

ROBINSON HELICOPTER COMPANY

R44 ILLUSTRATED PARTS CATALOG

RTR 460 VOLUME II

Production Certificate Number 424WE

Type Certificate Number H11NM



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OFFICE HOURS

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Lunch hour is 11:30 a.m. to 12:30 p.m.

HOLIDAYS

Please visit <https://robinsonheli.com> for a list of holidays and company shutdowns.

CUSTOMER SUPPORT AND SPARES ORDERS

Please visit <https://robinsonheli.com> for Customer Support contact information. Procure parts from any R44 Dealer or Service Center, or order directly from RHC Customer Service via email, fax, or phone.

PUBLICATIONS

Viewing RHC Maintenance Manuals (MMs) and Illustrated Parts Catalogs (IPCs) online at <https://robinsonheli.com> is recommended to ensure use of current data. Viewing MMs and IPCs offline via paper or digital download requires verification that the data is current. Refer to the online MM or IPC Revision Log for the list of current pages.

SUBSCRIPTION ORDER AND RENEWAL FORMS

Subscription order and renewal forms are located at <https://robinsonheli.com>.

WARRANTY INFORMATION

Helicopter and parts warranty information is located at <https://robinsonheli.com>.

CHAPTER 8

WEIGHT AND BALANCE

<i>Figure</i>	<i>Title</i>	<i>Page</i>
8-1	Nose Ballast Installation	8.0
8-3	Empennage Ballast Installation	8.2

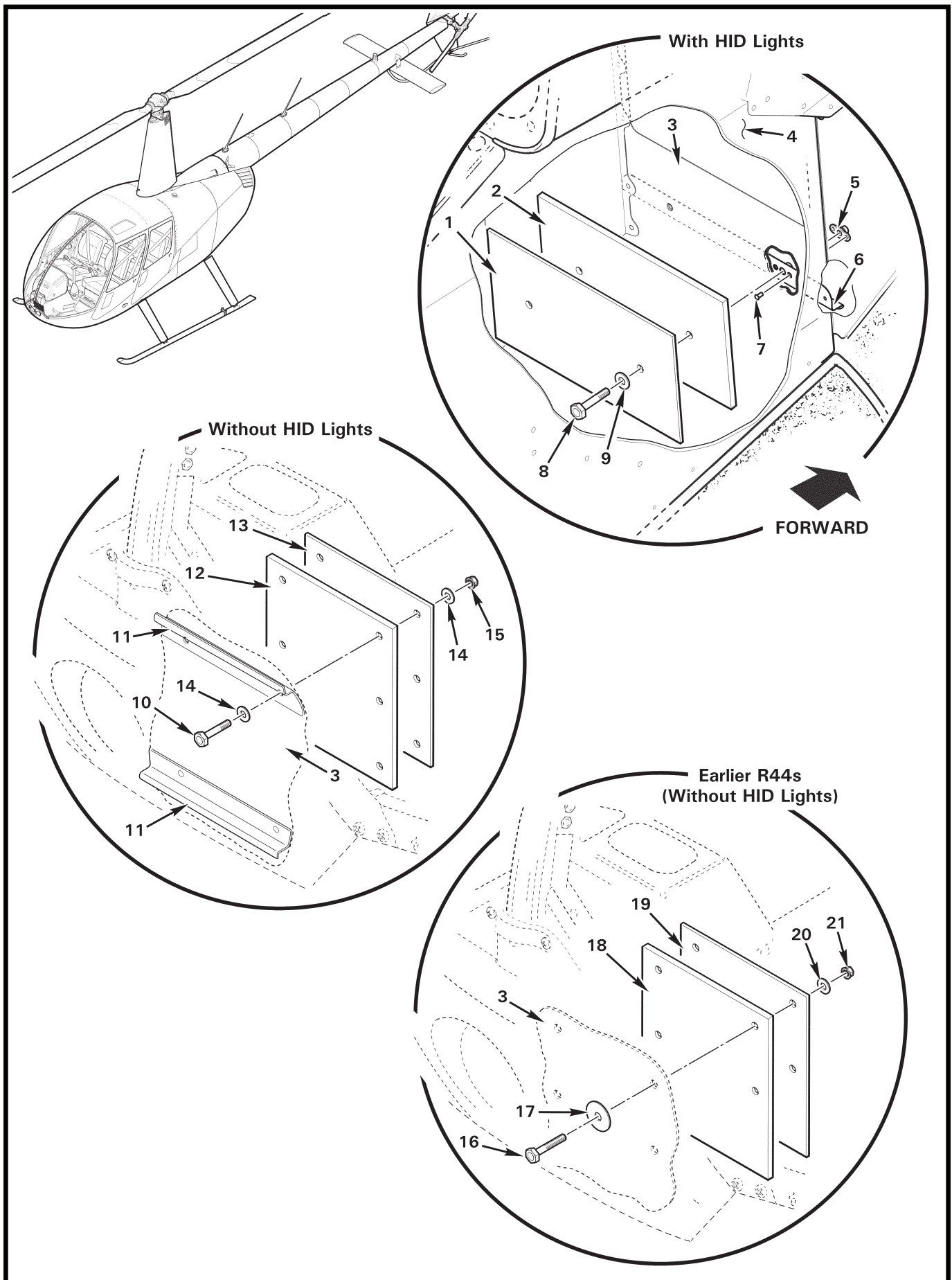


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		NOSE BALLAST INSTALLATION* (NOT ELIGIBLE ON POLICE AND E.N.G. VERSIONS)		
8-1-1	A941-5	Ballast Plate (0.25 lb; compatible with B557 HID landing lights)	X	A/R
2	A941-6	Ballast Plate (1.25 lb; compatible with B557 HID landing lights)	X	A/R
3	C361	Console Panel (Ref)		
4	C033-1	Lower Console Assembly (Ref; see Figure 53-51)		
5	MS21069L3	Nutplate (Ref; see Figure 53-51)		
6	C360-4	Stiffener (Ref; see Figure 53-51)		
7	NAS1097AD3	Rivet (Ref; see Figure 53-51)		
8	NAS6603	Bolt (Select bolt length to meet torque requirements per R44 MM § 23-30 Part E. NAS428-3A14 or shorter bolt with excess threads exposed optional.)	X	2
9	NAS1149F0332P	Washer	X	2
		* * *		
10	NAS6603	Bolt (Select bolt length to meet torque requirements per R44 MM § 23-30 Part E. NAS428-3A14 or shorter bolt with excess threads exposed optional.)	X	4
11	C360-2	Stiffener (no longer available order items 6, 8 [2], and 9 [2])	O	2
12	A941-3**	Ballast Plate (1.00 lb; not compatible with B557 HID landing lights)	X	A/R
13	A941-2**	Ballast Plate (0.25 lb; not compatible with B557 HID landing lights)	X	A/R
14	NAS1149F0332P	Washer	X	8
15	D210-3	Nut	X	4
		* * *		
16	NAS428-3A-12	Bolt (or NAS428-3-12)	X	4
17	AN970-3	Washer	X	4
18	A941-3**	Ballast Plate (1.00 lb; no longer available, superseded by item 12)	O	A/R
19	A941-2**	Ballast Plate (0.15 lb; no longer available, superseded by item 13)	O	A/R
20	NAS1149F0332P	Washer	X	4
21	D210-3	Nut	X	4

NOTES * Refer to R44 MM Chapter 18 for maximum allowable nose ballast, & determine fixed ballast requirements.
 ** For use with R44 I helicopters S/N 1711 and prior, and R44 II helicopters S/N 11684 and prior, and S/N 11686 thru 11714, without B557 HID landing lights installed (refer to Figure 33-11).

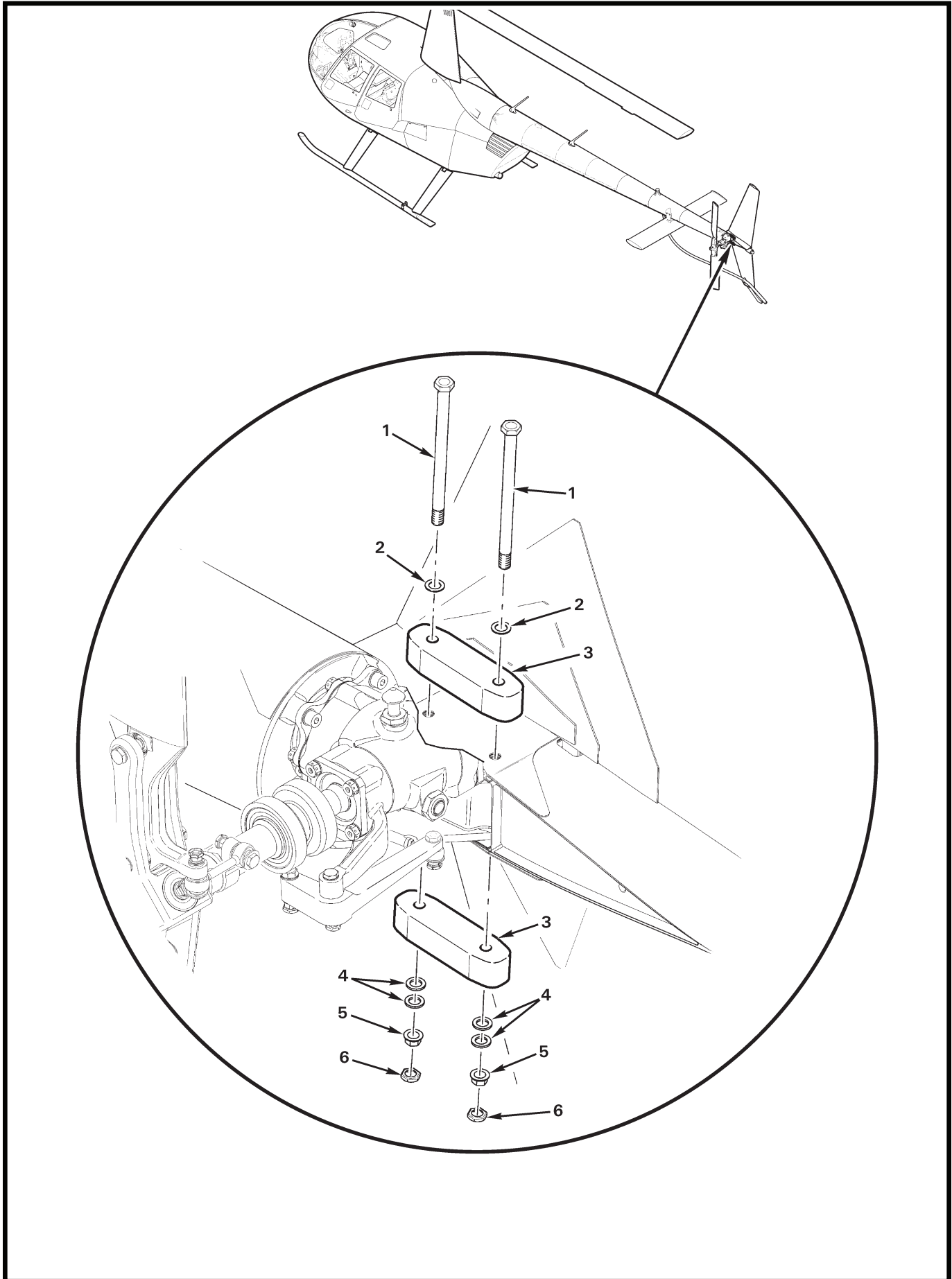


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
EMPENNAGE BALLAST INSTALLATION				
8-3-1	NAS6606-78	Bolt	X	2
2	NAS1149F0632P	Washer	X	2
3	D301-2*	Weight (1.5 lb; 4.65-in. x 1-in. not available unless previously installed, order item 7 as required. Contact RHC Technical Support with empty weight and balance for eligibility)	X	2
4	NAS1149F0663P	Washer ([1] or [2] under nut as required for 1 to 4 threads exposed)	X	A/R
5	D210-6	Nut	X	2
6	B330-19	Palnut	X	2
* * *				
7	KI-174	R44-series & R66 D301-7 Empennage 3.0 lb Ballast Installation Instructions	X	A/R

NOTES * Maximum allowable empennage ballast is 3.0 lb (except R44s with tailcone battery installed). One upper and one lower weight are required. Refer to R44 MM Chapter 18 to determine fixed ballast requirements.

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FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
STRUT FAIRING INSTALLATION*				
32-9-1	C082-62.CS**	Fairing Assembly – Forward (RH)	X	1
	C082-32.CS**	Fairing Assembly – Forward (RH)	X	1
2	C082-63.CS	Fairing Assembly – Forward (LH)	X	1
	C082-33.CS	Fairing Assembly – Forward (LH)	X	1
3	C082-64.CS**	Fairing Assembly – Aft (RH)	X	1
	C082-34.CS**	Fairing Assembly – Aft (RH)	X	1
4	C082-65.CS	Fairing Assembly – Aft (LH)	X	1
	C082-35.CS	Fairing Assembly – Aft (LH)	X	1
5	B227-28	Clamp	X	4
6	B526-6*	Screw ([24] required with items 13 thru 16)	X	26
7	B162-3	Clipnut ([24] required with items 13 thru 16)	X	26
8	MS27039C0810	Screw	X	8
* * *				
9	C082-72.CS**	Fairing Assembly – Forward (RH, extended gear)	X	1
	C082-42.CS**	Fairing Assembly – Forward (RH, extended gear)	X	1
10	C082-73.CS**	Fairing Assembly – Forward (LH, extended gear)	X	1
	C082-43.CS**	Fairing Assembly – Forward (LH, extended gear)	X	1
11	C082-74.CS**	Fairing Assembly – Aft (RH, extended gear)	X	1
	C082-44.CS**	Fairing Assembly – Aft (RH, extended gear)	X	1
12	C082-75.CS**	Fairing Assembly – Aft (LH, extended gear)	X	1
	C082-45.CS**	Fairing Assembly – Aft (LH, extended gear)	X	1
* * *				
13	C082-82.CS**	Fairing Assembly – Forward (RH, pop-out float gear)	X	1
	C082-52.CS**	Fairing Assembly – Forward (RH, pop-out float gear)	X	1
14	C082-83.CS	Fairing Assembly – Forward (LH, pop-out float gear)	X	1
	C082-53.CS	Fairing Assembly – Forward (LH, pop-out float gear)	X	1
15	C082-84.CS**	Fairing Assembly – Aft (RH, pop-out float gear)	X	1
	C082-54.CS**	Fairing Assembly – Aft (RH, pop-out float gear)	X	1
16	C082-85.CS	Fairing Assembly – Aft (LH, pop-out float gear)	X	1
	C082-55.CS	Fairing Assembly – Aft (LH, pop-out float gear)	X	1

NOTES * Revision "N" and subsequent fairing assemblies. Installed on C014-27 and -30 landing gear. See Figure 32-1. Will be shipped painted white. Additional charges for color matching.
 ** Not shown.

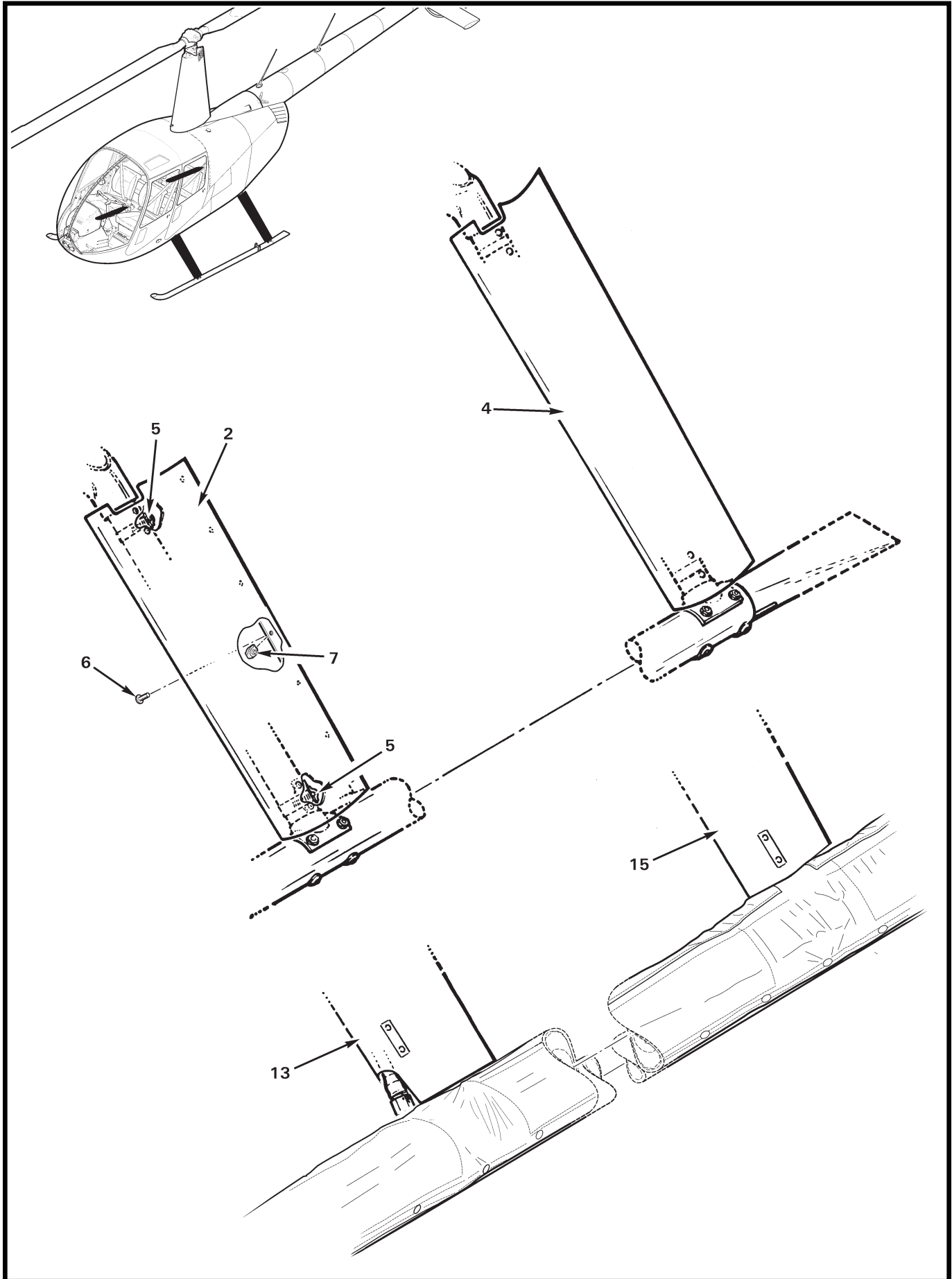


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
STRUT FAIRING INSTALLATION*				
32-11-1	C082-2.CS**	Fairing Assembly – Forward (RH)	X	1
2	C082-3.CS	Fairing Assembly – Forward (LH)	X	1
3	C082-4.CS**	Fairing Assembly – Aft (RH)	X	1
4	C082-5.CS	Fairing Assembly – Aft (LH)	X	1
5	HTM-200	Clamp	X	8
	B270-10	Adhesive (for clamp threads)	X	A/R
6	MS27039C0805	Screw (B526-6 screw optional)	X	26
7	B162-3	Clipnut	X	26
* * *				
8	C082-12.CS**	Fairing Assembly – Forward (RH, extended gear)	X	1
9	C082-13.CS**	Fairing Assembly – Forward (LH, extended gear)	X	1
10	C082-14.CS**	Fairing Assembly – Aft (RH, extended gear)	X	1
11	C082-15.CS**	Fairing Assembly – Aft (LH, extended gear)	X	1
* * *				
12	C082-22.CS**	Fairing Assembly – Forward (RH, pop-out float gear)	X	1
13	C082-23.CS	Fairing Assembly – Forward (LH, pop-out float gear)	X	1
14	C082-24.CS**	Fairing Assembly – Aft (RH, pop-out float gear)	X	1
15	C082-25.CS	Fairing Assembly – Aft (LH, pop-out float gear)	X	1
<p>NOTES * Revision "M" and prior fairing assemblies. Installed on C014-8 and -22 landing gear. See Figure 32-5. Will be shipped painted white. Additional charge for color matching.</p> <p> ** Not shown.</p>				

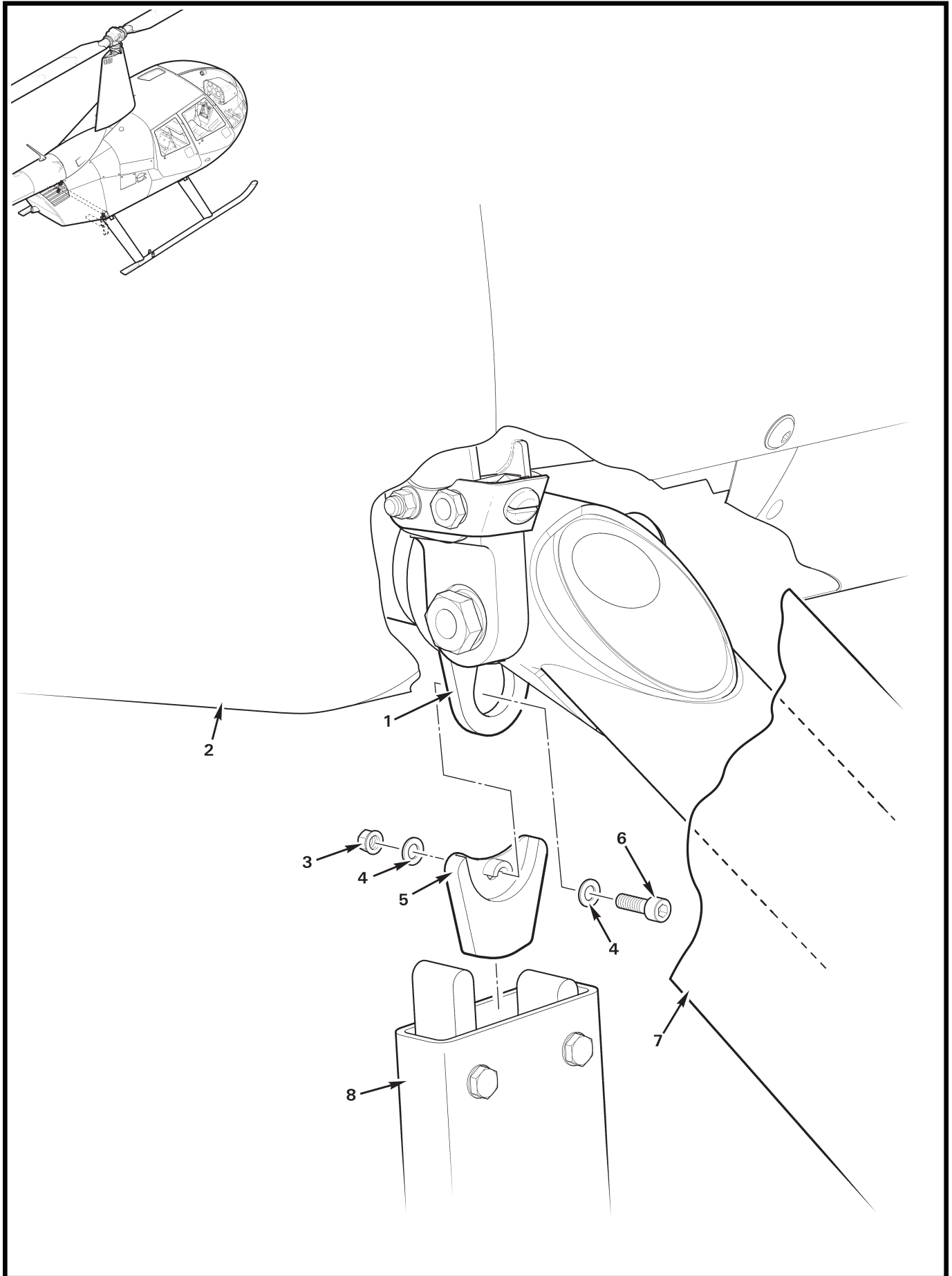


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		NAVIGATION LIGHTS INSTALLATION – RIGHT AND LEFT POSITION*		
33-5-1	B263-11	Housing (Ref)		
2	B263-10	Housing	X	1
	B263-1	Pin	X	1
3	MS21042L06	Nut	X	3
4	NAS1149FN616P	Washer	X	3
5	B260-2	Terminal	X	1
6	C272-1	Chin (Ref)		
7	A779-1	Gasket	X	1
8	MS3367-5-9	Ty-Rap	X	1
9	A039-19	Position Light Assembly – LH (Red LED, 28-volt; includes items 2, 5, and 12 thru 15.)	X	1
	A039-21	Position Light Assembly – LH (Red LED, 14-volt; includes items 2, 5, and 12 thru 15.)	X	1
10	A039-20	Position Light Assembly – RH (Green LED, 28-volt; includes items 2, 5, and 12 thru 15. Not shown.)	X	1
	A039-22	Position Light Assembly – RH (Green LED, 14-volt; includes items 2, 5, and 12 thru 15. Not shown.)	X	1
11	MS35206-230	Screw	X	3
12	38-0230021-00**	Gasket	O	1
13	68-3950902A30**	Lens (clear)	X	1
14	19-150002-010**	Retainer	O	1
15	14-0050508-27**	Screw	O	1
16	A039-15	Position Light Assembly – LH (Red incandescent, 28-volt. Ref, no longer available.)		
	A039-5	Position Light Assembly – LH (Red incandescent, 14-volt. Ref, no longer available.)		
17	A039-16	Position Light Assembly – RH (Green incandescent, 28-volt. Ref, no longer available.)		
	A039-4	Position Light Assembly – RH (Green incandescent, 14-volt. Ref, no longer available.)		
18	W1290-14**	Lamp (14-volt)	X	1
	W1290-28**	Lamp (28-volt)	X	1
19	W1284R**	Lens – LH (red)	X	1
	W1284G**	Lens – RH (green, not shown)	X	1
20	W1282**	Retainer	X	1
21	—	Screw	O	1

NOTES * Refer to Figure 32-33 for position light installation with fixed floats installed.
 ** Whelen part no.

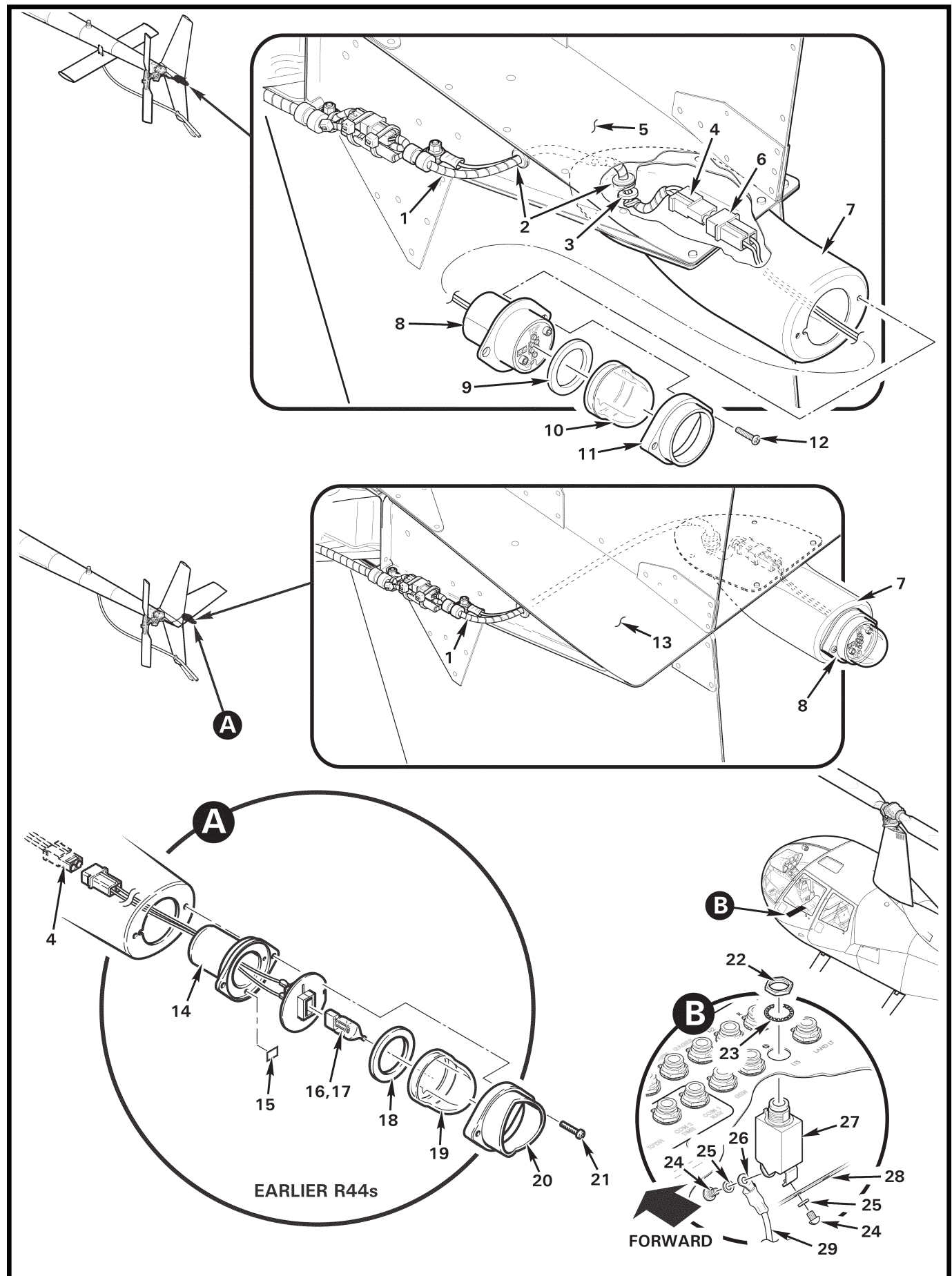


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		NAVIGATION LIGHTS INSTALLATION – TAIL POSITION		
33-7-1	D049-8*	Wire Harness – Tail Light (Ref)		
	D049-3*	Wire Harness – Tail Light (Ref)		
2	MS35489-4*	Grommet (Ref)		
3	90295A075*	Washer (Ref)		
4	B263-13*	Housing (Ref)		
	B263-2*	Socket (Ref)		
5	F044-1	Mount Assembly (Ref, see Figure 53-37)		
6	B263-12	Housing	X	1
	B263-1	Pin	X	2
7	C529-1*	Mount Assembly – Tail Light (Ref)		
8	01-0771554-01**	Tail Light Assembly (LED, 28-volt; includes items 6, and 9 thru 12)	X	1
	01-0771554-11**	Tail Light Assembly (LED, 14-volt; includes items 6, and 9 thru 12)	X	1
9	38-0231061-00**	Gasket	O	1
10	68-3970991-30**	Lens	O	1
11	19-0150350-03**	Lens Retainer	O	1
12	14-0050505-18**	Screw	O	2
13	C044-1	Stabilizer – Horizontal (Ref, see Figure 53-41)		
14	A698-3	Tail Light Assembly (Ref, incandescent, 14-volt ships; no longer available. Superseded by item 8. Includes items 15 thru 21. See R44 MM § 26-12 Part C, also order item 1.) . . .		
15	A701-1	Foil Tape	X	A/R
16	34-0412070-63**	Lamp (halogen, 14-volt ships)	X	1
17	34-0428070-64**	Lamp (halogen, 28-volt ships)	X	1
18	A455**	Gasket	X	1
19	A457A**	Lens	X	1
20	A425**	Lens Retainer	X	1
21	–	Screw	O	2
22	–	Nut	O	1
23	–	Lockwasher	O	1
24	–	Screw	O	2
25	–	Washer	O	2
26	B260-2	Terminal (Ref)		
27	B297-5	Circuit Breaker (5 amp; includes items 22 thru 25)	X	1

NOTES * See Figures 53-37 and 53-41.
 ** Whelen part number.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<p>33-7-28 29</p>	<p>A448 -104</p>	<p>NAVIGATION LIGHTS INSTALLATION – TAIL POSITION (Cont'd)</p> <p>Bus Bar (Ref) Wire (Ref)</p>		
<p>NOTES</p>				

CHAPTER 52

DOORS AND WINDOWS

<i>Figure</i>	<i>Title</i>	<i>Page</i>
52-1	Forward Door Assembly	52.0
52-7	Aft Door Assembly	52.6
52-11	Aft Door Assembly – R44 Cadet	52.10
52-13	Windshield Installation	52.12
52-17	Windshield Installation – Impact-Resistant (Polycarbonate)	52.16
52-21	Windshield Installation – Impact-Resistant (Polycarbonate)	52.20

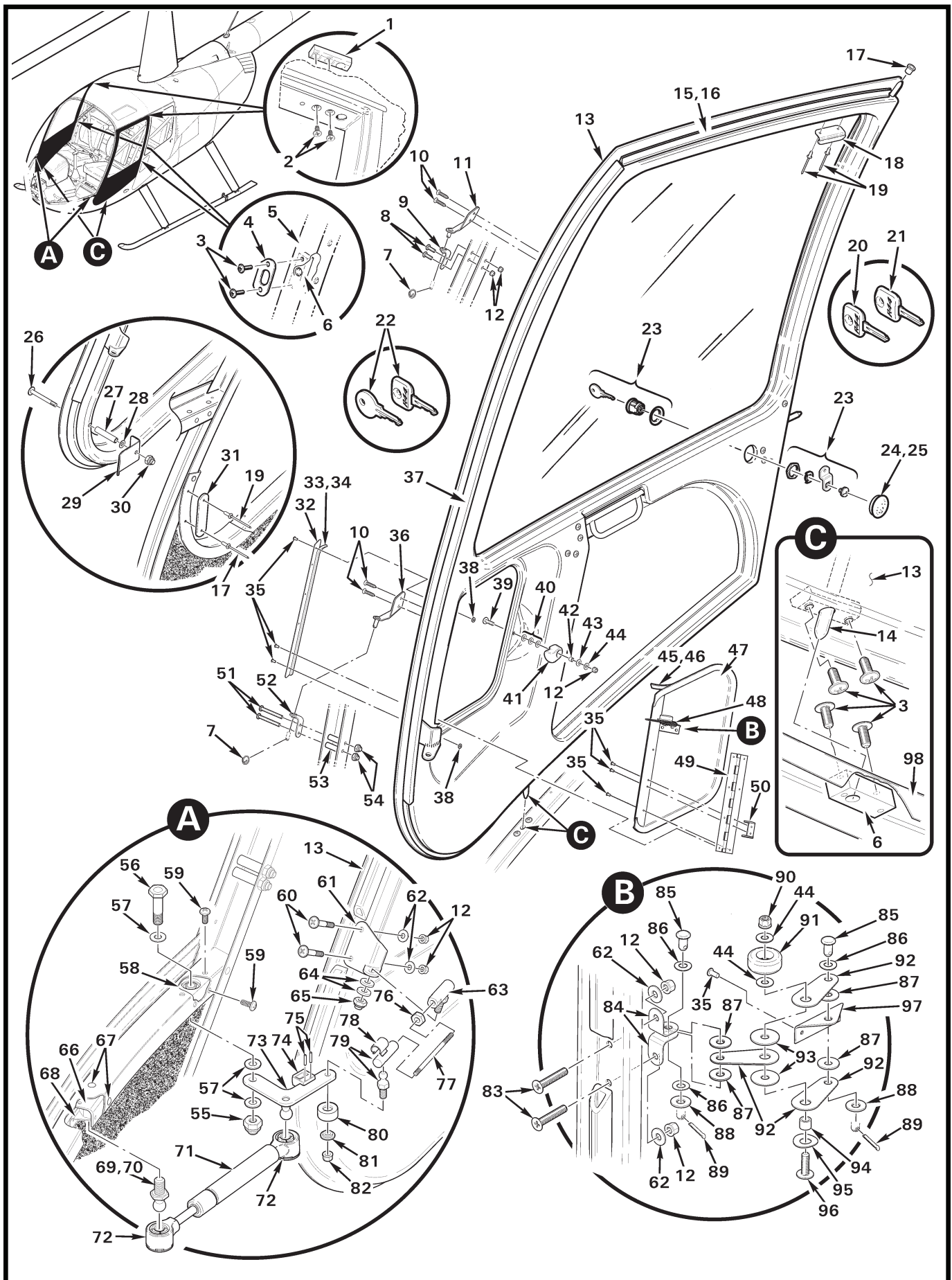


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
FORWARD DOOR ASSEMBLY (Cont'd)				
52-1-97	A425-13	Angle	X	1
98	C238-8	Sill (Ref, RH)		
	C238-7	Sill (Ref, LH; not shown)		
		* * *		
99	KI-244-1 *	(LH) R44-series Forward Door Kit Instructions (For upgrading to forward doors with C224-13 rod assembly [bottom latching rod, door not included].)	X	A/R
	KI-244-2 *	(RH) R44-series Forward Door Kit Instructions (see above) . . .	X	A/R
100	KI-259	R44/R66 Door Closure Assist Finger Tab Installation Kit Instructions (installs item 18)	X	A/R

NOTES * Ship S/N 2380 and prior, S/N 10001 thru 13760 may require KI-244, unless kit was previously installed, or doors with item 14 were factory-installed.

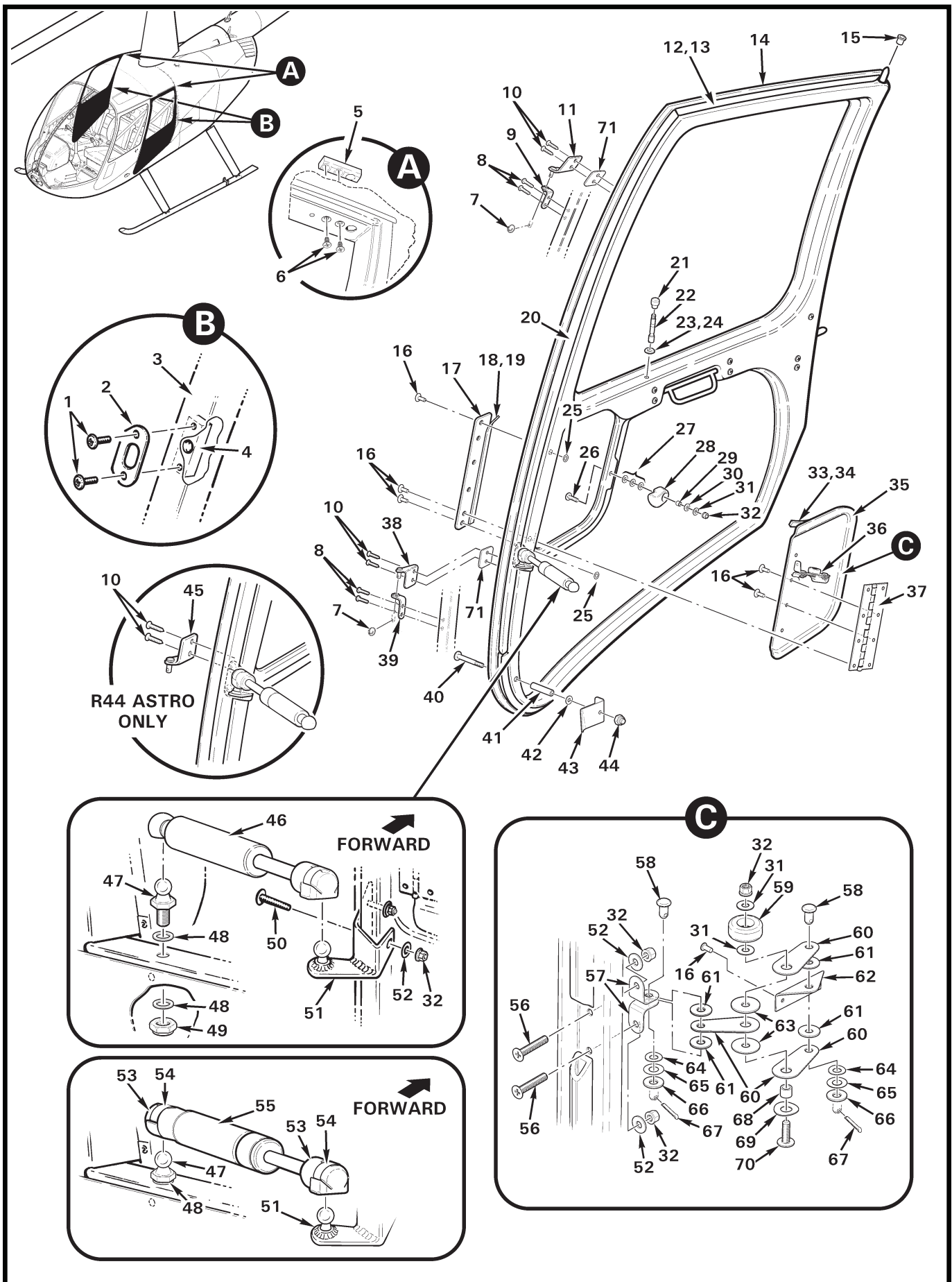


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		AFT DOOR ASSEMBLY*		
52-7-1	AN525-832R6	Screw (do not substitute MS27039 screws)	X	2
2	C538-1	Plate	X	1
3	C238	Door Jamb (Ref)		
4	C537-11	Block	X	1
5	C537-16	Block	X	1
6	D216-2	Screw (or 93195A322)	X	2
7	B427-1	Ring – Cotter	X	2
8	MS27039C0810	Screw	X	4
9	A228-1	Hinge	X	1
10	MS51861-37C	Screw	X	4
11	C389-4	Hinge Assembly (RH, upper)	X	1
	C389-3	Hinge Assembly (LH, upper)	X	1
12	A226-2	Seal (bond using item 13)	X	A/R
13	B270-18PT	Adhesive	X	A/R
14	C026-014**	Door Assembly (RH, clear; includes items 12, 13, 15, 16 thru 37, 49, and 50)	X	1
	C026-013**	Door Assembly (LH, clear; includes items 12, 13, 15, 16 thru 37, 49, and 50; not shown)	X	1
	C026-024**	Door Assembly (RH, light tint; includes items 12, 13, 15, 16 thru 37, 49, and 50; not shown)	X	1
	C026-023**	Door Assembly (LH, light tint; includes items 12, 13, 15, 16 thru 37, 49, and 50; not shown)	X	1
	C026-034**	Door Assembly (RH, bubble, clear; includes items 12, 13, 15, 16 thru 37, 49, and 50; not shown)	X	1
	C026-033**	Door Assembly (LH, bubble, clear; includes items 12, 13, 15, 16 thru 37, 49, and 50; not shown)	X	1
	C026-044**	Door Assembly (RH, bubble, light tint; includes items 12, 13, 15, 16 thru 37, 49, and 50; not shown)	X	1
	C026-043**	Door Assembly (LH, bubble, light tint; includes items 12, 13, 15, 16 thru 37, 49, and 50; not shown)	X	1
	C026-054**	Door Assembly (RH, dark tint; includes items 12, 13, 15, 16 thru 37, 49, and 50; not shown)	X	1
	C026-053**	Door Assembly (LH, dark tint; includes items 12, 13, 15, 16 thru 37, 49, and 50; not shown)	X	1
	C026-064**	Door Assembly (RH, bubble, dark tint; includes items 12, 13, 15, 16 thru 37, 49, and 50; not shown)	X	1
	C026-063**	Door Assembly (LH, bubble, dark tint; includes items 12, 13, 15, 16 thru 37, 49, and 50; not shown)	X	1

NOTES * Ship S/N 0001 thru 9999, and S/N 10001 thru 29999.

** Will be shipped painted white.

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FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
AFT DOOR ASSEMBLY (Cont'd)				
52-7-15	2017	Bushing	X	1
	NAS557-4B	Grommet (not shown, earlier R44s)	X	1
16	MS20470AD3	Rivet	X	12
17	C682-1	Barrier	X	1
18	A226-3	Seal (bond using item 19)	X	A/R
19	B270-8.2OZ	Adhesive (2-oz. container)	X	A/R
20	A226-6	Seal	X	A/R
21	A431-2	Knob (door lock)	X	1
	1770	Knob (Ref; not shown, earlier R44s. Replaced by A431-2.)		
22	C544-1	Pin	X	1
23	C26005	Washer (bond using item 24)	X	1
24	B270-9	Adhesive (2-oz. kit)	X	A/R
25	NAS1149FN232P	Washer	X	2
26	AN525-832R	Screw	X	1
27	NAS1149FN816P	Washer (or NAS1149FN832P for proper seal compression)	X	A/R
28	C285-1	Knob	X	1
29	C130-5	Spacer	X	1
30	U216-0100-S	Spring Washer (alternate part no. CRV-25134 or U216-0100)	X	1
31	NAS1149FN816P	Washer	X	3
32	MS21042L08	Nut	X	6
33	A226-7	Seal (bond using item 34; [3] sides of vent door)	X	A/R
34	B270-8.2OZ	Adhesive (2-oz. container)	X	A/R
35	C425-4	Vent Door (RH)	X	1
	C425-3	Vent Door (LH)	X	1
36	A425-17	Arm Assembly (LH and RH, includes items 31 [2], 32 [1], 57 thru 70)	X	1
37	C425-5	Hinge	X	1
38	C389-10	Hinge Assembly (RH, lower)	X	1
	C389-9	Hinge Assembly (LH, lower)	X	1
39	A228-2	Hinge	X	1
40	AN525-832R24*	Screw	X	1
41	C130-19*	Spacer	X	1
42	NAS1149FN816P*	Washer (as required for shimming)	X	A/R
43	A768-2*	Clip (RH)	X	1
44	B340-4*	Nut	X	1

NOTES * Earlier R44s.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
AFT DOOR ASSEMBLY (Cont'd)				
52-7-45	C389-2	Hinge Assembly (RH, lower; R44 Astro)	X	1
	C389-1	Hinge Assembly (LH, lower; R44 Astro)	X	1
46	C394-1	Gas Spring	X	1
47	C394-2	Ball Stud	X	1
48	C141-15	Washer	X	2
49	21FKF-518	Nut	X	1
50	MS27039C0816	Screw	X	2
51	C393-2	Bracket Weldment (RH)	X	1
	C393-1	Bracket Weldment (LH)	X	1
52	NAS1149FN832P	Washer	X	1
53	PC1249-2*	End Connector (Incl item 54)	X	2
54	-	Clip (Ref)		
55	C394-1*	Gas Spring (Ref; revision I and prior no longer available)		
56	MS24694-S11	Screw	X	2
57	A425-19	Clip	X	2
58	MS20392-2C7	Clevis Pin	X	2
59	A431-1	Knob	X	1
60	A425-7	Arm	X	3
61	A141-8	Washer	X	4
62	A425-13	Angle	X	1
63	A141-7	Washer	X	2
64	U190-0090-S	Spring Washer (alternate part no. U190-0090 or CRV-26132)	X	2
65	NAS1149F0332P	Washer	X	2
66	NAS1149F0316P	Washer	X	2
67	MS24665-151	Cotter Pin	X	2
68	A105-7	Journal	X	1
69	U250-0185-S	Spring Washer (alternate part no. U250-0185 or CRV-26152)	X	1
70	B526-8	Screw	X	1
71	C389-13	Shim ([1] maximum per hinge)	X	A/R

NOTES * Earlier R44s.

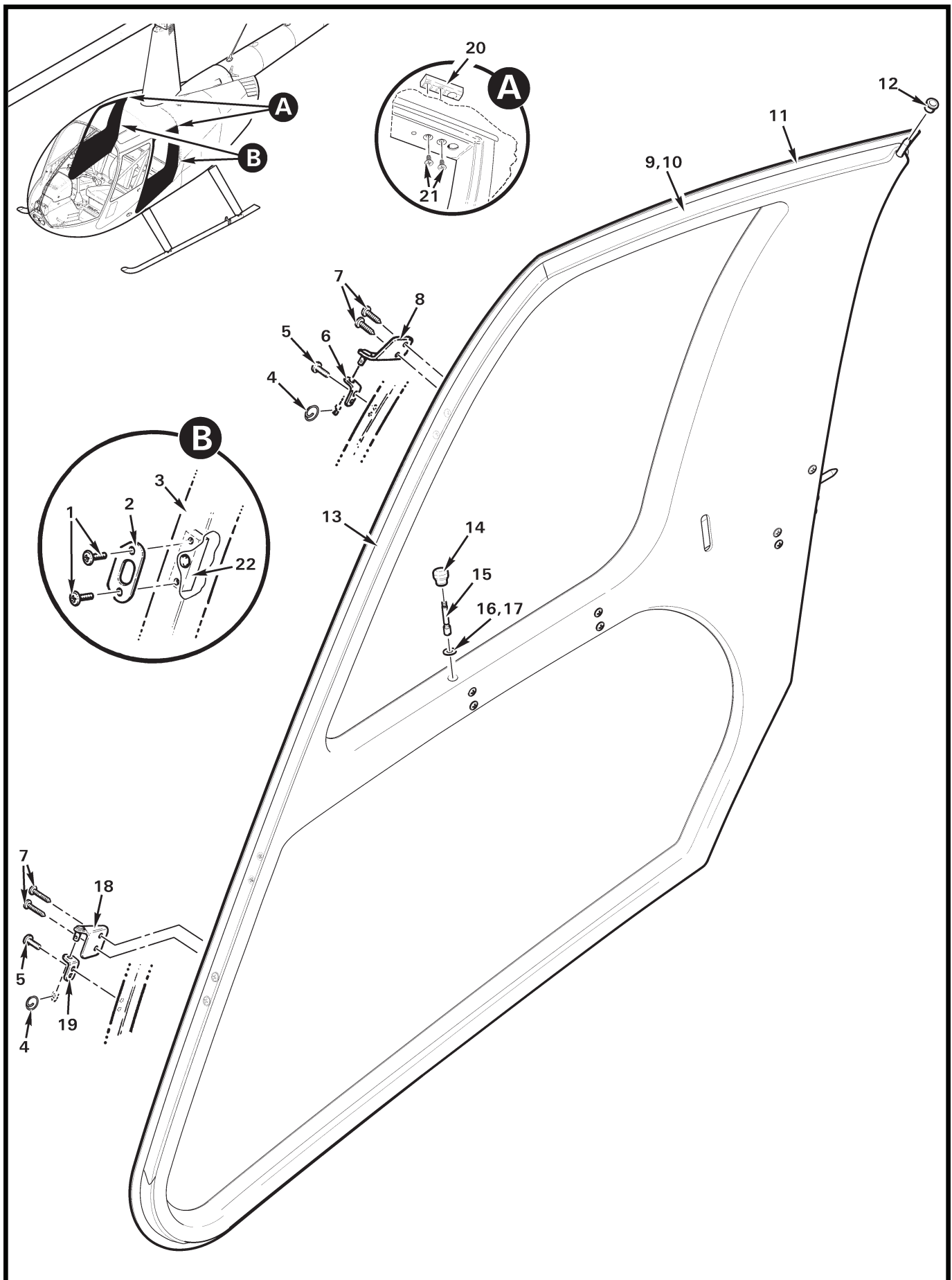


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		AFT DOOR ASSEMBLY – R44 CADET*		
52-11-1	AN525-832R6	Screw	X	2
2	C538-1	Plate	X	1
3	C238	Door Jamb (Ref)		
4	B427-1	Ring – Cotter	X	2
5	MS27039C0809	Screw	X	4
6	A228-1	Hinge	X	1
7	MS51861-37C	Screw (self-tapping)	X	4
8	C389-4	Hinge Assembly (RH, upper)	X	1
	C389-3	Hinge Assembly (LH, upper; not shown)	X	1
9	A226-2	Seal (install using item 10)	X	A/R
10	B270-18	Adhesive (5-oz. tube)	X	A/R
11	C026-224**	Door Assembly (RH, light tint; includes items 9, 13 thru 16) . . .	X	1
	C026-223**	Door Assembly (LH, light tint; includes items 9, 13 thru 16) . . .	X	1
	C026-254**	Door Assembly (RH, dark tint; includes items 9, 13 thru 16) . . .	X	1
	C026-253**	Door Assembly (LH, dark tint; includes items 9, 13 thru 16) . . .	X	1
12	2017	Bushing	X	1
	NAS557-4B	Grommet (not shown, earlier R44s)	X	1
13	A226-6	Seal (self-adhesive, front edge of door only)	X	A/R
14	A431-2	Knob (door lock)	X	1
	1770	Knob (not shown, earlier R44s)	O	1
15	C544-1	Pin	X	1
16	C26005	Washer (bond using item 17)	X	1
17	B270-9	Adhesive (2-oz. kit)	X	A/R
18	C389-10	Hinge Assembly (RH, lower)	X	1
	C389-9	Hinge Assembly (LH, lower; not shown)	X	1
19	A228-2	Hinge	X	1
20	C537-16	Block	X	2
21	93195A322	Screw	X	4
22	C537-11	Block	X	2

NOTES * Ship S/N 30001 and subsequent.
 ** Will be shipped painted white.

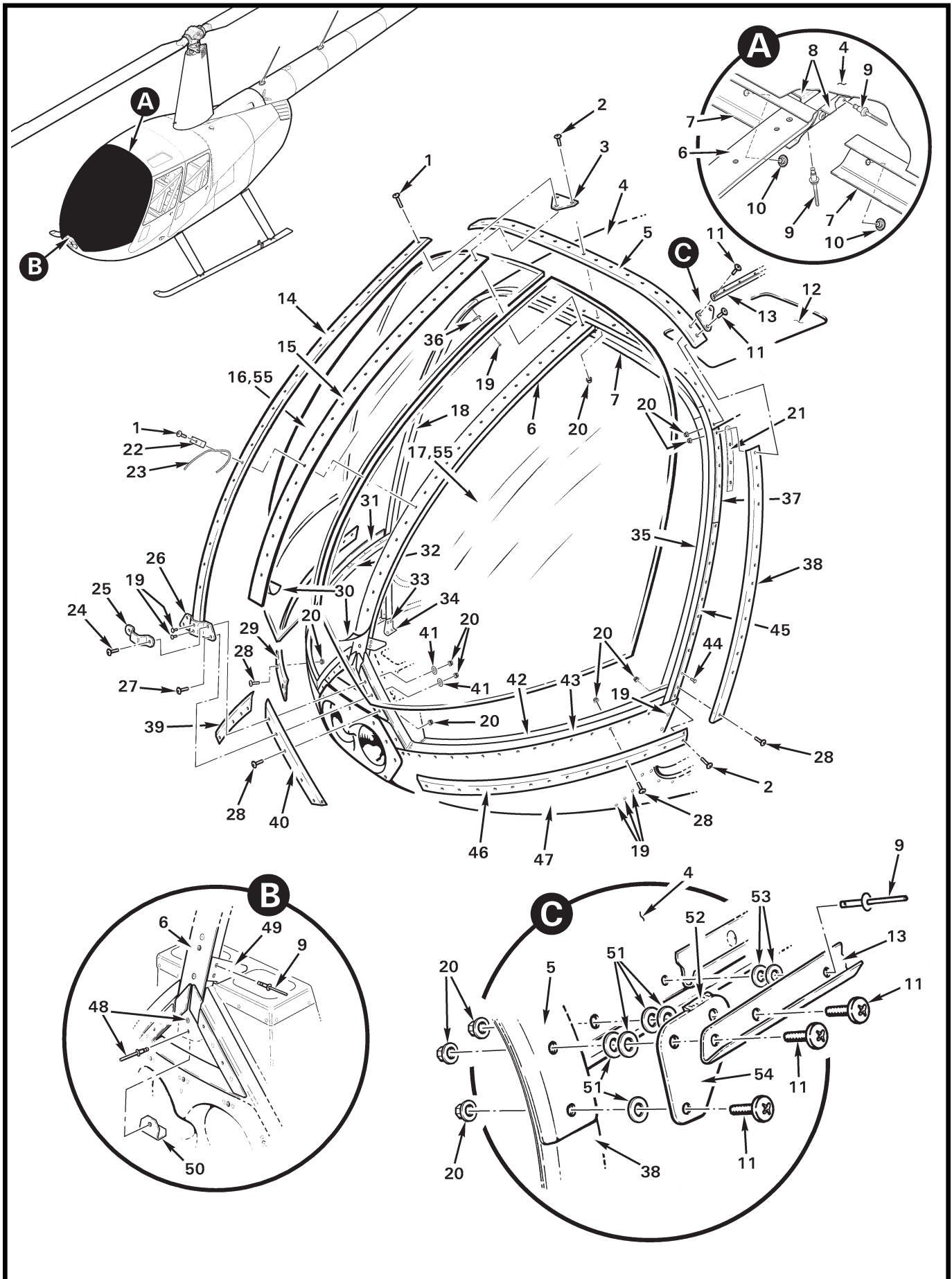


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
WINDSHIELD INSTALLATION				
52-13-1	AN526C832R12	Screw (do not substitute MS27039 screws)	X	22
2	AN526C832R9	Screw (do not substitute MS27039 screws)	X	10
3	B409-5	Gusset	X	1
4	C273-1	Roof (Incl item 12)	X	1
5	C238-29*	Retainer (apply item 52 to edges)	X	1
6	C238-2	Bow Assembly (includes wires)	X	1
7	C238-16	Frame (forward, roof)	X	1
8	C238-23	Support	X	1
9	NAS9301B-4-02	Rivet (blind; or NAS1919B04S02 as required)	X	9
10	BPF-5MM	Plug	X	8
11	AN526C832R9	Screw (or AN526C832R10 thru AN526C832R12 to obtain one thread minimum beyond nut)	X	6
12	C273-3	Window (clear acrylic)	X	1
13	C230-8*	Rain Gutter (RH, apply item 52 to edges)	X	1
	C230-7*	Rain Gutter (LH, apply item 52 to edges)	X	1
14	C367-12	Stiffener	X	1
15	C367-10*	Retainer	X	1
16	C274-2	Windshield** (RH, clear; install using item 55)	X	1
	C274-4	Windshield** (RH, tinted; install using item 55)	X	1
17	C274-1	Windshield** (LH, clear; install using item 55)	X	1
	C274-3	Windshield** (LH, tinted; install using item 55)	X	1
18	C238-4	Door Jamb (RH, forward; attach to cabin using items 25, 44, 33, and 34)	X	1
19	MS20470AD4	Rivet	X	38
20	MS21042L08	Nut	X	90
21	C396-1	Shim	X	A/R
22	B295-1	Clip (installed at 7th screw, from item 26, 8th screw with 10-hole console)	X	1
23	—	Yaw String (Ref; yarn, white acrylic, 0.10 inch dia., 3-inch length each side of clip. Source locally.)		
24	MS27039C0810	Screw	X	4
25	C366-5	Bracket	X	1
26	C366-8	Retainer	X	1
27	MS27039C0809	Screw	X	2

NOTES * Install using item 52.
 ** See Figure 99-15 for shipping crate.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
WINDSHIELD INSTALLATION (Cont'd)				
52-13-28	AN526C832R8	Screw (do not substitute MS27039 screws)	X	78
29	C367-6*	Retainer (RH)	X	1
30	C367-11	Tape	X	A/R
31	C367-2	Retainer (RH)	X	1
32	C238-18	Frame (RH; attach with item 31 to chin [item 47] using item 44)	X	1
33	MS20470AD3	Rivet	X	8
34	A414-2	Angle (RH)	X	1
	A414-1	Angle (LH, not shown)	X	1
35	C238-3	Door Jamb (LH, forward; attach to cabin using items 25, 44, 33, and 34)	X	1
36	C211-3	Gusset	X	2
37	C238-34	Spacer (LH and RH, 0.118 in. [3mm] or 0.125 in. thick polycarbonate. Attach to items 18 and 35 using item 44.)	X	2
38	C238-27*	Retainer (LH)	X	1
	C238-28*	Retainer (RH; not shown)	X	1
39	C367-8*	Retainer (RH)	X	1
40	C367-7*	Retainer (LH)	X	1
41	NAS1149FN832P	Washer	X	4
42	C238-17	Frame (LH; attach with item 43 to chin [item 47] using item 44)	X	1
43	C367-1	Retainer (LH)	X	1
44	MS20426AD3	Rivet (flush)	X	56
45	D661-1	Spacer (LH and RH, 0.118 in. [3mm] or 0.125 in. thick polycarbonate. Attach to items 18 and 35 using item 44.)	X	2
46	C367-5*	Retainer (LH)	X	1
47	C272-1	Chin	X	1
48	NAS9301B-4-03	Rivet (blind)	X	2
49	C358-2	Support (Ref)		
50	C366-6	Cap	X	1
51	NAS1149FN832P	Washer	X	A/R
52	B270-1	Sealant	X	A/R
53	NAS620-5	Washer	X	A/R
54	D805-2	Restraint (LH and RH. Use item 52 to fill gap between items 13, 54, and 4. To retrofit earlier R44s, order item 56.)	X	2

NOTES * Earlier R44s.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
WINDSHIELD INSTALLATION (Cont'd)				
52-13-55	B270-26	Sealant (polysulfide, 2-part, 4-oz. tube)	X	A/R
	B270-13	Sealant (silicone, 3-oz. tube)	X	A/R
		* * *		
56	KI-125	R44 Forward Door Restraint Installation Kit	X	A/R
NOTES				

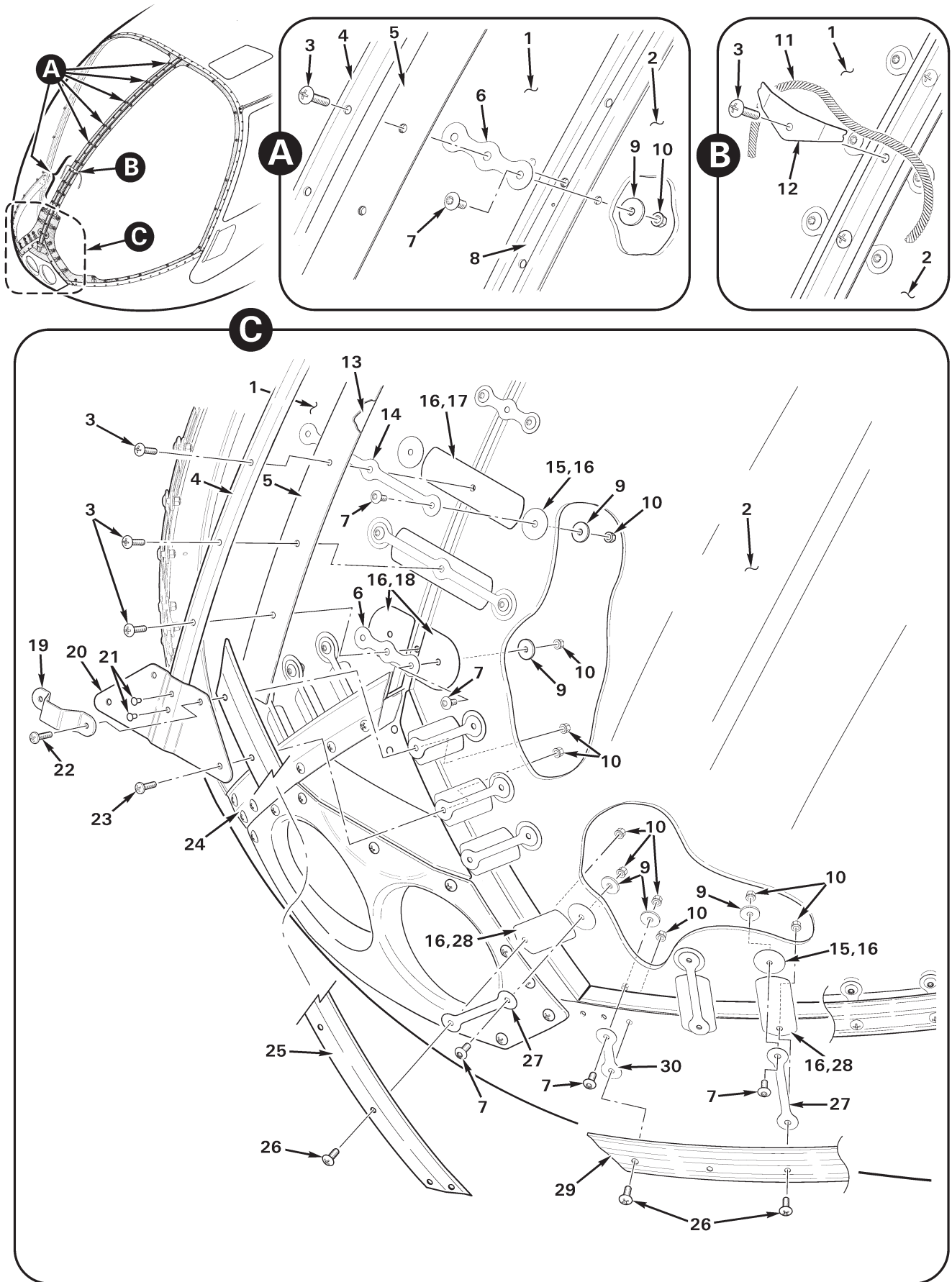


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		WINDSHIELD INSTALLATION – IMPACT-RESISTANT (POLYCARBONATE)		
52-17-1	C274-6*	Windshield** (Polycarbonate; RH, clear. Install using item 16. Also order item 31, as required.)	X	1
	C274-8*	Windshield** (Polycarbonate; RH, tinted. Install using item 16. Also order item 31, as required.)	X	1
2	C274-5*	Windshield** (Polycarbonate; LH, clear. Install using item 16. Also order item 31, as required.)	X	1
	C274-7*	Windshield** (Polycarbonate; LH, tinted. Install using item 16. Also order item 31, as required.)	X	1
3	AN526C832R12	Screw (do not substitute MS27039 screws)	X	22
4	C367-12***	Stiffener (Ref)		
5	C367-10	Retainer (Ref)		
6	G367-2	Tie	X	12
7	B526-6	Screw (do not substitute MS27039 screws)	X	68
8	C367-9***	Retainer (Ref)		
9	C141-25	Washer	X	68
10	MS21042L08	Nut	X	68
11	–	Yaw String (Ref; yarn, white acrylic, source locally. 0.10-inch dia., 3-inch length each side of clip.)		
12	B295-2	Clip – Yaw String (install 7th screw from bottom)	X	1
13	C367-11***	Tape (Ref)		
14	G367-11	Tie	X	2
15	G367-15*	Pad	X	16
16	B270-26	Sealant (polysulfide, 2-part 4-oz. tube)	X	A/R
17	G367-13*	Tab	X	2
18	G367-14*	Pad	X	2
19	C366-5***	Bracket (Ref)		
20	C366-8***	Retainer (Ref)		
21	MS20470AD4***	Rivet (Ref)		
22	MS27039C0810***	Screw (Ref)		
23	MS27039C0809	Screw	X	2
24	C367-8***	Retainer (RH, Ref)		
25	C367-7***	Retainer (LH, Ref)		
26	AN526C832R8	Screw (Ref)		
27	G367-10	Strap	X	12
28	G367-12*	Tab	X	12

NOTES * Refer to R44 MM § 27-32 for replacement procedures.
 ** See Figure 99-15 for shipping box.
 *** See Figure 52-15.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
WINDSHIELD INSTALLATION – IMPACT-RESISTANT (POLYCARBONATE) (Cont'd)				
52-17-29	C367-5*	Retainer (LH, Ref)		
	C367-6*	Retainer (RH, Ref)		
30	G367-1	Strap	X	28
31	MT084-1.CS	Paint Templates – Sheet (Apply trim paint using paint templates per R44 MM § 27-32 Part G when replacing windshield[s] or if otherwise required. One sheet accommodates layout for two RH & two LH windshields. For use with R22-series, R44-series, and R66 helicopters equipped with polycarbonate windshields. Not shown.)	X	A/R

NOTES * See Figure 52-15.

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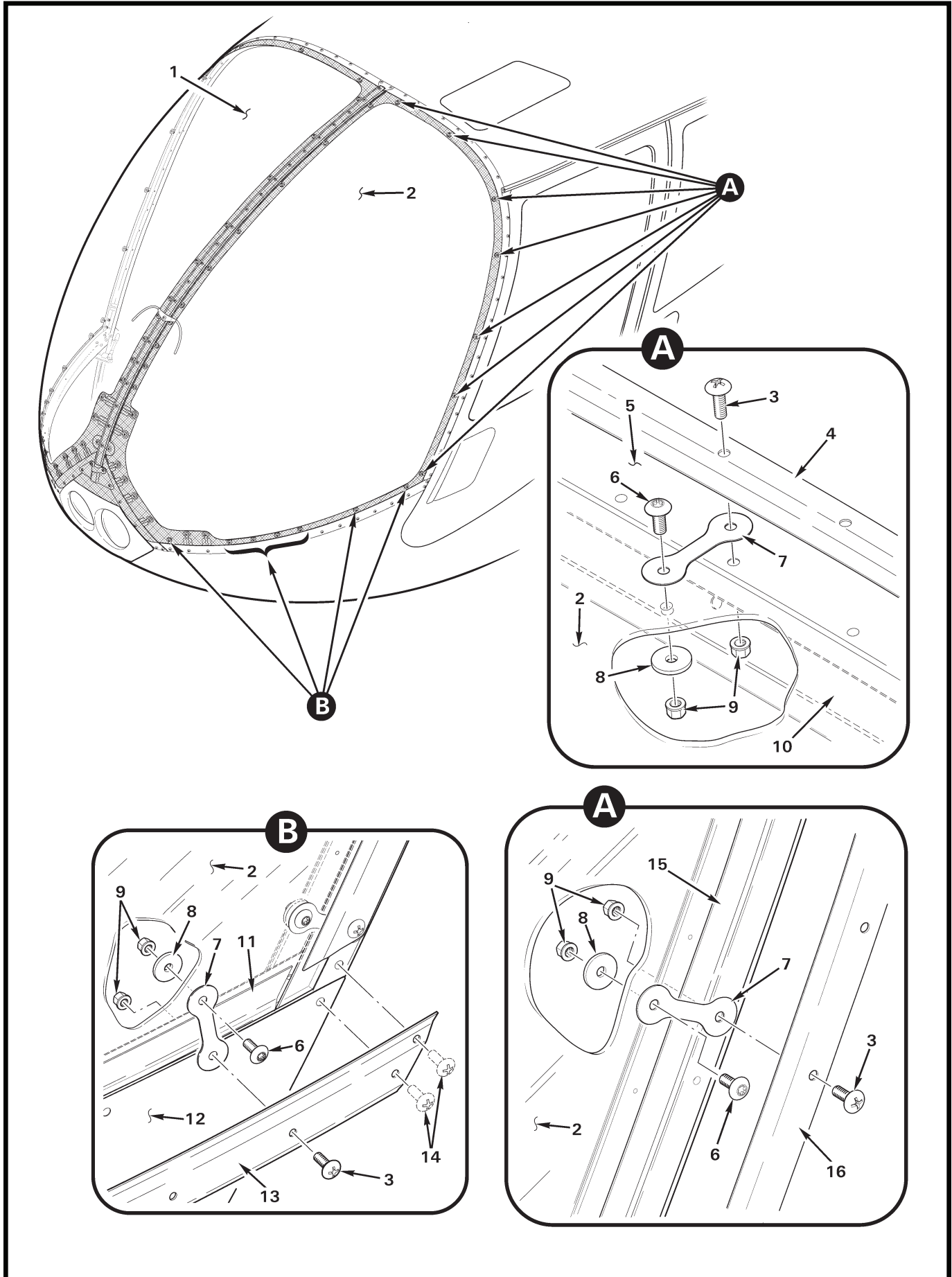


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		WINDSHIELD INSTALLATION – IMPACT-RESISTANT (POLYCARBONATE)		
52-21-1	C274-6*	Windshield (Ref; Polycarbonate; RH, clear)		
	C274-8*	Windshield (Ref; Polycarbonate; LH, clear)		
2	C274-5*	Windshield (Ref; Polycarbonate; RH, tinted)		
	C274-7*	Windshield (Ref; Polycarbonate; LH, tinted)		
3	AN526C832R8	Screw (do not substitute MS27039 screws)	X	60
4	C238-29**	Retainer (Ref)		
5	C273-1**	Roof (Ref)		
6	B526-6	Screw (do not substitute MS27039 screws)	X	68
7	G367-1	Strap	X	28
8	C141-25	Washer	X	68
9	MS21042L08	Nut	X	68
10	C238-16**	Frame (forward, roof; Ref)		
11	C367-1**	Retainer (LH, Ref)		
	C367-2**	Retainer (RH, Ref)		
12	C272-1**	Chin (Ref)		
13	C367-5**	Retainer (LH, Ref)		
	C367-6**	Retainer (RH, not shown; Ref)		
14	AN526832R9**	Screw (Ref)		
15	C238-3**	Door Jamb (LH, Ref)		
16	C238-27**	Retainer (LH, Ref)		
	C238-28**	Retainer (RH, Ref)		

NOTES * See Figure 52-19.
 ** See Figure 52-15.

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CHAPTER 53

FUSELAGE

<u>Figure</u>	<u>Title</u>	<u>Page</u>
53-1	Side Cowling Assemblies	53.0
53-5	Aft Cowling Assembly	53.4
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53-13	Tailcone Cowling Assembly	53.12
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53-19	Frame Assemblies	53.18
53-23	Frame Assemblies	53.22
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53-37	F004-2 Empennage Assembly	53.36
53-41	C004-2 Empennage Assembly	53.40
53-45	F050-2 Horizontal Stabilizer Installation	53.44
53-47	C050-2 Float Stabilizer Installation	53.46
53-49	Wind Deflector Installation	53.48
53-51	Lower Console Assembly	53.50

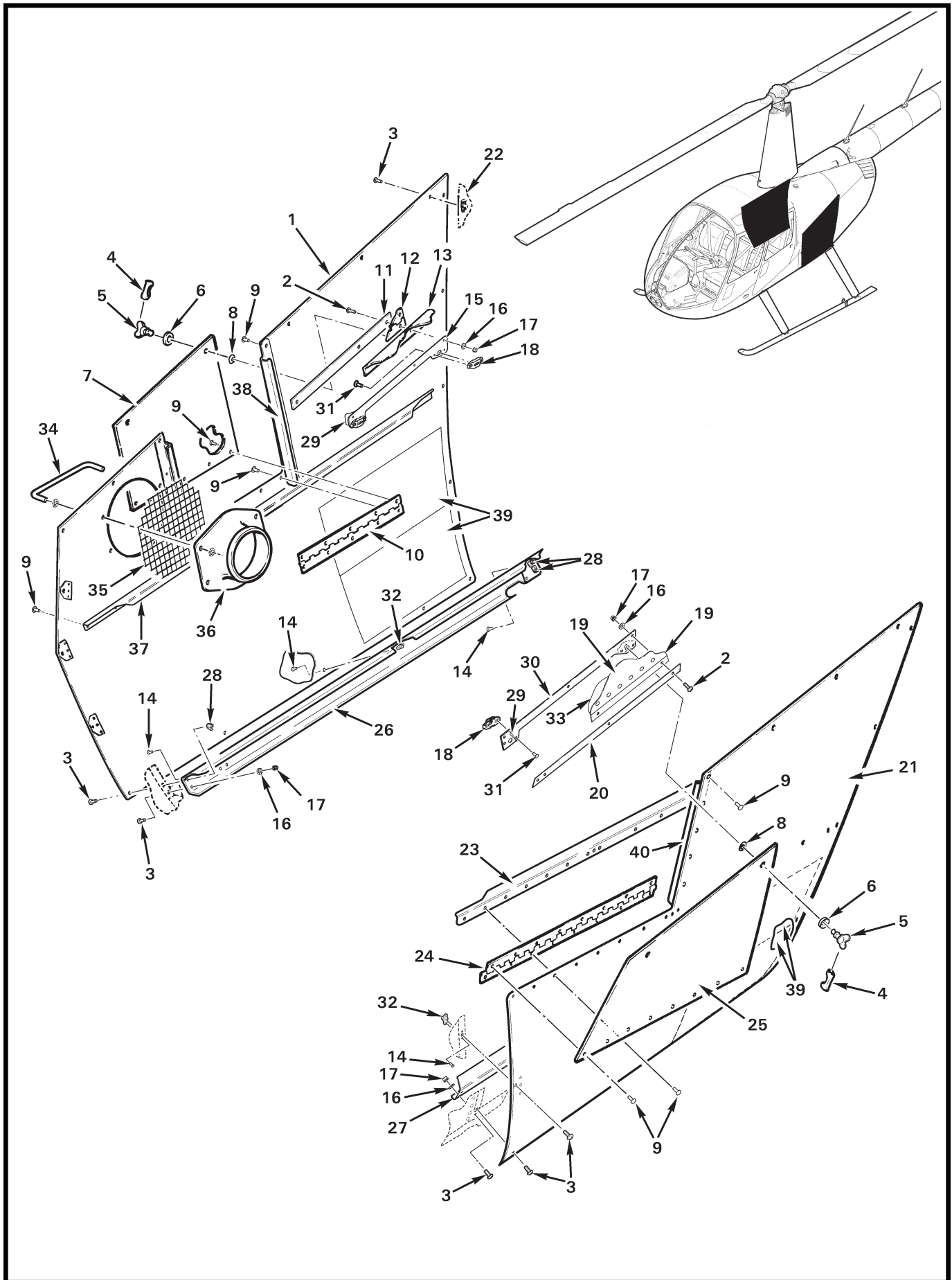


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
FRAME ASSEMBLIES				
53-23-1	C046-21	Lower Frame Assembly – LH (14V R44s, and Earlier non-A/C R44 IIs. Supersedes item 4. Has provision for 7.80 in. length battery box.)	X	1
	2 D046-2	Strut Weldment (LH, ship S/N 0001 thru 9999)	X	1
	3 D046-1	Strut Weldment (LH, ship S/N 10001 and subsequent)	X	1
	4 C046-19	Lower Frame Assembly – LH (No longer available; has provisions for 10.05-in. length battery box. Earlier R44 IIs require C046-23 [see Figure 53-19] frame assembly if A/C is installed.)	O	1
NOTES				

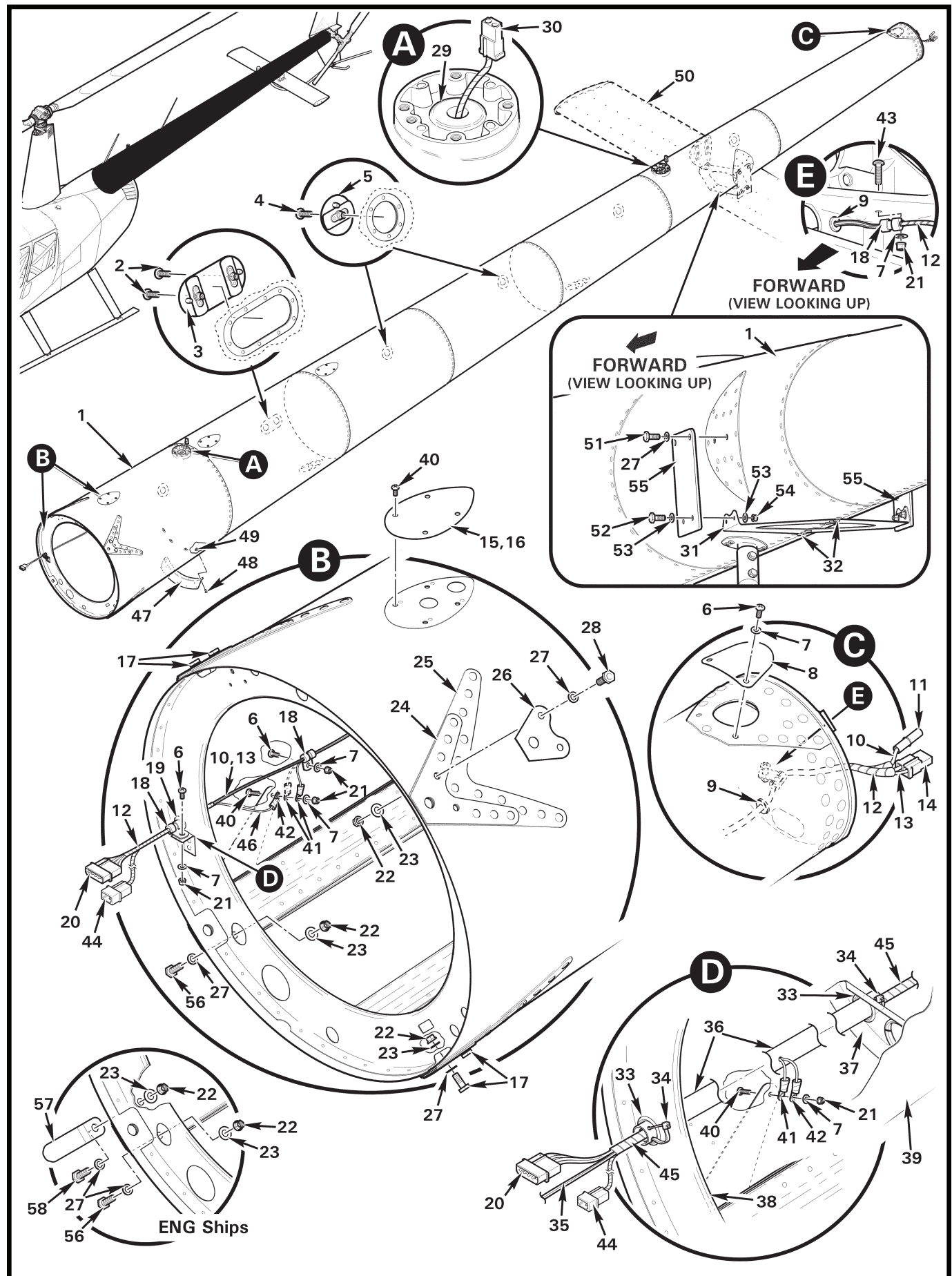


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		TAILCONE ASSEMBLY (LED STROBE)		
53-25-1	C023-1	Tailcone Assembly (Provision for two antennas as shown. Includes items 3, 5 thru 14, 17 thru 32, 43, and 44. Also order items 51, 52, or 53 as required.)	X	1
	C023-4	Tailcone Assembly (For ENG helicopter. Provision for four antennas. Includes Battery box installation. See also Figures 96-29 and 96-31. Includes items 3, 5 thru 8, 10 thru 17, 19 thru 36, 43, 44, and 46; not shown. Also order items 51, 52, or 53 as required.)	X	1
	C023-14	Tailcone Assembly (Provision for four antennas plus NAV antennas. Includes items 3, 5 thru 14, and 17 thru 32; not shown. Also order items 51, 52, or 53 as required.)	X	1
	C023-15	Tailcone Assembly (Provision for two antennas plus NAV antennas. Includes items 3, 5 thru 14, and 17 thru 32; not shown. Also order items 51, 52, or 53 as required.)	X	1
2	MS27039C0807	Screw	X	2
3	A231-10	Plug Assembly (Incl item 2 [2])	X	1
4	MS27039C0807	Screw	X	5
5	A231-1	Plug Assembly (Incl item 4 [1])	X	5
6	MS27039C0806	Screw	X	2
7	NAS1149FN816P	Washer	X	7
8	A558-2	Cover – Tailcone	X	1
9	MS35489-33	Grommet	X	1
10	-109	Wire (Ref, tail light power)		
11	B263-11	Housing (wires to tail light)	X	1
	B263-2	Socket	X	1
12	B161-2	Spirap	X	A/R
13	-5	Wire (Ref, TRGB chip detector warning light)		
	-503	Wire (Ref, TRGB chip detector warning light test switch)		
14	B263-13	Housing (wires to tail rotor gearbox chip detector)	X	1
	B263-2	Socket	X	2
15	B322-2	Cover (install using item 16 when antenna is not installed) . . .	X	A/R
16	B270-13	Sealant	X	A/R
17	NAS6604-4	Bolt	X	4
18	MS21919WDG2	Clamp	X	3
19	B401-4	Grommet	X	1
20	B263-16	Housing	X	1
	B263-1	Pin	X	4

NOTES

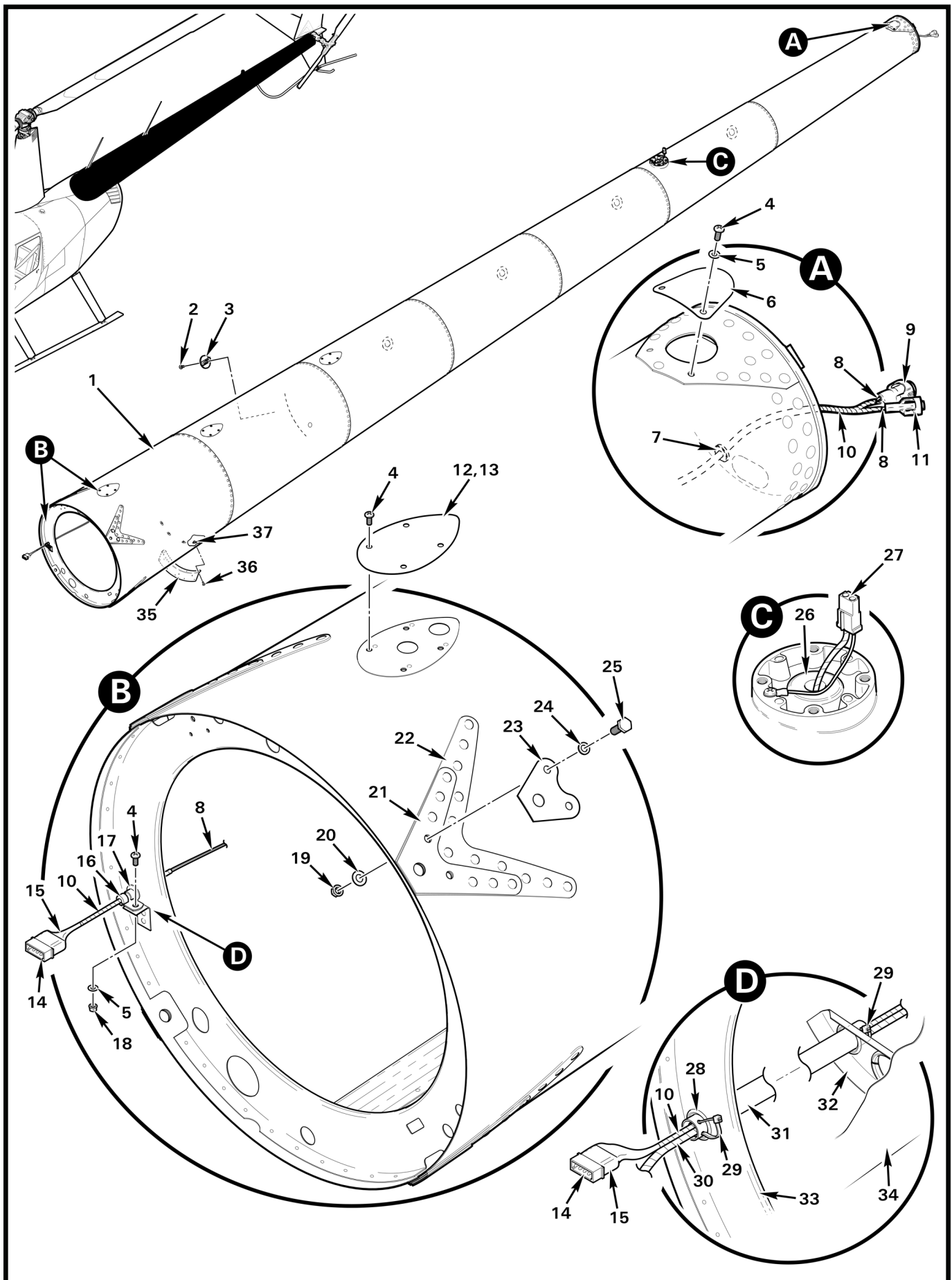
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FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
TAILCONE ASSEMBLY (LED STROBE; Cont'd)				
53-25-21	MS21042L08	Nut	X	A/R
22	D210-4	Nut	X	14
23	A141-11	Washer	X	14
24	D078-2	Doubler (Ref)		
25	D078-3	Doubler (Ref)		
26	D078-1	Doubler	X	4
27	NAS1149F0432P	Washer	X	18
28	NAS6604-3	Bolt	X	2
29	MS35489-15	Grommet	X	1
30	B263-13	Housing	X	1
	B263-2	Socket	X	2
31	F955-1*	Bracket (Revision AW and subsequent, AV and prior with item 62 installed)	X	1
32	MS20470AD5	Rivet	X	6
33	NAS557-10A	Grommet (for tailcone camera installation only)	X	8
34	MS3367-5-9	Ty-Rap	X	2
35	C023-757	Cable (Ref)		
	C023-2815	Wire (Ref)		
36	D686-1	Conduit	X	1
37	D080-1	Bulkhead Assembly (Ref)		
38	D070-1	Bulkhead Assembly (Ref)		
39	C023-12	Skin (Ref)		
40	MS27039C0807	Screw	X	8
41	B260-3	Terminal (Ref, see Figure 33-1)		
42	B260-9	Terminal (Ref, see Figure 33-1)		
43	MS27039C0808	Screw	X	1
44	B263-12	Housing	X	1
	B263-3	Pin (-2388 power; additional -2854 ground wire, optional fwd strobe)	X	A/R
45	B161-4	Spirap (E.N.G. ships)	X	A/R
46	-2854	Wire	X	1
47	D300-1	Support (Ref, see Figure 53-5)		
	D300-2	Support (Ref, see Figure 53-5)		
48	MS27039C0806	Screw (Ref, see Figure 53-5)		
49	MS21069L08	Nutplate (Ref, see Figure 53-5)		

NOTES * Item 1 with F955-1 bracket may not be installed on R44 I helicopters if C169-1 exhaust muffler assembly (smaller, 6-in. dia. shroud assembly) is installed. (C169-35 exhaust muffler assembly, or C169-36 muffler sub-assembly may be installed per Figure 71-21).

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
TAILCONE ASSEMBLY (LED STROBE; Cont'd)				
53-25-50	F050-2	Horizontal Stabilizer Assembly (Ref, see Figure 53-45)		
51	NAS6604-3	Bolt	X	4
52	NAS6603-2	Bolt	X	4
53	NAS1149F0332P	Washer	X	8
54	D210-3	Nut	X	4
55	MT023-2	Support – Stabilizer Bracket (install when stabilizer is removed, using existing hardware)	X	2
56	NAS6604-5	Bolt	X	2
57	D399-3	Tab (install using item 58, for ENG helicopter)	X	1
58	NAS6604-6	Bolt	X	1
* * *				
59	KI-204-1 & -2	R44-series KI-204-1 [14-volt], KI-204-2 [28-volt] R44-series Airframe Provisions for Single LED-Strobe Tailcone Kit Instructions (Kit removes A708 strobe power supply and provides wiring for current production LED strobe-equipped-only tailcones. R44-series helicopters may also require secondary ground wire; see KI-251 for affected serial numbers.)	X	A/R
60	KI-276	R44-series and R66 B264-XX Connector Upgrade Kit Instructions (Replaces obsoleted B264-XX connectors with B263-XX connectors on C049-1 tail rotor gearbox chip detector harness assembly. C023 tailcone aft wire harness, and tail light wire on C044 horizontal stabilizer harness.)	X	A/R
61	KI-277-1	C023 Tailcone with GMU 44 Magnetometer Installation Kit Instructions (Transfers existing GMU 44 Magnetometer and F951-2 harness assembly optionally installed on R44 S/N 1068 & prior, R44 II S/N 14473 & prior, and Cadet S/N 30077 & prior, to C023 tailcone revision AV. See Figure 97-9.)	X	A/R
62	KI-285-2	R44-series Horizontal Stabilizer Retrofit Kit Instructions (Replaces C044-1 horizontal stabilizer with F044-1 vertical stabilizers mount assembly, and installs F050-2 horizontal symmetrical stabilizer assembly. Kit is not approved for R44 I helicopters fitted with C169-1 exhaust muffler assembly which has a shroud diameter of 6.0 inches.)	X	A/R
NOTES				



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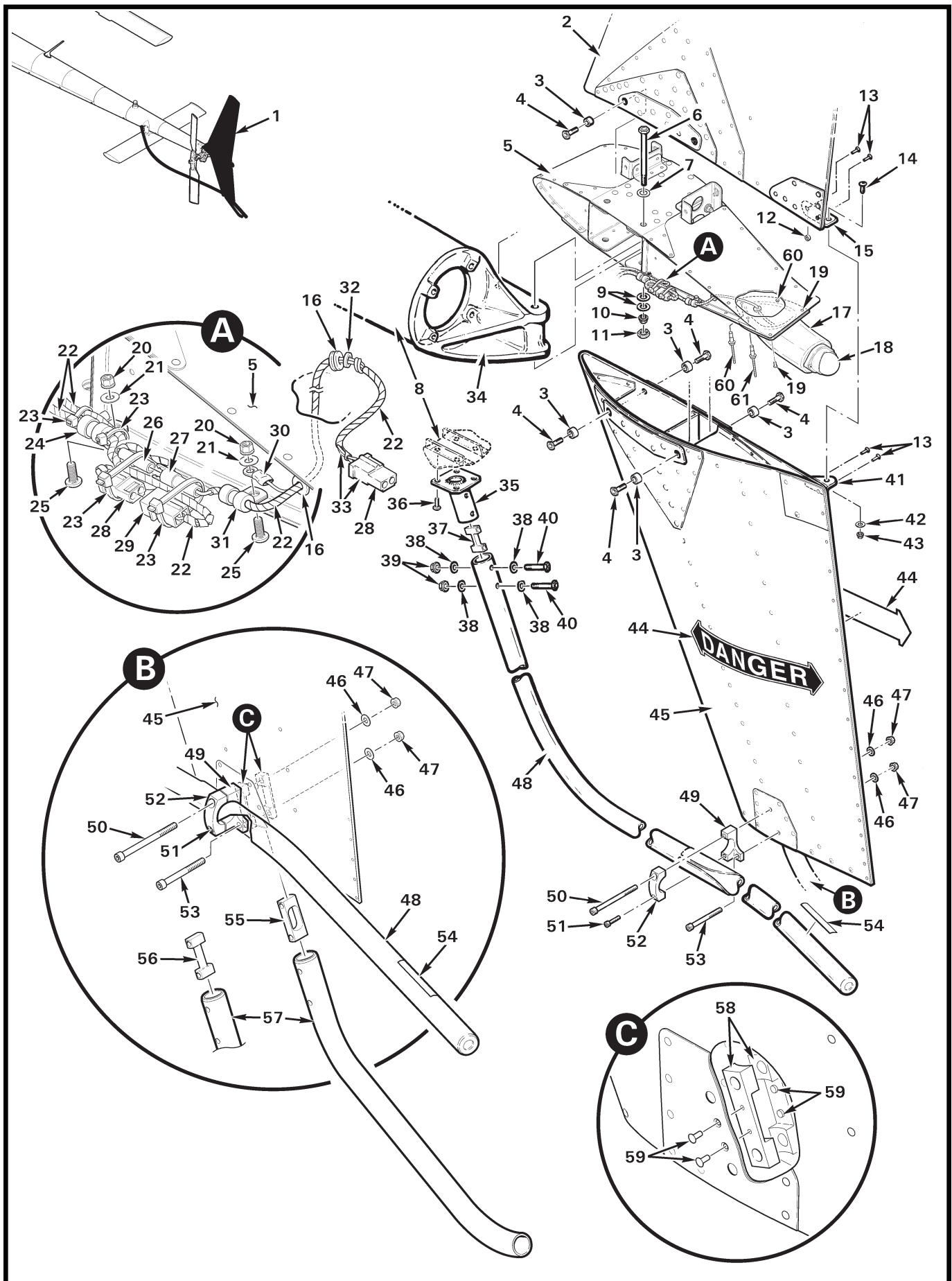


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
F004-2 EMPENNAGE ASSEMBLY				
53-37-1	F004-2*	Empennage Assembly (Incl items 2 thru 5, 12 thru 15, 41 thru 43, and 45)	X	1
2	C042-1	Stabilizer – Upper Vertical (does not include items 12, 13, and 15)	X	1
3	C130-9	Spacer	X	8
4	NAS6604-6	Bolt	X	8
5	F044-1*	Mount Assembly – Vertical Stabilizers (Incl items 17, 19, 33, 60, and 61)	X	1
6	NAS6606-47	Bolt	X	2
7	NAS1149F0632P	Washer	X	2
8	C023-1, -4, -14, & -15	Tailcone Assembly (Ref, see Figure 53-25)		
9	NAS1149F0663P	Washer ([1] or [2] under nut as required to meet torque requirements per R44 MM § 23-30 Part E.)	X	A/R
10	D210-6	Nut	X	2
11	B330-19	Palnut	X	2
12	A130-14	Spacer	X	1
13	MS20470AD4	Rivet	X	4
14	MS35206-228	Screw	X	1
15	C554-2	Clip – Upper (Vertical Stabilizer)	X	1
16	MS35489-4	Grommet	X	2
17	C529-1	Mount Assembly – Tail Light	X	1
18	01-0771554-01**	Light Assembly – Tail Light (Ref, see Figure 33-7)		
19	MS20470AD3	Rivet	X	2
20	MS21042L08	Nut	X	2
21	NAS1149FN816P	Washer	X	2
22	B161-2	Spirap	X	A/R
23	MS3367-5-0	Ty-Rap	X	A/R
24	MS21919WDG3	Clamp	X	1
25	MS27039C0806	Screw	X	2
26	B263-11	Housing	X	1
	B263-2	Socket	X	1
27	B263-10	Housing	X	1
	B263-1	Pin	X	1
28	B263-13	Housing	X	2
	B263-2	Socket	X	4

NOTES * May only be installed if F955-1 bracket is installed on tailcone, see Figure 53-25.
 ** Whelen part number.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
F004-2 EMPENNAGE ASSEMBLY (Cont'd)				
53-37-29	B263-12	Housing	X	1
	B263-1	Pin	X	2
30	B260-3	Terminal	X	1
31	MS21919WDG2	Clamp	X	1
32	90295A075	Washer	X	1
33	D049-8	Wire Harness Assembly – Tail Light (includes items 16, 22, 27, 28 [1], 30, 32, and wires; assembled)	X	1
34	C148	Bulkhead Assembly (Ref)		
35	D082-1	Tube Assembly – Tail Rotor Guard Mount (lightly coat mating surface to item 48 with wet primer)		
36	MS27039C1-07	Screw	X	4
37	D081-1	Spacer (lightly coat mating surface to item 35 with wet primer prior to installation)	X	1
38	NAS1149F0332P	Washer	X	4
39	D210-3	Nut	X	2
40	NAS6603-16	Bolt (install using wet primer on shank)	X	2
41	C554-1	Clip – Lower (Vertical Stabilizer)	X	1
42	NAS1149FN616P	Washer	X	1
43	MS21042L06	Nut	X	1
44	C654-2	Decal – "DANGER"	X	2
45	C043-1	Stabilizer – Lower Vertical (includes items 58 and 59; does not include items 13, 41, 44, and 57)	X	1
46	NAS1149F0432P	Washer	X	2
47	D210-4	Nut	X	2
48	D079-1	Tail Rotor Guard Assembly (Includes item 54; does not include items 35 and 37. Lightly coat inside top of guard with wet primer prior to installing item 35. Seal around seam with primer after installation.)	X	1
49	D081-4	Block Assembly	X	1
50	NAS1351-4-51P	Screw	X	1
51	NAS1352-3-14P	Screw	X	1
52	D081-2	Block – Cap	X	1
53	NAS1351-4-36P	Screw	X	1
54	C654-18	Decal – "NO HAND HOLD"	X	1
55	C470-3	Spacer	X	1
56	C470-3	Spacer (Ref; revision I and prior no longer available)		
57	C470-1	Tail Skid	X	1

NOTES

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
F004-2 EMPENNAGE ASSEMBLY (Cont'd)				
53-37-58	C470-2	Block	X	2
59	MS20426AD3	Rivet	X	4
60	NAS9301B-4-01	Rivet (or NAS9301B-4-02)	X	2
61	NAS9301B-4-02	Rivet (or NAS9301B-4-03)	X	1
NOTES				

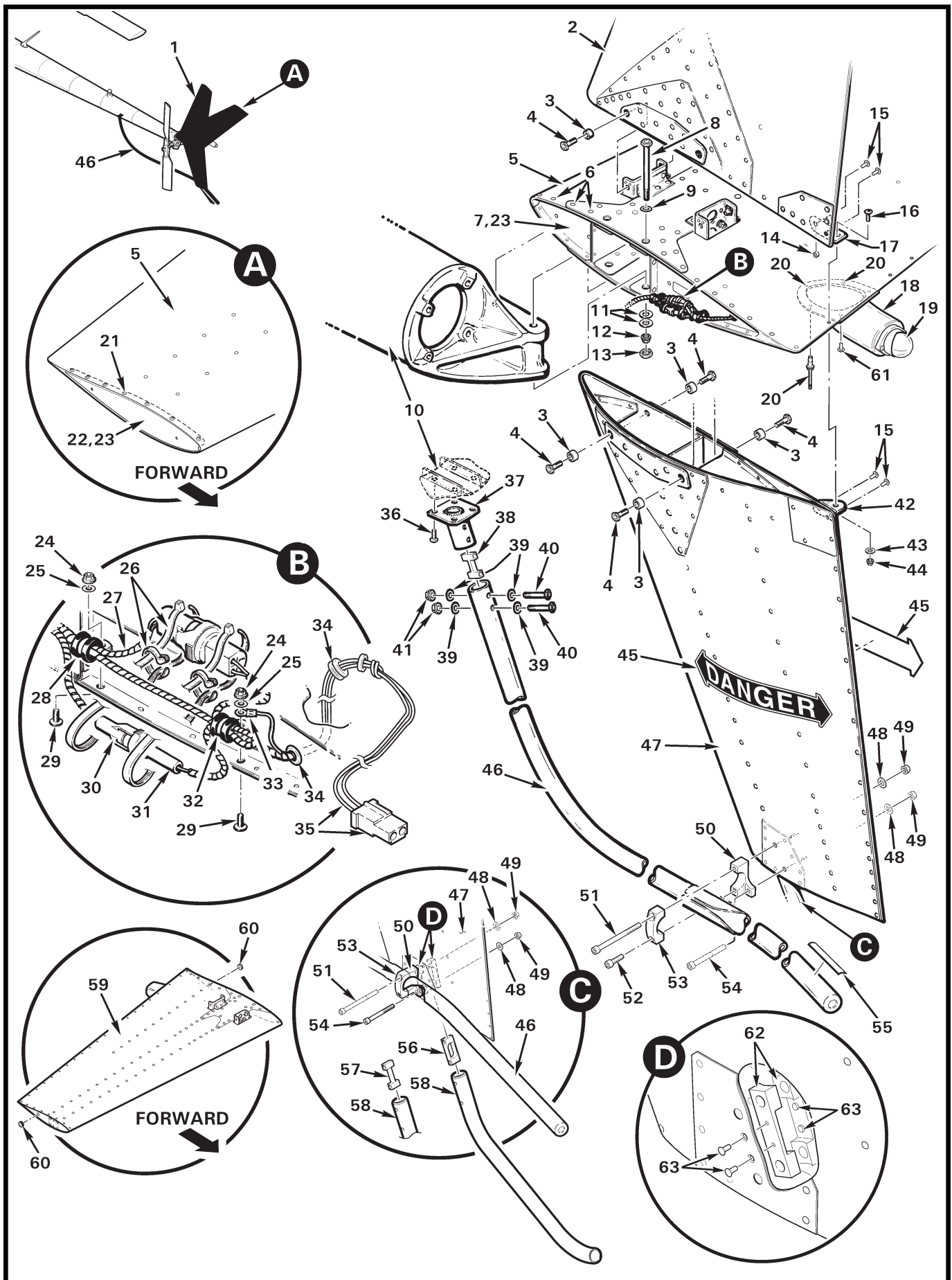


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		C004-2 EMPENNAGE ASSEMBLY		
53-41-1	C004-2*	Empennage Assembly (Includes items 2 thru 5, 14 thru 17, 23, 42 thru 44, and 47, does not include item 45. Also order item 64 as required.)	X	1
2	C042-1	Stabilizer – Upper Vertical (does not include items 14, 15, and 17)	X	1
3	C130-9	Spacer	X	8
4	NAS6604-6	Bolt	X	8
5	C044-1*	Stabilizer – Horizontal (Incl items 6, 7, 18, 20 thru 23, and 35)	X	1
6	MS20470AD3	Rivet	X	10
7	D292-2	Rib (inboard; seal around joint using item 23)	X	1
8	NAS6606-47	Bolt	X	2
9	NAS1149F0632P	Washer	X	2
10	C023	Tailcone Assembly (Ref)		
11	NAS1149F0663P	Washer ([1] or [2] under nut to meet torque requirements per R44 MM § 23-30 part E.)	X	A/R
12	D210-6	Nut	X	2
13	B330-19	Palnut	X	2
14	A130-14	Spacer	X	1
15	MS20470AD4	Rivet	X	4
16	MS35206-228	Screw	X	1
17	C554-2	Clip – Upper Vertical Stabilizer	X	1
18	C529-1	Mount Assembly – Tail Light	X	1
19	01-0771554-01**	Light Assembly – Tail Light (Ref, see Figure 33-7)		
20	NAS9301B-4-02	Rivet (or NAS1919B04S02)	X	3
21	NAS9301B-4-01	Rivet (or NAS1919B04S01)	X	14
22	D292-3	Rib (outboard; seal around joint using item 23)	X	1
23	B270-1	Sealant	X	1
24	MS21042L08	Nut	X	2
25	NAS1149FN816P	Washer	X	2
26	MS3367-5-9	Ty-Rap	X	4
27	B161-2	Spirap	X	A/R
28	MS21919WDG3	Clamp	X	1
29	MS27039C0806	Screw	X	2
30	B264-11	Housing	X	1
	B264-2	Socket	X	1

NOTES * May not be installed if F955-1 bracket is installed on tailcone, see Figure 53-25.
 ** Whelen part number.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
C004-2 EMPENNAGE ASSEMBLY (Cont'd)				
53-41-31	B264-10	Housing	X	1
	B264-1	Pin	X	1
32	MS21919WDG2	Clamp	X	1
33	B260-3	Terminal	X	1
34	MS35489-4	Grommet	X	2
35	D049-3	Wire Harness Assembly – Tail Light (Includes items 27, 30, 34, B264-1 pin, [2] B264-2 sockets, B264-13 housing, 90295A075 plastic washer, and wires; assembled. Replaced by D049-8, see Figure 53-37.)	X	1
36	MS27039C1-07	Screw	X	4
37	D082-1	Tube Assembly – Tail Rotor Guard Mount (lightly coat mating surface to item 46 with wet primer)	X	1
38	D081-1	Spacer (lightly coat with wet primer prior to installation)	X	2
39	NAS1149F0332P	Washer	X	4
40	NAS6603-16	Bolt (install using wet primer)	X	2
41	D210-3	Nut	X	2
42	C554-1	Clip – Lower Vertical Stabilizer	X	1
43	NAS1149FN616P	Washer	X	1
44	MS21042L06	Nut	X	1
45	C654-2	Decal – “Danger”	X	2
46	D079-1	Tail Rotor Guard (Includes item 55. Lightly coat inside top of guard with primer before installing item 37. Seal around seam with primer after installation.)	X	1
47	C043-1	Stabilizer – Lower Vertical (includes items 23, 62, and 63; does not include items 42, 45, and 58)	X	1
48	NAS1149F0432P	Washer	X	2
49	D210-4	Nut	X	2
50	D081-4	Block Assembly	X	1
51	NAS1351-4-51P	Screw	X	1
52	NAS1352-3-14P	Screw	X	1
53	D081-2	Block – Cap	X	1
54	NAS1351-4-36P	Screw	X	1
55	C654-18	Decal – “No Hand Hold”	X	1
56	C470-3	Spacer	X	1
57	C470-3	Spacer (Ref, revision I and prior no longer available)		
58	C470-1	Tail Skid	X	1
59	D097-11*	Stabilizer – Horizontal (Incl items 5 and 60)	X	1

NOTES * ENG ships only.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
C004-2 EMPENNAGE ASSEMBLY (Cont'd)				
53-41-60	MS35489-9*	Grommet	X	2
61	MS20426AD3	Rivet	X	2
62	C470-2	Block	X	2
63	MS20470AD4	Rivet	X	4
* * *				
64	KI-276	R44-series and R66 B264-XX Connector Upgrade Kit Instructions (Replaces obsoleted B264-XX connectors with B263-XX connectors on C049-1 tail rotor gearbox chip detector harness assembly. C023 tailcone aft wire harness, and tail light wire on C044 horizontal stabilizer harness.)	X	A/R

NOTES * ENG ships only.

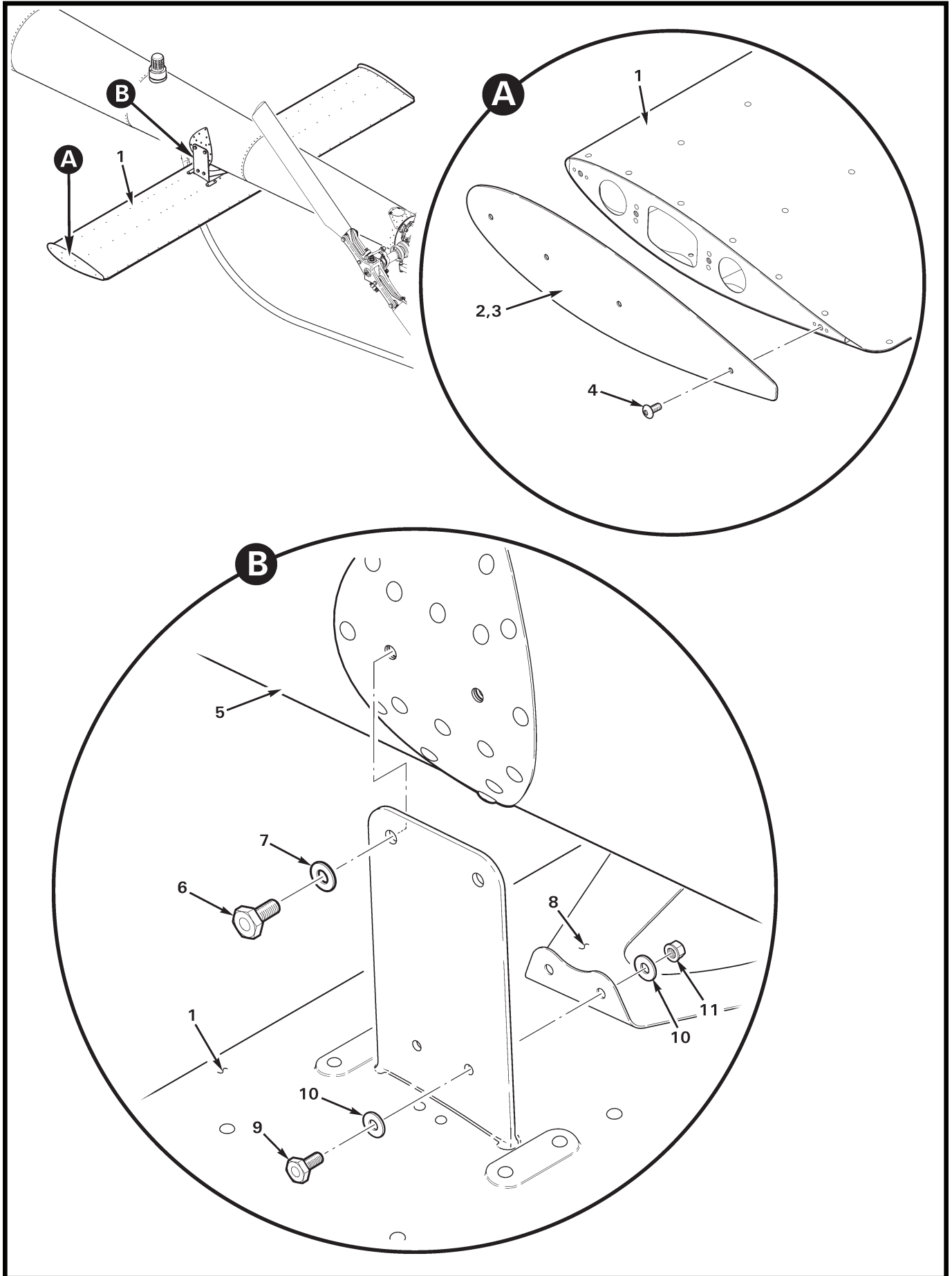


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
F050-2 HORIZONTAL STABILIZER INSTALLATION				
53-45-1	F050-2	Horizontal Stabilizer Assembly (Incl items 2 thru 4)	X	1
2	F952-3	Plate (seal all around plate in joint, where plate attaches to stabilizer using item 3)	X	2
3	B270-1	Sealant	X	A/R
4	B526-66	Screw (do not substitute)	X	8
5	C023-1, -2, -4, -14, & -15*	Tailcone Assembly (Ref)		
6	NAS6604-3*	Bolt (Ref)		
7	NAS1149F0432P*	Washer (Ref)		
8	F955-1*	Bracket (Ref)		
9	NAS6603-2*	Bolt (Ref)		
10	NAS1149F0332P*	Washer (Ref)		
11	D210-3*	Nut (Ref)		
12	A651-1	Data Plate (not shown)	O	1

NOTES * See Figure 53-25.

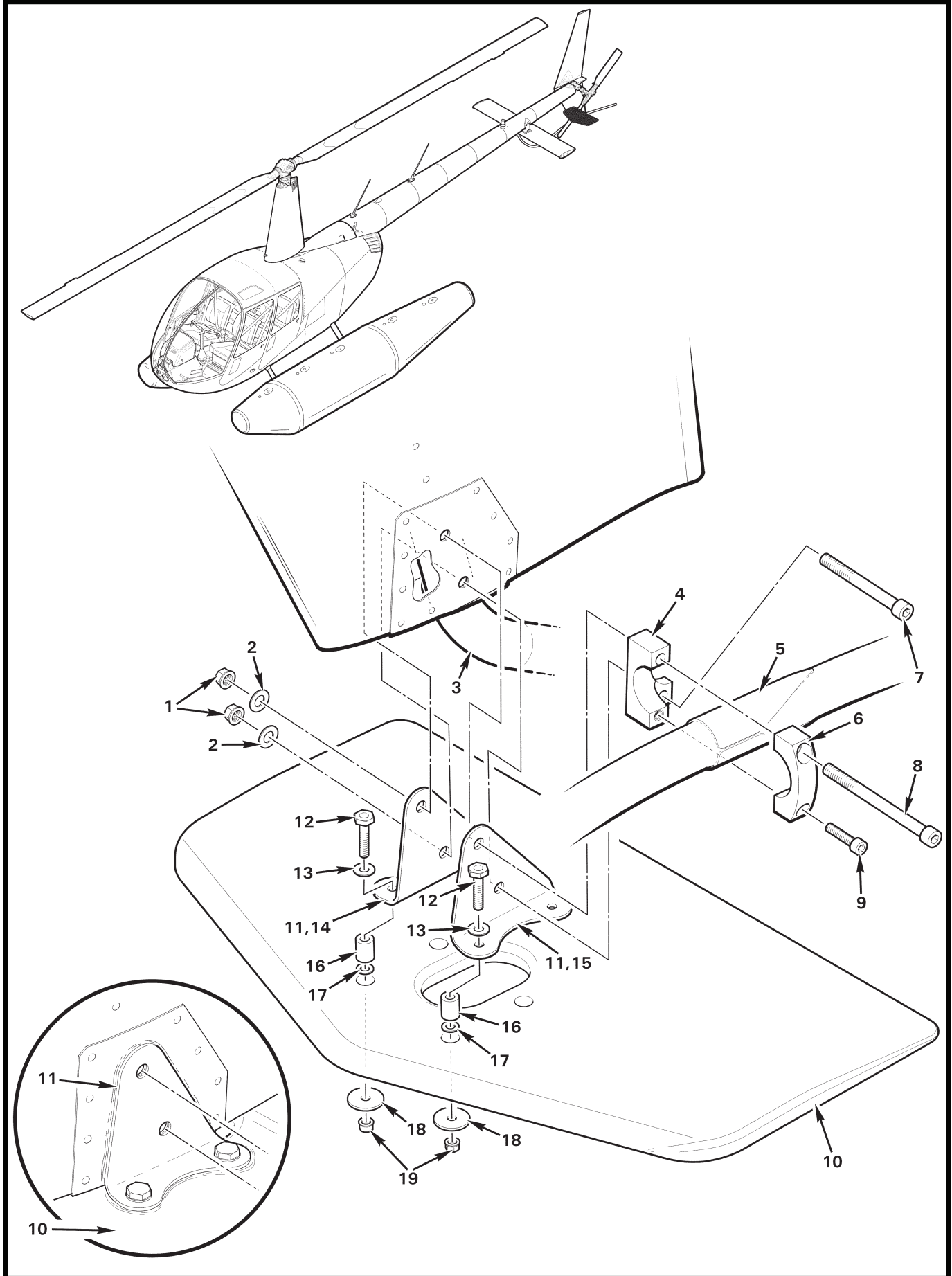


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
C050-2 FLOAT STABILIZER INSTALLATION				
53-47-1	D210-4	Nut	X	2
2	NAS1149F0432P	Washer	X	2
3	C470-1	Tail Skid (Ref, see Figure 53-37)		
4	D081-4	Block Assembly	X	1
5	D079-1	Tail Rotor Guard (Ref, see Figure 53-37)		
6	D081-2	Block – Cap	X	1
7	NAS1351-4-38P	Screw	X	1
8	NAS1351-4-53P	Screw	X	1
9	NAS1352-3-14P	Screw	X	1
10	C050-2	Stabilizer Assembly (Incl items 11 thru 16, 18, and 19)	X	1
11	B270-1	Sealant (2-oz tube)	X	A/R
12	NAS6603-9	Bolt (one exposed thread minimum permissible)	X	4
13	NAS1149F0332P	Washer	X	4
14	C971-4	Bracket (RH, seal around edges using item 11)	X	1
15	C971-3	Bracket (LH, seal around edges using item 11)	X	1
16	A130-35	Spacer	X	4
17	NAS620-10L *	Washer	X	A/R
18	A141-18	Washer (seal around edges using item 11)	X	4
19	MS21042L3	Nut	X	4

NOTES * Install one under item 18, (4) places if stabilizer is more than 0.015-inch thicker than spacer length.

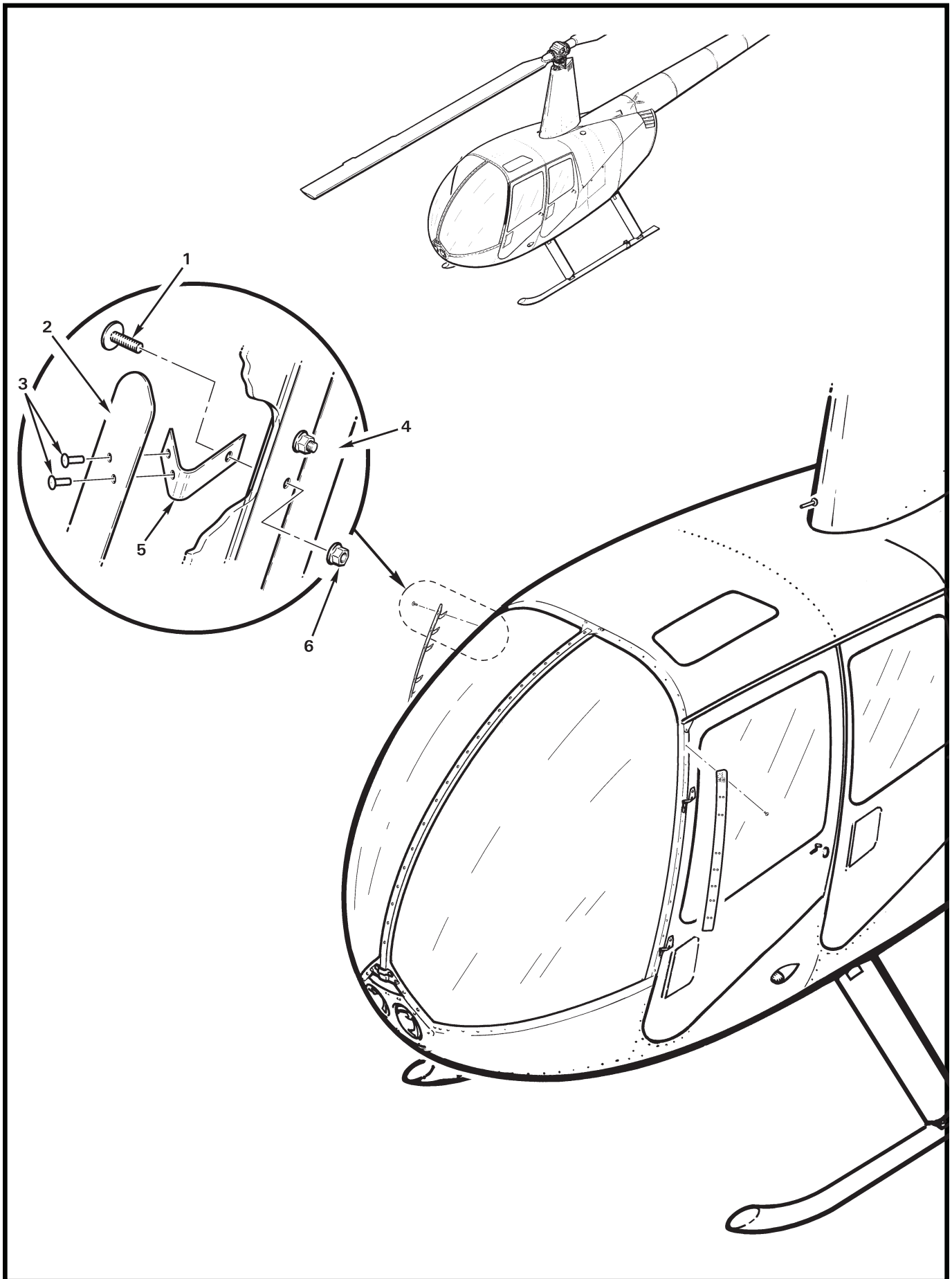


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
WIND DEFLECTOR INSTALLATION				
53-49-1	AN526C832R8	Screw	X	16
2	B228-1	Deflector (LH or RH)	X	2
3	MS20470AD4	Rivet	X	32
4	—	Door Jamb (Ref)		
5	B228-2	Angle	X	16
6	MS21042L08	Nut	X	16
NOTES				

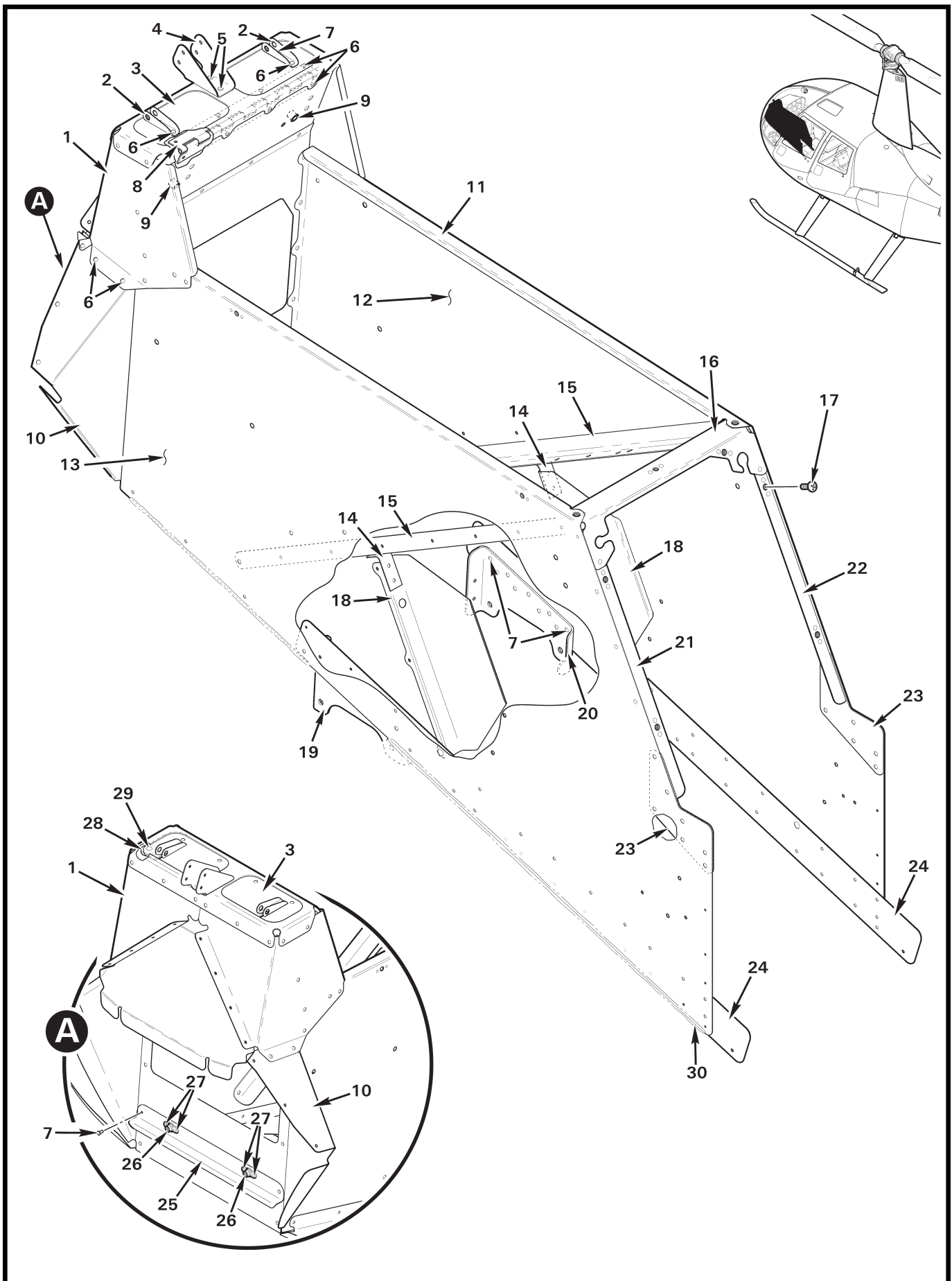


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
LOWER CONSOLE ASSEMBLY				
53-51-1	C062-1	Vent Box Assembly (Incl items 2, 3, and 6 thru 9)	X	1
2	A523-4	Channel	X	2
3	C358-4	Flap	X	1
4	C358-2	Support	X	1
5	MS20426AD4	Rivet	X	3
6	MS20470AD3	Rivet	X	A/R
7	MS20470AD4	Rivet	X	A/R
8	A523-3	Hinge	X	1
9	A130-36	Spacer (install using MS20470AD5 rivet)	X	2
10	C361-1	Panel	X	1
11	C033-1	Lower Console Assembly (Incl items 1, 4, 5, 10, and 12 thru 25)	X	1
12	C359-2	Panel (RH)	X	1
13	C359-1	Panel (LH)	X	1
14	A737-1	Clip	X	2
15	C365-1	Angle	X	2
16	C368-1	Support Assembly (includes MS21069L08 nutplates)	X	1
17	MS27039C0806	Screw	X	5
18	A371-3	Stiffener	X	2
19	A359-1	Support (LH)	X	1
20	A359-2	Support (RH)	X	1
21	C365-5	Angle Assembly (LH, includes MS21075L08E nutplates)	X	1
22	C365-6	Angle Assembly (RH, includes MS21075L08E nutplates)	X	1
23	C365-3	Doubler	X	2
24	C365-4	Doubler	X	2
25	C360-4	Stiffener Assembly (Includes items 26 and 27. Install using item 7 [2].)	X	1
26	MS21069L3	Nutplate	X	2
27	NAS1097AD3	Rivet	X	4
28	C358-7	Weight (install using item 29)	X	1
29	MS20426AD4	Rivet	X	1
30	B270-1	Sealant (for use on Clipper)	X	A/R

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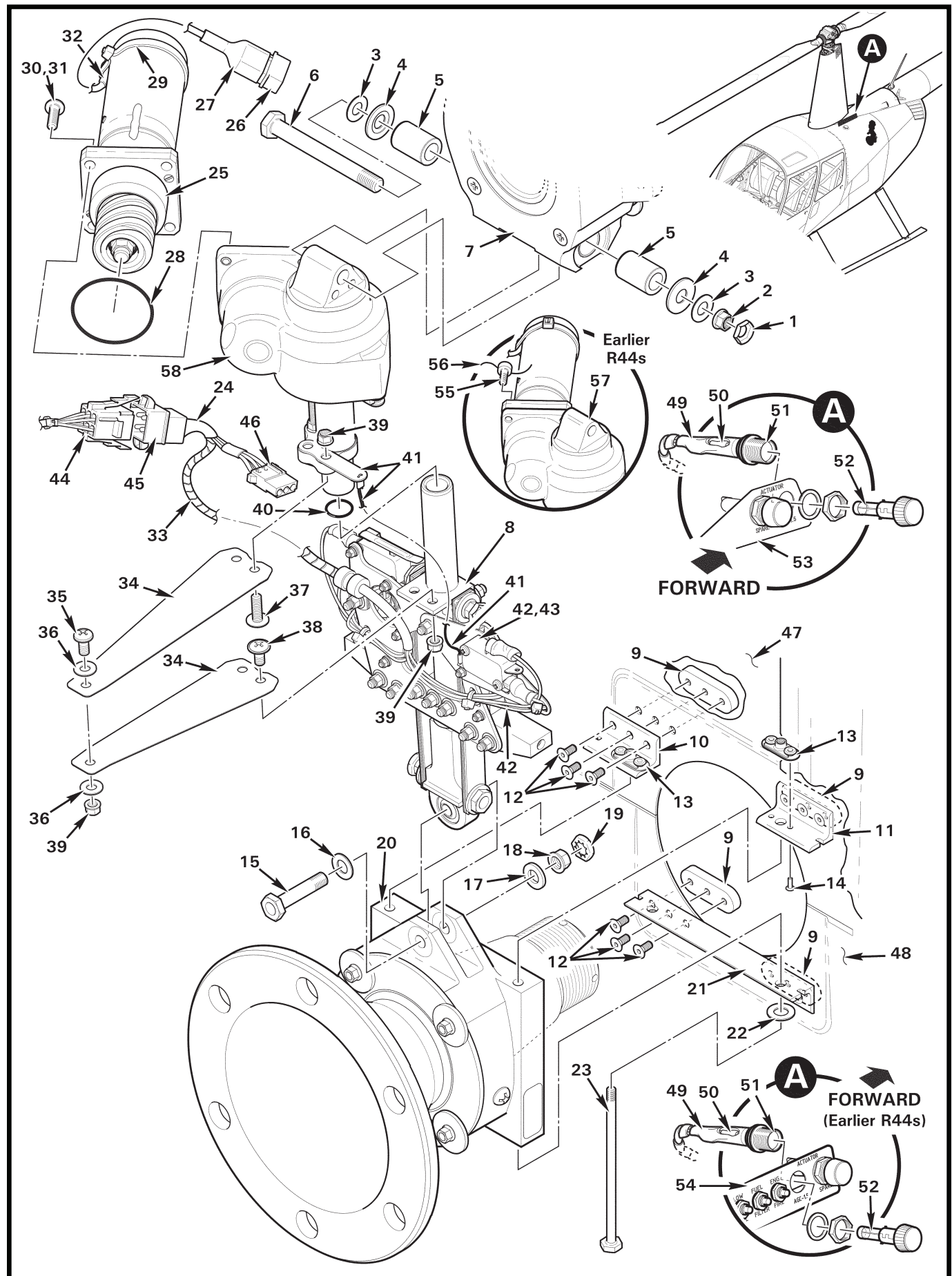


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
BELT TENSION ACTUATOR INSTALLATION				
63-19-1	B330-16	Palnut	X	1
2	D210-5	Nut	X	1
3	NAS1149F0532P	Washer	X	2
4	D214-2	Washer (install with counterbore toward journal)	X	2
5	C105-2	Journal	X	2
6	NAS6605-38	Bolt	X	1
7	C184-2	Upper Bearing Assembly (Ref, see Figure 63-15)		
8	C051-1	Actuator Assembly – Belt Tension (14-volt ships; includes items 25 [D276-1], 28 thru 31, 34 thru 42, and 57 or 58)	X	1
	C051-1R	C051-1 Actuator Assembly – Belt Tension (overhaul exchange; R7624 core deposit required)	X	1
	C051-2	Actuator Assembly – Belt Tension (28-volt ships; includes items 25 [D276-3], 28 thru 31, 34 thru 42, and 57 or 58)	X	1
	C051-2R	C051-2 Actuator Assembly – Belt Tension (overhaul exchange; R7539 core deposit required)	X	1
9	A185-7	Plate	X	4
	A185-3*	Plate	X	4
10	A185-8	Bracket	X	1
	A185-2*	Bracket	X	1
11	A185-9	Bracket	X	1
	A185-5*	Bracket	X	1
12	91266A192	Screw	X	12
	MS20470AD5*	Rivet	X	12
13	MS21075L3E	Nutplate	X	2
14	MS20426AD3	Rivet	X	4
15	NAS6604-13	Bolt	X	1
16	NAS1149F0432P	Washer	X	1
17	NAS1149F0463P	Washer	X	1
18	D210-4	Nut	X	1
19	B330-13	Palnut	X	1
20	C007-5	Shaft and Bearing Assembly (includes C181-3 lower bearing)	X	1
	C181-3	Bearing Assembly (Ref)		
21	A185-6	Bracket	X	1
	A185-1	Bracket	X	1
22	NAS620-10L	Washer	X	2
23	AN3-41A	Bolt	X	2

NOTES * Does not include item 13, refer to R44 Service Letter SL-61B.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
BELT TENSION ACTUATOR INSTALLATION (Cont'd)				
63-19-24	B158-12	Heat Shrink (around item 45)	X	A/R
25	D276-1	Gearmotor Assembly (14-volt ships; includes items 26, 27, and 32)	X	1
	D276-3	Gearmotor Assembly (28-volt ships; includes items 26, 27, and 32)	X	1
26	B263-12	Housing (14-volt ships)	X	1
	B263-14	Housing (28-volt ships)	X	1
	B263-1	Pin	X	2
27	B158-8	Heat Shrink (14-volt ships)	X	A/R
	B158-408	Heat Shrink (28-volt ships)	X	A/R
28	A215-029	O-Ring (lubricate with A257-1 grease)	X	1
29	MS3367-7-0	Ty-Rap	X	1
30	MS27039C1-09	Screw (install using item 31)	X	4
31	A257-9	Anti-Seize	X	A/R
32	B158-704	Heat Shrink (1.1 ± 0.2-inch long)	X	A/R
33	B161-4	Spirap	X	A/R
34	A510-2	Scissor	X	2
35	MS27039C1-06	Screw	X	1
36	NAS1149F0332P	Washer	X	2
37	AN525-10R9	Screw	X	2
38	AN525-10R6	Screw	X	2
39	D210-3	Nut	X	5
40	A215-016	O-Ring (install using A257-1 grease)	X	1
41	A482-1	Actuator Assembly	X	1
42	C053-2	Switches Assembly (Incl items 24, 33, 43 [4], 45, and 46)	X	1
43	V3-1001	Switch (use B158-2 or -3 [item 50] around terminals)	X	4
	B158-2	Heat Shrink	X	A/R
44	C859	Harness Assembly (Ref)		
45	B263-18	Housing (see Figure 96-55)	X	1
	B263-1	Pin	X	1
	B263-3	Pin	X	4
	A15A	Diode	X	1
46	B263-15	Housing	X	1
	B263-2	Socket	X	2
47	C236-1	Scroll Assembly (Ref; upper)		

NOTES

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
BELT TENSION ACTUATOR INSTALLATION (Cont'd)				
63-19-48	C236-2	Scroll Assembly (Ref; lower, without air conditioning)		
	C236-5	Scroll Assembly (Ref; lower, with air conditioning)		
49	B158-8	Heat Shrink (around fuse holder)	X	A/R
50	B158-3	Heat Shrink (around wires, terminal)	X	A/R
51	D262-11	Fuse Holder	X	2
52	AGC-3	Fuse (3 amp; for 14-volt ships, [1] spare)	X	2
	AGC-1.5	Fuse (1.5 amp; for 28-volt ships, [1] spare)	X	2
53	A938-9	Mount (Ref)		
54	A938-3	Mount – Test Switches (Ref; 14-volt)		
	A938-5	Mount – Test Switches (Ref; 28-volt)		
55	AN503-10-10	Screw	X	4
56	MS20995C32	0.032 in. dia. Safety Wire	X	A/R
57	C501-1	Housing	O	1
58	C501-2	Housing	O	1
NOTES				

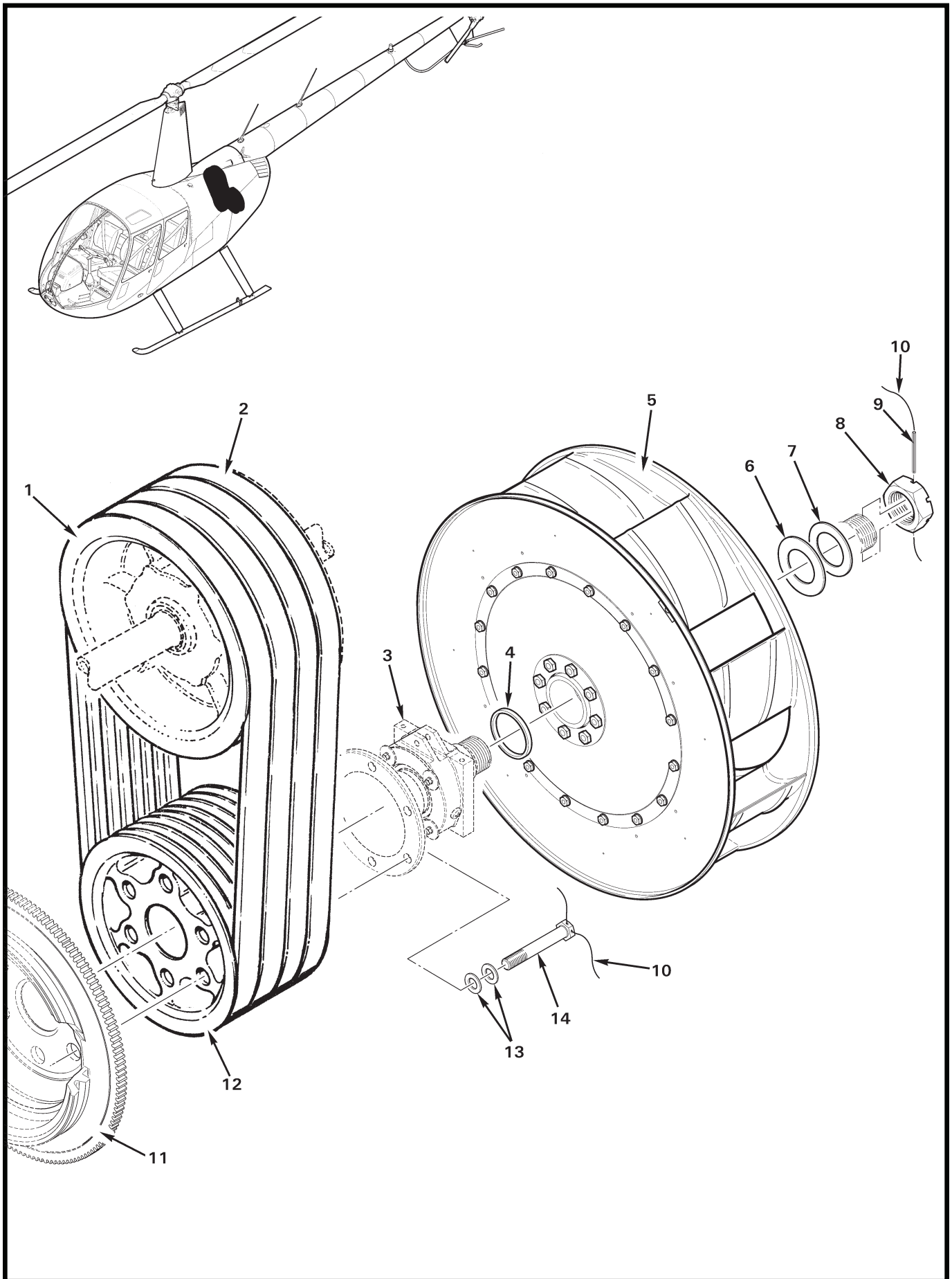


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
COLLECTIVE STICK ASSEMBLY				
67-21-1	C758-1 *	Stick Assembly – Collective (RH [pilot]; includes items 6, 7, 18, 22 thru 24, 26, 28, 30, 31, 40, 43, 54, 56 thru 59, 62, 64, 65, 68 thru 82, and 86)	X	1
2	C758-3**	Stick Assembly – Collective (RH [pilot]; includes items 6, 7, 18, 20 thru 23, 25 thru 28, 30, 31, 39 thru 43, 54, 56 thru 59, 62, 68 thru 70, 72 thru 82, and 86)	X	1
3	C758-2	Stick Assembly (LH [co-pilot]; includes items 23, 51, 52, and 70)	X	1
4	MS27039C0806	Screw	X	3
5	A431-1	Knob	X	1
6	NAS1149FN816P	Washer	X	10
7	MS21042L08	Nut	X	11
8	NAS1352-08LE9P	Screw	X	1
9	A332-2	Lever (supersedes A332-1)	X	1
10	NAS1304-17	Bolt (do not substitute NAS6604-17 bolt)	X	1
11	B340-4	Nut	X	3
12	NAS1352-06-12P	Screw	X	2
13	MS24694-S8	Screw	X	3
14	C329-3	Block Assembly – Collective Bearing	X	1
15	NAS1149FN632P	Washer	X	2
16	MS21042L06	Nut	X	2
17	NAS1149F0432P	Washer	X	3
18	D210-4	Nut	X	3
19	B330-13	Palnut	X	2
20	B158-3	Heat Shrink	X	A/R
21	B263-36	Housing	X	1
	B263-1	Pin	X	4
22	C328-1	Connecting Rod Assembly	X	1
23	A601-1	Grip (install using item 70)	X	2
24	A654-79*	Decal – “Gov, On-Off”	X	1
25	D682-8**	Decal – “Gov, On-Off/Start/Throttle (Open)”	X	1
26	A654-7	Decal – “Friction Increase”	X	1
27	C341-1	Arm (Ref; see Figure 76-5)		
28	NAS1351-4-28P	Screw	X	1
29	B330-7	Palnut	X	1
30	D210-3	Nut	X	3
31	NAS1149F0363P	Washer	X	1

NOTES * Ship S/N 0001 thru 9999.
 ** Ship S/N 10001 and subsequent.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
COLLECTIVE STICK ASSEMBLY (Cont'd)				
67-21-32	A105-6	Journal	X	1
33	NAS1149F0332P	Washer	X	3
34	MS27039C1-08	Screw	X	1
35	C303-1	Support	X	1
36	NAS6604-11	Bolt	X	1
37	B227-4	Dress Nut	X	1
38	B227-3	Lockwasher	X	1
39	B280-5*	Switch Assembly (engine starter, includes items 37 and 38) . .	X	1
40	A959-2	End Cap (install using item 70)	X	1
41	B252-7*	Bracket	X	1
42	B252-8*	Mount (install using item 70)	X	1
43	B280-1	Switch Assembly (Incl items 37 and 38)	X	1
44	NAS6603-5	Bolt	X	1
45	A141-20	Washer (arrange teflon facing item 49)	X	2
46	B0500-022-S	Belleville Washer	X	2
47	NAS1352-4-24P	Screw	X	1
48	NAS1149F0463P	Washer (or NAS1149F0432P)	X	A/R
49	A333-1	Stop	X	1
50	A130-4	Spacer	X	1
51	A959-1	End Cap (install using item 70)	X	1
52	A654-6	Decal – "Throttle Open"	X	1
53	A654-21	Decal – "No Stowage"	X	2
54	A127-3	Rod End	X	1
55	NAS6603-6	Bolt	X	2
56	AN315-3R	Nut	X	1
57	A430-3	Tube	X	1
58	A498-1	Rod End	X	1
59	NAS620-10L	Washer	X	2
60	B263-32	Housing	X	1
	B263-1	Pin	X	2
61	B158-3	Heat Shrink (around wires)	X	1
	B158-8	Heat Shrink (around connector)	X	2

NOTES * Ship S/N 10001 and subsequent.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
COLLECTIVE STICK ASSEMBLY (Cont'd)				
67-21-62	B247-5	Governor Assembly (14-volt; Includes items 60 and 61. R44 I S/N 0001 thru 2624; R44 Cadet 30001 thru 30060, 30062 thru 30070; R44 II S/N 10001 thru 14363, and 14365 thru 14411.)	X	1
	B247-9	Governor Assembly (28-volt; Includes items 60 and 61. R44 I S/N 2625 and subsequent; R44 Cadet 30061, 30071 and subsequent; R44 II S/N 14364, 14412 and subsequent.)	X	1
63	MS27039C0816	Screw	X	1
64	B263-32	Housing	X	1
	B263-1	Pin	X	2
65	B158-2	Heat Shrink	X	A/R
66	NAS1149FN832P	Washer	X	1
67	C342-1*	Arm	X	1
68	MS16562-18	Roll Pin	X	4
69	MS20995C32	0.032 in. dia. Safety Wire	X	A/R
70	B270-15	Adhesive	X	A/R
71	B252-4*	Mount (install using item 70)	X	1
72	A765-2	Coupling Assembly (Ref)		
73	NAS1149D0616J	Washer	X	A/R
74	A141-16	Washer	X	6
75	A139-1	Bearing	X	7
76	MS27039C0810	Screw	X	3
77	B330-6	Palnut	X	3
78	NAS1352N08-4	Screw	X	2
79	A325-1	Arm	X	3
80	04DU04	Bushing	X	3
81	A105-5	Journal	X	3
82	A486-2	Screw	X	3
83	NAS6604-9	Bolt	X	1
84	A141-11	Washer	X	2
85	C121-19	Push-Pull Tube (Ref, see Figure 67-41)		
86	C341-3*	Arm (Ref, see Figure 76-1)		
87	V3-1	Switch – Low RPM Warning/Hourmeter (Ref, see Figure 96-57)		
88	C015	Cabin Assembly (Ref)		

NOTES * Ship S/N 0001 thru 9999.

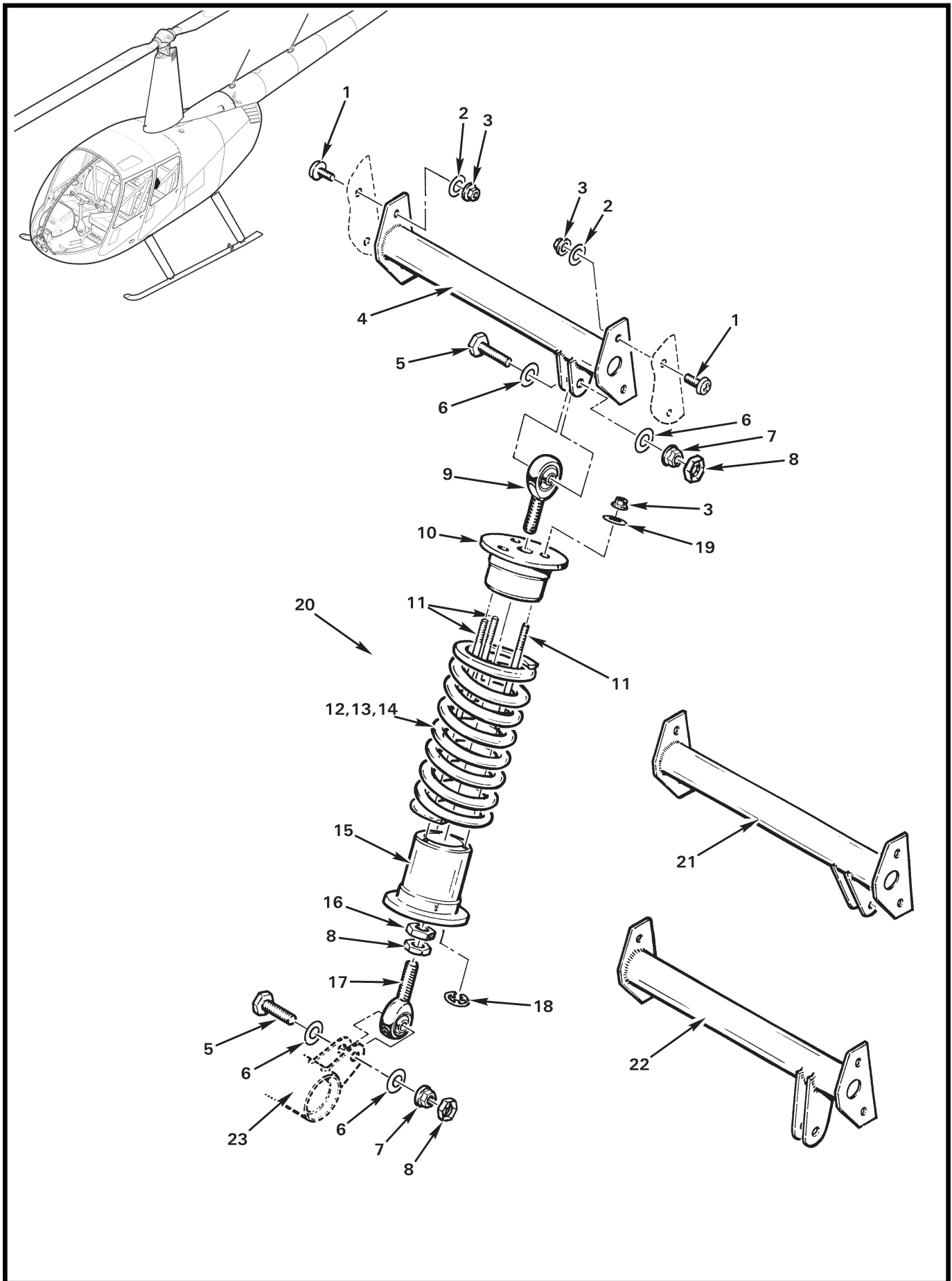


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		EXHAUST MUFFLER ASSEMBLY		
71-21-1	C169-37*	Exhaust Muffler Assembly (Includes C169-38 assembly, items 6, 12, 20 thru 25, 29 thru 34, 36, and 38. 7.2-in. dia.)	X	1
	C169-38*	Muffler Assembly (Incl items 32 and 33)	X	1
2	C169-35**	Exhaust Muffler Assembly (Includes C169-36 assembly, items 6, 12, 20 thru 22, 24, 25, 29 thru 33, 36, and 38 thru 40. 7.2-in. dia.)	X	1
	C169-36**	Muffler Assembly (Incl items 32 and 33)	X	1
3	NAS1149FN816P	Washer	X	5
4	MS21042L08	Nut	X	4
5	NAS1149FN832P	Washer	X	2
6	MS21042L3	Nut	X	2
7	C173-1	Bracket	X	1
8	NAS1149FN816P	Washer (as required for proper offset, 1 min, 4 max)	X	A/R
9	C173-2	Strap	X	2
10	C173-3	Strap	X	1
11	NAS1149F0363P	Washer	X	2
12	C169-18	Tail Pipe (Ref)		
13	MS27039C0806	Screw	X	3
14	MS27039C0807	Screw	X	1
15	MS27039C1-06	Screw (or MS27039C1-07)	X	2
16	NAS1149F0332P	Washer (as required for proper offset, 1 min, 3 max)	X	A/R
17	77611	Gasket	X	6
18	NAS1149F0532P	Washer	X	12
19	21FKF-518	Nut	X	12
20	C169-8	Riser (cylinder #2)	X	1
21	A169-14	Bead Clamp	X	12
22	C169-10	Riser (cylinder #4)	X	1
23	C169-30*	Riser (cylinder #6)	X	1
24	C169-6	Collector (RH)	X	1
25	C169-44	Clamp	X	2
26	MS51861-35	Screw	X	9
27	A6052-8Z-1	Nut (or A6052-8Z-1)	X	4
28	MS21043-3	Nut (or MS21042L3)	X	32
29	C169-7	Riser (cylinder #1)	X	1
30	C169-25	Bead Clamp	X	4
31	C169-5	Collector (LH)	X	1

NOTES * IO-540 Engine.
 ** O-540 Engine.

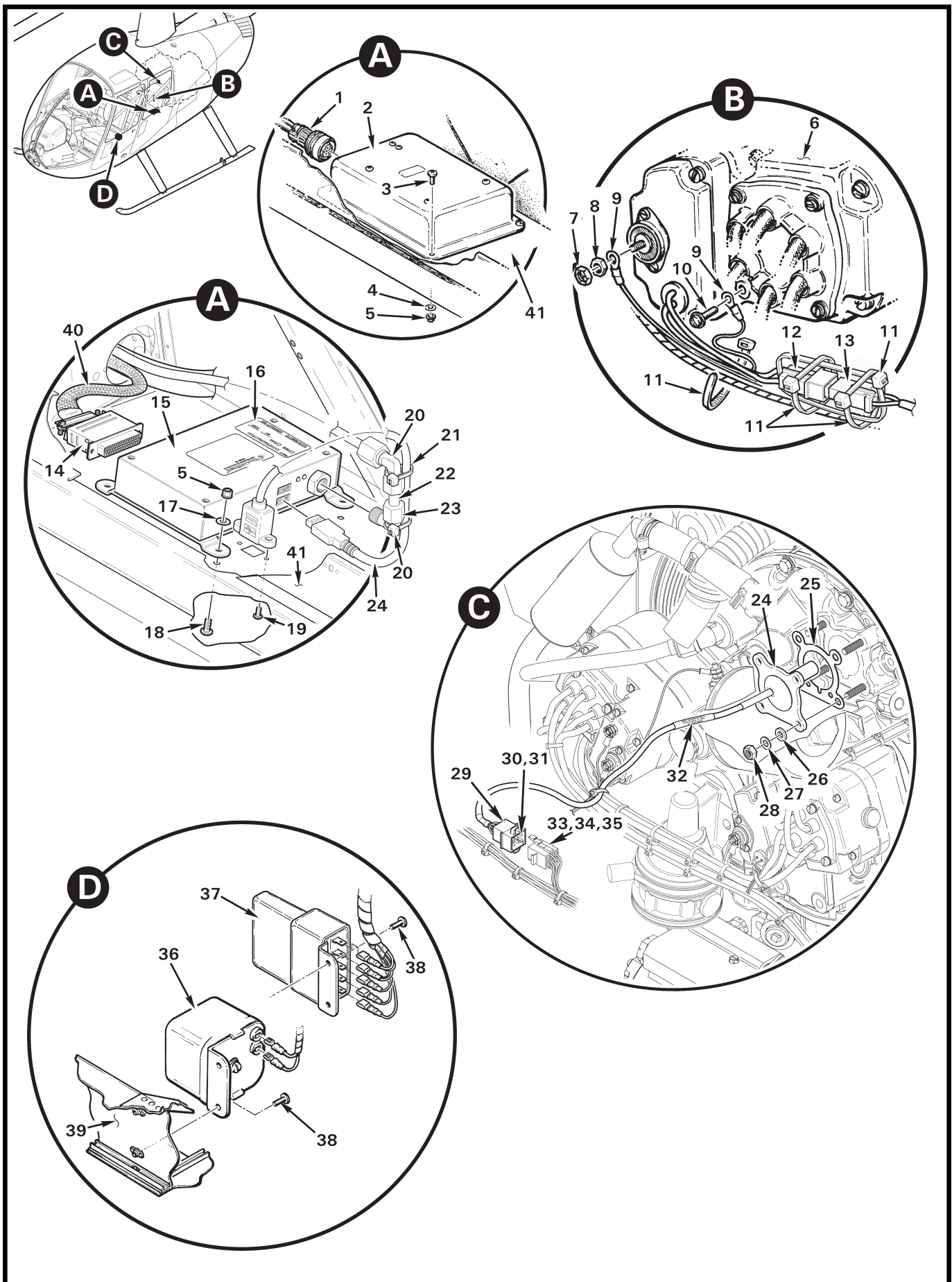
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FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
EXHAUST MUFFLER ASSEMBLY (Cont'd)				
71-21-31	C169-5	Collector (LH)	X	1
32	AN3-4A	Bolt (or AN3C4A)	X	32
33	NAS1149F0332P	Washer	X	32
34	C169-29*	Riser (cylinder #5)	X	1
35	C169-17	Exhaust Pipe (Ref)		
36	C169-39	Shroud Assembly (Revision T and higher. Includes items 30, 31, and 39.)	X	1
37	A701-10	Tape (1" stainless steel; under each bead clamp)	X	A/R
38	C169-9	Riser (cylinder #3)	X	1
39	C169-12**	Riser (cylinder #6)	X	1
40	C169-11**	Riser (cylinder #5)	X	1
41	B277-036	Clamp (Ref, see Figure 71-25)		
42	D314-2	Shield Assembly (Ref, see Figure 71-25)		
43	D314-1	Shield Assembly (Ref, see Figure 71-25)		
44	B277-48	Clamp (Ref, see Figure 71-25)		
45	D317-1	Shield Assembly (Ref, see Figure 71-25)		
46	C169-34	Clamp	X	2
47	C169-1**	Exhaust Muffler Assembly (Includes C169-3 assembly, items 6 thru 10, and 21 thru 29. 6.0-in. dia.)	X	1
	C169-3**	Muffler Assembly (Incl items 12 and 35)	O	1
48	C169-31*	Exhaust Muffler Assembly (Includes C169-32 assembly, items 6, 7, 9, 10, 21 thru 26, 28, 29, 37, and 38. 6.0-in. dia.)	X	1
	C169-32*	Muffler Assembly (Incl items 12 and 35)	O	1
49	C169-2	Shroud Assembly (revision K thru S; 6.0-in. dia.)	X	1
50	C169-2	Shroud Assembly (revision J and prior; 6.0-in. dia.)	O	1

NOTES * IO-540 Engine.
 ** O-540 Engine.

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 (R44 I ship S/N 0001 thru 2624, and R44 Cadet S/N 30001 thru 30060, and 30062 thru 30070)	X	1
	D278-1R	D278-1 Controller Assembly – Governor (overhaul exchange; R7534 core deposit required)	X	1
	D278-2	Controller Assembly – Governor (R44 II ship S/N 10001 thru 14363, and 14365 thru 14411)	X	1
	D278-2R	D278-2 Controller Assembly – Governor (overhaul exchange; R9615 core deposit required)	X	1
3	MS27039C0806	Screw	X	4
4	NAS1149FN816P	Washer	X	4
5	MS21042L08	Nut	X	4
6	10-176487-121*	Starting Vibrator (14-volt ships)	X	1
	10-357487-241*	Starting Vibrator (28-volt ships)	X	1
7	SS1002**	Vibrator 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.



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6.3	JAN 2014	6.34	APR 2016	10.2	JAN 2014
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71.42	JAN 2014	76.5	MAY 2016	90.5	JAN 2014
71.43	JAN 2014	76.6	MAY 2016	90.6	JAN 2014
71.44	JAN 2014	76.7	APR 2016	90.7	JAN 2014
71.45	JAN 2014	76.8	APR 2016	90.8	JAN 2014
71.46	JAN 2014	76.9	FEB 2020	90.9	JAN 2014
71.47	JAN 2014	76.10	FEB 2020	90.10	JAN 2014
71.48	JAN 2014	76.11	JAN 2014	90.11	JAN 2014
71.49	DEC 2021	76.12	JAN 2014	90.12	JAN 2014
71.49A	DEC 2021	76.13	JAN 2014	90.13	JAN 2014
71.49B	DEC 2021	76.14	JAN 2014	90.14	JAN 2014
71.49C	DEC 2021	76.15	JAN 2014	90.15	JAN 2014
71.49D	DEC 2021	76.16	JAN 2014	90.16	JAN 2014
71.50	DEC 2021	76.17	FEB 2020	90.17	JAN 2014
71.51	JAN 2014	76.18	FEB 2020	90.18	JAN 2014

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90.19	JAN 2014	92.18	FEB 2020	95.4	FEB 2020
90.20	JAN 2014	92.19	FEB 2020	95.5	FEB 2020
90.21	JAN 2014	92.20	FEB 2020	95.6	FEB 2020
90.22	JAN 2014	92.21	JAN 2014	95.7	FEB 2020
90.23	JAN 2014	92.22	JAN 2014	95.8	FEB 2020
90.24	JAN 2014	92.23	JAN 2014	95.9	FEB 2020
90.25	JAN 2014	92.24	JAN 2014	95.10	FEB 2020
90.26	JAN 2014	92.25	JAN 2014	95.11	FEB 2020
90.27	JAN 2014	92.26	JAN 2014	95.12	FEB 2020
90.28	JAN 2014	92.27	JAN 2014	95.13	FEB 2020
90.29	JAN 2014	92.28	JAN 2014	95.14	FEB 2020
90.30	JAN 2014	92.29	JAN 2014	95.15	FEB 2020
		92.30	JAN 2014	95.16	FEB 2020
92.i	FEB 2020	92.31	JAN 2014	95.17	FEB 2020
92.0	FEB 2020	92.32	JAN 2014	95.18	FEB 2020
92.1	JAN 2014	92.33	JAN 2014	95.19	FEB 2020
92.2	JAN 2014	92.34	JAN 2014	95.20	FEB 2020
92.3	JAN 2014	92.35	FEB 2020	95.21	FEB 2020
92.4	JAN 2014	92.36	FEB 2020	95.22	FEB 2020
92.5	JAN 2014	92.37	FEB 2020	95.23	FEB 2020
92.6	JAN 2014	92.38	FEB 2020	95.24	FEB 2020
92.7	JAN 2014			95.25	FEB 2020
92.8	JAN 2014	94.i	DEC 2021	95.26	FEB 2020
92.9	JAN 2014	94.0	DEC 2021	95.27	FEB 2020
92.10	JAN 2014	94.1	DEC 2021	95.28	FEB 2020
92.11	JAN 2014	94.2	DEC 2021	95.29	FEB 2020
92.12	JAN 2014	94.3	DEC 2021	95.30	FEB 2020
92.13	JAN 2014	94.4	DEC 2021	95.31	FEB 2020
92.14	JAN 2014			95.32	FEB 2020
92.15	JAN 2014	95.i	FEB 2020	95.33	FEB 2020
92.16	JAN 2014	95.ii	FEB 2020	95.34	FEB 2020
92.17	FEB 2020	95.iii	FEB 2020	95.35	FEB 2020
92.17A	FEB 2020	95.0	FEB 2020	95.36	FEB 2020
92.17B	FEB 2020	95.1	FEB 2020	95.37	FEB 2020
92.17C	FEB 2020	95.2	FEB 2020	95.38	FEB 2020
92.17D	FEB 2020	95.3	FEB 2020	95.39	FEB 2020

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95.40	FEB 2020	95.76	FEB 2020	96.17	JAN 2014
95.41	FEB 2020	95.77	FEB 2020	96.18	JAN 2014
95.42	FEB 2020	95.78	FEB 2020	96.19	JAN 2014
95.43	FEB 2020	95.79	FEB 2020	96.20	JAN 2014
95.44	FEB 2020	95.80	FEB 2020	96.21	JAN 2014
95.45	FEB 2020	95.81	FEB 2020	96.22	JAN 2014
95.46	FEB 2020	95.82	FEB 2020	96.23	JAN 2014
95.47	FEB 2020	95.83	FEB 2020	96.24	JAN 2014
95.48	FEB 2020	95.84	FEB 2020	96.25	JAN 2014
95.49	FEB 2020			96.26	JAN 2014
95.50	FEB 2020	96.i	DEC 2021	96.27	JAN 2014
95.51	FEB 2020	96.ii	DEC 2021	96.28	JAN 2014
95.52	FEB 2020	96.iii	JAN 2014	96.29	JAN 2014
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95.55	FEB 2020	96.2	JAN 2014	96.32	JAN 2014
95.56	FEB 2020	96.3	JAN 2014	96.33	JAN 2014
95.57	FEB 2020	96.4	JAN 2014	96.34	JAN 2014
95.58	FEB 2020	96.5	JAN 2014	96.35	JAN 2014
95.59	FEB 2020	96.6	JAN 2014	96.36	JAN 2014
95.60	FEB 2020	96.7	JAN 2014	96.37	JAN 2014
95.61	DEC 2021	96.8	JAN 2014	96.38	JAN 2014
95.62	DEC 2021	96.9	JAN 2014	96.39	JAN 2014
95.63	FEB 2020	96.10	JAN 2014	96.40	JAN 2014
95.64	FEB 2020	96.11	DEC 2021	96.41	JAN 2014
95.65	FEB 2020	96.12	DEC 2021	96.42	JAN 2014
95.66	FEB 2020	96.12A	DEC 2021	96.43	FEB 2020
95.67	FEB 2020	96.12B	DEC 2021	96.44	FEB 2020
95.68	FEB 2020	96.12C	DEC 2021	96.45	JAN 2014
95.69	FEB 2020	96.13	DEC 2021	96.46	JAN 2014
95.70	FEB 2020	96.13A	DEC 2021	96.47	FEB 2020
95.71	FEB 2020	96.13B	DEC 2021	96.48	FEB 2020
95.72	FEB 2020	96.13C	DEC 2021	96.49	FEB 2020
95.73	FEB 2020	96.14	DEC 2021	96.50	FEB 2020
95.74	FEB 2020	96.15	DEC 2021	96.51	FEB 2020
95.75	FEB 2020	96.16	DEC 2021	96.52	FEB 2020

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96.54	FEB 2020	97.3	FEB 2020	97.37	FEB 2020
96.55	JAN 2014	97.4	FEB 2020	97.38	FEB 2020
96.56	JAN 2014	97.5	FEB 2020	97.39	FEB 2020
96.57	JAN 2014	97.6	FEB 2020	97.40	FEB 2020
96.58	JAN 2014	97.7	FEB 2020	97.41	FEB 2020
96.59	JAN 2014	97.8	FEB 2020	97.42	FEB 2020
96.60	JAN 2014	97.9	FEB 2020	97.43	FEB 2020
96.61	JAN 2014	97.10	FEB 2020	97.44	FEB 2020
96.62	JAN 2014	97.11	FEB 2020	97.45	FEB 2020
96.63	FEB 2024	97.12	FEB 2020	97.46	FEB 2020
96.63A	FEB 2024	97.13	FEB 2020	97.47	FEB 2020
96.63B	FEB 2020	97.14	FEB 2020	97.48	FEB 2020
96.63C	FEB 2020	97.15	FEB 2020	97.49	FEB 2020
96.63D	FEB 2020	97.16	FEB 2020	97.50	FEB 2020
96.64	FEB 2020	97.17	FEB 2020	97.51	FEB 2020
96.65	JAN 2014	97.18	FEB 2020	97.52	FEB 2020
96.66	JAN 2014	97.19	FEB 2020	97.53	FEB 2020
96.67	JAN 2014	97.20	FEB 2020	97.54	FEB 2020
96.68	JAN 2014	97.21	FEB 2020	97.55	FEB 2020
96.69	JAN 2014	97.22	FEB 2020	97.56	FEB 2020
96.70	JAN 2014	97.23	FEB 2020	97.57	FEB 2020
96.71	JAN 2014	97.23A	FEB 2020	97.58	FEB 2020
96.72	JAN 2014	97.23B	FEB 2020	97.59	FEB 2020
96.73	JAN 2014	97.24	FEB 2020	97.60	FEB 2020
96.74	JAN 2014	97.25	FEB 2020	97.61	FEB 2020
96.75	JAN 2014	97.26	FEB 2020	97.62	FEB 2020
96.76	JAN 2014	97.27	FEB 2020		
96.77	JAN 2014	97.28	FEB 2020	99.i	FEB 2020
96.78	JAN 2014	97.29	FEB 2020	99.0	FEB 2020
96.79	JAN 2014	97.30	FEB 2020	99.1	FEB 2020
96.80	JAN 2014	97.31	FEB 2020	99.2	FEB 2020
		97.32	FEB 2020	99.3	FEB 2020
97.i	FEB 2020	97.33	FEB 2020	99.4	FEB 2020
97.0	FEB 2020	97.34	FEB 2020	99.5	FEB 2020
97.1	FEB 2020	97.35	FEB 2020	99.6	FEB 2020

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99.8	FEB 2020				
99.9	FEB 2020				
99.10	FEB 2020				
99.11	FEB 2020				
99.12	FEB 2020				
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99.18	FEB 2020				
100.i	DEC 2021				
100.0	DEC 2021				
100.1	FEB 2024				
100.2	FEB 2024				
100.3	FEB 2024				
100.4	FEB 2024				
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100.12	FEB 2024				

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