

## CHAPTER 33

## LIGHTS

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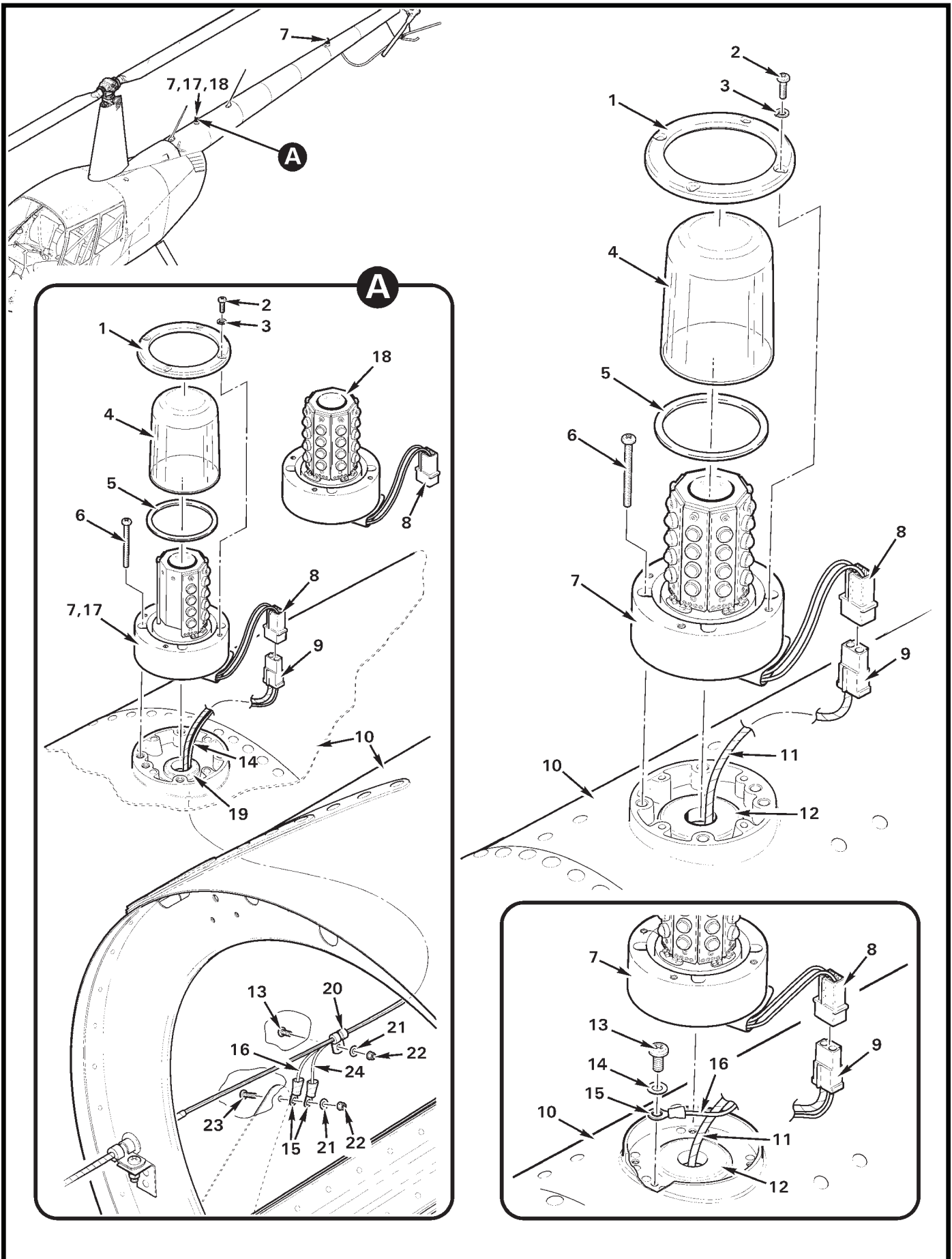


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>STROBE LIGHT INSTALLATION (LED)</b>				
33-1-1	19-171047-100*	Retainer . . . . .	O	1
2	14-0050505-14*	Screw . . . . .	O	4
3	16-0050506135*	Lockwasher (MS35338-135) . . . . .	O	4
4	68-4971082A30*	Lens . . . . .	O	1
5	38-0250885-00*	Gasket . . . . .	O	1
6	MS35206-234	Screw . . . . .	X	4
7	A708-13**	Strobe Light – Red LED (28 volt; optional equipment in forward location. Includes items 1 thru 5, and 8.) . . . . .	X	1
	A708-14**	Strobe Light – Red LED (14 volt; optional equipment in forward location. Includes items 1 thru 5, and 8.) . . . . .	X	1
8	02-0230007-00*	Housing . . . . .	O	1
	—	Pin . . . . .	O	2
9	B263-13	Housing . . . . .	X	1
	B263-2	Socket . . . . .	X	2
10	C023	Tailcone Assembly (Ref)		
11	B161-2	Spirap . . . . .	X	A/R
12	MS35489-15	Grommet . . . . .	X	1
13	MS27039C0806	Screw . . . . .	X	2
14	NAS1149FN832P	Washer . . . . .	X	1
15	B260-3	Terminal . . . . .	X	A/R
16	-2039	Wire (Ref; ground, aft strobe light, earlier R44s)		
17	A708-16**	Strobe Light – White LED (Optional equipment. Includes items 1 thru 5, and 8. Orient with blank strips facing forward.) . . . . .	X	1
18	A708-15**	Strobe Light – Blue LED (Optional equipment. R44 Police only. Includes items 1 thru 5, and 8.) . . . . .	X	1
19	MS35489-11	Grommet . . . . .	X	1
20	MS21919WDG2	Clamp . . . . .	X	1
21	NAS1149FN816P	Washer . . . . .	X	2
22	MS21042L08	Nut . . . . .	X	2
23	MS27039C0808	Screw . . . . .	X	1
24	-2734	Wire (Ref; ground, forward strobe light)		

NOTES \* Whelen part no.  
 \*\* If not previously accomplished, earlier ships require KI-204 Airframe Provisions for Single LED-Strobe Tailcone Kit Installation if an LED-equipped tailcone is to be installed.

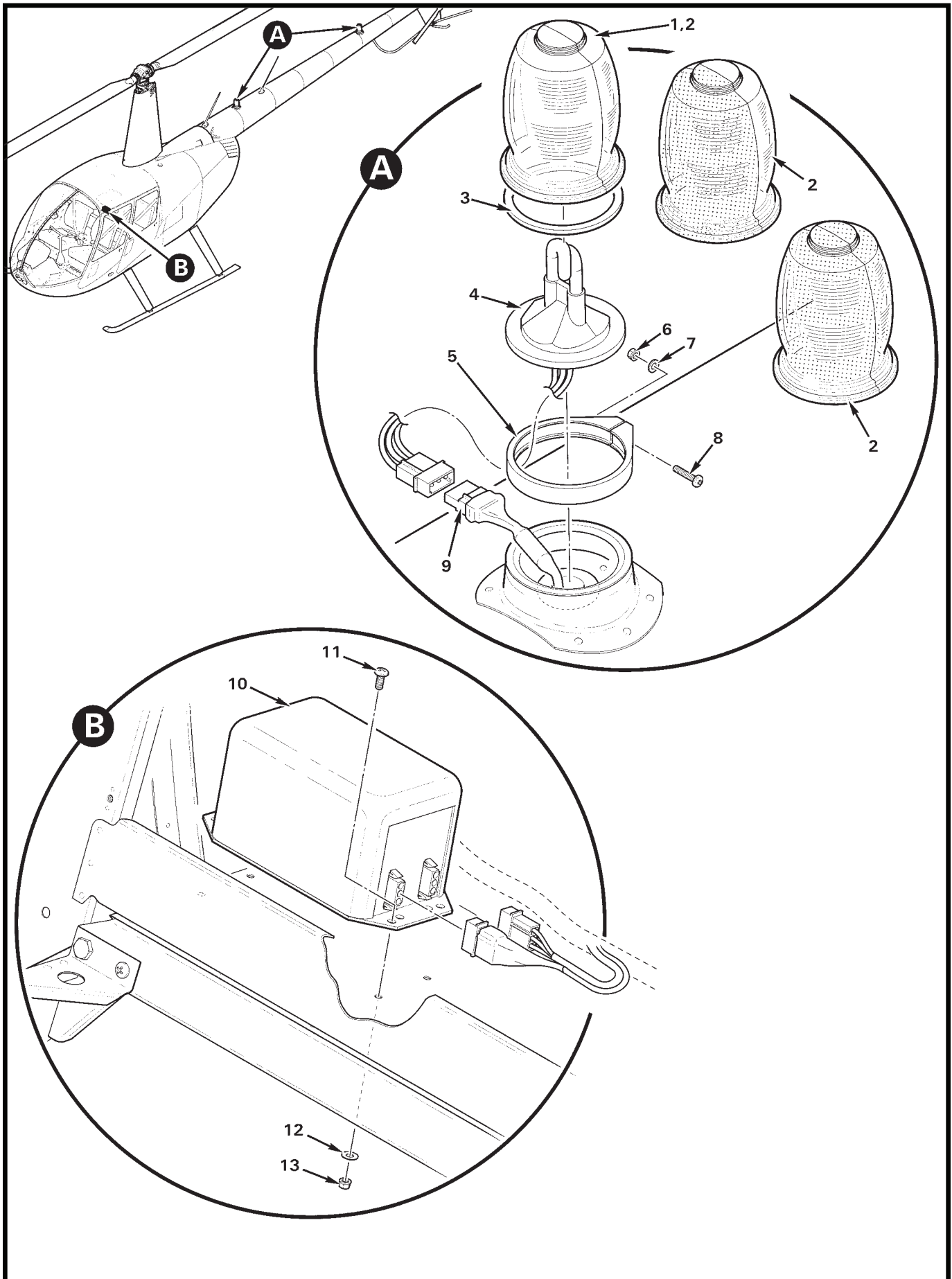


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>STROBE LIGHT INSTALLATION*</b>				
33-3-1	A708-11	Strobe Light Assembly (Incl items 2 [A708-12], 3 thru 5, and 8)	X	1
2	A708-7	Lens Assembly (red) . . . . .	X	1
	A708-10	Lens Assembly (white) . . . . .	X	1
	A708-12	Lens Assembly (red and white) . . . . .	X	1
3	38-0250429-00**	Gasket . . . . .	O	1
4	A469B**	Flash Tube Assembly . . . . .	X	1
5	01-0450685-00**	Clamp . . . . .	X	1
6	MS21042L06	Nut . . . . .	X	1
7	NAS620-6	Washer . . . . .	X	1
8	—	Screw . . . . .	O	1
9	B263-15	Housing (Ref; see Figure 53-33)		
10	A708-1	Strobe Power Supply . . . . .	X	1
11	MS27039C0806	Screw . . . . .	X	4
12	NAS1149FN816P	Washer . . . . .	X	4
13	MS21042L08	Nut . . . . .	X	4

NOTES \* Earlier R44s.  
 \*\* Whelen part no.



FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		<b>NAVIGATION LIGHTS INSTALLATION – RIGHT AND LEFT POSITION*</b>		
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.

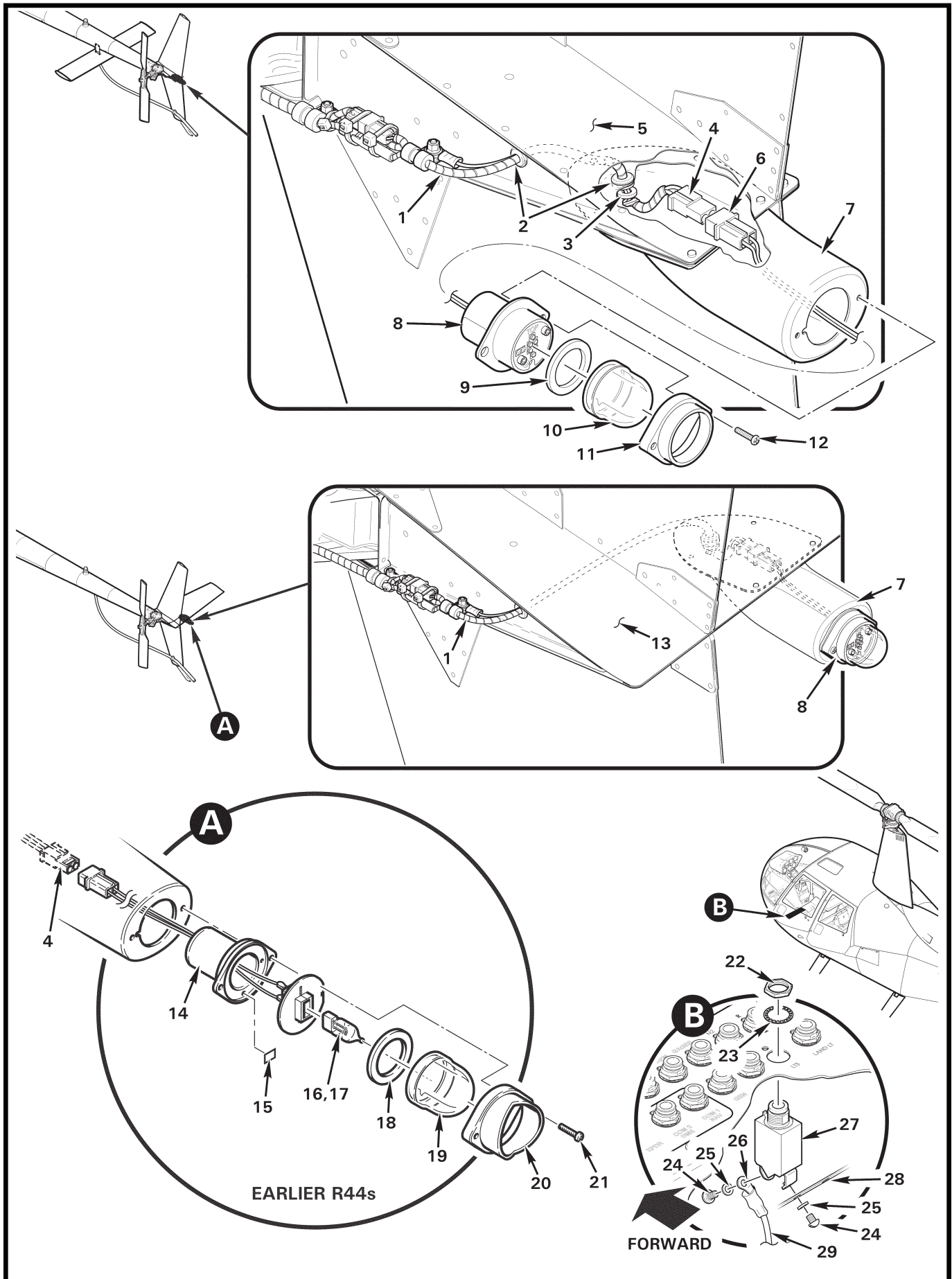




FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		NAVIGATION LIGHTS INSTALLATION – TAIL POSITION		
33-7-1	D049-8*	Wire Harness – Tail Light (Ref)		
	D049-3*	Wire Harness – Tail Light (Ref)		
2	MS35489-4*	Grommet (Ref)		
3	90295A075*	Washer (Ref)		
4	B263-13*	Housing (Ref)		
	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>				

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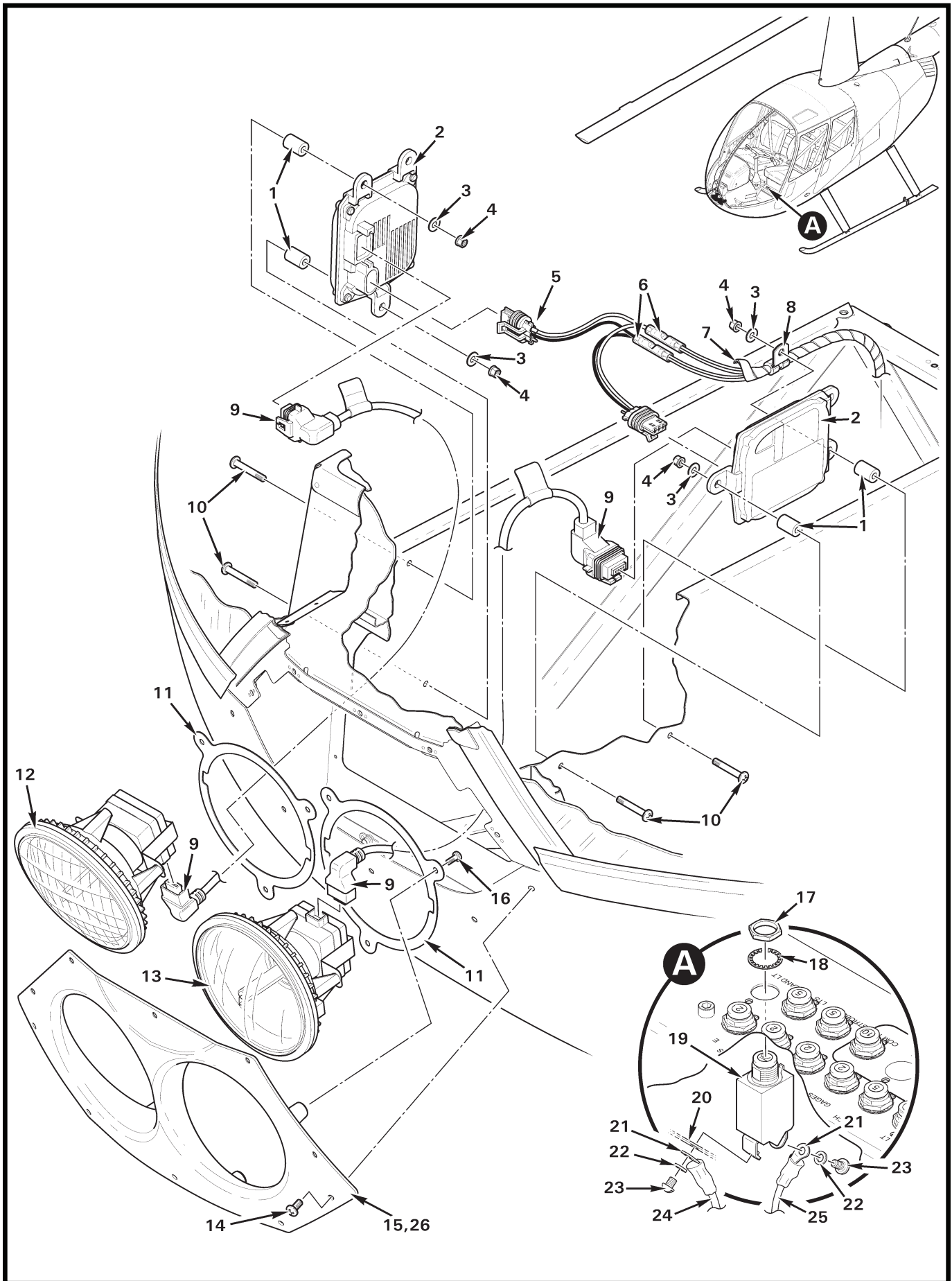


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>LANDING LIGHTS INSTALLATION (HID)</b>				
33-11-1	A130-38	Spacer . . . . .	X	4
2	B557-3	Ballast (28-volt; includes item 5) . . . . .	X	2
	B557-5	Ballast (14-volt; includes item 5) . . . . .	X	2
3	NAS1149FN832P	Washer . . . . .	X	4
4	MS21042L08	Nut . . . . .	X	4
5	B557-7	Power Cord (connector and wires) . . . . .	X	2
6	B261-3	Splice . . . . .	X	2
7	B161-4	Spirap . . . . .	X	A/R
8	MS21919WDG2	Clamp . . . . .	X	1
9	B557-8	Cable (long; 90° to 90°) . . . . .	X	2
10	MS27039C0816	Screw . . . . .	X	4
11	C526-3	Retainer . . . . .	X	2
12	B557-2	Lamp – RH (HID, flood) . . . . .	X	1
13	B557-1	Lamp – LH (HID, spot) . . . . .	X	1
14	AN526C832R8	Screw . . . . .	X	10
15	C526-2	Bezel (install using item 26 to seal edges) . . . . .	X	1
16	MS35206-228	Screw . . . . .	X	6
17	—	Nut . . . . .	O	1
18	—	Lockwasher . . . . .	O	1
19	B297-7	Circuit Breaker (7.5 amp; includes items 17, 18, 22, and 23) . . . . .	X	1
20	A448-16	Bus Bar (Ref)		
21	B260-2	Terminal (Ref)		
22	—	Washer . . . . .	O	2
23	—	Screw . . . . .	O	2
24	-102	Wire (Ref)		
25	-2380	Wire (Ref; to landing lights relay)		
26	B270-13	Sealant (3-oz. tube) . . . . .	X	A/R

NOTES

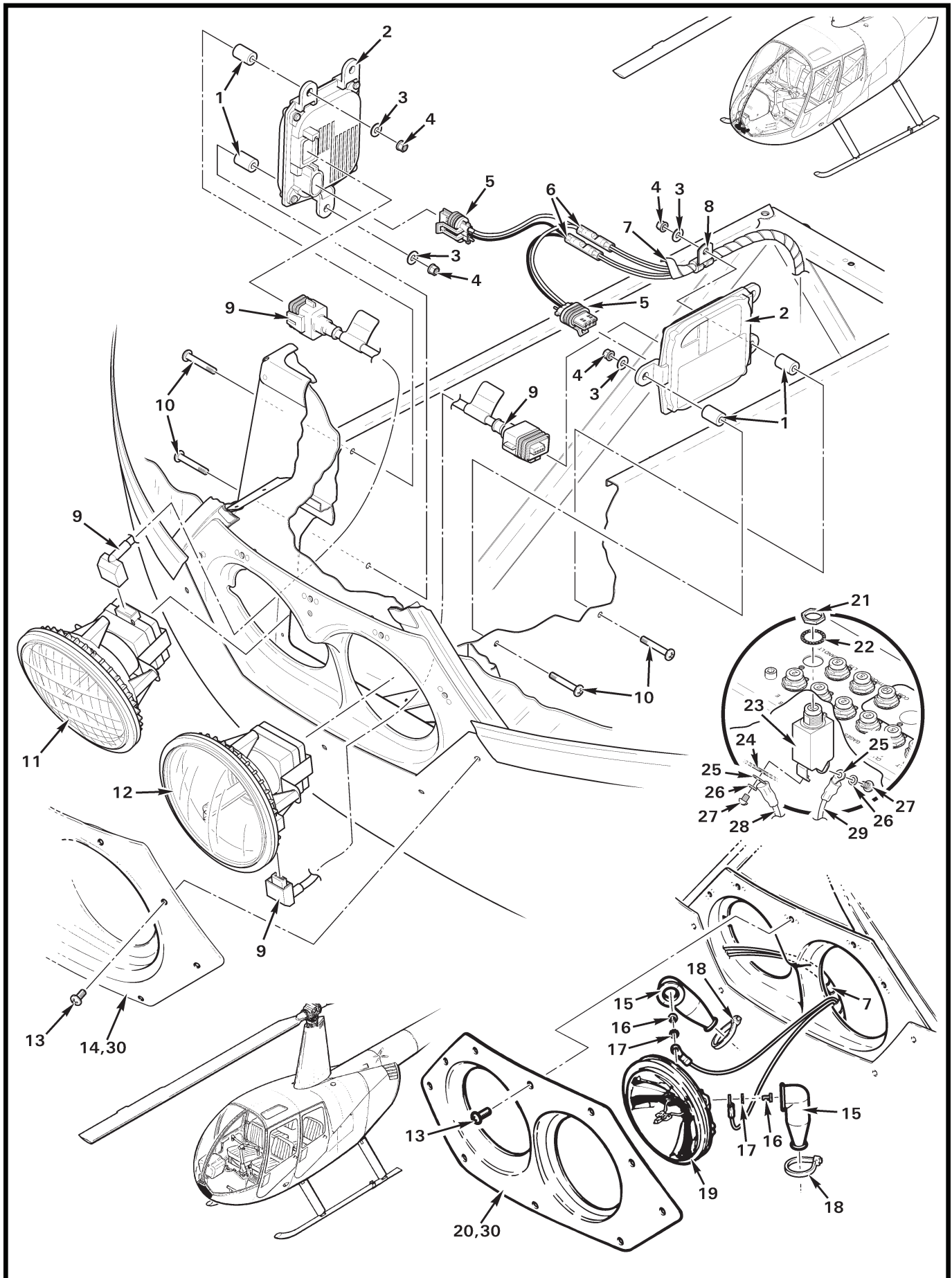


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		<b>LANDING LIGHTS INSTALLATION*</b>		
33-13-1	A130-38	Spacer . . . . .	X	4
2	B557-3	Ballast (28-volt; includes item 5) . . . . .	X	2
	B557-5	Ballast (14-volt; includes item 5) . . . . .	X	2
3	NAS1149FN832P	Washer . . . . .	X	4
4	MS21042L08	Nut . . . . .	X	4
5	B557-7	Power Cord (connector and wires) . . . . .	X	2
6	B261-3	Splice . . . . .	X	2
7	B161-4	Spirap . . . . .	X	A/R
8	MS21919WDG2	Clamp . . . . .	X	1
9	B557-8	Cable . . . . .	X	2
10	MS27039C0816	Screw . . . . .	X	4
11	B557-2	Lamp – RH (HID, flood) . . . . .	X	1
12	B557-1	Lamp – LH (HID, spot) . . . . .	X	1
13	AN526C832R8	Screw . . . . .	X	10
14	C526-3	Retainer (install using item 30 to seal edges). . . . .	X	1
15	MS25171-2S	Nipple . . . . .	X	4
16	—	Screw . . . . .	O	4
17	—	Lockwasher . . . . .	O	4
18	MS3367-4-9	Ty-Rap . . . . .	X	4
19	B196-26	Lamp (14-volt, includes items 16 and 17. GE part no. Q4509) . . . . .	X	2
	B196-27	Lamp (28-volt, includes items 16 and 17. GE part no. 4591) . . . . .	X	2
20	C526-1	Retainer (install using item 30 to seal edges). . . . .	X	1
21	—	Nut . . . . .	O	1
22	—	Lockwasher . . . . .	O	1
23	B297-7	Circuit Breaker (20 amp; includes items 21, 22, 26, and 27) . . . . .	X	1
24	A448-16	Bus Bar (Ref)		
25	B260-2	Terminal (Ref)		
26	—	Washer . . . . .	O	2
27	—	Screw . . . . .	O	2
28	-102	Wire (Ref)		
29	-103	Wire (Ref; to landing lights relay)		
30	B270-13	Sealant (3-oz. tube) . . . . .	X	A/R

NOTES \* Earlier R44s.

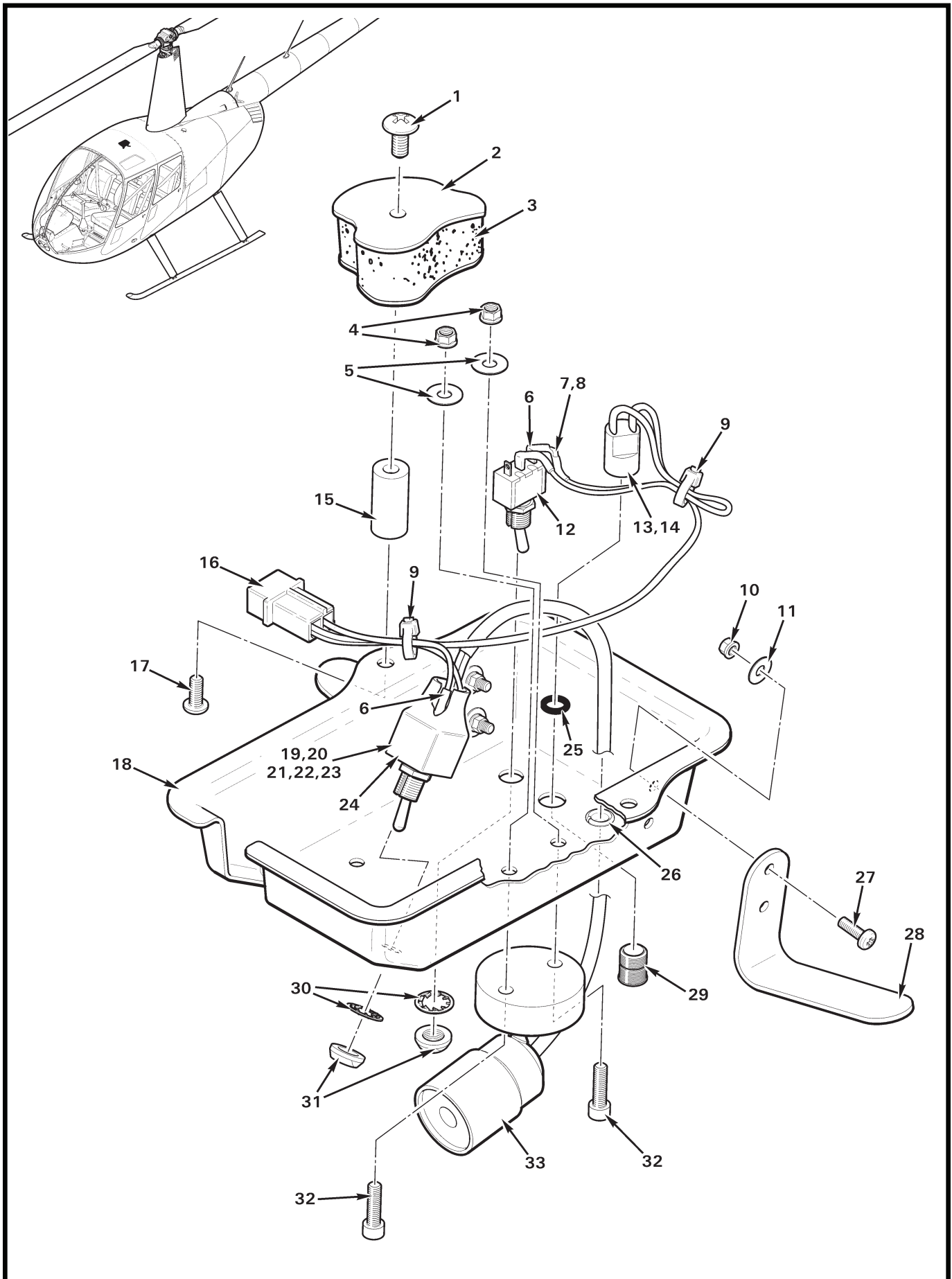




FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		<b>SPOTLIGHT INSTALLATION (LED)</b>		
33-15-1	AN526C832R6	Screw . . . . .	X	2
2	C273-1	Roof (Ref)		
3	C003	Insulation – Fwd (RH, Ref. See Figure 25-23.)		
4	MS21042L06	Nut . . . . .	X	2
5	NAS1149FN616P	Washer . . . . .	X	2
6	B158-2	Heat Shrink (around leads) . . . . .	X	A/R
7	B0207C511R0F5T*	Resistor . . . . .	X	1
8	B0207C1K210F5T**	Resistor . . . . .	X	1
9	MS3367-4-9	Ty-Rap . . . . .	X	2
10	MS21042L04	Nut . . . . .	X	4
11	NAS1149FN416P	Washer . . . . .	X	4
12	B300-1	Switch Assembly (Incl items 30 and 31) . . . . .	X	1
13	CNX310000X4112	Connector . . . . .	X	1
14	E1003	LED (not shown) . . . . .	X	1
15	C710-3	Spacer . . . . .	X	2
16	B263-12	Housing . . . . .	X	1
	B263-1	Pin . . . . .	X	2
17	MS27039C0806	Screw . . . . .	X	2
18	C712-2	Cover . . . . .	X	1
19	B300-5	Switch Assembly (Incl items 30 and 31) . . . . .	X	1
20	B0207C422R0F5T*	Resistor (not shown) . . . . .	X	1
21	B0207C1K430F5T*	Resistor (not shown) . . . . .	X	1
22	B0207C1K650F5T**	Resistor (not shown) . . . . .	X	1
23	B0207C3K400F5T**	Resistor (not shown) . . . . .	X	1
24	B158-12	Heat Shrink . . . . .	X	A/R
25	A215-008	O-Ring . . . . .	X	1
26	NAS557-3A	Grommet . . . . .	X	1
27	MS35206-215	Screw . . . . .	X	4
28	A752-1	Angle . . . . .	X	2
29	CMC321-CTP	Lens . . . . .	X	1
30	B227-3	Lockwasher . . . . .	X	2
31	B227-4	Dress Nut . . . . .	X	2
32	NAS1352-06-8	Screw . . . . .	X	2
33	D606-1	Spotlight . . . . .	X	1

NOTES \* 14-volt ships only.  
 \*\* 28-volt ships only.

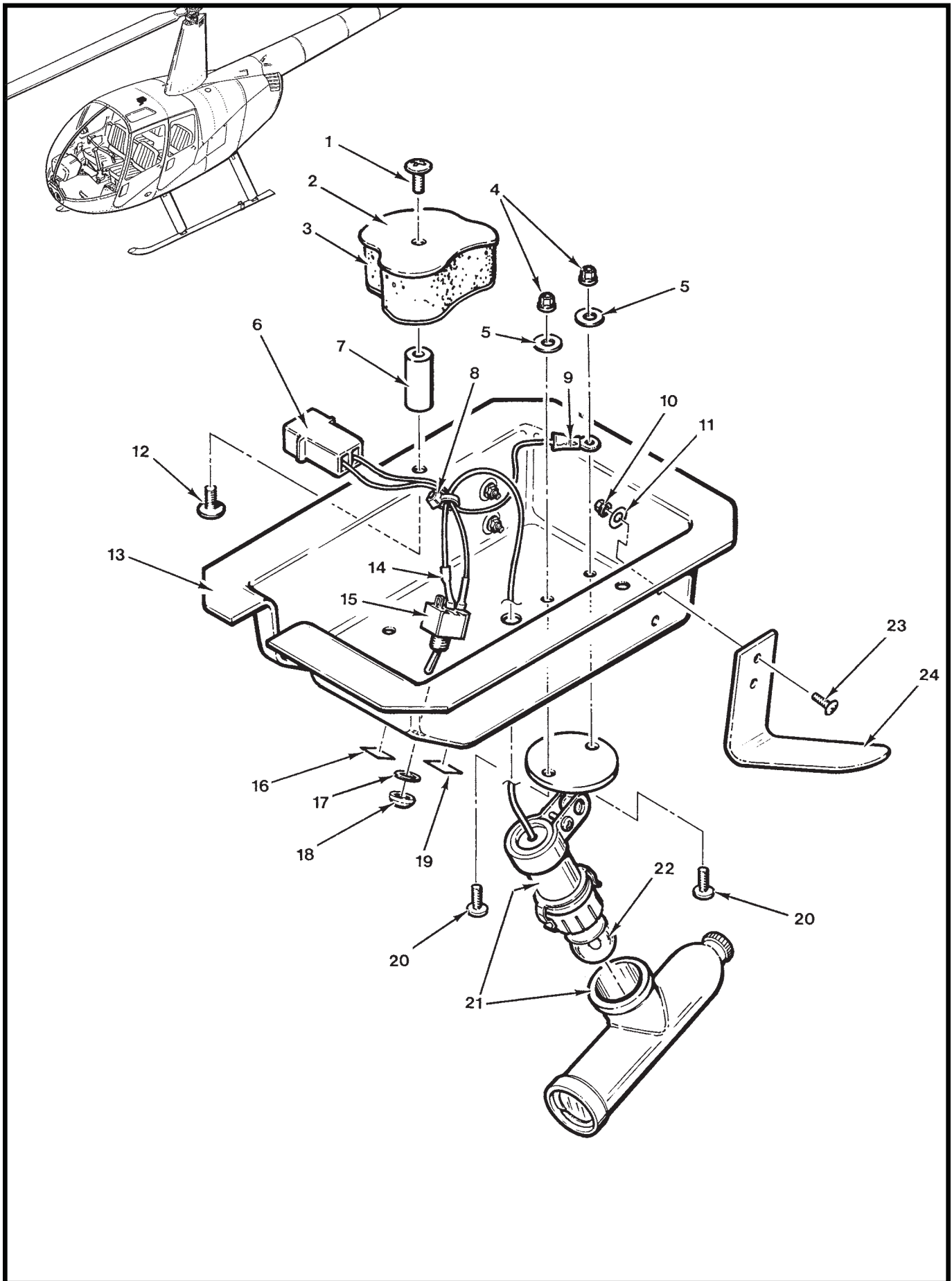


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>SPOTLIGHT INSTALLATION*</b>				
33-17-1	AN526C832R6	Screw . . . . .	X	2
2	C273-1	Roof (Ref)		
3	C003	Insulation – Fwd (RH, Ref; see Figure 25-23)		
4	MS21042L06	Nut . . . . .	X	2
5	NAS1149FN616P	Washer . . . . .	X	2
6	B263-12	Housing . . . . .	X	1
	B263-1	Pin . . . . .	X	2
7	C710-3	Spacer . . . . .	X	2
8	MS3367-4-9	Ty-Rap . . . . .	X	A/R
9	B260-2	Terminal . . . . .	X	1
10	MS21042L04	Nut . . . . .	X	4
11	NAS1149FN416P	Washer . . . . .	X	4
12	MS27039C0806	Screw . . . . .	X	2
13	C712-1	Cover (Ref; no longer available) . . . . .	O	1
14	B158-2	Heat Shrink (both wires) . . . . .	X	A/R
15	B300-1	Switch Assembly – Spotlight (Incl items 17 and 18) . . . . .	X	1
16	A654-15	Decal – “On” . . . . .	X	1
17	B227-3	Lockwasher . . . . .	X	1
18	B227-4	Dress Nut . . . . .	X	1
19	A654-13	Decal – “Off” . . . . .	X	1
20	MS35206-228	Screw . . . . .	X	2
21	A1425A-2	Spotlight Assembly (does not include item 22) . . . . .	X	1
22	B196-2	Lamp (14-volt ships) . . . . .	X	1
	B196-22	Lamp (28-volt ships) . . . . .	X	1
23	MS35206-215	Screw . . . . .	X	4
24	A752-1	Angle . . . . .	X	2

NOTES \* Earlier R44s.

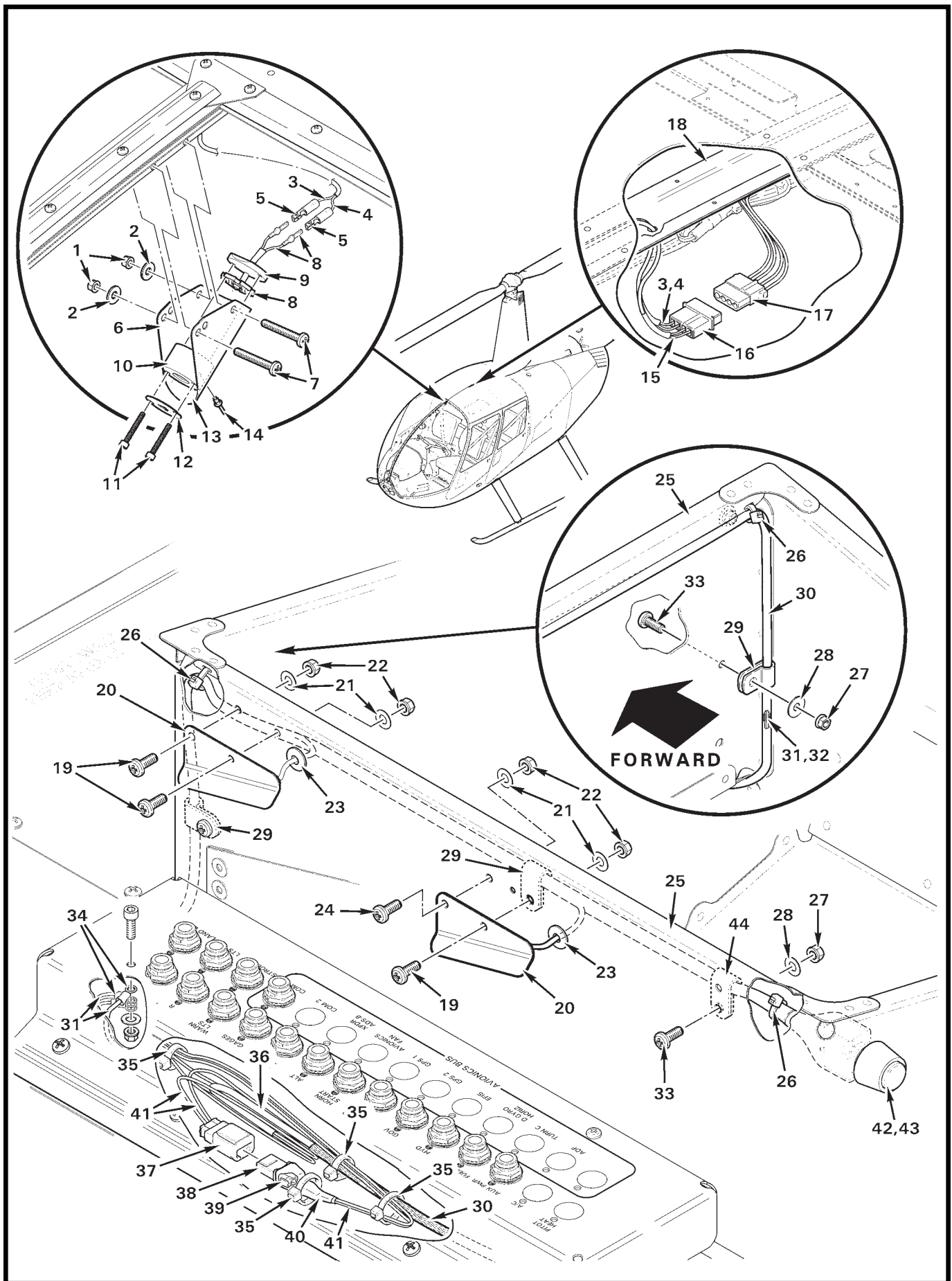


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>CABIN INTERIOR LIGHTING INSTALLATION</b>				
33-19-1	NAS1291C08M	Nut . . . . .	X	2
2	NAS1149DN816J	Washer . . . . .	X	2
3	C238-2289	Wire (Ref)		
4	C238-2290	Wire (Ref)		
5	B262-1	Terminal . . . . .	X	2
6	G196-8	Light Assembly – Console (Incl items 8 thru 14) . . . . .	X	1
7	MS35214-47	Screw . . . . .	X	2
8	G196-2	LED Assembly . . . . .	X	1
9	G197-5	Cover . . . . .	X	1
10	G197-10	Housing . . . . .	X	1
11	91251A113	Screw . . . . .	X	2
12	G197-9	Window . . . . .	X	1
13	G197-11	Bracket . . . . .	X	1
14	NAS9301B-4-02	Rivet . . . . .	X	1
15	C238-125	Wire (Ref, compass light)		
	C238-126	Wire (Ref, compass light)		
16	B263-16	Housing . . . . .	X	1
	B263-1	Pin . . . . .	X	4
17	B263-17	Housing . . . . .	X	1
	B263-2	Socket . . . . .	X	4
18	C087-3	Support – Roof (Ref)		
19	MS27039C0806	Screw . . . . .	X	2
20	G196-7	Light Assembly – Circuit Breaker Panel (Incl items 23, 31,32, and 34) . . . . .	X	2
21	NAS1149FN816P	Washer . . . . .	X	4
22	MS21042L08	Nut . . . . .	X	4
23	MS35489-4	Grommet . . . . .	X	2
24	MS27039C0805	Screw . . . . .	X	2
25	C297-4	Support – Seat (Ref; forward, LH)		
26	MS3367-4-0	Ty-Rap . . . . .	X	4
27	MS21042L06	Nut . . . . .	X	2
28	NAS1149FN616P	Washer . . . . .	X	2
29	N-4-BK	Clamp . . . . .	X	1
30	B266-4	Sleeving . . . . .	X	A/R
31	-2291	Wire (Ref; ground)		

NOTES

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>CABIN INTERIOR LIGHTING INSTALLATION (Cont'd)</b>				
33-19-32	-127	Wire (Ref; power)		
33	MS35206-228	Screw . . . . .	X	1
34	B260-3	Terminal . . . . .	X	2
35	MS3367-4-9	Ty-Rap . . . . .	X	A/R
36	B158-2	Heat Shrink . . . . .	X	A/R
37	D269-1	Plug . . . . .	X	1
38	D269-2	Receptacle . . . . .	X	1
39	D269-21	Backshell . . . . .	X	1
40	B158-6	Heat Shrink . . . . .	X	A/R
41	C859-127	Wire (Ref; power)		
42	C049-18	Harness Assembly (Incl items 26, 30 thru 32, B158-8 heat shrink, and B263-1 pins) . . . . .	X	1
43	B227-8	Switch Assembly . . . . .	X	1
44	N-3-BK	Clamp . . . . .	X	1

NOTES