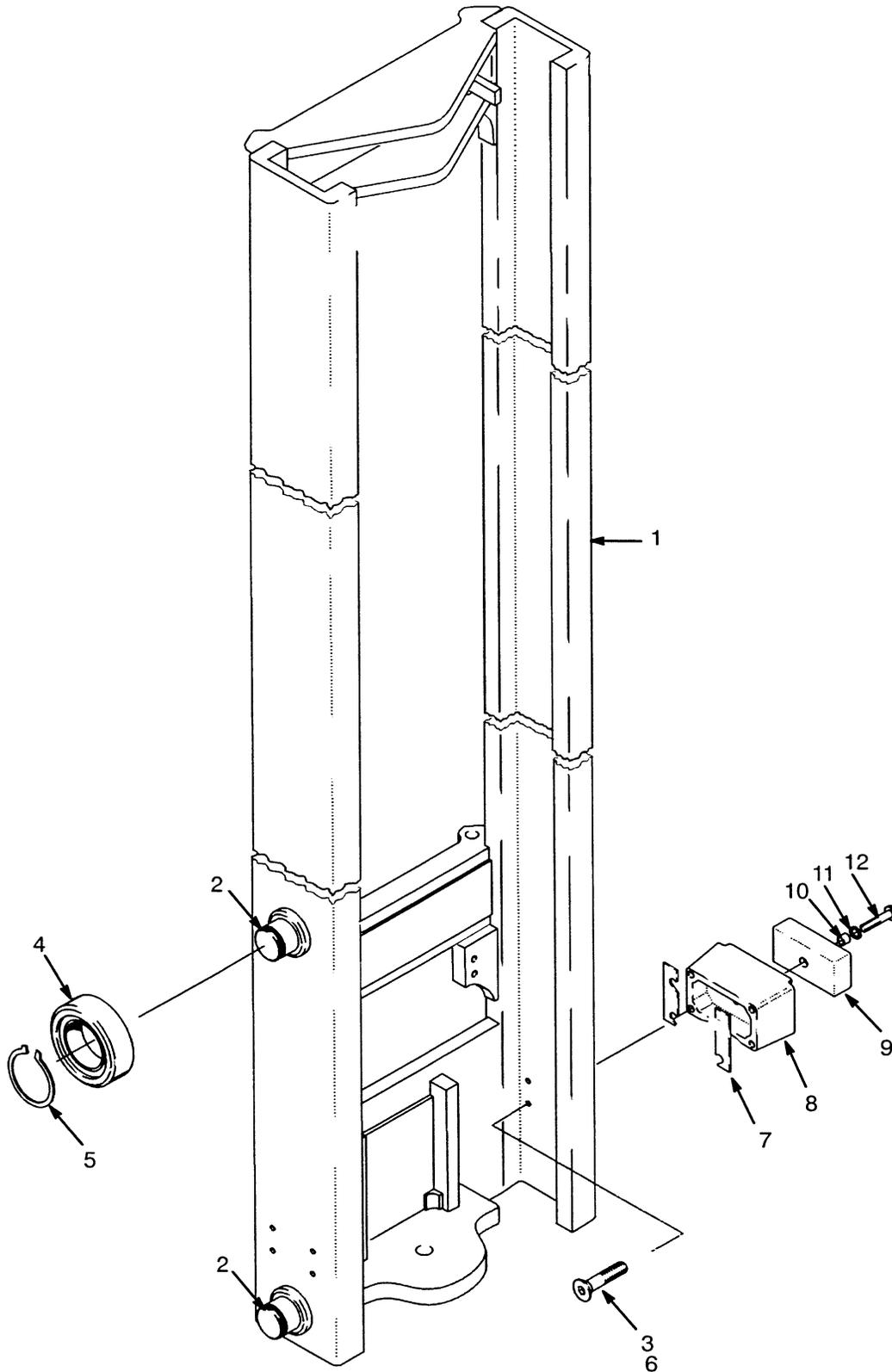


**INTERMEDIATE MAST
THREE-STAGE FULL FREE-LIFT MAST**

REF NO	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3658 mm 144.0 inch	4908 mm 193.0 inch	6096 mm 240.0 inch
	Mast Group Number	A781 3658	A781 4908	A781 6096
	Mast	1453234	1453233	1453232
1	Intermediate Mast	1452181	1452180	1452173

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
a	.....	Mast	1	10	1301016	Spacer	2
1	a	Inter Mast	1	11	15156	Lockwasher	2
2	1313357	Stubshaft	4	12	376203	Capscrew	2
3	220159	Capscrew	8	13	221560	Capscrew	4
4	1313358	Load Roller	4	14	1453413	Plate	2
5	58918	Snap Ring	4	15	342017	Wear Plate	2
6	321197	Thread Adhesive	AR	16	342032	Shim	AR
7	1310592	Shim (.030 in)	AR	17	16807	Capscrew	8
8	1301018	Bracket	2				
9	1335179	Block	2	a	☞	Table Above	

INNER MAST (FIGURE 187) THREE-STAGE FULL FREE-LIFT MAST

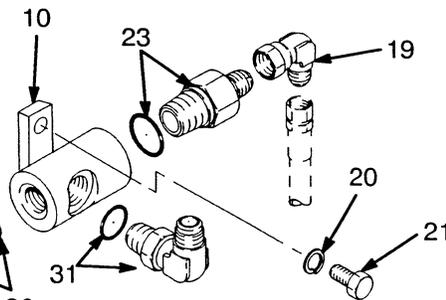
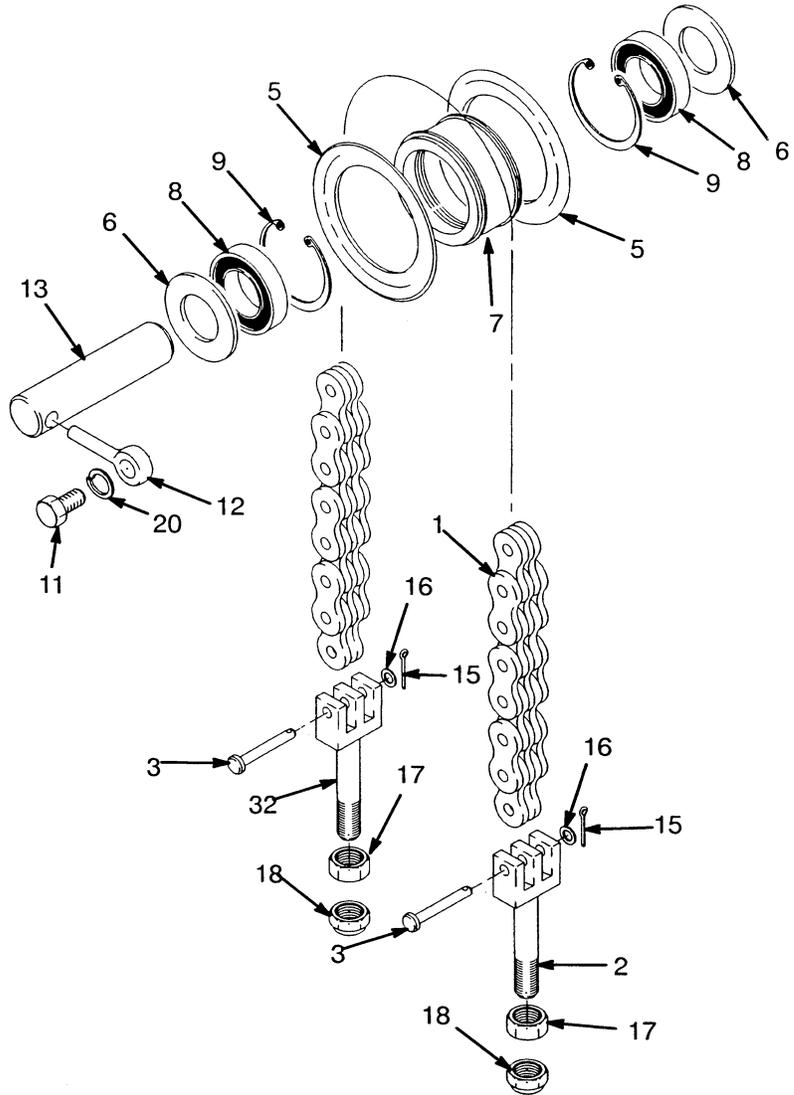
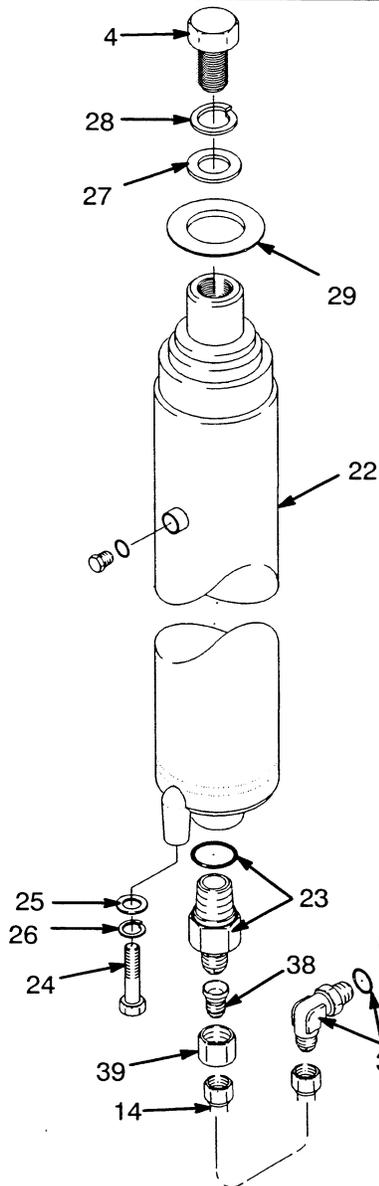
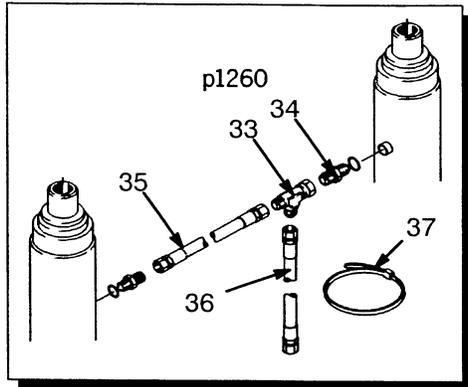


**INNER MAST
THREE-STAGE FULL FREE-LIFT MAST**

REF NO	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3658 mm 144.0 inch	4908 mm 193.0 inch	6096 mm 240.0 inch
	Mast Group Number	A781 3658	A781 4908	A781 6096
	Mast	1453234	1453233	1453232
1	Inner Mast	1452179	1452178	1452175

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
a	.....	Mast	1	8	1301018	Bracket	2
1	a	.....	1	9	1335179	Block	2
2	1313357	Stubshaft	4	10	1301016	Spacer	2
3	220159	Capscrew	8	11	15156	Lockwasher	2
4	1313358	Load Roller	4	12	376203	Capscrew	2
5	58918	Snap Ring	4				
6	321197	Thread Adhesive	AR	a	☞	Table Above	
7	1310592	Shim (.030 in)	AR				

MAIN LIFT (FIGURE 188) THREE-STAGE FULL FREE-LIFT MAST

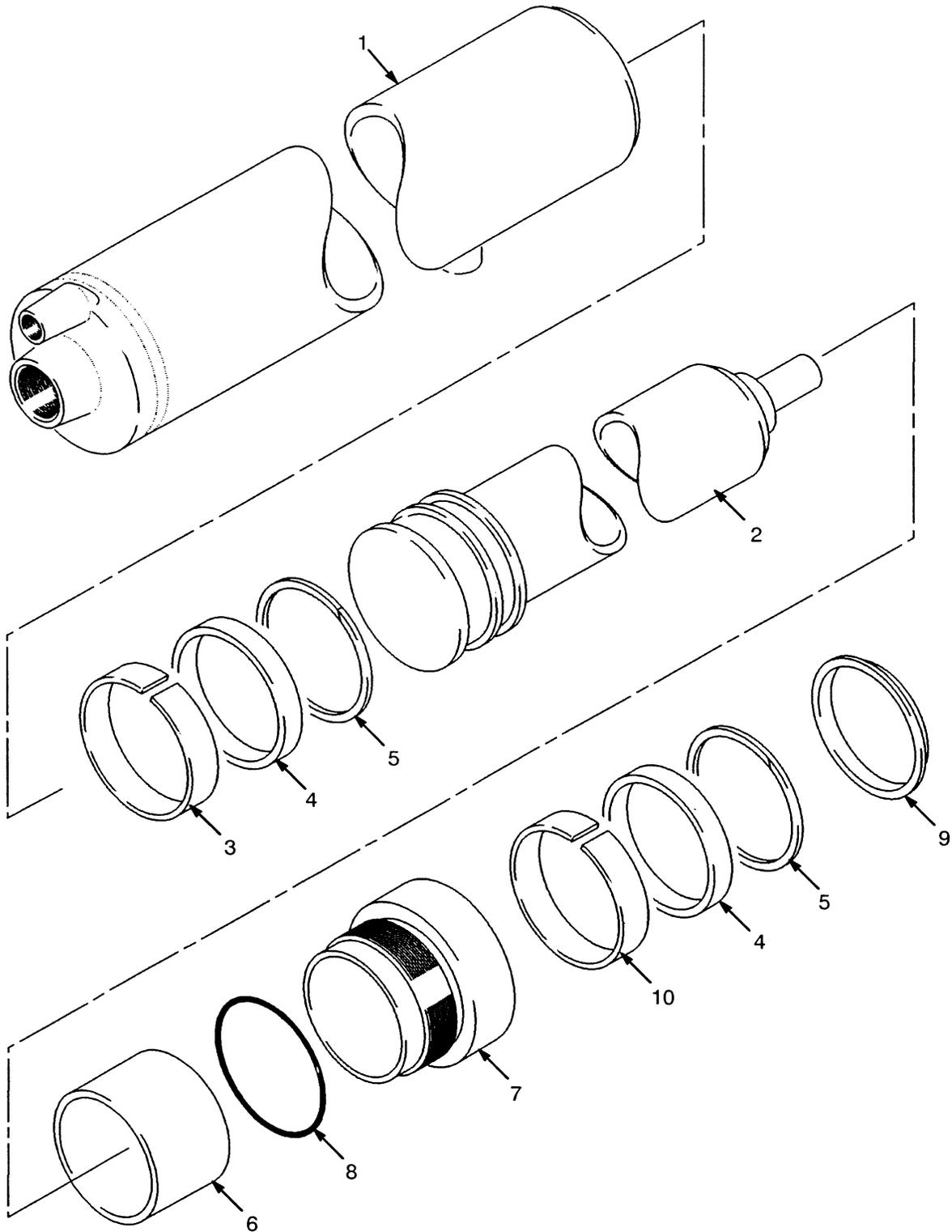


**MAIN LIFT
THREE-STAGE FULL FREE-LIFT MAST**

REF NO	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3658 mm 144.0 inch	4908 mm 193.0 inch	6096 mm 240.0 inch
	Mast Group Number	A781 3658	A781 4908	A781 6096
	Mast	1453234	1453233	1453232
1	Main Lift Chain	1453356	1453355	1453353
36	Hose Assembly	274885	276640	252385

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
a	.....	Mast	1			☞ (Figure 189)	
1	a	..... Lift Chain	2	23	346971	Lowering Control Valve	2
2	267829	Chain Anchor	2	23	16983	O-Ring	1
3	1303383	Pin	4	24	136985	Capscrew	2
4	292580	Capscrew	2	25	292682	Lockwasher	2
5	1453415	Guide Plate	4	26	1303391	Washer	2
6	267837	Washer	4	27	15181	Washer	2
7	1453414	Sheave	2	28	292687	Lockwasher	2
8	267830	Bearing	4	29	192830	Shim (.050 in)	AR
9	46692	Snap Ring	4	30	111331	Fitting	2
10	1453490	Housing Low. Container-LH	1	30	16485	O-Ring	1
10	1453491	Housing Low. Container-RH ...	1	31	201776	Fitting	2
11	292528	Capscrew	2	31	16487	O-Ring	1
12	82270	Eyebolt	2	32	267827	Chain Anchor	2
13	1303372	Pin	2	33	17062	Fitting	1
14	1453500	Tube	2	34	131460	Fitting	2
15	15244	Cotter Pin	2	34	16486	O-Ring	1
16	15146	Washer	2	35	73470	Hose Assy	1
17	221725	Nut	2	36	a	..... Hose Assy	1
18	17411	Locknut	2	37	273775	Strap Clamp	1
19	16992	Fitting	1	38	17783	Fitting	2
20	292683	Lockwasher	4	39	14494	Fitting	2
21	300937	Nut	2				
22	.....	Hoist Cylinder	2	a	☞	Table Above	

MAIN LIFT CYLINDER (FIGURE 189) THREE-STAGE FULL FREE-LIFT MAST

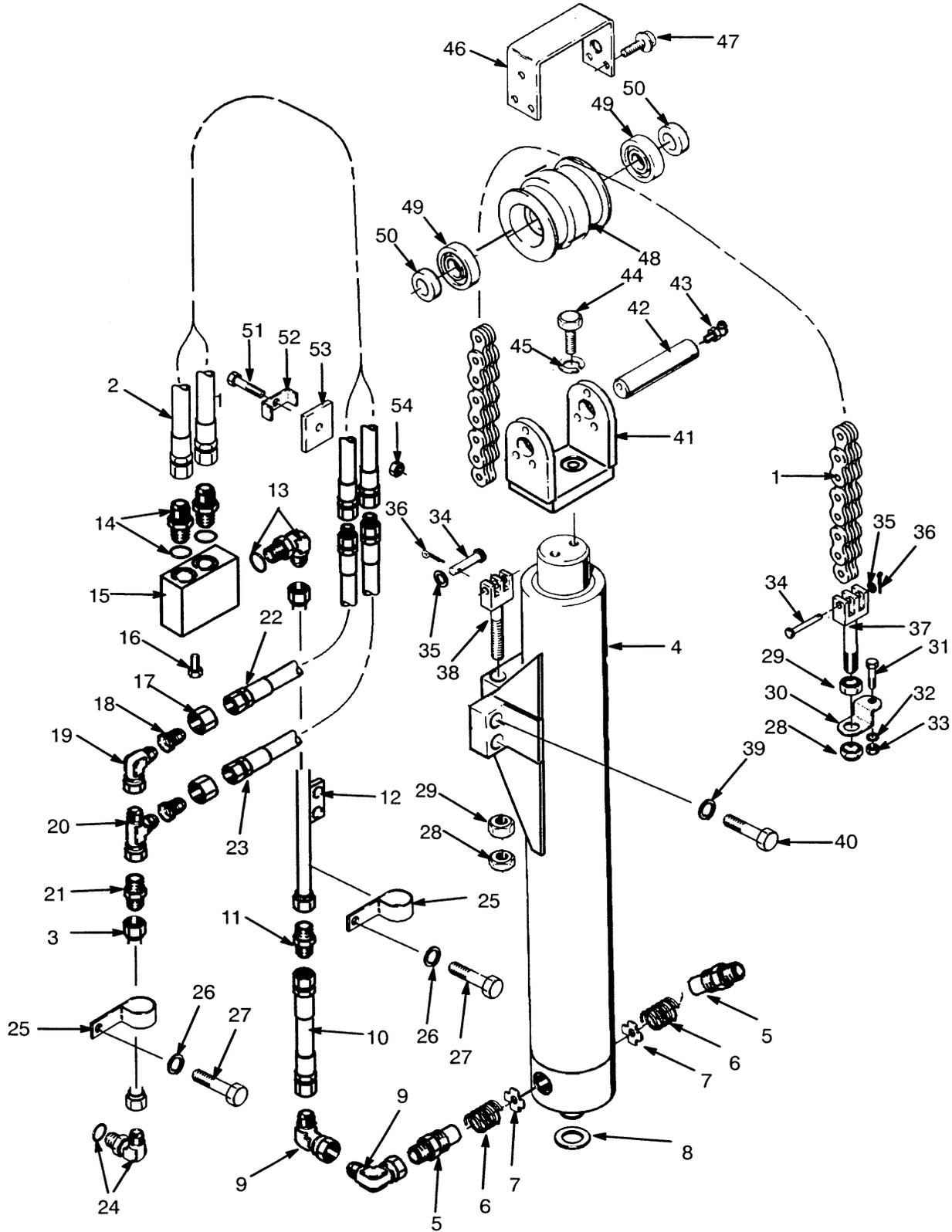


**MAIN LIFT CYLINDER
THREE-STAGE FULL FREE-LIFT MAST**

REF NO	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3658 mm 144.0 inch	4908 mm 193.0 inch	6096 mm 240.0 inch
	Mast Group Number	A781 3658	A781 4908	A781 6096
	Hoist Cylinder	1453279	1453278	1453277
1	Shell	1453282	1453281	1453280
2	Rod	1453288	1453287	1453286

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
a	.....	Hoist Cylinder	2	7	1328946	Retainer	1
1 a	.....	Shell	1	8 b	362102	O-Ring	1
2 a	.....	Rod	1	9 b	815620	Wiper	1
3 b	636954	Wear Ring	1	10 b	318067	Wear Ring	1
4 b	637166	Seal	2	a	☞	Table Above	
5 b	638224	Seal	2	b		Included In Seal Kit 1385958	
6	387286	Spacer	1				

FREE-LIFT (FIGURE 190) THREE-STAGE FULL FREE-LIFT MAST



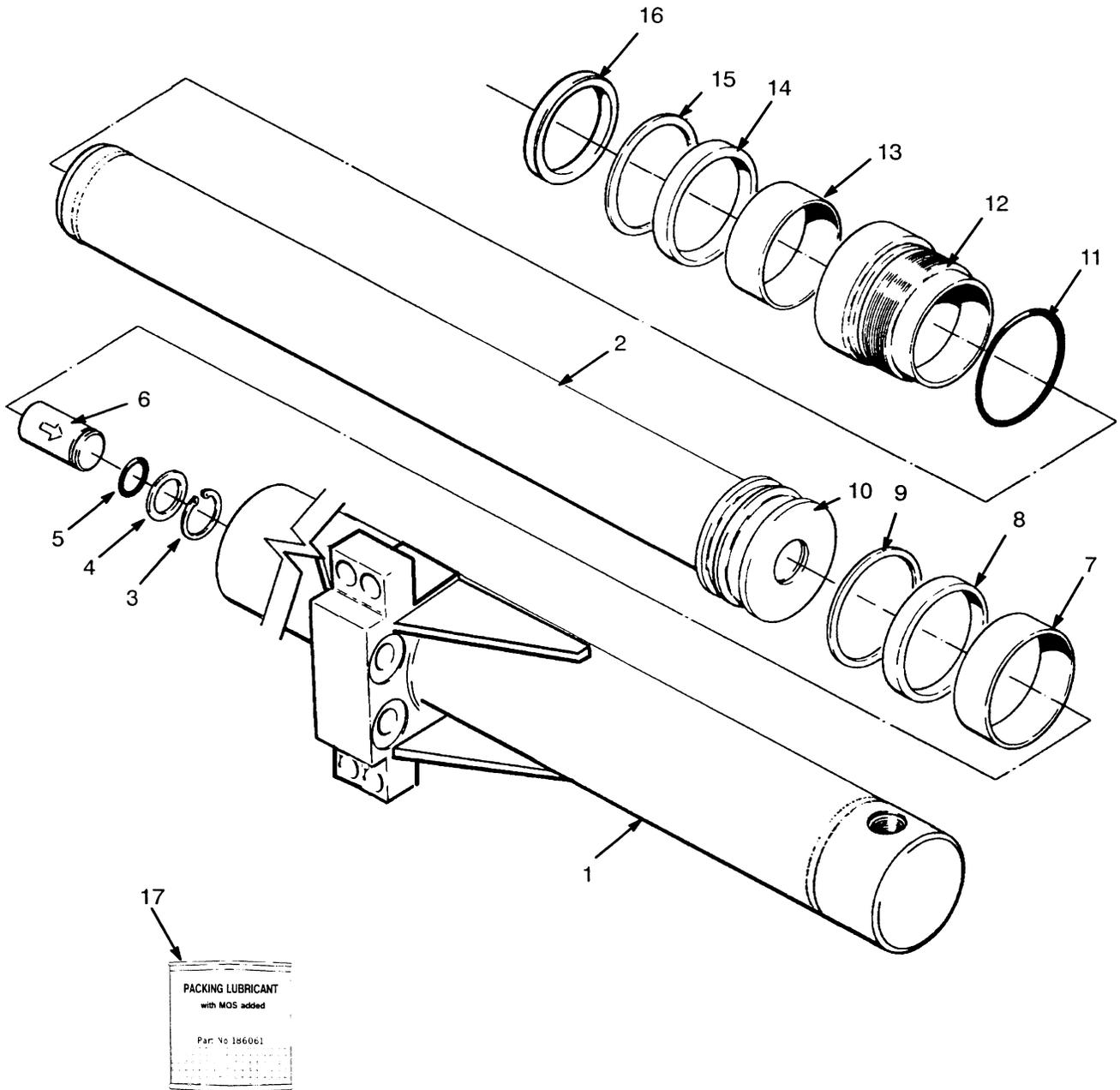
FREE-LIFT THREE-STAGE FULL FREE-LIFT MAST

REF NO	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3658 mm 144.0 inch	4908 mm 193.0 inch	6096 mm 240.0 inch
	Mast Group Number	A781 3658	A781 4908	A781 6096
1	Free-Lift Chain	1453360	1453359	1453357
2	Twin Hose	1453399	1453398	1453397
3	Tube RH	1453403	1453402	1453401
3	Tube LH	1453407	1453406	1453405

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	a	Chain	2	27	292682	Washer	6
2	a	Hose	2	28	221725	Nut	4
3	a	Tube	1	29	17411	Nut	4
4		Free-Lift Cylinder ☞ ((Figure 191))	1	30	132829	Lock Plate	2
5	89894	Fitting	2	31	292531	Capscrew	2
6	89892	Spring	2	32	292683	Washer	2
7	373287	Washer	2	33	216877	Nut	2
8	1453395	Washer	1	34	1303383	Pin	4
9	16962	Fitting	2	35	15146	Washer	4
10	1453499	Hose Assy	2	36	15244	Cotter Pin	4
11	17635	Fitting	2	37	267827	Chain Anchor	2
12	1453498	Tube Assy RH	1	38	1453408	Chain Anchor	2
12	1453497	Tube Assy LH	1	39	320169	Washer	4
13	16561	Fitting	2	40	292589	Capscrew	4
13	16486	O-Ring	1	41	1453412	Bracket	1
14	16542	Fitting	2	42	1453410	Sheave Shaft	1
14	16485	O-Ring	1	43	16018	Lube Fitting	1
15	b	1453495 Junction Block LH	1	44	292562	Capscrew	1
15	c	1455423 Junction Block LH	1	45	292685	Washer	1
15	b	1453496 Junction Block RH	1	46	1453417	Chain Guard	1
15	c	1455424 Junction Block RH	1	47	292528	Capscrew	2
16	136749	Capscrew	4	48	1453411	Chain Sheave	1
17	14494	Fitting	4	49	45315	Bearing	2
18	167260	Fitting	4	50	1453416	Washer	2
19	83857	Fitting	2	51	292535	Capscrew	1
20	17064	Fitting	2	52	254950	Clamp	1
21	14694	Fitting	2	53	138929	Plate	1
22	1453418	Hose Assy	2	54	300937	Nut	1
23	1453419	Hose Assy	2				
24	201776	Fitting	2				
24	16487	O-Ring	1				
25	173247	Clamp	6				
26	136985	Capscrew	8				

- a ☞ Table Above
- b Last Used On Mast S/N Pending Per ECN 63433
- c First Used On Mast S/N Pending Per ECN 63433

FREE-LIFT CYLINDER (FIGURE 191) THREE-STAGE FULL FREE-LIFT MAST

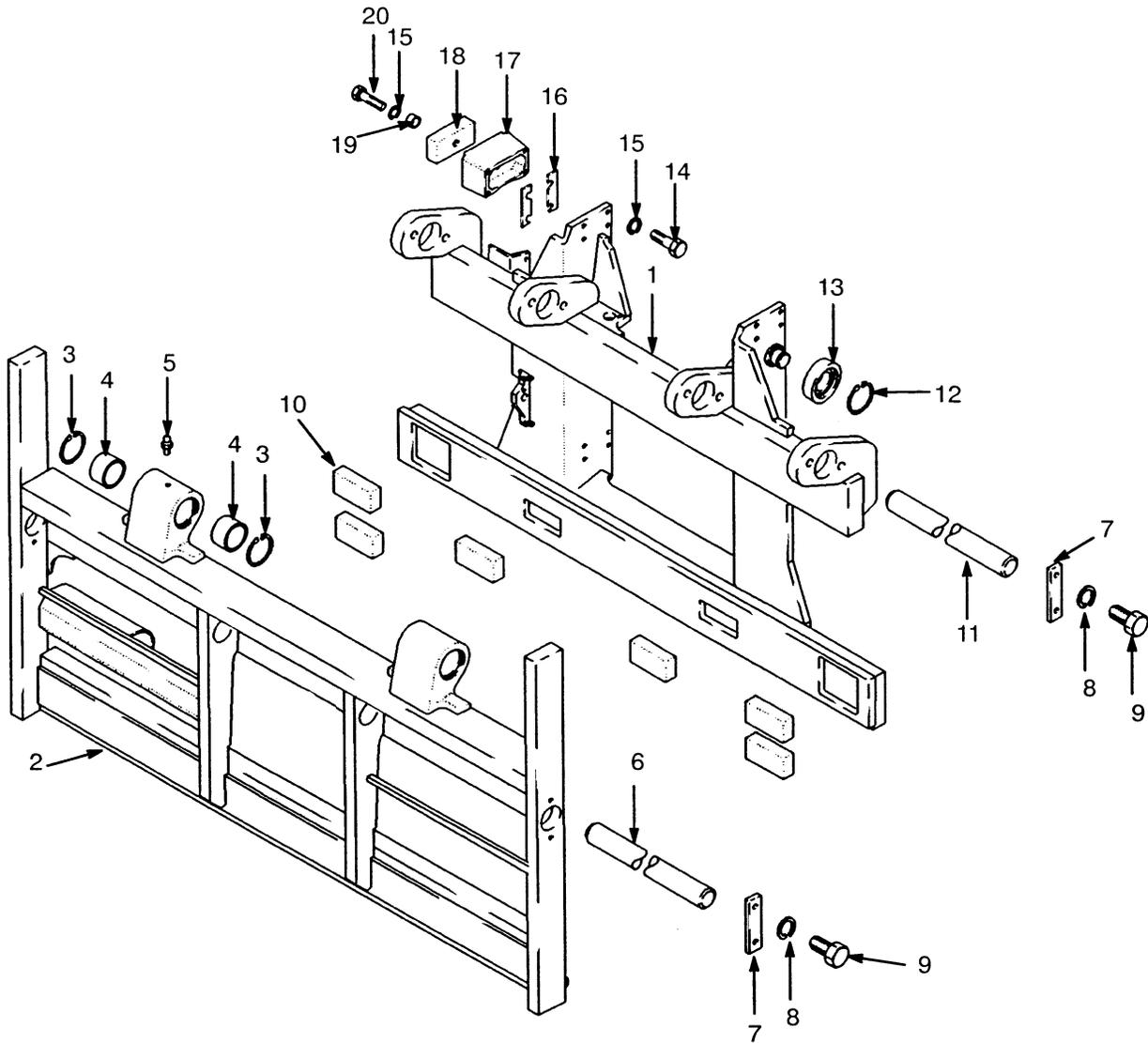


**FREE-LIFT CYLINDER
THREE-STAGE FULL FREE-LIFT MAST**

REF NO	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3658 mm 144.0 inch	4908 mm 193.0 inch	6096 mm 240.0 inch
	Free-Lift Cylinder	1452290	1452289	1452288
1	Shell	1452389	1452388	1452387
2	Rod	1452523	1452522	1452521

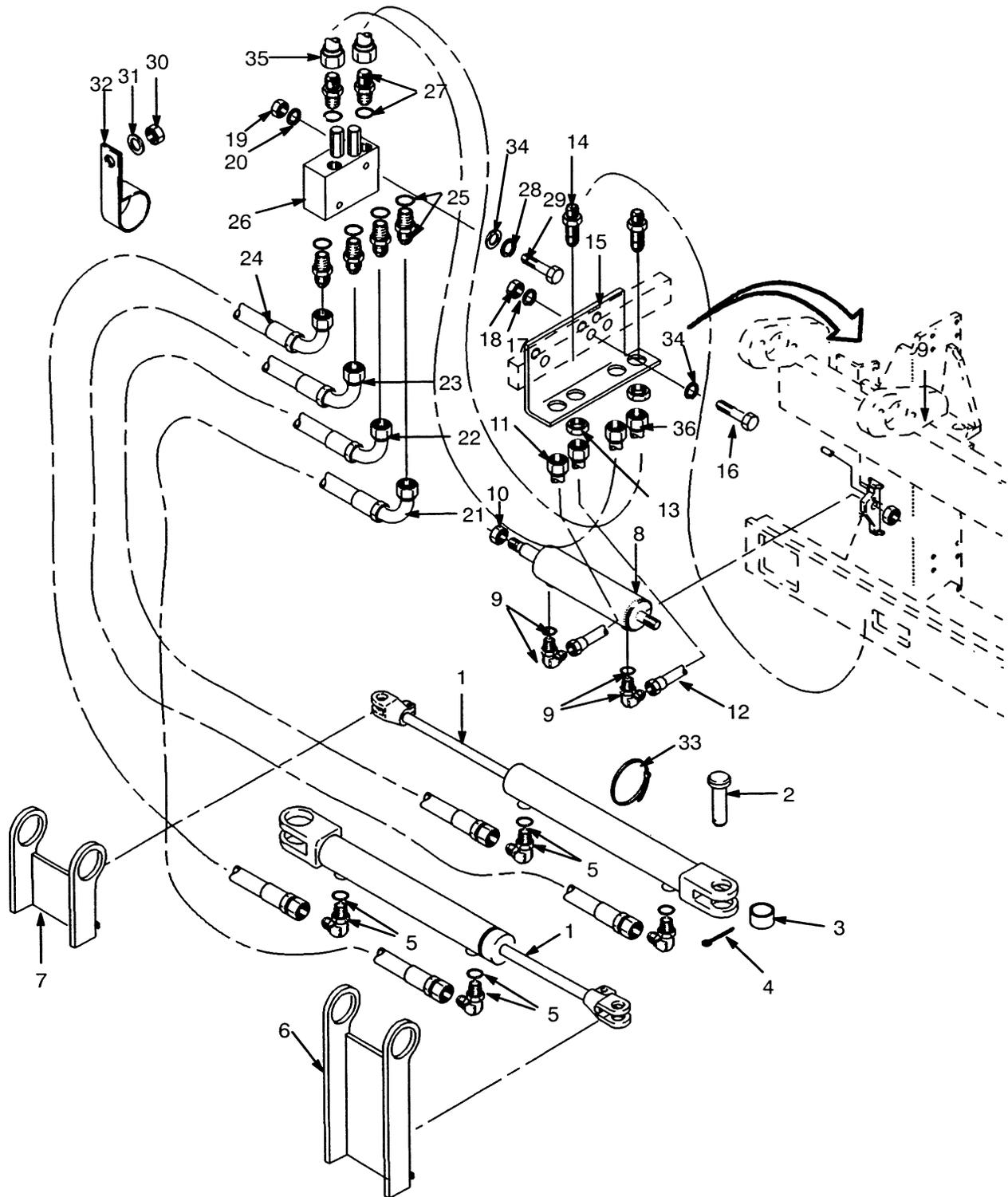
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
a	.....	Free-Lift Cylinder	1	10	1452582	Spacer	1
1 a	.....	Shell	1	11 b	1452452	O-Ring	1
2 a	.....	Rod	1	12	1452444	Retainer	1
3	187388	Snap Ring	1	13 b	636956	Wear Ring	1
4	637635	Washer	1	14 b	1453275	Seal	2
5 b	39348	O-Ring	1	15 b	1453276	Back-Up Ring	1
6	257913	Check Valve	1	16	1453274	Rod Wiper	1
7 b	231989	Wear Ring	1				
8 b	246888	Seal	1	a	☞	Table	
9 b	257030	Piston Seal	1	b		Included In Seal Kit 1360141	

CARRIAGE (FIGURE 192) 3 STG FFL WITH SIDESHIFT AND FORK POSITIONER



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1453692	Carriage Assembly	1	11	1303371	Slide Bar	2
1	1453446	Carriage	1	12	58918	Snap Ring	4
2	1450252	Apron	1	13	1313358	Load Roller	4
3	183609	Snap Ring	4	14	221510	Capscrew	16
4	376773	Bushing	4	15	15156	Washer	20
5	16001	Lube Fitting	2	16	1310592	Shim	AR
6	1303261	Pin-Load Arm	2	17	1301018	Bearing Bracket	4
7	376776	Keeper Plate	6	18	1335179	Block Bearing	4
8	292683	Lockwasher	12	19	1301016	Spacer	4
9	293647	Capscrew	12	20	376203	Capscrew	4
10	351458	Bearing Block	6				

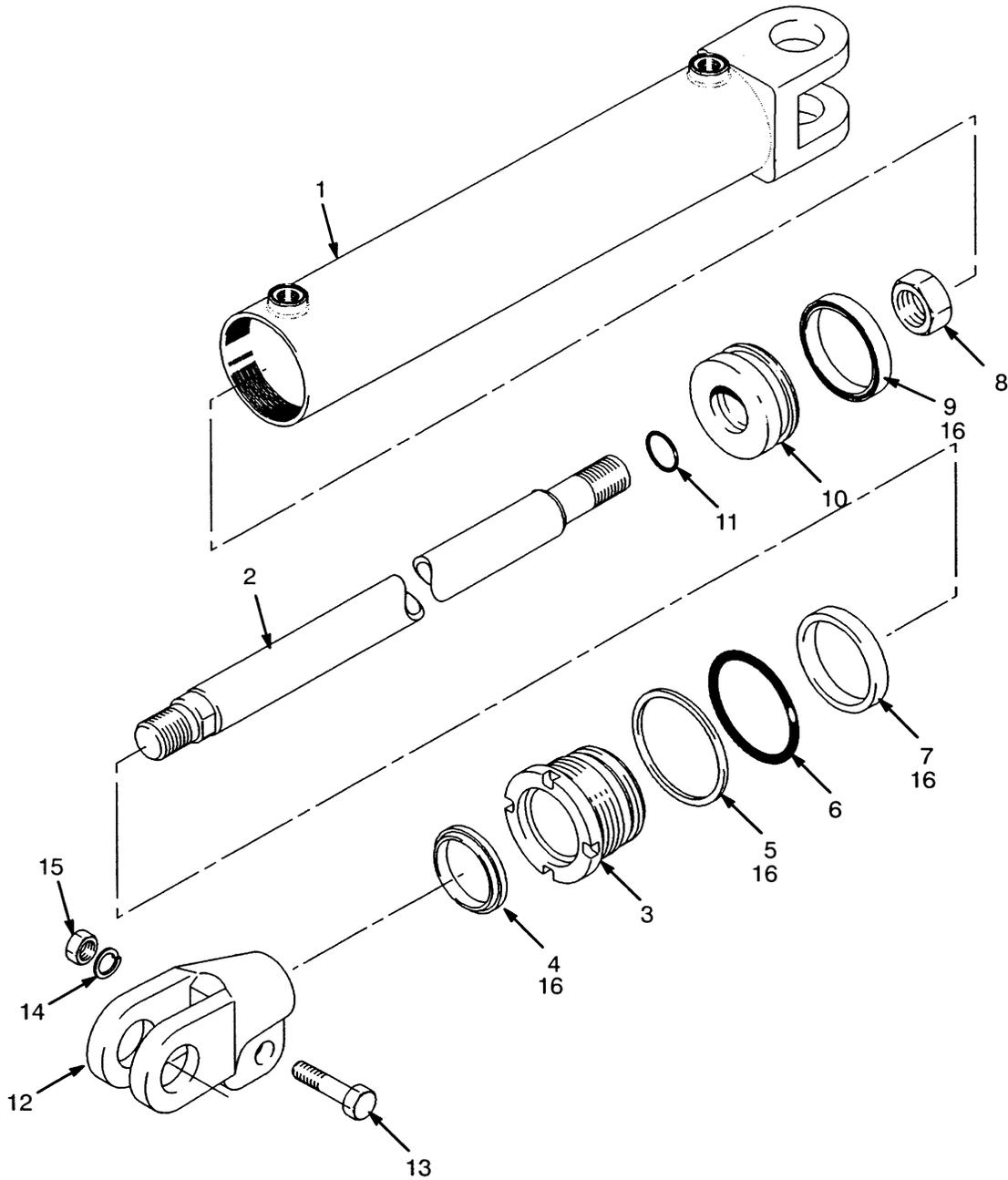
CARRIAGE HYDRAULICS (FIGURE 193) 3 STG FFL WITH SIDESHIFT AND FORK POSITIONER



CARRIAGE HYDRAULICS
3 STG FFL WITH SIDESHIFT AND FORK POSITIONER

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1		Fork Positioner Cylinder	2	17	292682	Washer	2
		☞ (Figure 194)		18	136692	Nut	2
2	308117	Rod End Pin	4	19	239503	Nut	2
3	300982	Bushing	4	20	292681	Washer	2
4	15236	Pin	4	21	1450351	Hose	1
5	1151326	Fitting	4	22	1450352	Hose	1
5	16481	O-Ring	1	23	1450353	Hose	1
6	1450274	Fork Carrier	1	24	1450350	Hose	1
7	1450275	Fork Carrier	1	25	16539	Fitting	4
8		Side Shift Cylinder	1	26		Valve	1
		☞ (Figure 195)				☞ (Figure 196)	
9	96521	Fitting	2	27	131460	Fitting	2
9	16483	O-Ring	1	28	320157	Washer	2
10	53157	Nut	2	29	136703	Capscrew	2
11	1454370	Tube Assembly	1	30	15056	Nut	2
12	1454369	Tube Assembly	1	31	15156	Washer	2
13	14761	Nut Fitting	4	32	153667	Clamp	2
14	16448	Fitting	4	33	129563	Strap	8
15	1454338	Bracket	1	34	292681	Washer	2
16	136985	Capscrew	2	35	1454367	Tube Assy	1
				36	1454368	Tube Assy	1

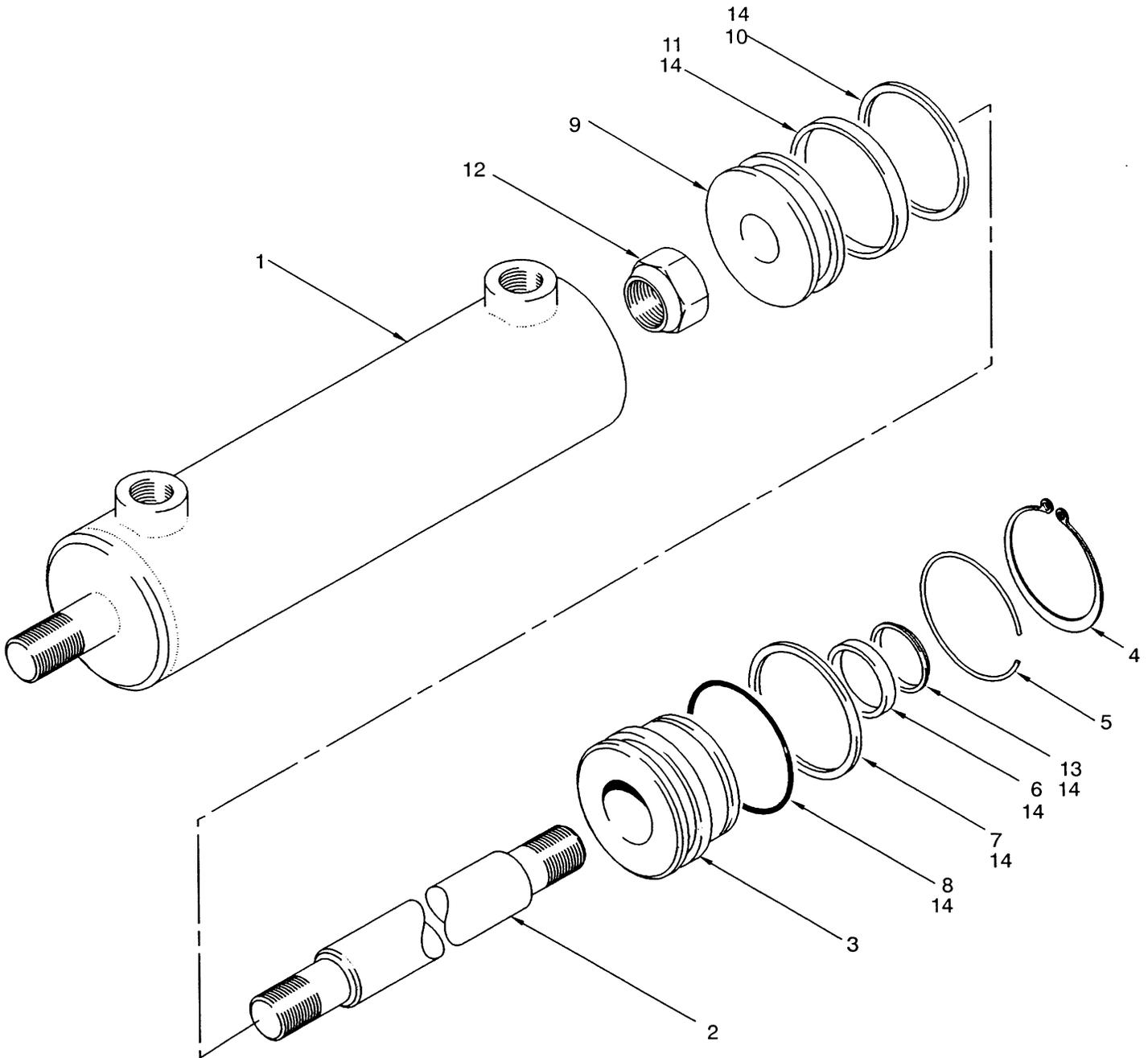
FORK POSITIONER CYLINDER (FIGURE 194)



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	2033308	Cylinder	2	10	2033105	Piston	1
1	2033099	Shell	1	11 ^a	15865	O-Ring	1
2	2033326	Rod	1	12	1307641	Rod End	2
3	1365689	Gland	1	13	18589	Capscrew	2
4 ^a	1310369	Wiper	1	14	15158	Washer	2
5 ^a	132834	Back-Up Ring	1	15	15058	Nut	2
6 ^a	55407	O-Ring	1	16	186061	Lubricant	1
7 ^a	1371654	Seal	1				
8	2306366	Locknut	1				
9 ^a	330692	Seal	1				

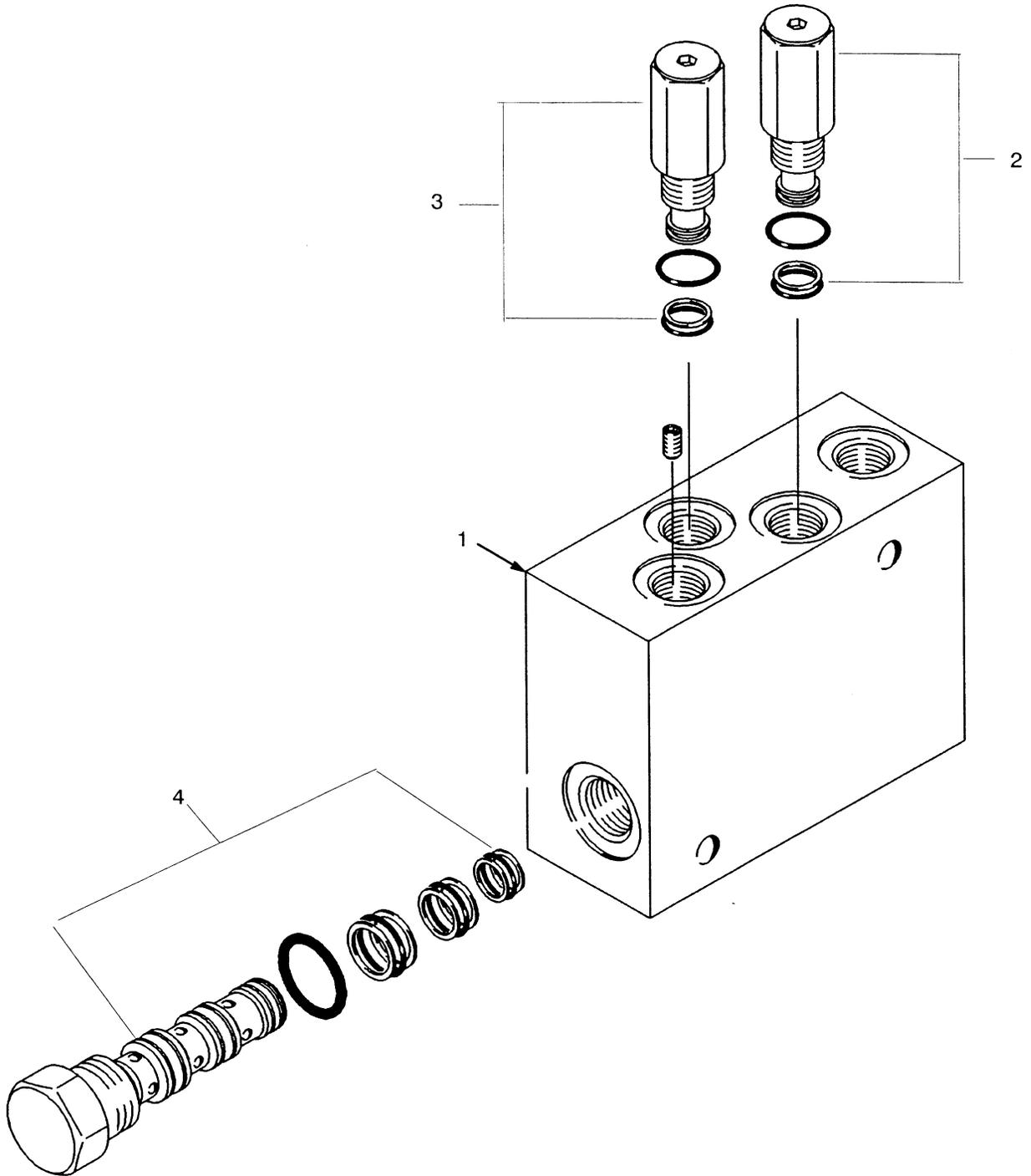
^a Included In Seal Kit 2033141

SIDESHIFT CYLINDER (FIGURE 195)



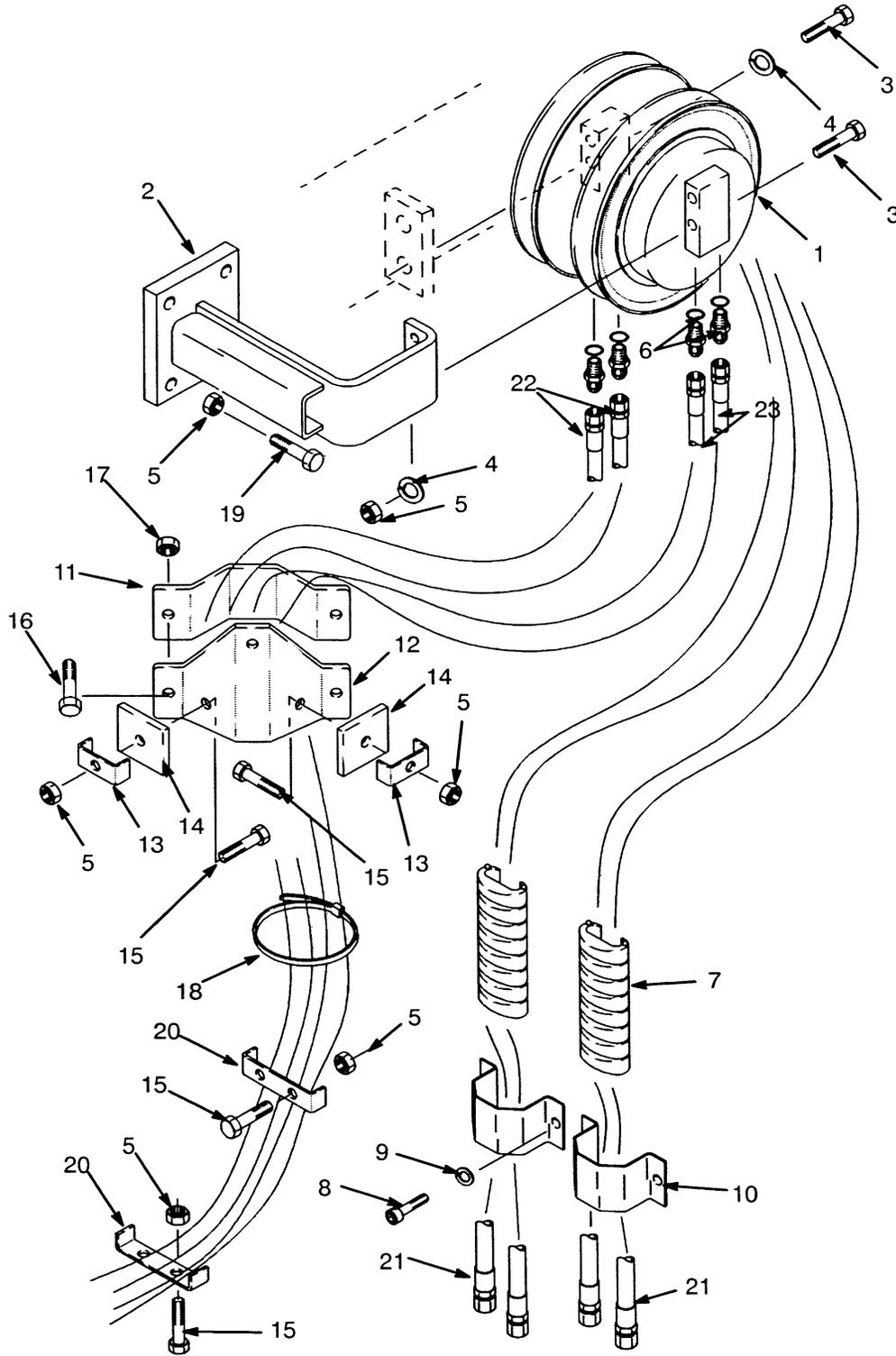
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	387090	Cylinder	1	9	376814	Piston	1
1	387085	Shell	1	10 a	638292	Back-Up Ring	1
2	387087	Rod	1	11 a	637161	Seal	1
3	376815	Retainer	1	12	53157	Locknut	1
4	307275	Snap Ring	1	13 a	203367	Wiper	1
5	376839	Retainer Ring	1	14	186061	Lubricant	1
6 a	330692	Seal	1				
7 a	154358	Back-Up Ring	1	a	Included In Seal Kit 376883		
8 a	15880	O-Ring	1				

FORK POSITIONER VALVE (FIGURE 196)



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1392626	Valve Assembly	1	3	1329308	Repair Kit	1
2	1450259	Relief Valve	1	4	1450260	Flow Control Valve	1
2	361678	Repair Kit	1	4	340739	Repair Kit	1
3	1450261	Relief Valve	1				

HEADER HOSE (FIGURE 197) (THREE AND FOUR FUNCTION) THREE-STAGE FULL FREE-LIFT MAST



HEADER HOSE (THREE AND FOUR FUNCTION) THREE-STAGE FULL FREE-LIFT MAST

REF NO	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS		
		3658 mm 144.0 inch	4908 mm 193.0 inch	6096 mm 240.0 inch
	Mast Group Number	A781 3658	A781 4908	A781 6096
21	Hose	386646	386646	386647
22	Hose	1454694	1454693	1311485
23	Hose	1454695	1311337	1338031

KEY:

A: Three And Four Function

B: Four Function

REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
	^a	..... Mast Assembly	1	1	13	254950	Clamp	2	2
1	1390556	Hose Reel RH	1	1	14	138929	Plate	2	2
1	1390557	Hose Reel LH	1	1	15	292533	Capscrew	4	2
2	1454403	Bracket	1	1	16	287860	Capscrew	4	..
3	292535	Capscrew	2	2	17	316826	Nut	4	..
4	292683	Washer	2	2	18	273775	Strap Clamp	2	..
5	216877	Nut	4	9	19	246001	Capscrew .....	..	4
6	16541	Fitting	2	2	20	254950	Clamp (3 Function)	2	..
6	16484	O-Ring	1	1	20	1310637	Clamp .....	..	2
7	358286	Strain Relief	1	1	21	^a	..... Hose	2	2
8	296023	Capscrew	2	2	22	^a	..... Hose	2	..
9	292682	Washer	2	2	23	^a	..... Hose .....	..	2
10	358287	Bracket	1	1					
11	1454656	Bracket	2	..					
12	1310608	Bracket	2	..		^a	☞ Table		

OPTIONAL EQUIPMENT

BACK-UP ALARM (Figure 214) Page 412

FIRE EXTINGUISHER (Figure 213) Page 411

FLOODLIGHTS (Figure 212) Page 410

FORK (Figure 204) Page 396

FORK (Figure 206)
HOOK TYPE QUICK DISCONNECT Page 398

HEADER HOSE (Figure 208)
(FIVE FUNCTION)
DUAL FUNCTION SIDE SHIFT FORK POSITIONER Page 402

HYDRAULIC CYLINDER (Figure 202)
DUAL FUNCTION PIN TYPE OR QUICK DISCONNECT
FIRST USED ON S/N PENDING PER ECN 63257 Page 394

LIGHTS (Figure 211) Page 408

PIN FORK (Figure 205) Page 397

ROTATING BEACON (Figure 210) Page 405

SELECTOR VALVE (Figure 203)
FIRST USED ON S/N PENDING PER ECN 63257 Page 395

SIDESHIFT CARRIAGE (Figure 198)
2 STAGE NFL Page 386

SIDESHIFT CARRIAGE (Figure 199)
3 STAGE FFL Page 388

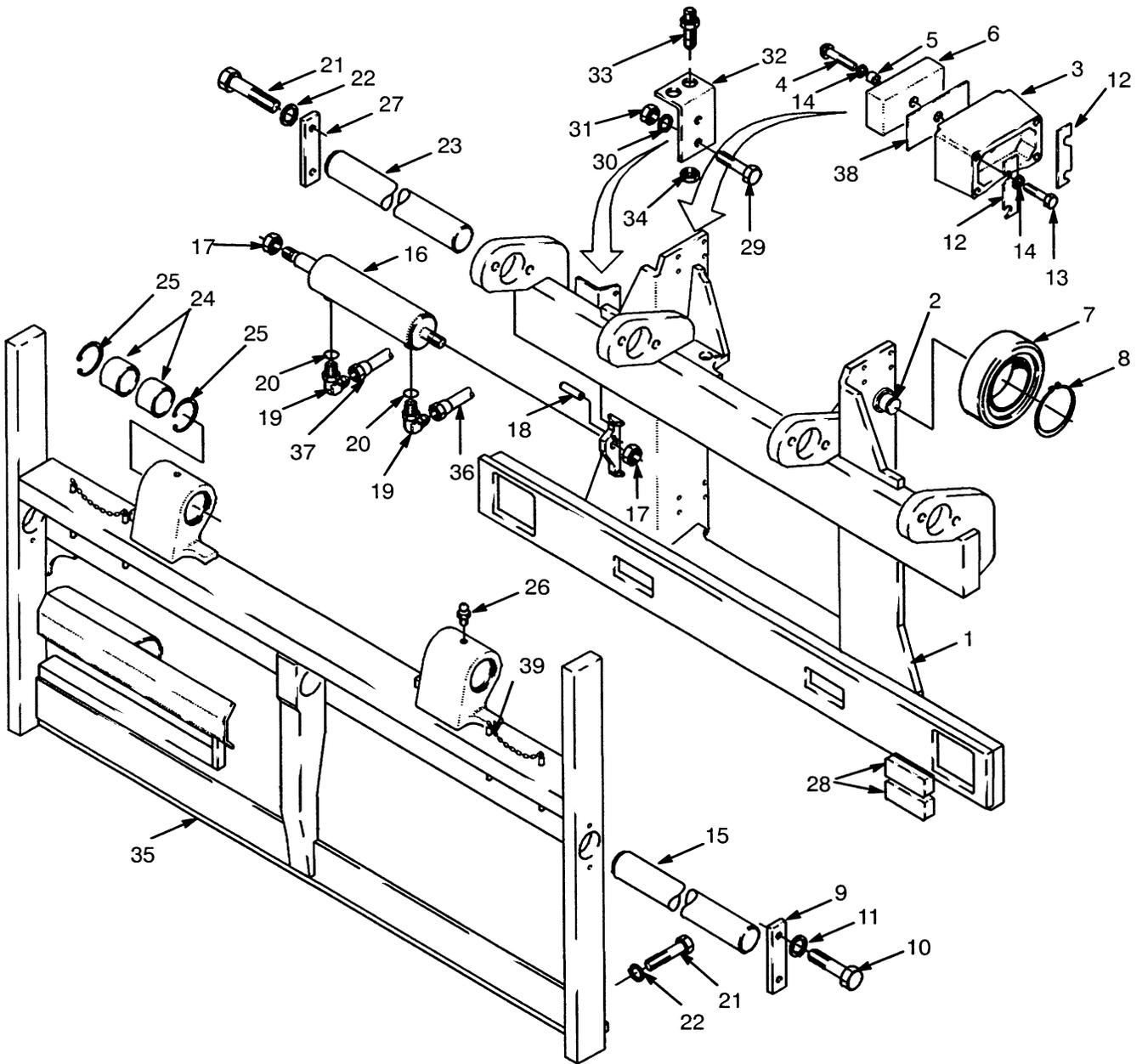
SIDESHIFT CARRIAGE (Figure 201)
DUAL FUNCTION PIN TYPE OR QUICK DISCONNECT
FIRST USED ON S/N PENDING PER ECN 63257 Page 392

SIDESHIFT CYLINDER (Figure 200) Page 390

STROBE LIGHT (Figure 209) Page 404

TIRE & WHEEL (Figure 207) Page 400

SIDESHIFT CARRIAGE (FIGURE 198) 2 STAGE NFL

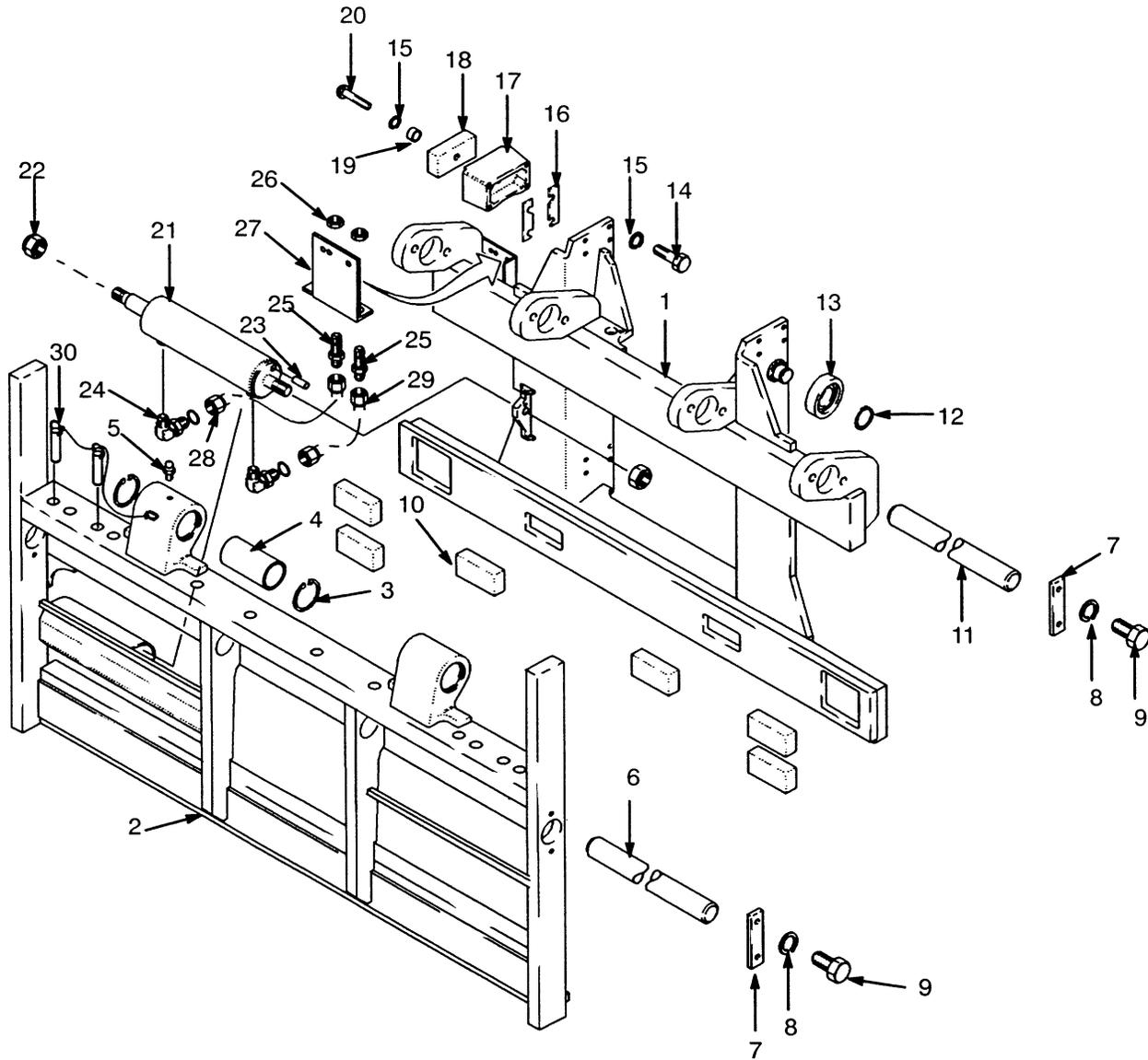


**SIDESHIFT CARRIAGE
2 STAGE NFL**

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1303386	Sideshift Carriage	1	20	16483	O-Ring	1
1	1303380	Frame	1	21	293647	Capscrew	8
2	1313357	Stubshaft	4	22	292683	Lockwasher	8
3 a	1301018	Bracket	4	23	1303371	Bar	2
4 a	376203	Capscrew	4	24	376773	Bushing	4
5 a	1301016	Spacer	4	25	183609	Snap Ring	4
6 a	1335179	Block	4	26	16001	Lube Fitting	2
7	1313358	Load Roller	4	27	376776	Plate	4
8	58918	Snap Ring	4	28	351458	Bearing Block	6
9	376776	Plate	2	29	136985	Capscrew	2
10	293647	Capscrew	4	30	292682	Lockwasher	2
11	292683	Lockwasher	4	31	136692	Nut	2
12 a	1310592	Shim	AR	32	1311208	Bracket	1
13	221510	Capscrew	16	33	16448	Fitting	2
14 a	15156	Lockwasher	20	34	14761	Nut	2
15	1303261	Pin	2	35	1303384	Apron	1
16	.....	Sideshift Cylinder	1	36	1313350	Tube	1
		☞ (Figure 200)		37	1332944	Tube	1
17	53157	Locknut	2	38	1301014	Shim (.050 in)	AR
18	68551	Pin	1	39	1334581	Pin	2
19	96521	Fitting	2				

a Included In Bearing Block Kit 1303400

SIDESHIFT CARRIAGE (FIGURE 199) 3 STAGE FFL

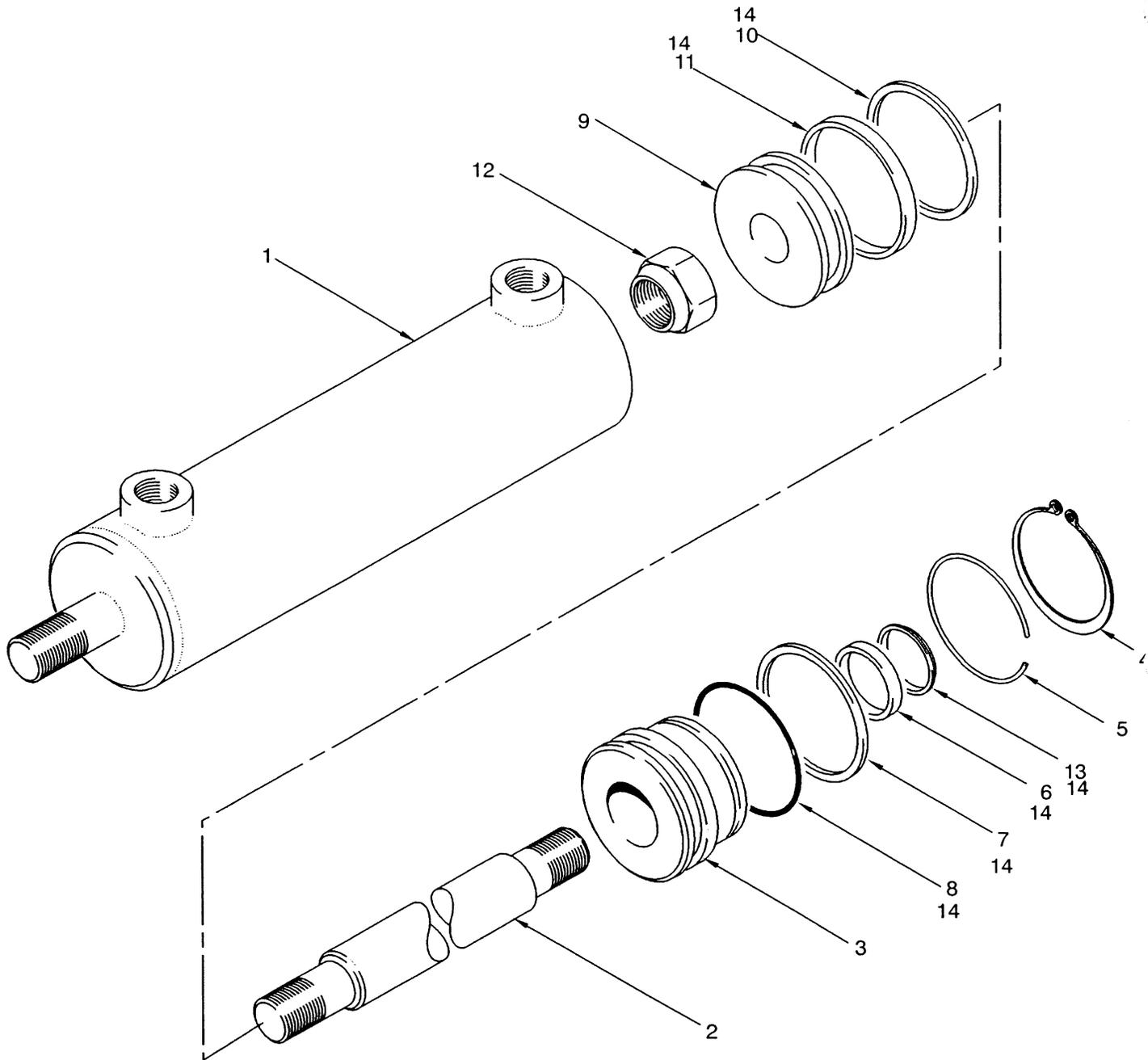


SIDESHIFT CARRIAGE

3 STAGE FFL

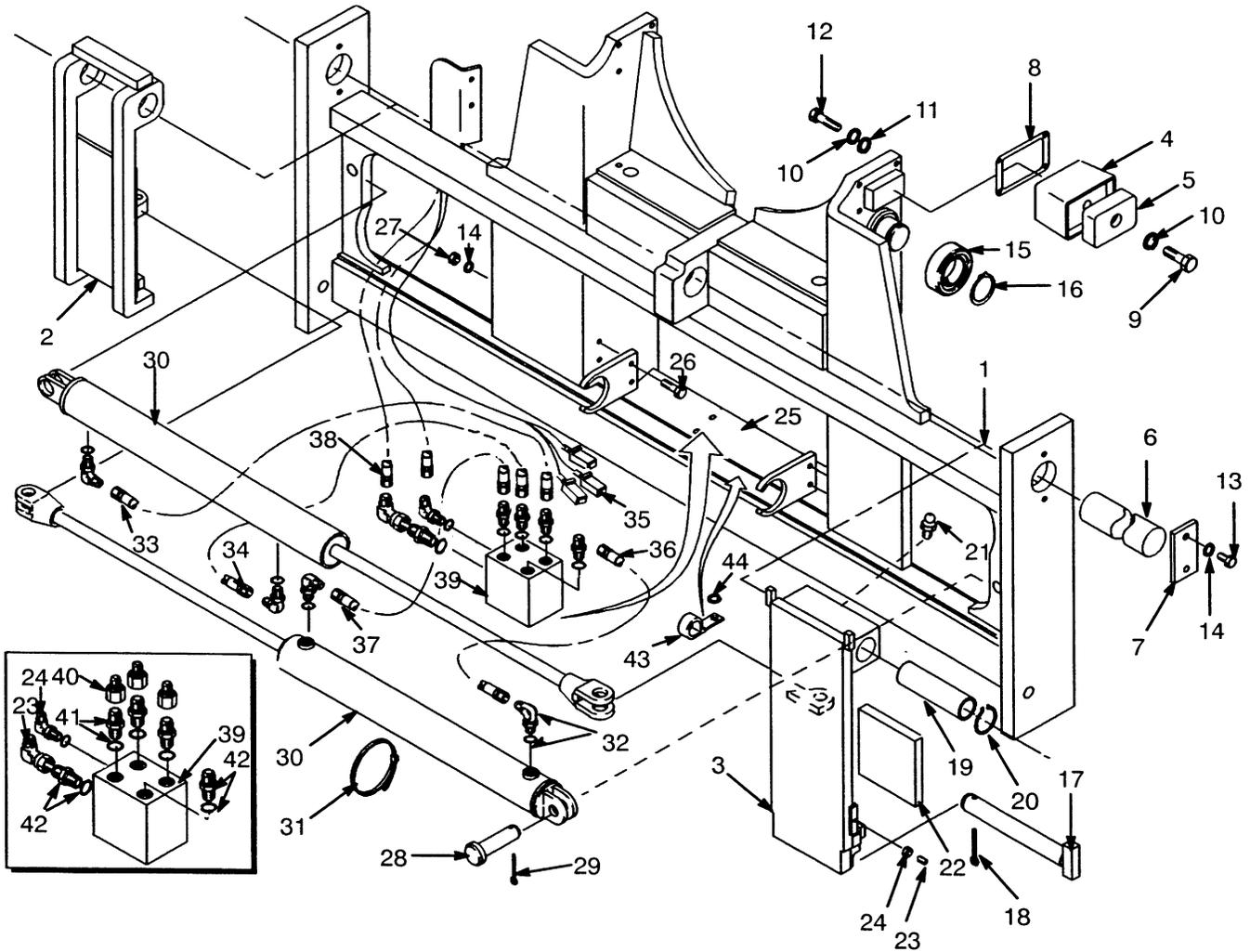
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1454562	Carriage Assembly	1	17	1301018	Bearing Bracket	4
1	1453446	Carriage	1	18	1335179	Block Bearing	4
2	1303384	Apron	1	19	1301016	Spacer	4
3	183609	Snap Ring	4	20	376203	Capscrew	4
4	376773	Bushing	4	21	.....	Siideshift Cylinder	1
5	16001	Lube Fitting	2			☞ (Figure 200)	
6	1303261	Pin-Load Arm	2	22	53157	Nut	2
7	376776	Keeper Plate	6	23	68551	Pin	1
8	292683	Lockwasher	12	24	96521	Fitting	2
9	293647	Capscrew	12	24	16483	O-Ring	1
10	351458	Bearing Block	6	25	16448	Fitting	2
11	1303371	Slide Bar	2	26	14761	Nut	2
12	58918	Snap Ring	4	27	1454338	Bracket	1
13	1313358	Load Roller	4	28	1454369	Tube Assy	1
14	221510	Capscrew	16	29	1454370	Tube Assy	1
15	15156	Washer	20	30	1334581	Retention Pin	4
16	1310592	Shim	AR				

SIDESHIFT CYLINDER (FIGURE 200)



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	387090	Sideshift Cylinder	1	8	a 15880	O-Ring	1
1	387085	Shell	1	9	376814	Piston	1
2	387087	Rod	1	10	a 638292	Back-Up Ring	1
3	376815	Retainer	1	11	a 637161	Seal	1
4	307275	Snap Ring	1	12	53157	Locknut	1
5	376839	Snap Ring	1	13	a 203367	Wiper	1
6	a 330692	Seal	1	14	186061	Lubricant	1
7	a 154358	Back-Up Ring	1	a		Included In Seal Kit 376883	

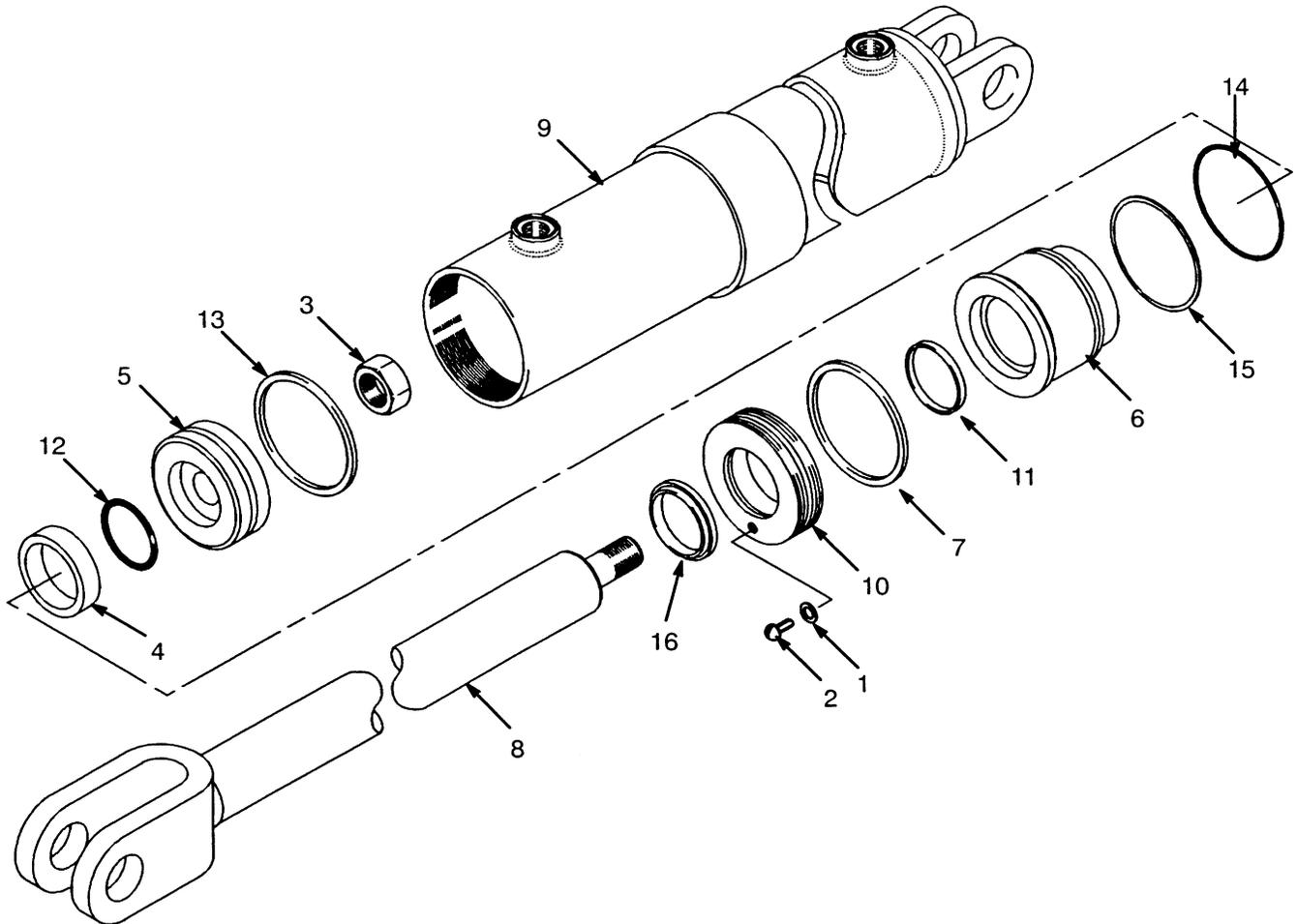
SIDESHIFT CARRIAGE (FIGURE 201) DUAL FUNCTION PIN TYPE OR QUICK DISCONNECT FIRST USED ON S/N PENDING PER ECN 63257



SIDESHIFT CARRIAGE
DUAL FUNCTION PIN TYPE OR QUICK DISCONNECT
FIRST USED ON S/N PENDING PER ECN 63257

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	2036848	Carriage/Fork Carrier Assy	1	27	216877	Nut	4
	1451108	Carriage Assembly	1	28	1373216	Pin	4
1	1451110	Carriage	1	29	15237	Pin	4
2	1451777	Carrier, RH	1	30	1451130	Cylinder	2
2 a	1452060	Carrier, RH	1			☞ (Figure 202)	
3	1451778	Carrier, LH	1	31	323864	Strap Clamp	4
3 a	1452059	Carrier, LH	1	32	16559	Fitting	4
4	1301018	Bearing Bracket	4	32	16484	O-Ring	4
5	1335179	Bearing Block	4	33	1454102	Hose Assy	1
6	1451127	Pin-Load Arm	1	34	1454104	Hose Assy	1
7	1453728	Keeper Plate	2	35	1454091	Wire Harness	1
8	1310592	Shim	AR	35	1330419	Plug	3
9	376203	Capscrew	4	35	1330424	Secondary Lock	3
10	15156	Washer	20	35	1330434	Socket	10
11	1301016	Spacer	4	35	1330421	Plug	1
12	221510	Capscrew	16	35	1330427	Secondary Lock	1
13	293647	Capscrew	4	36	1454103	Hose Assy	1
14	292683	Washer	8	37	95733	Hose Assy	1
15	1313358	Load Roller	4	38	270333	Hose Assy	2
16	58918	Snap Ring	4	39	1452526	Selector Valve	1
17 a	1451183	Pin	2			☞ (Figure 203)	
18 a	177194	Pin	2	40	222517	Fitting	3
19 a	1452066	Bushing	2	41	16551	Fitting	2
20 a	1454339	Snap Ring	4	41	16485	O-Ring	1
21	16001	Lube Fitting	2	42	16909	Fitting	2
22	1451833	Bearing Block	2	42	16485	O-Ring	1
23	17224	Fitting	1	43	198678	Clamp	1
23	16485	O-Ring	1	43	129684	Clamp	1
24	16989	Fitting	1	43	251994	Clamp	2
25	1451155	Cylinder Bracket	2	44	292681	Washer	2
26	292529	Capscrew	4	a		Quick Disconnect	

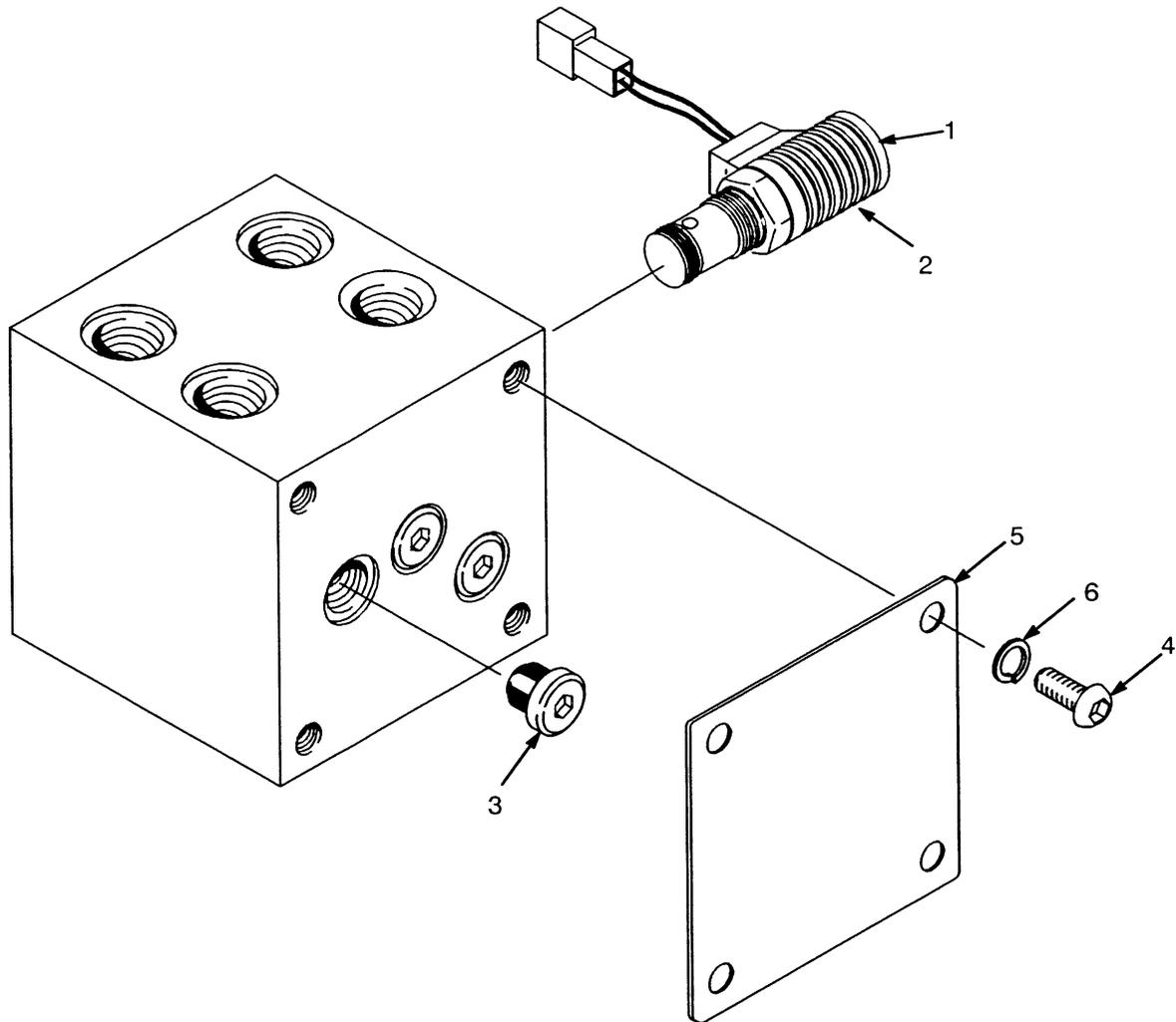
HYDRAULIC CYLINDER (FIGURE 202) DUAL FUNCTION PIN TYPE OR QUICK DISCONNECT FIRST USED ON S/N PENDING PER ECN 63257



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1451130	Cylinder	1	10	^a 1455370	Wiper	1
1	1347405	Lockwasher	1	11	^a 1455371	U-Ring	1
2	1347404	Capscrew	1	12	^a 1455373	O-Ring	1
3	1455367	Nut	1	13	^a 1455372	Seal	1
4	1455473	Spacer	1	14	^a 15880	O-Ring	1
5	1455369	Piston	1	15	^a 154358	Back-Up Ring	1
6	1455363	Bearing	1	16	^a 361000	Plug	1
7	1455364	Retainer	1				
8	1455471	Rod Assembly	1				
9	1455472	Tube Assembly	1				

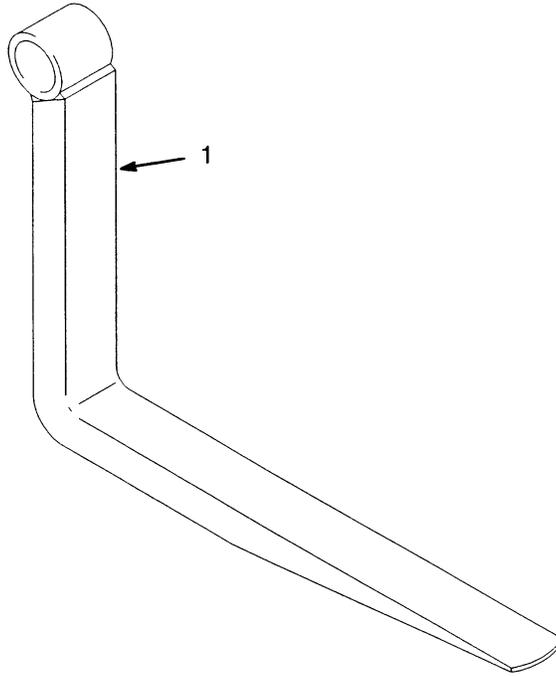
^a Included In Seal Kit 1455362

SELECTOR VALVE (FIGURE 203)
FIRST USED ON S/N PENDING PER ECN 63257



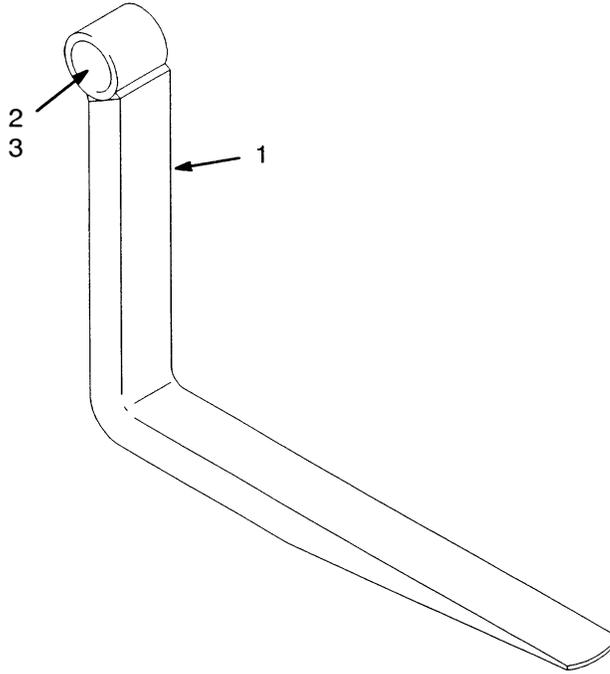
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1452526	Selector Valve Assy	1	3	1452132	Plug	3
1	1455353	Solenoid Valve	3	4	1452138	Bolt	4
1	1452131	Seal Kit	1	5	1452134	Cover	1
2	1455354	Coil	1	6	1452135	Washer	1

FORK (FIGURE 204) IDENTIFY BY PART NUMBER



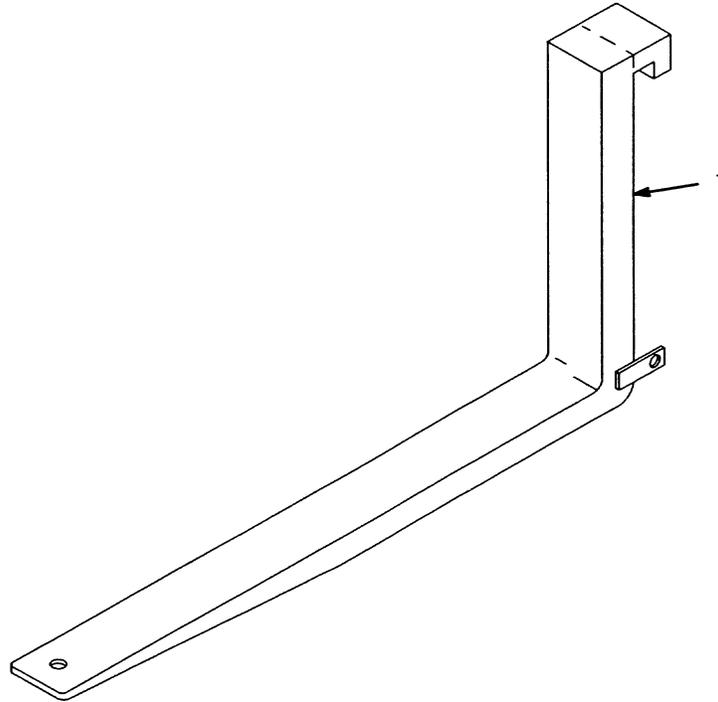
REF NO	NAME OF PART	PART NO.	QTY
1	Fork 3.50 X 8.00 in.	STANDARD TAPER	
	54 in.	1333412	2
	60 in.	1333413	2
	72 in.	1333414	2
	84 in.	1333415	2
	96 in.	1333416	2
1	Fork 3.50 x 8.00 in.	FULL BOTTOM TAPER	
	54 in.	1333417	2
	60 in.	1333418	2
	72 in.	1333419	2
	84 in.	1333420	2
	96 in.	1333421	2

PIN FORK (FIGURE 205)
IDENTIFY BY PART NUMBER
FIRST USED ON S/N PENDING PER ECN 63257



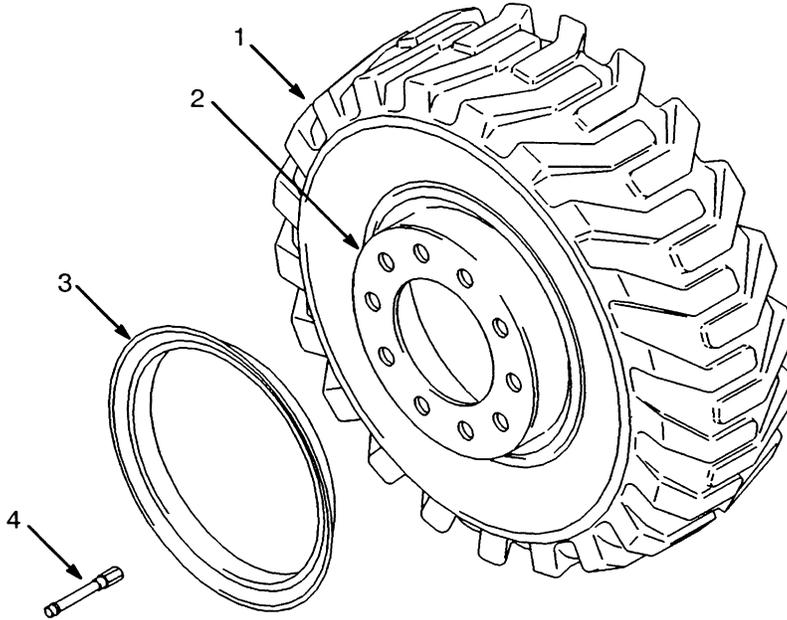
REF NO	NAME OF PART	PART NO.	QTY
1	Fork 3.50 X 8.00 in.	STANDARD TAPER	
	54 in.	1454435	2
	60 in.	1454436	2
	72 in.	1454437	2
	84 in.	1454438	2
	96 in.	1454439	2
2	Bushing	1452066	2
3	Snap Ring	1454339	2

FORK (FIGURE 206)
HOOK TYPE QUICK DISCONNECT
IDENTIFY BY PART NUMBER
FIRST USED ON S/N PENDING PER ECN 63257



REF NO	NAME OF PART	PART NO.	QTY
1	Fork 3.50 X 8.00 in.	DUAL FUNCTION	
	54 in.	1454440	2
	60 in.	1454441	2
	72 in.	1454442	2
	84 in.	1454443	2
	96 in.	1454444	2

TIRE & WHEEL (FIGURE 207)



PARTS-SERVICE GRAM	
ITEM	GRAM
1374468	C-G-13 (E)
1374468	C-G-23

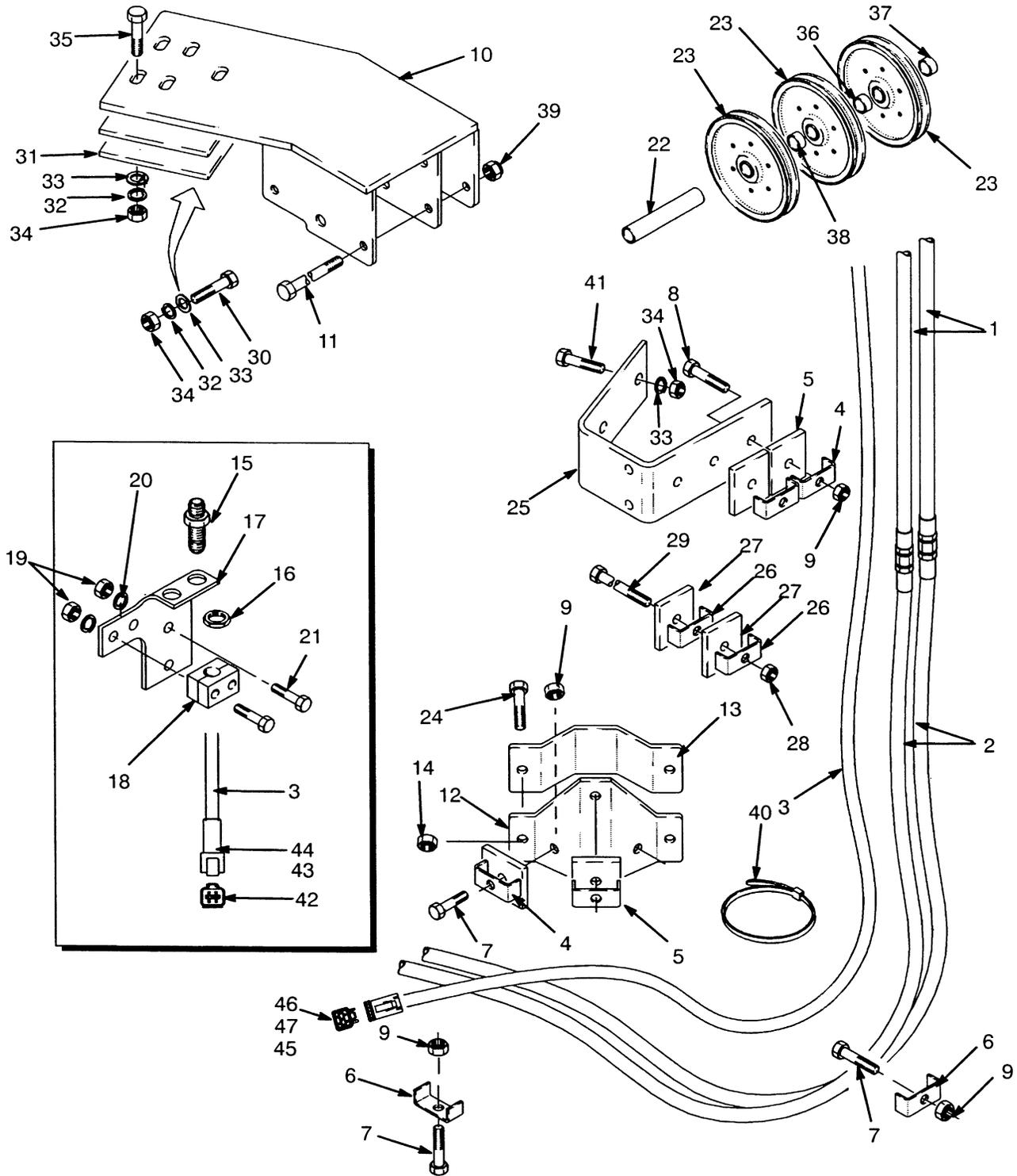
TIRE & WHEEL

REF NO	NAME OF PART 1 2 3 4	H300XL	H300-360XL
1	Tire/Wheel 11.00 x 20 14-PLY	^a 128734 ^b 1311377	^f 1393121
	Tire	^a 89622 ^b 1311378	^a 1393122
	Tube	23026	23026
2	Wheel	387075	387075
2	Wheel Heavy Duty (Optional)	1374468	1374468 ^g 1366711
3	Lock Ring	171675	
4	Extension	49189	
1	Tire/Wheel 12.00 x 20 16-PLY		^{ac} 130567 ^{bc} 1311379
	Tire	^d 816083	^{ac} 88278 ^{bc} 1311380
	Tube		300294
2	Wheel		387075
3	Lock Ring		171675
4	Extension		49189
1	Tire/Wheel 12.00 x 20 18-PLY		^{ac} 300208 ^{bc} 1311384
	Tire		^{ac} 300209 ^{bc} 1311385
	Tube		300294
2	Wheel		387075
2	Wheel Heavy Duty (Optional)		^d 1374468 ^g 1366711
3	Lock Ring		171675
4	Extension		49189
1	Tire 12.00 x 20		^d 1313390
2	Wheel Wheel (Optional)		1374468 ^g 1366711
1	Tire/Wheel 12.00 x 20	^a 1366721	^a 1366721
	Tire	1366719	1366719
	Tube	1366717	1366717
	Flap	1366715	1366715
2	Wheel Heavy Duty (8.0 x 20)	1374468	1374468
2	Wheel Heavy Duty (8.0 x 20)	^e 1366722	^e 1366722

Note: Part Number Stamped On Wheel

- ^a Off Road
- ^b On/Off Road
- ^c Empty Container Handler
- ^d Solid Tire
- ^e Optional
- ^f Lug (11.00 x 20)
- ^g H360XL

HEADER HOSE (FIGURE 208) (FIVE FUNCTION) DUAL FUNCTION SIDE SHIFT FORK POSITIONER



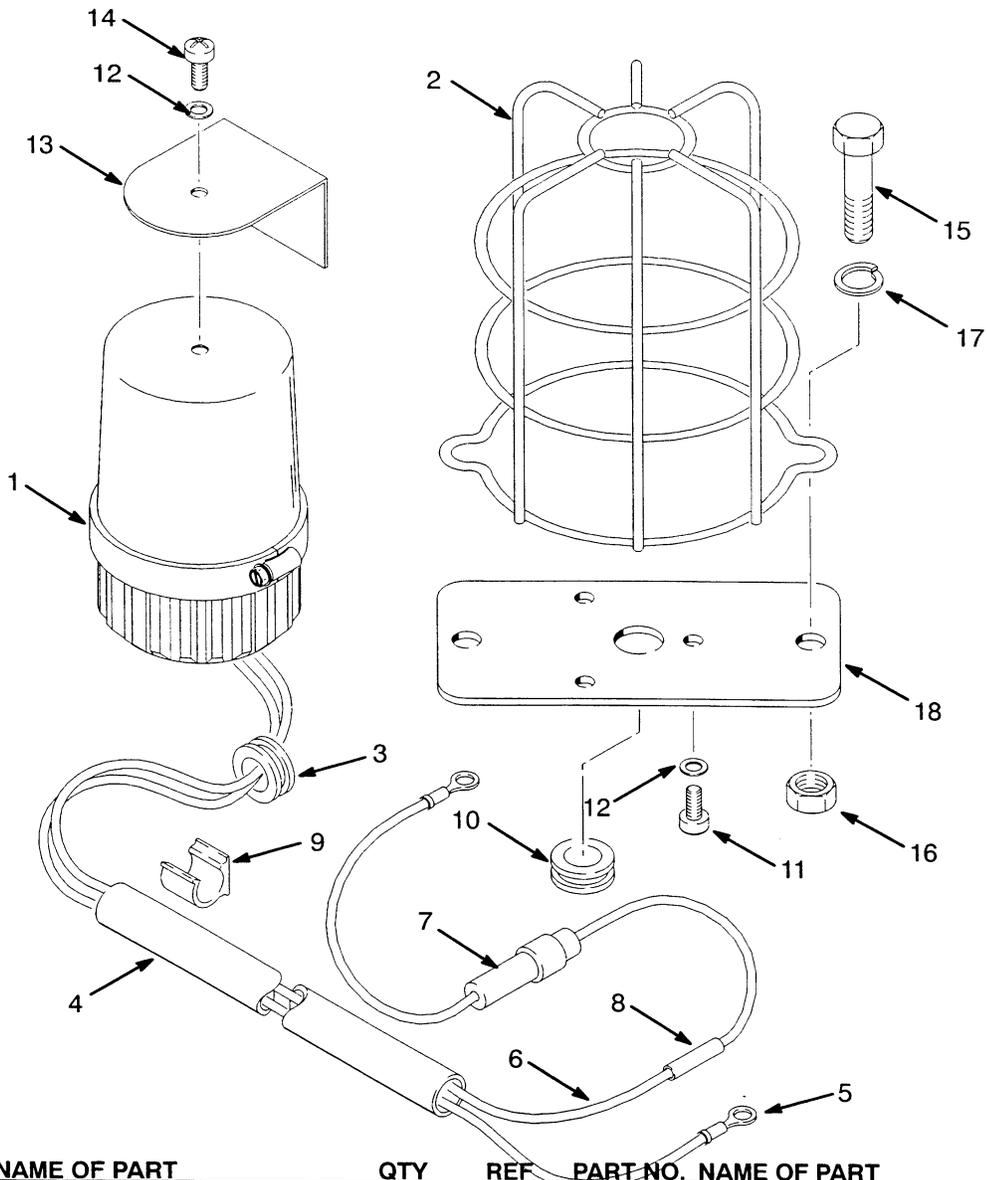
**HEADER HOSE
(FIVE FUNCTION)
DUAL FUNCTION SIDE SHIFT FORK POSITIONER**

H300-360XL

REF NO	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS				
		3660 mm 144.0 in.	4560 mm 179.5 in.	5310 mm 209.0 in.	6110 mm 240.5 in.	6610 mm 260.3 in.
1	Hose	815559	1311337	1311339	1311340	1311341
2	Hose	1311342	1311344	1311344	1311344	1311344
3	Mast Harness	1454282	1454288	1454289	1454290	1454291

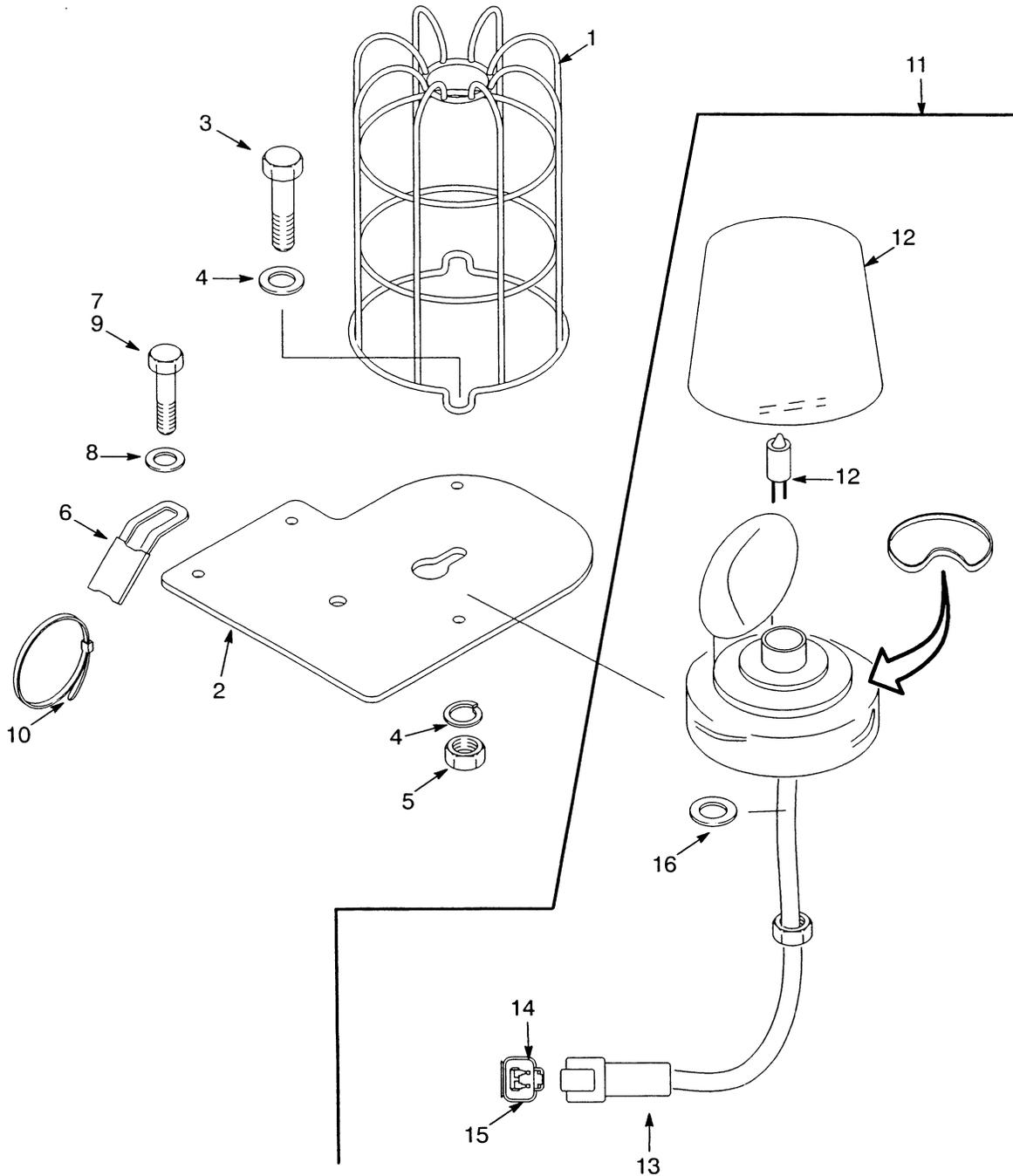
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	a	..... Hose Assenbly	2	26	b	254950 Clamp	2
2	a	..... Hose	2	27	b	138929 Plate	2
3	a	..... Mast Harness	1	28	b	300937 Nut	1
4		254950 Clamp	5	29	b	292538 Capscrew	1
5		138929 Plate	5	30		292529 Capscrew	1
6		1310637 Clamp	2	31		1301571 Plate	2
7		292529 Capscrew	5	32		320162 Washer	3
8		292531 Capscrew	2	33		292683 Washer	6
9		300937 Nut	7	34		216877 Nut	6
10		1352661 Bracket	1	35		292533 Capscrew	3
11		1311265 Capscrew	3	36		280610 Spacer	1
12		1310608 Hose Bracket	1	37		1301650 Spacer	1
13		1310609 Bracket	1	38		1311264 Spacer	1
14		316826 Nut	2	39		221357 Nut	3
15		16448 Fitting	4	40		273775 Strap Clamp	2
16		14761 Nut	4	41		292528 Capscrew	2
17		1454301 Connection Bracket	1	42		1330433 Pin	4
18		1330603 Clamp	1	43		1330411 Connector	1
19		239503 Nut	2	44		1330416 Lock	1
20		292681 Washer	2	45		1330421 Plug	1
21		136704 Capscrew	2	46		1330436 Socket	4
22		1454302 Spacer	1	47		1330427 Lock	1
23		189451 Sheave	3				
24		292522 Capscrew	2	a		☞ Table	
25		1310612 Bracket	1	b		5310 mm, 6110 mm and 6610 mm	

STROBE LIGHT (FIGURE 209)



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1316485	Strobe Light	1	7	335850	Fused Wire	1
1	1326366	Lens	1	8	1152830	Connector	1
1	1322390	Bulb	1	9	241878	Adhesive Clamp	3
1	1367544	Circuit Board	1	10	133484	Grommet	1
1	1322393	Fuse	1	11	227098	Screw	3
1	1479120	Lens	1	12	15930	Washer	4
2	1312465	Guard	1	13	1316480	Shield	1
3	328389	Grommet	1	14	16719	Screw	1
4	275494	Conduit	1	15	16828	Cap screw	2
5	1306578	Wire	1	16	222667	Nut	2
6	1306579	Wire	1	17	15156	Washer	2
				18	1316479	Plate	1

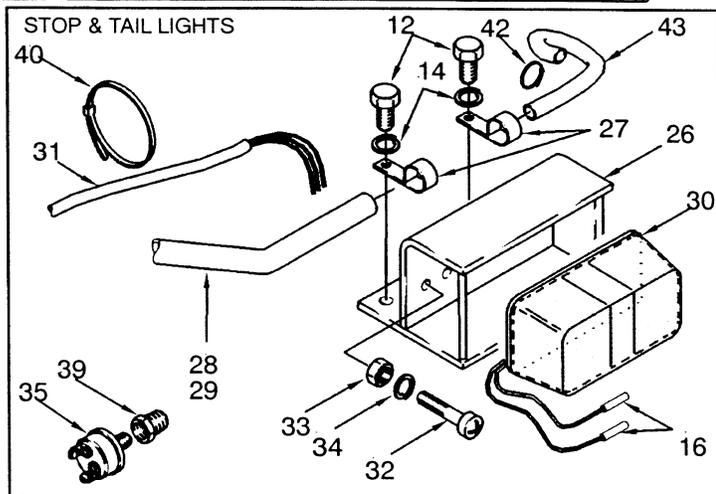
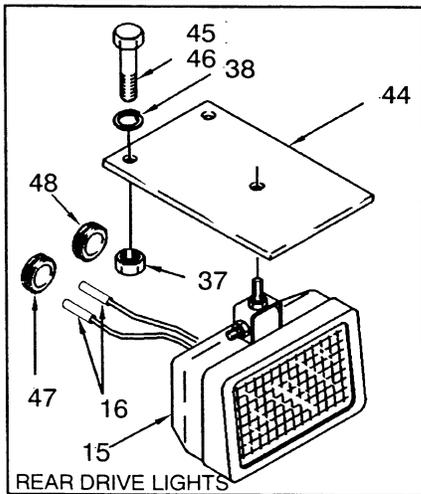
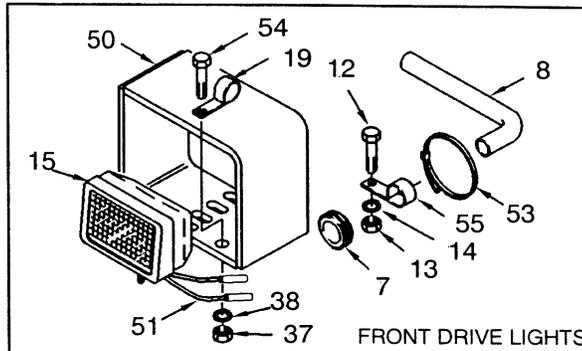
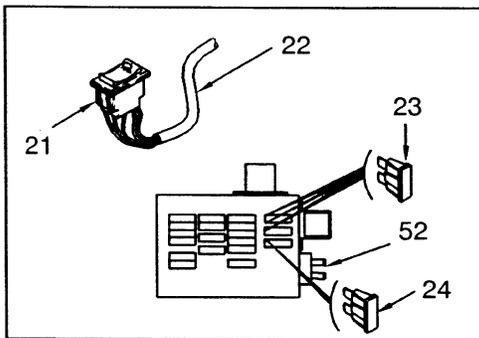
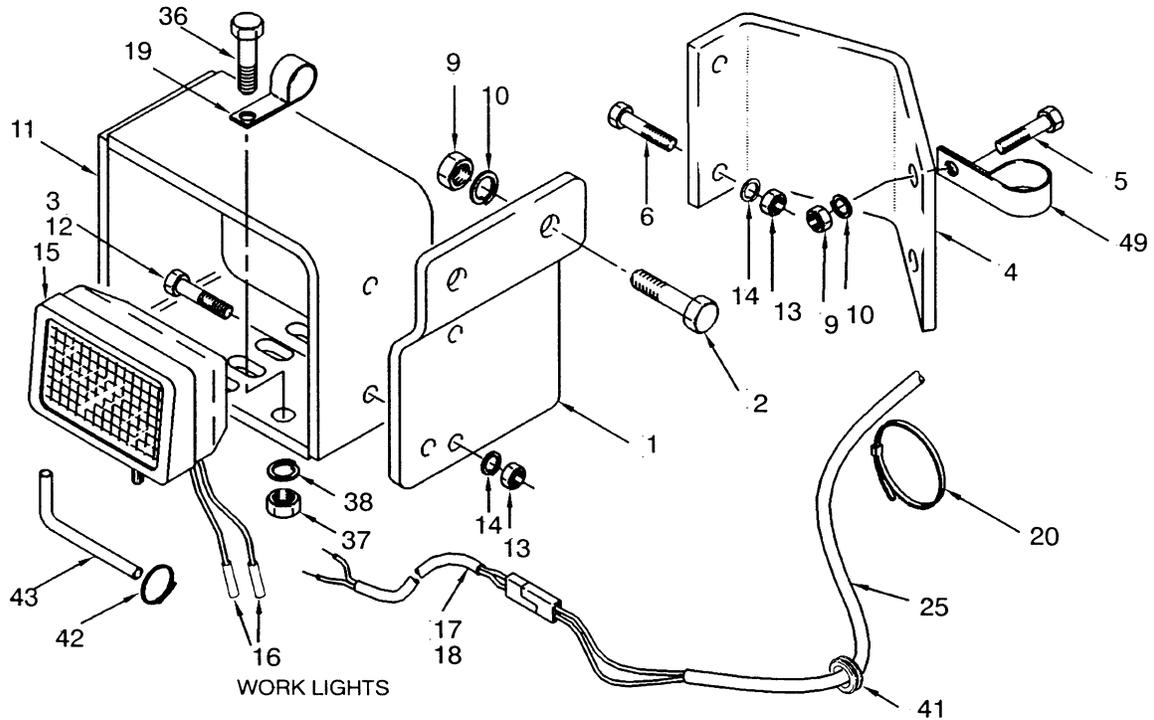
ROTATING BEACON (Figure 210)



ROTATING BEACON

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	250095	Guard	1	10	137852	Strap Clamp	1
2	1465628	Plate	AR	11	1465621	Rotating Beacon	1
3	302049	Screw	2	12	1385522	Rotating Beacon	1
4	320156	Washer	4	12	1453564	Bulb (24V)	1
5	302399	Nut	2	13	1330409	Connector	1
6	1301727	Clamp	1	14	1330414	Lock	1
7	176640	Capscrew	2	15	1330437	Pin	2
8	292681	Lockwasher	2	16	320162	Washer	1
9	280472	Thread Adhesive	AR				

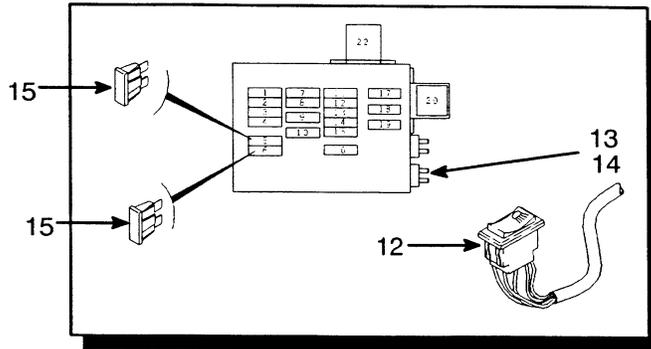
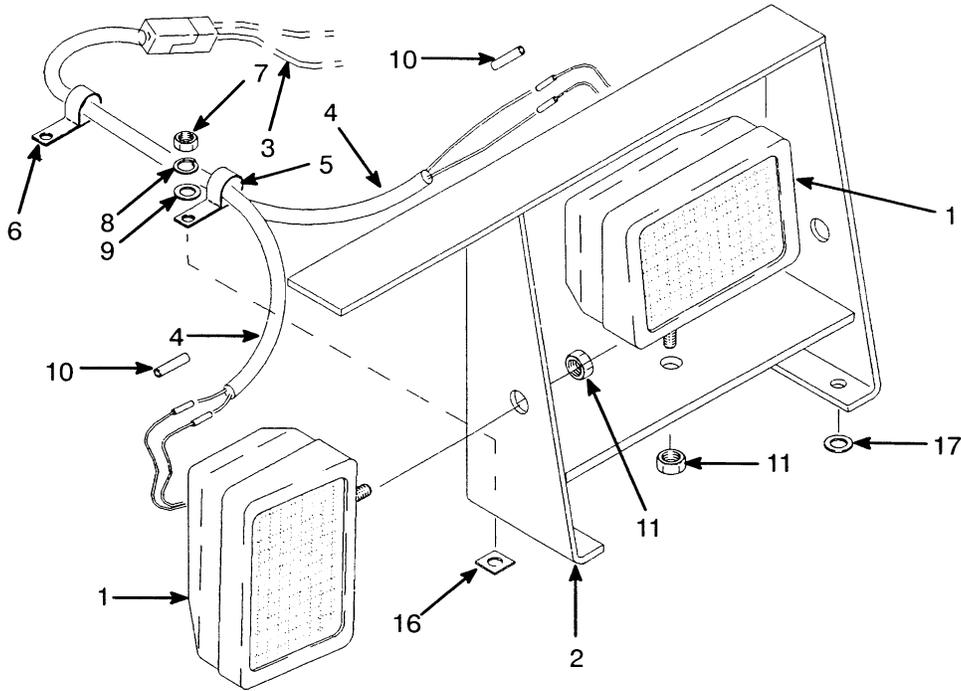
LIGHTS (FIGURE 211)



LIGHTS

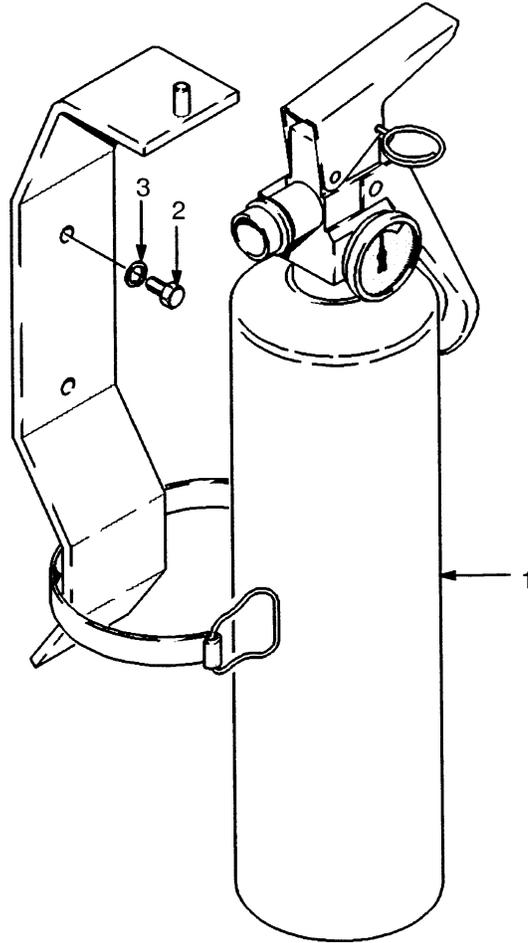
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1311425	Bracket	1	28	1309569	Tube, RH	1
2	132860	Capscrew	2	29	1309570	Tube, LH	1
3	a 287854	Capscrew	2	30	353479	Lamp	2
4	b 1311209	Bracket	1	31	1311254	Harness	1
5	b 246001	Capscrew	2	32	1300742	Screw	4
6	b 136985	Capscrew	2	33	15052	Nut	4
7	216735	Grommet	4	34	15152	Lockwasher	4
8	c 1330569	Tube	2	35	1301299	Switch	1
8	d 1332908	Tube	2	36	136681	Capscrew	2
9	216877	Nut	4	37	239503	Nut	3
10	292683	Lockwasher	4	38	292681	Lockwasher	6
11	389136	Bracket	2	39	12843	Fitting	1
12	287854	Capscrew	6	40	137852	Clamp	3
13	136692	Nut	4	41	236890	Grommet	2
14	292682	Lockwasher	8	42	137852	Clamp	6
15	353478	Light	4	43	275494	Conduit	AR
15	1350992	Sealed Beam	1	44	353379	Plate	2
15	c 357934	Halogen Light	4	45	176640	Capscrew	4
15	c 389793	Sealed Beam	1	45	e 132861	Capscrew	4
15	1461402	Light Assy (Optional)	4	46	358674	Sealant	AR
16	201950	Connector	12	46	c 288394	Sealant	AR
17	1330566	Harness, RH	1	47	216735	Grommet	2
18	1330567	Harness, LH	1	48	102990	Grommet	2
19	164488	Clamp	2	49	b 154208	Clamp	1
20	323864	Clamp	6	50	350164	Bracket	2
21	1301616	Switch	1	51	1332905	Harness	2
21	1301160	Switch	1	52	1301224	Diode	1
21	1323993	Socket	1	53	137852	Clamp	2
21	1326355	Bulb	1	54	136985	Capscrew	4
21	1301157	Lens	1	55	178119	Clamp	4
22	1301748	Harness	1				
23	1310630	Fuse-15 Amp	2	a	Without Header Hoses		
24	370647	Fuse-10 Amp	1	b	With Header Hoses		
25	1311252	Harness	1	c	H330-360XL, H330XL-EC-3		
26	1301717	Bracket	2	d	H360XL-EC-4		
27	154278	Clamp	4	e	With HYBRID Cab		

FLOODLIGHTS (FIGURE 212)



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	353478	Light	4	10	201950	Connector	4
1	389793	Sealed Beam	1	11	239503	Nut	4
1	357934	Light (Optional)	4	12	1331559	Switch	1
1	1350992	Sealed Beam	1	12	1331560	Switch	1
2	1331591	Bracket, RH	1	12	1323993	Socket	1
2	1331592	Bracket, LH	1	12	1326355	Bulb	1
3	1331527	Harness	1	12	1301157	Lens	1
4	1331532	Harness	2	13	1301224	Diode	1
5	132131	Clamp	2	14	1301284	Screw	1
6	156848	Clamp	2	15	1310630	Fuse 15 Amp	2
7	136692	Nut	6	16	1326055	Plate	4
8	320159	Lockwasher	6	17	320162	Washer	2
9	292681	Washer	6				

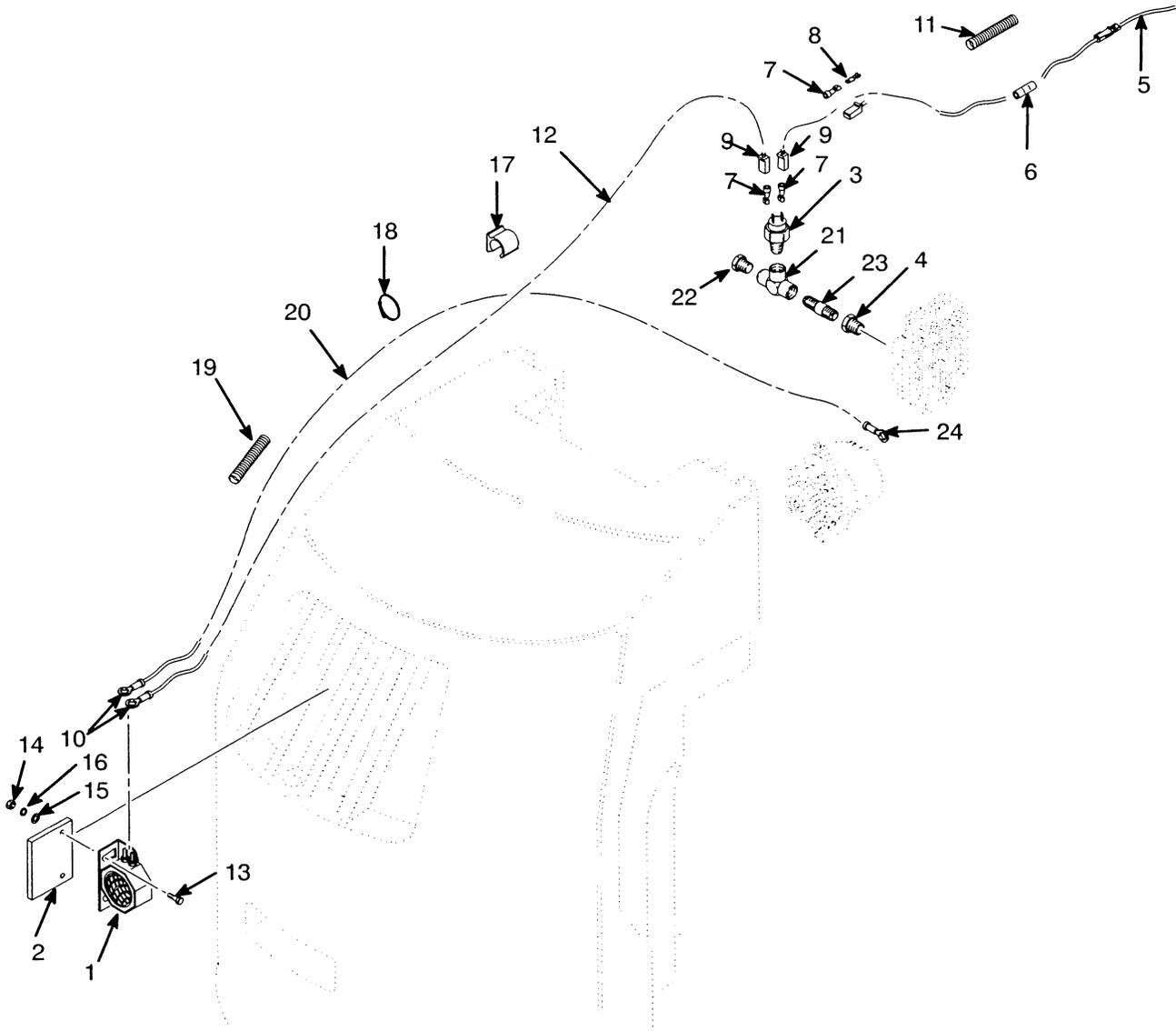
FIRE EXTINGUISHER (FIGURE 213)



REF	PART NO.	NAME OF PART	QTY
1	146540	Fire Extinguisher	1
2	227180	Screw	3

REF	PART NO.	NAME OF PART	QTY
3	15923	Washer	3

BACK-UP ALARM (FIGURE 214)



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1350733	Audible Alarm (87 dBA)	1	11	1355818	Conduit	1
1	1350734	Audible Alarm (97 dBA)	1	12	1355819	Wire Assembly	1
1	1350735	Audible Alarm (102 dBA)	1	13	18461	Capscrew	2
1	1350736	Audible Alarm (107 dBA)	1	14	15004	Nut	2
1	1339947	Audible Alarm (82-102 dBA)	1	15	15127	Washer	2
2	1339939	Bracket	1	16	15154	Lockwasher	2
3	1352534	Oil Pressure Switch	1	17	279740	Adhesive Clamp	4
4	231956	Fitting	1	18	137852	Strap Clamp	16
5	1352544	Wire Assembly	1	19	1355820	Conduit	1
5	354515	Fuse (2 Amp)	1	20	1355821	Wire Assembly	1
6	826004	Connector	1	21	12838	Fitting	1
7	134812	Blade Terminal	5	22	14349	Fitting	1
8	129892	Blade Terminal	3	23	16150	Fitting	1
9	1301720	Connector Body	5	24	129886	Ring Terminal	1
10	129887	Ring Terminal	2				

EMPTY CONTAINER ATTACHMENT

AIR SYSTEM (Figure 219) Page 422

CONTAINER HANDLING ATTACHMENT (Figure 215) Page 414

ELECTRICAL CONTROLS (Figure 221) Page 426

ELECTRICAL SYSTEM (Figure 222) Page 428

ENDBEAM (Figure 216) Page 416

EXTENSION (Figure 220) Page 424

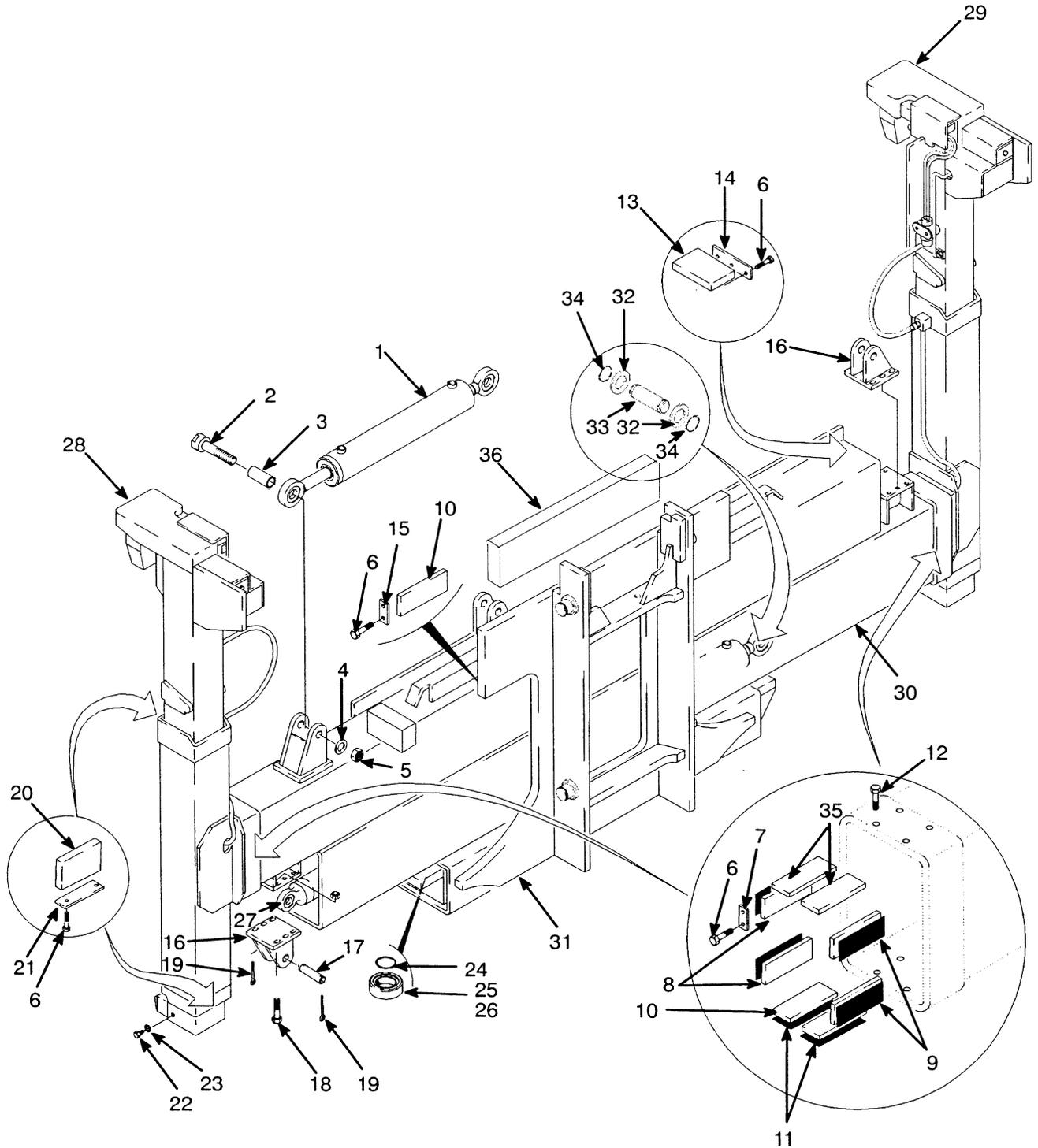
HYDRAULIC HOSES (Figure 217) Page 418

HYDRAULIC SYSTEM (Figure 218) Page 420

LIGHTS (Figure 224) Page 432

SIDESHIFT CYLINDER (Figure 223) Page 430

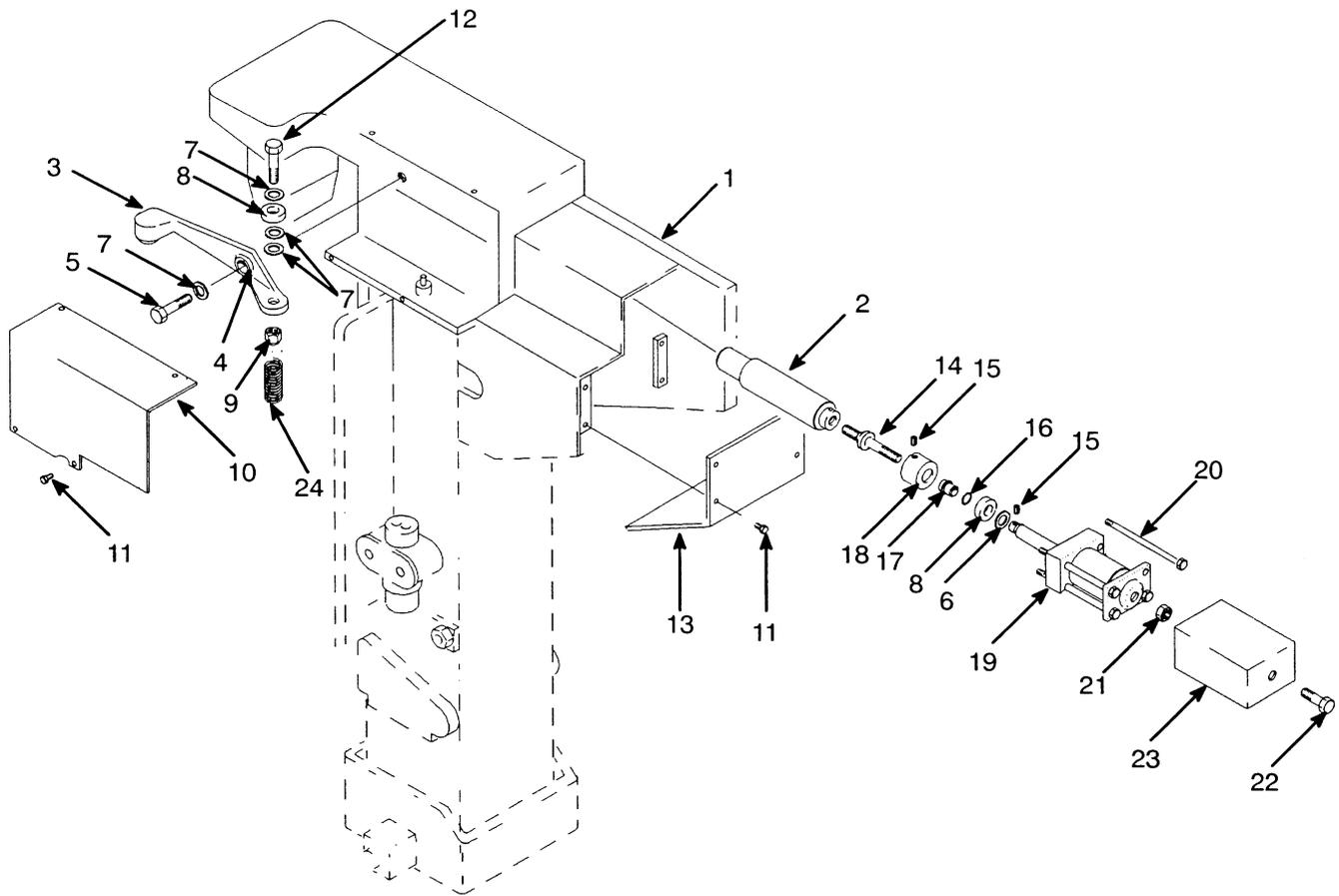
CONTAINER HANDLING ATTACHMENT (FIGURE 215)



CONTAINER HANDLING ATTACHMENT

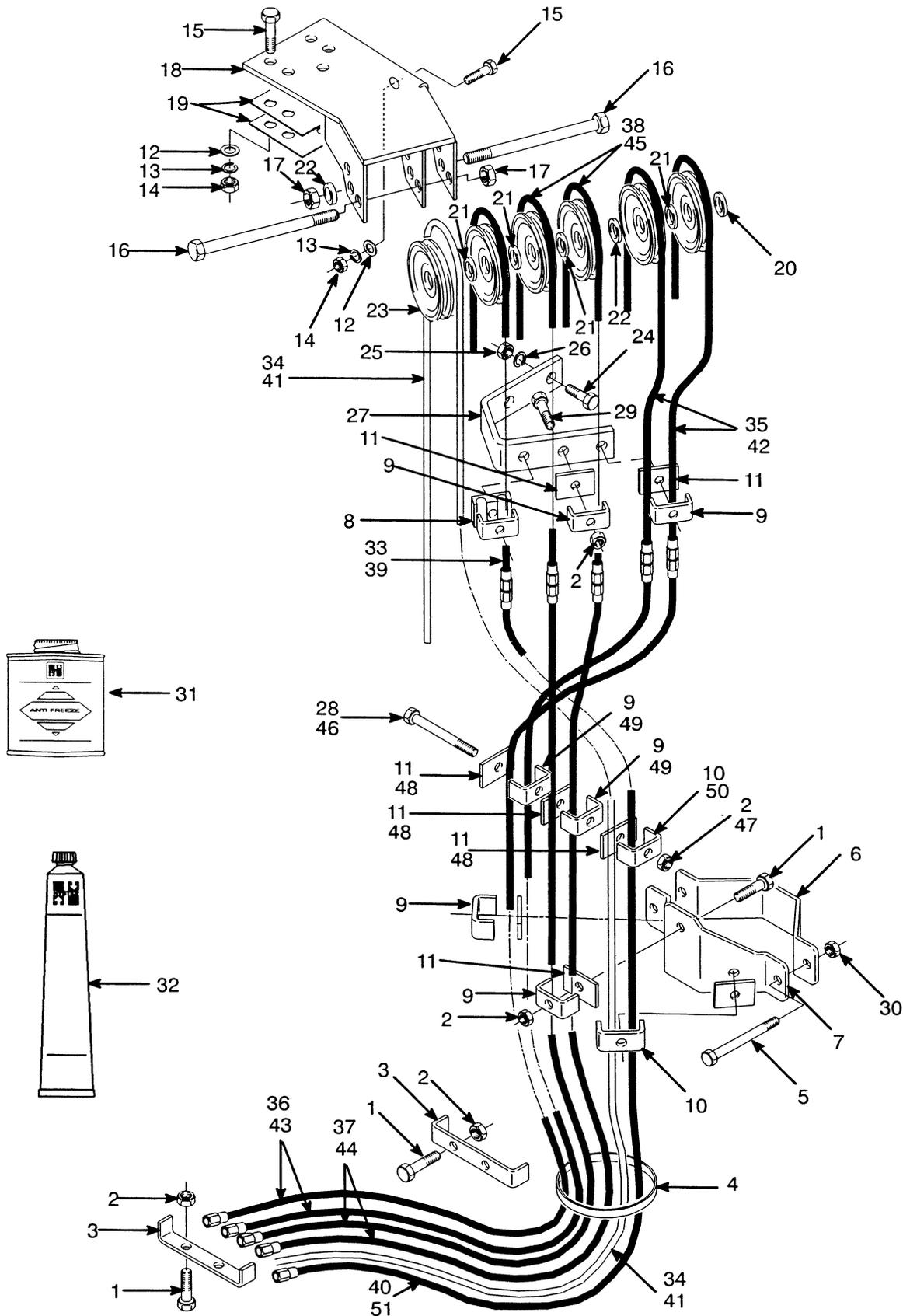
REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
a	1323825	Container Attachment	1	20	1329499	Nylon Pad	4
b	1457306	Container Attachment	1	21	1329498	Plate	4
1		Sideshift Cylinder	1	22	292514	Capscrew	4
		☞ (Figure 223)		23	1332309	Ring	4
2	1332284	Pin	2	24	1479121	Snap Ring	8
3	1332285	Spacer	2	25	1332288	Load Roller	8
4	320181	Washer	2	26	1332289	Bearing	8
5	302408	Nut	2	26	1376447	Snap Ring	16
6	132860	Capscrew	66	27		Extension Cylinder	2
7	1332278	Plate	14			☞ (Figure 220)	
8	1332310	Pad	8	28	1332303	Beam, LH	1
9	1329639	Shim (.080 in)	AR	29	1332304	Beam, RH	1
9	1329641	Shim (.20 in)	AR	30	1332305	Frame	1
10	1332300	Nylon Pad	6	31	1332306	Carriage	1
11	1329639	Shim (.080 in)	AR	31	1335190	Stubshaft	4
11	1329641	Shim (.20 in)	AR	32	296426	Washer	4
12	292516	Capscrew	8	33	1332313	Pin	2
13	1332315	Nylon Pad	2	34	1332314	Snap Ring	4
14	1332316	Plate	2	35	1334634	Nylon Pad	4
15	1332278	Plate	2	36	1347859	Label	1
16	1332280	Bracket	2				
17	1332281	Pin	2	a	Last Used On S/N D19D-2681		
18	293650	Capscrew	12	b	First Used On S/N D19D-2681		
19	15246	Cotter Pin	2				

ENDBEAM (FIGURE 216)



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1329450	Endbeam, RH	1	12	292561	Capscrew	2
1	1329451	Endbeam, LH	1	13	1329479	Cover	2
2	1329452	Lockpin	2	14	1329466	Adjuster	2
3	1329453	Arm, LH	1	15	302100	Screw	4
3	1329454	Arm, RH	1	16	1329469	O-Ring	2
4	1329455	Bushing	2	17	1329468	Bushing	2
5	293689	Capscrew	2	18	1329465	Nut	2
6	1329457	Washer	2	19	1329470	Twist-Lock Cylinder	2
7	1329458	Washer	4	19	1332317	Kit-Seal	1
8	1334612	Magnet	4	20	1390174	Bolt	8
9	302404	Nut	2	21	292658	Nut	2
10	1329494	Cover, LH	1	22	292561	Bolt	2
10	1329495	Cover, RH	1	23	1329474	Indicator	2
11	1329478	Capscrew	16	24	1374080	Spring	2

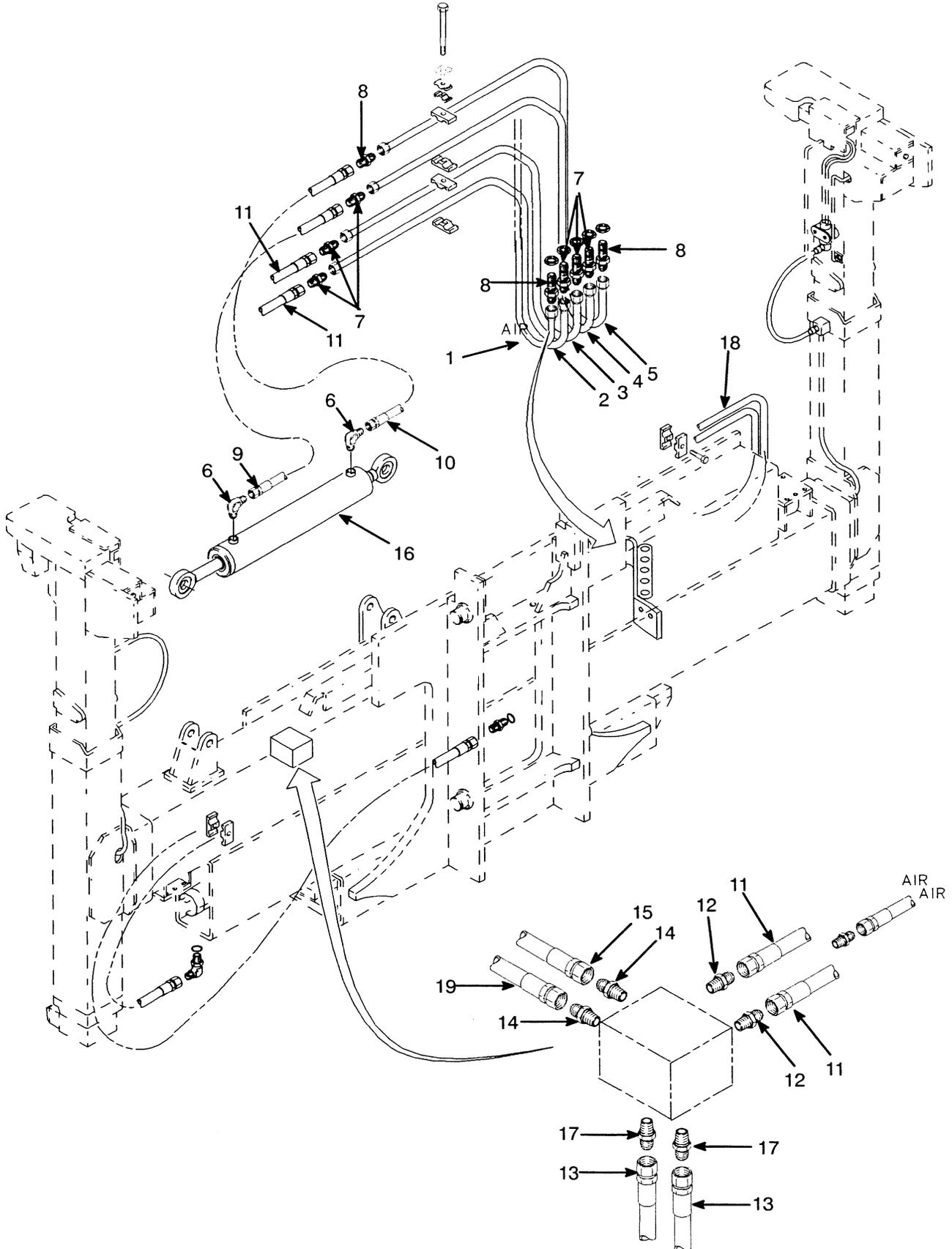
HYDRAULIC HOSES (FIGURE 217)



HYDRAULIC HOSES

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY	
1	292531	Capscrew	7	35	af	1460252	Hose	2
2	300937	Nut	11	36	a	1330614	Hose	2
3	1310637	Clamp	2	37	a	1330607	Hose	2
4	273775	Clamp	2	38	a	1358751	Hose	2
5	292522	Capscrew	2	38	af	1460254	Hose	2
6	1310609	Bracket	1	39	ae	1358752	Hose	1
7	1310608	Bracket	1	39	af	1460256	Hose	1
8	1310027	Clamp	1	40	a	1330618	Hose	1
9	254950	Clamp	6	41	cb	1333763	Harness	1
10	100623	Clamp	2	41	db	1457644	Harness	1
11	138929	Plate	8	41	bf	1460247	Harness	1
12	320160	Washer	4	42	be	1330611	Hose	2
13	292682	Lockwasher	5	42	bf	1460253	Hose	2
14	136692	Nut	5	43	b	1330612	Hose	2
15	292517	Capscrew	1	44	b	1330609	Hose	2
16	1311265	Capscrew	3	45	be	1330610	Hose	2
17	221357	Nut	3	45	bf	1460255	Hose	2
18	1352661	Bracket	1	46	b	287814	Capscrew	2
19	1301571	Plate	2	47	b	300937	Nut	2
20	1301650	Spacer	1	48	b	138929	Plate	6
21	280610	Spacer	4	49	b	254950	Clamp	4
22	1311264	Spacer	2	50	b	100623	Clamp	2
23	189451	Sheave	6	51	be	1330615	Hose	1
24	292528	Capscrew	2	51	bf	1460257	Hose	1
25	216877	Nut	2					
26	292683	Lockwasher	2					
27	1310612	Bracket	1					
28	287814	Capscrew	1					
29	292533	Capscrew	3					
30	316826	Nut	2					
31	322784	Compound	AR					
32	280472	Sealant	AR					
33	b	1330616	Hose	1	a	H330XL-EC-3		
34	ca	1358722	Harness	1	b	H360XL-EC-4		
34	da	1457645	Harness	1	c	Last Used On S/N D19D-2962		
34	af	1460246	Harness	1	d	Used On S/N D19D-2963 Thru S/N Pending Per ECN 63270		
35	ae	1358750	Hose	2	e	Last Used On S/N Pending Per ECN 63270		
					f	First Used On S/N Pending Per ECN 63270		

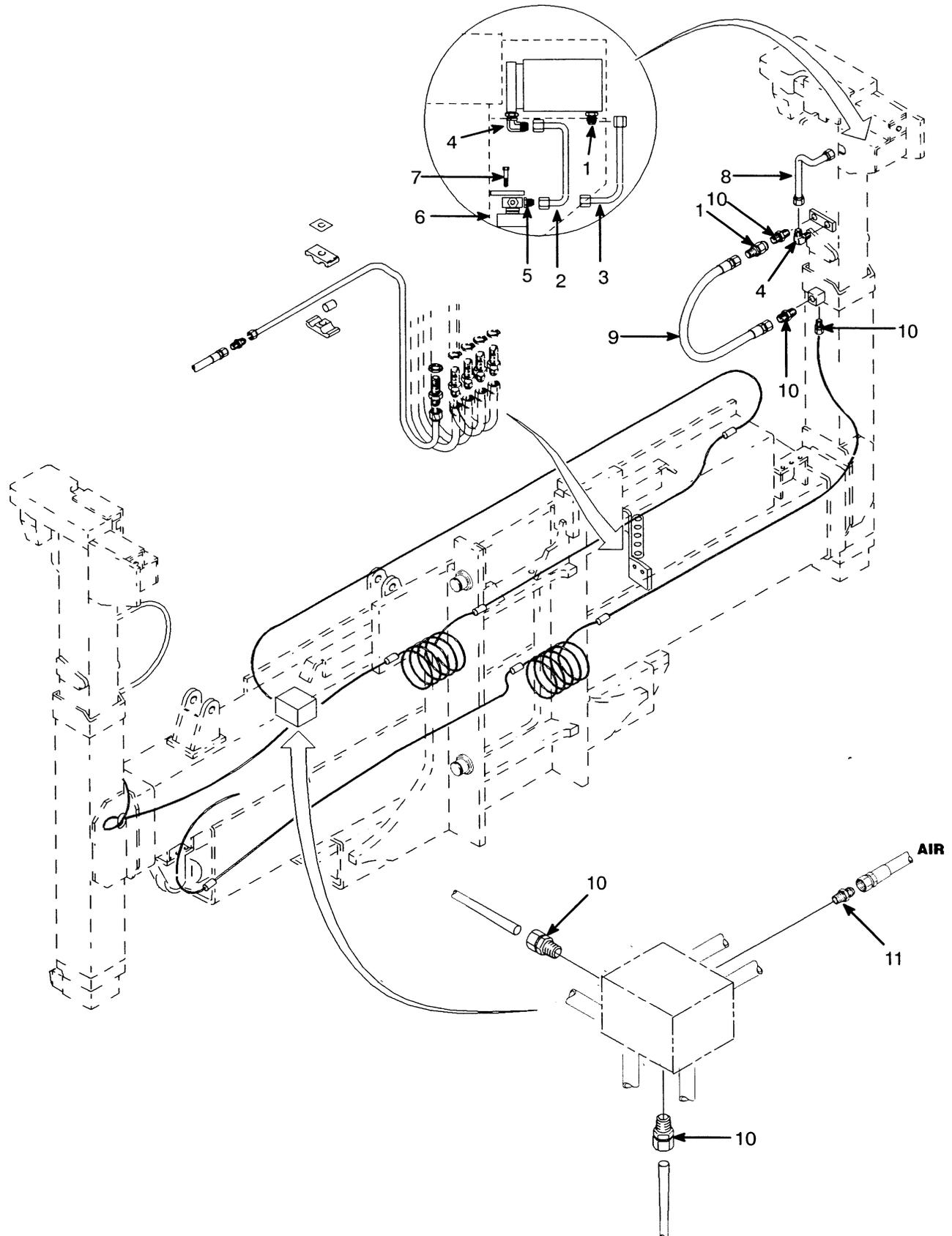
HYDRAULIC SYSTEM (FIGURE 218)



HYDRAULIC SYSTEM

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1332293	Hose Assy	7	10	1332299	Hose	1
2	1332294	Hose Assy	1	11	181822	Hose	2
3	1332295	Hose Assy	1	12	1332292	Fitting	2
4	1332296	Hose Assy	1	13	1332318	Hose	2
5	1332297	Hose Assy	1	14	1332275	Fitting	2
6	1332283	Fitting	4	15	1332324	Hose	1
7	15448	Fitting	6	16	.....	Sideshift Cylinder	1
7	16484	O-Ring	1			☞ (Figure 223)	
8	16449	Fitting	3	17	1332277	Fitting	2
8	16485	O-Ring	1	18	1332319	Hose	2
9	1332302	Hose	1	19	1332325	Hose	2

AIR SYSTEM (FIGURE 219)



AIR SYSTEM

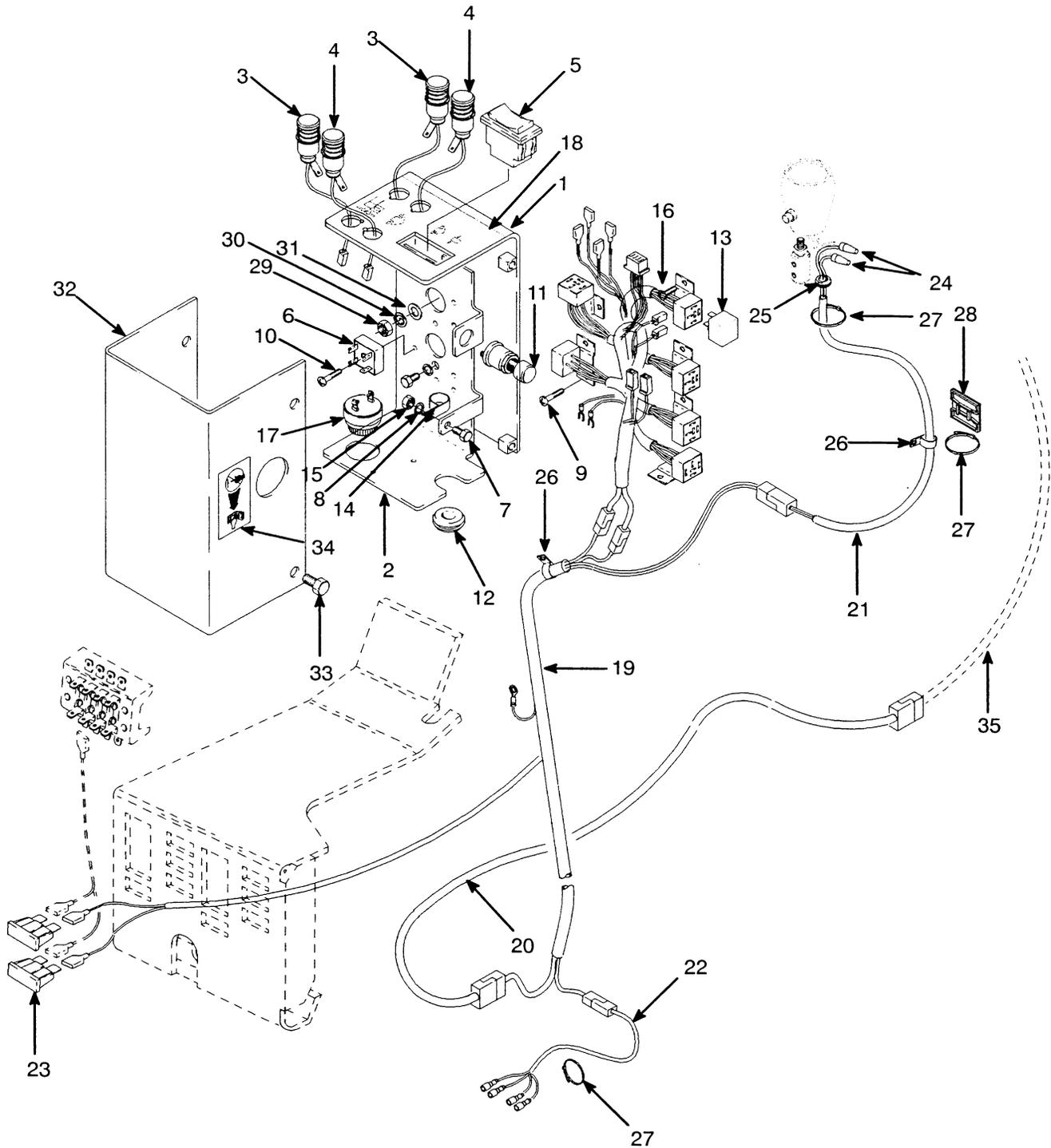
<u>REF</u>	<u>PART NO.</u>	<u>NAME OF PART</u>	<u>QTY</u>	<u>REF</u>	<u>PART NO.</u>	<u>NAME OF PART</u>	<u>QTY</u>
1	1329475	Fitting	6	6	1329484	Solenoid	1
2	1329480	Tube	2	7	293726	Capscrew	4
3	1329476	Tube, LH	1	8	1329486	Tube, LH	1
3	1329477	Tube, RH	1	8	1329487	Tube, RH	1
4	1329481	Fitting	4	9	1332276	Hose	2
5	1329482	Fitting	6	10	1332277	Fitting	4
6	1329483	Valve	2	11	16448	Fitting	2

EXTENSION

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1332320	Extension Cylinder	1	22	1332335	Hose	2
1	1332339	Shell	1	23	1332333	Pad	4
2	1332340	Rod	1	24	1332326	Screw	8
3	356035	Bearing	2	25	1332332	Screw	8
4	1332342	Snap Ring	2	26	302402	Nut	8
5	1332343	Ring	1	27	1332329	Ring	2
6	293650	Capscrew	4	28	1332330	Support	2
7	1332344	Nut	1	29	1346131	Snap Ring	8
8	302454	Pin	1	30	1346132	Bushing	2
9	1332346	Piston	1	31	1334631	Harness	2
10	1332347	Spacer	1	32	1346129	Plate	2
11	1332348	Retainer	1	33	1332277	Fitting	1
12	1332349	Insert	1	34	16448	Fitting	1
13	a	..... Wiper	1	35	1332283	Fitting	1
14	a	..... U-Cup	1	36	1391204	Hose (72 in.)	1
15	a	..... Seal	1	36	1391200	Hose (102 in.)	1
16	a	..... O-Ring	1	36	1391201	Hose (124 in.)	1
17	a	1479122 O-Ring	1	36	1391202	Hose (144 in.)	1
18	a	..... Back-Up Ring	1	36	1391203	Hose (246 in.)	1
19	302400	Nut	2	37	1332325	Hose	1
20	1332337	Screw	2				
21	1332322	Fitting	6				

a Included In Seal Kit 1329440

ELECTRICAL CONTROLS (FIGURE 221)

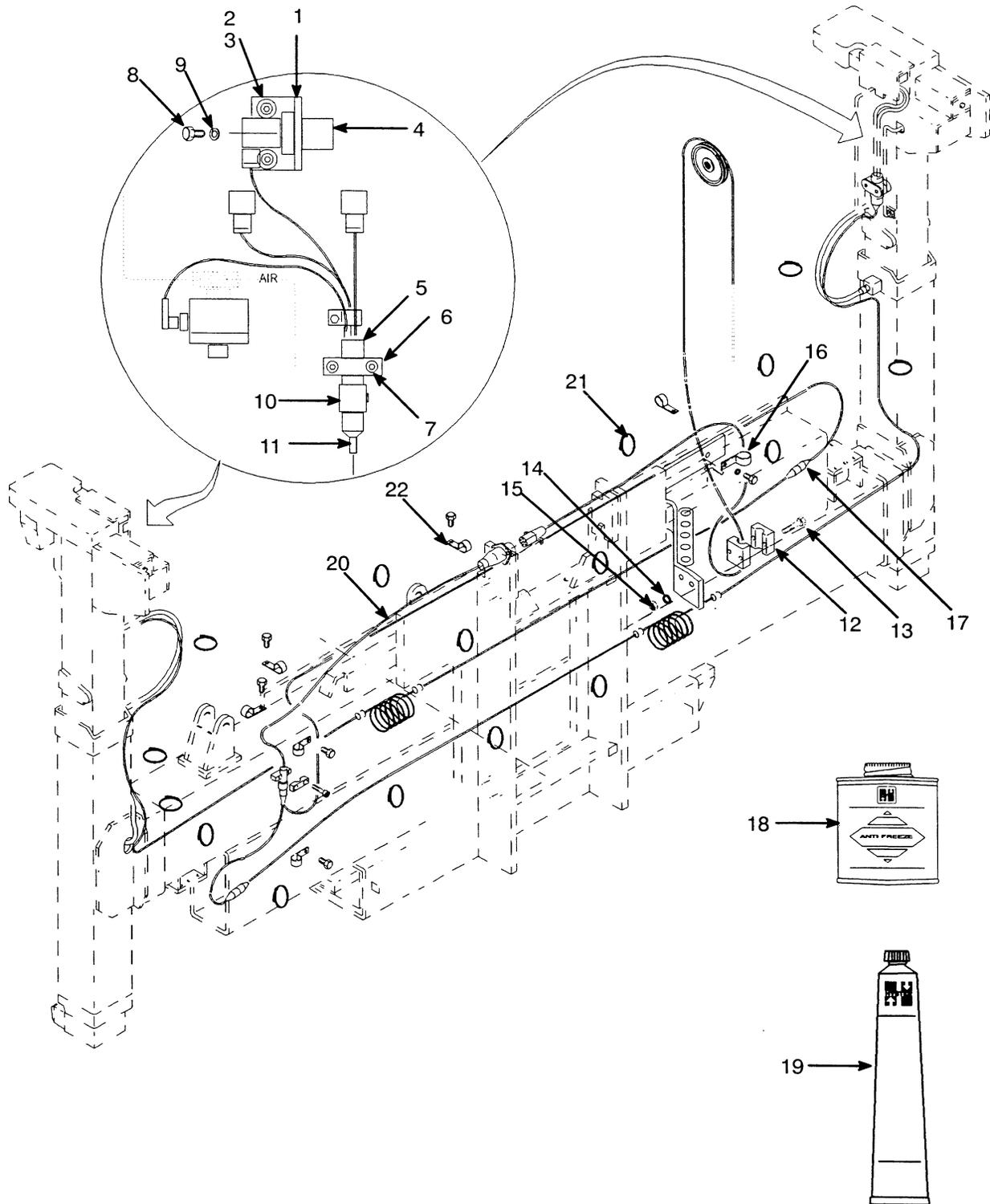


ELECTRICAL CONTROLS

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	a 1323856	Bracket	1	19	b 1326784	Harness	1
2	a 1323854	Plate	1	19	c 1457833	Harness	1
3	a 1326793	Lamp	2	20	ba 1326785	Harness	1
3	a 199925	Bulb	1	20	ca 1457336	Harness	1
3	a 325789	Terminal	2	21	1330581	Harness	1
4	a 1326795	Lamp	2	22	1330582	Harness	1
4	a 199925	Bulb	1	23	370646	Fuse (5 Amp)	2
4	a 134810	Connector	2	24	1300053	Connector	2
4	a 181045	Connector	1	25	1300040	Grommet	1
5	a 1316527	Switch	1	26	136516	Clamp	2
6	a 1301224	Diode Block	1	27	114312	Strap Clamp	8
7	a 287817	Screw	3	28	1331528	Clamp	1
8	a 292680	Lockwasher	3	29	239503	Nut	2
9	a 227096	Screw	12	30	292681	Lockwasher	2
10	a 227099	Screw	1	31	296418	Washer	2
11	a 370776	Switch	1	32	1323852	Cover	1
12	a 1152816	Grommet	1	33	353144	Capscrew	4
13	a 1326783	Relay	6	34	1326805	Label	1
14	a 132131	Clamp	1	35	a 1326786	Harness	1
15	a 136687	Nut	1	35	ab 1326789	Harness	1
16	a 1326791	Harness	1	35	ac 1457444	Harness	1
17	a 1330619	Alarm	1				
18	a 1326804	Label	1				

- a Attachment Control
- b Last Used On S/N D19D-2962
- c First Used On S/N D19D-2963

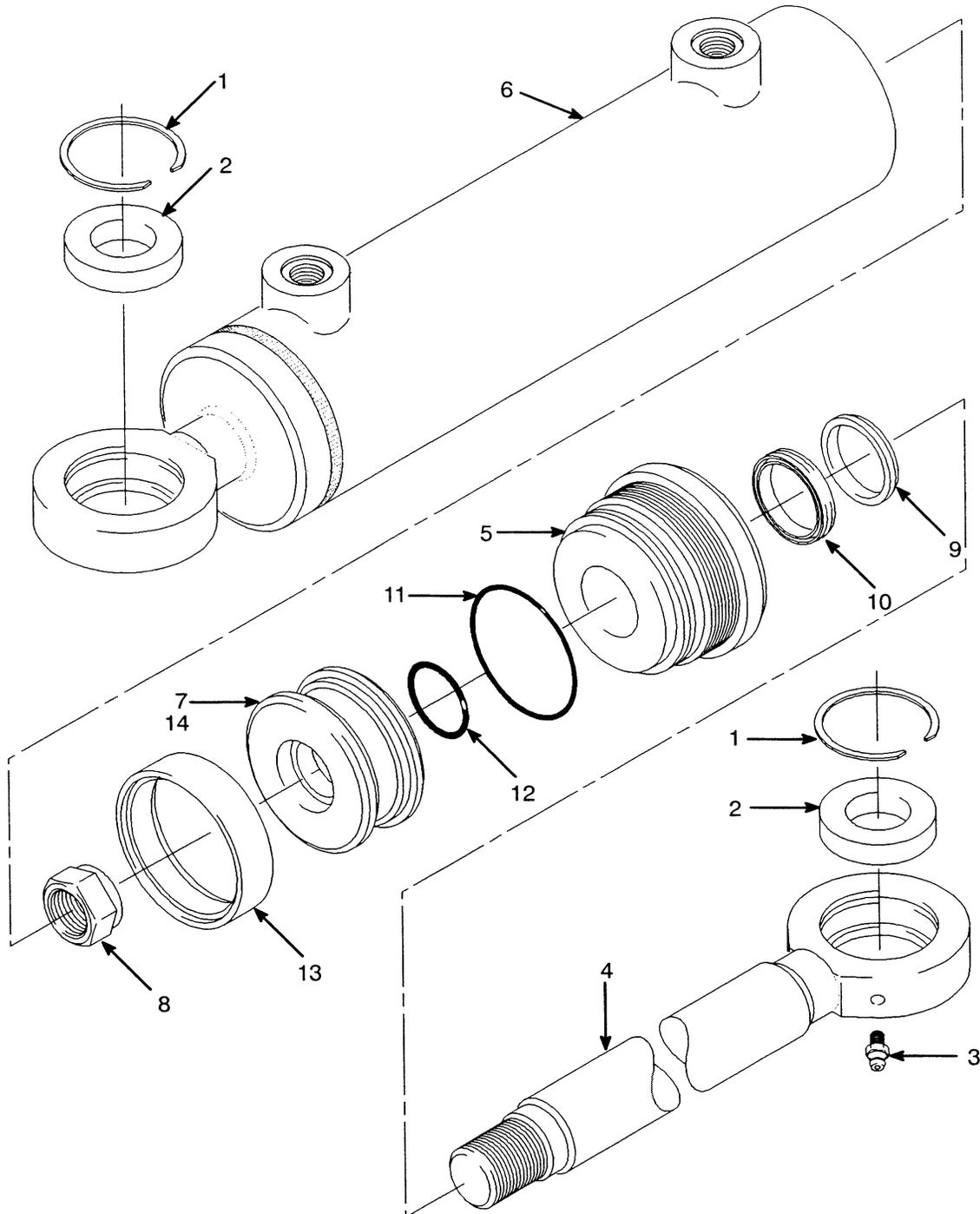
ELECTRICAL SYSTEM (FIGURE 222)



ELECTRICAL SYSTEM

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1329461	Bracket	2	12	1330603	Clamp	1
2	292514	Capscrew	4	13	136704	Capscrew	2
3	320159	Washer	4	14	292681	Washer	2
4	1329464	Switch	6	15	239503	Nut	2
5	1334614	Harness	2	16	173247	Clamp	2
6	1329490	Clamp	3	17	. . . .	U-Bolt	1
7	296003	Capscrew	6	18	280472	Thread Sealant	AR
8	292502	Capscrew	12	19	322784	Compound	AR
9	1329493	Washer	12	20	1334613	Harness	1
10	1334633	Bracket	3	21	114312	Strap Clamp	AR
11	1335277	Socket	1	22	136516	Clamp	AR

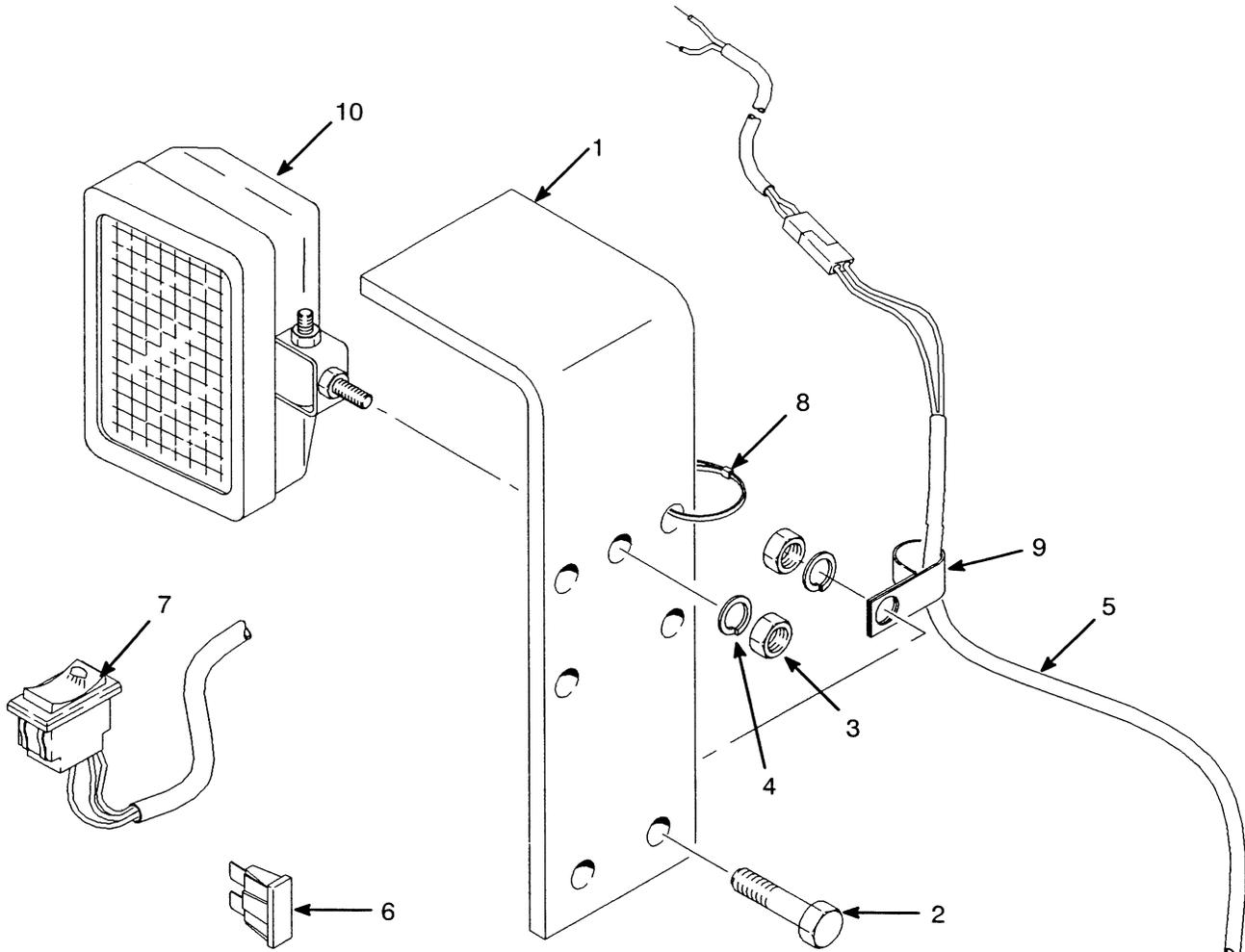
SIDESHIFT CYLINDER (FIGURE 223)



SIDESHIFT CYLINDER

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	1332321	Sideshift Cylinder	1	9	a	Seal	1
1	1329441	Snap Ring	2	10	a	Wiper	1
2	1329442	Bushing	2	11	a	O-Ring	1
3	1329443	Fitting	4	12	a	O-Ring	1
4	1329444	Rod	1	13	a	Back-Up Ring	1
5	1329445	Retainer	1	14	a	Seal	1
6	1329446	Shell	1				
7	1329447	Piston	1				
8	1329448	Nut	1	a	Included In Seal Kit 1329449		

LIGHTS (FIGURE 224)



REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
1	1331593	Bracket	2	7	1326355	Bulb	1
2	292529	Capscrew	4	7	1301157	Lens	1
3	216877	Nut	4	8	137852	Clamp	6
4	292683	Washer	4	9	391484	Clamp	2
5 a	1332927	Harness	1	10	353478	Light	2
5 b	1457668	Harness	1	10	357934	Light (Optional)	2
6	1310630	Fuse (15 Amp)	1				
7	1331559	Switch	1	a	Last Used On S/N D19D-2962		
7	1331560	Switch	1	b	First Used On S/N D19D-2963		
7	1323993	Socket	1				

NUMERICAL INDEX

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
125	257 17	14387	240 20			163	20	15146	347 16		38 20
	259 4	14388	123 26			163	3		367 16	15158	301 10
	261 4		220 20			165	20		371 35		305 9
	263 4		309 12			165	3	15151	171 28		378 14
126	257 16	14491	305 37			166	4		173 22	15160	245 30
	259 2		307 37			257	14	15152	133 12		245 34
	261 2	14494	305 54			259	37		193 29	15162	301 49
	263 2		307 66			261	36		409 34	15166	29 14
	313 24		367 39	15025	263 37		9 34		9 34	15168	29 5
	317 24		371 17		313 29	15154	133 7		133 7	15170	29 5
	319 24	14538	239 18		317 29		137 7		137 7	15176	239 11
	323 44	14550	217 19		319 29		181 10		181 10		39 13
	329 42		219 27		323 49		185 29		185 29		40 13
138	313 26	14586	305 23		329 47		257 13		257 13		43 21
	317 26		307 23	15026	81 28		259 14		259 14	15177	257 7
	319 26	14591	265 31		83 28		259 38		259 38	15178	313 8
	323 46		267 31		85 28		261 14		261 14		313 8
	329 44		281 16	15030	246 11		263 14		263 14		317 8
139	313 27		283 27	15039	185 40		412 16		412 16		317 8
	317 27	14595	265 26		195 10	15155	117 36		117 36		319 8
	319 27		267 26	15049	171 27		133 17		133 17		323 8
	323 47		333 19		173 21		195 30		195 30		323 8
	329 45	14668	239 17		183 48		195 32		195 32		329 8
142	168 17	14676	219 20	15052	133 11		195 43		195 43		329 8
	171 17	14692	309 20		193 25		49 8		49 8		40 18
5586	340 8	14694	371 21		409 33	15156	179 5	15181	347 27		347 27
9033	71 6	14761	357 37	15054	133 8		185 41		185 41		367 27
12815	45 13		377 13		137 6		220 4	15189	29 12		29 12
	47 13		387 34	15055	133 18		221 4	15200	147 40		147 40
12829	309 14		389 26		219 49		222 4		222 4		163 13
12831	219 14		403 16		25 22		239 13		239 13		165 13
12838	241 5	15000	137 33		27 22		254 12		254 12		167 8
	242 6		185 28	15056	115 28		343 8		343 8		168 5
	412 21	15001	247 27		220 5		345 11		345 11		171 5
12843	185 56	15002	123 33		221 5		354 14		354 14		173 8
	223 12		160 5		222 5		361 8		361 8		313 25
	409 39		161 5		239 33		363 11		363 11		317 25
12844	240 25		163 19		377 30		365 11		365 11		319 25
12845	13 44		165 19	15058	378 15		374 15		374 15		323 45
12855	222 27		166 5	15060	311 14		377 31		377 31		329 43
	254 25		257 21	15083	185 42		387 14	15201	257 15		257 15
12860	137 24		259 7	15106	263 43		389 15		389 15		259 3
12894	273 14		261 7	15107	263 44		393 10		393 10		261 3
12898	247 25		263 7	15125	85 12		404 17		404 17		263 3
13963	301 25	15004	257 12	15127	133 6		49 5	15212	160 7		160 7
14326	123 6		257 22		137 8	15157	137 3		137 3		161 7
14349	111 30		259 8		261 37		185 39		185 39		163 23
	223 14		261 8		412 15		203 7		203 7		165 23
	412 22		263 8	15128	277 7		239 4		239 4		166 7
14358	137 10		412 14	15132	147 12		279 27		279 27		168 10
14385	242 5	15024	160 4	15134	48 8		305 43		305 43		171 10
14386	240 16		161 4	15135	123 37		307 48		307 48		297 23

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
	313 28		97 17	16328	315 11		301 41	16486	254 9
	317 28		99 15		315 27		301 42		265 35
	319 28	15963	134 3		321 11		305 22		267 35
	323 48		221 19		321 27		307 22		267 46
	329 46		222 19		321 41		307 55		283 17
15223	245 32		267 42		325 11		307 57		313 13
15224	239 29	16001	287 42		325 27		313 17		317 13
15236	377 4		291 42		325 41		317 36		317 32
15237	393 29		374 5		325 54		319 39		319 13
15244	347 15		387 26		331 11		323 50		319 35
	367 15		389 5		331 27		323 51		323 13
	371 36		393 21		331 41		323 52		329 13
15246	415 19	16006	333 3	16344	13 51		329 48		329 36
15255	301 7	16015	287 48	16372	75 40		333 15		367 34
15303	63 15		291 48	16374	39 16		333 16		371 13
15313	88 5		335 17		40 16		333 19	16487	265 37
15314	129 34		343 12		43 23		333 25		267 37
	61 14		361 12		49 7		340 7		309 7
	63 14	16018	371 43	16448	357 36		383 6		313 15
	65 14	16100	123 14		377 14		393 32		313 16
	71 15		129 11		387 33		421 7		317 15
	73 15		129 18		389 25	16485	265 39		317 16
	86 3		129 21		403 15		267 39		319 15
	87 3		151 11		423 11		281 19		319 16
15316	287 2		151 18		425 34		281 25		323 15
	291 2		151 21	16449	421 8		283 22		323 16
15382	309 15		153 14	16481	265 32		305 16		329 15
15383	309 15		153 17		267 32		305 17		329 16
15448	421 7		153 4		267 50		305 18		367 31
15483	51 25	16114	123 11		281 17		305 23		371 24
	53 25		153 24		283 26		307 16	16538	267 49
	55 25	16118	123 10		283 28		307 17		317 17
	86 5		153 23		283 38		307 18		319 17
	87 5	16142	123 4		317 17		307 23		323 17
15865	378 11	16150	412 23		319 17		307 54		329 17
15870	336 25	16151	263 42		323 17		307 63	16539	377 25
15880	379 8	16155	137 26		329 17		313 14	16541	283 6
	390 8		239 21		377 5		315 42		305 22
	394 14	16156	11 44	16482	279 15		317 14		307 22
15890	335 8	16177	123 15		340 9		319 14		313 17
	339 8		129 19	16483	281 23		321 55		317 36
15915	195 42	16186	219 57		347 30		323 14		319 39
15916	123 34	16187	217 38		377 9		323 38		323 50
15918	247 29		219 61		387 20		326 68		323 51
15923	411 3		241 16		389 24		329 14		329 48
15930	404 12		242 3	16484	265 27		331 55		333 25
15931	123 32	16193	149 34		265 30		367 30		383 6
15942	254 4		71 19		267 27		371 14	16542	371 14
15962	129 35		73 22		267 30		393 23	16551	393 41
	61 15	16199	223 13		281 10		393 41	16556	283 38
	65 13	16271	133 35		281 14		393 42	16558	281 22
	95 17	16279	301 48		283 7		421 8	16559	301 42

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
	333 15	16816	239 12		367 33		137 5	30107	301 20		
	393 32	16828	239 31	17064	371 20	18479	247 28	30189	301 15		
16561	371 13		254 11	17144	220 13	18497	143 13	30368	219 48		
16568	301 41		404 15		221 13		145 13	30372	39 6		
	307 54	16835	239 36		222 13		157 13		43 12		
16570	305 16	16836	133 16	17216	217 7		159 7	30374	39 7		
	307 16		185 53		219 60		15 14		43 3		
16571	313 15		247 26		241 17		21 11	30375	143 11		
	317 15	16841	241 3		242 2	18498	195 32		145 11		
	319 15	16848	217 46	17224	307 55		25 29		40 7		
	323 15		219 8		393 23		27 29	35503	123 26		
	329 15	16863	133 36	17258	220 3	18500	165 8	38556	29 15		
16597	245 29	16865	284 14		221 3	18508	25 37	38640	193 17		
	297 4	16870	48 9		222 3	18515	195 27	39348	349 6		
16693	219 21	16874	185 53	17306	219 27		195 29		373 5		
16706	315 28	16909	313 14	17314	217 49		239 26	39349	267 57		
	321 28		317 14		219 54		39 18	39742	309 5		
	321 42		317 32		242 9		40 22	41310	273 23		
	325 28		319 14	17321	317 35		43 25	41459	271 24		
	325 42		319 35		319 38	18516	25 37	43208	275 7		
	325 55		323 14		323 41		27 37	43209	268 6		
	331 28		323 38		323 55	18546	195 39	43211	268 3		
	331 42		329 14		323 60	18557	137 2	43212	275 17		
16708	123 31		329 36		329 39		185 38	43215	268 4		
16719	404 14		393 42	17343	137 9		239 3	43307	273 6		
16743	183 49	16923	267 51	17344	221 12	18558	185 38	43308	273 16		
16746	137 15		283 39		222 12		305 42		275 13		
16750	9 33		305 32	17345	309 18	18565	203 14		277 1		
16764	239 15		307 32	17411	367 18	18574	203 6	43310	277 4		
16794	51 16		313 18		371 29		307 47	44307	268 10		
	51 7		317 18	17635	305 46	18580	279 26	44308	271 9		
	53 7		319 18		307 59	18588	301 11	44309	268 7		
	55 7		323 18		371 11		305 8	44479	277 9		
16805	179 5		329 18	17665	220 17	18589	378 13	44542	301 17		
	49 4	16925	283 5		221 17	18608	38 5	44547	301 21		
16807	361 17	16935	323 60		222 17	18611	38 17	45315	371 49		
	363 17	16962	371 9	17672	222 26	18612	38 10	46629	302 8		
16813	313 9	16971	313 13	17736	242 4		38 17	46692	347 9		
	313 9		317 13	17764	305 40		38 5		367 9		
	317 9		319 13		307 46	18613	357 22	49189	401		
	317 9		323 13	17779	305 55	18628	38 10		401		
	319 9		329 13		307 67	18678	29 16	51455	149 35		
	323 9	16982	281 5	17780	305 48	18701	349 14		71 19		
	323 9	16983	265 15		307 6		353		73 22		
	329 9		267 15	17783	305 53	18727	21 9	53157	377 10		
	329 9		367 23		307 65	18901	11 39		379 12		
16815	287 18	16989	333 24		367 38	18909	307 2		387 17		
	291 18		393 24	18460	137 14	19870	191 24		389 22		
	297 5	16992	367 19		247 10	21278	283 8		390 12		
	39 14	17054	305 52	18461	412 13	23026	401	53162	284 14		
	40 14		307 64	18465	133 5	30062	293 7	55280	276 4		
	43 22	17062	347 32	18470	133 14	30100	301 4	55289	335 6		

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
	339 6	86520	33 31		85 19		157 16	127852	137 23		
55407	378 6	87281	279 25	99723	81 19		159 11		13 50		
55580	195 7	87300	265 21		83 19	116046	347	128216	223 9		
	197 26		267 21		85 20	116102	179 9	128398	221 9		
57568	284 10		340 5	99725	81 16		185 43		222 9		
58911	271 14	87911	333 14		83 16	119074	123 35	128408	217 17		
58918	345 5	88194	254 10		85 17	119236	104 4		239 20		
	354 8	88278	401	99728	81 34		143 31	128734	401		
	363 5	88300	347		83 34		145 31	128777	247 31		
	365 5	88587	245 10		85 33		157 31	128779	247 24		
	374 12		289 9	99756	127 21		159 12	128795	247 2		
	387 8		293 27		147 22		217 39	128835	195 16		
	389 12	89622	401	99779	149 37		219 33		197 27		
	393 16	89892	371 6	99780	149 38		45 14	128838	195 3		
59184	57 25	89894	371 5		151 24		47 14	128852	195 4		
	59 23	93260	48 3	99782	147 47		95 25		197 28		
60835	277 6	94351	181 12	99783	147 49		97 25	129498	301 24		
63108	222 24	94724	111 40	99784	147 46	121452	137 25	129499	301 24		
63111	133 32	95721	283 16	100623	419 10	122400	245 12	129563	217 24		
	220 14	95733	393 37		419 50	123045	347		219 26		
	221 14	96521	377 9	100792	220 10	123798	13 43		305 19		
	222 14		387 19		221 10	124010	134 9		307 19		
	241 4		389 24		222 10	124119	45 15		333 23		
63899	123 28	97310	143 3	101625	179 47		47 15		377 33		
67551	349 2		145 3	101804	133 37	124606	273 17		47 33		
68551	387 18	97313	143 6	101809	133 33	124642	271 19	129684	393 43		
	389 23		145 6	101985	129 32	124682	271 16	129886	412 24		
69029	301 27	97647	245 4		151 31	124744	271 25	129887	412 10		
73470	347 31		245 9		153 21	125303	11 43	129892	412 8		
	367 35	97656	245 22		71 21		13 46	130567	401		
77451	315 24	97657	245 23		73 21	125305	137 11	130845	107 3		
	315 7	97999	133 31	102990	179 17	125428	245 36		11 38		
	321 24	98556	147 31		409 48		293 23		137 27		
	321 37	98594	340 6	110177	137 12	125574	163 15		13 38		
	325 24	99037	245 24	110279	239 16		165 15		239 23		
	325 37	99569	61 6	111331	305 17	125789	133 30		71 27		
	325 50		63 6		307 17		134 1		73 27		
	325 7	99571	61 10		367 30	125847	143 4		81 6		
	331 24		63 10	111561	123 30		145 4		83 6		
	331 37	99576	51 4	112468	340 10	126358	185 34	131136	38 18		
	331 7		53 4	112471	305 18		193 35	131137	239 9		
77541	321 7		55 4		307 18		195 25	131190	301 44		
78286	143 17	99601	75 8	112989	305 4	127045	137 35	131191	301 44		
	145 17	99610	57 16		307 4		143 35	131193	301 43		
	157 17		59 12	114312	185 59		145 34	131460	347 30		
82270	347 12		67 18		284 5		157 35		367 34		
	367 12		69 18		319 33		159 19		377 27		
83857	371 19	99663	57 10		427 27		217 23	131878	157 39		
85785	137 32		59 9		429 21		219 32	132131	410 5		
86007	287 7	99668	57 8	114662	265 40		305 11		427 14		
	291 7	99722	81 18	115696	143 16		307 11	132462	287 33		
86008	293 17		83 18		145 16		99 17		291 33		

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
132473	139 11		15 10		219 40	139589	47 17	153667	377 32
132829	347 14		160 9		371 16	139727	242 8	154208	409 49
	371 30		161 9	136985	160 8	139728	242 15	154278	409 27
132834	378 5		163 29		161 8	139743	195 35	154358	379 7
132860	409 2		165 29		163 28	139820	59 15		390 7
	415 6		166 9		165 28	139922	305 51		394 15
133481	193 34		167 3		166 8		307 63	154452	221 22
133484	404 10		168 18		257 42	141276	143 7		222 23
133683	297 22		171 32		259 42		145 7		240 15
134131	13 46		173 3		25 16		157 10	155442	239 30
134436	279 14		179 37		261 40	143004	289 11	155510	239 28
	340 9		179 8		27 16		301 23	156696	309 17
134810	30 9		181 16		347 24	143061	49 1	156848	410 6
	427 4		185 61		357 35	144157	333 21	156954	157 9
134812	206 17		19 17		367 24	144613	75 7	156958	157 5
	412 7		203 12		371 26	145639	21 8	156960	157 6
134958	127 2		21 19		377 16	145641	39 15	156961	157 4
135189	247 7		220 8		387 29		40 15	157065	179 26
135685	284 2		221 8		409 54		43 8		185 36
136516	427 26		222 8		409 6	145858	219 64		195 41
	429 22		259 29	137852	179 51	146049	48 2	157233	45 17
136681	11 8		25 40		179 56	146540	411 1		47 36
	13 8		261 29		183 47	146803	335 5	158139	51 22
	163 7		267 44		185 49		339 5		53 22
	179 2		27 40		185 7	147294	133 22		55 22
	179 23		305 29		189 32	147983	157 19	158160	107 20
	179 67		307 29		217 34		159 16		71 24
	185 2		357 39		219 22	147985	157 21	158187	81 29
	195 43		377 18		219 25		159 16		83 29
	257 2		387 31		223 10	149531	29 4		85 32
	263 40		39 21		406 10	150179	179 46	158609	301 6
	297 30		409 13		409 40		185 64	158753	49 6
	409 36		40 21		409 42	151315	127 3	159368	38 8
136687	11 30		410 7		409 53		147 4	159369	347
	13 30		419 14		412 18	151316	127 4	159865	57 3
	161 14		9 65		432 8		147 5	159866	57 3
	165 39	136703	283 33		47 29	151557	237 22	159867	57 3
	179 11		377 29	138710	239 22	151857	137 28	159868	57 3
	179 24	136704	283 34	138929	357	152605	51 8	159942	115 22
	179 30		305 33		357 15		75 41	159971	109 6
	183 14		307 33		371 53	152608	129 26	160268	248
	185 13		333 7		383 14		129 28	161252	160 3
	189 9		403 21		403 27		147 45		161 3
	195 42		429 13		403 5		149 32		163 18
	25 9	136749	11 50		419 11		149 5		165 18
	27 9		13 47		419 48		151 29		166 3
	323 26		15 48	139012	257 24		151 40	161296	57 4
	33 3		165 16		259 10		153 12		59 4
	3 4		179 22		259 33	152609	129 29	161297	57 5
	427 15		195 31		261 10		151 28		59 5
	7 25		203 8		263 10		153 11	161385	51 13
136692	123 23		217 9	139024	163 2	153070	239 10		53 13

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
	55 13	169303	157 8	181045	209 5	191492	47 11	200591	245 19
161440	57 6	169307	157 7		211 16	192293	265 18	200659	281 4
161454	81 22	169592	333 16		30 8		267 18	200972	289 7
	81 24	169593	13 43		427 4	192406	137 29		293 6
	83 22	169786	183 10	181046	179 57	192529	211 18		301 22
161617	257 19		183 23		185 22	192814	301 36	200982	293 32
	259 5		189 22		189 49	192830	347 29	201776	367 31
	261 5		189 30		209 6		367 29		371 24
	263 5	170379	287 29		211 9	195566	301 38	201783	323 52
162562	157 23		291 29	181822	421 11	195852	88 1	201950	409 16
	159 3	170380	287 32	181941	309 8		89 1		410 10
162836	160 6		291 32	183609	374 3		90 3	202003	195 20
	161 6	170658	133 42		387 25	196297	133 20	203367	379 13
	163 24	170682	143 9		389 3	196898	195 33		390 13
	165 24		145 9	183611	301 37	197038	134 4	208483	195 26
	166 6	170688	124 11	183779	305 15	197041	134 2	213100	257 38
163180	38 19	170748	86 14		307 15	197067	193 22		259 25
164431	206 12		87 14	184761	254 8	197068	33 5		261 25
	211 8	171675	401	186061	349 18	197853	195 40		263 25
164433	206 7		401		378 16	198011	206 10	214117	139 4
	211 6		401		379 14		211 3	214195	287 5
164435	211 4	173247	371 25		390 14	198012	211 19		291 5
164436	206 8		429 16	186412	301 3	198013	206 11	214338	157 3
	211 7	173307	38 14	186415	301 19		211 2	216735	15 17
164488	409 19		38 2	186420	265 24	198014	211 5		297 10
164639	301 14	173357	220 9		267 24	198401	195 9		409 47
165702	248 6	175861	323 33		48 6	198410	195 8		409 7
165703	248 7		329 31	186504	15 49	198518	305 41		45 18
165719	248 1	176159	311 3	187004	61 8		335 7		47 18
166129	247 22	176167	311 13		63 8		339 7	216877	123 25
166216	191 19	176173	311 22	187388	349 3	198678	11 49		133 25
166425	245 35	176640	183 26		373 3		13 39		297 17
166818	133 40		189 46	187791	15 55		393 43		29 27
	23 22		217 3	188210	265 14	198693	305 24		309 2
166857	239 14		219 62		267 14		307 24		335 22
167023	129 12		240 9	188486	315 44	199567	287 26		347 21
	129 22		406 7		321 57		291 26		357 4
	151 12		409 45		326 70	199725	246 7		371 33
	151 19	177194	393 18		331 57	199728	246 3		383 5
	151 22	177303	305 28	189338	195 37	199917	305 6		393 27
	153 15		307 28	189451	357 6		307 45		403 34
	153 18	177407	124 6		403 23	199925	427 3		409 9
	153 5	177599	267 54		419 23		427 4		419 25
167260	305 50	177946	185 54	190252	179 15	199971	307 56		432 3
	307 61	177989	133 9		185 57	200170	134 6	217964	219 24
	371 18	177991	133 13	190269	211 1	200172	134 7	217977	241 14
167261	305 32	178119	409 55	190270	206 9	200445	237 20		241 15
	305 60	178899	45 3	190784	309 9		239 34		242 16
	307 59		47 3	190785	309 10		287 3	217979	217 48
	307 68	179414	133 39	190787	309 4		291 3		219 43
168718	123 8	179920	195 34	190887	349 15	200454	245 11	218612	309 6
168914	124 3	179967	157 2		353 7	200465	245 17	220159	345 3

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
	363 3	221704	259 39		145 33		377 19	255115	219 64
	365 3	221720	287 45		157 33		403 19	255124	163 14
220283	139 10		291 45		159 14		409 37		165 14
	247 5	221725	347 17	228342	15 50		410 11	255156	217 25
220302	191 26		367 17	228376	15 29		427 29		219 44
220434	284 16		371 28		7 37		429 15	256219	124 1
220456	171 26	221765	117 7	229875	67 5	241878	404 9	256220	124 12
	173 20	221767	115 27		69 5	241976	145 24	257030	373 9
220494	133 10		254 5	230376	289 39	244272	309 6	257241	179 41
220932	284 3		287 19	230419	289 6	244901	111 8		185 16
221341	133 15		291 19	231956	412 4	245800	51 24	257603	51 9
221354	313 6	221771	287 7	231989	373 7		55 24		53 9
	313 6	221780	287 44	233683	265 36	245885	104 6	257913	349 5
	317 6		291 44		267 36		91 20		373 6
	317 6	221786	29 4	233693	265 38	245996	206 16	258320	137 4
	319 6	222030	21 15		267 38	246001	15 18		141
	323 6	222080	247 6		281 18		383 19	258321	137 13
	323 6	222085	165 6		283 21		409 5		140
	329 6	222365	305 31	233908	134 8	246108	11 45	258590	305 49
	329 6		307 31	235691	265 29		13 45		307 62
221355	287 8	222400	281 24		267 29		163 31	261162	47 30
221357	357 10	222442	283 25		281 9		179 18	261379	195 36
	38 16	222444	265 34		340 7	246888	373 8	261780	45 27
	38 4		267 34	235796	237 19	246943	193 30	261963	139 21
	38 9		267 45	235811	237 23	247041	301 18	262283	143 5
	403 39	222517	393 40	235830	237 13	247093	301 12		145 5
	419 17	222531	305 7	235831	237 13	247097	301 16	263795	115 19
221358	38 9		307 72	235832	237 12	247098	301 16	263922	246 8
221377	335 12	222590	305 2	236890	15 51	247099	301 16	263950	141
	339 12		307 2		409 41	247125	302 3	263958	140
221420	257 27	222666	239 27	239423	23 9	247827	301 13	264141	165 7
	259 13	222667	404 16	239503	11 53	248128	193 5	264159	267 48
	261 13	223095	197 9		11 9	248129	193 7	265732	299 1
	263 13	223216	39 11		13 48	248147	193 24	265817	5 16
221453	117 6		40 11		13 9	249564	220 9	266465	75 2
221455	113 17		43 20		165 17	250095	406 1		77 2
221465	117 35	223625	267 56		168 24	251099	48 5		79 2
221506	343 2	224226	67 16		171 31	251974	217 8	266535	217 29
221507	254 18	224248	81 35		179 21		219 9		219 45
221508	361 2		83 35		179 63	251994	393 43		219 66
221510	354 13		85 34		183 28	252385	367	267827	347 2
	374 14	224384	107 19		185 42	252388	347		367 32
	387 13		71 23		185 66	254950	357		371 37
	389 14	226577	193 8		189 44		357 14	267829	347 5
	393 12	226774	9 70		217 3		357 23		367 2
221533	49 2	227096	427 9		219 37		371 52	267830	347 8
221560	361 13	227098	404 11		240 10		383 13		367 8
	363 13	227099	427 10		25 24		383 20	267837	347 6
221703	257 28	227113	181 11		27 24		403 26		367 6
	259 15	227163	181 19		283 36		403 4	268225	45 16
	261 15	227180	411 2		305 56		419 49	268356	195 15
	263 15	227220	143 33		307 69		419 9		197 14

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
268980	287 38		325 49		419 32		9 56	292527	123 18
	291 38		325 6		429 18	289143	183 44		133 27
270329	49 11		331 23	280610	357 7		189 43	292528	347 11
270330	302 9		331 36		403 36	289166	183 45		357 13
270333	393 38		331 6		419 21		189 42		367 11
270825	39 22	274427	315 25	280644	15 56	290300	197 13		371 47
	39 4		315 9		7 18	290303	195 12		403 41
	43 11		321 25	281190	220 11		197 1		419 24
270826	40 4		321 38		221 11	290369	197 15	292529	297 15
270854	301 29		321 9		222 11	290370	197 16		343 13
271047	123 20		325 25	281846	191 5	290508	197 8		347 11
	124		325 38	283453	309 19	290509	197 22		357 25
271443	124 8		325 51	286199	289 40	292500	160 13		393 26
271448	124 10		325 9	286901	33 25		163 16		403 30
271449	124 9		331 25	287719	289 1		166 13		403 7
271494	191 6		331 38	287814	357		267 55		432 2
271495	191 17		331 9		419 28		9 58	292531	133 28
271496	191 13	274428	325 53		419 46	292501	11 28		347 19
271497	191 28	274548	315 10	287816	15 4		13 28		357 16
271499	191 29		315 26		161 12		185 45		371 31
271666	191 10		321 10		165 34		25 8		403 8
	191 25		321 26		179 10		27 8		419 1
271668	191 11		321 39		185 46		9 45	292533	357
271670	191 18		325 10		223 3	292502	429 8		357 5
272273	124 4		325 26	287817	427 7	292505	9 47		383 15
272274	124 2		325 39	287831	47 34	292512	217 10		403 35
273775	347 33		325 52	287837	45 19		219 39		419 29
	357 11		331 10		47 19	292513	11 47	292535	371 51
	367 37		331 26	287851	11 31		13 49		383 3
	383 18		331 39		13 31		185 51	292538	335 20
	403 40	274648	197 3		168 23		9 62		357
	419 4	274885	367		171 23	292514	160 11		3 43
274232	109 9	275494	404 4	287854	15 7		161 11		403 29
274363	191 1		409 43		167 16		163 26		7 20
274366	191 3	276022	81 11		173 16		165 26	292560	333 5
274367	191 9		83 11		181 15		166 11		335 19
274368	191 7		85 13		19 16		415 22	292561	416 12
274369	191 2	276640	367		21 18		429 2		416 22
274370	191 2	276963	340 3		409 12	292515	259 27	292562	371 44
274373	191 15	277446	211 10		409 3		261 27	292564	239 6
274374	191 12	279740	412 17	287860	123 21	292516	415 12	292566	29 20
274400	191 14	279752	11 37		25 39	292517	419 15	292580	347 4
274401	191 23		133 34		263 27	292521	167 2		367 4
274402	191 22		13 37		265 22		173 2	292581	254 22
274403	191 21		15 54		267 22	292522	357 27		38 11
274426	315 23	280472	11 6		27 39		403 24	292589	357 38
	315 6		13 6		383 16		419 5		371 40
	321 23		29 7	288032	191 8	292523	168 2	292598	29 8
	321 36		305 44	288394	301 39		171 2	292600	29 23
	321 6		307 40		409 46		193 40	292655	263 29
	325 23		3 39		5 22		201 7	292658	416 21
	325 36		406 9		7 17	292525	203 11	292668	179 6

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
	185 40		25 25		263 28	293623	45 37	296734	245 16		
	33 19		263 41		265 23	293629	48 5	298096	67 16		
	9 10		27 25		267 23	293635	257 6		69 16		
	9 43		283 37		27 17	293639	25 27	298832	123 27		
292678	165 32		297 32		297 6		27 27	300088	25 20		
292679	11 41		305 34		305 30	293647	289 8		27 20		
	179 7		305 57		307 30		354 10	300208	401		
	185 39		307 34		347 25		374 9	300209	401		
	33 20		307 70		367 25		387 10	300294	401		
	9 11		313 12		371 27		387 21		401		
	9 17		317 12		377 17		389 9	300723	315 30		
292680	11 29		319 12		383 9		393 13		321 30		
	13 29		323 12		387 30	293650	415 18		325 30		
	160 14		329 12		39 20		425 6		325 53		
	161 13		377 20		409 14	293689	416 5		331 30		
	163 17		377 34		40 20	293696	29 20	300937	15 19		
	165 35		393 44		419 13	293708	301 32		343 18		
	166 14		403 20		9 64	293716	293 39		357 17		
	179 12		406 8	292683	123 19	293726	423 7		367 21		
	179 31		409 38		133 24	293782	297 18		371 54		
	181 7		410 9		309 13	294863	340 4		3 44		
	185 14		427 30		335 21	295197	220 1		403 28		
	25 10		429 14		336 27		221 1		403 9		
	267 55		45 38		347 20		222 1		419 2		
	27 10	292682	11 48		347 20	296003	429 7		419 47		
	323 27		123 22		354 11	296011	257 32		45 21		
	33 4		15 9		357 3		259 19		47 21		
	3 5		160 10		367 20		261 19		7 21		
	427 8		161 10		371 32		263 19	300939	133 29		
	7 26		163 30		374 8	296023	383 8		3 45		
	9 21		163 8		383 4	296128	167 17		7 22		
292681	11 32		165 30		387 11		173 17	300982	377 3		
	11 51		166 10		387 22	296130	29 28	301749	75 31		
	13 32		167 19		389 8	296359	179 25		77 31		
	143 14		168 18		393 14	296360	297 39		79 31		
	145 14		171 18		403 33	296380	179 64	301750	75 32		
	157 14		173 17		409 10		183 27		77 32		
	159 8		173 3		419 26		185 65		79 32		
	15 15		179 39		432 4		189 45	301751	75 33		
	15 47		185 32	292685	29 21	296396	9 19		77 33		
	168 8		19 18		333 6	296418	193 46		79 33		
	171 8		203 13		371 45		199 8	301752	75 36		
	179 20		21 20	292687	254 23		427 31		77		
	179 3		220 7		301 33	296421	25 18	301775	83 10		
	181 3		221 7		347 28		27 18	301785	81 7		
	185 3		222 7		367 28	296422	25 38		83 7		
	185 41		257 43		38 12		27 38		85 8		
	203 9		259 28	292781	124 5	296426	415 32	301791	57 22		
	217 3		259 43	292782	124 7	296431	29 9		59 18		
	219 38		25 17	292882	13 40	296464	9 18	301793	95 21		
	240 11		261 28	293604	323 25	296472	33 2		97 21		
	257 4		261 41	293613	289 20		9 40	301805	91 3		

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
	92 3	303809	101 20	310085	197 7		25 11	320160	15 8
301806	91 2		101 23	310088	197 25		27 11		167 18
	92 2	303810	101 19	311245	123 27		406 4		168 11
301821	151 23	303812	101 22	313805	15 5		9 44		168 2
301836	53 33	303814	101 21	313828	19 15		9 59		171 11
301986	245 5	303819	101 10		297 27	320157	11 33		171 2
	245 8	303820	101 6		333 9		11 52		173 16
302036	33 18	303824	101 12	313860	257 26		13 33		173 2
302049	406 3	303825	101 11		259 12		143 38		419 12
302069	183 43	303826	101 9		261 12		157 24		43 17
	189 39	303827	101 16		263 12		159 22	320161	220 6
302100	416 15	303828	101 7	313979	333 17		159 9		221 6
302236	9 57	303829	101 8	314538	143 8		15 46		222 6
302244	11 40	303830	101 14		145 8		171 30		257 30
	5 15	303831	101 17		157 11		173 24		259 17
	7 51	303835	91 12	314809	257 20		179 13		261 17
302248	9 16	303865	104 15		259 6		179 48		263 17
	9 46	304242	287 5		261 6		183 12	320162	123 24
	9 9	305100	195 38		263 6		185 44		133 26
302256	9 22	305104	340 2	316826	257 8		189 7		15 20
302271	171 29	305110	333 13		25 28		217 24		309 1
	173 23	305522	179 27		27 28		219 36		329 22
302398	9 49		185 10		357 20		25 34		357 2
302399	223 4	305681	179 27		383 17		27 34		403 32
	406 5	306008	133 19		403 14		283 35		406 16
	9 14	306113	323 31		419 30		377 28		410 17
	9 41		329 29	316828	239 8		45 39		45 20
302400	425 19	306725	185 30		29 23		47 37		47 20
302402	425 26	306751	104 7	316829	29 10	320158	15 16	320166	239 7
302404	416 9	307275	379 4	317801	340		168 9	320169	371 39
302408	415 5		390 4	317802	340 1		171 9	320181	415 4
302428	323 34	308117	377 2	318067	349 16		185 31	321197	345 6
	329 32	308993	257 10		351 10		203 10		363 6
302454	425 8		313 3		369 10		257 3		365 6
302638	73 28		317 3	318352	5 19		261 39	321293	287 10
302711	57 21		319 3	319049	220 2		263 39		287 4
	59 16		323 3		221 2		297 31		291 10
302712	57 23		329 3		222 2		313 11		291 4
	59 19	309109	257 18	319050	220 15		317 11	321298	245 37
302713	57 24		259 1		221 15		319 11	321703	245 21
	59 21		261 1		222 15		323 11	321719	245 33
302720	129 4		263 1	320155	9 12		329 11	322177	195 24
	151 4	309124	179 28	320156	11 3		333 8	322428	245 15
	154 2		185 11		13 3	320159	179 38	322784	419 31
302721	129 5	309637	15 61		167 7		185 50		429 19
	151 5		181 6		168 4		267 41	322792	240 23
	154 3		9 54		171 4		307 9	322793	217 27
303741	57 1	309666	25 31		173 7		39 19		219 28
303748	59 7		27 31		179 32		40 19	322794	217 31
303758	67 17		9 29		183 13		410 8		217 32
	69 17	310081	195 1		185 15		429 3		219 47
303808	101 18		197 17		189 8		9 63	323488	307 50

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
	307 51	334417	271 4	342032	361 16		367 23		427 33
323541	139 4		273 12		363 16	348362	309 6		7 24
323864	305 27		275 10	343029	195 18	348368	309 6		9 25
	307 27	334442	271 7		197 5	349378	95 34	353154	284 4
	309 22		273 4	343031	195 5		97 29	353159	167 15
	393 31		275 8		197 10		99 22		173 15
	409 20	334475	271 6	343032	195 6	349478	101 15	353164	167 4
324634	187 24		273 7		197 12	349479	101 5		168 20
324896	297 20		275 6	343038	195 2	349480	101		171 20
325708	167 14	334480	271 8	343039	195 19	350164	409 50		173 4
	173 14		273 5	343040	195 11	350397	51 18	353165	284 15
325789	427 3		275 5	343041	195 14		51 23	353168	284 6
326360	21 7	334500	283 4	343042	195 13		53 18	353172	168 15
326361	21 6	334542	281 11	343046	195 17		55 18		171 15
326362	21 4	334543	281 12	344228	134 5	350399	67 23	353175	284 12
326363	21 2		283 11	344230	134 2		69 23	353195	167 9
326364	21 1	334560	265 28	344232	134 4	350498	189 31		168 12
326365	21 5		267 28	344233	197 18	350965	137 22		171 12
326926	139 13	334970	195 14	344234	195 21	351458	374 10		173 9
326978	21 3	335553	21 10		197 24		387 28	353220	284 13
328043	53 20	335850	404 7	344432	45 4		389 10	353230	168 16
	77 7	335989	21 13		47 4	352013	247		171 16
328047	67 11	335991	21 14	345408	298 2	352482	167 1	353302	309 3
	69 11	336550	45 9	345409	298 3		168 19	353310	45 22
328389	404 3		47 9	345410	298 4	352485	167 5		47 22
328753	143 19	339530	143 36	345411	298 5		168 6	353379	409 44
	145 19		157 36	345412	298 6		171 6	353397	284 1
328754	143 21		159 20	345413	298 7		173 5	353398	284
	145 21	339599	195	345418	298 12	352499	167 12	353422	284 7
329029	133 41	339735	45 6	345423	297 3		173 12	353432	284 7
329067	15 21		47 6	345424	298 11	352885	167 13	353448	284 9
	15 45	339969	313 7	345453	45 7		173 13	353453	168 14
	33 22		313 7		47 7	352909	29 6		171 14
	3 29		317 7	345454	45 8	352950	168 13	353478	409 15
	7 10		317 7		47 8		171 13		410 1
329069	257 33		319 7	346634	281 7	352955	297 36		432 10
	259 20		323 7	346636	281 3	352969	284 8	353479	409 30
	261 20		323 7	346671	271 13	353129	167 6	354515	412 5
	263 20		329 7		273 2		168 7	355597	217 28
	297 40		329 7		275 11		171 7		219 51
330692	378 9	340044	179 52	346675	271 17		173 6	355750	217 14
	379 6		185 63	346677	271 21	353141	168 3		219 41
	390 6	340204	45 12		273 20		171 3	356035	425 3
332256	130 2		47 12		275 14	353142	167 10	356821	19
334228	9 1	340213	257 29	346716	275 15		168 21	357263	257 11
334229	9 4		259 16	346788	281 2		171 21	357426	247 1
334230	9 5		261 16	346795	271 12		173 10	357427	247
334233	9 3		263 16		273 8	353143	167 11	357869	333 18
334234	9 2	340739	380 4		275 2		168 22	357934	409 15
334402	271 2	341788	133 21	346805	281 8		171 22		410 1
	273 10	342017	361 15	346848	281 6		173 11	358099	287 8
	275 12		363 15	346971	347 23	353144	297 35		291 8

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
358286	383 7	366066	299					376868	5 5
358287	383 10	366097	191 4					376876	45 10
358458	217 30	366098	191					376883	379
	219 45	367251	25 12						390
	241 2		25 6					376922	5 6
	242 19		27 12					376947	3 26
358506	81 12		27 6	376018	45 26				7 35
	83 12	367338	91 11	376026	287 47			376948	3 47
358674	409 46		92 8		291 47	376400	25 19		7 34
359144	127 22	367394	81 36		301 47		27 19	376949	3 27
	147 23		83 24	376038	343 10	376402	25 30		7 33
359145	127 23		85 29		361 10		27 30	376953	9 7
	147 24	369242	297 12	376051	333 2	376410	25 4	376954	9 8
359207	284 11	369485	53 24		335 16		27 4	376968	9 37
359767	19 1	370155	111 10	376053	343 9	376441	25 5	376970	9 48
360387	284 3	370169	117 32	376064	5 4		27 5	376971	9 36
360815	81 25	370473	189 33	376066	309 11	376442	25 32	376972	9 35
360816	81 26	370646	183 19	376086	302 5		27 32	376981	38 7
361000	394 16		183 33	376087	302 1	376447	25 13	376999	15 27
361271	53 8		189 14	376088	302 2		27 13	377210	137 17
	55 8		189 47	376089	302 2	376448	25 13	377211	137 30
361289	71 8		427 23	376090	302 2		27 13	377618	23 18
361298	103 6	370647	183 18	376091	302	376478	45 1	377945	81 17
361336	61 28		183 57	376116	48 4	376479	45 2		83 17
	63 28		189 13	376117	48 7	376480	45 23	377976	75 3
	65 22		189 52	376137	11 12	376504	297 9		77 3
361678	380 2		409 24		13 12	376505	297 11		79 3
362011	313 16	370648	183 20	376203	343 4	376506	297 19	378289	289 10
	317 16		183 34		345 12	376510	297 14	379199	21 22
	319 16		189 15		354 4	376567	25 33	379650	183 7
	323 16		189 48		361 4		27 33		189 26
	329 16	370776	183 8		363 12	376649	45 24	379674	21 29
362030	25 7		427 11		365 12		47 24		297 25
	27 7	371257	123 29		374 20	376681	347 23	379675	19 14
362102	349 12	371536	61 4		387 4	376772	45 11		21 28
	351 8		63 4		389 20	376773	374 4	379697	21 23
	353 3	371666	297 37		393 9		387 24		297 16
	369 8	372003	137 19	376206	311		389 4	379698	21 25
362255	297 8	372008	137 34	376245	29 13	376776	354 9	379902	183 5
362816	297 3	372109	311 16	376255	39 12		374 7		189 27
364847	21 30	372110	311 19		43 7		387 27	381255	115 6
364848	21 27	372112	311 21	376270	39 5		387 9	381846	183 53
364854	21 26	373287	371 7	376271	39 2		389 7		183 56
365337	5 18	375295	15 34	376276	7 30	376801	15 12		189 51
365344	9 23	375571	49 10	376300	25 23	376814	379 9		205 2
365854	51 11	375629	297 26		27 23		390 9		208 7
	53 11	376001	127	376316	123 5	376815	379 3		211 12
	55 11		129	376318	29 1		390 3	381847	211 13
366057	289 3		51	376319	29 3	376839	379 5	382639	193 9
366063	299 3		57	376350	291 43		390 5	382642	193 33
366064	299 5		61	376397	143 12	376840	5 20	383116	21 17
366065	299 6		67		145 12	376867	5 5	385251	237 1

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
385514	19 27	387085	379 1	387491	193 32	816083	401	894469	43 13
385516	19 24		390 1	387492	193 26	816136	29 19	894470	43 10
385531	55 10	387087	379 2	387493	193 19	816137	29 19	894471	43 5
	65 16		390 2	387494	193 20	816138	29 21	894472	43 6
385533	61 12	387090	379	388305	115 7	816231	29 26	894480	25 36
	63 12		390	388308	113 12	816373	305 3	894497	254 2
385656	193	387118	301 30		113 6	816377	9 71	894502	311
385847	67 12	387119	301 31	388364	113 17	816378	9 72	894504	305 2
	69 12	387225	301 5	389045	323 57	816578	335 2	894511	117 34
385895	233 34	387229	301 1	389136	409 11		339 2	894513	115 26
	235 34	387240	254 13	389688	23 21	816579	302 7	894514	115 25
386069	193 2	387243	335	389692	23 29	816580	335 4	894515	237
386070	193 3		335	389793	409 15		339 4		239
386071	193 6	387244	335		410 1	816581	302 6	894516	239 2
386073	193 10		335	391484	432 9	826004	412 6	894517	49 3
386074	193 11	387247	335 10	392238	15 52	833549	161 2	894519	239 25
386400	193 12		339 10	397676	123 35	833694	45 26	894520	137 20
386401	193 13	387248	335 11		123 38	842799	57 4	894521	137 31
386402	193 14		339 11		161 18		59 4	894522	113 15
386403	193 15	387262	349		163 22	842800	57 5	894526	43 15
386404	193 16	387263	349		165 22		59 5	894527	43 16
386406	193 18	387264	349		179 54	894406	297 14	894531	137 37
386407	193 21	387265	349		181 29	894410	181 1		139
386459	107 10	387266	349		185 48	894411	181 1	894532	139 20
	127 11	387280	349 2		305 62	894416	259 26	894544	49 1
	129 15	387281	349		307 5		261 26	894549	203 3
	149 43	387282	349	636954	349 7		263 26	894550	239 5
	151 15	387283	349		351 3	894417	7 32	894557	239 19
	153 8	387284	349		353	894419	7 32	894558	203 2
	201 10	387285	349		369	894423	23 26	894559	239 32
	51 21	387286	349 10	636956	373 13	894424	171 25	894560	203 4
	53 21		351	637161	379 11		173 19	894561	203 5
	55 21		369		390 11	894425	171 19	894566	185 37
	67 13	387312	123 9	637166	349 8		173 1	894568	117 17
	67 27	387313	123 7		351	894426	171 19	894570	113 19
	69 13	387316	123 16		369		173 1	894571	191 16
	75 14	387317	123 17	637635	349 4	894427	171 24	894572	111 35
	77 14	387325	336		373 4		173 18	894573	117 37
	79 14		339	638224	349 9	894438	165 5	894574	239 35
	86 10	387326	123 1		351	894441	163 9	894575	239 37
	87 10	387327	123 2		369	894444	163 10	894580	133 1
	99 10	387348	25 41	638292	379 10		165 10	894584	133 2
386461	129 13		27 41		390 10	894445	163 11	894621	15 60
	151 13	387353	25 26	815559	403		165 11	894622	15 60
	153 6		27 26	815596	163 5		165 36	894629	47 27
386646	383	387356	25 42		165 31	894446	163 12	894630	47 31
386647	383		27 42	815597	163 6		165 12	894633	47 1
387075	401	387358	29 13		165 33	894452	43 1	894634	47 2
	401	387487	193 27	815620	349 13	894454	43 14	894638	47 10
	401	387488	193 28		351 9	894459	43 9	894639	47 5
387078	301 35	387489	193 23		369 9	894467	43 2	894640	47 25
387080	287	387490	193 31	816043	29 24	894468	43 4	894641	47 35

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
894642	47 32	894974	181 18	1151722	311 23		393 11	1301177	11 34
894643	47 26	894975	206	1152816	427 12	1301018	343 3		13 34
894658	166 17	980727	51 10	1152830	404 8		345 8		3 12
894659	166 2		53 10	1198539	259 36		354 3		3 18
894660	166 12		61 11	1300040	427 25		361 3		7 39
894668	163 21		63 11	1300050	323 56		363 8	1301179	15 25
	166 16		65 20	1300053	427 24		365 8	1301184	5 14
894671	167 1		81 8	1300107	21 16		374 17	1301189	3 20
	168 19	981608	73 23	1300117	297 13		387 3		7 40
894682	145 22	982155	91 4	1300165	297 33		389 17	1301195	3 13
894703	185 18	982226	69 7	1300231	211 14		393 4	1301196	3 10
894706	185 27	982234	129 30	1300742	409 32	1301020	16	1301203	257 25
894742	137 21		151 32	1300757	179 55	1301026	9 50		259 11
894746	137 1	982256	87 16		185 8	1301027	9 51		261 11
894747	137 16		89 10	1300978	9 13	1301038	257 23		263 11
894749	137 18		90 14	1300979	9 13		259 9	1301208	3 23
894793	219 23	983340	127 27	1300988	313 1		261 9		7 47
894823	5 1		147 28		317 1		263 9	1301209	3 24
894828	3 1	983346	129 31		319 1	1301041	257 31		7 48
894863	15 31		151 30		323 1		259 18	1301211	257 9
894872	185 12		153 20		329 1		261 18	1301224	409 52
894875	185 17	983375	127 29	1300989	313 2		263 18		410 13
894876	185 52		147 30		317 2	1301066	3 2		427 6
894878	185 37	983484	67 4		319 2		7 23	1301229	205 1
	187		69 4		323 2	1301086	29 11		208 8
894879	49 1	983761	147 44		329 2	1301088	7 29	1301233	181 20
894880	49 1		149 36	1300990	317 31	1301089	3 33		183 1
894881	239 32		73 24		323 29	1301109	7 32		189 4
894883	203 2	984632	51 14		329 27	1301121	11 17	1301235	183 11
894885	185 18		53 14	1300991	323 19		13 17		189 6
894886	185 6		55 14		329 19	1301122	323 32	1301254	9 30
894924	163 1	985567	127 28	1300992	329 20		329 30	1301255	3 22
894925	163 1		127 30	1300993	323 30	1301127	11 5		7 42
894927	209		147 29		329 28		13 5	1301256	9 31
894929	207	986475	61 26	1300995	5 2	1301129	313 21	1301260	7 2
894931	48 4		63 26	1300996	5 2		317 21	1301261	7 2
894932	181 9		65 18	1300999	323 24		319 21	1301263	3 31
894934	208	990429	81 15	1301001	11 35		323 21		7
894945	223 2		83 15		13 35		329 23	1301264	3 32
894946	223 1		85 16	1301014	343 19	1301133	323 36	1301282	183 35
	224	992003	57 13		345 13		329 34		183 35
894949	259 32	992025	61 25		354 16	1301150	183 32		189 17
	261 32		63 25		387 38		189 23	1301283	183 36
894950	259 30		65 17	1301016	343 5	1301154	211 17		189 16
	261 30	992393	51 12		345 10	1301157	409 21	1301284	11 42
894951	259 34		53 12		354 5		410 12		13 42
894953	267 7		55 12		361 5		432 7		181 21
894954	267	992522	217 21		363 10	1301160	409 21		183 17
894956	267		219 30		365 10	1301164	257 5		183 29
	267 7		71 13		374 19	1301167	143 18		189 12
	48 10	1151313	15 58		387 5		145 18		189 5
894958	267 52	1151326	377 5		389 19	1301175	257 1		410 14

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
1301286	3 21		13 27		219 59	1301586	39 3	1301704	183 16
	7 41	1301404	11 23		241 13	1301589	11 25		189 11
1301288	3 14		13 23		242 14		13 25	1301705	9 26
1301292	3 36	1301405	11 24	1301437	297 21	1301593	179 50	1301706	9 28
	7 45		13 24	1301441	45 25		185 62	1301707	9 27
1301293	3 37	1301406	179 29	1301442	45 5	1301598	11 36	1301708	11 2
	7 46	1301410	23 11	1301528	315		13 36		13 2
1301295	183 21	1301411	23 10	1301529	321	1301605	38 1		143 37
	189 21	1301412	23 16	1301530	325	1301609	48 10		157 37
1301296	183 15	1301413	23 14	1301531	331		49 9		159 21
	189 10	1301414	3 25	1301534	305 45	1301612	183 32	1301717	409 26
1301297	3 30		7 49		307 58		189 23	1301720	412 9
	7 11	1301416	317 33	1301535	143 15	1301616	409 21	1301721	181 14
1301299	179 62		319 36		145 15	1301634	160 1	1301726	313 5
	181 25		323 39		157 15		163 27		317 5
	181 28		323 53		159 10		165 27		319 5
	185 20		329 37	1301537	217 15		166 1		323 5
	409 35	1301417	317 34		219 29	1301640	179 45		329 5
1301310	11 7		319 37		219 65		185 4	1301727	33 34
	13 7		323 40	1301538	220 16	1301642	11 46		406 6
1301314	45 27		323 54		221 16		13 41		47 28
1301323	11 4		329 38		222 16	1301645	183 3	1301739	183 6
	13 4	1301422	297 3		223 6	1301647	179 60		189 25
1301325	305 14	1301424	179 53	1301539	219 12		181 26	1301744	23 19
	307 14		183 31		220 18		185 19	1301746	7 16
1301326	11 1		185 67		221 18		189 18		7 36
	13 1		189 24		221 23	1301648	179 61	1301747	179 65
1301327	307 3		33 26		222 18		181 27		183 40
1301341	183 25	1301425	297 28		240 12		185 21		185 24
	189 28	1301426	297 24	1301540	240 18	1301650	357 8		189 2
1301346	333 10	1301428	222 25	1301541	221 24		403 37	1301748	409 22
1301348	298		241 9	1301542	217 16		419 20	1302305	217 8
1301371	5 8		242 10		219 29	1301659	357 9		219 9
1301372	5 9	1301429	241 8	1301543	240 19	1301668	305 10	1302735	289 37
1301373	5 10	1301430	217 4	1301544	217 13		307 10	1302957	47 23
1301374	5 11		219 58		219 53	1301671	305 45	1303251	354 1
1301375	5 12		241 10		220 19		307 58	1303261	354 15
1301389	11 11	1301431	165 38		221 21	1301675	183 32		374 6
	13 11	1301433	163 4		222 22		189 23		387 15
1301393	11 14		165 4		240 26	1301676	297 34		389 6
	13 14		165 4	1301545	217 11	1301684	33 6	1303263	45 26
1301395	11 19		241 11		219 52	1301685	33 33	1303271	29 18
	13 19		242 11	1301550	241 7	1301686	33 24	1303272	29 18
1301396	11 20		242 12	1301563	183 39	1301689	240 24	1303274	29 3
	13 20		259 31		189 36	1301690	183 41	1303279	354
1301397	11 21		261 31	1301571	357 1		189 40	1303281	25 15
	13 21		263 31		403 31	1301700	133 3		27 15
1301398	11 22	1301434	222 20		419 19		9 73	1303282	25 15
	13 22		241 12	1301582	143 23	1301702	25 35		27 15
1301399	11 26		242 13		145 23		27 35	1303311	345
	13 26		263 47	1301585	305 35	1301703	25 36	1303312	345
1301400	11 27	1301435	217 5		307 35		27 36	1303313	345

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
1303314	345		307 38	1306037	67 33		63 20		95 14
1303315	345	1303441	305 39		69 33	1306347	61 22		97 14
1303345	343		307 39	1306041	67 9	1306350	57 9		99 4
1303346	343	1303443	335		69 9		59 8	1306360	67 31
1303347	343		335	1306049	127 5	1306351	81 30		69 31
1303348	343	1303455	257 39		147 6		83 30	1306361	67 34
1303361	343	1303463	217 26	1306125	127 9		85 30		69 34
	345		217 31		147 10	1306352	81 32	1306362	129 16
	347		219 18	1306133	127 19		83 32		130 5
1303362	343		219 24	1306134	127 20	1306353	199 7		151 16
	345	1303464	217 30	1306135	127 24		81 33		153 9
	347		219 46		147 25		83 33		201 14
1303363	343	1303469	220 12	1306143	75 16		85 35		67 27
	345	1303476	23 1		77 9	1306354	67 38		69 28
	347	1303477	23 1		79 9		69 35		73 34
1303364	343	1303478	23 1	1306180	81 4	1306355	67 20		88 23
	345	1303494	23 6		83 4	1306356	67 6	1306364	67 21
	347	1303551	287 12	1306181	81 5		69 6		69 21
1303365	343		291 12		83 4	1306357	201 16	1306365	193 41
	345	1304971	3 48	1306182	69 10		67 28		45 31
	347	1305696	51 3		81 8		69 27		86 13
1303366	347		53 3	1306185	67 10	1306358	193 44		87 13
1303367	347		57 19	1306186	67 35		199 11	1306368	45 33
1303368	347	1305697	51 15	1306199	95 26		67 14		86 6
1303369	347		53 15		97 26		69 14		87 6
1303370	347	1305706	57 15	1306201	95 2		71 12		88 9
1303371	374 11		59 11	1306205	95 22		75 22		89 9
	387 23	1305709	61 16	1306208	95 31		75 28		90 22
	389 11	1305710	61 17		97 31		75 39	1306370	107 18
1303372	347 13	1305711	61 2	1306212	193 50		77 22		91 14
	367 13	1305714	61 3	1306214	193 45		79 22		91 14
1303376	45 35		63 5		199 4		89 13		92 6
1303380	387 1	1305715	61 7	1306216	193 38		89 5	1306371	127 10
1303383	347 3		63 7	1306219	73 29		90 11		129 9
	367 3	1305716	61 7	1306224	91 18		99 11		147 11
	371 34		63 7	1306328	75 34	1306359	127 8		149 42
1303384	387 35	1305717	61 9		77 34		147 9		151 9
	389 2		63 9		79 34		149 44		154 7
1303386	387	1305722	81 20	1306329	127 1		149 9		61 23
1303390	47 38	1305723	83 21		147 2		67 26		63 23
1303391	347 26	1305724	83 23		149 2		69 26		71 30
	367 26	1306030	67 3	1306331	129 3		71 18	1306372	127 35
1303400	387		69 3		151 3		75 10	1306373	127 25
1303417	287 46	1306031	67 22		154 8		75 19		147 26
	291 46	1306033	67 25	1306334	127 36		75 23		95 12
1303431	305 5		69 25		147 37		77 19		97 12
	307 44		87 15	1306337	129 38		77 23	1306374	75 4
1303432	305 24		89 8		151 37		79 19		77 4
	307 24		90 12	1306338	149 33		79 23		79 4
1303437	179 34	1306034	67 29	1306339	129 39		87 17	1306578	404 5
1303438	179 33		69 29		151 35		88 26	1306579	404 6
1303440	305 38	1306036	67 32	1306346	61 20		90 13	1307367	357

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
	357	1307900	95 10	1309068	246 6	1310637	357 24		7 28
1307375	357	1307901	71 17	1309071	246 9		383 20	1311288	3 19
1307641	378 12		79 7	1309403	247 34		403 6		7 27
1307736	183 38		97 9	1309427	246 10		419 3	1311295	33 27
	189 37	1307902	71 38	1309475	313 20	1311054	53 29	1311296	33 28
	297 42		95 7		317 20		55 29	1311297	33 29
1307737	181 31		97 7		319 20	1311055	53 30	1311300	33 32
	183 37	1307904	95 5		323 20		55 30	1311302	5 13
	297 41	1307906	193 40	1309479	323 35	1311056	53 31	1311303	5 13
	3 16	1307907	193 37		329 21		55 31	1311337	357
	3 38	1307908	193 51		329 33	1311057	53 32		383
	7 44		199 12	1309503	217 33		55 32		403
1307875	75 42		201 4		219 56	1311058	53 16	1311339	357
	77 8		93 7	1309524	11 54		55 16		403
	79 8		99 6	1309568	287	1311067	147 21	1311340	357
1307876	75 9	1307909	88 28	1309569	409 28	1311070	129 25		403
1307877	107 17	1307910	107 14	1309570	409 29		147 42	1311341	357
1307881	90 21		193 36	1309824	9 15		149 31		403
	104 8		199 14	1309831	95 24		149 4	1311342	357
	107 15		61 21		95 24		151 39		403
	107 5		63 21		97 24	1311074	71 39	1311343	357
	149 7		65 26	1309832	57 14		73 30	1311344	357
	67 37		71 33	1310027	419 8	1311081	75 26		403
	73 12		73 33	1310277	185 35		77 26	1311345	357
	75 29		91 9		193 43	1311085	107 11	1311346	25 14
	77 29	1307911	193 48		199 2	1311094	88 21		27 14
	79 29		199 6		201 2		90 18		3 46
	83 36		91 15	1310369	378 4	1311208	357 26	1311358	302
	85 11	1307913	45 31	1310592	343 7		387 32	1311360	45 36
	95 28		71 34		345 7	1311209	409 4	1311362	357 26
	97 28		90 20		354 12	1311213	30 1	1311363	357 26
	99 11		95 29		361 7	1311217	3 15	1311366	297 2
1307886	104 13		97 35		363 7		3 40		299
1307888	81 9	1307914	129 7		365 7		7 43	1311371	19 26
1307890	107 17		151 7		374 16	1311219	145 2	1311375	217 12
1307891	129 8		154 5		387 12	1311252	409 25		219 42
	151 8		199 15		389 16	1311254	409 31	1311376	241 6
	154 6		201 6		393 8	1311260	33 23		242 7
	71 35		88 10	1310608	357 18	1311264	357 9	1311377	401
	89 14	1307915	61 24		383 12		403 38	1311378	401
1307894	86 9	1307922	149 39		403 12		419 22	1311379	401
	87 9		151 25		419 7	1311265	357 22	1311380	401
	99 7	1307923	149 40	1310609	357 19		403 11	1311384	401
1307895	95 13		151 26		403 13		419 16	1311385	401
	97 13	1307994	283 32		419 6	1311267	33 1	1311388	3 17
1307897	104 5	1308007	129 37	1310612	357 12	1311268	179 58		7 38
1307898	193 49		151 36		403 25		185 23	1311403	183 46
	75 38	1308030	199 9		419 27	1311272	11 10	1311407	301 2
	95 18	1308050	23 17	1310616	160 12		13 10	1311409	19 21
	95 33	1309059	246 1	1310630	409 23	1311273	11 18	1311423	23 20
	97 18	1309065	246 4		410 15		13 18	1311425	409 1
	99 13	1309067	246 5		432 6	1311287	3 41	1311430	7 13

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
1311432	7 2	1312638	289 26	1313737	16 6	1316309	287 16	1318912	81 13
1311433	7 2	1312640	289 33	1313744	16 3		291 15		83 14
1311485	383	1312641	289 34	1313869	287 20	1316310	287 17	1318913	81 14
1311517	147 48	1312642	289 35	1313876	289 5		291 16	1318914	81 31
1311518	147 36	1312643	289 38	1313879	289 19	1316312	287 25	1318916	67 8
1311519	59	1312645	289 42	1313883	289 12		291 25		69 8
1311603	71 16	1312805	287 30	1313884	289 13	1316313	287 28	1318918	67 29
1311708	127 2		291 30	1313885	289 22		291 28	1318919	75 27
1311780	311 1	1312806	287 34	1313887	289 27	1316314	287 35	1318920	75 30
1311781	311 4		291 34	1313888	289 28		291 35		77 30
1311782	311 8	1312807	287 36	1313889	289 32	1316316	287 39		79 30
1311783	311 11		291 36	1313890	289 36		291 39	1318921	75 35
1311784	311 12	1312814	247 9	1313904	143 20	1316317	287 40		95 19
1311785	311 16	1312820	311		145 20	1316318	287 40		97 19
1311786	311 24		311	1314295	311 25	1316322	245 25		99 14
1311787	311 7	1312821	311	1315497	104 13	1316384	245 31	1318922	75 37
1311788	311 19		311		201 5	1316479	404 18	1318924	127 12
1311791	311 9	1312823	254 14		88 24	1316480	404 13	1318925	127 13
1311792	311 10	1312824	254 15		99 5	1316485	404 1	1318926	127 14
1311793	311 18	1312825	254 16	1315621	254 19	1316527	427 5	1318927	127 15
1311794	311 26	1312827	254 17	1315648	245 18	1316540	23 13	1318928	127 16
1311795	311 15	1313350	333 12	1315649	287 1	1316806	313 22	1318929	127 17
1312083	293 38		387 36	1315750	63 24		317 22	1318930	127 18
1312337	183 2	1313351	333 11	1315751	127 37		319 22	1318931	127 26
	189 34	1313356	305 25		147 38		323 42		147 27
1312339	183 2		307 25	1315752	127 38		329 40	1318933	127 33
	183 3	1313357	345 2	1315778	298 10	1316807	313 23	1318934	127 34
1312340	183 2		354 2	1315779	298 13		317 23	1318935	45 28
	183 3		363 2	1315780	298 14		319 23	1318937	45 32
1312344	183 3		365 2	1315781	298 15		323 43	1318940	75 5
1312345	189 33		387 2	1315918	133 38		329 41		77 5
1312450	9 15	1313358	345 4	1316039	287 6	1317394	183 2		79 5
1312465	404 2		354 7	1316040	287 14		183 3	1318943	75 12
1312473	183 2		363 4		291 14	1318306	201 8		77 12
	183 3		365 4	1316041	287 21		71 40		79 12
	189 34		374 13		291 21		73 13	1318945	75 17
1312474	189 33		387 7	1316042	287 24	1318324	227	1318946	75 18
1312608	245 1		389 13		291 24	1318900	61 1		77 18
1312609	245 1		393 15	1316043	287 27	1318903	61 27		79 18
1312614	245 28	1313362	349 10		291 27		63 27	1318947	75 20
1312616	289 14	1313374	301 9	1316044	287 15	1318904	61 13		77 20
	293 16	1313375	301 8		291 17		63 13		79 20
1312617	289 15	1313379	349	1316045	287 23		91 16	1318948	75 21
1312618	289 16		353		291 23	1318906	57 1		77 21
1312619	289 18	1313386	349 13	1316047	287 31	1318907	57 2		79 21
1312620	289 21		353		291 31		59 2	1318949	75 24
1312624	289 41	1313390	401	1316049	287 37	1318908	57 2		77 24
1312633	289 2	1313394	204		291 37		59 2		79 24
1312634	289 2	1313733	16 1	1316306	287 9	1318909	57 2	1318950	75 25
1312635	289 4	1313734	16 2		291 9		59 2		77 25
1312636	289 17	1313735	16 4	1316307	287 11	1318910	57 2	1318951	77 10
1312637	289 23	1313736	16 5		291 11		59 2		79 10

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
1318952	81 1	1319040	71 3		325 4		326 63	1320998	315 20
	83 1		73 20		331 4		331 51		315 32
1318953	81 2	1319041	91 1	1320977	321 34	1320988	315 31		321 20
	83 2		92 1		325 34		321 31		321 32
1318954	81 3	1319042	91 5		325 34		321 44		321 45
	83 3		92 5		331 34		325 31		325 20
1318956	86 7	1319043	91 6	1320978	315 21		325 44		325 32
1318958	86 11		92 4		321 21		325 57		325 45
	87 11	1319045	91 8		325 21		331 31		331 20
1318960	57 20	1319046	91 10		331 21		331 44		331 32
1318961	57 26	1319047	91 13	1320979	315 39	1320989	315 32		331 45
	59 20	1319050	129 2		321 52		321 32	1320999	315 34
1318962	95 15		151 2		326 65		321 45	1321375	315 36
	97 15		154 1		331 52		325 32	1321376	315 35
1318963	88 4	1319051	129 6	1320980	315 1		325 45	1321377	315 34
	89 4		151 6		321 1		331 32		321 47
	95 20		154 4		325 1		331 45	1321379	321 49
	97 20	1319053	129 10		331 1	1320990	325 33		325 62
1318964	95 30		151 10	1320981	315 2	1320991	315 15	1321380	321 48
	97 30		153 3		321 2		321 15		325 61
1318965	99 12	1319054	129 14		325 2		321 40	1321381	315 39
1318967	95 8		151 14		331 2		325 15		321 52
	97 8		153 7	1320982	315 22		325 40		326 65
1318968	193 42	1319056	129 20		315 3		331 15		331 52
	199 16	1319057	129 27		315 41		331 40	1321382	315 36
	75 35		151 27		315 5	1320992	315 8		321 49
	77 35	1319058	129 33		321 22		321 8	1321383	315 35
	79 28		151 33		321 3		325 8		321 48
	88 18		153 22		321 35		331 8	1321911	9 6
	95 33	1319059	129 36		321 5	1320994	315 14	1322322	217 42
	97 33		151 34		321 54		315 31		219 3
	99 10	1319060	51 20		325 22		321 14		240 4
1318969	71 1		53 28		325 3		321 31	1322337	217 44
1318970	71 2		55 28		325 35		321 44		219 5
1318971	71 4	1319062	57 17		325 48		325 14	1322338	217 45
1318972	71 5	1319063	57 18		325 5		325 31		219 6
1318973	71 7	1319089	95		326 67		325 44	1322339	217 41
1318974	71 9	1319175	179 14		331 22		331 14		219 2
1319027	71 14		185 58		331 3		331 31	1322340	217 47
1319028	71 20	1319176	15 33		331 35		331 44		219 7
1319029	71 19		309 21		331 5	1320995	315 16	1322342	217 43
1319030	71 22	1319177	9 20		331 54		321 16		219 4
1319031	71 25	1319189	15 3	1320983	315 38		325 16	1322343	240 2
1319032	71 26	1319190	185 55		321 51		331 16	1322344	240 3
1319033	71 28	1319373	137 36		326 64	1320996	315 17	1322346	240 5
	73 25	1320001	183 2		331 50		321 17	1322347	240 6
1319034	71 29		183 3	1320984	325 62		325 17	1322348	240 7
1319035	71 31	1320264	133 43		331 49		331 17	1322349	240 8
1319036	71 32	1320975	325 60	1320985	325 61	1320997	315 18	1322390	404 1
1319037	71 36		331 47		331 48		321 18	1322393	404 1
1319038	71 37	1320976	315 4	1320986	315 37		325 18	1322627	267 47
	73 14		321 4		321 50		331 18	1323024	147 19

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
1323115	19 22		5 13		7 15	1326813	305 38	1327638	283 18
1323116	19 25		5 13	1325624	3 35		307 38	1327639	283 19
1323117	19 23	1324767	5 13		7 14	1326814	305 39	1327640	283 20
1323146	265 33		5 13	1325726	7 14		307 39	1327641	283 23
	267 33	1324996	181 4	1325729	7 15	1326815	23 1	1327643	281 13
1323579	208 4	1325329	7 50	1325730	7 8	1326816	23 1	1327644	281 15
1323837	343	1325331	181 8	1325731	7 5	1326931	195 28	1327645	283 30
1323839	347		183 51	1325737	15 57	1327164	208 6	1327646	281 20
1323844	349 8		189 20	1326055	410 16	1327501	311 17	1327647	283 31
	353 4	1325336	25 1	1326100	240 1	1327575	265 16	1327649	281 1
1323845	349 11	1325338	25 2	1326337	21 12		267 16	1327650	273 18
	353 5	1325346	19 13	1326355	183 32	1327582	271 3	1327651	271 15
1323847	343	1325356	19		189 23		273 9	1327652	276 2
	345	1325366	305 47		409 21		275 3	1327653	271 23
	347		307 60		410 12	1327583	271 22	1327655	281 21
1323848	345	1325379	179 66		432 7	1327587	275 16	1327656	254 3
1323852	427 32	1325380	240 13	1326366	404 1	1327588	273 22	1327657	265 2
1323854	427 2	1325382	336 24	1326699	319 32	1327590	276 6		267 2
1323856	427 1	1325398	15 42	1326750	217 30	1327591	271 18	1327658	265 abf
1323862	307 41	1325399	15 43		219 46	1327592	277 3	1327659	265 6
1323863	307 42	1325519	3 42	1326755	336 24	1327593	277 2		267 6
1323864	307 43		7 19	1326756	217 51	1327595	265 7	1327660	265 8
1323865	307 49	1325548	11 16		219 15	1327596	268 8		267 8
1323866	307 50		13 16		219 19	1327598	268 5	1327661	279 24
1323867	307 51	1325550	7 31	1326757	217 35	1327601	271 10	1327662	265
1323869	307 52	1325551	15 24		217 6		273 13	1327663	268 2
1323870	307 53	1325553	39 9		219 13	1327602	271 20	1327664	271
1323884	217 25	1325555	15 11		219 50		273 3	1327665	273
	219 44	1325557	15 22	1326761	323 1		275 4	1327666	275
1323885	217 32	1325564	297 29	1326762	311	1327603	271 11	1327667	271 1
	219 43	1325567	9 52	1326763	219 16		273 19	1327668	273 1
1323889	287 43	1325576	9 53	1326764	336 26	1327605	273 21	1327670	275 1
	291 43	1325583	7 32	1326772	33 30	1327606	268 9	1327671	265 20
1323892	349 17	1325585	11 15	1326774	307 13	1327608	273 15		267 20
1323993	183 32		13 15	1326775	307 12	1327611	268 1	1327681	254 2
	189 23	1325597	3 7	1326777	343 11	1327612	279 1	1327682	254 21
	409 21	1325598	3 6		361 11	1327615	265 5		38 6
	410 12	1325599	3 8	1326783	427 13	1327616	277 5	1327683	265 17
	432 7	1325600	3 9	1326784	427 19	1327619	265 1		267 17
1324084	5 13	1325604	33 21	1326785	427 20		267 1	1327691	254 7
	5 13	1325610	179 42	1326786	427 35	1327620	265 9	1327692	265 10
1324088	5 13		185 25	1326789	427 35		267 9		267 10
	5 13	1325611	183 30	1326791	427 16	1327621	265 3	1327694	265 12
1324313	183 2		189 3	1326793	427 3	1327624	265 19		267 12
	189 34	1325613	23 15	1326795	427 4		267 19	1327695	265 13
1324744	183 42	1325616	3 8	1326804	427 18	1327625	283 1		267 13
	189 41	1325617	7 32	1326805	427 34	1327628	283 2	1327696	268 11
1324761	5 13	1325619	7 3	1326808	297 38	1327630	283 3	1327697	277 8
	5 13	1325620	7 4	1326809	323 58	1327633	283 10	1327699	48 1
1324762	5 13	1325621	7 6	1326810	323 59	1327634	283 12	1327702	39 8
	5 13	1325622	7 7	1326812	305 24	1327635	283 13	1327703	257 34
1324765	5 13	1325623	3 34		307 24	1327636	283 14		259 21

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
	261 21		319 30	1329457	416 6	1330412	206 5	1330453	115 11
	263 21		319 4	1329458	416 7		207 19	1330566	409 17
1327705	254 20		323 23	1329461	429 1	1330413	206 1	1330567	409 18
1327706	39 1		323 28	1329464	429 4		207 7	1330569	409 8
1327708	257 44		323 4	1329465	416 18	1330414	406 14	1330574	183 4
	259 41		329 25	1329466	416 14	1330415	267 53		189 35
	261 42		329 26	1329468	416 17	1330416	205 6		3 3
	263 48		329 4	1329469	416 16		403 44	1330576	23 25
1327709	257 41	1328917	289 31	1329470	416 19	1330417	206 6	1330581	427 21
1327710	265 11	1328919	289 24	1329474	416 23		207 20	1330582	427 22
	267 11	1328921	289 2	1329475	423 1	1330418	206 2	1330603	403 18
1327711	276 3	1328924	289	1329476	423 3		207 8		429 12
1327732	276 5	1328930	313 10	1329477	423 3	1330419	206 18	1330604	325
1327742	283 15		317 10	1329478	416 11		207 4	1330607	419 37
1327743	283 29		319 10	1329479	416 13		393 35	1330609	419 44
1327745	276 1		323 10	1329480	423 2	1330420	205 3	1330610	419 45
1327746	257 35		329 10	1329481	423 4		206 13	1330611	419 42
	259 22	1328946	349 11	1329482	423 5		207 17	1330612	419 43
	261 22		351 7	1329483	423 6	1330421	393 35	1330614	419 36
	263 22		369 7	1329484	423 6		403 45	1330615	419 51
1327747	257 36	1329030	191 27	1329486	423 8	1330422	207 13	1330616	419 33
	259 23	1329308	380 3	1329487	423 8		209 1	1330618	419 40
	261 23	1329414	183 2	1329490	429 6	1330423	207 15	1330619	427 17
	263 23		189 34	1329493	429 9		208 14	1330917	23 7
1327748	257 37	1329417	227 1	1329494	416 10	1330424	206 19	1330920	23 4
	259 24		229 1	1329495	416 10		207 5	1331014	247 19
	261 24	1329418	227 2	1329498	415 21		393 35	1331015	247 32
	263 24		229 2	1329499	415 20	1330426	205 4	1331017	247 33
1327751	247	1329419	227 3	1329639	415 11		206 14	1331018	247 12
1327803	265 25		229 3		415 9		207 18	1331033	217 40
	267 25	1329420	227 4	1329641	415 11	1330427	393 35		219 1
1327811	283 9		229 4		415 9		403 47	1331034	217 2
1327818	305 20	1329425	227 33	1329691	287 1	1330428	209 2		219 55
	305 20	1329426	227 35	1329693	287 13	1330429	207 14		222 28
	307 20	1329428	227 37	1329694	287 22		207 16	1331037	181 32
1327819	305 21		229 36		291 22		208 15	1331047	240 22
	307 21	1329440	425	1329700	287 40	1330433	403 42	1331048	240 13
1327821	254 24	1329441	431 1	1329701	287 40	1330434	393 35	1331049	240 14
1327895	297 36	1329442	431 2	1329703	245 1	1330436	403 46	1331233	208 9
1327905	86 1	1329443	431 3	1329704	245 1	1330437	206 4	1331341	109 17
	87 1	1329444	431 4	1329705	245 3		207 21		109 8
1328565	67 20	1329445	431 5	1329707	245 7		207 9	1331521	311 2
	69 20	1329446	431 6	1329708	245 7		208 13	1331523	311 16
1328695	347 7	1329447	431 7	1329710	245 20		406 15	1331527	410 3
1328696	323 35	1329448	431 8	1329714	245 27	1330438	206 15	1331528	427 28
	329 21	1329449	431		246		207 6	1331530	183 22
	329 33	1329450	416 1	1330409	211 11		208 16		183 50
1328697	323 37	1329451	416 1		406 13		209 4		189 19
	329 35	1329452	416 2	1330410	267 53	1330439	206 3	1331532	410 4
1328699	313 4	1329453	416 3		319 34		207 12	1331559	410 12
	317 30	1329454	416 3	1330411	205 5		208 12		432 7
	317 4	1329455	416 4		403 43		209 3	1331560	410 12

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
	432 7	1332326	425 24	1333924	245 7		365 9	1339939	412 2
1331561	29 19	1332329	425 27	1334267	247 35		374 18	1339947	412 1
1331562	29 19	1332330	425 28	1334411	191 20		387 6	1342660	5 21
1331575	29 22	1332332	425 25	1334423	113 23		389 18	1342662	183 9
1331581	335	1332333	425 23	1334458	19 2		393 5		189 29
1331591	410 2	1332335	425 22	1334461	19 4	1335188	349	1342664	3 28
1331592	410 2	1332337	425 20	1334462	19 10		353		7 9
1331593	432 1	1332339	425 1	1334463	19 5	1335190	415 31	1342839	247 11
1332078	247 11	1332340	425 2	1334464	19 8	1335216	109 27	1343169	204 3
1332084	247 34	1332342	425 4	1334465	19 6	1335217	115 5	1343174	104 5
1332275	421 14	1332343	425 5	1334466	19 9	1335243	111 27	1343187	204 1
1332276	423 9	1332344	425 7	1334467	19 11	1335247	325 58	1343189	204 16
1332277	421 17	1332346	425 9	1334468	19 7	1335277	429 11	1343190	204 13
	423 10	1332347	425 10	1334470	19 3	1335479	111 32	1343191	204 8
	425 33	1332348	425 11	1334491	305 58	1335497	113 22	1343192	204 12
1332278	415 15	1332349	425 12		307 71	1335499	109 18	1343193	204 17
	415 7	1332780	246 2	1334497	347 10	1335575	19 12	1343194	204 20
1332281	415 17	1332831	129 17	1334500	347 10	1335576	19 1	1343195	204 18
1332283	421 6	1332905	409 51	1334515	179 59	1335578	19 3	1343196	204 5
	425 35	1332907	305 59		185 5	1335579	19 5	1343197	204 2
1332284	415 2	1332908	409 8	1334521	15 39	1335831	15 59	1343198	204 11
1332285	415 3	1332915	15 38	1334523	15 41	1335832	15 6	1343199	204 19
1332288	415 25	1332917	15 40	1334555	349	1335870	301 46	1343205	9 55
1332289	415 26	1332927	432 5	1334556	349	1335873	301 45	1343562	254 26
1332292	421 12	1332940	305 59	1334557	349	1336038	133 4	1343700	204 14
1332293	421 1	1332941	305 36	1334558	349	1336173	208 5	1343701	204 9
1332294	421 2		307 36	1334559	349	1336327	15 1	1343702	204 6
1332295	421 3	1332942	305 26	1334581	354 17	1336344	183 52	1343703	204 10
1332296	421 4		307 26		387 39		189 38	1343705	204 7
1332297	421 5	1332943	305 26		389 30	1336605	23 28	1343706	204 15
1332299	421 10		307 26	1334583	343	1336668	15 22	1343769	204 4
1332300	415 10	1332944	333 11	1334612	416 8	1336669	15 24	1344274	197 11
1332302	421 9		387 37	1334613	429 20	1336670	15 37	1344924	107 9
1332303	415 28	1332947	217 31	1334614	429 5	1336671	15 35	1345008	193 50
1332304	415 29		217 32	1334617	129 24	1336672	15 36	1345014	193 38
1332305	415 30		219 47		151 38	1336982	15 26		199 10
1332306	415 31	1333412	396	1334631	425 31	1336985	7		201 9
1332309	415 23	1333413	396	1334633	429 10	1336986	7 12	1345023	179 49
1332310	415 8	1333414	396	1334634	415 35	1337197	183 5		185 47
1332313	415 33	1333415	396	1334674	127 1	1337225	160 2		217 24
1332314	415 34	1333416	396	1334945	325 21		161 15		219 35
1332315	415 13	1333417	396	1334946	325 47	1337772	160 16		267 40
1332316	415 14	1333418	396	1334999	208 3		161 16	1345702	349
1332317	416 19	1333419	396	1335051	183 42		163 21		353
1332318	421 13	1333420	396	1335126	23 5		165 21	1345705	349
1332319	421 18	1333421	396	1335143	23 7	1338031	383		353
1332320	425	1333541	115 13	1335146	23 6	1338222	117 1	1345751	107 6
1332321	431	1333750	15 44	1335179	343 6	1338738	23 24		83 8
1332322	425 21	1333752	15 62		345 9	1338837	95 1	1345760	97 27
1332324	421 15	1333753	15 63		354 6	1338838	95 9	1345785	95 3
1332325	421 19	1333763	419 41		361 6		97 34		97 3
	425 37	1333923	245 7		363 9	1339904	301 34	1345786	75 11

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
	77 11	1347774	293 4		79 13	1357734	293 37	1360193	143 29
	79 11	1347800	293 10	1352534	412 3	1357749	139 12		145 29
1345787	67 2	1347812	293 11	1352544	412 5	1357789	101 24		157 29
	69 2	1347813	293 25	1352602	208 10	1357865	279	1360194	143 30
1345788	67 24	1347819	293 8	1352603	208 11	1357866	281		145 30
1345790	67 30	1347822	293 21	1352661	357 21		283		157 30
	69 30	1347831	293 28		403 10	1358325	143 24	1360661	189 1
1345791	95 23	1347835	293 33		419 18	1358337	39 9	1360777	9 20
1345792	95 32	1347839	293 18	1352663	357 21	1358713	343	1360875	311 5
	97 32	1347851	343 14	1352666	143 2	1358714	347	1360876	311 6
1345793	104 2	1347852	143 1	1352668	217 22	1358715	349	1360967	254 13
	91 7		145 1		219 34		353	1360969	287
1345798	95 16	1347854	179 35	1352669	143 25	1358717	349	1361200	39 23
	97 16		185 9		145 25		353		40 6
1345800	107 12	1347855	23 2		157 25	1358718	349	1361201	143 34
	86 4	1347856	143 10		159 12		353		157 34
	87 4		145 10	1352670	143 26	1358721	343		159 18
	88 7	1347859	415 36		145 26		345	1363008	279 23
	89 7	1347860	23 13		157 26		347	1363009	279 23
	90 6	1347861	333 4	1352671	217 20	1358722	419 34	1365264	249 2
1345801	71 11		335 18		219 31	1358734	9 69	1365265	249 3
1345802	86 12	1347862	333 1	1354439	245 19	1358738	219 17	1365266	249 1
	87 12		335 15	1354770	279 17	1358746	345	1365275	249 4
1345826	21	1347863	335	1355319	91 19	1358750	419 35	1365689	378 3
1345939	23 8		335	1355326	298 8	1358751	419 38	1365938	265 5
1346129	425 32	1347864	335	1355818	412 11	1358752	419 39		267 5
1346131	425 29	1347869	335	1355819	412 12	1358911	197	1365940	265 3
1346132	425 30		335	1355820	412 19	1359101	343 20	1365941	265
1346422	5 7	1347870	335	1355821	412 20		361 18		268
1346423	3 1	1347871	335	1356943	9 67	1359658	7 50		271
	5 1	1347872	335	1356948	9 68	1359659	3 6		273
1346424	5 8		335	1357026	298 9	1359661	165 37		275
1346425	5 10	1350666	227 21	1357035	279		219 63		277
1346426	5 3		229 21	1357097	107 7		221 20	1365942	265 acf
1346452	3 11	1350667	227 22	1357098	88 8		222 21		267 4
1346460	5 1		229 22	1357208	289 1		223 7	1365943	267 43
1346892	343 15	1350733	412 1	1357225	25 3		242 17	1366710	291
1346893	23 23	1350734	412 1	1357228	143 22		263 46	1366711	401
1346958	217 18	1350735	412 1		143 22	1359706	23 30		401
	219 23	1350736	412 1	1357230	143 32	1359710	123 12	1366715	401
1346960	245 26	1350911	123 36		145 32	1359711	123 13	1366717	401
1346972	257 40		179 40		157 32		123 9	1366719	401
	259 40	1350914	179 36	1357237	242 18	1359712	29 17	1366721	401
	261 38		185 60	1357398	15 32	1359715	15 30	1366722	401
	263 38		305 61	1357401	15 31	1360141	373	1367544	404 1
1346973	343 16		307 8	1357424	15 2	1360178	113 18	1367556	254 16
1346974	343 17	1350992	409 15	1357425	15 2	1360191	143 27	1367825	305 13
1347224	211 15		410 1	1357427	309 16		145 27		307 13
1347404	394 2	1351068	207 10	1357428	309 16		157 27	1367826	305 12
1347405	394 1	1351069	207 11	1357430	123 3	1360192	143 28		307 12
1347588	287 5	1351996	75 13	1357431	123 3		145 28	1368150	11 10
1347770	293 40		77 13	1357437	249		157 28		13 10

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
1369041	97 10	1374097	293 15		97	1377597	157 22	1380208	73 26
1369046	67 1	1374110	117 18	1376020	287	1377601	40 9	1380209	73 19
1369073	92 9	1374112	113 16	1376447	415 26	1377639	160 12	1380210	73 17
1369074	95 27	1374428	9 66	1377047	197 4	1377702	5 13	1380212	73 32
1369077	51 17	1374468	401	1377048	197 6		5 13	1380213	73 31
	53 17		401	1377049	197 21	1377703	5 13	1380214	73 11
	55 17		401	1377050	197 13		5 13	1380223	231 11
1369081	107 13		401	1377051	197 20	1377704	5 13	1380238	231 29
	53 19	1374550	293 22	1377052	197 19		5 13	1380239	231 32
1369431	127	1374551	293 24	1377053	197 23	1377720	75 1	1380242	67 22
	147	1374558	293 34	1377067	197 2		77 1		69 22
	61	1374559	293 36	1377091	157 20		79 1	1380244	83 9
	63	1374586	287 1	1377187	183 54	1377726	5 2	1380245	81 10
	81	1374588	245 13	1377237	331 48	1377727	5 2		83 10
	83	1374591	245 19	1377238	331 49	1377728	7 2		85 10
	91	1374594	245 27	1377271	5 13	1377729	7 2	1380246	83 5
	92	1374596	287 13		5 13	1377730	7 2	1380247	83 5
	95		291 13	1377550	101	1377731	7 2		85 6
1369496	9 60	1374598	287 40		147	1377882	249 1	1380248	81 2
1370944	61 19	1374599	287 40		151	1377887	287 13		83 2
	63 19	1374750	19 20		53		291 13	1380249	81 3
	65 24		21 24		59	1377888	245 19		83 3
1370945	61 18	1374980	81 25		63	1377906	67 1	1380250	81 6
	63 18		83 25		69	1377907	45 34		85 7
	65 23		85 25		77	1377908	75 15	1380251	67 36
1370947	81 20	1375944	3 1		83		77 15	1380253	51 6
	83 20	1375947	5 1		88		79 15		53 6
	85 21	1375952	115 24		89	1378447	5 1		55 6
1370948	81 26	1375954	109 20		92	1379734	53 23	1380258	81 13
	83 26	1375984	5 13		97		55 23		83 13
	85 26	1375985	5 13	1377551	45 1	1379738	127	1380259	75 37
1370949	73 18	1376008	127	1377552	45 2		147		77 16
	83 31		129	1377554	45 26		51		79 16
	85 31		51	1377556	40 1		53	1380261	77 17
1371654	378 7		57	1377558	40 2		67		79 17
1371703	67 32		61	1377559	40 5		69	1380264	51 27
	69 32		67	1377560	40 12		75		53 27
1371708	147 3		75	1377561	39 10		77		55 27
1371711	83 10		81		40 10		86	1380266	51 26
1371720	127 6		87		43 19		87		53 26
	147 7		91	1377562	40 3		95		55 26
1371730	63 22		97	1377564	157 1	1379772	231 1	1380267	57 20
1373216	393 28	1376009	127	1377573	25 3	1379773	73 9	1380273	293 26
1373270	29 25		129	1377577	157 18	1379774	73 1	1380274	293 29
1373928	289 29		51	1377580	157 38	1380200	73 6	1380755	51 5
1374080	416 24		57	1377585	123 17	1380201	73 4		53 5
1374086	245 6		61	1377586	123 12	1380202	73 5		55 5
1374088	293 1		67	1377587	123 13	1380203	73 7	1380763	81 9
1374089	293 2		75	1377588	157 18	1380204	73 8		85 9
1374090	293 3		81	1377589	40 8	1380205	73 3	1380776	293 31
1374094	293 12		87	1377590	40 9	1380206	73 2	1380777	293 41
1374095	293 13		91	1377592	45 35	1380207	73 22	1380779	293 5

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
1380784	287 6		69 15		90 2		235	1388376	97 5
	291 6	1382481	67 19	1382955	88 6	1385681	233	1388385	127 31
1380786	287 1		69 19		89 6		235	1388387	55 15
1380797	293 30	1382482	67 24	1382956	88 11	1385682	233 29	1388388	130 1
1380798	293 14		69 24	1382957	88 12		235 29	1388389	130 3
1380803	43 18	1382484	77 27	1382958	88 13	1385683	231 30	1388390	130 4
1380886	302 4		79 27	1382959	88 14		233 31	1390149	187 1
1380890	335 9	1382485	229	1382960	88 15		235 31	1390155	187 38
	339 9	1382486	71 1	1382961	88 16	1385684	233 32	1390156	187 25
1381125	23 27	1382487	71 11	1382963	107 13		235 32	1390157	187 23
1382033	227	1382488	71 16		201 12	1385703	75 25	1390159	187 39
1382060	53 1	1382491	229 10	1383620	88 22		77 25	1390160	187 31
1382061	51 19	1382492	229 28	1383621	88 20		79 25	1390161	187 28
	55 19	1382493	229 37	1383622	88 17	1385704	75 26	1390162	187 29
1382063	59 1	1382494	227 36	1383623	86 8		77 26	1390163	187 36
1382064	59 3		229 35		87 8		79 26	1390164	187 37
1382065	59 3	1382497	147 13		88 19	1385715	291 20	1390165	187 30
1382066	59 3	1382498	147 14	1383624	88 25	1385716	291 40	1390166	187 33
1382067	59	1382499	147 15	1383778	179 1	1385717	291 40	1390168	187 4
1382069	59 3	1382526	104 12		185 1	1385718	291 1	1390169	187 3
1382071	63 1	1382527	104 14	1383803	208 1	1385884	351	1390170	187 40
1382072	63 2	1382528	101 1	1383804	208 2	1385885	351	1390171	187 35
1382073	61 5	1382530	101 2	1384400	88 27	1385886	351	1390172	187 32
	63 3	1382531	101 3	1384985	81 1	1385887	351	1390173	187 26
1382074	63 16	1382532	101 4		83 1	1385888	351	1390174	416 20
1382450	147 16	1382534	104 1	1385513	183 55	1385928	351	1390556	383 1
1382451	147 17	1382536	107 1		189 50	1385929	351	1390557	383 1
1382452	147 18	1382538	107 16	1385522	406 12	1385930	351	1390609	283 24
1382453	147 20	1382539	107 8	1385549	343 9	1385931	351	1391200	425 36
1382454	147 32	1382540	151 17		361 9	1385932	351	1391201	425 36
	149 25	1382541	151 20	1385601	305 13	1385934	351	1391202	425 36
1382455	147 33	1382542	151 41	1385602	305 12	1385935	351	1391203	425 36
	149 26		153 25	1385603	333 11	1385936	351	1391204	425 36
1382456	147 34	1382543	153 26	1385604	333 12	1385937	351	1391231	59 13
	149 27	1382545	147 39	1385611	315	1385938	351	1391238	187 16
1382457	147 35	1382546	147 50	1385612	321	1385953	343	1391239	187 17
	149 28	1382551	147 1	1385613	325		345	1391240	187 18
1382459	107 4	1382553	147 41	1385614	331		347	1391244	187 34
	83 37	1382565	51 1	1385615	325	1385954	343	1391245	86 2
1382462	59 22	1382758	25 2	1385616	315 40		345		87 2
1382463	59 24		27 2		321 53		347	1391246	85 5
1382464	59 17	1382762	25 1		326 66	1385955	343	1391638	315 21
1382467	92 7		27 1		331 53		345		321 21
1382468	92 11	1382936	335	1385619	321 47		347		325 21
1382470	104 11		335		325 60	1385956	343		331 21
1382471	104 10	1382937	335		331 47		345	1391639	321 34
1382472	104 9	1382951	147 43	1385647	301 28		347		325 34
1382475	63 17	1382953	88 2	1385648	301 26	1385957	343		325 34
1382478	69 1		89 2	1385674	233 1		345		331 34
1382479	67 7		90 1	1385675	73 22		347	1391643	315 49
	69 7	1382954	88 3	1385678	73 26	1385958	351		321 62
1382480	67 15		89 3	1385679	233		369		326 75

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
	331 62		85	1450936	115 10	1451213	113 21	1451272	111 25
1391644	315 48		90	1450939	115 15		117 29	1451273	111 26
	321 61		93	1450940	115 16	1451220	109 1	1451274	111 26
	326 74		99	1450941	109 26	1451221	109 2	1451275	111 26
	331 61	1395977	311		115 20	1451222	109 3	1451276	111 26
1391645	315 46	1395979	311		117 13	1451223	109 5	1451277	111 28
	321 59	1395982	307 42	1450942	115 21	1451224	109 7	1451278	111 28
	326 72	1395983	307 43	1450943	115 23	1451225	109 10	1451279	111 16
	331 59	1450136	75 6	1450944	115 12	1451226	109 11	1451280	111 41
1391791	235 1		77 6	1450945	115 14	1451227	109 12	1451284	111 36
1392601	339		79 6	1450947	113 13	1451228	109 13	1451287	111 23
1392626	380 1	1450252	374 2		113 5	1451229	109 14	1451288	111 39
1393121	401	1450254	311 12	1450948	113 1	1451230	109 15	1451290	117 15
1393122	401	1450259	380 2	1450949	113 3	1451231	109 16	1451291	117 33
1393160	283 24	1450260	380 4	1450950	113 4	1451232	109 21	1451292	115 9
1393703	315 13	1450261	380 3	1450952	113 7	1451233	109 22	1451304	179 44
	315 29	1450274	377 6	1450953	111	1451234	109 19	1451305	185 6
	321 13	1450275	377 7		113	1451235	109 23	1451306	179 43
	321 29	1450350	377 24	1450990	113 10	1451236	109 23		185 26
	321 43	1450351	377 21	1450994	113 8	1451237	109 24	1451330	15 28
	325 13	1450352	377 22	1450996	113 11	1451238	109 24	1451416	23 19
	325 29	1450353	377 23	1451028	117 2	1451240	109 25	1451601	59 25
	325 43	1450488	279 24	1451029	117 3	1451241	111 1	1451602	59 26
	325 56	1450618	265 3	1451030	117 4	1451242	111 12	1451603	59 27
	331 13		267 3	1451031	117 5	1451243	111 2	1451604	59 28
	331 29	1450619	139 1	1451032	117 8	1451244	111 3	1451605	59 29
	331 43	1450620	139 1	1451033	117 9	1451245	111 4	1451606	59 30
1393704	315 19	1450621	139 1	1451034	109 4	1451246	111 5	1451607	59 31
	315 33	1450622	139 1		117 10	1451247	111 6	1451609	45 bce
	321 19	1450623	139 2	1451035	117 11	1451248	111 7	1451611	45 32
	321 33	1450624	139 15	1451039	117 12	1451249	111 11	1451624	55 3
	321 46	1450626	139 5	1451041	117 14		111 17	1451625	55 9
	325 19	1450627	139 17	1451043	117 16	1451250	111 9	1451627	55 20
	325 46	1450628	139 3	1451045	117 19	1451251	111 13	1451629	65 11
	325 59	1450629	139 4	1451046	117 20	1451252	111 15	1451630	65 5
	331 19	1450630	139 7	1451047	117 21	1451253	111 14	1451631	65 6
	331 33	1450631	139 16	1451048	117 22	1451255	111 18	1451632	65 12
	331 46	1450632	139 4	1451049	117 24	1451256	111 20	1451633	65 7
1393707	38 7	1450633	139 4	1451050	117 23	1451257	111 21	1451634	65 9
1393708	38 14	1450634	139 18	1451051	117 25	1451258	111 22	1451635	65 2
	38 2	1450635	139 9	1451052	117 26	1451259	111 24	1451636	65 8
1393748	9 61	1450636	139 19	1451053	117 27	1451261	111 19	1451637	65 15
1394108	38 1	1450637	139 4	1451054	117 28	1451262	111 31	1451638	61 27
1394110	45 36	1450638	139 14	1451055	117 30	1451263	111 33		63 27
1394111	45 34	1450639	139 8	1451056	117 31	1451264	111 30		65 21
1395975	103	1450641	139 4	1451108	393	1451265	111 34	1451639	65 10
	149	1450828	265	1451110	393 1	1451266	111 34	1451640	65 4
	153		279	1451127	393 6	1451267	111 37	1451641	65 3
	55	1450861	293 9	1451130	393 30	1451268	111 38	1451642	85 18
	65	1450932	115 2		394	1451269	111 29	1451643	85 22
	69	1450933	115 3	1451155	393 25	1451270	111 25	1451644	85 23
	79	1450934	115 8	1451183	393 17	1451271	111 25	1451645	85 24

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
1451647	69 1	1451747	73 8	1452102	237 16	1452864	85 15	1453403	371
1451648	69 15	1451749	93 1	1452103	237 17	1452925	237 3	1453405	371
1451649	69 22	1451750	93 3	1452104	237 18	1452991	293 36	1453406	371
1451650	69 32	1451751	93 4	1452105	237 18	1453030	11 10	1453407	371
1451651	69 33	1451752	93 10	1452106	237 18		13 10	1453408	371 38
1451655	149 3	1451753	107 18	1452107	237 18	1453063	85	1453410	371 42
1451656	149 24		93 6	1452110	237 2		93	1453411	371 48
1451657	149 10	1451754	93 5	1452115	361	1453064	55	1453412	371 41
1451659	149 11	1451755	107 1	1452131	395 1		69	1453413	361 14
1451660	149 12	1451756	107 2	1452132	395 3		79		363 14
1451661	149 13	1451758	93 8	1452134	395 5	1453154	149 29	1453414	367 7
1451662	149 14	1451759	103	1452135	395 6	1453185	93 9	1453415	367 5
1451663	149 15	1451760	103 8	1452138	395 4	1453232	361	1453416	371 50
1451665	149 16	1451761	104 1	1452173	363		363	1453417	371 46
1451666	149 17	1451762	104 2	1452175	365		365	1453418	371 22
1451667	149 18	1451763	104 3	1452176	361		367	1453419	371 23
1451669	149 19	1451764	104 12	1452177	361	1453233	361	1453446	374 1
1451670	149 20	1451765	130 1	1452178	365		363		389 1
1451672	149 21	1451766	130 3	1452179	365		365	1453469	29 3
1451673	149 22	1451767	153 13	1452180	363		367	1453470	29 3
1451674	149 23	1451768	153 16	1452181	363	1453234	361	1453490	367 10
1451676	149 30	1451769	153 10	1452258	281 1		363	1453491	367 10
1451677	85 1	1451770	153 19	1452262	281 7		365	1453495	371 15
1451715	85 2	1451771	65 27	1452288	373		367	1453496	371 15
1451719	107 4	1451772	65 25	1452289	373	1453259	15 30	1453497	371 12
1451722	90 4	1451777	393 2	1452290	373	1453274	373 16	1453498	371 12
1451723	90 5	1451778	393 3	1452382	123 13	1453275	373 14	1453499	371 10
1451724	89 12	1451833	393 22	1452387	373	1453276	373 15	1453500	367 14
	90 10	1451856	40 2	1452388	373	1453277	369	1453550	187 14
1451725	89 15	1452059	393 3	1452389	373	1453278	369	1453551	187 15
	89 21	1452060	393 2	1452404	38 15	1453279	369	1453564	406 12
	90 16	1452066	393 19		38 3	1453280	369	1453692	374
1451726	90 8		397		38 8	1453281	369	1453728	393 7
1451727	89 20	1452074	237	1452406	38 13	1453282	369	1453775	311 18
	90 17	1452076	237	1452412	179 44	1453286	369	1453776	311 21
1451728	89 17	1452077	237 4	1452444	373 12	1453287	369	1453777	311 8
	90 7	1452079	237 14	1452452	373 11	1453288	369	1453798	19
1451729	89 16	1452080	237 21	1452521	373	1453315	149 45	1453799	19
	90 15	1452081	237 15	1452522	373	1453353	367	1453843	311
1451731	99 3	1452082	237 5	1452523	373	1453355	367	1453889	187 3
1451733	99 2	1452083	237 11	1452526	393 39	1453356	367	1453890	187 21
1451735	99 9	1452084	237 10		395	1453357	371	1454002	19 1
1451736	99 16	1452085	237 7	1452582	373 10	1453359	371	1454003	19 1
1451737	99 24	1452086	237 6	1452596	283 24	1453360	371	1454004	19 2
1451738	99 25	1452087	237 8	1452597	283 24	1453378	87 7	1454091	393 35
1451739	99 19	1452088	237 14	1452781	287	1453390	93 13	1454102	393 33
1451741	99 20	1452096	237	1452800	93 2	1453395	371 8	1454103	393 36
1451742	99 26	1452097	237 14	1452841	89 11	1453397	371	1454104	393 34
1451743	201 13	1452098	237 14		90 9	1453398	371	1454154	45 36
1451744	201 17	1452099	237 16	1452861	55	1453399	371	1454155	45 29
1451745	201 11	1452100	237 16	1452862	65 1	1453401	371	1454156	45 30
1451746	201 15	1452101	237 16	1452863	85 14	1453402	371	1454176	61 1

NUMERICAL INDEX

PART NO	REF PAGE NO													
	63	1	1455363	394	6		165	1	1458947	15	11	1465381	19	19
	65	19	1455364	394	7	1456345	267	3	1459303	187	41		21	21
1454242	59	29	1455367	394	3	1456346	267		1459453	107	8	1465403	15	23
1454267	93	12	1455369	394	5	1456528	129	23	1459454	107	21	1465406	15	23
1454282	403		1455370	394	10	1456552	7	6	1459455	107	11	1465553	15	53
1454288	403		1455371	394	11	1456726	127	7	1459565	289	25	1465621	406	11
1454289	403		1455372	394	13		147	8	1459728	91	17	1465628	406	2
1454290	403		1455373	394	12		149	8	1459731	93	11	1465634	187	2
1454291	403		1455423	371	15	1456727	149	6	1459763	289	30	1465635	187	5
1454296	104	3	1455424	371	15	1456744	199	3	1460024	149	41	1465639	187	13
1454301	403	17	1455471	394	8		201	3	1460025	149	1	1465640	187	19
1454302	403	22	1455472	394	9	1456745	99	23	1460066	104	9	1465641	187	20
1454316	193	47	1455473	394	4	1456782	99	18	1460100	63	1	1465642	187	27
	199	5	1455594	315	47	1456819	224	1	1460102	61	1	1465643	187	42
1454317	97	22		321	60	1456820	224	4	1460103	89	19	1465644	187	43
1454318	97	23		326	73	1456821	224	5	1460132	353		1465803	99	20
1454338	377	15		331	60	1456822	224	6	1460133	353		1465810	99	21
	389	27	1455595	315	43	1456823	224	7	1460134	347		1465811	99	22
1454339	393	20		321	56	1456824	224	2	1460135	347		1465812	99	25
	397			326	69	1456825	224	3	1460136	343		1465895	99	1
1454367	377	35		331	56	1456826	224	7	1460137	345		1465896	99	
1454368	377	36	1455596	315	12	1456827	224	8	1460179	353		1466016	107	2
1454369	377	12		315	45	1456829	224	5	1460180	353		1466329	99	8
	389	28		321	12	1456937	133	23	1460183	353		1466398	311	20
1454370	377	11		321	58	1457099	97	1	1460184	353		1466858	95	11
	389	29		325	12	1457151	40	23	1460189	343			97	11
1454403	383	2		326	71	1457275	224	12	1460190	343		1466859	81	27
1454435	397			331	12	1457279	224	9	1460197	345			83	27
1454436	397			331	58	1457284	224	10	1460198	343			85	27
1454437	397		1455623	339		1457296	224	11	1460209	87	8	1467401	103	1
1454438	397		1455631	254	6	1457336	427	20		89	18	1467402	103	2
1454439	397		1455641	281	11	1457644	419	41		90	19	1467403	103	3
1454440	398		1455814	293		1457645	419	34	1460246	419	34	1467404	103	3
1454441	398		1455855	159	2	1457668	432	5	1460247	419	41	1467405	103	4
1454442	398		1455856	159	16	1457771	127	32	1460252	419	35	1467407	103	7
1454443	398		1455857	159	17	1457833	427	19	1460253	419	42	1467408	103	7
1454444	398		1455861	159	4	1457876	193	39	1460254	419	38	1467409	103	7
1454506	319	31	1455862	159	13	1458191	29	2	1460255	419	45	1467415	85	1
1454507	319	31	1455864	159	1	1458323	23	15	1460256	419	39	1467586	33	35
1454508	339		1455867	27	3	1458327	149	46	1460257	419	51	1467588	33	31
1454562	389		1455877	159	15	1458329	57	6	1460454	99	1	1468891	159	16
1454656	383	11	1455926	159	5		59	6	1460564	92	10	1469300	271	5
1454693	383		1455928	181	2	1458331	81	21	1460572	149	2		273	11
1454694	383		1455929	181	17	1458332	81	23	1460962	7	5		275	9
1454695	383		1456027	223	8	1458373	183	11	1461402	409	15	1470910	263	30
1454954	205		1456028	223	5		189	6	1462541	5	1	1470911	263	32
1455057	245	2	1456109	223	11	1458551	15	32	1462542	5	1	1470912	263	33
1455058	245	14	1456118	207	2	1458552	15	31	1462734	3	1		263	36
1455061	301	35	1456286	165	2	1458554	15	2	1463263	5	1	1470913	263	34
1455265	45	16	1456287	165	9	1458694	73	16	1463548	7	1	1470916	263	35
1455353	395	1	1456339	130	1	1458890	159	16	1465375	15	23	1471320	263	45
1455354	395	2	1456340	161	1	1458940	15	12	1465376	15	23	1471326	85	36

NUMERICAL INDEX

PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO	PART NO	REF PAGE NO
1475420	293 19		339 3		335	2032229	298		335
1475421	293 20	2013366	335	2013804	335	2033099	378 1	2037435	181 5
1478007	335		335	2013805	335	2033105	378 10	2037934	183 24
1479119	239 24		335	2013809	335	2033141	378		211
1479120	404 1		335	2015363	335	2033308	378	2037996	187 22
1479121	415 24		339	2015364	335	2033326	378 2	2038103	181 5
1479122	425 7	2013403	335	2015375	335	2034459	23 3	2306366	378 8
1479123	9 24		335		335	2035275	207 1	3000495	47 16
1479124	9 38	2013404	335		335	2035276	207 3	3012611	195
1479125	9 39	2013405	335	2015376	335	2035802	335	3026190	95
1479126	9 42	2013407	335	2015377	335	2037088	261 34	3029189	193
2005059	297 7		335		335	2037089	261 33	3039895	259 35
2013361	335	2013414	336 24	2015381	335	2037090	261 35	3047334	5 17
	335	2013415	336 24	2032001	335	2037398	335		
	335	2013803	335						