

0CS10-M59000EN

TIRES

Purchase equivalent-quality tires for your skid-steer loader.
 Contact your dealer for replacement tire information.
 All air-filled tires take the 172215-01960 valve stem part number.

Ref.No.	Part No.	Description
1	172216-10100	ASSY/WHEEL 12.0 X16.5 HEAVY DUTY
2	172216-03210	WHEEL 16.5 X 9.75
3	172216-10110	ASSEMBLY/WHEEL 12 X 16.5 HEAVY DUTY FOAM-FILLED
4	172216-03210	WHEEL 16.5 X 9.75
5	172216-09970	ASSY/WHEEL 33 X 16.5 X 15.5 HEAVY DUTY
6	172216-04350	WHEEL 16.5 X 12
7	172215-11340	TIRE AND RIM/FLOTATION 10 X 16.5 8-PLY
8	172215-01390	WHEEL 16.5 X 8.25
9	172215-03470	ASSY/WHEEL 31 X 15.50-15
10	172215-01400	WHEEL 15 X 13
11	172216-10180	ASSY/WHEEL 10 X 16.5 NARROW HEAVY DUTY
12	172216-08190	WHEEL 16.5 X 8.25 NARROW
13	172216-09970	ASSEMBLY/WHEEL 33 X 16.5 X 15.5 HEAVY DUTY
14	172216-04350	WHEEL 16.5 X 12
15	172216-10140	ASSY/WHEEL 12 X 16.5 SEVERE DUTY
16	172216-03210	WHEEL 16.5 X 9.75
17	172216-10150	ASSEMBLY/WHEEL 12 X 16.5 SEVERE DUTY FOAM-FILLED
18	172216-03210	WHEEL 16.5 X 9.75
19	172216-10150	ASSY/WHEEL 12 X 16.5 SEVERE DUTY FOAM-FILLED
20	172216-03210	WHEEL 16.5 X 9.75
21	172216-09990	ASSY/WHEEL 10 X 16.5 SEVERE DUTY
22	172215-01390	WHEEL 16.5 X 8.25
23	172216-10030	ASSY/WHEEL SOLID FLEX 12 X 16.5 LEFT
24	172216-10040	ASSY/WHEEL SOLID FLEX 12 X 16.5 RIGHT
25	172217-04100	ASSEMBLY/WHEEL SOLID FLEX 14 X 17.5 LEFT
26	172217-04110	ASSEMBLY/WHEEL SOLID FLEX 14 X 17.5 RIGHT
27	172215-03450	ASSY/WHEEL SOLID FLEX 10 X 16.5 LEFT
28	172215-03460	ASSY/WHEEL SOLD FLEX 10 X 16.5 RIGHT
29	172216-10080	WHEEL/SOLID RUBBER 8.00 X 16

Contents

OCS10-M59000

Fig. No.	Fig. Name	Fig. No.	Fig. Name
MAIN LOADER COMPONENTS		25.	WHEEL DRIVES(S190R
1.	CHASSIS(S190R	26.	WHEEL DRIVES(S190R AXLE ASSEMBLY
2.	CHASSIS(S220R	27.	WHEEL DRIVES(S190R
3.	CHASSIS(S220R REAR BUMPER AND COUNTERWEIGHT	28.	WHEEL DRIVES(S220R
4.	CHASSIS(HVAC	29.	WHEEL DRIVES(S220R AXLE ASSEMBLY
5.	CHASSIS(HVAC	30.	ENGINE(S190R
6.	CHASSIS(HEATER-ONLY	31.	ENGINE(S220R
7.	CHASSIS(HYDRAULIC QUICK COUPLER	32.	AIR CLEANER AND EXHAUST(S190R
8.	GRILLE AND ENGINE COVER(S190R	33.	AIR CLEANER AND EXHAUST(S220R
9.	GRILLE AND ENGINE COVER(S220R	34.	RADIATOR/COOLER(S190R
10.	ROPS/FOPS STRUCTURE	35.	RADIATOR/COOLER(S220R
11.	ROPS/FOPS STRUCTURE(NON-HVAC	36.	HYDROSTATIC SYSTEM WITH DRIVE MOTORS(S190R SINGLE-SPEED HAND/FOOT AND DUAL JOYST
12.	ROPS/FOPS STRUCTURE(HVAC COMPLETING	37.	HYDROSTATIC SYSTEM WITH DRIVE MOTORS(S190R TWO-SPEED HAND/FOOT AND DUAL JOYSTICK
13.	ROPS/FOPS STRUCTURE(HEATER-ONLY	38.	HYDROSTATIC SYSTEM WITH DRIVE MOTORS(S220R SINGLE-SPEED HAND/FOOT AND DUAL JOYST
14.	RESTRAINT BAR	39.	HYDROSTATIC SYSTEM WITH DRIVE MOTORS(S220R TWO-SPEED HAND/FOOT AND DUAL JOYSTICK
15.	SEATS(NON-SUSPENSION	40.	HYDRAULICS-CHASSIS(S190R TANK HYDRAULICS
16.	SEATS(STANDARD AND SUSPENSION	41.	HYDRAULICS-CHASSIS(S220R TANK HYDRAULICS
17.	SEATS-SEAT BELT OPTION	42.	HYDRAULICS-CHASSIS(RIDE CONTROL ASSEMBLY
18.	SEATS-THREE-POINT RESTRAINT SEAT BELT OPTION	43.	HYDRAULICS-CHASSIS(S190R STANDARD AUXILIARY HYDRAULICS HAND/FOOT AND DUAL JOYSTI
19.	LIFT ARM(S190R	44.	HYDRAULICS-CHASSIS(S220R STANDARD AUXILIARY HYDRAULICS HAND/FOOT AND DUAL JOYSTI
20.	LIFT ARM(S220R	45.	HYDRAULICS-CHASSIS(S190R HIGH-FLOW AUXILIARY HYDRAULICS DUAL JOYSTICK AND HAND/F
21.	ATTACHMENT BRACKET(S190R MANUAL QUICK COUPLER	46.	HYDRAULICS-CHASSIS(S220R HIGH-FLOW AUXILIARY HYDRAULICS DUAL JOYSTICK AND HAND/F
22.	ATTACHMENT BRACKET(S220R MANUAL QUICK COUPLER	47.	HYDRAULICS-CHASSIS(HAND/FOOT AND DUAL JOYSTICK CONTROLS WITH SELF-LEVELING
23.	ATTACHMENT BRACKET(S190R HYDRAULIC QUICK COUPLER HITCH	48.	HYDRAULICS-CHASSIS(HAND/FOOT AND DUAL JOYSTICK CONTROLS WITHOUT SELF-LEVELING
24.	ATTACHMENT BRACKET(S220R HYDRAULIC QUICK COUPLER HITCH	49.	HYDRAULICS-LIFT ARM(S190R

Contents

OCS10-M59000

Fig. No. Fig. Name

- 50. HYDRAULICS-LIFT ARM(S220R
- 51. HYDRAULICS-LIFT ARM(S190R HIGH-FLOW
- 52. HYDRAULICS-LIFT ARM(S220R HIGH-FLOW
- 53. CONTROLS-WHEEL DRIVES-LIFT/TILT(HAND/FOOT CONTROLS
- 54. CONTROLS-WHEEL DRIVES-LIFT/TILT(DUAL JOYSTICK CONTROLS
- 55. CONTROLS-ENGINE(ELECTRIC THROTTLE SENSOR DUAL JOYSTICK CONTROLS
- 56. ELECTRICAL-CHASSIS
- 57. ELECTRICAL-CHASSIS(RIDE CONTROL/TWO-SPEED ASSEMBLY
- 58. ELECTRICAL-ROPS/FOPS
- 59. ELECTRICAL-ROPS/FOPS(STANDARD LIGHT HARNESS WITH SELF-LEVELING
- 60. ELECTRICAL-LIGHTS
- 61. ELECTRICAL-ENGINE(S190R
- 62. ELECTRICAL-ENGINE(S220R
- 63. ELECTRICAL-CONTROL(HIGH FLOW CONTROL/TWO-SPEED CONTROL
- 64. ELECTRICAL-14-PIN AUXILIARY CONNECTOR(S190R
- 65. ELECTRICAL-14-PIN AUXILIARY CONNECTOR(S220R
- 66. FOUR-POINT LIFT
- 67. SOUND SUPPRESSION(S190R STANDARD
- 68. SOUND SUPPRESSION(S190R DELUXE(OPTIONAL)
- 69. SOUND SUPPRESSION(S220R STANDARD
- 70. SOUND SUPPRESSION(S220R DELUXE(OPTIONAL)
- 71. TIRES
- 132. BRAKE RELEASE(S190R
- 133. BRAKE RELEASE(S220R
- 72. DECALS(1

Fig. No. Fig. Name

- 73. DECALS(2
- 74. DECALS(3
- 75. DECALS(4
- 76. DECALS(5
- 77. DECALS(6

HYDRAULIC COMPONENTS

- 78. LIFT CYLINDER(S190R
- 79. LIFT CYLINDER(S220R
- 80. TILT CYLINDER(S190R
- 81. TILT CYLINDER(S220R
- 82. DRIVE MOTORS(S190R SINGLE-SPEED
- 83. DRIVE MOTORS(S190R SINGLE-SPEED
- 84. DRIVE MOTORS(S220R SINGLE-SPEED
- 85. DRIVE MOTORS(S190R TWO-SPEED
- 86. DRIVE MOTORS(S220R TWO-SPEED
- 87. TANDEM PUMP(HAND/FOOT AND DUAL JOYSTICK PUMP
- 88. TANDEM PUMP(HAND/FOOT AND DUAL JOYSTICK TANDEM PUMP/ENGINE END
- 89. TANDEM PUMP(HAND/FOOT AND DUAL JOYSTICK TANDEM PUMP/GEAR PUMP END
- 90. GEAR PUMP-SINGLE(S190R STANDARD AUXILIARY
- 91. GEAR PUMP-SINGLE(S220R STANDARD AUXILIARY
- 92. GEAR PUMP-DOUBLE(S190R HIGH-FLOW AUXILIARY
- 93. GEAR PUMP-DOUBLE(S220R HIGH-FLOW AUXILIARY
- 94. SELF-LEVELING VALVE
- 95. LIFT AND TILT SOLENOID VALVE(SOLENOID

Contents

OCS10-M59000

Fig. No. Fig. Name

- 96. LIFT AND TILT SOLENOID VALVE(HYDRAULIC SOLENOID THREE-WAY SOLENOID VALVES-BRAKE, JOYSTICK SUPPLY AND BRAKE
- 97. RELEASE(SINGLE-SPEED SOLENOID VALVES-BRAKE, JOYSTICK SUPPLY AND BRAKE
- 98. RELEASE(TWO-SPEED SOLENOID VALVES-BRAKE, JOYSTICK SUPPLY AND BRAKE
- 99. RELEASE(JOYSTICK SUPPLY MAIN CONTROL VALVE(STANDARD CONTROL VALVE-HAND/FOOT AND
- 100. DUAL JOYSTICK CONTROLS MAIN CONTROL VALVE(HIGH-FLOW CONTROL VALVE-HAND/FOOT AND
- 101. DUAL JOYSTICK CONTROLS
- 102. RIDE CONTROL MANIFOLD
- 103. CONDENSOR, HEATER HOUSING AND HVAC HOUSING ASSEMBLY
- 104. FOOT VALVE

KITS AND ACCESSORIES

- 105. COUNTERWEIGHT KIT
- 106. AUXILIARY COUPLER SERVICE KITS
- 107. WARNING LAMP KIT
- 108. REARVIEW MIRROR KIT
- 109. AM/FM RADIO KIT
- 110. 3-POINT RESTRAINT-2INCH SEAT BELT
- 111. 3-POINT RESTRAINT-3INCH SEAT BELT
- 112. ENGINE BLOCK HEATER KIT
- 113. CAB DOOR KIT
- 114. CAB DOOR KIT(DOOR COMPLETING PACKAGE
- 115. SIDE WINDOW KIT
- 116. SEAT BELT KIT(2INCH
- 117. SEAT BELT KIT(3INCH
- 118. SEAT KIT(SUSPENSION

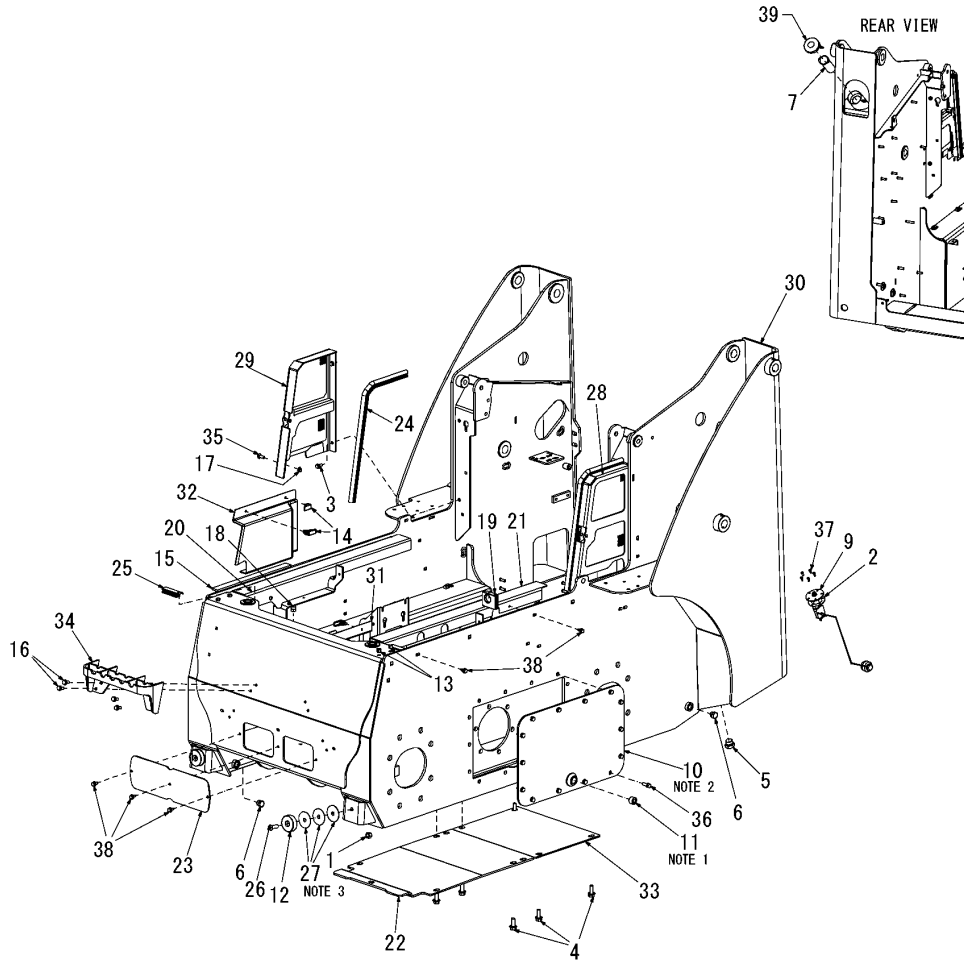
Fig. No. Fig. Name

- 119. SEAT KIT(STANDARD
- 120. UNIVERSAL RADIO KIT
- 121. PRE-CLEANER KIT(S190R
- 122. DUAL FLASHER KIT
- 123. IMPACT-RESISTANT DOOR KIT(S220R
- 124. FOUR-POINT LIFT KIT
- 125. REAR WIPER KIT
- 126. HYDRAULIC QUICK COUPLER KIT(S190R
- 127. HYDRAULIC QUICK COUPLER KIT(S220R
- 128. COMPLETING KIT FOR ALL HYDRAULIC QUICK COUPLER KITS
- 129. CAB HEATER KIT
- 130. CAB HEATER COMPLETING PARTS-CAB HEATER KIT
- 131. IMPACT-RESISTANT FRONT DOOR KIT(S190R

Fig.1. CHASSIS(S190R)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

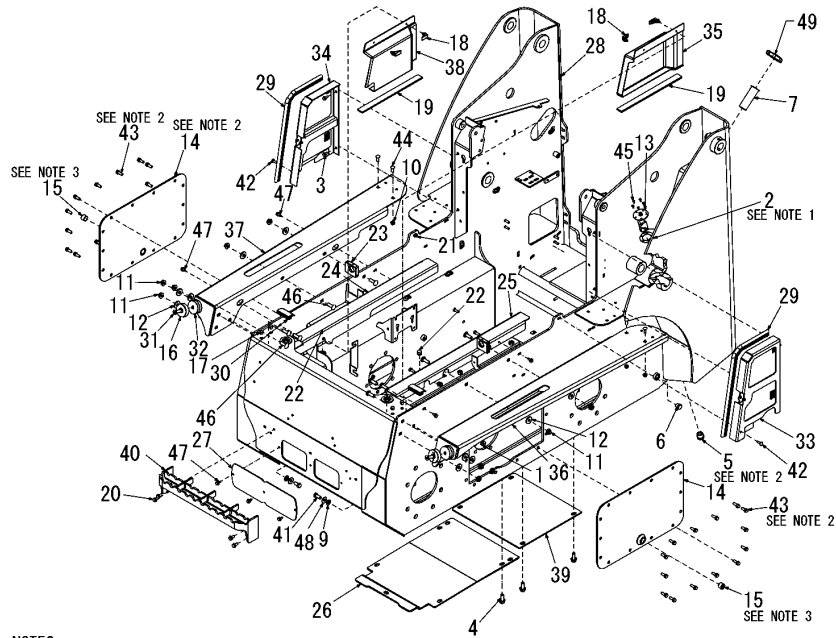


- NOTES:
 1. APPLY PIPE THREAD SEALANT
 2. APPLY OIL-RESISTANT RTV
 3. SHIM AS REQUIRED

No.	Lev.	Parts No.	Description	Qty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00290	NUT	2							
2	1	172216-00210	GASKET, FUEL SENDER	1							
3	1	172551-00610	SCREW	4							
4	1	172215-00510	SCREW	6							
5	1	172551-01040	PLUG	1							
6	1	172215-00620	PLUG	3							
7	1	172216-01240	STRAINER, FUEL FILL	1							
8	1	172216-09380	SCREW	2							1
9	1	172216-02080	FUEL SENSOR, VDO	1							
10	1	172217-00300	COVER ASSY	2							
11	1	172551-02190	PLUG	2							
12	1	172215-01720	STOP, DOWN	2							
13	1	172216-05270	PLUG, HOLE	4							
14	1	172216-05820	LATCH, SWELL	4							
15	1	172216-06260	STRIP, FOAM	2							
16	1	172216-06810	SCREW	4							
17	1	172215-06620	NUT	2							
18	1	172215-07170	BREATHER	2							
19	1	172218-00890	PLUG, PASS THROUGH	2							
20	1	172218-01140	FILLER, ROPS RIGHT	1							
21	1	172218-01150	FILLER, ROPS LEFT	1							
22	1	172218-01340	BELLY PAN	1							
23	1	172218-02540	COVER, CLEAN-OUT	1							
24	1	172218-04500	SEAL, BULB 90	2							
25	1	172218-04880	SEAL, FILLER PLATE	2							
26	1	172215-07710	SCREW	2							
27	1	172215-08690	SHIM	6							
28	1	172216-12620	COVER, SIDE L	1							
29	1	172216-12630	COVER, SIDE R	1							
30	1	172216-12640	CHASSIS, WLDMT	1							
31	1	172216-12650	COVER, LOWER LEFT	1							
32	1	172216-12660	COVER, LOWER RIGHT	1							
33	1	172216-12670	COVER, CHASSIS	1							
34	1	172216-12680	STEP	1							
35	1	172215-02820	BOLT	2							
36	1	172216-09500	SCREW	28							
37	1	172215-03120	SCREW	5							
38	1	172215-03150	SCREW	7							
39	1	172216-01250	CAP, FUEL TANK	1							

Remarks
 (1)Not shown in illustration.

Fig.2. CHASSIS(S220R



- NOTES:
 1. APPLY HI-TACK GASKET ADHESIVE
 2. APPLY OIL-RESISTANT RTV
 3. APPLY PIPE THREAD SEALANT

(A)=S190R-1
 (B)=S220R-1
 (C)=

(D)=
 (E)=
 (F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00290	NUT		2						
2	1	172216-00210	GASKET, FUEL SENDER		1						
3	1	172551-00610	SCREW		4						
4	1	172215-00510	SCREW		6						
5	1	172551-01040	PLUG		1						
6	1	172215-00620	PLUG		1						
7	1	172216-01240	STRAINER, FUEL FILL		1						
8	1	172216-09380	SCREW		2						1
9	1	172216-12690	WASER		2						
10	1	172551-00720	NUT		4						
11	1	172215-00710	NUT		10						
12	1	172216-01770	WASHER		10						
13	1	172216-02080	FUEL SENSOR, VDO		1						
14	1	172217-00300	COVER ASSY		2						
15	1	172551-02190	PLUG		2						
16	1	172215-01720	STOP, DOWN		2						
17	1	172216-05270	PLUG, HOLE		4						
18	1	172216-05820	LATCH, SWELL		4						
19	1	172216-06260	STRIP, FOAM		2						
20	1	172216-06810	SCREW		4						
21	1	172215-06620	NUT		2						
22	1	172215-07170	BREATHER		2						
23	1	172218-00890	PLUG, PASS THROUGH		2						
24	1	172218-01140	FILLER, ROPS RIGHT		1						
25	1	172218-01150	FILLER, ROPS LEFT		1						
26	1	172218-01340	BELLY PAN		1						
27	1	172218-02540	COVER, CLEAN-OUT		1						
28	1	172216-12700	CHASSIS, WLDMT		1						
29	1	172218-04500	SEAL, BULB 90		2						
30	1	172218-04880	SEAL, FILLER PLATE		2						
31	1	172215-07710	SCREW		2						
32	1	172215-08690	SHIM		6						
33	1	172216-12620	COVER, SIDE L		1						
34	1	172216-12630	COVER, SIDE R		1						
35	1	172216-12650	COVER, LOWER LEFT		1						
36	1	172216-12710	FENDER, WLDMT L		1						
37	1	172216-12720	FENDER, WLDMT R		1						
38	1	172216-12660	COVER, LOWER RIGHT		1						
39	1	172216-12730	COVER, CHASSIS		1						
40	1	172216-12740	STEP		1						
41	1	172551-09560	SCREW		2						
42	1	172215-02820	BOLT		2						
43	1	172216-09500	SCREW		28						
44	1	172218-05020	BOLT		4						
45	1	172215-03120	SCREW		5						
46	1	172216-12750	BOLT		10						
47	1	172215-03150	SCREW		7						
48	1	172215-03340	WASHER		2						
49	1	172216-01250	CAP, FUEL TANK		1						

Remarks
 (1)Not shown in illustration.

Fig.3. CHASSIS(S220R REAR BUMPER AND COUNTERWEIGHT

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172218-00080	NUT		2						
2	1	172216-12760	BUMPER, REAR-CASTING		1						
3	1	172215-03060	WASHER		4						
4	1	172218-05170	SCREW		2						
5	1	172218-00080	NUT		2						
6	1	172218-04470	COUNTERWEIGHT, CAST		1						
7	1	172218-05170	SCREW		2						
8	1	172216-09810	WASHER		2						

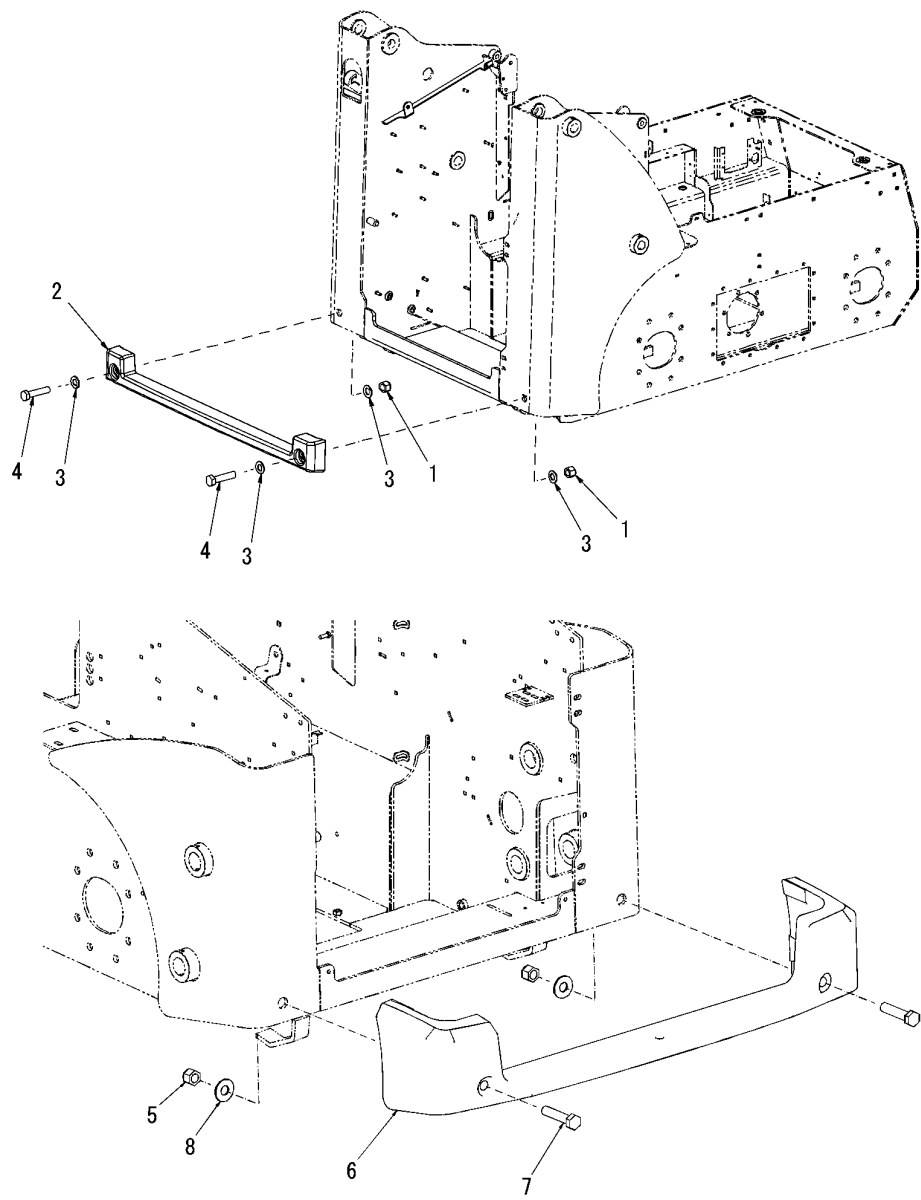
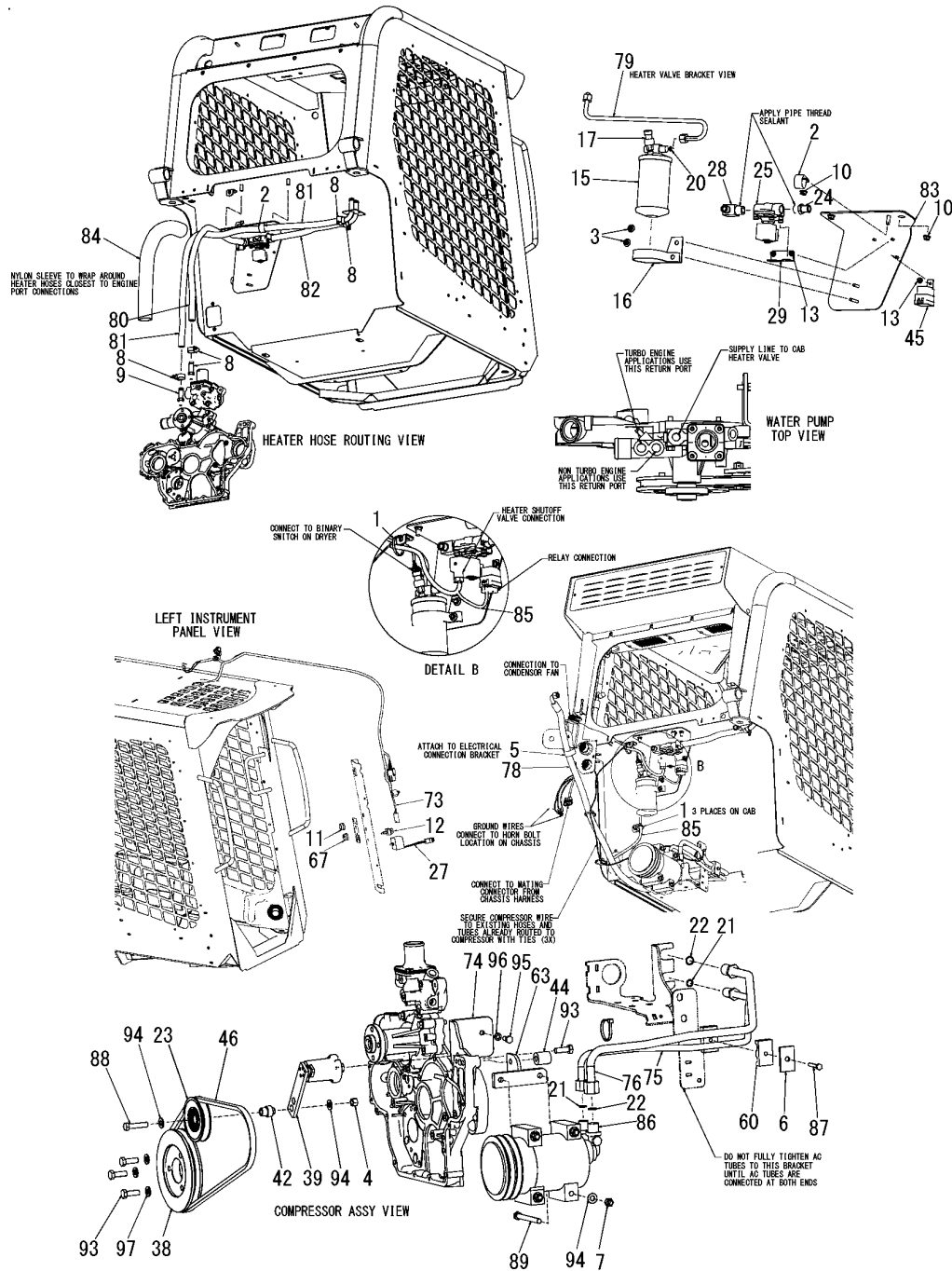


Fig.4. CHASSIS(HVAC)



(A)=S190R-1
(B)=S220R-1
(C)=

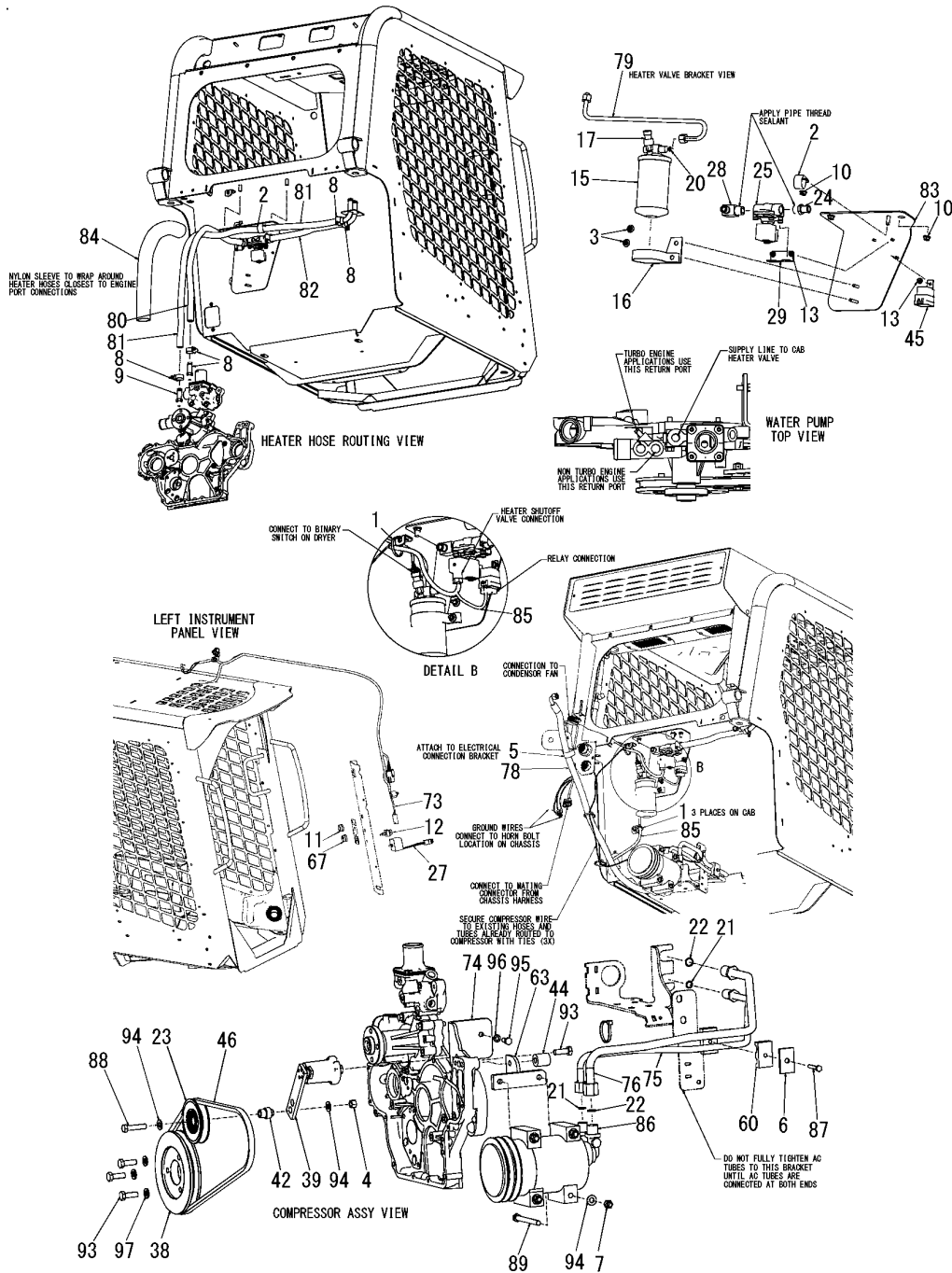
(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Qty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00120	TIE, CABLE	6	6						
2	1	172216-00080	CLAMP	1	1						
3	1	172551-00230	NUT	2	2						
4	1	172551-00280	NUT	1	1						
5	1	172215-00320	CLAMP	1	1						
6	1	172551-00510	PLATE	1	1						
7	1	172216-00490	NUT	4	4						
8	1	172551-00760	CLAMP	14	14						
9	1	172551-00840	FITTING	2	2						
10	1	172551-01060	NUT	7	7						
11	1	172215-00740	KNOB	1	1						
12	1	172551-01280	SWITCH, HEATER	1	1						
13	1	172551-01590	FLANGE	3	3						
15	1	172551-01680	RECEIVER DRIER	1	1						
16	1	172551-01690	CLAMP	1	1						
17	1	172551-01710	SWITCH, BINARY	1	1						
20	1	172551-01730	O-RING	6	6						
21	1	172551-01740	O-RING	4	4						
22	1	172551-01750	O-RING	5	5						
23	1	172551-01830	PULLEY W/BEARING	1	1						
24	1	172551-02270	FITTING	1	1						
25	1	172551-02300	VALVE, SOLENOID	1	1						
27	1	172551-02380	MODULE, A/C CONTROL	1	1						
28	1	172217-01170	FITTING	1	1						
29	1	172216-12780	BRACKET, VALVE	1	1						
38	1	172551-02880	PULLEY, CRANKSHAFT	1	1						
39	1	172551-02890	TENSIONER	1	1						
42	1	172551-02910	SPACER, PULLEY	1	1						
44	1	172216-07890	SPACER, ALTERNATOR	1	1						
45	1	172216-07930	RELAY, SEALED	1	1						
46	1	172216-07950	BELT, AC	1	1						
60	1	172551-03120	CLAMP	2	2						
63	1	172216-08290	BRACKET, COMPRESSOR	1	1						
67	1	172218-04490	KNOB, TEMP CONTROL	1	1						
73	1	172218-05760	HARNES, HVAC CAB	1	1						
74	1	172216-12820	BRACKET, TENSIONER	1	1						
75	1	172216-12830	TUBE, AC H- PRESSURE	1	1						
76	1	172216-12840	TUBE, AC L- PRESSURE	1	1						
78	1	172216-12860	HOSE	1	1						
79	1	172216-12870	TUBE, AC	1	1						
80	1	172216-12880	HOSE, HEATER	1	1						
81	1	172216-12890	HOSE, HEATER	1	1						
82	1	172216-12900	HOSE, HEATER	1	1						
83	1	172216-12910	BRACKET ASSY, VALVE	1	1						
84	1	172216-12920	SLEEVE	1	1						
85	1	172216-12930	HARNES, CHASSIS	1	1						
86	1	172216-12940	COMPRESSOR, A-C	1	1						
87	1	172551-09450	SCREW	1	1						
88	1	172551-09630	SCREW	1	1						
89	1	172216-09450	SCREW	4	4						
93	1	172551-10060	SCREW	4	4						

Fig.4. CHASSIS(HVAC)

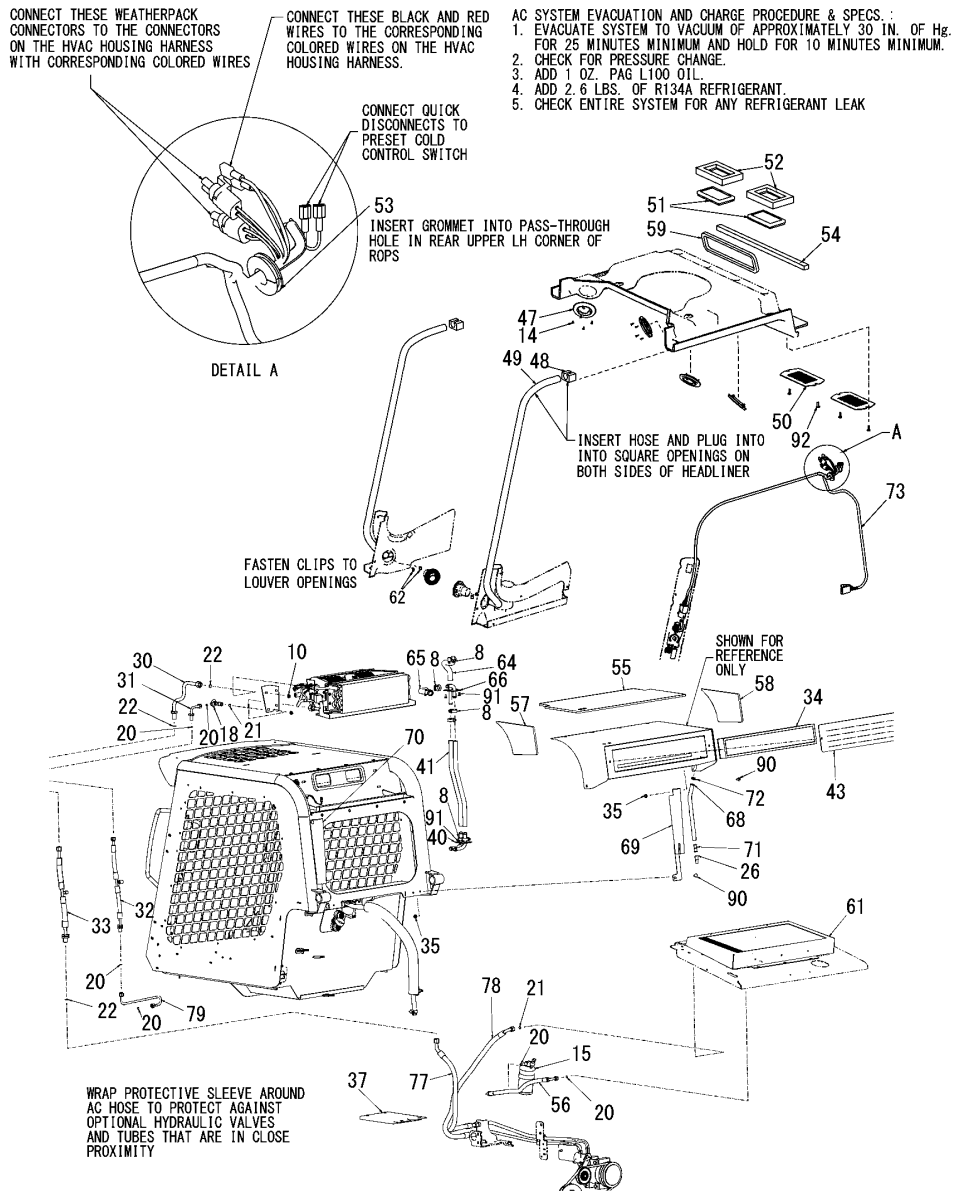
(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
94	1	172551-10400	WASHER	6	6						
95	1	172215-03360	SCREW	1	1						
96	1	172215-03380	WASHER	1	1						
97	1	172216-09850	WASHER	3	3						

Fig.5. CHASSIS(HVAC)



(A)=S190R-1
 (B)=S220R-1
 (C)=

(D)=
 (E)=
 (F)=

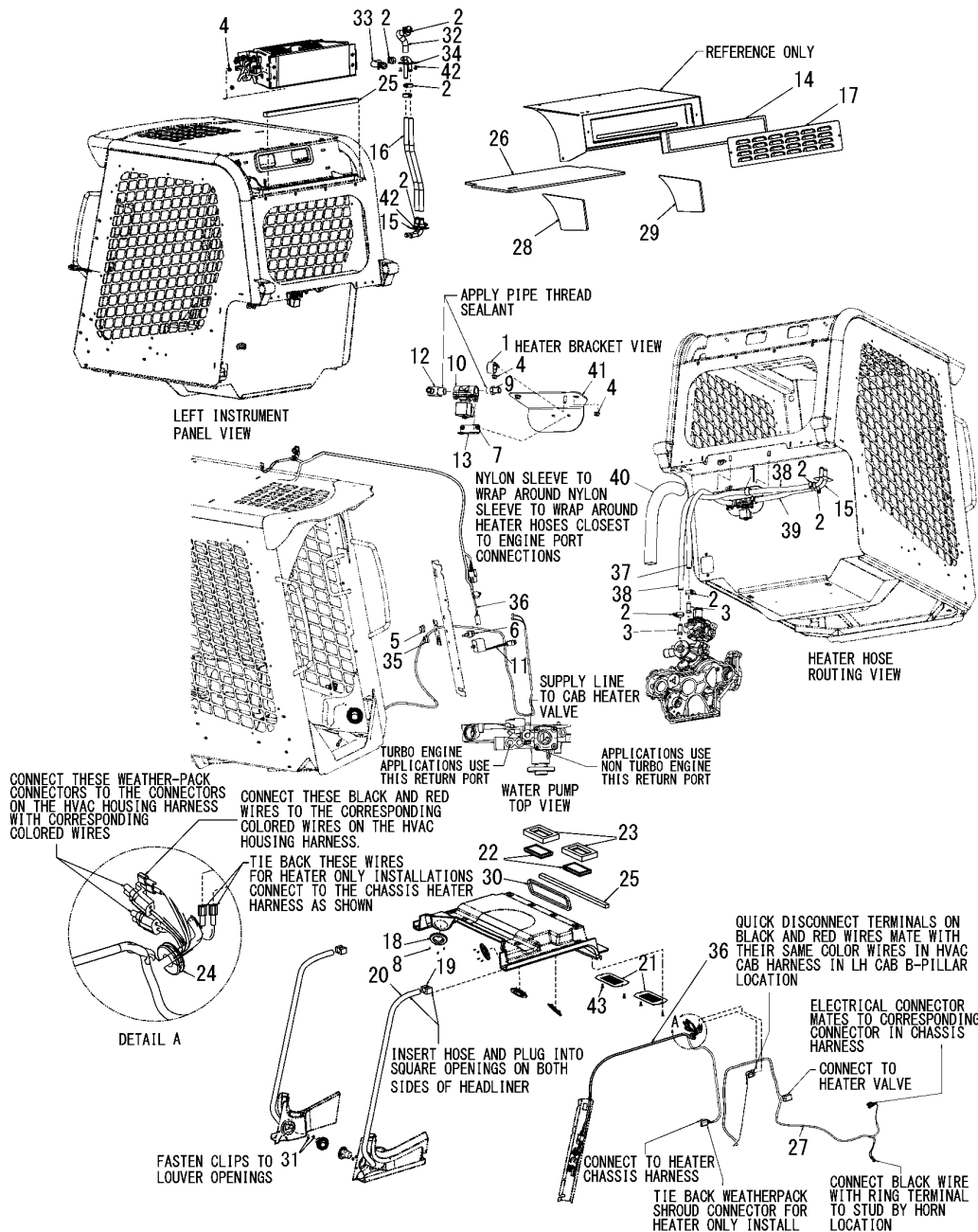
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
8	1	172551-00760	CLAMP	14	14						
10	1	172551-01060	NUT	7	7						
14	1	172216-06750	SCREW	16	16						
15	1	172551-01680	RECEIVER DRIER	1	1						
18	1	172216-02670	VALVE, EXPANSION, AC	1	1						
19	1	172216-12770	O-RING KIT	1	1						1
20	1	172551-01730	O-RING	6	6						
21	1	172551-01740	O-RING	4	4						
22	1	172551-01750	O-RING	5	5						
26	1	172216-04240	CAP, DRIP	2	2						
30	1	172218-00630	TUBE, AC	1	1						
31	1	172218-00640	TUBE, AC	1	1						
32	1	172218-00650	HOSE	1	1						
33	1	172218-00660	HOSE	1	1						
34	1	172551-00010	FILTER, FRESH AIR	1	1						
35	1	172215-06620	NUT	4	4						
37	1	172216-12800	PAD, INSULATION	1	1						
40	1	172218-01110	PLATE, HEATER TUBES	1	1						
41	1	172218-01120	HOSE, HEATER	2	2						
43	1	172218-01410	PLATE, COVER	1	1						
47	1	172218-02170	VENT	4	4						
48	1	172218-02330	PLUG, TUBE	2	2						
49	1	172218-02340	TUBE, FORWARD HVAC	2	2						
50	1	172218-02810	COVER, RECIRC	2	2						
51	1	172551-03090	FILTER, AIR	2	2						
52	1	172218-02820	PAD, SEALING FILTER	2	2						
53	1	172218-02880	GROMMET	1	1						
54	1	172218-02890	PAD	1	1						
55	1	172218-02970	PAD, HOUSING TOP	1	1						
56	1	172218-03260	HOSE	1	1						
57	1	172218-03450	PAD, HOUSING LEFT	1	1						
58	1	172218-03460	PAD, HOUSING RIGHT	1	1						
59	1	172218-03480	PAD, HEADLINER SEAL	1	1						
61	1	172216-12810	CONDENSER ASSY	1	1						2
62	1	172218-03950	CLIP, HOSE RETAINING	4	4						
64	1	172218-04180	HOSE, MOLDED HEATER	1	1						
65	1	172218-04190	HOSE, MOLDED HEATER	1	1						
66	1	172218-04200	TUBE, HEATER	1	1						
68	1	172218-04670	TUBE, DRAIN HVAC	2	2						
69	1	172218-04710	COVER, DRAIN HVAC, R	1	1						
70	1	172218-04720	COVER, DRAIN HVAC, L	1	1						
71	1	172218-04730	HOSE	2	2						
72	1	172218-04860	CLAMP	2	2						
73	1	172218-05760	HARNES, HVAC CAB	1	1						
77	1	172216-12850	HOSE	1	1						
78	1	172216-12860	HOSE	1	1						
79	1	172216-12870	TUBE, AC	1	1						
90	1	172218-05000	BOLT	4	4						
91	1	172215-03110	SCREW	4	4						
92	1	172551-10010	SCREW	4	4						

Remarks
 (1)Not shown in illustration.
 (2)For breakdown see Fig.No.103.

Fig.6. CHASSIS(HEATER-ONLY

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



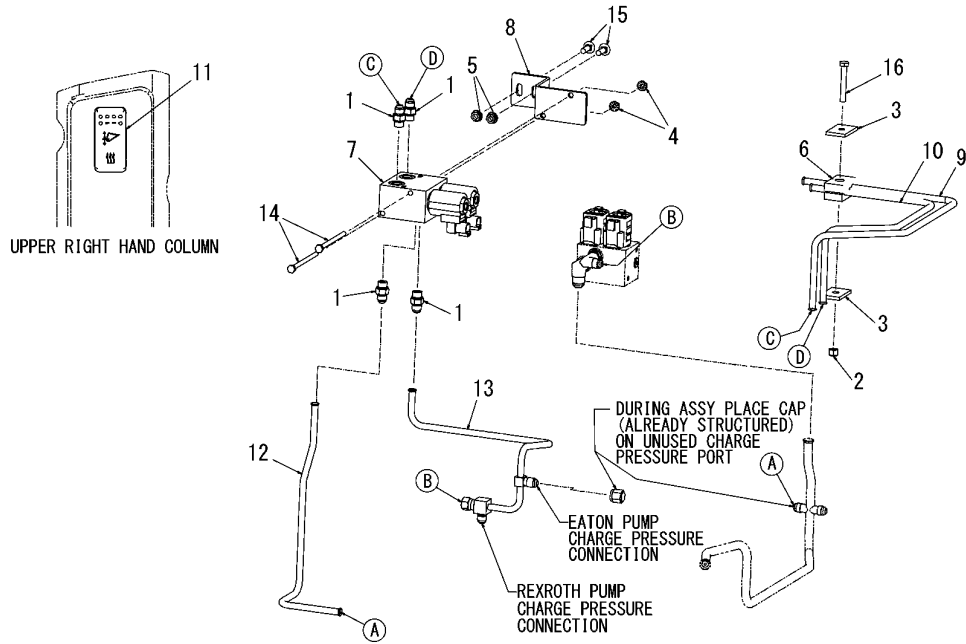
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-00080	CLAMP	1	1						
2	1	172551-00760	CLAMP	14	14						
3	1	172551-00840	FITTING	2	2						
4	1	172551-01060	NUT	7	7						
5	1	172215-00740	KNOB	1	1						
6	1	172551-01280	SWITCH, HEATER	1	1						
7	1	172551-01590	FLANGE	2	2						
8	1	172216-06750	SCREW	16	16						
9	1	172551-02270	FITTING	1	1						
10	1	172551-02300	VALVE, SOLENOID	1	1						
11	1	172551-02380	MODULE, A/C CONTROL	1	1						
12	1	172217-01170	FITTING	1	1						
13	1	172216-12780	BRACKET, VALVE	1	1						
14	1	172551-00010	FILTER, FRESH AIR	1	1						
15	1	172218-01110	PLATE, HEATER TUBES	1	1						
16	1	172218-01120	HOSE, HEATER	2	2						
17	1	172218-01410	PLATE, COVER	1	1						
18	1	172218-02170	VENT	4	4						
19	1	172218-02330	PLUG, TUBE	2	2						
20	1	172218-02340	TUBE, FORWARD HVAC	2	2						
21	1	172218-02810	COVER, RECIRC	2	2						
22	1	172551-03090	FILTER, AIR	2	2						
23	1	172218-02820	PAD, SEALING FILTER	2	2						
24	1	172218-02880	GROMMET	1	1						
25	1	172218-02890	PAD	1	1						
26	1	172218-02970	PAD, HOUSING TOP	1	1						
27	1	172218-05770	HARNESS, HEATER	1	1						
28	1	172218-03450	PAD, HOUSING LEFT	1	1						
29	1	172218-03460	PAD, HOUSING RIGHT	1	1						
30	1	172218-03480	PAD, HEADLINER SEAL	1	1						
31	1	172218-03950	CLIP, HOSE RETAINING	4	4						
32	1	172218-04180	HOSE, MOLDED HEATER	1	1						
33	1	172218-04190	HOSE, MOLDED HEATER	1	1						
34	1	172218-04200	TUBE, HEATER	1	1						
35	1	172218-04490	KNOB, TEMP CONTROL	1	1						
36	1	172218-05760	HARNESS, HVAC CAB	1	1						
37	1	172216-12880	HOSE, HEATER	1	1						
38	1	172216-12890	HOSE, HEATER	1	1						
39	1	172216-12900	HOSE, HEATER	1	1						
40	1	172216-12920	SLEEVE	1	1						
41	1	172216-12950	BRKT ASSY, VALVE	1	1						
42	1	172215-03110	SCREW	6	6						
43	1	172551-10010	SCREW	4	4						

N:Old $\xrightarrow{\text{Yes}}$ New, Q:Old $\xrightarrow{\text{No}}$ New, R:Old $\xrightarrow{\text{Yes}}$ New, S:Old $\xrightarrow{\text{No}}$ New, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change

Fig.7. CHASSIS(HYDRAULIC QUICK COUPLER)

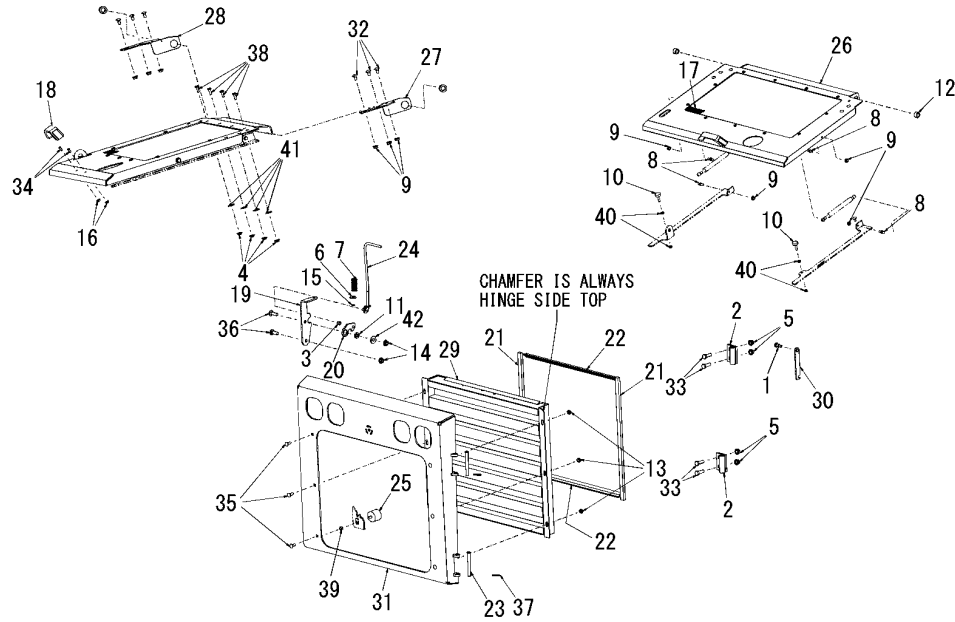
(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00070	FITTING	4	4						
2	1	172551-00150	NUT	1	1						
3	1	172551-00510	PLATE	2	2						
4	1	172215-06610	NUT	2	2						
5	1	172215-06620	NUT	2	2						
6	1	172216-12960	CLAMP	1	1						
7	1	172216-12970	VALVE, QUICK COUPLER	1	1						
8	1	172216-12980	BRKT, QUICK COUPLER	1	1						
9	1	172216-12990	TUBE, QUICK COUPLER	1	1						
10	1	172216-13000	TUBE, QUICK COUPLER	1	1						
11	1	172216-13010	SWITCH, Q COUPLER	1	1						
12	1	172216-13020	TUBE, DRAIN	1	1						
13	1	172216-13030	TUBE, CHARGE	1	1						
14	1	172216-09260	SCREW	2	2						
15	1	172215-02820	BOLT	2	2						
16	1	172551-09760	SCREW	1	1						

Fig.8. GRILLE AND ENGINE COVER(S190R



(A)=S190R-1
(B)=S220R-1
(C)=

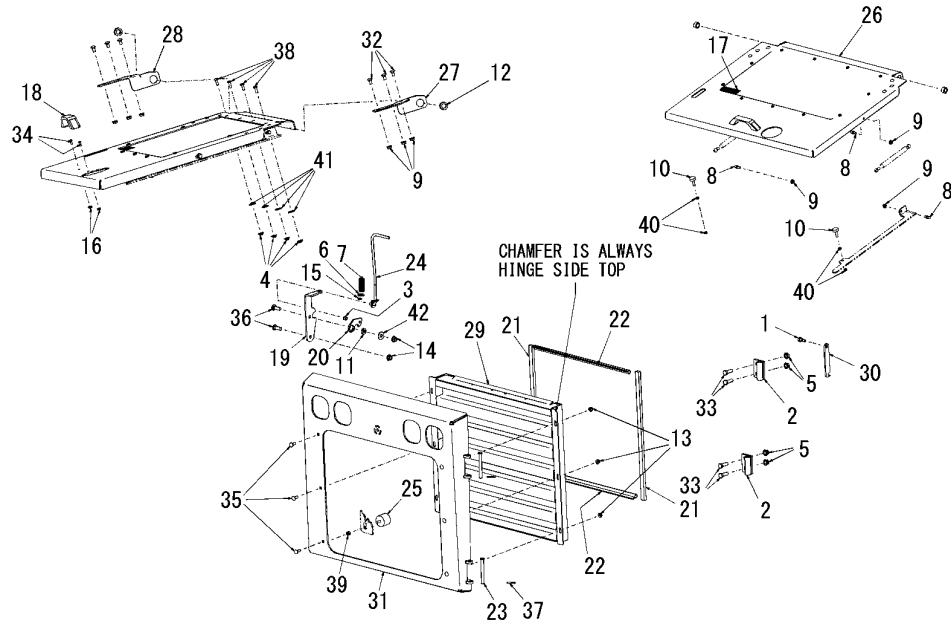
(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Qty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172215-03790	BOLT	1							
2	1	172215-04030	HINGE, REAR DOOR	2							
3	1	172551-00180	NUT	1							
4	1	172551-00230	NUT	11							
5	1	172551-00580	NUT	4							
6	1	172218-00040	WASHER	1							
7	1	172216-00520	SPRING, COMPRESSION	1							
8	1	172215-00550	STUD, BALL	4							
9	1	172551-01060	NUT	10							
10	1	172551-01070	BUMPER	2							
11	1	172216-01200	BUSHING	1							
12	1	172216-01210	BUSHING	2							
13	1	172215-00700	NUT	6							
14	1	172215-00710	NUT	2							
15	1	172218-00090	CLIP, RETAINING	1							
16	1	172551-01590	FLANGE	2							
17	1	172217-00420	SCREEN	1							
18	1	172215-01410	HANDLE, GRAB	1							
19	1	172218-00490	LATCH, MOUNT	1							
20	1	172218-00500	LATCH, REAR GRILLE	1							
21	1	172218-00510	SEAL, FOAM	2							
22	1	172217-01060	SEAL, BULB	2							
23	1	172215-06940	PIN, CLEVIS	2							
24	1	172218-01530	ROD ASSY, LATCH	1							
25	1	172215-09280	BUMPER, RUBBER	1							
26	1	172216-13040	COVER, ENGINE	1							
27	1	172216-13050	HINGE FLANGE R	1							
28	1	172216-13060	HINGE FLANGE L	1							
29	1	172216-13070	GRILLE, REAR	1							
30	1	172216-13080	LEVER, DOOR PROP	1							
31	1	172216-13090	DOOR, REAR	1							
32	1	172551-09470	BOLT	6							
33	1	172215-02700	SCREW	4							
34	1	172551-09610	SCREW	2							
35	1	172551-09750	BOLT	6							
36	1	172551-09870	BOLT	2							
37	1	172215-03000	PIN, COTTER	2							
38	1	172551-10010	SCREW	11							
39	1	172551-10300	NUT	1							
40	1	172551-10320	NUT	4							
41	1	172551-10370	WASHER	11							
42	1	172551-10390	WASHER	1							

Fig.9. GRILLE AND ENGINE COVER(S220R)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

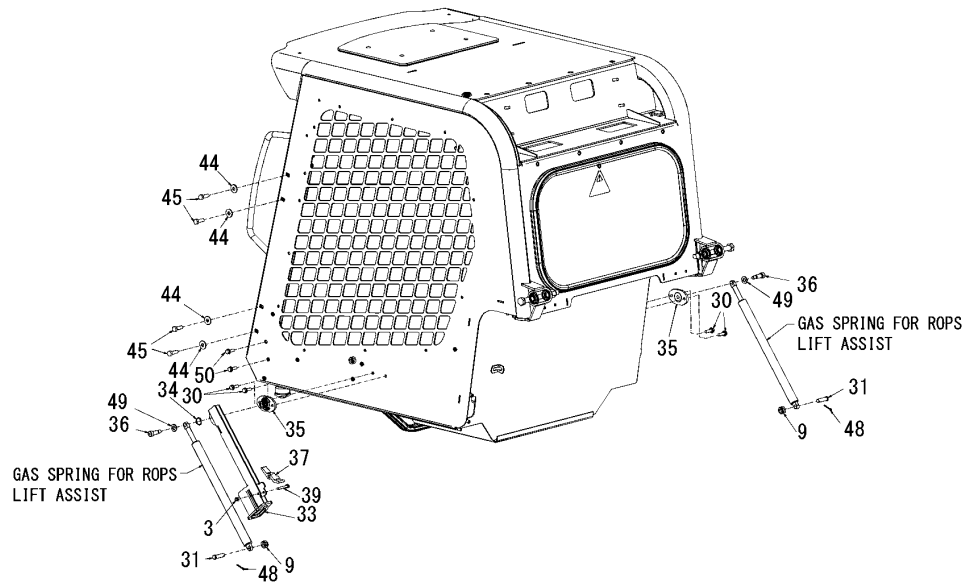
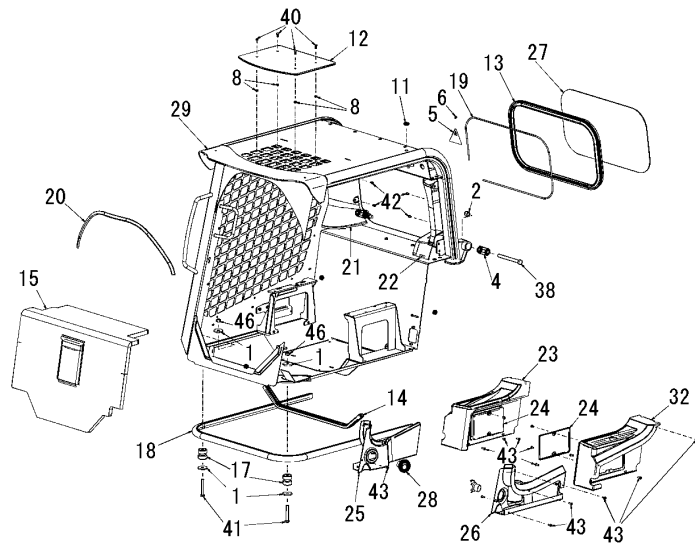


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172215-03790	BOLT		1						
2	1	172215-04030	HINGE, REAR DOOR		2						
3	1	172551-00180	NUT		1						
4	1	172551-00230	NUT		11						
5	1	172551-00580	NUT		4						
6	1	172218-00040	WASHER		1						
7	1	172216-00520	SPRING, COMPRESSION		1						
8	1	172215-00550	STUD, BALL		4						
9	1	172551-01060	NUT		10						
10	1	172551-01070	BUMPER		2						
11	1	172216-01200	BUSHING		1						
12	1	172216-01210	BUSHING		2						
13	1	172215-00700	NUT		6						
14	1	172215-00710	NUT		2						
15	1	172218-00090	CLIP, RETAINING		1						
16	1	172551-01590	FLANGE		2						
17	1	172217-00420	SCREEN		1						
18	1	172215-01410	HANDLE, GRAB		1						
19	1	172218-00490	LATCH, MOUNT		1						
20	1	172218-00500	LATCH, REAR GRILLE		1						
21	1	172216-13100	SEAL, BULB		2						
22	1	172217-01060	SEAL, BULB		2						
23	1	172215-06940	PIN, CLEVIS		2						
24	1	172218-01530	ROD ASSY, LATCH		1						
25	1	172215-09280	BUMPER, RUBBER		1						
26	1	172216-13110	COVER, ENGINE		1						
27	1	172216-13050	HINGE FLANGE R		1						
28	1	172216-13060	HINGE FLANGE L		1						
29	1	172216-13070	GRILLE, REAR		1						
30	1	172216-13080	LEVER, DOOR PROP		1						
31	1	172216-13090	DOOR, REAR		1						
32	1	172551-09470	BOLT		6						
33	1	172215-02700	SCREW		4						
34	1	172551-09610	SCREW		2						
35	1	172551-09750	BOLT		6						
36	1	172551-09870	BOLT		2						
37	1	172215-03000	PIN, COTTER		2						
38	1	172551-10010	SCREW		11						
39	1	172551-10300	NUT		1						
40	1	172551-10320	NUT		4						
41	1	172551-10370	WASHER		11						
42	1	172551-10390	WASHER		1						

Fig.10. ROPS/FOPS STRUCTURE

(A)=S190R-1
(B)=S220R-1
(C)=

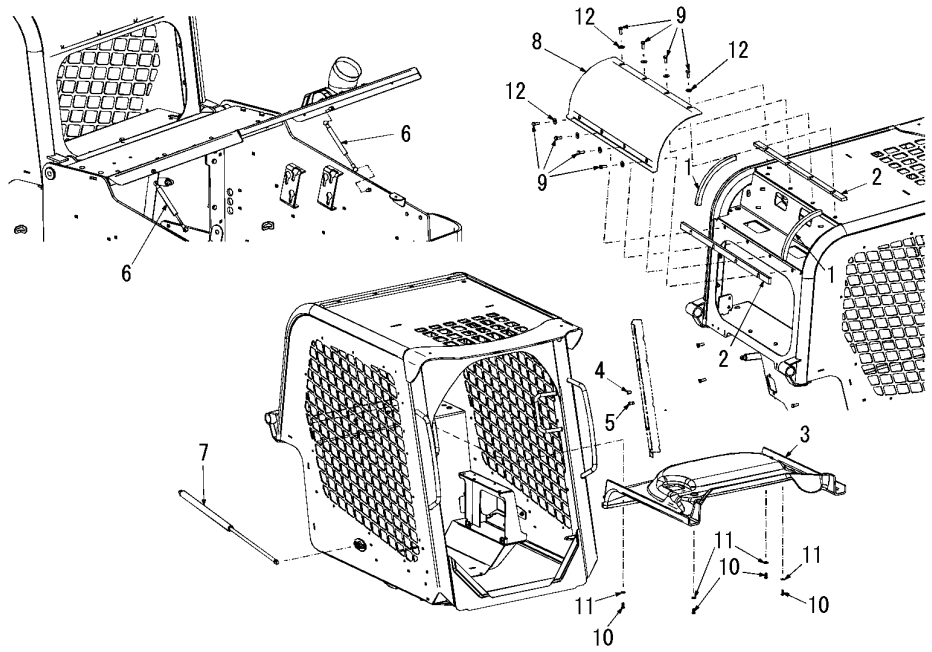
(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00130	WASHER	4	4						
2	1	172216-00150	NUT	2	2						
3	1	172551-00250	NUT	1	1						
4	1	172216-00220	ISOLATOR, ROPS	2	2						
5	1	172551-01110	TAG, RIP-CORD	1	1						
6	1	172215-00650	RING	1	1						
7	1	172216-13120	INSERT	10	10						1
8	1	172218-00250	NUT	4	4						
9	1	172216-13130	SPACER	2	2						
10	1	172216-13140	INSERT	8	8						1
11	1	172551-02430	PLUG	1	1						
12	1	172218-00680	WINDOW	1	1						
13	1	172551-02870	WEATHER STRIP	1	1						
14	1	172218-00820	SEAL, BULB	1	1						
15	1	172218-01080	PAD, ACOUSTIC R DECK	1	1						
16	1	172218-01260	SEAL, FOAM BOTTOM	1	1						1
17	1	172218-01280	MOUNT, ISOLATOR	2	2						
18	1	172218-01310	SEAL, ROPS	1	1						
19	1	172551-02940	RIPCORD	1	1						
20	1	172218-01480	TRIM, EDGE	1	1						
21	1	172218-01600	COVER, B-PILLAR ,R	1	1						
22	1	172218-01740	COVER, B-PILLAR LEFT	1	1						
23	1	172218-02020	CONSOLE, SIDE RIGHT	1	1						
24	1	172218-02030	PANEL, ACCESS	2	2						
25	1	172218-02040	CONSOLE, FRONT RIGHT	1	1						
26	1	172218-02050	CONSOLE, FRONT LEFT	1	1						
27	1	172551-03140	WINDOW	1	1						
28	1	172218-03960	LOUVER, SNAP-IN	2	2						
29	1	172216-13150	CANOPY, ROPS&FOPS	1	1						
30	1	172216-13160	SCREW	4	4						
31	1	172216-13170	PIN	2	2						
32	1	172218-05750	CONSOLE LEFT SIDE	1	1						
33	1	172216-13180	LOCK, ROPS	1	1						
34	1	172216-13190	RETAINING	1	1						
35	1	172216-13200	MOUNT, GAS SPRING	2	2						
36	1	172216-13210	SCREW	2	2						
37	1	172216-13220	FLIPPER, ROPS LOCK	1	1						
38	1	172216-13230	SCREW	2	2						
39	1	172551-09450	SCREW	1	1						
40	1	172551-09830	BOLT	4	4						
41	1	172218-05040	SCREW	2	2						
42	1	172215-03110	SCREW	8	8						
43	1	172551-10010	SCREW	18	18						
44	1	172218-05090	WASHER	4	4						
45	1	172218-05180	SCREW	4	4						
46	1	172215-03240	NUT	2	2						
47	1	172551-10380	WASHER	4	4						1
48	1	172551-10410	PIN, COTTER	2	2						
49	1	172216-13240	WASHER	2	2						
50	1	172216-17380	SCREW	2	2						

Remarks
(1)Not shown in illustration.

Fig.11. ROPS/FOPS STRUCTURE(NON-HVAC)



(A)=S190R-1
(B)=S220R-1
(C)=

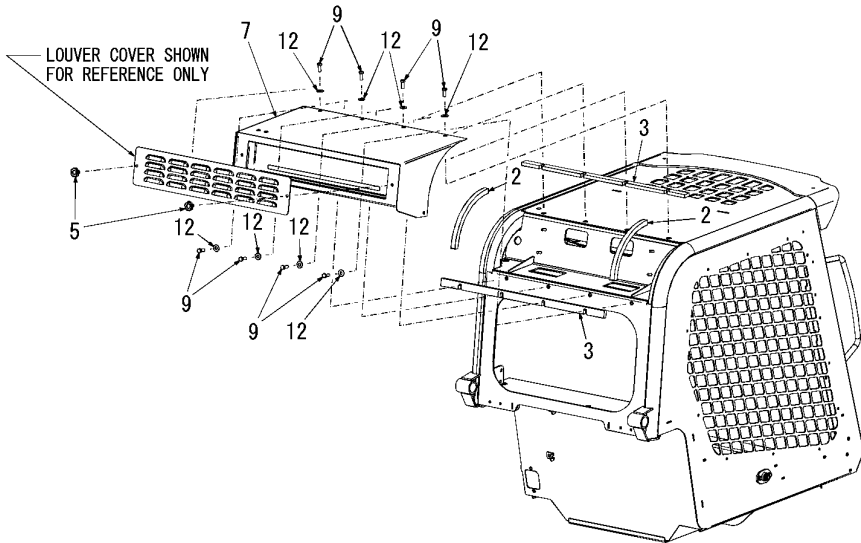
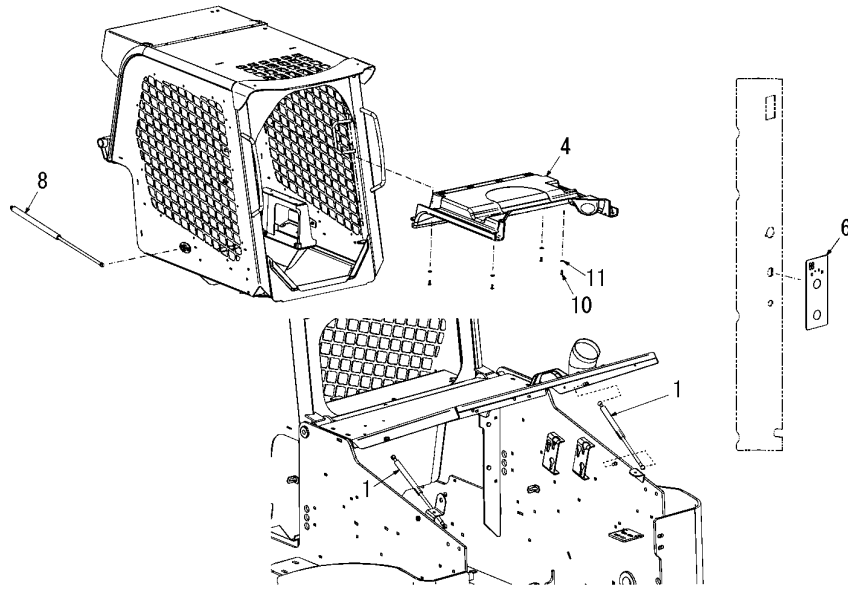
(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172218-01200	SEAL, FOAM SIDE	2	2						
2	1	172218-01260	SEAL, FOAM BOTTOM	2	2						
3	1	172218-01830	HEADLINER, NON A/C	1	1						
4	1	172218-02690	PLUG, SWITCH	1	1						
5	1	172218-04480	PLUG, RUBBER	1	1						
6	1	172218-04820	SPRING, GAS	2	2						
7	1	172216-13250	GAS SPRING	2	2						
8	1	172216-13260	COVER, UPPER ROPS	1	1						
9	1	172216-13270	SCREW	8	8						
10	1	172551-10010	SCREW	4	4						
11	1	172218-05160	WASHER	4	4						
12	1	172216-13280	WASHER	8	8						

Fig.12. ROPS/FOPS STRUCTURE(HVAC COMPLETING)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-01330	SPRING, GAS	2	2						
2	1	172218-01200	SEAL, FOAM SIDE	2	2						
3	1	172218-01260	SEAL, FOAM BOTTOM	2	2						
4	1	172218-01500	HEADLINER, DUCT A/C	1	1						
5	1	172218-02210	KNOB, CLAMPING	2	2						
6	1	172218-04370	LABEL, FAN SPEED	1	1						
7	1	172218-04660	HOUSING, HVAC	1	1						
8	1	172216-13290	GAS SPRING	2	2						
9	1	172216-13270	SCREW	8	8						
10	1	172551-10010	SCREW	4	4						
11	1	172218-05160	WASHER	4	4						
12	1	172216-13280	WASHER	8	8						

Fig.13. ROPS/FOPS STRUCTURE(HEATER-ONLY)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Qty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-01330	SPRING, GAS	2	2						
2	1	172218-01200	SEAL, FOAM SIDE	2	2						
3	1	172218-01260	SEAL, FOAM BOTTOM	2	2						
4	1	172218-01500	HEADLINER, DUCT A/C	1	1						
5	1	172218-02210	KNOB, CLAMPING	2	2						
6	1	172218-04370	LABEL, FAN SPEED	1	1						
7	1	172218-04660	HOUSING, HVAC	1	1						
8	1	172216-13290	GAS SPRING	2	2						
9	1	172216-13270	SCREW	8	8						
10	1	172551-10010	SCREW	4	4						
11	1	172218-05160	WASHER	4	4						
12	1	172216-13280	WASHER	8	8						

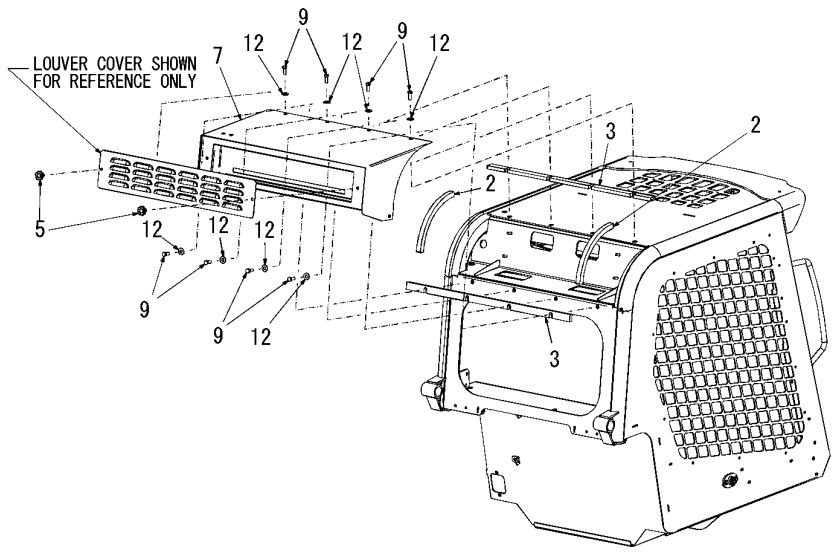
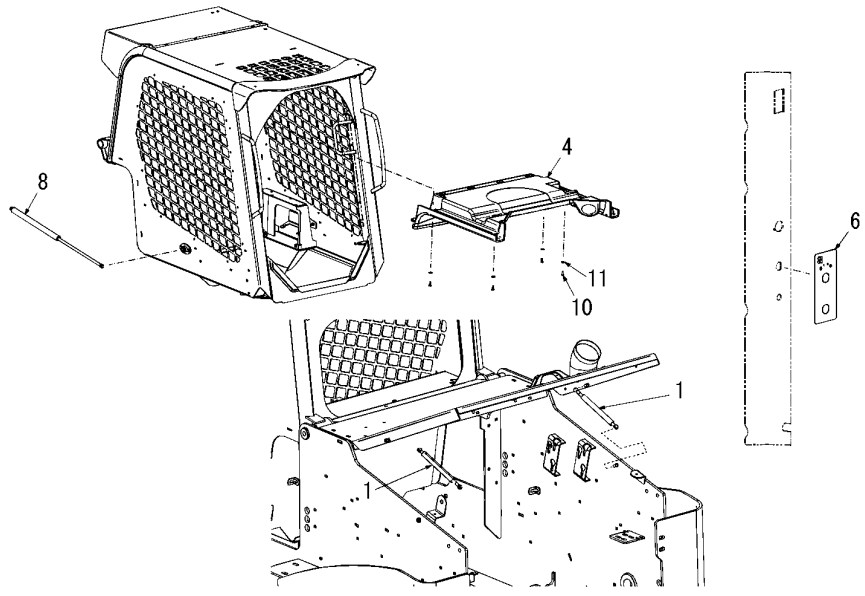
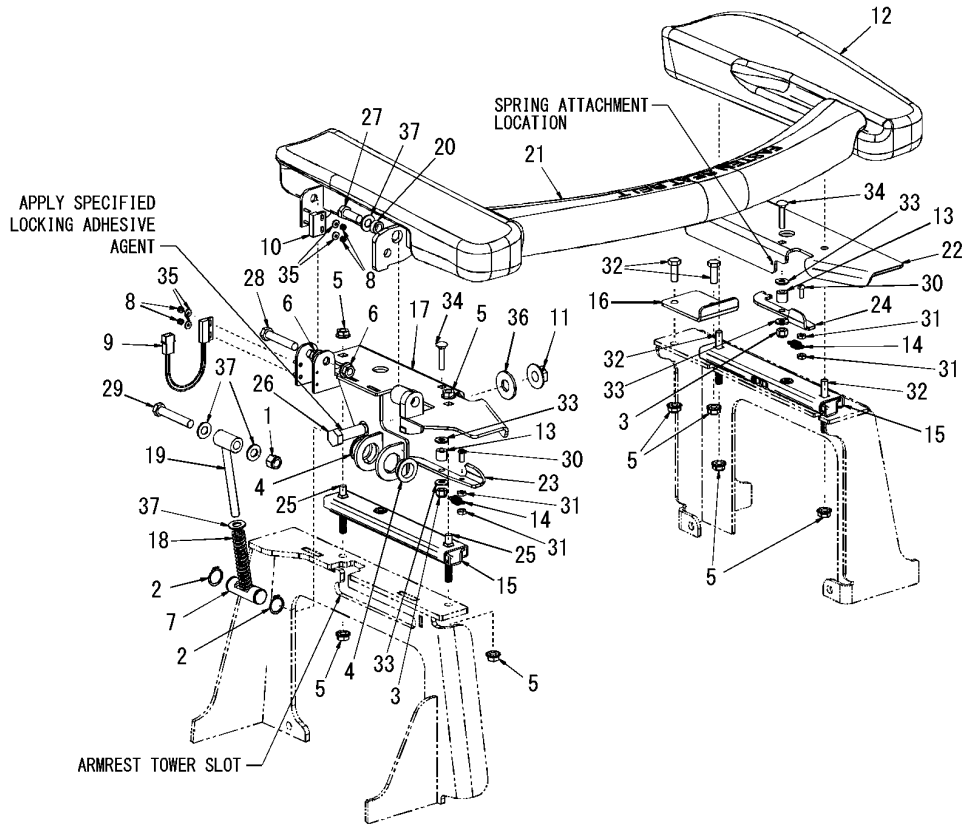


Fig.14. RESTRAINT BAR

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00180	NUT	1	1						
2	1	172216-00160	RING, RETAINING	2	2						
3	1	172551-00250	NUT	2	2						
4	1	172216-00900	BUSHING, PIVOT	2	2						
5	1	172551-01060	NUT	8	8						
6	1	172215-00700	NUT	2	2						
7	1	172216-02270	PIN, PIVOT GROOVED	1	1						
8	1	172216-02290	NUT	4	4						
9	1	172215-02110	SWITCH, PROXIMITY	1	1						
10	1	172551-02480	MAGNET, SWITCH	1	1						
11	1	172218-05970	NUT	1	1						
12	1	172218-01690	ARMREST, LEFT	1	1						
13	1	172218-01710	TUBE	2	2						
14	1	172218-01790	SPRING, EXTENSION	2	2						
15	1	172218-01960	RAIL, ARMREST	2	2						
16	1	172218-03650	STOP, TRAVEL	1	1						
17	1	172218-03710	BAR, PIVOT	1	1						
18	1	172218-03720	SPRING, COMPRESSION	1	1						
19	1	172218-03810	ARM, PIVOT	1	1						
20	1	172218-03910	SPACER, PIVOT	1	1						
21	1	172218-03920	BAR, RESTRAINT	1	1						
22	1	172218-04170	PLATE, SLIDER TOP,L	1	1						
23	1	172218-04210	LEVER, ADJUSTER, R	1	1						
24	1	172218-04220	LEVER, ADJUSTER, L	1	1						
25	1	172551-09470	BOLT	2	2						
26	1	172215-02700	SCREW	1	1						
27	1	172551-09530	SCREW	1	1						
28	1	172215-02760	SCREW	1	1						
29	1	172551-09580	SCREW	1	1						
30	1	172551-09610	SCREW	2	2						
31	1	172215-02790	NUT	4	4						
32	1	172551-09850	SCREW	4	4						
33	1	172551-09890	WASHER	4	4						
34	1	172551-09940	BOLT	2	2						
35	1	172216-09620	WASHER	4	4						
36	1	172551-10390	WASHER	1	1						
37	1	172551-10400	WASHER	4	4						

Fig.15. SEATS(NON-SUSPENSION)

(A)=S190R-1
 (B)=S220R-1
 (C)=

(D)=
 (E)=
 (F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-02490	NUT	4	4						
2	1	172216-03370	SEAT	1	1						
3	1	172216-03860	BRACKET, SEAT BELT	1	1						
4	1	172216-13300	HARNESS	1	1						
5	1	172215-02850	SCREW	2	2						
6	1	172215-03340	WASHER	2	2						

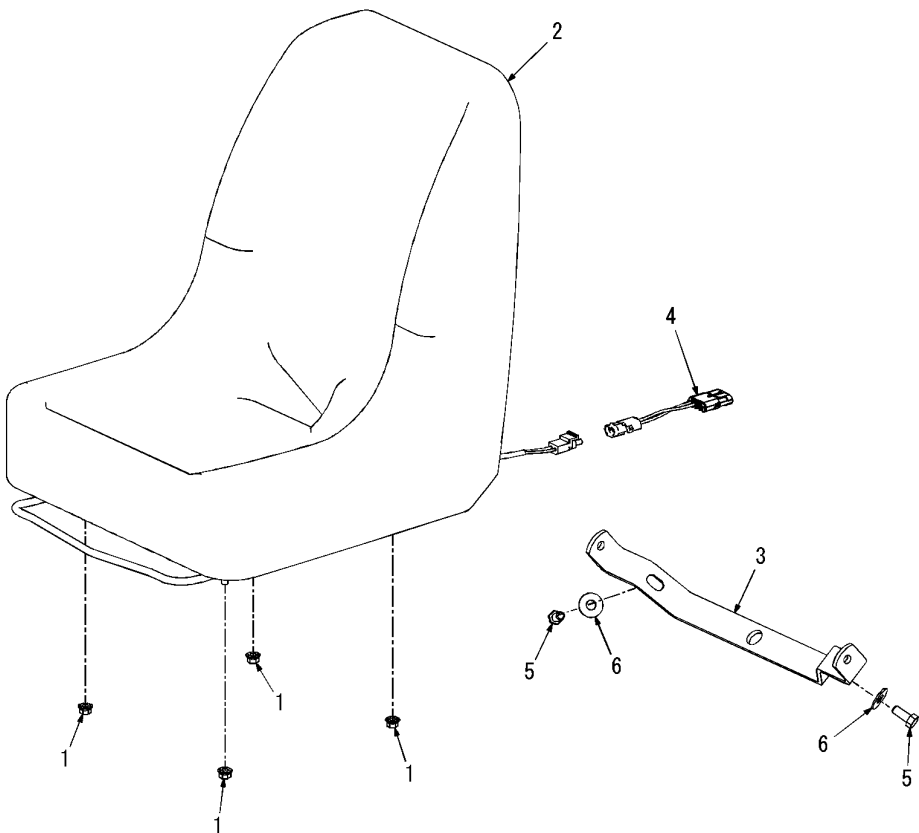
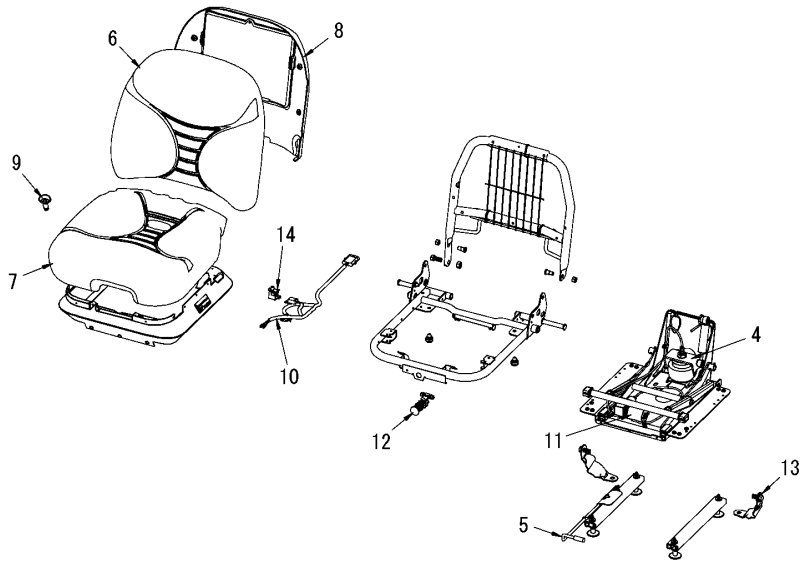
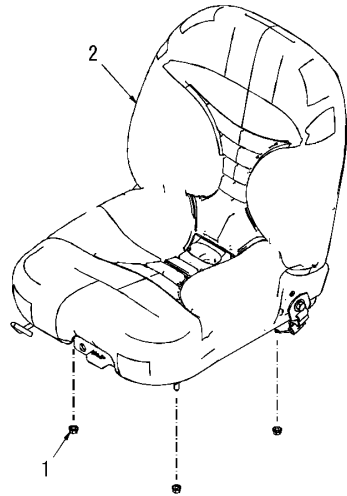


Fig.16. SEATS(STANDARD AND SUSPENSION)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172215-06620	NUT	4	4						
2	1	172218-02290	SEAT, SUSPENSION	1	1						
3	1	172218-02480	SEAT, AIR SUSPENSION	1	1						1
4	1	172218-04260	SPRING&SADDLE KIT	1	1						2
5	1	172218-04270	SLIDE KIT	1	1						
6	1	172218-04280	VINYL KIT, CUSHION	1	1						
7	1	172218-04290	VINYL KIT, CUSHION	1	1						
8	1	172218-04300	PANEL KIT ,BACK	1	1						
9	1	172218-04310	DRAIN, WATER	1	1						
10	1	172218-04320	WIRE HARNESS	1	1						2
11	1	172218-04330	COMPRESSOR KIT	1	1						2
12	1	172218-04340	VALVE KIT, AIR	1	1						2
13	1	172218-04350	TETHER KIT	1	1						
14	1	172218-04360	SWITCH KIT, SAFETY	1	1						

Remarks

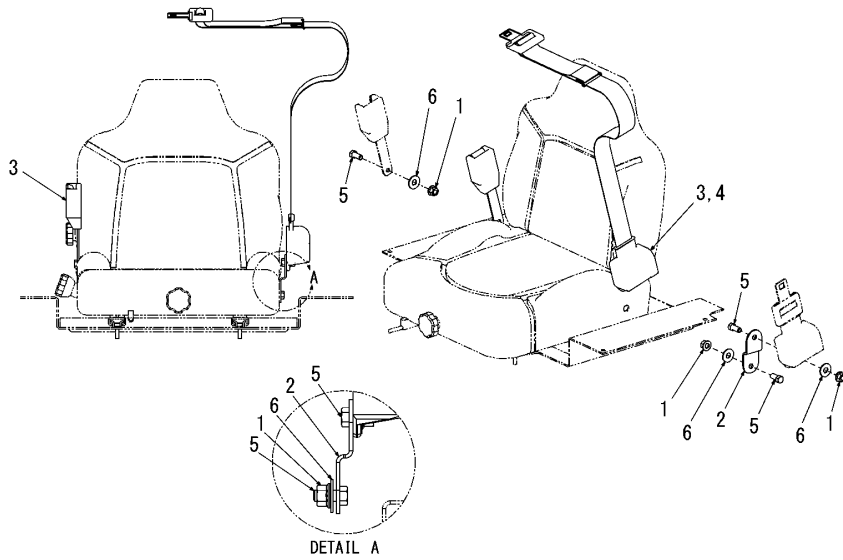
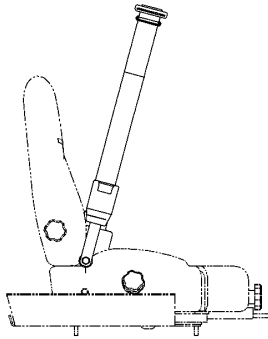
- (1)Not shown in illustration.
- (2)Air suspension seat only.

Fig.17. SEATS-SEAT BELT OPTION

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172215-00400	NUT	3	3						
2	1	172216-03350	TAB, RETRACTOR MOUNT	1	1						
3	1	172216-11080	BELT ASSY, SEAT	1	1						1
4	1	172216-11090	BELT ASSY, SEAT	1	1						2
5	1	172215-02850	SCREW	3	3						
6	1	172215-03340	WASHER	3	3						



DETAIL A

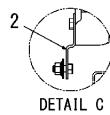
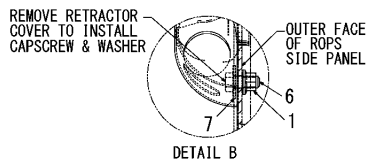
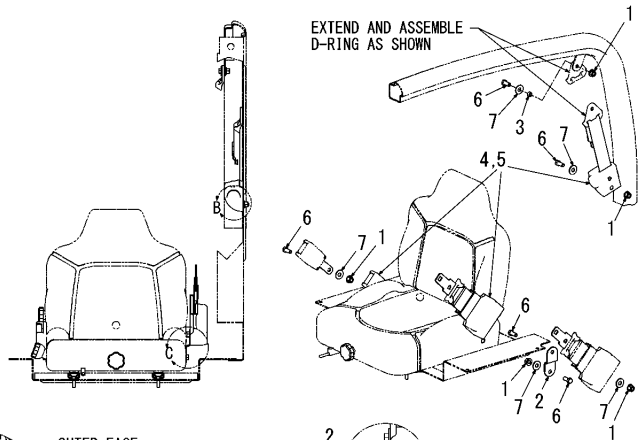
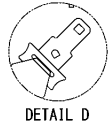
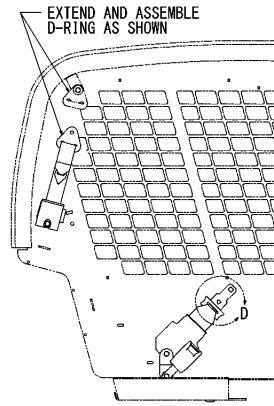
Remarks

- (1) 2" Seat belt.
- (2) 3" Seat belt.

Fig.18. SEATS-THREE-POINT RESTRAINT SEAT BELT OPTION

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172215-00400	NUT	5	5						
2	1	172216-03350	TAB, RETRACTOR MOUNT	1	1						
3	1	172216-04110	SPACER	1	1						
4	1	172217-03670	RESTRAINT ASSY	1	1						1
5	1	172217-03690	RESTRAINT ASSY	1	1						2
6	1	172215-02850	SCREW	5	5						
7	1	172215-03340	WASHER	5	5						

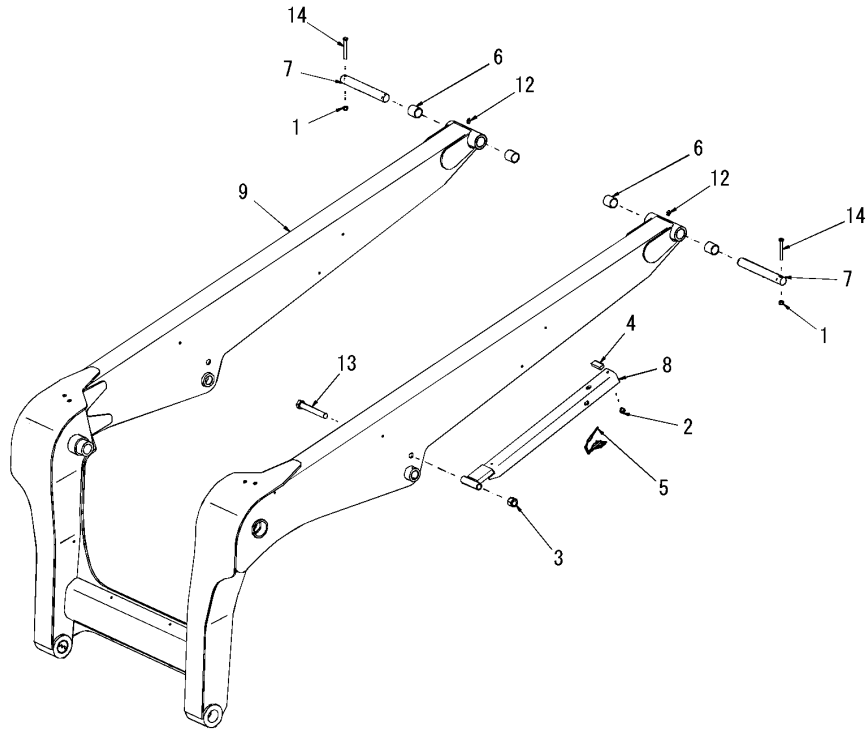
Remarks

- (1) 2" Seat belt.
- Restraint assemblies includes all associated hardware, except PN 172216-03350.
- (2) 3" Seat belt.
- Restraint assemblies includes all associated hardware, except PN 172216-03350.

Fig.19. LIFT ARM(S190R)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Qty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00180	NUT	2							
2	1	172216-00270	STEM, RUBBER	1							
3	1	172551-00520	NUT	1							
4	1	172216-00410	PAD, ARM BRACE	1							
5	1	172216-00470	PIN, KLIK	1							
6	1	172216-02820	BUSHING	4							
7	1	172216-04530	PIN, GREASELESS	2							
8	1	172216-08140	ARM, SAFETY	1							
9	1	172216-13310	ARM, LEFT	1							
10	1	172551-04980	BUSHING, SPRING	2							1
11	1	172216-13320	BUSHING	2							1
12	1	172551-09410	FITTING	2							
13	1	172216-09300	SCREW	1							
14	1	172215-02950	SCREW	2							

Remarks

(1)Not shown in illustration.

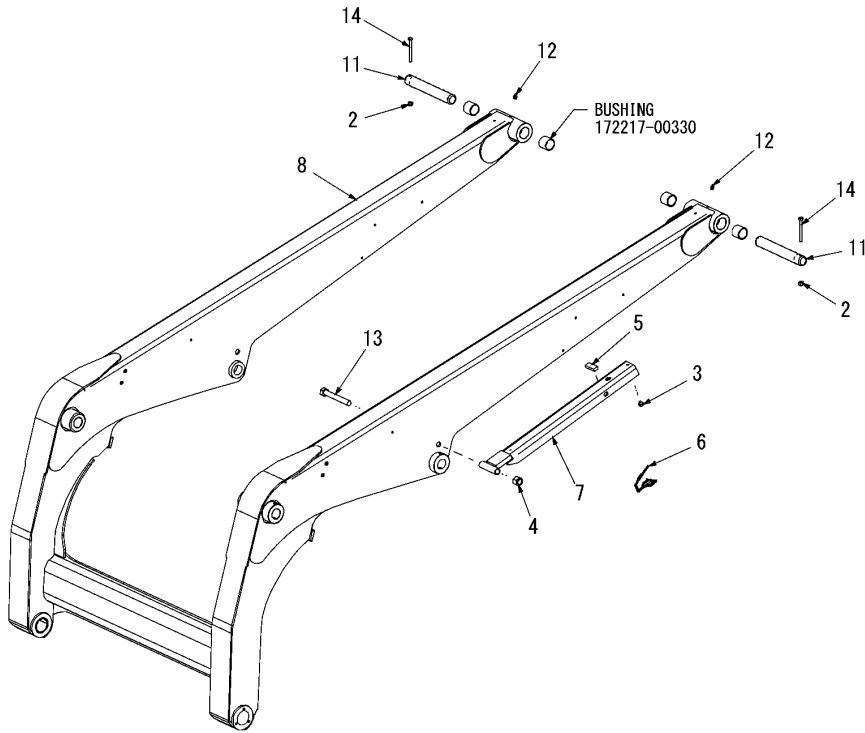
N:Old $\xrightarrow{\text{Yes}}$ New, Q:Old $\xrightarrow{\text{No}}$ New, R:Old $\xrightarrow{\text{Yes}}$ New, S:Old $\xrightarrow{\text{No}}$ New, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change

Fig.20. LIFT ARM(S220R

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Qty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-13330	NUT		4						1
2	1	172551-00180	NUT		2						
3	1	172216-00270	STEM, RUBBER		1						
4	1	172551-00520	NUT		1						
5	1	172216-00410	PAD, ARM BRACE		1						
6	1	172216-00470	PIN, KLIK		1						
7	1	172216-08140	ARM, SAFETY		1						
8	1	172216-13340	ARM, LEFT		1						
9	1	172216-00440	BUSHING		2						1
10	1	172217-00330	BUSHING		4						1
11	1	172216-13350	PIN, PIVOT		2						
12	1	172551-09410	FITTING		2						
13	1	172216-09300	SCREW		1						
14	1	172551-09780	SCREW		2						

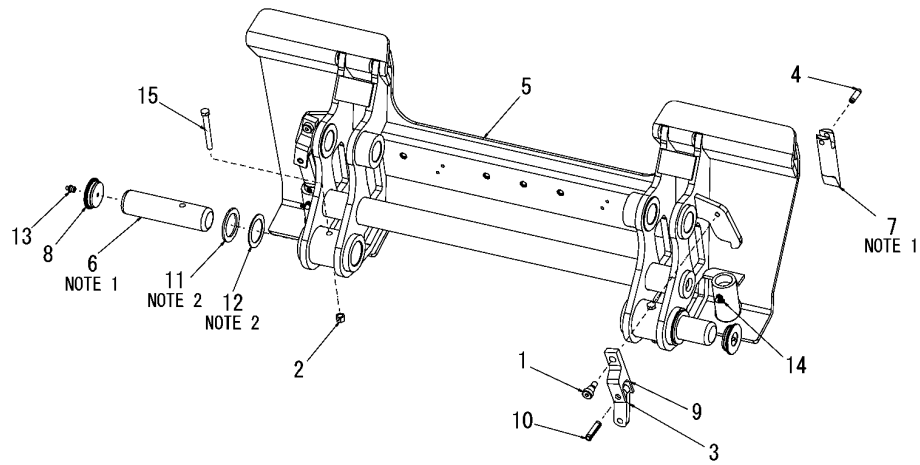


Remarks
(1)Not shown in illustration.

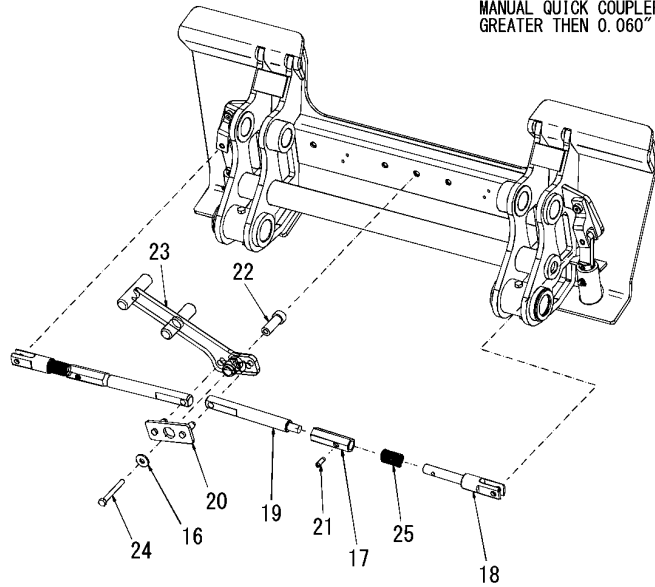
Fig.21. ATTACHMENT BRACKET(S190R MANUAL QUICK COUPLER

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



NOTES
1) GREASE
2) ADD SHIMS 172216-13420 & 172216-13430 AS REQUIRED TO ACHIEVE A GAP BETWEEN THE LIFT ARM AND THE MANUAL QUICK COUPLER OF NO GREATER THEN 0.060"

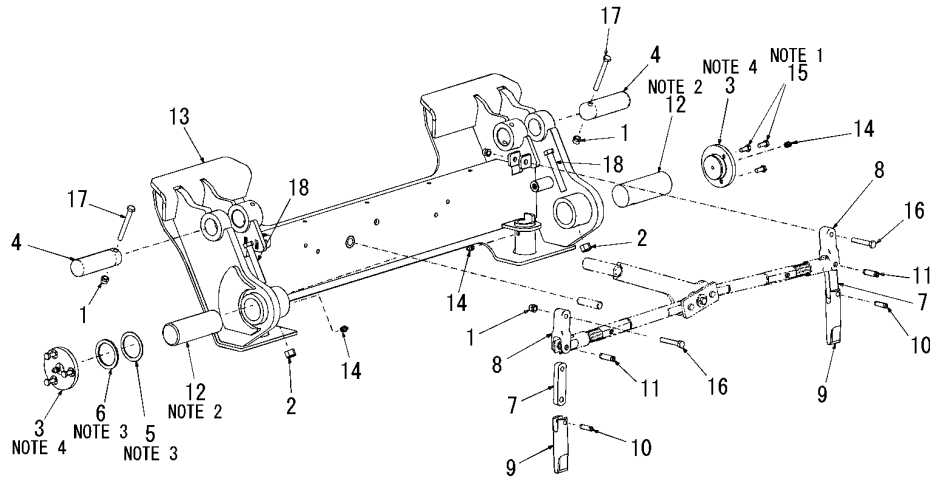


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172215-03790	BOLT	2							
2	1	172551-00180	NUT	2							
3	1	172551-01350	LINK, PIN	2							
4	1	172551-01410	PIN	2							
5	1	172216-13360	QUICK COUPLER	1							
6	1	172216-13370	PIN, PIVOT	2							
7	1	172216-13380	PIN	2							
8	1	172216-13390	CAP, GREASE	2							
9	1	172216-13400	LINK, LATCH	2							
10	1	172216-13410	PIN, SPRING	2							
11	1	172216-13420	SHIM	2							
12	1	172216-13430	SHIM	2							
13	1	172551-09410	FITTING	2							
14	1	172215-02650	ZERK	2							
15	1	172218-04960	SCREW	2							
16	1	172218-00040	WASHER	1							
17	1	172551-01320	LINK, SPRING STOP	2							
18	1	172551-01330	LINK, SPRING SLIDE	2							
19	1	172551-01340	LINK, ADJUSTABLE END	2							
20	1	172551-01390	PIN LINK	1							
21	1	172551-01400	SPRING PIN	2							
22	1	172551-01720	HANDLE PIVOT	1							
23	1	172216-13440	HANDLE	1							
24	1	172551-09650	SCREW	1							
25	1	172551-10550	SPRING	2							

Fig.22. ATTACHMENT BRACKET(S220R MANUAL QUICK COUPLER

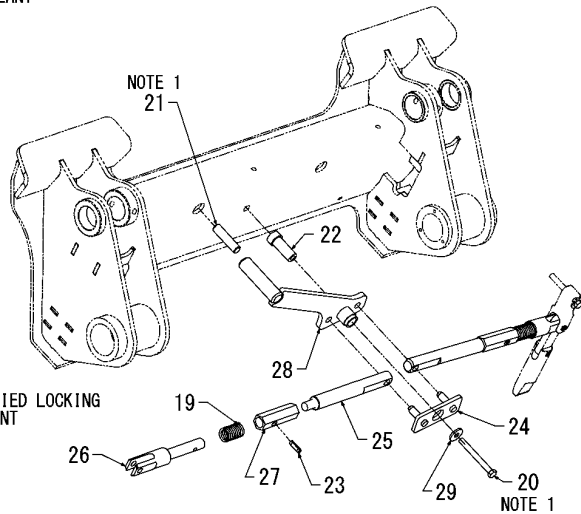
(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



NOTES

1. APPLY SPECIFIED LOCKING ADHESIVE AGENT
2. GREASE
3. ADD SHIMS 172216-02120 AND 172216-02130 AS REQUIRED TO ACHIEVE A GAP BETWEEN THE LIFT ARM AND THE MANUAL QUICK COUPLER, OF NO GREATER THEN 0.060"
4. APPLY RTV SEALANT



NOTES

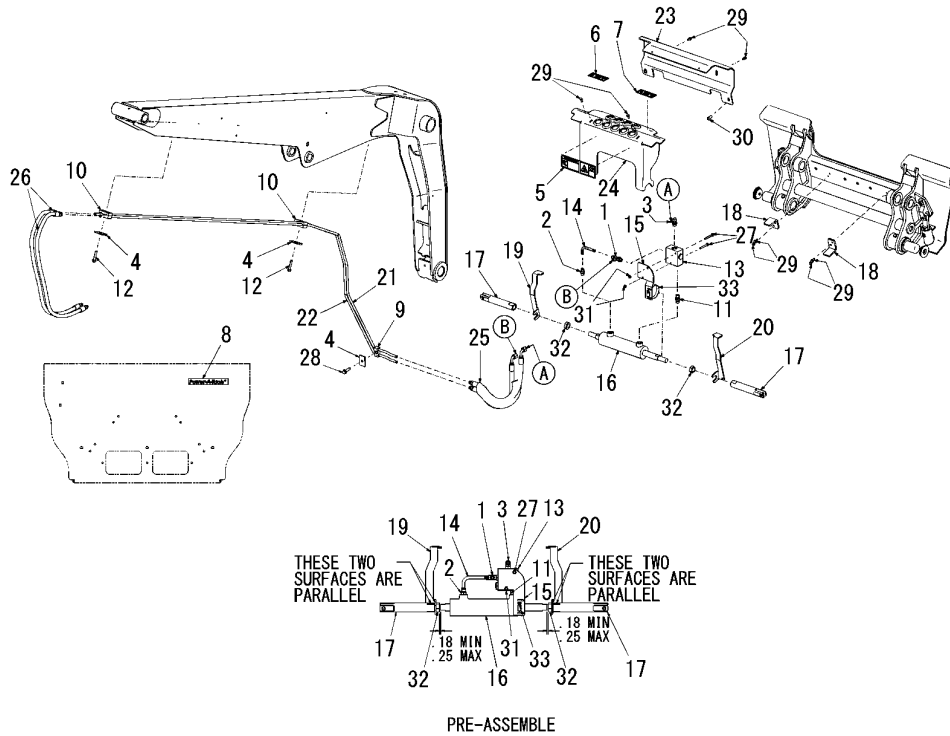
1. APPLY SPECIFIED LOCKING ADHESIVE AGENT

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00180	NUT		4						
2	1	172551-00200	NUT		2						
3	1	172218-00070	CAP, GREASE		2						
4	1	172216-01810	PIN		2						
5	1	172216-02120	SHIM		1						
6	1	172216-02130	SHIM		1						
7	1	172551-01350	LINK, PIN		2						
8	1	172551-01360	LATCH, LINK		2						
9	1	172551-01370	LATCH, PIN		2						
10	1	172551-01410	PIN		2						
11	1	172551-01420	PIN		2						
12	1	172216-13450	PIN, Q COUPLER PIVOT		2						
13	1	172216-13460	QUICK COUPLER		1						
14	1	172551-09410	FITTING		4						
15	1	172551-09510	SCREW		6						
16	1	172551-09580	SCREW		2						
17	1	172218-04960	SCREW		2						
18	1	172215-02870	SCREW		2						
19	1	172551-10550	SPRING		2						
20	1	172551-10100	SCREW		1						
21	1	172218-00240	STOP, PIN		1						
22	1	172551-01720	HANDLE PIVOT		1						
23	1	172551-01400	SPRING PIN		2						
24	1	172551-01390	PIN LINK		1						
25	1	172551-01340	LINK, ADJUSTABLE END		2						
26	1	172551-01330	LINK, SPRING SLIDE		2						
27	1	172551-01320	LINK, SPRING STOP		2						
28	1	172218-00100	HANDLE		1						
29	1	172218-00040	WASHER		1						

Fig.23. ATTACHMENT BRACKET(S190R HYDRAULIC QUICK COUPLER HITCH)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

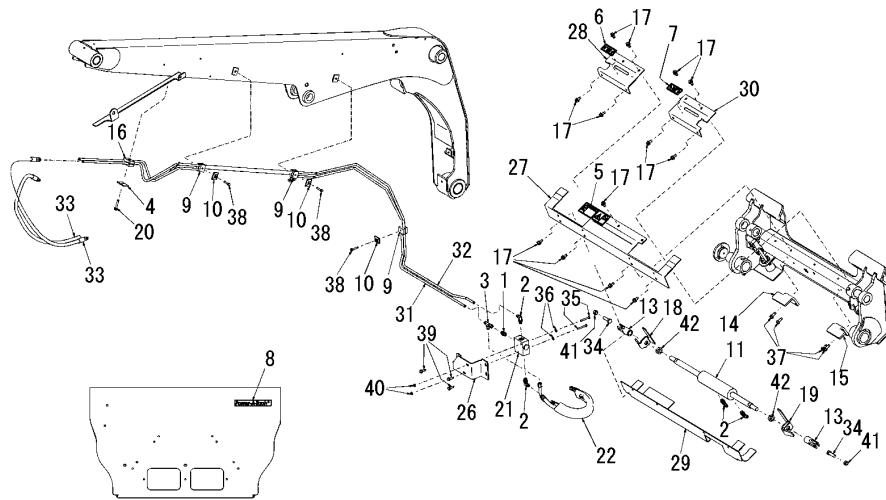


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00060	FITTING	1							
2	1	172551-00070	FITTING	1							
3	1	172551-00220	CONNECTOR	1							
4	1	172551-00510	PLATE	3							
5	1	172551-01770	LABEL, QUICK COUPLER	1							
6	1	172551-01780	LABEL, LATCHING	1							
7	1	172551-01790	LABEL, LATCHING	1							
8	1	172551-02080	LABEL, QUICK COUPLER	1							
9	1	172216-05350	CLAMP	1							
10	1	172216-12960	CLAMP	2							
11	1	172216-13470	FITTING	1							
12	1	172218-05820	SCREW	2							
13	1	172216-13480	VALVE, QUICK COUPLER	1							
14	1	172216-13490	TUBE, QUICK COUPLER	1							
15	1	172216-13500	BRKT, QUICK COUPLER	1							
16	1	172216-13510	CYL., QUICK COUPLER	1							
17	1	172216-13520	LINK, SPRING SLIDE	2							
18	1	172216-13530	BRACKET, STOP	2							
19	1	172216-13540	FLAG, INDICATOR L	1							
20	1	172216-13550	FLAG, INDICATOR R	1							
21	1	172216-13560	TUBE, QUICK COUPLER	1							
22	1	172216-13570	TUBE, QUICK COUPLER	1							
23	1	172216-13580	COVER, Q COUPLER F	1							
24	1	172216-13590	COVER, Q COUPLER	1							
25	1	172216-13600	HOSE ASSY, W/ SLEEVE	1							
26	1	172216-13610	HOSE	2							
27	1	172215-02890	SCREW	2							
28	1	172216-09480	SCREW	1							
29	1	172215-03080	SCREW	8							
30	1	172216-13620	SCREW	1							
31	1	172551-10290	NUT	1							
32	1	172218-05210	NUT	1							
33	1	172216-13630	CLAMP, HOSE	1							

Fig.24. ATTACHMENT BRACKET(S220R HYDRAULIC QUICK COUPLER HITCH)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00070	FITTING		1						
2	1	172551-00220	CONNECTOR		4						
3	1	172551-00340	FITTING		1						
4	1	172551-00510	PLATE		1						
5	1	172551-01770	LABEL, QUICK COUPLER		1						
6	1	172551-01780	LABEL, LATCHING		1						
7	1	172551-01790	LABEL, LATCHING		1						
8	1	172551-02080	LABEL, QUICK COUPLER		1						
9	1	172216-06280	CLAMP		3						
10	1	172216-06290	PLATE		3						
11	1	172218-01540	CYLINDER, HYDRAULIC		1						
12	1	172216-13640	SEAL KIT		1						1
13	1	172218-01550	LINK, SPRING SLIDE		2						
14	1	172218-03930	BRACKET, STOP		1						
15	1	172218-03940	BRACKET, STOP		1						
16	1	172216-12960	CLAMP		1						
17	1	172216-10940	SCREW		13						
18	1	172218-05640	FLAG, LEFT WELDMENT		1						
19	1	172218-05650	FLAG, RIGHT WELDMENT		1						
20	1	172218-05820	SCREW		1						
21	1	172216-13480	VALVE, QUICK COUPLER		1						
22	1	172216-13650	SLEEVE ASSY, HOSE		1						
23	1	172216-13660	HOSE		1						1
24	1	172216-13670	SLEEVE, PROTECTIVE		1						1
25	1	172216-13680	HOSE		1						1
26	1	172216-13690	BRKT, QUICK COUPLER		1						
27	1	172216-13700	COVER, CYL. UPPER		1						
28	1	172216-13710	COVER, FLAG LEFT		1						
29	1	172216-13720	COVER, CYL. LOWER		1						
30	1	172216-13730	COVER, FLAG RIGHT		1						
31	1	172216-13740	TUBE, QUICK COUPLER		1						
32	1	172216-13750	TUBE, QUICK COUPLER		1						
33	1	172216-13760	HOSE		2						
34	1	172218-04950	SCREW		2						
35	1	172215-02890	SCREW		2						
36	1	172551-09890	WASHER		2						
37	1	172551-09910	SCREW		4						
38	1	172216-13770	SCREW		3						
39	1	172216-13780	SCREW		3						
40	1	172551-10290	NUT		2						
41	1	172215-03240	NUT		2						
42	1	172218-05210	NUT		2						

Remarks

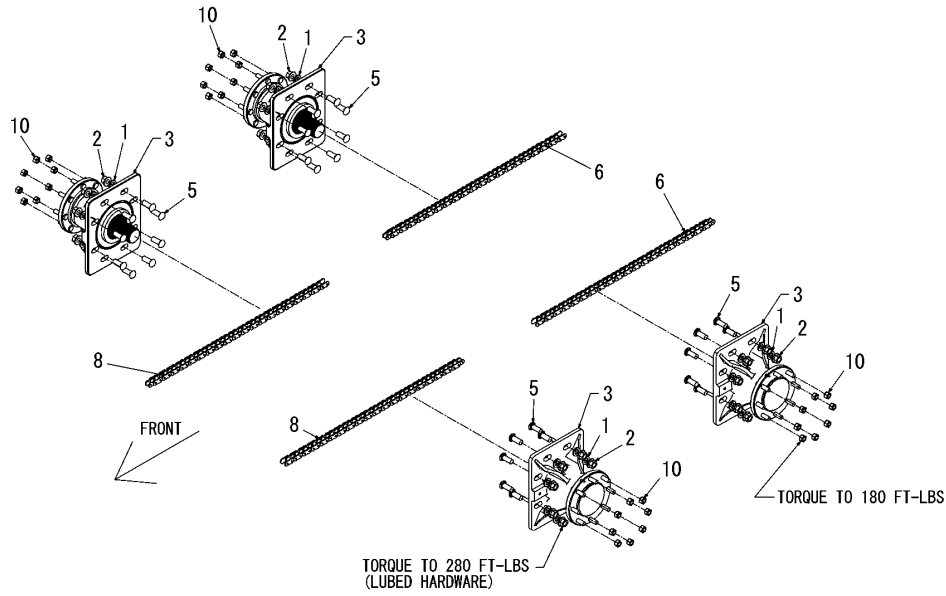
(1)Not shown in illustration.

N:Old $\frac{Yes}{No}$ New, Q:Old $\frac{No}{Yes}$ New, R:Old $\frac{Yes}{No}$ New, S:Old $\frac{No}{Yes}$ New, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change

Fig.25. WHEEL DRIVES(S190R)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-09640	WASHER	32							
2	1	172216-13790	NUT	32							
3	1	172216-06570	AXLE ASSY	4							1
4	1	172216-02530	BOLT	32							2
5	1	172216-02300	BOLT	32							
6	1	172216-01530	CHAIN	2							
7	1	172217-00030	LINK, CONNECTING	1							2
8	1	172216-01520	CHAIN	2							
9	1	172217-00030	LINK, CONNECTING	1							2
10	1	172216-00360	NUT	32							

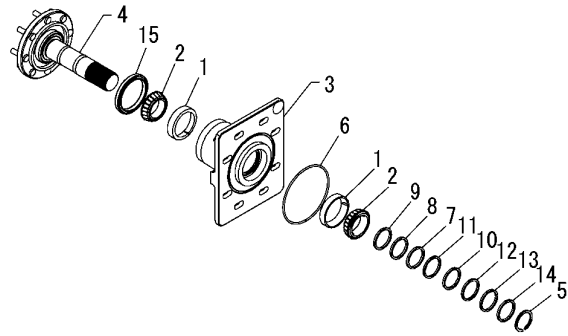
Remarks

- (1) Inner parts are shown Fig.No.26.
- (2) Not shown in illustration.

Fig.26. WHEEL DRIVES(S190R AXLE ASSEMBLY

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-10830	CUP, BEARING	2							
2	1	172216-10840	CONE, BEARING	2							
3	1	172216-02690	HOUSING, AXLE	1							
4	1	172216-02810	AXLE ASSY	1							
5	1	172216-10980	RING, RETAINING	1							
6	1	172215-08550	O-RING	1							
7	1	172216-11000	WASHER	1							
8	1	172216-11010	WASHER	1							
9	1	172216-11020	WASHER	1							
10	1	172216-11030	WASHER	1							
11	1	172216-11040	WASHER	1							
12	1	172216-11050	WASHER	1							
13	1	172216-11060	WASHER	1							
14	1	172216-11070	WASHER	1							
15	1	172216-17510	SEAL, AXLE	1							

ASSEMBLY NOTES:

- 1) PRESS OUTSIDE BEARING CUP INTO CASTING(6000 lbs)
- 2) PRESS OUTER SEAL INTO CASTING(500 lbs)
- 3) PRESS INNER BEARING CUP INTO CASTING(6000 lbs)
- 4) PACK BEARING WITH LITHIUM GREASE
- 5) PRESS BEARING CONE ONTO AXLE(6000 lbs)
- 6) ASSEMBLE AXLE INTO HOUSING
- 7) PACK BEARING WITH LITHIUM GREASE
- 8) PRESS BEARING ONTO AXLE AND INTO CASTING(6000 lbs)
- 9) INSTALL RETAINING RING
- 10) MEASURE GAP BETWEEN BEARING AND SNAP RING
- 11) REMOVE RETAINING RING
- 12) INSTALL SPECIAL WASHER OF APPROPRIATE THICKNESS
- 13) INSTALL RETAINING RING AND REMOVE PRESSURE

Note: All special washers are used 'as required'

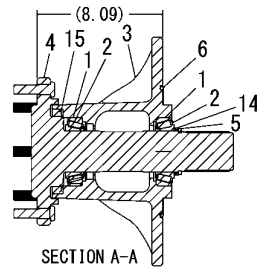
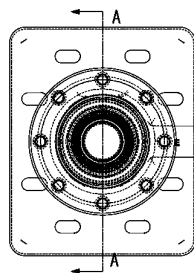
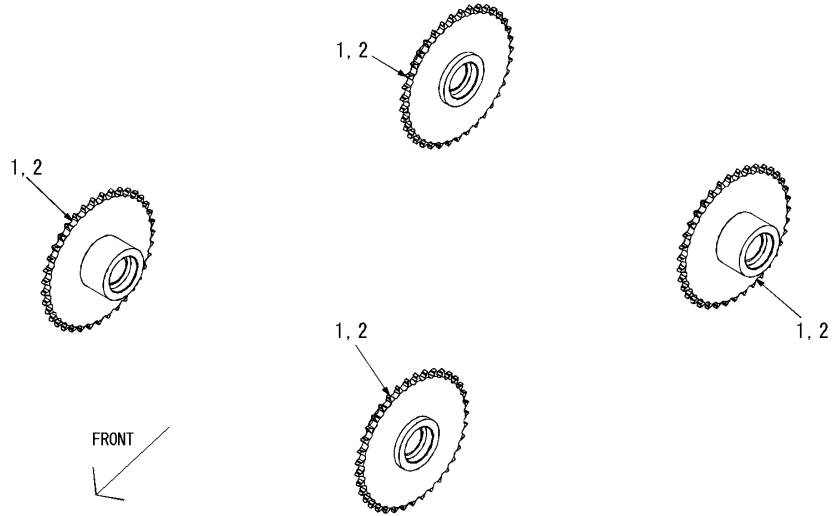


Fig.27. WHEEL DRIVES(S190R

(A)=S190R-1
(B)=S220R-1
(C)=

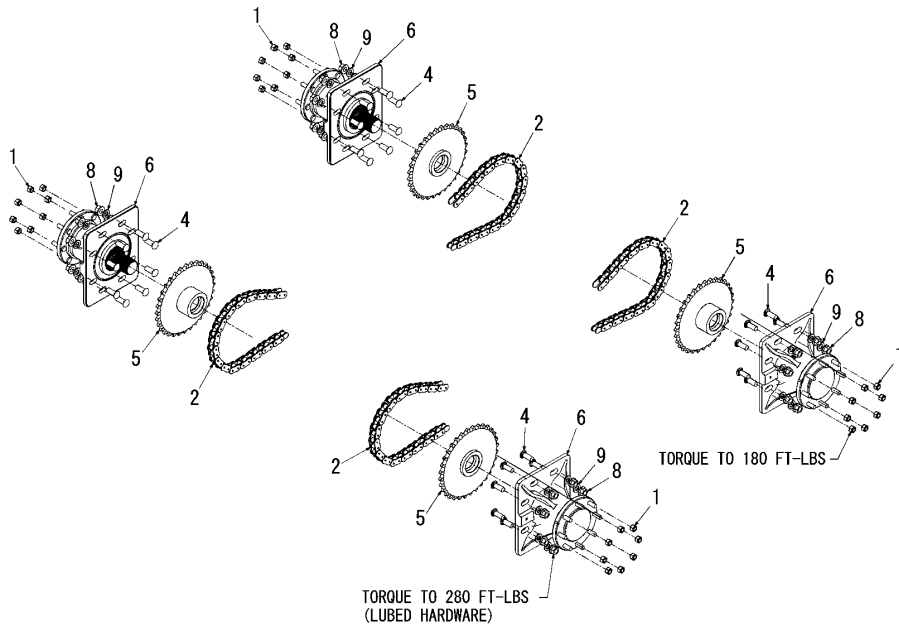
(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-02580	SPROCKET	4							1
2	1	172216-02780	SPROCKET	4							2

Remarks
(1)Single-speed.
(2)Two-speed.

Fig.28. WHEEL DRIVES(S220R)



(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-00360	NUT		32						
2	1	172217-00130	CHAIN		4						
3	1	172217-00030	LINK, CONNECTING		1						1
4	1	172216-02300	BOLT		32						
5	1	172217-00280	SPROCKET ASSY		4						
6	1	172217-02420	AXLE ASSY		4						2
7	1	172216-02530	BOLT		32						1
8	1	172216-13790	NUT		32						
9	1	172216-09640	WASHER		32						

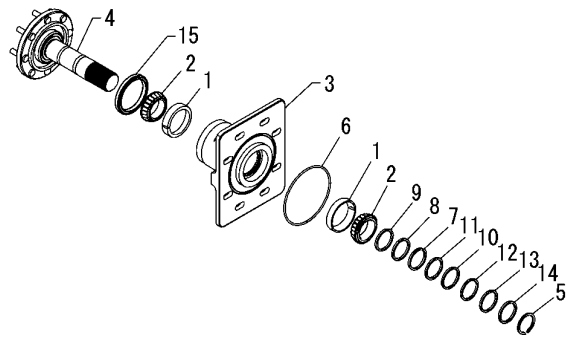
Remarks

- (1)Not shown in illustration.
- (2)Inner parts are shown Fig.No.29.

Fig.29. WHEEL DRIVES(S220R AXLE ASSEMBLY

(A)=S190R-1
(B)=S220R-1
(C)=

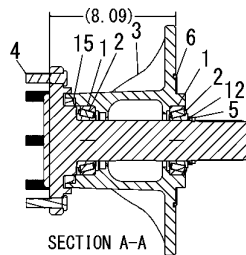
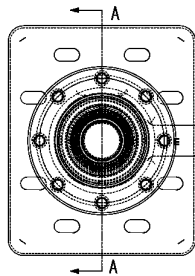
(D)=
(E)=
(F)=



Assembly Notes:

- 1) Press outside bearing cup into casting(6000 lbs)
- 2) Press outer seal into casting(500 lbs)
- 3) Press inner bearing cup into casting(6000 lbs)
- 4) Pack bearing with lithium grease
- 5) Press bearing cone onto axle(6000 lbs)
- 6) Assemble axle into housing
- 7) Pack bearing with lithium grease
- 8) Press bearing onto axle and into casting(6000 lbs)
- 9) Install retaining ring
- 10) Measure gap between bearing and snap ring
- 11) Remove retaining ring
- 12) Install special washer of appropriate thickness
- 13) Install retaining ring and remove pressure

Note: All special washers are used 'as required'



No.	Lev.	Parts No.	Description	Q'ty						I	R	
				(A)	(B)	(C)	(D)	(E)	(F)			
1	1	172216-10830	CUP, BEARING		2							
2	1	172216-10840	CONE, BEARING		2							
3	1	172216-02690	HOUSING, AXLE		1							
4	1	172217-04470	AXLE&BOLT ASSY		1							
5	1	172216-10980	RING, RETAINING		1							
6	1	172215-08550	O-RING		1							
7	1	172216-11000	WASHER		1							
8	1	172216-11010	WASHER		1							
9	1	172216-11020	WASHER		1							
10	1	172216-11030	WASHER		1							
11	1	172216-11040	WASHER		1							
12	1	172216-11050	WASHER		1							
13	1	172216-11060	WASHER		1							
14	1	172216-11070	WASHER		1							
15	1	172216-17510	SEAL, AXLE		1							

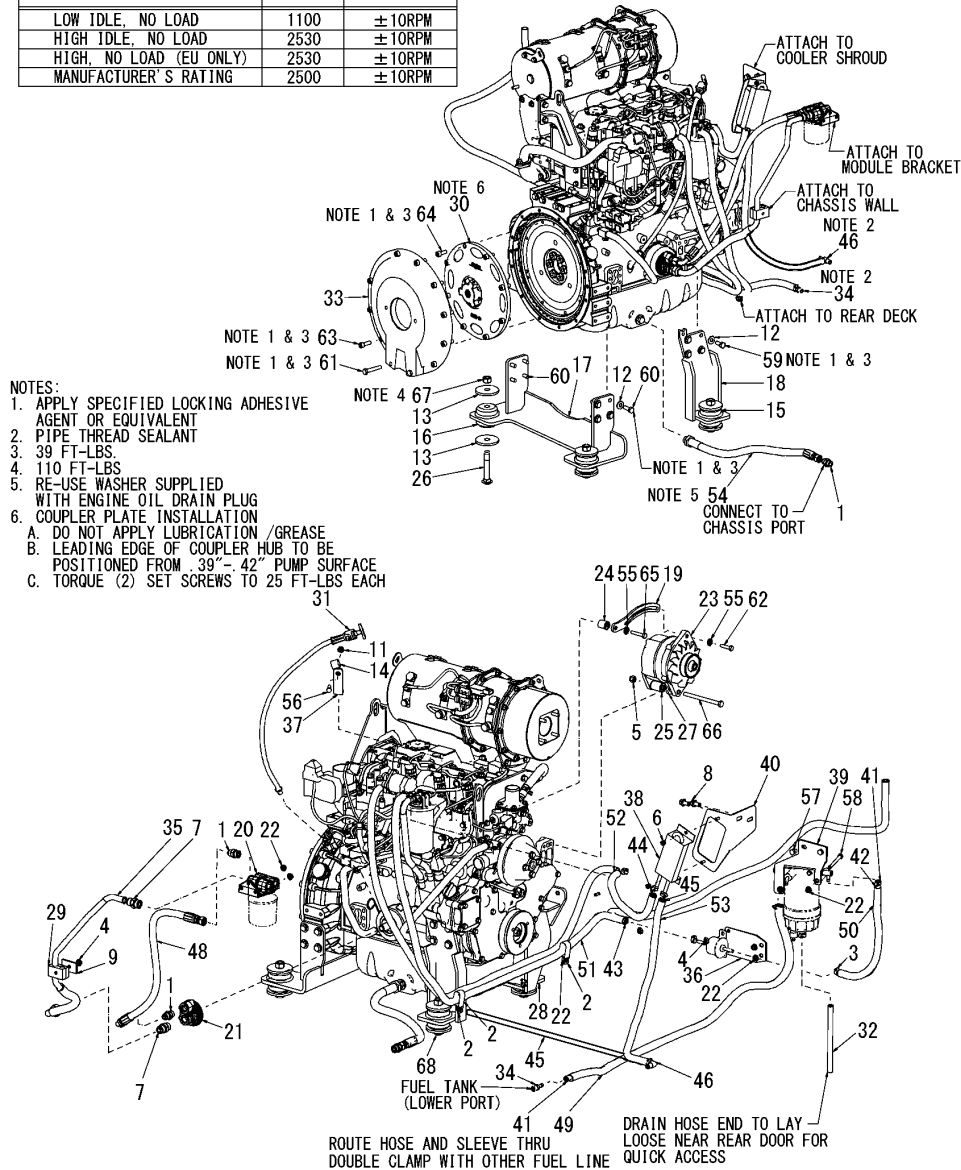
Fig.30. ENGINE(S190R

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

ENGINE SPEED SPECIFICATIONS

SPEED SETTING	RPM	TOLERANCE
LOW IDLE, NO LOAD	1100	±10RPM
HIGH IDLE, NO LOAD	2530	±10RPM
HIGH, NO LOAD (EU ONLY)	2530	±10RPM
MANUFACTURER'S RATING	2500	±10RPM



- NOTES:
 1. APPLY SPECIFIED LOCKING ADHESIVE AGENT OR EQUIVALENT
 2. PIPE THREAD SEALANT
 3. 39 FT-LBS
 4. 110 FT-LBS
 5. RE-USE WASHER SUPPLIED WITH ENGINE OIL DRAIN PLUG
 6. COUPLER PLATE INSTALLATION
 A. DO NOT APPLY LUBRICATION /GREASE
 B. LEADING EDGE OF COUPLER HUB TO BE POSITIONED FROM .39" - .42" PUMP SURFACE
 C. TORQUE (2) SET SCREWS TO 25 FT-LBS EACH

No.	Lev.	Parts No.	Description	(A)	(B)	(C)	(D)	(E)	(F)	Q'ty	I	R
1	1	172551-00040	FITTING							3		
2	1	172551-00090	CLAMP							2		
3	1	172551-00140	CLAMP							11		
4	1	172551-00230	NUT							3		
5	1	172216-00180	NUT							1		
6	1	172551-00250	NUT							2		
7	1	172551-00320	CONNECTOR							2		
8	1	172551-00440	SCREW							2		
9	1	172551-00510	PLATE							1		
10	1	172551-00720	NUT							1		1
11	1	172551-01060	NUT							1		
12	1	172216-01470	WASHER							16		
13	1	172551-01240	WASHER							8		
14	1	172551-01270	CLAMP							1		
15	1	172551-01310	ISOLATOR							2		
16	1	172216-04700	ISOLATOR							2		
17	1	172217-01370	MOUNT, ENGINE							1		
18	1	172217-01390	MOUNT, ENGINE							1		
19	1	172551-02510	BRACKET, ALTERNATOR							1		
20	1	172551-02540	MOUNT, FILTER							1		
21	1	172551-02550	ADAPTOR, FILTER							1		
22	1	172215-06620	NUT							7		
23	1	172551-02920	ALTERNATOR							1		
24	1	172551-02950	SPACER							1		
25	1	172551-02960	SPACER							1		
26	1	172218-01490	BOLT							2		
27	1	172551-02980	SPACER							1		
28	1	172217-03590	MOUNT, ENGINE							1		
29	1	172551-03120	CLAMP							1		
30	1	172216-08330	COUPLER, FLEX							1		
31	1	172216-08350	DIPSTICK ASSY							1		
32	1	172216-08490	HOSE, FUEL							1		
33	1	172216-08590	HOUSING, FLYWHEEL							1		
34	1	172216-13810	FITTING							1		
35	1	172216-13820	HOSE							1		
36	1	172216-13830	PLATE ASSY							1		
37	1	172216-13840	BRACKET, DIPSTICK							1		
38	1	172216-13850	COOLER, FUEL							1		
39	1	172216-13860	BRKT, WATERSEPARATOR							1		
40	1	172216-13870	BRKT ASSY, FO COOLER							1		
41	1	172216-13880	LINE, FUEL							1		
42	1	172216-13890	HOSE							1		
43	1	172216-13900	HOSE							1		
44	1	172216-13910	HOSE							1		
45	1	172216-13920	HOSE							1		
46	1	172216-13930	FITTING							1		
48	1	172216-12320	HOSE 1/2 X 35							1		
49	1	172216-13950	SLEEVE, NYLON							1		
50	1	172216-13960	SLEEVE, NYLON							1		
51	1	172216-13970	SLEEVE, NYLON							1		
52	1	172216-13980	SLEEVE, NYLON							1		

Remarks
 (1)Not shown in illustration.

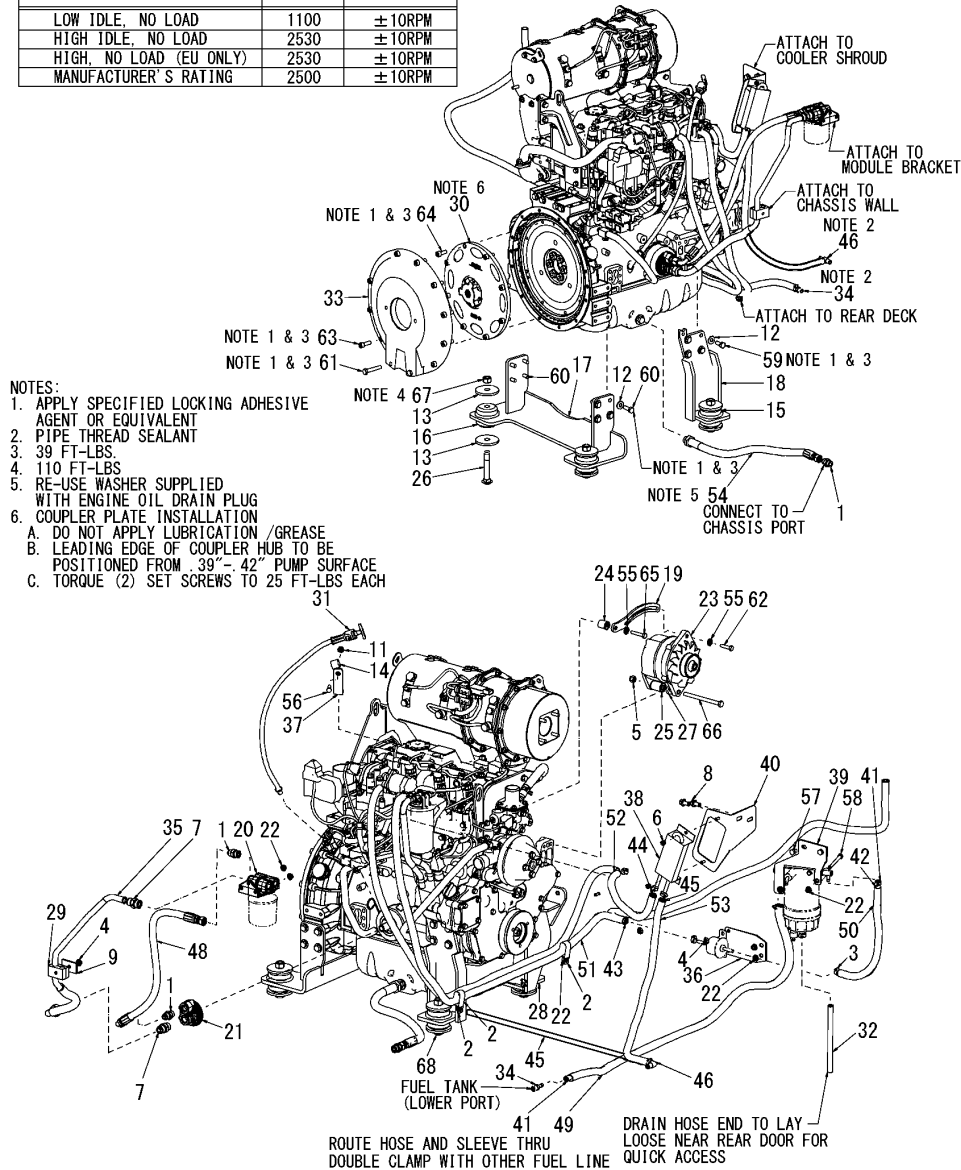
Fig.30. ENGINE(S190R

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

ENGINE SPEED SPECIFICATIONS

SPEED SETTING	RPM	TOLERANCE
LOW IDLE, NO LOAD	1100	±10RPM
HIGH IDLE, NO LOAD	2530	±10RPM
HIGH, NO LOAD (EU ONLY)	2530	±10RPM
MANUFACTURER'S RATING	2500	±10RPM



No.	Lev.	Parts No.	Description	(A)	(B)	(C)	(D)	(E)	(F)	Q'ty	I	R
53	1	172216-13990	SLEEVE, NYLON							1		
54	1	172216-14000	HOSE ASSY							1		
55	1	172216-09250	WASHER							2		
56	1	172551-09510	SCREW							1		
57	1	172216-14010	SCREW							2		
58	1	172551-09790	SCREW							2		
59	1	172216-09580	SCREW							8		
60	1	172551-10060	SCREW							8		
61	1	172216-09770	SCREW							2		
62	1	172216-09820	SCREW							1		
63	1	172216-09830	SCREW							9		
64	1	172216-09860	SCREW							8		
65	1	172551-10520	SCREW							1		
66	1	172551-10530	SCREW							1		
67	1	172216-11150	NUT							4		
68	1	172216-07880	BOLT							2		

Remarks
(1)Not shown in illustration.

Fig.31. ENGINE(S220R

(A)=S190R-1
(B)=S220R-1
(C)=

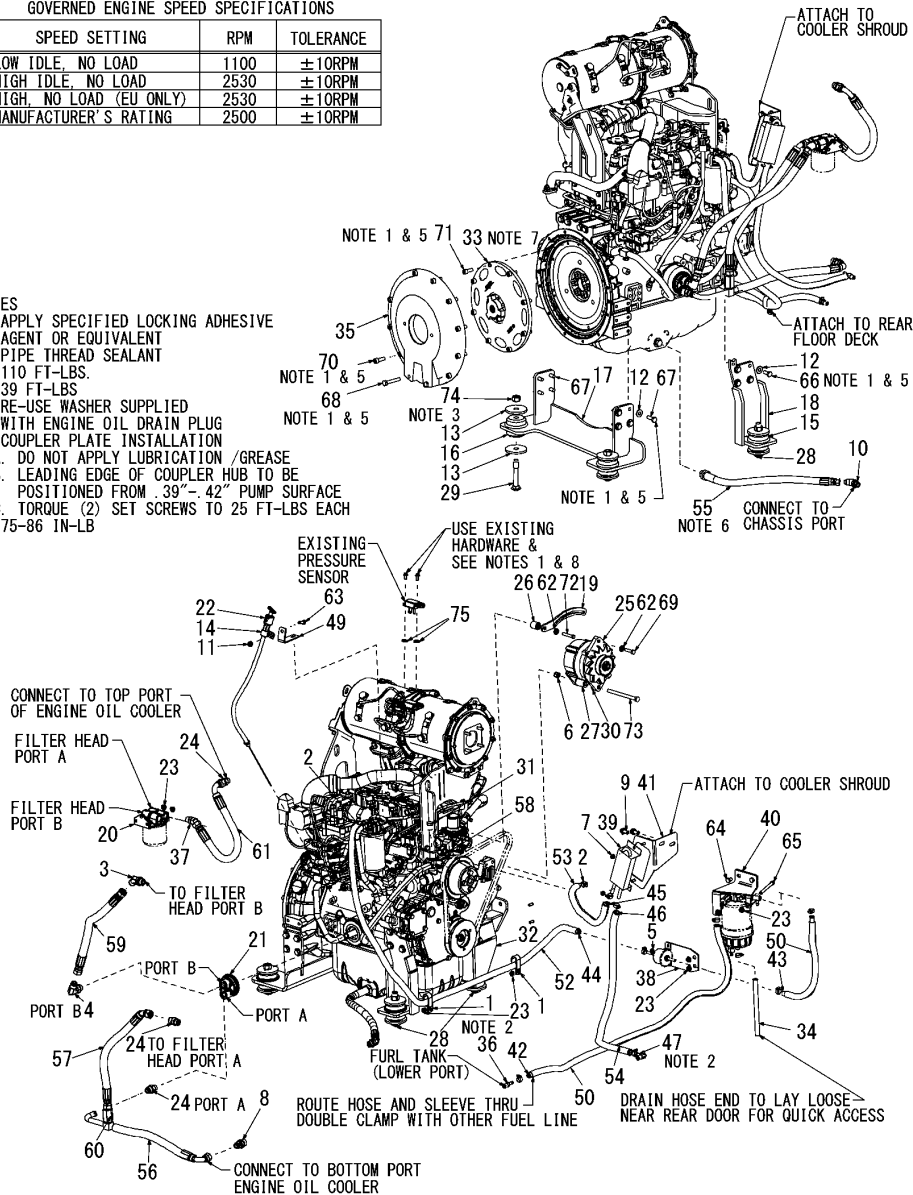
(D)=
(E)=
(F)=

GOVERNED ENGINE SPEED SPECIFICATIONS

SPEED SETTING	RPM	TOLERANCE
LOW IDLE, NO LOAD	1100	±10RPM
HIGH IDLE, NO LOAD	2530	±10RPM
HIGH, NO LOAD (EU ONLY)	2530	±10RPM
MANUFACTURER'S RATING	2500	±10RPM

NOTES

1. APPLY SPECIFIED LOCKING ADHESIVE AGENT OR EQUIVALENT
2. PIPE THREAD SEALANT
3. 110 FT-LBS.
5. 39 FT-LBS
6. RE-USE WASHER SUPPLIED WITH ENGINE OIL DRAIN PLUG
7. COUPLER PLATE INSTALLATION
 - A. DO NOT APPLY LUBRICATION /GREASE
 - B. LEADING EDGE OF COUPLER HUB TO BE POSITIONED FROM .39"-.42" PUMP SURFACE
 - C. TORQUE (2) SET SCREWS TO 25 FT-LBS EACH
 8. 75-86 IN-LB



No.	Lev.	Parts No.	Description	Qty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00090	CLAMP		2						
2	1	172551-00140	CLAMP		11						
3	1	172215-00120	FITTING		1						
4	1	172215-00190	FITTING		1						
5	1	172551-00230	NUT		2						
6	1	172216-00180	NUT		1						
7	1	172551-00250	NUT		2						
8	1	172551-00320	CONNECTOR		1						
9	1	172551-00440	SCREW		2						
10	1	172551-00460	FITTING		1						
11	1	172551-01060	NUT		1						
12	1	172216-01470	WASHER		16						
13	1	172551-01240	WASHER		8						
14	1	172551-01270	CLAMP		1						
15	1	172551-01310	ISOLATOR		2						
16	1	172216-04700	ISOLATOR		2						
17	1	172217-01370	MOUNT, ENGINE		1						
18	1	172217-01390	MOUNT, ENGINE		1						
19	1	172551-02510	BRACKET, ALTERNATOR		1						
20	1	172551-02540	MOUNT, FILTER		1						
21	1	172551-02550	ADAPTOR, FILTER		1						
22	1	172551-02600	DIPSTICK ASSY		1						
23	1	172215-06620	NUT		6						
24	1	172551-02780	CONNECTOR		3						
25	1	172551-02920	ALTERNATOR		1						
26	1	172551-02950	SPACER		1						
27	1	172551-02960	SPACER		1						
28	1	172216-07880	BOLT		2						
29	1	172218-01490	BOLT		2						
30	1	172551-02980	SPACER		1						
31	1	172216-14020	PLUG		1						
32	1	172217-03590	MOUNT, ENGINE		1						
33	1	172216-08330	COUPLER, FLEX		1						
34	1	172216-08490	HOSE, FUEL		1						
35	1	172216-08590	HOUSING, FLYWHEEL		1						
36	1	172216-13810	FITTING		1						
37	1	172216-14030	FITTING		1						
38	1	172216-13830	PLATE ASSY		1						
39	1	172216-13850	COOLER, FUEL		1						
40	1	172216-13860	BRKT, WATERSEPARATOR		1						
41	1	172216-13870	BRKT ASSY, FO COOLER		1						
42	1	172216-13880	LINE, FUEL		1						
43	1	172216-13890	HOSE		1						
44	1	172216-13900	HOSE		1						
45	1	172216-13910	HOSE		1						
46	1	172216-13920	HOSE		1						
47	1	172216-13930	FITTING		1						
49	1	172216-14050	BRKT, OIL DIPSTICK		1						
50	1	172216-13950	SLEEVE, NYLON		1						
51	1	172216-13960	SLEEVE, NYLON		1						
52	1	172216-13970	SLEEVE, NYLON		1						

Remarks

(1)Not shown in illustration.

Fig.31. ENGINE(S220R

(A)=S190R-1
(B)=S220R-1
(C)=

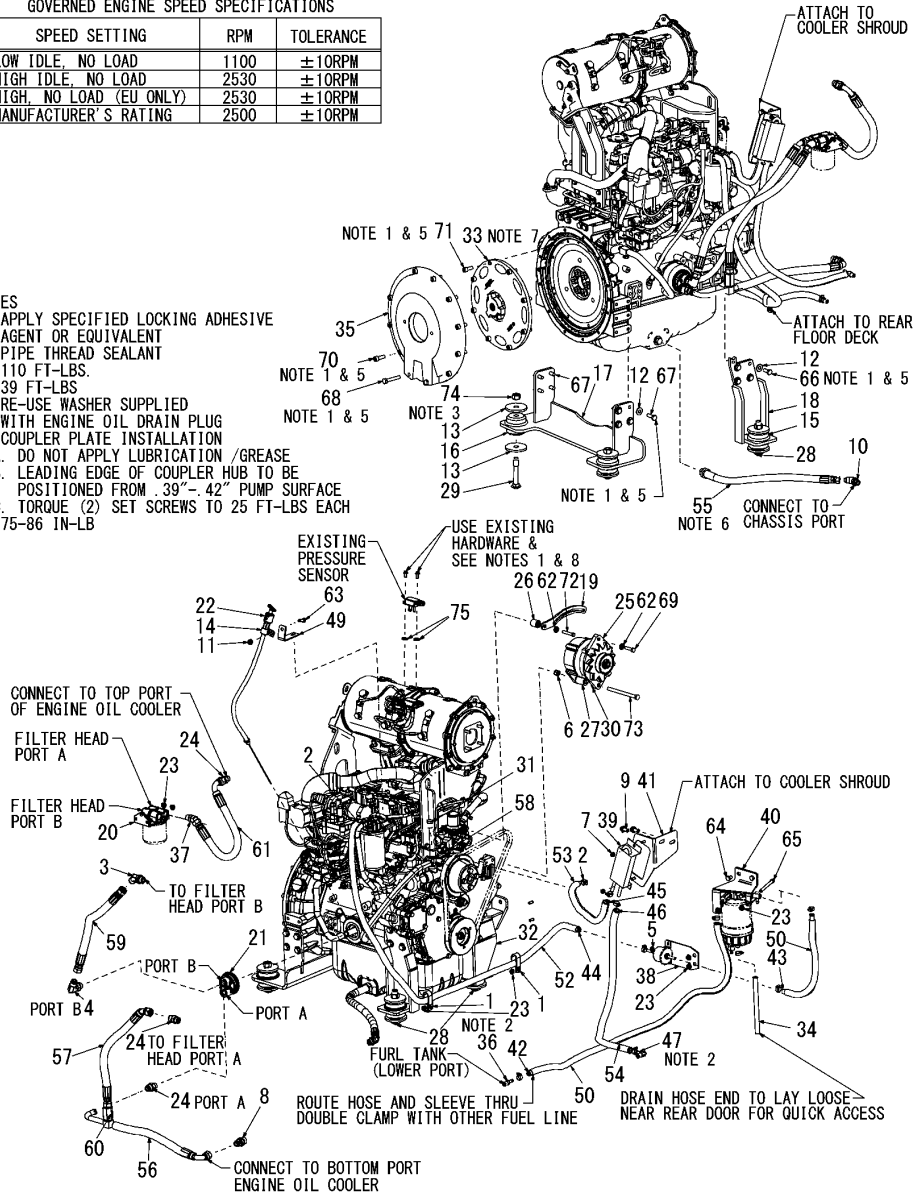
(D)=
(E)=
(F)=

GOVERNED ENGINE SPEED SPECIFICATIONS

SPEED SETTING	RPM	TOLERANCE
LOW IDLE, NO LOAD	1100	±10RPM
HIGH IDLE, NO LOAD	2530	±10RPM
HIGH, NO LOAD (EU ONLY)	2530	±10RPM
MANUFACTURER'S RATING	2500	±10RPM

NOTES

1. APPLY SPECIFIED LOCKING ADHESIVE AGENT OR EQUIVALENT
2. PIPE THREAD SEALANT
3. 110 FT-LBS.
5. 39 FT-LBS
6. RE-USE WASHER SUPPLIED WITH ENGINE OIL DRAIN PLUG
7. COUPLER PLATE INSTALLATION
 - A. DO NOT APPLY LUBRICATION /GREASE
 - B. LEADING EDGE OF COUPLER HUB TO BE POSITIONED FROM .39"-.42" PUMP SURFACE
 - C. TORQUE (2) SET SCREWS TO 25 FT-LBS EACH
 8. 75-86 IN-LB

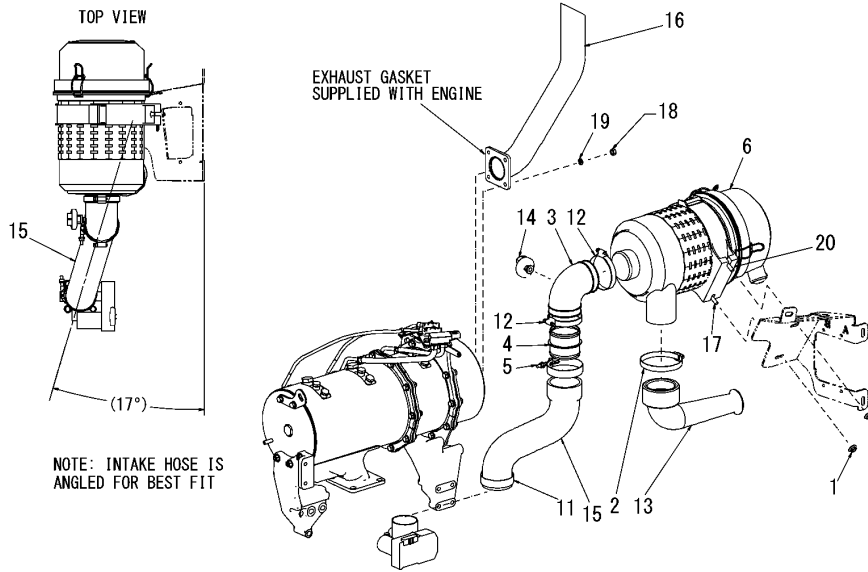


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
53	1	172216-13980	SLEEVE, NYLON		1						
54	1	172216-13990	SLEEVE, NYLON		1						
55	1	172216-14000	HOSE ASSY		1						
56	1	172216-14060	TUBE, EOC RETURN		1						
57	1	172216-14070	HOSE		1						
58	1	172216-14080	FITTING		1						
59	1	172216-14090	HOSE		1						
60	1	172216-14100	VALVE, INLINE CHECK		1						
61	1	172216-14110	HOSE		1						
62	1	172216-09250	WASHER		2						
63	1	172551-09510	SCREW		1						
64	1	172216-14010	SCREW		2						
65	1	172551-09790	SCREW		2						
66	1	172216-09580	SCREW		8						
67	1	172551-10060	SCREW		8						
68	1	172216-09770	SCREW		2						
69	1	172216-09820	SCREW		1						
70	1	172216-09830	SCREW		9						
71	1	172216-09860	SCREW		8						
72	1	172551-10520	SCREW		1						
73	1	172551-10530	SCREW		1						
74	1	172216-11150	NUT		4						
75	1	172216-17470	WASHER		2						

Remarks
(1)Not shown in illustration.

N:Old $\begin{matrix} \text{Yes} \\ \text{No} \end{matrix}$ New, Q:Old $\begin{matrix} \text{No} \\ \text{Yes} \end{matrix}$ New, R:Old $\begin{matrix} \text{Yes} \\ \text{No} \end{matrix}$ New, S:Old $\begin{matrix} \text{No} \\ \text{Yes} \end{matrix}$ New, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change

Fig.32. AIR CLEANER AND EXHAUST(S190R)



(A)=S190R-1
(B)=S220R-1
(C)=

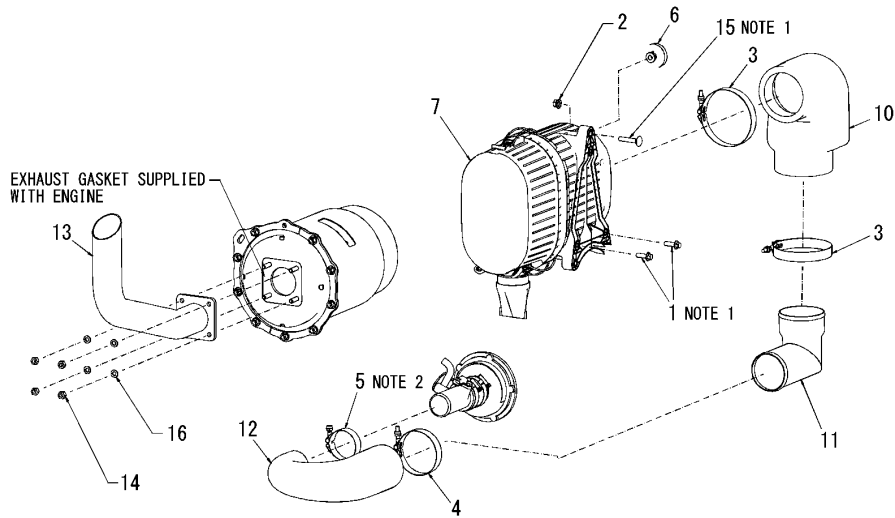
(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Qty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00240	NUT	2							
2	1	172551-00630	CLAMP	1							
3	1	172216-03440	ELBOW	1							
4	1	172216-03590	COUPLING, HOSE	1							
5	1	172216-14120	CLAMP	1							
6	1	172551-02250	CLEANER ASSY, AIR	1							
7	2	172551-02050	FILTER,AIR	1							1
8	2	172551-02060	FILTER,AIR	1							1
9	2	172551-02340	VALVE, EVACUATOR	1							1
10	2	172551-02350	CAP, AIR CLEANER	1							1
11	1	172216-04130	CLAMP	1							
12	1	172215-01560	CLAMP	2							
13	1	172551-02450	DIFFUSER, SOUND	1							
14	1	172551-04310	INDICATOR, SERVICE	1							
15	1	172216-14130	HOSE	1							
16	1	172216-14140	PIPE, EXHAUST	1							
17	1	172551-09810	BOLT	2							
18	1	172551-10440	NUT	4							
19	1	172215-03380	WASHER	4							
20	1	172551-02000	CLAMP, AIR CLEANER	1							

Remarks

(1)Not shown in illustration.

Fig.33. AIR CLEANER AND EXHAUST(S220R)



NOTES

- 1) ATTACH TO RIGHT CHASSIS TOWER
- 2) ENSURE CLAMP AND INTAKE HOSE ARE SECURELY FASTENED TO TURBO INTAKE

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-14150	SCREW		2						
2	1	172216-02490	NUT		1						
3	1	172216-14160	CLAMP		2						
4	1	172551-02170	CLAMP		1						
5	1	172217-02870	CLAMP		1						
6	1	172551-04310	INDICATOR, SERVICE		1						
7	1	172216-14170	CLEANER, AIR		1						
8	1	172217-05140	FILTER, MAIN		1						1
9	1	172217-05150	FILTER, SECONDARY		1						1
10	1	172216-14180	ADAPTER, INTAKE		1						
11	1	172216-14190	TUBE, INTAKE		1						
12	1	172216-14200	TUBE, INTAKE		1						
13	1	172216-14210	PIPE, EXHAUST		1						
14	1	172551-10440	NUT		4						
15	1	172216-14220	BOLT		1						
16	1	172215-03380	WASHER		4						

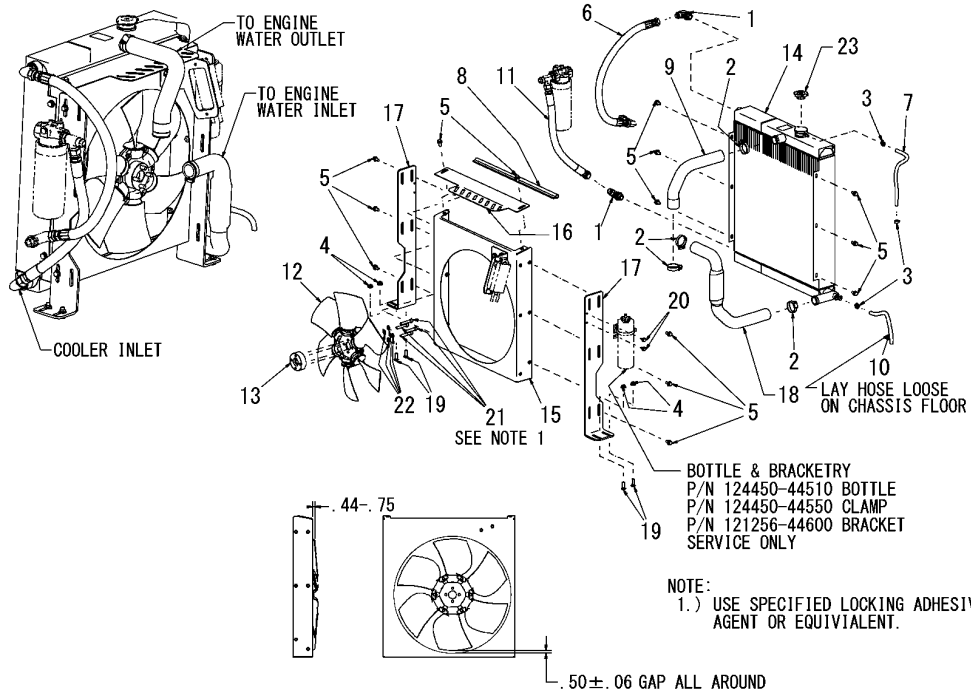
Remarks

(1)Not shown in illustration.

Fig.34. RADIATOR/COOLER(S190R

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

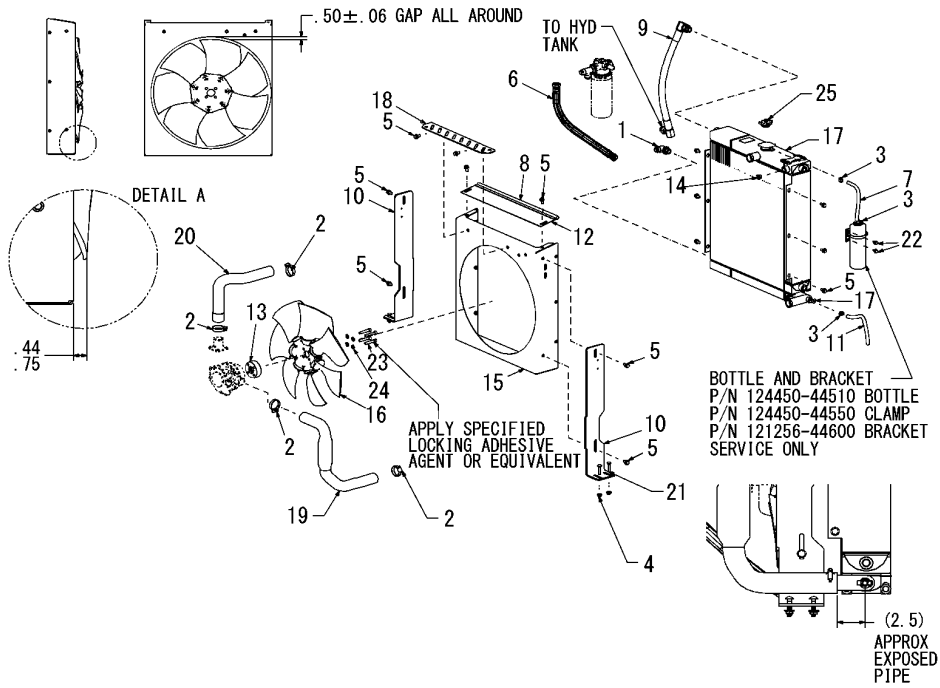


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00080	CONNECTOR	2							
2	1	172216-00130	CLAMP	4							
3	1	172551-00140	CLAMP	3							
4	1	172215-00200	NUT	4							
5	1	172551-00440	SCREW	14							
6	1	172217-00140	HOSE	1							
7	1	172217-00840	HOSE, FUEL	1							
8	1	172217-01060	SEAL, BULB	1							
9	1	172217-03200	HOSE, RAD, UPPER	1							
10	1	172218-02360	HOSE, FUEL	1							
11	1	172218-04770	HOSE	1							
12	1	172216-08880	FAN	1							
13	1	172551-04680	SPACER, FAN	1							
14	1	172216-14230	COOLER, RAD	1							
15	1	172216-14240	SHROUD, FAN	1							
16	1	172216-14250	PLATE, COVER	1							
17	1	172216-14260	PLATE, COOLER MOUNT	2							
18	1	172216-14270	HOSE, RAD LOWER	1							
19	1	172215-02930	BOLT	4							
20	1	172215-03150	SCREW	2							
21	1	172218-05140	SCREW	4							
22	1	172216-09850	WASHER	4							
23	1	172216-03740	CAP, RADIATOR	1							

Fig.35. RADIATOR/COOLER(S220R)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

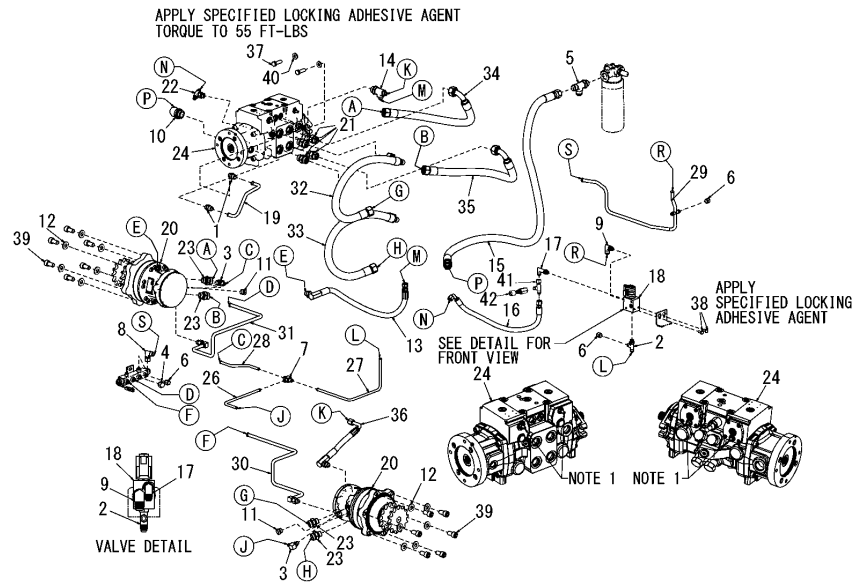
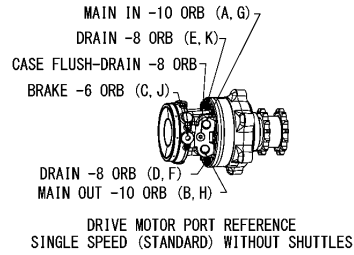


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00080	CONNECTOR		1						
2	1	172216-00130	CLAMP		4						
3	1	172551-00140	CLAMP		3						
4	1	172215-00200	NUT		4						
5	1	172551-00440	SCREW		14						
6	1	172216-14280	HOSE		1						
7	1	172217-00840	HOSE, FUEL		1						
8	1	172217-01060	SEAL, BULB		1						
9	1	172217-02150	HOSE		1						
10	1	172217-03340	PLATE, COOLER MOUNT		2						
11	1	172218-02360	HOSE, FUEL		1						
12	1	172217-03800	PLATE, COVER		1						
13	1	172551-04680	SPACER, FAN		1						
14	1	172216-14290	PLUG		1						
15	1	172216-14300	SHROUD		1						
16	1	172216-14310	FAN, PUSHER		1						
17	1	172216-14320	COOLER, RAD		1						
18	1	172216-14330	FLANGE, COOLER COVER		1						
19	1	172216-14270	HOSE, RAD LOWER		1						
20	1	172216-14340	HOSE		1						
21	1	172215-02990	BOLT		4						
22	1	172215-03150	SCREW		2						
23	1	172218-05140	SCREW		4						
24	1	172216-09850	WASHER		4						
25	1	172216-03740	CAP, RADIATOR		1						

Fig.36. HYDROSTATIC SYSTEM WITH DRIVE MOTORS(S190R SINGLE-SPEED HAND/FOOT AND DUAL JOYST)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



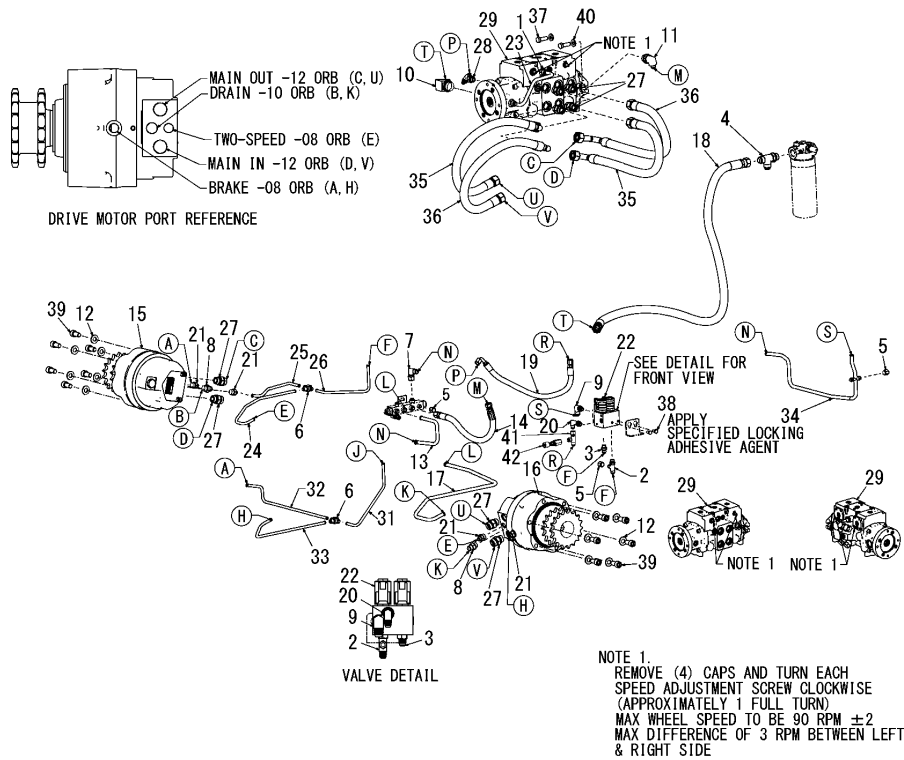
NOTE 1.
REMOVE (4) CAPS AND TURN EACH
SPEED ADJUSTMENT SCREW CLOCKWISE
(APPROXIMATELY 1 FULL TURN)
MAX WHEEL SPEED TO BE 90 RPM ±2
MAX DIFFERENCE OF 3 RPM BETWEEN LEFT & RIGHT SIDE

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00040	FITTING	2							
2	1	172551-00060	FITTING	1							
3	1	172551-00220	CONNECTOR	2							
4	1	172216-00300	CAP	1							
5	1	172551-00490	CONNECTOR, TEE-RUN	1							
6	1	172216-00380	CAP	3							
7	1	172216-00400	FITTING	1							
8	1	172215-00470	FITTING	1							
9	1	172215-00540	FITTING	1							
10	1	172216-00560	FITTING	1							
11	1	172215-00620	PLUG	2							
12	1	172216-02040	WASHER	12							
13	1	172216-03010	HOSE	1							
14	1	172216-14350	FITTING	1							
15	1	172217-01890	HOSE	1							
16	1	172217-02080	HOSE	1							
17	1	172217-02410	FITTING	1							
18	1	172218-00690	VALVE, BRAKE	1							1
19	1	172218-02270	TUBE, CHARGE	1							
20	1	172216-11910	MOTOR, SINGLE-SPEED	2							2
21	1	172216-14360	FITTING	4							
22	1	172216-14370	FITTING	1							
23	1	172216-14380	FITTING	4							
24	1	172216-14390	PUMP, TANDEM	3							3
25	1	172216-08390	O-RING	1							4
26	1	172216-14400	TUBE ASSY, BRAKE L	1							
27	1	172216-14410	TUBE, BRAKE LEFT	1							
28	1	172216-14420	TUBE ASSY, BRAKE R	1							
29	1	172216-14430	TUBE, DRAIN	1							
30	1	172216-14440	TUBE ASSY, DRAIN L	1							
31	1	172216-14450	TUBE ASSY, DRAIN R	1							
32	1	172216-14460	HOSE	1							
33	1	172216-14470	HOSE	1							
34	1	172216-14480	HOSE	1							
35	1	172216-14490	HOSE	1							
36	1	172216-14500	HOSE	1							
37	1	172215-02700	SCREW	2							
38	1	172215-02710	SCREW	2							
39	1	172216-09650	SCREW	12							
40	1	172216-11190	WASHER	2							
41	1	172551-00340	FITTING	1							
42	1	172216-05470	PORT, TEST	1							

Remarks

- (1)For breakdown see Fig.No.97.
- (2)For breakdown see Fig.No.82, 83.
- (3)For breakdown see Fig.No.87.
- (4)Not shown in illustration.

Fig.37. HYDROSTATIC SYSTEM WITH DRIVE MOTORS(S190R TWO-SPEED HAND/FOOT AND DUAL JOYSTICK)



(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

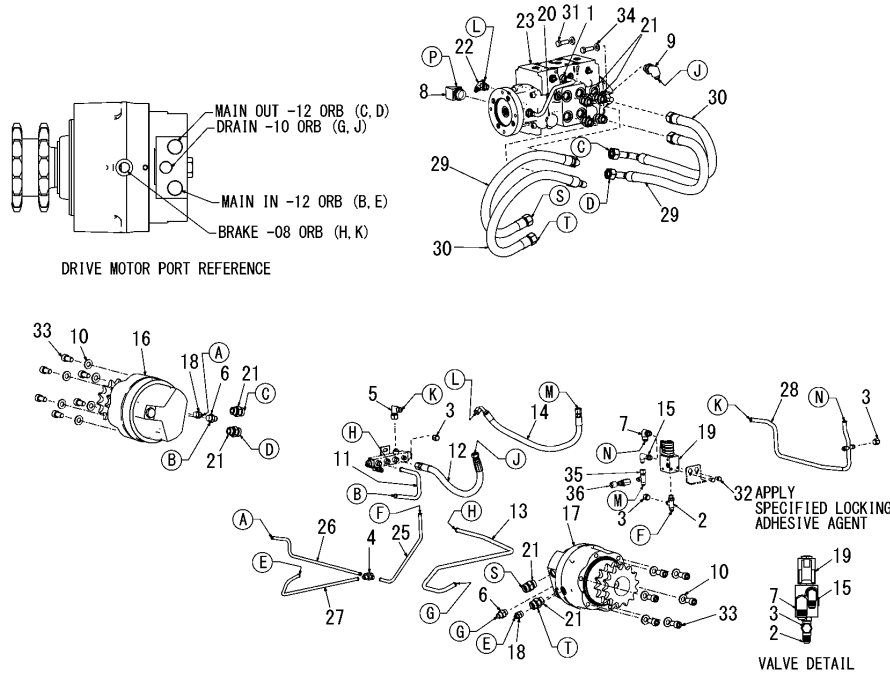
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00040	FITTING	2							
2	1	172551-00060	FITTING	1							
3	1	172551-00070	FITTING	1							
4	1	172551-00490	CONNECTOR, TEE-RUN	1							
5	1	172216-00380	CAP	2							
6	1	172216-00400	FITTING	2							
7	1	172215-00470	FITTING	1							
8	1	172551-00700	CONNECTOR	2							
9	1	172215-00540	FITTING	1							
10	1	172216-00560	FITTING	1							
11	1	172216-00570	FITTING	1							
12	1	172216-02040	WASHER	12							
13	1	172216-17480	TUBE, DRAIN	1							
14	1	172216-03710	HOSE	1							
15	1	172216-05720	MOTOR, TWO-SPEED R	1							1
16	1	172216-05730	MOTOR, TWO-SPEED L	1							1
17	1	172217-01850	TUBE ASSY, MOTOR L	1							
18	1	172217-01890	HOSE	1							
19	1	172217-02080	HOSE	1							
20	1	172217-02410	FITTING	1							
21	1	172216-10890	FITTING	4							
22	1	172218-00700	VALVE, BRAKE 2-SPEED	1							2
23	1	172218-02270	TUBE, CHARGE	1							
24	1	172217-03880	TUBE, TWO-SPEED LEFT	1							
25	1	172217-03890	TUBE, TWO-SPEED,R	1							
26	1	172218-04870	TUBE, CASE DRAIN	1							
27	1	172216-14360	FITTING	8							
28	1	172216-14370	FITTING	1							
29	1	172216-14390	PUMP, TANDEM	1							3
30	1	172216-08390	O-RING	1							4
31	1	172216-14510	TUBE, BRAKE LEFT	1							
32	1	172216-14520	TUBE, BRAKE RIGHT	1							
33	1	172216-14530	TUBE, BRAKE LEFT	1							
34	1	172216-14430	TUBE, DRAIN	1							
35	1	172216-14540	HOSE	2							
36	1	172216-14460	HOSE	2							
37	1	172215-02700	SCREW	2							
38	1	172215-02710	SCREW	2							
39	1	172216-09650	SCREW	12							
40	1	172216-11190	WASHER	2							
41	1	172551-00340	FITTING	1							
42	1	172216-05470	PORT, TEST	1							

Remarks
 (1)For breakdown see Fig.No.85.
 (2)For breakdown see Fig.No.98.
 (3)For breakdown see Fig.No.87.
 (4)Not shown in illustration.

Fig.38. HYDROSTATIC SYSTEM WITH DRIVE MOTORS(S220R SINGLE-SPEED HAND/FOOT AND DUAL JOYST

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00040	FITTING		2						
2	1	172551-00060	FITTING		1						
3	1	172216-00380	CAP		3						
4	1	172216-00400	FITTING		1						
5	1	172215-00470	FITTING		1						
6	1	172551-00700	CONNECTOR		2						
7	1	172215-00540	FITTING		1						
8	1	172216-00560	FITTING		1						
9	1	172216-00570	FITTING		1						
10	1	172216-02040	WASHER		12						
11	1	172216-17480	TUBE, DRAIN		1						
12	1	172216-03710	HOSE		1						
13	1	172217-01850	TUBE ASSY, MOTOR L		1						
14	1	172217-02080	HOSE		1						
15	1	172217-02410	FITTING		1						
16	1	172217-02500	MOTOR, SINGLESPEED R		1						1
17	1	172217-02510	MOTOR, SINGLESPEED L		1						1
18	1	172216-10890	FITTING		2						
19	1	172218-00690	VALVE, BRAKE		1						2
20	1	172218-02270	TUBE, CHARGE		1						
21	1	172216-14360	FITTING		8						
22	1	172216-14370	FITTING		1						
23	1	172216-14390	PUMP, TANDEM		1						3
24	1	172216-08390	O-RING		1						4
25	1	172216-14510	TUBE, BRAKE LEFT		1						
26	1	172216-14520	TUBE, BRAKE RIGHT		1						
27	1	172216-14530	TUBE, BRAKE LEFT		1						
28	1	172216-14430	TUBE, DRAIN		1						
29	1	172216-14540	HOSE		2						
30	1	172216-14460	HOSE		2						
31	1	172215-02700	SCREW		2						
32	1	172215-02710	SCREW		2						
33	1	172216-09650	SCREW		12						
34	1	172216-11190	WASHER		2						
35	1	172551-00340	FITTING		1						
36	1	172216-05470	PORT, TEST		1						

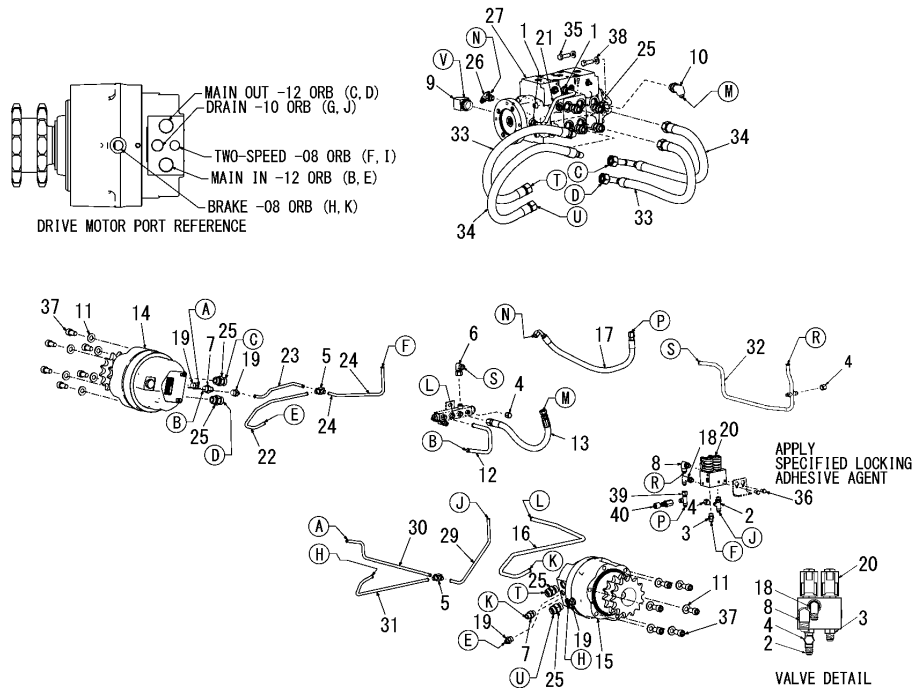
Remarks

- (1)For breakdown see Fig.No.84.
- (2)For breakdown see Fig.No.97.
- (3)For breakdown see Fig.No.87.
- (4)Not shown in illustration.

Fig.39. HYDROSTATIC SYSTEM WITH DRIVE MOTORS(S220R TWO-SPEED HAND/FOOT AND DUAL JOYSTICK)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

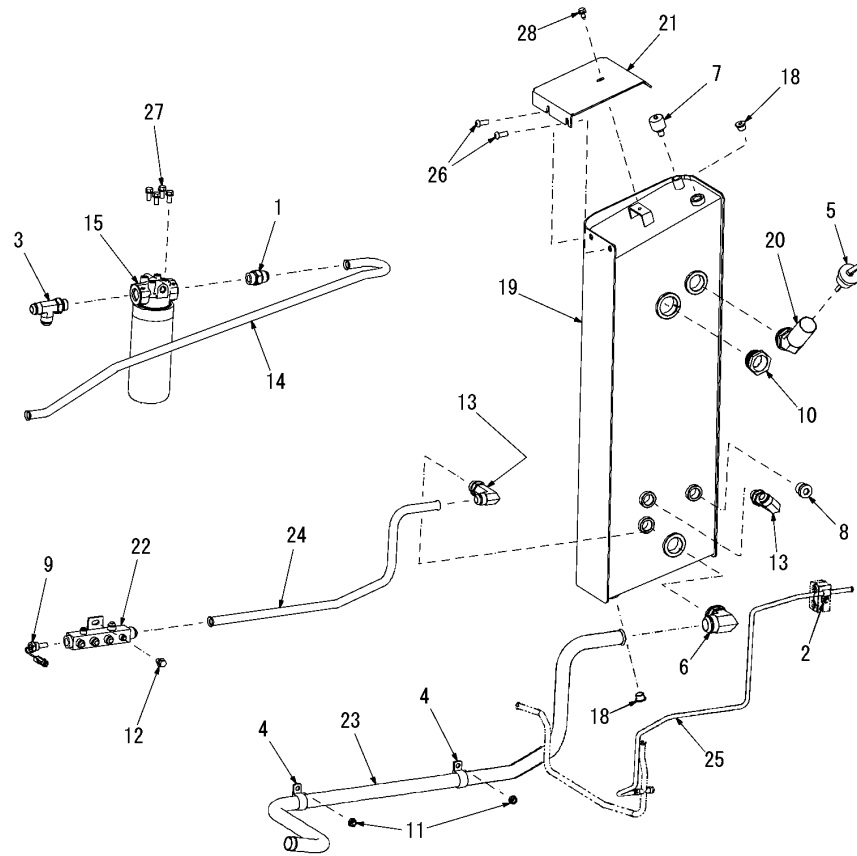


No.	Lev.	Parts No.	Description	Qty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00040	FITTING		2						
2	1	172551-00060	FITTING		1						
3	1	172551-00070	FITTING		1						
4	1	172216-00380	CAP		3						
5	1	172216-00400	FITTING		2						
6	1	172215-00470	FITTING		1						
7	1	172551-00700	CONNECTOR		2						
8	1	172215-00540	FITTING		1						
9	1	172216-00560	FITTING		1						
10	1	172216-00570	FITTING		1						
11	1	172216-02040	WASHER		12						
12	1	172216-17480	TUBE, DRAIN		1						
13	1	172216-03710	HOSE		1						
14	1	172217-01690	MOTOR, TWO-SPEED R		1						1
15	1	172217-01700	MOTOR, TWO-SPEED L		1						1
16	1	172217-01850	TUBE ASSY, MOTOR L		1						
17	1	172217-02080	HOSE		1						
18	1	172217-02410	FITTING		1						
19	1	172216-10890	FITTING		4						
20	1	172218-00700	VALVE, BRAKE 2-SPEED		1						2
21	1	172218-02270	TUBE, CHARGE		1						
22	1	172217-03880	TUBE, TWO-SPEED LEFT		1						
23	1	172217-03890	TUBE, TWO-SPEED,R		1						
24	1	172218-04870	TUBE, CASE DRAIN		1						
25	1	172216-14360	FITTING		8						
26	1	172216-14370	FITTING		1						
27	1	172216-14390	PUMP, TANDEM		1						3
28	1	172216-08390	O-RING		1						4
29	1	172216-14510	TUBE, BRAKE LEFT		1						
30	1	172216-14520	TUBE, BRAKE RIGHT		1						
31	1	172216-14530	TUBE, BRAKE LEFT		1						
32	1	172216-14430	TUBE, DRAIN		1						
33	1	172216-14540	HOSE		2						
34	1	172216-14460	HOSE		2						
35	1	172215-02700	SCREW		2						
36	1	172215-02710	SCREW		2						
37	1	172216-09650	SCREW		12						
38	1	172216-11190	WASHER		2						
39	1	172551-00340	FITTING		1						
40	1	172216-05470	PORT, TEST		1						

Remarks

- (1)For breakdown see Fig.No.86.
- (2)For breakdown see Fig.No.98.
- (3)For breakdown see Fig.No.87.
- (4)Not shown in illustration.

Fig.40. HYDRAULICS-CHASSIS(S190R TANK HYDRAULICS)



(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00330	CONNECTOR	1							
2	1	172551-00420	CLAMP	1							
3	1	172551-00490	CONNECTOR, TEE-RUN	1							
4	1	172551-00750	CLAMP	2							
5	1	172216-00810	CAP, HYD. RESERVOIR	1							
6	1	172217-00070	FITTING	1							
7	1	172551-01000	BREATHER	1							
8	1	172551-01040	PLUG	1							
9	1	172551-01090	SWITCH,TEMPERATURE	1							
10	1	172551-01190	SIGHT PORT	1							
11	1	172215-00700	NUT	2							
12	1	172551-01810	SCREW	1							
13	1	172216-14550	FITTING	2							
14	1	172218-01190	TUBE, FILTER	1							
15	1	172218-03640	FILTER ASSY	1							
16	1	172218-06520	FILTER	1							1
17	1	172551-00380	FILTER, HYDRAULIC	1							1
18	1	172216-14290	PLUG	2							
19	1	172216-14560	TANK, HYDRAULIC	1							
20	1	172216-14570	TUBE, FILL NECK	1							
21	1	172216-14580	COVER, TOP TANK	1							
22	1	172216-14590	MANIFOLD, HYD RETURN	1							
23	1	172216-14600	TUBE, SUCTION	1							
24	1	172216-14610	TUBE, MANIFOLD DRAIN	1							
25	1	172216-14620	TUBE, DRAIN	1							
26	1	172216-14630	SCREW	2							
27	1	172216-09490	SCREW	4							
28	1	172215-03150	SCREW	1							

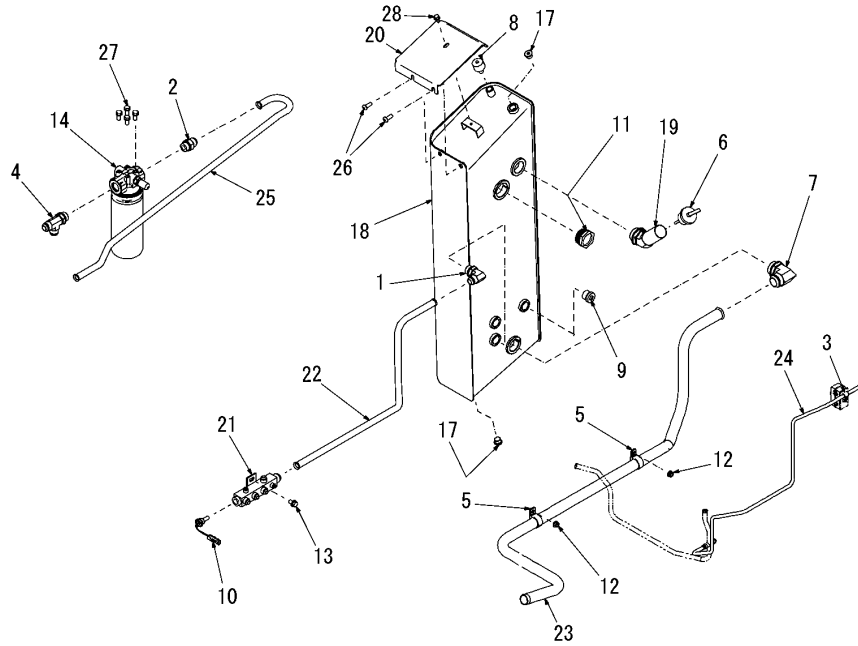
Remarks

(1)Not shown in illustration.

Fig.41. HYDRAULICS-CHASSIS(S220R TANK HYDRAULICS)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00080	CONNECTOR		1						
2	1	172551-00330	CONNECTOR		1						
3	1	172551-00420	CLAMP		2						
4	1	172551-00490	CONNECTOR, TEE-RUN		1						
5	1	172551-00750	CLAMP		2						
6	1	172216-00810	CAP, HYD. RESERVOIR		1						
7	1	172217-00070	FITTING		1						
8	1	172551-01000	BREATHER		1						
9	1	172551-01040	PLUG		1						
10	1	172551-01090	SWITCH,TEMPERATURE		1						
11	1	172551-01190	SIGHT PORT		1						
12	1	172215-00700	NUT		2						
13	1	172551-01810	SCREW		1						
14	1	172218-03640	FILTER ASSY		1						
15	1	172218-06520	FILTER		1						1
16	1	172551-00380	FILTER, HYDRAULIC		1						1
17	1	172216-14290	PLUG		2						
18	1	172216-14560	TANK, HYDRAULIC		1						
19	1	172216-14570	TUBE, FILL NECK		1						
20	1	172216-14580	COVER, TOP TANK		1						
21	1	172216-14590	MANIFOLD, HYD RETURN		1						
22	1	172216-14640	TUBE, TANK RETURN		1						
23	1	172216-14650	TUBE, SUCTION		1						
24	1	172216-14620	TUBE, DRAIN		1						
25	1	172216-14660	TUBE, FILTER		1						
26	1	172216-14630	SCREW		2						
27	1	172216-09490	SCREW		4						
28	1	172215-03150	SCREW		1						

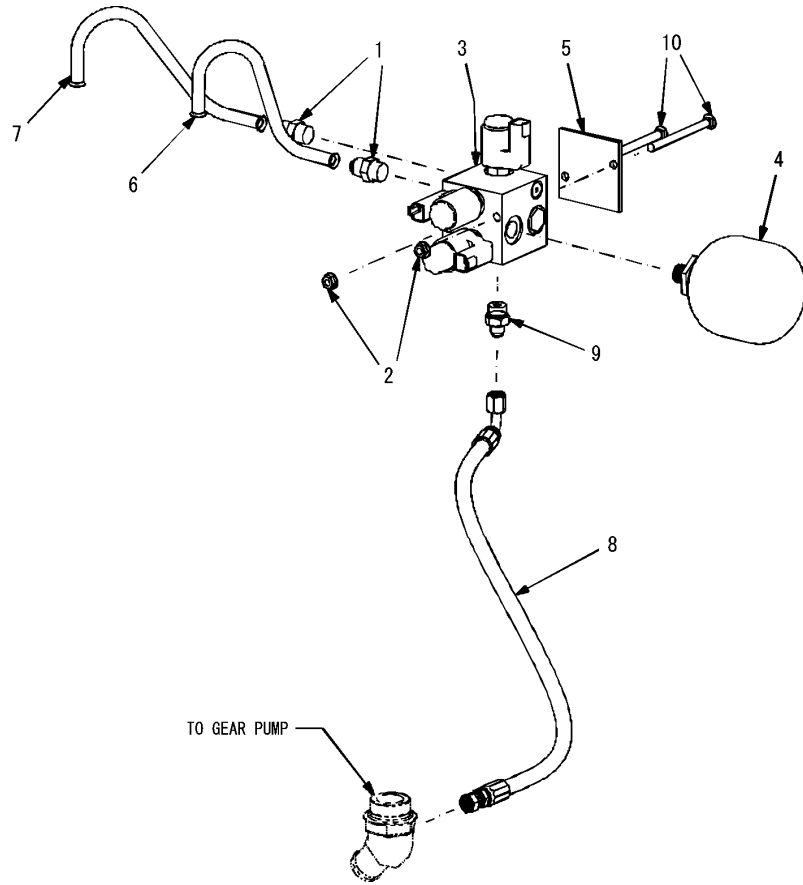
Remarks

(1)Not shown in illustration.

Fig.42. HYDRAULICS-CHASSIS(RIDE CONTROL ASSEMBLY

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00040	FITTING	2	2						
2	1	172551-01060	NUT	2	2						
3	1	172551-02090	MANIFOLD, RIDE CNTRL	1	1						1
4	1	172551-02130	ACCUMULATOR	1	1						
5	1	172216-03850	PLATE, SPACER	1	1						
6	1	172217-01340	TUBE, RIDE CONTROL	1	1						
7	1	172217-01350	TUBE, RIDE CONTROL	1	1						
8	1	172216-06070	HOSE	1	1						
9	1	172216-10890	FITTING	1	1						
10	1	172551-10160	BOLT	2	2						

Remarks

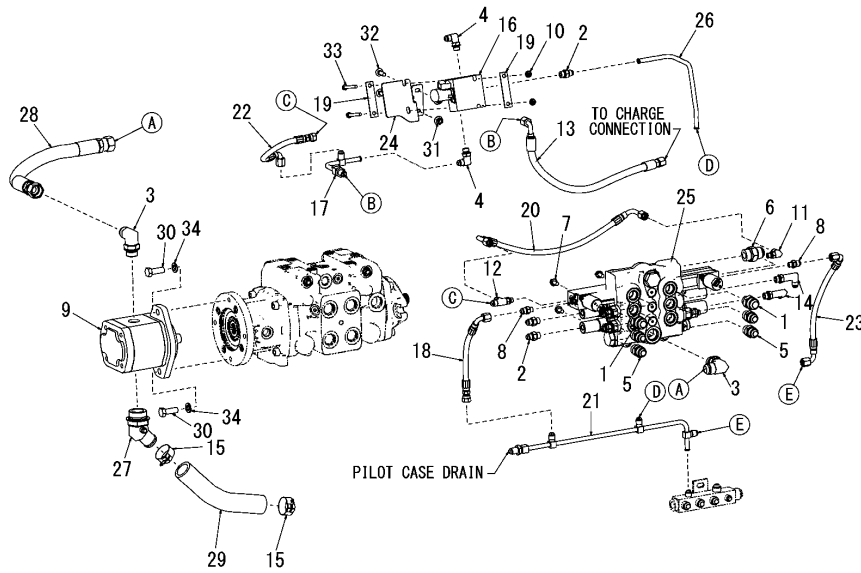
(1)For breakdown see Fig.No.102.

N:Old $\xrightarrow{\text{Yes}}$ New, Q:Old $\xrightarrow{\text{No}}$ New, R:Old $\xrightarrow{\text{Yes}}$ New, S:Old $\xrightarrow{\text{No}}$ New, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change

Fig.43. HYDRAULICS-CHASSIS(S190R STANDARD AUXILIARY HYDRAULICS HAND/FOOT AND DUAL JOYSTI

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172215-00030	FITTING	2							
2	1	172551-00070	FITTING	3							
3	1	172551-00080	CONNECTOR	2							
4	1	172551-00220	CONNECTOR	2							
5	1	172551-00320	CONNECTOR	4							
6	1	172551-00330	CONNECTOR	1							
7	1	172216-00290	SCREW	4							
8	1	172218-00050	FITTING	2							
9	1	172551-01100	GEAR PUMP	1							1
10	1	172216-01590	NUT	2							
11	1	172215-00850	FITTING	1							
12	1	172216-14670	FITTING	1							
13	1	172217-02080	HOSE	1							
14	1	172217-02410	FITTING	2							
15	1	172216-06760	CLAMP	2							
16	1	172216-14680	VALVE, SOLENOID 3WAY	1							2
17	1	172216-14690	TUBE, HYD PILOT	1							
18	1	172216-14700	HOSE	1							
19	1	172216-14710	STRAP	2							
20	1	172216-14720	HOSE	1							
21	1	172216-14730	TUBE, HYD DRAIN	1							
22	1	172216-14740	HOSE	1							
23	1	172216-14750	HOSE	1							
24	1	172216-14760	BRACKET, VALVE	1							
25	1	172216-14770	VALVE, 3-SPOOL PILOT	1							3
26	1	172216-14780	TUBE, CASE DRAIN	1							
27	1	172216-14790	FITTING	1							
28	1	172216-14800	HOSE	1							
29	1	172216-14810	HOSE, SUCTION	1							
30	1	172216-10750	SCREW	2							
31	1	172216-14820	NUT	2							
32	1	172215-02820	BOLT	2							
33	1	172216-09440	SCREW	2							
34	1	172215-03310	WASHER	2							

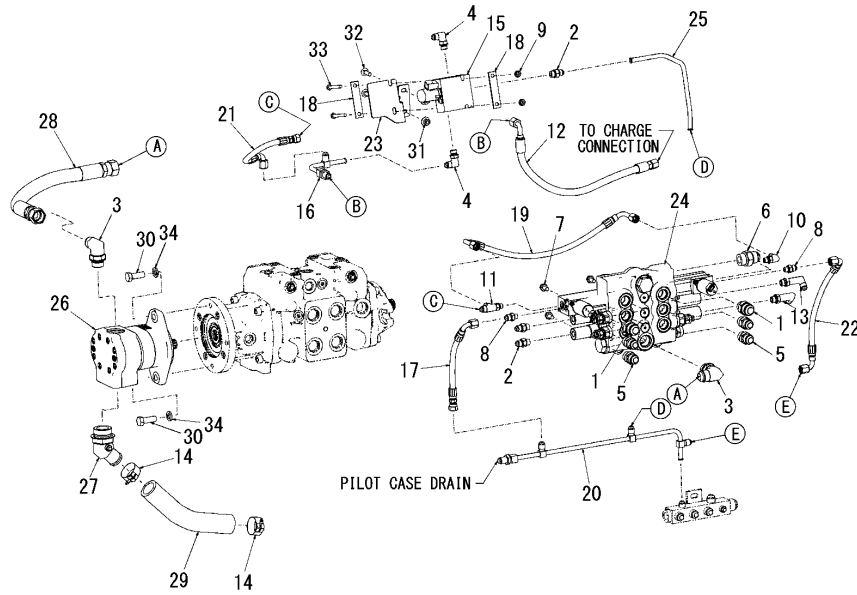
Remarks

- (1)For breakdown see Fig.No.90.
- (2)For breakdown see Fig.No.96.
- (3)For breakdown see Fig.No.100.

Fig.44. HYDRAULICS-CHASSIS(S220R STANDARD AUXILIARY HYDRAULICS HAND/FOOT AND DUAL JOYSTI

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172215-00030	FITTING		2						
2	1	172551-00070	FITTING		3						
3	1	172551-00080	CONNECTOR		2						
4	1	172551-00220	CONNECTOR		2						
5	1	172551-00320	CONNECTOR		4						
6	1	172551-00330	CONNECTOR		1						
7	1	172216-00290	SCREW		4						
8	1	172218-00050	FITTING		2						
9	1	172216-01590	NUT		2						
10	1	172215-00850	FITTING		1						
11	1	172216-14670	FITTING		1						
12	1	172217-02080	HOSE		1						
13	1	172217-02410	FITTING		2						
14	1	172216-06760	CLAMP		2						
15	1	172216-14680	VALVE, SOLENOID 3WAY		1						1
16	1	172216-14690	TUBE, HYD PILOT		1						
17	1	172216-14700	HOSE		1						
18	1	172216-14710	STRAP		2						
19	1	172216-14720	HOSE		1						
20	1	172216-14730	TUBE, HYD DRAIN		1						
21	1	172216-14740	HOSE		1						
22	1	172216-14750	HOSE		1						
23	1	172216-14760	BRACKET, VALVE		1						
24	1	172216-14770	VALVE, 3-SPOOL PILOT		1						2
25	1	172216-14780	TUBE, CASE DRAIN		1						
26	1	172216-14830	PUMP, SINGLE		1						3
27	1	172216-14790	FITTING		1						
28	1	172216-14800	HOSE		1						
29	1	172216-14810	HOSE, SUCTION		1						
30	1	172216-10750	SCREW		2						
31	1	172216-14820	NUT		2						
32	1	172215-02820	BOLT		2						
33	1	172216-09440	SCREW		2						
34	1	172215-03310	WASHER		2						

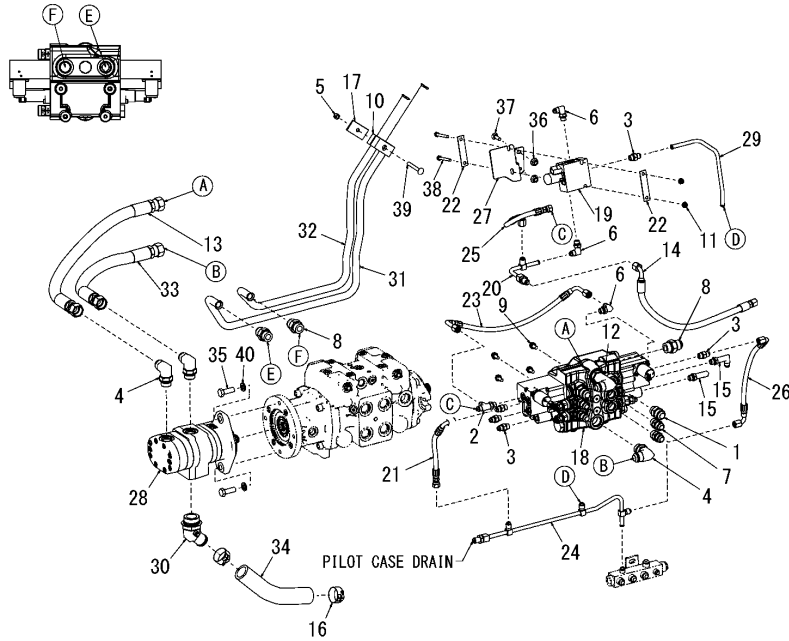
Remarks

- (1)For breakdown see Fig.No.96.
- (2)For breakdown see Fig.No.100.
- (3)For breakdown see Fig.No.91.

Fig.45. HYDRAULICS-CHASSIS(S190R HIGH-FLOW AUXILIARY HYDRAULICS DUAL JOYSTICK AND HAND/F

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172215-00030	FITTING	2							
2	1	172551-00060	FITTING	1							
3	1	172551-00070	FITTING	5							
4	1	172551-00080	CONNECTOR	3							
5	1	172551-00150	NUT	1							
6	1	172551-00220	CONNECTOR	3							
7	1	172551-00320	CONNECTOR	4							
8	1	172551-00330	CONNECTOR	3							
9	1	172216-00290	SCREW	4							
10	1	172551-00500	CLAMP	1							
11	1	172216-01590	NUT	2							
12	1	172216-14550	FITTING	1							
13	1	172217-01740	HOSE	1							
14	1	172217-02080	HOSE	1							
15	1	172217-02410	FITTING	2							
16	1	172216-06760	CLAMP	2							
17	1	172218-04780	PLATE, TWIN FLAT	1							
18	1	172216-14840	VALVE, 4-SPOOL PILOT	1							1
19	1	172216-14680	VALVE, SOLENOID 3WAY	1							2
20	1	172216-14690	TUBE, HYD PILOT	1							
21	1	172216-14700	HOSE	1							
22	1	172216-14710	STRAP	2							
23	1	172216-14720	HOSE	1							
24	1	172216-14730	TUBE, HYD DRAIN	1							
25	1	172216-14740	HOSE	1							
26	1	172216-14750	HOSE	1							
27	1	172216-14760	BRACKET, VALVE	1							
28	1	172216-14850	PUMP, GEAR	1							3
29	1	172216-14780	TUBE, CASE DRAIN	1							
30	1	172216-14790	FITTING	1							
31	1	172216-14860	TUBE, HYD HIGH FLOW	1							
32	1	172216-14870	TUBE, HYD HIGH FLOW	1							
33	1	172216-14800	HOSE	1							
34	1	172216-14810	HOSE, SUCTION	1							
35	1	172216-10750	SCREW	2							
36	1	172216-14820	NUT	2							
37	1	172215-02820	BOLT	2							
38	1	172216-09440	SCREW	2							
39	1	172215-03200	BOLT	1							
40	1	172215-03310	WASHER	2							

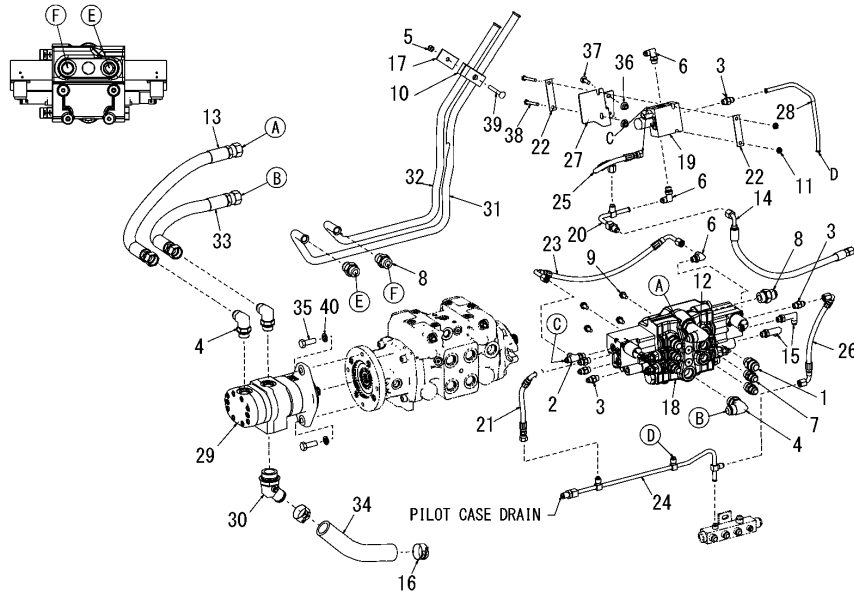
Remarks

- (1)For breakdown see Fig.No.101.
- (2)For breakdown see Fig.No.96.
- (3)For breakdown see Fig.No.92.

Fig.46. HYDRAULICS-CHASSIS(S220R HIGH-FLOW AUXILIARY HYDRAULICS DUAL JOYSTICK AND HAND/F

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Qty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172215-00030	FITTING		2						
2	1	172551-00060	FITTING		1						
3	1	172551-00070	FITTING		5						
4	1	172551-00080	CONNECTOR		3						
5	1	172551-00150	NUT		1						
6	1	172551-00220	CONNECTOR		3						
7	1	172551-00320	CONNECTOR		4						
8	1	172551-00330	CONNECTOR		3						
9	1	172216-00290	SCREW		4						
10	1	172551-00500	CLAMP		1						
11	1	172216-01590	NUT		2						
12	1	172216-14550	FITTING		1						
13	1	172217-01740	HOSE		1						
14	1	172217-02080	HOSE		1						
15	1	172217-02410	FITTING		2						
16	1	172216-06760	CLAMP		2						
17	1	172551-00510	PLATE		1						
18	1	172216-14840	VALVE, 4-SPOOL PILOT		1						1
19	1	172216-14680	VALVE, SOLENOID 3WAY		1						2
20	1	172216-14690	TUBE, HYD PILOT		1						
21	1	172216-14700	HOSE		1						
22	1	172216-14710	STRAP		2						
23	1	172216-14720	HOSE		1						
24	1	172216-14730	TUBE, HYD DRAIN		1						
25	1	172216-14740	HOSE		1						
26	1	172216-14750	HOSE		1						
27	1	172216-14760	BRACKET, VALVE		1						
28	1	172216-14780	TUBE, CASE DRAIN		1						
29	1	172216-14880	PUMP, GEAR		1						3
30	1	172216-14790	FITTING		1						
31	1	172216-14860	TUBE, HYD HIGH FLOW		1						
32	1	172216-14870	TUBE, HYD HIGH FLOW		1						
33	1	172216-14800	HOSE		1						
34	1	172216-14810	HOSE, SUCTION		1						
35	1	172216-10750	SCREW		2						
36	1	172216-14820	NUT		2						
37	1	172215-02820	BOLT		2						
38	1	172216-09440	SCREW		2						
39	1	172215-03200	BOLT		1						
40	1	172215-03310	WASHER		2						

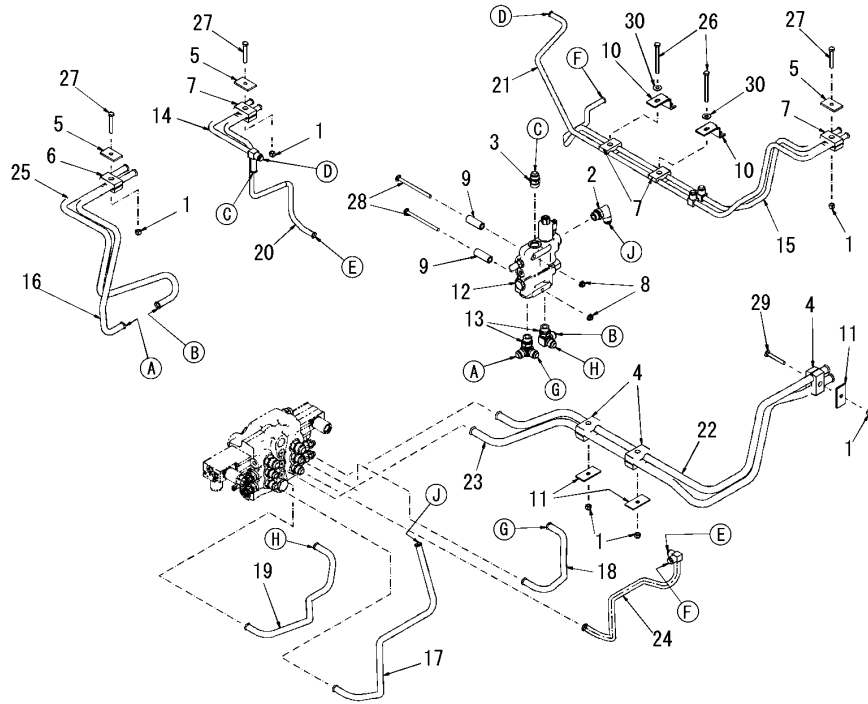
Remarks

- (1)For breakdown see Fig.No.101.
- (2)For breakdown see Fig.No.96.
- (3)For breakdown see Fig.No.93.

Fig.47. HYDRAULICS-CHASSIS(HAND/FOOT AND DUAL JOYSTICK CONTROLS WITH SELF-LEVELING)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00150	NUT	6	6						
2	1	172215-00190	FITTING	1	1						
3	1	172551-00320	CONNECTOR	1	1						
4	1	172551-00500	CLAMP	3	3						
5	1	172551-00510	PLATE	3	3						
6	1	172215-00390	CLAMP	1	1						
7	1	172216-00460	CLAMP	4	4						
8	1	172551-01060	NUT	2	2						
9	1	172217-01250	SPACER	2	2						
10	1	172216-06390	BRACKET, HARNESS	2	2						
11	1	172218-04780	PLATE, TWIN FLAT	3	3						
12	1	172551-04200	VALVE, SELF-LEVEL	1	1						1
13	1	172216-14890	FITTING	2	2						
14	1	172216-14900	TUBE, HYD LIFT	1	1						
15	1	172216-14910	TUBE, HYD LIFT	1	1						
16	1	172216-14920	TUBE, HYD TILT	1	1						
17	1	172216-14930	TUBE, HYD LIFT	1	1						
18	1	172216-14940	TUBE, HYD TILT	1	1						
19	1	172216-14950	TUBE, HYD TILT	1	1						
20	1	172216-14960	TUBE, HYD LIFT	1	1						
21	1	172216-14970	TUBE, HYD LIFT	1	1						
22	1	172216-14980	TUBE, HYD STD AUX	1	1						
23	1	172216-14990	TUBE, HYD STD AUX	1	1						
24	1	172216-15000	TUBE, HYD LIFT	1	1						
25	1	172216-15010	TUBE, HYD TILT	1	1						
26	1	172216-09340	SCREW	2	2						
27	1	172551-09760	SCREW	3	3						
28	1	172217-04020	BOLT	2	2						
29	1	172215-03200	BOLT	1	1						
30	1	172551-10370	WASHER	2	2						

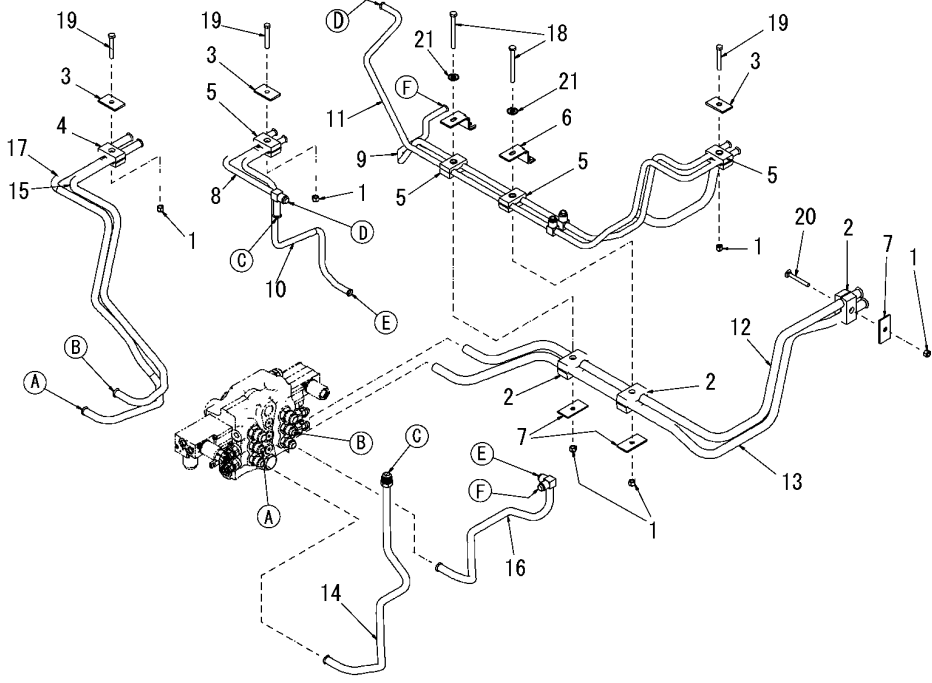
Remarks

(1)For breakdown see Fig.No.94.

Fig.48. HYDRAULICS-CHASSIS(HAND/FOOT AND DUAL JOYSTICK CONTROLS WITHOUT SELF-LEVELING)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

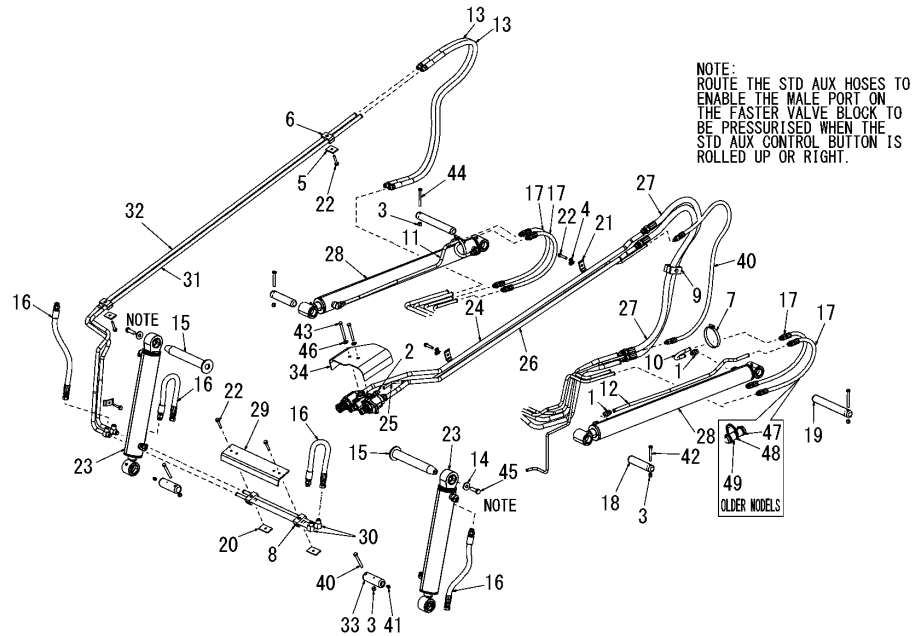


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00150	NUT	7	7						
2	1	172551-00500	CLAMP	4	4						
3	1	172551-00510	PLATE	3	3						
4	1	172215-00390	CLAMP	1	1						
5	1	172216-00460	CLAMP	4	4						
6	1	172216-06390	BRACKET, HARNESS	2	2						
7	1	172218-04780	PLATE, TWIN FLAT	4	4						
8	1	172216-14900	TUBE, HYD LIFT	1	1						
9	1	172216-14910	TUBE, HYD LIFT	1	1						
10	1	172216-14960	TUBE, HYD LIFT	1	1						
11	1	172216-14970	TUBE, HYD LIFT	1	1						
12	1	172216-14980	TUBE, HYD STD AUX	1	1						
13	1	172216-14990	TUBE, HYD STD AUX	1	1						
14	1	172216-15020	TUBE, HYD LIFT	1	1						
15	1	172216-15030	TUBE, HYD TILT	1	1						
16	1	172216-15000	TUBE, HYD LIFT	1	1						
17	1	172216-15040	TUBE, HYD TILT	1	1						
18	1	172216-09340	SCREW	2	2						
19	1	172551-09760	SCREW	3	3						
20	1	172215-03200	BOLT	2	2						
21	1	172551-10370	WASHER	2	2						

Fig.49. HYDRAULICS-LIFT ARM(S190R

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



NOTE:
ROUTE THE STD AUX HOSES TO
ENABLE THE MALE PORT ON
THE FASTER VALVE BLOCK TO
BE PRESSURISED WHEN THE
STD AUX CONTROL BUTTON IS
ROLLED UP OR RIGHT.

NOTE

NOTE

OLDER MODELS

NOTE: USE SPECIFIED LOCKING ADHESIVE AGENT OR EQUIVALENT

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00040	FITTING	4							
2	1	172551-00070	FITTING	1							
3	1	172551-00180	NUT	6							
4	1	172551-00420	CLAMP	2							
5	1	172551-00510	PLATE	2							
6	1	172215-00390	CLAMP	2							
7	1	172551-00630	CLAMP	2							
8	1	172216-00460	CLAMP	2							
9	1	172551-00780	CLAMP	1							
10	1	172216-01540	TUBE, LIFT CYLINDER	2							
11	1	172216-01550	TUBE, LIFT CYLINDER R	1							
12	1	172216-01560	TUBE, LIFT CYLINDER L	1							
13	1	172216-01630	HOSE	2							
14	1	172216-01770	WASHER	2							
15	1	172216-01820	PIN, TILT CYLINDER	2							
16	1	172216-15070	HOSE ASSY	4							
17	1	172216-15080	HOSE	4							
18	1	172216-04470	PIN, GREASELESS	2							
19	1	172216-04530	PIN, GREASELESS	2							
20	1	172218-04780	PLATE, TWIN FLAT	2							
21	1	172215-08920	CLAMP	3							
22	1	172218-05820	SCREW	7							
23	1	172216-15090	CYLINDER, TILT	2							1
24	1	172216-15100	TUBE, STD-AUX/UPPER	1							
25	1	172216-15110	TUBE, STD-AUX/DRAIN	1							
26	1	172216-15120	TUBE, STD-AUX/LOWER	1							
27	1	172216-15130	HOSE	2							
28	1	172216-15140	CYLINDER, LIFT	2							2
29	1	172216-15150	PLATE, COVER	1							
30	1	172216-15160	TUBE, TILT	2							
31	1	172216-15170	TUBE, TILT INNER	1							
32	1	172216-15180	TUBE, TILT OUTER	1							
33	1	172216-15190	PIN	2							
34	1	172216-15200	COVER, AUX COUPLER	1							
40	1	172216-15220	HOSE	1							
41	1	172551-09410	FITTING	2							
42	1	172551-09550	SCREW	2							
43	1	172218-04960	SCREW	2							
44	1	172215-02950	SCREW	4							
45	1	172216-09570	SCREW	2							
46	1	172551-10370	WASHER	2							
47	1	172551-00120	TIE, CABLE	2							3
48	1	172215-00480	TIE, CABLE	1							3
49	1	172216-17390	PROTECTOR, HOSE	1							3

Remarks

(1) For breakdown see Fig.No.80.

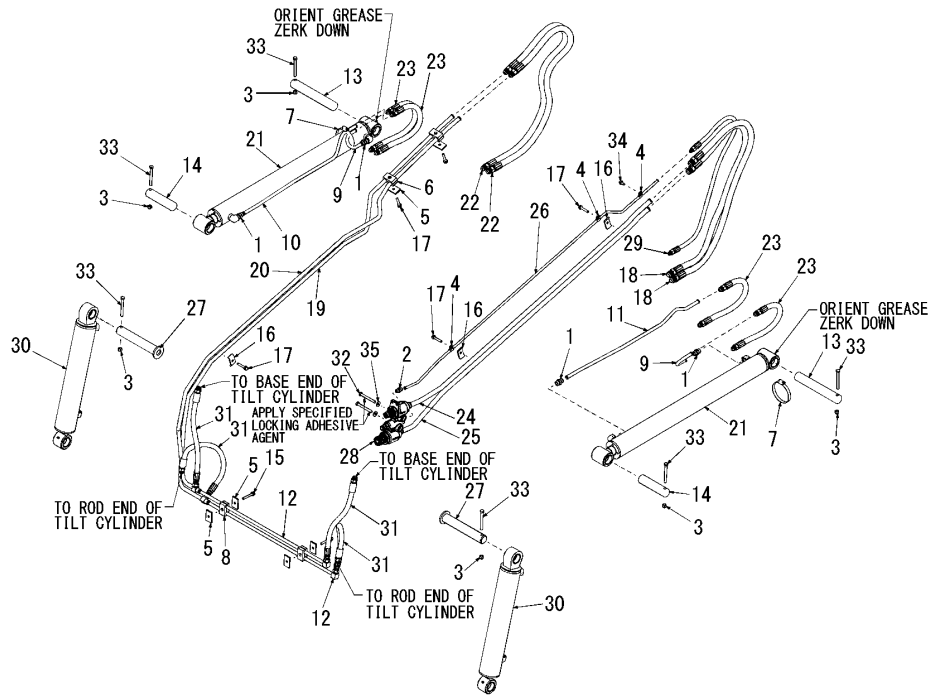
(2) For breakdown see Fig.No.78.

(3) Part numbers for older model loaders before fuel sender was relocated higher in the left chassis tower.

Fig.50. HYDRAULICS-LIFT ARM(S220R)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00040	FITTING		4						
2	1	172551-00070	FITTING		1						
3	1	172551-00180	NUT		6						
4	1	172551-00420	CLAMP		3						
5	1	172551-00510	PLATE		6						
6	1	172215-00390	CLAMP		2						
7	1	172551-00630	CLAMP		2						
8	1	172216-00460	CLAMP		2						
9	1	172216-01540	TUBE, LIFT CYLINDER		2						
10	1	172216-01550	TUBE, LIFTCYLINDER R		1						
11	1	172216-01560	TUBE, LIFTCYLINDER L		1						
12	1	172218-00110	TUBE, CROSSMEMBER		2						
13	1	172217-00910	PIN, GREASE-FREE		2						
14	1	172216-15230	PIN		2						
15	1	172218-04530	SCREW		2						
16	1	172215-08920	CLAMP		3						
17	1	172218-05820	SCREW		5						
18	1	172216-15130	HOSE		2						
19	1	172216-15240	TUBE, TILT		1						
20	1	172216-15250	TUBE, TILT UPPER		1						
21	1	172216-15260	CYLINDER, LIFT		2						1
22	1	172216-15270	HOSE		2						
23	1	172216-15280	HOSE		4						
24	1	172216-15290	TUBE, AUX UPPER		1						
25	1	172216-15300	TUBE, AUX LOWER		1						
26	1	172216-15310	TUBE, AUX DRAIN		1						
27	1	172216-15320	PIN, TILT CYLINDER		2						
28	1	172216-15210	BLOCK, COUPLER		1						
29	1	172216-15220	HOSE		1						
30	1	172216-15330	CYLINDER, TILT		2						2
31	1	172216-15340	HOSE		4						
32	1	172218-04960	SCREW		2						
33	1	172551-09780	SCREW		6						
34	1	172215-03150	SCREW		1						
35	1	172551-10370	WASHER		2						

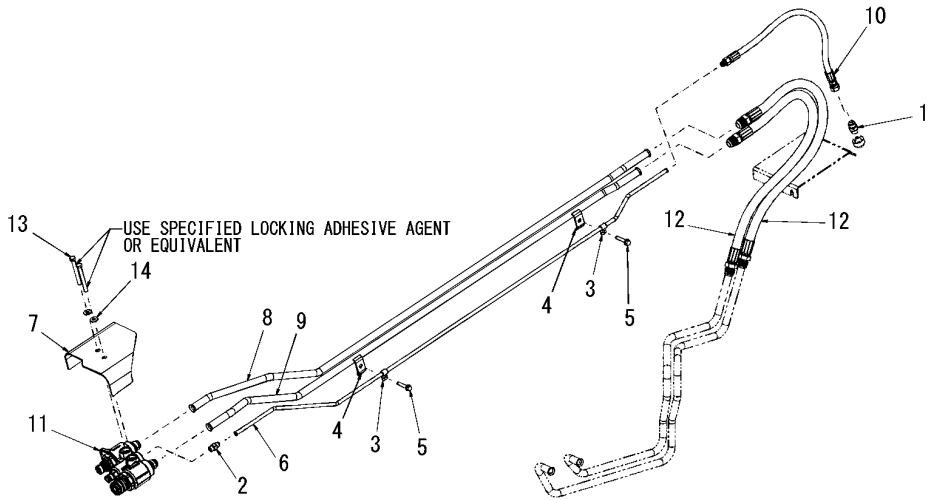
Remarks

- (1) For breakdown see Fig.No.79.
- (2) For breakdown see Fig.No.81.

Fig.51. HYDRAULICS-LIFT ARM(S190R HIGH-FLOW)

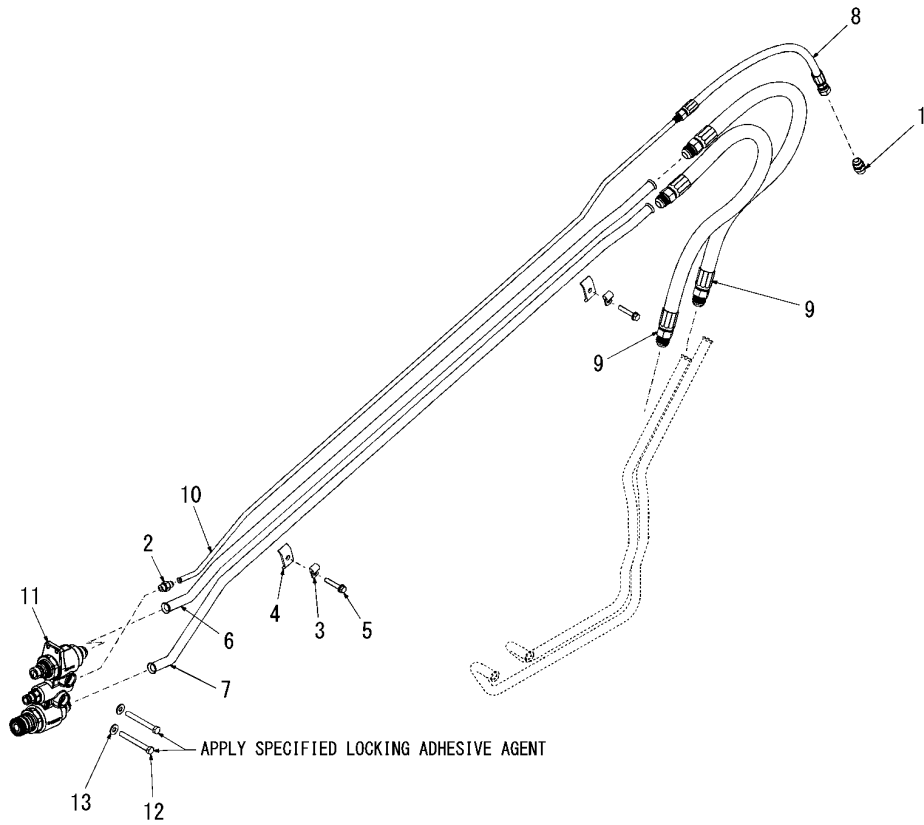
(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00040	FITTING	1							
2	1	172551-00070	FITTING	1							
3	1	172551-00420	CLAMP	2							
4	1	172215-08920	CLAMP	2							
5	1	172218-05820	SCREW	2							
6	1	172216-15350	TUBE, STD-AUX/DRAIN	1							
7	1	172216-15360	COVER, AUX COUPLER	1							
8	1	172216-15370	TUBE, HI-FLOW UPPER	1							
9	1	172216-15380	TUBE, HI-FLOW LOWER	1							
10	1	172216-15390	HOSE	1							
11	1	172216-15210	BLOCK, COUPLER	1							
12	1	172216-15400	HOSE	2							
13	1	172218-04960	SCREW	2							
14	1	172551-10370	WASHER	2							

Fig.52. HYDRAULICS-LIFT ARM(S220R HIGH-FLOW)

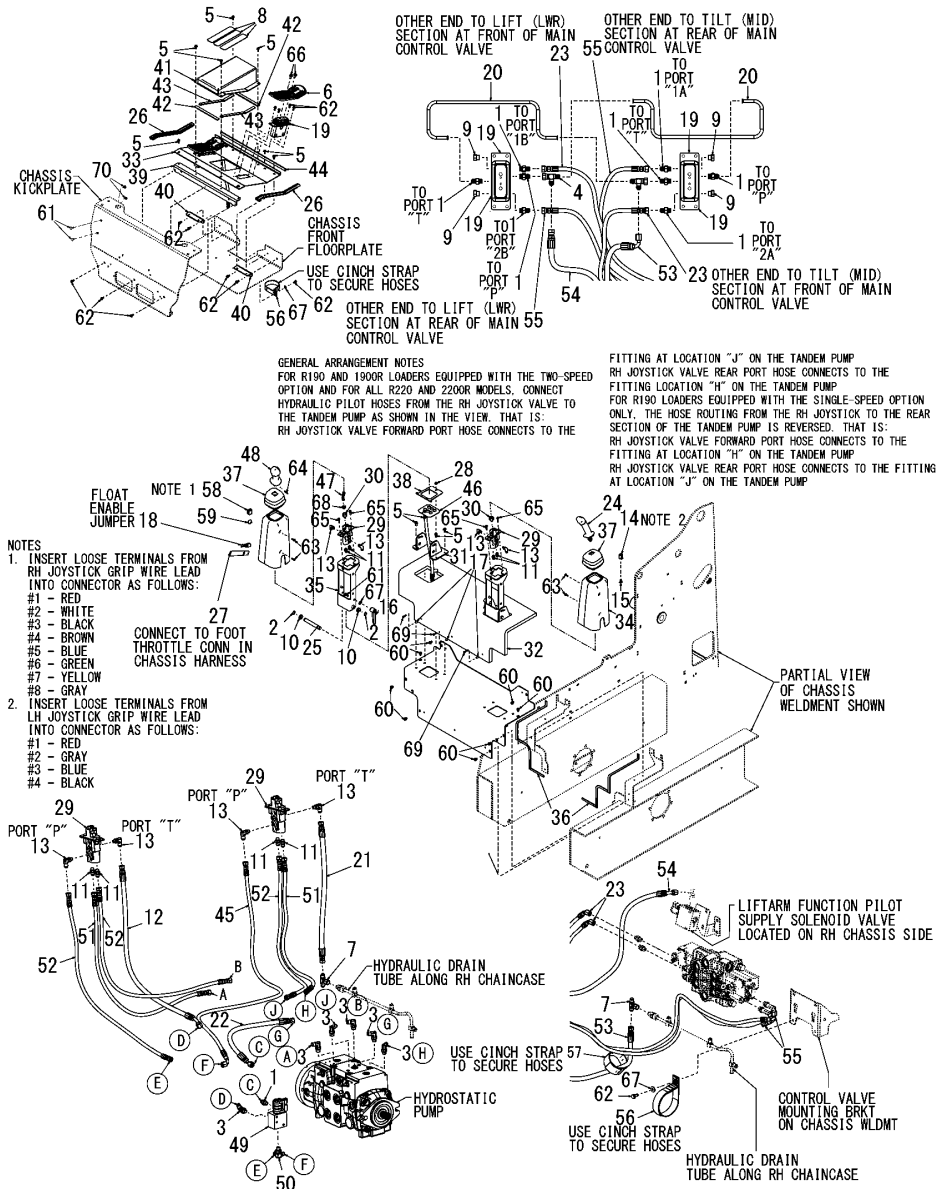


(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R	
				(A)	(B)	(C)	(D)	(E)	(F)			
1	1	172551-00040	FITTING		1							
2	1	172551-00070	FITTING		1							
3	1	172551-00420	CLAMP		2							
4	1	172215-08920	CLAMP		2							
5	1	172218-05820	SCREW		2							
6	1	172216-15410	TUBE, AUX UPPER		1							
7	1	172216-15420	TUBE, HIGHFLOW LOWER		1							
8	1	172216-15390	HOSE		1							
9	1	172216-15430	HOSE		2							
10	1	172216-15440	TUBE, DRAIN AUX		1							
11	1	172216-15210	BLOCK, COUPLER		1							
12	1	172218-04960	SCREW		2							
13	1	172551-10370	WASHER		2							

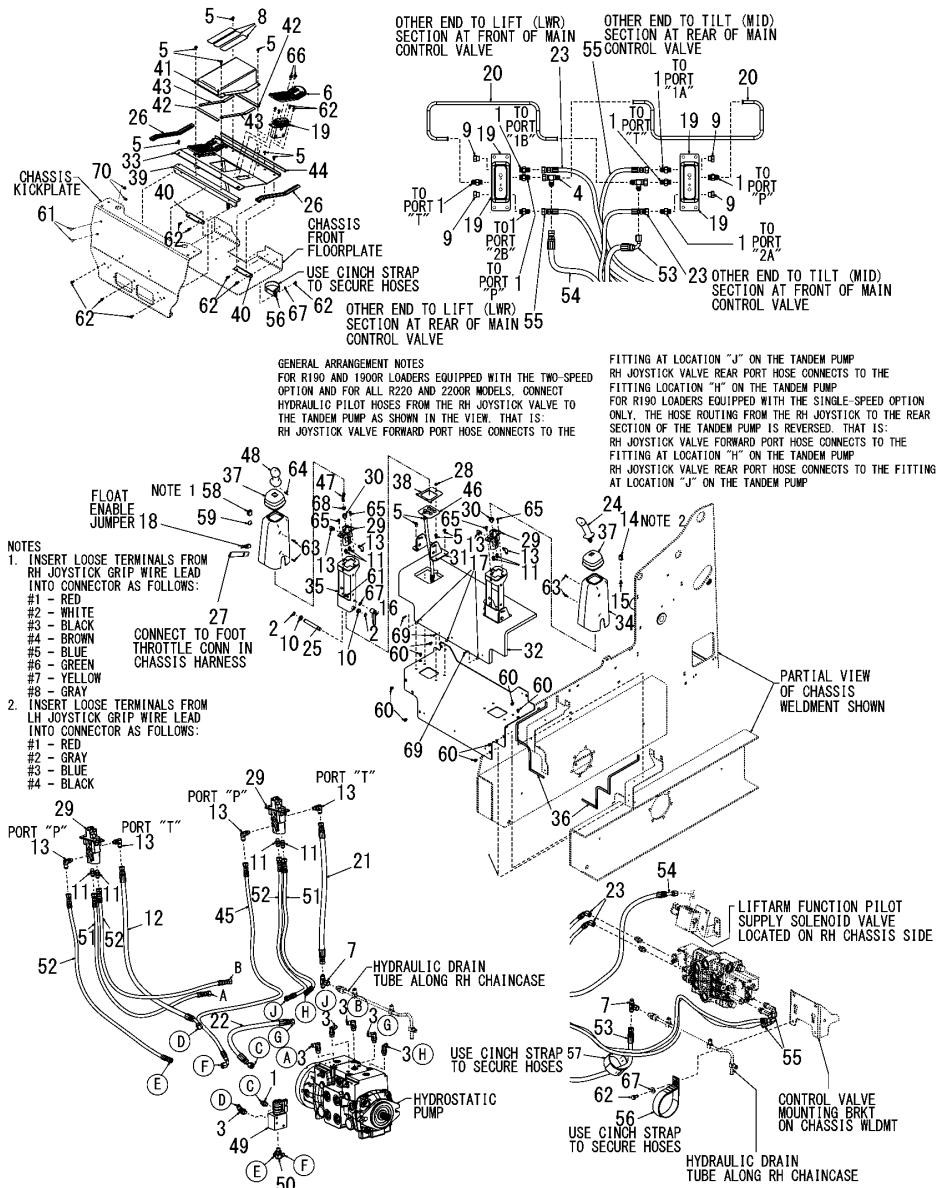
Fig.53. CONTROLS-WHEEL DRIVES-LIFT/TILT(HAND/FOOT CONTROLS)



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00070	FITTING	9	9						
2	1	172216-00160	RING, RETAINING	4	4						
3	1	172551-00220	CONNECTOR	6	6						
4	1	172551-00340	FITTING	2	2						
5	1	172551-00610	SCREW	18	18						
6	1	172215-04530	PEDAL, FOOT	2	2						
7	1	172216-15450	FITTING, TEE	1	1						
8	1	172216-00550	STRIP	3	3						
9	1	172551-00960	PLUG	4	4						
10	1	172216-00900	BUSHING, PIVOT	4	4						
11	1	172218-00050	FITTING	4	4						
12	1	172218-00170	HOSE	1	1						
13	1	172215-00850	FITTING	4	4						
14	1	172216-03520	PLUG, 4-PIN	1	1						
15	1	172216-03530	WEDGE, 4-PIN	1	1						
16	1	172216-04490	HANDLE, RATCHET	2	2						
17	1	172216-04870	SPACER	3	3						
18	1	172216-04930	ADAPTOR	1	1						
19	1	172217-01430	VALVE, FOOT	2	2						1
20	1	172217-01480	TUBE	2	2						
21	1	172217-02220	HOSE	1	1						
22	1	172216-15460	HOSE	1	1						
23	1	172217-02590	HOSE	2	2						
24	1	172217-02630	GRIP	1	1						
25	1	172218-00600	PIN, TILT CONSOLE	2	2						
26	1	172218-00610	SEAL, BULB	2	2						
27	1	172216-15470	PLUG, HARNESS	1	1						
28	1	172215-06610	NUT	2	2						
29	1	172218-00790	VALVE, CONTROL	2	2						
30	1	172218-00850	ADAPTOR	2	2						
31	1	172218-01050	BASE, JOYSTICK	2	2						
32	1	172218-01100	COVER, CROSSMEMBER	1	1						
33	1	172218-01460	PLATE, FLOOR H-F	1	1						
34	1	172218-01730	COVER, TOWER	2	2						
35	1	172218-02230	TOWER, H-F	2	2						
36	1	172218-02240	SEAL	2	2						
37	1	172218-02300	BOOT, CONTROL VALVE	2	2						
38	1	172218-02440	BRACKET,RETAINER	2	2						
39	1	172218-02470	BRACKET, MOUNTING	1	1						
40	1	172218-02490	BRACKET,R H-F FLOOR	2	2						
41	1	172218-02500	COVER, DOGHOUSE	1	1						
42	1	172218-02510	STRIP, FOAM SEAL	2	2						
43	1	172218-02520	STRIP, FOAM SEAL	2	2						
44	1	172218-02530	SEAL, FLOOR	1	1						
45	1	172551-11400	HOSE	1	1						
46	1	172216-15480	GROMMET	2	2						
47	1	172216-15490	LEVER, GRIP RIGHT	1	1						
48	1	172216-15500	GRIP	1	1						
49	1	172218-06360	VALVE, JOYSTICK	1	1						2
50	1	172216-15510	FITTING	1	1						
51	1	172216-15520	HOSE	2	2						

Remarks
(1)For breakdown see Fig.No.104.
(2)For breakdown see Fig.No.99.

Fig.53. CONTROLS-WHEEL DRIVES-LIFT/TILT(HAND/FOOT CONTROLS)



(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

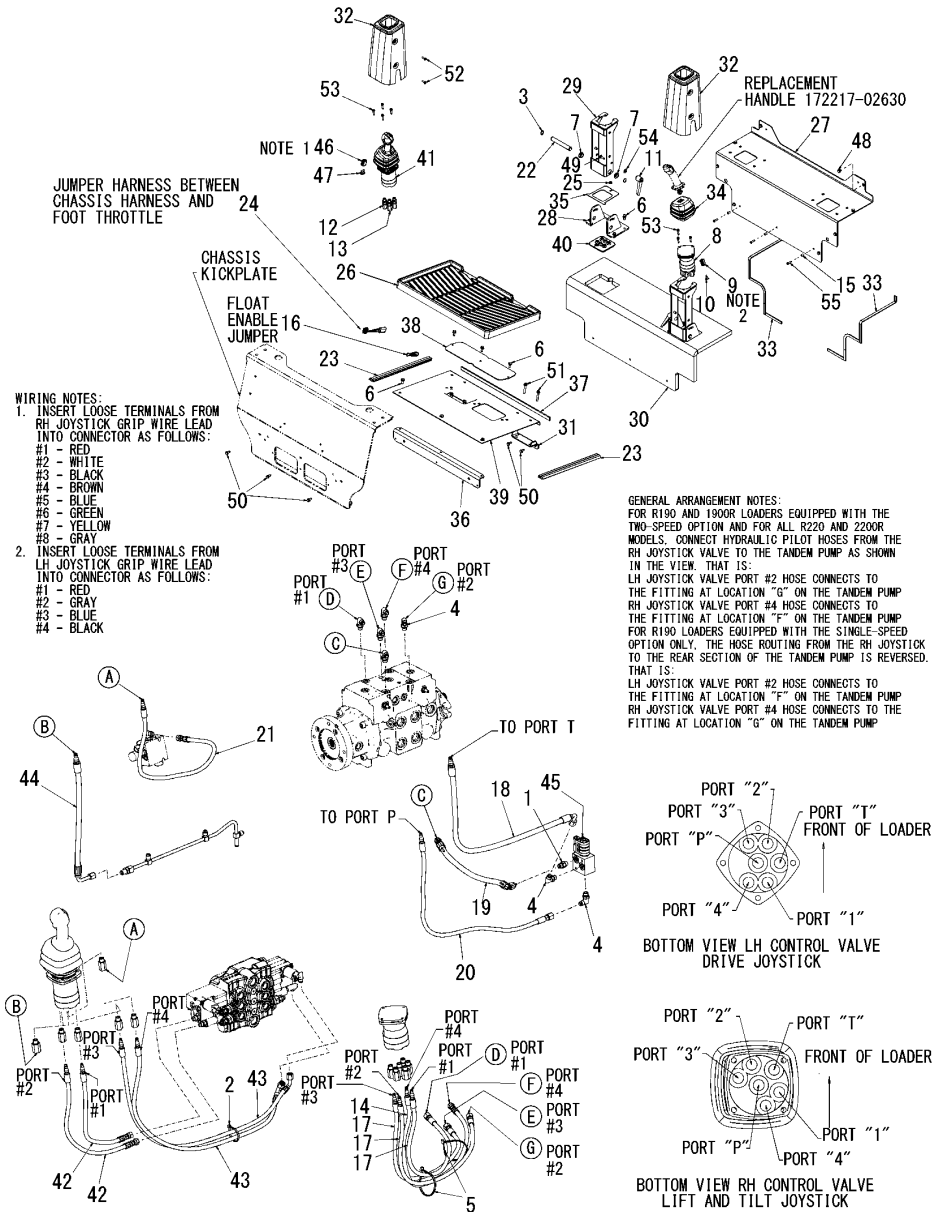
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
52	1	172216-15530	HOSE	3	3						
53	1	172216-15540	HOSE	1	1						
54	1	172216-15550	HOSE	1	1						
55	1	172216-15560	HOSE	2	2						
56	1	172216-15570	STRAP	2	2						
57	1	172216-15580	STRAP	1	1						
58	1	172216-15590	PLUG	1	1						
59	1	172216-15600	WEDGE, LOCKING	1	1						
60	1	172215-02740	SCREW	8	8						
61	1	172215-02820	BOLT	4	4						
62	1	172215-03040	SCREW	17	17						
63	1	172551-10010	SCREW	4	4						
64	1	172216-09610	PIN, ROLL	1	1						
65	1	172216-09710	SCREW	4	4						
66	1	172217-04010	SCREW	4	4						
67	1	172551-10370	WASHER	4	4						
68	1	172216-15610	NUT	1	1						
69	1	172216-11170	SCREW	3	3						
70	1	172215-06620	NUT	2	2						

Remarks
(1)For breakdown see Fig.No.104.
(2)For breakdown see Fig.No.99.

Fig.54. CONTROLS-WHEEL DRIVES-LIFT/TILT(DUAL JOYSTICK CONTROLS)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



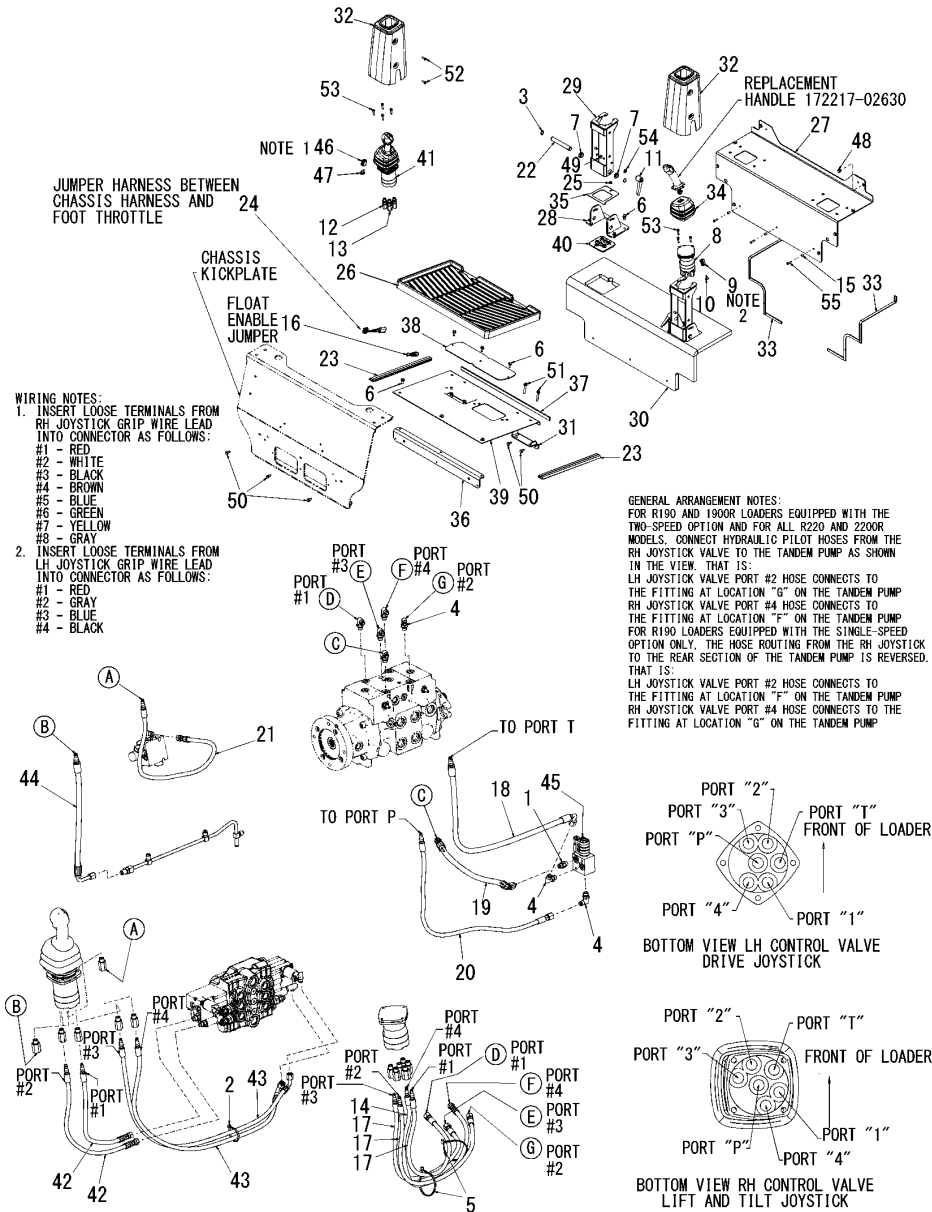
No.	Lev.	Parts No.	Description	Qty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00070	FITTING	1	1						
2	1	172551-00120	TIE, CABLE	1	1						
3	1	172216-00160	RING, RETAINING	4	4						
4	1	172551-00220	CONNECTOR	7	7						
5	1	172551-00370	TIE, CABLE	2	2						
6	1	172551-00610	SCREW	14	14						
7	1	172216-00900	BUSHING, PIVOT	4	4						
8	1	172216-03290	JOYSTICK, DRIVE	1	1						
9	1	172216-03520	PLUG, 4-PIN	1	1						
10	1	172216-03530	WEDGE, 4-PIN	1	1						
11	1	172216-04490	HANDLE, RATCHET	2	2						
12	1	172216-04590	ADAPTOR	10	10						
13	1	172216-04600	ADAPTOR	2	2						
14	1	172216-15620	HOSE, W/T ADAPTER	1	1						
15	1	172216-04870	SPACER	3	3						
16	1	172216-04930	ADAPTOR	1	1						
17	1	172217-02750	HOSE	3	3						
18	1	172217-02760	HOSE	1	1						
19	1	172216-15460	HOSE	1	1						
20	1	172217-02770	HOSE	1	1						
21	1	172217-02800	HOSE	1	1						
22	1	172218-00600	PIN, TILT CONSOLE	2	2						
23	1	172218-00610	SEAL, BULB	2	2						
24	1	172216-07120	HARNES, THROTTLE	1	1						
25	1	172215-06610	NUT	2	2						
26	1	172218-00880	MAT, FLOOR	1	1						
27	1	172218-00950	COVER, CROSSMEMBER	1	1						
28	1	172218-01050	BASE, JOYSTICK	2	2						
29	1	172218-01060	TOWER, JOYSTICK	2	2						
30	1	172218-01100	COVER, CROSSMEMBER	1	1						
31	1	172218-01350	COVR, FLOORPLATE R	2	2						
32	1	172218-01730	COVER, TOWER	2	2						
33	1	172218-02240	SEAL	2	2						
34	1	172218-02300	BOOT, CONTROL VALVE	1	1						
35	1	172218-02440	BRACKET,RETAINER	2	2						
36	1	172218-02460	BRACKET, FLOOR PLATE	1	1						
37	1	172218-02530	SEAL, FLOOR	1	1						
38	1	172218-02540	COVER, CLEAN-OUT	1	1						
39	1	172218-02550	PLATE, FLOOR	1	1						
40	1	172216-15480	GROMMET	2	2						
41	1	172216-15630	JOYSTICK ASSY, LIFT	1	1						
42	1	172216-15640	HOSE	2	2						
43	1	172216-15650	HOSE	2	2						
44	1	172216-15660	HOSE	1	1						
45	1	172218-06360	VALVE, JOYSTICK	1	1						1
46	1	172216-15590	PLUG	1	1						
47	1	172216-15600	WEDGE, LOCKING	1	1						
48	1	172215-02740	SCREW	8	8						
49	1	172215-02820	BOLT	2	2						
50	1	172215-03040	SCREW	7	7						
51	1	172218-05050	SCREW	4	4						

Remarks
(1)For breakdown see Fig.No.99.

Fig.54. CONTROLS-WHEEL DRIVES-LIFT/TILT(DUAL JOYSTICK CONTROLS)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



- WIRING NOTES:**
1. INSERT LOOSE TERMINALS FROM RH JOYSTICK GRIP WIRE LEAD INTO CONNECTOR AS FOLLOWS:
#1 - RED
#2 - WHITE
#3 - BLACK
#4 - BROWN
#5 - BLUE
#6 - GREEN
#7 - YELLOW
#8 - GRAY
 2. INSERT LOOSE TERMINALS FROM LH JOYSTICK GRIP WIRE LEAD INTO CONNECTOR AS FOLLOWS:
#1 - RED
#2 - GRAY
#3 - BLUE
#4 - BLACK

GENERAL ARRANGEMENT NOTES:
FOR R190 AND 190R LOADERS EQUIPPED WITH THE TWO-SPEED OPTION AND FOR ALL R220 AND 220R MODELS, CONNECT HYDRAULIC PILOT HOSES FROM THE RH JOYSTICK VALVE TO THE TANDEM PUMP AS SHOWN IN THE VIEW. THAT IS:
LH JOYSTICK VALVE PORT #2 HOSE CONNECTS TO THE FITTING AT LOCATION "G" ON THE TANDEM PUMP
RH JOYSTICK VALVE PORT #4 HOSE CONNECTS TO THE FITTING AT LOCATION "F" ON THE TANDEM PUMP
FOR R190 LOADERS EQUIPPED WITH THE SINGLE-SPEED OPTION ONLY, THE HOSE ROUTING FROM THE RH JOYSTICK TO THE REAR SECTION OF THE TANDEM PUMP IS REVERSED. THAT IS:
LH JOYSTICK VALVE PORT #2 HOSE CONNECTS TO THE FITTING AT LOCATION "F" ON THE TANDEM PUMP
RH JOYSTICK VALVE PORT #4 HOSE CONNECTS TO THE FITTING AT LOCATION "G" ON THE TANDEM PUMP

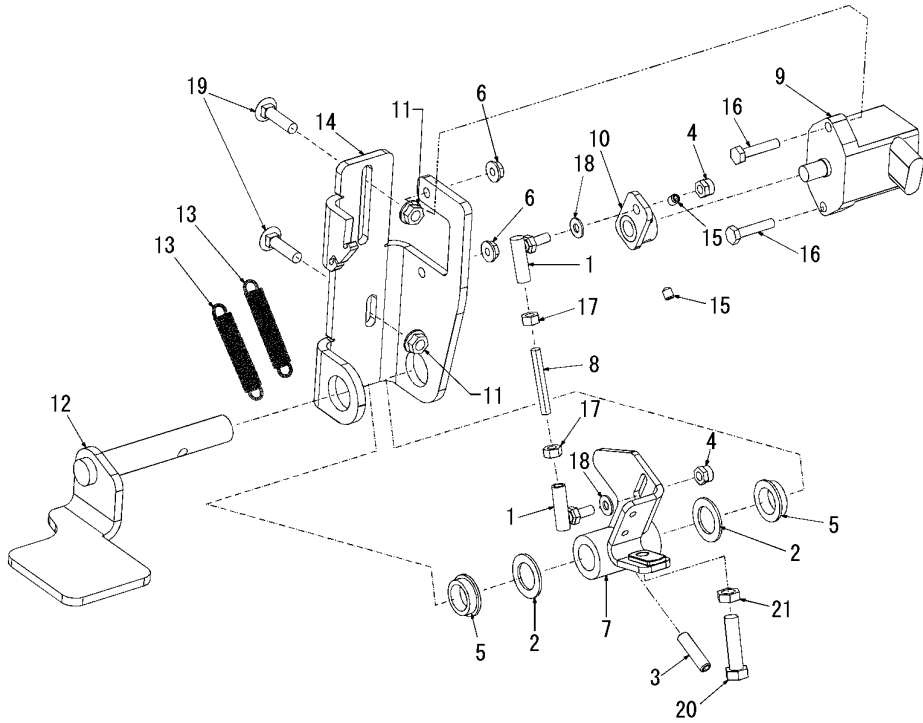
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
52	1	172551-10010	SCREW	4	4						
53	1	172216-09710	SCREW	7	7						
54	1	172551-10370	WASHER	2	2						
55	1	172216-11170	SCREW	3	3						

Remarks
(1)For breakdown see Fig.No.99.

Fig.55. CONTROLS-ENGINE(ELECTRIC THROTTLE SENSOR DUAL JOYSTICK CONTROLS)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

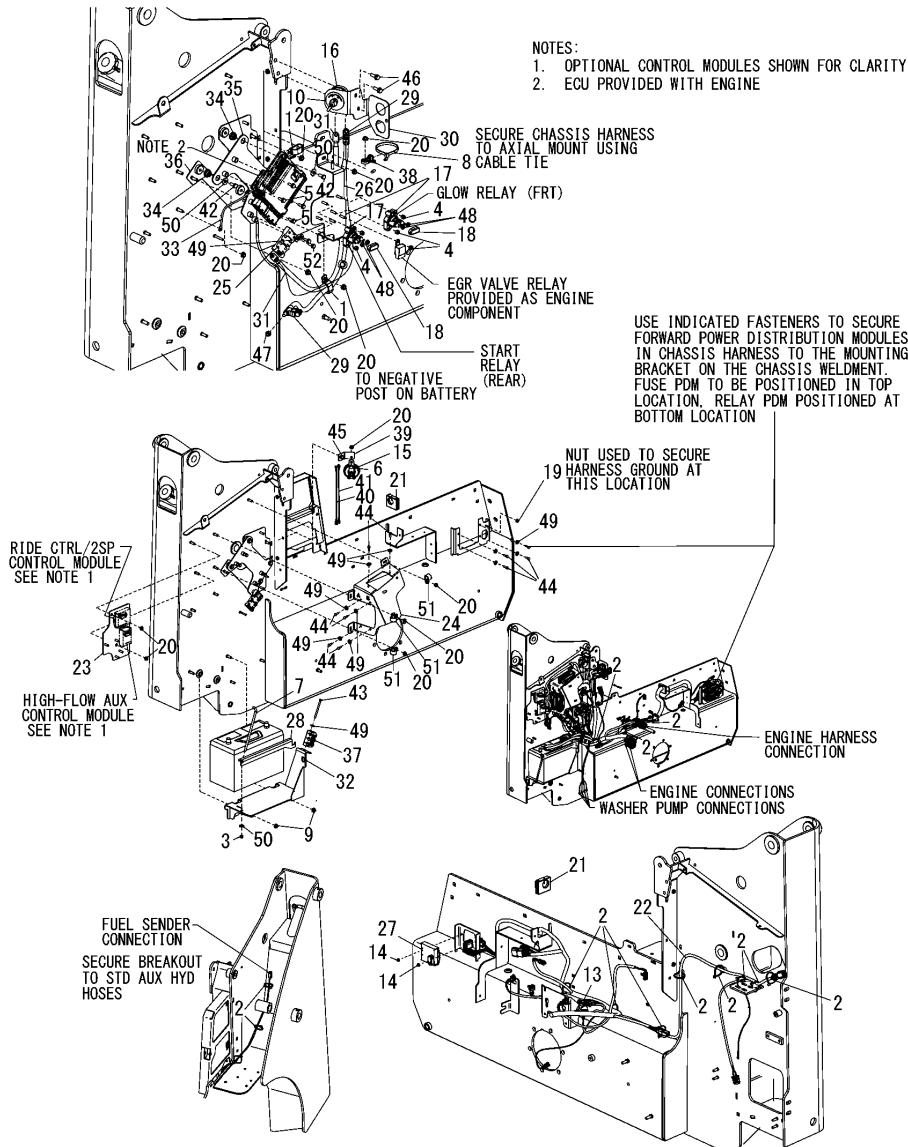


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-00020	JOINT, BALL	2	2						
2	1	172216-00070	WASHER	2	2						
3	1	172216-00280	PIN, ROLL	1	1						
4	1	172216-00540	NUT	2	2						
5	1	172216-00900	BUSHING, PIVOT	2	2						
6	1	172216-01590	NUT	2	2						
7	1	172216-06540	BRACKET, THROTTLE	1	1						
8	1	172217-02620	ROD, THREADED	1	1						
9	1	172216-15670	BODY, THROTTLE	1	1						
10	1	172216-06970	LINK, THROTTLE	1	1						
11	1	172215-06620	NUT	2	2						
12	1	172217-03390	PEDAL, THROTTLE	1	1						
13	1	172216-07990	SPRING	2	2						
14	1	172216-10430	BRACKET, THROTTLE	1	1						
15	1	172216-09270	SCREW SET	2	2						
16	1	172551-09460	SCREW	2	2						
17	1	172216-09330	NUT	2	2						
18	1	172551-09640	WASHER	2	2						
19	1	172551-09810	BOLT	2	2						
20	1	172551-10040	SCREW	1	1						
21	1	172551-10330	NUT	1	1						

Fig.56. ELECTRICAL-CHASSIS

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Qty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00090	CLAMP	2	2						
2	1	172551-00120	TIE, CABLE	21	21						
3	1	172551-00150	NUT	1	1						
4	1	172551-00250	NUT	5	5						
5	1	172216-17490	SCREW	4	4						
6	1	172216-00290	SCREW	1	1						
7	1	172218-00010	ROD, BATTERY	1	1						
8	1	172215-00480	TIE, CABLE	1	1						
9	1	172551-00720	NUT	2	2						
10	1	172551-00740	FACE PLATE	1	1						
11	1	172216-17500	DECAL, BATTERY	1	1						1
13	1	172215-00700	NUT	1	1						
14	1	172551-01590	FLANGE	2	2						
15	1	172551-01980	HORN	1	1						
16	1	172216-15690	SWITCH	1	1						
17	1	172216-06000	SOLENOID	2	2						
18	1	172216-07150	COVER, ELECTRICAL	2	2						
19	1	172215-06610	NUT	1	1						
20	1	172215-06620	NUT	12	12						
21	1	172218-00890	PLUG, PASS THROUGH	2	2						
22	1	172216-15700	HARNESS, CHASSIS	1	1						2
23	1	172216-15710	PLATE, STUD	1	1						
24	1	172216-15720	BRACKET, AIR CLEANER	1	1						
25	1	172216-15730	CLAMP, HARNESS	1	1						
26	1	172216-15740	BRACKET	1	1						
27	1	172216-15750	MODULE, STD AUX HYD	1	1						
28	1	172216-15760	ANGLE, BATTERY	1	1						
29	1	172216-15770	CABLE, BATTERY	1	1						
30	1	172216-15780	BRKT, CONNECTOR	1	1						
31	1	172216-15790	CABLE, BATTERY	1	1						
32	1	172216-15800	TRAY, BATTERY	1	1						
33	1	172216-15810	CABLE, CASE GROUND	1	1						
34	1	172216-15820	ISOLATOR	4	4						
35	1	172216-15830	BRACKET, ECU SUPPORT	1	1						
36	1	172216-15840	BRKT, MOUNTING ECU	1	1						
37	1	172216-15850	CLAMP, CABLE TRIPLE	1	1						
38	1	172216-15860	MOUNT, AXIAL	1	1						
39	1	172216-15870	BRACKET, HORN	1	1						
40	1	172216-15880	HORN, LEAD GROUND	1	1						3
41	1	172216-15890	HORN, LEAD POWER	1	1						3
42	1	172551-09510	SCREW	4	4						
43	1	172216-15900	SCREW	1	1						
44	1	172216-09590	SCREW	10	10						
45	1	172215-03150	SCREW	1	1						
46	1	172218-05150	SCREW	2	2						
47	1	172551-10300	NUT	1	1						
48	1	172551-10320	NUT	4	4						
49	1	172551-10360	WASHER	13	13						
50	1	172551-10370	WASHER	5	5						
51	1	172216-15910	CLAMP, HOSE	3	3						
52	1	172551-09460	SCREW	2	2						

Remarks

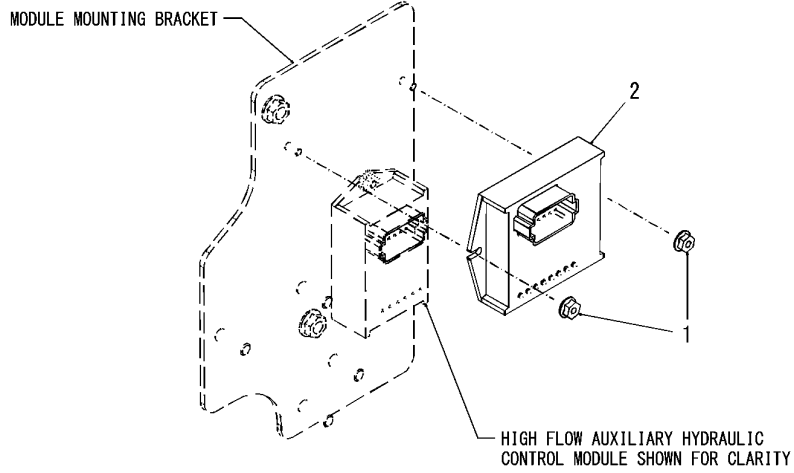
- (1) Not shown in illustration.
- (2) PN's 172216-15880 and 172216-15890 used with an earlier revision of the 172216-15700 chassis harness. With Revision F of the 172216-15700 chassis harness, PN's 172216-15880 and 172216-15890 are unnecessary.
- (3) PN'S 172216-15880 and 172216-15890 used with an earlier revision of the 172216-15700 chassis harness.

N:Old $\frac{Yes}{No}$ New, Q:Old $\frac{No}{Yes}$ New, R:Old $\frac{Yes}{Yes}$ New, S:Old $\frac{No}{No}$ New, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change

Fig.57. ELECTRICAL-CHASSIS(RIDE CONTROL/TWO-SPEED ASSEMBLY

(A)=S190R-1
 (B)=S220R-1
 (C)=

(D)=
 (E)=
 (F)=

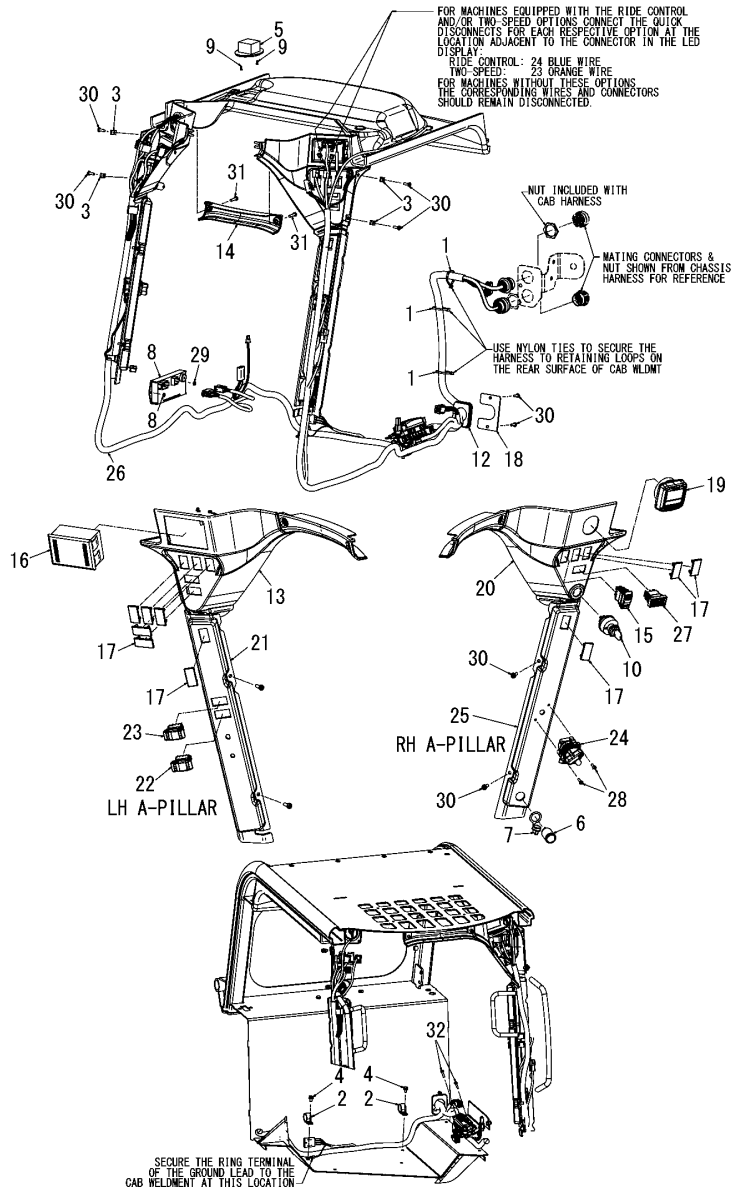


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-01590	FLANGE	2	2						
2	1	172216-07710	MODULE, 2-SPEED	1	1						

Fig.58. ELECTRICAL-ROPS/FOPS

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00120	TIE, CABLE	3	3						
2	1	172216-00080	CLAMP	2	2						
3	1	172216-00140	NUT, SPEED	4	4						
4	1	172218-00020	SCREW	2	2						
5	1	172216-02350	LIGHT, DOME	1	1						
6	1	172551-01460	POWER,AUXILIARY	1	1						
7	1	172551-01470	COVER	1	1						
8	1	172216-02440	MODULE, INTERLOCK	1	1						
9	1	172216-02460	SCREW	2	2						
10	1	172215-02140	SWITCH, IGNITION	1	1						
11	2	172215-00300	KEY	1	1						1
12	1	172218-01020	PLUG, PASS-THROUGH	1	1						
13	1	172218-01800	PANEL, INSTRUMENT,L	1	1						
14	1	172218-01820	CROSSPIECE, PANEL	1	1						
15	1	172218-01980	SWITCH, PARK BRAKE	1	1						
16	1	172218-02420	MODULE, DISPLAY	1	1						
17	1	172551-03050	PLUG	9	9						
18	1	172218-02640	PLATE, BACKING	1	1						
19	1	172216-15920	DISPLAY, ELECTRONIC	1	1						
20	1	172216-15930	PANEL, INSTRUMENT R	1	1						
21	1	172216-15940	COVER, A-PILLAR L TF	1	1						
22	1	172216-15950	SWITCH,LIGHT SINGLE	1	1						
23	1	172216-15960	SWITCH,LIGHT DOUBLE	1	1						
24	1	172218-06250	THROTTLE, HAND	1	1						
25	1	172218-06260	COVER,A-PILLAR RH TF	1	1						
26	1	172216-15970	HARNESS, CAB	1	1						
27	1	172216-15980	SWITCH, DPF REGEN	1	1						
28	1	172218-06480	SCREW	2	2						
29	1	172215-02790	NUT	2	2						
30	1	172551-10010	SCREW	10	10						
31	1	172216-09730	SCREW	2	2						
32	1	172216-15990	SCREW	2	2						

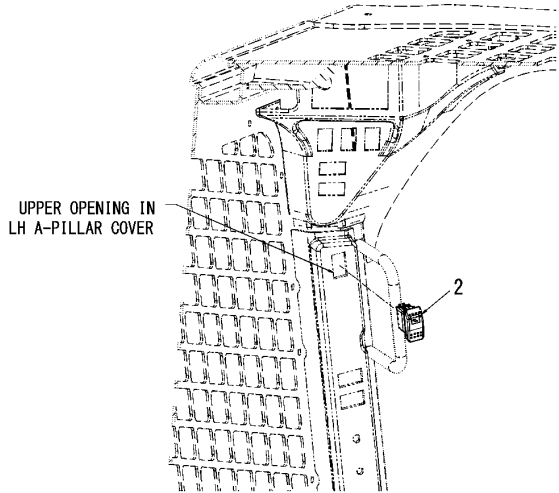
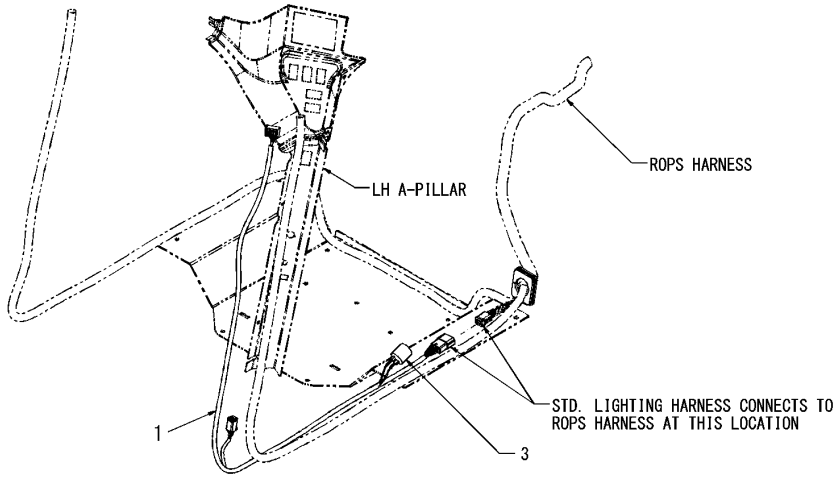
Remarks
* DPF: DPF stands for DIESEL PARTICULATE FILTER.
(1)Not shown in illustration.

Fig.59. ELECTRICAL-ROPS/FOPS(STANDARD LIGHT HARNESS WITH SELF-LEVELING)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172218-01130	HARNESS,CAB LIGHTING	1	1						
2	1	172551-04060	SWITCH	1	1						1
3	1	172216-00060	FLASHER	1	1						

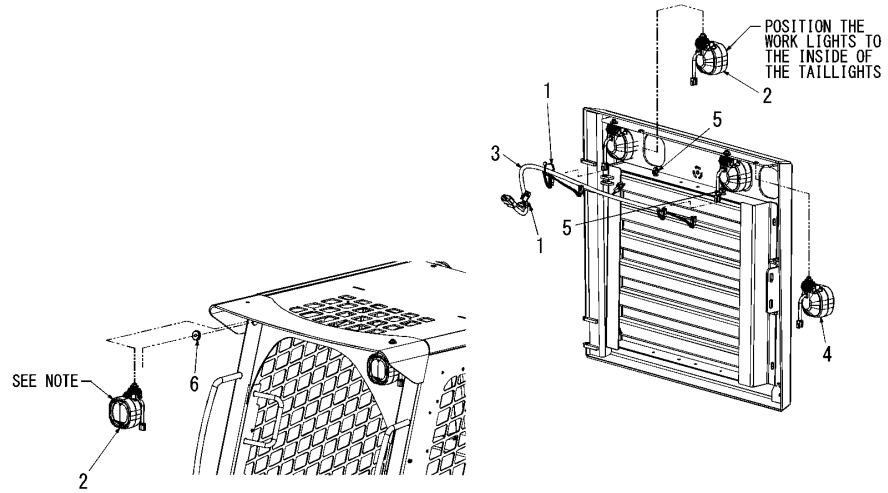


Remarks
(1)With self-level.

Fig.60. ELECTRICAL-LIGHTS

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



NOTES:
FORWARD WORK LIGHTS ARE TO BE INSTALLED WITH THE LIGHT HOUSING IS ANGLED 10 DEGREES DOWNWARD FROM THE HORIZONTAL AND 10 DEGREES OUT FROM CENTERLINE OF THE MACHINE.

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00370	TIE, CABLE	2	2						
2	1	172218-01010	LIGHT, WHITE, 55W	4	4						1
3	1	172218-01450	HARNES, TAILLIGHT	1	1						
4	1	172218-02120	LIGHT, RED, 35W	2	2						2
5	1	172218-02350	CLIP, WIRE HARNES	2	2						
6	1	172551-03040	GROMMET	2	2						
7	1	172217-05070	55 W BULB	4	4						1
8	1	172217-05080	35 W BULB	2	2						2

Remarks

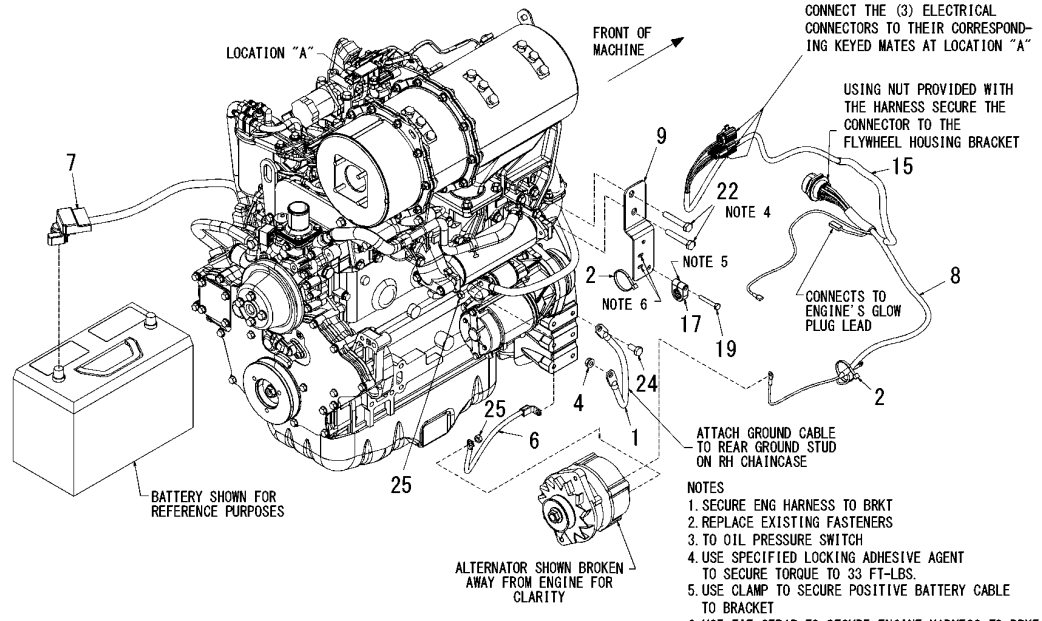
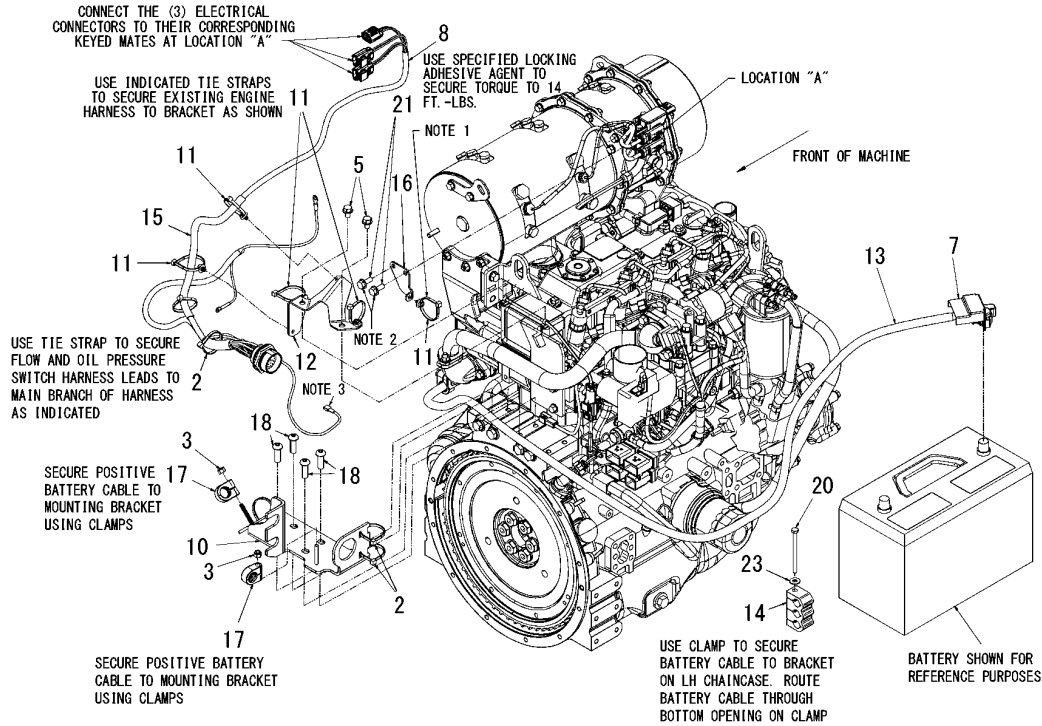
- (1)Order replacement 55 W bulb part number 172217-05070.
- (2)Order replacement 35 W bulb part number 172217-05080.

N:Old $\xrightarrow{\text{Yes}}$ New, Q:Old $\xrightarrow{\text{No}}$ New, R:Old $\xrightarrow{\text{Yes}}$ New, S:Old $\xrightarrow{\text{No}}$ New, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change

Fig.61. ELECTRICAL-ENGINE(S190R)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

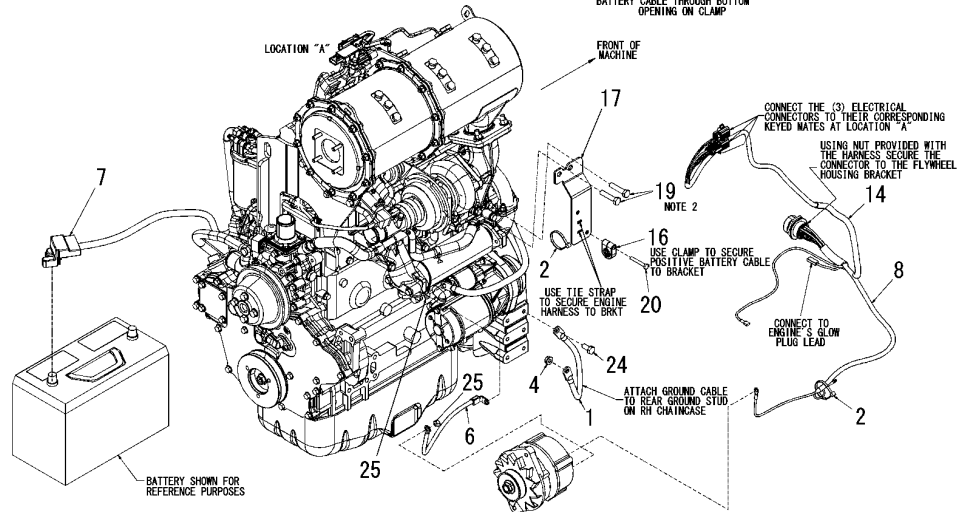
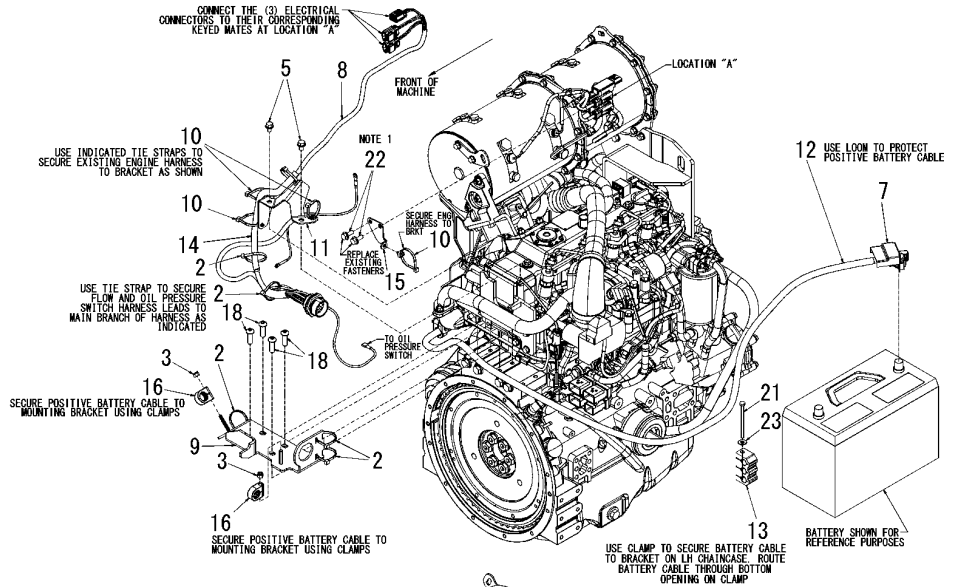


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172215-00040	CABLE	1							
2	1	172551-00120	TIE, CABLE	7							
3	1	172551-00250	NUT	2							
4	1	172215-00700	NUT	1							
5	1	172216-16000	SCREW	2							
6	1	172216-16010	WIRE, ALTERNATOR	1							
7	1	172216-16020	CABLE, POS BATT	1							
8	1	172216-16030	HARNESS, ENGINE	1							
9	1	172216-16040	RETAINER, HARNESS	1							
10	1	172216-16050	BRACKET, HOUSING	1							
11	1	172216-16060	TIE, CABLE	5							
12	1	172216-16070	BRACKET, ENG HARNESS	1							
13	1	172216-16080	LOOM, BATTERY CABLE	1							
14	1	172216-15850	CLAMP, CABLE TRIPLE	1							
15	1	172216-16090	SLEEVE, FIBERGLASS	1							
16	1	172216-16100	BRKT, ENG HARNESS	1							
17	1	172216-16110	CLAMP, TUBE	3							
18	1	172216-16120	SCREW	4							
19	1	172551-09450	SCREW	1							
20	1	172216-15900	SCREW	1							
21	1	172551-10130	SCREW	2							
22	1	172216-09770	SCREW	2							
23	1	172551-10360	WASHER	1							
24	1	172551-10420	SCREW	1							
25	1	172551-10440	NUT	2							

Fig.62. ELECTRICAL-ENGINE(S220R)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



NOTES
1. USE SPECIFIED LOCKING ADHESIVE AGENT TO SECURE TORQUE TO 14 FT.-LBS.
2. USE SPECIFIED LOCKING ADHESIVE AGENT TO SECURE TORQUE TO 33 FT.-LBS.

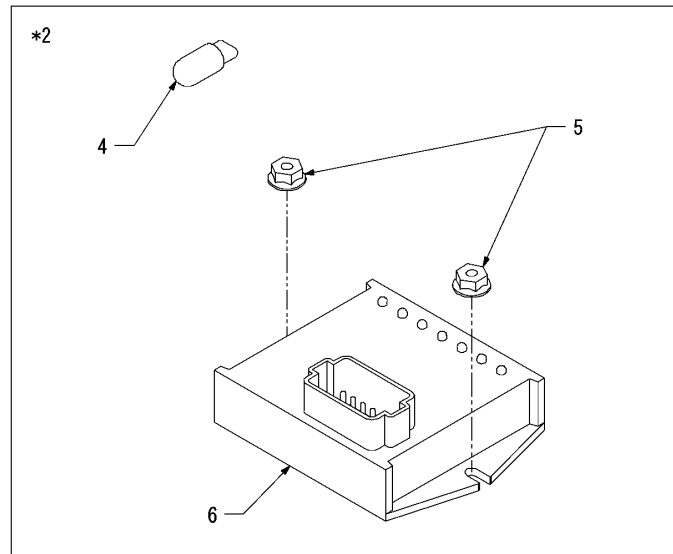
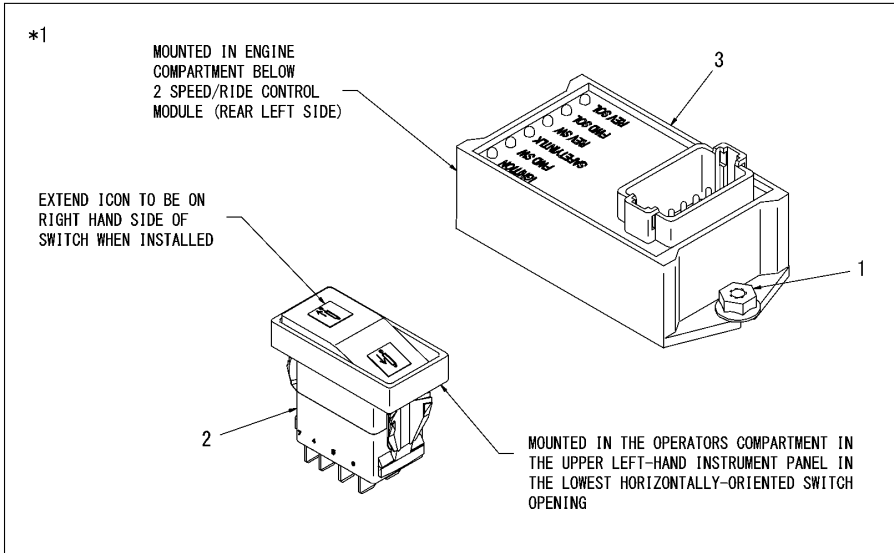
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172215-00040	CABLE		1						
2	1	172551-00120	TIE, CABLE		7						
3	1	172551-00250	NUT		2						
4	1	172215-00700	NUT		1						
5	1	172216-16000	SCREW		2						
6	1	172216-16010	WIRE, ALTERNATOR		1						
7	1	172216-16020	CABLE, POS BATT		1						
8	1	172216-16030	HARNESS, ENGINE		1						
9	1	172216-16050	BRACKET, HOUSING		1						
10	1	172216-16060	TIE, CABLE		5						
11	1	172216-16070	BRACKET, ENG HARNESS		1						
12	1	172216-16080	LOOM, BATTERY CABLE		1						
13	1	172216-15850	CLAMP, CABLE TRIPLE		1						
14	1	172216-16090	SLEEVE, FIBERGLASS		1						
15	1	172216-16100	BRKT, ENG HARNESS		1						
16	1	172216-16110	CLAMP, TUBE		3						
17	1	172216-16130	RETAINER, HARNESS		1						
18	1	172216-16120	SCREW		4						
19	1	172216-16140	SCREW		2						
20	1	172551-09450	SCREW		1						
21	1	172216-15900	SCREW		1						
22	1	172551-10130	SCREW		2						
23	1	172551-10360	WASHER		1						
24	1	172551-10420	SCREW		1						
25	1	172551-10440	NUT		2						

Fig.63. ELECTRICAL-CONTROL(HIGH FLOW CONTROL/TWO-SPEED CONTROL

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-01590	FLANGE	2	2						
2	1	172218-02000	SWITCH, HIGH FLOW	1	1						
3	1	172551-04790	CONTROLLER,HIGH-FLOW	1	1						
4	1	172215-00580	BULB, LAMP	1	1						
5	1	172551-01590	FLANGE	2	2						
6	1	172216-07710	MODULE, 2-SPEED	1	1						



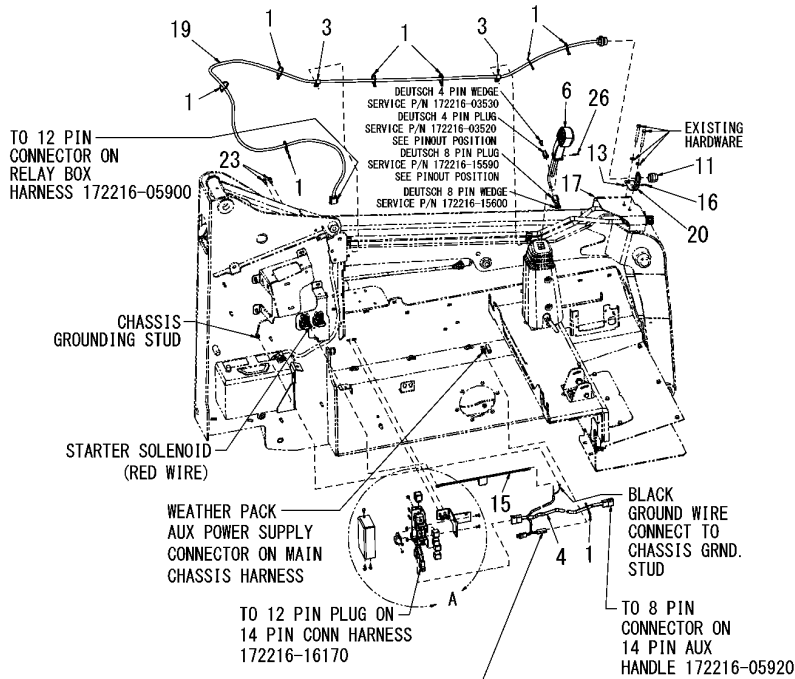
Remarks

- *1.High Flow Control.
- *2.Two-Speed Control.

Fig.64. ELECTRICAL-14-PIN AUXILIARY CONNECTOR(S190R

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



PINOUT POSITIONS:

1. 4 PIN CONNECTOR

PIN-OUT CONFIGURATION:

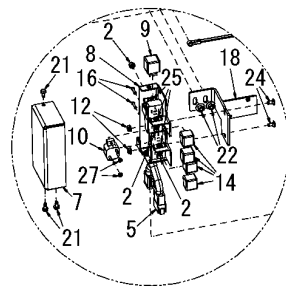
1. RED
2. PINK
3. GREEN
4. BLACK

2. 8 PIN CONNECTOR

PIN-OUT CONFIGURATION:

1. YELLOW
2. GRAY
3. ORANGE
4. BROWN
5. WHITE
6. VIOLET
7. BLUE
8. TAN

3. IF INSTALLING 14 PIN AUXILIARY WITH MANUAL QUICK COUPLER, REMOVE EXISTING MANUAL QUICK COUPLER VALVE MOUNTING BRACKET FROM CHASSIS AND REPLACE WITH 172216-16160 BRACKET PROVIDED WITH THIS KIT.



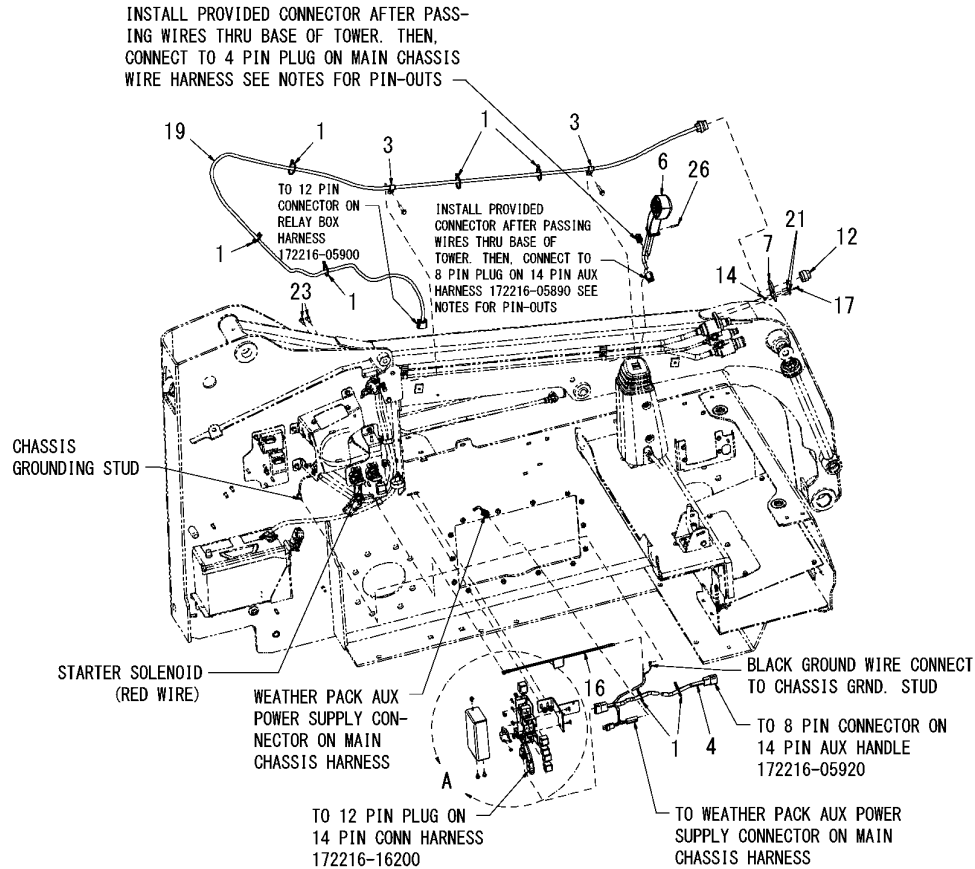
DETAIL A

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00120	TIE, CABLE	8							
2	1	172551-00250	NUT	3							
3	1	172215-00340	CLAMP	2							
4	1	172216-05890	HARNES, 14-PIN AUX	1							
5	1	172216-05900	HARNES, RELAY BOX	1							
6	1	172216-05920	HANDLE, 14-PIN AUX	1							
7	1	172216-05990	COVER, RELAY BOX	1							
8	1	172216-06010	CHASSIS, RELAY BOX	1							
9	1	172216-06090	DIODE BLOCK	1							
10	1	172216-06100	BREAKER 15 A	1							
11	1	172216-06370	CAP, DUCT	1							
12	1	172215-06610	NUT	2							
13	1	172216-10870	NUT	1							
14	1	172216-07920	RELAY	4							
15	1	172216-09010	FUSE, 20 A INLINE	1							
16	1	172215-07650	SCREW	3							
17	1	172216-15200	COVER, AUX COUPLER	1							
18	1	172216-16160	BRACKET, RELAY BOX	1							
19	1	172216-16170	HARNES	1							
20	1	172216-16180	MOUNT, PIN CONNECTOR	1							
21	1	172551-09440	SCREW	3							
22	1	172216-14820	NUT	2							
23	1	172215-02820	BOLT	2							
24	1	172216-09410	BOLT	2							
25	1	172215-03110	SCREW	3							
26	1	172216-09610	PIN, ROLL	1							
27	1	172216-16190	NUT	2							

Fig.65. ELECTRICAL-14-PIN AUXILIARY CONNECTOR(S220R)

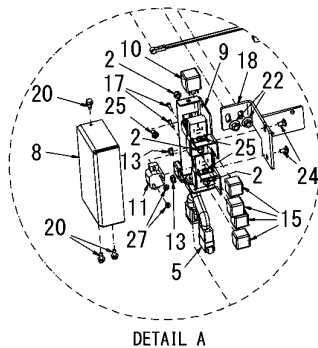
(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



NOTES:

1. 4 PIN CONNECTOR
PIN-OUT CONFIGURATION:
1. RED
2. PINK
3. GREEN
4. BLACK
2. 8 PIN CONNECTOR
PIN-OUT CONFIGURATION:
1. YELLOW
2. GRAY
3. ORANGE
4. BROWN
5. WHITE
6. VIOLET
7. BLUE
8. TAN

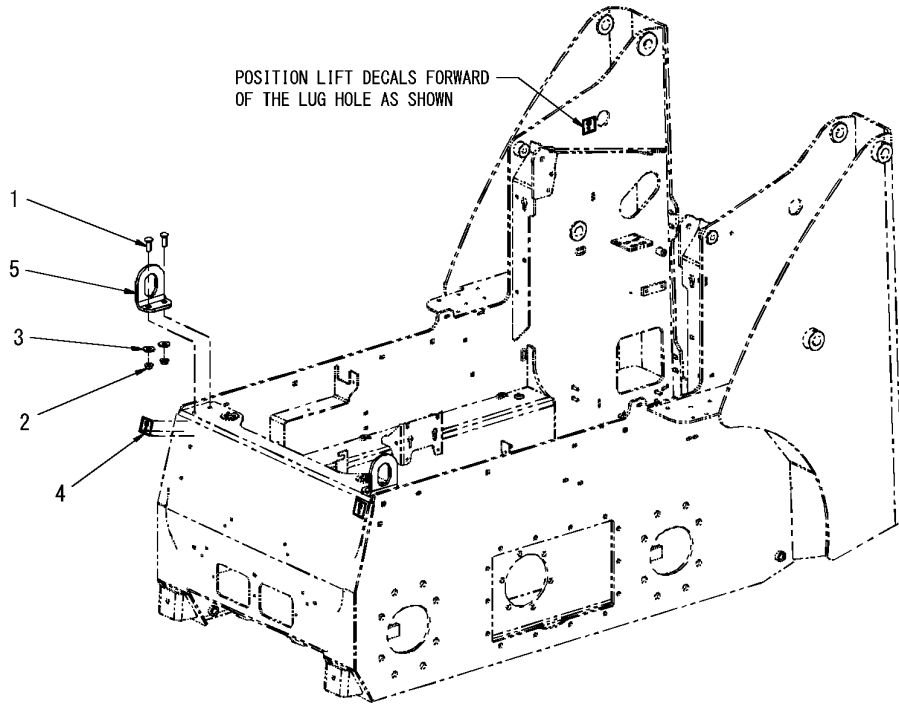


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00120	TIE, CABLE		7						
2	1	172551-00250	NUT		3						
3	1	172215-00340	CLAMP		2						
4	1	172216-05890	HARNESS, 14-PIN AUX		1						
5	1	172216-05900	HARNESS, RELAY BOX		1						
6	1	172216-05920	HANDLE, 14-PIN AUX		1						
7	1	172216-05970	MOUNT, CONNECTOR		1						
8	1	172216-05990	COVER, RELAY BOX		1						
9	1	172216-06010	CHASSIS, RELAY BOX		1						
10	1	172216-06090	DIODE BLOCK		1						
11	1	172216-06100	BREAKER 15 A		1						
12	1	172216-06370	CAP, DUCT		1						
13	1	172215-06610	NUT		2						
14	1	172216-10870	NUT		1						
15	1	172216-07920	RELAY		4						
16	1	172216-09010	FUSE, 20 A INLINE		1						
17	1	172215-07650	SCREW		3						
18	1	172216-16160	BRACKET, RELAY BOX		1						
19	1	172216-16200	HARNESS		1						
20	1	172551-09440	SCREW		3						
21	1	172551-09510	SCREW		2						
22	1	172216-14820	NUT		2						
23	1	172215-02820	BOLT		2						
24	1	172216-09410	BOLT		2						
25	1	172215-03110	SCREW		3						
26	1	172216-09610	PIN, ROLL		1						
27	1	172216-16190	NUT		2						

Fig.66. FOUR-POINT LIFT

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172218-05930	BOLT	4	4						
2	1	172215-00710	NUT	4	4						
3	1	172216-01770	WASHER	4	4						
4	1	172551-01570	LABEL,LIFT POINT	4	4						
5	1	172218-04050	LIFT EYE, 4 POINT	2	2						

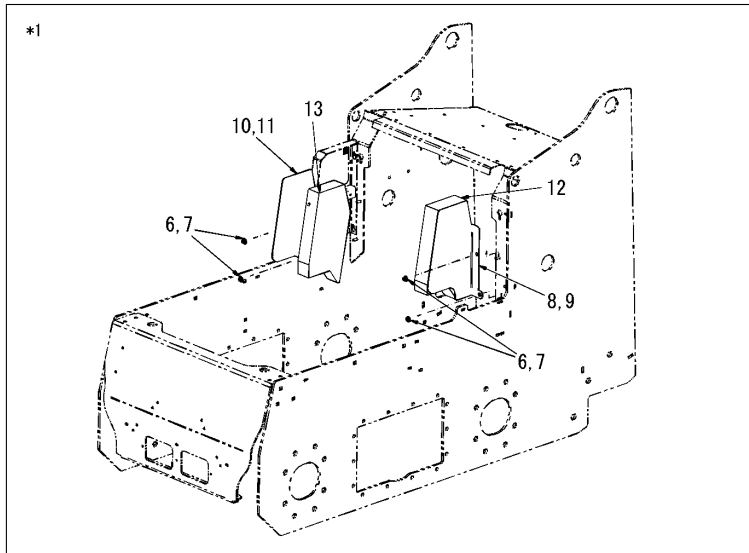
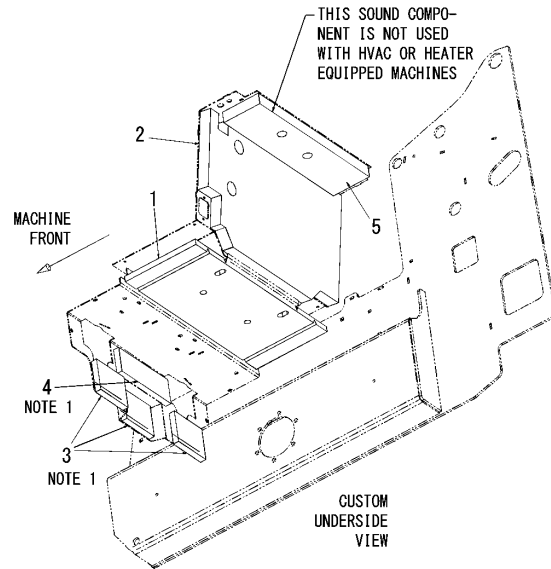
Fig.67. SOUND SUPPRESSION(S190R STANDARD)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

NOTES

1. THESE PARTS ARE SHOWN IN THE T-BAR CONFIGURATION. THESE PARTS WILL BE SLIGHTLY REARRANGED ON THE BACK SIDE OF THE CROSSMEMBER FOR ALL OTHER CONTROL TYPES.



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172218-05810	FOAM, SEAT PAN	1							
2	1	172216-16210	FOAM, ROPS BACK	1							
3	1	172216-16220	PAD, GEAR PUMP	3							
4	1	172216-16230	PAD, CROSSMEMBER	1							
5	1	172216-16320	FOAM, ROPS BACK	1							
6	1	172215-00200	NUT	4							1
7	1	172551-09600	SCREW	4							2
8	1	172216-17400	PANEL, LEFT	1							1
9	1	172216-16300	PANEL ASSY, LEFT	1							2
10	1	172216-17410	PANEL, RIGHT	1							1
11	1	172216-16310	PANEL ASSY, RIGHT	1							2
12	1	172216-16280	PAD, SOUND PANEL L	1							
13	1	172216-16290	PAD, SOUND PANEL R	1							

Remarks

*1.Group Side Screen Baffles.

(1)Parts used after chassis update adding capscrews to chassis weldment.

(2)Parts used before chassis update adding capscrews to chassis weldment.

Fig.68. SOUND SUPPRESSION(S190R DELUXE(OPTIONAL))

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-16240	PAD, CHASSIS R LOWER	1							
2	1	172216-16250	PAD, CHASSIS R UPPER	1							
3	1	172216-16260	PAD, CHASSIS, BOTTOM	1							
4	1	172216-16270	PAD, ENGINE COVER	1							

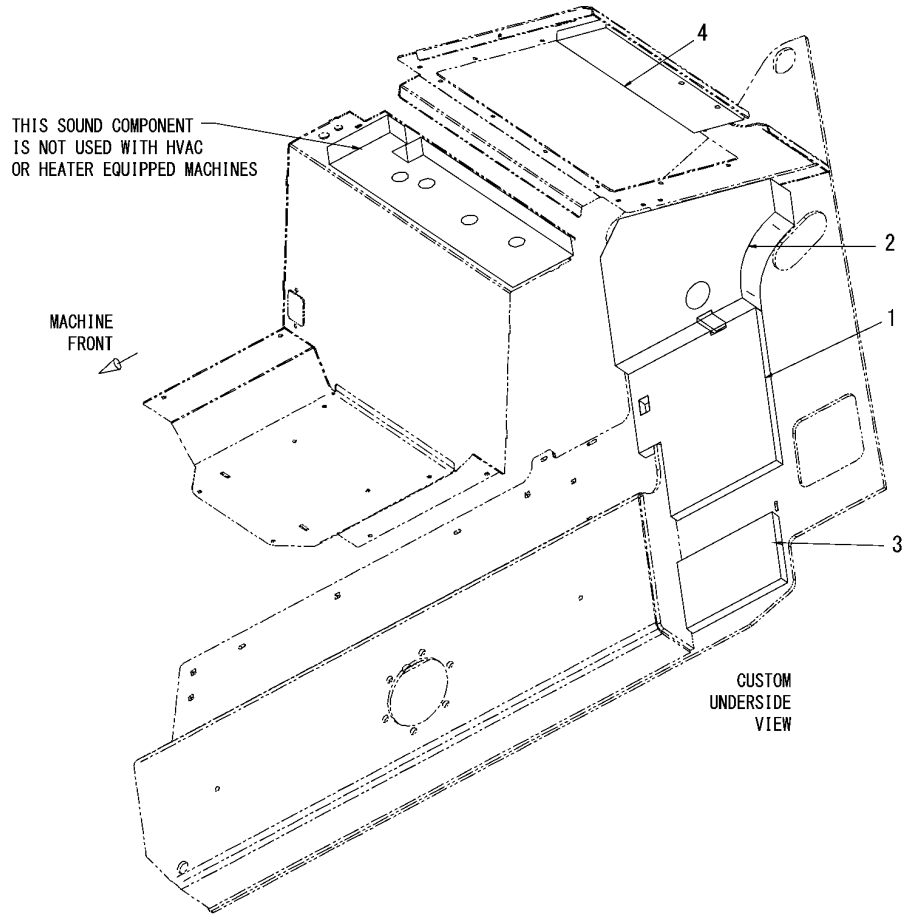


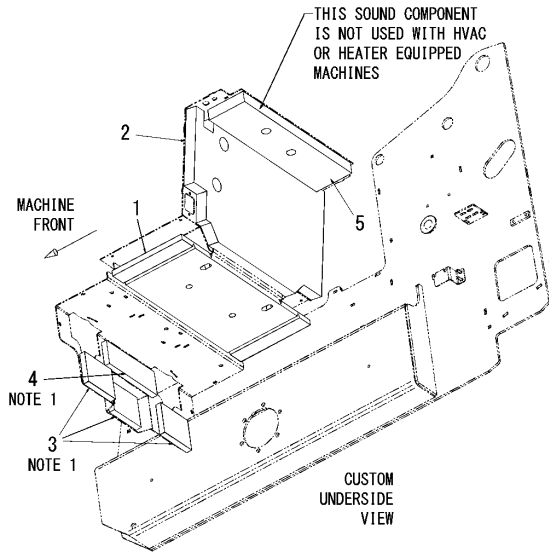
Fig.69. SOUND SUPPRESSION(S220R STANDARD)

(A)=S190R-1
(B)=S220R-1
(C)=

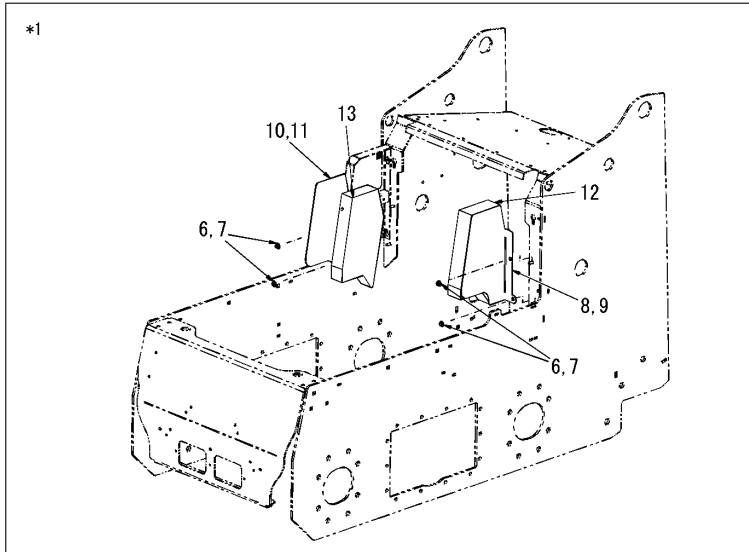
(D)=
(E)=
(F)=

NOTES

- 1. THESE PARTS ARE SHOWN IN THE T-BAR CONFIGURATION. THESE PARTS WILL BE SLIGHTLY REARRANGED ON THE BACK SIDE OF THE CROSSMEMBER FOR ALL OTHER CONTROL TYPES.



No.	Lev.	Parts No.	Description	Q'ty						I	R	
				(A)	(B)	(C)	(D)	(E)	(F)			
1	1	172218-05810	FOAM, SEAT PAN		1							
2	1	172216-16210	FOAM, ROPS BACK		1							
3	1	172216-16220	PAD, GEAR PUMP		3							
4	1	172216-16230	PAD, CROSSMEMBER		1							
5	1	172216-16320	FOAM, ROPS BACK		1							
6	1	172215-00200	NUT		4							1
7	1	172551-09600	SCREW		4							2
8	1	172216-17400	PANEL, LEFT		1							1
9	1	172216-16300	PANEL ASSY, LEFT		1							2
10	1	172216-17410	PANEL, RIGHT		1							1
11	1	172216-16310	PANEL ASSY, RIGHT		1							2
12	1	172216-16280	PAD, SOUND PANEL L		1							
13	1	172216-16290	PAD, SOUND PANEL R		1							



Remarks

*1.Group Side Screen Baffles.

- (1)Parts used after chassis update adding capscrews to chassis weldment.
- (2)Parts used before chassis update adding capscrews to chassis weldment.

Fig.70. SOUND SUPPRESSION(S220R DELUXE(OPTIONAL)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-16330	PAD, TOWER R UPPER		1						
2	1	172216-16340	PAD, TOWER R LOWER		1						
3	1	172216-16350	PAD, TOWER R MIDDLE		1						
4	1	172216-16360	PAD, ENGINE COVER		1						
5	1	172216-16370	PAD, R UPPER FWRD		1						

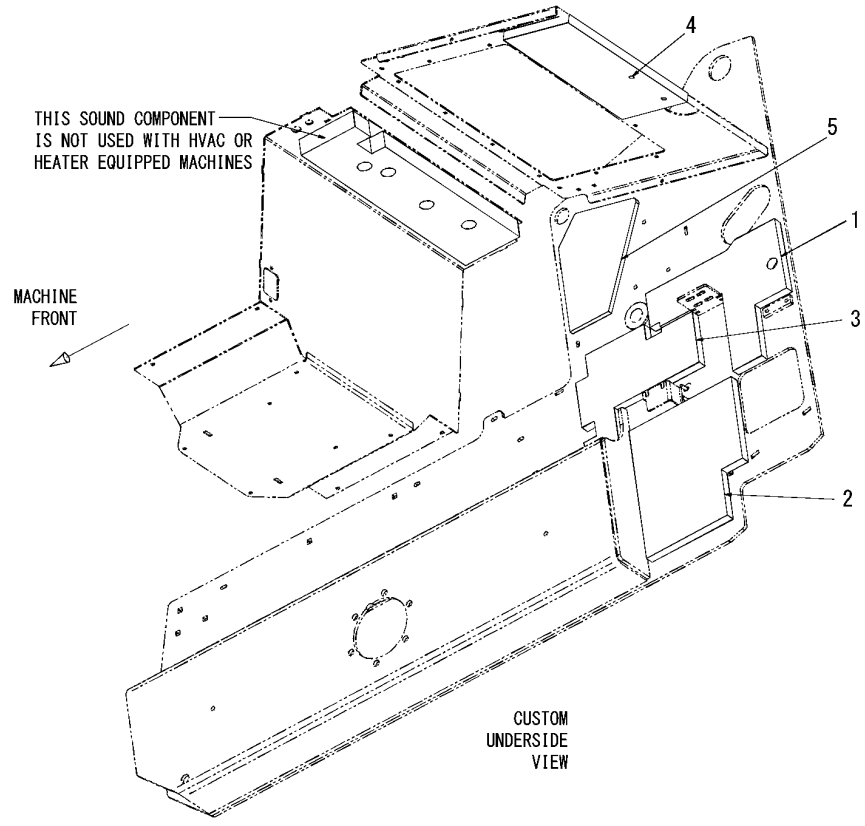
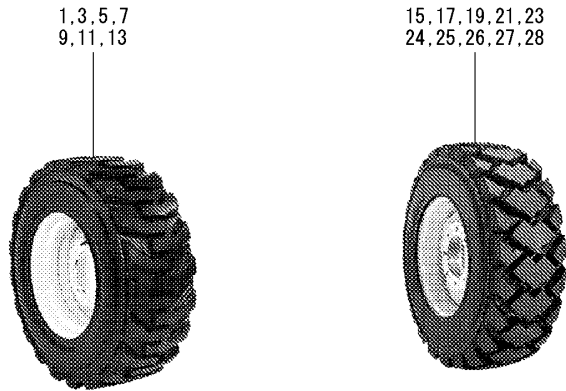


Fig.71. TIRES

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Qty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-10100	WHEEL ASSY	1	1						
2	1	172216-03210	WHEEL	1	1						1
3	1	172216-10110	WHEEL ASSY	1	1						
4	1	172216-03210	WHEEL	1	1						1
5	1	172216-09970	WHEEL ASSY	1	1						
6	1	172216-04350	WHEEL	1	1						1
7	1	172215-11340	TIRE AND RIM	1	1						
8	1	172215-01390	WHEEL	1	1						1
9	1	172215-03470	WHEEL ASSY	1	1						
10	1	172215-01400	WHEEL	1	1						1
11	1	172216-10180	WHEEL ASSY	1	1						
12	1	172216-08190	WHEEL	1	1						1
13	1	172216-09970	WHEEL ASSY	1	1						
14	1	172216-04350	WHEEL	1	1						1
15	1	172216-10140	WHEEL ASSY	1	1						
16	1	172216-03210	WHEEL	1	1						1
17	1	172216-10150	WHEEL ASSY	1	1						
18	1	172216-03210	WHEEL	1	1						1
19	1	172216-10150	WHEEL ASSY	1	1						
20	1	172216-03210	WHEEL	1	1						1
21	1	172216-09990	WHEEL ASSY	1	1						
22	1	172215-01390	WHEEL	1	1						1
23	1	172216-10030	WHEEL SOLD FLEX ASSY	1	1						
24	1	172216-10040	WHEEL SOLD FLEX ASSY	1	1						
25	1	172217-04100	WHEEL SOLD FLEX ASSY	1	1						
26	1	172217-04110	WHEEL SOLD FLEX ASSY	1	1						
27	1	172215-03450	WHEEL SOLD FLEX ASSY	1	1						
28	1	172215-03460	WHEEL SOLD FLEX ASSY	1	1						
29	1	172216-10080	WHEEL	1	1						1

Remarks

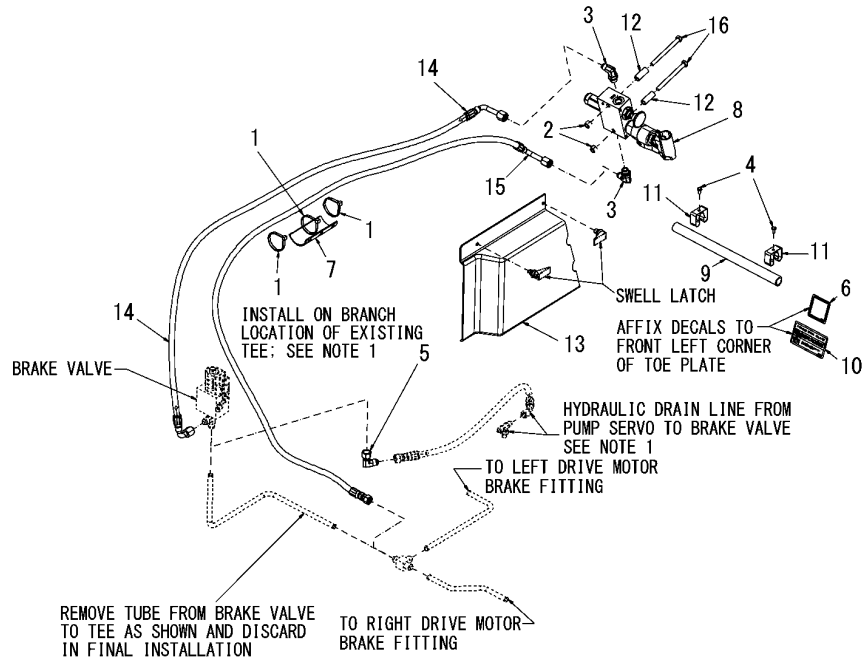
*.Refer to PREFACE.

(1)Not shown in illustration.

Fig.132. BRAKE RELEASE(S190R)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



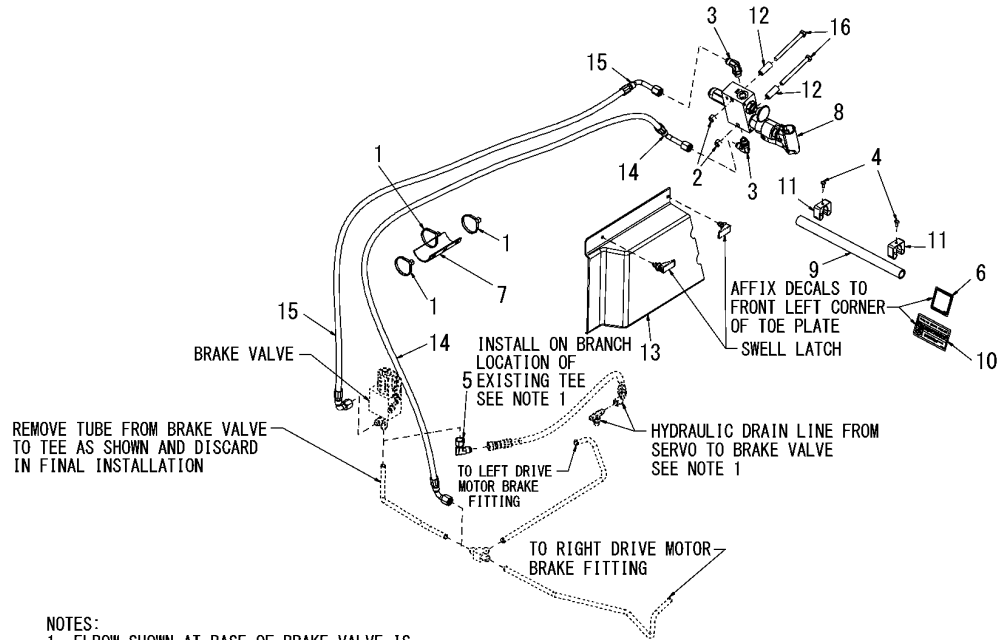
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00120	TIE, CABLE	3							
2	1	172551-00150	NUT	2							
3	1	172551-00220	CONNECTOR	2							
4	1	172216-00190	RIVET, BLIND	2							
5	1	172215-00500	FITTING	1							
6	1	172216-03540	LABEL, JACK	1							
7	1	172216-17390	PROTECTOR, HOSE	1							
8	1	172217-03440	VALVE, BRAKE RELEASE	1							
9	1	172216-08950	TUBE, HANDLE	1							
10	1	172216-08970	LABEL, PARK BRAKE	1							
11	1	172216-08990	HANDLE HOLDER CLIP	2							
12	1	172216-17420	SPACER	2							
13	1	172216-17430	COVER, LOWER L	1							
14	1	172216-17440	HOSE	1							
15	1	172216-17450	HOSE	1							
16	1	172216-09340	SCREW	2							

NOTES:
1. ELBOW SHOWN AT BASE OF BRAKE VALVE IS INCLUDED FOR USE ON SERVO-CONTROLLED MODELS ONLY.

Fig.133. BRAKE RELEASE(S220R)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



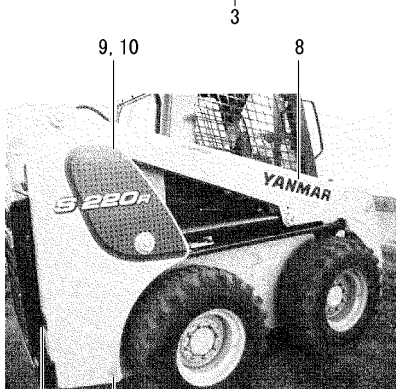
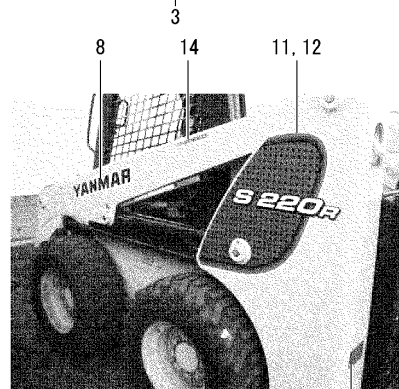
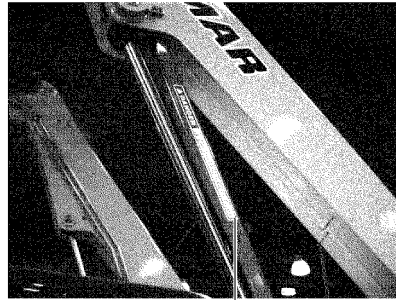
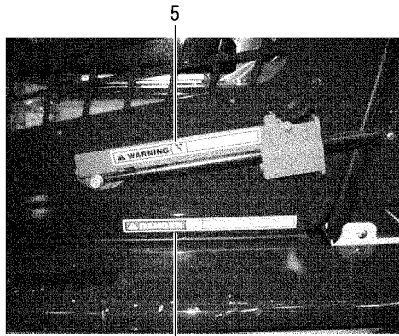
No.	Lev.	Parts No.	Description	Qty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00120	TIE, CABLE		3						
2	1	172551-00150	NUT		2						
3	1	172551-00220	CONNECTOR		2						
4	1	172216-00190	RIVET, BLIND		2						
5	1	172215-00500	FITTING		1						
6	1	172216-03540	LABEL, JACK		1						
7	1	172216-17390	PROTECTOR, HOSE		1						
8	1	172217-03440	VALVE, BRAKE RELEASE		1						
9	1	172216-08950	TUBE, HANDLE		1						
10	1	172216-08970	LABEL, PARK BRAKE		1						
11	1	172216-08990	HANDLE HOLDER CLIP		2						
12	1	172216-17420	SPACER		2						
13	1	172216-17430	COVER, LOWER L		1						
14	1	172216-17460	HOSE		1						
15	1	172216-17440	HOSE		1						
16	1	172216-09340	SCREW		2						

NOTES:
1. ELBOW SHOWN AT BASE OF BRAKE VALVE IS INCLUDED FOR USE ON SERVO-CONTROLLED MODELS ONLY.

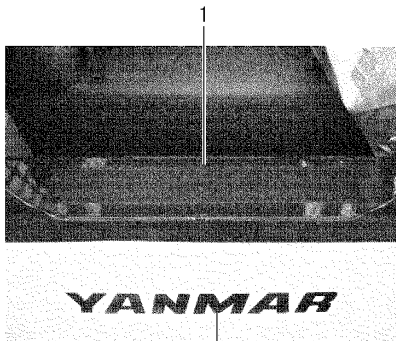
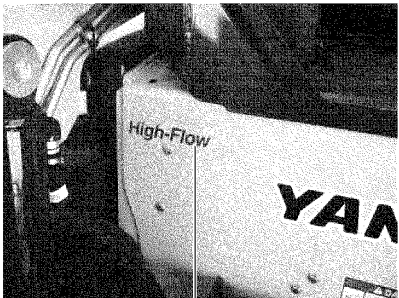
Fig.72. DECALS(1)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



S220R-1 Models



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-00240	STRIP	1	1						
2	1	172215-00800	REFLECTOR, RED	2	2						
3	1	172551-01510	LABEL, KEEP OUT	2	2						
4	1	172551-01560	LABEL, TIEDOWN POINT	1	1						
5	1	172216-12610	DECAL, ROPS LOCK	1	1						
6	1	172551-11460	LABEL	1							
7	1	172218-06320	LABEL		1						
8	1	172215-11550	LABEL	2	2						
9	1	172216-17320	DECAL, S190R RIGHT	1							
10	1	172216-17330	DECAL, S220R RIGHT		1						
11	1	172216-17340	DECAL, S190R LEFT	1							
12	1	172216-17350	DECAL, S220R LEFT		1						
13	1	172551-02040	LABEL, HIGH-FLOW		1						1
14	1	172551-02020	LABEL, 2-SPEED	1	1						2

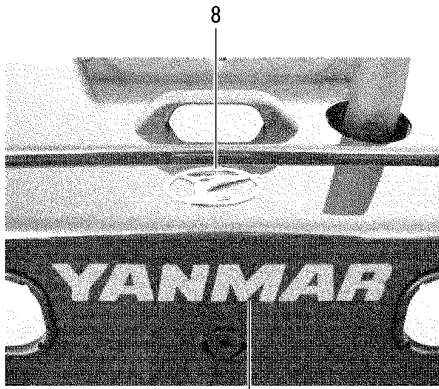
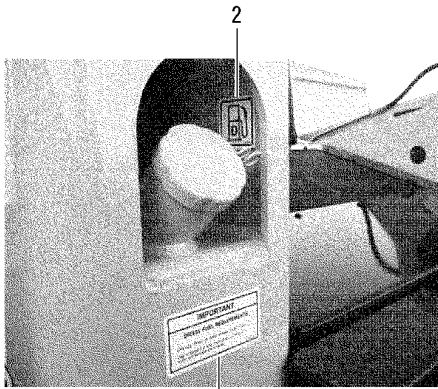
Remarks
(1)Option.
(2)Option.
Set of 2.

Fig.73. DECALS(2)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-01490	LABEL, HYDRAULIC	1	1						
2	1	172551-01500	LABEL, DIESEL FUEL	1	1						
3	1	172551-01530	LABEL, WARNING	1	1						
4	1	172551-01550	LABEL, WARNING		1						
5	1	172216-17270	DECAL, FUEL	1	1						
6	1	172216-17280	DECAL,PDM FUSE RELAY	1	1						
7	1	172218-06330	LABEL, RED	1	1						
8	1	172216-17310	BADGE, YANMAR	1	1						



S190R-1 Models

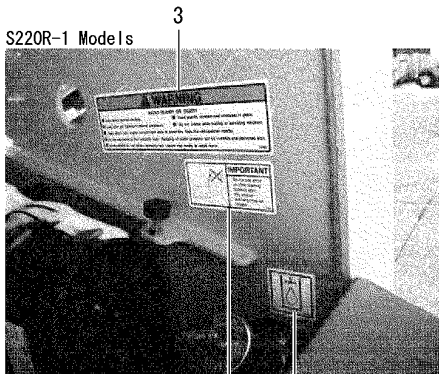
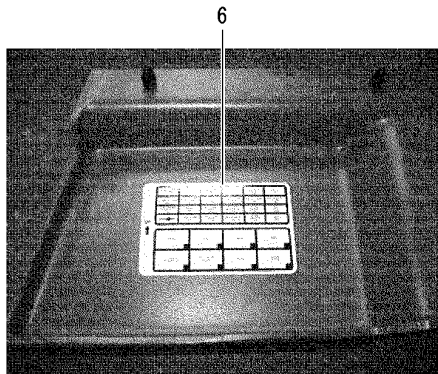
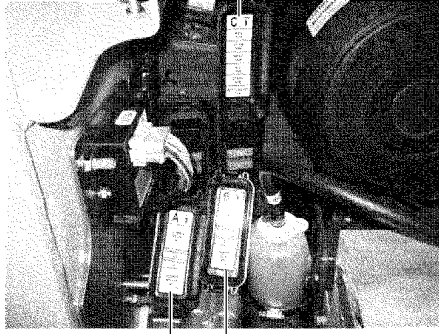
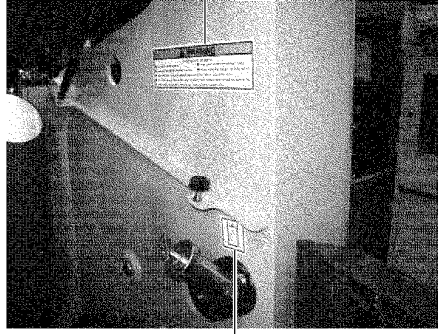


Fig.74. DECALS(3)

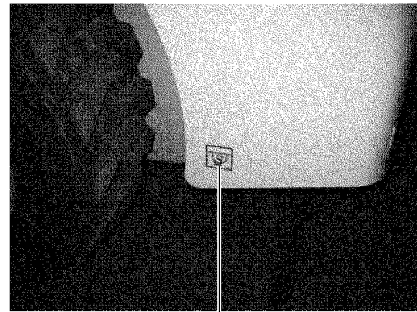
(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

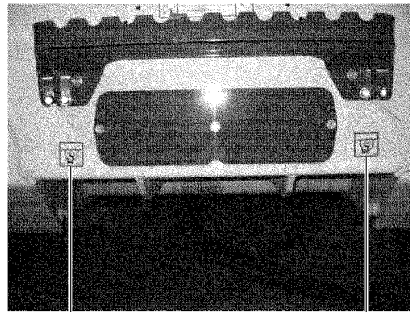
S190R-1 Models



2



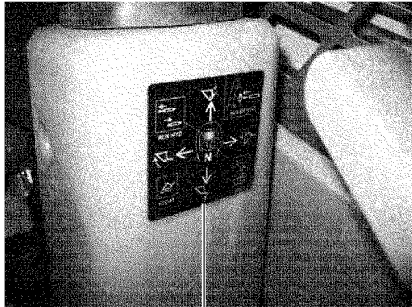
3



3

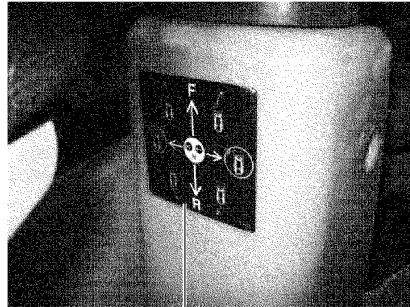
3

Dual Joystick Models



5

Dual Joystick Models



6

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-12590	DECAL, DANGER HOT	1	1						
2	1	172551-01550	LABEL, WARNING	1							
3	1	172551-01560	LABEL, TIEDOWN POINT	3	3						
4	1	172216-12600	DECAL, DANGER FAN	1	1						
5	1	172216-17360	DECAL, JOYSTICK RIGHT	1	1						1
6	1	172216-03730	LABEL, JOYSTICK LEFT	1	1						1

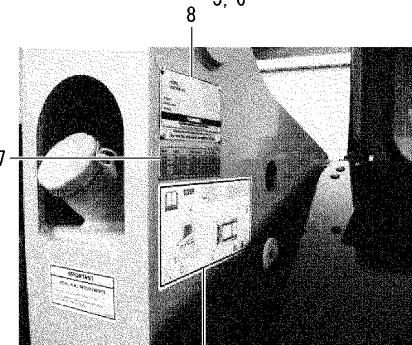
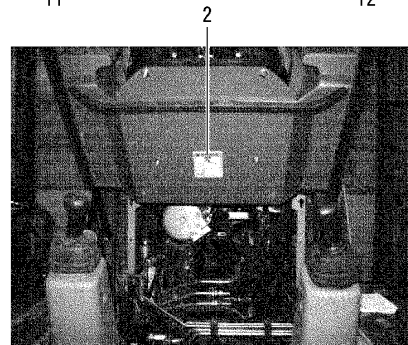
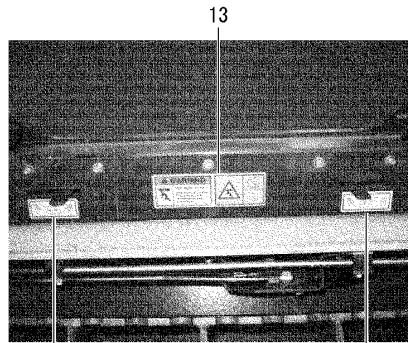
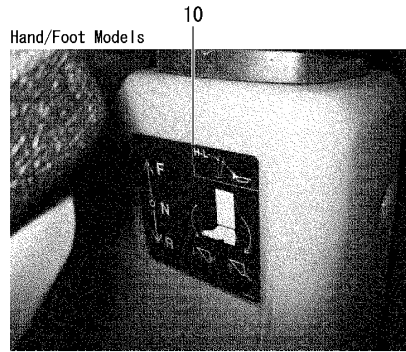
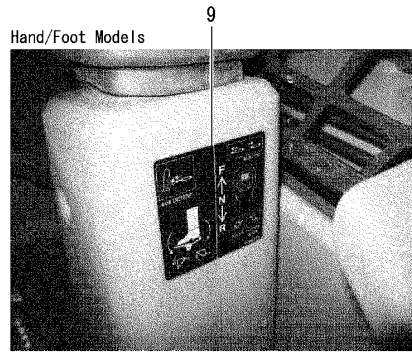
Remarks

(1)Dual Joystick models.

Fig.75. DECALS(4)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-01520	LABEL, NO RIDERS	1	1						
2	1	172551-02070	LABEL., LOCK	1	1						
3	1	172216-17250	DECAL, SERVICE NA	1	1						
4	1	172216-17260	DECAL, SERVICE TURBO	1	1						
5	1	172216-17230	DECAL, ATTACH BRT.	1	1						
6	1	172216-17240	DECAL, LATCHING	1	1						
7	1	172215-11520	PLATE, CAPACITY	1	1						
8	1	172216-11930	PLATE, SERIAL YANMAR	1	1						
9	1	172216-17370	DECAL, HAND&FOOT R	1	1						1
10	1	172217-02470	LABEL, HAND&FOOT L	1	1						1
11	1	172551-01780	LABEL, LATCHING	1	1						2
12	1	172551-01790	LABEL, LATCHING	1	1						2
13	1	172551-01770	LABEL, QUICK COUPLER	1	1						2

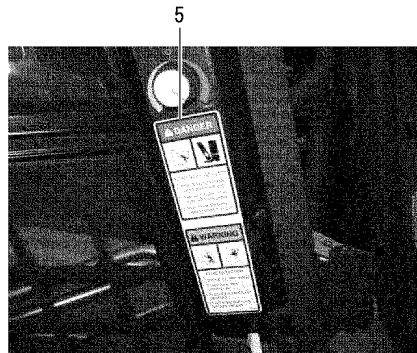
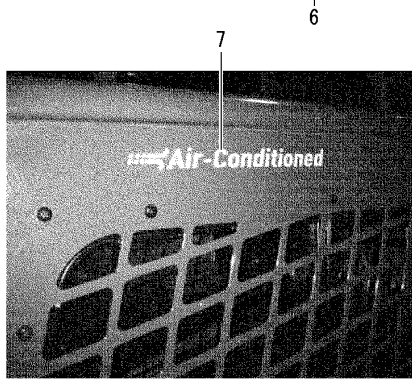
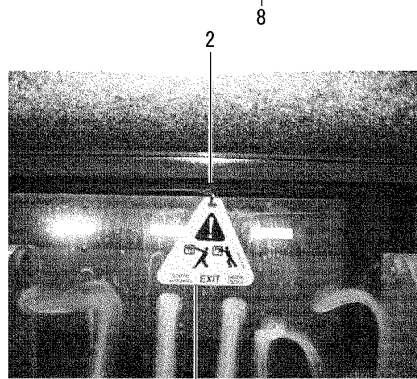
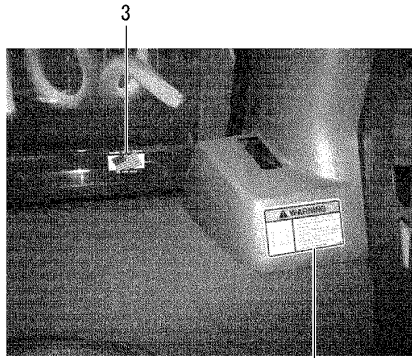
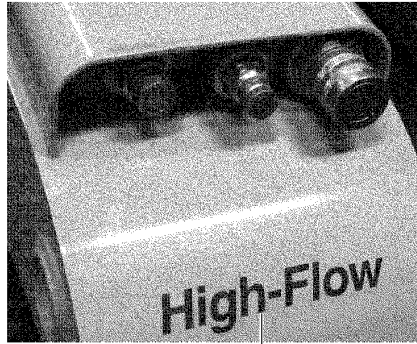
Remarks
(1)Hand/Foot models.
(2)Option.

Fig.76. DECALS(5)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

S190R-1 Models



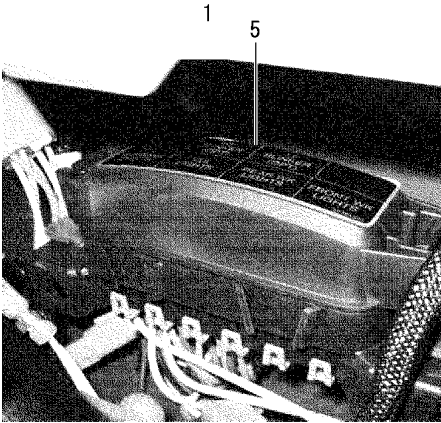
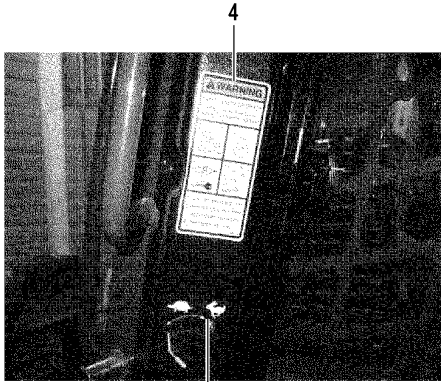
No.	Lev.	Parts No.	Description	Q'ty						I	R	
				(A)	(B)	(C)	(D)	(E)	(F)			
1	1	172551-01110	TAG, RIP-CORD	1	1							
2	1	172215-00650	RING	1	1							
3	1	172551-01840	LABEL, FLAG	1	1							
4	1	172218-01940	LABEL, WARNING	1	1							
5	1	172218-02150	LABEL, WARNING	1	1							
6	1	172218-02400	LABEL, WARNING	1	1							
7	1	172216-02760	LABEL, A/C	2	2							
8	1	172551-02040	LABEL, HIGH-FLOW	1								1

Remarks
(1)Option.

Fig.77. DECALS(6)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

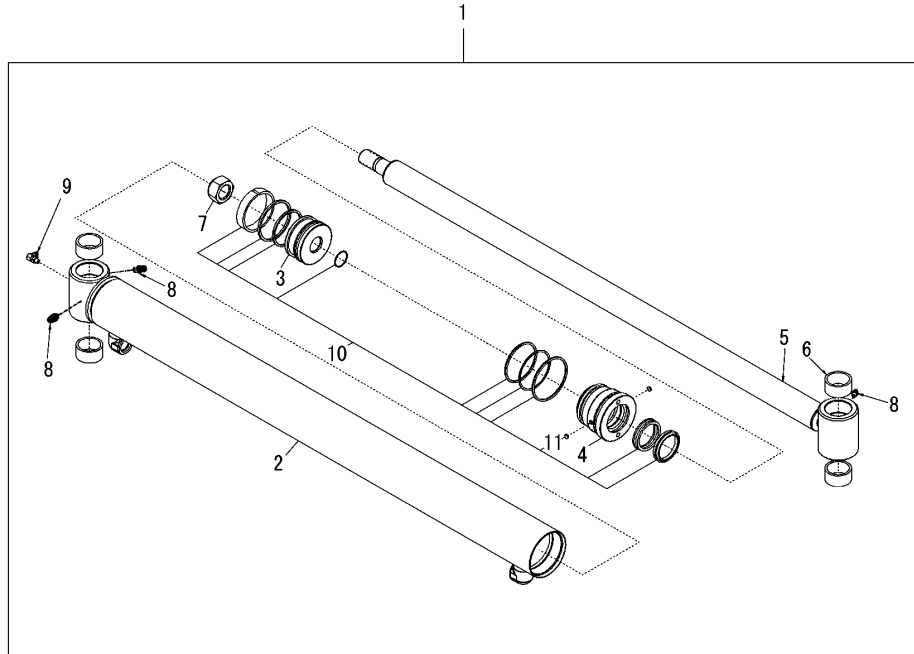


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172218-06270	LABEL, ACCELERATOR	1	1						
2	1	172551-03010	LABEL,IGNITION	1	1						
3	1	172216-17290	CHAIN, KEY	1	1						
4	1	172218-01910	LABEL, SAFETY	1	1						
5	1	172216-17300	DECAL, PANEL ROPS	1	1						

Fig.78. LIFT CYLINDER(S190R

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-15140	CYLINDER, LIFT	1							
2	2	172216-16380	TUBE, LIFT CYLINDER	1							
3	2	172216-01660	PISTON	1							
4	2	172216-16390	GLAND, HEAD	1							
5	2	172216-16400	ROD, LIFT CYLINDER	1							
6	2	172216-03250	BUSHING	3							
7	2	172551-00390	NUT	1							
8	2	172218-06230	ZERK	3							
9	2	172216-16410	FITTING	1							1
10	2	172216-16430	SEAL KIT	1							
11	3	172216-16420	INSERT	2							

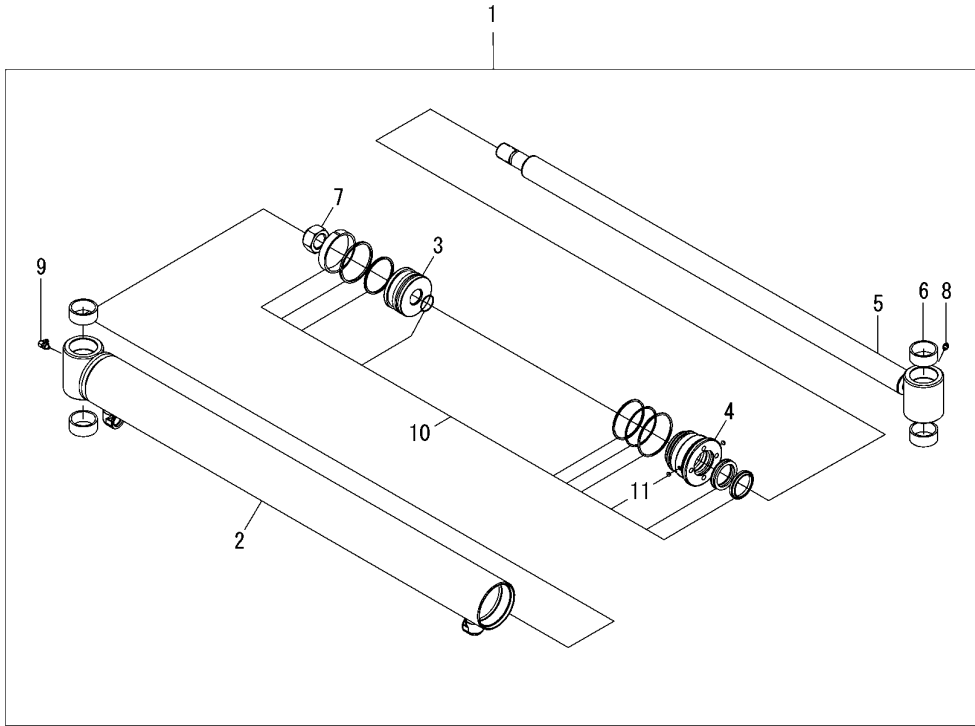
Remarks

(1)Check cylinder tube to see if it has a 90 degree fitting.
Later models use the 172218-06230 fitting in all three places.

Fig.79. LIFT CYLINDER(S220R)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

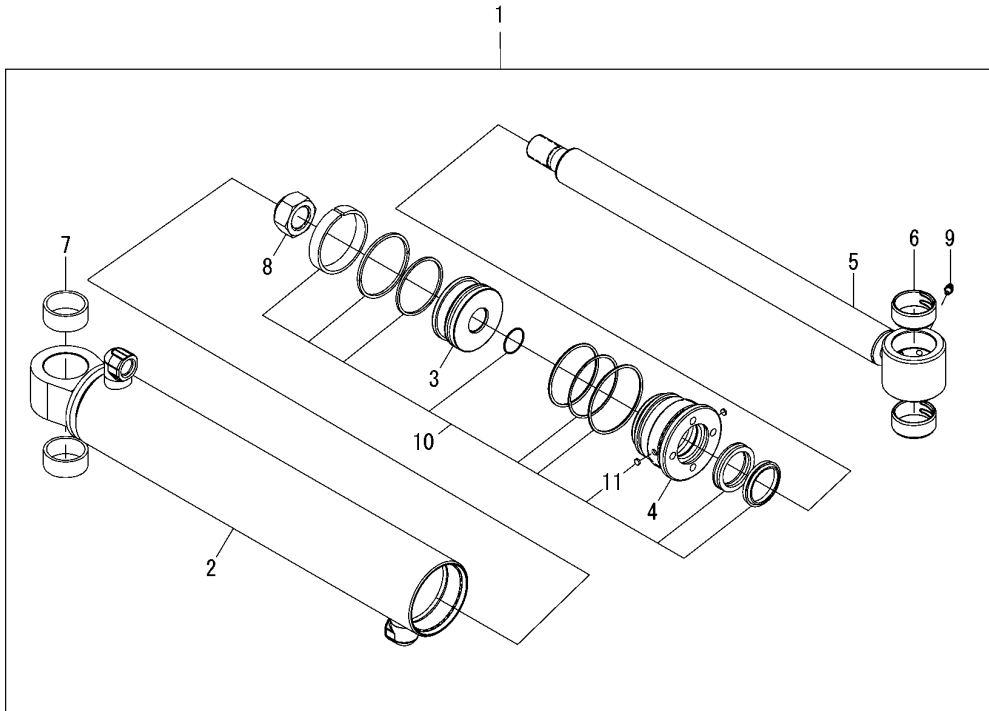


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-15260	CYLINDER, LIFT		1						
2	2	172216-16440	TUBE, LIFT CYLINDER		1						
3	2	172217-00050	PISTON		1						
4	2	172216-16450	GLAND, HEAD		1						
5	2	172216-16460	ROD, LIFT CYLINDER		1						
6	2	172216-03100	BUSHING		4						
7	2	172552-00020	NUT		1						
8	2	172218-06230	ZERK		1						
9	2	172216-16410	FITTING		1						
10	2	172216-16470	SEAL KIT		1						
11	3	172216-16420	INSERT		2						

Fig.80. TILT CYLINDER(S190R

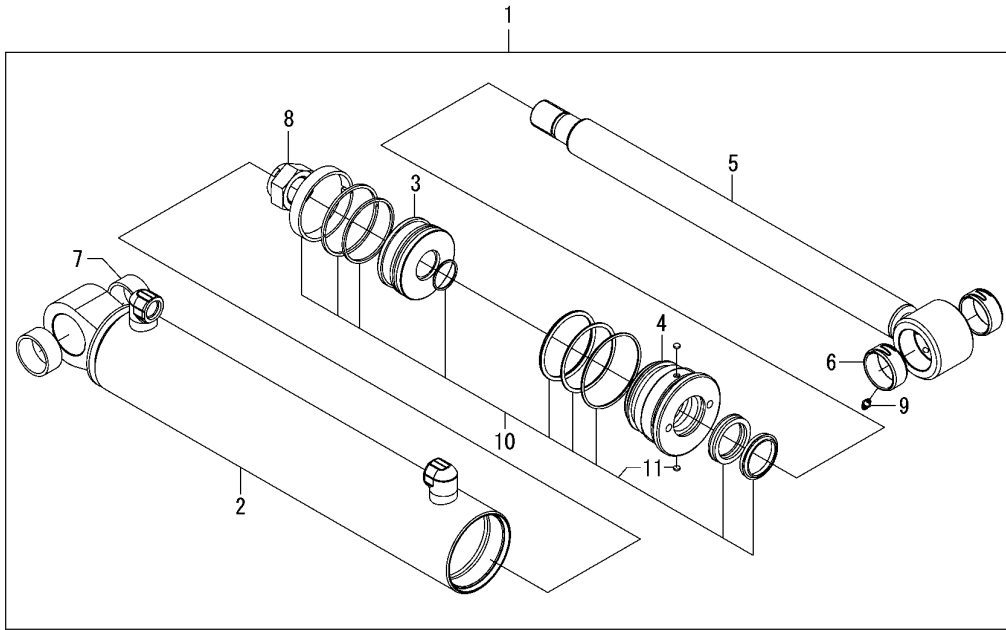
(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-15090	CYLINDER, TILT	1							
2	2	172216-16480	WELDMENT, TUBE	1							
3	2	172552-00670	PISTON	1							
4	2	172216-16450	GLAND, HEAD	1							
5	2	172216-16490	WELDMENT, ROD	1							
6	2	172551-01030	BUSHING	2							
7	2	172551-06900	BEARING,POLYLUBE	2							
8	2	172552-00020	NUT	1							
9	2	172218-06230	ZERK	1							
10	2	172216-16470	SEAL KIT	1							
11	3	172216-16420	INSERT	2							

Fig.81. TILT CYLINDER(S220R)



(A)=S190R-1
(B)=S220R-1
(C)=

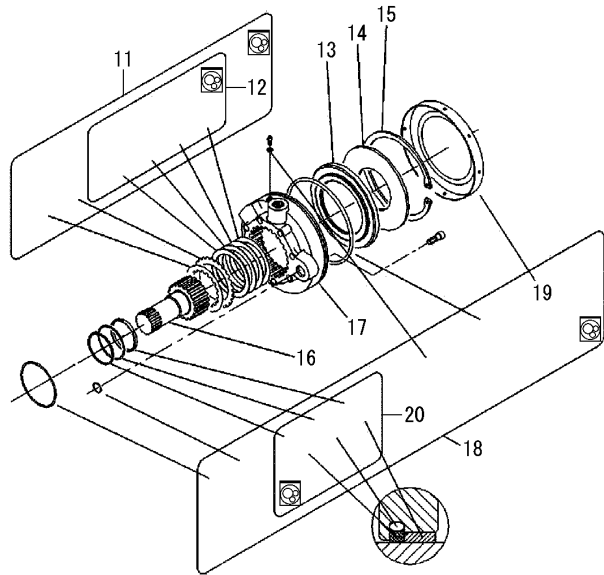
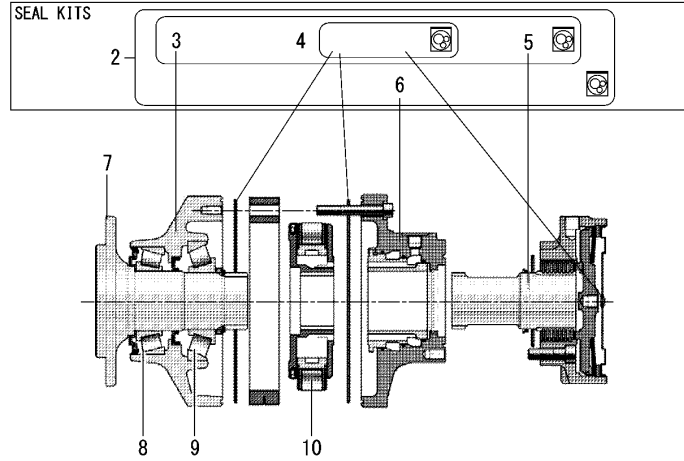
(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-15330	CYLINDER, TILT		1						
2	2	172216-16500	TUBE, TILT CYLINDER		1						
3	2	172218-03660	PISTON		1						
4	2	172216-16510	GLAND, HEAD		1						
5	2	172216-16520	ROD, TILT CYLINDER		1						
6	2	172551-01030	BUSHING		2						
7	2	172216-03100	BUSHING		2						
8	2	172218-06490	NUT		1						
9	2	172218-06230	ZERK		1						
10	2	172218-03670	SEAL KIT		1						
11	3	172216-16420	INSERT		2						

Fig.82. DRIVE MOTORS(S190R SINGLE-SPEED

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-11910	MOTOR, SINGLE-SPEED	2							1
2	1	172216-12240	SEAL KIT	1							
3	2	172216-12250	SEAL KIT	1							
4	3	172216-12110	KIT, SEAL MOTOR	1							
5	3	172216-12040	KIT, SEAL BRAKE	1							
6	2	172216-12190	KIT, SEAL COVER	1							
7	1	172216-12230	SHAFT, MOTOR	1							
8	1	172216-12210	BEARING, ROLLER	1							
9	1	172216-12220	BEARING, ROLLER	1							
10	1	172216-12130	BLOCK, CYLINDER ASSY	1							
11	1	172216-12070	KIT, BRAKE DISC, SHIMS	1							
12	2	172216-12060	SET, SHIM	1							
13	1	172216-12030	PISTON, STATIC BRAKE	1							
14	1	172216-12000	WASHER	1							
15	1	172216-12010	SNAP, RING	1							
16	1	172216-12020	SHAFT, BRAKE	1							
17	1	172216-11990	HOUSING, BRAKE	1							
18	1	172216-12040	KIT, SEAL BRAKE	1							
19	2	172216-12260	COVER, BRAKE	1							
20	2	172216-12050	KIT, SEAL BRAKE SHAFT	1							

Remarks

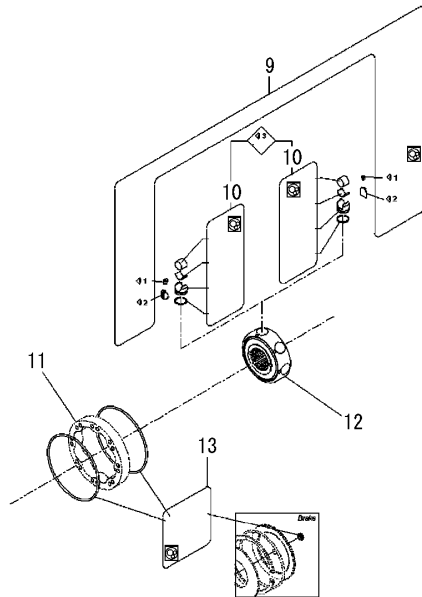
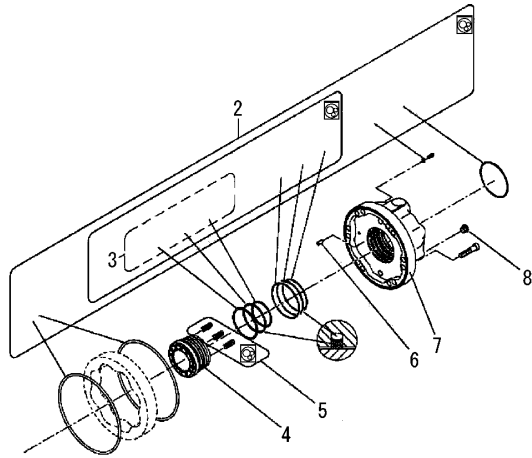
(1)Not shown in illustration.

N:Old $\xrightarrow{\text{Yes}}$ New, Q:Old $\xrightarrow{\text{No}}$ New, R:Old $\xrightarrow{\text{Yes}}$ New, S:Old $\xrightarrow{\text{No}}$ New, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change

Fig.83. DRIVE MOTORS(S190R SINGLE-SPEED

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



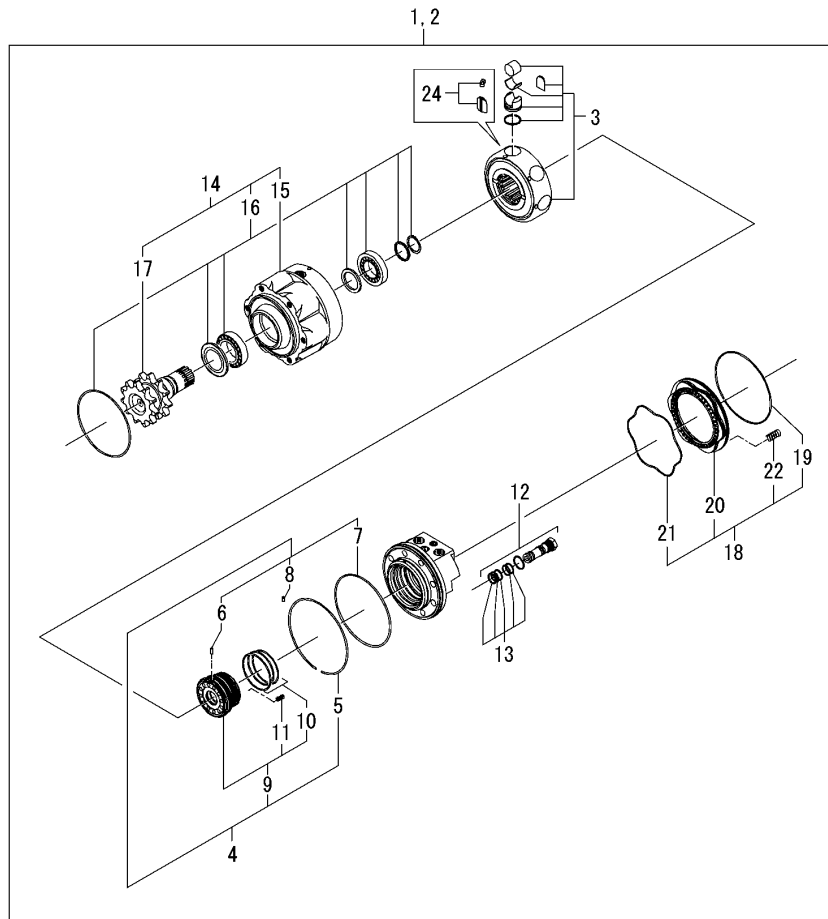
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-11910	MOTOR, SINGLE-SPEED	2							1
2	1	172216-12190	KIT, SEAL COVER	1							
3	1	172216-12140	KIT, SEAL VALVING	1							
4	1	172216-12170	VALVING	1							
5	1	172216-12200	SET, SPRING	1							
6	1	172216-12160	PIN, ROLL	1							
7	1	172216-12150	COVER, VALVING	1							
8	1	172216-12180	PLUG, METALLIC	1							
9	1	172216-12090	KIT, CLIPS	1							
10	1	172216-12080	ASSY, PISTON	1							2
11	1	172216-12100	CAM	1							
12	1	172216-12130	BLOCK, CYLINDER ASSY	1							
13	1	172216-12110	KIT, SEAL MOTOR	1							

Remarks
(1)Not shown in illustration.
(2)Set of 8.

Fig.84. DRIVE MOTORS(S220R SINGLE-SPEED

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



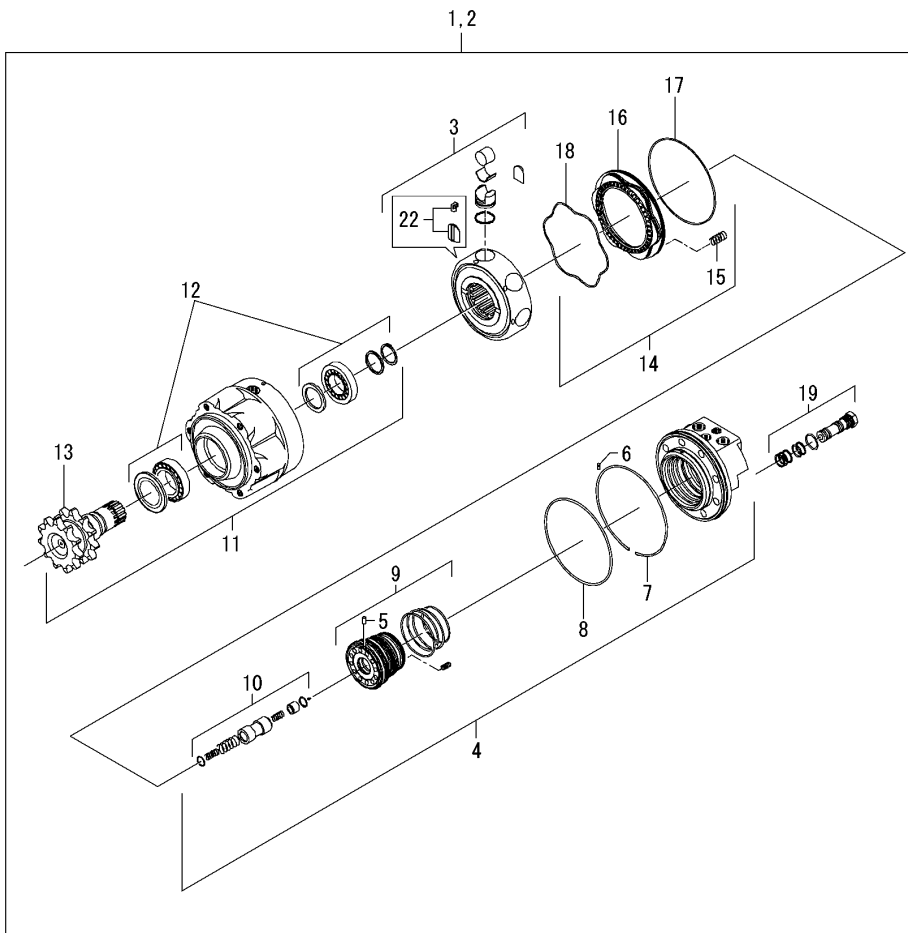
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172217-02500	MOTOR, SINGLESPEED R		1						
2	1	172217-02510	MOTOR, SINGLESPEED L		1						
3	2	172216-06110	CLYNDER ASSY, BLOCK		1						
4	2	172217-02710	VALVE ASSY		1						
5	3	172216-03880	WASHER		1						
6	3	172216-06140	PIN, DOWEL		1						
7	3	172216-03890	O-RING		1						
8	3	172216-06150	PIN, DOWEL		1						
9	3	172217-02720	VALVING		1						
10	4	172217-00520	SEAL KIT		1						
11	4	172216-01450	SPRING		6						
12	2	172216-03900	VALVING, SHUTTLE		1						
13	3	172216-03910	SEAL KIT		1						
14	2	172217-02110	SUPPORT ASSY		1						
15	3	172217-00510	SUPPORT, BEARING		1						
16	3	172216-06190	EARING KIT		1						
17	3	172217-02120	SHAFT		1						
18	2	172216-06210	BRAKE ASSY		1						
19	3	172216-06240	O-RING		1						
20	3	172216-06230	PISTON, BRAKE		1						
21	3	172216-03920	O-RING		1						
22	3	172216-06220	SPRING, BRAKE		8						
23	2	172217-02730	SEAL KIT		1						1
24	1	172216-06120	REPAIR KIT, PISTON		1						

Remarks
(1)Not shown in illustration.

Fig.85. DRIVE MOTORS(S190R TWO-SPEED

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-05720	MOTOR, TWO-SPEED R	1							
2	1	172216-05730	MOTOR, TWO-SPEED L	1							
3	2	172216-06110	CLYNDER ASSY, BLOCK	1							
4	2	172216-06130	COVER ASSY, VALVING	1							
5	3	172216-06140	PIN, DOWEL	1							
6	3	172216-06150	PIN, DOWEL	1							
7	3	172216-03880	WASHER	1							
8	3	172216-03890	O-RING	1							
9	3	172216-06160	ASSY, VALVING	1							
10	3	172216-06170	SPOOL ASSY	1							
11	2	172216-06180	SUPPORT ASSY	1							
12	3	172216-06190	EARING KIT	1							
13	3	172216-06200	SHAFT	1							
14	2	172216-06210	BRAKE ASSY	1							
15	3	172216-06220	SPRING, BRAKE	8							
16	3	172216-06230	PISTON, BRAKE	1							
17	3	172216-06240	O-RING	1							
18	3	172216-03920	O-RING	1							
19	2	172216-03900	VALVING, SHUTTLE	1							
20	1	172216-03910	SEAL KIT	1							1
21	1	172216-06250	SEAL KIT	1							1
22	1	172216-06120	REPAIR KIT, PISTON	1							

Remarks

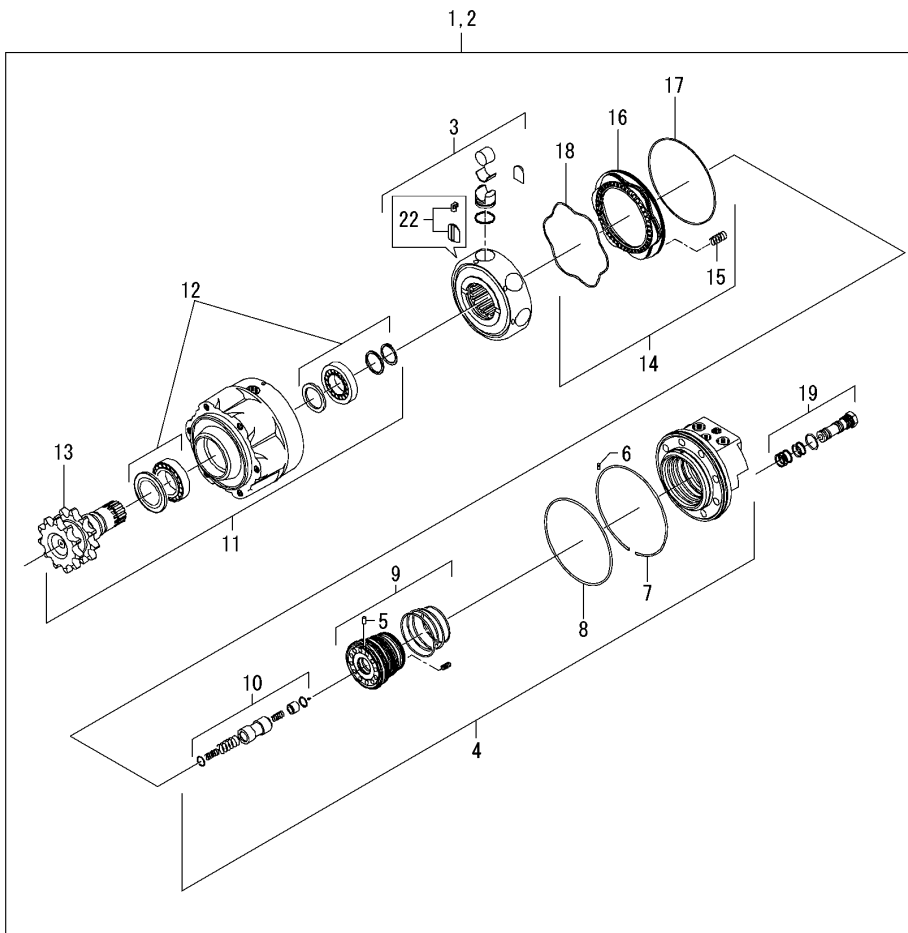
(1)Not shown in illustration.

N:Old $\xrightarrow{\text{Yes}}$ New, Q:Old $\xrightarrow{\text{No}}$ New, R:Old $\xrightarrow{\text{Yes}}$ New, S:Old $\xrightarrow{\text{No}}$ New, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change

Fig.86. DRIVE MOTORS(S220R TWO-SPEED

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172217-01690	MOTOR, TWO-SPEED R		1						
2	1	172217-01700	MOTOR, TWO-SPEED L		1						
3	2	172216-06110	CLYNDER ASSY, BLOCK		1						
4	2	172216-06130	COVER ASSY, VALVING		1						
5	3	172216-06140	PIN, DOWEL		1						
6	3	172216-06150	PIN, DOWEL		1						
7	3	172216-03880	WASHER		1						
8	3	172216-03890	O-RING		1						
9	3	172216-06160	ASSY, VALVING		1						
10	3	172216-06170	SPOOL ASSY		1						
11	2	172217-02110	SUPPORT ASSY		1						
12	3	172216-06190	EARING KIT		1						
13	3	172217-02120	SHAFT		1						
14	2	172216-06210	BRAKE ASSY		1						
15	3	172216-06220	SPRING, BRAKE		8						
16	3	172216-06230	PISTON, BRAKE		1						
17	3	172216-06240	O-RING		1						
18	3	172216-03920	O-RING		1						
19	2	172216-03900	VALVING, SHUTTLE		1						
20	2	172216-03910	SEAL KIT		1						1
21	2	172216-06250	SEAL KIT		1						1
22	1	172216-06120	REPAIR KIT, PISTON		1						

Remarks

(1)Not shown in illustration.

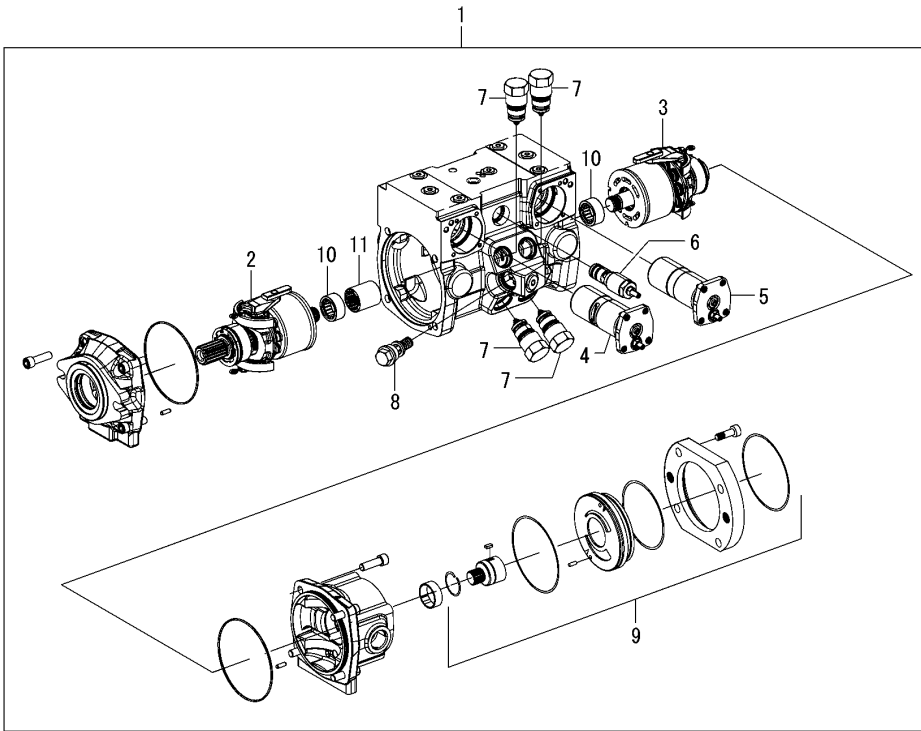
N:Old $\xrightarrow{\text{Yes}}$ New, Q:Old $\xrightarrow{\text{No}}$ New, R:Old $\xrightarrow{\text{Yes}}$ New, S:Old $\xrightarrow{\text{No}}$ New, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change

Fig.87. TANDEM PUMP(HAND/FOOT AND DUAL JOYSTICK PUMP)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-14390	PUMP, TANDEM	1	1						
2	2	172216-16530	GROUP, ROTARY	1	1						
3	2	172216-16540	GROUP, ROTARY	1	1						
4	2	172216-16550	CNTROL, HYDRAULIC	1	1						
5	2	172216-16550	CNTROL, HYDRAULIC	1	1						
6	2	172216-16560	CARTRIDGE, CONTROL	1	1						
7	2	172216-16570	VALVE, RELIEF	4	4						
8	2	172216-16580	VALVE, RELIEF	1	1						
9	2	172216-05150	PUMP, GEAR/INTERNAL	1	1						
10	2	172216-05170	BEARING, ROLLER	2	2						
11	2	172216-16590	COUPLER	1	1						
12	2	172216-16600	SEAL KIT	1	1						1



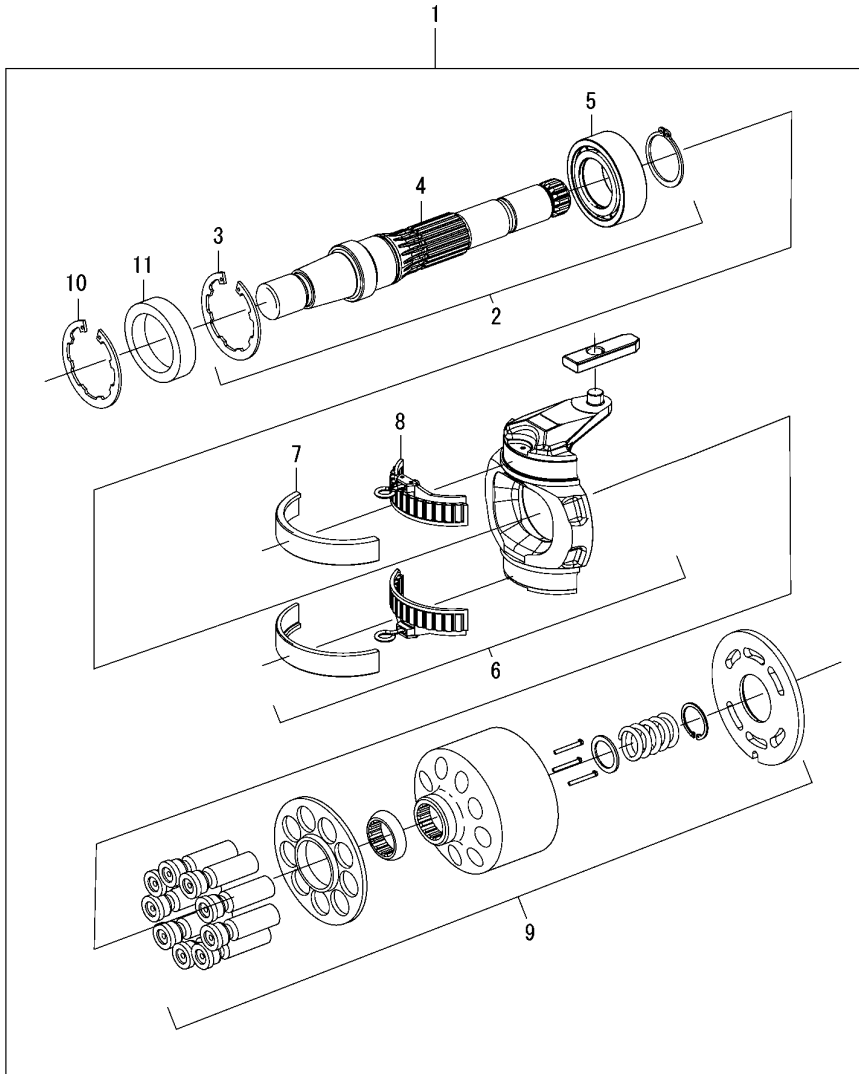
Remarks

(1)Not shown in illustration.

Fig.88. TANDEM PUMP(HAND/FOOT AND DUAL JOYSTICK TANDEM PUMP/ENGINE END

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

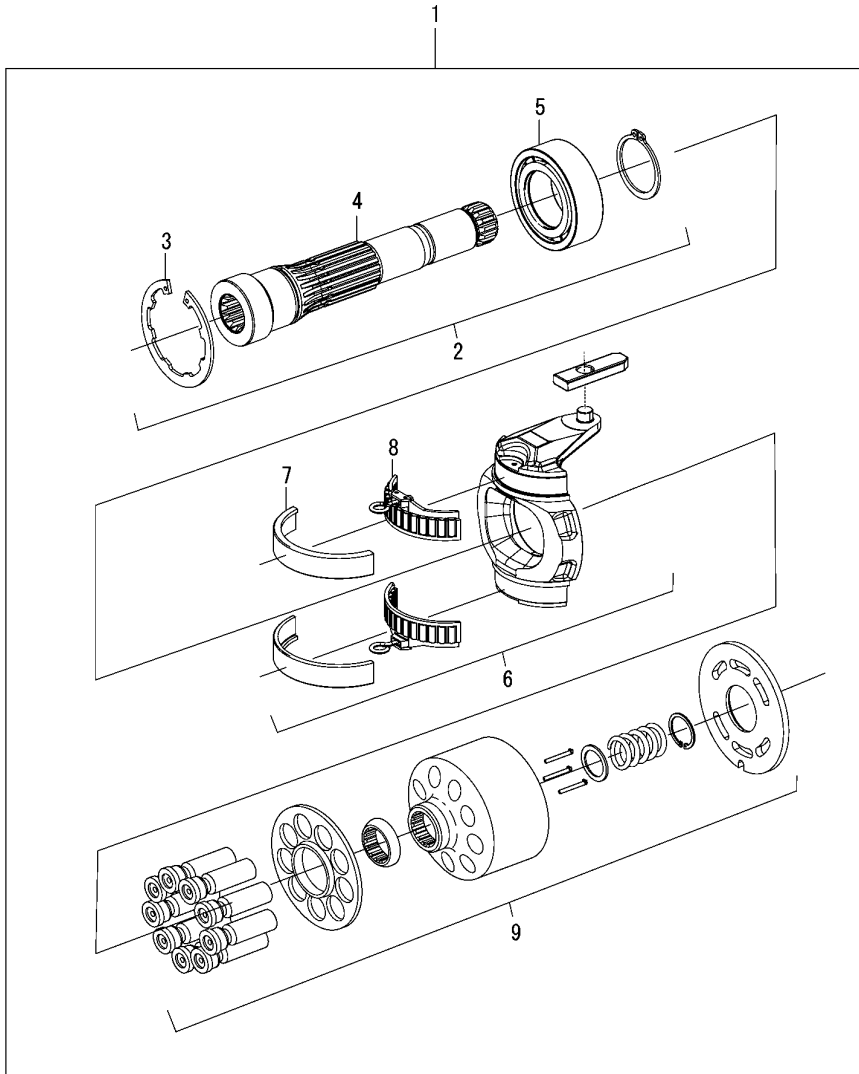


No.	Lev.	Parts No.	Description	Q'ty							
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-16530	GROUP, ROTARY	1	1						
2	2	172216-16610	SHAFT ASSY, DRIVE	1	1						
3	3	172216-05190	SEEGER-V-RING	1	1						
4	3	172216-05180	SHAFT, DRIVE	1	1						
5	3	172216-16640	BEARING	1	1						
6	2	172216-16620	CRADLE ASSY	1	1						
7	3	172216-16650	LINER, BEARING	2	2						
8	3	172216-16660	BEARING, CRADLE	2	2						
9	2	172216-16630	GROUP, ROTARY RIGHT	1	1						
10	2	172216-05190	SEEGER-V-RING	1	1						
11	2	172216-05200	RING, SHAFT SEAL	1	1						

Fig.89. TANDEM PUMP(HAND/FOOT AND DUAL JOYSTICK TANDEM PUMP/GEAR PUMP END

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

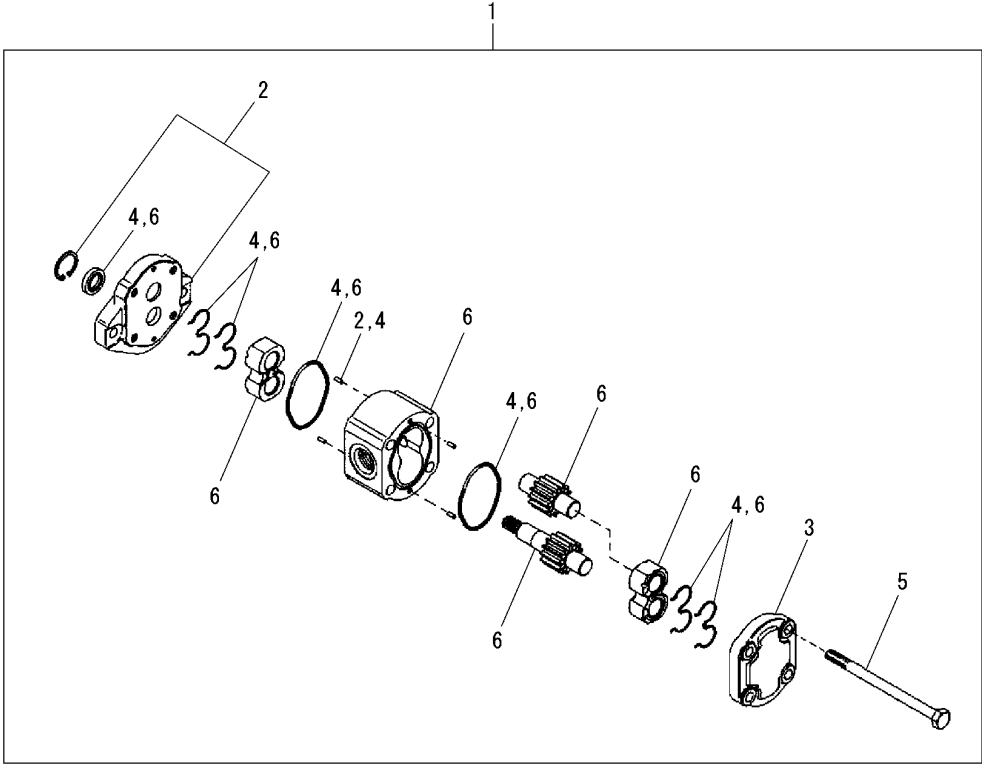


No.	Lev.	Parts No.	Description	Qty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-16540	GROUP, ROTARY	1	1						
2	2	172216-16670	SHAFT ASSY, DRIVE	1	1						
3	3	172216-05190	SEEGER-V-RING	1	1						
4	3	172216-05210	SHAFT, DRIVE	1	1						
5	3	172216-16640	BEARING	1	1						
6	2	172216-16620	CRADLE ASSY	1	1						
7	3	172216-16650	LINER, BEARING	2	2						
8	3	172216-16660	BEARING, CRADLE	2	2						
9	2	172216-16680	GROUP, ROTARY LEFT	1	1						

Fig.90. GEAR PUMP-SINGLE(S190R STANDARD AUXILIARY

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

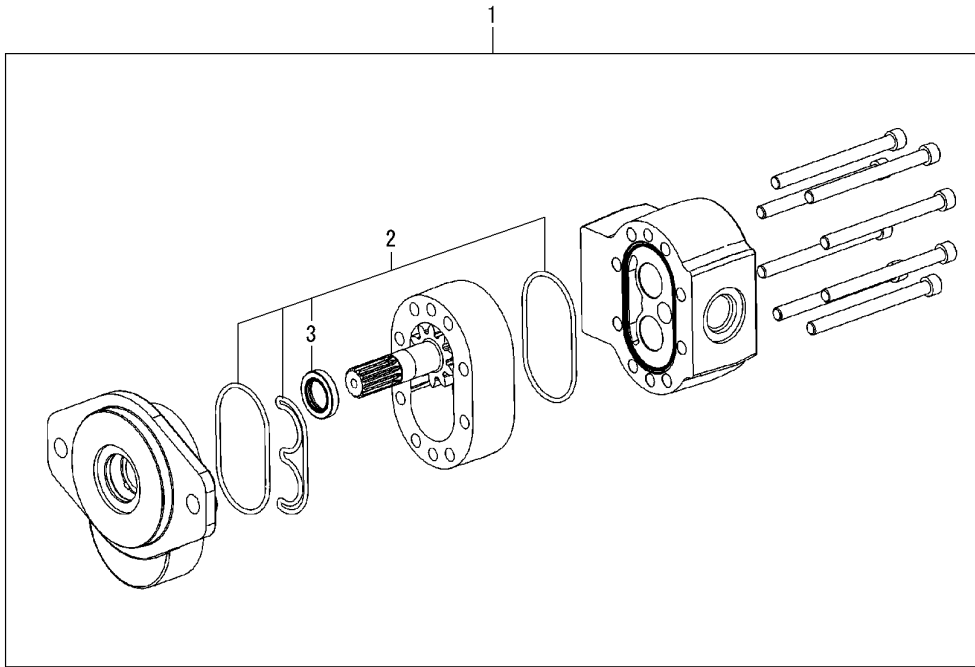


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-01100	GEAR PUMP	1							
2	2	172551-01140	FLANGE KIT	1							
3	2	172551-01150	ENDCOVER	1							
4	2	172551-01130	SEAL KIT	1							
5	2	172551-01160	SCREW	4							
6	2	172551-01170	HOUSING KIT	1							

Fig.91. GEAR PUMP-SINGLE(S220R STANDARD AUXILIARY

(A)=S190R-1
 (B)=S220R-1
 (C)=

(D)=
 (E)=
 (F)=

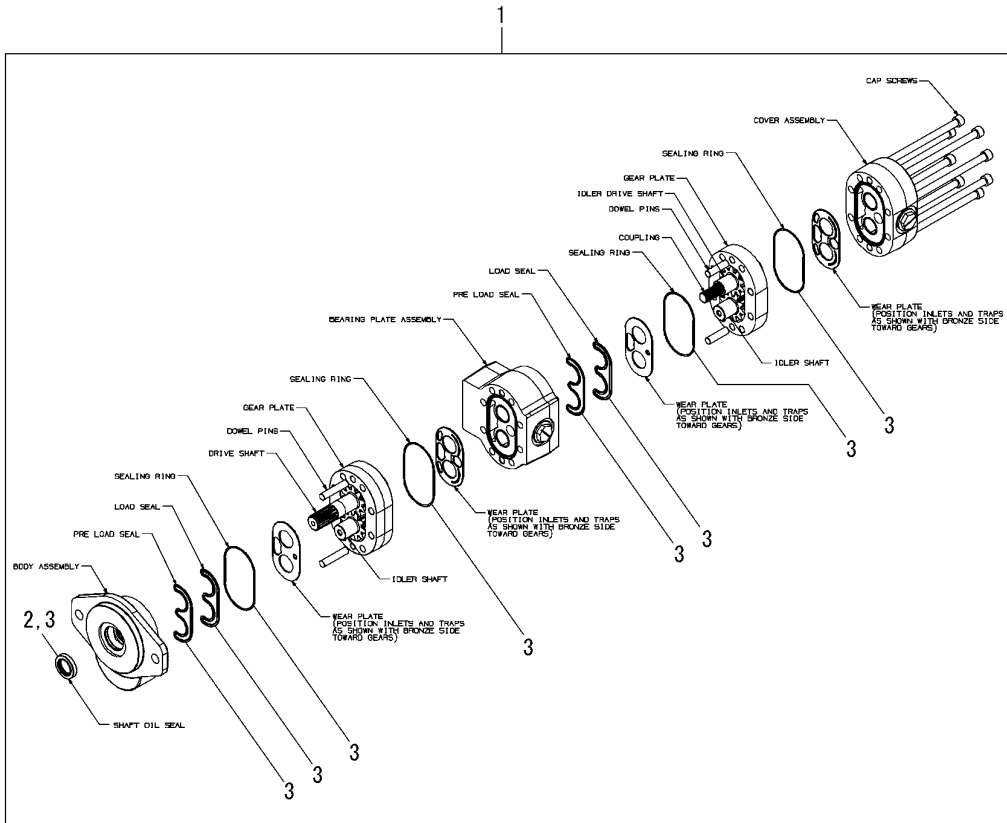


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-14830	PUMP, SINGLE		1						
2	2	172552-00730	SEAL KIT		1						
3	3	172551-07010	SEAL,SHAFT		1						

Fig.92. GEAR PUMP-DOUBLE(S190R HIGH-FLOW AUXILIARY

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

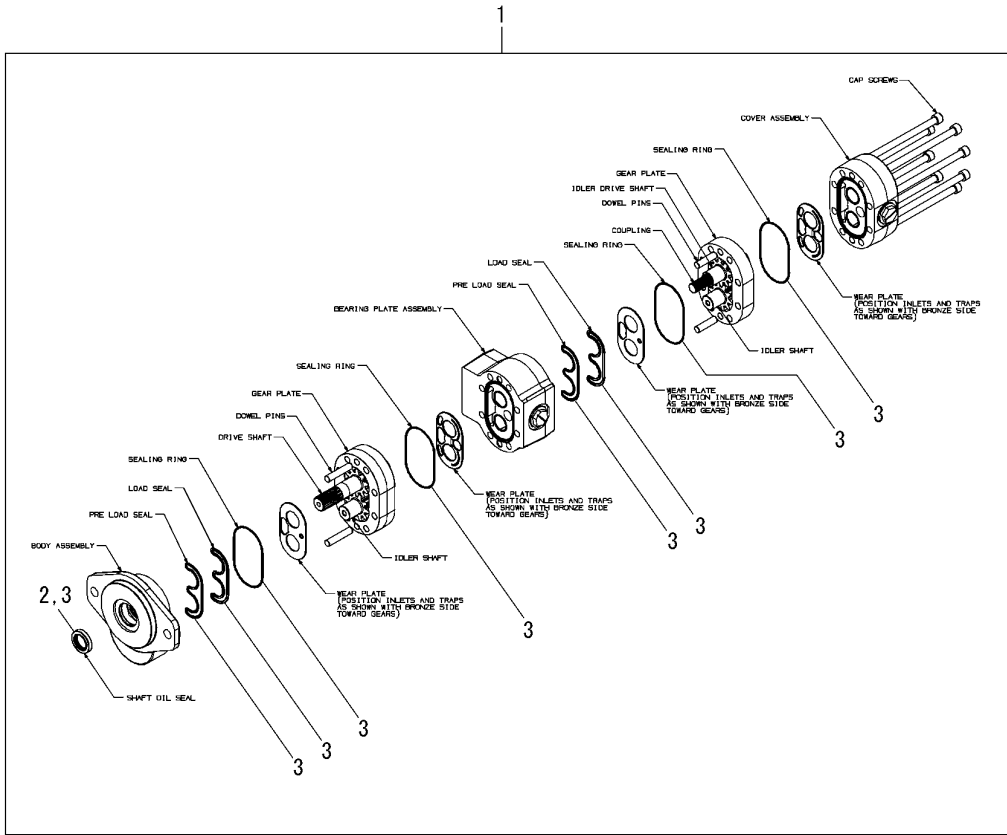


No.	Lev.	Parts No.	Description	Qty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-14850	PUMP, GEAR	1							
2	2	172551-07010	SEAL, SHAFT	1							
3	2	172551-07020	SEAL KIT	1							

Fig.93. GEAR PUMP-DOUBLE(S220R HIGH-FLOW AUXILIARY

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

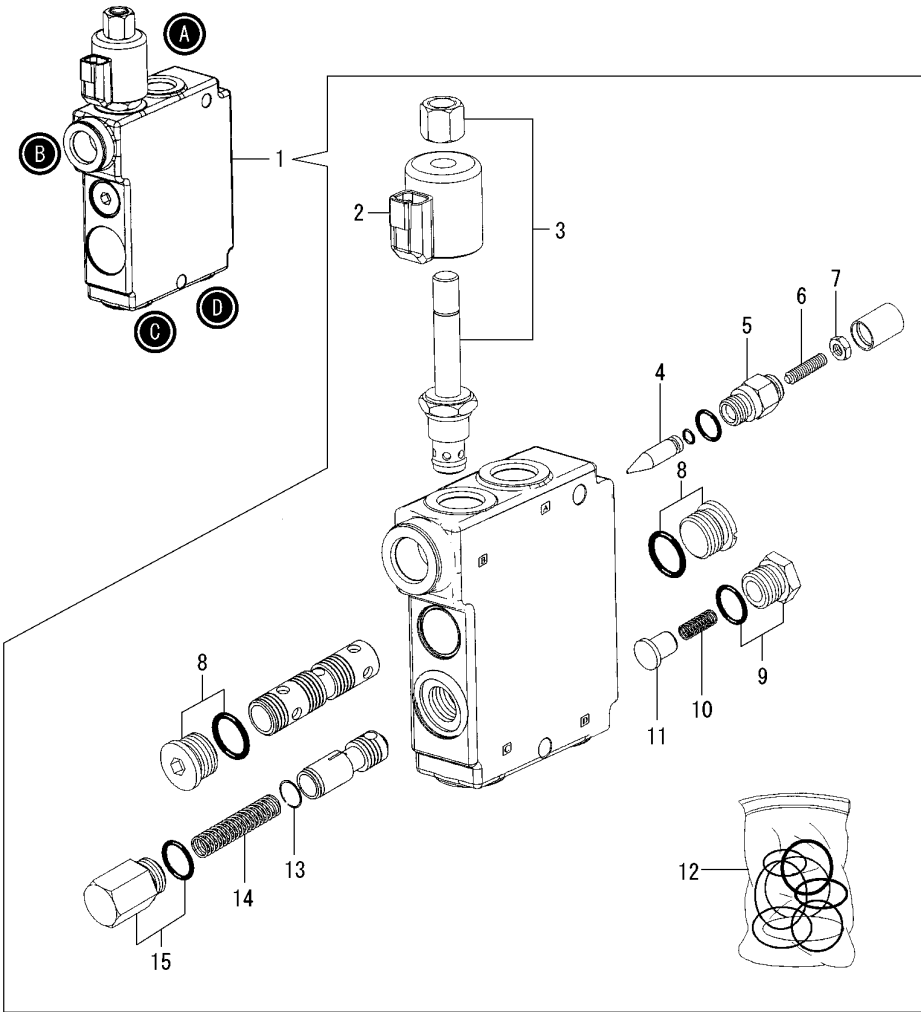


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-14880	PUMP, GEAR		1						
2	2	172551-07010	SEAL, SHAFT		1						
3	2	172551-07020	SEAL KIT		1						

Fig.94. SELF-LEVELING VALVE

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Qty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-04200	VALVE, SELF-LEVEL	1	1						
2	2	172551-07030	COIL	1	1						
3	2	172551-07040	VALVE	1	1						
4	2	172551-00530	PIN	1	1						
5	2	172551-00540	CAP,ADJUSTMENT	1	1						
6	2	172551-00560	SCREW SET	1	1						
7	2	172551-00550	NUT	1	1						
8	2	172551-00570	PLUG ASSY	2	2						
9	2	172551-00670	PLUG ASSY	1	1						
10	2	172551-00660	SPRING	1	1						
11	2	172551-00680	LOAD CHECK	1	1						
12	2	172551-01020	SEAL KIT	1	1						
13	2	172551-06760	RING,RETAINING	1	1						
14	2	172551-00710	SPRING	1	1						
15	2	172551-01010	PLUG ASSY	1	1						

Fig.95. LIFT AND TILT SOLENOID VALVE(SOLENOID)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-16690	VALVE, SOLENOID	1	1						
2	2	172216-16700	SPOOL, SOLENOID VALVE	1	1						
3	2	172216-16710	CCIL	1	1						
4	2	172216-16720	NUT, COIL	1	1						

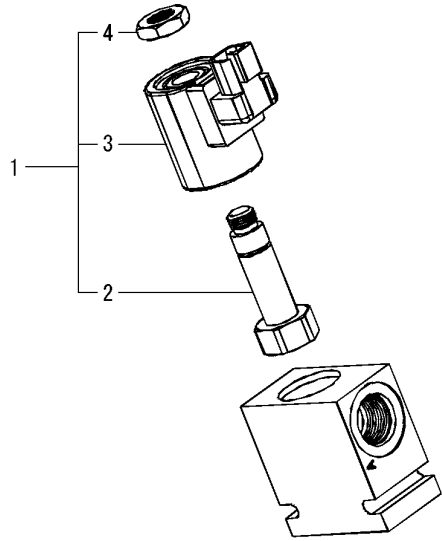
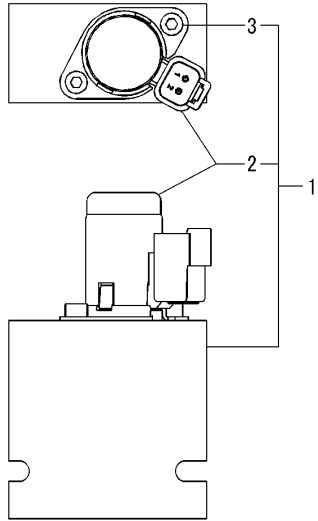


Fig.96. LIFT AND TILT SOLENOID VALVE(HYDRAULIC SOLENOID THREE-WAY

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-14680	VALVE, SOLENOID 3WAY	1	1						
2	2	172217-03870	VALVE, SOLENOID	1	1						
3	2	172217-02940	SCREW	2	2						
4	2	172217-02960	SEAL KIT	1	1						1

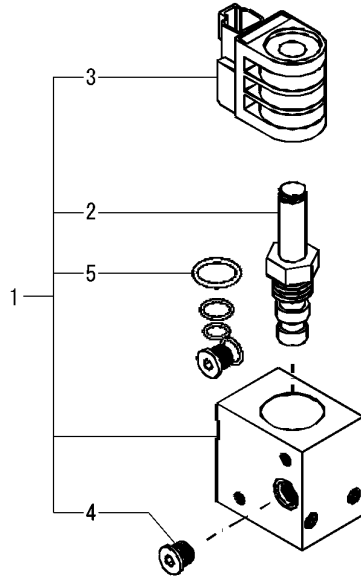


Remarks
(1)Not shown in illustration.

Fig.97. SOLENOID VALVES-BRAKE, JOYSTICK SUPPLY AND BRAKE RELEASE(SINGLE-SPEED)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

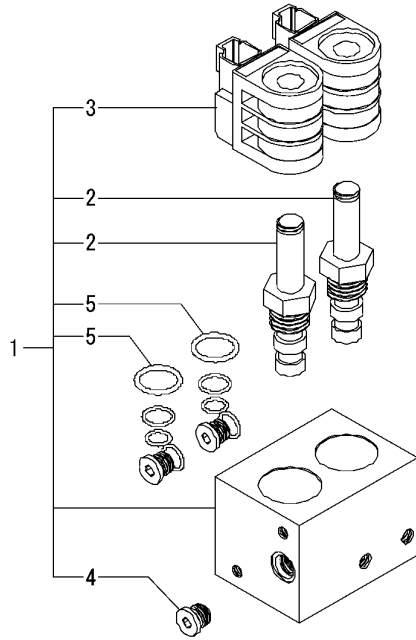


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172218-00690	VALVE, BRAKE	1	1						
2	2	172218-03770	CARTRIDGE	1	1						
3	2	172218-03780	COIL	1	1						
4	2	172218-03790	PLUG	1	1						
5	2	172218-03800	SEAL KIT	1	1						

Fig.98. SOLENOID VALVES-BRAKE, JOYSTICK SUPPLY AND BRAKE RELEASE(TWO-SPEED

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

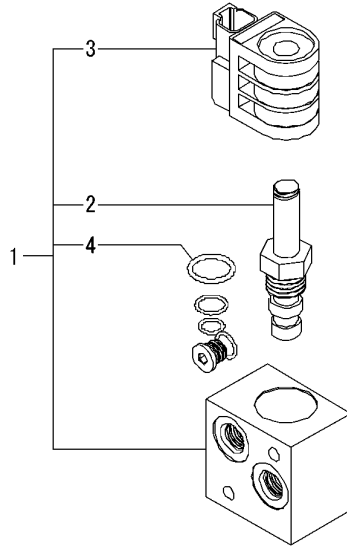


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172218-00700	VALVE, BRAKE 2-SPEED	1	1						
2	2	172218-03770	CARTRIDGE	2	2						
3	2	172218-03780	COIL	2	2						
4	2	172218-03790	PLUG	1	1						
5	2	172218-03800	SEAL KIT	2	2						

Fig.99. SOLENOID VALVES-BRAKE, JOYSTICK SUPPLY AND BRAKE RELEASE(JOYSTICK SUPPLY

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

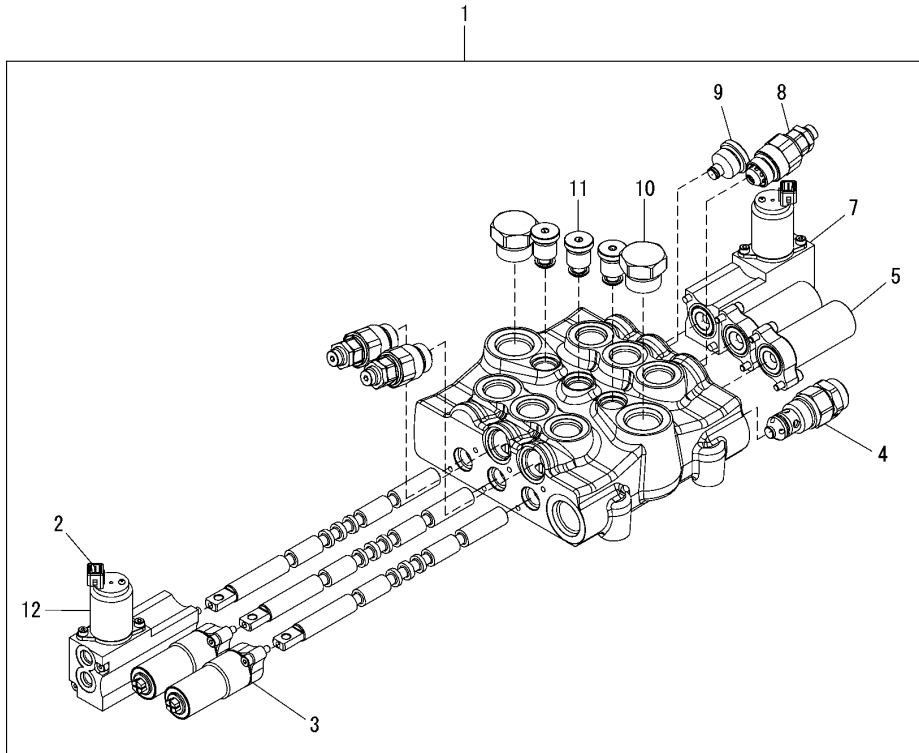


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172218-06360	VALVE, JOYSTICK	1	1						
2	2	172218-06350	CARTRIDGE	1	1						
3	2	172218-03780	COIL	1	1						
4	2	172218-03800	SEAL KIT	1	1						

Fig.100. MAIN CONTROL VALVE(STANDARD CONTROL VALVE-HAND/FOOT AND DUAL JOYSTICK CONTROLS

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



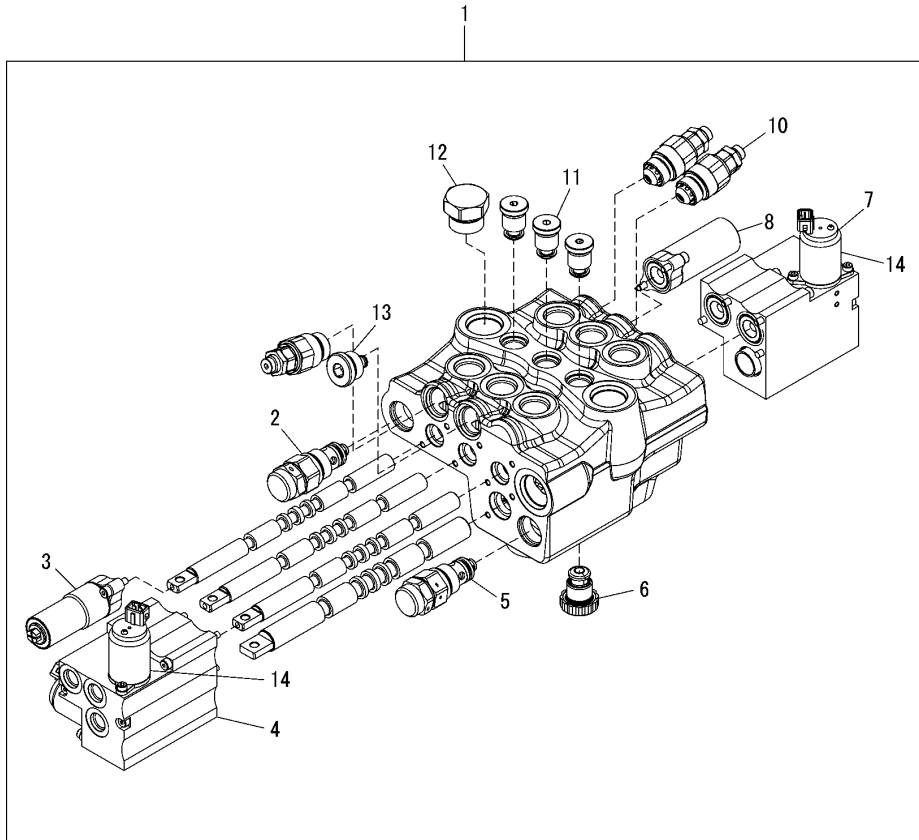
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-14770	VALVE, 3-SPOOL PILOT	1	1						
2	2	172216-16730	SPOOL KIT, ELECHYD F	1	1						
3	2	172216-07520	HYD. CNTRL, ANTERIOR	2	2						
4	2	172216-16740	RELIEF, MAIN	1	1						
5	2	172216-07500	HYD. CONTROL, REAR	2	2						
6	2	172216-16750	BAR, HYD COMMAND	1	1						1
7	2	172216-16760	SPOOL KIT, ELECHYD R	1	1						
8	2	172216-16770	PORT, RELIEF	3	3						
9	2	172551-02840	PLUG KIT	1	1						
10	2	172551-00820	PLUG KIT	2	2						
11	2	172551-02830	VALVE, CHECK	3	3						
12	2	172551-07980	VALVE,PROPORTIONAL	2	2						
13	2	172216-16780	SEAL KIT	1	1						1

Remarks
(1)Not shown in illustration.

Fig.101. MAIN CONTROL VALVE(HIGH-FLOW CONTROL VALVE-HAND/FOOT AND DUAL JOYSTICK CONTROLS

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-14840	VALVE, 4-SPOOL PILOT	1	1						
2	2	172216-16740	RELIEF, MAIN	1	1						
3	2	172216-07520	HYD. CNTRL, ANTERIOR	1	1						
4	2	172216-16790	SPOOL, ELEC HYD	1	1						
5	2	172216-16800	RELIEF, MAIN	1	1						
6	2	172551-00810	VALVE, CHECK	1	1						
7	2	172216-16810	SPOOL, ELEC HYD	1	1						
8	2	172216-07500	HYD. CONTROL, REAR	1	1						
9	2	172216-16750	BAR, HYD COMMAND	1	1						1
10	2	172216-16770	PORT, RELIEF	3	3						
11	2	172551-02830	VALVE, CHECK	3	3						
12	2	172551-00820	PLUG KIT	1	1						
13	2	172551-02840	PLUG KIT	1	1						
14	2	172551-07980	VALVE,PROPORTIONAL	4	4						
15	2	172216-16820	SEAL KIT	1	1						1

Remarks

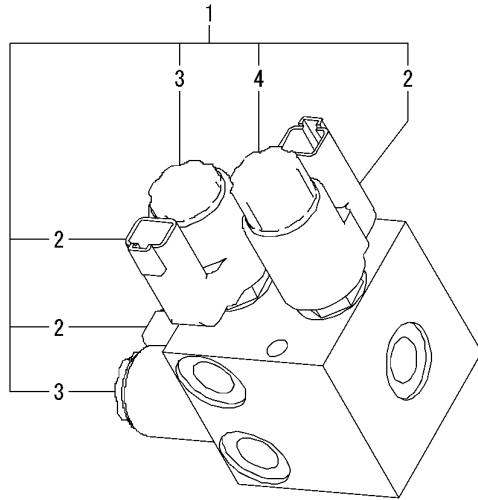
(1)Not shown in illustration.

N:Old $\xrightarrow{\text{Yes}}$ New, Q:Old $\xrightarrow{\text{No}}$ New, R:Old $\xrightarrow{\text{Yes}}$ New, S:Old $\xrightarrow{\text{No}}$ New, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change

Fig.102. RIDE CONTROL MANIFOLD

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

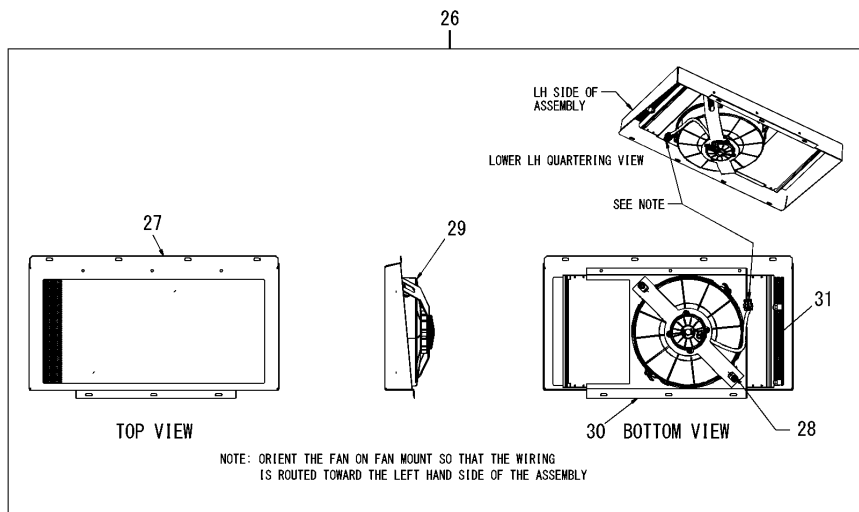
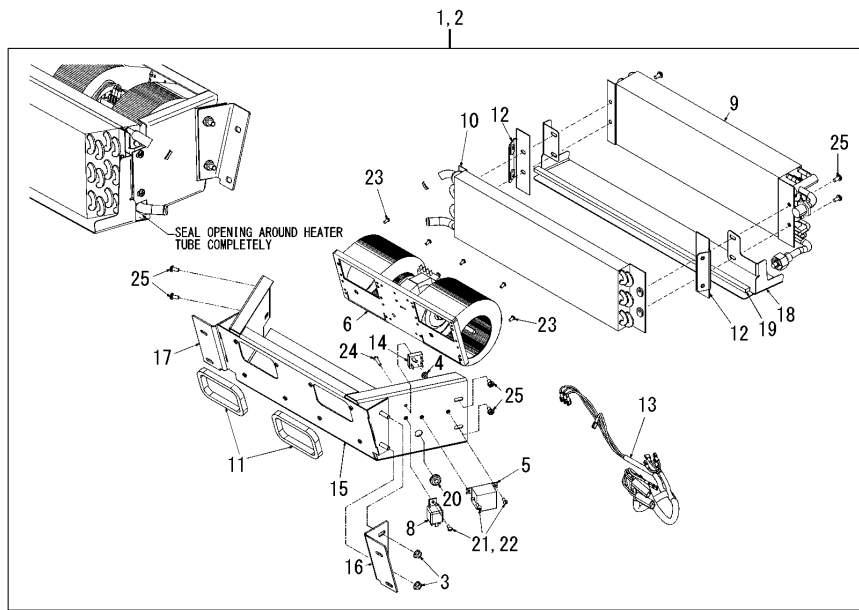


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-02090	MANIFOLD, RIDE CNTRL	1	1						
2	2	172551-02100	COIL	3	3						
3	2	172551-02120	CARTRIDGE	2	2						
4	2	172551-02110	CARTRIDGE	1	1						

Fig.103. CONDENSOR, HEATER HOUSING AND HVAC HOUSING ASSEMBLY

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



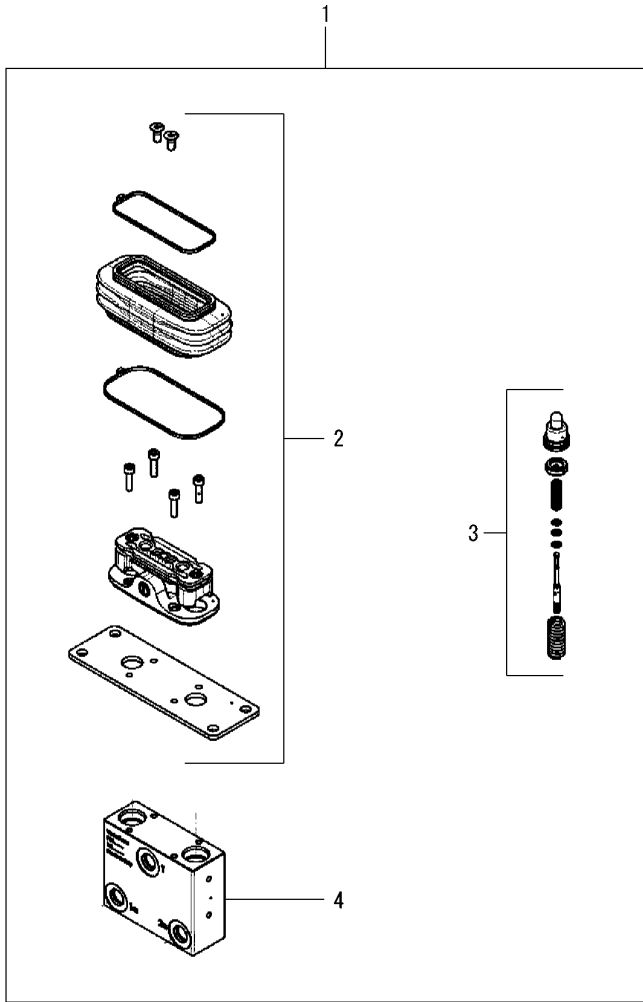
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172218-00770	HOUSING ASSY, HVAC	1	1						
2	1	172218-03430	HOSING ASSY, HEATER	1	1						
3	2	172551-01060	NUT	4	4						
4	2	172551-01590	FLANGE	1	1						
5	2	172551-01670	SWITCH, PRESET	1	1						1
6	2	172551-02260	BLOWER ASSY	1	1						
7	2	172551-02580	BLOWER	1	1						2
8	2	172216-07930	RELAY, SEALED	1	1						
9	2	172218-02180	EVAPORATOR	1	1						1
10	2	172218-02190	CORE, HEATER	1	1						
11	2	172218-02200	FOAM, SEAL	2	2						
12	2	172218-02830	FLANGE, CORE MOUNT	2	2						
13	2	172218-02920	HARNES, HVAC BOX	1	1						
14	2	172218-02930	RECTIFIER PACK	1	1						
15	2	172218-03880	MOUNT, BLOWER	1	1						
16	2	172218-03890	BRACKET, HOUSING	1	1						
17	2	172218-03900	BRACKET, HOUSING	1	1						
18	2	172218-04690	PLATE, DRIP HVAC	1	1						1
19	2	172218-04700	PAD, SEALING	1	1						1
20	2	172551-06780	GROMMET	1	1						
21	2	172551-09610	SCREW	3	3						1
22	2	172551-09610	SCREW	9	9						3
23	2	172218-05010	SCREW	8	8						1
24	2	172218-05060	SCREW	1	1						
25	2	172215-03110	SCREW	8	8						
26	1	172216-12810	CONDENSER ASSY	1	1						
27	2	172218-00580	COVER, CONDENSOR	1	1						
28	2	172216-10880	NUT	6	6						
29	2	172218-03560	FAN, CONDENSER	1	1						
30	2	172218-03570	MOUNT, FAN	1	1						
31	2	172551-10590	CONDENSER	1	1						

Remarks
(1)HVAC only.
(2)Includes resistor block.
Not shown in illustration.
(3)Heater only.

Fig.104. FOOT VALVE

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

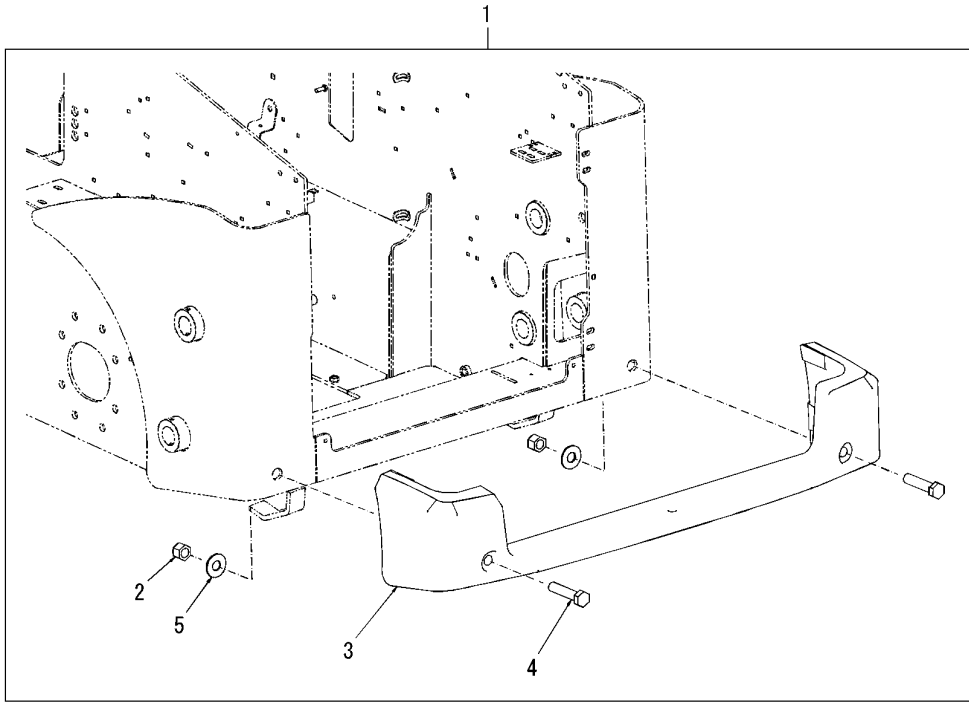


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172217-01430	VALVE, FOOT	1	1						
2	2	172217-04370	KINEMAMTIC KIT	1	1						
3	2	172217-04380	CURVE KIT	1	1						
4	2	172217-04390	BODY, VALVE	1	1						

Fig.105. COUNTERWEIGHT KIT

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

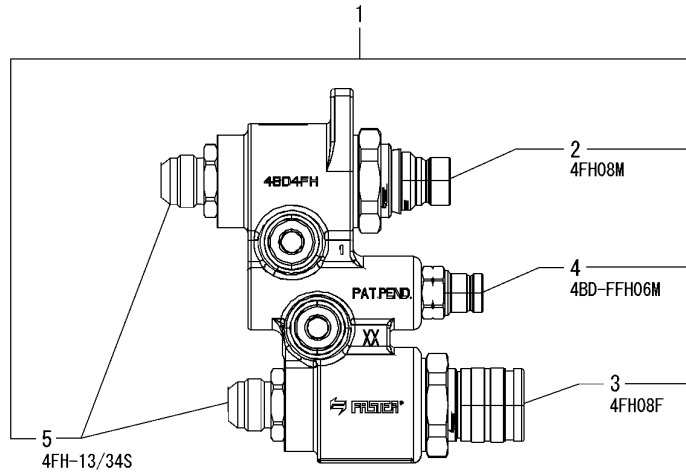


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172218-05890	COUNTERWEIGHT KIT	1	1						
2	2	172218-00080	NUT	2	2						
3	2	172218-04470	COUNTERWEIGHT, CAST	1	1						
4	2	172218-05170	SCREW	2	2						
5	2	172216-09810	WASHER	2	2						

Fig.106. AUXILIARY COUPLER SERVICE KITS

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

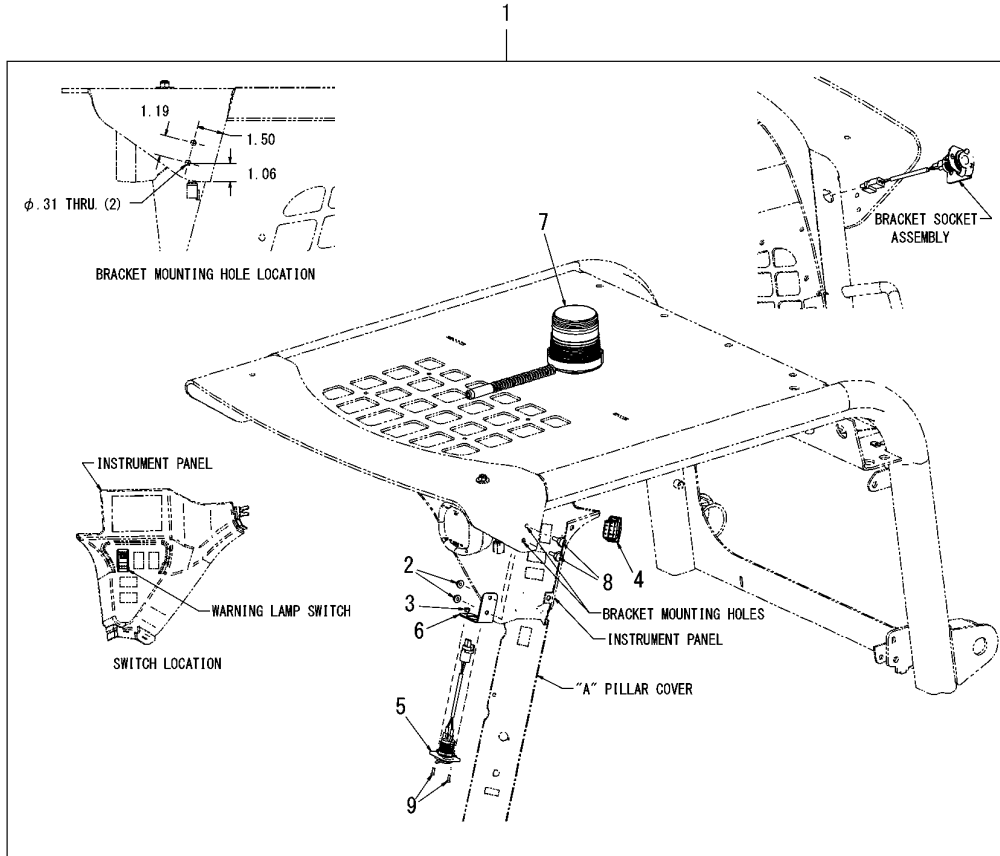


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-15210	BLOCK, COUPLER	1	1						
2	2	172216-16830	Q-COUPLER KIT,MALE	1	1						
3	2	172216-16840	Q-COUPLER KIT,FEMALE	1	1						
4	2	172216-16850	Q-COUPLER KIT RETURN	1	1						
5	2	172216-16860	FITTING KIT, 3/4SAE	1	1						

Fig.107. WARNING LAMP KIT

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

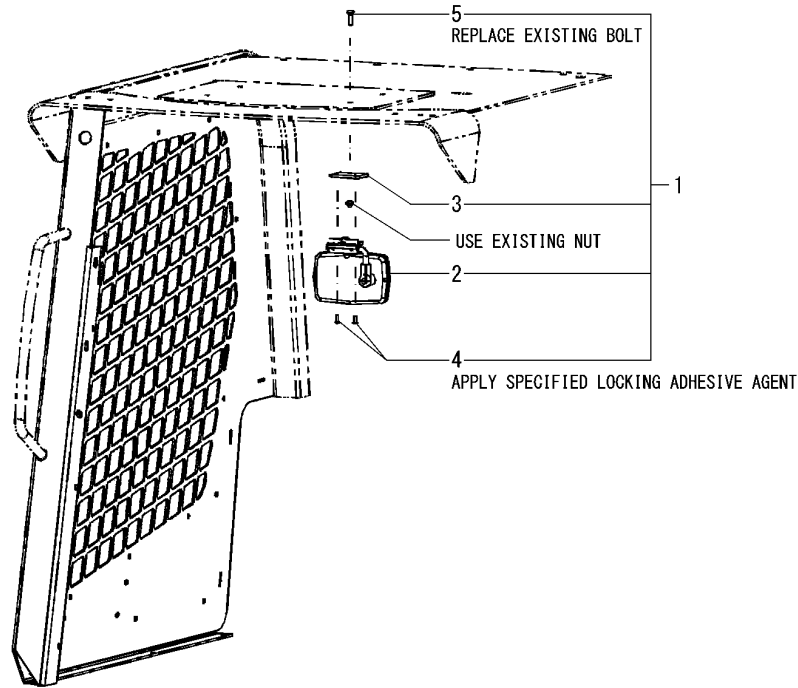


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172218-05330	LAMP KIT, WARNING	1	1						
2	2	172216-01590	NUT	2	2						
3	2	172216-10870	NUT	2	2						
4	2	172218-02060	SWITCH, WARNING LAMP	1	1						
5	2	172218-03860	SOCKET, 12V	1	1						
6	2	172218-03870	BRKT, SOCKET MTG	1	1						
7	2	172218-00670	BEACON WITH BULB	1	1						
8	2	172551-09710	SCREW	2	2						
9	2	172218-05080	SCREW	2	2						

Fig.108. REARVIEW MIRROR KIT

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

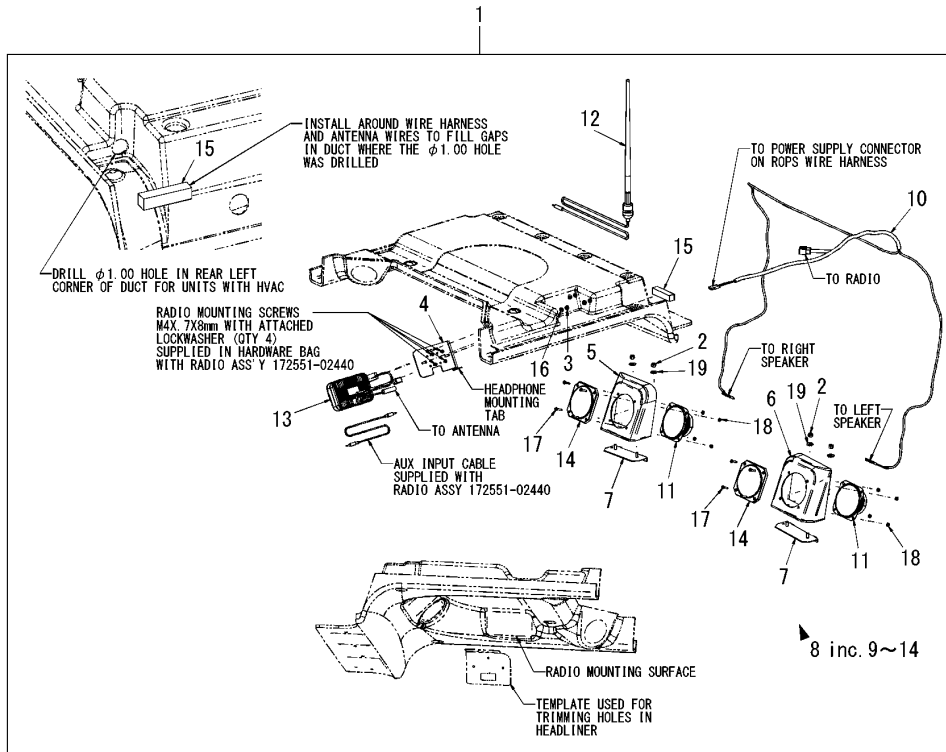


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172218-05310	MIRROR KIT ,REARVIEW	1	1						
2	2	172216-01360	MIRROR	1	1						
3	2	172218-02780	PLATE, MIRROR	1	1						
4	2	172551-09610	SCREW	2	2						
5	2	172218-05870	BOLT	1	1						

Fig.109. AM/FM RADIO KIT

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



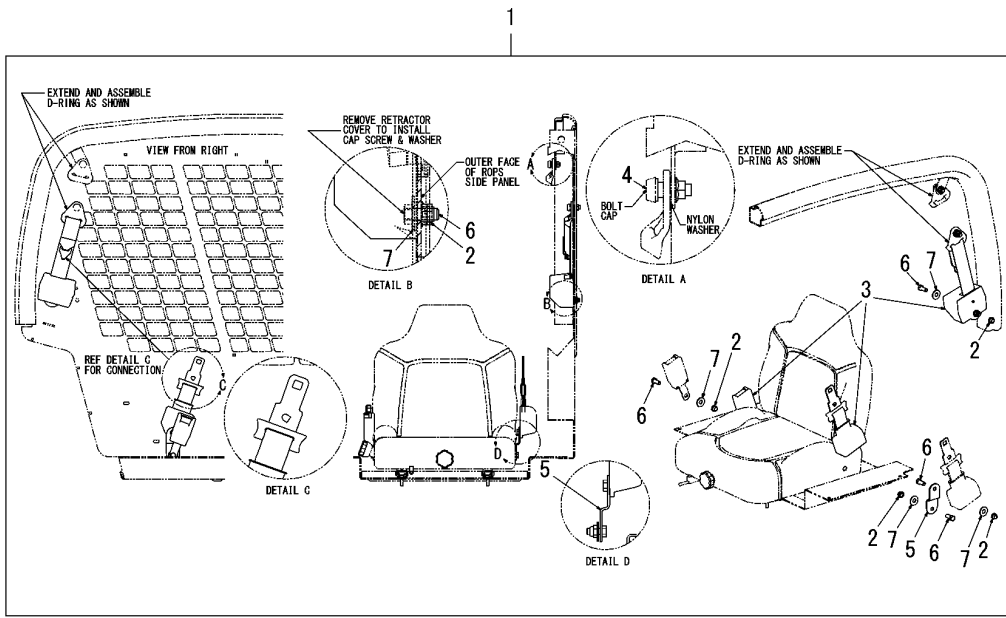
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172218-05320	RADIO KIT	1	1						
2	2	172551-00250	NUT	4	4						
3	2	172551-00620	NUT	3	3						
4	2	172218-01770	RADIO MNT ASSY	1	1						
5	2	172218-02090	HOUSING, SPEAKER RH	1	1						
6	2	172218-02100	HOUSING, SPEAKER LH	1	1						
7	2	172218-03600	MOUNT, SPEAKER	2	2						
8	2	172216-16870	PACKAGE, RADIO	1	1						
9	3	172218-01780	TEMPLATE, RADIO MNT	1	1						1
10	3	172218-01880	HARNESS, WIRE RADIO	1	1						
11	3	172551-02140	SPEAKER, RADIO	2	2						
12	3	172551-02150	ANTENNA, RADIO	1	1						
13	3	172551-02440	RADIO	1	1						
14	3	172551-04210	SPEAKER GRILLE	2	2						
15	2	172216-16880	SEAL, FOAM	1	1						
16	2	172551-09660	WASHER	3	3						
17	2	172551-10170	SCREW	8	8						
18	2	172215-03220	NUT	8	8						
19	2	172551-10360	WASHER	4	4						

Remarks
(1)Not shown in illustration.

Fig.110. 3-POINT RESTRAINT-2INCH SEAT BELT

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

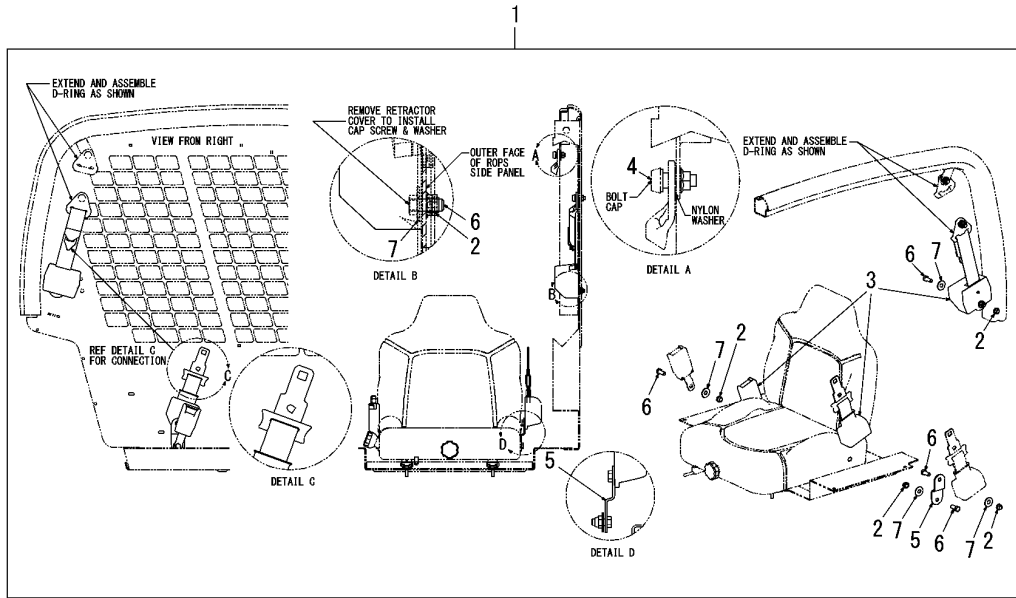


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-17210	2 SEAT BELT	1	1						
2	2	172215-00400	NUT	4	4						
3	2	172217-00310	RESTRAINT ASSY	1	1						
4	2	172217-00430	BOLT GROUP, SHOULDER	1	1						
5	2	172216-03350	TAB, RETRACTOR MOUNT	1	1						
6	2	172215-02850	SCREW	4	4						
7	2	172215-03340	WASHER	4	4						

Fig.111. 3-POINT RESTRAINT-3INCH SEAT BELT

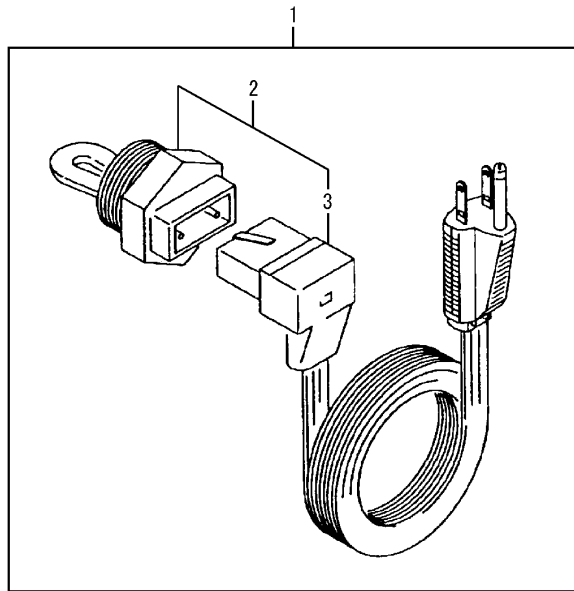
(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-17220	3 SEAT BELT	1	1						
2	2	172215-00400	NUT	4	4						
3	2	172217-00320	RESTRAINT ASSY	1	1						
4	2	172217-00430	BOLT GROUP, SHOULDER	1	1						
5	2	172216-03350	TAB, RETRACTOR MOUNT	1	1						
6	2	172215-02850	SCREW	4	4						
7	2	172215-03340	WASHER	4	4						

Fig.112. ENGINE BLOCK HEATER KIT



(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

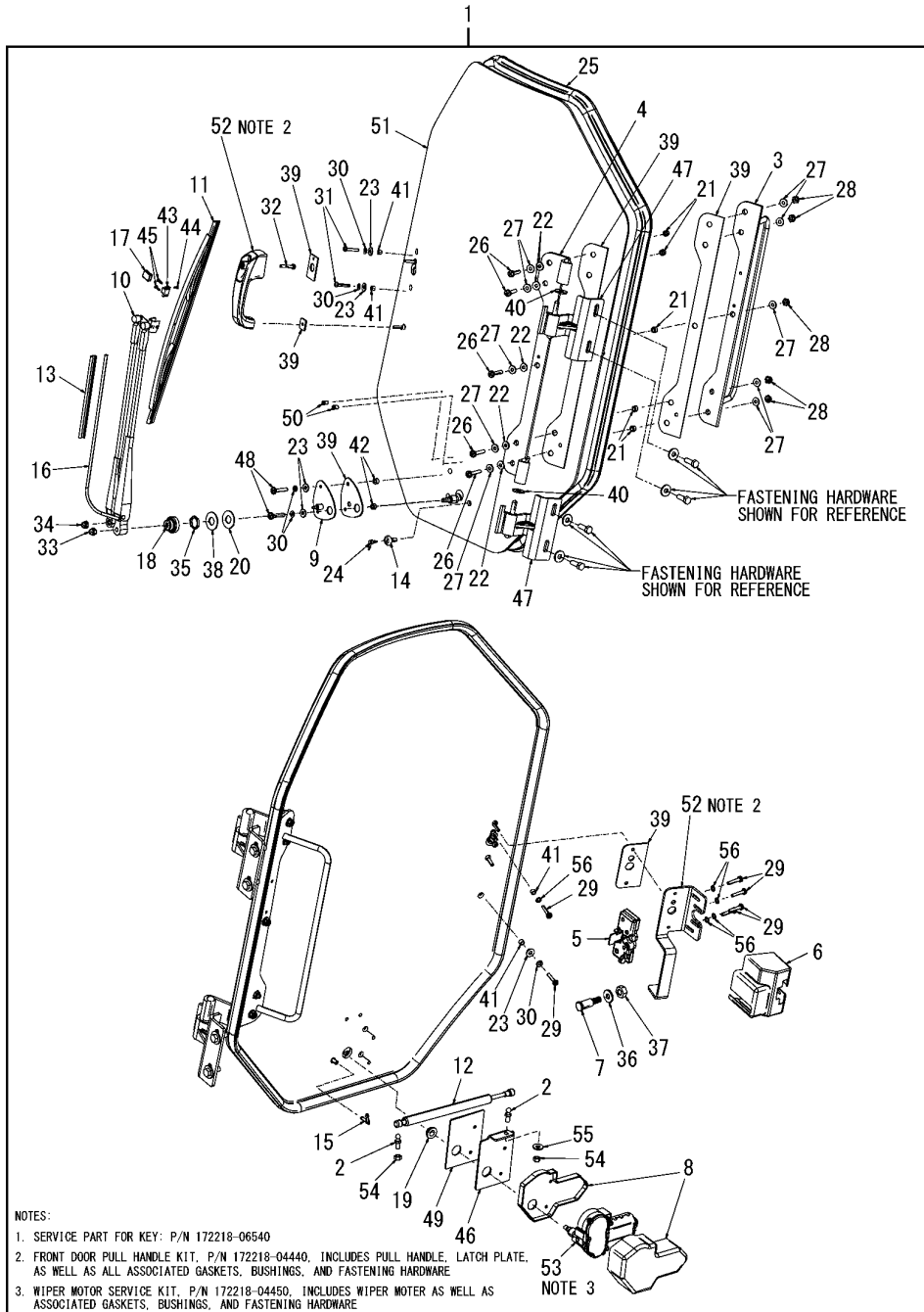
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-16890	HEATER, BLOCK	1	1						
2	2	172551-00910	BLOCK HEATER	1	1						
3	3	172551-00920	CORD, HEATER	1	1						
4	2	172551-00120	TIE, CABLE	3	3						1

Remarks
(1)Not shown in illustration.

Fig.113. CAB DOOR KIT

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



NOTES:

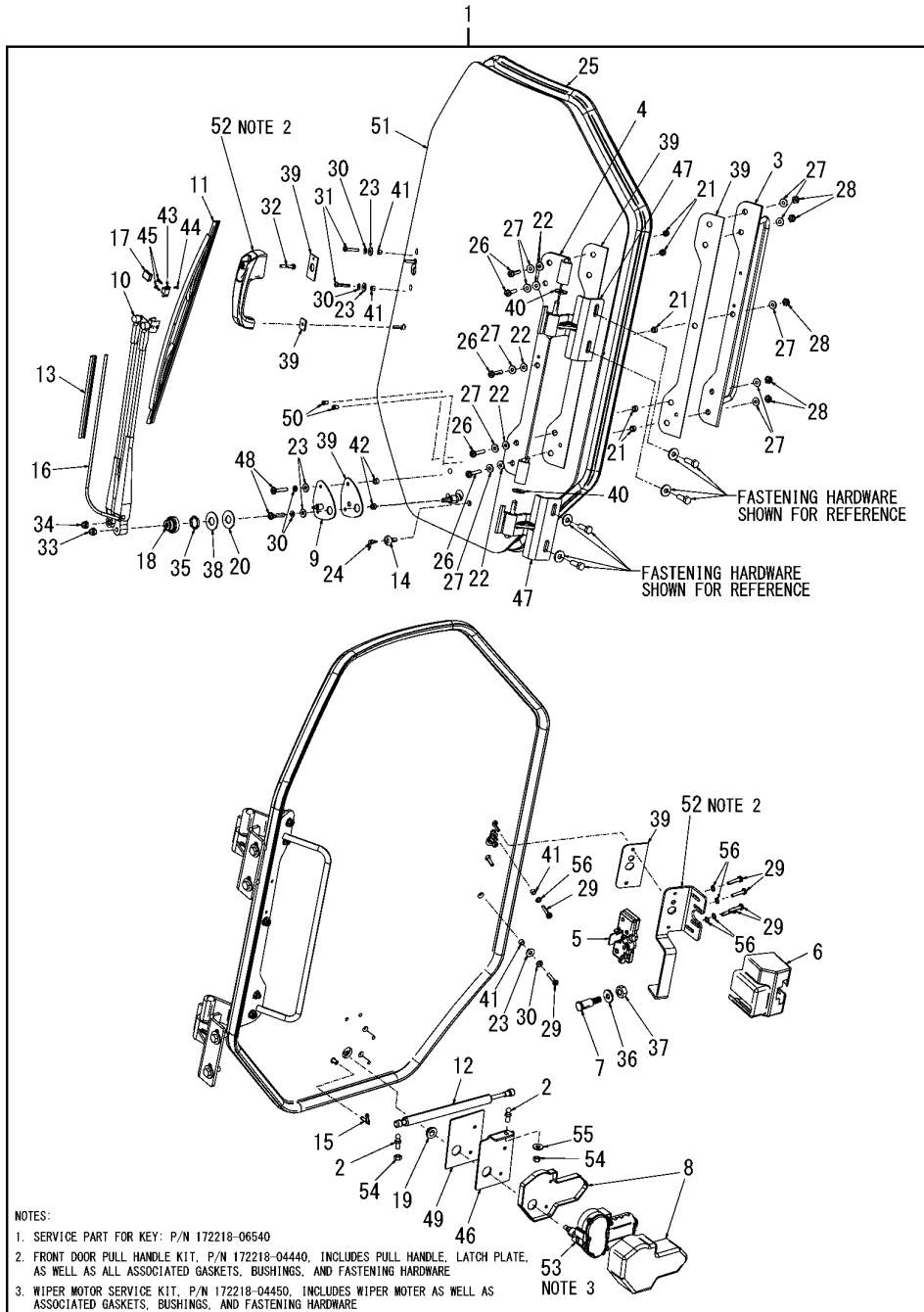
- 1. SERVICE PART FOR KEY: P/N 172218-06540
- 2. FRONT DOOR PULL HANDLE KIT, P/N 172218-04440, INCLUDES PULL HANDLE, LATCH PLATE, AS WELL AS ALL ASSOCIATED GASKETS, BUSHINGS, AND FASTENING HARDWARE
- 3. WIPER MOTOR SERVICE KIT, P/N 172218-04450, INCLUDES WIPER MOTOR AS WELL AS ASSOCIATED GASKETS, BUSHINGS, AND FASTENING HARDWARE

No.	Lev.	Parts No.	Description	(A)	(B)	(C)	(D)	(E)	(F)	Q'ty	I	R
1	1	172216-16900	DOOR KIT, CAB	1	1							
2	2	172215-00550	STUD, BALL	2	2							
3	2	172218-02980	BACKER, HINGE	1	1							
4	2	172218-02990	HINGE, DOOR	1	1							
5	2	172218-03000	LATCH, DOOR	1	1							
6	2	172218-03010	COVER, LATCH	1	1							
7	2	172218-03020	STRIKER	1	1							
8	2	172218-03040	COVER, WIPER MOTOR	1	1							
9	2	172218-03050	PLATE, PANTOGRAPH	1	1							
10	2	172218-03060	ARM, WIPER	1	1							
11	2	172218-03070	BLADE, WIPER ASSY	1	1							
12	2	172218-03080	SPRING, GAS	1	1							
13	2	172218-03090	CLIP, WIPER HOSE	1	1							
14	2	172218-03100	GROMMET, WASHER HOSE	1	1							
15	2	172218-03110	ELBOW, WASHER HOSE	1	1							
16	2	172218-03120	HOSE, WASHER	1	1							
17	2	172551-03100	HEAD, SPRITZER	1	1							
18	2	172218-03130	SEAL, RAIN, WIPER	1	1							
19	2	172218-03150	GROMMET, DRIVE SHAFT	1	1							
20	2	172218-03160	WASHER	1	1							
21	2	172218-03170	BUSHING	5	5							
22	2	172218-03180	WASHER	5	5							
23	2	172218-03190	WASHER	5	5							
24	2	172218-03200	ELBOW, WASHER HOSE	1	1							
25	2	172218-03210	SEAL, BULB	1	1							
26	2	172218-03250	SCREW	5	5							
27	2	172218-03270	WASHER	10	10							
28	2	172218-03280	LOCK NUT	5	5							
29	2	172218-03310	SCREW	6	6							
30	2	172218-03320	WASHER	5	5							
31	2	172218-03330	SCREW	2	2							
32	2	172218-03340	SCREW	1	1							
33	2	172218-03350	NUT	1	1							
34	2	172218-03360	NUT	1	1							
35	2	172218-03370	NUT	1	1							
36	2	172218-03380	WASHER	1	1							
37	2	172218-03390	NUT	1	1							
38	2	172218-03400	WASHER	1	1							
39	2	172218-03490	GASKET SET	1	1							
40	2	172218-03500	BUSHING, BRONZE	2	2							
41	2	172218-03510	BUSHING	4	4							
42	2	172218-03520	BUSHING	2	2							
43	2	172218-04140	BARCKET, MOUNTING	1	1							
44	2	172218-04150	SCREW	1	1							
45	2	172218-04160	SCREW	2	2							
46	2	172218-04380	PLATE, MOUNT	1	1							
47	2	172218-04390	HINGE, CABSIDE	2	2							
48	2	172218-04400	SCREW	2	2							
49	2	172218-04410	GASKET, MOUNT	1	1							
50	2	172218-04420	PLUG	2	2							
51	2	172218-04430	GLASS KIT, FR DOOR	1	1							

Fig.113. CAB DOOR KIT

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



NOTES:

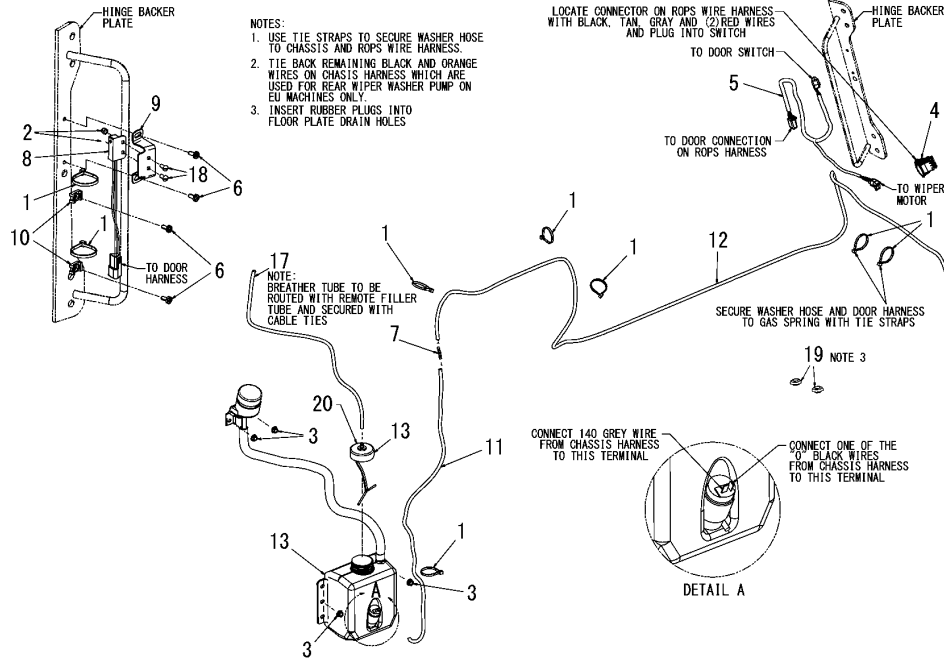
1. SERVICE PART FOR KEY: P/N 172218-06540
2. FRONT DOOR PULL HANDLE KIT, P/N 172218-04440, INCLUDES PULL HANDLE, LATCH PLATE, AS WELL AS ALL ASSOCIATED GASKETS, BUSHINGS, AND FASTENING HARDWARE
3. WIPER MOTOR SERVICE KIT, P/N 172218-04450, INCLUDES WIPER MOTOR AS WELL AS ASSOCIATED GASKETS, BUSHINGS, AND FASTENING HARDWARE

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
52	2	172218-04440	PULL HAND KIT, DOOR	1	1						
53	2	172218-04450	MOTOR KIT, WIPER	1	1						
54	2	172215-03230	NUT	2	2						
55	2	172551-10370	WASHER	1	1						
56	2	172218-05220	WASHER	5	5						

Fig.114. CAB DOOR KIT(DOOR COMPLETING PACKAGE)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



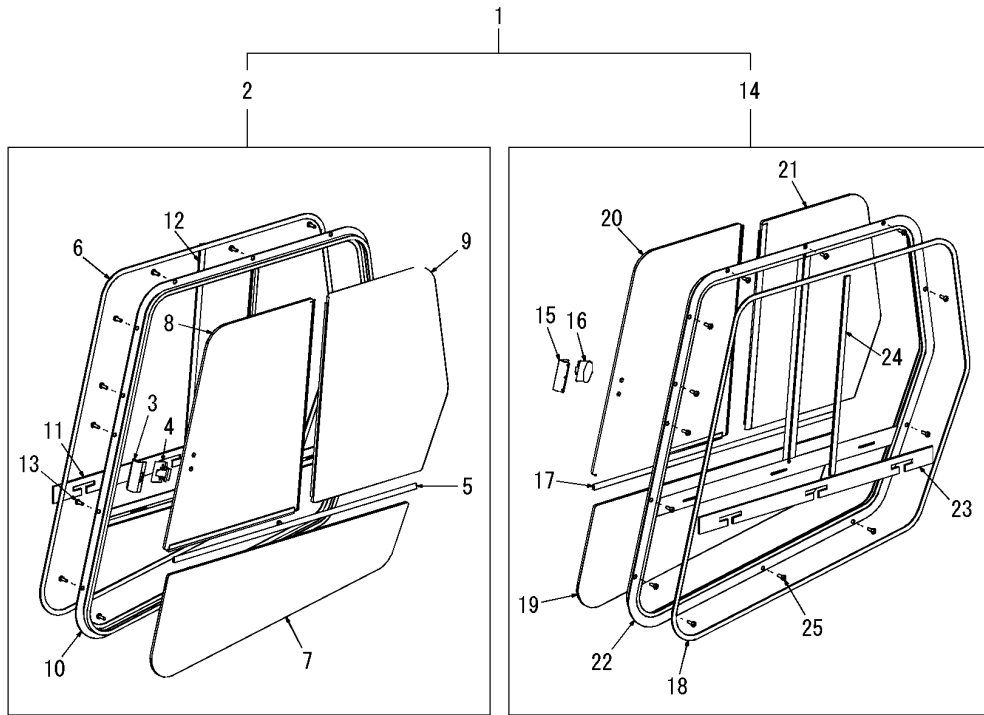
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00120	TIE, CABLE	8	8						
2	1	172218-00030	LOCK NUT	2	2						
3	1	172215-06620	NUT	8	8						
4	1	172218-01990	SWITCH, WIPER-WASHER	1	1						
5	1	172218-02900	HARNESS, DOOR	1	1						
6	1	172218-03300	SCREW	4	4						
7	1	172218-03970	BARB, HOSE	1	1						
8	1	172218-04640	SENSOR, PROXIMITY	1	1						
9	1	172218-04650	BRACKET, SWITCH	1	1						
10	1	172218-05610	TIE, CABLE	2	2						
11	1	172216-16910	HOSE	1	1						
12	1	172216-16920	HOSE	1	1						
13	1	172216-16930	RESERVOIR	1	1						
14	1	172218-03530	PUMP, WASHER	1	1						1
15	1	172218-03540	FILL SPOUT, REMOTE	1	1						1
16	1	172218-03550	CAP, VENTED	1	1						1
17	1	172216-16940	TUBE, BREATHER	1	1						
18	1	172218-04980	SCREW	2	2						
19	1	172551-02430	PLUG	2	2						
20	1	172218-06550	SERVICE PART	1	1						

Remarks
(1)Not shown in illustration.

Fig.115. SIDE WINDOW KIT

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172218-05300	WINDOW KIT, SIDE	1	1						
2	2	172218-01220	WINDOW ASSY, RIGHT	1	1						
3	3	172551-03060	STRIKER	1	1						
4	3	172551-03070	LATCH ASSY	1	1						
5	3	172218-02700	RAIL, SLIDE	1	1						
6	3	172218-02710	SEAL, WINDOW	1	1						
7	3	172218-02720	WINDOW	1	1						
8	3	172218-02750	WINDOW	1	1						
9	3	172218-02760	WINDOW	1	1						
10	3	172218-02800	FRAME, WINDOW RH	1	1						
11	3	172216-16950	FOAM, WINDOW	1	1						
12	3	172216-16960	FOAM, WINDOW	1	1						
13	3	172551-10010	SCREW	13	13						
14	2	172218-01230	WINDOW ASSY, LEFT	1	1						
15	3	172551-03060	STRIKER	1	1						
16	3	172551-03070	LATCH ASSY	1	1						
17	3	172218-02700	RAIL, SLIDE	1	1						
18	3	172218-02710	SEAL, WINDOW	1	1						
19	3	172218-02720	WINDOW	1	1						
20	3	172218-02730	WINDOW	1	1						
21	3	172218-02740	WINDOW	1	1						
22	3	172218-02790	FRAME, WINDOW LH	1	1						
23	3	172216-16950	FOAM, WINDOW	1	1						
24	3	172216-16960	FOAM, WINDOW	1	1						
25	3	172551-10010	SCREW	13	13						

Fig.116. SEAT BELT KIT(2INCH)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-12530	2 SEAT BELT	1	1						
2	2	172215-00400	NUT	3	3						
3	2	172216-03350	TAB, RETRACTOR MOUNT	1	1						
4	2	172216-11080	BELT ASSY, SEAT	1	1						
5	2	172215-02850	SCREW	3	3						
6	2	172215-03340	WASHER	3	3						

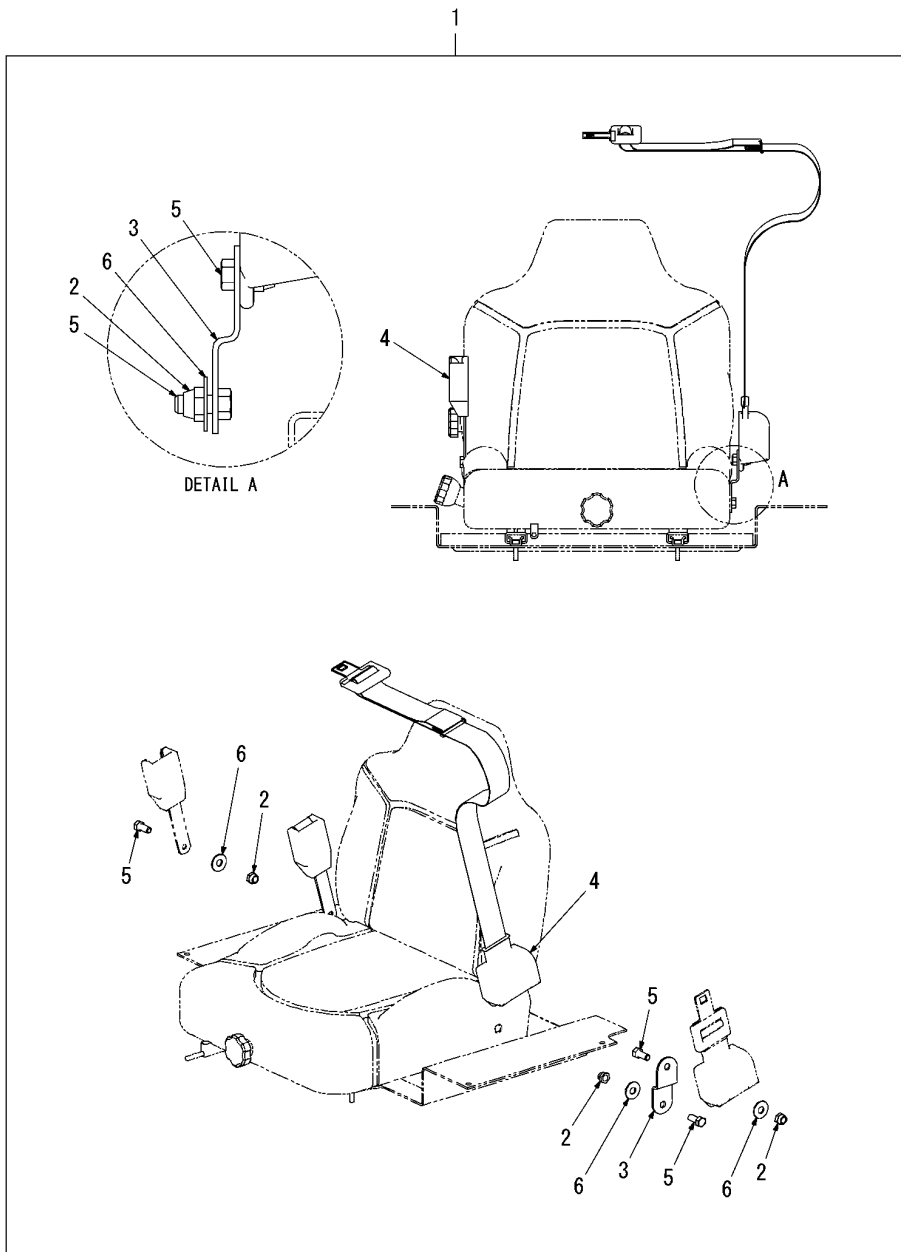


Fig.117. SEAT BELT KIT(3INCH)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-12540	3 SEAT BELT	1	1						
2	2	172215-00400	NUT	3	3						
3	2	172216-03350	TAB, RETRACTOR MOUNT	1	1						
4	2	172216-11090	BELT ASSY, SEAT	1	1						
5	2	172215-02850	SCREW	3	3						
6	2	172215-03340	WASHER	3	3						

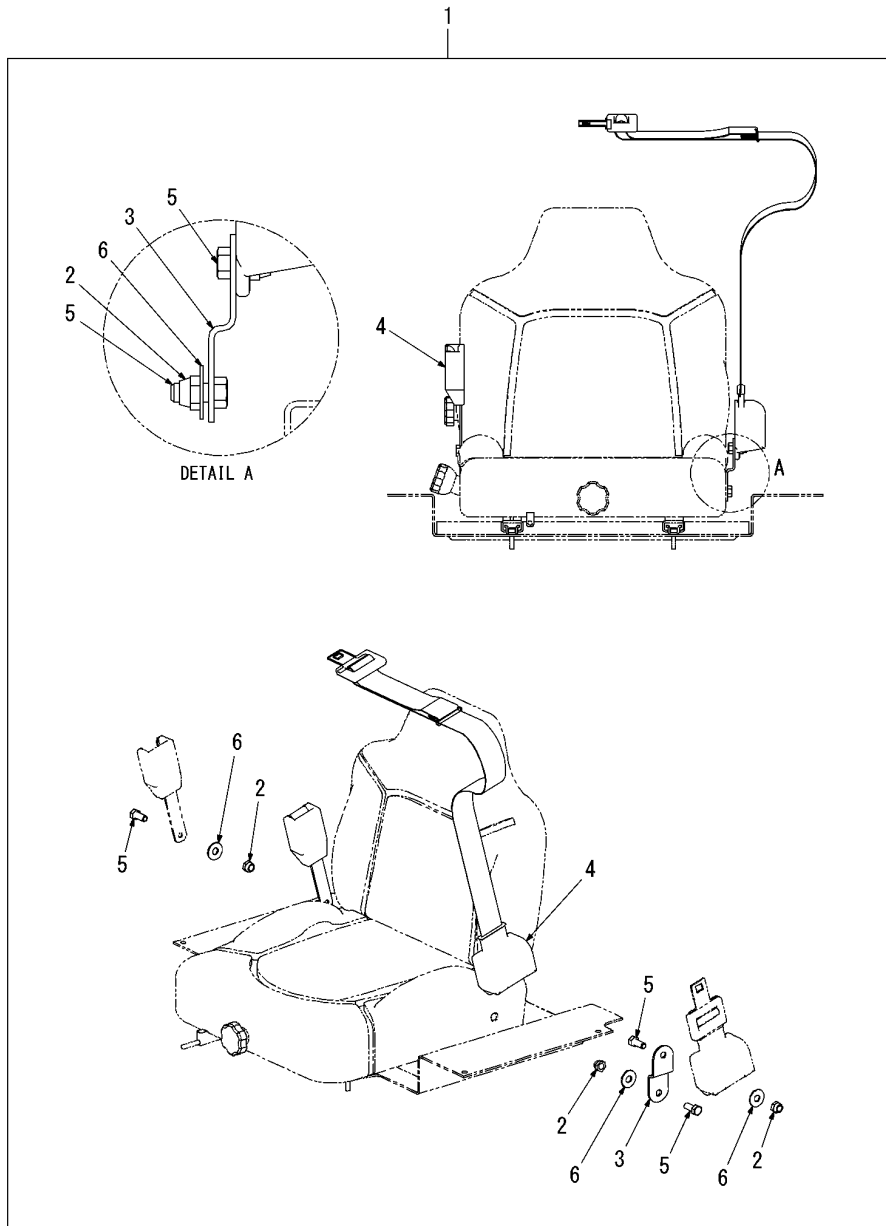
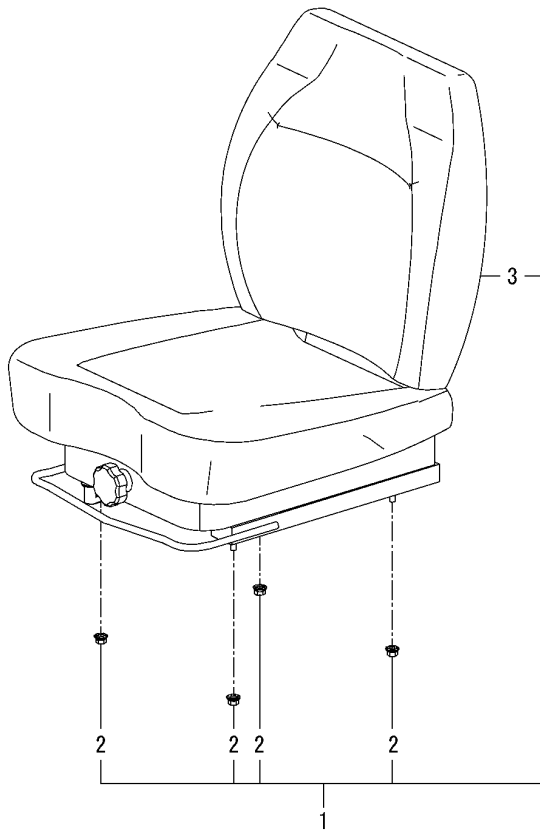


Fig.118. SEAT KIT(SUSPENSION

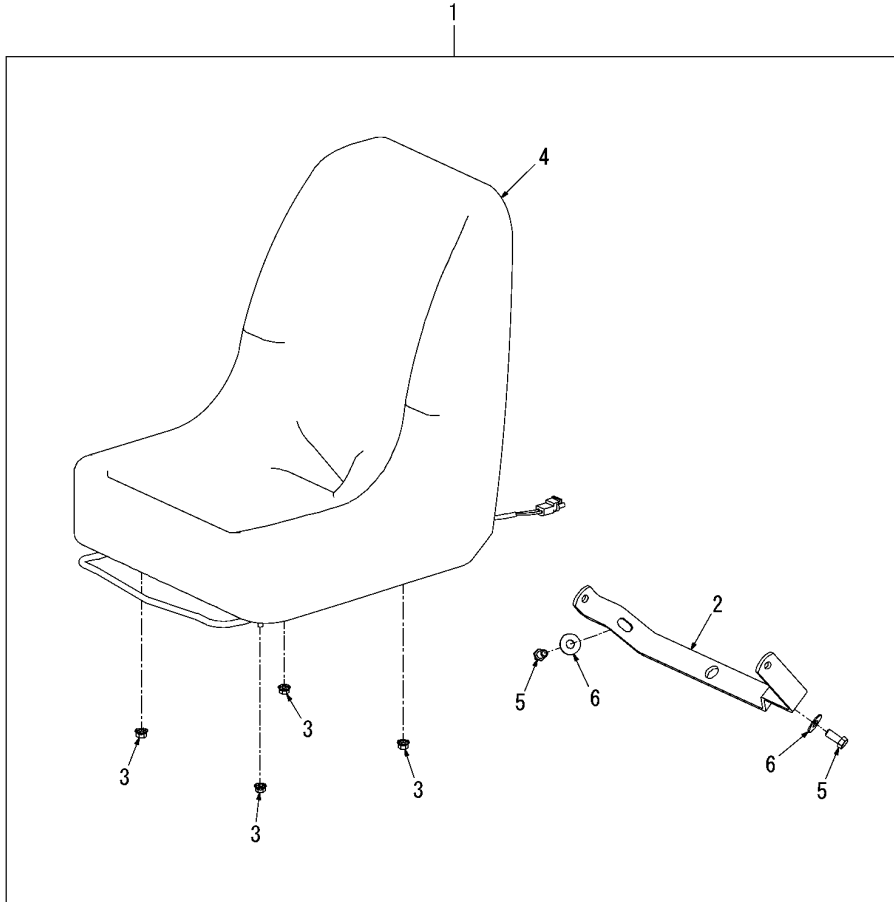
(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-12550	SUSPENSION SEAT	1	1						
2	2	172216-02490	NUT	4	4						
3	2	172216-03360	SEAT, SUSPENSION	1	1						

Fig.119. SEAT KIT(STANDARD



(A)=S190R-1
(B)=S220R-1
(C)=

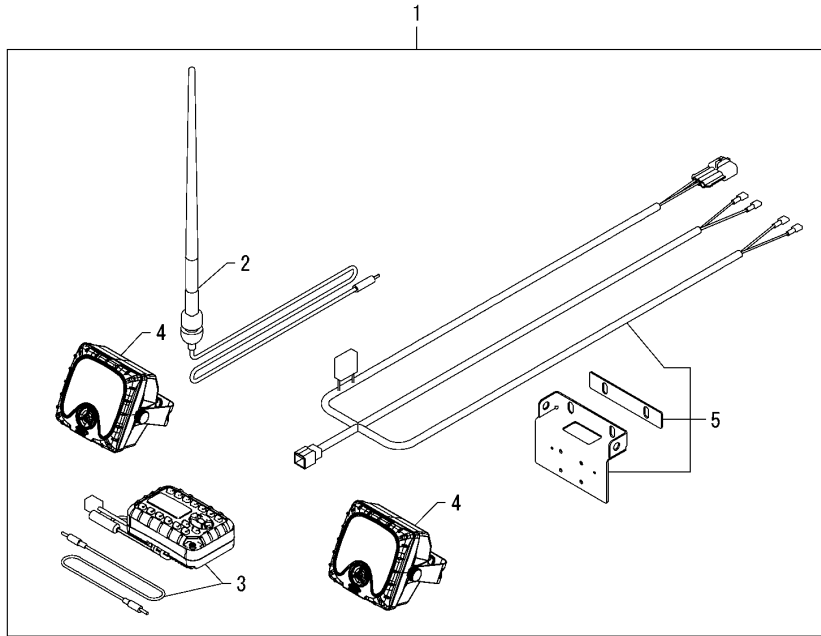
(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-12560	STANDARD SEAT	1	1						
2	2	172216-03860	BRACKET, SEAT BELT	1	1						
3	2	172216-02490	NUT	4	4						
4	2	172216-03370	SEAT	1	1						
5	2	172215-02850	SCREW	2	2						
6	2	172215-03340	WASHER	2	2						

Fig.120. UNIVERSAL RADIO KIT

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



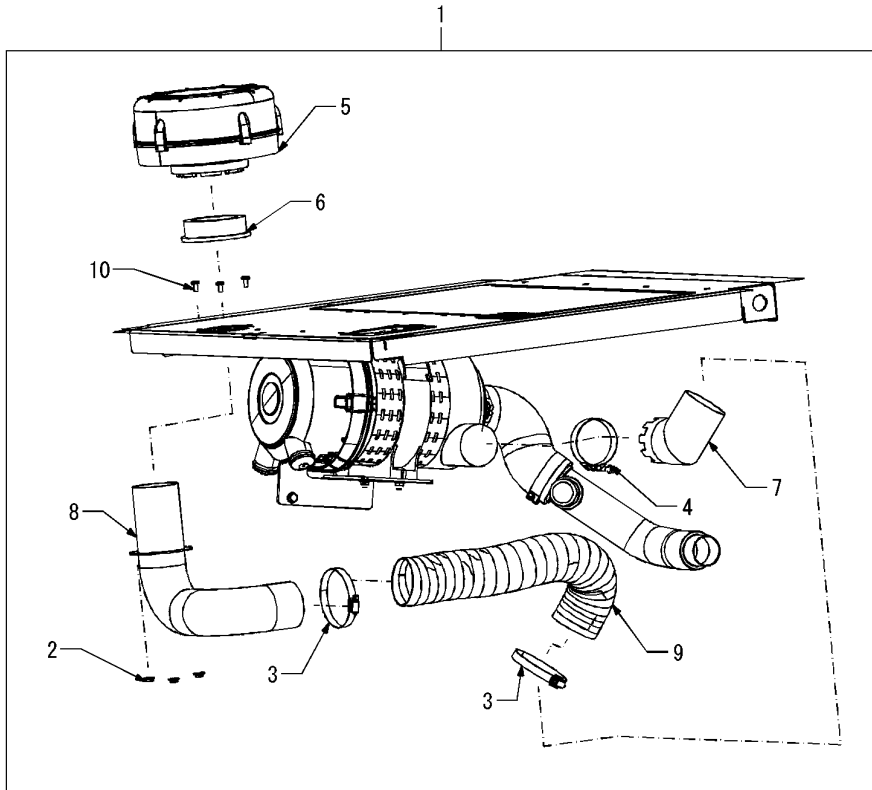
No.	Lev.	Parts No.	Description	Q'ty						I	R	
				(A)	(B)	(C)	(D)	(E)	(F)			
1	1	172215-03480	RADIO KIT	1	1							
2	2	172551-02150	ANTENNA, RADIO	1	1							
3	2	172551-02440	RADIO	1	1							
4	2	172215-02090	SPEAKER/PAIR	1	1							
5	2	172215-02630	INSTALL KIT, RADIO	1	1							
6	2	172215-02080	HARNESS, RADIO	1	1							1

Remarks
(1)Not shown in illustration.

Fig.121. PRE-CLEANER KIT(S190R)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

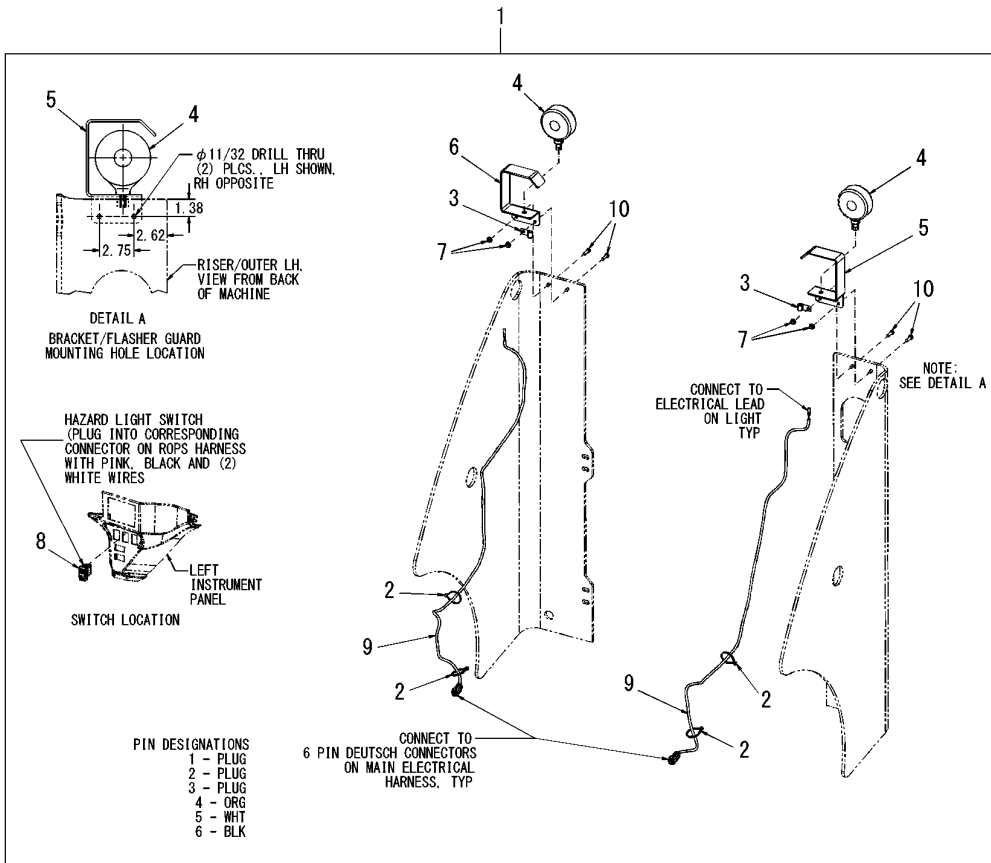


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-16970	PRE-CLENER KIT	1							
2	2	172551-00230	NUT	3							
3	2	172551-00630	CLAMP	2							
4	2	172216-04130	CLAMP	1							
5	2	172552-00120	PRE-CLEANER	1							
6	2	172217-01280	ADAPTOR, PRE-CLEANER	1							
7	2	172217-02880	ELBOW	1							
8	2	172217-02890	WELDMENT,AIR INTAKE	1							
9	2	172216-16980	HOSE	1							
10	2	172215-03110	SCREW	3							

Fig.122. DUAL FLASHER KIT

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

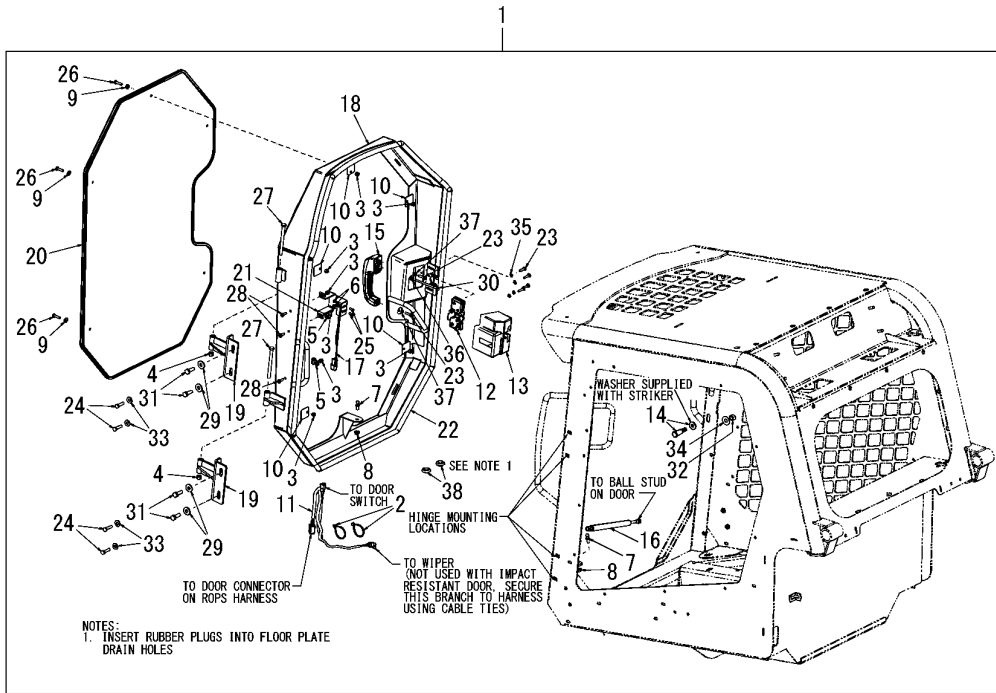


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-16990	FLASHER KIT, DUAL	1	1						
2	2	172551-00120	TIE, CABLE	4	4						
3	2	172215-00100	CLAMP	2	2						
4	2	172216-00390	LIGHT ASSY, WARNING	2	2						
5	2	172216-04230	BRACKET, GUARD R	1	1						
6	2	172216-04250	BRACKET, GUARD L	1	1						
7	2	172215-06620	NUT	4	4						
8	2	172218-02010	SWITCH, HAZARD	1	1						
9	2	172216-17000	HARNESS, FLASHER	2	2						
10	2	172215-02720	SCREW	4	4						

Fig.123. IMPACT-RESISTANT DOOR KIT(S220R)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Qty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172218-05910	DOOR KIT		1						
2	2	172551-00120	TIE, CABLE		2						
3	2	172551-00250	NUT		8						
4	2	172551-00280	NUT		2						
5	2	172551-00420	CLAMP		2						
6	2	172218-00030	LOCK NUT		2						
7	2	172215-00550	STUD, BALL		2						
8	2	172551-01060	NUT		2						
9	2	172551-01430	WASHER		5						
10	2	172216-04340	TAB, LEXAN DOOR		5						
11	2	172218-02900	HARNES, DOOR		1						
12	2	172218-03000	LATCH, DOOR		1						
13	2	172218-03010	COVER, LATCH		1						
14	2	172218-03020	STRIKER		1						
15	2	172218-03030	HANDLE ASSY		1						
16	2	172218-03080	SPRING, GAS		1						
17	2	172218-04640	SENSOR, PROXIMITY		1						
18	2	172218-04890	FRAME, DOOR		1						
19	2	172218-05660	HINGE		2						
20	2	172218-05680	PANEL, IMPACT		1						
21	2	172218-05720	SENSOR		1						
22	2	172218-05730	SEAL, BULB		1						
23	2	172218-05880	SCREW		6						
24	2	172551-09600	SCREW		4						
25	2	172218-04980	SCREW		2						
26	2	172551-09880	SCREW		5						
27	2	172216-09450	SCREW		2						
28	2	172551-10010	SCREW		3						
29	2	172218-05090	WASHER		4						
30	2	172218-05120	SCREW		1						
31	2	172218-05180	SCREW		4						
32	2	172218-05200	NUT		1						
33	2	172551-10370	WASHER		4						
34	2	172215-03340	WASHER		1						
35	2	172218-05220	WASHER		4						
36	2	172551-10430	NUT		1						
37	2	172218-05250	WASHER		2						
38	2	172551-02430	PLUG		2						

Fig.124. FOUR-POINT LIFT KIT

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

No.	Lev.	Parts No.	Description	Qty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-17010	LIFT KIT, 4-POINT	1	1						
2	2	172218-05930	BOLT	4	4						
3	2	172215-00710	NUT	4	4						
4	2	172216-01770	WASHER	4	4						
5	2	172551-01570	LABEL,LIFT POINT	4	4						
6	2	172218-04050	LIFT EYE, 4 POINT	2	2						

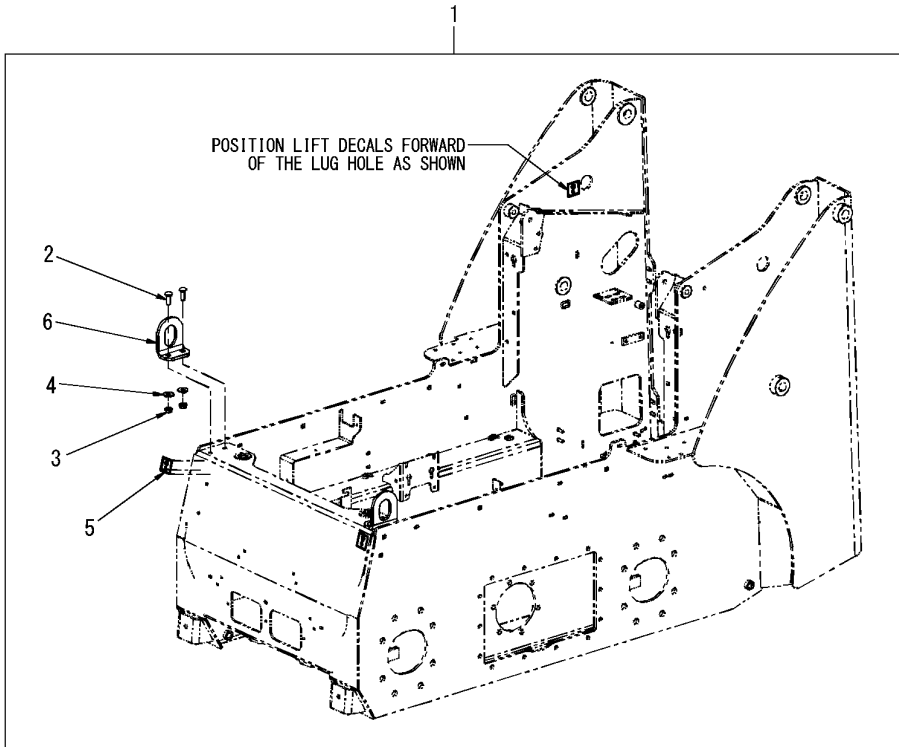
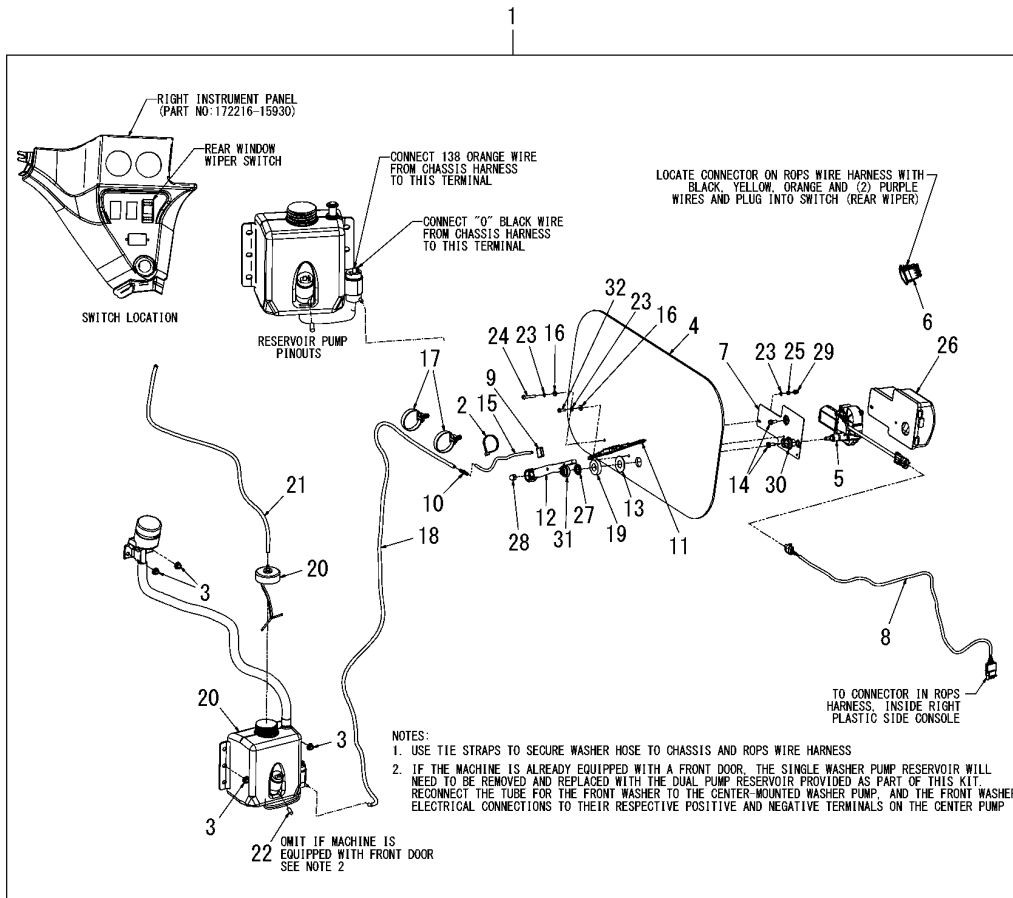


Fig.125. REAR WIPER KIT

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

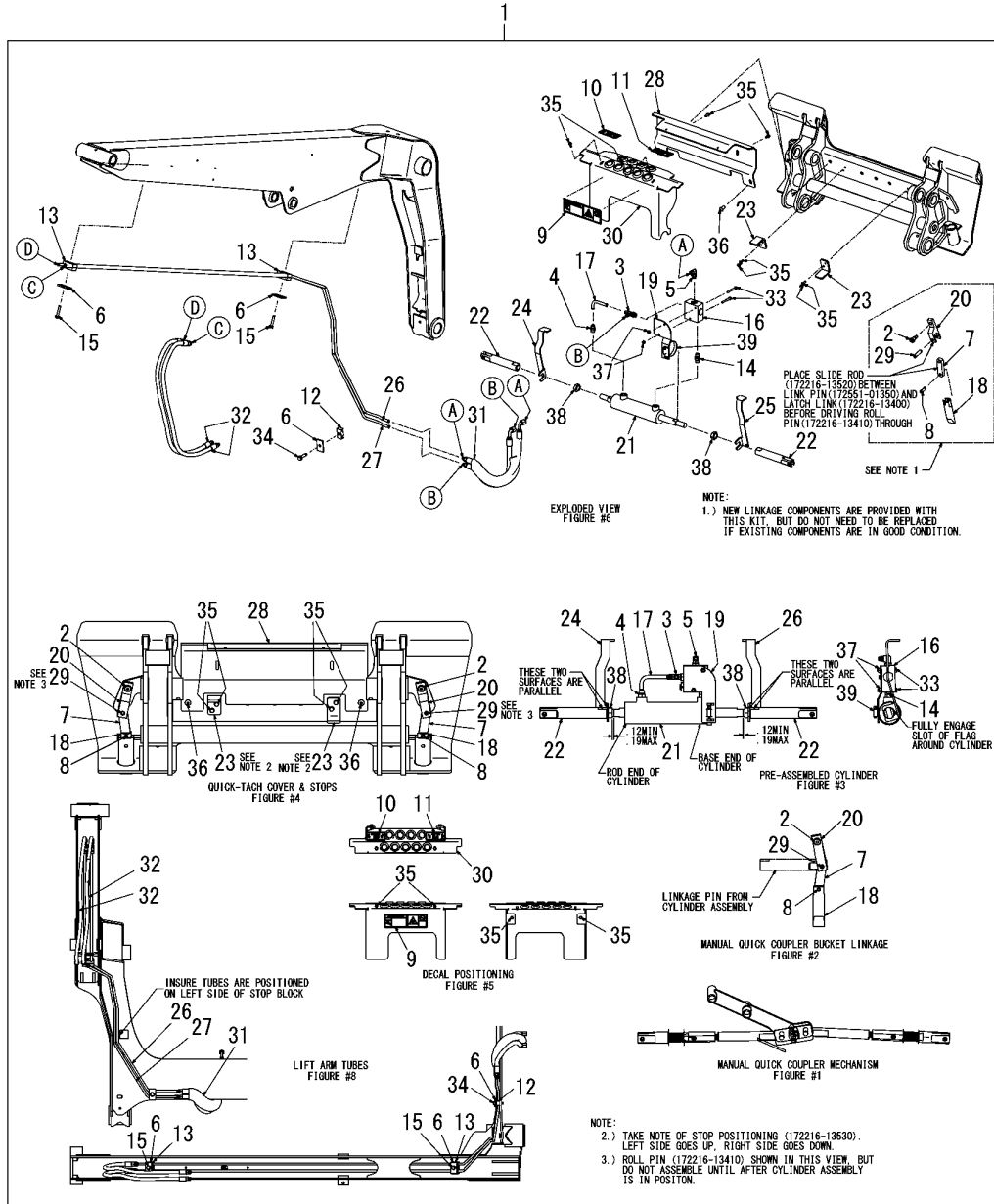


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-17020	WIPER KIT, REAR	1	1						
2	2	172551-00120	TIE, CABLE	2	2						
3	2	172215-06620	NUT	4	4						
4	2	172551-02820	WINDOW	1	1						
5	2	172551-02970	MOTOR, REAR WIPER	1	1						
6	2	172218-02080	SWITCH, WIPER-WASHER	1	1						
7	2	172551-03080	PLATE, WIPER MOTOR	1	1						
8	2	172218-02910	WIPER HARNESS, REAR	1	1						
9	2	172551-03100	HEAD, SPRITZER	1	1						
10	2	172218-03970	BARB, HOSE	1	1						
11	2	172551-03150	BLADE, WIPER	1	1						
12	2	172551-03160	ARM, WIPER	1	1						
13	2	172551-03180	WASHER	1	1						
14	2	172551-03190	SCREW	2	2						
15	2	172218-04020	HOSE, REAR WIPER ARM	1	1						
16	2	172551-03210	WASHER	2	2						
17	2	172551-08760	CABLE TIE AND MOUNT	3	3						
18	2	172216-17030	HOSE	1	1						
19	2	172216-17040	SPACER, SHAFT	1	1						
20	2	172216-17050	RESERVOIR	1	1						
21	2	172216-16940	TUBE, BREATHER	1	1						
22	2	172216-17060	PLUG	1	1						
23	2	172551-10220	WASHER	3	3						
24	2	172551-10230	SCREW	1	1						
25	2	172551-10470	NUT	1	1						
26	2	172551-10610	COVER, WIPER MOTOR	1	1						
27	2	172551-10620	NUT	1	1						
28	2	172551-10630	NUT	1	1						
29	2	172218-05980	NUT	1	1						
30	2	172551-10640	TOWER SEAL, TRICO WI	1	1						
31	2	172551-10650	SHIELD, RAIN	1	1						
32	2	172551-10660	SCREW	1	1						

Fig.126. HYDRAULIC QUICK COUPLER KIT(S190R)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

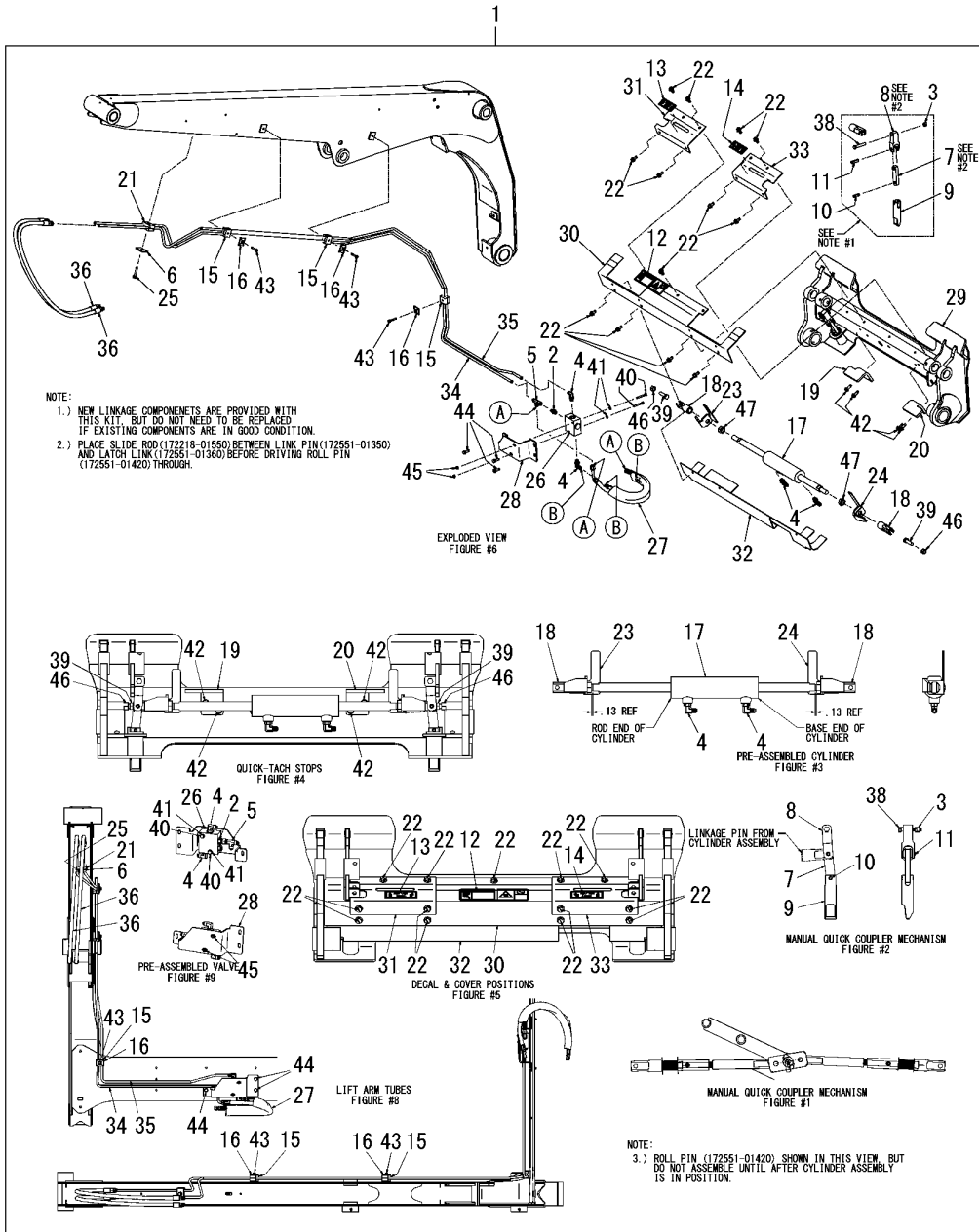


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-17070	QUICK COUPLER KIT	1							
2	2	172215-03790	BOLT	2							
3	2	172551-00060	FITTING	1							
4	2	172551-00070	FITTING	1							
5	2	172551-00220	CONNECTOR	1							
6	2	172551-00510	PLATE	3							
7	2	172551-01350	LINK, PIN	2							
8	2	172551-01410	PIN	2							
9	2	172551-01770	LABEL, QUICK COUPLER	1							
10	2	172551-01780	LABEL, LATCHING	1							
11	2	172551-01790	LABEL, LATCHING	1							
12	2	172216-05350	CLAMP	1							
13	2	172216-12960	CLAMP	2							
14	2	172216-13470	FITTING	1							
15	2	172218-05820	SCREW	2							
16	2	172216-13480	VALVE, QUICK COUPLER	1							
17	2	172216-13490	TUBE, QUICK COUPLER	1							
18	2	172216-13380	PIN	2							
19	2	172216-13500	BRKT, QUICK COUPLER	1							
20	2	172216-13400	LINK, LATCH	2							
21	2	172216-13510	CYL., QUICK COUPLER	1							
22	2	172216-13520	LINK, SPRING SLIDE	2							
23	2	172216-13530	BRACKET, STOP	2							
24	2	172216-13540	FLAG, INDICATOR L	1							
25	2	172216-13550	FLAG, INDICATOR R	1							
26	2	172216-13560	TUBE, QUICK COUPLER	1							
27	2	172216-13570	TUBE, QUICK COUPLER	1							
28	2	172216-13580	COVER, Q COUPLER F	1							
29	2	172216-13410	PIN, SPRING	2							
30	2	172216-13590	COVER, Q COUPLER	1							
31	2	172216-13600	HOSE ASSY, W/ SLEEVE	1							
32	2	172216-13610	HOSE	2							
33	2	172215-02890	SCREW	2							
34	2	172216-09480	SCREW	1							
35	2	172215-03080	SCREW	8							
36	2	172216-13620	SCREW	2							
37	2	172551-10290	NUT	2							
38	2	172218-05210	NUT	2							
39	2	172216-13630	CLAMP, HOSE	1							

Fig.127. HYDRAULIC QUICK COUPLER KIT(S220R)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

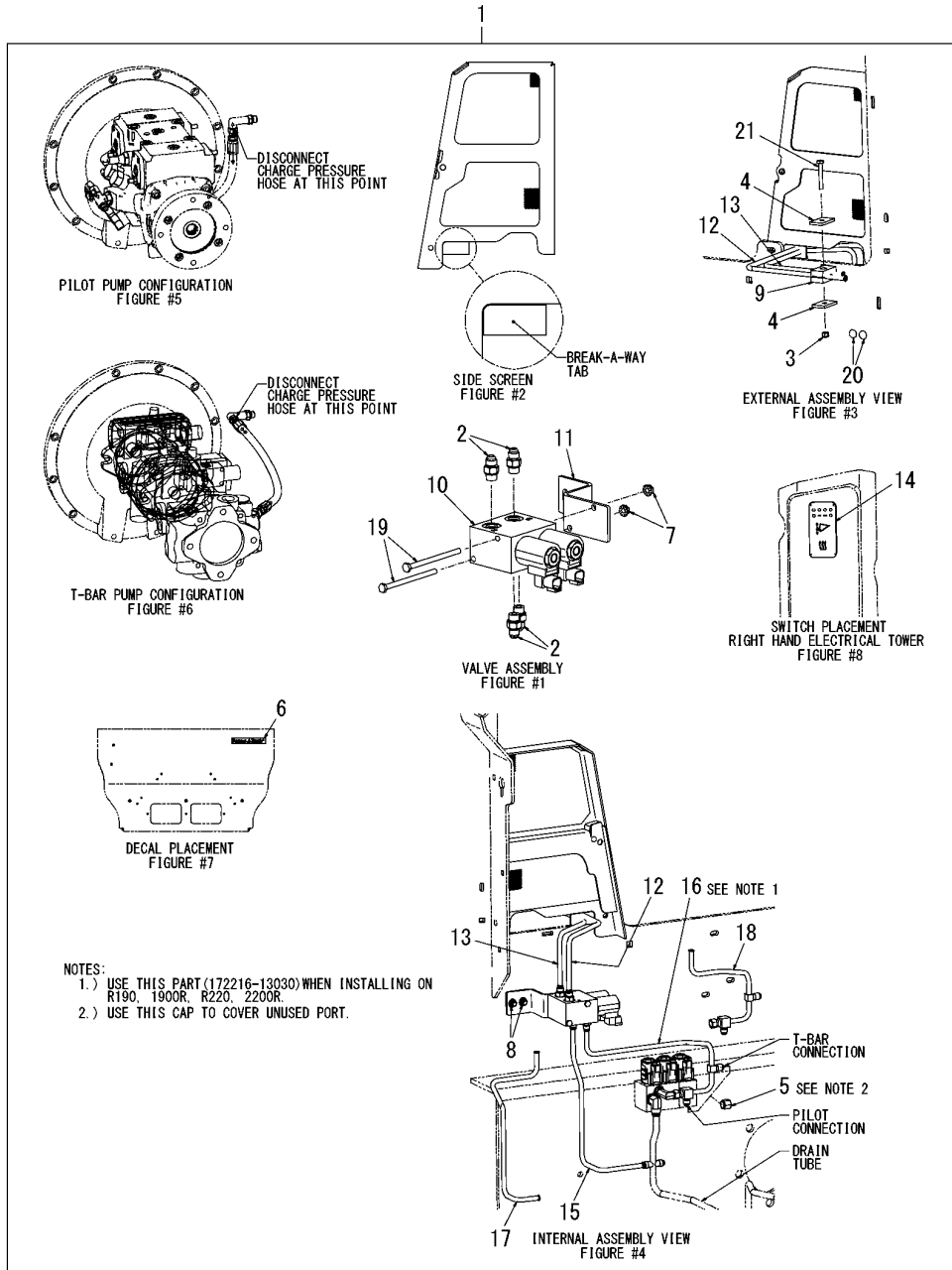


No.	Lev.	Parts No.	Description	Qty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-17080	QUICK COUPLER KIT		1						
2	2	172551-00070	FITTING		1						
3	2	172551-00180	NUT		2						
4	2	172551-00220	CONNECTOR		4						
5	2	172551-00340	FITTING		1						
6	2	172551-00510	PLATE		1						
7	2	172551-01350	LINK, PIN		2						
8	2	172551-01360	LATCH, LINK		2						
9	2	172551-01370	LATCH, PIN		2						
10	2	172551-01410	PIN		2						
11	2	172551-01420	PIN		2						
12	2	172551-01770	LABEL, QUICK COUPLER		1						
13	2	172551-01780	LABEL, LATCHING		1						
14	2	172551-01790	LABEL, LATCHING		1						
15	2	172216-06280	CLAMP		3						
16	2	172216-06290	PLATE		3						
17	2	172218-01540	CYLINDER, HYDRAULIC		1						
18	2	172218-01550	LINK, SPRING SLIDE		2						
19	2	172218-03930	BRACKET, STOP		1						
20	2	172218-03940	BRACKET, STOP		1						
21	2	172216-12960	CLAMP		1						
22	2	172216-10940	SCREW		13						
23	2	172218-05640	FLAG, LEFT WELDMENT		1						
24	2	172218-05650	FLAG, RIGHT WELDMENT		1						
25	2	172218-05820	SCREW		1						
26	2	172216-13480	VALVE, QUICK COUPLER		1						
27	2	172216-13650	SLEEVE ASSY, HOSE		1						
28	2	172216-13690	BRKT, QUICK COUPLER		1						
29	2	172216-13460	QUICK COUPLER		1						
30	2	172216-13700	COVER, CYL. UPPER		1						
31	2	172216-13710	COVER, FLAG LEFT		1						
32	2	172216-13720	COVER, CYL. LOWER		1						
33	2	172216-13730	COVER, FLAG RIGHT		1						
34	2	172216-13740	TUBE, QUICK COUPLER		1						
35	2	172216-13750	TUBE, QUICK COUPLER		1						
36	2	172216-13760	HOSE		2						
38	2	172551-09580	SCREW		2						
39	2	172218-04950	SCREW		2						
40	2	172215-02890	SCREW		2						
41	2	172551-09890	WASHER		2						
42	2	172551-09910	SCREW		4						
43	2	172216-13770	SCREW		3						
44	2	172216-13780	SCREW		3						
45	2	172551-10290	NUT		2						
46	2	172215-03240	NUT		2						
47	2	172218-05210	NUT		2						

Fig.128. COMPLETING KIT FOR ALL HYDRAULIC QUICK COUPLER KITS

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



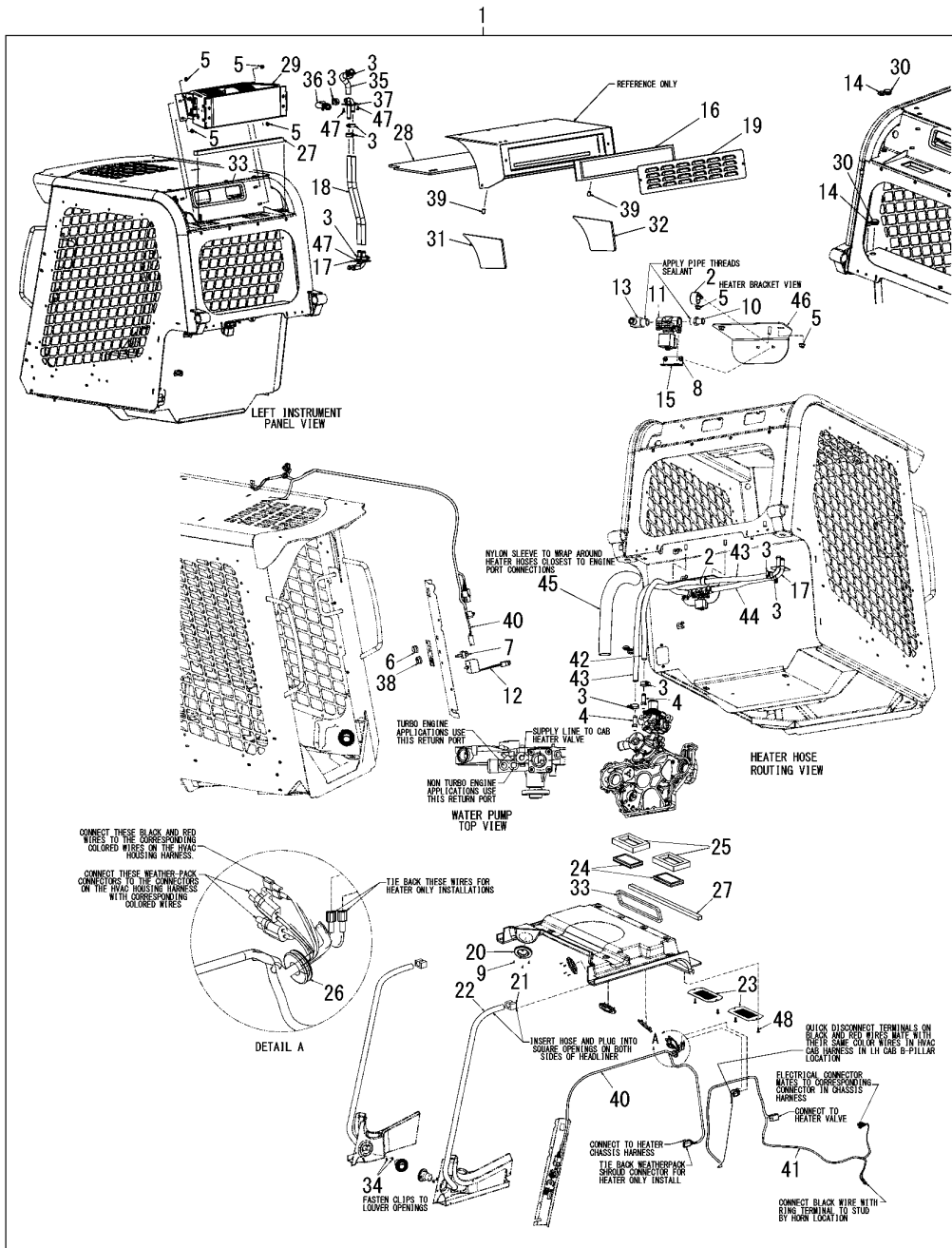
NOTES:
1.) USE THIS PART (172216-13030) WHEN INSTALLING ON R190, 1900R, R220, 2200R.
2.) USE THIS CAP TO COVER UNUSED PORT.

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-17100	CHASSIS ASSY	1	1						
2	2	172551-00070	FITTING	4	4						
3	2	172551-00150	NUT	1	1						
4	2	172551-00510	PLATE	2	2						
5	2	172216-00380	CAP	1	1						
6	2	172551-02080	LABEL, QUICK COUPLER	1	1						
7	2	172215-06610	NUT	2	2						
8	2	172215-06620	NUT	2	2						
9	2	172216-12960	CLAMP	1	1						
10	2	172216-12970	VALVE, QUICK COUPLER	1	1						
11	2	172216-12980	BRKT, QUICK COUPLER	1	1						
12	2	172216-12990	TUBE, QUICK COUPLER	1	1						
13	2	172216-13000	TUBE, QUICK COUPLER	1	1						
14	2	172216-13010	SWITCH, Q COUPLER	1	1						
15	2	172216-13020	TUBE, DRAIN	1	1						
16	2	172216-13030	TUBE,CHARGE	1	1						
17	2	172216-17110	TUBE, DRAIN	1	1						
18	2	172216-17120	TUBE,CHARGE	1	1						
19	2	172216-09260	SCREW	2	2						
20	2	172215-02820	BOLT	2	2						
21	2	172551-09760	SCREW	1	1						

Fig.129. CAB HEATER KIT

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

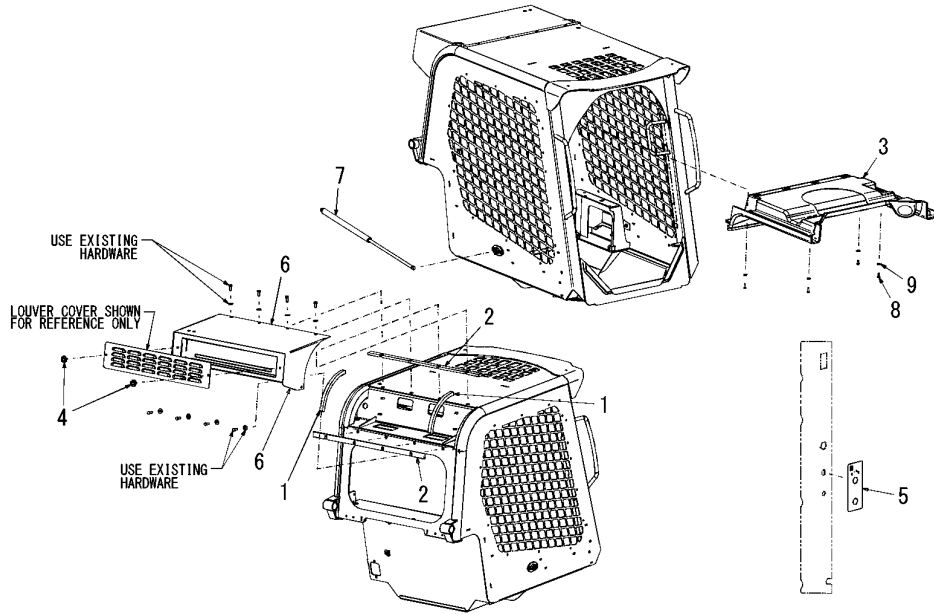


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-17130	HEATER KIT, CAB	1	1						
2	2	172216-00080	CLAMP	1	1						
3	2	172551-00760	CLAMP	14	14						
4	2	172551-00840	FITTING	2	2						
5	2	172551-01060	NUT	7	7						
6	2	172215-00740	KNOB	1	1						
7	2	172551-01280	SWITCH, HEATER	1	1						
8	2	172551-01590	FLANGE	2	2						
9	2	172216-06750	SCREW	16	16						
10	2	172551-02270	FITTING	1	1						
11	2	172551-02300	VALVE, SOLENOID	1	1						
12	2	172551-02380	MODULE, A/C CONTROL	1	1						
13	2	172217-01170	FITTING	1	1						
14	2	172551-02430	PLUG	2	2						
15	2	172216-12780	BRACKET, VALVE	1	1						
16	2	172551-00010	FILTER, FRESH AIR	1	1						
17	2	172218-01110	PLATE, HEATER TUBES	1	1						
18	2	172218-01120	HOSE, HEATER	2	2						
19	2	172218-01410	PLATE, COVER	1	1						
20	2	172218-02170	VENT	4	4						
21	2	172218-02330	PLUG, TUBE	2	2						
22	2	172218-02340	TUBE, FORWARD HVAC	2	2						
23	2	172218-02810	COVER, RECIRC	2	2						
24	2	172551-03090	FILTER, AIR	2	2						
25	2	172218-02820	PAD, SEALING FILTER	2	2						
26	2	172218-02880	GROMMET	1	1						
27	2	172218-02890	PAD	1	1						
28	2	172218-02970	PAD, HOUSING TOP	1	1						
29	2	172218-03430	HOSING ASSY, HEATER	1	1						
30	2	172551-03110	GROMMET	2	2						
31	2	172218-03450	PAD, HOUSING LEFT	1	1						
32	2	172218-03460	PAD, HOUSING RIGHT	1	1						
33	2	172218-03480	PAD, HEADLINER SEAL	1	1						
34	2	172218-03950	CLIP, HOSE RETAINING	4	4						
35	2	172218-04180	HOSE, MOLDED HEATER	1	1						
36	2	172218-04190	HOSE, MOLDED HEATER	1	1						
37	2	172218-04200	TUBE, HEATER	1	1						
38	2	172218-04490	KNOB, TEMP CONTROL	1	1						
39	2	172218-04740	CAP, TUBE	2	2						
40	2	172218-05760	HARNESS, HVAC CAB	1	1						
41	2	172218-05770	HARNESS, HEATER	1	1						
42	2	172216-12880	HOSE, HEATER	1	1						
43	2	172216-12890	HOSE, HEATER	1	1						
44	2	172216-12900	HOSE, HEATER	1	1						
45	2	172216-12920	SLEEVE	1	1						
46	2	172216-12950	BRKT ASSY, VALVE	1	1						
47	2	172215-03110	SCREW	4	4						
48	2	172551-10010	SCREW	4	4						

Fig.130. CAB HEATER COMPLETING PARTS-CAB HEATER KIT

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=

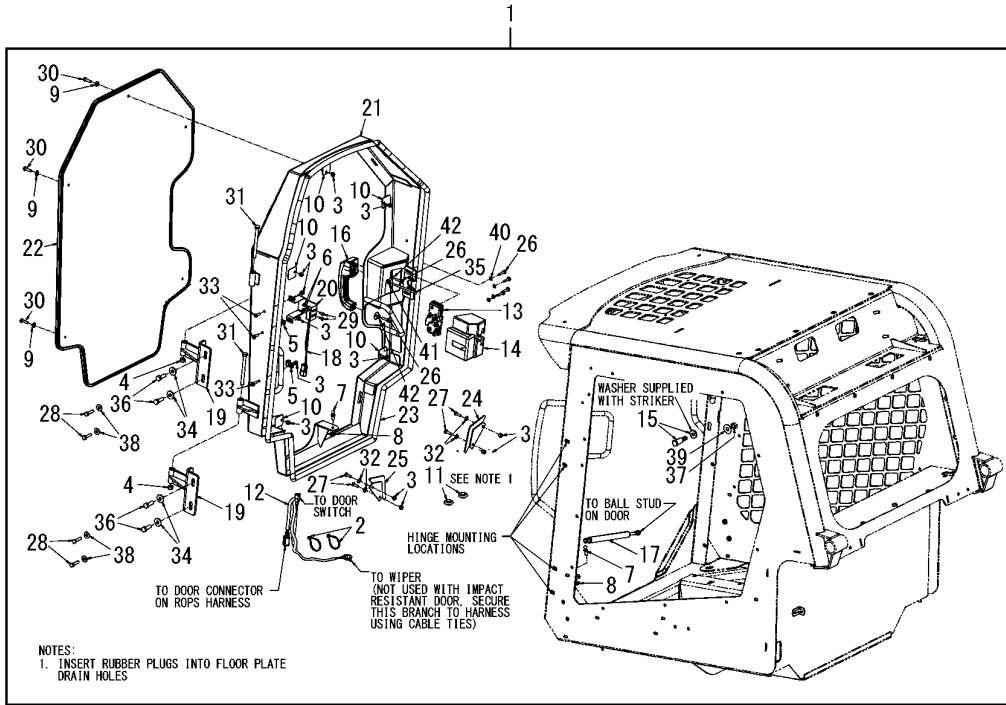


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172218-01200	SEAL, FOAM SIDE	2	2						
2	1	172218-01260	SEAL, FOAM BOTTOM	2	2						
3	1	172218-01500	HEADLINER, DUCT A/C	1	1						
4	1	172218-02210	KNOB, CLAMPING	2	2						
5	1	172218-04370	LABEL, FAN SPEED	1	1						
6	1	172218-04660	HOUSING, HVAC	1	1						
7	1	172216-13290	GAS SPRING	2	2						
8	1	172551-10010	SCREW	4	4						
9	1	172218-05160	WASHER	4	4						

Fig.131. IMPACT-RESISTANT FRONT DOOR KIT(S190R)

(A)=S190R-1
(B)=S220R-1
(C)=

(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-17140	RESISTANT KIT	1							
2	2	172551-00120	TIE, CABLE	2							
3	2	172551-00250	NUT	12							
4	2	172551-00280	NUT	2							
5	2	172551-00420	CLAMP	2							
6	2	172218-00030	LOCK NUT	2							
7	2	172215-00550	STUD, BALL	2							
8	2	172551-01060	NUT	2							
9	2	172551-01430	WASHER	5							
10	2	172216-04340	TAB, LEXAN DOOR	5							
11	2	172551-02430	PLUG	2							
12	2	172218-02900	HARNES, DOOR	1							
13	2	172218-03000	LATCH, DOOR	1							
14	2	172218-03010	COVER, LATCH	1							
15	2	172218-03020	STRIKER	1							
16	2	172218-03030	HANDLE ASSY	1							
17	2	172218-03080	SPRING, GAS	1							
18	2	172218-04640	SENSOR, PROXIMITY	1							
19	2	172218-05660	HINGE	2							
20	2	172218-05720	SENSOR	1							
21	2	172216-17150	FRAME, DOOR WELDMENT	1							
22	2	172216-17160	PANEL, IMPACT	1							
23	2	172216-17170	SEAL, BULB	1							
24	2	172216-17180	PALTE, GAP RH	1							
25	2	172216-17190	PALTE, GAP LH	1							
26	2	172218-05880	SCREW	6							
27	2	172216-17200	SCREW	4							
28	2	172551-09600	SCREW	4							
29	2	172218-04980	SCREW	2							
30	2	172551-09880	SCREW	5							
31	2	172216-09450	SCREW	2							
32	2	172551-09890	WASHER	4							
33	2	172551-10010	SCREW	3							
34	2	172218-05090	WASHER	4							
35	2	172218-05120	SCREW	1							
36	2	172218-05180	SCREW	4							
37	2	172218-05200	NUT	1							
38	2	172551-10370	WASHER	4							
39	2	172215-03340	WASHER	1							
40	2	172218-05220	WASHER	4							
41	2	172551-10430	NUT	1							
42	2	172218-05250	WASHER	2							

Parts No. Index

Parts No.	Fig. No.	Ref. No.
172215-00030	43	1
	44	1
	45	1
	46	1
172215-00040	61	1
	62	1
172215-00100	122	3
172215-00120	31	3
172215-00190	31	4
	47	2
172215-00200	34	4
	35	4
	67	6
	69	6
172215-00300	58	11
172215-00320	4	5
172215-00340	64	3
	65	3
172215-00390	47	6
	48	4
	49	6
	50	6
172215-00400	17	1
	18	1
	110	2
	111	2
	116	2
	117	2
172215-00470	36	8
	37	7
	38	5
	39	6
172215-00480	49	48
	56	8
172215-00500	132	5
	133	5
172215-00510	1	4
	2	4
172215-00540	36	9
	37	9
	38	7
	39	8
172215-00550	8	8
	9	8
	113	2
	123	7
	131	7
172215-00580	63	4
172215-00620	1	6
	2	6

Parts No.	Fig. No.	Ref. No.
172215-00620	36	11
172215-00650	10	6
	76	2
172215-00700	8	13
	9	13
	14	6
	40	11
	41	12
	56	13
	61	4
	62	4
172215-00710	2	11
	8	14
	9	14
	66	2
	124	3
172215-00740	4	11
	6	5
	129	6
172215-00800	72	2
172215-00850	43	11
	44	10
	53	13
172215-01390	71	8
	22	22
172215-01400	71	10
172215-01410	8	18
	9	18
172215-01560	32	12
172215-01720	1	12
	2	16
172215-02080	120	6
172215-02090	120	4
172215-02110	14	9
172215-02140	58	10
172215-02630	120	5
172215-02650	21	14
172215-02700	8	33
	9	33
	14	26
	36	37
	37	37
	38	31
	39	35
172215-02710	36	38
	37	38
	38	32
	39	36
172215-02720	122	10
172215-02740	53	60

Parts No.	Fig. No.	Ref. No.
172215-02740	54	48
172215-02760	14	28
172215-02790	14	31
	58	29
172215-02820	1	35
	2	42
	7	15
	43	32
	44	32
	45	37
	46	37
	53	61
	54	49
	64	23
	65	23
	128	20
172215-02850	15	5
	17	5
	18	6
	110	6
	111	6
	116	5
	117	5
	119	5
172215-02870	22	18
172215-02890	23	27
	24	35
	126	33
	127	40
172215-02930	34	19
172215-02950	19	14
	49	44
172215-02990	35	21
172215-03000	8	37
	9	37
172215-03040	53	62
	54	50
172215-03060	3	3
172215-03080	23	29
	126	35
172215-03110	5	91
	6	42
	10	42
	64	25
	65	25
	103	25
	121	10
	129	47
172215-03120	1	37
	2	45

Parts No.	Fig. No.	Ref. No.
172215-03150	1	38
	2	47
	34	20
	35	22
	40	28
	41	28
	50	34
	56	45
172215-03200	45	39
	46	39
	47	29
	48	20
172215-03220	109	18
172215-03230	113	54
172215-03240	10	46
	24	41
	127	46
172215-03310	43	34
	44	34
	45	40
	46	40
172215-03340	2	48
	15	6
	17	6
	18	7
	110	7
	111	7
	116	6
	117	6
	119	6
	123	34
	131	39
172215-03360	4	95
172215-03380	4	96
	32	19
	33	16
172215-03450	71	27
172215-03460	71	28
172215-03470	71	9
172215-03480	120	1
172215-03790	8	1
	9	1
	21	1
	126	2
172215-04030	8	2
	9	2
172215-04530	53	6
172215-06610	7	4
	53	28
	54	25

Parts No. Index

Parts No.	Fig. No.	Ref. No.
172215-06610	56	19
	64	12
	65	13
	128	7
172215-06620	1	17
	2	21
	5	35
	7	5
	16	1
	30	22
	31	23
	53	70
	55	11
	56	20
	114	3
	122	7
	125	3
	128	8
172215-06940	8	23
	9	23
172215-07170	1	18
	2	22
172215-07650	64	16
	65	17
172215-07710	1	26
	2	31
172215-08550	26	6
	29	6
172215-08690	1	27
	2	32
172215-08920	49	21
	50	16
	51	4
	52	4
172215-09280	8	25
	9	25
172215-11340	71	7
172215-11520	75	7
172215-11550	72	8
172216-00020	55	1
172216-00060	59	3
172216-00070	55	2
172216-00080	4	2
	6	1
	58	2
	129	2
172216-00130	34	2
	35	2
172216-00140	58	3
172216-00150	10	2

Parts No.	Fig. No.	Ref. No.
172216-00160	14	2
	53	2
	54	3
172216-00180	30	5
	31	6
172216-00190	132	4
	133	4
172216-00210	1	2
	2	2
172216-00220	10	4
172216-00240	72	1
172216-00270	19	2
	20	3
172216-00280	55	3
172216-00290	43	7
	44	7
	45	9
	46	9
	56	6
172216-00300	36	4
172216-00360	25	10
	28	1
172216-00380	36	6
	37	5
	38	3
	39	4
	128	5
172216-00390	122	4
172216-00400	36	7
	37	6
	38	4
	39	5
172216-00410	19	4
	20	5
172216-00440	20	9
172216-00460	47	7
	48	5
	49	8
	50	8
172216-00470	19	5
	20	6
172216-00490	4	7
172216-00520	8	7
	9	7
172216-00540	55	4
172216-00550	53	8
172216-00560	36	10
	37	10
	38	8
	38	8
	39	9

Parts No.	Fig. No.	Ref. No.
172216-00570	37	11
	38	9
	39	10
172216-00810	40	5
	41	6
172216-00900	14	4
	53	10
	54	7
	55	5
172216-01200	8	11
	9	11
172216-01210	8	12
	9	12
172216-01240	1	7
	2	7
172216-01250	1	39
	2	49
172216-01330	12	1
	13	1
172216-01360	108	2
172216-01450	84	11
172216-01470	30	12
	31	12
172216-01520	25	8
172216-01530	25	6
172216-01540	49	10
	50	9
172216-01550	49	11
	50	10
172216-01560	49	12
	50	11
172216-01590	43	10
	44	9
	45	11
	46	11
	55	6
	107	2
172216-01630	49	13
172216-01660	78	3
172216-01770	2	12
	49	14
	66	3
	124	4
172216-01810	22	4
172216-01820	49	15
172216-02040	36	12
	37	12
	38	10
	39	11
172216-02080	1	9

Parts No.	Fig. No.	Ref. No.
172216-02080	2	13
172216-02120	22	5
172216-02130	22	6
172216-02270	14	7
172216-02290	14	8
172216-02300	25	5
	28	4
172216-02350	58	5
172216-02440	58	8
172216-02460	58	9
172216-02490	15	1
	33	2
	118	2
	119	3
172216-02530	25	4
	28	7
172216-02580	27	1
172216-02670	5	18
172216-02690	26	3
	29	3
172216-02760	76	7
172216-02780	27	2
172216-02810	26	4
172216-02820	19	6
172216-03010	36	13
172216-03100	79	6
	81	7
172216-03210	71	2
		4
		16
		18
		20
172216-03250	78	6
172216-03290	54	8
172216-03350	17	2
	18	2
	110	5
	111	5
	116	3
	117	3
172216-03360	118	3
172216-03370	15	2
	119	4
172216-03440	32	3
172216-03520	53	14
	54	9
172216-03530	53	15
	54	10
172216-03540	132	6
	133	6

Parts No. Index

Parts No.	Fig. No.	Ref. No.
172216-03590	32	4
172216-03710	37	14
	38	12
	39	13
172216-03730	74	6
172216-03740	34	23
	35	25
172216-03850	42	5
172216-03860	15	3
	119	2
172216-03880	84	5
	85	7
	86	7
172216-03890	84	7
	85	8
	86	8
172216-03900	84	12
	85	19
	86	19
172216-03910	84	13
	85	20
	86	20
172216-03920	84	21
	85	18
	86	18
172216-04110	18	3
172216-04130	32	11
	121	4
172216-04230	122	5
172216-04240	5	26
172216-04250	122	6
172216-04340	123	10
	131	10
172216-04350	71	6
		14
172216-04470	49	18
172216-04490	53	16
	54	11
172216-04530	19	7
	49	19
172216-04590	54	12
172216-04600	54	13
172216-04700	30	16
	31	16
172216-04870	53	17
	54	15
172216-04930	53	18
	54	16
172216-05150	87	9
172216-05170	87	10

Parts No.	Fig. No.	Ref. No.
172216-05180	88	4
172216-05190	88	3
		10
	89	3
172216-05200	88	11
172216-05210	89	4
172216-05270	1	13
	2	17
172216-05350	23	9
	126	12
172216-05470	36	42
	37	42
	38	36
	39	40
172216-05720	37	15
	85	1
172216-05730	37	16
	85	2
172216-05820	1	14
	2	18
172216-05890	64	4
	65	4
172216-05900	64	5
	65	5
172216-05920	64	6
	65	6
172216-05970	65	7
172216-05990	64	7
	65	8
172216-06000	56	17
172216-06010	64	8
	65	9
172216-06070	42	8
172216-06090	64	9
	65	10
172216-06100	64	10
	65	11
172216-06110	84	3
	85	3
	86	3
172216-06120	84	24
	85	22
	86	22
172216-06130	85	4
	86	4
172216-06140	84	6
	85	5
	86	5
172216-06150	84	8
	85	6

Parts No.	Fig. No.	Ref. No.
172216-06150	86	6
172216-06160	85	9
	86	9
172216-06170	85	10
	86	10
172216-06180	85	11
172216-06190	84	16
	85	12
	86	12
172216-06200	85	13
172216-06210	84	18
	85	14
	86	14
172216-06220	84	22
	85	15
	86	15
172216-06230	84	20
	85	16
	86	16
172216-06240	84	19
	85	17
	86	17
172216-06250	85	21
	86	21
172216-06260	1	15
	2	19
172216-06280	24	9
	127	15
172216-06290	24	10
	127	16
172216-06370	64	11
	65	12
172216-06390	47	10
	48	6
172216-06540	55	7
172216-06570	25	3
172216-06750	5	14
	6	8
	129	9
172216-06760	43	15
	44	14
	45	16
	46	16
172216-06810	1	16
	2	20
172216-06970	55	10
172216-07120	54	24
172216-07150	56	18
172216-07500	100	5
	101	8

Parts No.	Fig. No.	Ref. No.
172216-07520	100	3
	101	3
172216-07710	57	2
	63	6
172216-07880	30	68
	31	28
172216-07890	4	44
172216-07920	64	14
	65	15
172216-07930	4	45
	103	8
172216-07950	4	46
172216-07990	55	13
172216-08140	19	8
	20	7
172216-08190	71	12
172216-08290	4	63
172216-08330	30	30
	31	33
172216-08350	30	31
172216-08390	36	25
	37	30
	38	24
	39	28
172216-08490	30	32
	31	34
172216-08590	30	33
	31	35
172216-08880	34	12
172216-08950	132	9
	133	9
172216-08970	132	10
	133	10
172216-08990	132	11
	133	11
172216-09010	64	15
	65	16
172216-09250	30	55
	31	62
172216-09260	7	14
	128	19
172216-09270	55	15
172216-09300	19	13
	20	13
172216-09330	55	17
172216-09340	47	26
	48	18
	132	16
	133	16
172216-09380	1	8

Parts No. Index

Parts No.	Fig. No.	Ref. No.
172216-09380	2	8
172216-09410	64	24
	65	24
172216-09440	43	33
	44	33
	45	38
	46	38
172216-09450	4	89
	123	27
	131	31
172216-09480	23	28
	126	34
172216-09490	40	27
	41	27
172216-09500	1	36
	2	43
172216-09570	49	45
172216-09580	30	59
	31	66
172216-09590	56	44
172216-09610	53	64
	64	26
	65	26
172216-09620	14	35
172216-09640	25	1
	28	9
172216-09650	36	39
	37	39
	38	33
	39	37
172216-09710	53	65
	54	53
172216-09730	58	31
172216-09770	30	61
	31	68
	61	22
172216-09810	3	8
	105	5
172216-09820	30	62
	31	69
172216-09830	30	63
	31	70
172216-09850	4	97
	34	22
	35	24
172216-09860	30	64
	31	71
172216-09970	71	5
		13
172216-09990	71	21

Parts No.	Fig. No.	Ref. No.
172216-10030	71	23
172216-10040	71	24
172216-10080	71	29
172216-10100	71	1
172216-10110	71	3
172216-10140	71	15
172216-10150	71	17
		19
172216-10180	71	11
172216-10430	55	14
172216-10750	43	30
	44	30
	45	35
	46	35
172216-10830	26	1
	29	1
172216-10840	26	2
	29	2
172216-10870	64	13
	65	14
	107	3
172216-10880	103	28
172216-10890	37	21
	38	18
	39	19
	42	9
172216-10940	24	17
	127	22
172216-10980	26	5
	29	5
172216-11000	26	7
	29	7
172216-11010	26	8
	29	8
172216-11020	26	9
	29	9
172216-11030	26	10
	29	10
172216-11040	26	11
	29	11
172216-11050	26	12
	29	12
172216-11060	26	13
	29	13
172216-11070	26	14
	29	14
172216-11080	17	3
	116	4
172216-11090	17	4
	117	4

Parts No.	Fig. No.	Ref. No.
172216-11150	30	67
	31	74
172216-11170	53	69
	54	55
172216-11190	36	40
	37	40
	38	34
	39	38
172216-11910	36	20
	82	1
	83	1
172216-11930	75	8
172216-11990	82	17
172216-12000	82	14
172216-12010	82	15
172216-12020	82	16
172216-12030	82	13
172216-12040	82	5
		18
172216-12050	82	20
172216-12060	82	12
172216-12070	82	11
172216-12080	83	10
172216-12090	83	9
172216-12100	83	11
172216-12110	82	4
	83	13
172216-12130	82	10
	83	12
172216-12140	83	3
172216-12150	83	7
172216-12160	83	6
172216-12170	83	4
172216-12180	83	8
172216-12190	82	6
	83	2
172216-12200	83	5
172216-12210	82	8
172216-12220	82	9
172216-12230	82	7
172216-12240	82	2
172216-12250	82	3
172216-12260	82	19
172216-12320	30	48
172216-12530	116	1
172216-12540	117	1
172216-12550	118	1
172216-12560	119	1
172216-12590	74	1
172216-12600	74	4

Parts No.	Fig. No.	Ref. No.
172216-12610	72	5
172216-12620	1	28
	2	33
172216-12630	1	29
	2	34
172216-12640	1	30
172216-12650	1	31
	2	35
172216-12660	1	32
	2	38
172216-12670	1	33
172216-12680	1	34
172216-12690	2	9
172216-12700	2	28
172216-12710	2	36
172216-12720	2	37
172216-12730	2	39
172216-12740	2	40
172216-12750	2	46
172216-12760	3	2
172216-12770	5	19
172216-12780	4	29
	6	13
	129	15
172216-12800	5	37
172216-12810	5	61
	103	26
172216-12820	4	74
172216-12830	4	75
172216-12840	4	76
172216-12850	5	77
172216-12860	4	78
	5	78
172216-12870	4	79
	5	79
172216-12880	4	80
	6	37
	129	42
172216-12890	4	81
	6	38
	129	43
172216-12900	4	82
	6	39
	129	44
172216-12910	4	83
172216-12920	4	84
	6	40
	129	45
172216-12930	4	85
172216-12940	4	86

Parts No. Index

Parts No.	Fig. No.	Ref. No.
172216-12950	6	41
	129	46
172216-12960	7	6
	23	10
	24	16
	126	13
	127	21
	128	9
172216-12970	7	7
	128	10
172216-12980	7	8
	128	11
172216-12990	7	9
	128	12
172216-13000	7	10
	128	13
172216-13010	7	11
	128	14
172216-13020	7	12
	128	15
172216-13030	7	13
	128	16
172216-13040	8	26
172216-13050	8	27
	9	27
172216-13060	8	28
	9	28
172216-13070	8	29
	9	29
172216-13080	8	30
	9	30
172216-13090	8	31
	9	31
172216-13100	9	21
172216-13110	9	26
172216-13120	10	7
172216-13130	10	9
172216-13140	10	10
172216-13150	10	29
172216-13160	10	30
172216-13170	10	31
172216-13180	10	33
172216-13190	10	34
172216-13200	10	35
172216-13210	10	36
172216-13220	10	37
172216-13230	10	38
172216-13240	10	49
172216-13250	11	7
172216-13260	11	8

Parts No.	Fig. No.	Ref. No.
172216-13270	11	9
	12	9
	13	9
172216-13280	11	12
	12	12
	13	12
172216-13290	12	8
	13	8
	130	7
172216-13300	15	4
172216-13310	19	9
172216-13320	19	11
172216-13330	20	1
172216-13340	20	8
172216-13350	20	11
172216-13360	21	5
172216-13370	21	6
172216-13380	21	7
	126	18
172216-13390	21	8
172216-13400	21	9
	126	20
172216-13410	21	10
	126	29
172216-13420	21	11
172216-13430	21	12
172216-13440	21	23
172216-13450	22	12
172216-13460	22	13
	127	29
172216-13470	23	11
	126	14
172216-13480	23	13
	24	21
	126	16
	127	26
172216-13490	23	14
	126	17
172216-13500	23	15
	126	19
172216-13510	23	16
	126	21
172216-13520	23	17
	126	22
172216-13530	23	18
	126	23
172216-13540	23	19
	126	24
172216-13550	23	20
	126	25

Parts No.	Fig. No.	Ref. No.
172216-13560	23	21
	126	26
172216-13570	23	22
	126	27
172216-13580	23	23
	126	28
172216-13590	23	24
	126	30
172216-13600	23	25
	126	31
172216-13610	23	26
	126	32
172216-13620	23	30
	126	36
172216-13630	23	33
	126	39
172216-13640	24	12
172216-13650	24	22
	127	27
172216-13660	24	23
172216-13670	24	24
172216-13680	24	25
172216-13690	24	26
	127	28
172216-13700	24	27
	127	30
172216-13710	24	28
	127	31
172216-13720	24	29
	127	32
172216-13730	24	30
	127	33
172216-13740	24	31
	127	34
172216-13750	24	32
	127	35
172216-13760	24	33
	127	36
172216-13770	24	38
	127	43
172216-13780	24	39
	127	44
172216-13790	25	2
	28	8
172216-13810	30	34
	31	36
172216-13820	30	35
172216-13830	30	36
	31	38
172216-13840	30	37

Parts No.	Fig. No.	Ref. No.
172216-13850	30	38
	31	39
172216-13860	30	39
	31	40
172216-13870	30	40
	31	41
172216-13880	30	41
	31	42
172216-13890	30	42
	31	43
172216-13900	30	43
	31	44
172216-13910	30	44
	31	45
172216-13920	30	45
	31	46
172216-13930	30	46
	31	47
172216-13950	30	49
	31	50
172216-13960	30	50
	31	51
172216-13970	30	51
	31	52
172216-13980	30	52
	31	53
172216-13990	30	53
	31	54
172216-14000	30	54
	31	55
172216-14010	30	57
	31	64
172216-14020	31	31
172216-14030	31	37
172216-14050	31	49
172216-14060	31	56
172216-14070	31	57
172216-14080	31	58
172216-14090	31	59
172216-14100	31	60
172216-14110	31	61
172216-14120	32	5
172216-14130	32	15
172216-14140	32	16
172216-14150	33	1
172216-14160	33	3
172216-14170	33	7
172216-14180	33	10
172216-14190	33	11
172216-14200	33	12

Parts No. Index

Parts No.	Fig. No.	Ref. No.
172216-14210	33	13
172216-14220	33	15
172216-14230	34	14
172216-14240	34	15
172216-14250	34	16
172216-14260	34	17
172216-14270	34	18
	35	19
172216-14280	35	6
172216-14290	35	14
	40	18
	41	17
172216-14300	35	15
172216-14310	35	16
172216-14320	35	17
172216-14330	35	18
172216-14340	35	20
172216-14350	36	14
172216-14360	36	21
	37	27
	38	21
	39	25
172216-14370	36	22
	37	28
	38	22
	39	26
172216-14380	36	23
172216-14390	36	24
	37	29
	38	23
	39	27
	87	1
172216-14400	36	26
172216-14410	36	27
172216-14420	36	28
172216-14430	36	29
	37	34
	38	28
	39	32
172216-14440	36	30
172216-14450	36	31
172216-14460	36	32
	37	36
	38	30
	39	34
172216-14470	36	33
172216-14480	36	34
172216-14490	36	35
172216-14500	36	36
172216-14510	37	31

Parts No.	Fig. No.	Ref. No.
172216-14510	38	25
	39	29
172216-14520	37	32
	38	26
	39	30
172216-14530	37	33
	38	27
	39	31
172216-14540	37	35
	38	29
	39	33
172216-14550	40	13
	45	12
	46	12
172216-14560	40	19
	41	18
172216-14570	40	20
	41	19
172216-14580	40	21
	41	20
172216-14590	40	22
	41	21
172216-14600	40	23
172216-14610	40	24
172216-14620	40	25
	41	24
172216-14630	40	26
	41	26
172216-14640	41	22
172216-14650	41	23
172216-14660	41	25
172216-14670	43	12
	44	11
172216-14680	43	16
	44	15
	45	19
	46	19
	96	1
172216-14690	43	17
	44	16
	45	20
	46	20
172216-14700	43	18
	44	17
	45	21
	46	21
172216-14710	43	19
	44	18
	45	22
	46	22

Parts No.	Fig. No.	Ref. No.
172216-14720	43	20
	44	19
	45	23
	46	23
172216-14730	43	21
	44	20
	45	24
	46	24
172216-14740	43	22
	44	21
	45	25
	46	25
172216-14750	43	23
	44	22
	45	26
	46	26
172216-14760	43	24
	44	23
	45	27
	46	27
172216-14770	43	25
	44	24
	100	1
172216-14780	43	26
	44	25
	45	29
	46	28
172216-14790	43	27
	44	27
	45	30
	46	30
172216-14800	43	28
	44	28
	45	33
	46	33
172216-14810	43	29
	44	29
	45	34
	46	34
172216-14820	43	31
	44	31
	45	36
	46	36
	64	22
	65	22
172216-14830	44	26
	91	1
172216-14840	45	18
	46	18
	101	1

Parts No.	Fig. No.	Ref. No.
172216-14850	45	28
	92	1
172216-14860	45	31
	46	31
172216-14870	45	32
	46	32
172216-14880	46	29
	93	1
172216-14890	47	13
172216-14900	47	14
	48	8
172216-14910	47	15
	48	9
172216-14920	47	16
172216-14930	47	17
172216-14940	47	18
172216-14950	47	19
172216-14960	47	20
	48	10
172216-14970	47	21
	48	11
172216-14980	47	22
	48	12
172216-14990	47	23
	48	13
172216-15000	47	24
	48	16
172216-15010	47	25
172216-15020	48	14
172216-15030	48	15
172216-15040	48	17
172216-15070	49	16
172216-15080	49	17
172216-15090	49	23
	80	1
172216-15100	49	24
172216-15110	49	25
172216-15120	49	26
172216-15130	49	27
	50	18
172216-15140	49	28
	78	1
172216-15150	49	29
172216-15160	49	30
172216-15170	49	31
172216-15180	49	32
172216-15190	49	33
172216-15200	49	34
	64	17
172216-15210	50	28

Parts No. Index

Parts No.	Fig. No.	Ref. No.
172216-15210	51	11
	52	11
	106	1
172216-15220	49	40
	50	29
172216-15230	50	14
172216-15240	50	19
172216-15250	50	20
172216-15260	50	21
	79	1
172216-15270	50	22
172216-15280	50	23
172216-15290	50	24
172216-15300	50	25
172216-15310	50	26
172216-15320	50	27
172216-15330	50	30
	81	1
172216-15340	50	31
172216-15350	51	6
172216-15360	51	7
172216-15370	51	8
172216-15380	51	9
172216-15390	51	10
	52	8
172216-15400	51	12
172216-15410	52	6
172216-15420	52	7
172216-15430	52	9
172216-15440	52	10
172216-15450	53	7
172216-15460	53	22
	54	19
172216-15470	53	27
172216-15480	53	46
	54	40
172216-15490	53	47
172216-15500	53	48
172216-15510	53	50
172216-15520	53	51
172216-15530	53	52
172216-15540	53	53
172216-15550	53	54
172216-15560	53	55
172216-15570	53	56
172216-15580	53	57
172216-15590	53	58
	54	46
172216-15600	53	59
	54	47

Parts No.	Fig. No.	Ref. No.
172216-15610	53	68
172216-15620	54	14
172216-15630	54	41
172216-15640	54	42
172216-15650	54	43
172216-15660	54	44
172216-15670	55	9
172216-15690	56	16
172216-15700	56	22
172216-15710	56	23
172216-15720	56	24
172216-15730	56	25
172216-15740	56	26
172216-15750	56	27
172216-15760	56	28
172216-15770	56	29
172216-15780	56	30
172216-15790	56	31
172216-15800	56	32
172216-15810	56	33
172216-15820	56	34
172216-15830	56	35
172216-15840	56	36
172216-15850	56	37
	61	14
	62	13
172216-15860	56	38
172216-15870	56	39
172216-15880	56	40
172216-15890	56	41
172216-15900	56	43
	61	20
	62	21
172216-15910	56	51
172216-15920	58	19
172216-15930	58	20
172216-15940	58	21
172216-15950	58	22
172216-15960	58	23
172216-15970	58	26
172216-15980	58	27
172216-15990	58	32
172216-16000	61	5
	62	5
172216-16010	61	6
	62	6
172216-16020	61	7
	62	7
172216-16030	61	8
	62	8

Parts No.	Fig. No.	Ref. No.
172216-16040	61	9
172216-16050	61	10
	62	9
172216-16060	61	11
	62	10
172216-16070	61	12
	62	11
172216-16080	61	13
	62	12
172216-16090	61	15
	62	14
172216-16100	61	16
	62	15
172216-16110	61	17
	62	16
172216-16120	61	18
	62	18
172216-16130	62	17
172216-16140	62	19
172216-16160	64	18
	65	18
172216-16170	64	19
172216-16180	64	20
172216-16190	64	27
	65	27
172216-16200	65	19
172216-16210	67	2
	69	2
172216-16220	67	3
	69	3
172216-16230	67	4
	69	4
172216-16240	68	1
172216-16250	68	2
172216-16260	68	3
172216-16270	68	4
172216-16280	67	12
	69	12
172216-16290	67	13
	69	13
172216-16300	67	9
	69	9
172216-16310	67	11
	69	11
172216-16320	67	5
	69	5
172216-16330	70	1
172216-16340	70	2
172216-16350	70	3
172216-16360	70	4

Parts No.	Fig. No.	Ref. No.
172216-16370	70	5
172216-16380	78	2
172216-16390	78	4
172216-16400	78	5
172216-16410	78	9
	79	9
172216-16420	78	11
	79	11
	80	11
	81	11
172216-16430	78	10
172216-16440	79	2
172216-16450	79	4
	80	4
172216-16460	79	5
172216-16470	79	10
	80	10
172216-16480	80	2
172216-16490	80	5
172216-16500	81	2
172216-16510	81	4
172216-16520	81	5
172216-16530	87	2
	88	1
172216-16540	87	3
	89	1
172216-16550	87	4
	87	5
172216-16560	87	6
172216-16570	87	7
172216-16580	87	8
172216-16590	87	11
172216-16600	87	12
172216-16610	88	2
172216-16620	88	6
	89	6
172216-16630	88	9
172216-16640	88	5
	89	5
172216-16650	88	7
	89	7
172216-16660	88	8
	89	8
172216-16670	89	2
172216-16680	89	9
172216-16690	95	1
172216-16700	95	2
172216-16710	95	3
172216-16720	95	4
172216-16730	100	2

Parts No. Index

Parts No.	Fig. No.	Ref. No.
172216-16740	100	4
	101	2
172216-16750	100	6
	101	9
172216-16760	100	7
172216-16770	100	8
	101	10
172216-16780	100	13
172216-16790	101	4
172216-16800	101	5
172216-16810	101	7
172216-16820	101	15
172216-16830	106	2
172216-16840	106	3
172216-16850	106	4
172216-16860	106	5
172216-16870	109	8
172216-16880	109	15
172216-16890	112	1
172216-16900	113	1
172216-16910	114	11
172216-16920	114	12
172216-16930	114	13
172216-16940	114	17
	125	21
172216-16950	115	11
		23
172216-16960	115	12
		24
172216-16970	121	1
172216-16980	121	9
172216-16990	122	1
172216-17000	122	9
172216-17010	124	1
172216-17020	125	1
172216-17030	125	18
172216-17040	125	19
172216-17050	125	20
172216-17060	125	22
172216-17070	126	1
172216-17080	127	1
172216-17100	128	1
172216-17110	128	17
172216-17120	128	18
172216-17130	129	1
172216-17140	131	1
172216-17150	131	21
172216-17160	131	22
172216-17170	131	23
172216-17180	131	24

Parts No.	Fig. No.	Ref. No.	
172216-17190	131	25	
172216-17200	131	27	
172216-17210	110	1	
172216-17220	111	1	
172216-17230	75	5	
172216-17240	75	6	
172216-17250	75	3	
172216-17260	75	4	
172216-17270	73	5	
172216-17280	73	6	
172216-17290	77	3	
172216-17300	77	5	
172216-17310	73	8	
172216-17320	72	9	
172216-17330	72	10	
172216-17340	72	11	
172216-17350	72	12	
172216-17360	74	5	
172216-17370	75	9	
172216-17380	10	50	
172216-17390	49	49	
		132	7
		133	7
172216-17400	67	8	
		69	8
172216-17410	67	10	
		69	10
172216-17420	132	12	
		133	12
172216-17430	132	13	
		133	13
172216-17440	132	14	
		133	15
172216-17450	132	15	
172216-17460	133	14	
172216-17470	31	75	
172216-17480	37	13	
		38	11
		39	12
172216-17490	56	5	
172216-17500	56	11	
172216-17510	26	15	
		29	15
172217-00030	25	7	
			9
		28	3
172217-00050	79	3	
172217-00070	40	6	
		41	7
172217-00130	28	2	

Parts No.	Fig. No.	Ref. No.
172217-00140	34	6
172217-00280	28	5
172217-00300	1	10
	2	14
172217-00310	110	3
172217-00320	111	3
172217-00330	20	10
172217-00420	8	17
	9	17
172217-00430	110	4
	111	4
172217-00510	84	15
172217-00520	84	10
172217-00840	34	7
	35	7
172217-00910	50	13
172217-01060	8	22
	9	22
	34	8
	35	8
172217-01170	4	28
	6	12
	129	13
172217-01250	47	9
172217-01280	121	6
172217-01340	42	6
172217-01350	42	7
172217-01370	30	17
	31	17
172217-01390	30	18
	31	18
172217-01430	53	19
	104	1
172217-01480	53	20
172217-01690	39	14
	86	1
172217-01700	39	15
	86	2
172217-01740	45	13
	46	13
172217-01850	37	17
	38	13
	39	16
172217-01890	36	15
	37	18
172217-02080	36	16
	37	19
	38	14
	39	17
	43	13

Parts No.	Fig. No.	Ref. No.
172217-02080	44	12
	45	14
	46	14
172217-02110	84	14
	86	11
172217-02120	84	17
	86	13
172217-02150	35	9
172217-02220	53	21
172217-02410	36	17
	37	20
	38	15
	39	18
	43	14
	44	13
	45	15
	46	15
172217-02420	28	6
172217-02470	75	10
172217-02500	38	16
	84	1
172217-02510	38	17
	84	2
172217-02590	53	23
172217-02620	55	8
172217-02630	53	24
172217-02710	84	4
172217-02720	84	9
172217-02730	84	23
172217-02750	54	17
172217-02760	54	18
172217-02770	54	20
172217-02800	54	21
172217-02870	33	5
172217-02880	121	7
172217-02890	121	8
172217-02940	96	3
172217-02960	96	4
172217-03200	34	9
172217-03340	35	10
172217-03390	55	12
172217-03440	132	8
	133	8
172217-03590	30	28
	31	32
172217-03670	18	4
172217-03690	18	5
172217-03800	35	12
172217-03870	96	2
172217-03880	37	24

Parts No. Index

Parts No.	Fig. No.	Ref. No.
172217-03880	39	22
172217-03890	37	25
	39	23
172217-04010	53	66
172217-04020	47	28
172217-04100	71	25
172217-04110	71	26
172217-04370	104	2
172217-04380	104	3
172217-04390	104	4
172217-04470	29	4
172217-05070	60	7
172217-05080	60	8
172217-05140	33	8
172217-05150	33	9
172218-00010	56	7
172218-00020	58	4
172218-00030	114	2
	123	6
	131	6
172218-00040	8	6
	9	6
	21	16
	22	29
172218-00050	43	8
	44	8
	53	11
172218-00070	22	3
172218-00080	3	1
		5
	105	2
172218-00090	8	15
	9	15
172218-00100	22	28
172218-00110	50	12
172218-00170	53	12
172218-00240	22	21
172218-00250	10	8
172218-00490	8	19
	9	19
172218-00500	8	20
	9	20
172218-00510	8	21
172218-00580	103	27
172218-00600	53	25
	54	22
172218-00610	53	26
	54	23
172218-00630	5	30
172218-00640	5	31

Parts No.	Fig. No.	Ref. No.
172218-00650	5	32
172218-00660	5	33
172218-00670	107	7
172218-00680	10	12
172218-00690	36	18
	38	19
	97	1
172218-00700	37	22
	39	20
	98	1
172218-00770	103	1
172218-00790	53	29
172218-00820	10	14
172218-00850	53	30
172218-00880	54	26
172218-00890	1	19
	2	23
	56	21
172218-00950	54	27
172218-01010	60	2
172218-01020	58	12
172218-01050	53	31
	54	28
172218-01060	54	29
172218-01080	10	15
172218-01100	53	32
	54	30
172218-01110	5	40
	6	15
	129	17
172218-01120	5	41
	6	16
	129	18
172218-01130	59	1
172218-01140	1	20
	2	24
172218-01150	1	21
	2	25
172218-01190	40	14
172218-01200	11	1
	12	2
	13	2
	130	1
172218-01220	115	2
172218-01230	115	14
172218-01260	10	16
	11	2
	12	3
	13	3
	130	2

Parts No.	Fig. No.	Ref. No.
172218-01280	10	17
172218-01310	10	18
172218-01340	1	22
	2	26
172218-01350	54	31
172218-01410	5	43
	6	17
	129	19
172218-01450	60	3
172218-01460	53	33
172218-01480	10	20
172218-01490	30	26
	31	29
172218-01500	12	4
	13	4
	130	3
172218-01530	8	24
	9	24
172218-01540	24	11
	127	17
172218-01550	24	13
	127	18
172218-01600	10	21
172218-01690	14	12
172218-01710	14	13
172218-01730	53	34
	54	32
172218-01740	10	22
172218-01770	109	4
172218-01780	109	9
172218-01790	14	14
172218-01800	58	13
172218-01820	58	14
172218-01830	11	3
172218-01880	109	10
172218-01910	77	4
172218-01940	76	4
172218-01960	14	15
172218-01980	58	15
172218-01990	114	4
172218-02000	63	2
172218-02010	122	8
172218-02020	10	23
172218-02030	10	24
172218-02040	10	25
172218-02050	10	26
172218-02060	107	4
172218-02080	125	6
172218-02090	109	5
172218-02100	109	6

Parts No.	Fig. No.	Ref. No.
172218-02120	60	4
172218-02150	76	5
172218-02170	5	47
	6	18
	129	20
172218-02180	103	9
172218-02190	103	10
172218-02200	103	11
172218-02210	12	5
	13	5
	130	4
172218-02230	53	35
172218-02240	53	36
	54	33
172218-02270	36	19
	37	23
	38	20
	39	21
172218-02290	16	2
172218-02300	53	37
	54	34
172218-02330	5	48
	6	19
	129	21
172218-02340	5	49
	6	20
	129	22
172218-02350	60	5
172218-02360	34	10
	35	11
172218-02400	76	6
172218-02420	58	16
172218-02440	53	38
	54	35
172218-02460	54	36
172218-02470	53	39
172218-02480	16	3
172218-02490	53	40
172218-02500	53	41
172218-02510	53	42
172218-02520	53	43
172218-02530	53	44
	54	37
172218-02540	1	23
	2	27
	54	38
172218-02550	54	39
172218-02640	58	18
172218-02690	11	4
172218-02700	115	5

Parts No. Index

Parts No.	Fig. No.	Ref. No.
172218-02700	115	17
172218-02710	115	6
		18
172218-02720	115	7
		19
172218-02730	115	20
172218-02740	115	21
172218-02750	115	8
172218-02760	115	9
172218-02780	108	3
172218-02790	115	22
172218-02800	115	10
172218-02810	5	50
	6	21
	129	23
172218-02820	5	52
	6	23
	129	25
172218-02830	103	12
172218-02880	5	53
	6	24
	129	26
172218-02890	5	54
	6	25
	129	27
172218-02900	114	5
	123	11
	131	12
172218-02910	125	8
172218-02920	103	13
172218-02930	103	14
172218-02970	5	55
	6	26
	129	28
172218-02980	113	3
172218-02990	113	4
172218-03000	113	5
	123	12
	131	13
172218-03010	113	6
	123	13
	131	14
172218-03020	113	7
	123	14
	131	15
172218-03030	123	15
	131	16
172218-03040	113	8
172218-03050	113	9
172218-03060	113	10

Parts No.	Fig. No.	Ref. No.
172218-03070	113	11
172218-03080	113	12
	123	16
	131	17
172218-03090	113	13
172218-03100	113	14
172218-03110	113	15
172218-03120	113	16
172218-03130	113	18
172218-03150	113	19
172218-03160	113	20
172218-03170	113	21
172218-03180	113	22
172218-03190	113	23
172218-03200	113	24
172218-03210	113	25
172218-03250	113	26
172218-03260	5	56
172218-03270	113	27
172218-03280	113	28
172218-03300	114	6
172218-03310	113	29
172218-03320	113	30
172218-03330	113	31
172218-03340	113	32
172218-03350	113	33
172218-03360	113	34
172218-03370	113	35
172218-03380	113	36
172218-03390	113	37
172218-03400	113	38
172218-03430	103	2
	129	29
172218-03450	5	57
	6	28
	129	31
172218-03460	5	58
	6	29
	129	32
172218-03480	5	59
	6	30
	129	33
172218-03490	113	39
172218-03500	113	40
172218-03510	113	41
172218-03520	113	42
172218-03530	114	14
172218-03540	114	15
172218-03550	114	16
172218-03560	103	29

Parts No.	Fig. No.	Ref. No.
172218-03570	103	30
172218-03600	109	7
172218-03640	40	15
	41	14
172218-03650	14	16
172218-03660	81	3
172218-03670	81	10
172218-03710	14	17
172218-03720	14	18
172218-03770	97	2
	98	2
172218-03780	97	3
	98	3
	99	3
172218-03790	97	4
	98	4
172218-03800	97	5
	98	5
	99	4
172218-03810	14	19
172218-03860	107	5
172218-03870	107	6
172218-03880	103	15
172218-03890	103	16
172218-03900	103	17
172218-03910	14	20
172218-03920	14	21
172218-03930	24	14
	127	19
172218-03940	24	15
	127	20
172218-03950	5	62
	6	31
	129	34
172218-03960	10	28
172218-03970	114	7
	125	10
172218-04020	125	15
172218-04050	66	5
	124	6
172218-04140	113	43
172218-04150	113	44
172218-04160	113	45
172218-04170	14	22
172218-04180	5	64
	6	32
	129	35
172218-04190	5	65
	6	33
	129	36

Parts No.	Fig. No.	Ref. No.
172218-04200	5	66
	6	34
	129	37
172218-04210	14	23
172218-04220	14	24
172218-04260	16	4
172218-04270	16	5
172218-04280	16	6
172218-04290	16	7
172218-04300	16	8
172218-04310	16	9
172218-04320	16	10
172218-04330	16	11
172218-04340	16	12
172218-04350	16	13
172218-04360	16	14
172218-04370	12	6
	13	6
	130	5
172218-04380	113	46
172218-04390	113	47
172218-04400	113	48
172218-04410	113	49
172218-04420	113	50
172218-04430	113	51
172218-04440	113	52
172218-04450	113	53
172218-04470	3	6
	105	3
172218-04480	11	5
172218-04490	4	67
	6	35
	129	38
172218-04500	1	24
	2	29
172218-04530	50	15
172218-04640	114	8
	123	17
	131	18
172218-04650	114	9
172218-04660	12	7
	13	7
	130	6
172218-04670	5	68
172218-04690	103	18
172218-04700	103	19
172218-04710	5	69
172218-04720	5	70
172218-04730	5	71
172218-04740	129	39

Parts No. Index

Parts No.	Fig. No.	Ref. No.
172218-04770	34	11
172218-04780	45	17
	47	11
	48	7
	49	20
172218-04820	11	6
172218-04860	5	72
172218-04870	37	26
	39	24
172218-04880	1	25
	2	30
172218-04890	123	18
172218-04950	24	34
	127	39
172218-04960	21	15
	22	17
	49	43
	50	32
	51	13
	52	12
172218-04980	114	18
	123	25
	131	29
172218-05000	5	90
172218-05010	103	23
172218-05020	2	44
172218-05040	10	41
172218-05050	54	51
172218-05060	103	24
172218-05080	107	9
172218-05090	10	44
	123	29
	131	34
172218-05120	123	30
	131	35
172218-05140	34	21
	35	23
172218-05150	56	46
172218-05160	11	11
	12	11
	13	11
	130	9
172218-05170	3	4
		7
	105	4
172218-05180	10	45
	123	31
	131	36
172218-05200	123	32
	131	37

Parts No.	Fig. No.	Ref. No.
172218-05210	23	32
	24	42
	126	38
	127	47
172218-05220	113	56
	123	35
	131	40
172218-05250	123	37
	131	42
172218-05300	115	1
172218-05310	108	1
172218-05320	109	1
172218-05330	107	1
172218-05610	114	10
172218-05640	24	18
	127	23
172218-05650	24	19
	127	24
172218-05660	123	19
	131	19
172218-05680	123	20
172218-05720	123	21
	131	20
172218-05730	123	22
172218-05750	10	32
172218-05760	4	73
	5	73
	6	36
	129	40
172218-05770	6	27
	129	41
172218-05810	67	1
	69	1
172218-05820	23	12
	24	20
	49	22
	50	17
	51	5
	52	5
	126	15
	127	25
172218-05870	108	5
172218-05880	123	23
	131	26
172218-05890	105	1
172218-05910	123	1
172218-05930	66	1
	124	2
172218-05970	14	11
172218-05980	125	29

Parts No.	Fig. No.	Ref. No.
172218-06230	78	8
	79	8
	80	9
	81	9
172218-06250	58	24
172218-06260	58	25
172218-06270	77	1
172218-06320	72	7
172218-06330	73	7
172218-06350	99	2
172218-06360	53	49
	54	45
	99	1
172218-06480	58	28
172218-06490	81	8
172218-06520	40	16
	41	15
172218-06550	114	20
172551-00010	5	34
	6	14
	129	16
172551-00040	30	1
	36	1
	37	1
	38	1
	39	1
	42	1
	49	1
	50	1
	51	1
	52	1
172551-00060	23	1
	36	2
	37	2
	38	2
	39	2
	45	2
	46	2
	126	3
172551-00070	7	1
	23	2
	24	1
	37	3
	39	3
	43	2
	44	2
	45	3
	46	3
	49	2
	50	2

Parts No.	Fig. No.	Ref. No.
172551-00070	51	2
	52	2
	53	1
	54	1
	126	4
	127	2
	128	2
172551-00080	34	1
	35	1
	41	1
	43	3
	44	3
	45	4
	46	4
172551-00090	30	2
	31	1
	56	1
172551-00120	4	1
	49	47
	54	2
	56	2
	58	1
	61	2
	62	2
	64	1
	65	1
	112	4
	114	1
	122	2
	123	2
	125	2
	131	2
	132	1
	133	1
172551-00130	10	1
172551-00140	30	3
	31	2
	34	3
	35	3
172551-00150	7	2
	45	5
	46	5
	47	1
	48	1
	56	3
	128	3
	132	2
	133	2
172551-00180	8	3
	9	3

Parts No. Index

Parts No.	Fig. No.	Ref. No.	
172551-00180	14	1	
	19	1	
	20	2	
	21	2	
	22	1	
	49	3	
	50	3	
	127	3	
	172551-00200	22	2
	172551-00220	23	3
	24	2	
	36	3	
	43	4	
	44	4	
	45	6	
	46	6	
	53	3	
	54	4	
	126	5	
	127	4	
	132	3	
	133	3	
172551-00230	4	3	
	8	4	
	9	4	
	30	4	
	31	5	
	121	2	
	172551-00240	32	1
	172551-00250	10	3
		14	3
		30	6
	31	7	
	56	4	
	61	3	
	62	3	
	64	2	
	65	2	
	109	2	
	123	3	
	131	3	
172551-00280	4	4	
	123	4	
	131	4	
172551-00290	1	1	
	2	1	
172551-00320	30	7	
	31	8	
	43	5	
	44	5	

Parts No.	Fig. No.	Ref. No.	
172551-00320	45	7	
	46	7	
	47	3	
172551-00330	40	1	
	41	2	
	43	6	
	44	6	
	45	8	
	46	8	
	172551-00340	24	3
		36	41
		37	41
		38	35
	39	39	
	53	4	
	127	5	
172551-00370	54	5	
	60	1	
172551-00380	40	17	
	41	16	
172551-00390	78	7	
172551-00420	40	2	
	41	3	
	49	4	
	50	4	
	51	3	
	52	3	
	123	5	
	131	5	
172551-00440	30	8	
	31	9	
	34	5	
	35	5	
	31	10	
172551-00460	36	5	
172551-00490	37	4	
	40	3	
	41	4	
172551-00500	45	10	
	46	10	
	47	4	
	48	2	
172551-00510	4	6	
	7	3	
	23	4	
	24	4	
	30	9	
	46	17	
	47	5	
	48	3	

Parts No.	Fig. No.	Ref. No.
172551-00510	49	5
	50	5
	126	6
	127	6
	128	4
172551-00520	19	3
	20	4
172551-00530	94	4
172551-00540	94	5
172551-00550	94	7
172551-00560	94	6
172551-00570	94	8
172551-00580	8	5
	9	5
172551-00610	1	3
	2	3
	53	5
	54	6
172551-00620	109	3
172551-00630	32	2
	49	7
	50	7
	121	3
172551-00660	94	10
172551-00670	94	9
172551-00680	94	11
172551-00700	37	8
	38	6
	39	7
172551-00710	94	14
172551-00720	2	10
	30	10
	56	9
	56	10
172551-00740	40	4
172551-00750	41	5
172551-00760	4	8
	5	8
	6	2
	129	3
172551-00780	49	9
172551-00810	101	6
172551-00820	100	10
	101	12
172551-00840	4	9
	6	3
	129	4
172551-00910	112	2
172551-00920	112	3
172551-00960	53	9

Parts No.	Fig. No.	Ref. No.
172551-01000	40	7
	41	8
172551-01010	94	15
172551-01020	94	12
172551-01030	80	6
	81	6
172551-01040	1	5
	2	5
	40	8
	41	9
172551-01060	4	10
	5	10
	6	4
	8	9
	9	9
	14	5
	30	11
	31	11
	42	2
	47	8
	103	3
	123	8
	129	5
	131	8
172551-01070	8	10
	9	10
172551-01090	40	9
	41	10
172551-01100	43	9
	90	1
172551-01110	10	5
	76	1
172551-01130	90	4
172551-01140	90	2
172551-01150	90	3
172551-01160	90	5
172551-01170	90	6
172551-01190	40	10
	41	11
172551-01240	30	13
	31	13
172551-01270	30	14
	31	14
172551-01280	4	12
	6	6
	129	7
172551-01310	30	15
	31	15
172551-01320	21	17
	22	27

Parts No. Index

Parts No.	Fig. No.	Ref. No.
172551-01330	21	18
	22	26
172551-01340	21	19
	22	25
172551-01350	21	3
	22	7
	126	7
	127	7
172551-01360	22	8
	127	8
172551-01370	22	9
	127	9
172551-01390	21	20
	22	24
172551-01400	21	21
	22	23
172551-01410	21	4
	22	10
	126	8
	127	10
172551-01420	22	11
	127	11
172551-01430	123	9
	131	9
172551-01460	58	6
172551-01470	58	7
172551-01490	73	1
172551-01500	73	2
172551-01510	72	3
172551-01520	75	1
172551-01530	73	3
172551-01550	73	4
	74	2
172551-01560	72	4
	74	3
172551-01570	66	4
	124	5
172551-01590	4	13
	6	7
	8	16
	9	16
	56	14
	57	1
	63	1
		5
	103	4
	129	8
172551-01670	103	5
172551-01680	4	15
	5	15

Parts No.	Fig. No.	Ref. No.
172551-01690	4	16
172551-01710	4	17
172551-01720	21	22
	22	22
172551-01730	4	20
	5	20
172551-01740	4	21
	5	21
172551-01750	4	22
	5	22
172551-01770	23	5
	24	5
	75	13
	126	9
	127	12
172551-01780	23	6
	24	6
	75	11
	126	10
	127	13
172551-01790	23	7
	24	7
	75	12
	126	11
	127	14
172551-01810	40	12
	41	13
172551-01830	4	23
172551-01840	76	3
172551-01980	56	15
172551-02000	32	20
172551-02020	72	14
172551-02040	72	13
	76	8
172551-02050	32	7
172551-02060	32	8
172551-02070	75	2
172551-02080	23	8
	24	8
	128	6
172551-02090	42	3
	102	1
172551-02100	102	2
172551-02110	102	4
172551-02120	102	3
172551-02130	42	4
172551-02140	109	11
172551-02150	109	12
	120	2
172551-02170	33	4

Parts No.	Fig. No.	Ref. No.
172551-02190	1	11
	2	15
172551-02250	32	6
172551-02260	103	6
172551-02270	4	24
	6	9
	129	10
172551-02300	4	25
	6	10
	129	11
172551-02340	32	9
172551-02350	32	10
172551-02380	4	27
	6	11
	129	12
172551-02430	10	11
	114	19
	123	38
	129	14
	131	11
172551-02440	109	13
	120	3
172551-02450	32	13
172551-02480	14	10
172551-02510	30	19
	31	19
172551-02540	30	20
	31	20
172551-02550	30	21
	31	21
172551-02580	103	7
172551-02600	31	22
172551-02780	31	24
172551-02820	125	4
172551-02830	100	11
	101	11
172551-02840	100	9
	101	13
172551-02870	10	13
172551-02880	4	38
172551-02890	4	39
172551-02910	4	42
172551-02920	30	23
	31	25
172551-02940	10	19
172551-02950	30	24
	31	26
172551-02960	30	25
	31	27
172551-02970	125	5

Parts No.	Fig. No.	Ref. No.
172551-02980	30	27
	31	30
172551-03010	77	2
172551-03040	60	6
172551-03050	58	17
172551-03060	115	3
		15
172551-03070	115	4
		16
172551-03080	125	7
172551-03090	5	51
	6	22
	129	24
172551-03100	113	17
	125	9
172551-03110	129	30
172551-03120	4	60
	30	29
172551-03140	10	27
172551-03150	125	11
172551-03160	125	12
172551-03180	125	13
172551-03190	125	14
172551-03210	125	16
172551-04060	59	2
172551-04200	47	12
	94	1
172551-04210	109	14
172551-04310	32	14
	33	6
172551-04680	34	13
	35	13
172551-04790	63	3
172551-04980	19	10
172551-06760	94	13
172551-06780	103	20
172551-06900	80	7
172551-07010	91	3
	92	2
	93	2
172551-07020	92	3
	93	3
172551-07030	94	2
172551-07040	94	3
172551-07980	100	12
	101	14
172551-08760	125	17
172551-09410	19	12
	20	12
	21	13

Parts No. Index

Parts No.	Fig. No.	Ref. No.
172551-09410	22	14
	49	41
172551-09440	64	21
	65	20
172551-09450	4	87
	10	39
	61	19
	62	20
172551-09460	55	16
	56	52
172551-09470	8	32
	9	32
	14	25
172551-09510	22	15
	30	56
	31	63
	56	42
	65	21
172551-09530	14	27
172551-09550	49	42
172551-09560	2	41
172551-09580	14	29
	22	16
	127	38
172551-09600	67	7
	69	7
	123	24
	131	28
172551-09610	8	34
	9	34
	14	30
	103	21
		22
	108	4
172551-09630	4	88
172551-09640	55	18
172551-09650	21	24
172551-09660	109	16
172551-09710	107	8
172551-09750	8	35
	9	35
172551-09760	7	16
	47	27
	48	19
	128	21
172551-09780	20	14
	50	33
172551-09790	30	58
	31	65
172551-09810	32	17

Parts No.	Fig. No.	Ref. No.
172551-09810	55	19
172551-09830	10	40
172551-09850	14	32
172551-09870	8	36
	9	36
172551-09880	123	26
	131	30
172551-09890	14	33
	24	36
	127	41
	131	32
172551-09910	24	37
	127	42
172551-09940	14	34
172551-10010	5	92
	6	43
	8	38
	9	38
	10	43
	11	10
	12	10
	13	10
	53	63
	54	52
	58	30
	115	13
		25
	123	28
	129	48
	130	8
	131	33
172551-10040	55	20
172551-10060	4	93
	30	60
	31	67
172551-10100	22	20
172551-10130	61	21
	62	22
172551-10160	42	10
172551-10170	109	17
172551-10220	125	23
172551-10230	125	24
172551-10290	23	31
	24	40
	126	37
	127	45
172551-10300	8	39
	9	39
	56	47
172551-10320	8	40

Parts No.	Fig. No.	Ref. No.
172551-10320	9	40
	56	48
172551-10330	55	21
172551-10360	56	49
	61	23
	62	23
	109	19
172551-10370	8	41
	9	41
	47	30
	48	21
	49	46
	50	35
	51	14
	52	13
	53	67
	54	54
	56	50
	113	55
	123	33
	131	38
172551-10380	10	47
172551-10390	8	42
	9	42
	14	36
172551-10400	4	94
	14	37
172551-10410	10	48
172551-10420	61	24
	62	24
172551-10430	123	36
	131	41
172551-10440	32	18
	33	14
	61	25
	62	25
172551-10470	125	25
172551-10520	30	65
	31	72
172551-10530	30	66
	31	73
172551-10550	21	25
	22	19
172551-10590	103	31
172551-10610	125	26
172551-10620	125	27
172551-10630	125	28
172551-10640	125	30
172551-10650	125	31
172551-10660	125	32

Parts No.	Fig. No.	Ref. No.
172551-11400	53	45
172551-11460	72	6
172552-00020	79	7
	80	8
172552-00120	121	5
172552-00670	80	3
172552-00730	91	2