

CHAPTER 96

ELECTRICAL SYSTEM

<i>Figure</i>	<i>Title</i>	<i>Page</i>
96-1	Aft Battery Installation (14V)	96.0
96-5	Aft Battery Installation (14V)	96.4
96-9	Aft Battery Installation (28V)	96.8
96-12A	Aft Battery Installation (28V)	96.12
96-13A	Aft Battery Installation (28V Lithium-Ion)	96.13
96-15	Aft Battery Installation (28V)	96.14
96-19	Nose Battery Installation (14V)	96.18
96-23	Nose Battery Installation (28V)	96.22
96-27	Nose Battery Installation (28V)	96.26
96-29	Tailcone Battery Installation	96.28
96-31	Tailcone Battery Installation	96.30
96-33	Aft Battery Relay Installation	96.32
96-37	Aft Battery Relay Installation	96.36
96-41	Nose Battery Relay (14V)	96.40
96-43	Tailcone Battery Relay Installation	96.42
96-47	Circuit Breaker Panel	96.46
96-49	Test Switches and Gage Probes	96.48
96-53	Test Switches and Gage Probes	96.52
96-55	Belt Tension Actuator Time Delay and Test Plug	96.54
96-57	Collective-Activated Switch Installation	96.56
96-59	Carbon Monoxide Detector and Dimmer Installation	96.58
96-61	Electrical Components	96.60
96-63	Electrical Components	96.62
96-63B	Electrical Components	96.63A
96-65	Electrical Components	96.64
96-69	Power Booster Installation (14V to 28V)	96.68
96-71	Power Converter Installation (28V to 14V)	96.70
96-73	Power Converter Installation (28V to 14V)	96.72
96-75	Power Converter Installation (28V to 14V)	96.74
96-77	Battery Charging Post Installation	96.76
96-79	Engine Ground Straps Installation	96.78

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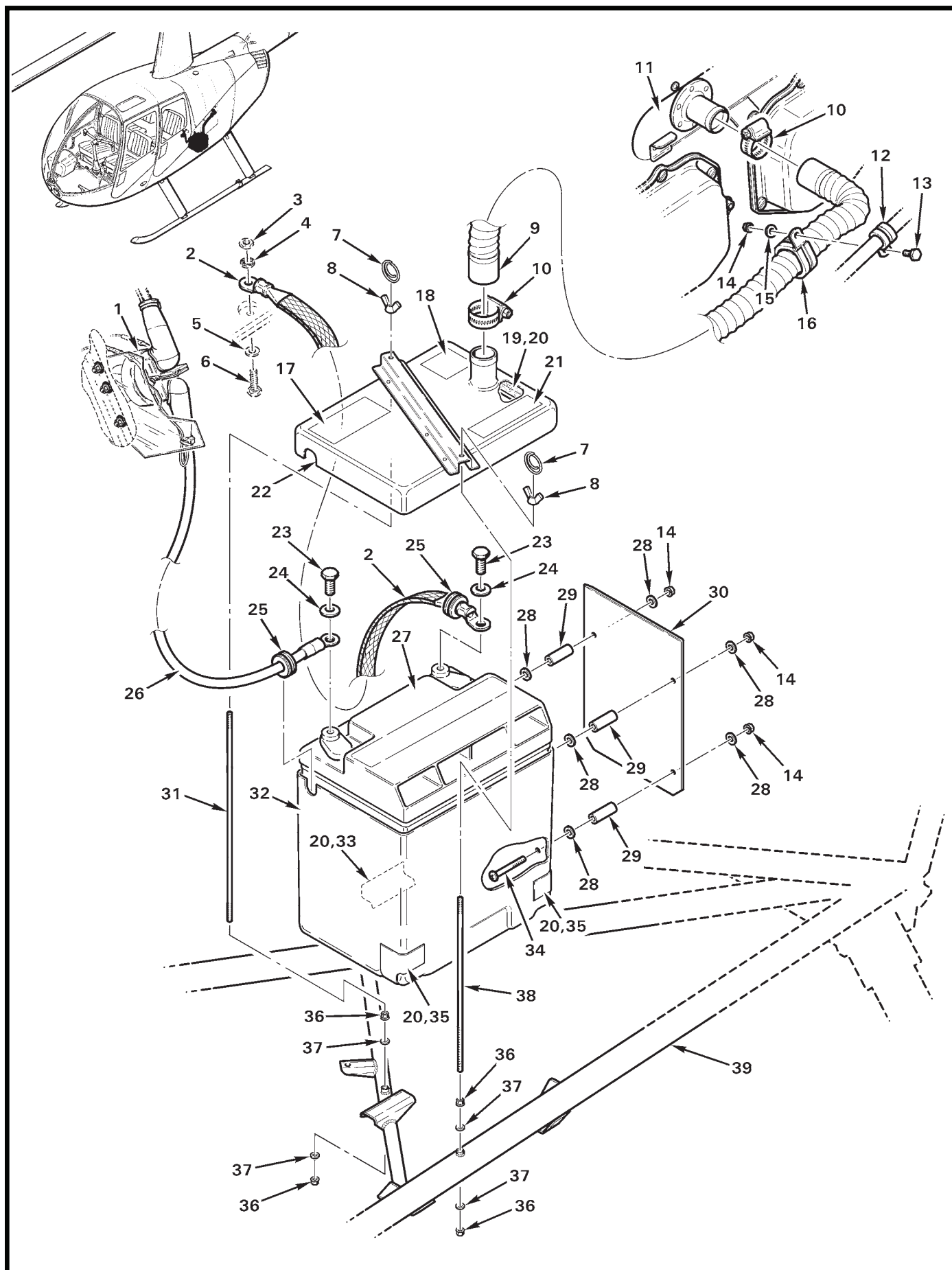


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		AFT BATTERY INSTALLATION (14V)*		
96-1-1	B415-1	Battery Relay (14-volt, Ref; see Figure 96-33 and 96-37 for complete installation)		
2	A780-22	Cable Assembly - Battery Negative	X	1
3	STD-1411**	Nut (Ref)		
4	STD-160**	Lockwasher (Ref)		
5	STD-8**	Washer (Ref)		
6	LW-25-1.13**	Bolt (Ref)		
7	95390A317	Circle Cotter	X	2
8	94924A009	Wingnut	X	2
9	A785-33	Hose	X	1
10	B277-12	Clamp	X	2
11	C449-3	Cover Assembly (Ref, see also Figure 71-31)		
12	MS21919WDG8	Clamp	X	1
13	AN3-4A	Bolt	X	1
14	MS21042L3	Nut	X	5
15	NAS1149F0332P	Washer	X	1
16	MS21919WDG18	Clamp	X	1
17	C654-44	Decal - "+ 12V"	X	1
18	C654-45	Decal - "—"	X	1
19	R5556	Seal (install using item 20)	X	A/R
20	B270-8qt	Adhesive (or B270-8qt)	X	A/R
21	C654-21	Decal - "Caution; Install Only Sealed Maintenance-Free Battery"	X	1
22	C955-9	Cover Assembly (14-volt ships; includes items 17 thru 21)	O	1
23	—	Bolt (M8)	O	2
24	—	Washer - Conical (M8)	O	2
25	MS35489-40	Grommet	X	2
26	A780-25	Cable Assembly - Battery Positive	X	1
27	B237-6	Battery (Sealed case, 12-volt; includes items 23 and 24. Concorde part no. RG25XC.)	X	1
28	NAS1149F0363P	Washer	X	8
29	A130-15	Spacer	X	4
NOTES * When C046-21 lower frame is installed. ** Lycoming part no.				
				Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		AFT BATTERY INSTALLATION (14V)* (Cont'd)		
96-1-30	A954-1	Shield	X	1
31	A923-8	Rod (inboard)	X	1
32	C955-8	Battery Box Assembly (14-volt ships; includes items 14, 20, 22, 28 thru 30, and 33 thru 35)	X	1
33	C955-12	Pad (install using item 20)	X	1
34	MS27039C1-24	Screw	X	4
35	A955-4	Pad (install using item 20)	X	2
36	MS21042L08	Nut	X	4
37	NAS620-8L	Washer	X	4
38	A923-7	Rob (outboard)	X	1
39	C046-21	Lower Frame - (LH, Ref)		
NOTES * When C046-21 lower frame is installed.				

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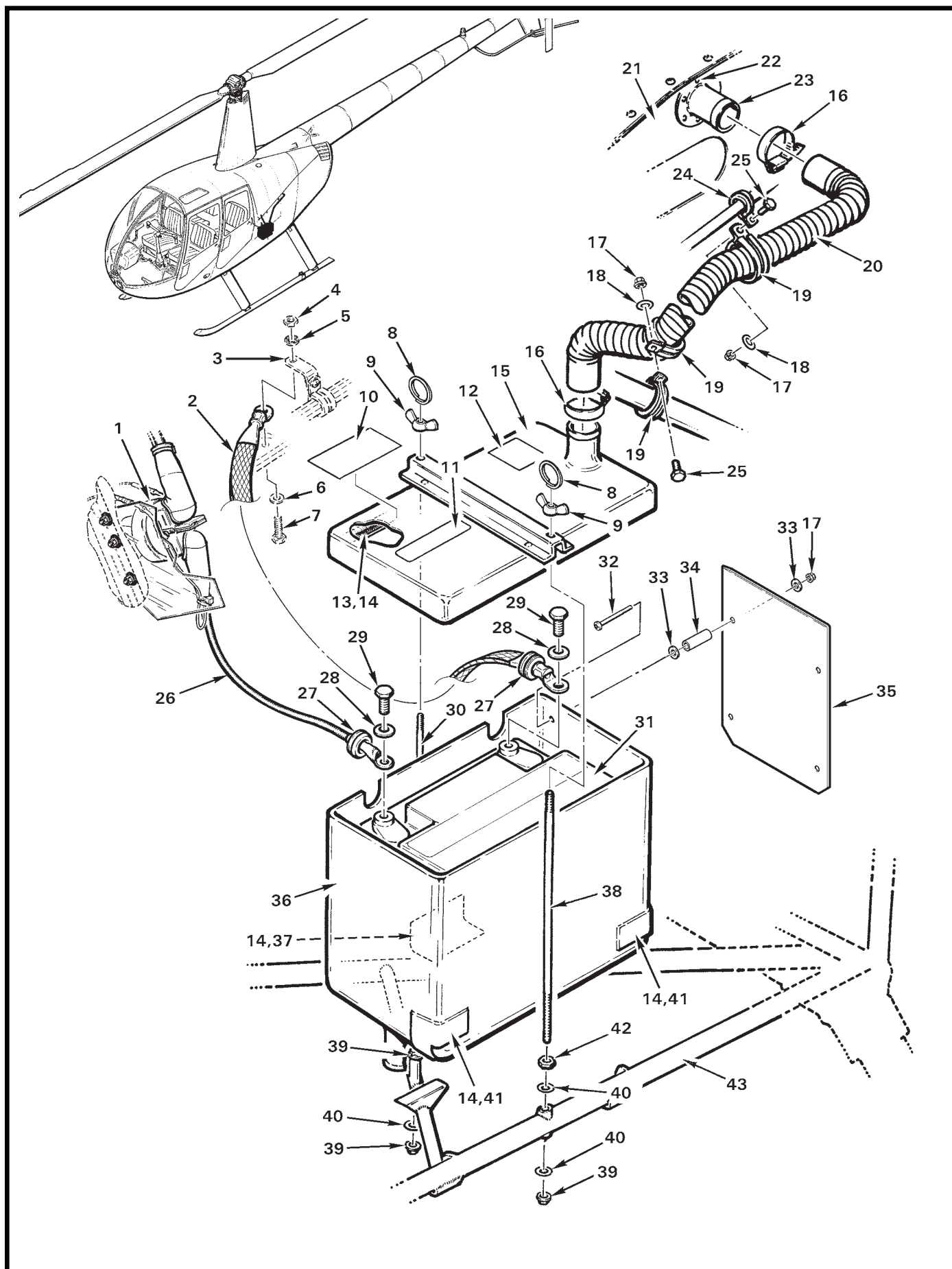


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		AFT BATTERY INSTALLATION (14V)*		
96-5-1	B415-1**	Relay (Ref, 14-volt ships; see Figure 96-33 and Figure 96-37 for complete relay installation)		
2	A780-2	Cable Assembly - Battery Negative	X	1
3	C357-1	Clip (Ref)		
4	STD-1411***	Nut (Ref)		
5	STD-160***	Lockwasher (Ref)		
6	STD-8***	Washer (Ref)		
7	LW-25-1.13***	Bolt (Ref)		
8	95390A317	Circle Cotter	X	2
9	94924A009	Wingnut	X	2
10	C654-44	Decal "12V" (14-volt ships)	X	1
11	C654-21	Decal - "Caution; Install Only Sealed Maintenance-Free Battery"	X	1
12	C654-45	Decal - "—"	X	1
13	R5556	Seal (install using item 14)	X	A/R
14	B270-14	Adhesive (or B270-8qt)	X	A/R
15	C955-7	Cover Assembly (14-volt ships; includes items 10 thru 14)	O	1
16	B277-12	Clamp	X	2
17	MS21042L3	Nut	X	16
18	NAS1149F0332P	Washer	X	4
19	MS21919WDG16	Clamp	X	A/R
20	A785-22	Hose	X	1
21	C305-7	Panel - LH (Ref, see also Figure 71-35)		
22	MS20470AD3-3	Rivet (Ref)		
23	A372-1	Tube (Ref)		
24	MS21919WDG8	Clamp	X	1
25	AN3-4A	Bolt	X	2
26	A780-25	Cable Assembly - Battery Positive	X	1
27	MS35489-40	Grommet	X	2
28	—	Washer - Conical (M8)	O	2
29	—	Bolt (M8)	O	2
30	A923-4	Rod (inboard; for C046-1 and -19 frames)	X	1

NOTES * When C046-1 or -19 lower frame is installed.
 ** Ship S/N 0945 and higher. For ship S/N 0001 thru 0944, see Figure 96-33.
 *** Lycoming part no.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		AFT BATTERY INSTALLATION (14V)* (Cont'd)		
96-5-31	B237-6	Battery (Sealed case, 12-volt; includes items 28 and 29. Ship S/N 0247 and higher. Concorde part no. RG25XC. To replace non-sealed battery, contact RHC.)	X	1
32	MS27039C1-24	Screw	X	4
33	NAS1149F0363P	Washer	X	8
34	A130-15	Spacer	X	4
35	A954-1	Shield	X	1
36	C955-3	Battery Box Assembly (14-volt ships; includes items 14, 15, 17 [4], 32 thru 35, 37, and 41)	X	1
37	A955-3	Pad (install using item 14)	X	1
38	A923-3	Rod (outboard; for C046-1 and -19 frames)	X	1
39	MS21042L08	Nut	X	3
40	NAS1149FN816P	Washer	X	3
41	A955-4	Pad (install using item 14)	X	2
42	AN340-8	Nut	X	1
43	C046-1 or -19	Frame (Ref)		
NOTES * When C046-1 or -19 lower frame is installed.				

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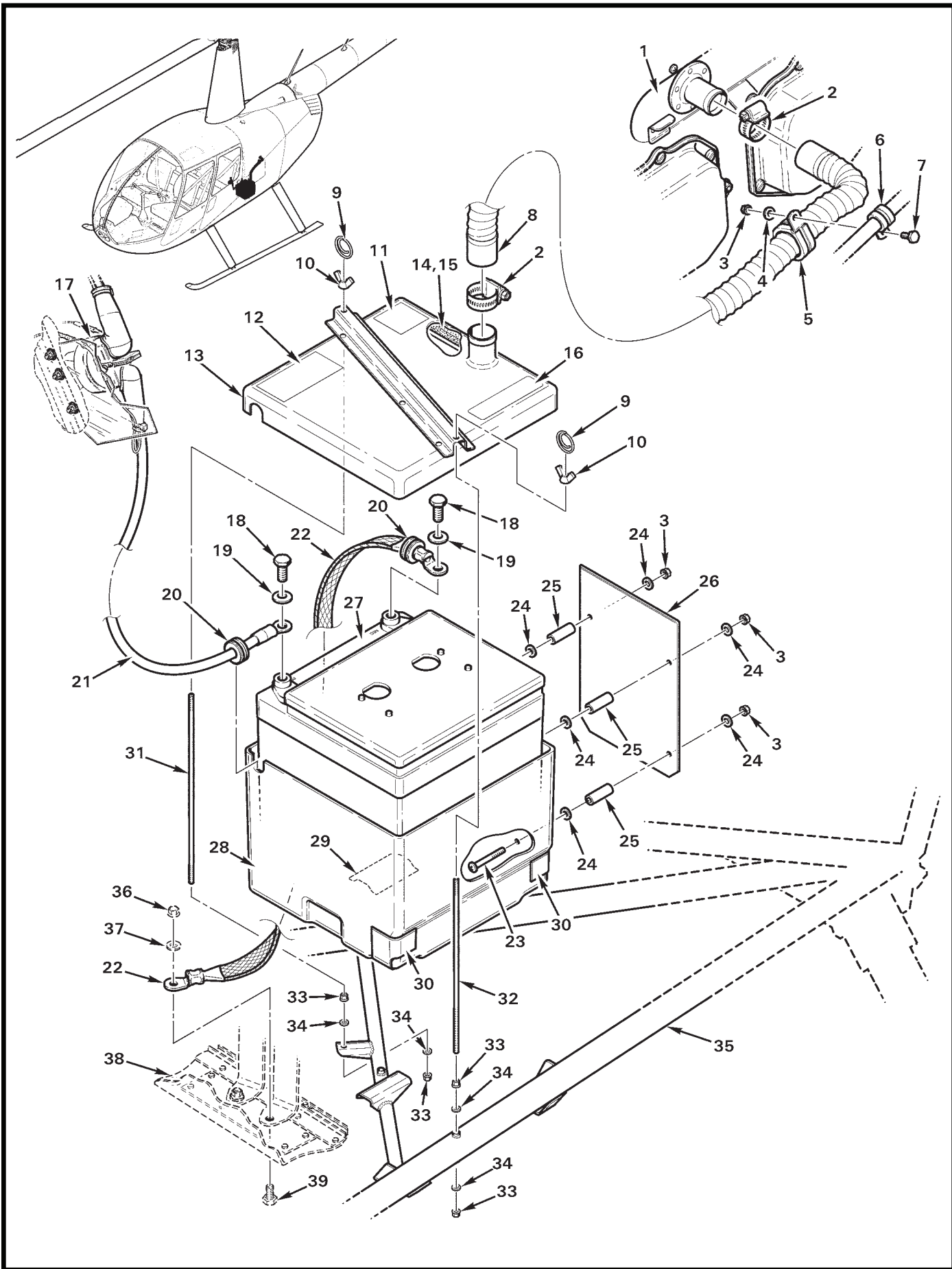


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		AFT BATTERY INSTALLATION (28V)*		
96-9-1	C449-3	Cover Assembly (Ref, see also Figure 71-31)		
2	B277-12	Clamp	X	2
3	MS21042L3	Nut	X	5
4	NAS1149F0332P	Washer	X	1
5	MS21919WDG18	Clamp	X	1
6	MS21919WDG8	Clamp	X	1
7	AN3-4A	Bolt	X	1
8	A785-33	Hose	X	1
9	95390A317	Circle Cotter	X	2
10	94924A009	Wingnut	X	2
11	C654-45	Decal - "—"	X	1
12	C654-43	Decal - "+ 24V"	X	1
13	C955-11	Cover Assembly (28-volt ships; includes items 11, 12, and 14 thru 16)	O	1
14	A540-4	Seal (install using item 15)	X	A/R
15	B270-14	Adhesive (or B270-8qt)	X	A/R
16	C654-21	Decal - "Caution; Install Only Sealed Maintenance-Free Battery"	X	1
17	B415-2	Relay (28-volt, Ref; see Figure 96-33 and Figure 96-37)		
18	—	Bolt (M8)	O	2
19	—	Washer - Conical (M8)	O	2
20	MS35489-40	Grommet	X	2
21	A780-25	Cable Assembly - Battery Positive	X	1
22	A780-22	Cable Assembly - Battery Negative	X	1
23	MS27039C1-24	Screw	X	4
24	NAS1149F0363P	Washer	X	8
25	A130-15	Spacer	X	4
26	A954-1	Shield	X	1
27	B237-4	Battery (Sealed case, 24-volt; includes items 18 and 19. Concorde part no. RG24-15.)	X	1
28	C955-10	Battery Box Assembly (28-volt ships; includes items 3, 13, 15, 23 thru 26, 29, and 30)	X	1
29	C955-12	Pad (install using item 15)	X	1
NOTES * When C046-21 lower frame is installed.				
				Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		AFT BATTERY INSTALLATION (28V)* (Cont'd)		
96-9-30	A955-4	Pad (install using item 15)	X	2
31	A923-10	Rod (inboard)	X	1
32	A923-9	Rod (outboard)	X	1
33	MS21042L08	Nut	X	4
34	NAS620-8L	Washer	X	4
35	C046-21	Lower Frame - (LH, Ref)		
36	MS21042L4	Nut (Ref)		
37	NAS1149F0432P	Washer (Ref)		
38	C015-3	Skin (LH cabin belly; Ref)		
39	AN4-4A	Bolt (Ref)		
NOTES * When C046-21 lower frame is installed.				

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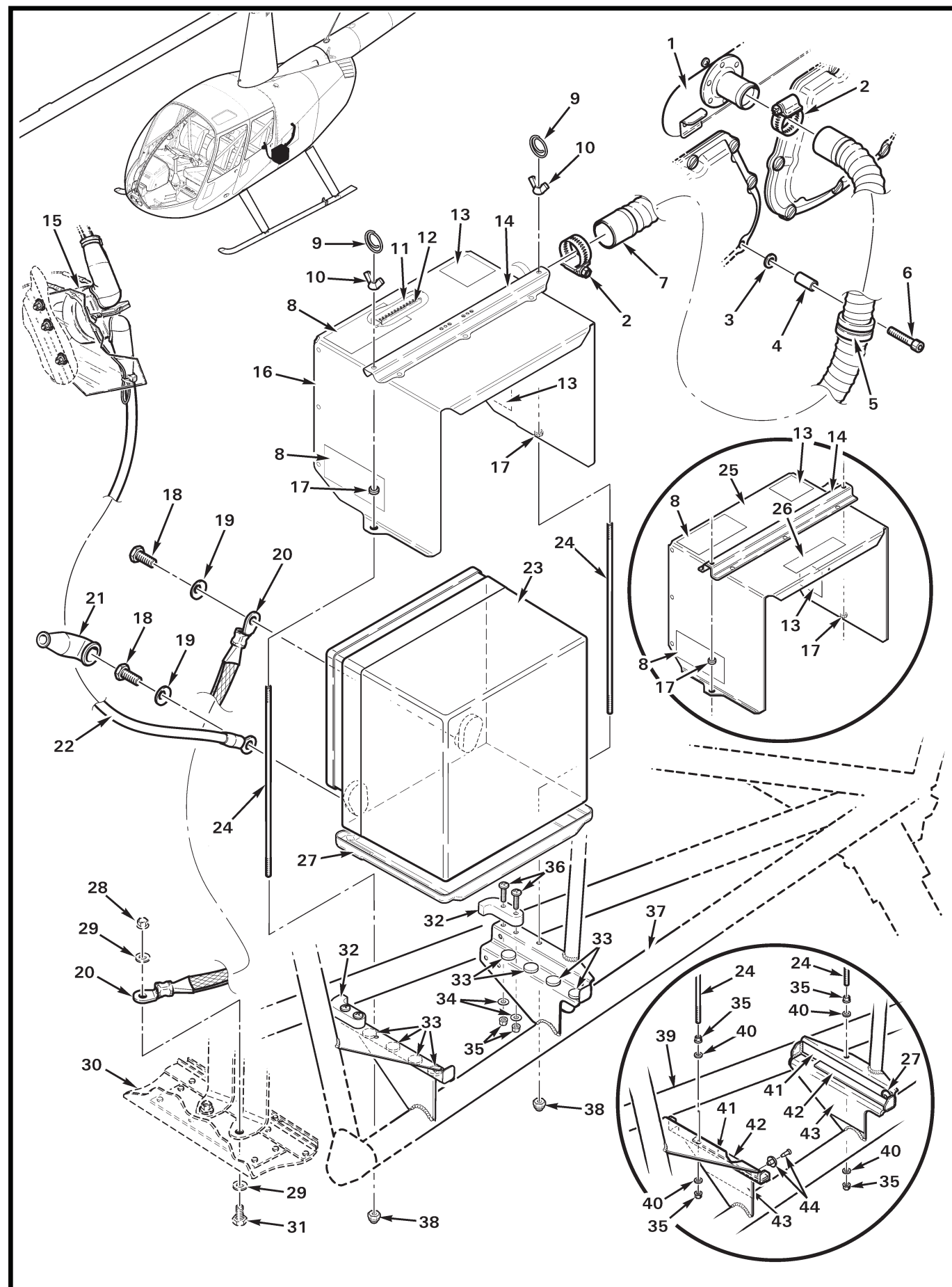


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		AFT BATTERY INSTALLATION (28V)		
96-12A-1	C449-3	Cover Assembly (Ref, see also Figure 71-31)		
2	B277-12	Clamp	X	2
3	NAS1149F0432P	Washer	X	1
4	C130-34	Spacer	X	1
5	MS21333-107	Clamp	X	1
6	NAS1352-4H20P	Screw	X	1
7	A785-35	Hose	X	1
8	C654-43	Decal – “+ 24V”	X	2
9	95390A317	Circle Cotter	X	2
10	94924A009	Wing Nut	X	2
11	A409-1	Angle	X	1
12	A225-1	Grommet	X	A/R
13	C654-45	Decal – “—”	X	2
14	A922-6	Channel (Ref)	X	1
15	B415-2	Relay (Ref, see Figures 96-33 and 96-37)		
16	D809-3	Cover Assembly (Incl items 8, 11 thru 14, and 17)	X	1
17	NAS557-3A	Grommet	X	2
18	—	Bolt (M8)	O	2
19	—	Washer – Conical (M8)	O	2
20	A780-22	Cable Assembly - Battery Negative	X	1
21	MS25171-2S	Nipple	X	1
	MS25171-4S	Nipple (superseded by MS25171-2S, this location)	X	1
22	A780-46	Cable Assembly – Battery Positive	X	1
23	B237-4	Battery (Sealed case, 24-volt; includes items 18 and 19. Concorde part no. RG24-15.)	X	1
24	A923-10	Rod	X	2
25	D809-1	Cover Assembly (Incl items 8, 13, 14, 17, and 26)	X	1
26	C654-21	Decal - “Caution; Install Only Sealed Maintenance-Free Battery”	X	1
27	G123-3	Tray (for B237-4 Battery)	X	1
28	D210-4	Nut (Ref)		
29	NAS1149F0432P	Washer (Ref)		
30	C015-3	Skin (LH cabin belly; Ref)		
31	AN4-4A	Bolt (Ref)		
32	D131-2	Retainer	X	2
NOTES				
Continues				

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		AFT BATTERY INSTALLATION (28V) (Cont'd)		
96-12A-33	G405-2	Bumper	X	8
34	NAS1149FN816P	Washer	X	4
35	MS21042L08	Nut	X	6
36	MS27039C0810	Screw	X	2
37	C046-26	Frame (Ref)		
38	B340-4	Nut	X	2
39	C046-23	Frame (Ref; see Figure 53-19)		
40	NAS620-8L	Washer	X	4
41	A701-3	Tape (0.5 in. wide polyethylene)	X	A/R
42	D832-1	Strip	X	2
43	PPR-4850B	Push Rivet	X	1
NOTES				

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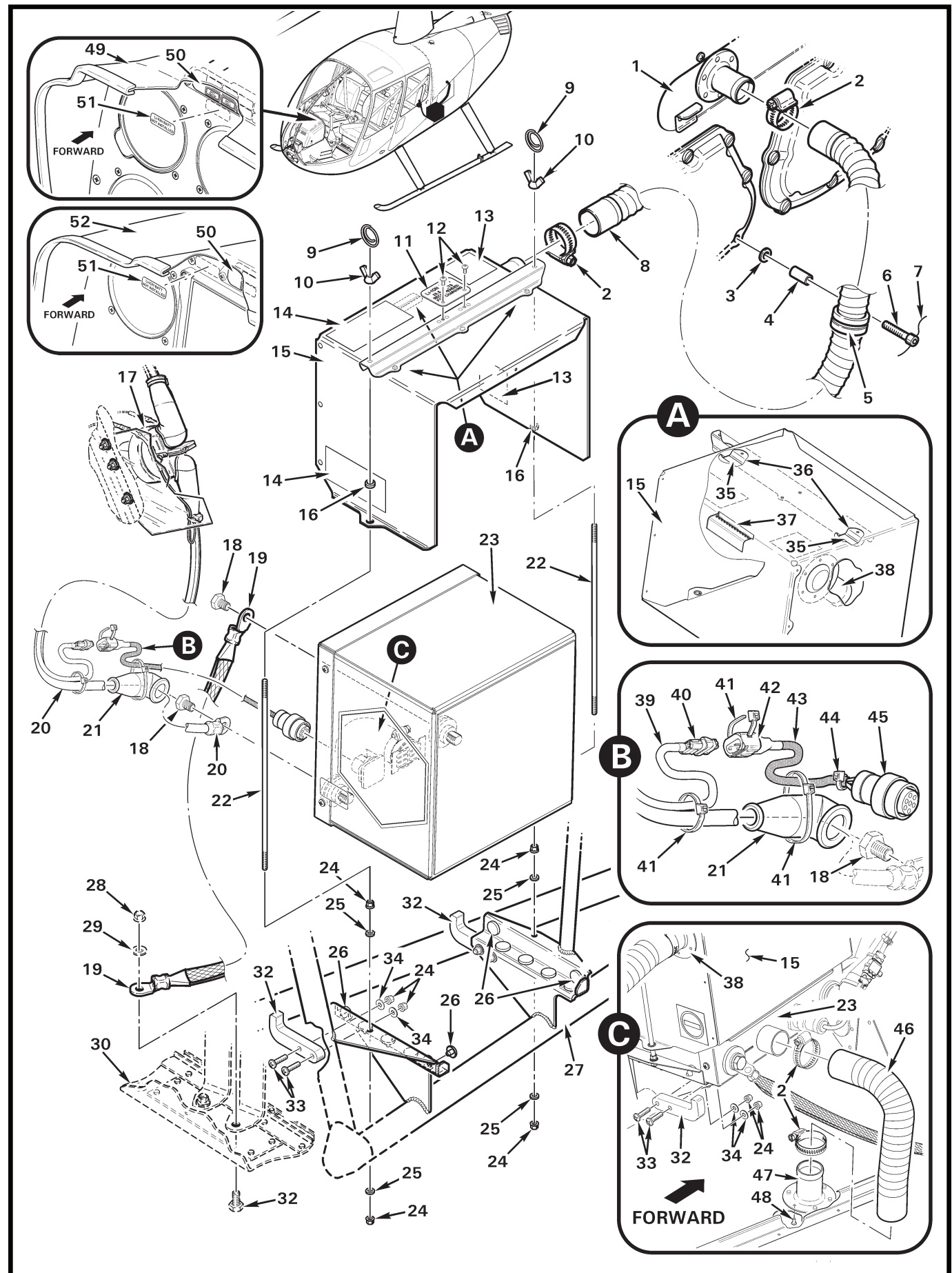


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		AFT BATTERY INSTALLATION (28V LITHIUM-ION)		
96-13A-1	C449-3	Cover Assembly (Ref, see also Figure 71-31)		
2	B277-12	Clamp	X	2
3	NAS1149F0432P	Washer	X	1
4	C130-34	Spacer	X	1
5	MS21333-107	Clamp	X	1
6	NAS1352-4H20P	Screw	X	1
7	MS20995C32	0.032-in. dia. Safety Wire	X	A/R
8	A785-35	Hose	X	1
9	95390A317	Circle Cotter	X	2
10	94924A009	Wingnut	X	2
11	G598-4	Cover	X	1
12	MS35206-213	Screw	X	2
13	C654-45	Decal – “—”	X	2
14	C654-43	Decal – “+ 24V”	X	2
15	D809-3	Cover Assembly (Incl items 13, 14, 16, and 35 thru 38)	X	1
16	NAS557-3A	Grommet	X	2
17	B415-2	Relay (Ref, see Figure 96-33 and Figure 96-37)		
18	—	Bolt (M8)	O	2
19	A780-22	Cable Assembly – Battery Negative	X	1
20	A780-46	Cable Assembly – Battery Positive	X	1
21	MS25171-2S	Nipple	X	1
22	A923-10	Rod	X	2
23	D237-2	Battery (Sealed case, Lithium-Ion, 24-volt; includes item 18. Mid-Continent part no. 6430017-2 (TB17).)	X	1
24	MS21042L08	Nut	X	4
25	NAS620-8L	Washer	X	4
26	G405-2	Bumper	X	4
27	C046-26	Frame (Ref)		
28	D210-4	Nut (Ref)		
29	NAS1149F0432P	Washer (Ref)		
30	C015-3	Skin (LH cabin belly; Ref)		
31	AN4-4A	Bolt (Ref)		
32	D131-3	Retainer	X	2
NOTES				
Continues				

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		AFT BATTERY INSTALLATION (28V LITHIUM-ION) (Cont'd)		
96-13A-33	MS27039C0810	Screw	X	4
34	NAS1149FN816P	Washer	X	4
35	A701-3	Tape	X	A/R
36	A922-7	Bumper (Ref)		
37	A225-1	Grommet (1.95-inch length)	X	1
38	A372-1	Tube (Ref)		
39	C859	Harness Assembly – Electrical (Ref, cabin; includes item 40)		
40	D269-2	Receptacle (Ref)		
	C859-2819	Wire (Ref)		
	C859-2882	Wire (Ref)		
41	MS3367-5-9	Ty-Rap	X	A/R
42	D269-1	Plug	X	1
43	F693-6	Harness Assembly (Incl items 42, 44, and 45)	X	1
44	MS3367-4-0	Ty-rap	X	1
45	9018048	Plug	X	1
46	A785-42	Hose	X	1
47	A372-1	Tube	X	1
48	MS20470AD3	Rivet	X	6
49	G050	Console Assembly (Ref)		
50	G198	Panel (Ref)		
51	D819-9*	Decal	X	1
52	G060	Console Assembly (Ref)		

NOTES * When D237-2 is not installed.

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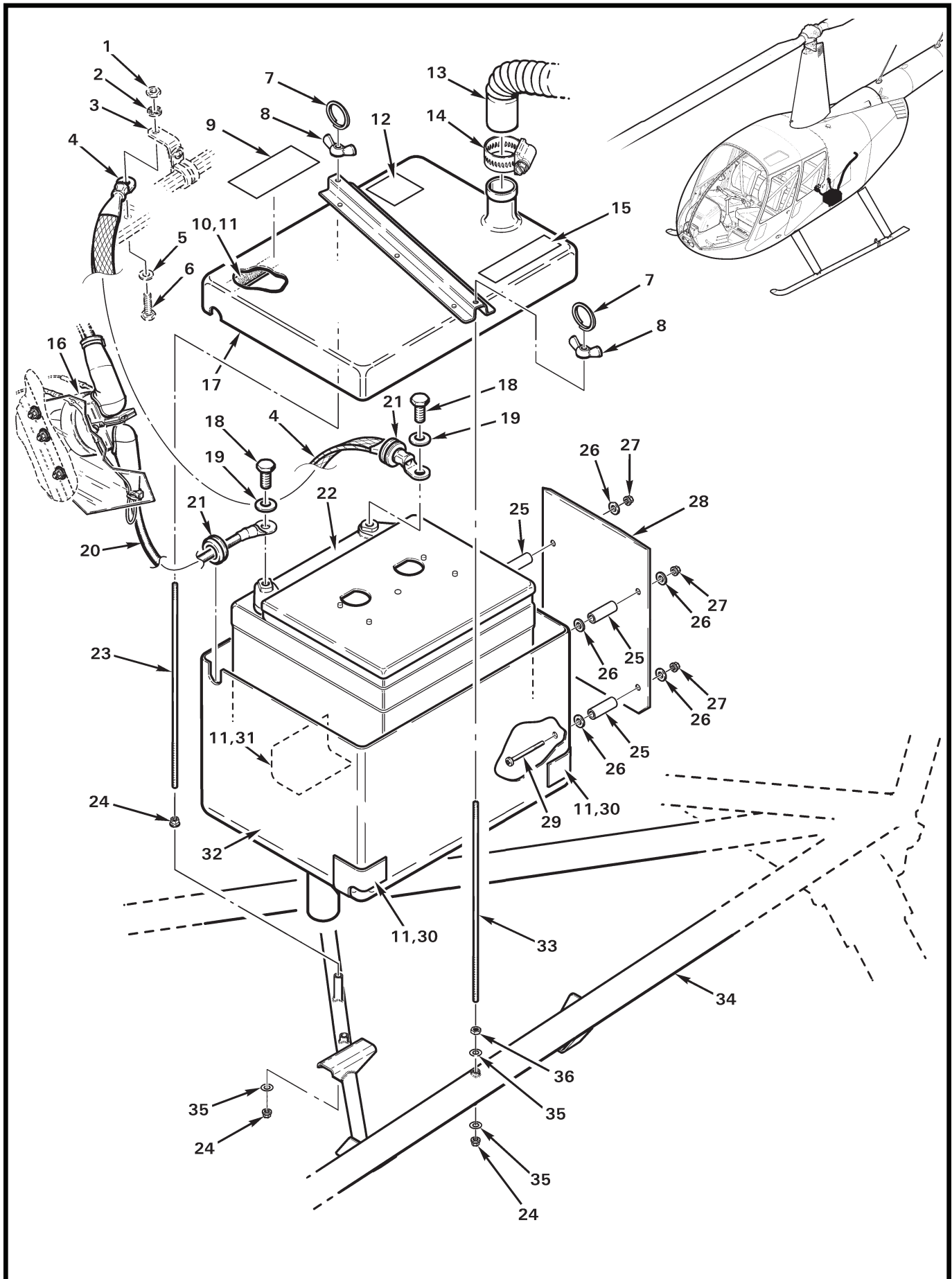


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		AFT BATTERY INSTALLATION (28V)*		
96-15-1	STD-1411**	Nut (Ref)		
2	STD-160**	Lockwasher (Ref)		
3	C357-1	Clip (Ref)		
4	A780-2	Cable Assembly - Battery Negative	X	1
5	STD-8**	Washer (Ref)		
6	LW-25-1.13**	Bolt (Ref)		
7	95390A317	Circle Cotter	X	2
8	94924A009	Wingnut	X	2
9	C654-43	Decal - "24V" (28-volt ships)	X	1
10	R5556	Seal (install using item 11)	X	A/R
11	B270-8QT	Adhesive	X	A/R
12	C654-45	Decal - "—"	X	1
13	A785-22	Hose	X	1
14	B277-12	Clamp	X	2
15	C654-21	Decal - "Caution; Install Only Sealed Maintenance Free Battery"	X	1
16	B415-2	Relay (Ref, 28-volt ships; see Figure 96-33 and Figure 96-37 for complete installation.)		
17	C955-6	Cover Assembly (28-volt ships; includes items 9, 10, 12 and 15)	O	1
18	—	Bolt (M8)	O	2
19	—	Washer - Conical (M8)	O	2
20	A780-25	Cable Assembly - Battery Positive	X	1
21	MS35489-40	Grommet	X	2
22	B237-4	Battery (Sealed case, 24-volt; includes items 18 and 19. Concorde part no. RG24-15.)	X	1
23	A923-6	Rod (inboard)	X	1
24	MS21042L08	Nut	X	3
25	A130-15	Spacer	X	4
26	NAS1149F0363P	Washer	X	8
27	D210-3	Nut	X	16
28	A954-1	Shield	X	1
29	MS27039C1-24	Screw	X	4
NOTES * When C046-1 or -19 lower frame is installed. ** Lycoming part no.				
				Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		AFT BATTERY INSTALLATION (28V)* (Cont'd)		
96-15-30	A955-4	Pad (install using item 11)	X	2
31	A955-3	Pad (install using item 11)	X	1
32	C955-5	Battery Box Assembly (28-volt ships; includes items 11, 17, 25 thru 29, 30, and 31)	X	1
33	A923-5	Rod (outboard)	X	1
34	C046-1 or -19	Frame (Ref)		
35	NAS1149FN816P	Washer	X	3
36	AN340-8	Nut	X	1
NOTES * When C046-1 or -19 lower frame is installed.				

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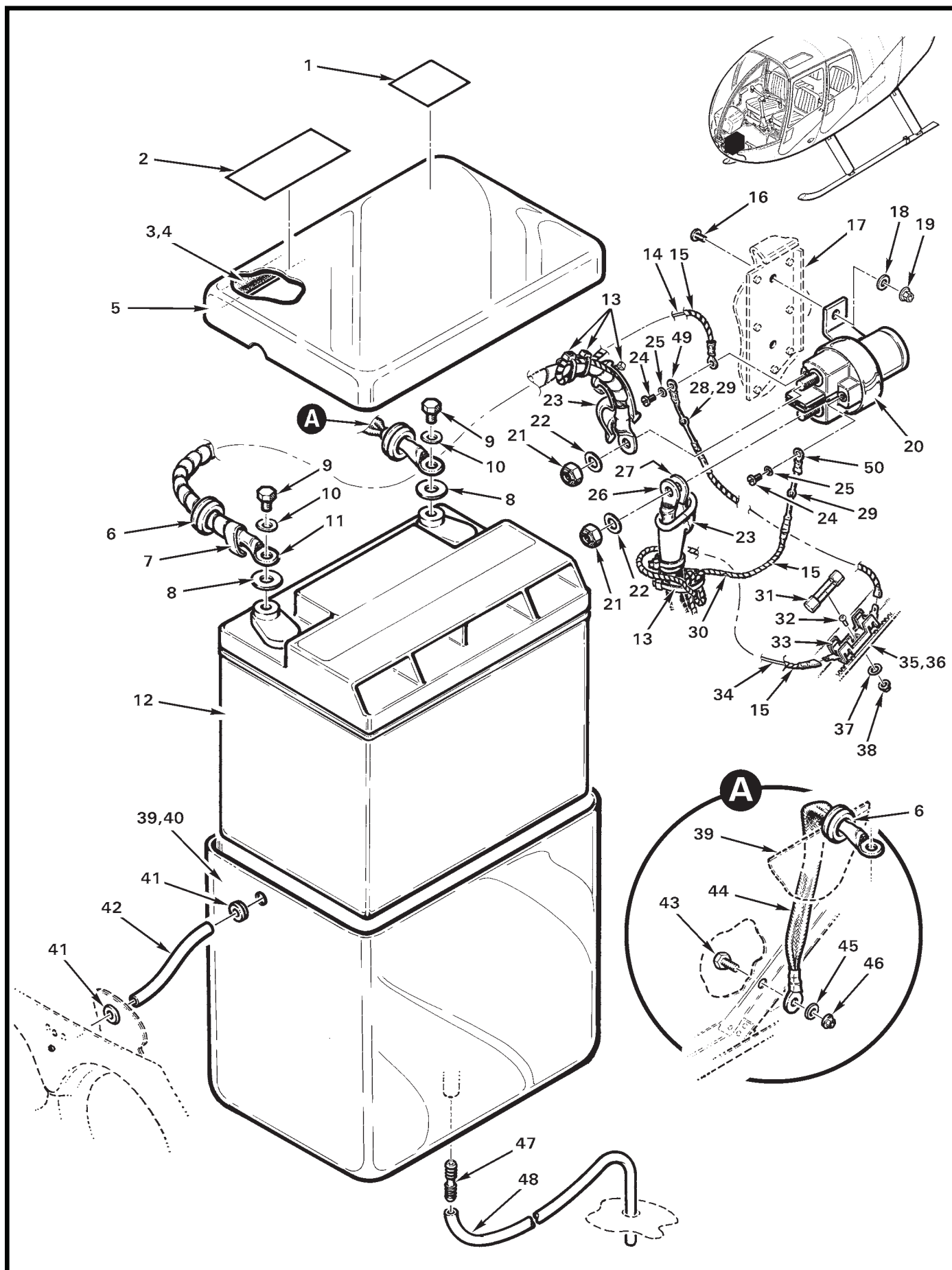


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		NOSE BATTERY INSTALLATION (14V)		
96-19-1	C654-45	Decal - "—"	X	1
2	C654-44	Decal - "12V + "	X	1
3	R5556	Seal (install using item 4)	X	A/R
4	B270-14	Adhesive (or B270-8qt)	X	A/R
5	A540-10	Cover Assembly (Incl items 1 thru 4)	O	1
6	MS35489-40	Grommet	X	2
7	B161-8	Spirap	X	A/R
8	A141-31	Washer (Ref; no longer available, no longer required.)		
9	—	Bolt (M8)	O	2
10	—	Washer - Conical (M8)	O	2
11	A780-35	Cable Assembly - Battery Positive (Incl item 14)	X	1
12	B237-6	Battery (Sealed case, 12-volt; includes items 9 and 10. Concorde part no. RG25XC.)	X	1
13	MS3367-4-9	Ty-Rap	X	A/R
14	A780-64	Wire (Ref)		
15	B161-2	Spirap	X	A/R
16	MS27039C1-06	Screw	X	2
17	A547-1	Channel Mount (Ref)		
18	NAS1149F0332P	Washer	X	2
19	MS21042L3	Nut	X	2
20	B415-1*	Relay (Incl items 21, 22, 24, and 25)	X	1
21	MS21044B5	Nut	O	2
22	O1000424	Washer (conical)	O	2
23	MS25171-4S	Nipple	X	2
24	O1003621	Screw	O	2
25	O1004635	Washer	O	2
26	A780-20	Cable (to alternator shunt; C067-580 wire)	X	1
27	C067-587	Cable (to starter)	X	1
28	B304-8	Diode Assembly (Includes items 31 thru 33, 37, 38, and 49 as an assembled unit.)	X	1
29	A15A	Diode (cover with B158-103 heat shrink)	X	1
	B158-103	Heat Shrink (clear)	X	A/R
NOTES * Ship S/N 0945 and higher. For ship S/N 0001 thru 0944, see Figure 96-41.				
				Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		NOSE BATTERY INSTALLATION (14V) (Cont'd)		
96-19-30	C059-141	Wire (Ref)		
31	AGC-3	Fuse (3-amp)	X	1
32	MS35206-228	Screw	X	1
33	D262-1	Fuse Block (alternate part no. 354601)	X	1
34	C059-142	Wire (Ref)		
35	MS21266-1N	Grommet (Ref; install using item 36)	X	A/R
36	B270-8qt	Adhesive	X	A/R
37	NAS1149FN616P	Washer	X	1
38	MS21042L06	Nut	X	1
39	A540-2	Box Bottom	O	1
40	A540-12	Battery Box Assembly (Incl items 5 and 39)	X	1
41	MS35489-6	Grommet	X	2
42	A691-3	Tube (install using item 36)	X	1
43	AN4-3A	Bolt	X	1
44	A780-2	Cable - Battery Negative	X	1
45	NAS1149F0432P	Washer	X	1
46	MS21042L4	Nut	X	1
47	O705T-015	Connector - Tube	X	1
48	D233-1	Drain Tube Assembly (Incl items 47 and R5022 tube)	X	1
49	B260-3	Terminal	X	1
50	B260-2	Terminal	X	1
		* * *		
51	KI-153	Forward Battery Relay Upgrade Kit (For 14-volt ship S/Ns 0001 thru 0944. Includes items 6, 7, 11, 13, 15, 16, 18 thru 20, 23, and 52 thru 56.)	X	1
52	B158-103	Heat Shrink (1 in. length)	X	1
53	B161-4	Spirap	X	1
54	MS3367-5-9	Ty-Rap	X	5
55	MS3367-7-9	Ty-Rap	X	5
56	B260-2	Terminal	X	2
NOTES				

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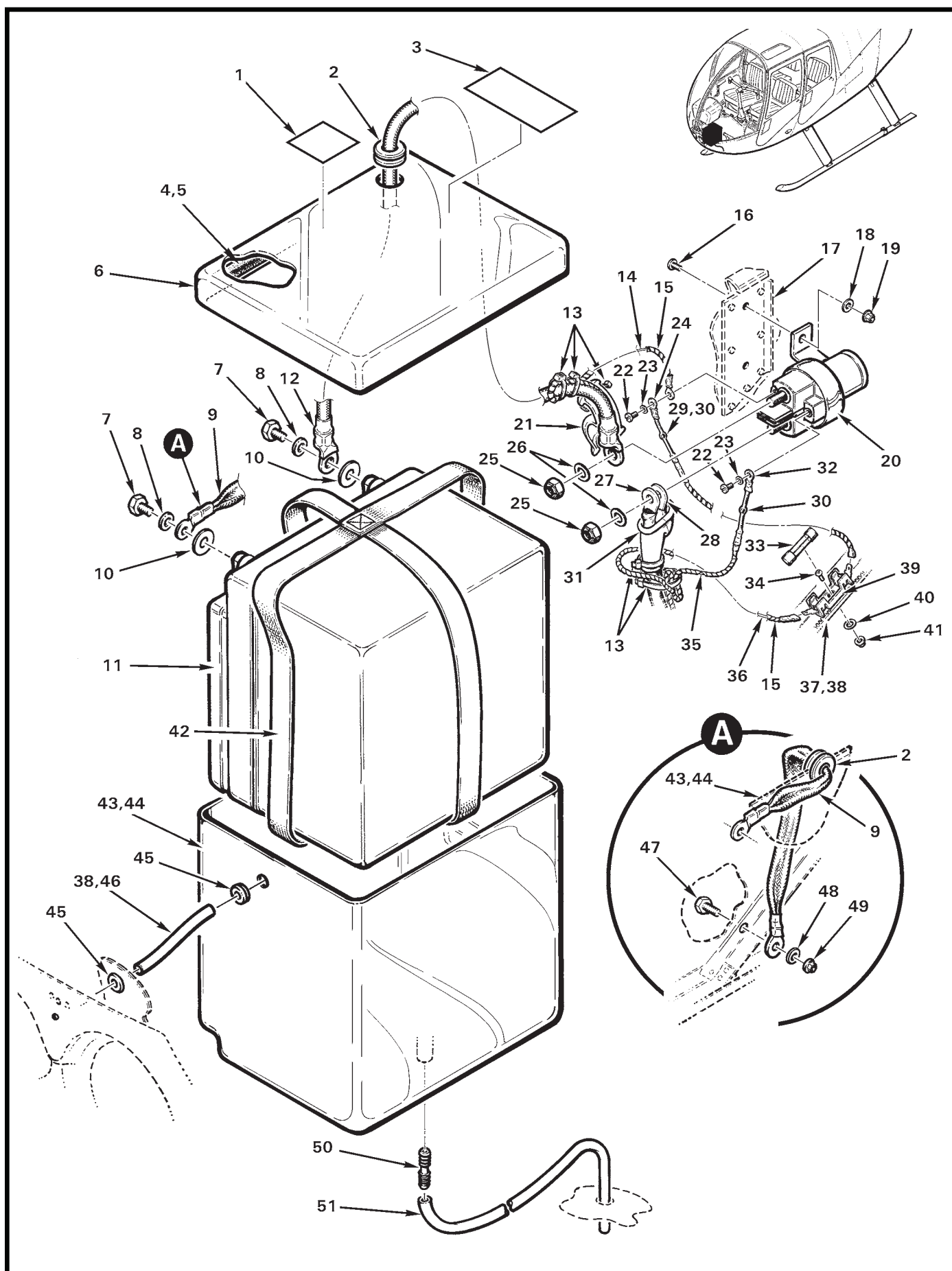


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		NOSE BATTERY INSTALLATION (28V)		
96-23-1	C654-45	Decal - “-”	X	1
2	MS35489-40	Grommet	X	2
3	C654-43	Decal - “+ 24V”	X	1
4	R5556	Seal (install using item 5)	X	A/R
5	B270-14	Adhesive (or B270-8qt)	X	A/R
6	D689-3	Cover Assembly (Revision “D” and higher)	O	1
7	—	Bolt (M8)	O	2
8	—	Washer - Conical (M8)	O	2
9	A780-22	Cable - Battery Negative	X	1
10	A141-31	Washer (Ref; no longer available, no longer required)		
11	B237-4	Battery (Sealed case; 24-volt, includes items 7 and 8. Concord par no. RG24-15.)	X	1
12	A780-40	Cable - Battery Positive (Includes item 14; use only with item 44.)	X	1
13	MS3367-4-9	Ty-Rap	X	A/R
14	A780-64	Wire (Ref)		
15	B161-2	Spirap (0.125 in. dia.)	X	A/R
16	MS27039C1-06	Screw	X	2
17	A547-1	Channel Mount (Ref)		
18	NAS1149F0332P	Washer	X	2
19	MS21042L3	Nut	X	2
20	B415-2	Relay (Incl items 22, 23, 25, and 26)	X	1
21	MS25171-2S	Nipple	X	1
22	01003621	Screw (M4 x 6)	O	2
23	01004635	Washer (M4)	O	2
24	B260-3	Terminal	X	1
25	MS21044B5	Nut	O	2
26	01000424	Washer (conical)	O	2
27	A780-23	Cable (to shunt)	X	1
28	C067-1386	Cable (to starter)	X	1
29	B304-8	Diode Assembly (Includes items 24, 30, 33, 34, and 39 thru 41 as an assembled unit.)	X	1
30	A15A	Diode (cover with B158-103 heat shrink)	X	1
	B158-103	Heat Shrink	X	A/R
NOTES				
Continues				

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		NOSE BATTERY INSTALLATION (28V) (Cont'd)		
96-23-31	MS25171-4S	Nipple	X	1
32	B260-2	Terminal	X	1
33	AGC-3	Fuse (3-amp)	X	1
34	MS35206-228	Screw	X	1
35	C059-141	Wire (Ref)		
36	C059-142	Wire (Ref)		
37	MS21266-1N	Grommet (Ref; install using item 38)	X	1
38	B270-8qt	Adhesive	X	1
39	D262-1	Fuse Block (alternate part no. 354601)	X	1
40	NAS1149FN616P	Washer	X	1
41	MS21042L06	Nut	X	1
42	D693-1	Strap Assembly	X	1
43	D689-2	Box Bottom	O	1
44	D689-5	Battery Box Assembly (Incl items 1, 3 thru 6, and 43)	X	1
45	MS35489-6	Grommet	X	2
46	A691-3	Tube - Vent (install using item 38)	X	1
47	AN4-3A	Bolt	X	1
48	NAS1149F0432P	Washer	X	1
49	MS21042L4	Nut	X	1
50	0705T-015	Connector - Tube	X	1
51	D233-1	Drain Tube Assembly (Incl items 50 and R5022 tube)	X	1
NOTES				

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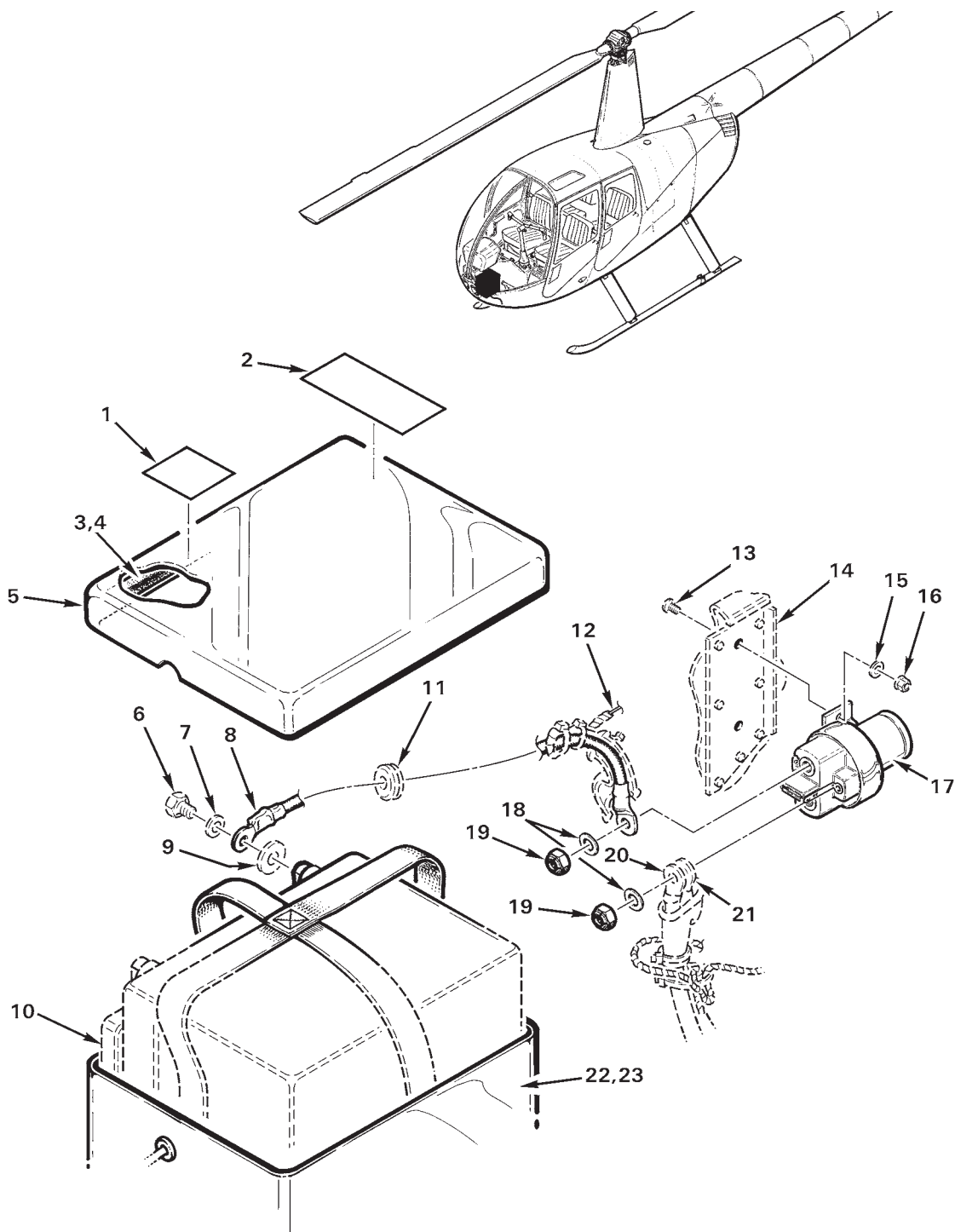


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		NOSE BATTERY INSTALLATION (28V)		
96-27-1	C654-45	Decal - “-”	X	1
2	C654-43	Decal - “+ 24V”	X	1
3	R5556	Seal (install using item 4)	X	A/R
4	B270-8	Adhesive	X	A/R
5	D689-3	Cover Assembly (Rev “C” and prior, Ref; no longer available. Order items 12 and 44 from Figure 96-23 when replacing.)		
6	—	Bolt (M8)	O	2
7	—	Washer - Conical (M8)	O	2
8	A780-21	Cable - Battery Positive (Incl item 12)	X	1
9	A141-31	Washer (Ref; no longer available, no longer required.)		
10	B237-4	Battery (Sealed case; 24-volt, includes items 6 and 7. Concord part no. RG24-15.)	X	1
11	MS35489-40	Grommet (Ref)		
12	A780-64	Wire (Ref)		
13	MS27039C1-06	Screw	X	2
14	A547-1	Channel Mount (Ref)		
15	NAS1149F0332P	Washer	X	2
16	MS21042L3	Nut	X	2
17	B415-2	Relay (Ref, see Figure 96-33 and Figure 96-37.)		
18	O1000424	Washer (conical)	O	2
19	MS21044B5	Nut	O	2
20	A780-23	Cable (to shunt)	X	1
21	C067-1386	Cable (to starter)	X	1
22	D689-2	Box Bottom (Ref)	O	1
23	D689-5	Battery Box Assembly (Ref, Revision “C” and prior, no longer available. Used with items 5 and 22. Order items 5 and 22. Order items 12 and 44 from Figure 96-19 when replacing.)		
NOTES				

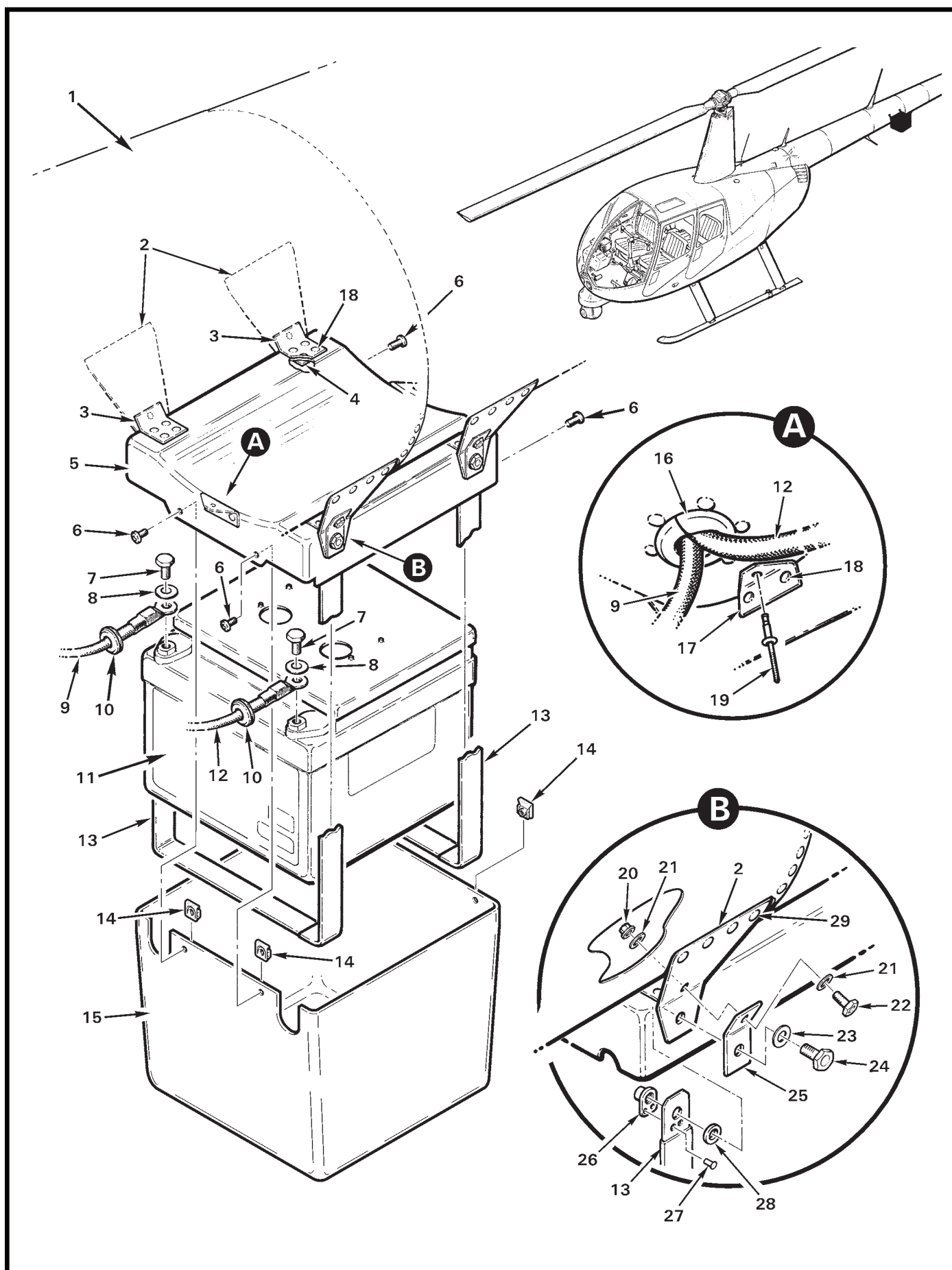


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		TAILCONE BATTERY INSTALLATION		
96-29-1	C023	Tailcone Assembly (Ref, see Figure 53-25)		
2	D362-7	Strap	X	4
3	D362-9	Angle	X	4
4	D362-5	Doubler	X	4
5	D361-6*	Cover Assembly (Incl items 3, 4, 17, and 18)	X	1
6	MS27039C0806	Screw	X	4
7	—	Bolt (M8)	O	2
8	—	Washer (conical, M8)	O	2
9	A780-12	Cable Assembly - Battery Negative	X	1
10	MS35489-41X	Grommet	X	2
11	B237-4	Battery (Sealed case; 24-volt, includes items 7 and 8. Concord part RG24-15.)	X	1
12	A780-29	Cable Assembly - Battery Positive	X	1
13	D362-10	Strap Assembly (Incl items 26 and 27)	X	2
14	B162-2	Clipnut	X	4
15	D540-5	Box	X	1
16	MS35489-19	Grommet	X	1
17	D362-6	Angle	X	2
18	MS20470AD4	Rivet	X	20
19	NAS9301B-4-02	Rivet	X	2
20	MS21042L3	Nut	X	4
21	NAS1149F0332P	Washer	X	8
22	NAS6603-3	Bolt	X	4
23	NAS1149F0432P	Washer	X	4
24	NAS6604-3	Bolt	X	4
25	D362-8	Angle	X	4
26	MS21086L4	Nutplate	X	4
27	NAS1097AD3	Rivet	X	8
28	A130-47	Spacer	X	4
29	NAS9301B-5-02	Rivet	X	16
NOTES * D361 Revision "G" and higher.				

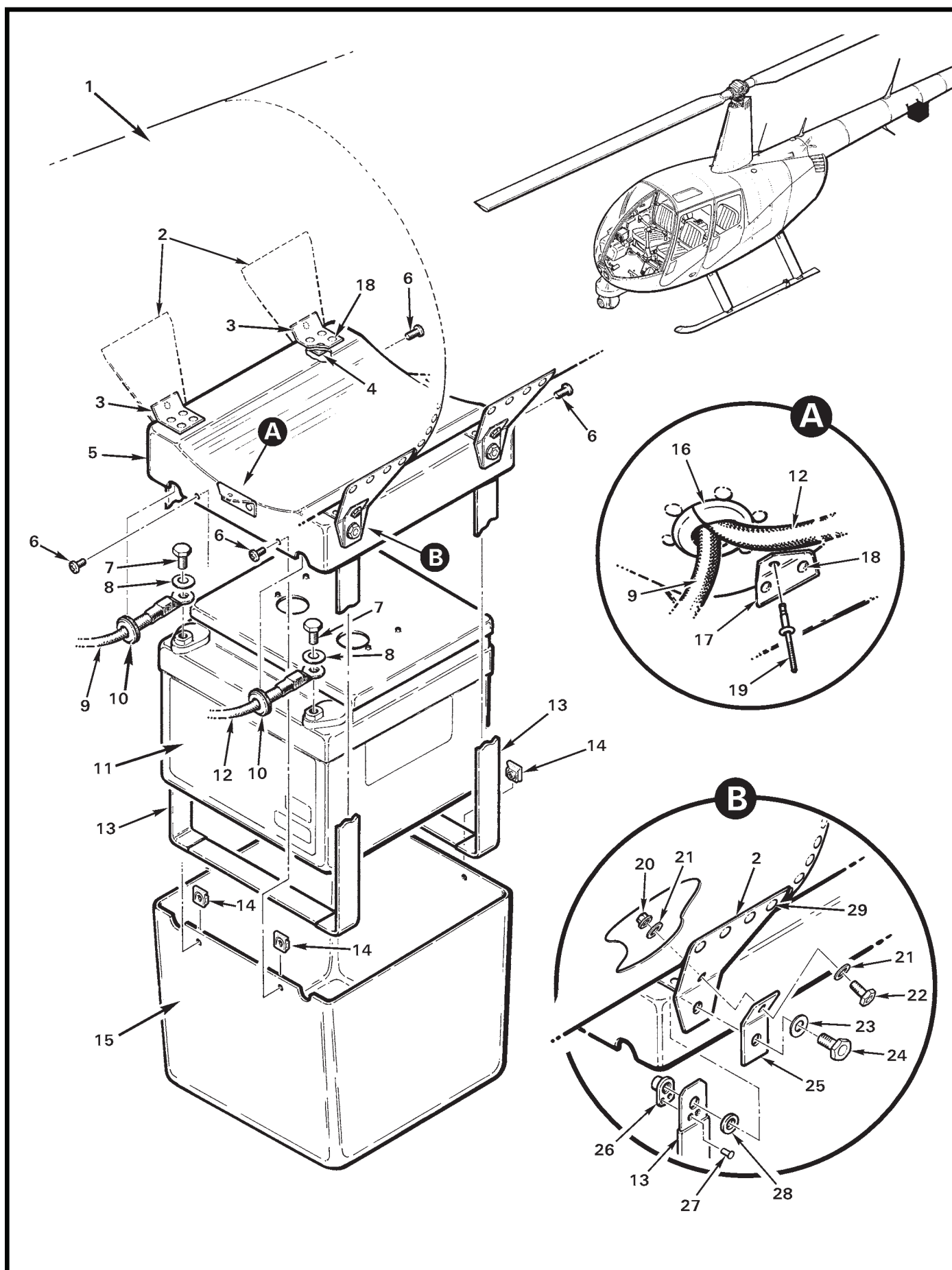


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		TAILCONE BATTERY INSTALLATION		
96-31-1	C023	Tailcone Assembly (Ref, see Figure 53-25)		
2	D362-7	Strap	X	4
3	D362-9	Angle	X	4
4	D362-5	Doubler	X	4
5	D361-5 *	Cover Assembly (Ref; no longer available)		
6	MS27039C0806	Screw	X	4
7	—	Bolt (M8)	O	2
8	—	Washer (conical, M8)	O	2
9	A780-12	Cable Assembly - Battery Negative	X	1
10	MS35489-41X	Grommet	X	2
11	B237-4	Battery (Sealed case; 24-volt, includes items 7 and 8. Concord part no. RG24-15.)	X	1
12	A780-29	Cable Assembly - Battery Positive	X	1
13	D362-10	Strap Assembly (Incl items 26 and 27)	X	2
14	B162-2	Clipnut	X	4
15	D540-3	Box (Ref; no longer available)		
16	MS35489-19	Grommet	X	1
17	D362-6	Angle	X	2
18	MS20470AD4	Rivet	X	20
19	NAS9301B-4-02	Rivet	X	2
20	MS21042L3	Nut	X	4
21	NAS1149F0332P	Washer	X	8
22	NAS6603-3	Bolt	X	4
23	NAS1149F0432P	Washer	X	4
24	NAS6604-3	Bolt	X	4
25	D362-8	Angle	X	4
26	MS21086L4	Nutplate	X	4
27	NAS1097AD3	Rivet	X	8
28	A130-47	Spacer	X	4
29	NAS9301B-5-02	Rivet	X	16
NOTES * D361 Revision "F" and prior.				

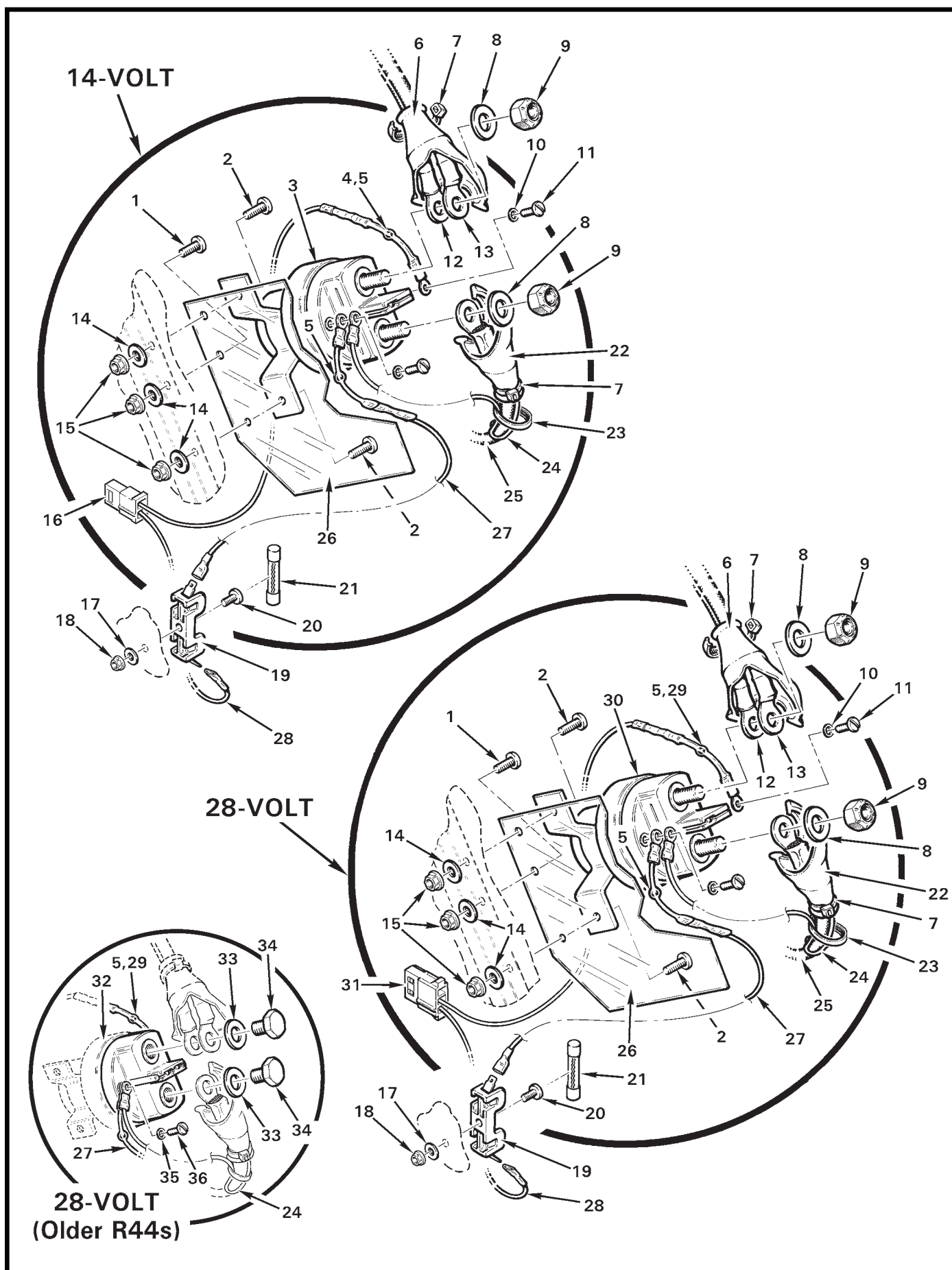


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		AFT BATTERY RELAY INSTALLATION*		
96-33-1	MS27039C1-06	Screw	X	1
2	MS27039C1-07	Screw	X	2
3	B415-1	Relay (14-volt; includes items 8 thru 11)	X	1
4	B304-4	Diode Assembly (14-volt; includes items 5, 16 thru 21, 27, and 28)	X	1
5	A15A	Diode (cover with B158-103 heat shrink)	X	2
	B158-103	Heat Shrink (0.187 in. dia., clear)	X	A/R
6	MS25171-4S	Nipple	X	1
7	MS3367-4-9	Ty-Rap	X	2
8	O1000424	Washer (conical)	O	2
9	MS21044B5	Nut	O	2
10	O1004635	Washer	O	2
11	O1003621	Screw	O	2
12	A780-27	Cable (wire no. 580, to alternator shunt)	X	1
13	A780-26	Cable (wire no. 581, to starter)	X	1
14	NAS1149F0332P	Washer	X	3
15	MS21042L3	Nut	X	3
16	B263-13	Housing	X	1
	B263-2	Socket	X	2
17	NAS1149FN616P	Washer	X	1
18	MS21042L06	Nut	X	1
19	D262-1	Fuse Block (alternate part no. 354601)	X	1
20	MS35206-228	Screw	X	1
21	AGC-3	Fuse (3-amp)	X	1
22	MS25171-2S	Nipple	X	1
23	MS3367-4-9	Ty-Rap	X	A/R
24	A780-64	Wire (Ref)		
25	A780-25	Cable Assembly - Battery Positive (Includes item 24)	X	1
26	C452-3	Guard (clear plastic)	X	1
27	-65	Wire (Ref)		
28	-66	Wire (Ref)		

NOTES * Ship S/N 0945 and higher.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		AFT BATTERY RELAY INSTALLATION* (Cont'd)		
96-33-29	B304-5	Diode Assembly (28-volt; includes items 5, 17 thru 21, 27, 28, and 31)	X	1
30	B415-2	Relay (28-volt; includes items 8 thru 11)	X	1
31	B263-15	Housing	X	1
	B263-2	Socket	X	2
32	26.57.01	Relay (Ref, 28-volt; for earlier R44s. To replace order item 30.)		
33	—	Washer (M8)	O	2
34	—	Bolt (M8 x 8)	O	2
35	—	Washer (M4)	O	2
36	—	Screw (M4 x 6)	O	2
NOTES * Ship S/N 0945 and higher.				

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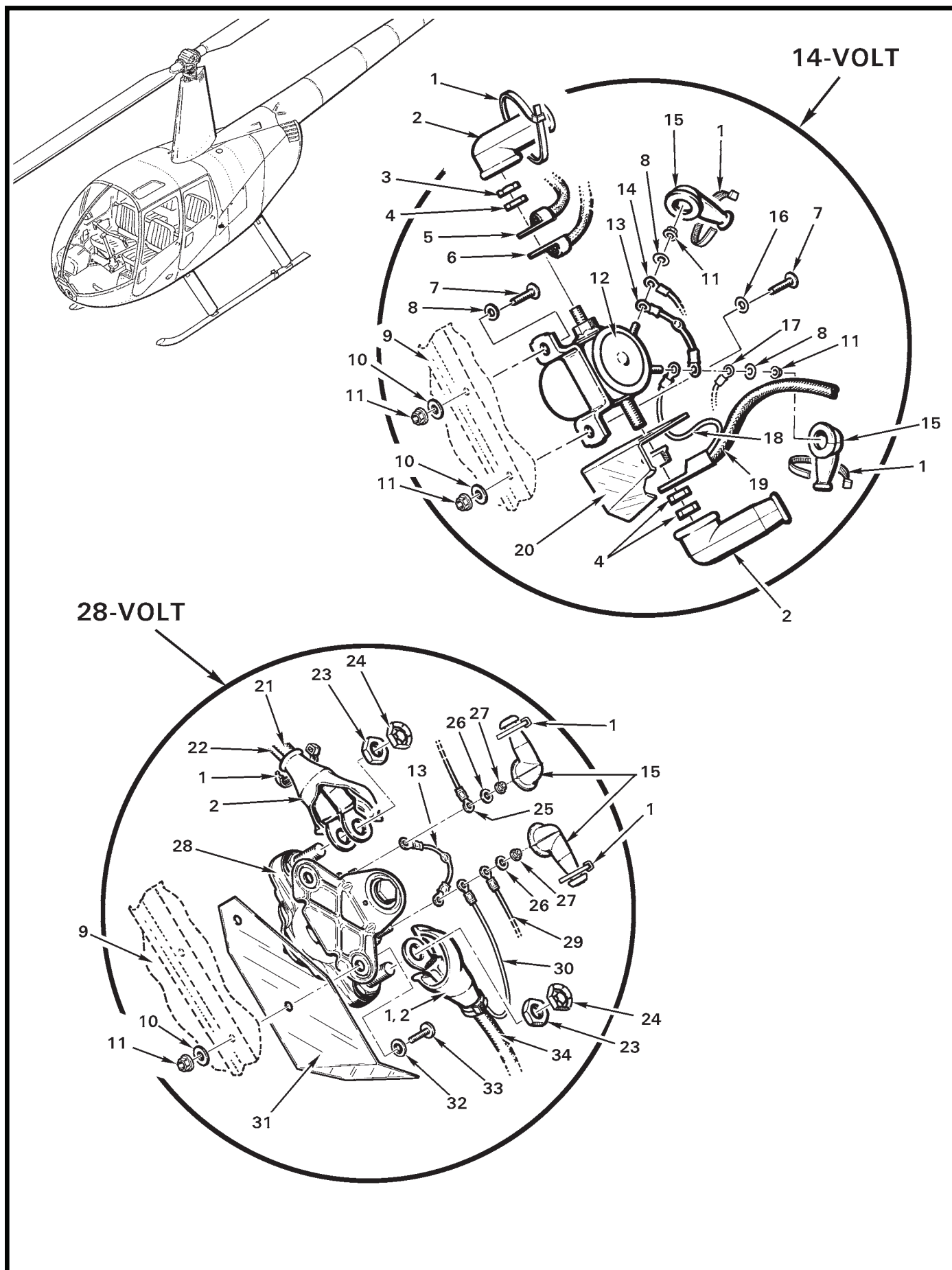


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		AFT BATTERY RELAY INSTALLATION		
96-37-1	MS3367-4-9	Ty-Rap	X	A/R
2	MS25171-4S	Nipple	X	2
3	B330-16	Palnut	X	1
4	AN316-5R	Nut	X	3
5	A780-9	Cable (wire no. 581, to starter)	X	1
6	C067-580	Cable (wire no. 580, to alternator shunt)	X	1
7	MS27039C1-07	Screw	X	2
8	NAS1149F0363P	Washer	X	2
9	C233-1	Vertical Firewall (Ref)		
10	NAS1149F0332P	Washer	X	2
11	MS21042L3	Nut	X	2
12	70-906*	Relay (14-volt, Ref)		
13	B304-2	Diode Assembly	X	1
14	B304-4	Diode Assembly (Wire no. 65. See also Figure 96-33.)	X	1
15	MS25171-1S	Nipple	X	2
16	A141-17	Washer	X	2
17	B304-4	Diode Assembly (Ref, wire no. 66)	X	1
18	A780-64	Wire (Ref)		
19	A780-8	Cable Assembly - Battery Positive (Include item 18)	X	1
20	C452-1	Guard	X	2
		* * *		
21	A780-15**	Cable Assembly (Ref)		
22	A780-16**	Cable Assembly (Ref)		
23	AN316-6R	Nut	X	2
24	B330-19	Palnut	X	2
25	B304-5	Diode Assembly (Wire no. 65. See also Figure 96-33.)	X	1
26	NAS1149FN616P	Washer	X	2
27	MS21042L06	Nut	X	2
28	6041H202*	Relay (28-volt, Ref)		
29	B304-5	Diode Assembly (Wire no. 66. See also Figure 96-33.)	X	1
30	A780-64	Wire (Ref)		
NOTES * Ship S/N 0001 thru 0944. ** No longer available. Refer to R44 SL-23.				
				Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		AFT BATTERY RELAY INSTALLATION* (Cont'd)		
96-37-31	C452-2	Guard	X	2
32	5745-PH-248-027-194	Shoulder Washer	X	2
33	MS27039C1-07	Screw	X	2
	B270-4	Sealant (for bottom screw head)	X	A/R
34	A780-14	Cable Assembly - Battery Positive (Incl item 30)	X	1
NOTES * Ship S/N 0001 thru 0944.				

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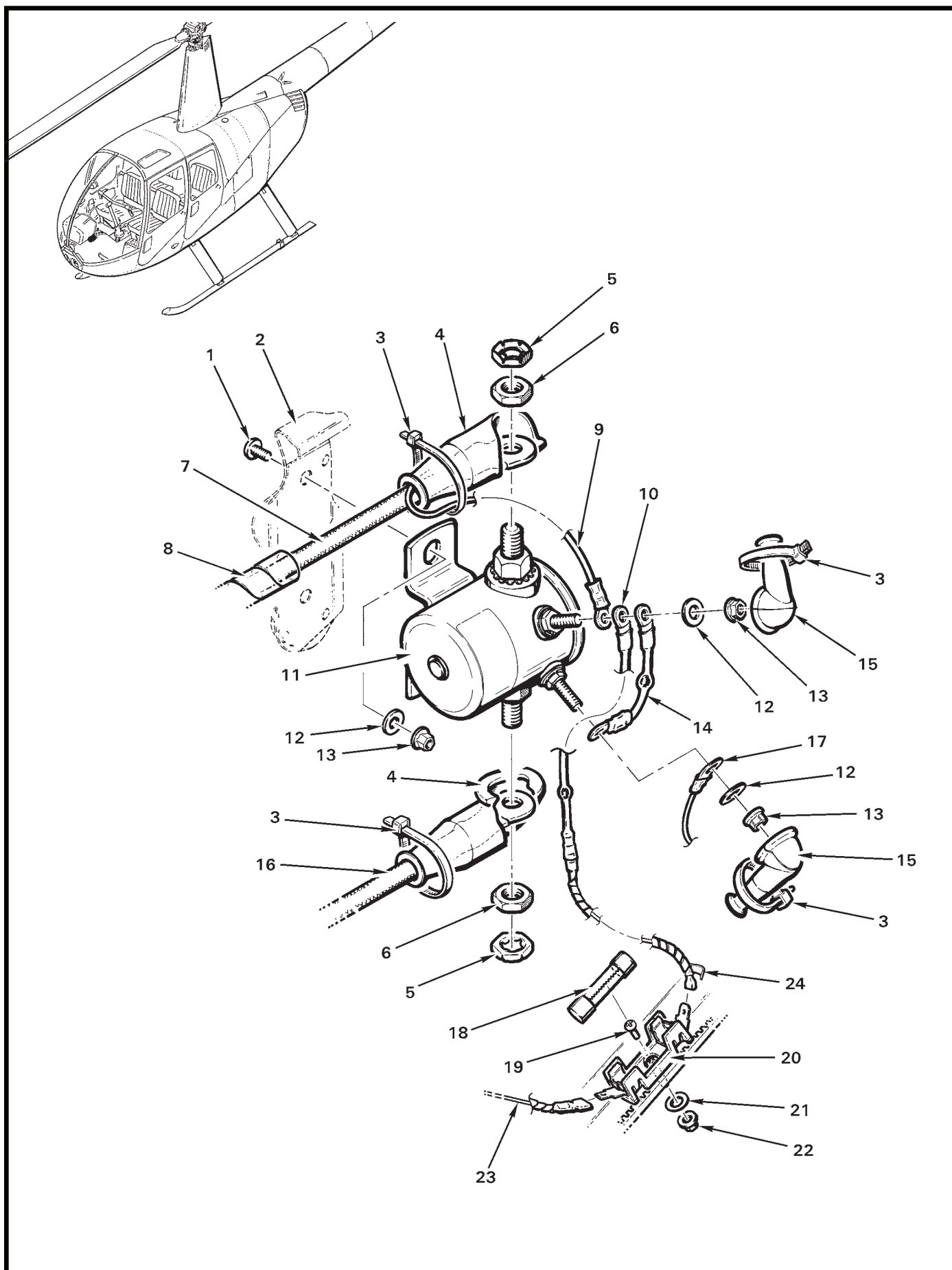


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		NOSE BATTERY RELAY (14V)*		
96-41-31	MS27039C1-06	Screw	X	2
2	C359-2	Console Panel (Ref)		
3	MS3367-4-9	Ty-Rap	X	4
4	MS25171-2S	Nipple	X	2
5	B330-16	Palnut	X	2
6	AN316-5R	Nut	X	2
7	A780-6	Cable Assembly - Battery Positive (Incl item 9)	X	1
8	B161-8	Spirap	X	A/R
9	A780-64	Wire (Ref)		
10	B304-3	Diode Assembly (Includes A15A diode and items 18 thru 22) . .	X	1
11	70-906**	Relay (14-volt, Ref)		
12	NAS1149F0363P	Washer	X	4
13	MS21042L3	Nut	X	4
14	B304-2	Diode Assembly	X	1
15	MS25171-1S	Nipple	X	2
16	C067-587	Cable (to starter)	X	1
17	C059-141	Wire (Ref)		
18	AGC-3	Fuse (3-amp)	X	1
19	MS35206-228	Screw	X	1
20	354601	Fuse Block	X	1
21	NAS1149FN616P	Washer	X	1
22	MS21042L06	Nut	X	1
23	C059-142	Wire (Ref)		
24	B161-2	Spirap	X	A/R
NOTES * Ship S/N 0001 thru 0944, no longer available. ** Order KI-153 kit to replace relay (see Figure 96-19, item 51).				

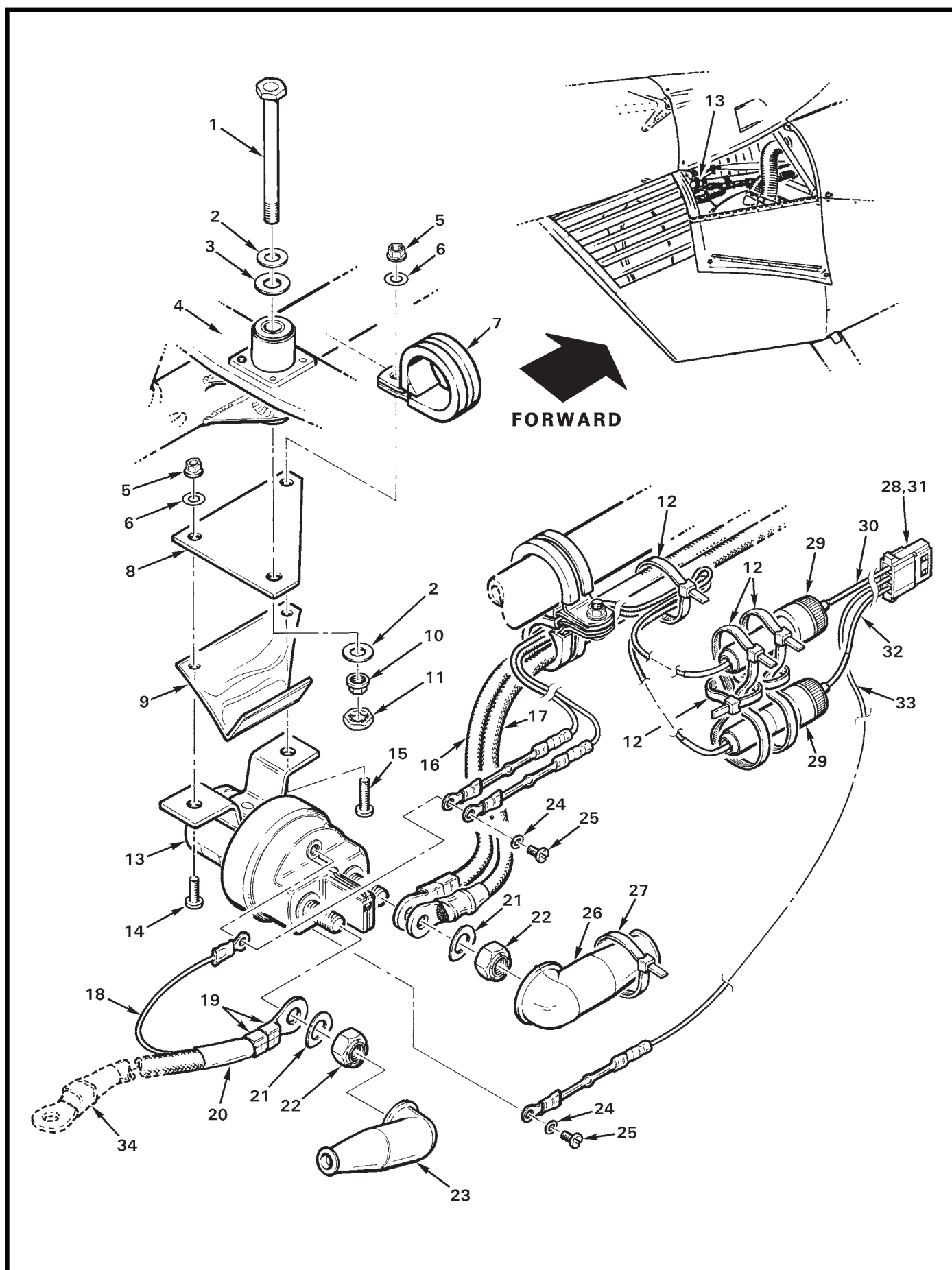


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		TAILCONE BATTERY RELAY INSTALLATION		
96-43-1	NAS6604-37	Bolt	X	1
2	NAS1149F0432P*	Washer (Ref)		
3	A141-3*	Washer (Ref)		
4	A331-4*	Bellcrank – Tail Rotor Control (Ref)		
5	MS21042L3	Nut	X	2
6	NAS1149F0332P	Washer	X	2
7	MS21919WDG16	Clamp	X	1
8	D399-9	Tab	X	1
9	D399-7	Shield	X	1
10	D210-4*	Nut (Ref)		
11	B330-13*	Palnut (Ref)		
12	MS3367-5-9	Ty-Rap	X	A/R
13	B415-2	Relay (Incl items 21, 22, 24, and 25)	X	1
14	MS27039C1-07	Screw	X	1
15	MS27039C1-09	Screw	X	1
16	A780-24	Cable Assembly	X	1
17	A780-28	Cable Assembly	X	1
18	-64	Wire (Ref)		
19	B260-20	Terminal	X	2
20	B158-8	Heat Shrink	X	A/R
21	01000424	Washer (conical)	X	2
22	MS21044B5	Nut	X	2
23	MS25171-2S	Nipple	X	1
24	01004635	Washer	X	2
25	01003621	Screw	X	2
26	MS25171-4S	Nipple	X	1
27	MS3367-4-9	Ty-Rap	X	1
28	B304-7	Diode Assembly (Includes items 29 thru 33, terminals, heat shrink, and splices as an assembled unit.)	X	1
29	15502	Fuse Holder	X	2
	AGC-3	Fuse (3-amp)	X	2
30	-66	Wire (Ref, housing slot no. 1)		
NOTES * See Figure 67-91.				
				Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		TAILCONE BATTERY RELAY INSTALLATION (Cont'd)		
96-43-31	B263-15	Housing	X	1
	B263-2	Socket	X	3
32	-1226	Wire (Ref, housing slot no. 3)		
33	-65	Wire (Ref, housing slot no. 2)		
34	A780-29	Cable Assembly – Battery Positive (Ref, see Figure 96-31. Does not include items 18, 19, or 20.)		
NOTES				

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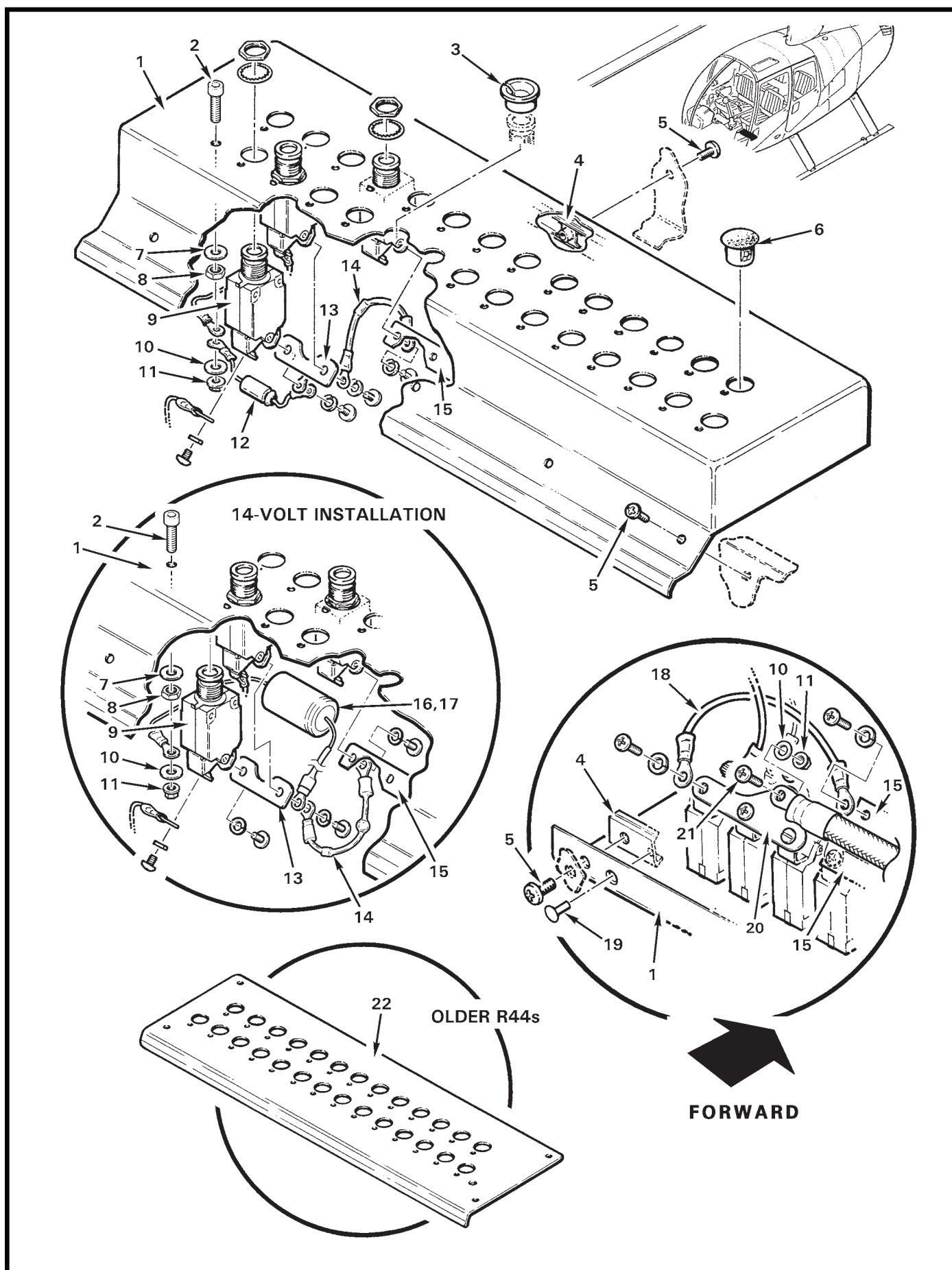


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		CIRCUIT BREAKER PANEL		
96-47-1	C490-8	Circuit Breaker Panel Assembly (28 holes, 14/28-volt ships with hydraulic flight controls. Includes items 4 and 19.)	X	1
2	NAS1352-08-10P	Screw	X	1
3	10164-5	Button (red; for "Clutch/Start" breaker)	X	1
4	A738-11	Gang Channel	X	1
5	MS27039C0806	Screw	X	10
6	2633	Hole Plug	X	A/R
7	NAS1149DN832H	Washer (aluminum)	X	1
8	AN340-8	Nut	X	1
9	B297-2	Circuit Breaker (2-amp)	X	A/R
	B297-5	Circuit Breaker (5-amp)	X	A/R
	B297-7	Circuit Breaker (7 1/2-amp; "COM" breaker on earlier R44s)	X	A/R
	B297-10	Circuit Breaker (10-amp)	X	A/R
	B297-20	Circuit Breaker (20-amp)	X	A/R
10	NAS1149FN816P	Washer	X	2
11	MS21042L08	Nut	X	2
12	B304-1	Capacitor Assembly (28-volt, IO-540 ships)	X	1
13	A448-3	Bus Bar (2 breakers)	X	1
14	A045-2	Diode Assembly	X	1
15	A448-1	Bus Bar (6 breakers)	X	A/R
	A448-4	Bus Bar (3 breakers)	X	A/R
	A448-9	Bus Bar (9 breakers)	X	A/R
	A448-10	Bus Bar (4 breakers)	X	A/R
	A448-14	Bus Bar (8 breakers)	X	A/R
16	B304-11	Capacitor Assembly (14-volt, O-540 ships. Install using item 17.)	X	1
17	B270-13	Sealant (clear)	X	A/R
18	C059-102	Jumper Wire (Ref)		
19	MS20426AD3	Rivet	X	3
20	A448-16	Bus Bar (with power tab)	X	1
21	MS27039C0805	Screw	X	1
22	C490-1	Circuit Breaker Panel (27 holes, ship S/N 0001 thru 0270) . . .	X	1
	C490-7	Circuit Breaker Panel Assembly (28 holes, 14-volt ships with manual flight controls. Includes items 4 and 19; not shown.)	X	1
	C490-9	Circuit Breaker Panel Assembly (28 holes, 28-volt ships with manual flight controls. Includes items 4 and 19; not shown.)	X	1
NOTES				

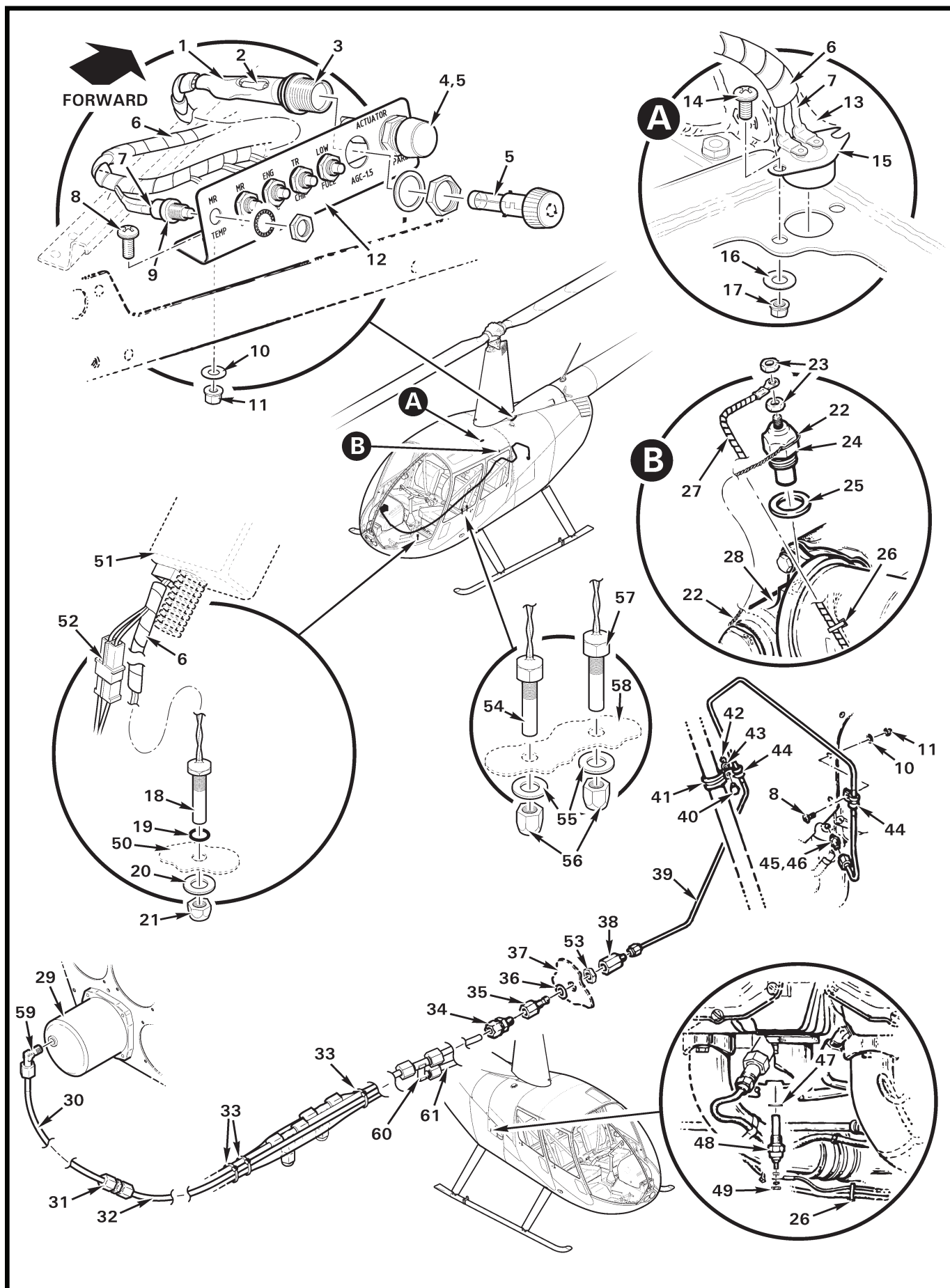


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		TEST SWITCHES AND GAGE PROBES*		
96-49-1	B158-8	Heat Shrink (around fuse holder)	X	A/R
2	B158-3	Heat Shrink (around wires)	X	A/R
3	D262-11	Fuse Holder (clutch actuator; includes washer and nut)	X	1
4	D262-11	Fuse Holder (spare; includes washer and nut)	X	1
5	D275-203	Fuse (3-amp, 14-volt ships; AGC-3-R)	X	2
	AGC-1-1/2-R	Fuse (1.5-amp, 28-volt ships)	X	2
6	B161-4	Spirap	X	A/R
7	B158-2	Heat Shrink	X	A/R
8	MS27039C0806	Screw	X	3
9	B227-1	Switch – Test (includes washer and nut)	X	5
10	NAS1149FN816P	Washer	X	3
11	MS21042L08	Nut	X	3
12	A938-3	Mount	X	1
13	B270-1	Sealant	X	A/R
14	MS51957-27	Screw	X	2
15	A688-2	Switch – Fire Detection (includes terminals)	X	1
16	NAS1149FN616P	Washer	X	2
17	MS21042L06	Nut	X	2
18	B341-4	Probe Assembly – Outside Air Temperature (includes items 19 thru 21 and item 52)	X	1
19	—	O-Ring	O	1
20	—	Washer	O	1
21	—	Nut	O	1
22	MS20995C32	0.032 in. dia. Safety Wire	O	A/R
23	—	Nut	O	2
24	A760-1	Oil Temperature Sender (Single; includes items 23 and 25. Used with B144-3 instrument cluster on 14-volt ships, and B144-4 instrument cluster on 28-volt ships.)	X	1
	A760-3	Oil Temperature Sender (Dual; includes items 23 and 25. Used with B144-5 10- to 32-volt instrument cluster and D270-1 governor controller.)	X	1
25	15-724**	Gasket	X	1
26	MS3367-4-9	Ty-Rap	X	A/R

NOTES * Ship S/N 0001 thru 9999.

** Rochester Gauges part no.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		TEST SWITCHES AND GAGE PROBES* (Cont'd)		
96-49-27	B161-2	Spirap	X	A/R
28	D723	Oil Filter Adapter (Ref)		
29	A600-4	Manifold Pressure Gage (Ref; R44 I O-540 engine, see Figure 95-1)		
	A600-6	Manifold Pressure Gage (Ref; R44 II IO-540 engine, see Figure 95-1)		
	A600-7	Manifold Pressure Gage (Ref; R44 Cadet O-540 engine, see Figure 95-1)		
30	A729-52	Tube	X	1
31	15-4-N-0	Union	X	1
32	A729-15	Tube	X	1
33	MS3367-5-9	Ty-Rap (or MS3367-5-9)	X	A/R
34	10-4-2-N-0	Fitting (install using item 46)	X	1
35	A457-14	Bulkhead Adapter (includes item 53; or 0253-2-4)	X	1
36	NAS1149F0732P	Washer	X	2
37	C233-1	Firewall (Ref)		
38	AN894D4-3	Bushing	X	1
39	C740-1	Manifold Pressure Line	X	1
40	AN3-3A	Bolt	X	1
41	MS21919WDG14	Clamp	X	1
42	MS21042L3	Nut	X	1
43	NAS1149F0332P	Washer	X	1
44	MS21919WDG3	Clamp	X	2
45	AN816-3D	Nipple (install using item 46)	X	1
46	B270-6	Sealant (for pipe threads)	X	A/R
47	—	Gasket	O	1
48	A760-2	Sender – Cylinder Head Temperature (Located at no. 2 cylinder, or no. 5 w/AC installed**; includes item 47, and nuts. For use with B144-5 [10- to 32-volt] instrument cluster.)	X	1
	3080-38	Sender – Cylinder Head Temperature (Located at no. 2 cylinder, or no. 5 w/AC installed**; includes item 47, and nuts. For use with B144-3 [14-volt] or B144-1 [28-volt] instrument cluster.)	X	1
NOTES * Ship S/N 0001 thru 9999. ** Ship S/N 30001 and subsequent.				
				Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		TEST SWITCHES AND GAGE PROBES* (Cont'd)		
96-49-49	B330-2	Palnut	X	1
50	C272-1	Chin (Ref)		
51	B341-1	Gauge – Outside Air Temperature (Ref)		
52	B263-12	Housing	X	1
50	C272-1	Chin (Ref)		
51	B341-4	Gage – Outside Air Temperature (Ref)		
52	B263-12	Housing	X	1
	B263-1	Pin	X	2
53	—	Nut	O	1
54	A760-4	Sender – Outside Air Temperature (Incl items 55 thru 57) . . .	X	1
55	—	Washer (teflon coated)	O	1
56	—	Nut	O	1
57	GTP59*	Sender – Outside Air Temperature (Incl items 55 and 56)	X	1
58	C392	Belly Panel (Ref)		
59	40-4-2-N-O	Elbow	X	1
60	60-4-2-N-O	Tee	X	1
	45-4-2-N-O	Elbow	X	1
61	A729-24	Tube (to D270-1 governor controller/data recorder; see Figure 96-63)	X	1
NOTES * Garmin part number.				

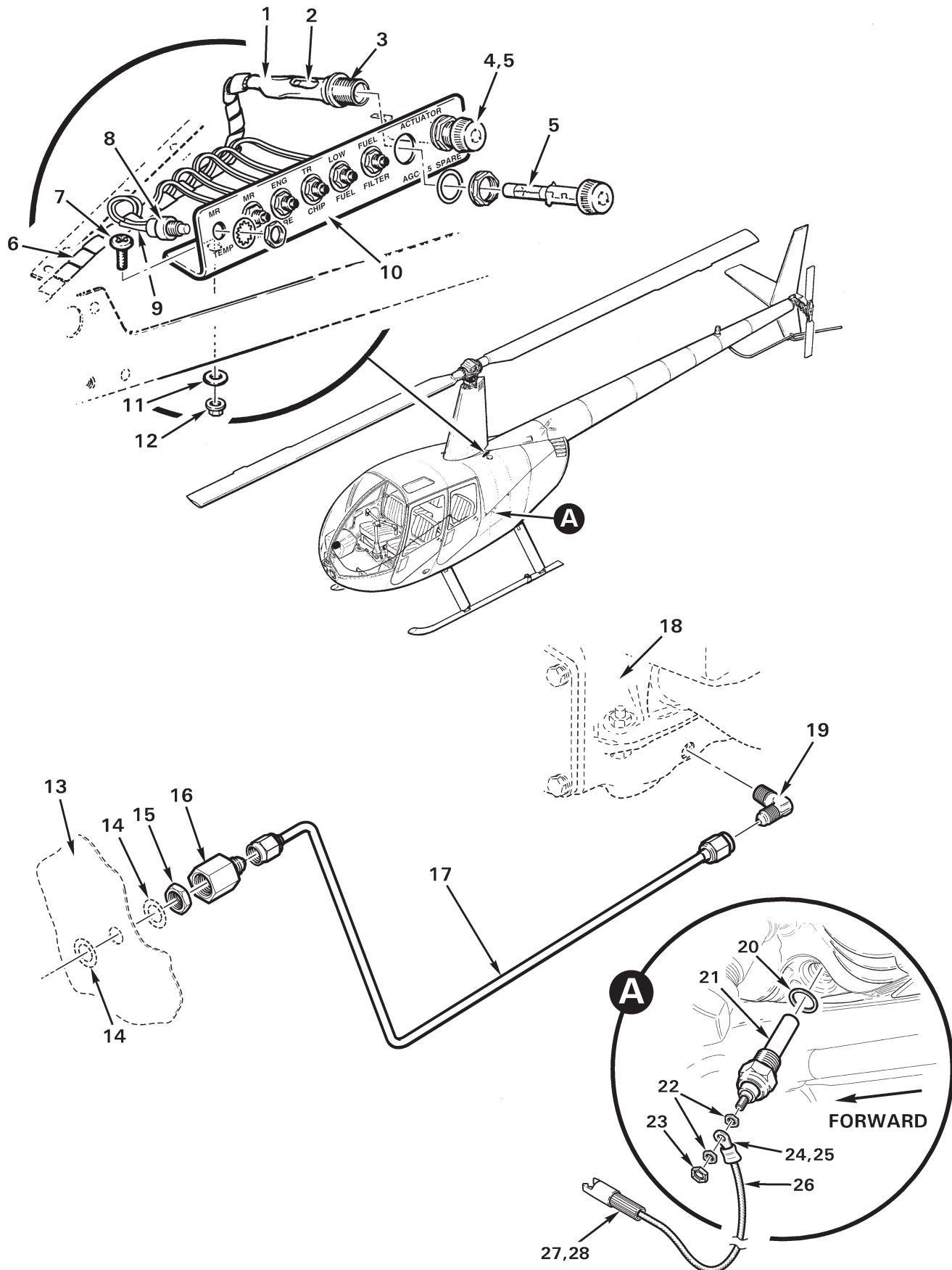


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		TEST SWITCHES AND GAGE PROBES*		
96-53-1	B158-6	Heat Shrink (around fuse holder)	X	A/R
2	B158-3	Heat Shrink (around wires)	X	A/R
3	D262-11	Fuse Holder (clutch actuator)	X	1
4	D262-11	Fuse Holder (spare)	X	1
5	AGC-1.5	Fuse (1.5-amp)	X	2
6	B161-4	Spirap	X	A/R
7	MS27039C0806	Screw	X	2
8	B227-1	Switch – Test (includes washer and nut)	X	6
9	B158-2	Heat Shrink	X	A/R
10	A938-5	Mount	X	1
11	NAS1149FN816P	Washer	X	3
12	MS21042L08	Nut	X	3
13	—	Firewall – Vertical (Ref)		
14	NAS1149F0732P	Washer** (Ref)		
15	—	Nut** (Ref)		
16	AN894D4-3	Bushing** (Ref)		
17	D740-1	Line Assembly – Manifold Pressure	X	1
18	—	Engine (Ref)	X	1
19	MS20822-3D	Elbow	X	1
20	—	Gasket (supplied with item 21)	O	1
21	A760-2	Sender – Cylinder Head Temperature (Located at no. 5 cylinder; includes items 20 and 22. For use with B144-5 (10- to 32-volt) instrument cluster.)	X	1
	3080-38	Sender – Cylinder Head Temperature (Located at no. 5 cylinder, includes items 20 and 22. For use with B144-3 (14-volt) or B144-1 (28-volt) instrument cluster.)	X	1
22	—	Nut	O	A/R
23	B330-2	Palnut	X	1
24	C049-7	Harness Assy. (Incl items 25 thru 28. Assembled as shown.)	X	1
25	B260-10	Terminal	X	1
26	—	Wire (Ref)		
27	B263-10	Housing	X	1
28	B263-1	Pin	X	1
NOTES * Ship S/N 10001 and subsequent. ** See also Figure 95-51.				

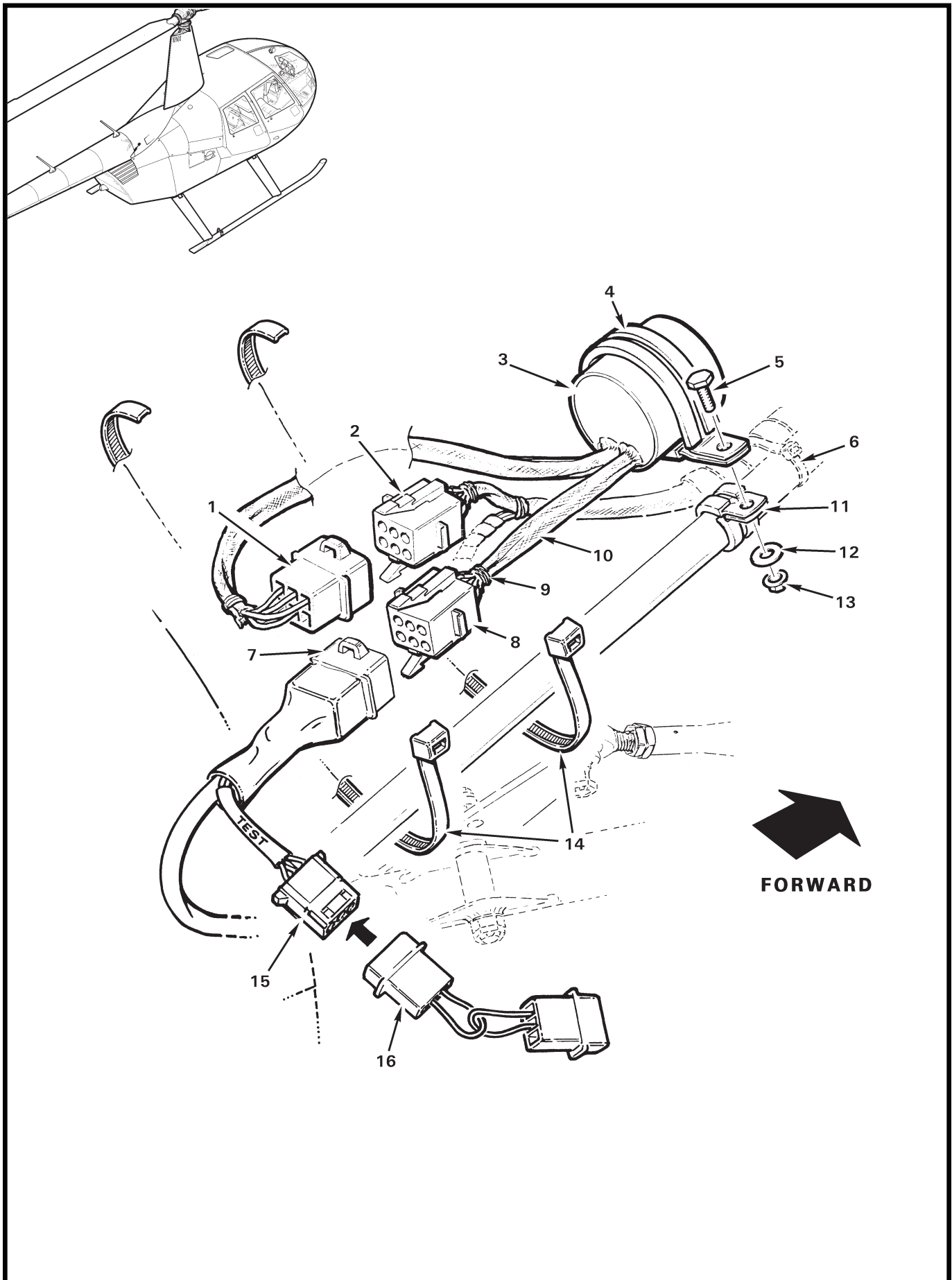


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		BELT TENSION ACTUATOR TIME DELAY AND TEST PLUG		
96-55-1	B263-18	Housing	X	1
	B263-1	Pin	X	5
2	B263-19	Housing (Ref, airframe harness)	X	1
	B263-4	Socket	X	5
3	D602-1	Time Delay Assembly - Belt Tension Actuator (Incl items 1, and 8 thru 10)	X	1
4	MS21919WDG20	Clamp	X	1
5	AN3-4A	Bolt	X	1
6	MS3367-5-9	Ty-Rap (Ref)	X	1
7	B263-18	Housing (6-pin)	X	1
	B263-1	Pin (not shown)	X	1
	B263-3	Pin (not shown)	X	4
	A15A	Diode (between pins 3 and 5)	X	1
8	B263-19	Housing	X	1
	B263-2	Socket	X	5
9	B268-3	Tape - Lacing	X	2
10	B266-4	Sleeving (expandable)	X	2
11	MS21919WDG10	Clamp	X	1
12	NAS1149F0332P	Washer	X	4
13	MS21042L3	Nut	X	1
14	MS3367-7-9	Ty-Rap	X	1
			X	1
15	B263-15	Housing	X	1
	B263-2	Socket	X	2
	B263-4	Socket	X	1
16	MT558-1	Actuator Test Plug Assembly	X	1
NOTES				

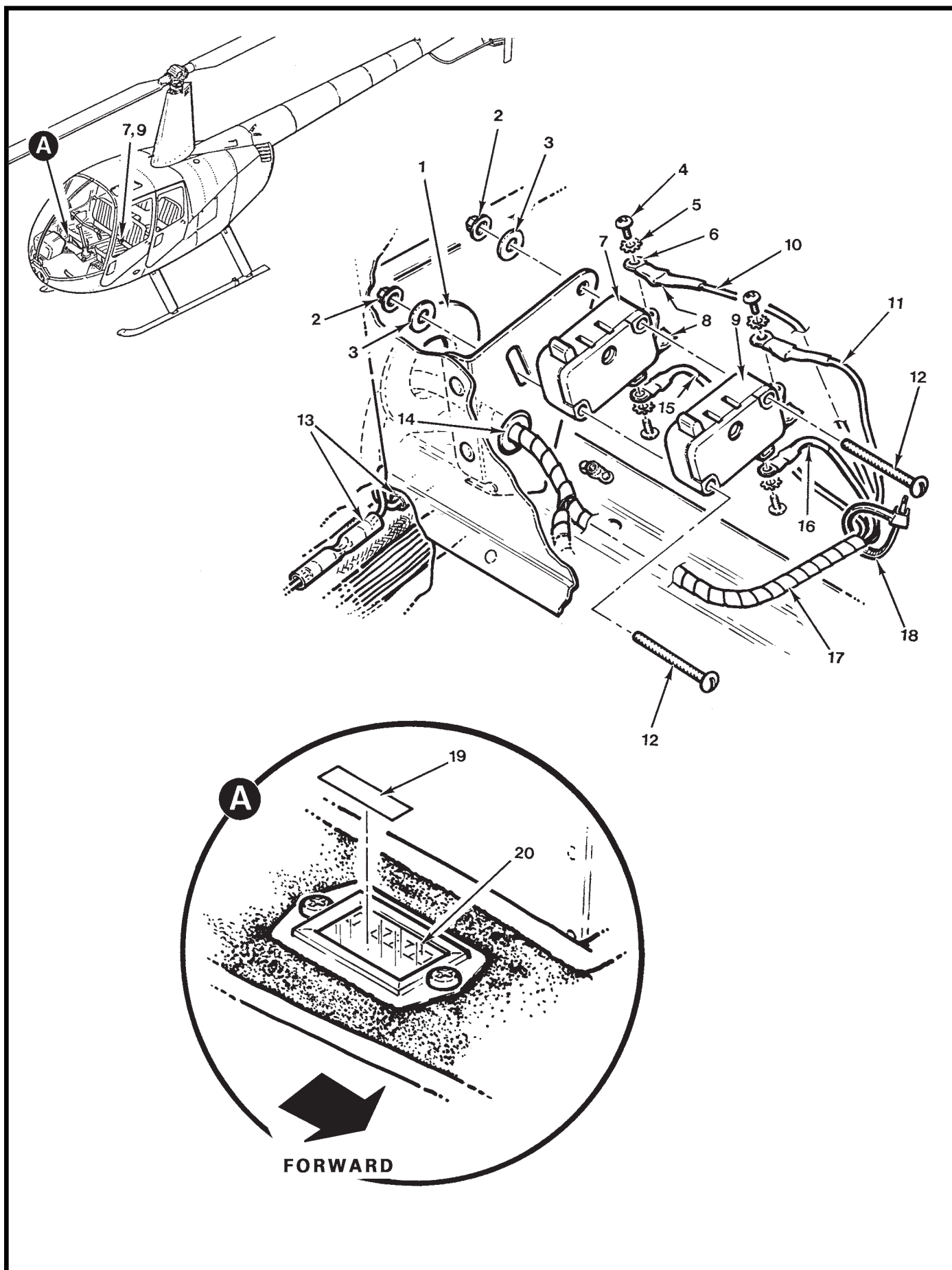


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		COLLECTIVE-ACTIVATED SWITCH INSTALLATION		
96-57-1	MS35489-19	Grommet	X	1
2	MS21042L04	Nut	X	2
3	NAS1149FN416P	Washer	X	2
4	—	Screw	O	3
5	—	Washer	O	3
6	B260-2	Terminal (4 places)	X	4
7	V3-1	Switch - Micro (Low RPM warning; includes items 4 and 5.) . . .	X	1
8	B158-6	Heat Shrink	1	A/R
9	V3-1	Switch - Micro (Hourmeter, includes items 4 and 5.)	X	1
10	-76	Wire (Ref)		
11	-751	Wire (Ref)		
12	MS35206-222	Screw	X	2
13	B261-2	Splice (used only with item 21)	X	2
14	MS35489-4	Grommet	X	1
15	-75	Wire (Ref)		
16	-750	Wire (Ref)		
17	B161-2	Spirap	X	A/R
18	MS3367-4-9	Ty-Rap	X	1
19	B387-3	Decal - "Collective Activated"	X	1
20	D830-2	Hourmeter (Ref, see Figure 95-5)		
		* * *		
21	KI-108	Collective-Activated Hourmeter Switch Installation Kit (Includes items 2, 3, 8, 9, 12, 13, 18, 19, 22, and 23)	X	1
22	B387-750	Wire (includes wire and item 6 [1])	X	1
23	B387-751	Wire (includes wire and item 6 [1])	X	1
NOTES				

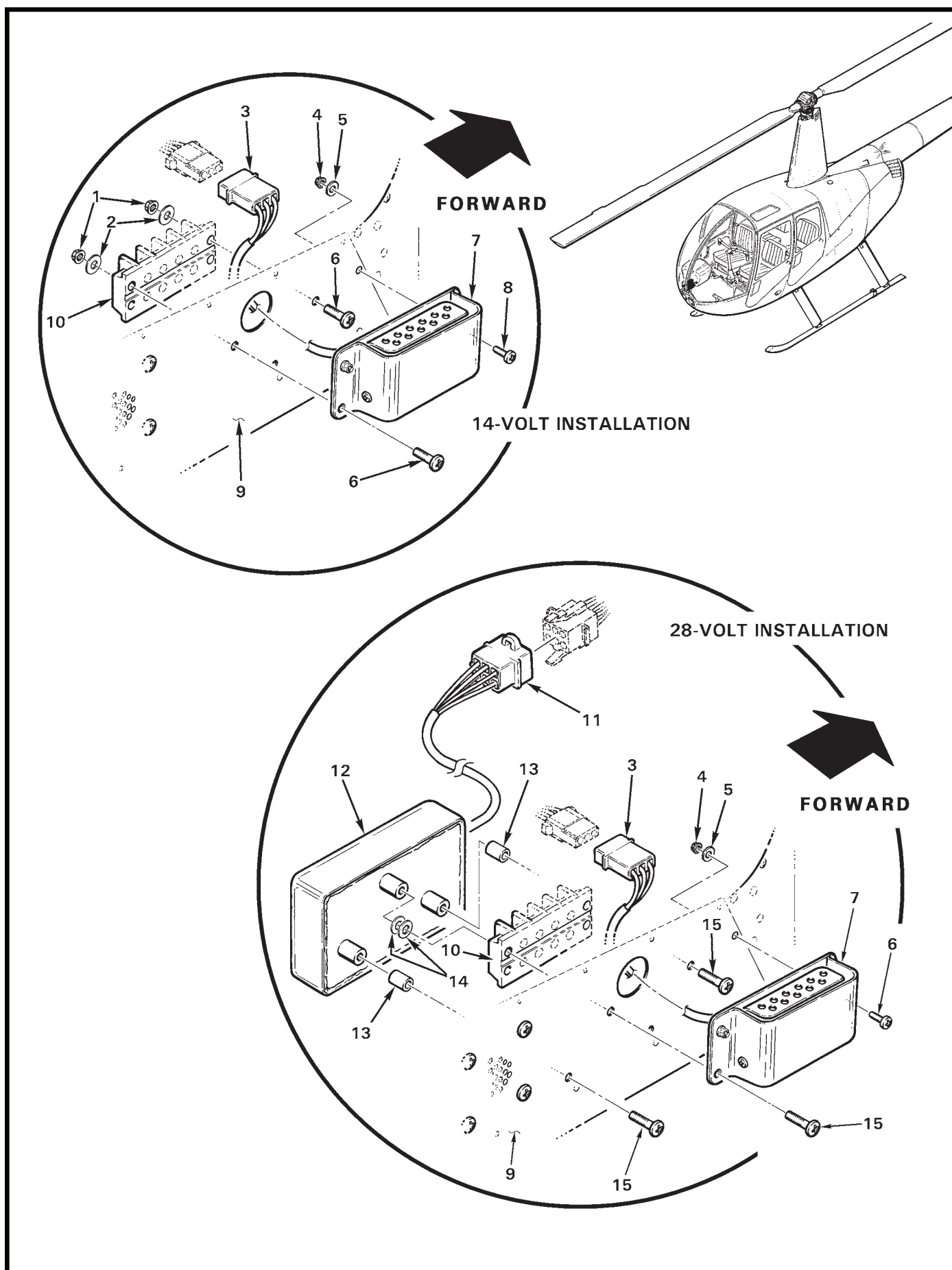


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		CARBON MONOXIDE DETECTOR AND DIMMER INSTALLATION		
96-59-1	MS21042L06	Nut	X	2
2	NAS1149FN616P	Washer	X	2
3	B263-14	Housing	X	2
	B263-1	Pin	X	2
4	MS21042L04	Nut	X	1
5	NAS1149FN416P	Washer	X	1
6	MS35206-232	Screw	X	2
7	C696-1	Carbon Monoxide Detector Assembly (Incl item 3)	X	1
8	MS35206-215	Screw	X	1
9	—	Panel - Upper Console (RH, Ref)		
10	601716-4	Terminal Block (Ref)		
11	B263-18	Housing	X	1
	B263-1	Pin	X	6
12	B395-1*	Dimmer Assembly (panel lamp; includes item 11)	X	1
13	A130-34*	Spacer	X	2
14	NAS1149FN816P*	Washer	X	2
15	MS27039C0810*	Screw	X	3
NOTES * 28-volt ships only.				

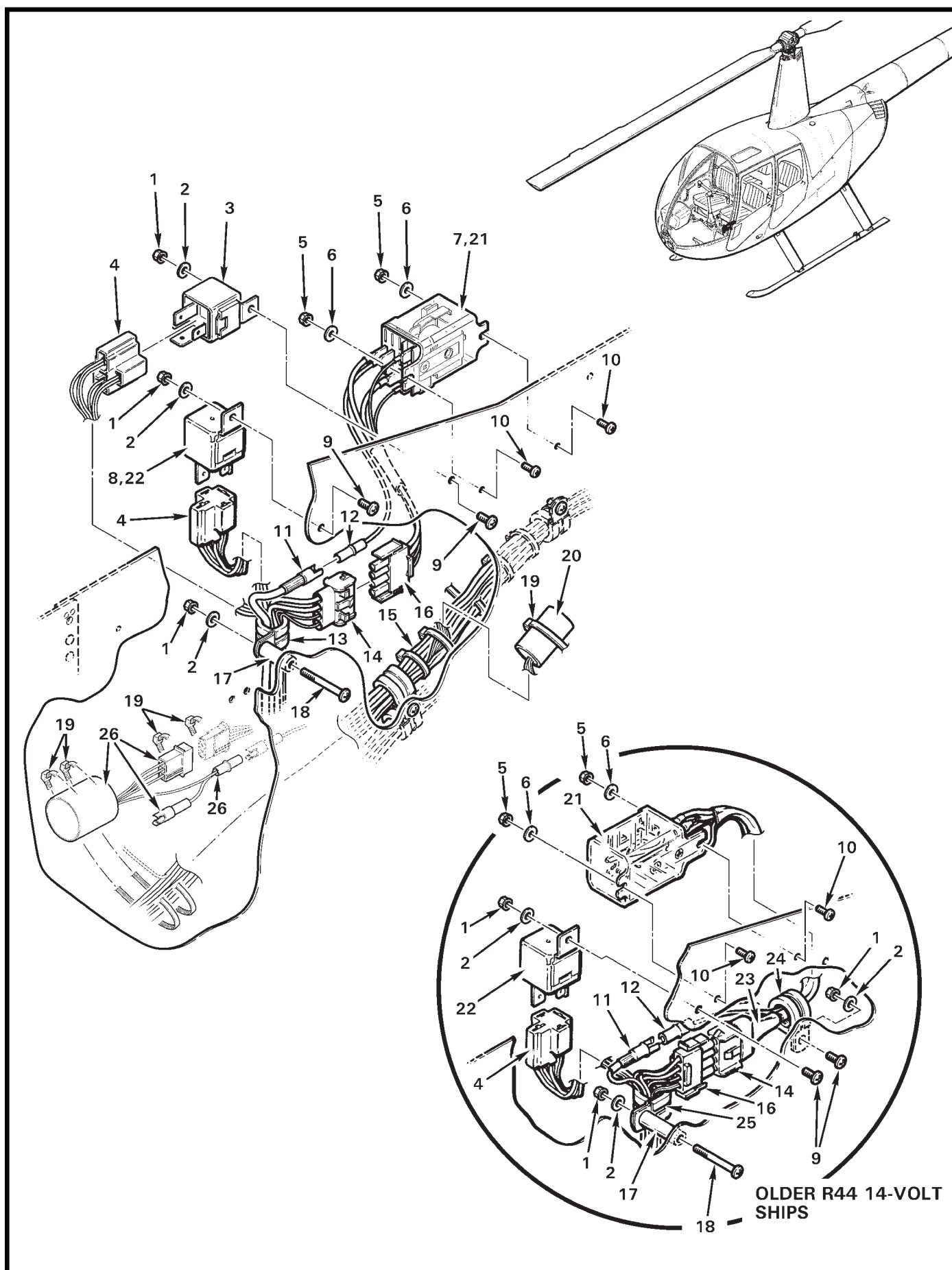


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		ELECTRICAL COMPONENTS		
96-61-1	MS21042L08	Nut	X	3
2	NAS1149FN816P	Washer	X	3
3	VF7-41H11	Relay - Fuel Pump (ship S/N 10001 and higher, this location)	X	1
4	VCF7-1000	Connector	X	1
	B262-6	Receptacle (small)	X	2
	B262-7	Receptacle (large)	X	2
5	MS21042L06	Nut	X	2
6	NAS1149FN632P	Washer	X	2
7	A999-4	Master Radio Relay Assembly (28-volt ships; Incl items 12 and 16) .	X	1
8	VF7-41H11	Relay - Landing Light (28-volt ships)	X	1
9	MS27039C0806	Screw	X	2
10	MS35206-228	Screw	X	2
11	B263-10	Housing	X	1
	B263-1	Pin	X	1
12	B263-11	Housing	X	1
	B263-2	Socket	X	1
13	MS21919WDG8	Clamp (WDG9 or WDG10, as required to secure wire bundle) . .	X	1
14	B263-68	Housing	X	1
	B263-52	Socket	X	2
	B263-56	Socket	X	2
15	C059	Harness Assembly (Ref)		
16	B263-67	Housing	X	1
	B263-51	Pin	X	2
	B263-55	Pin	X	2
17	C130-17	Spacer (upper aft position shown)	X	4
18	MS27039C0822	Screw (upper aft position shown)	X	4
19	MS3367-5-9	Ty-Rap	X	A/R
20	D767-1	Logic Module Assembly - Fuel Pump	X	1
21	A999-3	Master Radio Relay Assembly (14-volt ships; Incl items 12, 14, and 23)	X	1
22	VF7-41F11	Relay - Landing Light (14-volt ships)	X	1
23	B158-12	Heat Shrink	X	A/R
24	MS21919WDG7	Clamp	X	1
25	MS21919WDG8	Clamp	X	1
26	D880-1 *	Time Delay Assembly - Ignition Starting (assembled as shown)	X	1
NOTES * Ship S/N 10001 and higher only. Refer to R44 Service Letter R44 SL-42 to upgrade earlier R44 IIs.				

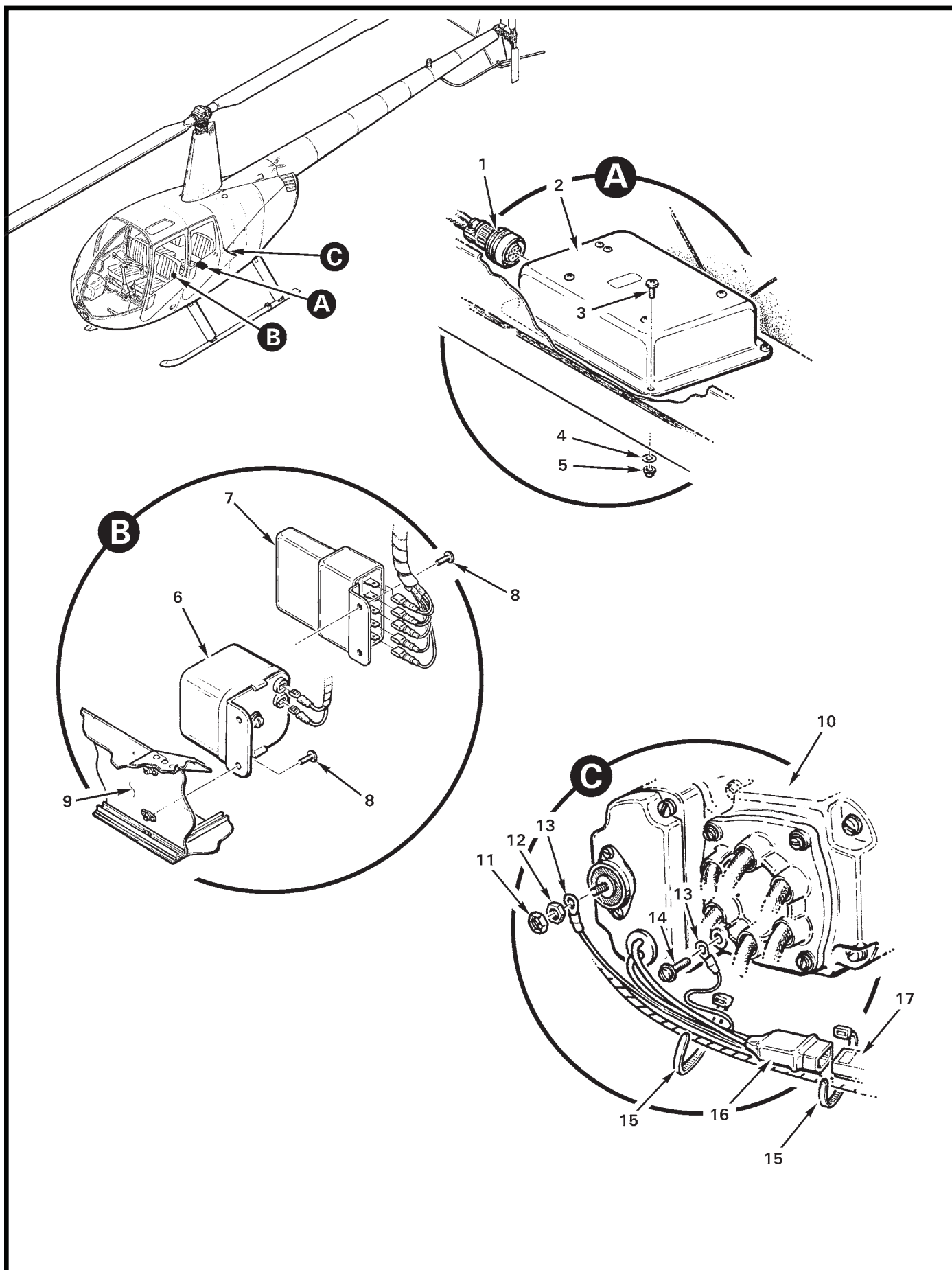


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		ELECTRICAL COMPONENTS		
96-63-1	MS3116F12-10S	Plug	X	1
2	D278-1	Controller Assembly – Governor (ship S/N 0001 thru 9999) . .	X	1
	D278-1R	D278-1 Controller Assembly – Governor (overhaul exchange)	X	1
	D278-2	Controller Assembly – Governor (ship S/N 10001 and subsequent)	X	1
	D278-2R	D278-2 Controller Assembly – Governor (overhaul exchange)	X	1
3	MS27039C0806	Screw	X	4
4	NAS1149FN816P	Washer	X	4
5	MS21042L08	Nut	X	4
6	10-176487-121 *	Magneto Start Booster (14-volt ships)	X	1
	10-357487-241 *	Magneto Start Booster (28-volt ships)	X	1
7	SS1002 **	Magneto Start Booster (ship S/N 10001 and subsequent) . .	X	1
8	MS27039C1-08	Screw	X	2
9	C296	Bulkhead (Ref)		
10	10-600646-201 *	Magneto – Tachometer (Ref)		
11	B330-7	Palnut ([2] required on retard mag, not shown)	X	3
12	MS35650-302	Nut ([2] required on retard mag, not shown)	X	3
13	B260-4	Terminal (4 required on retard mag, not shown)	X	6
14	10-35937-10	Screw	X	4
15	MS3367-5-9	Ty-Rap	X	A/R
16	B263-12	Housing	X	1
	B263-1	Pin	X	2
	B158-8	Heat Shrink	X	A/R
17	B263-13	Housing	X	1
	B263-2	Socket	X	2
NOTES * Continental Motors part no. ** Unison part no.				

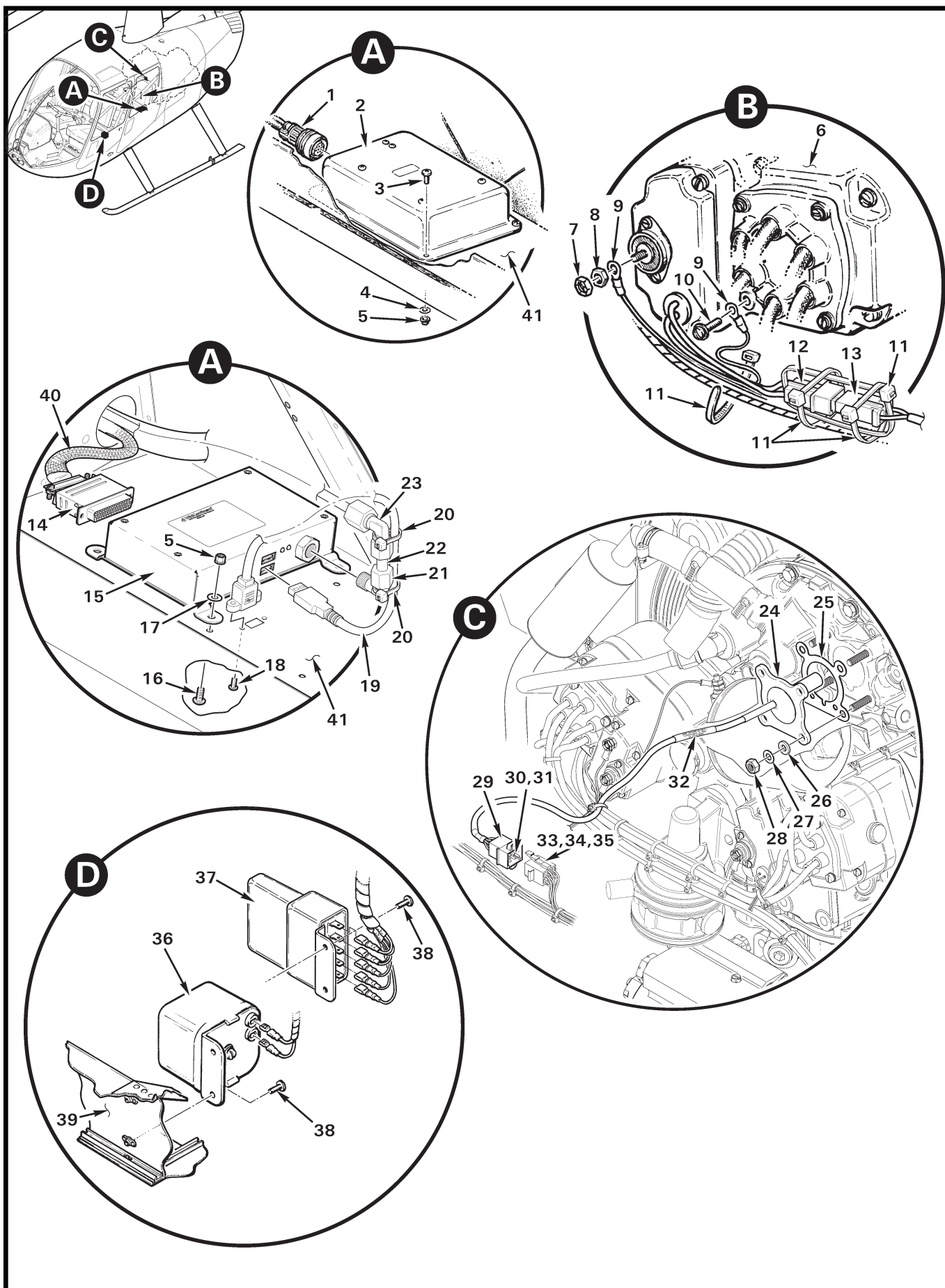


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		ELECTRICAL COMPONENTS		
96-63B-1	MS3116F12-10S	Plug	X	1
2	D278-1	Controller Assembly – Governor (Earlier R44s)	X	1
	D278-1R	D278-1 Controller Assembly – Governor (overhaul exchange)	X	1
	D278-2	Controller Assembly – Governor (Earlier R44 Raven IIs)	X	1
	D278-2R	D278-2 Controller Assembly – Governor (overhaul exchange)	X	1
3	MS27039C0806	Screw	X	4
4	NAS1149FN816P	Washer	X	4
5	MS21042L08	Nut	X	8
6	10-600646-201 *	Magneto – Tachometer (Ref)		
7	B330-7	Palnut ([2] required on retard mag, not shown)	X	3
8	MS35650-302	Nut ([2] required on retard mag, not shown)	X	3
9	B260-4	Terminal (4 required on retard mag, not shown)	X	6
10	10-35937-10	Screw	X	4
11	MS3367-5-9	Ty-Rap	X	A/R
12	B263-12	Housing	X	1
	B263-1	Pin	X	2
	B158-8	Heat Shrink	X	A/R
13	B263-13	Housing	X	1
	B263-2	Socket	X	2
14	B269-82	Receptacle (Ref)		
	B269-23	Backshell (Ref)		
15	D270-1	Controller Assembly – Governor (Digital)	X	1
16	MS27039C0805	Screw	X	4
17	NAS1149FN816P	Washer	X	4
18	—	Screw	O	2
19	1598-01C	Cable	X	1
20	MS3367-4-9	Ty-Rap	X	A/R
21	40-4-2-N-O	Fitting	X	2
22	A729-69	Tube	X	1
23	50-4-N-O	Elbow	X	1
24	C143-2	Sensor Assembly (Engine tachometer; includes items 29 thru 32)	X	1
NOTES * Continental Motors part no.				

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		ELECTRICAL COMPONENTS		
96-63B-25	61183	Gasket, Accessory adapter	X	1
26	STD-8*	Washer (1/4 inch plain)	X	4
27	STD-160*	Lockwasher (internal teeth)	X	4
28	STD-1411*	Nut (1/4-20, plain)	X	4
29	B263-18	Housing	X	1
30	B263-1	Pin	X	6
31	B267-3	Terminator (not shown)	X	1
32	—	Heat Shrink	X	A/R
33	B263-19	Housing (wires -2886, -2887, -2888)	X	1
34	B263-2	Socket	X	4
35	B267-2	Terminator (not shown)	X	1
36	10-176487-121**	Magneto Start Booster (14-volt ships)	X	1
	10-357487-241**	Magneto Start Booster (28-volt ships)	X	1
37	SS1002***	Magneto Start Booster (ship S/N 10001 and subsequent) . . .	X	1
38	MS27039C1-08	Screw	X	2
39	C296	Bulkhead (Ref)		
40	C859	Wire Harness (Ref)		
41	C679-3	Cover – Aft Baggage Compartment (Ref)		
NOTES * Lycoming part no. ** Continental Motors part no. *** Unison part no.				

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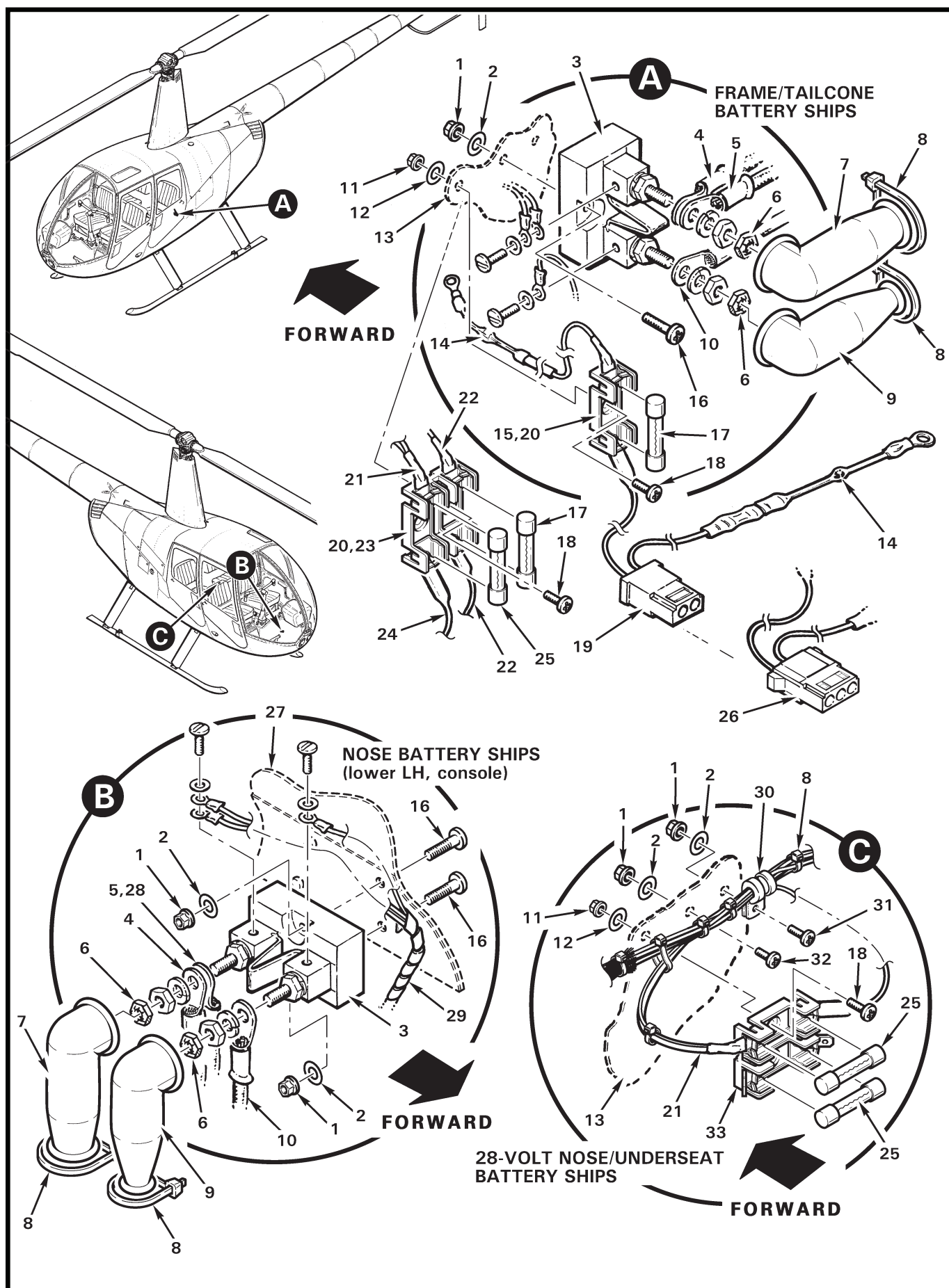


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		ELECTRICAL COMPONENTS		
96-65-1	MS21042L08	Nut	X	2
2	NAS1149FN816P	Washer	X	2
3	1465-70-104	Shunt (includes hardware.)	X	1
4	C059-22	Wire (Ref, from alternator output)		
5	C059-14	Wire (Ref, to circuit breaker panel)		
6	B330-13	Palnut	X	2
7	MS25171-4S	Nipple	X	1
8	MS3367-4-9	Ty-Rap	X	2
9	MS25171-2S	Nipple	X	1
10	C067-580	Cable (Ref)		
11	MS21042L06	Nut	X	1
12	NAS1149FN616P	Washer	X	1
13	C233	Firewall - Vertical (Ref)		
14	A15A	Diode	X	2
15	D262-1	Fuse Block (alternate part no. 354601)	X	1
16	MS27039C0810	Screw	X	2
17	AGC-3	Fuse (3-amp)	X	1
18	MS35206-228	Screw	X	1
19	B263-13	Housing	X	1
	B263-2	Socket	X	2
20	B304-4	Diode Assembly (14-volt ships with frame battery. Includes items 11, 12, 14, 15, 17 thru 19, wires, splice, heat shrink and terminals; assembled as shown.)	X	1
	B304-5	Diode Assembly (28-volt ships with frame battery. Includes items 11, 12, 14, 17, 18, 23, 26, wires, splice, heat shrink and terminals; assembled as shown.)	X	1
21	C059-1601*	Wire (Ref)		
	C059-1602*	Wire (Ref)		
22	C059-66	Wire (Ref, to battery relay)		
23	D262-2	Fuse Block (28-volt ships, frame/tailcone battery; alternate part no. 354602)	X	1
24	C059-1528*	Wire (Ref)		
25	AGC-5*	Fuse (5-amp)	X	1

NOTES * Ship S/N 10001 and subsequent.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		ELECTRICAL COMPONENTS (Cont'd)		
96-65-26	B263-15	Housing	X	1
	B263-2	Socket	X	2
27	C359	Panel - LH Lower Console (Ref)		
28	C059-1403	Wire (Ref)		
29	B161-2	Spirap	X	A/R
30	MS21919WDG7	Clamp	X	1
31	MS27039C0807	Screw	X	1
32	MS27039C0806	Screw	X	1
33	D262-2	Fuse Block (Ships with nose or under seat battery, S/N 10001 and higher. Alternate part no. 354602.)	X	1
NOTES				

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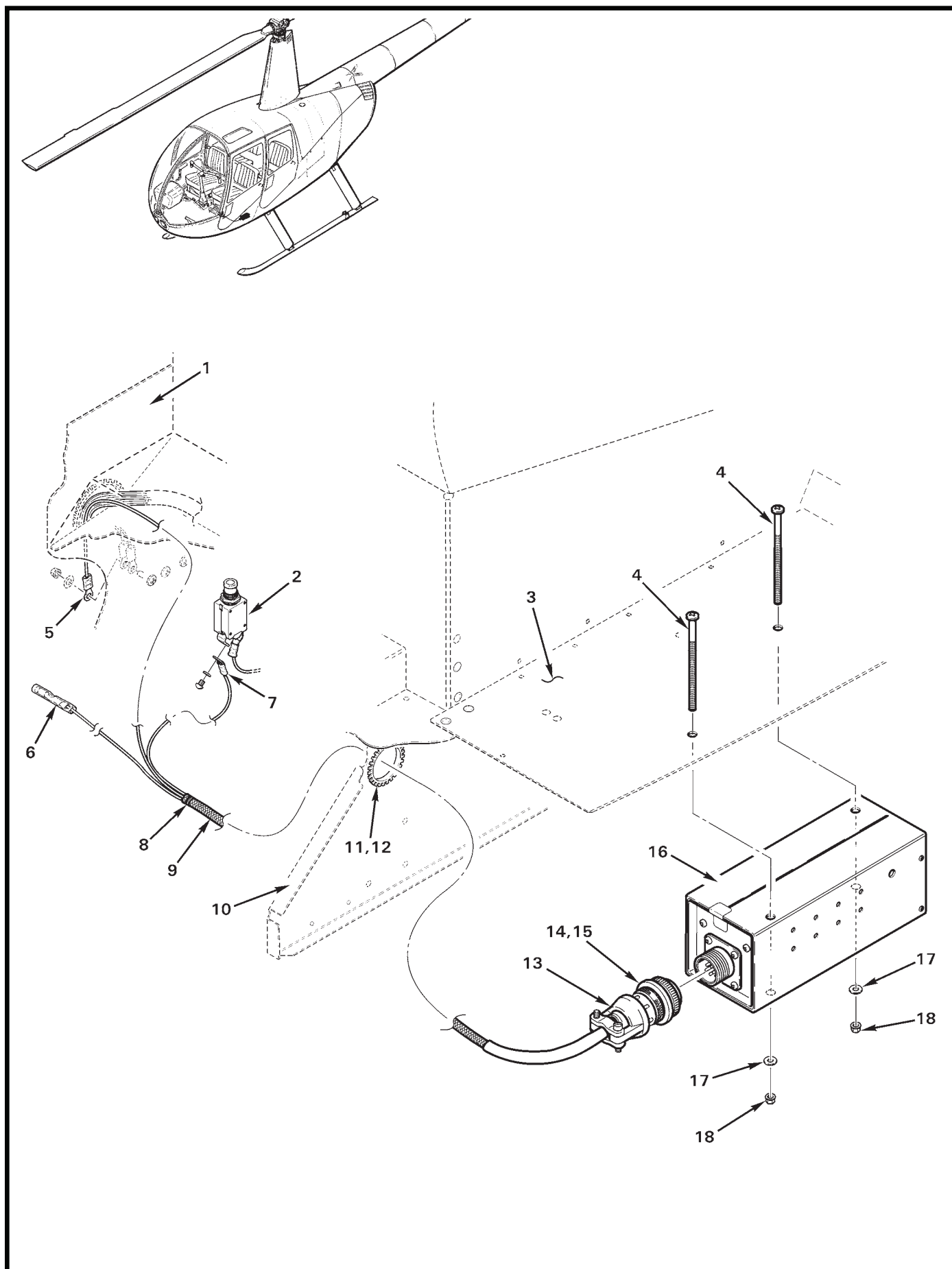


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		POWER BOOSTER INSTALLATION (14V TO 28V)*		
96-69-1	C293	Keel Panel (LH, Ref)		
2	B297-2	Circuit Breaker (2-amp)	X	1
3	C353	Panel (LH, Ref)		
4	—	Screw (supplied with item 16)	O	2
5	B260-3	Terminal ("ground" wire)	X	1
6	B261-2	Splice (28-volt "out" wire)	X	1
7	B260-2	Terminal (14-volt "in" wire)	X	1
8	B268-3	Tape - Lacing	X	A/R
9	B266-8	Sleeving	X	A/R
10	C531	Support (Ref)		
11	MS21266-1N	Grommet (install using item 12)	X	A/R
12	B270-8qt	Adhesive	X	A/R
13	M85049/2-6C	Cable Clamp	X	1
14	MS3106A14S-5S	Plug	X	1
15	D392-5	Wire Harness Assembly (Incl items 5 thru 9, 13, 14, and wiring; assembled)	X	1
16	RB125	Power Booster* (regulated; includes item 4)	X	1
17	NAS1149FN832P	Washer	X	2
18	MS21042L08	Nut	X	2
NOTES * 14-volt ships only.				

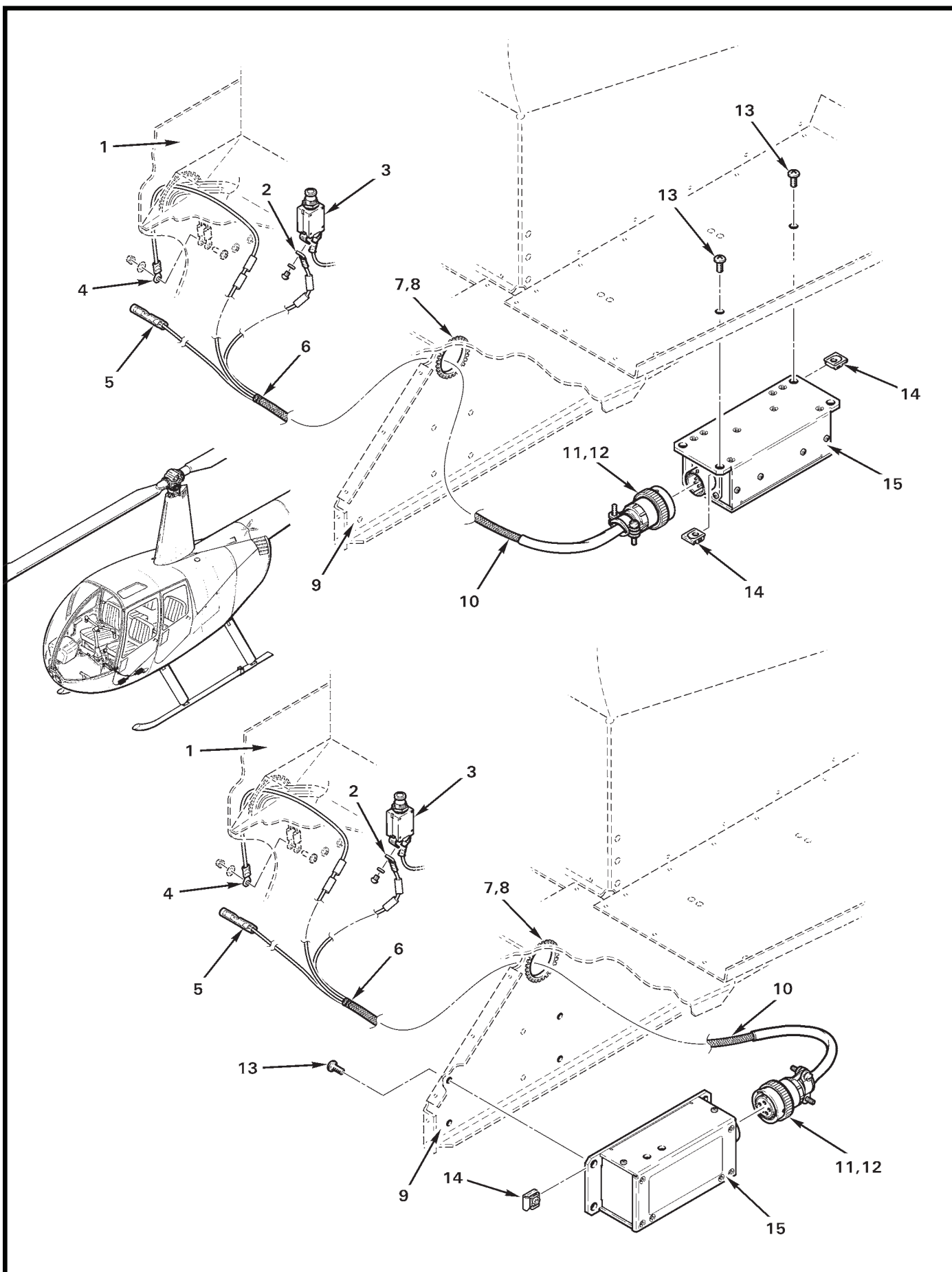


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		POWER CONVERTER INSTALLATION (28V TO 14V)		
96-71-1	C293	Keel Panel (LH, Ref)		
2	B260-2	Terminal (28-volt "in" wire)	X	1
3	B297-2	Circuit Breaker (2-amp)	X	1
4	B260-9	Terminal (ground wire)	X	1
5	B261-3	Splice (14-volt "out")	X	1
6	B268-3	Tape - Lacing	X	A/R
7	MS21266-1N	Grommet (install using item 8)	X	A/R
8	B270-8qt	Adhesive	X	A/R
9	C531	Support (Ref)		
10	B266-4	Sleeving	X	A/R
11	D392-2	Harness Assembly (Incl items 2, 4 thru 6, 10, and 12)	X	A/R
12	MS3116F14-5S	Plug	X	1
13	MS27039C0806	Screw	X	A/R
14	B162-2	Clipnut	X	A/R
15	LT-46D	Converter - Power (28- to 14-volt, 4-amp output)	X	A/R
NOTES				

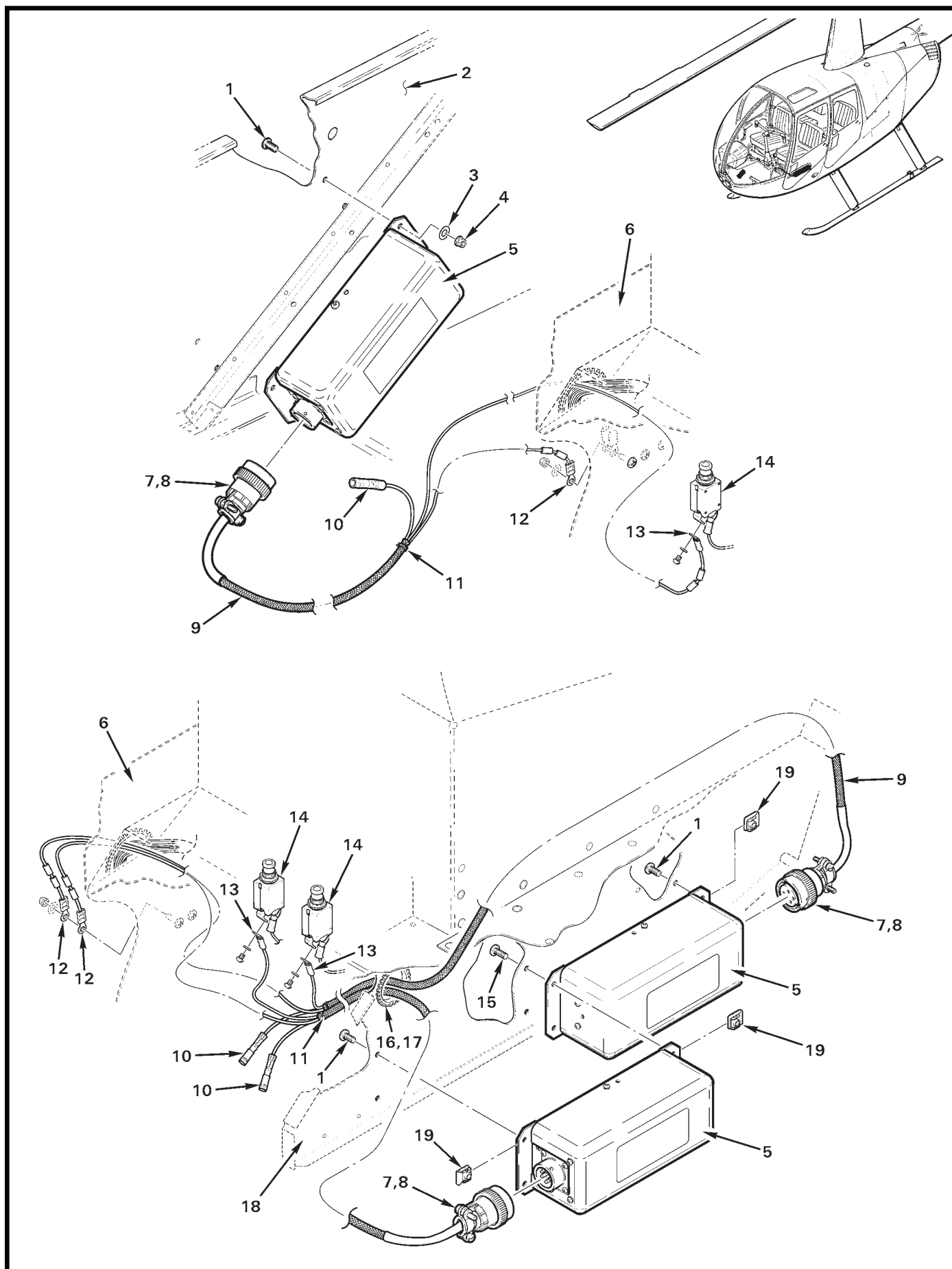


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		POWER CONVERTER INSTALLATION (28V TO 14V)		
96-73-1	MS27039C0806	Screw	X	A/R
2	C033	Lower Console Assembly (Ref)		
3	NAS1149FN832P	Washer	X	A/R
4	MS21042L08	Nut	X	A/R
5	LT-71A	Converter - Power (28- to 14-volt, 8-amp output)	X	A/R
6	C293	Keel Panel (LH, Ref)		
7	D392-2	Harness Assembly (Incl items 8 thru 13)	X	A/R
8	MS3116F14-5S	Plug	X	1
9	B266-4	Sleeving	X	A/R
10	B261-3	Splice (14-volt "out" wire)	X	1
11	B268-3	Tape - Lacing	X	A/R
12	B260-9	Terminal (ground wire)	X	1
13	B260-2	Terminal (28-volt "in" wire)	X	1
14	B297-2	Circuit Breaker (2-amp)	X	1
15	MS27039C0808	Screw	X	A/R
16	MS21266-1N	Grommet (install using item 17)	X	A/R
17	B270-8qt	Adhesive	X	A/R
18	C531	Support (Ref)		
19	B162-2	Clipnut	X	A/R
NOTES				

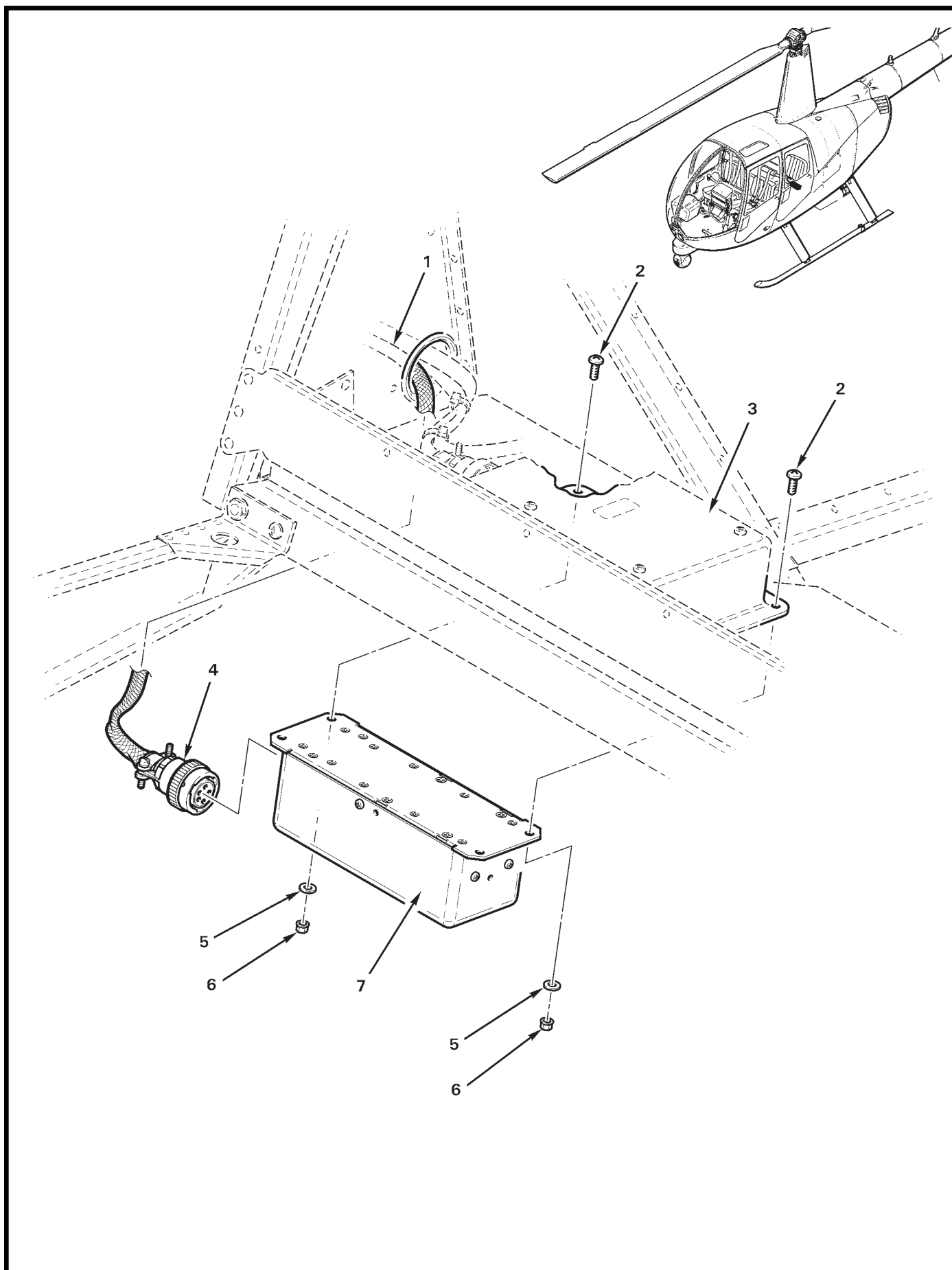


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
96-75-1	D058-1	POWER CONVERTER INSTALLATION (28V TO 14V) Harness Assembly (Ref, Police Ship only; contact Customer Service for replacement)		
	2 MS27039C0807	Screw	X	1
	3 D278	Controller Assembly - Governor (Ref)		
	4 MS3116F14-5S	Plug	X	1
	5 NAS1149FN816P	Washer	X	1
	6 MS21042L08	Nut	X	1
	7 LT-71A	Converter - Power (28- to 14-volt, 8-amp output)	X	1
NOTES				

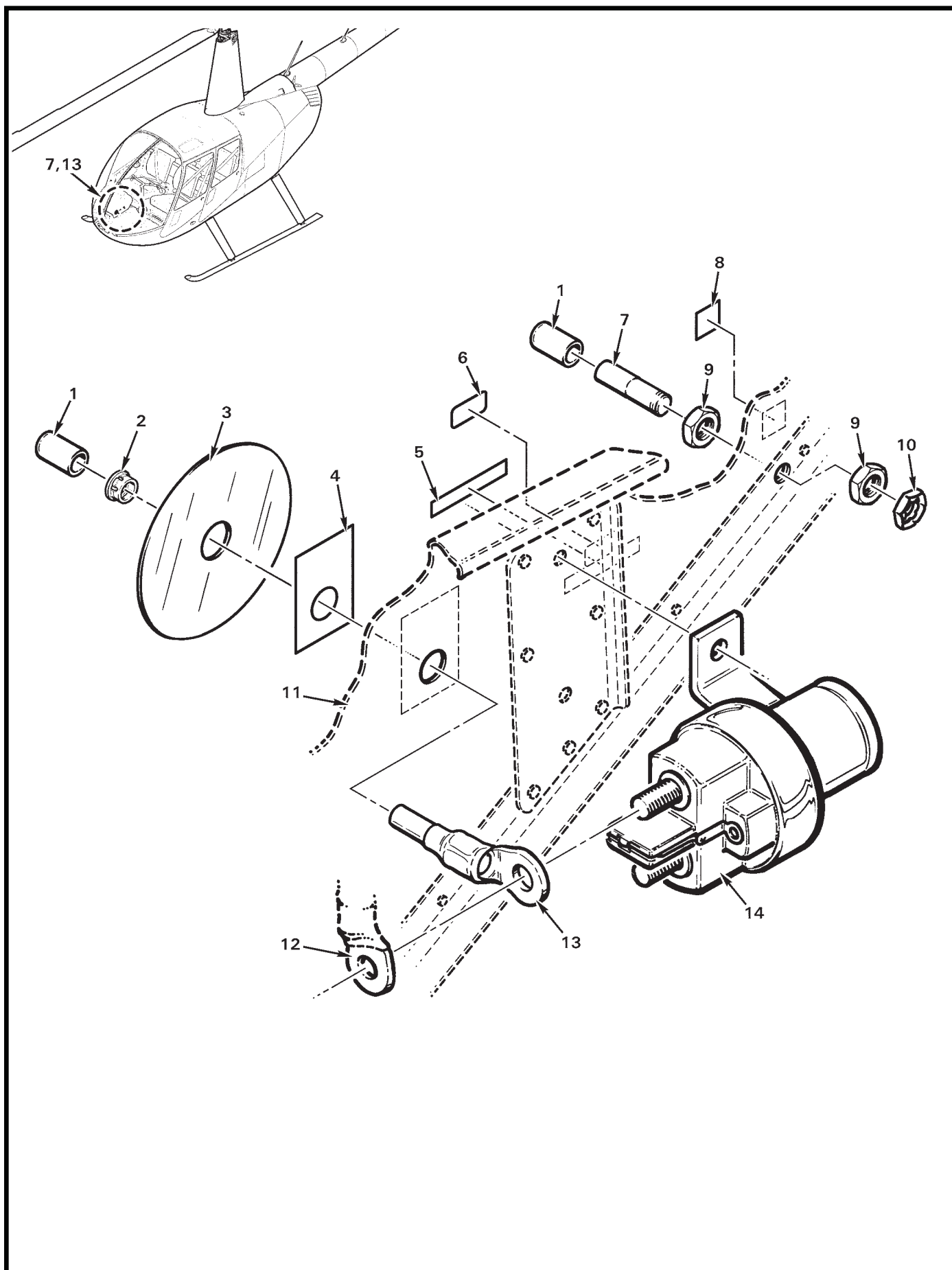


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		BATTERY CHARGING POST INSTALLATION		
96-77-1	A959-10	Cap	X	2
2	2813	Bushing	X	1
3	D548-4	Insulator	X	1
4	D682-22	Decal - " + "	X	1
5	D682-21	Decal - "For Charging Only"	X	1
6	C654-22	Decal - "28V"	X	1
	C654-29	Decal - "14V"	X	1
7	D548-3	Stud	X	1
8	D682-23	Decal - " - "	X	1
9	AN316-4R	Nut	X	2
10	B330-13	Palnut	X	1
11	C359-2	Console Panel (Ref)		
12	A780-35	Cable Assembly (Ref)		
13	D548-1	Stud Assembly	X	1
14	B415	Relay (Ref)		
15	KI-177	Battery Charging Studs Installation Kit (Incl items 1 thru 10, and 13)	X	1
NOTES				

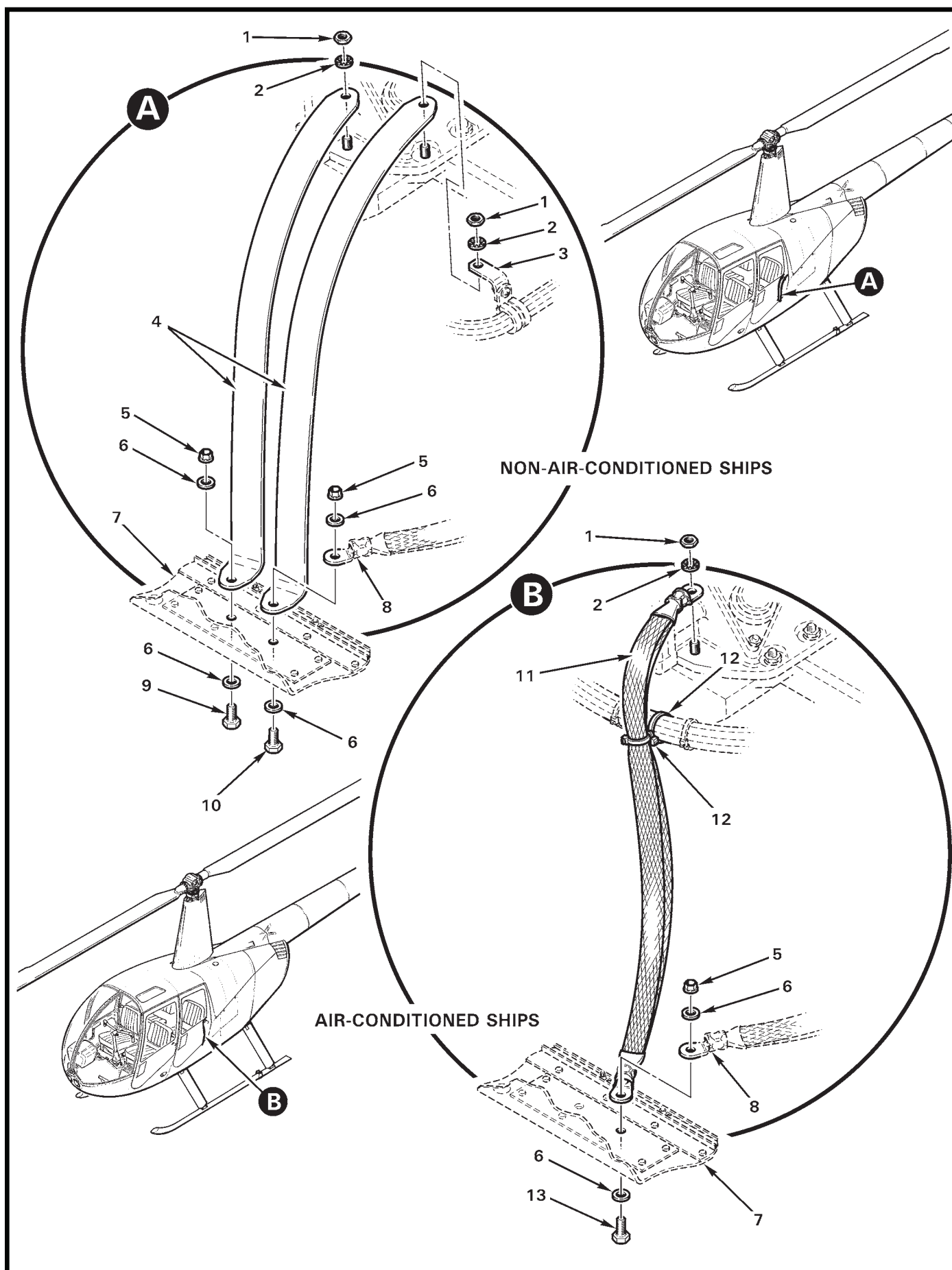


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		ENGINE GROUND STRAPS INSTALLATION		
96-79-1	STD-1411*	Nut	X	2
2	STD-160*	Lockwasher	X	2
3	C357-1	Clip (Ref)		
4	A212-2	Strap	X	2
5	MS21042L4	Nut	X	2
6	NAS1149F0432P	Washer	X	4
7	C015-3	Skin (LH cabin belly; Ref)		
8	A780-22	Cable Assembly (Ref)		
9	AN4-3A	Bolt	X	2
10	AN4-3A	Bolt	X	1
	AN4-4A	Bolt	X	1
11	A780-45	Cable Assembly	X	1
12	MS3367-5-9	Ty-Rap	X	2
13	AN4-4A	Bolt	X	1
NOTES * Lycoming part no.				

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