

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

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DUAL JOYSTICK CONTROLS
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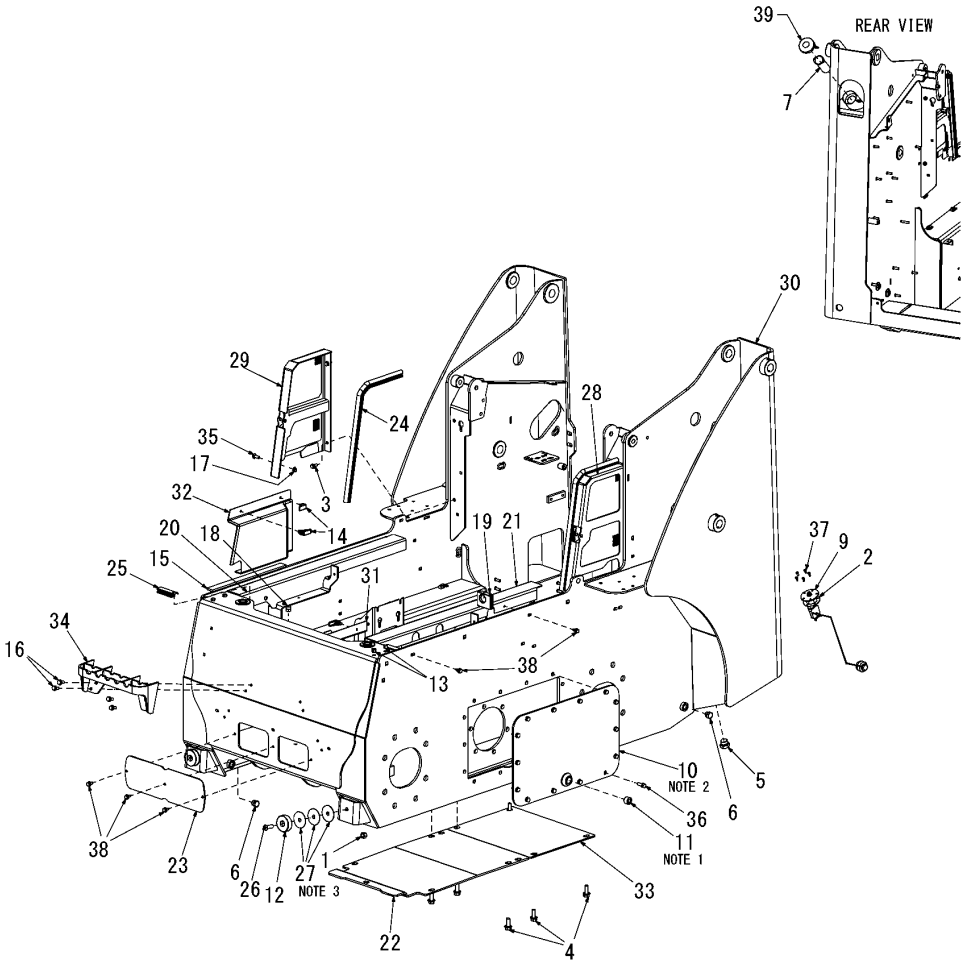
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Fig.1. CHASSIS(S190R

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

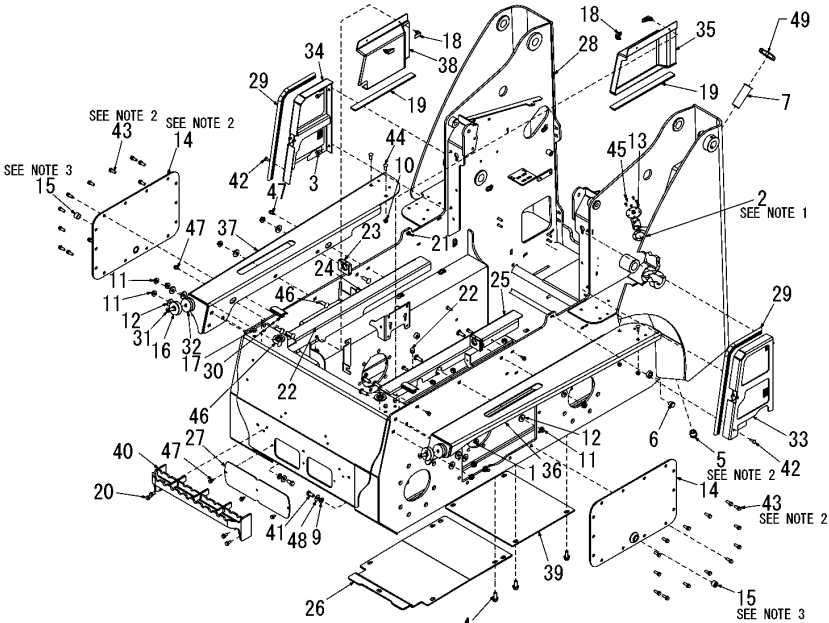
(D)=
(E)=
(F)=



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00290	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.

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

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

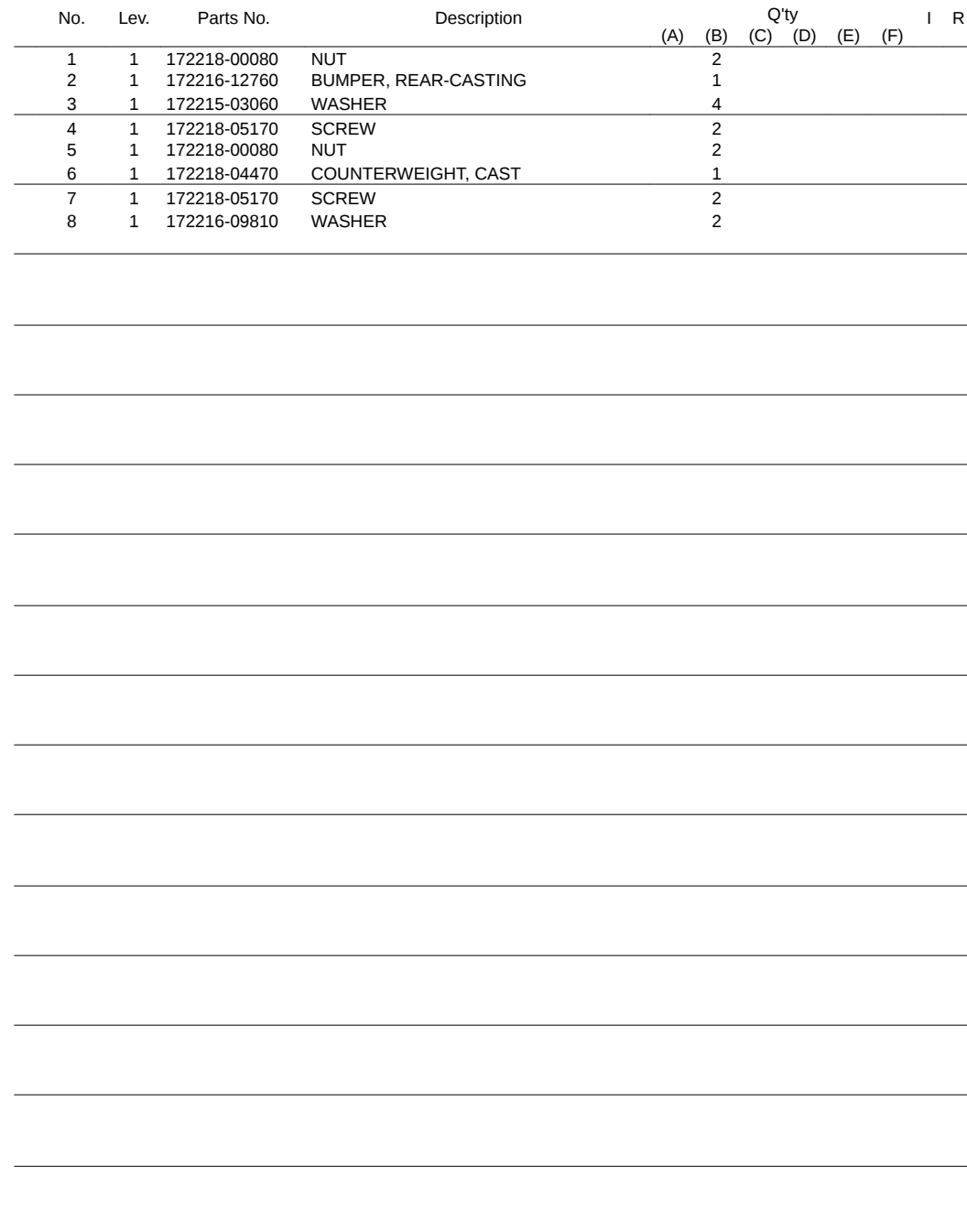
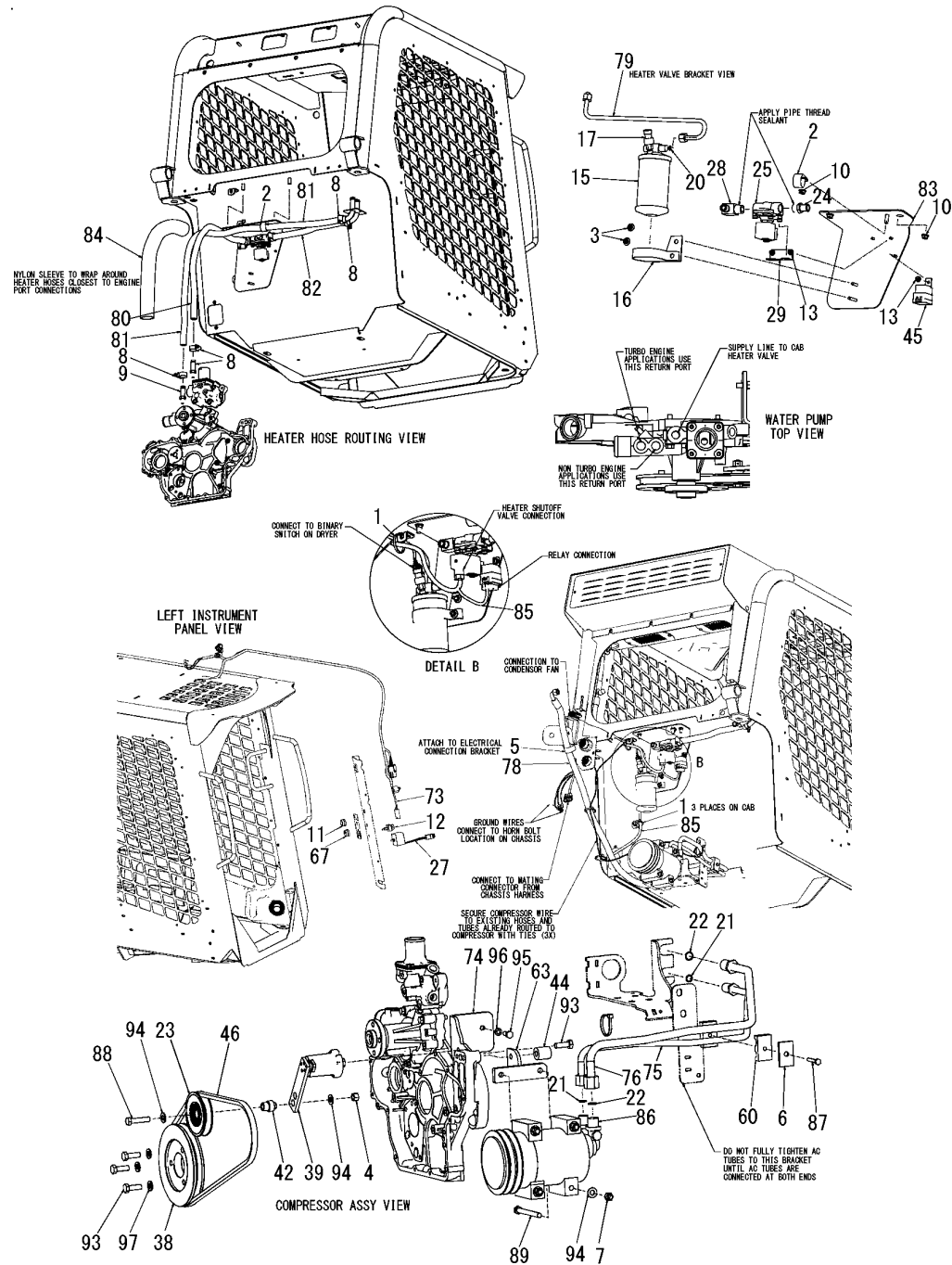
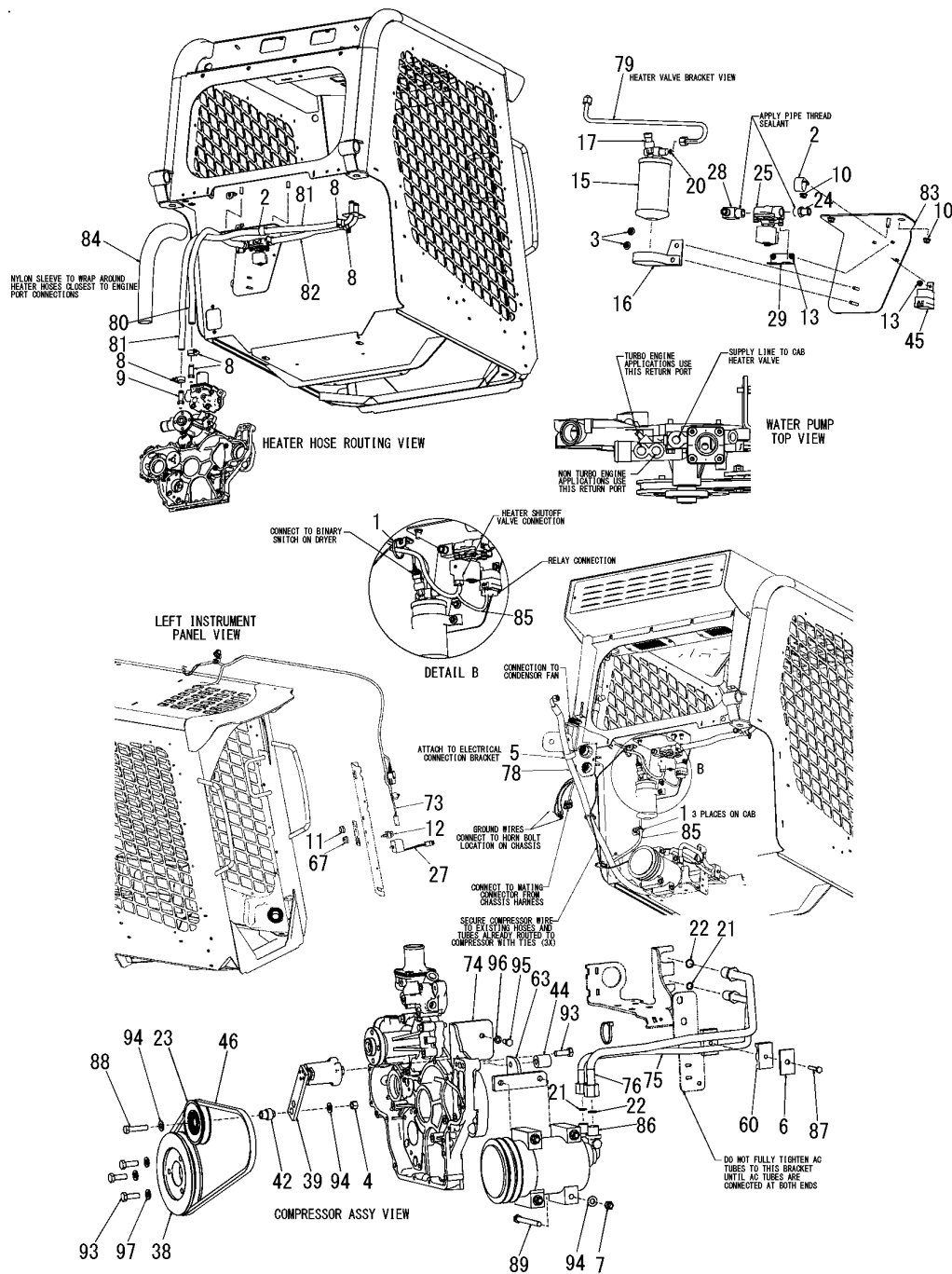


Fig.4. CHASSIS(HVAC



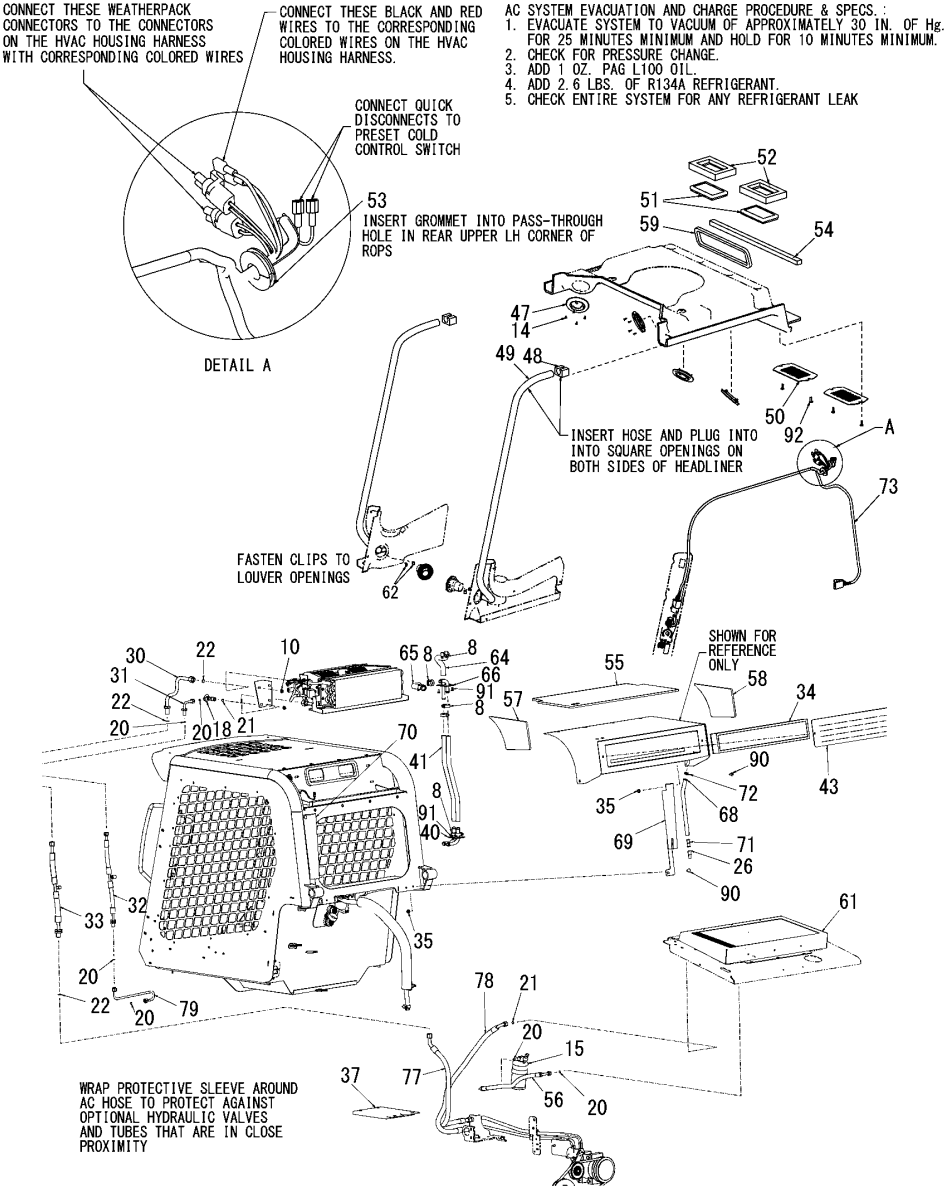
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00120	TIE, CABLE	6	6						
2	1	172216-00080	CLAMP	1	1						
3	1	172551-00230	NUT	2	2						
4	1	172551-00280	NUT	1	1						
5	1	172215-00320	CLAMP	1	1						
6	1	172551-00510	PLATE	1	1						
7	1	172216-00490	NUT	4	4						
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	HARNESS, 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	HARNESS, 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



No.	Lev.	Parts No.	Description	(A)=S190R-1	(B)=S220R-1	(C)=	(D)=	(E)=	(F)=	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							

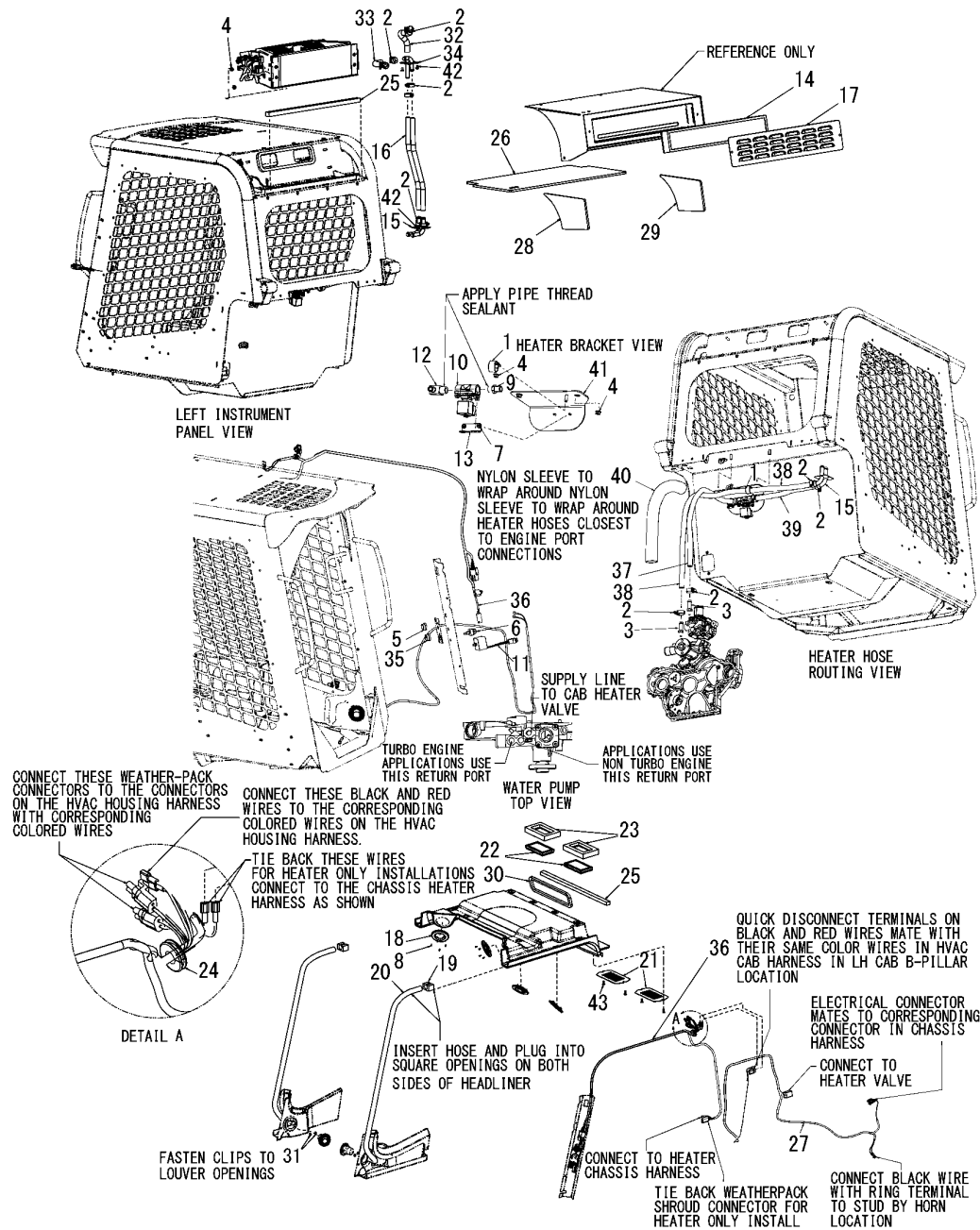
Fig.5. CHASSIS(HVAC



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

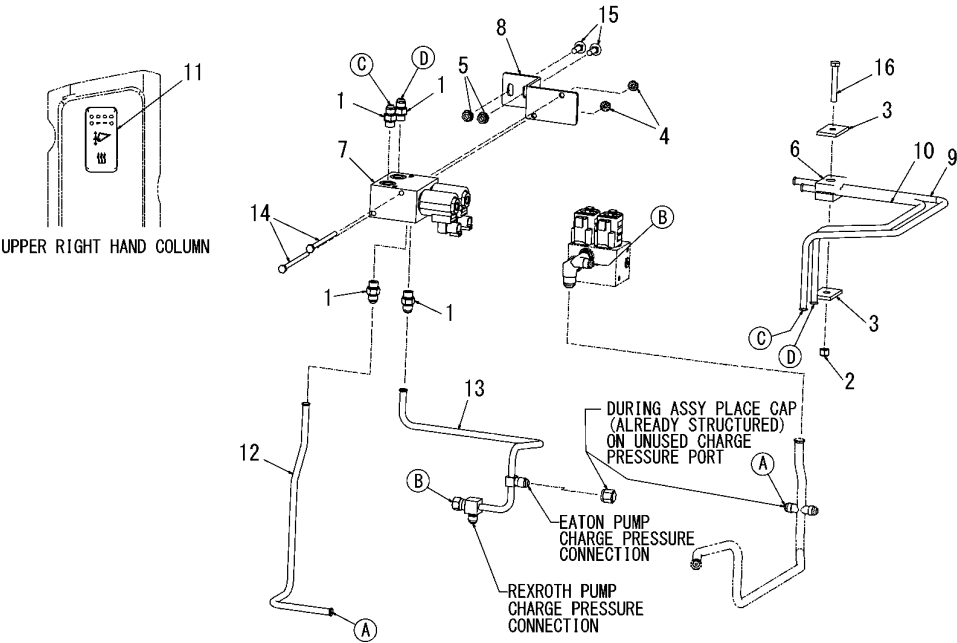
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
8	1	172551-00760	CLAMP	14	14						
10	1	172551-01060	NUT	7	7						
14	1	172216-06750	SCREW	16	16						
15	1	172551-01680	RECEIVER DRIER	1	1						
18	1	172216-02670	VALVE, EXPANSION, AC	1	1						
19	1	172216-12770	O-RING KIT	1	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	CONSENSER 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	HARNESS, 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						

Fig.6. CHASSIS(HEATER-ONLY



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						

Fig.7. CHASSIS(HYDRAULIC QUICK COUPLER



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

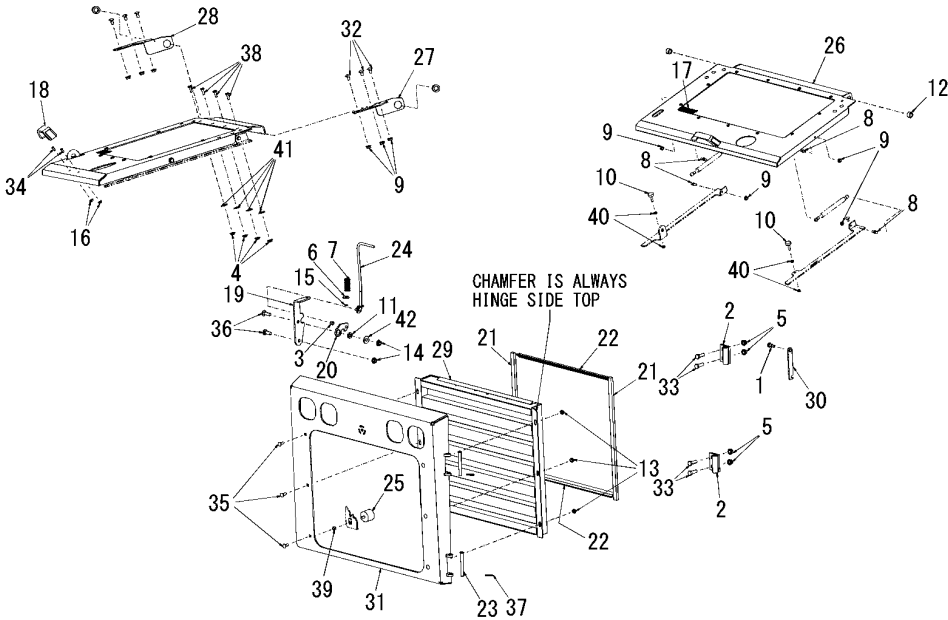
(D)=
(E)=
(F)=

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)=

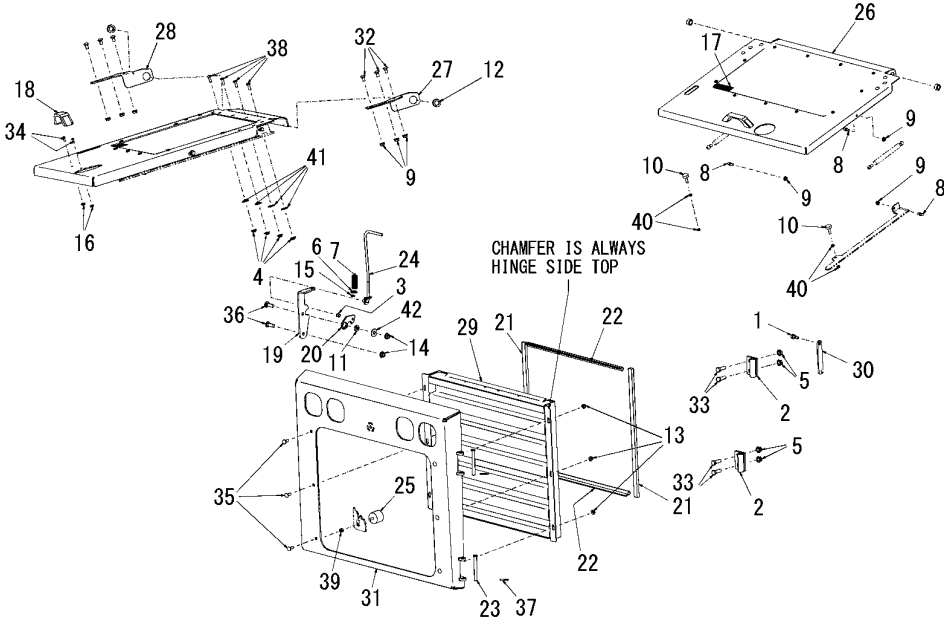


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172215-03790	BOLT	1							
2	1	172215-04030	HINGE, REAR DOOR	2							
3	1	172551-00180	NUT	1							
4	1	172551-00230	NUT	11							
5	1	172551-00580	NUT	4							
6	1	172218-00040	WASHER	1							
7	1	172216-00520	SPRING, COMPRESSION	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	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)=

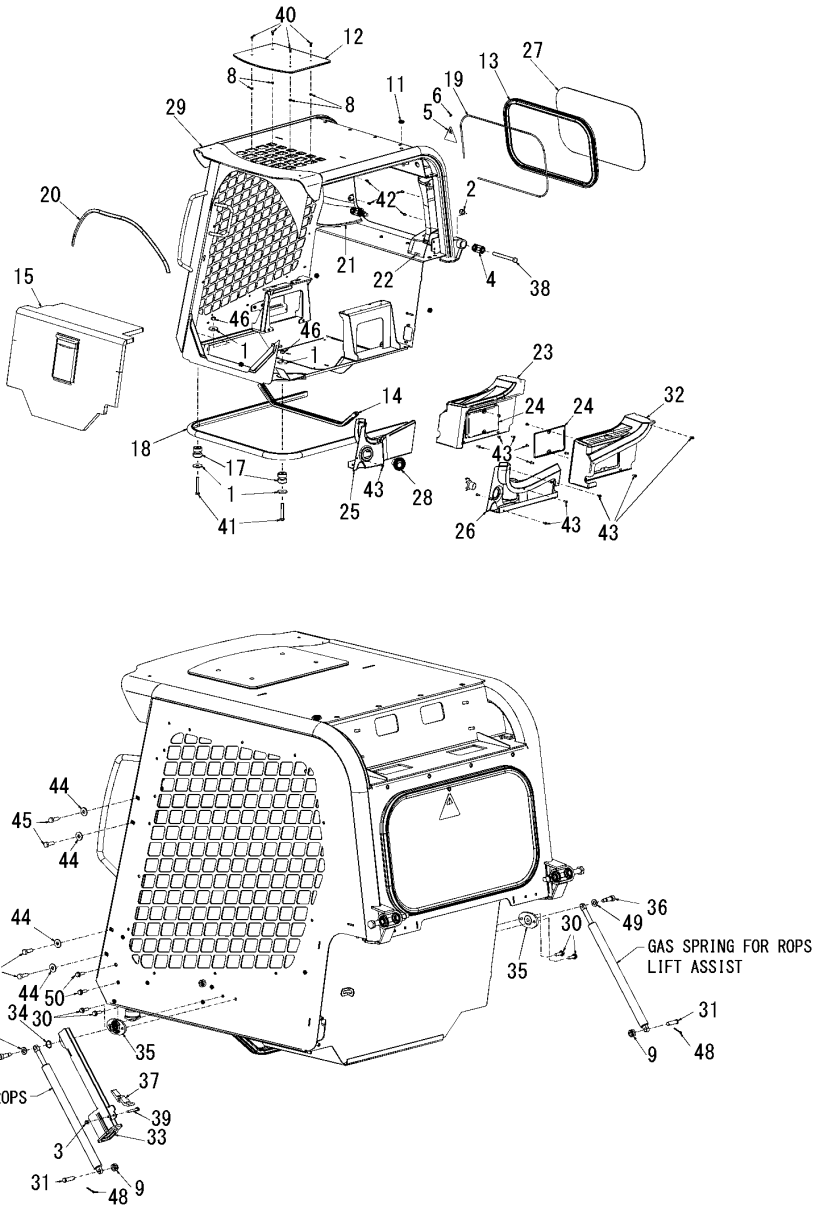


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172215-03790	BOLT		1						
2	1	172215-04030	HINGE, REAR DOOR		2						
3	1	172551-00180	NUT		1						
4	1	172551-00230	NUT		11						
5	1	172551-00580	NUT		4						
6	1	172218-00040	WASHER		1						
7	1	172216-00520	SPRING, COMPRESSION		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)=

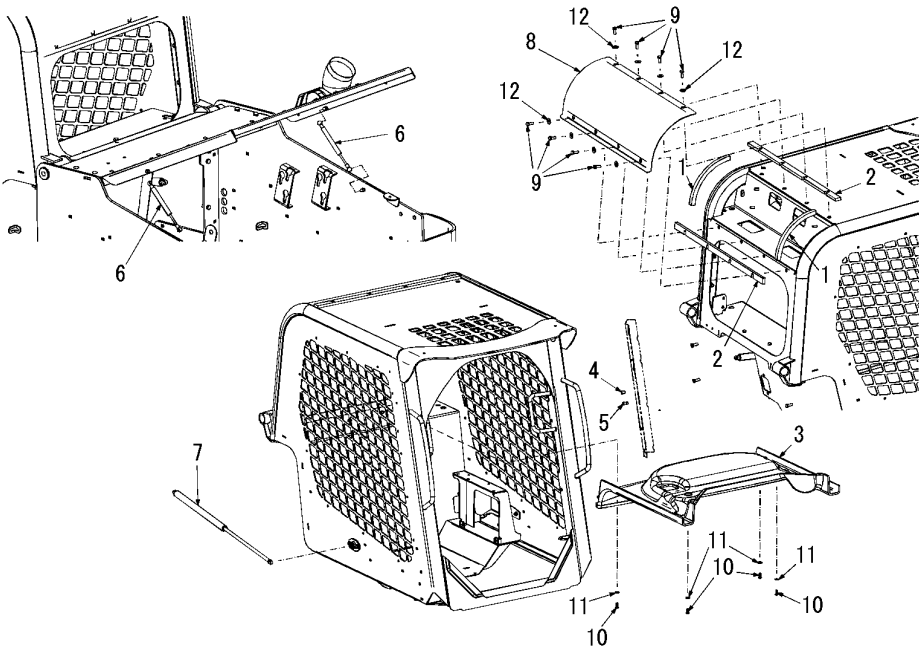
(D)=
(E)=
(F)=



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)=

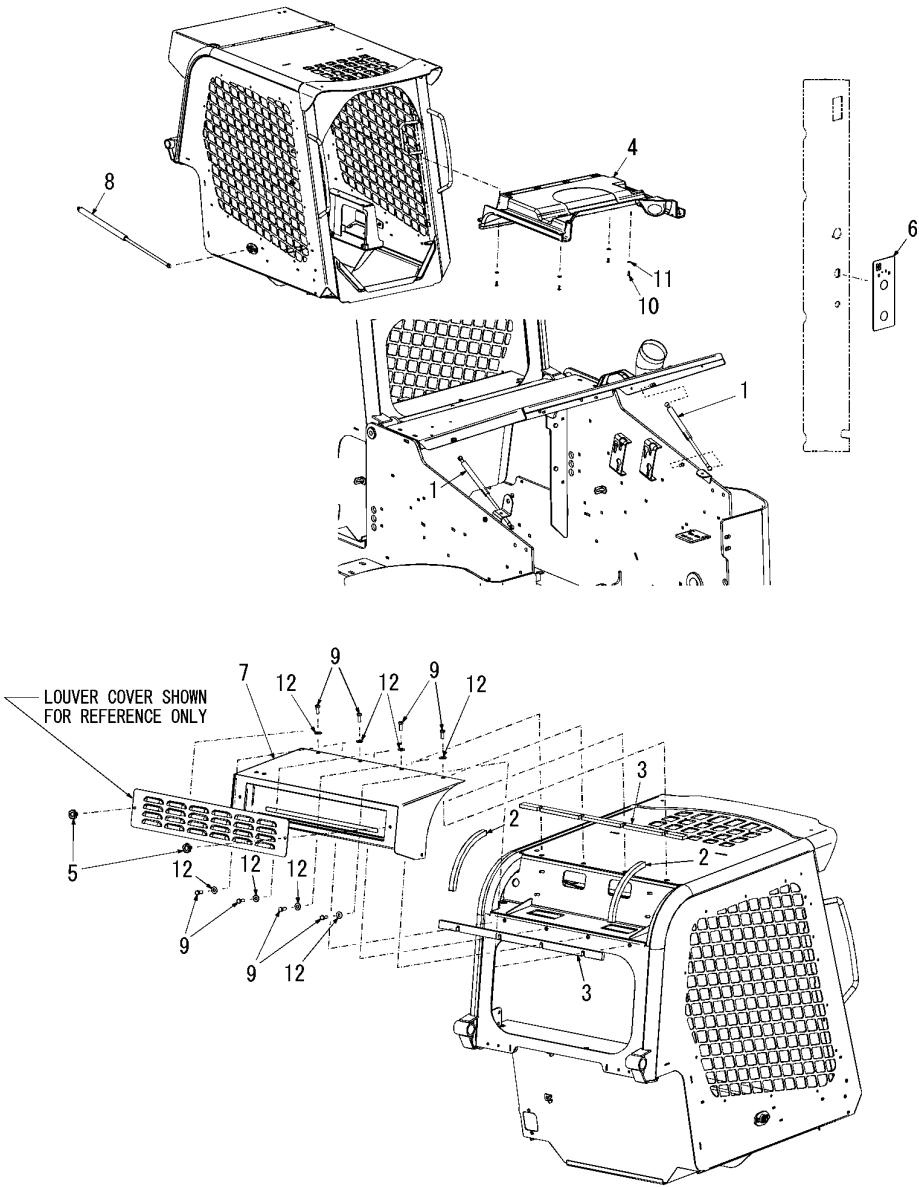
(D)=
(E)=
(F)=

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)=

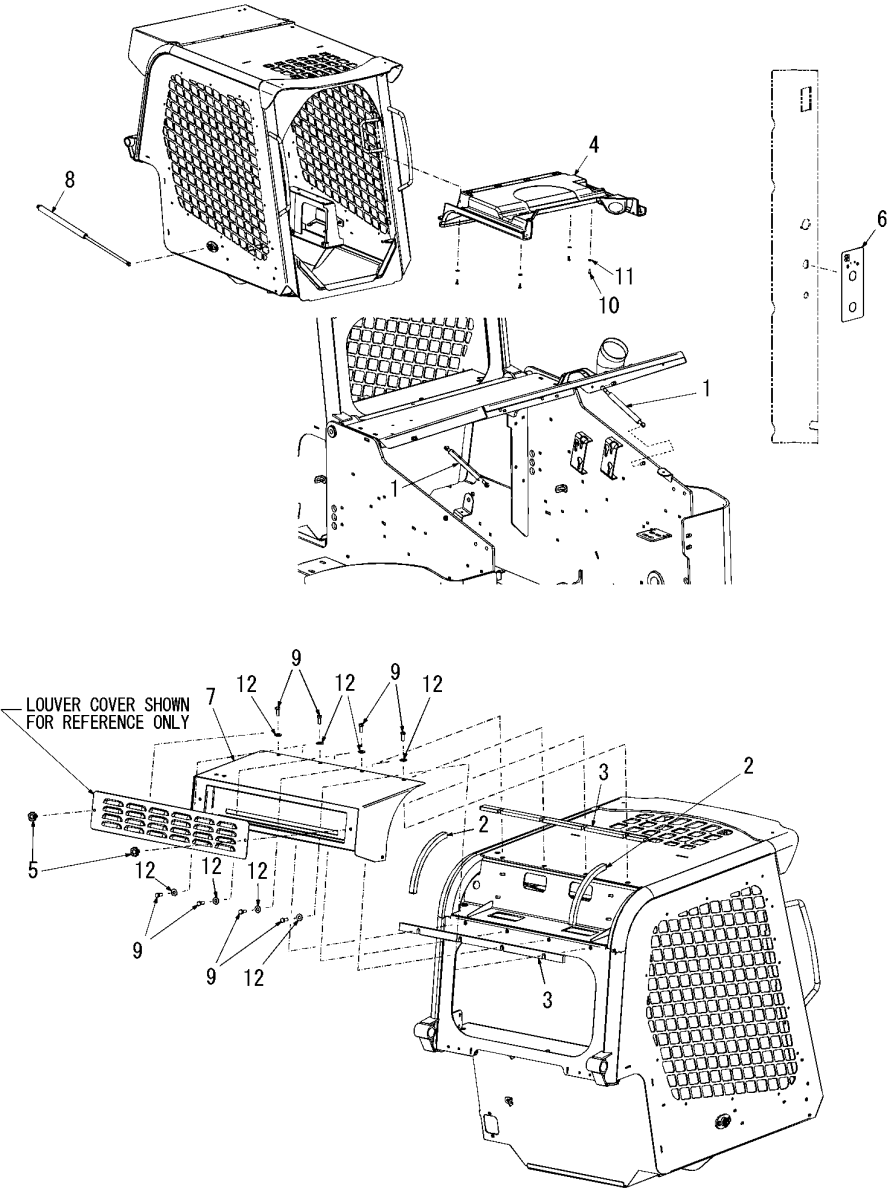


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-01330	SPRING, GAS	2	2						
2	1	172218-01200	SEAL, FOAM SIDE	2	2						
3	1	172218-01260	SEAL, FOAM BOTTOM	2	2						
4	1	172218-01500	HEADLINER, DUCT A/C	1	1						
5	1	172218-02210	KNOB, CLAMPING	2	2						
6	1	172218-04370	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)

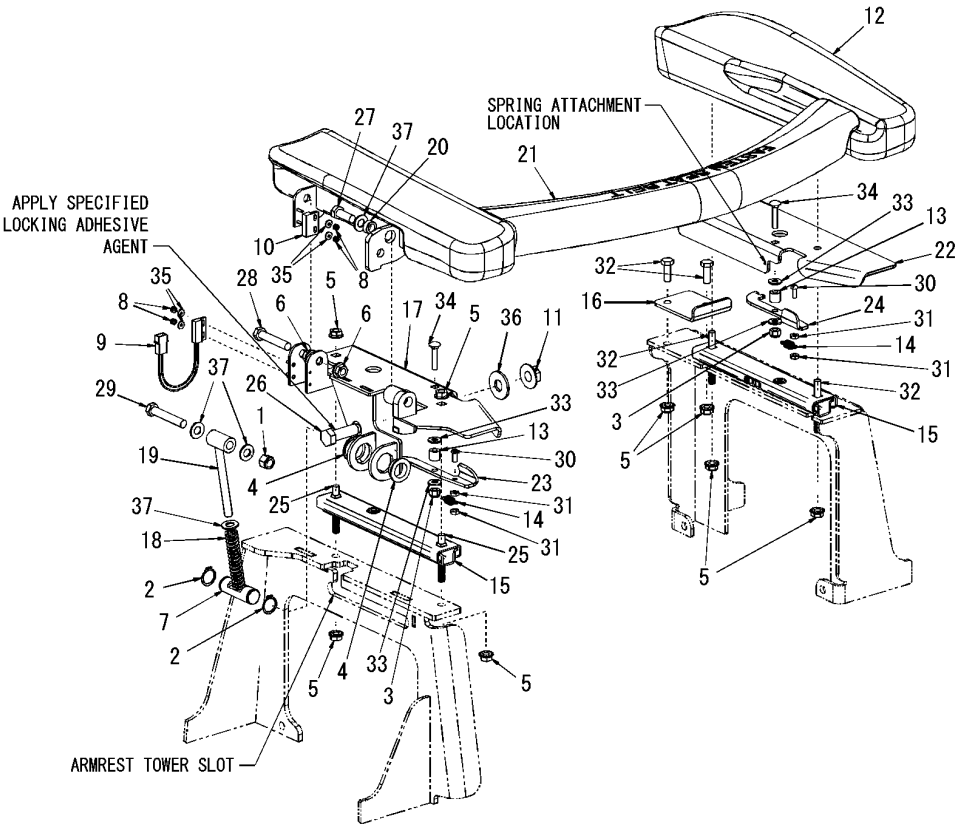
(A)=S190R-1
(B)=S220R-1
(C)=

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



No.	Lev.	Parts No.	Description	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.14. RESTRAINT BAR



						OCS10-M59000				Fig.14	
				(A)=S190R-1					(D)=		
				(B)=S220R-1					(E)=		
				(C)=					(F)=		
No.	Lev.	Parts No.	Description	(A)	(B)	Q'ty			I	R	
				(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						

(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						

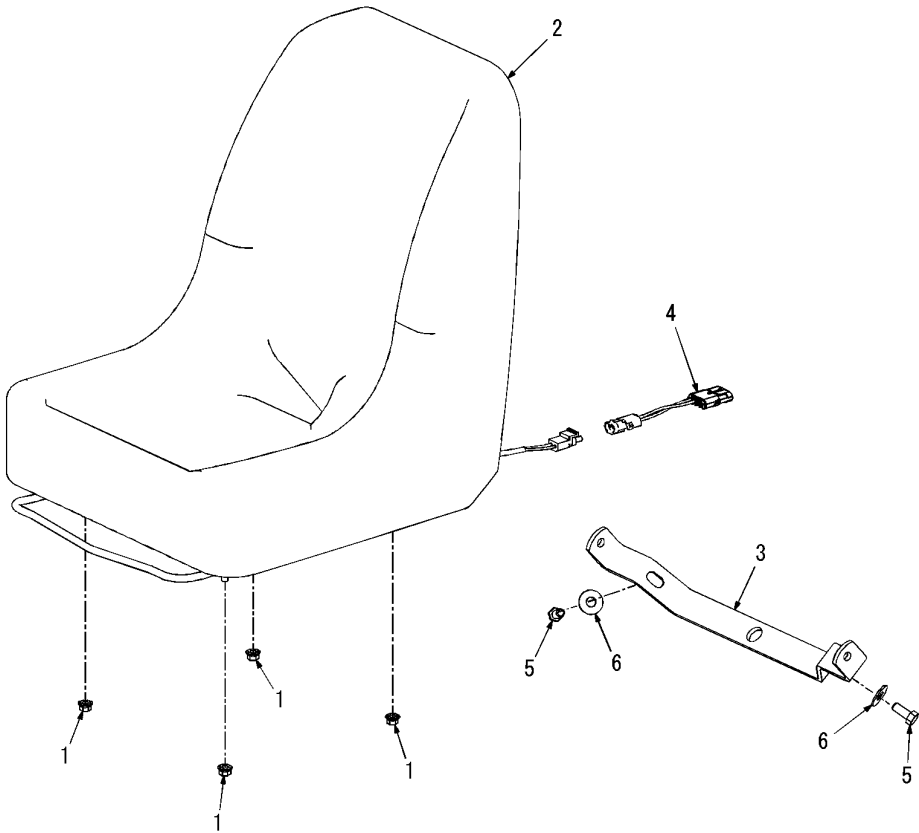
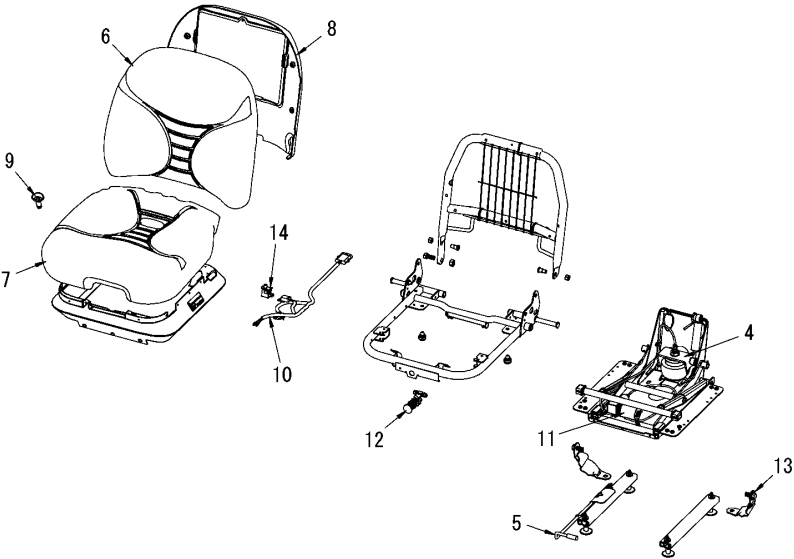
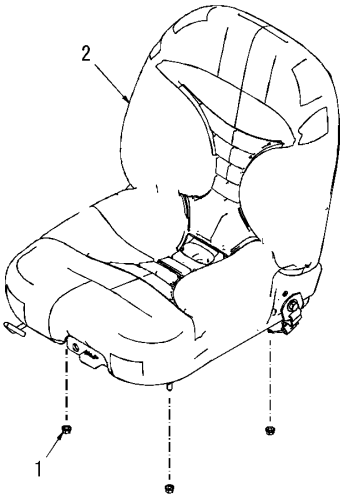


Fig.16. SEATS(STANDARD AND SUSPENSION

(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						

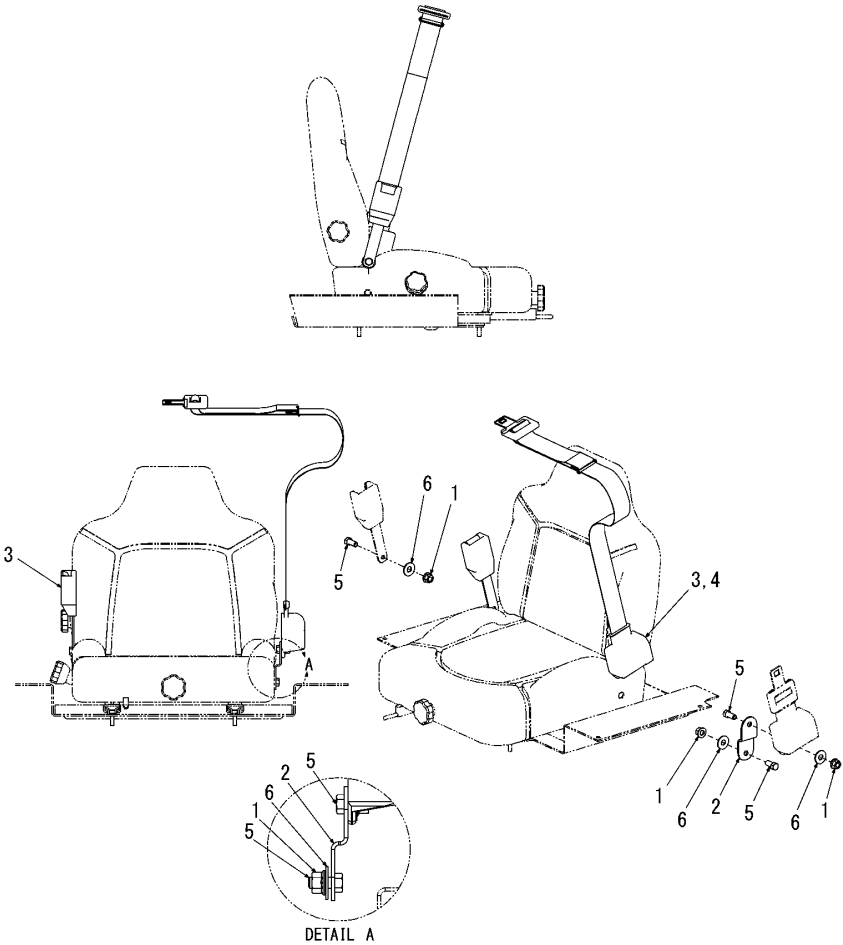
Remarks
(1)Not shown in illustration.
(2)Air suspension seat only.

Fig.17. SEATS-SEAT BELT OPTION

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

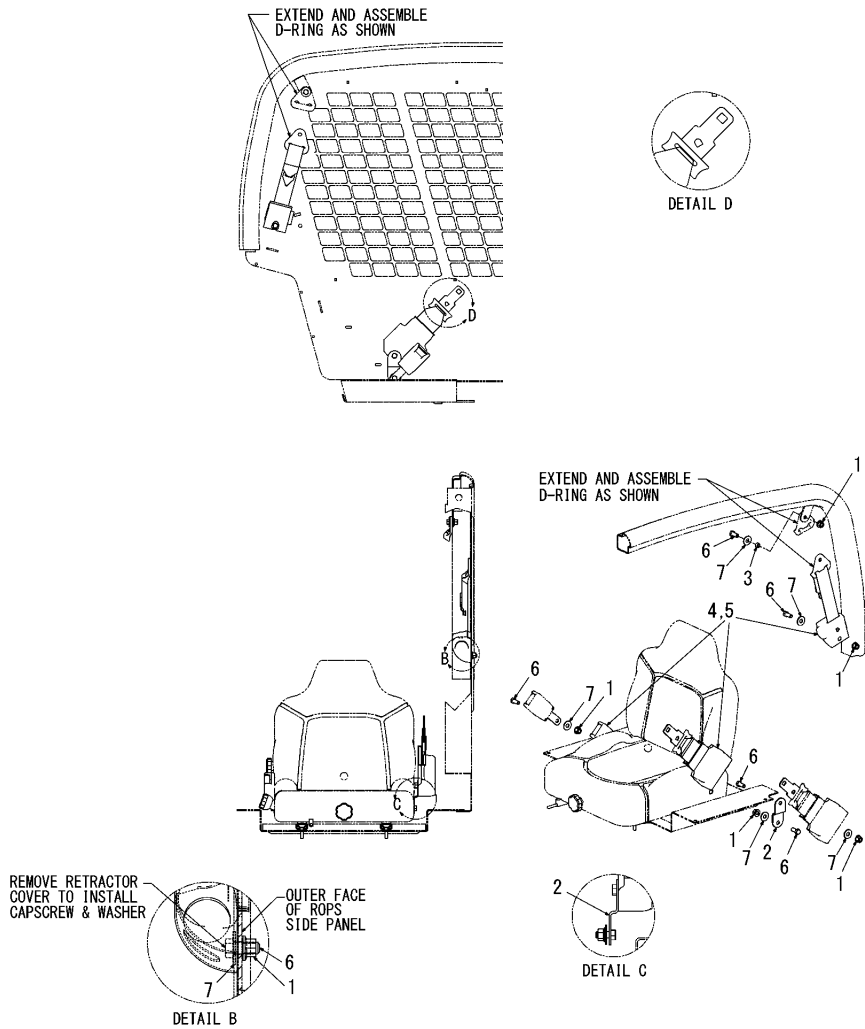
(D)=
(E)=
(F)=

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						



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

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



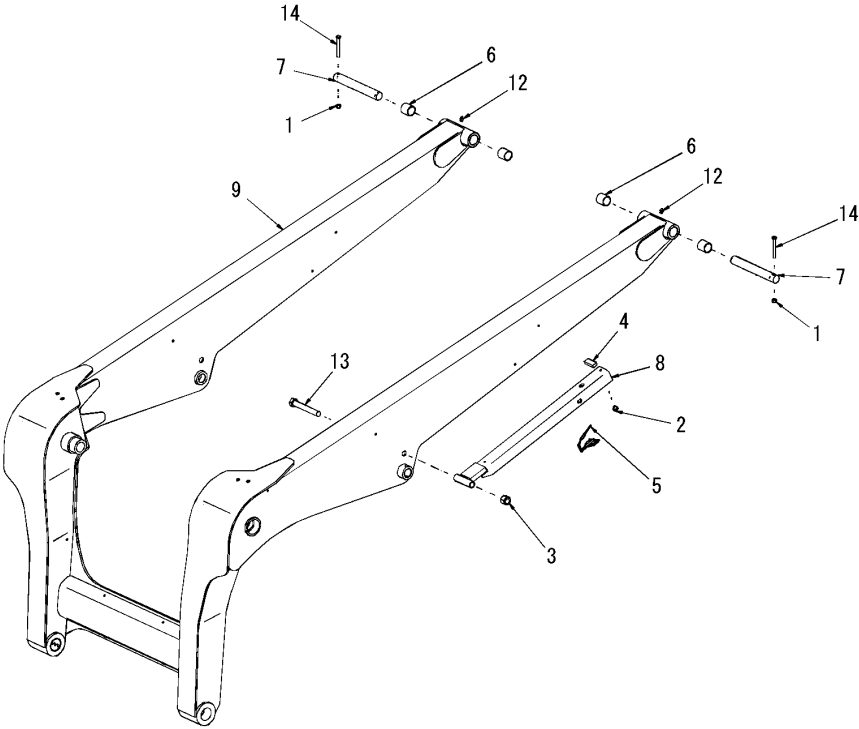
(A)=S190R-1
(B)=S220R-1
(C)=

(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



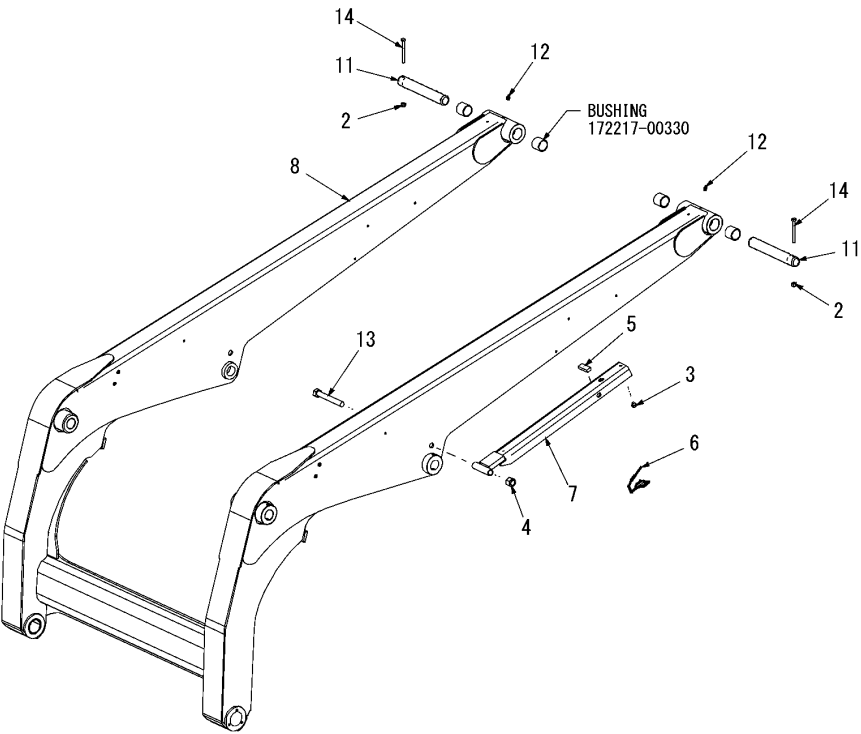
(A)=S190R-1
(B)=S220R-1
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						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.

Fig.20. LIFT ARM(S220R



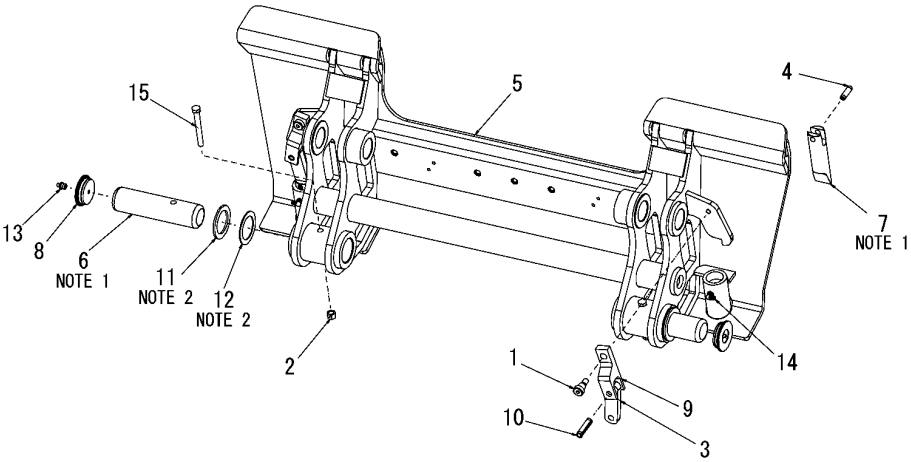
(A)=S190R-1
(B)=S220R-1
(C)=

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

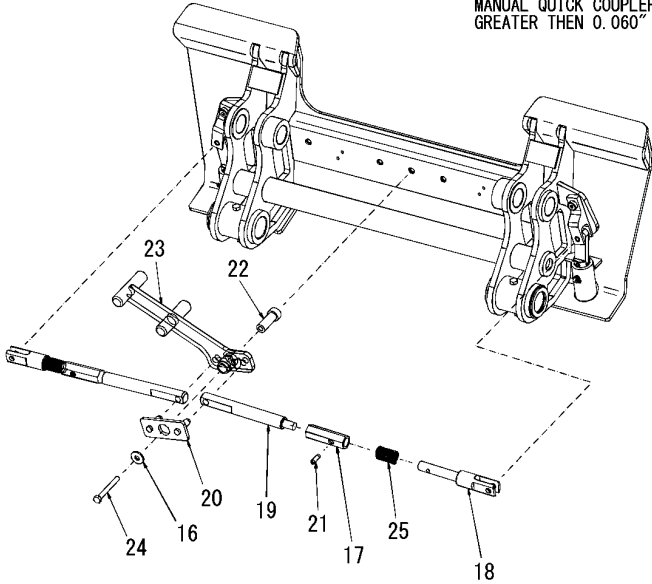
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-13330	NUT		4						1
2	1	172551-00180	NUT		2						
3	1	172216-00270	STEM, RUBBER		1						
4	1	172551-00520	NUT		1						
5	1	172216-00410	PAD, ARM BRACE		1						
6	1	172216-00470	PIN, KLIK		1						
7	1	172216-08140	ARM, 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



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"



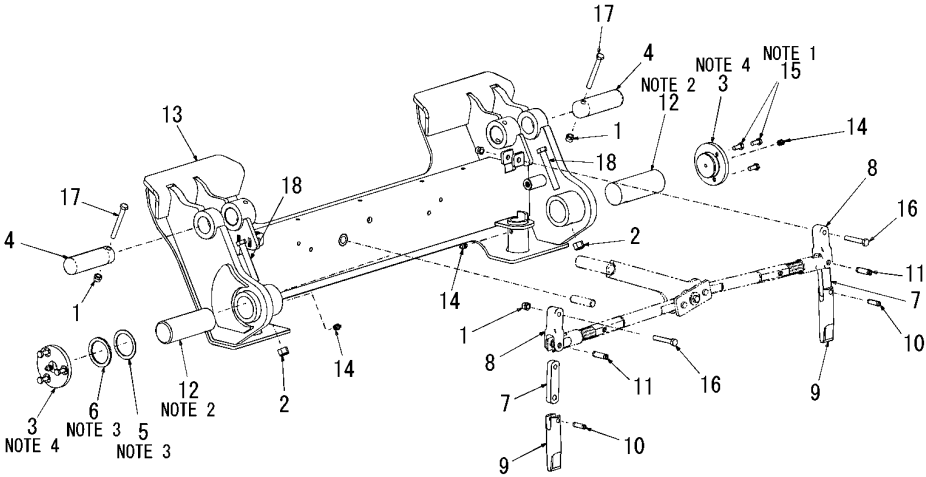
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172215-03790	BOLT	2							
2	1	172551-00180	NUT	2							
3	1	172551-01350	LINK, PIN	2							
4	1	172551-01410	PIN	2							
5	1	172216-13360	QUICK COUPLER	1							
6	1	172216-13370	PIN, PIVOT	2							
7	1	172216-13380	PIN	2							
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

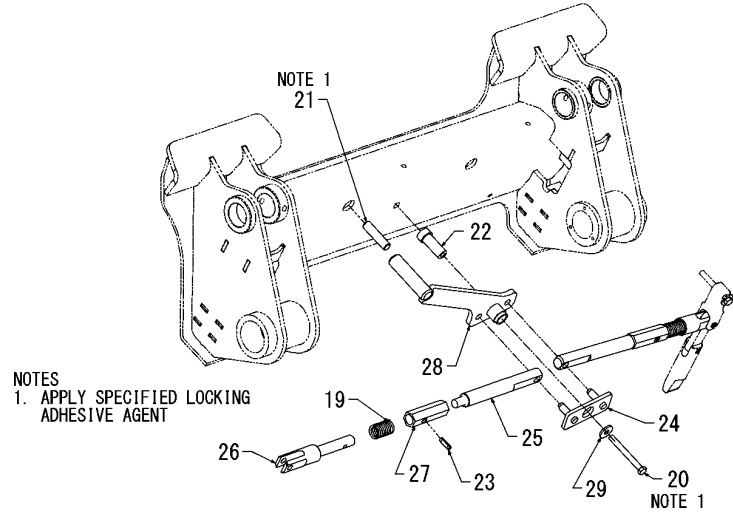
(A)=S190R-1
(B)=S220R-1
(C)=

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

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						



- 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 LEFT ARM AND THE MANUAL QUICK COUPLER, OF NO GREATER THEN 0.060"
 - 4. APPLY RTV SEALANT

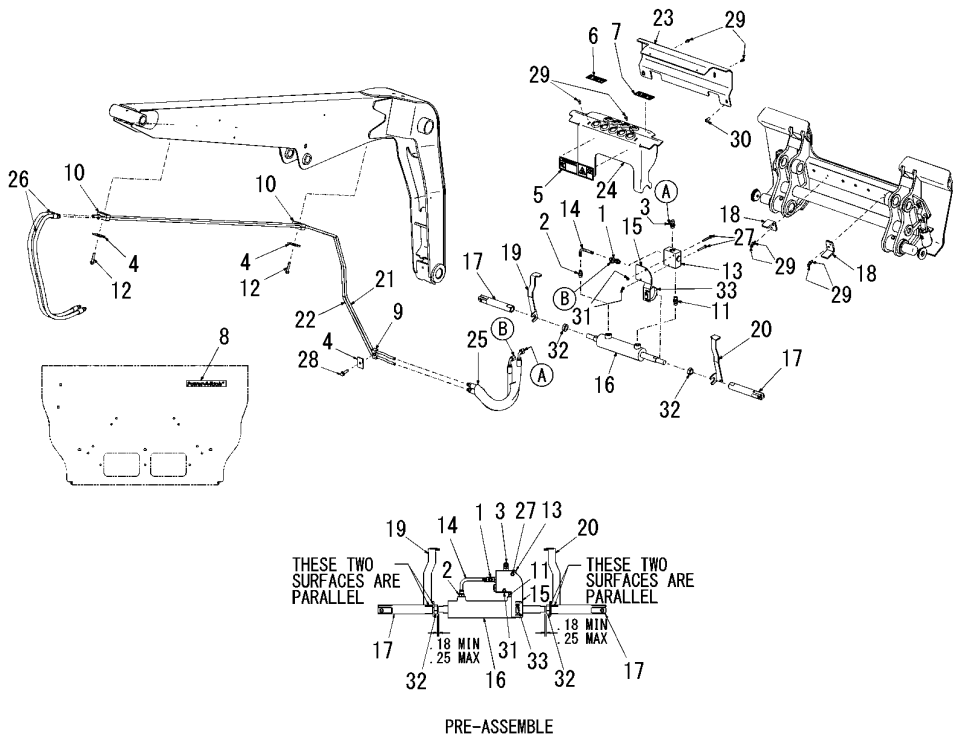


- NOTES
- 1. APPLY SPECIFIED LOCKING ADHESIVE AGENT

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

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

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

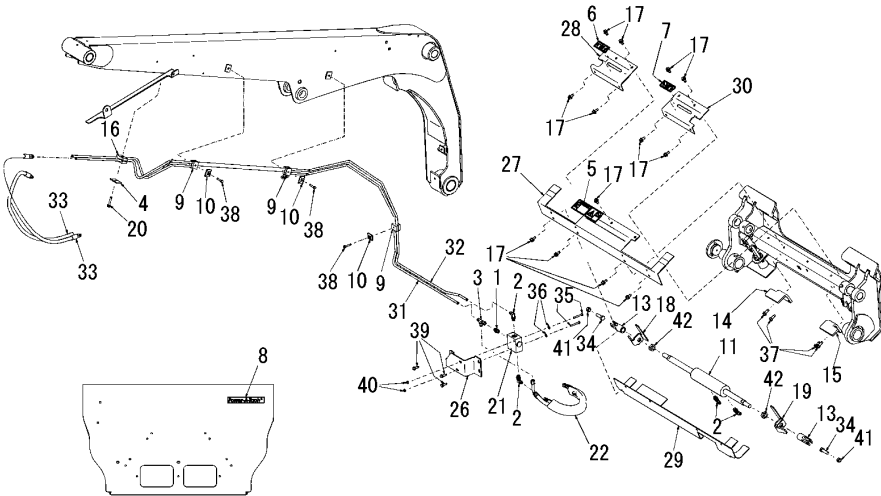


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00060	FITTING	1							
2	1	172551-00070	FITTING	1							
3	1	172551-00220	CONNECTOR	1							
4	1	172551-00510	PLATE	3							
5	1	172551-01770	LABEL, QUICK COUPLER	1							
6	1	172551-01780	LABEL, LATCHING	1							
7	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)=

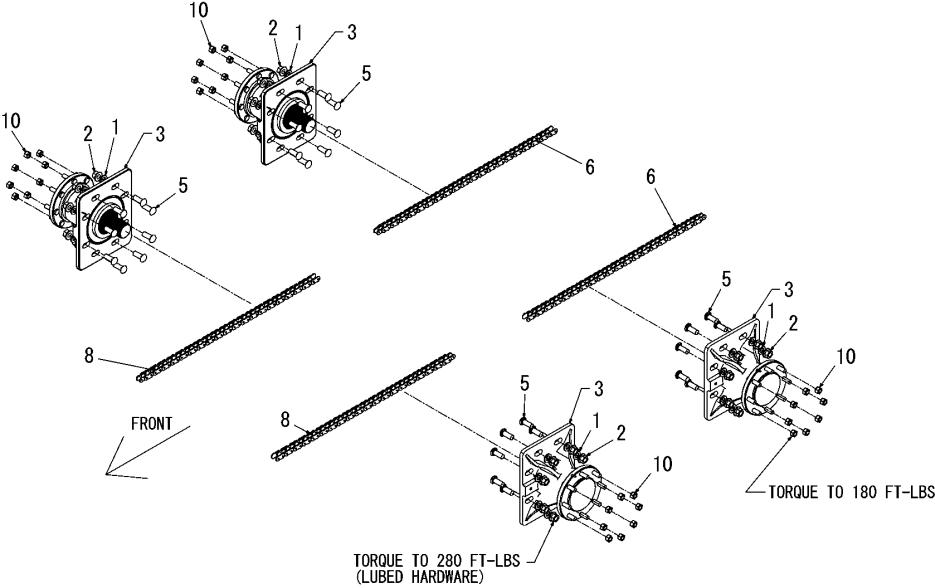
(D)=
(E)=
(F)=



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.

Fig.25. WHEEL DRIVES(S190R



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

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

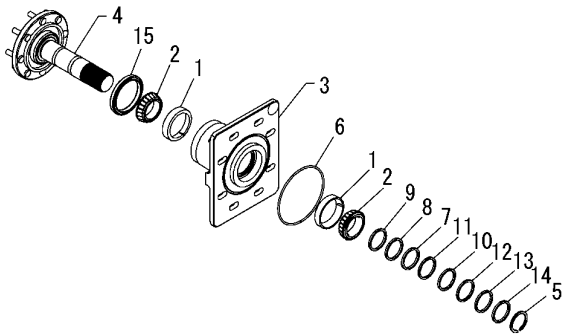
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-09640	WASHER	32							
2	1	172216-13790	NUT	32							
3	1	172216-06570	AXLE ASSY	4							1
4	1	172216-02530	BOLT	32							2
5	1	172216-02300	BOLT	32							
6	1	172216-01530	CHAIN	2							
7	1	172217-00030	LINK, CONNECTING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

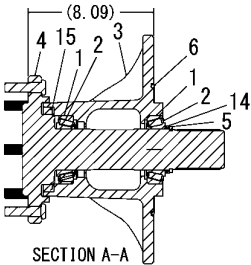
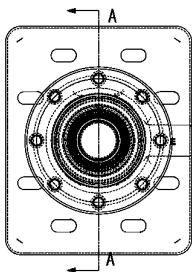
(A)=S190R-1
(B)=S220R-1
(C)=

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



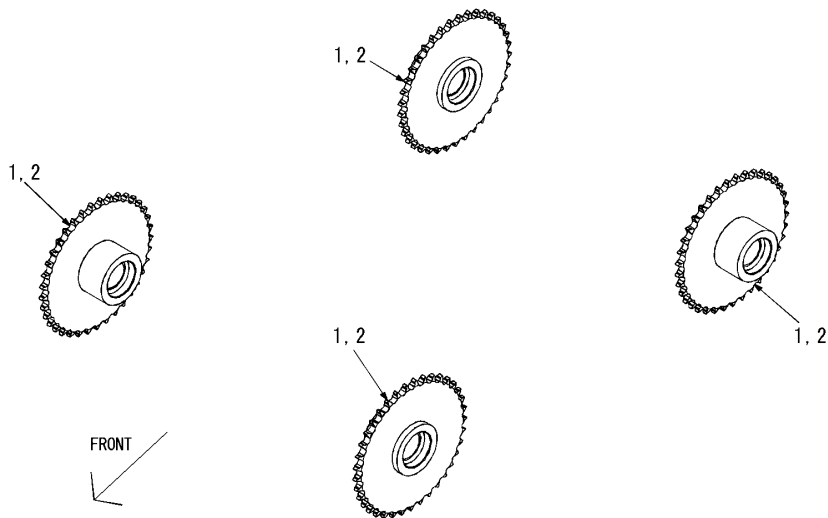
- ASSEMBLY NOTES:
- 1) PRESS OUTSIDE BEARING CUP INTO CASTING(6000 lbs)
 - 2) PRESS OUTER SEAL INTO CASTING(500 lbs)
 - 3) PRESS INNER BEARING CUP INTO CASTING(6000 lbs)
 - 4) PACK BEARING WITH LITHIUM GREASE
 - 5) PRESS BEARING CONE ONTO AXLE(6000 lbs)
 - 6) ASSEMBLE AXLE INTO HOUSING
 - 7) PACK BEARING 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	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							

Fig.27. WHEEL DRIVES(S190R

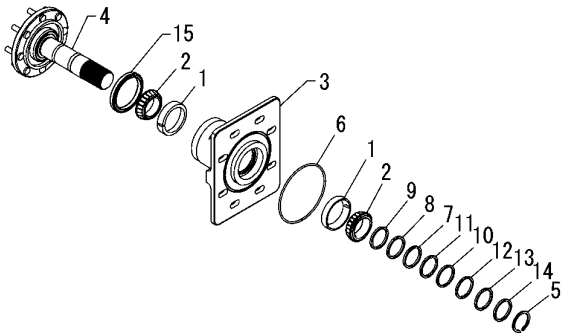
[illegible]

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

Fig.29. WHEEL DRIVES(S220R AXLE ASSEMBLY

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

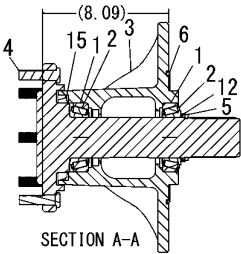
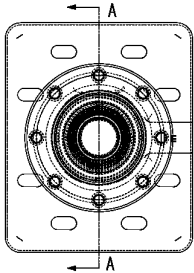
(D)=
(E)=
(F)=



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'



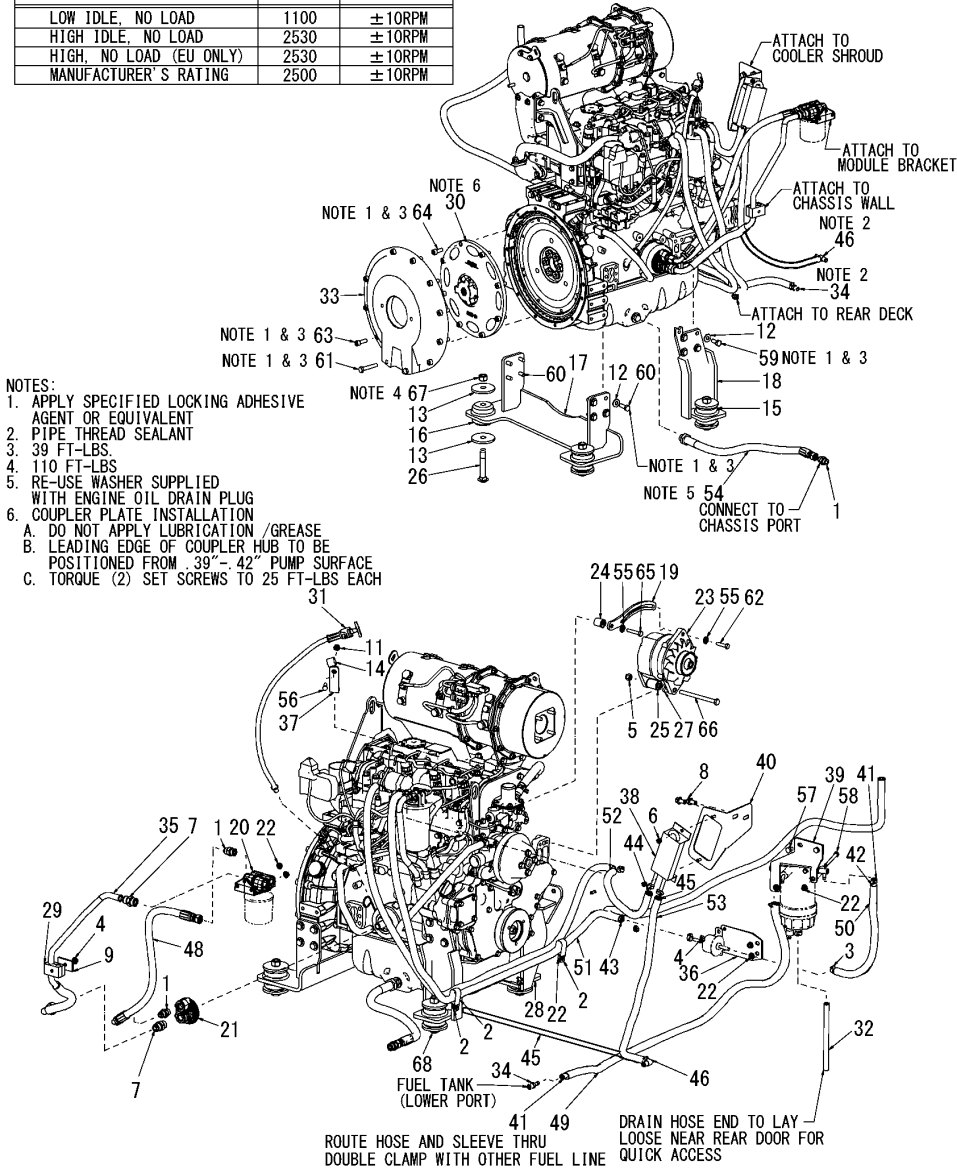
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-10830	CUP, BEARING		2						
2	1	172216-10840	CONE, BEARING		2						
3	1	172216-02690	HOUSING, AXLE		1						
4	1	172217-04470	AXLE&BOLT ASSY		1						
5	1	172216-10980	RING, RETAINING		1						
6	1	172215-08550	O-RING		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

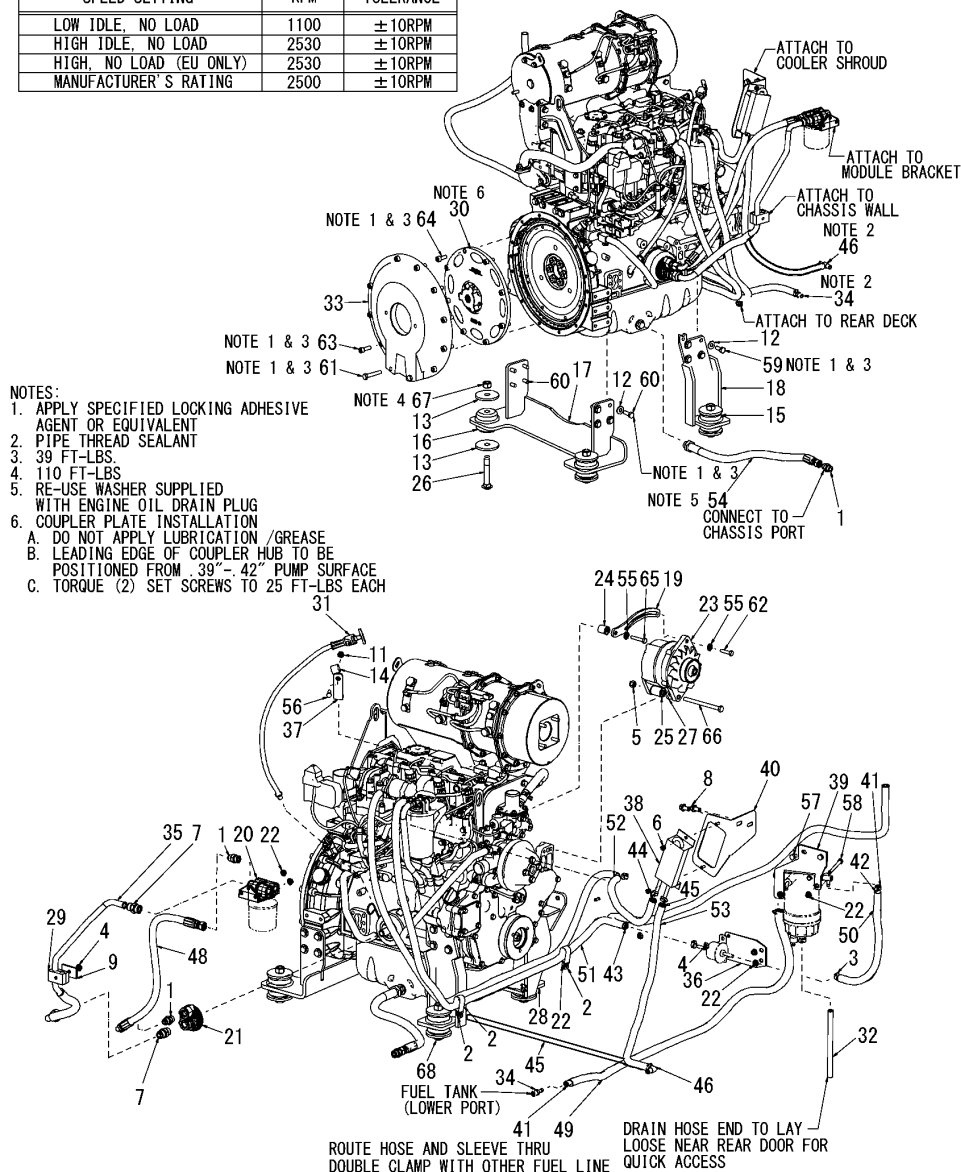


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00040	FITTING	3							
2	1	172551-00090	CLAMP	2							
3	1	172551-00140	CLAMP	11							
4	1	172551-00230	NUT	3							
5	1	172216-00180	NUT	1							
6	1	172551-00250	NUT	2							
7	1	172551-00320	CONNECTOR	2							
8	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	2							
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

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



Remarks
(1)Not shown in illustration.

No.	Lev.	Parts No.	Description	(A)=S190R-1	(B)=S220R-1	(C)=	(D)=	(E)=	(F)=	Q'ty	I	R
				(A)	(B)	(C)	(D)	(E)	(F)			
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								

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

Fig.31. ENGINE(S220R

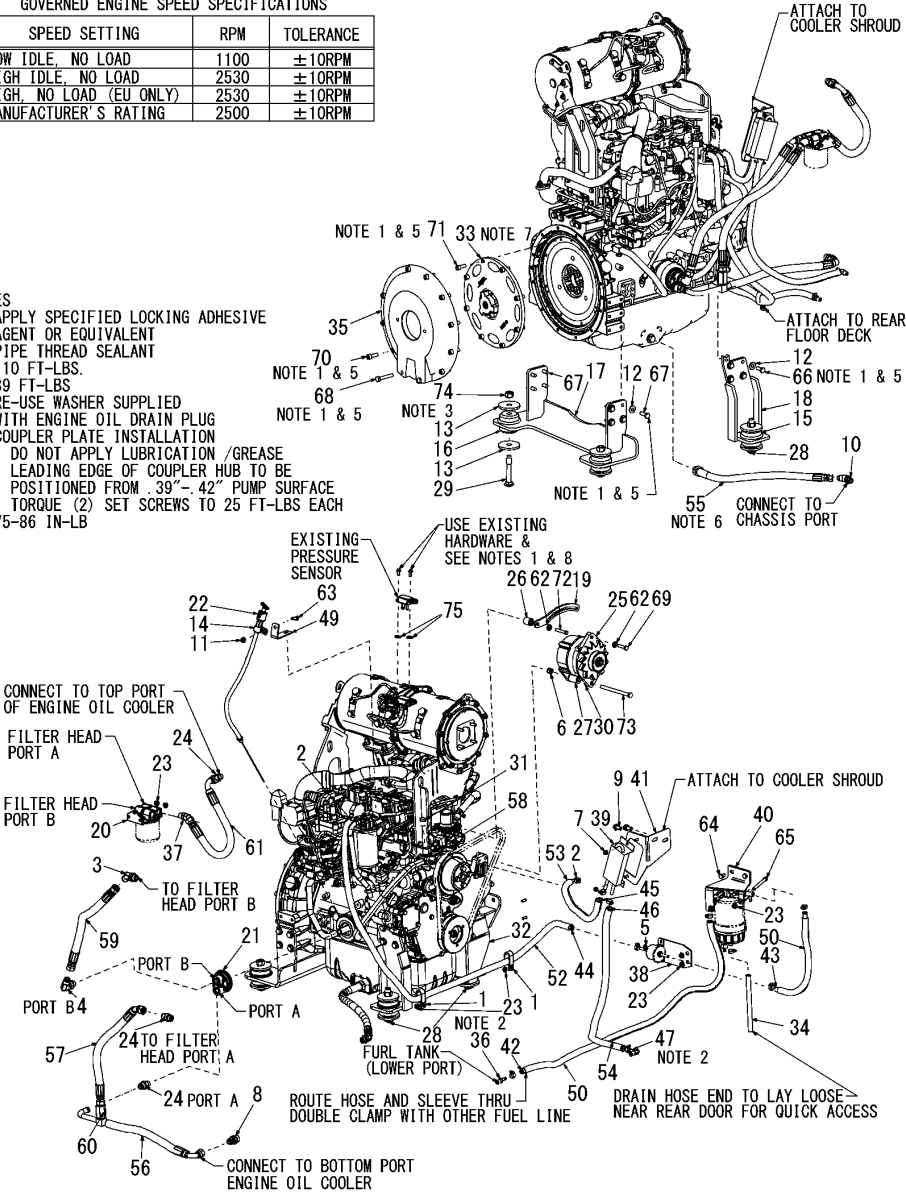
(A)=S190R-1
(B)=S220R-1
(C)=

(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)		
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

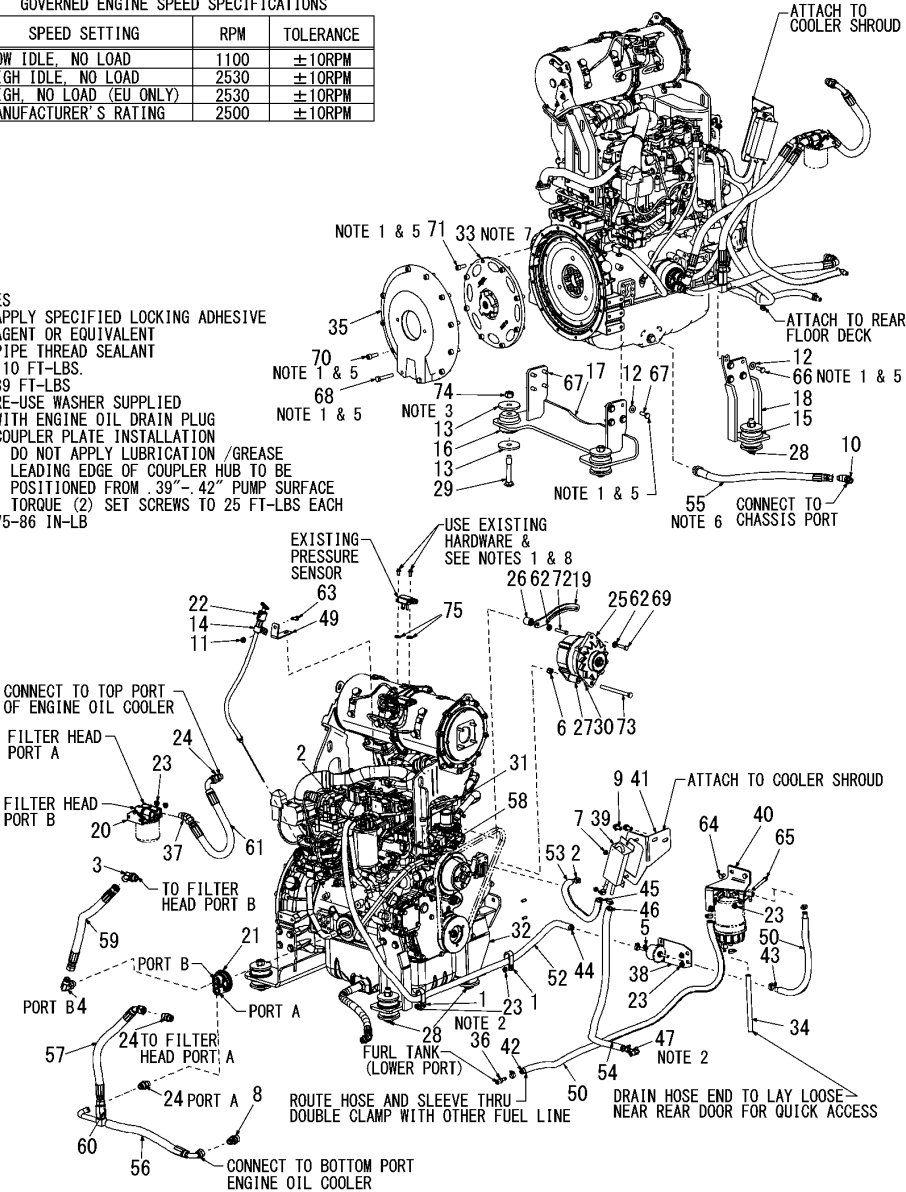
(A)=S190R-1
(B)=S220R-1
(C)=

(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

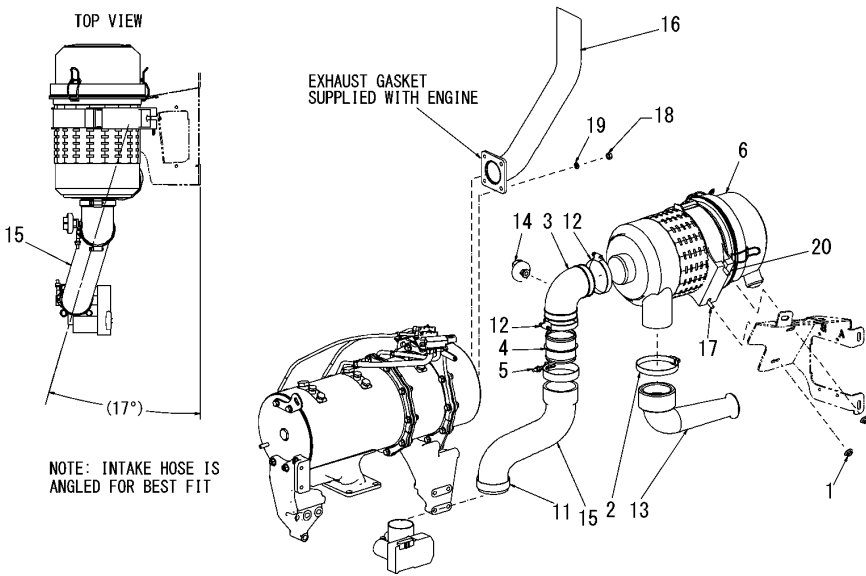
1. APPLY SPECIFIED LOCKING ADHESIVE AGENT OR EQUIVALENT
2. PIPE THREAD SEALANT
3. 110 FT-LBS.
5. 39 FT-LBS
6. RE-USE WASHER SUPPLIED WITH ENGINE OIL DRAIN PLUG
7. COUPLER PLATE INSTALLATION
 - A. DO NOT APPLY LUBRICATION /GREASE
 - B. LEADING EDGE OF COUPLER HUB TO BE POSITIONED FROM .39"-.42" PUMP SURFACE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

Fig.32. AIR CLEANER AND EXHAUST(S190R



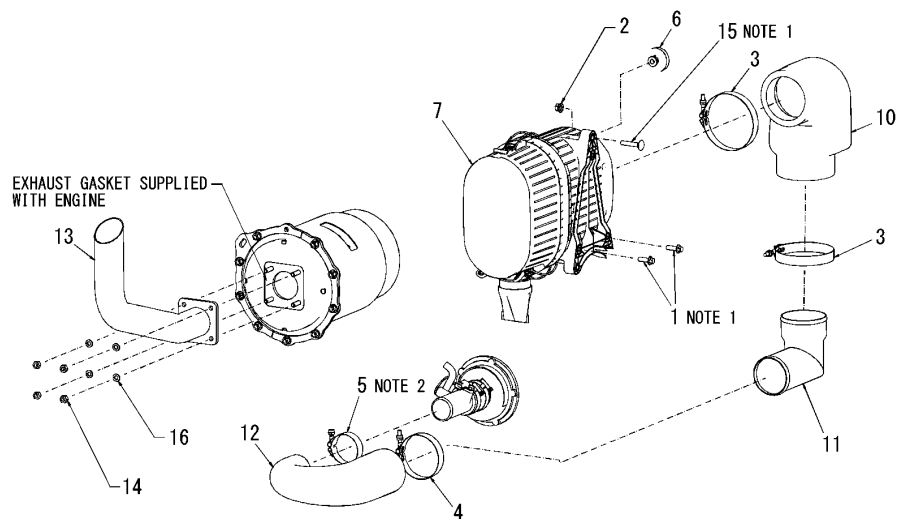
(A)=S190R-1
(B)=S220R-1
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00240	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						

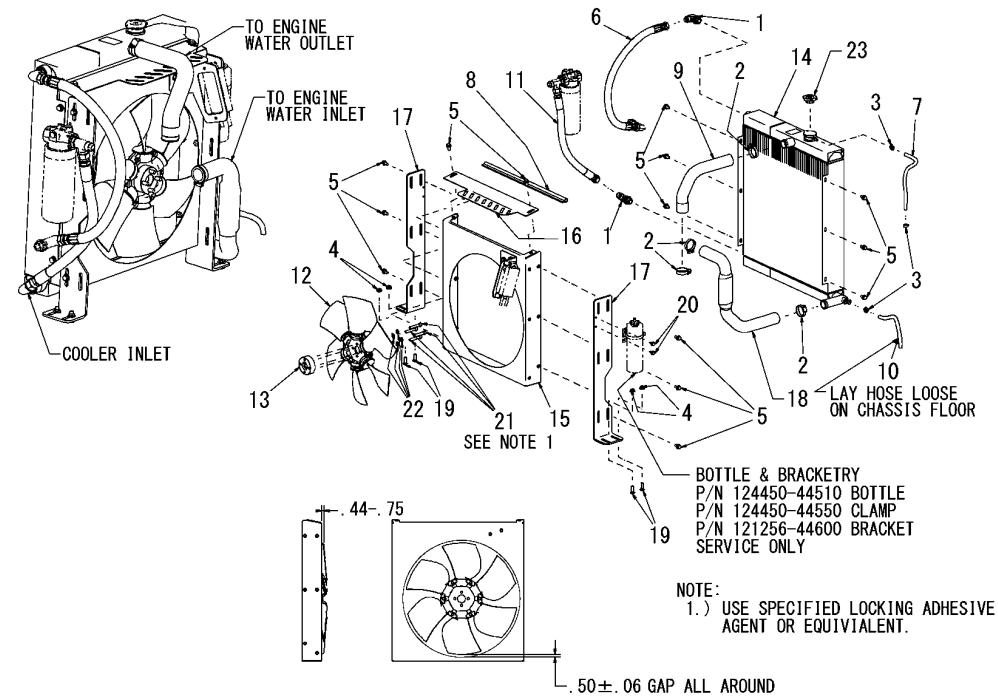
Remarks

(1) Not shown in illustration.

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

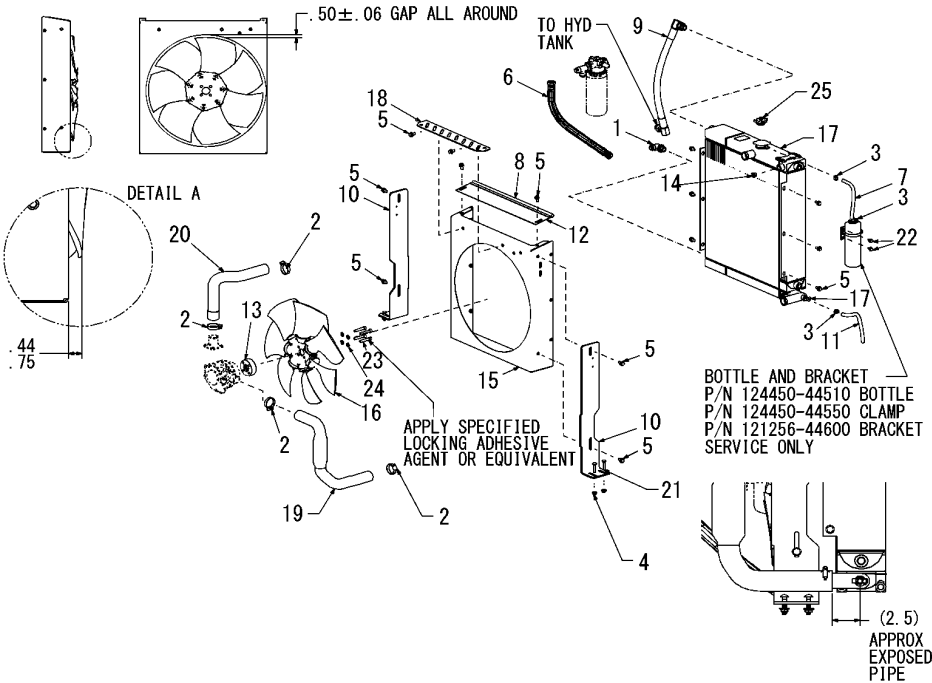
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Fig.34. RADIATOR/COOLER(S190R



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)=

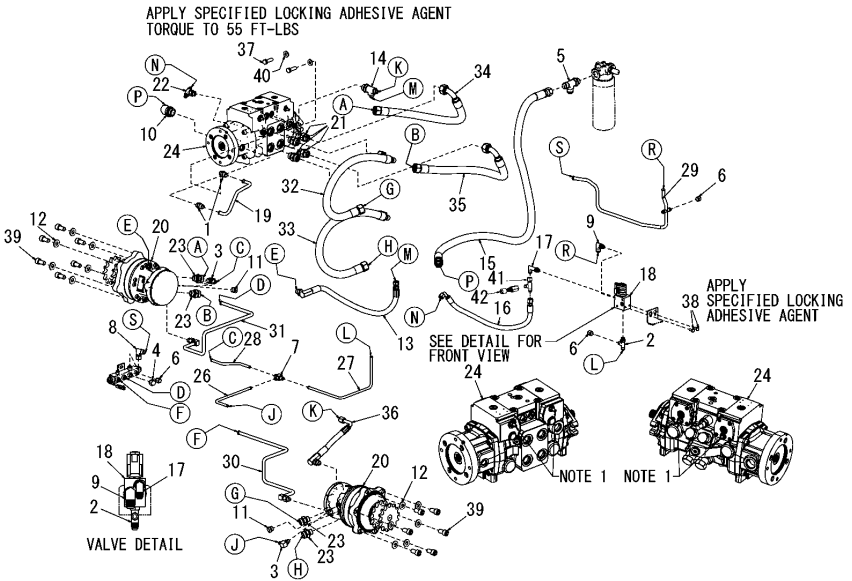
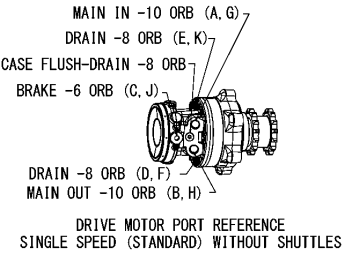
(D)=
(E)=
(F)=

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)=

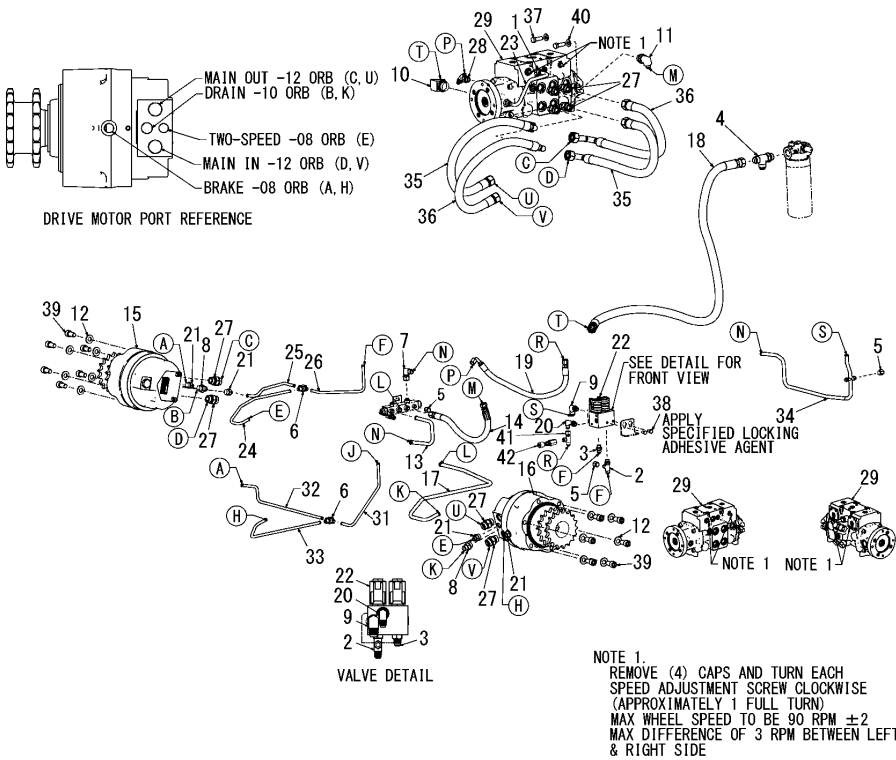
(D)=
(E)=
(F)=



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	1							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)=

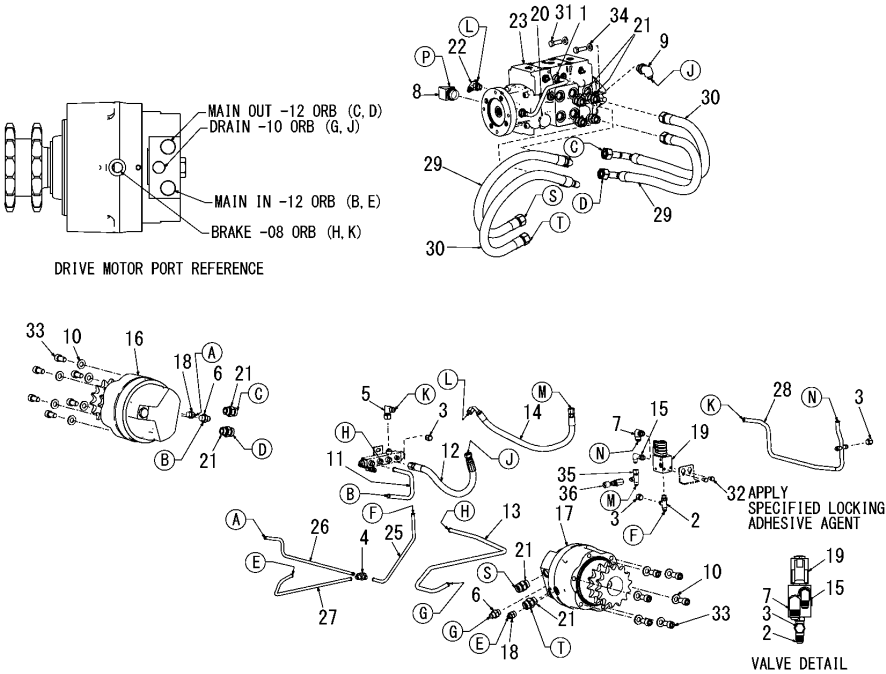
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00040	FITTING	2							
2	1	172551-00060	FITTING	1							
3	1	172551-00070	FITTING	1							
4	1	172551-00490	CONNECTOR, TEE-RUN	1							
5	1	172216-00380	CAP	2							
6	1	172216-00400	FITTING	2							
7	1	172215-00470	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)=

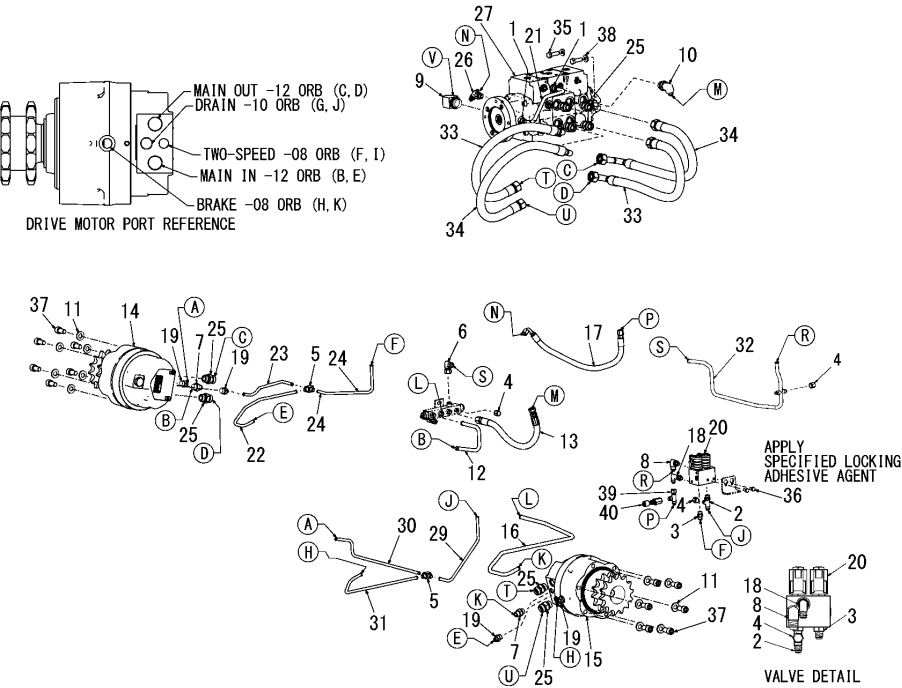
(D)=
(E)=
(F)=



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.

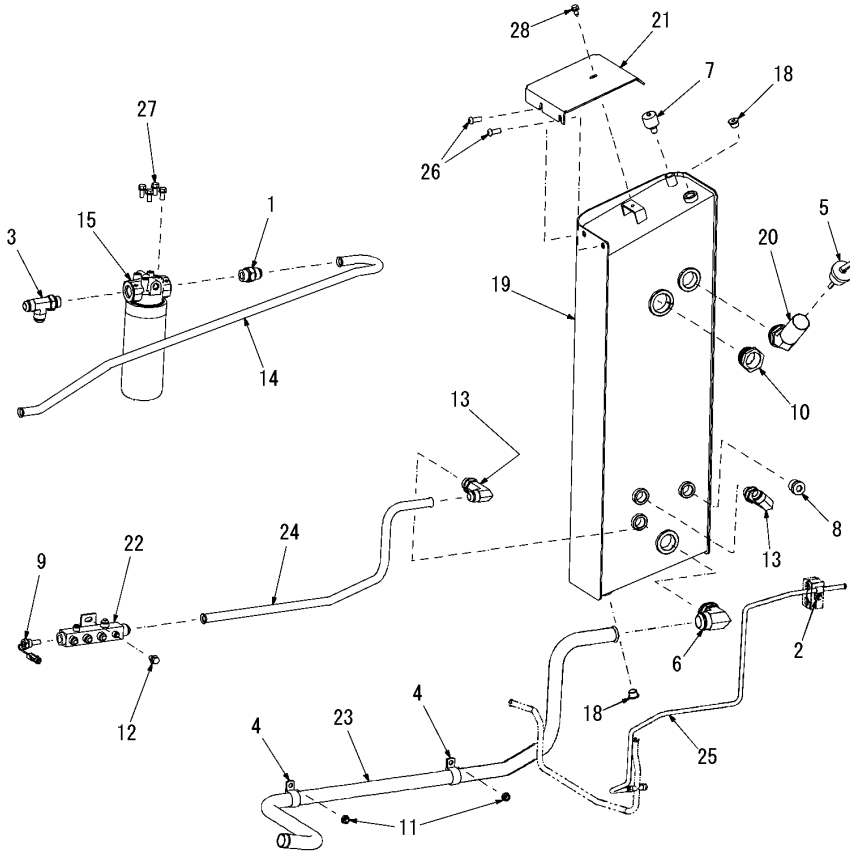
Fig.39. HYDROSTATIC SYSTEM WITH DRIVE MOTORS(S220R TWO-SPEED HAND/FOOT AND DUAL JOYSTICK



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	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



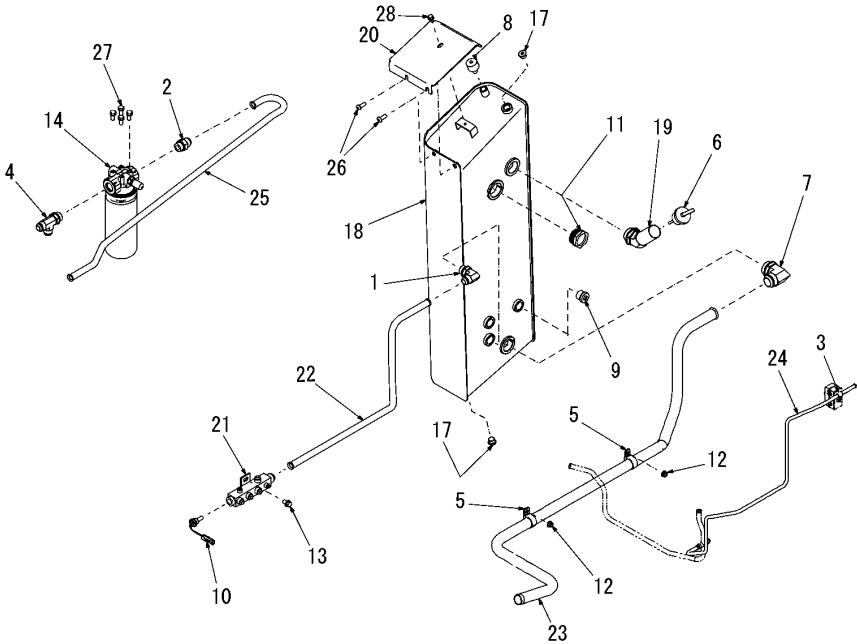
(A)=S190R-1
(B)=S220R-1
(C)=

(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



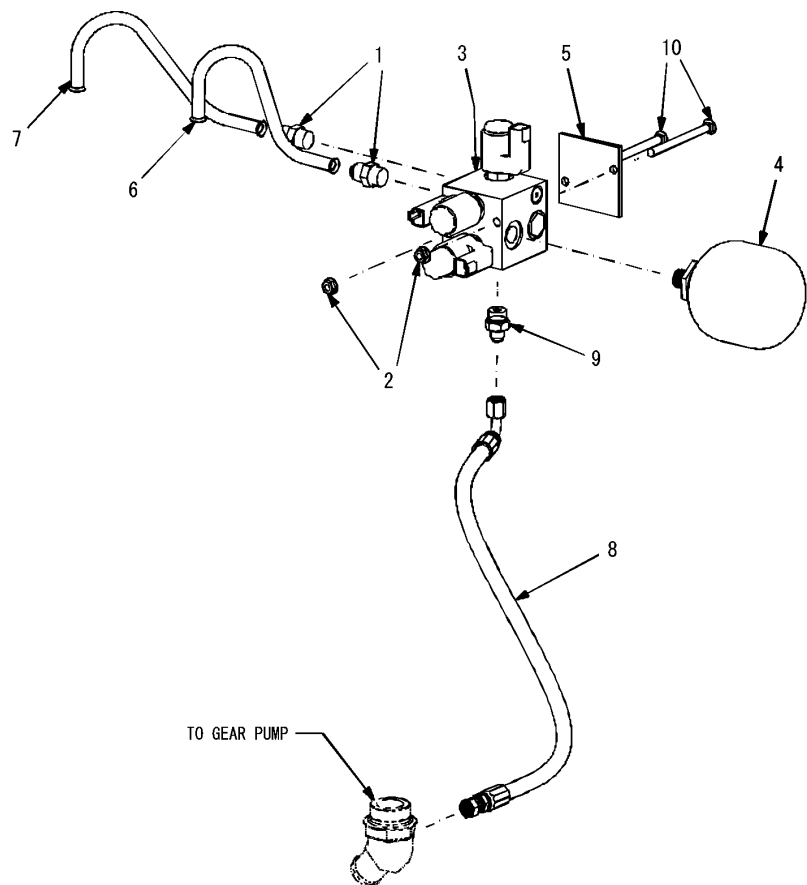
(A)=S190R-1
(B)=S220R-1
(C)=

(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



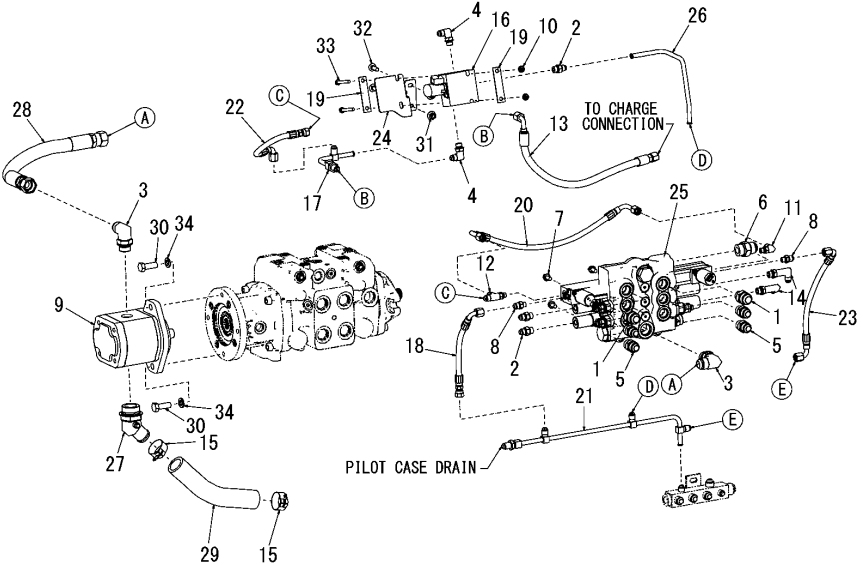
No.	Lev.	Parts No.	Description	(A)=S190R-1	(D)=					I	R
				(B)=S220R-1	(E)=	(C)	(D)	(E)	(F)		
1	1	172551-00040	FITTING	2	2						
2	1	172551-01060	NUT	2	2						
3	1	172551-02090	MANIFOLD, RIDE CNTRL	1	1						1
4	1	172551-02130	ACCUMULATOR	1	1						
5	1	172216-03850	PLATE, SPACER	1	1						
6	1	172217-01340	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.

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							

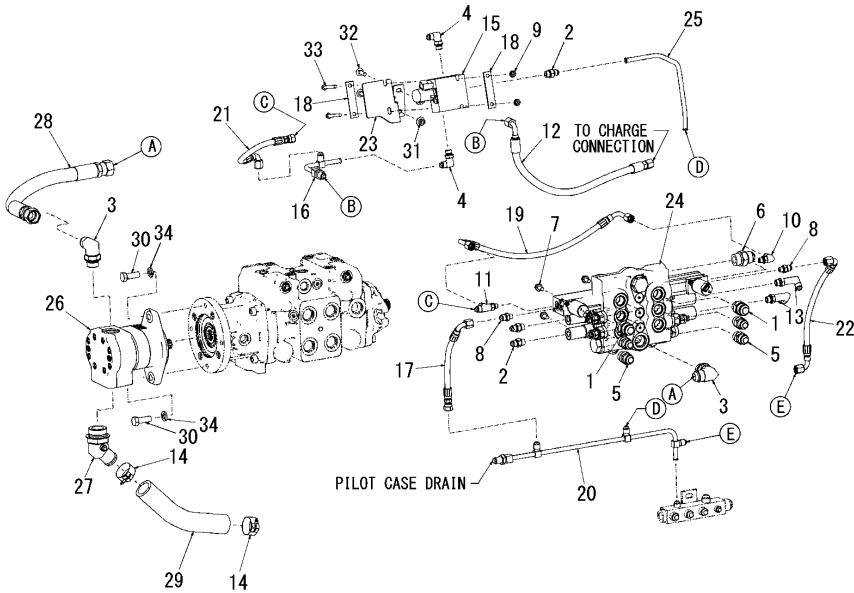
Remarks

- (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						

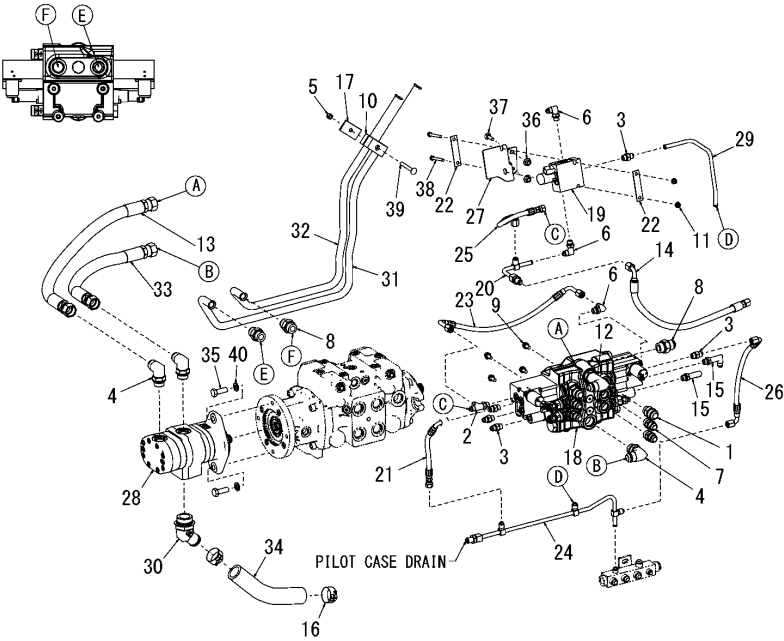
Remarks

- (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							

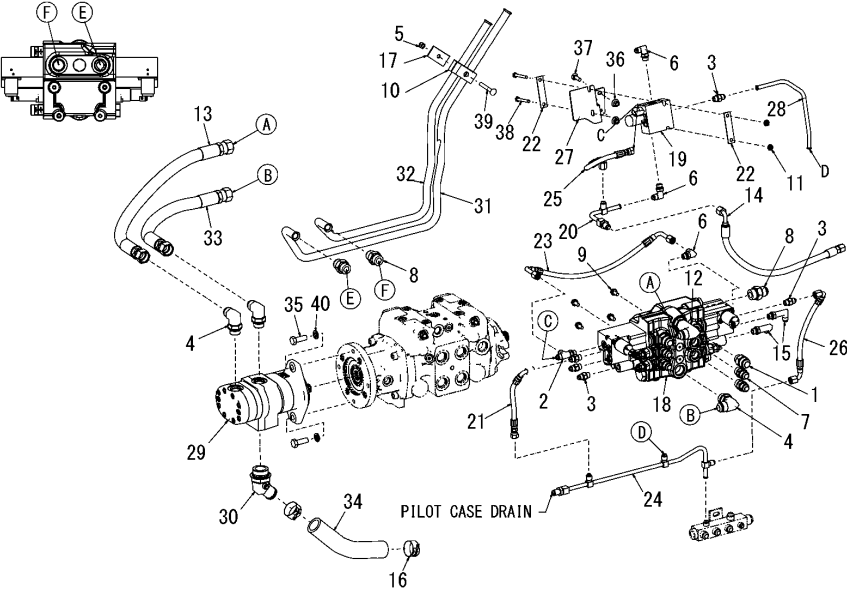
Remarks

- (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	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	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						

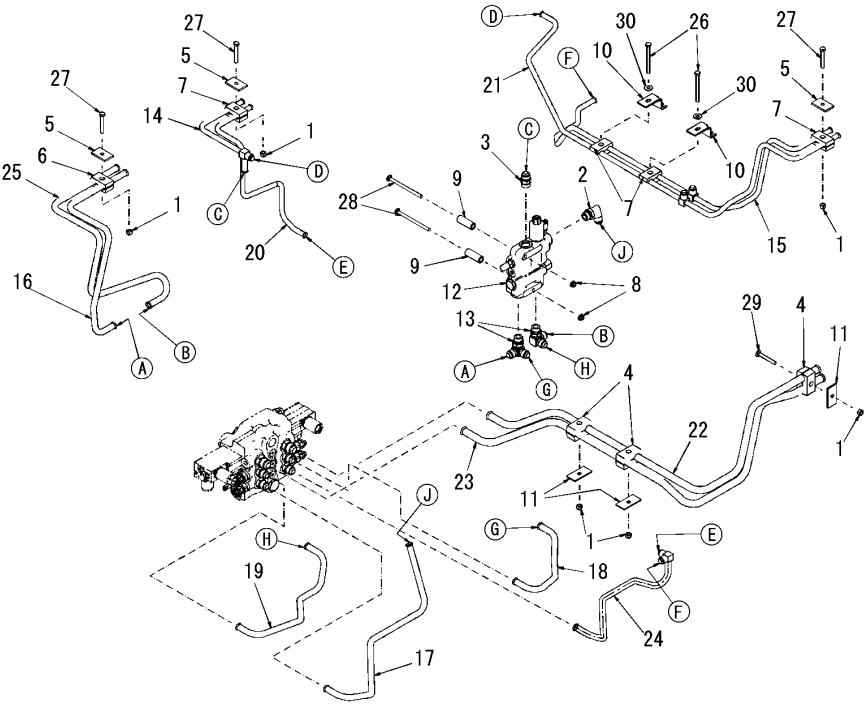
Remarks
(1)For breakdown see Fig.No.101.
(2)For breakdown see Fig.No.96.
(3)For breakdown see Fig.No.93.

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						

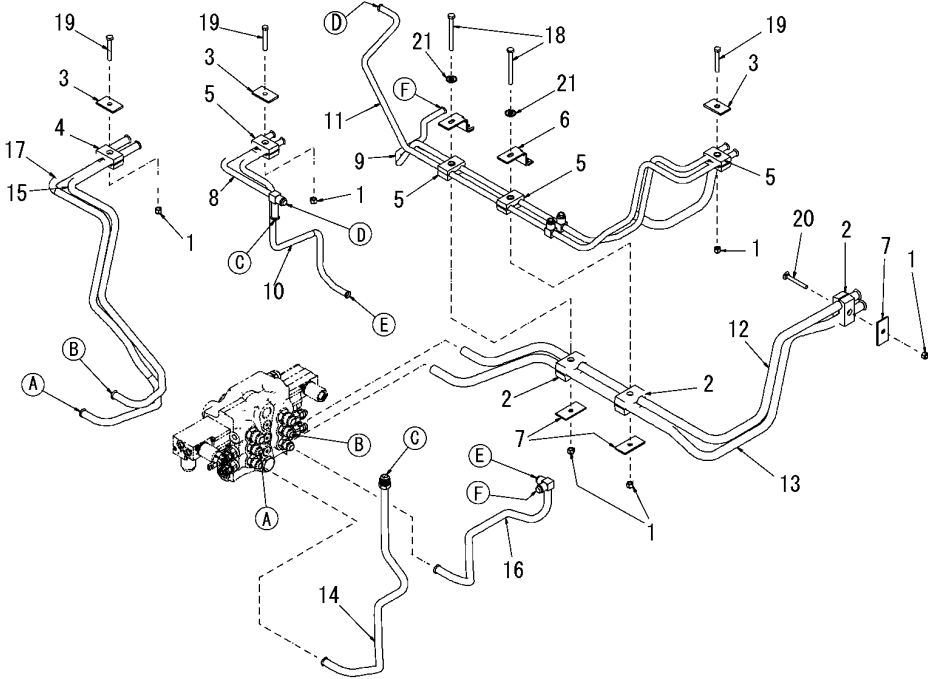
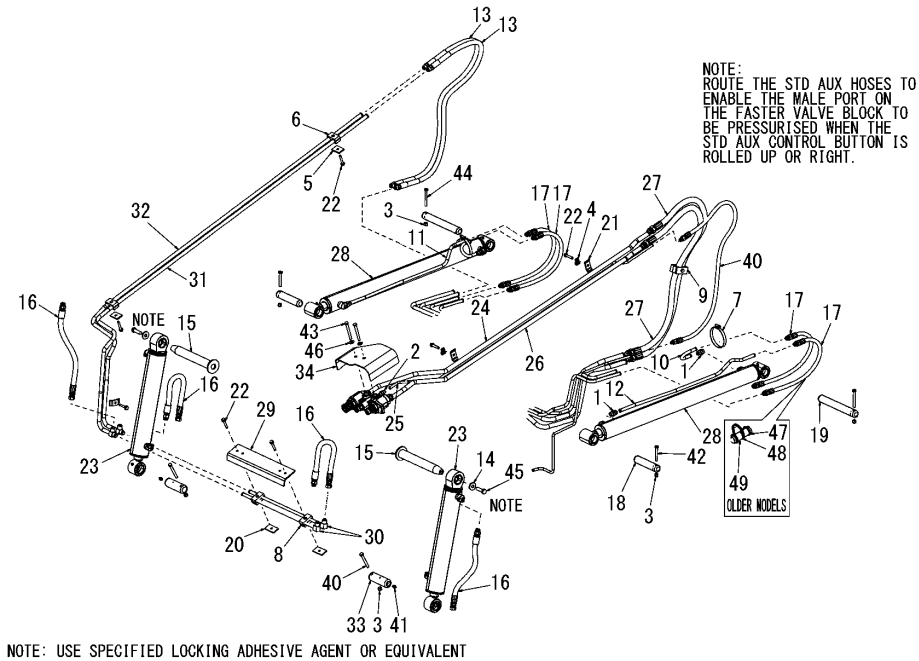


Fig.49. HYDRAULICS-LIFT ARM(S190R



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

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

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

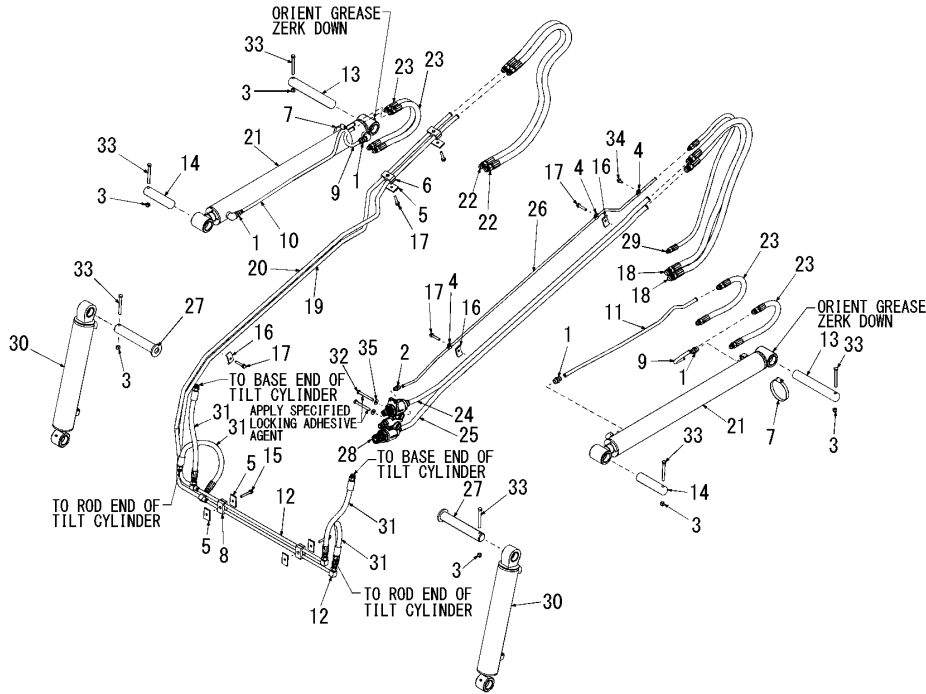
Remarks

- (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)=

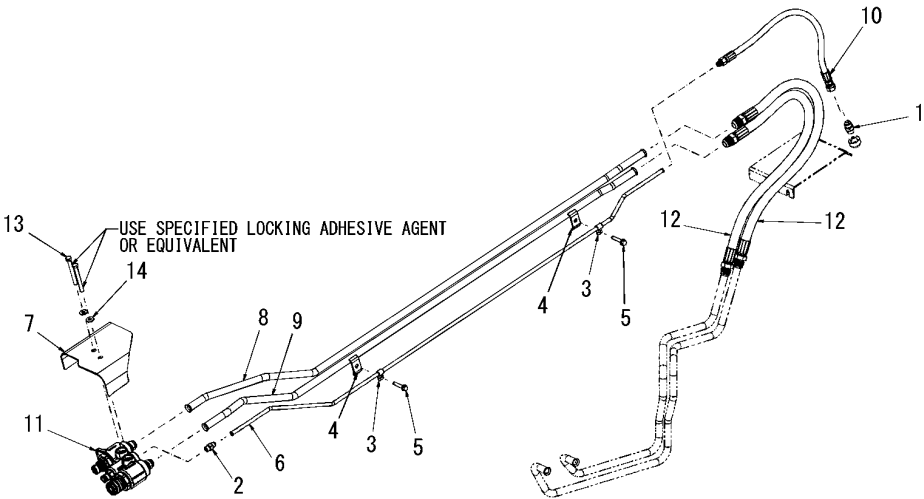
(D)=
(E)=
(F)=



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, LIFT CYLINDER R		1						
11	1	172216-01560	TUBE, LIFT CYLINDER 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)

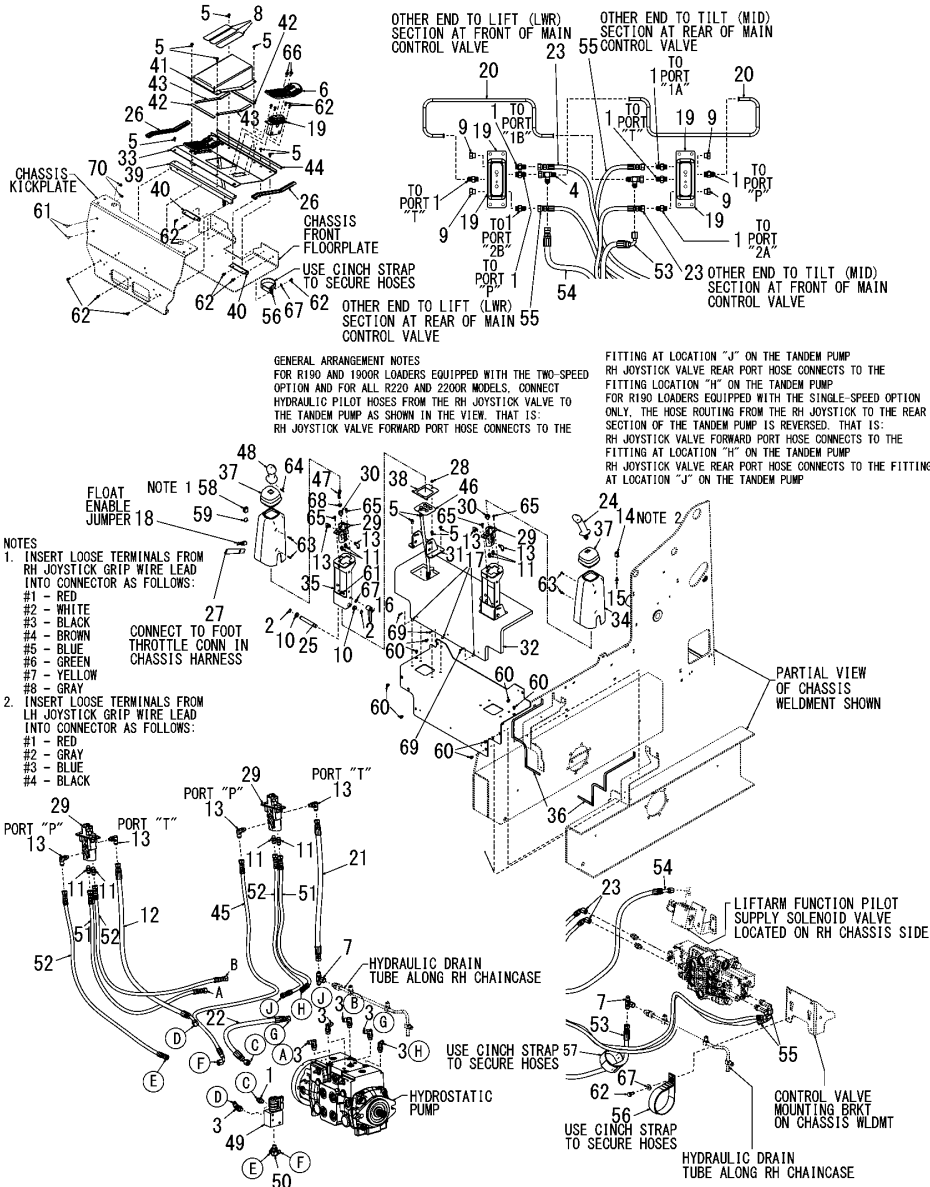


(A)=S190R-1
(B)=S220R-1
(C)=

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



Remarks

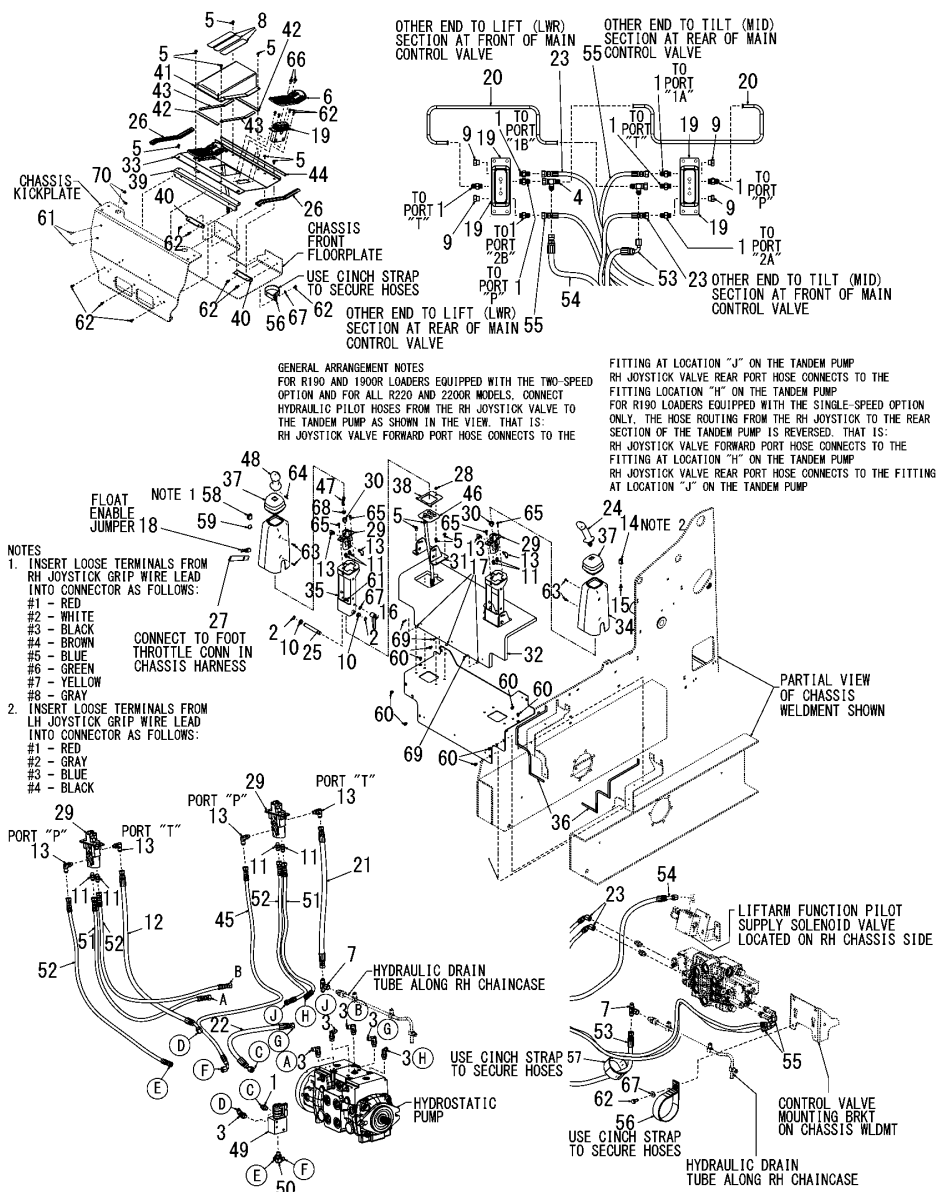
(1)For breakdown see Fig.No.104.

(2)For breakdown see Fig.No.99.

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						

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

(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						

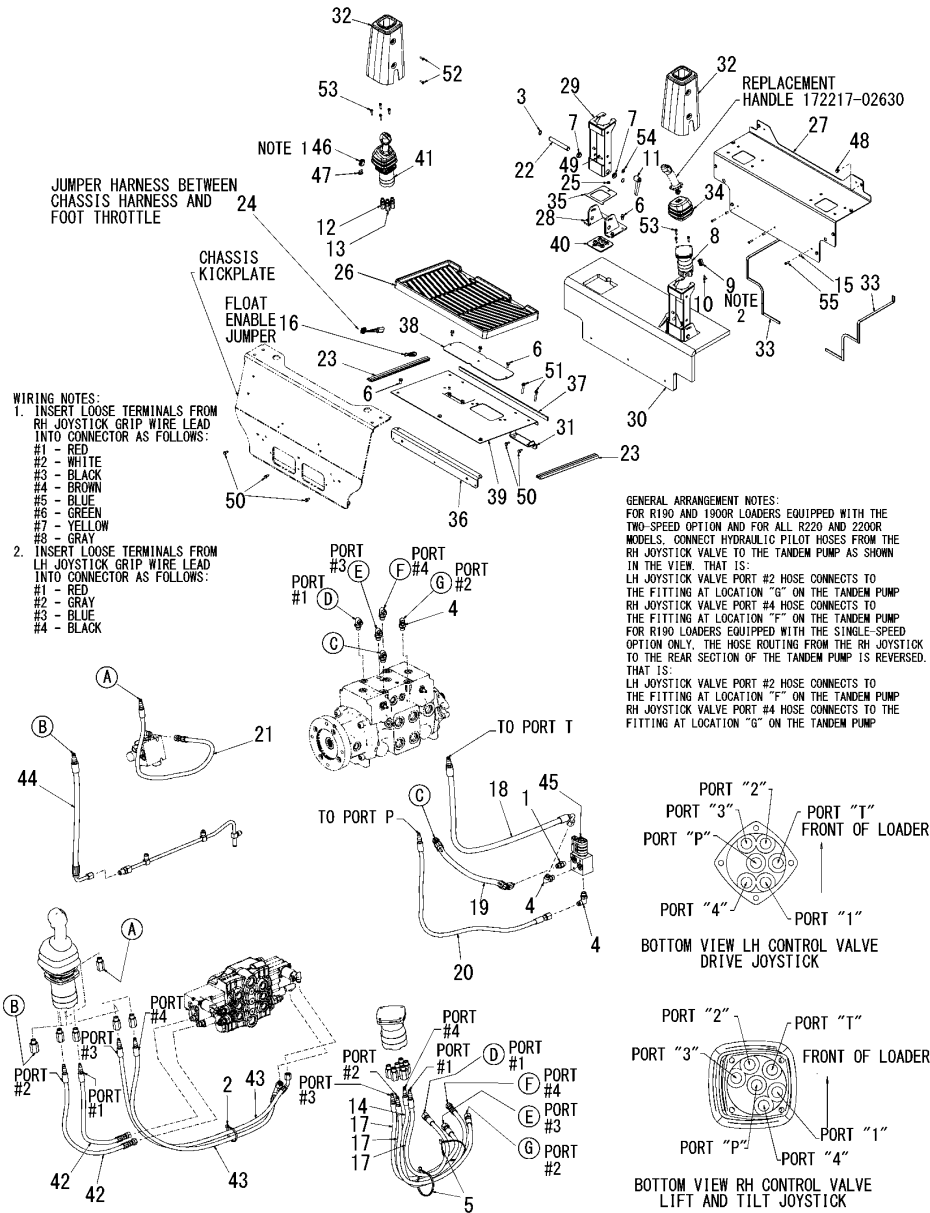
(1)For breakdown see Fig.No.104.
(2)For breakdown see Fig.No.99.

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

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

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

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



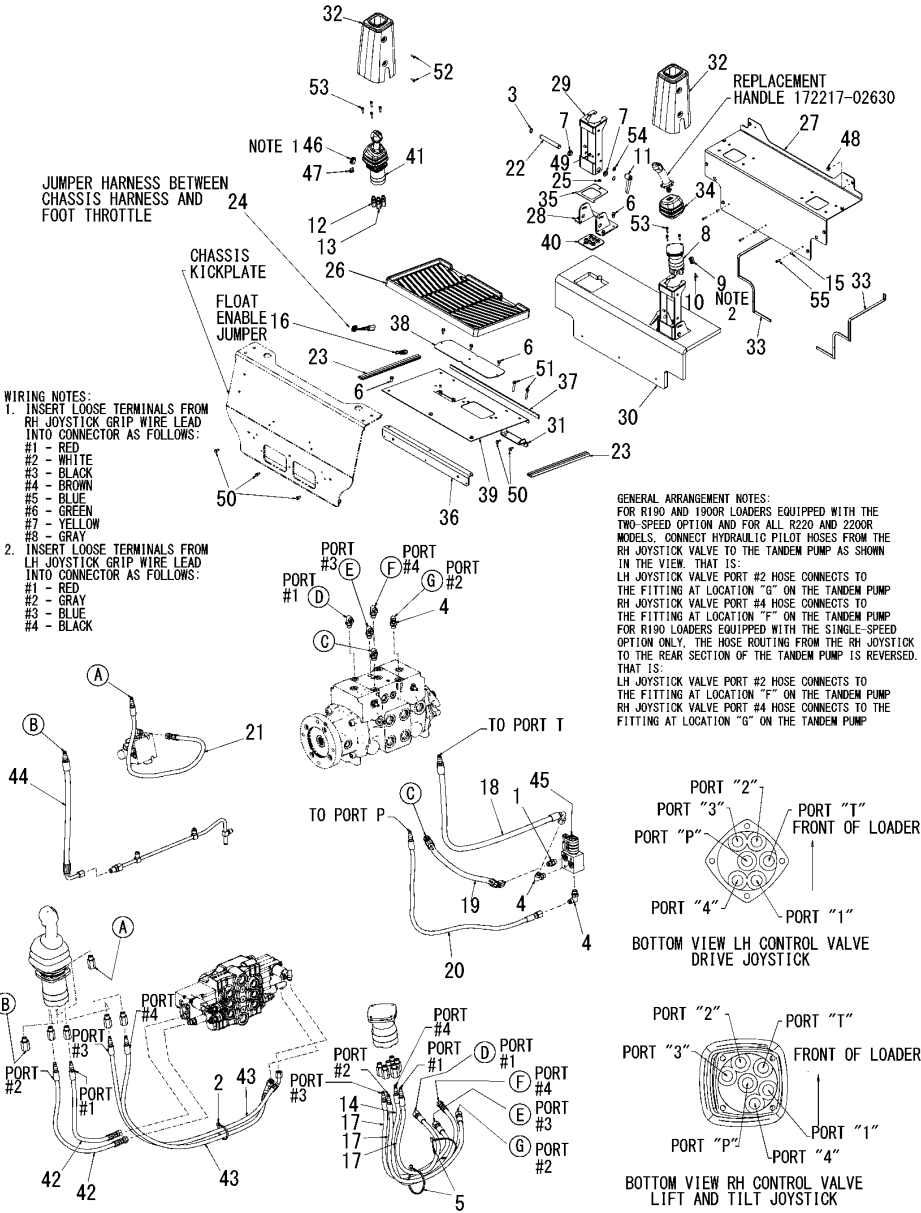
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00070	FITTING	1	1						
2	1	172551-00120	TIE, CABLE	1	1						
3	1	172216-00160	RING, RETAINING	4	4						
4	1	172551-00220	CONNECTOR	7	7						
5	1	172551-00370	TIE, CABLE	2	2						
6	1	172551-00610	SCREW	14	14						
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	HARNESS, 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)=



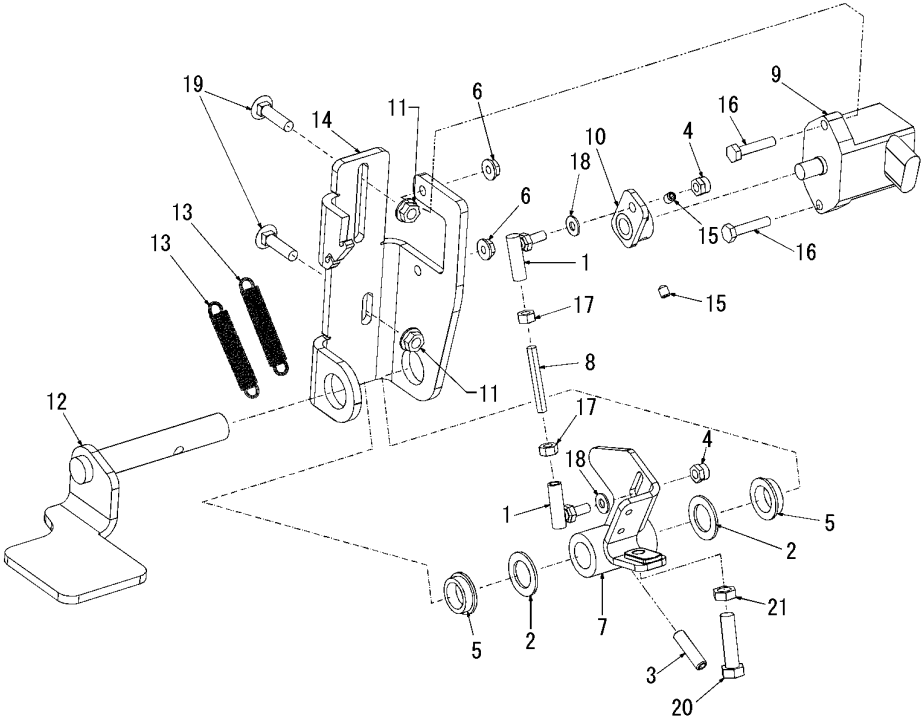
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
52	1	172551-10010	SCREW	4	4						
53	1	172216-09710	SCREW	7	7						
54	1	172551-10370	WASHER	2	2						
55	1	172216-11170	SCREW	3	3						

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)=



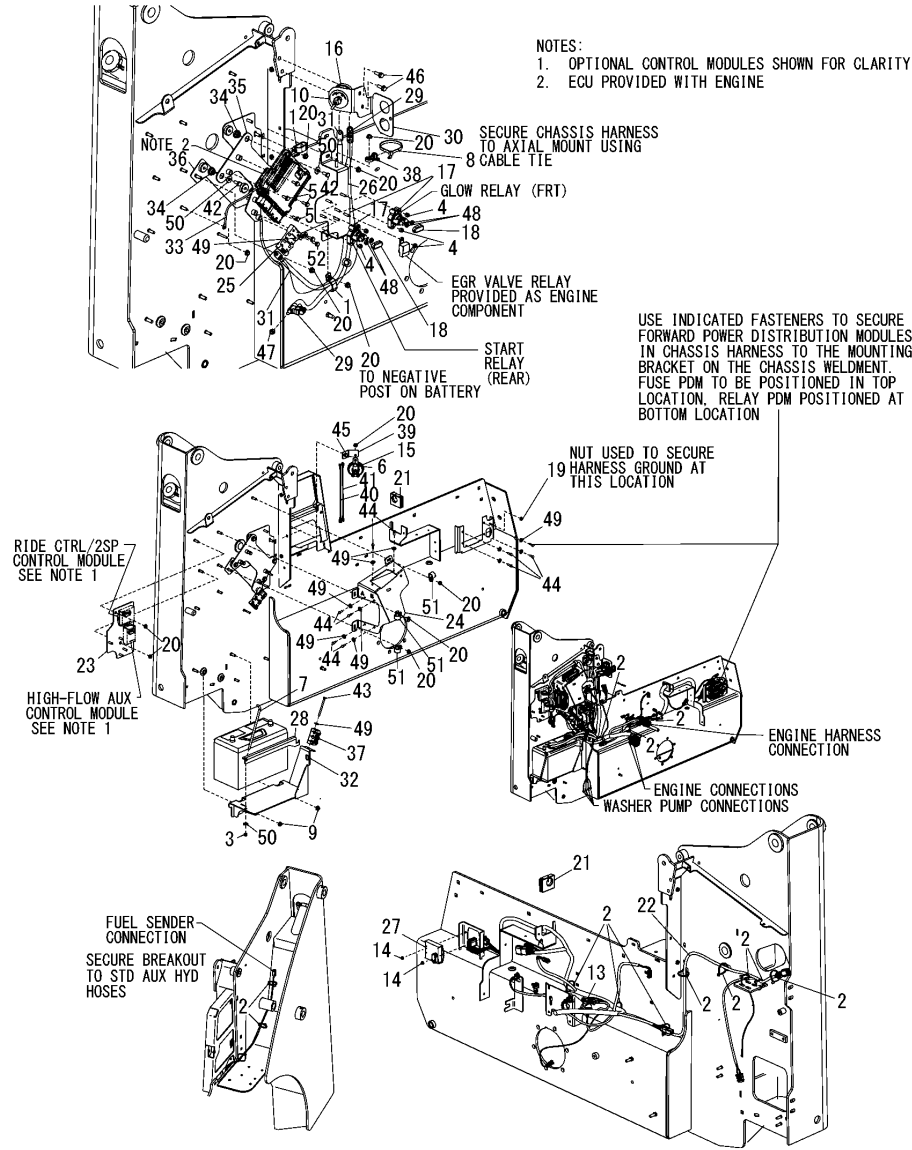
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-00020	JOINT, BALL	2	2						
2	1	172216-00070	WASHER	2	2						
3	1	172216-00280	PIN, ROLL	1	1						
4	1	172216-00540	NUT	2	2						
5	1	172216-00900	BUSHING, PIVOT	2	2						
6	1	172216-01590	NUT	2	2						
7	1	172216-06540	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	Q'ty						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.

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

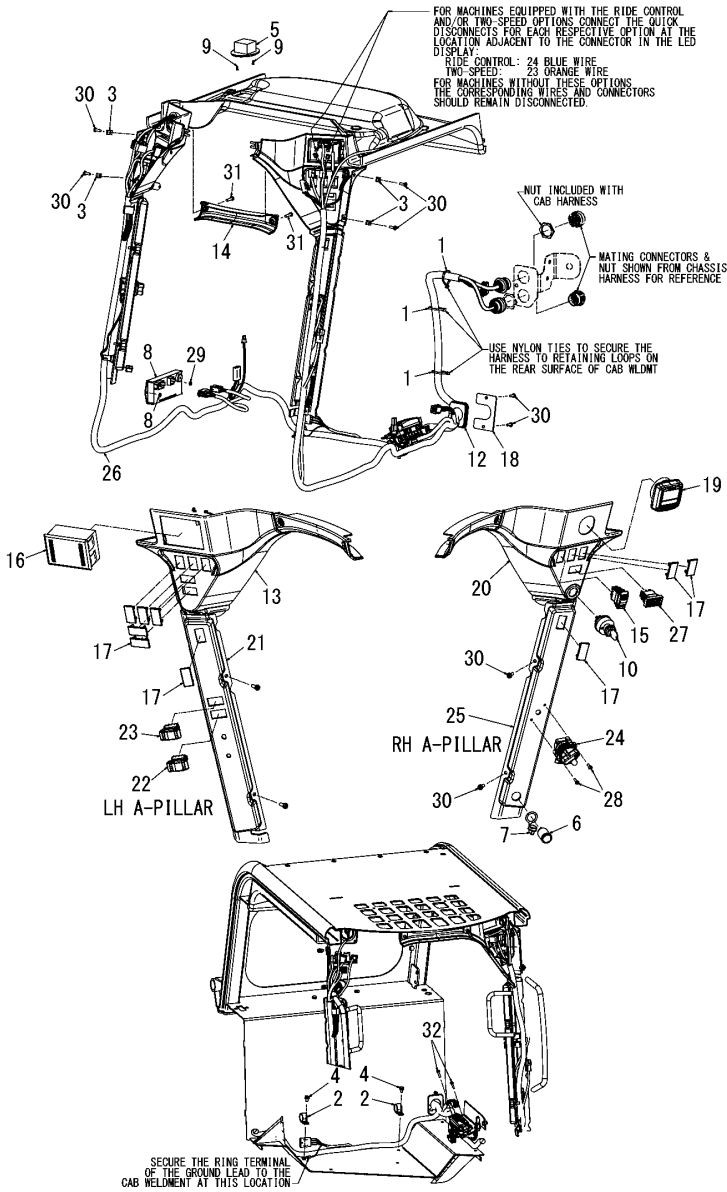
(D)=
(E)=
(F)=



Fig.58. ELECTRICAL-ROPS/FOPS

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

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

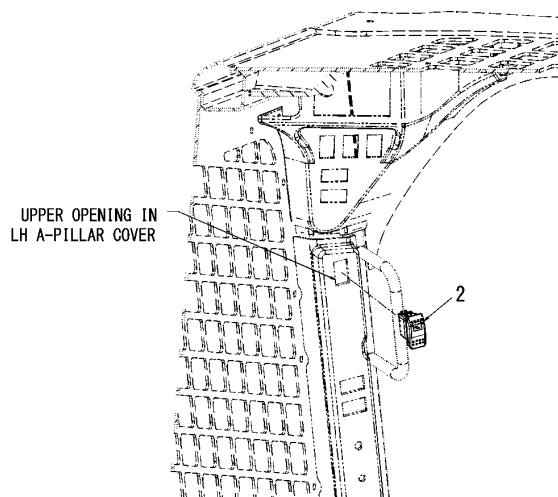
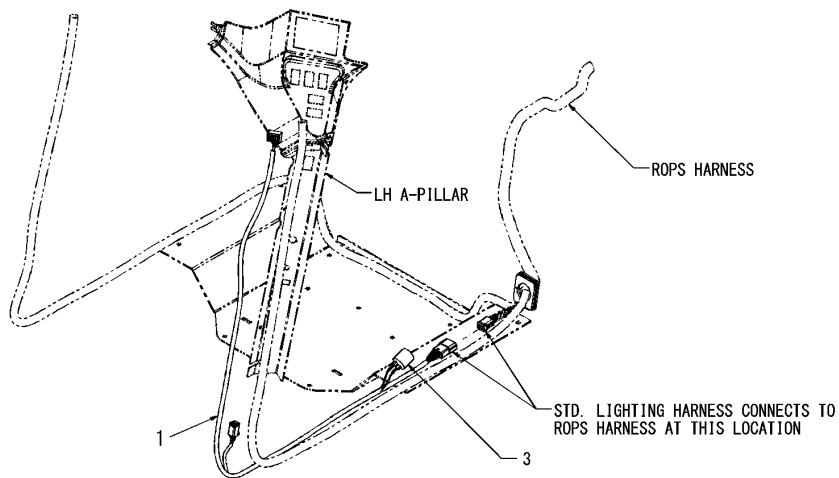


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00120	TIE, CABLE	3	3						
2	1	172216-00080	CLAMP	2	2						
3	1	172216-00140	NUT, SPEED	4	4						
4	1	172218-00020	SCREW	2	2						
5	1	172216-02350	LIGHT, DOME	1	1						
6	1	172551-01460	POWER,AUXILIARY	1	1						
7	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

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

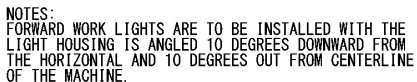


No.	Lev.	Parts No.	Description	Q'ty						R
				(A)	(B)	(C)	(D)	(E)	(F)	
1	1	172218-01130	HARNES,CAB LIGHTING	1	1					
2	1	172551-04060	SWITCH	1	1					1
3	1	172216-00060	FLASHER	1	1					

Remarks
(1)With self-level.

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

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

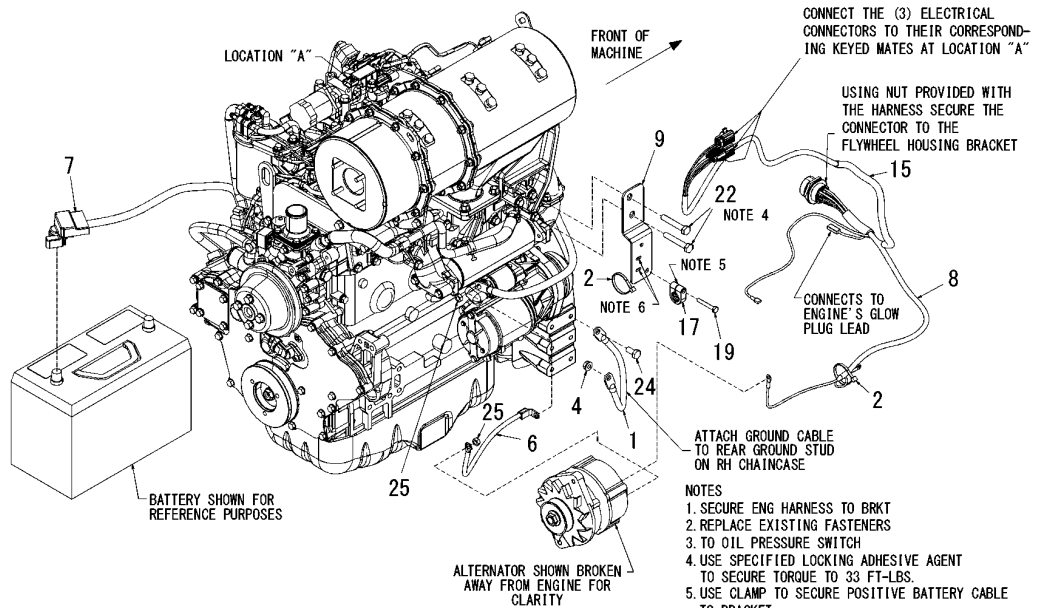
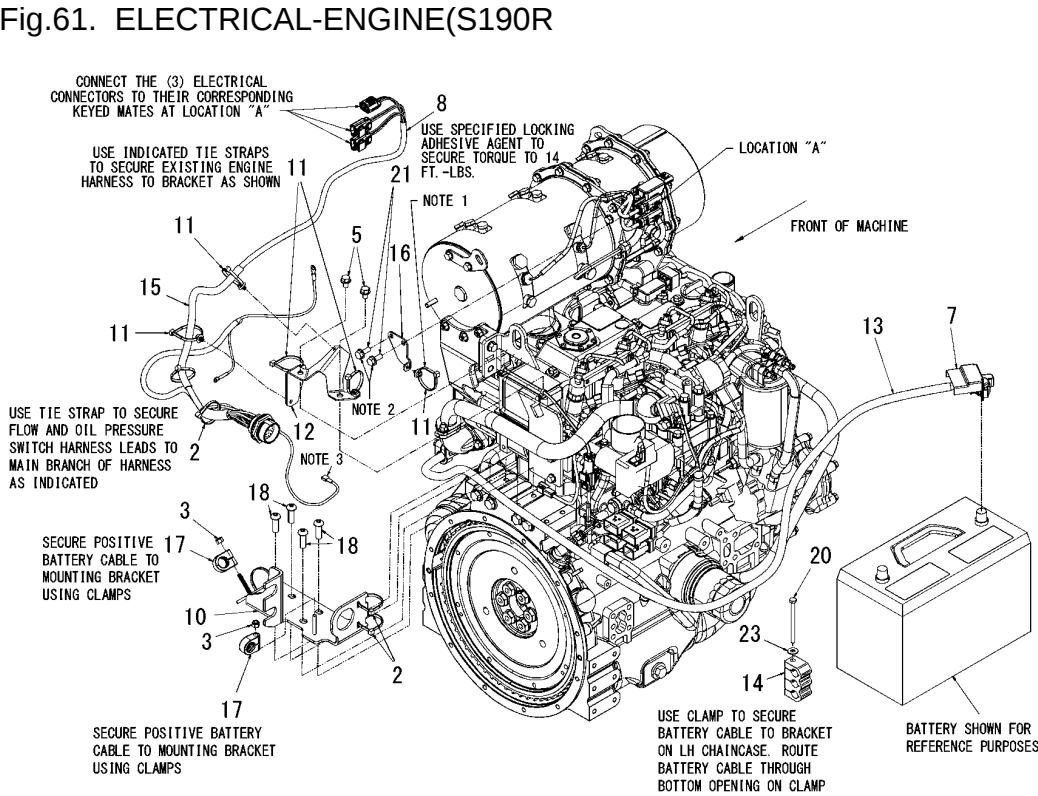
[illegible]

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

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

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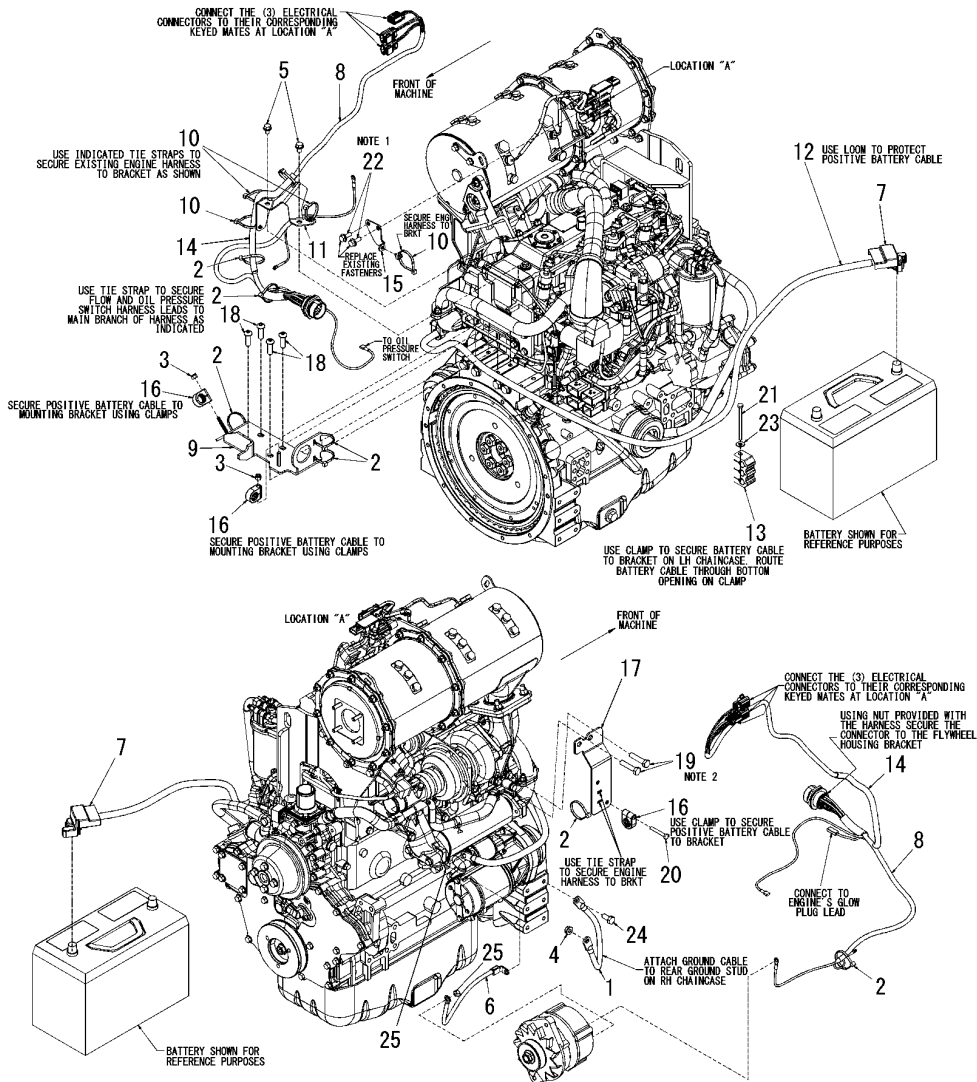
OCS10-M59000 MAIN LOADER COMPONENTS
Fig.61. ELECTRICAL-ENGINE(S190R



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							

(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.

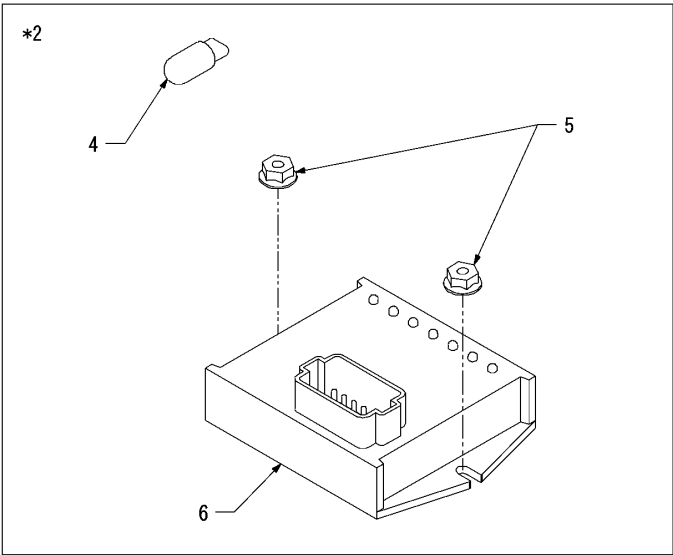
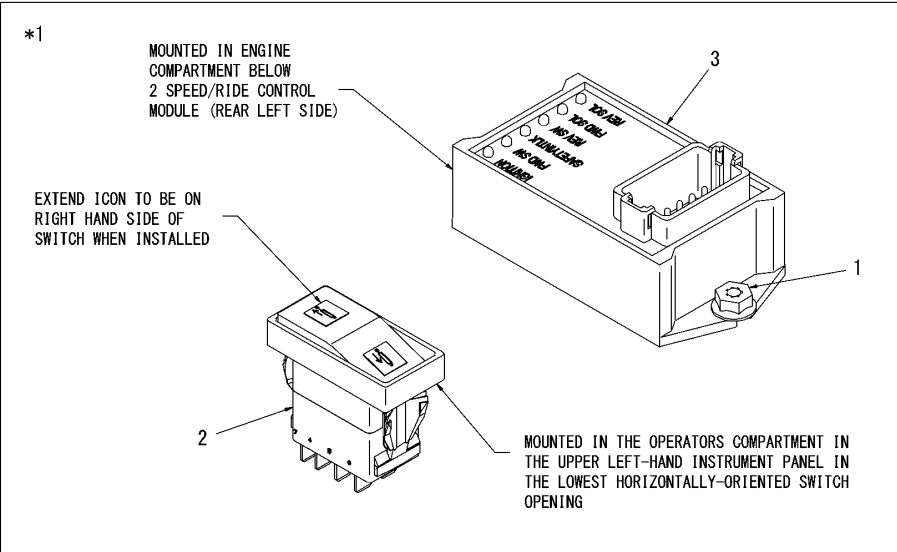
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172215-00040	CABLE		1						
2	1	172551-00120	TIE, CABLE		7						
3	1	172551-00250	NUT		2						
4	1	172215-00700	NUT		1						
5	1	172216-16000	SCREW		2						
6	1	172216-16010	WIRE, ALTERNATOR		1						
7	1	172216-16020	CABLE, 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						

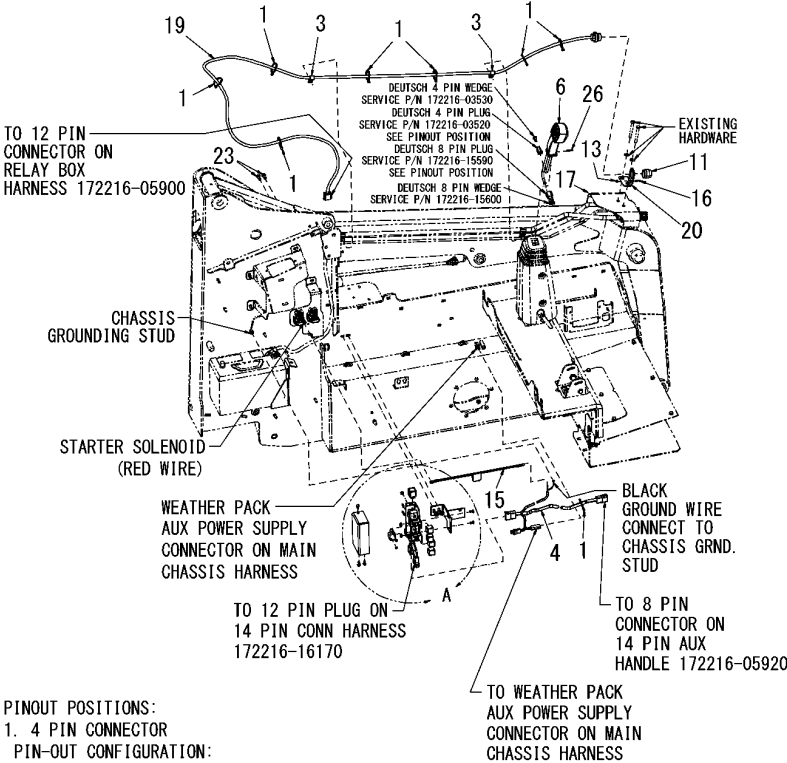


Remarks
*1.High Flow Control.
*2.Two-Speed Control.

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

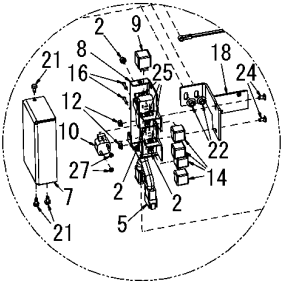
(A)=S190R-1
(B)=S220R-1
(C)=

(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.



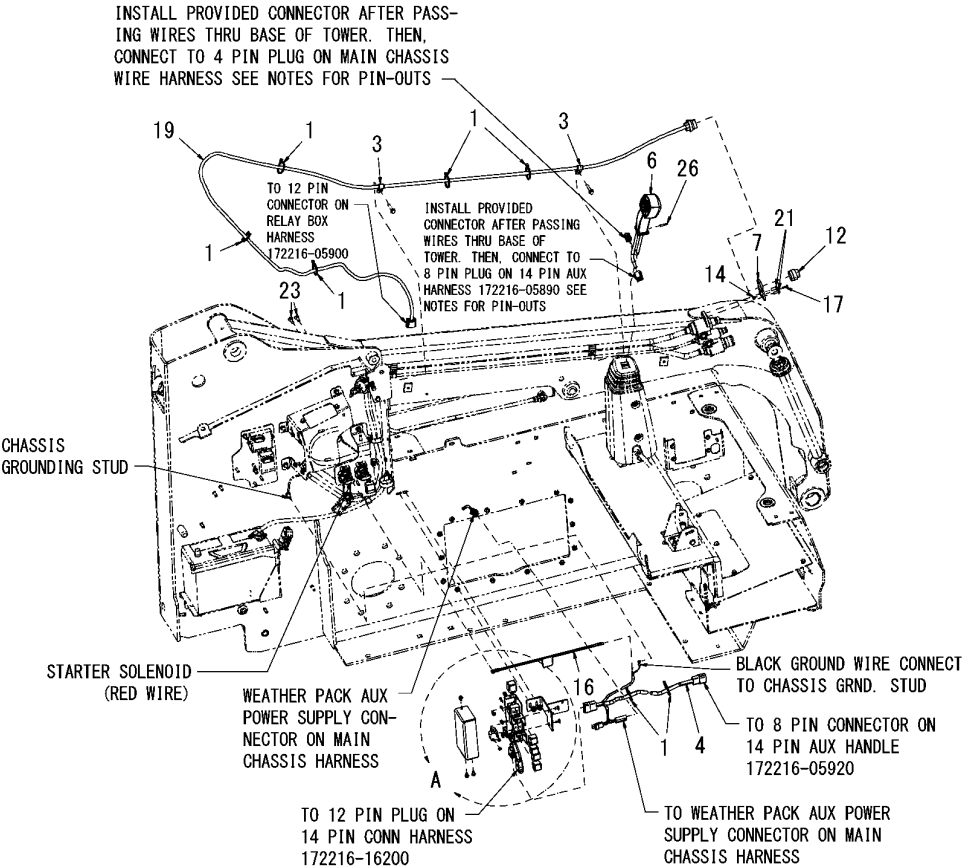
DETAIL A

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	HARNESS, 14-PIN AUX	1							
5	1	172216-05900	HARNESS, RELAY BOX	1							
6	1	172216-05920	HANDLE, 14-PIN AUX	1							
7	1	172216-05990	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	HARNESS	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							

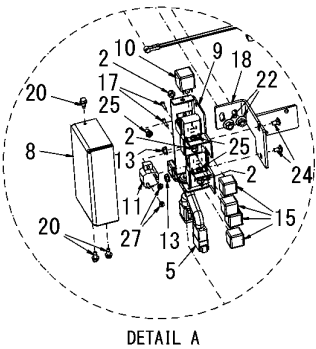
Fig.65. ELECTRICAL-14-PIN AUXILIARY CONNECTOR(S220R

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

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

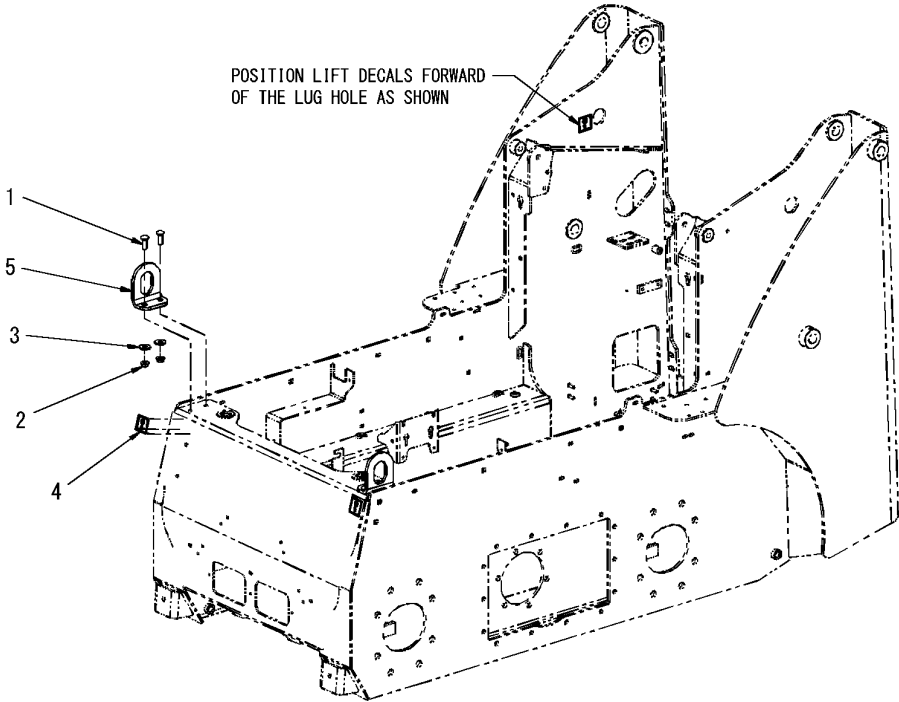


- NOTES:
1. 4 PIN CONNECTOR
PIN-OUT CONFIGURATION:
1. RED
2. PINK
3. GREEN
4. BLACK
2. 8 PIN CONNECTOR
PIN-OUT CONFIGURATION:
1. YELLOW
2. GRAY
3. ORANGE
4. BROWN
5. WHITE
6. VIOLET
7. BLUE
8. TAN



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)=

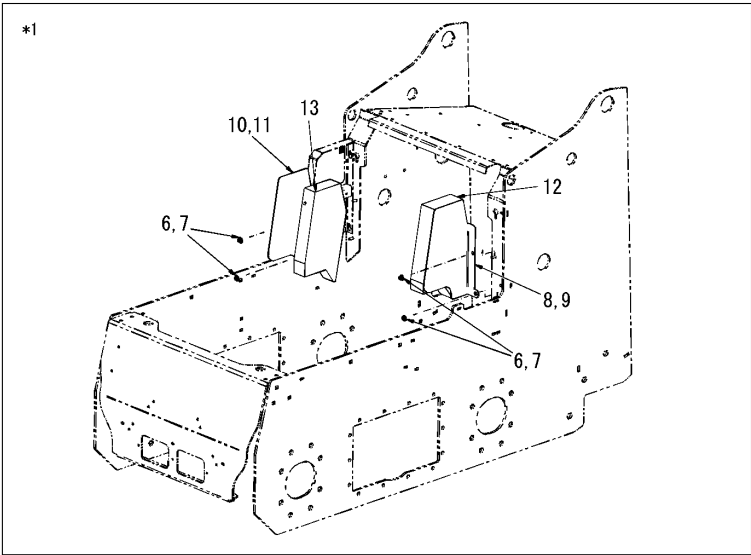
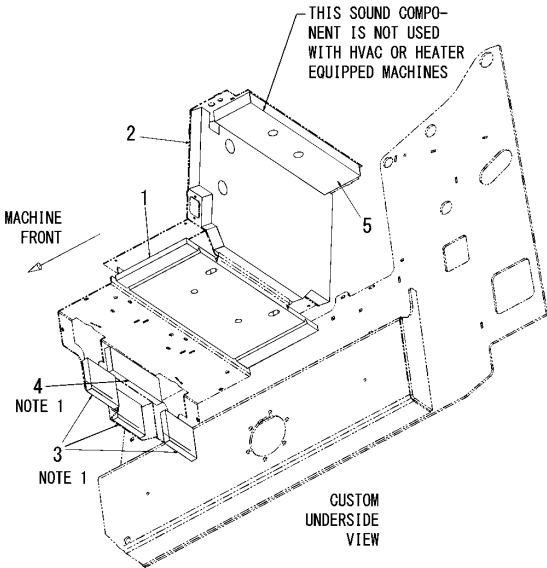
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172218-05930	BOLT	4	4						
2	1	172215-00710	NUT	4	4						
3	1	172216-01770	WASHER	4	4						
4	1	172551-01570	LABEL,LIFT POINT	4	4						
5	1	172218-04050	LIFT EYE, 4 POINT	2	2						

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.

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

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

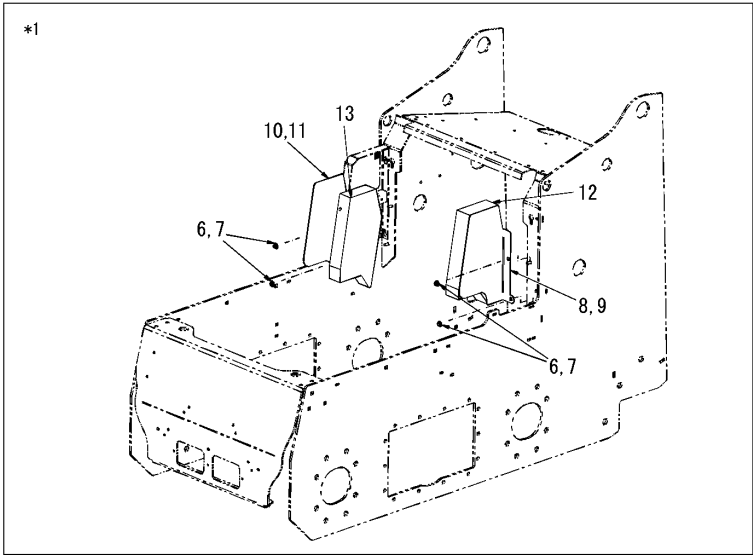
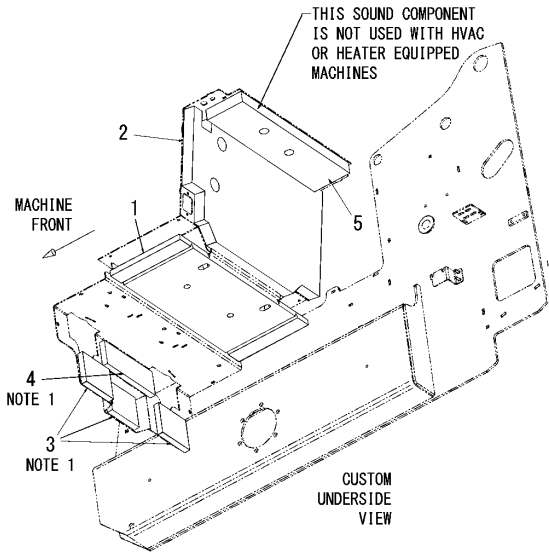
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-16240	PAD, CHASSIS R LOWER	1							
2	1	172216-16250	PAD, CHASSIS R UPPER	1							
3	1	172216-16260	PAD, CHASSIS, BOTTOM	1							
4	1	172216-16270	PAD, ENGINE COVER	1							



Fig.69. SOUND SUPPRESSION(S220R STANDARD

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.



(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	172218-05810	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.

(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						

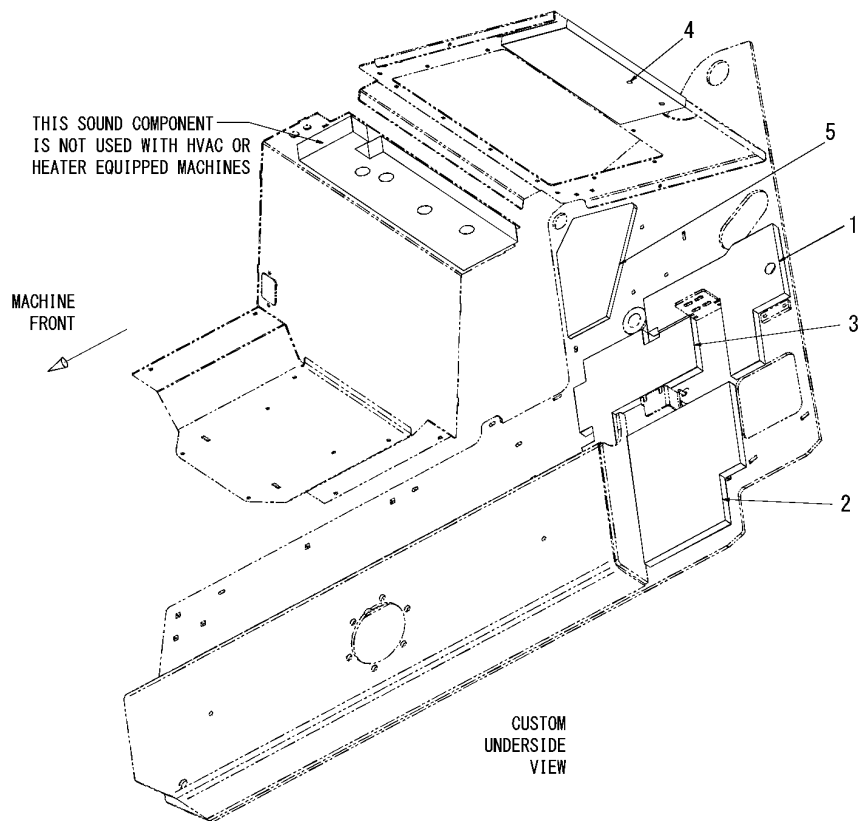
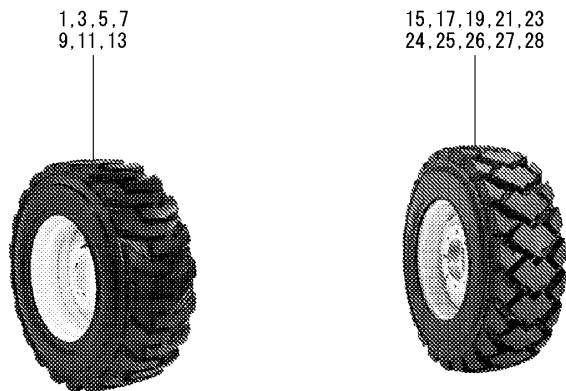


Fig.71. TIRES



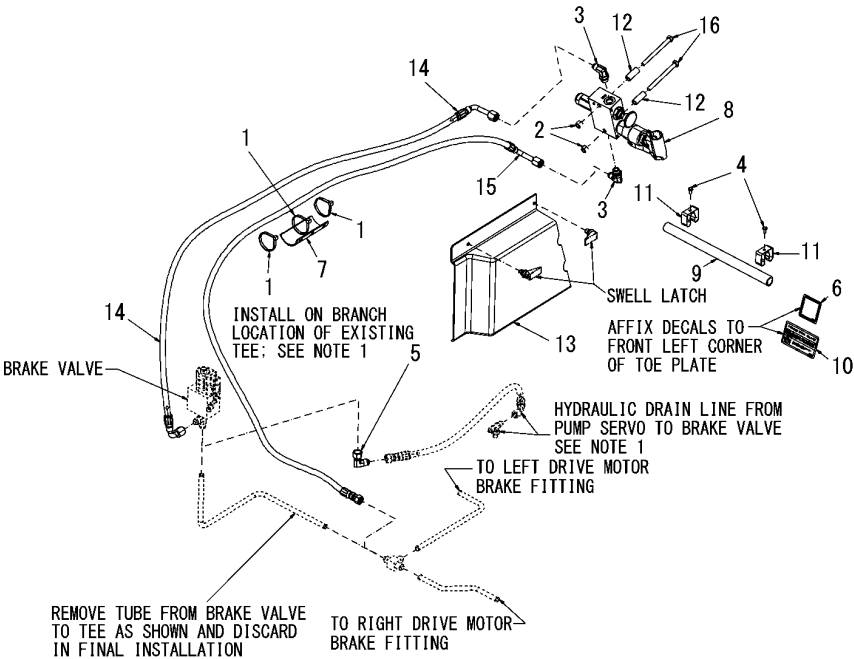
No.	Lev.	Parts No.	Description	(A)=S190R-1 (B)=S220R-1 (C)=		(D)= (E)= (F)=				I	R
				(A)	(B)	Q'ty (C)	(D)	(E)	(F)		
1	1	172216-10100	WHEEL ASSY	1	1						
2	1	172216-03210	WHEEL	1	1						1
3	1	172216-10110	WHEEL ASSY	1	1						
4	1	172216-03210	WHEEL	1	1						1
5	1	172216-09970	WHEEL ASSY	1	1						
6	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)=



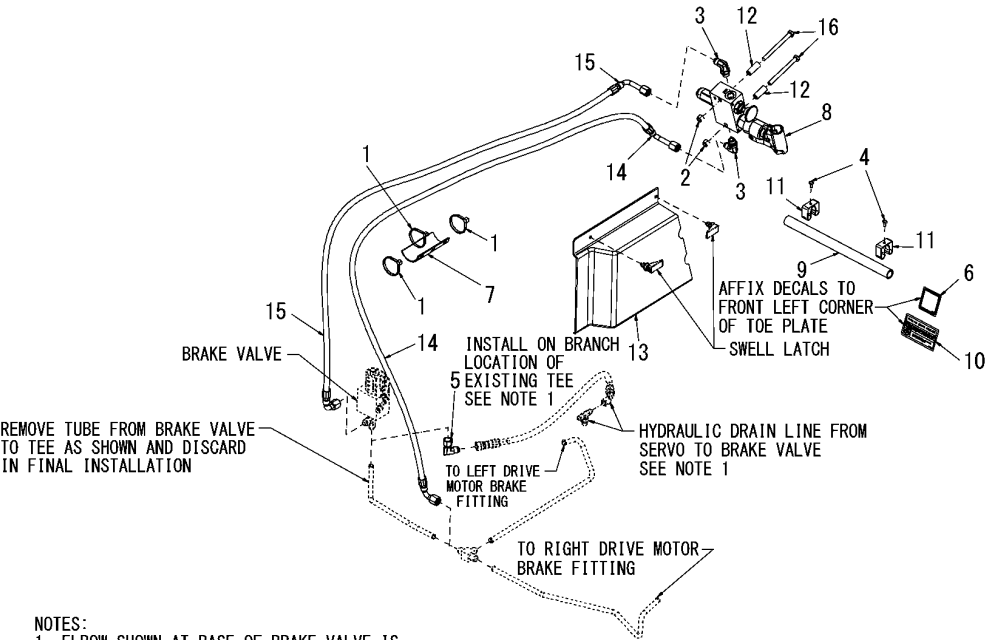
NOTES:
1. ELBOW SHOWN AT BASE OF BRAKE VALVE IS INCLUDED FOR USE ON SERVO-CONTROLLED MODELS ONLY.

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							

Fig.133. BRAKE RELEASE(S220R

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

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



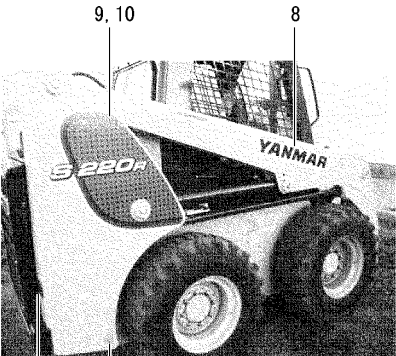
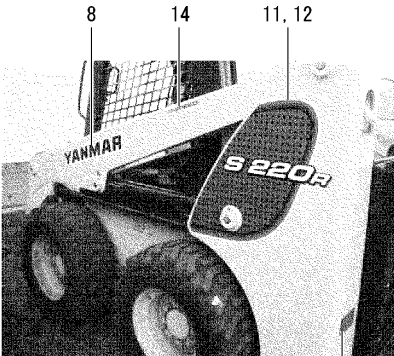
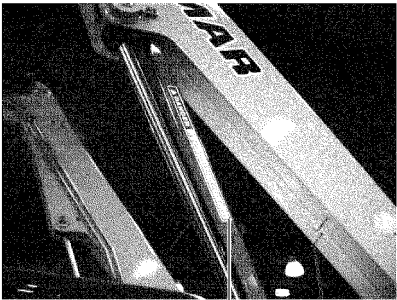
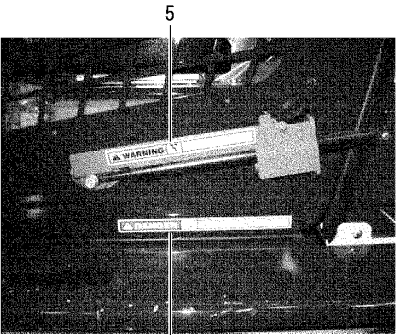
NOTES:
1. ELBOW SHOWN AT BASE OF BRAKE VALVE IS INCLUDED FOR USE ON SERVO-CONTROLLED MODELS ONLY.

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	172216-17460	HOSE		1						
15	1	172216-17440	HOSE		1						
16	1	172216-09340	SCREW		2						

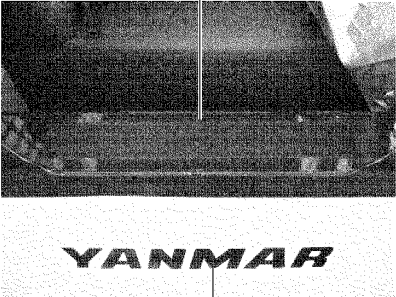
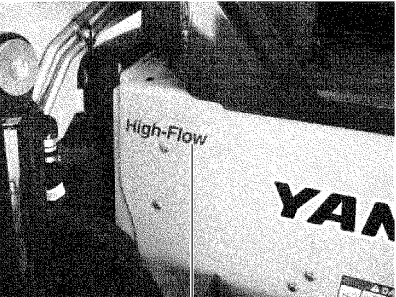
Fig.72. DECALS(1

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

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



S220R-1 Models

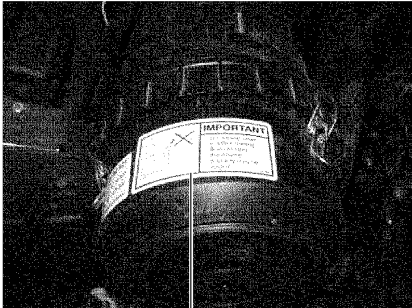


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-00240	STRIP	1	1						
2	1	172215-00800	REFLECTOR, RED	2	2						
3	1	172551-01510	LABEL, KEEP OUT	2	2						
4	1	172551-01560	LABEL, TIEDOWN POINT	1	1						
5	1	172216-12610	DECAL, ROPS LOCK	1	1						
6	1	172551-11460	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

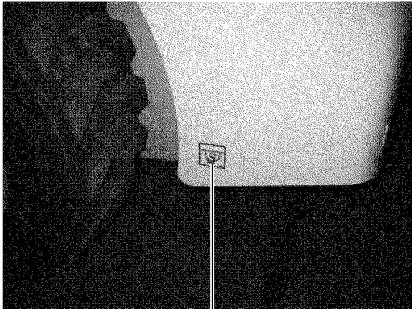
Remarks
(1)Option.
(2)Option.
Set of 2.

Fig.74. DECALS(3)

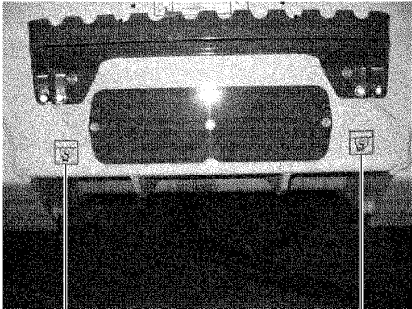
S190R-1 Models



2



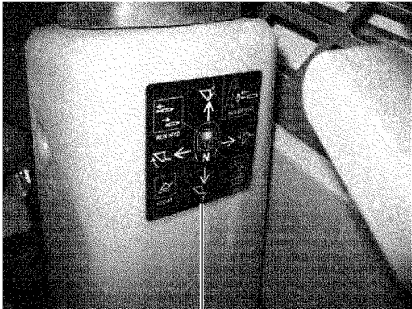
3



3

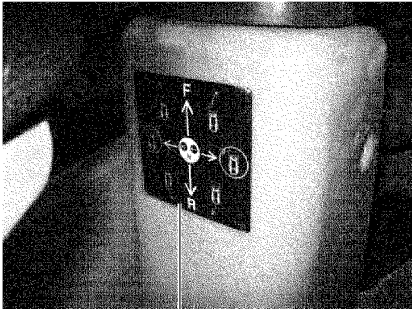
3

Dual Joystick Models



5

Dual Joystick Models

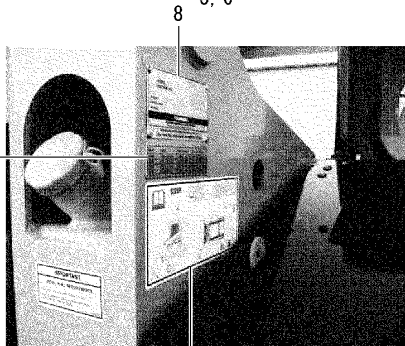
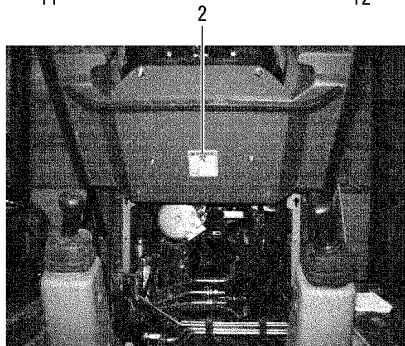
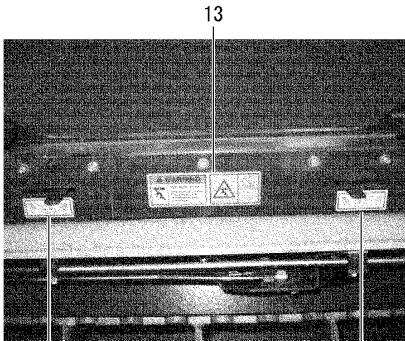
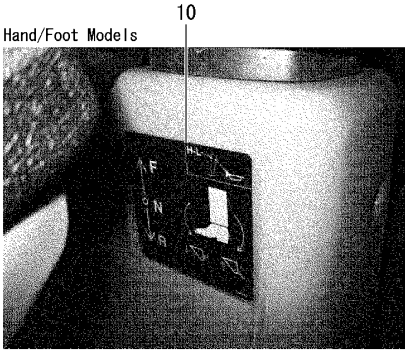
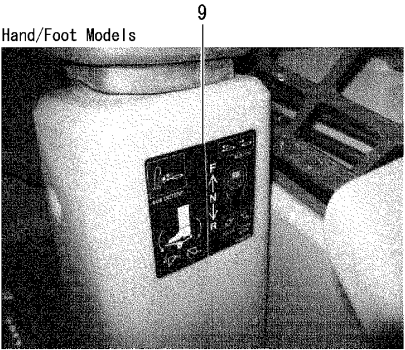


6

						OCS10-M59000 Fig.74							
						(A)=S190R-1		(D)=					
						(B)=S220R-1		(E)=					
						(C)=		(F)=					
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						
6	1	172216-03730	LABEL, JOYSTICK LEFT			1	1						

Remarks
(1)Dual Joystick models.

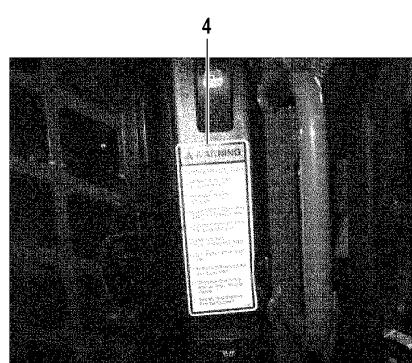
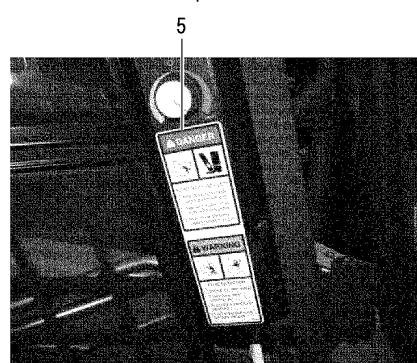
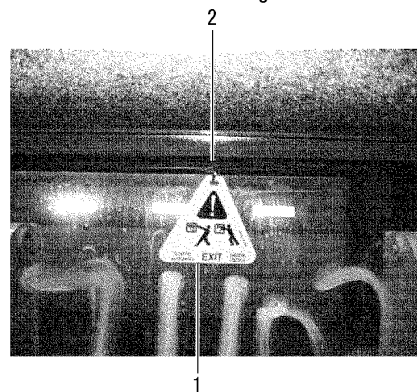
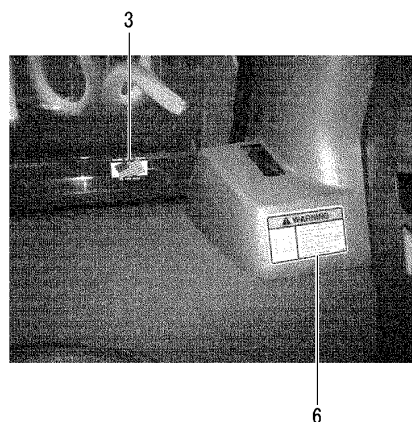
Fig.75. DECALS(4



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

							OCS10-M59000 Fig.75					
							(A)=S190R-1		(D)=			
							(B)=S220R-1		(E)=			
							(C)=		(F)=			
No.	Lev.	Parts No.	Description	(A)	(B)	Q'ty	(C)	(D)	(E)	(F)	I	R
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

Fig.76. DECALS(5



No.	Lev.	Parts No.	Description	(A)=S190R-1 (B)=S220R-1 (C)=		(D)= (E)= (F)=				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.
---------	------------

N:Old $\xrightarrow[\text{No}]{\text{Yes}}$ New, Q:Old $\xrightarrow[\text{Yes}]{\text{No}}$ New, R:Old $\xrightarrow[\text{Yes}]{\text{Yes}}$ New, S:Old $\xrightarrow[\text{No}]{\text{No}}$ New, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change
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Fig.77. DECALS(6

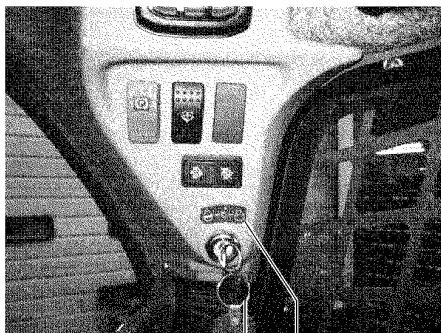
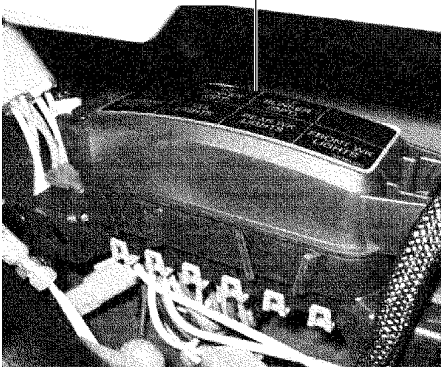
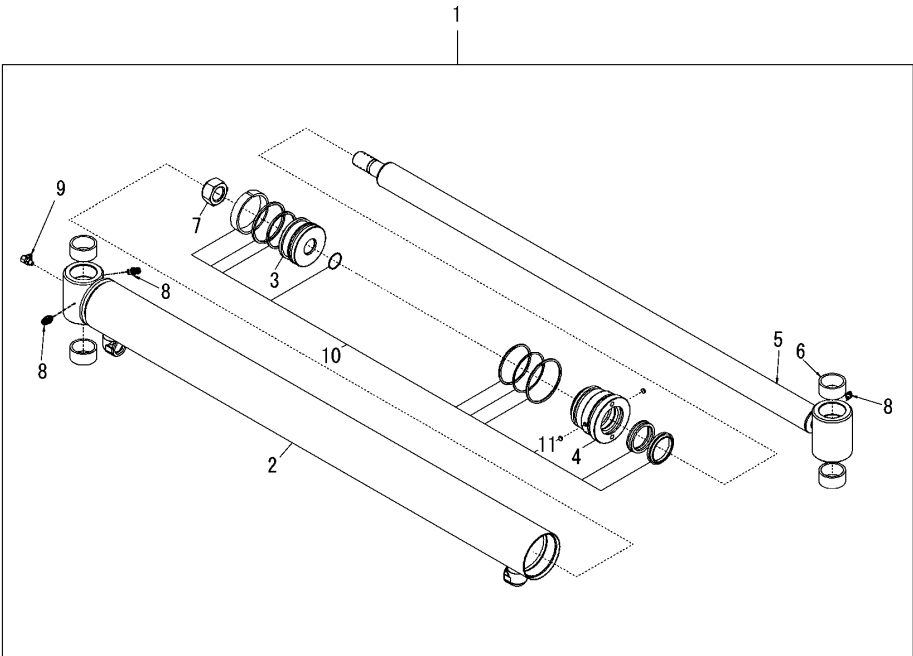
[illegible]

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						

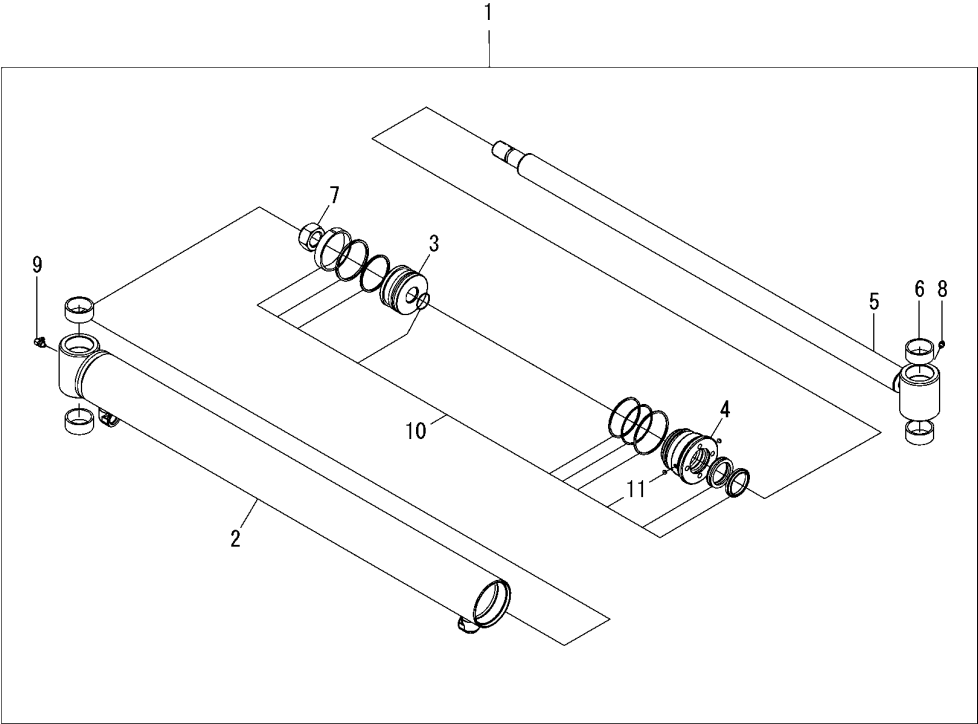
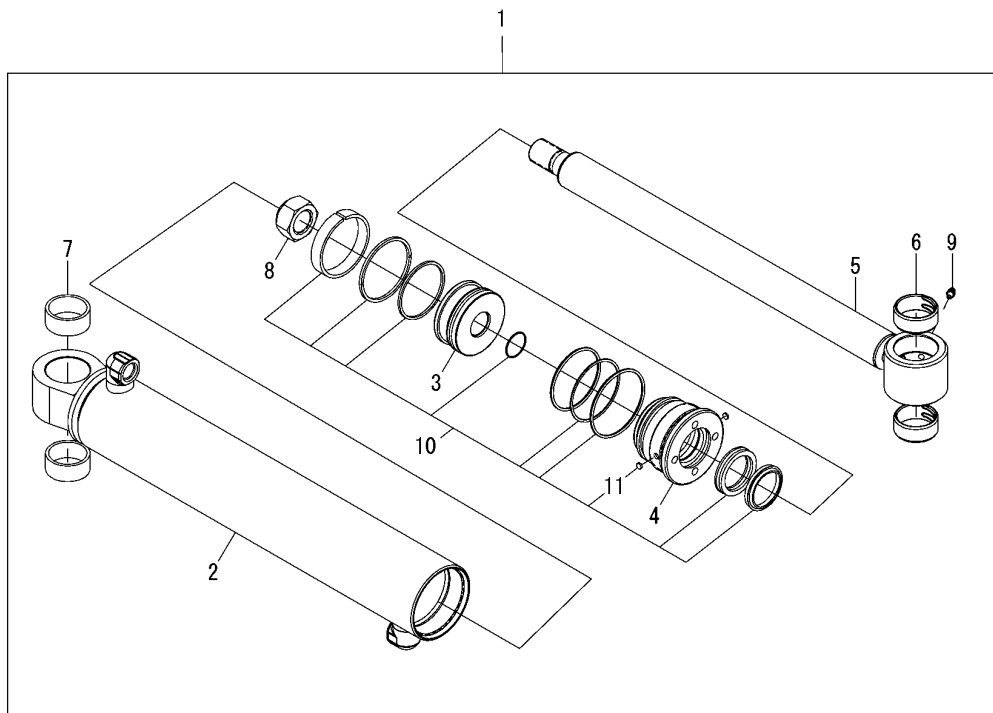


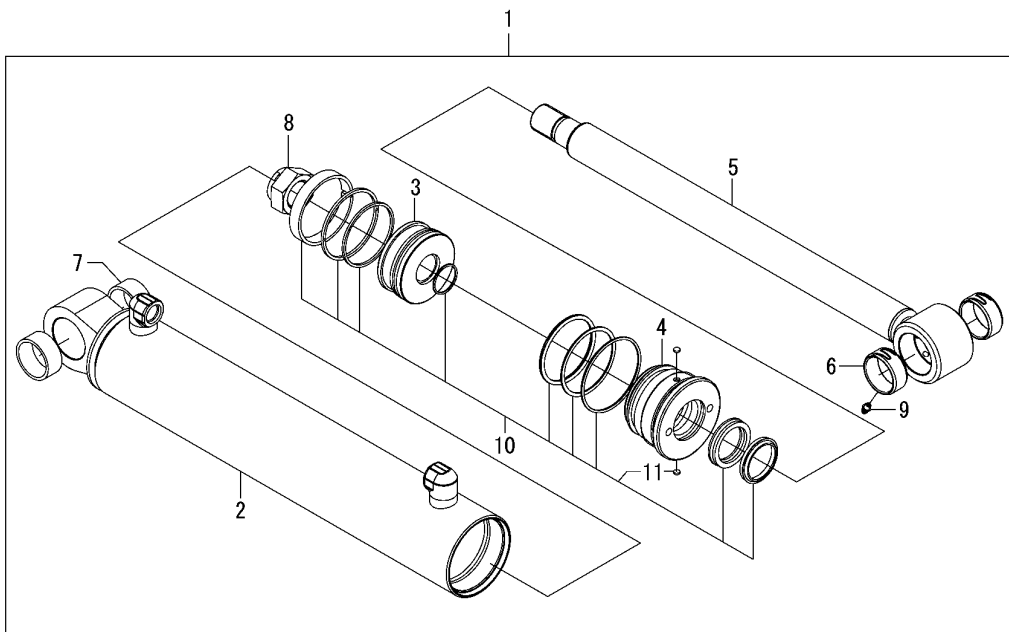
Fig.80. TILT CYLINDER(S190R



No.	Lev.	Parts No.	Description	(A)=S190R-1 (B)=S220R-1 (C)=		(D)= (E)= (F)=		I	R
				(A)	(B)	(C)	(D)		
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					

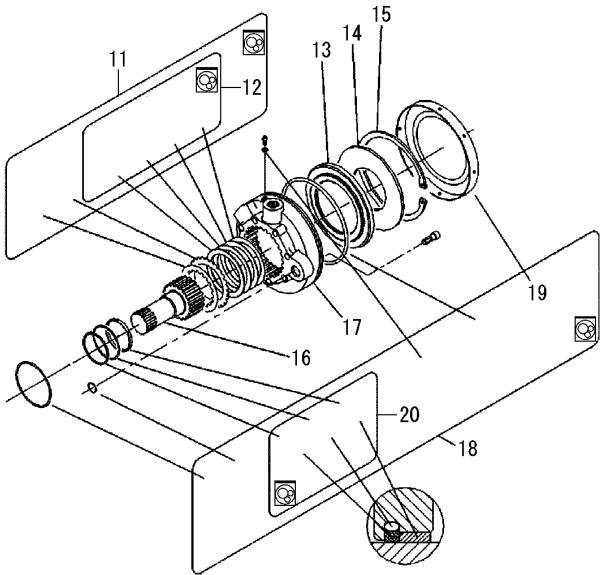
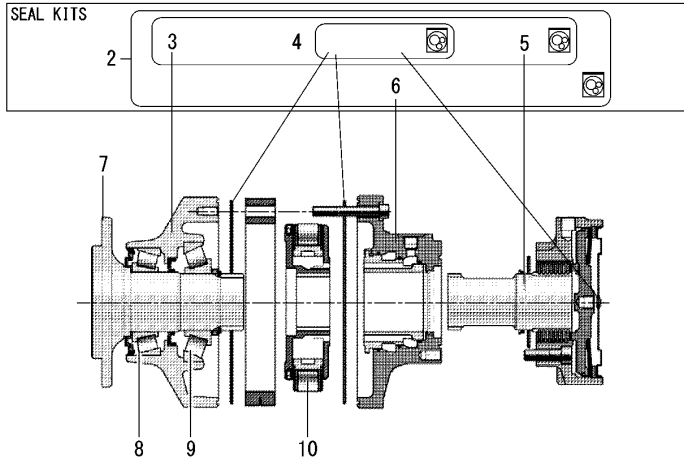
(A)=S190R-1
(B)=S220R-1
(C)=

(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)=

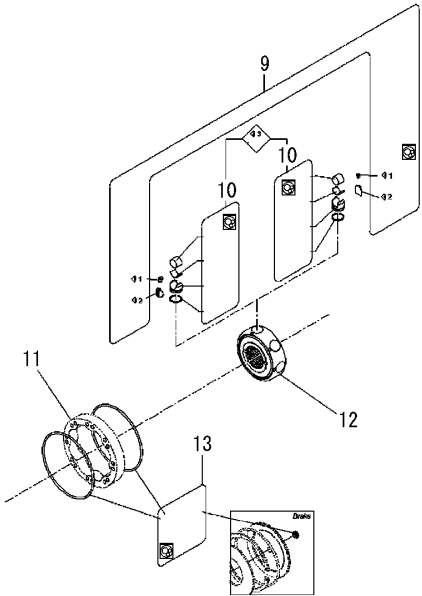
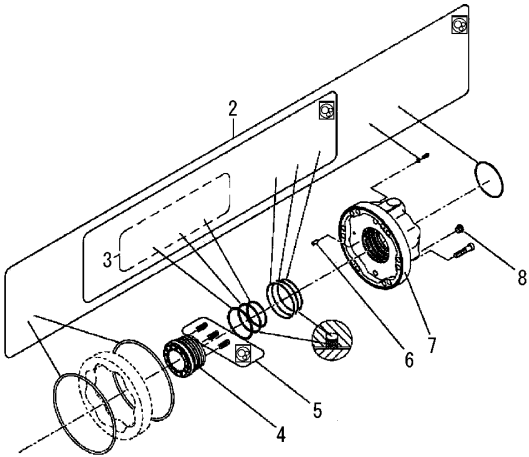
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-11910	MOTOR, SINGLE-SPEED	2							1
2	1	172216-12240	SEAL KIT	1							
3	2	172216-12250	SEAL KIT	1							
4	3	172216-12110	KIT, SEAL MOTOR	1							
5	3	172216-12040	KIT, SEAL BRAKE	1							
6	2	172216-12190	KIT, SEAL 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.

Fig.83. DRIVE MOTORS(S190R SINGLE-SPEED

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

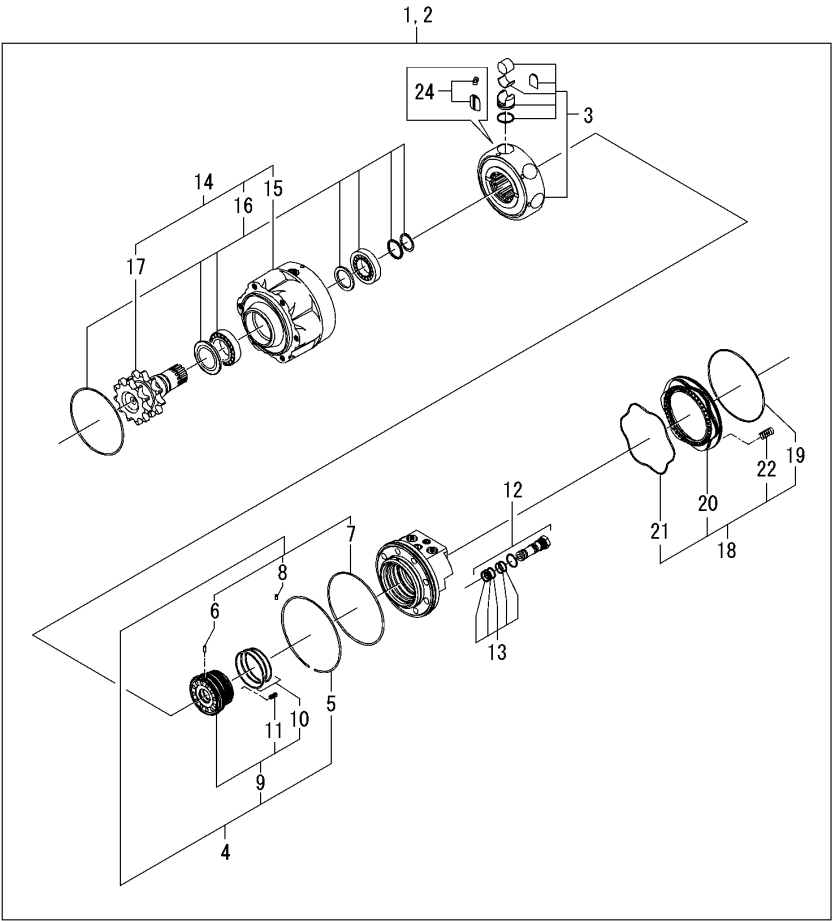
(D)=
(E)=
(F)=



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)=

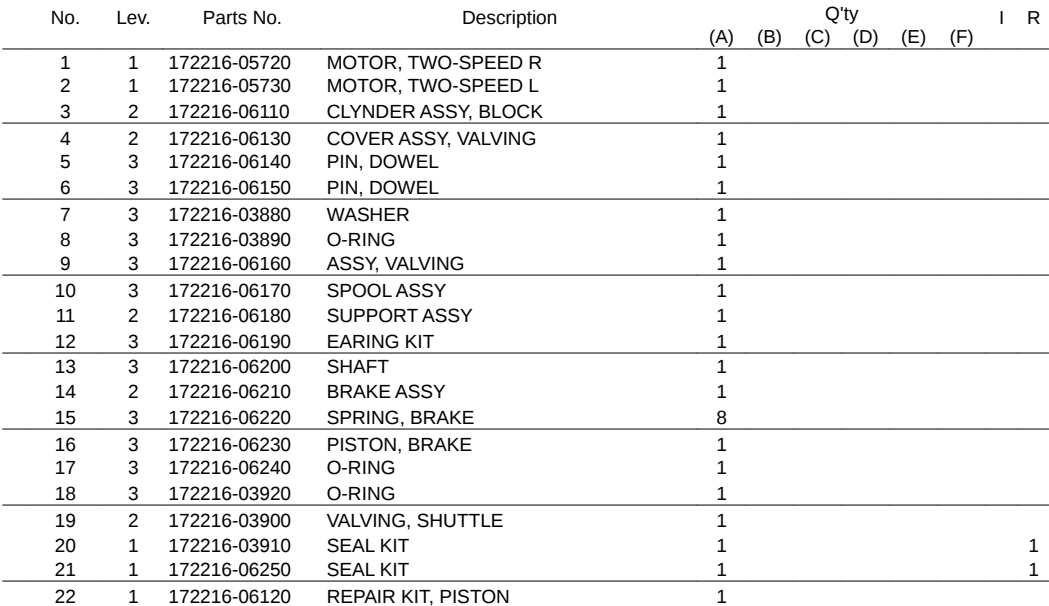
(D)=
(E)=
(F)=

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.

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

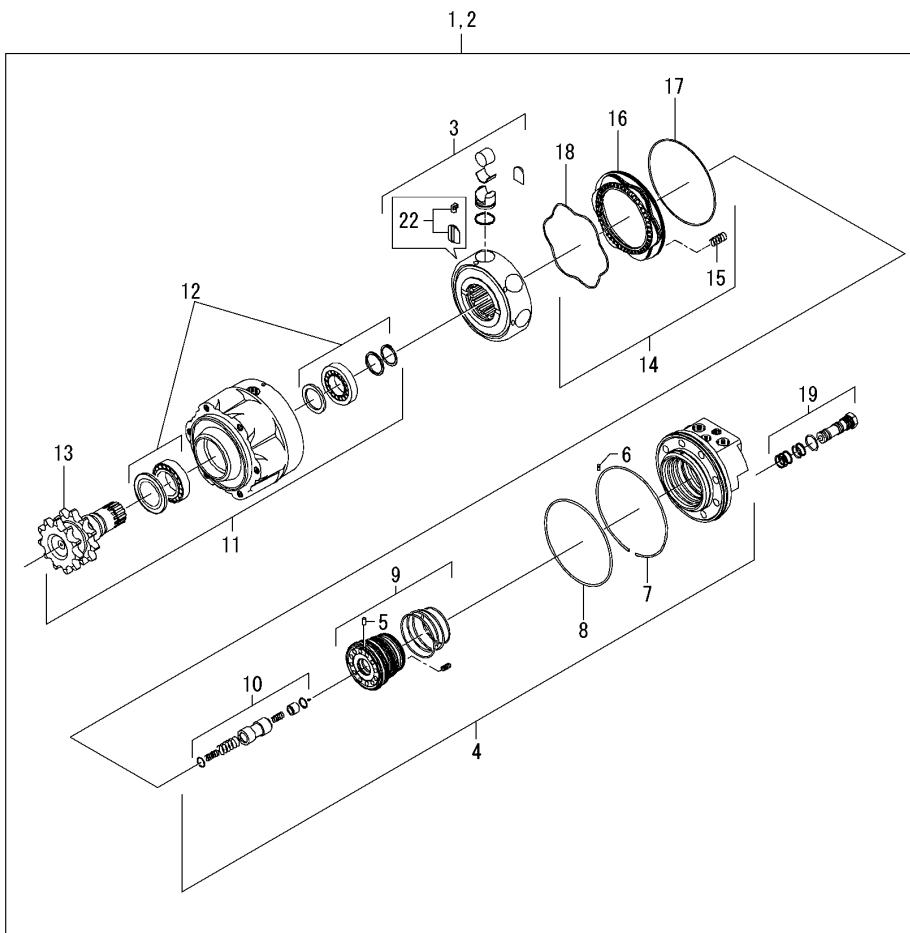
(D)=
(E)=
(F)=



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

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Fig.86. DRIVE MOTORS(S220R TWO-SPEED

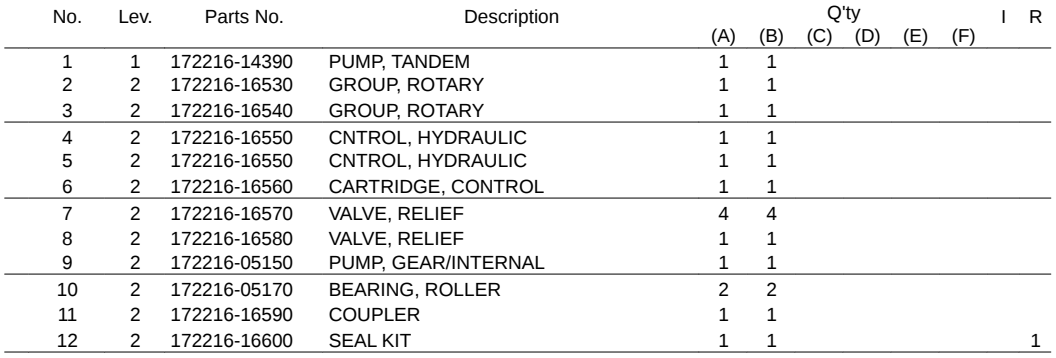


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172217-01690	MOTOR, TWO-SPEED R		1						
2	1	172217-01700	MOTOR, TWO-SPEED L		1						
3	2	172216-06110	CLYNDER ASSY, BLOCK		1						
4	2	172216-06130	COVER ASSY, VALVING		1						
5	3	172216-06140	PIN, DOWEL		1						
6	3	172216-06150	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.

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

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

[illegible]

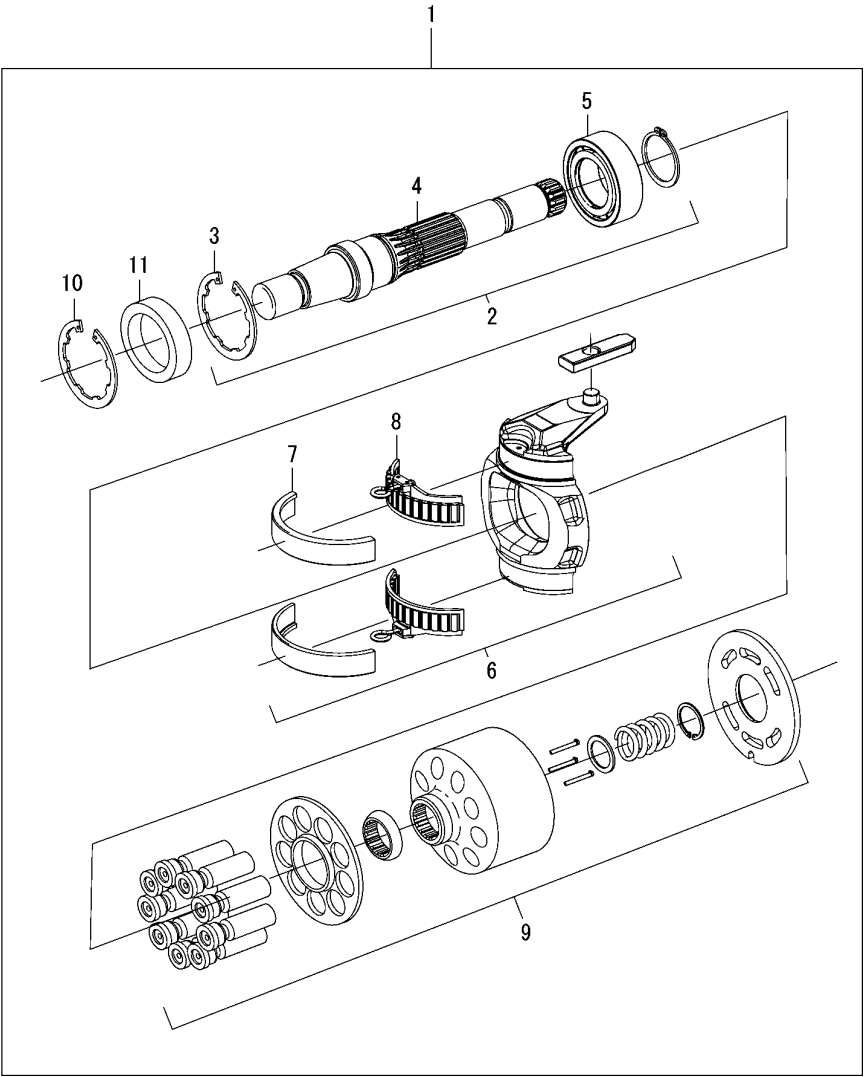
N:Old $\xrightarrow{\text{Yes}} \text{New}$, Q:Old $\xrightarrow{\text{No}} \text{New}$, R:Old $\xrightarrow{\text{Yes}} \text{New}$, S:Old $\xrightarrow{\text{No}} \text{New}$, W:Add, Z:Discontinued, F:Interchangeable by set, K:Q'ty Change

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

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

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

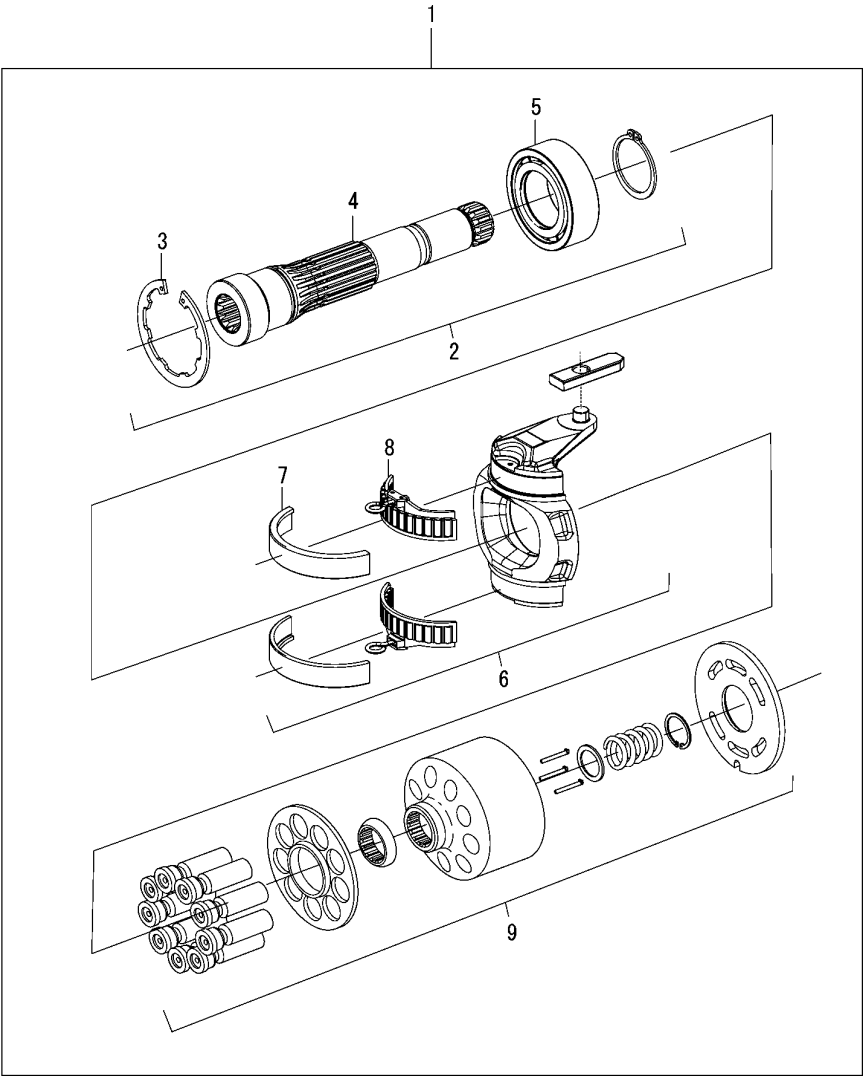


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-16530	GROUP, ROTARY	1	1						
2	2	172216-16610	SHAFT ASSY, DRIVE	1	1						
3	3	172216-05190	SEEGER-V-RING	1	1						
4	3	172216-05180	SHAFT, DRIVE	1	1						
5	3	172216-16640	BEARING	1	1						
6	2	172216-16620	CRADLE 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)=



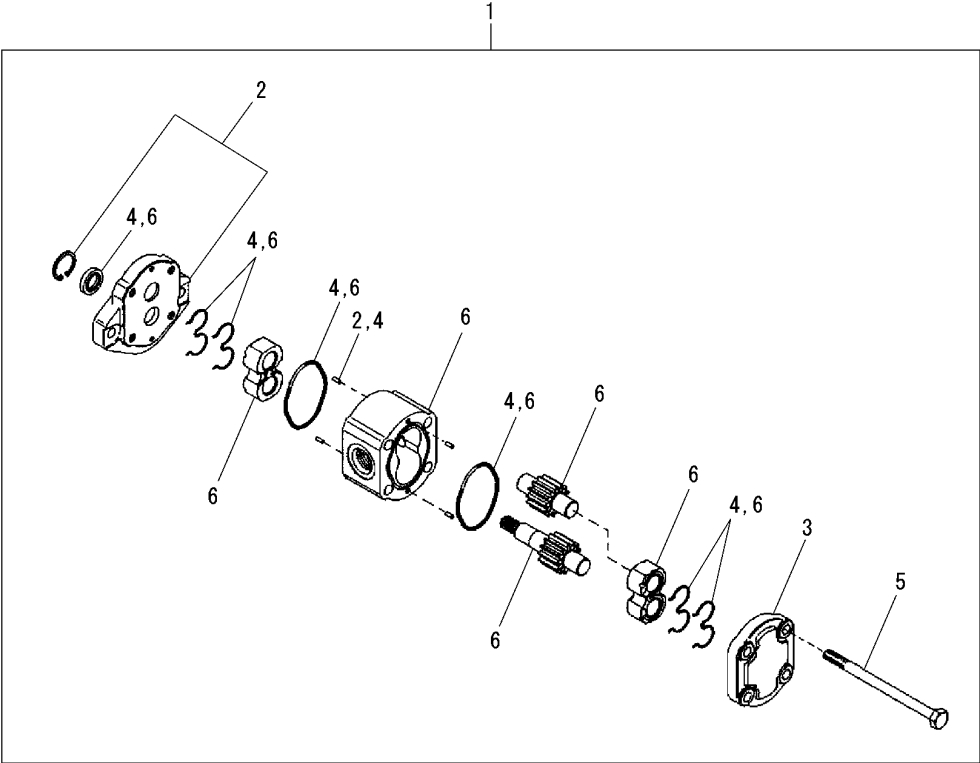
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-16540	GROUP, ROTARY	1	1						
2	2	172216-16670	SHAFT ASSY, DRIVE	1	1						
3	3	172216-05190	SEEGER-V-RING	1	1						
4	3	172216-05210	SHAFT, DRIVE	1	1						
5	3	172216-16640	BEARING	1	1						
6	2	172216-16620	CRADLE 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							



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

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

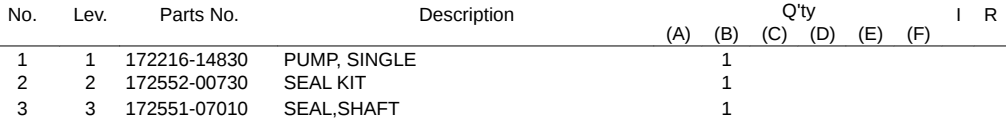
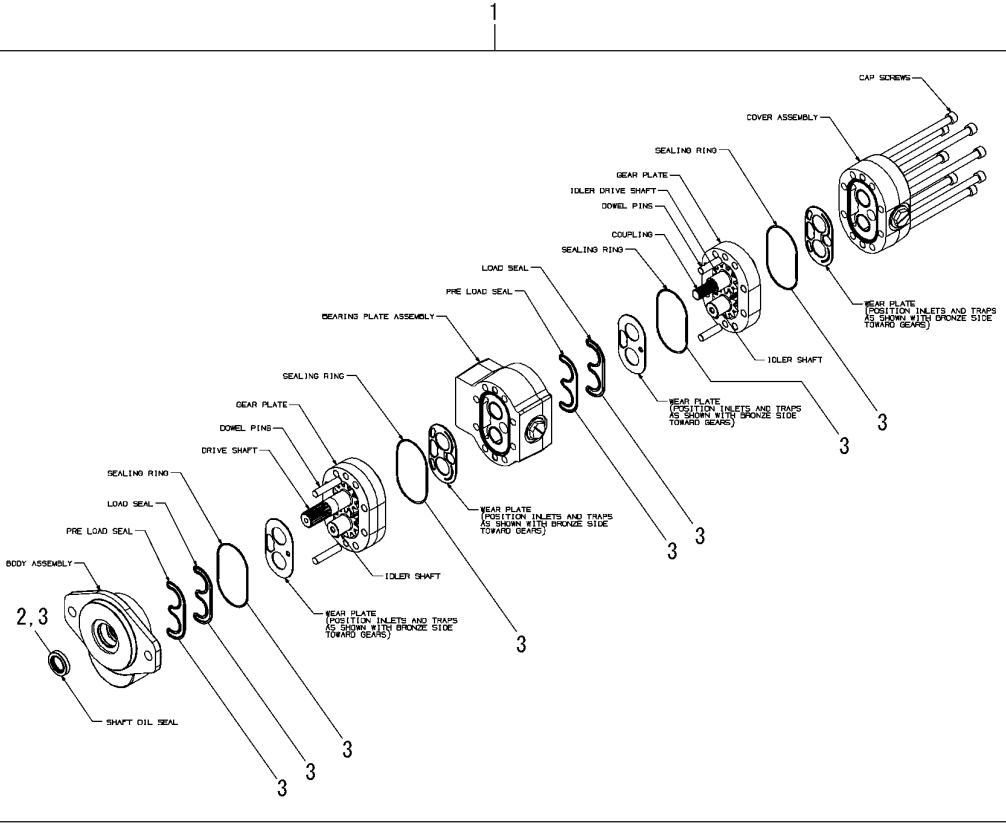
[illegible]

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

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

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



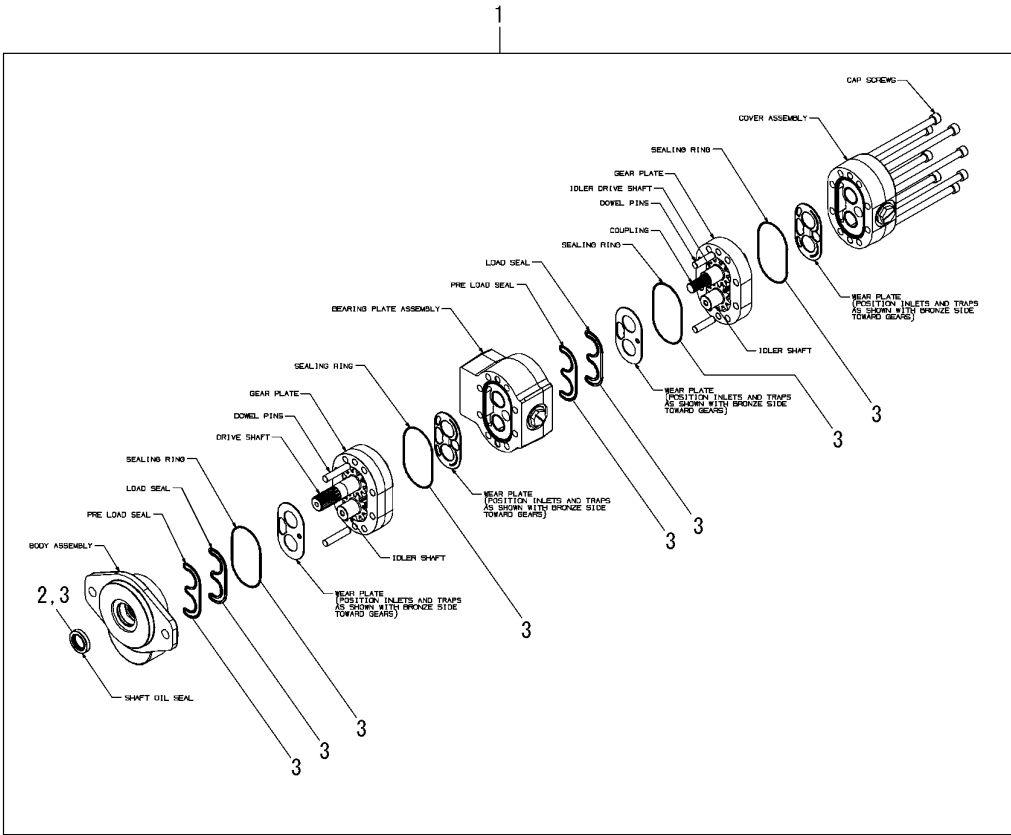
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-14850	PUMP, GEAR	1							
2	2	172551-07010	SEAL, SHAFT	1							
3	2	172551-07020	SEAL KIT	1							

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						



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

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

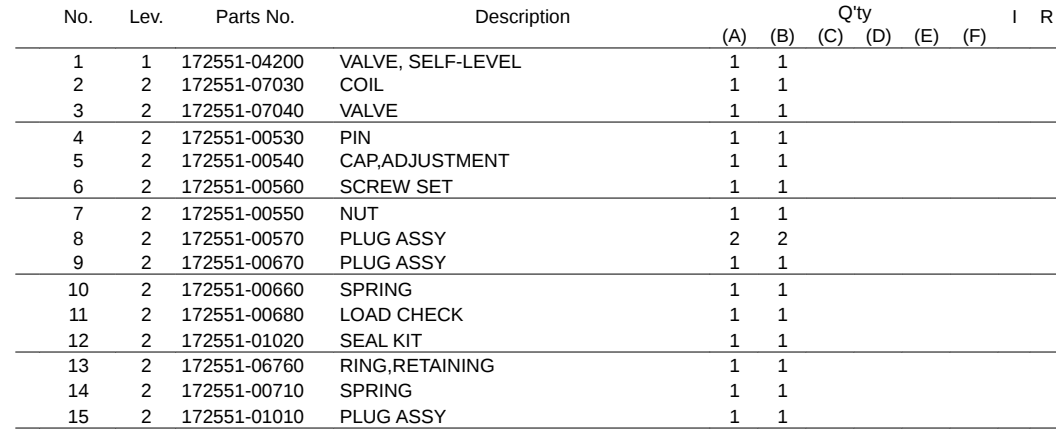


Fig.95. LIFT AND TILT SOLENOID VALVE(SOLENOID

(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						

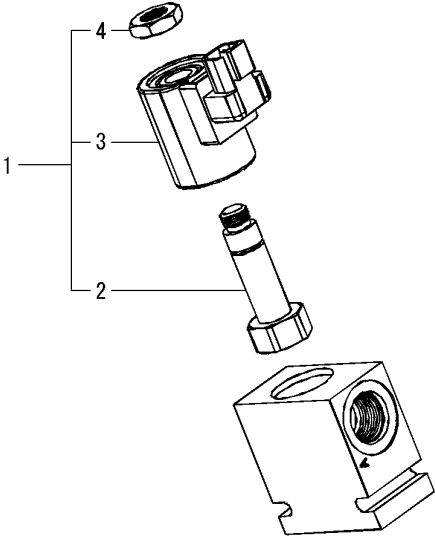
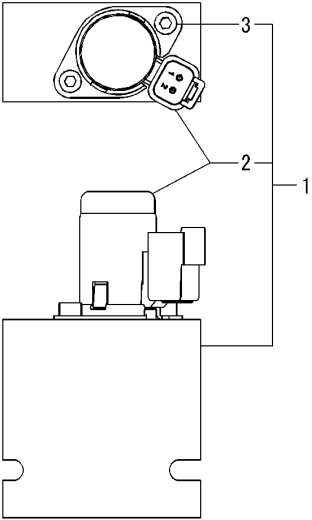


Fig.96. LIFT AND TILT SOLENOID VALVE(HYDRAULIC SOLENOID THREE-WAY

(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.

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

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

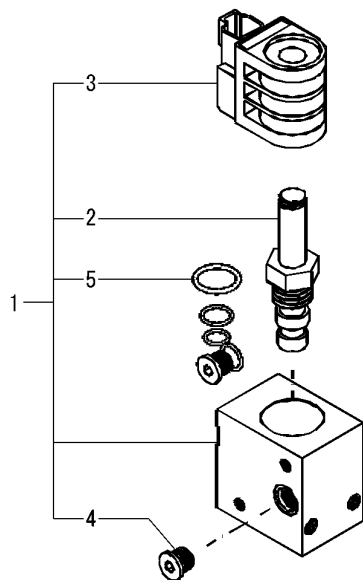
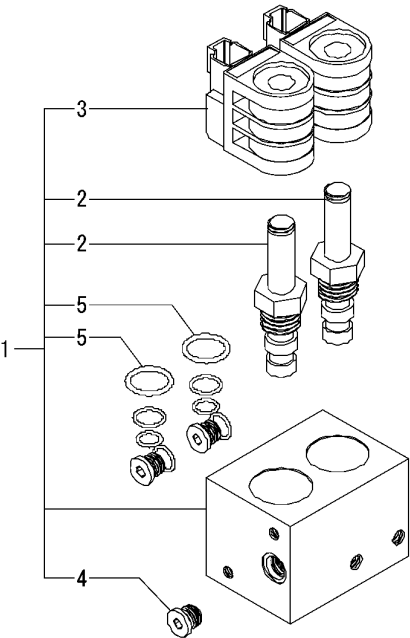
[illegible]

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

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

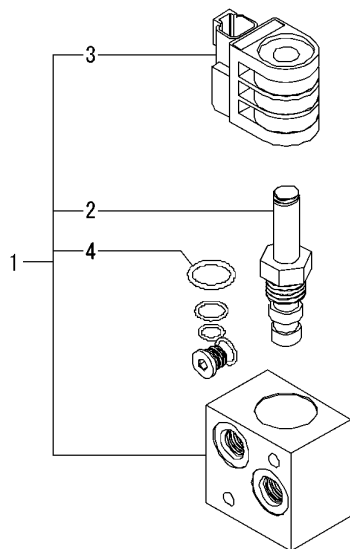
(D)=
(E)=
(F)=



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						

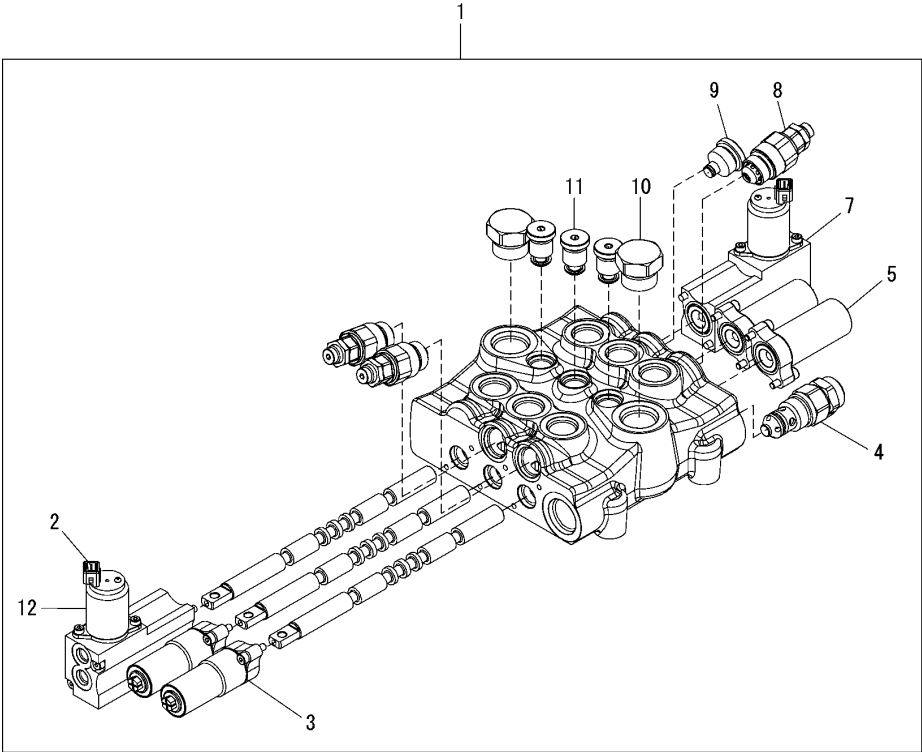
Fig.99. SOLENOID VALVES-BRAKE, JOYSTICK SUPPLY AND BRAKE RELEASE(JOYSTICK SUPPLY

(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)=

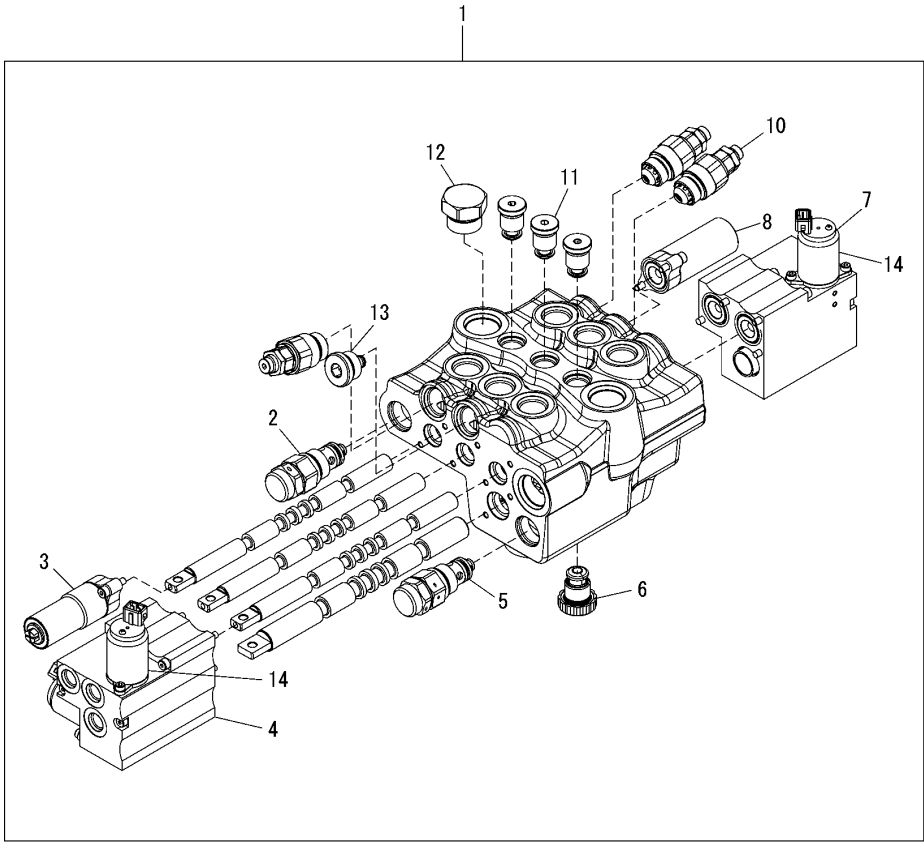
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-14770	VALVE, 3-SPOOL PILOT	1	1						
2	2	172216-16730	SPOOL KIT, ELECHYD F	1	1						
3	2	172216-07520	HYD. CNTRL, ANTERIOR	2	2						
4	2	172216-16740	RELIEF, MAIN	1	1						
5	2	172216-07500	HYD. CONTROL, REAR	2	2						
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)=

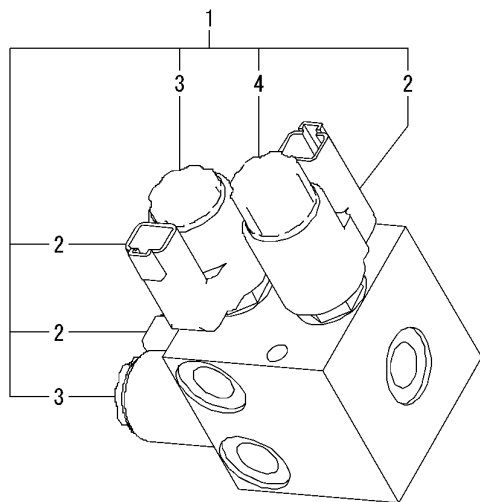
OCS10-M59000 Fig.101
(D)=
(E)=
(F)=



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.

Fig.102. RIDE CONTROL MANIFOLD

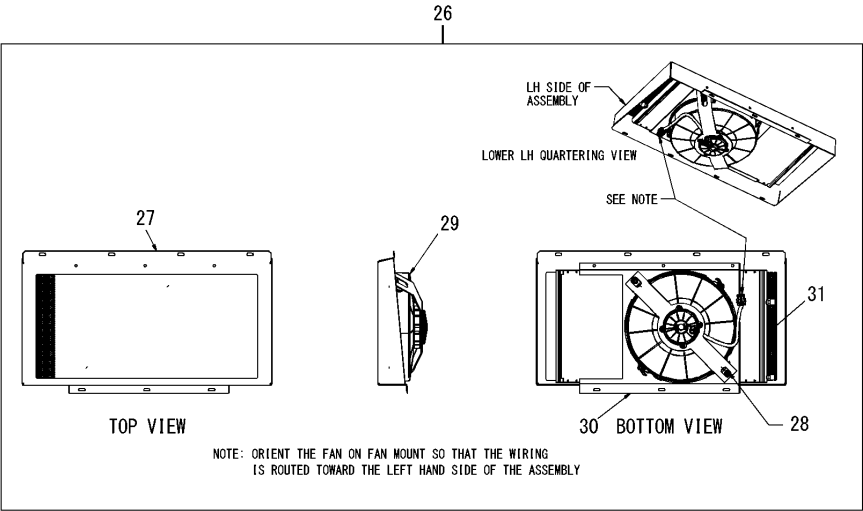
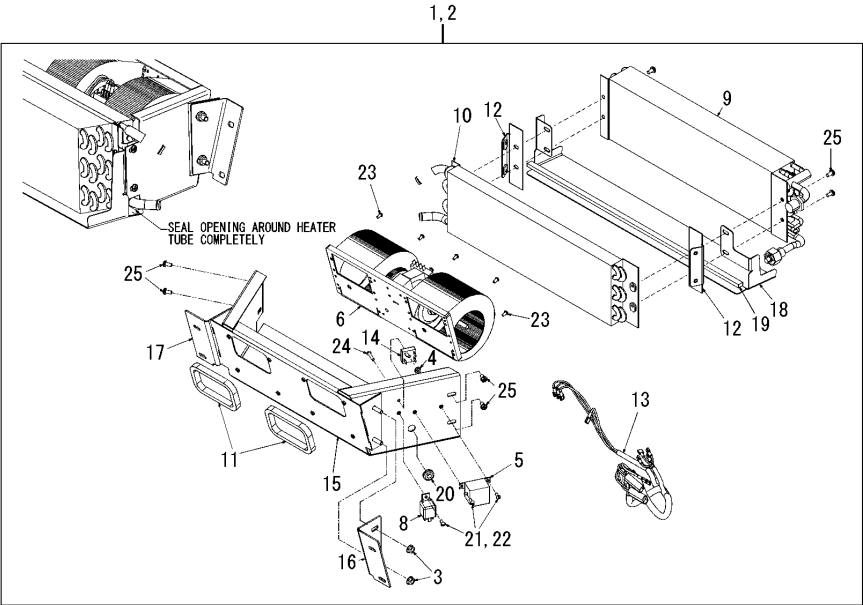


No.	Lev.	Parts No.	Description	(A)=S190R-1 (B)=S220R-1 (C)=		(D)= (E)= (F)=				I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-02090	MANIFOLD, RIDE CNTRL	1	1						
2	2	172551-02100	COIL	3	3						
3	2	172551-02120	CARTRIDGE	2	2						
4	2	172551-02110	CARTRIDGE	1	1						

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

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

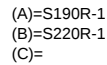
(D)=
(E)=
(F)=



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	HARNESS, 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	CONSENSER 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

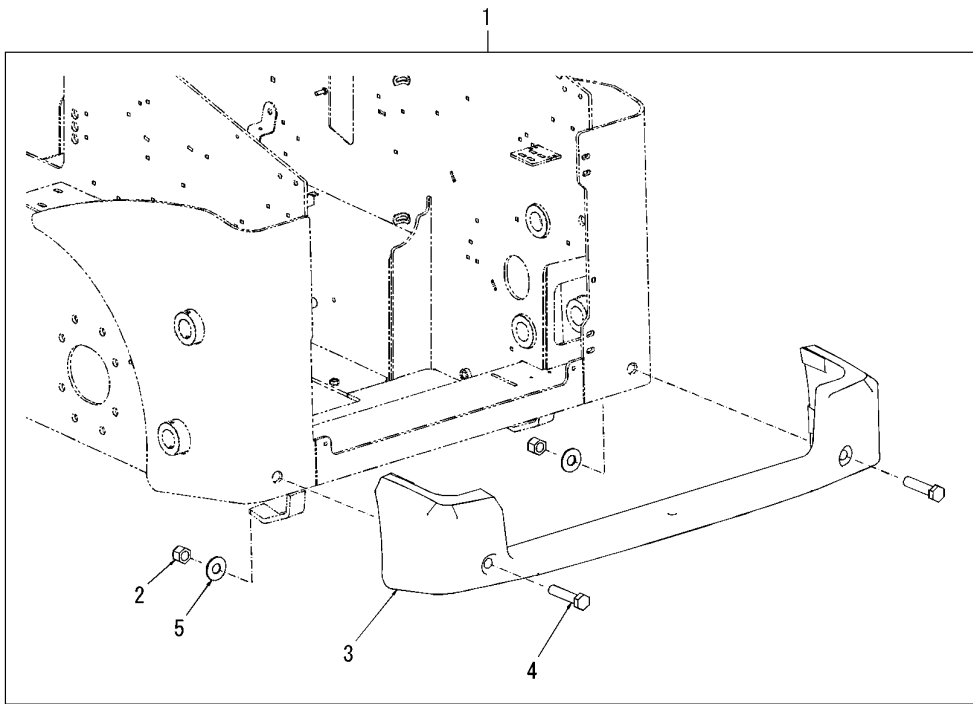


(D)=
(E)=
(F)=

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						

(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

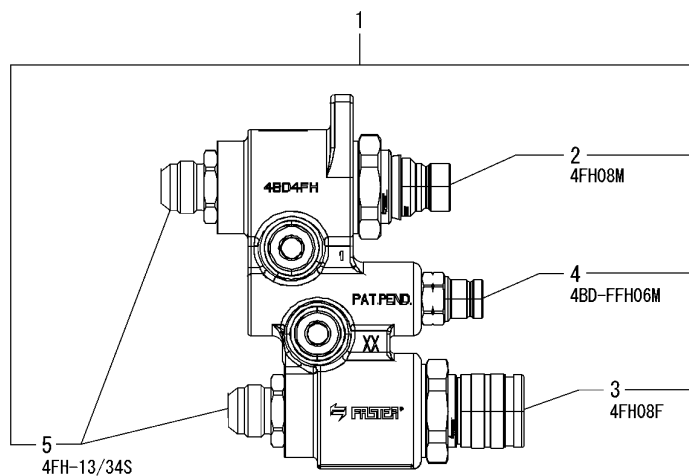
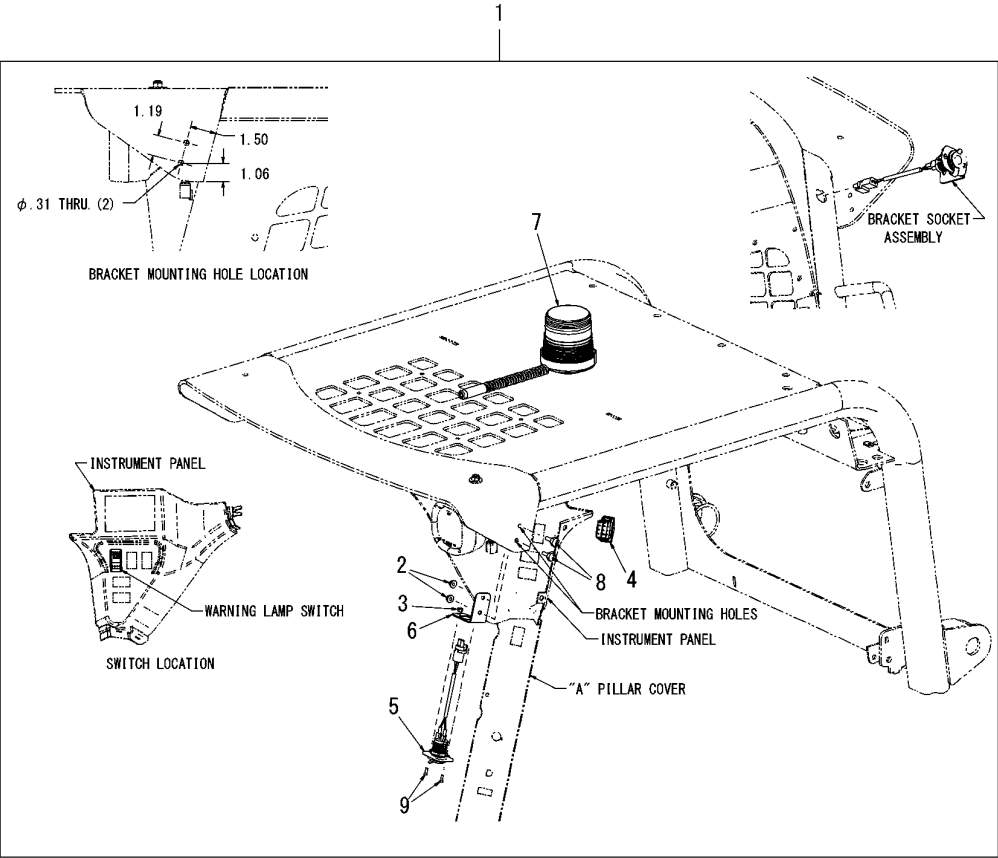
[illegible]

Fig.107. WARNING LAMP KIT

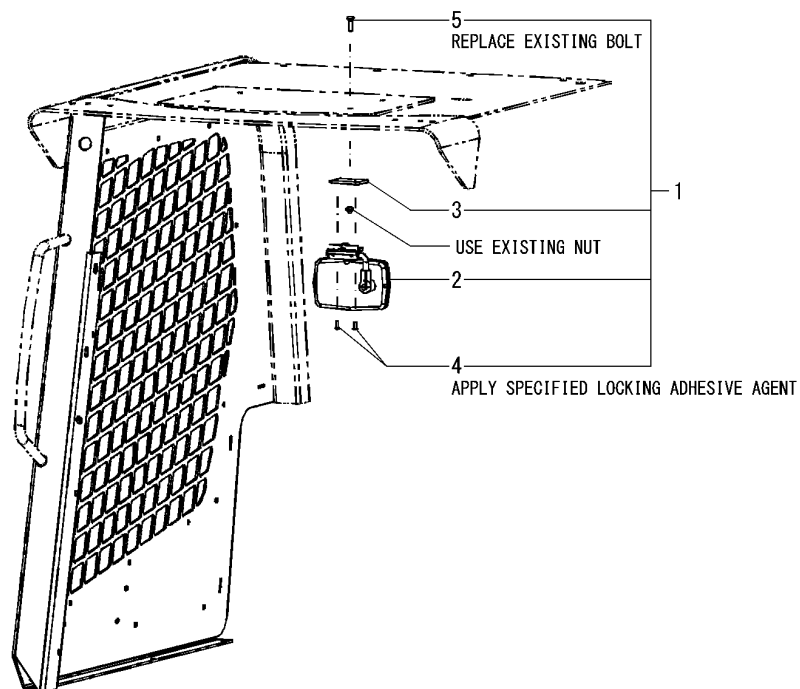
(A)=S190R-1
(B)=S220R-1
(C)=

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



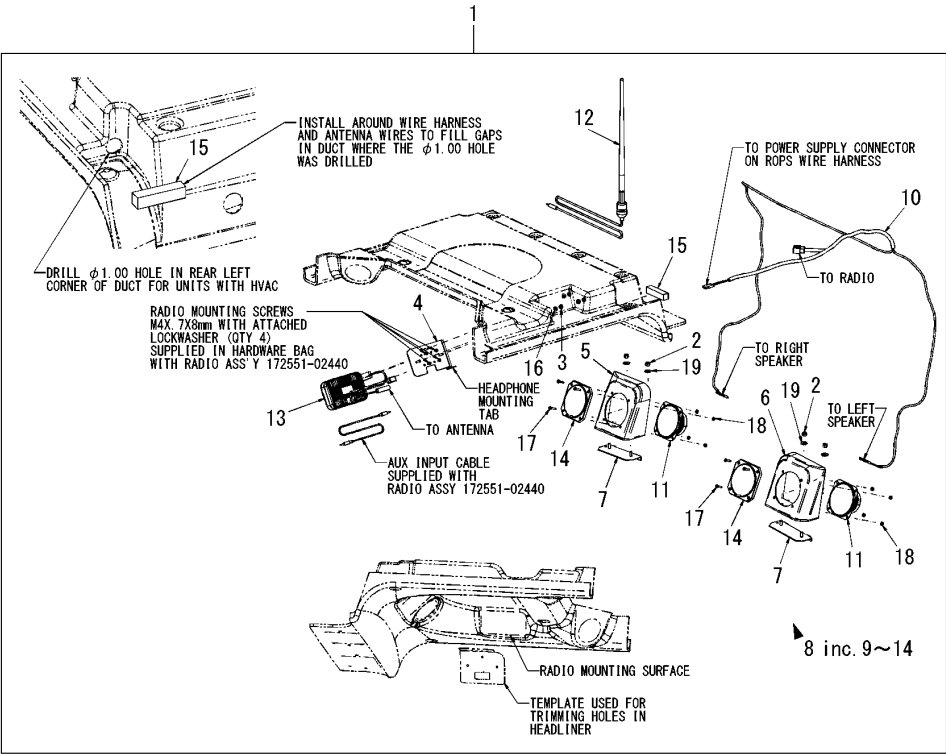
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172218-05330	LAMP KIT, WARNING	1	1						
2	2	172216-01590	NUT	2	2						
3	2	172216-10870	NUT	2	2						
4	2	172218-02060	SWITCH, WARNING LAMP	1	1						
5	2	172218-03860	SOCKET, 12V	1	1						
6	2	172218-03870	BRKT, SOCKET MTG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



No.	Lev.	Parts No.	Description	(A)=S190R-1 (B)=S220R-1 (C)=		(D)= (E)= (F)=			
				(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)=

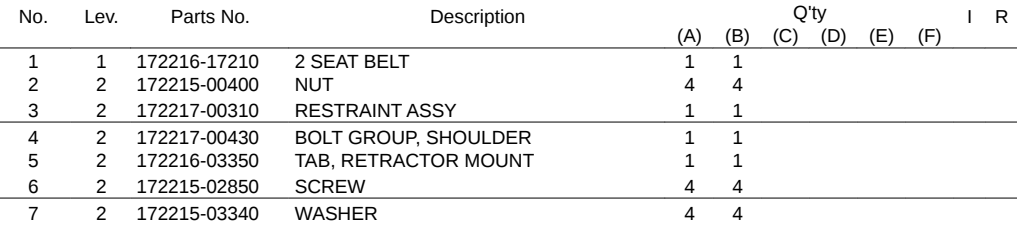
(D)=
(E)=
(F)=

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.

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

(D)=
(E)=
(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	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						

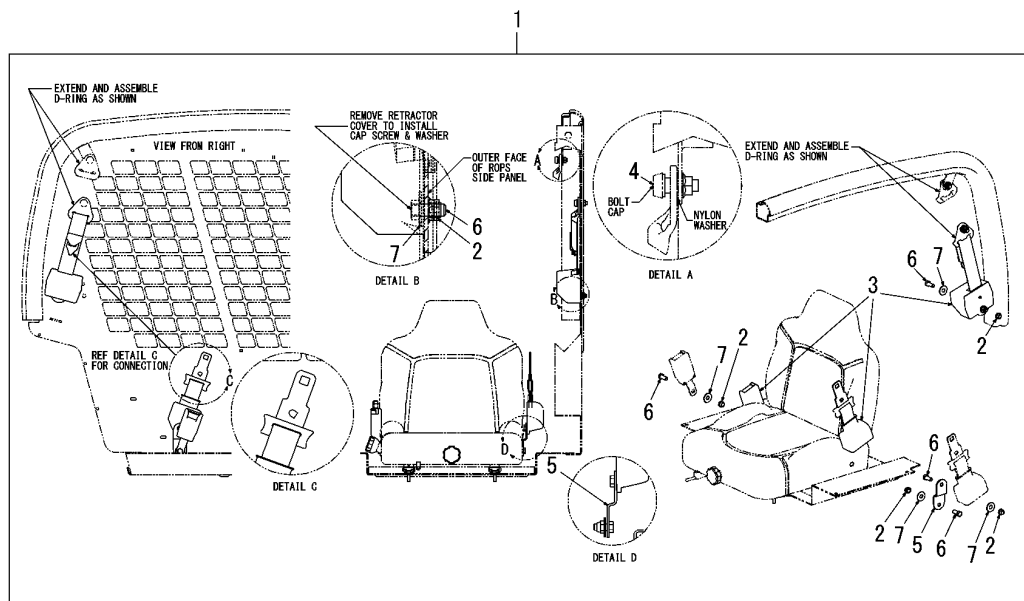
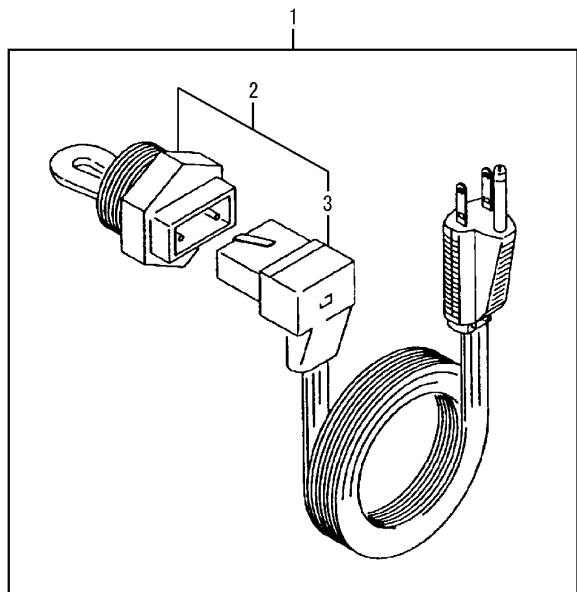


Fig.112. ENGINE BLOCK HEATER KIT



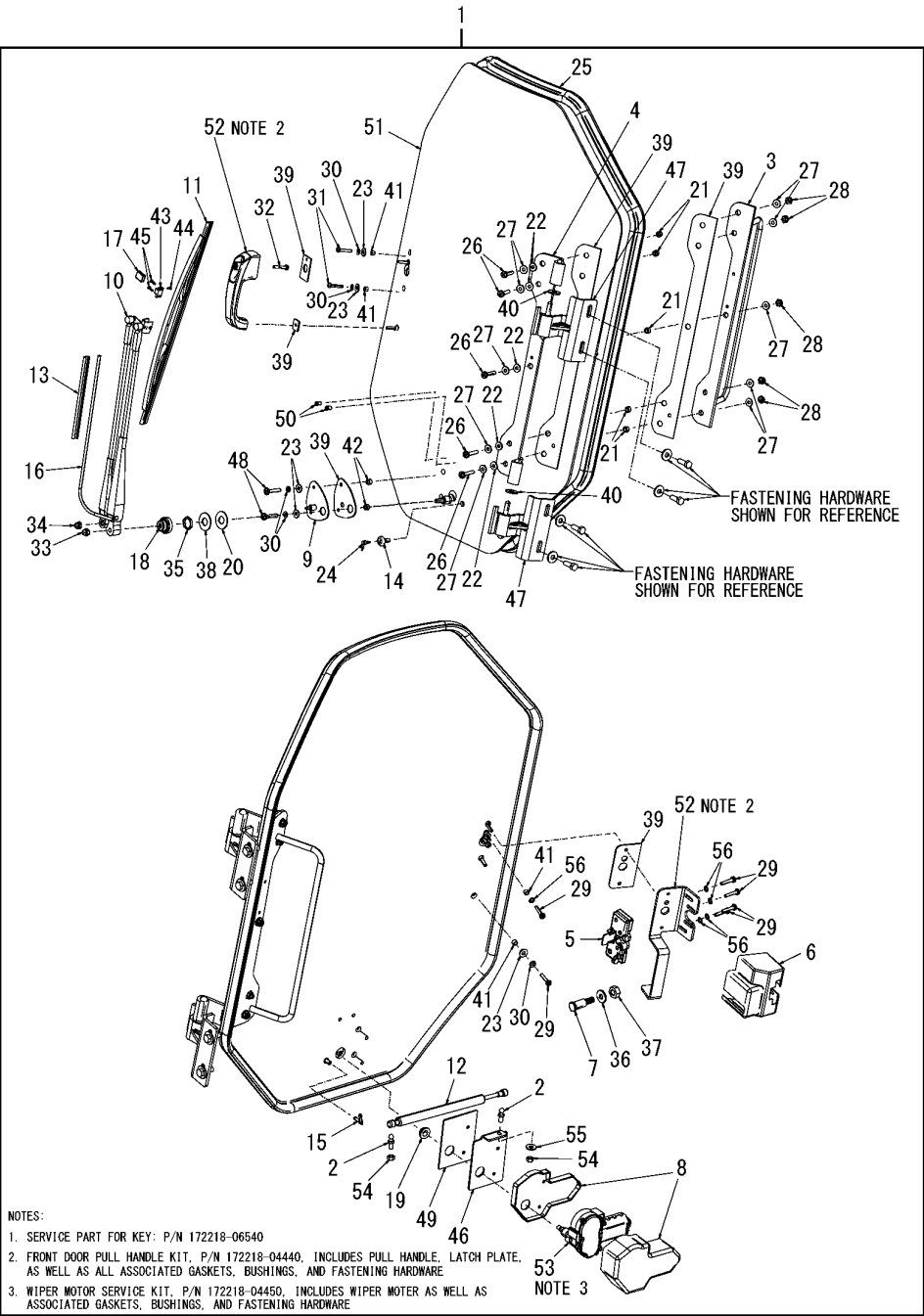
No.	Lev.	Parts No.	Description	(A)=S190R-1 (B)=S220R-1 (C)=		(D)= (E)= (F)=			
				(A)	(B)	(C)	(D)	(E)	(F)
1	1	172216-16890	HEATER, BLOCK	1	1				
2	2	172551-00910	BLOCK HEATER	1	1				
3	3	172551-00920	CORD, HEATER	1	1				
4	2	172551-00120	TIE, CABLE	3	3				1

Remarks
(1)Not shown in illustration.

Fig.113. CAB DOOR KIT

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

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



No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
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)=

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						

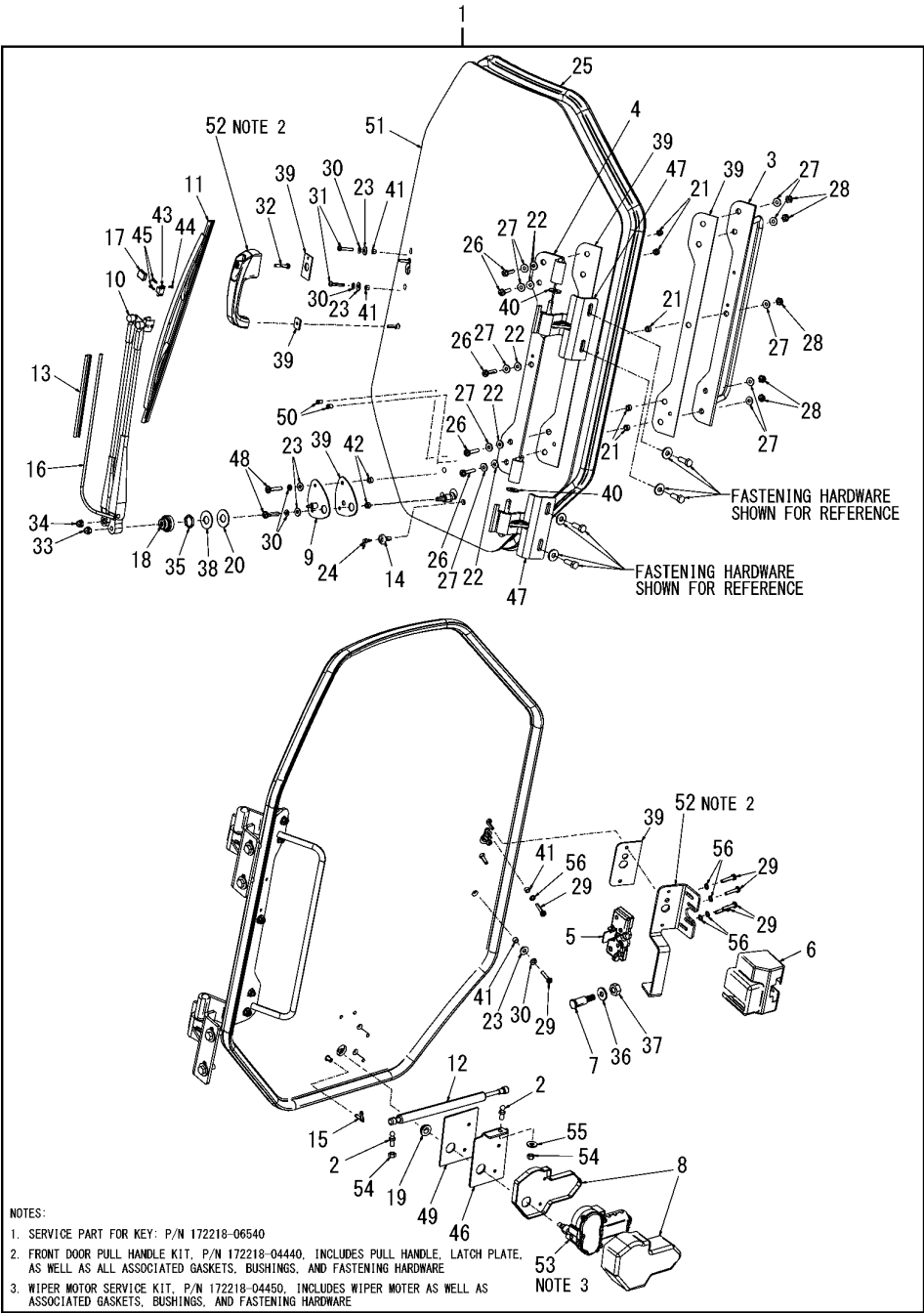
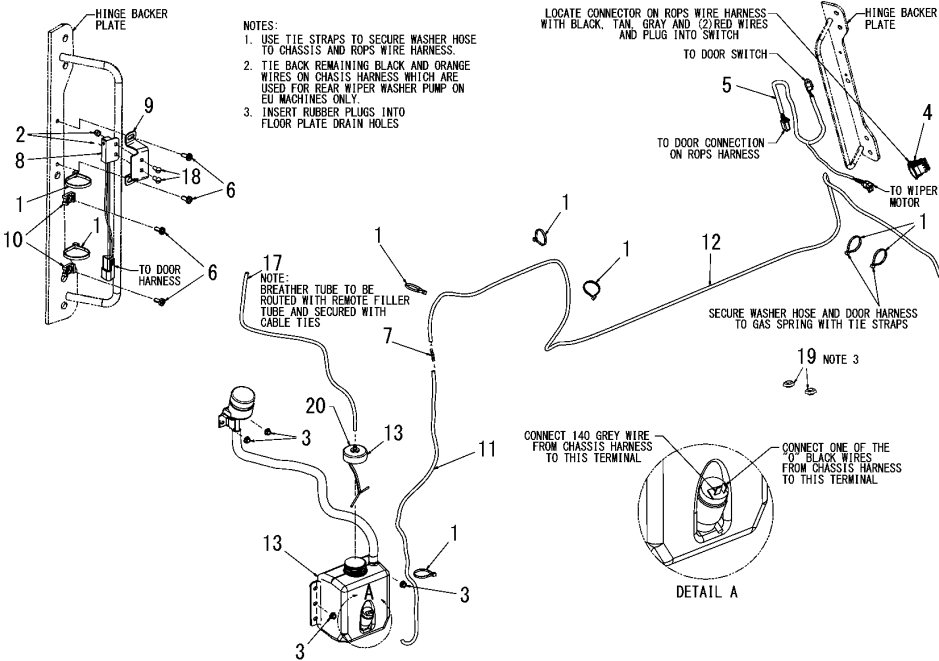


Fig.114. CAB DOOR KIT(DOOR COMPLETING PACKAGE)



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

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

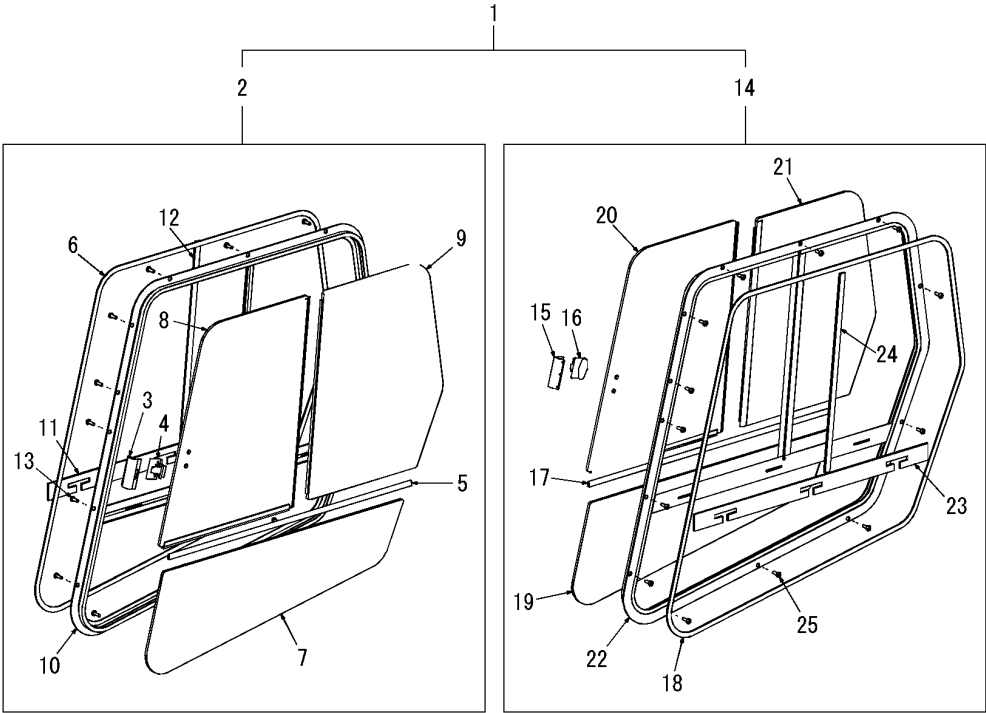
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172551-00120	TIE, CABLE	8	8						
2	1	172218-00030	LOCK NUT	2	2						
3	1	172215-06620	NUT	8	8						
4	1	172218-01990	SWITCH, WIPER-WASHER	1	1						
5	1	172218-02900	HARNESS, DOOR	1	1						
6	1	172218-03300	SCREW	4	4						
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						

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

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

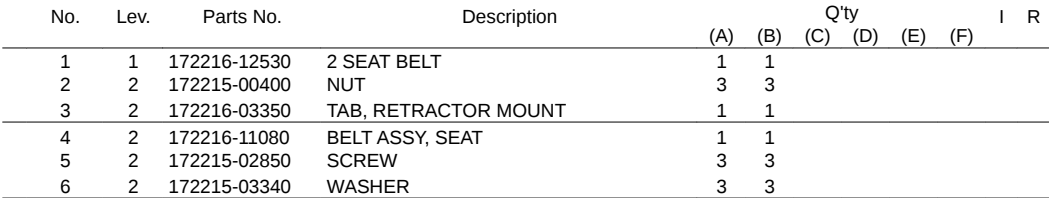
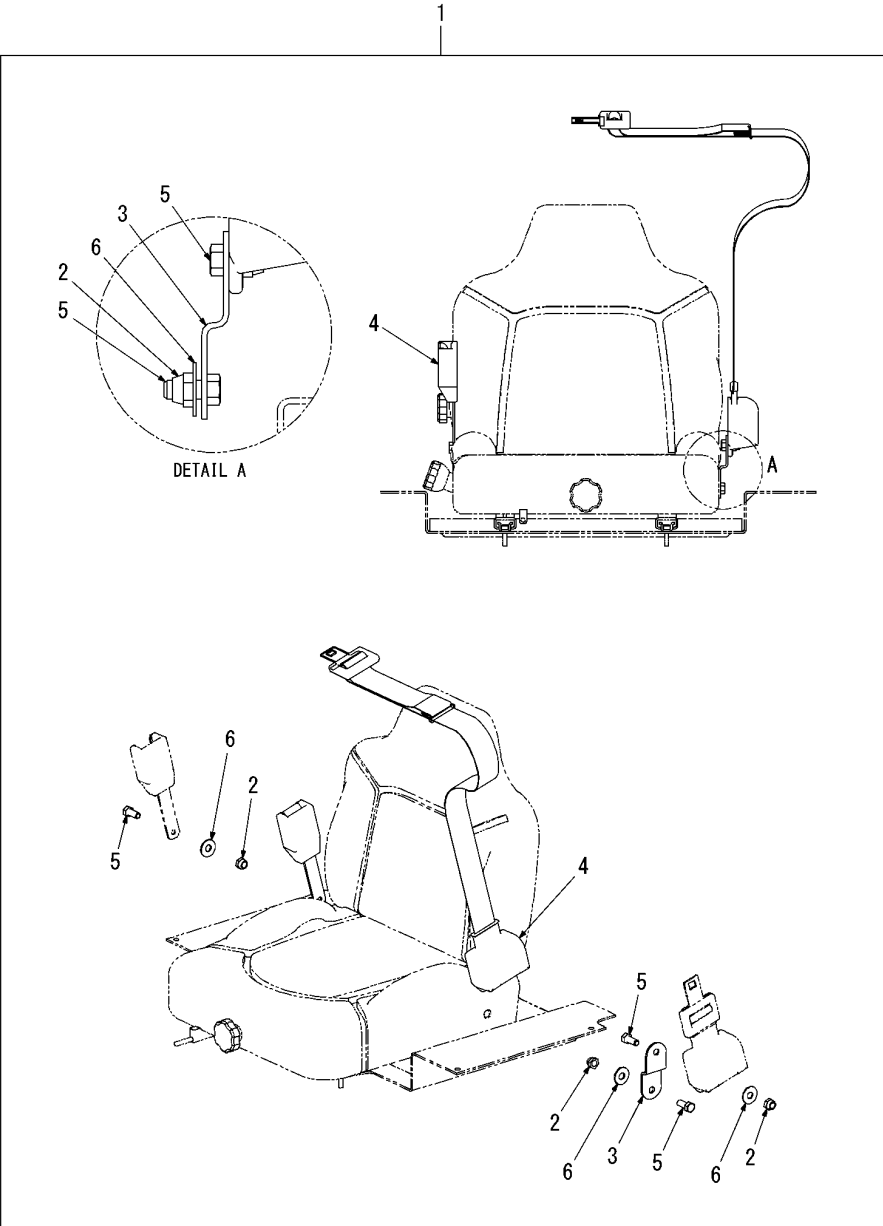


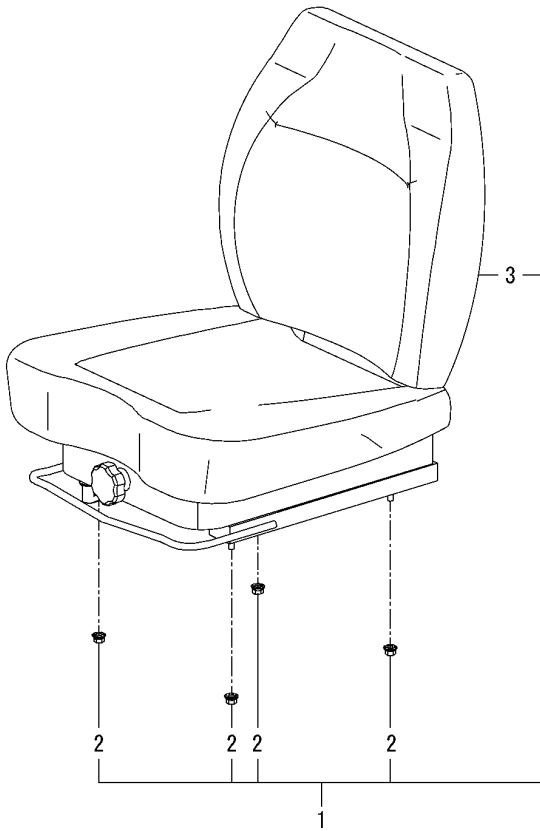
Fig.117. SEAT BELT KIT(3INCH

(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						





(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						

(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						

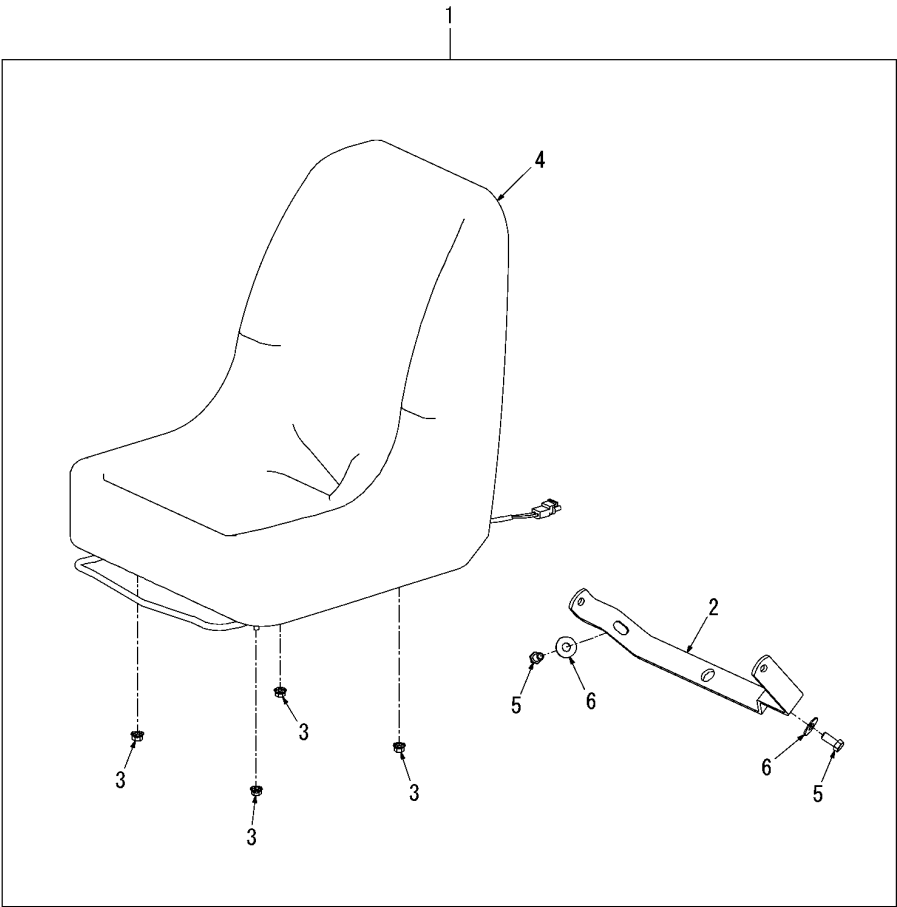
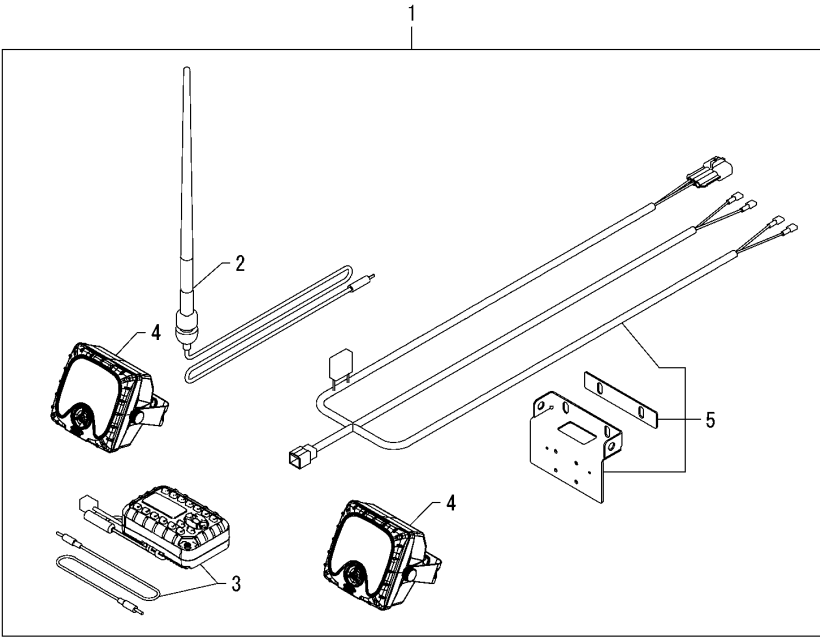


Fig.120. UNIVERSAL RADIO KIT

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

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

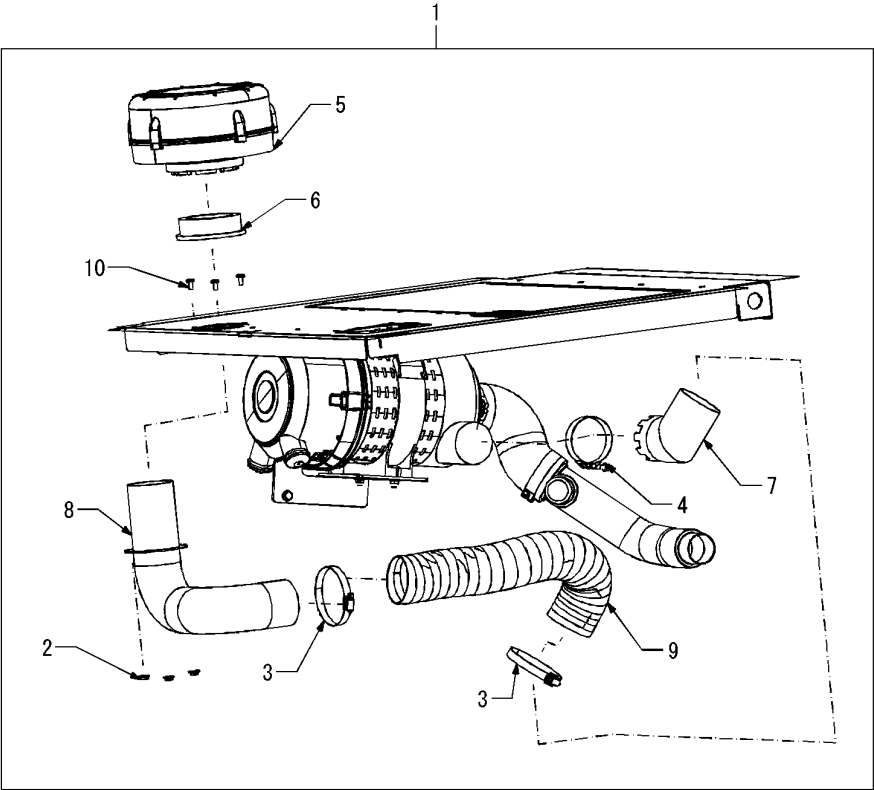
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172215-03480	RADIO KIT	1	1						
2	2	172551-02150	ANTENNA, RADIO	1	1						
3	2	172551-02440	RADIO	1	1						
4	2	172215-02090	SPEAKER/PAIR	1	1						
5	2	172215-02630	INSTALL KIT, RADIO	1	1						
6	2	172215-02080	HARNESS, RADIO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



Remarks
(1)Not shown in illustration.

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

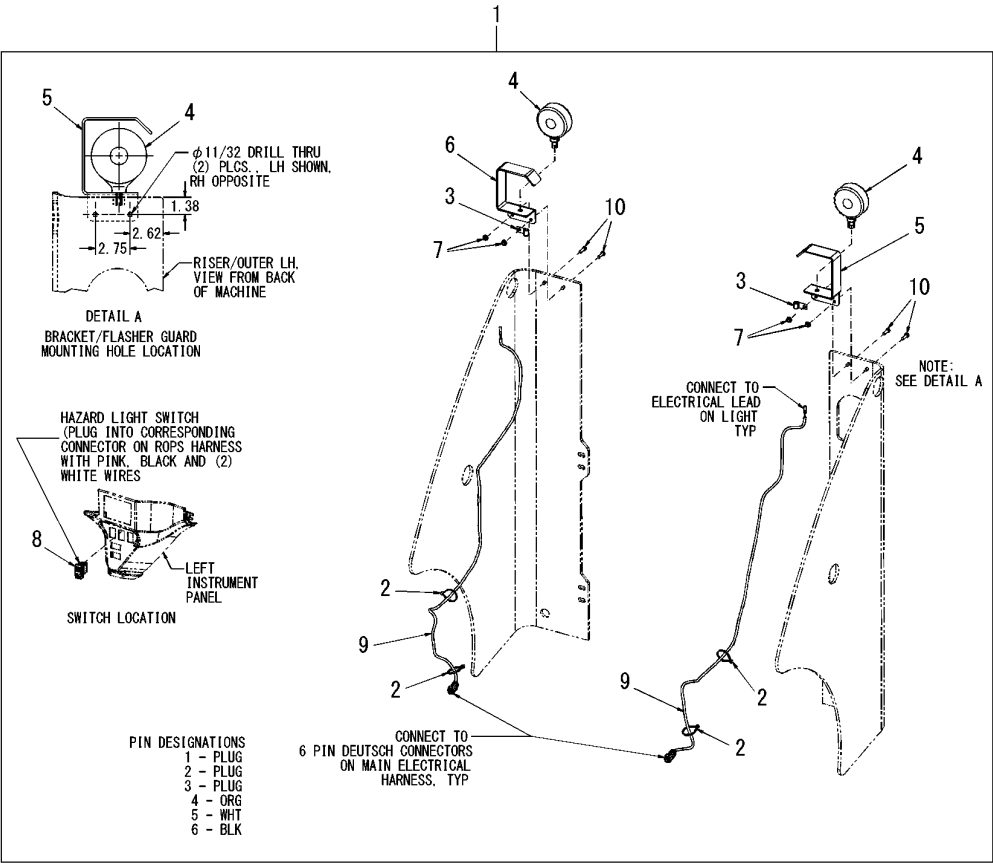
(D)=
(E)=
(F)=



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							

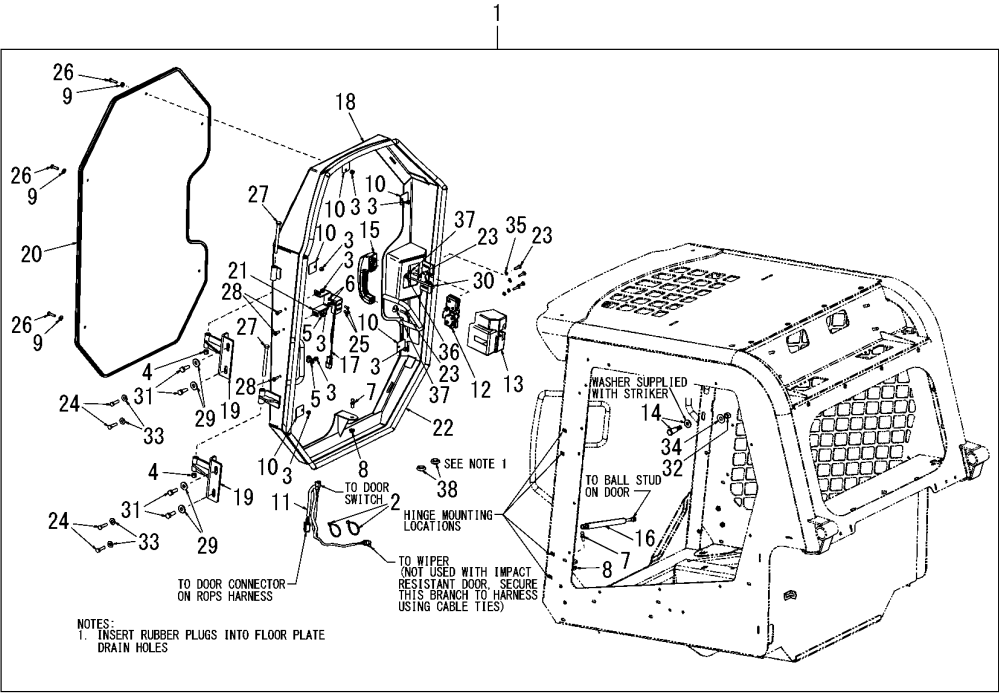
(A)=S190R-1
(B)=S220R-1
(C)=

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



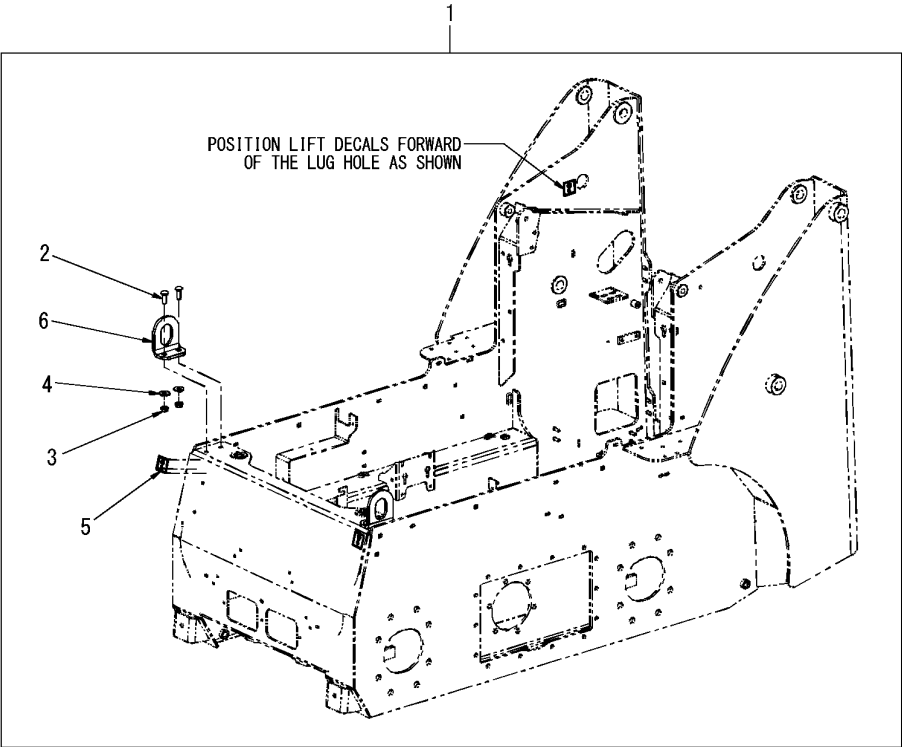
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-16990	FLASHER KIT, DUAL	1	1						
2	2	172551-00120	TIE, CABLE	4	4						
3	2	172215-00100	CLAMP	2	2						
4	2	172216-00390	LIGHT ASSY, WARNING	2	2						
5	2	172216-04230	BRACKET, GUARD R	1	1						
6	2	172216-04250	BRACKET, 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



							OCS10-M59000 Fig.123					
							(A)=S190R-1 (B)=S220R-1 (C)=		(D)= (E)= (F)=			
No.	Lev.	Parts No.	Description	(A)	(B)	(C)	Q'ty	(D)	(E)	(F)	I	R
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	HARNESS, 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

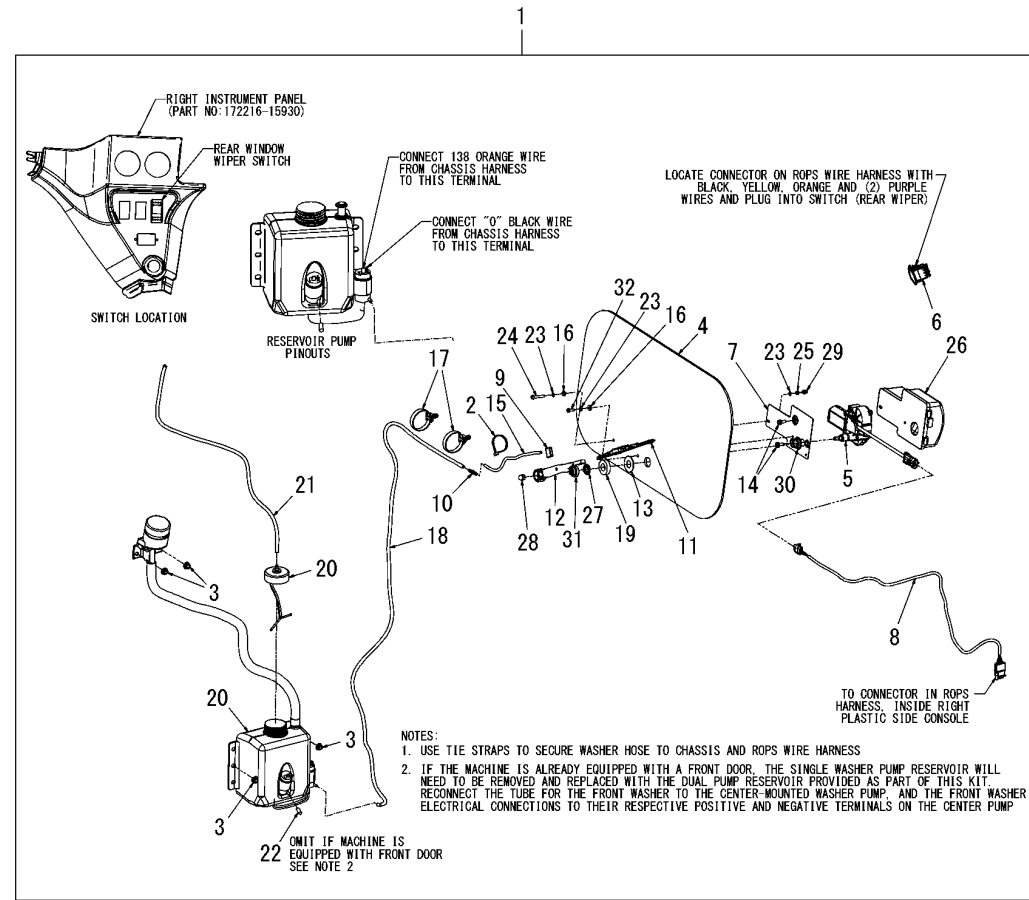


(A)=S190R-1
(B)=S220R-1
(C)=

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

No.	Lev.	Parts No.	Description	Q'ty						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

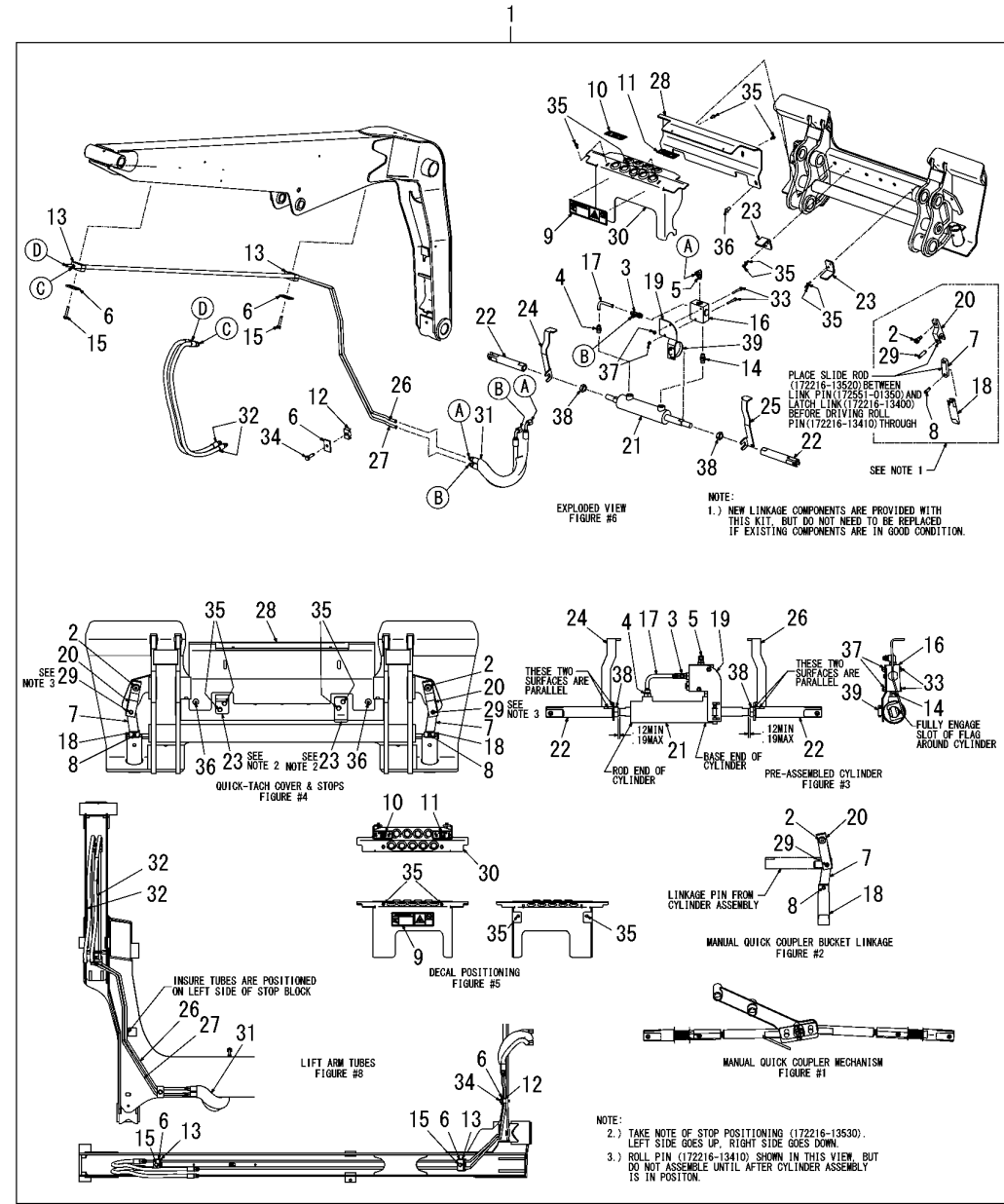


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-17020	WIPER KIT, REAR	1	1						
2	2	172551-00120	TIE, CABLE	2	2						
3	2	172215-06620	NUT	4	4						
4	2	172551-02820	WINDOW	1	1						
5	2	172551-02970	MOTOR, REAR WIPER	1	1						
6	2	172218-02080	SWITCH, WIPER-WASHER	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)=

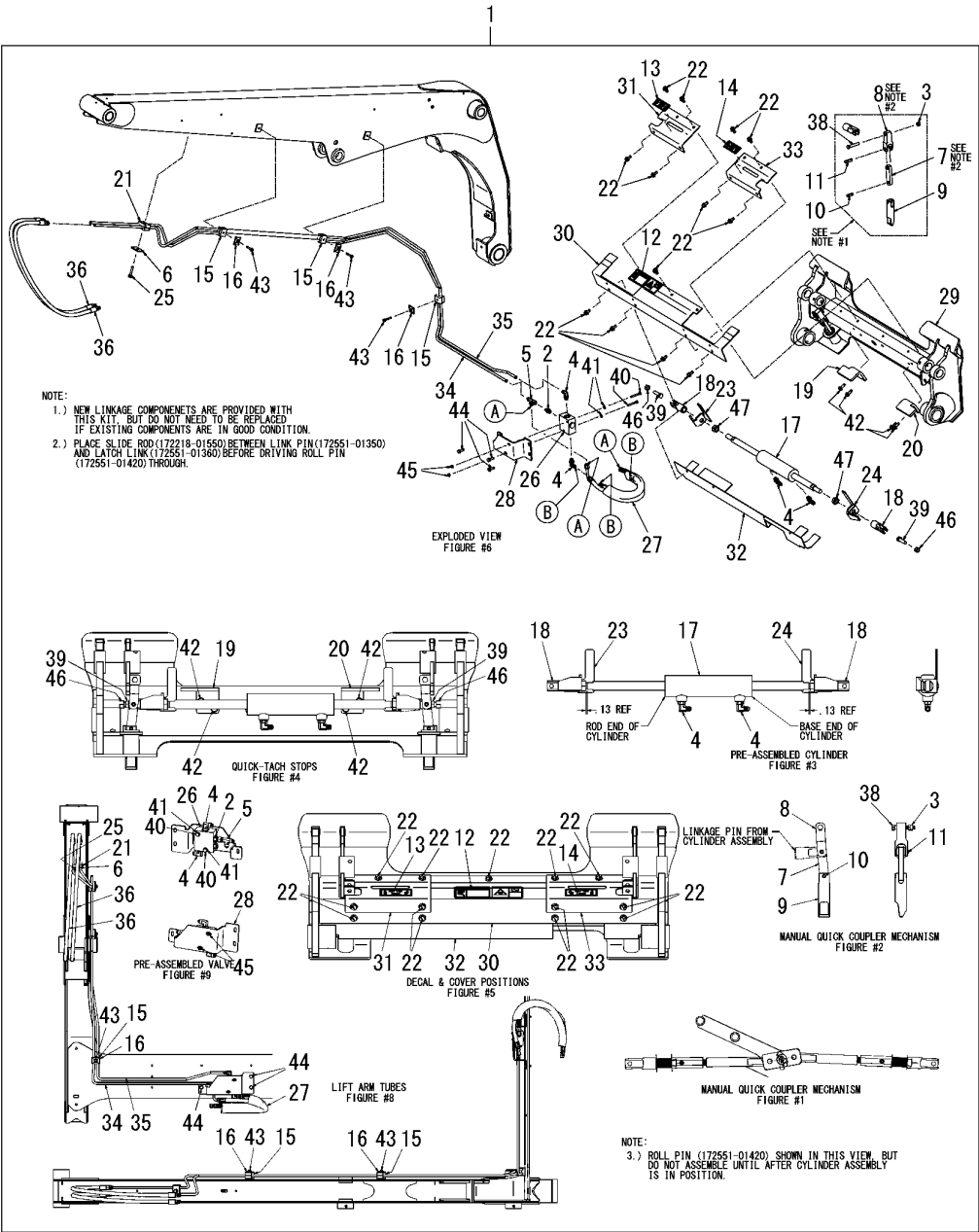


No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-17070	QUICK COUPLER KIT	1							
2	2	172215-03790	BOLT	2							
3	2	172551-00060	FITTING	1							
4	2	172551-00070	FITTING	1							
5	2	172551-00220	CONNECTOR	1							
6	2	172551-00510	PLATE	3							
7	2	172551-01350	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

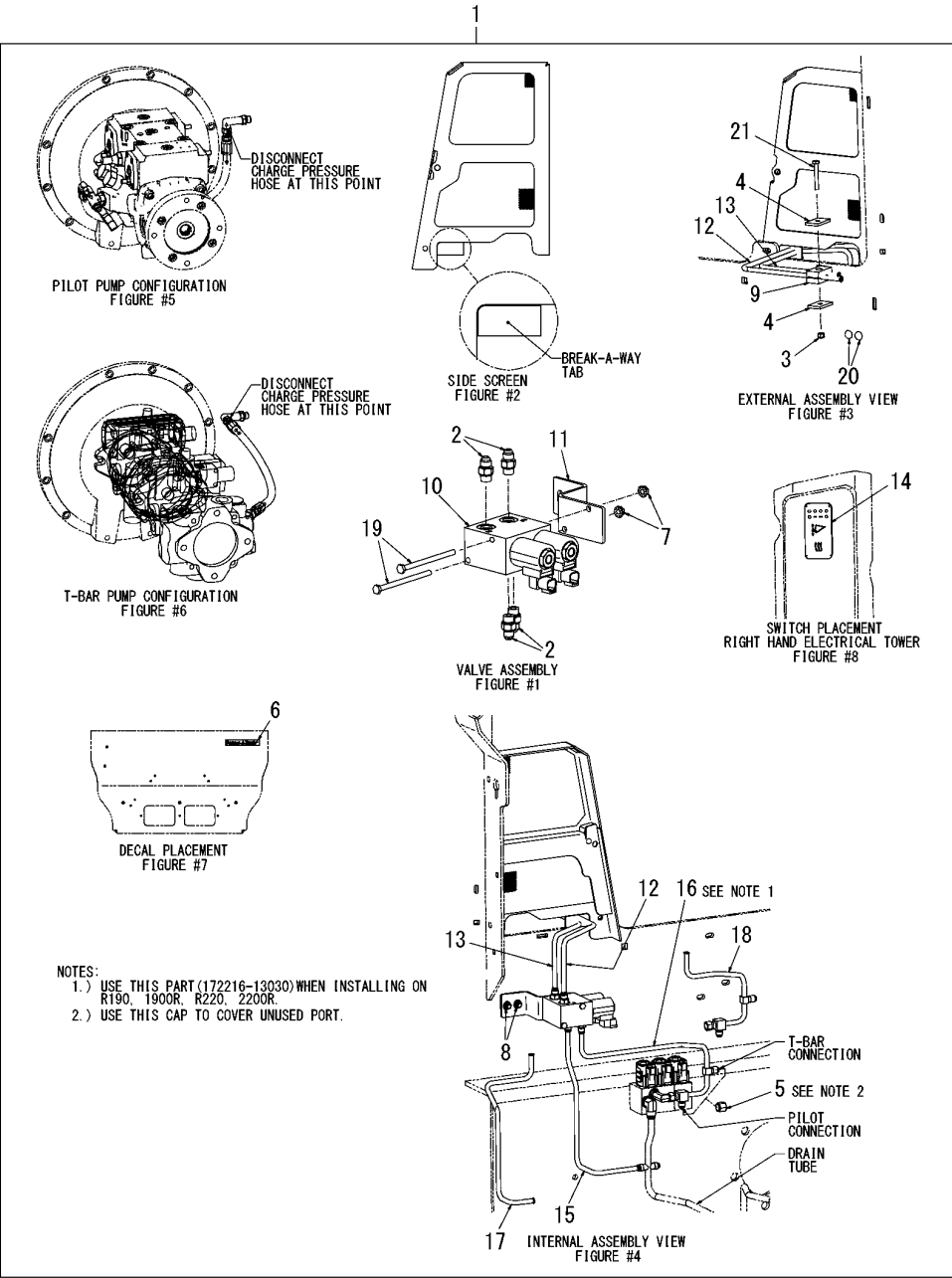
(A)=S190R-1
(B)=S220R-1
(C)=

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



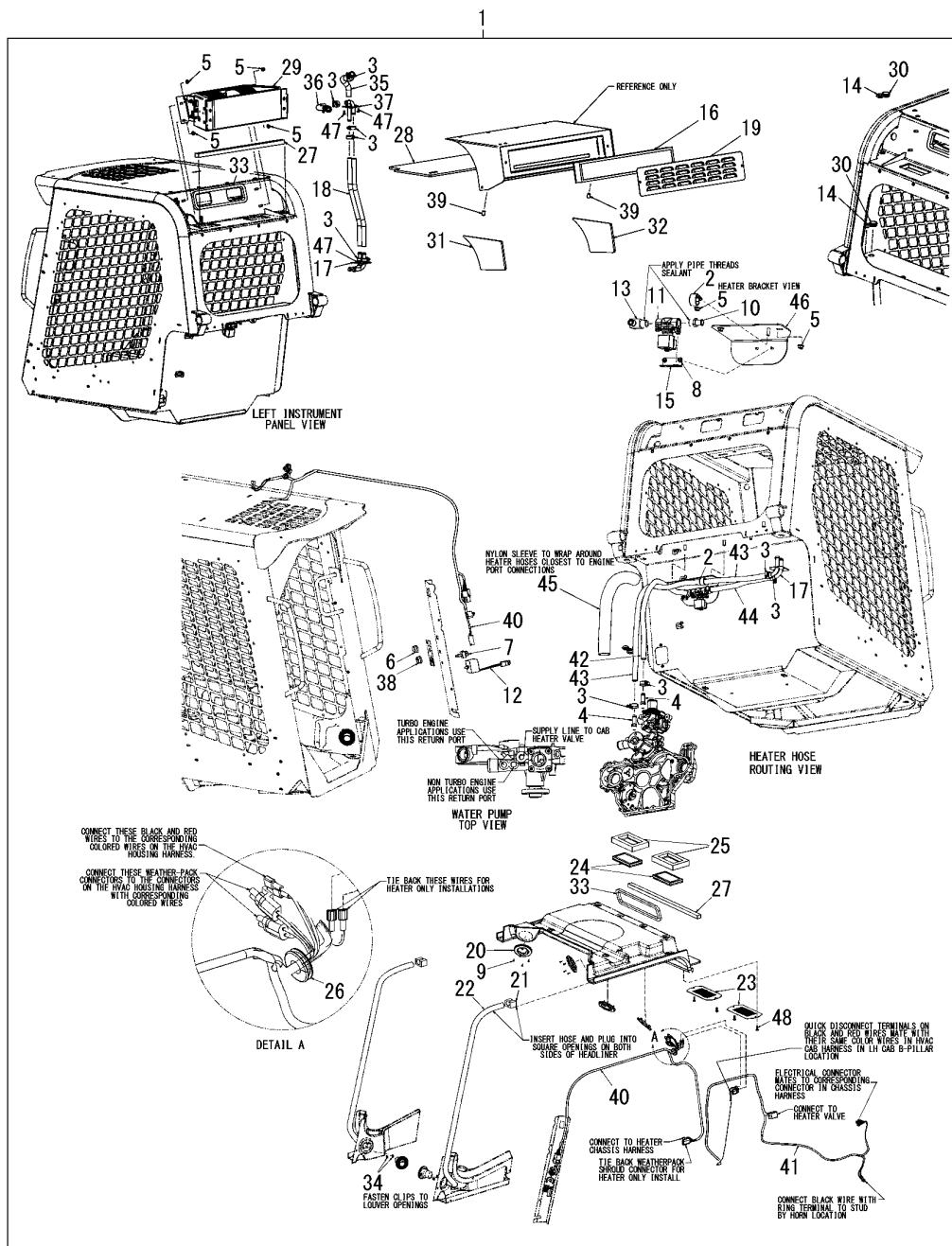
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-17080	QUICK COUPLER KIT		1						
2	2	172551-00070	FITTING		1						
3	2	172551-00180	NUT		2						
4	2	172551-00220	CONNECTOR		4						
5	2	172551-00340	FITTING		1						
6	2	172551-00510	PLATE		1						
7	2	172551-01350	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



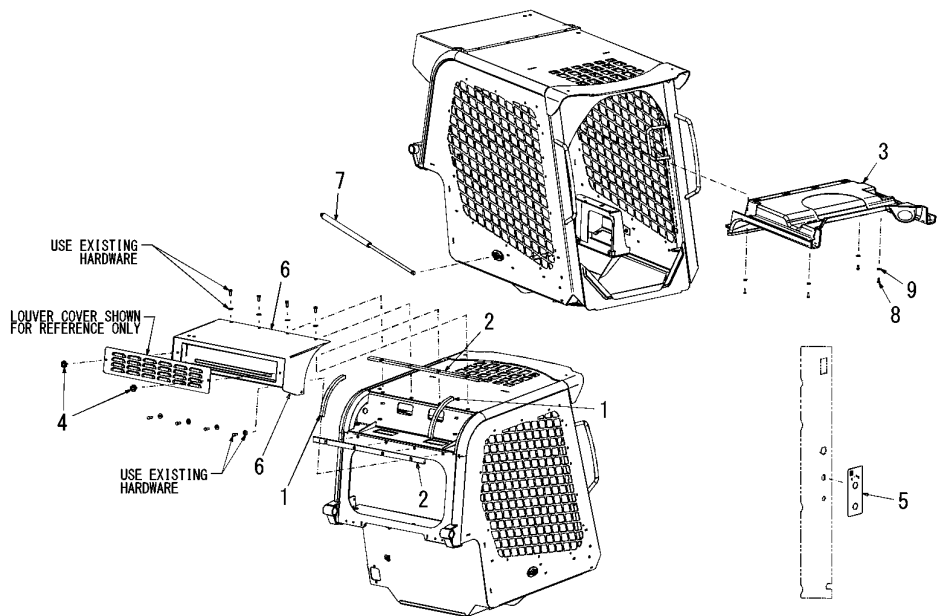
No.	Lev.	Parts No.	Description	Q'ty						I	R
				(A)	(B)	(C)	(D)	(E)	(F)		
1	1	172216-17100	CHASSIS ASSY	1	1						
2	2	172551-00070	FITTING	4	4						
3	2	172551-00150	NUT	1	1						
4	2	172551-00510	PLATE	2	2						
5	2	172216-00380	CAP	1	1						
6	2	172551-02080	LABEL, QUICK COUPLER	1	1						
7	2	172215-06610	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



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						

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

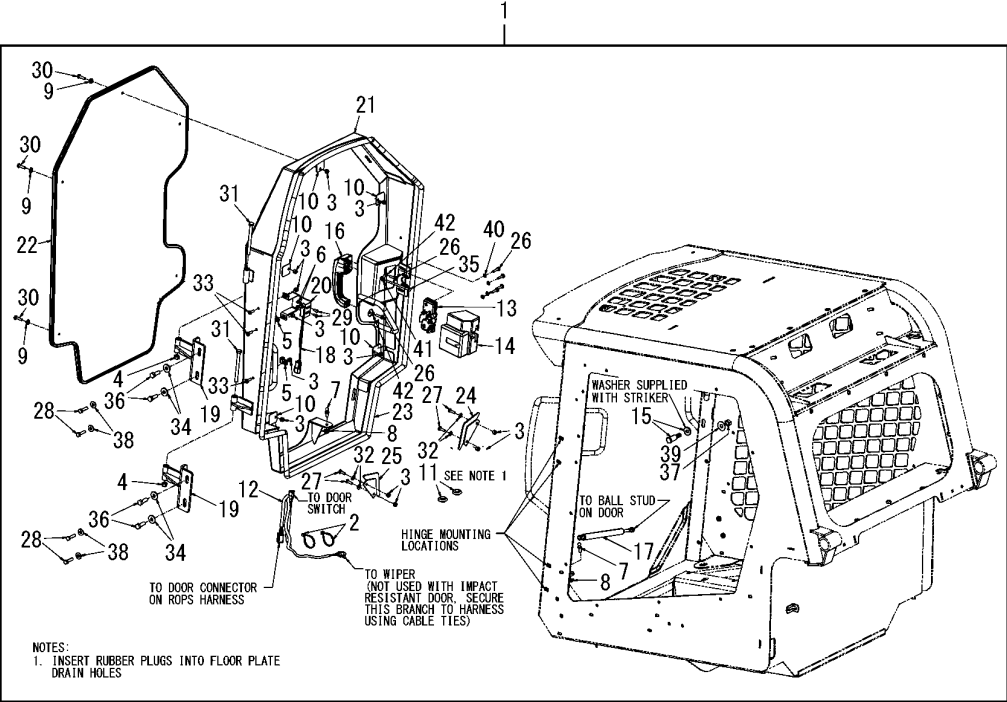


				(A)=S190R-1 (B)=S220R-1 (C)=			(D)= (E)= (F)=					
No.	Lev.	Parts No.	Description		(A)	(B)	Q'ty (C)	(D)	(E)	(F)	I	R
1	1	172218-01200	SEAL, FOAM SIDE		2	2						
2	1	172218-01260	SEAL, FOAM BOTTOM		2	2						
3	1	172218-01500	HEADLINER, DUCT A/C		1	1						
4	1	172218-02210	KNOB, CLAMPING		2	2						
5	1	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
	71	8
172215-01390		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
	8	33
172215-02700	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
	71	27
172215-03450	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

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Parts No.	Fig. No.	Ref. No.
172215-06610	56	19
	64	12
	65	13
172215-06620	128	7
	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
	58	2
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
172216-00130	129	2
	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
	132	4
172216-00190	133	4
	1	2
172216-00210	2	2
	10	4
172216-00220	72	1
172216-00240	19	2
172216-00270	20	3
	55	3
172216-00280	43	7
	44	7
172216-00290	45	9
	46	9
172216-00300	56	6
	36	4
172216-00360	25	10
	28	1
172216-00380	36	6
	37	5
	38	3
	39	4
	128	5
	122	4
	36	7
	37	6
	38	4
	39	5
172216-00410	19	4
	20	5
	20	9
172216-00440	47	7
	48	5
172216-00460	49	8
	50	8
172216-00470	19	5
	20	6
172216-00490	4	7
	8	7
172216-00520	9	7
	55	4
172216-00540	53	8
172216-00550	36	10
172216-00560	37	10
	38	8
	39	9

Parts No.	Fig. No.	Ref. No.
172216-00570	37	11
	38	9
	39	10
172216-00810	40	5
	41	6
	14	4
172216-00900	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
172216-01630	45	11
	46	11
172216-01660	55	6
	107	2
172216-01770	49	13
	78	3
172216-01810	2	12
	49	14
172216-01820	66	3
	124	4
172216-02040	22	4
	49	15
172216-02080	36	12
	37	12
	38	10
	39	11
	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
	15	1
172216-02490	33	2
	118	2
172216-02530	119	3
	25	4
172216-02580	28	7
	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
		6
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
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172218-05170	3	4
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	131	36
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172218-05220	113	56
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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
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172218-05680	123	20
172218-05720	123	21
	131	20
172218-05730	123	22
172218-05750	10	32
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172218-05770	6	27
	129	41
172218-05810	67	1
	69	1
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	50	17
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	52	5
	126	15
	127	25
172218-05870	108	5
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172218-05890	105	1
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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
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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
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	53	1
	54	1
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	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
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	62	2
	64	1
	65	1
	112	4
	114	1
	122	2
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	132	1
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172551-01370	22	9
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	22	10
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	127	10
172551-01420	22	11
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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
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172551-01590	4	13
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172551-01770	23	5
	24	5
	75	13
	126	9
	127	12
172551-01780	23	6
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172551-01790	23	7
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	6	11
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172551-02430	10	11
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