

**CHAPTER 71****POWERPLANT**

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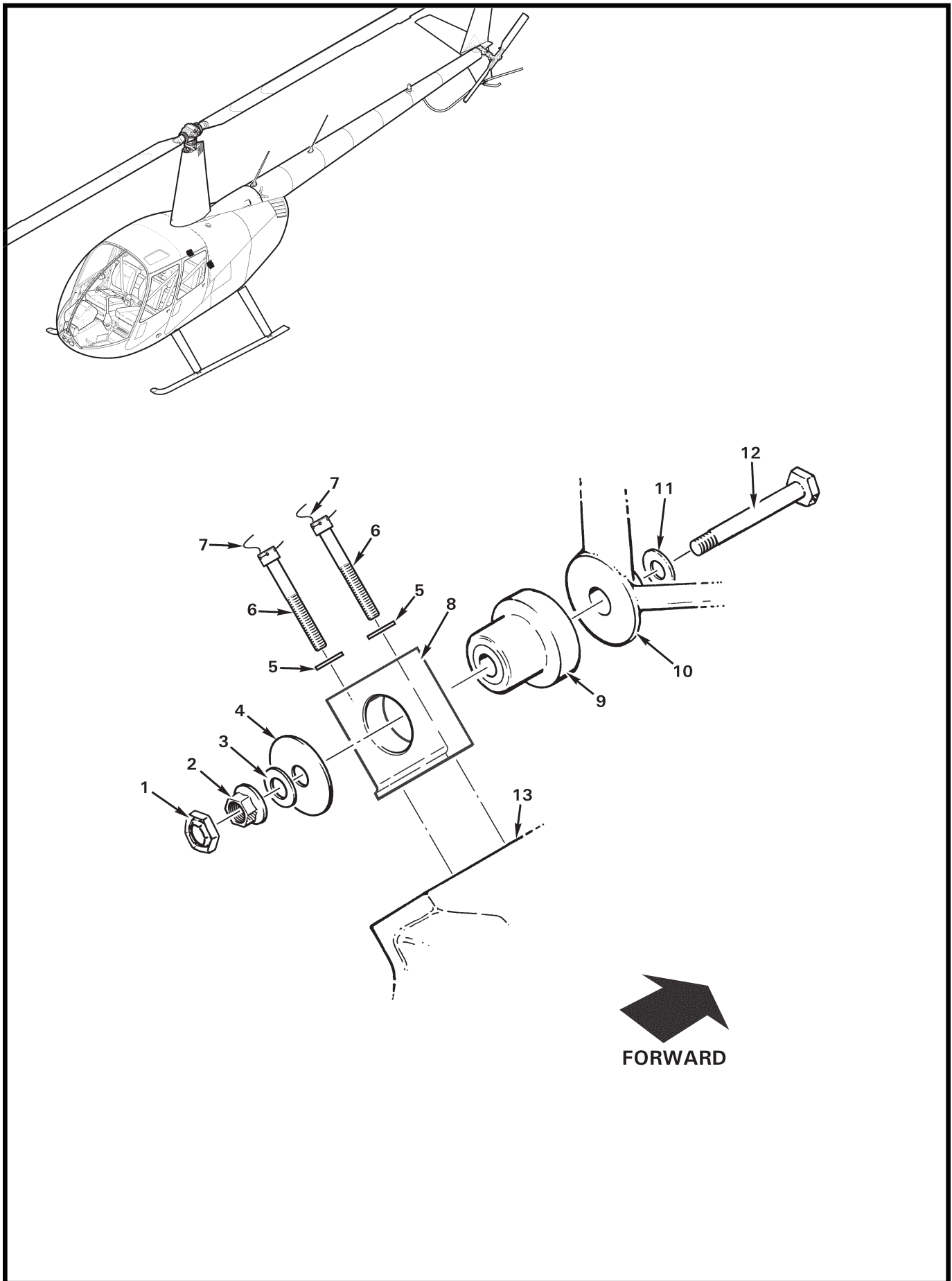


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>FORWARD ENGINE MOUNTS</b>				
71-1-1	B330-24	Palnut . . . . .	X	2
2	D210-8	Nut . . . . .	X	2
3	NAS1149F0832P	Washer . . . . .	X	2
4	C141-9	Washer . . . . .	X	2
5	NAS1149F0632P	Washer . . . . .	X	4
6	NAS1352-6H48P	Screw . . . . .	X	4
7	MS20995C32	0.032 in. dia. Safety Wire . . . . .	X	A/R
8	C593-3	Engine Mount Assembly (Incl item 9) . . . . .	X	2
9	C653-2	Mount . . . . .	X	2
10	C046	Lower Frame Assembly (Ref)		
11	MS20002C8	Washer . . . . .	X	2
12	NAS6608-39	Bolt (or AN8-31A) . . . . .	X	2
13	—	Engine (Ref)		
<b>NOTES</b>				

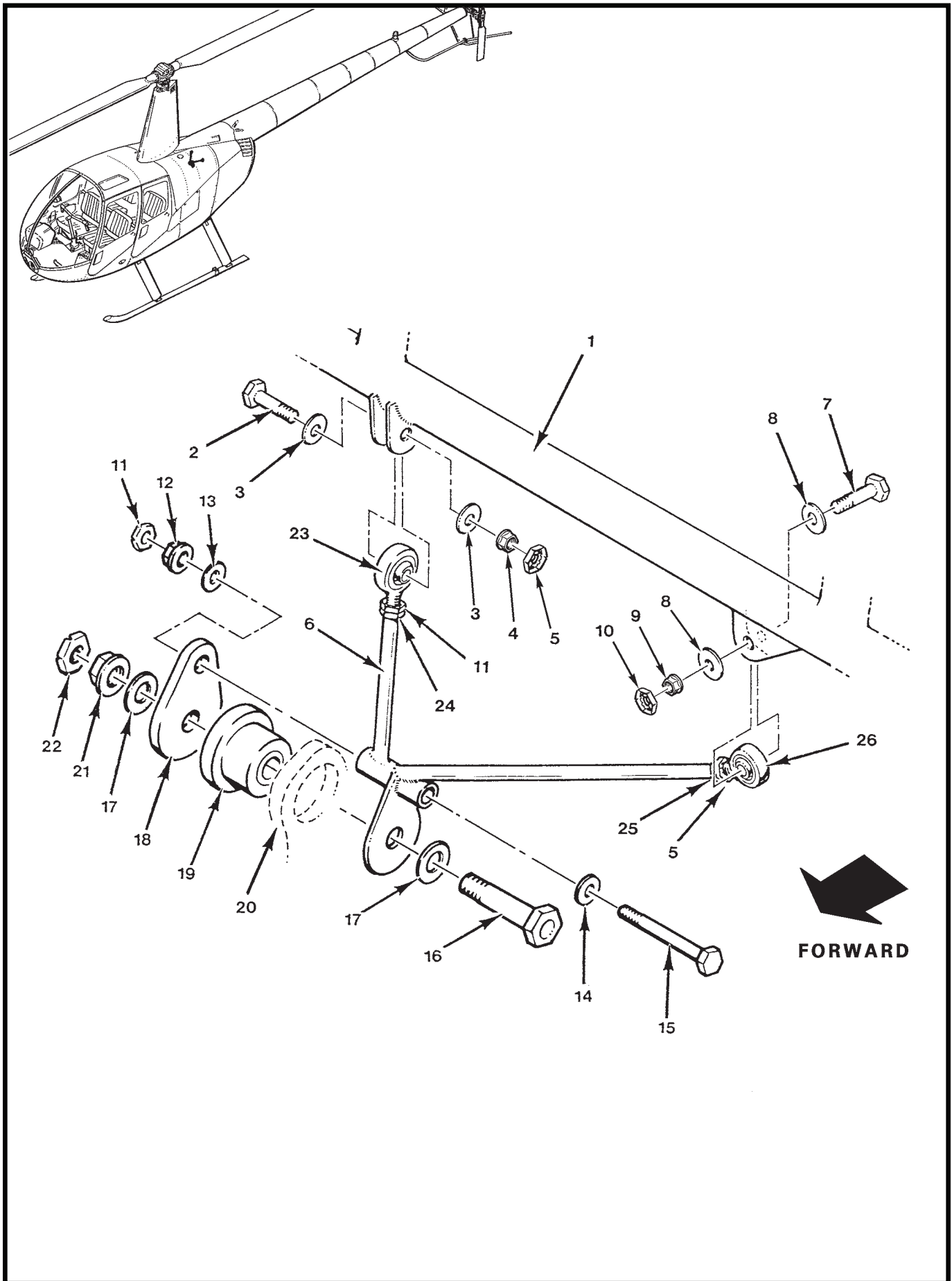


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>AFT ENGINE SUPPORT ASSEMBLY</b>				
71-3-1	C020-1	Upper Frame Assembly (Ref)		
2	NAS6605-9	Bolt . . . . .	X	1
3	NAS1149F0532P	Washer . . . . .	X	2
4	D210-5	Nut . . . . .	X	1
5	B330-16	Palnut . . . . .	X	1
6	C174-1	Support . . . . .	X	1
7	NAS6604-8	Bolt . . . . .	X	1
8	NAS1149F0432P	Washer . . . . .	X	2
9	D210-4	Nut . . . . .	X	1
10	B330-13	Palnut . . . . .	X	1
11	B330-19	Palnut . . . . .	X	2
12	D210-6	Nut . . . . .	X	1
13	NAS1149F0632P	Washer . . . . .	X	1
14	A141-23	Washer . . . . .	X	1
15	NAS6606-30	Bolt (or AN6-23A) . . . . .	X	1
16	NAS6608-20	Bolt (or AN8-20A) . . . . .	X	1
17	NAS1149F0832P	Washer . . . . .	X	2
18	C592-2	Link . . . . .	X	1
19	C653-1	Mount . . . . .	X	1
20	C592-3	Engine Mount (Ref, includes item 19. See also Figure 71-5 and 71-9.)		
21	D210-8	Nut . . . . .	X	1
22	B330-24	Palnut . . . . .	X	1
23	D173-2	Rod End . . . . .	X	1
24	AN316-6R	Nut . . . . .	X	1
25	AN316-5R	Nut . . . . .	X	1
26	A101-4	Rod End . . . . .	X	1

NOTES

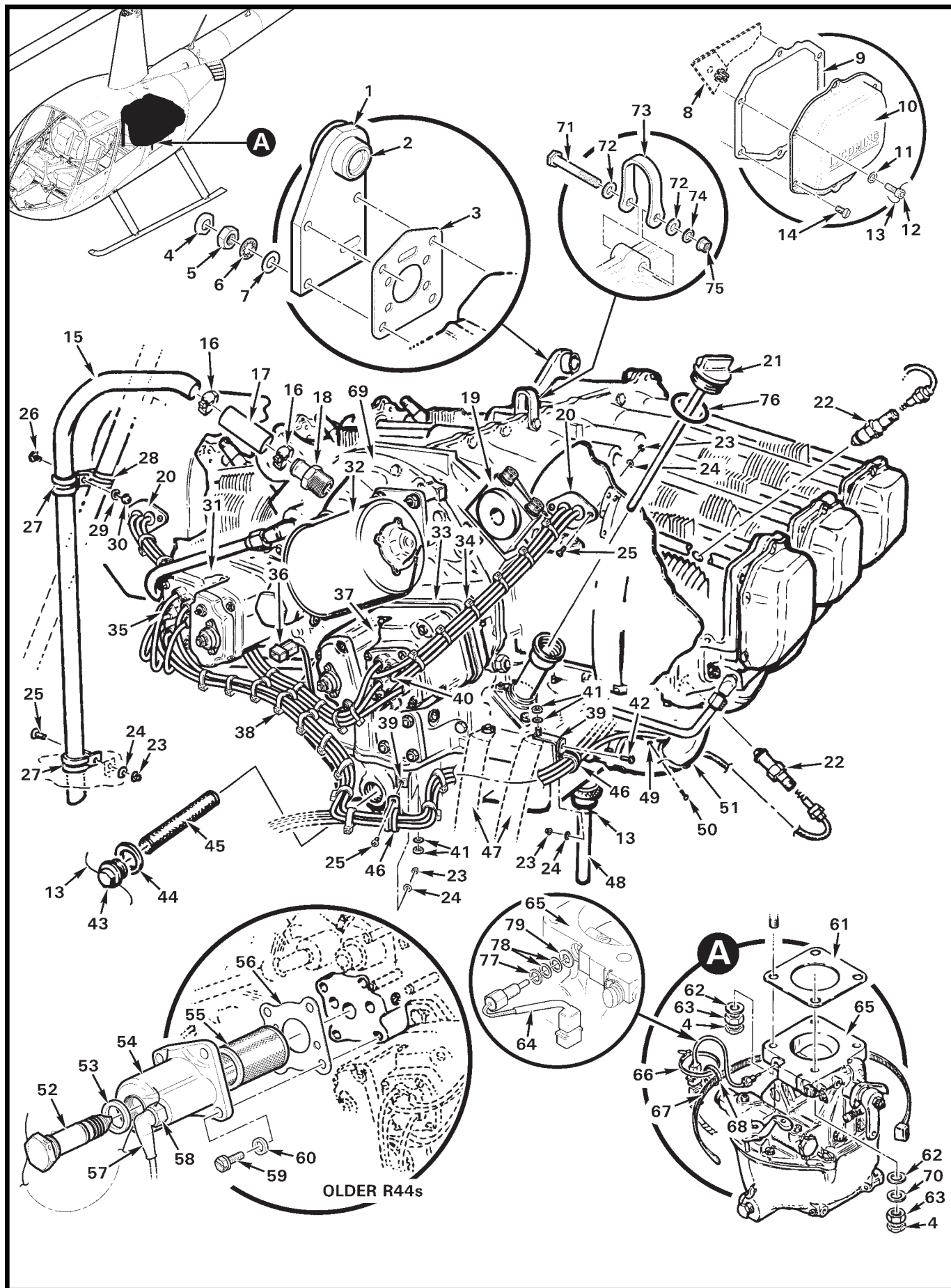


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>O-540 POWERPLANT COMPONENTS*</b>				
71-5-1	C592-3	Engine Mount Assembly (Incl item 2) . . . . .	X	1
2	C653-1	Mount (install using A257-8 lubricant) . . . . .	X	1
3	72053**	Gasket . . . . .	X	1
4	B330-15	Palnut . . . . .	X	8
5	STD-1410**	Nut . . . . .	X	4
6	STD-475**	Washer (internal teeth) . . . . .	X	4
7	STD-35**	Washer . . . . .	X	4
8	A305-7	Panel Assembly (Ref)		
9	06B26669**	Gasket (or RG-75906-SP) . . . . .	X	6
10	61247**	Cover – Rocker Box . . . . .	X	6
11	NAS1149F0432P	Washer . . . . .	X	22
12	NAS1352-4H10P	Screw . . . . .	X	22
13	MS20995C32	0.032 in. dia. Safety Wire . . . . .	X	A/R
14	STD-1925**	Screw . . . . .	X	24
15	C727-2	Breather Tube (0.75 in. dia.) . . . . .	X	1
	C727-1	Breather Tube (1.00 in. dia.; Ref. No longer available, not shown. To replace, order C727-2 tube, A729-31 tube, LW-18575** Nipple and [2] MS21919WDG12 clamps.)		
16	B277-12	Clamp . . . . .	X	2
17	A729-31	Tube . . . . .	X	1
18	LW-18575**	Nipple (0.75 in. dia. hose to 0.825 in. dia.) . . . . .	X	1
19	C593-3	Engine Mount Assembly (Ref, see Figure 71-1)		
20	LW-M-2376**	Harness Plate . . . . .	X	2
21	LW-16783-17P**	Dip Stick (9-quarts marking) . . . . .	X	1
22	UREM38E	Spark Plug (or UREM40E, Unison part no.; Ref Lycoming SI 1042) . . . . .	X	12
	REM38E	Spark Plug (or REM40E, Champion part no.; Ref Lycoming SI 1042) . . . . .	X	12
23	MS21042L08	Nut . . . . .	X	7
24	NAS1149FN816P	Washer . . . . .	X	7
25	MS27039C0806	Screw . . . . .	X	6
26	AN3-3A	Bolt . . . . .	X	1
27	MS21919WDG14	Clamp . . . . .	X	2
28	MS21919WDG12	Clamp . . . . .	X	1
29	NAS1149F0332P	Washer . . . . .	X	1
30	MS21042L3	Nut . . . . .	X	1

NOTES \* Ship S/N 0001 thru 9999.  
 \*\* Lycoming part no.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
O-540 POWERPLANT COMPONENTS* (Cont'd)				
71-5-31	10-600616-3*	Magneto (retard; TCM type S6LSC-200) . . . . .	X	1
	R7567	BL-600616-3* Magneto, retard, overhauled . . . . .	X	1
32	B123-1 / -2	Oil Filter (Ref, see Figure 79-9)		
33	MS3367-6-0	Ty-Rap (large, black; around magneto) . . . . .	X	1
34	MS3367-5-9	Ty-Rap (small, around item 33 and wires) . . . . .	X	2
35	M2463**	Ignition Harness (for retard magneto part no. 10-600616-3*)	X	1
36	B263-12	Housing . . . . .	X	1
	B263-1	Pin . . . . .	X	2
37	10-600646-201*	Magneto (tachometer; TCM type S6LSC-204T; Ref)		
	R8265	10-600646-201* Magneto, tachometer, with tachometer connector pins, housing, and heat shrink . . . . .	X	1
38	MS3367-4-9	Ty-Rap (around ignition wires) . . . . .	X	A/R
39	C357-1	Clip (one each side and front) . . . . .	X	3
40	M2464**	Ignition Harness (for tachometer magneto part no. 10-600646-201*) . . . . .	X	1
41	—	Existing Engine Hardware (Ref)		
42	MS27039C0807	Screw . . . . .	X	2
43	LW-12545***	Plug . . . . .	X	1
44	06E19769-1.00***	Gasket . . . . .	X	1
45	70484***	Screen (oil suction) . . . . .	X	1
46	MS21919WDG9	Clamp (engine front and right side) . . . . .	X	2
	MS21919WDG10	Clamp (engine left side, not shown) . . . . .	X	1
47	A212-2	Ground Strap (Ref, see Figure 96-79)		
48	B367-1	Drain Valve – Oil . . . . .	X	1
49	MS21044N06	Nut . . . . .	O	6
50	STD-553***	Screw . . . . .	X	6
51	LW-18959-175-25***	Clamp . . . . .	X	6
	B444-3	Clamp . . . . .	X	6
52	53E22144***	Thermostatic Oil Cooler Bypass Valve . . . . .	X	1
53	76510***	Gasket – Valve Assembly . . . . .	X	1
54	69510*	Housing . . . . .	X	1
55	62817*	Screen Assembly – Oil . . . . .	X	1
56	61173*	Gasket . . . . .	X	1
57	MS25171-1S	Nipple . . . . .	X	1

NOTES \* Continental Motors part no.  
 \*\* Slick part no.  
 \*\*\* Lycoming part no.

Continues



FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		O-540 POWERPLANT COMPONENTS* (Cont'd)		
71-5-58	A760-1	Oil Temperature Sender (Ref; single, see also Figure 96-49)		
	A760-3	Oil Temperature Sender (Ref; dual, see also Figure 96-49)		
59	STD-1856*	Screw (supplied with engine) . . . . .	X	4
60	STD-8*	Washer . . . . .	X	4
61	66224*	Gasket . . . . .	X	1
62	STD-35*	Washer . . . . .	X	4
63	STD-1410*	Nut . . . . .	X	4
64	A058-10**	Carb Air Temp Probe (Incl items 77 and 78) . . . . .	X	1
65	AV10-6035-11	Carburetor (alternate part no. 61C26050*) . . . . .	X	1
66	MS3367-5-9	Ty-Rap (around connector) . . . . .	X	1
67	MS3367-6-0	Ty-Rap (around carburetor) . . . . .	X	1
68	MS3367-4-9	Ty-Rap (around item 66) . . . . .	X	1
69	C145-1	Engine Assembly (Ref, O-540-F1B5)		
70	NAS1149F0532P	Washer (may be installed at forward left position as required)	X	1
71	LW-25-1.75*	Bolt . . . . .	X	1
72	NAS1149F0463P	Washer . . . . .	X	2
73	B200-4	Lug . . . . .	X	1
74	STD-160*	Lockwasher . . . . .	X	1
75	—	Nut . . . . .	O	1
76	74068*	O-Ring – Oil Level Gauge Plug . . . . .	X	1
77	—	Spacer (thick) . . . . .	O	1
78	—	Spacer (thin) . . . . .	O	A/R
79	NAS620-416L	Washer . . . . .	X	A/R

NOTES \* Lycoming part no.  
 \*\* Proper probe position set at RHC, reuse spacer and washer stack up when reinstalling.

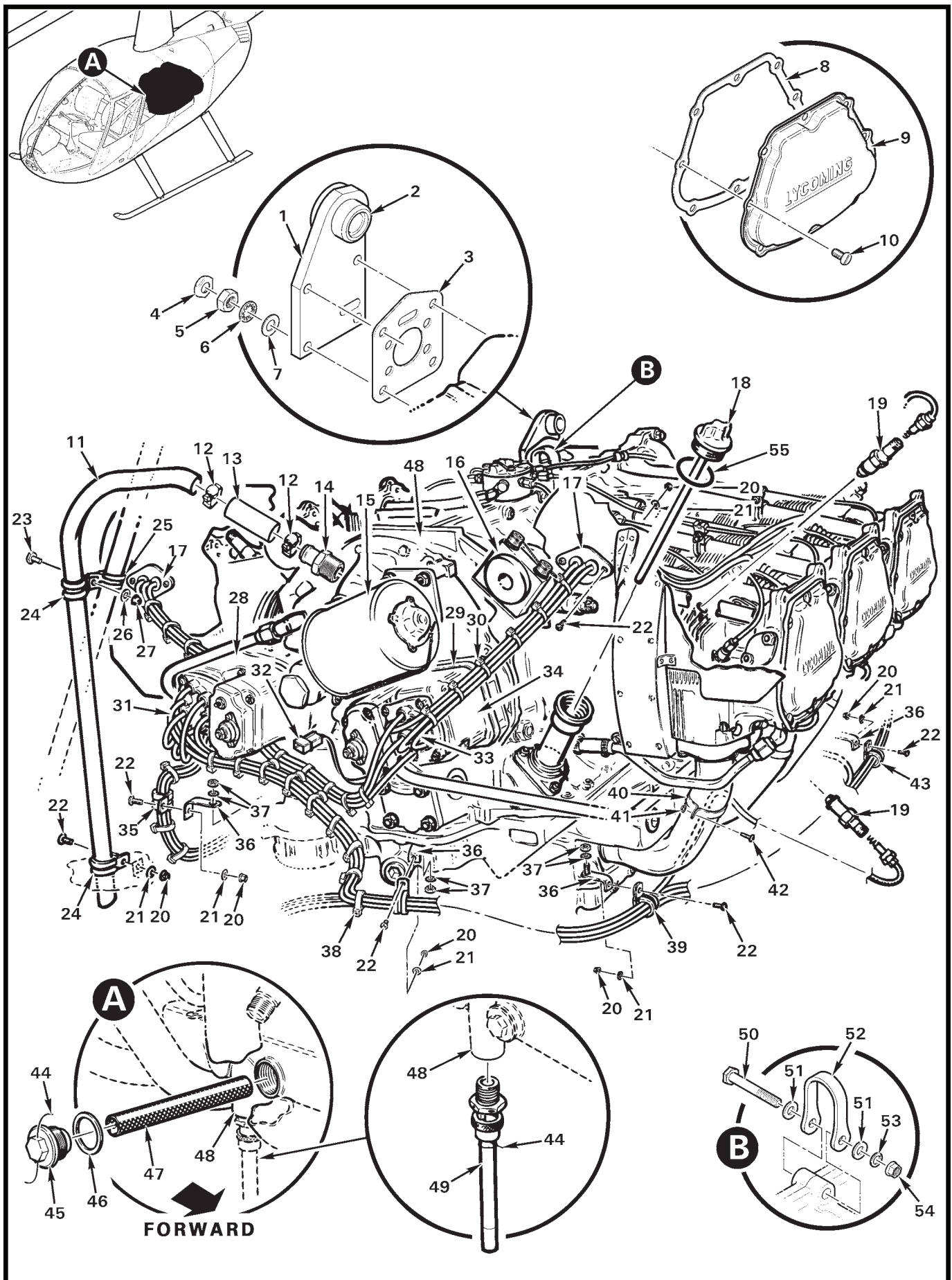


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
IO-540 POWERPLANT COMPONENTS*				
71-9-1	C592-3	Engine Mount Assembly (Incl item 2) . . . . .	X	1
2	C653-1	Mount (install using A257-8 lubricant) . . . . .	X	1
3	72053**	Gasket . . . . .	X	1
4	B330-15	Palnut . . . . .	X	4
5	STD-1410**	Nut . . . . .	X	4
6	STD-475**	Washer (internal teeth) . . . . .	X	4
7	STD-35**	Washer . . . . .	X	4
8	RG-67193	Gasket . . . . .	X	6
9	68795**	Cover Assembly – Rocker Box . . . . .	X	6
10	STD-1925**	Screw . . . . .	X	48
11	C727-2	Breather Tube (0.75 in. dia.) . . . . .	X	1
	C727-1	Breather Tube (Ref; 1.00 in. dia. No longer available, not shown. To replace, order C727-2 tube, A729-31 tube, LW-18575** nipple and [2] MS21919WDG12 clamps.)		
12	B277-12	Clamp . . . . .	X	2
13	A729-31	Tube (use with C727-2 tube) . . . . .	X	1
	A729-10	Tube (use with C727-1 tube) . . . . .	X	1
14	LW-18575**	Nipple . . . . .	X	1
15	B123-1 / -2	Oil Filter (Ref, see Figure 79-9)		
16	C593-3	Engine Mount Assembly (Ref, see Figure 71-1)		
17	LW-M-2376**	Harness Plate . . . . .	X	2
18	LW-16783-30P**	Dipstick (9 quarts marking) . . . . .	X	1
19	UREM38E***	Spark Plug (or UREM40E*** ) . . . . .	X	12
20	MS21042L08	Nut . . . . .	X	11
21	NAS1149FN816P	Washer . . . . .	X	11
22	MS27039C0806	Screw . . . . .	X	11
23	AN3-3A	Bolt . . . . .	X	1
24	MS21919WDG12	Clamp (use with C727-2 tube) . . . . .	X	2
	MS21919WDG16	Clamp (use with C727-1 tube) . . . . .	X	2
25	MS21919WDG14	Clamp . . . . .	X	1
26	NAS1149FO332P	Washer . . . . .	X	1
27	MS21042L3	Nut . . . . .	X	1

NOTES \* Ship S/N 10001 and subsequent.  
 \*\* Lycoming part no.  
 \*\*\* Unison part no.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
IO-540 POWERPLANT COMPONENTS (Cont'd)				
71-9-28	10-600616-9*	Magneto (retard; TCM type S6LSC-200) . . . . .	X	1
29	MS3367-6-0	Ty-Rap (large, black; around magneto) . . . . .	X	1
30	MS3367-5-9	Ty-Rap (small, around item 29 and wires) . . . . .	X	2
31	M2463**	Ignition Harness (for retard magneto part no. 10-600616-9*) . .	X	1
32	B263-12	Housing . . . . .	X	1
	B263-1	Pin . . . . .	X	2
33	M2464**	Ignition Harness (for tachometer magneto part no. 10-600646-201**) . . . . .	X	1
34	10-600646-201*	Magneto (tachometer; TCM type S6LSC-204T; Ref)		
	R8265	10-600646-201* Magneto (tachometer, with tachometer connector pins, housing and heat shrink) . . . . .	X	1
35	MS21919WDG7	Clamp . . . . .	X	1
36	C357-1	Clip . . . . .	X	6
37	—	Existing Engine Hardware (Ref)		
38	MS3367-4-9	Ty-Rap (around ignition wires) . . . . .	X	A/R
39	MS21919WDG12	Clamp (engine right side and front) . . . . .	X	2
	MS21919WDG6	Clamp (engine left side, not shown) . . . . .	X	1
40	B444-2 or -3	Clamp . . . . .	X	6
	LW-18959-163-25***	Clamp . . . . .	X	6
41	AN365-632A	Nut (supplied with engine) . . . . .	O	6
42	STD-533***	Screw . . . . .	O	6
43	MS21919WDG9	Clamp (engine right side) . . . . .	X	1
	MS21919WDG3	Clamp (engine left side, not shown) . . . . .	X	1
44	MS20995C32	0.032 in. dia. Safety Wire . . . . .	X	A/R
45	LW-12545***	Plug . . . . .	X	1
46	06E19769-1.00***	Gasket . . . . .	X	1
47	60422***	Screen (oil suction) . . . . .	X	1
48	C145-2	Engine Assembly (Ref, IO-540-AE1A5)		
49	B367-1	Drain Valve (oil) . . . . .	X	1
50	LW-25-1.75***	Bolt . . . . .	O	1
51	NAS1149F0463P	Washer . . . . .	X	2
52	B200-4	Lug . . . . .	X	1

NOTES \* Continental Motors part no.  
 \*\* Slick part no.  
 \*\*\* Lycoming part no.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
IO-540 POWERPLANT COMPONENTS (Cont'd)				
71-9-53	STD-160*	Lockwasher . . . . .	O	1
54	—	Nut . . . . .	O	1

NOTES \* Lycoming part no.

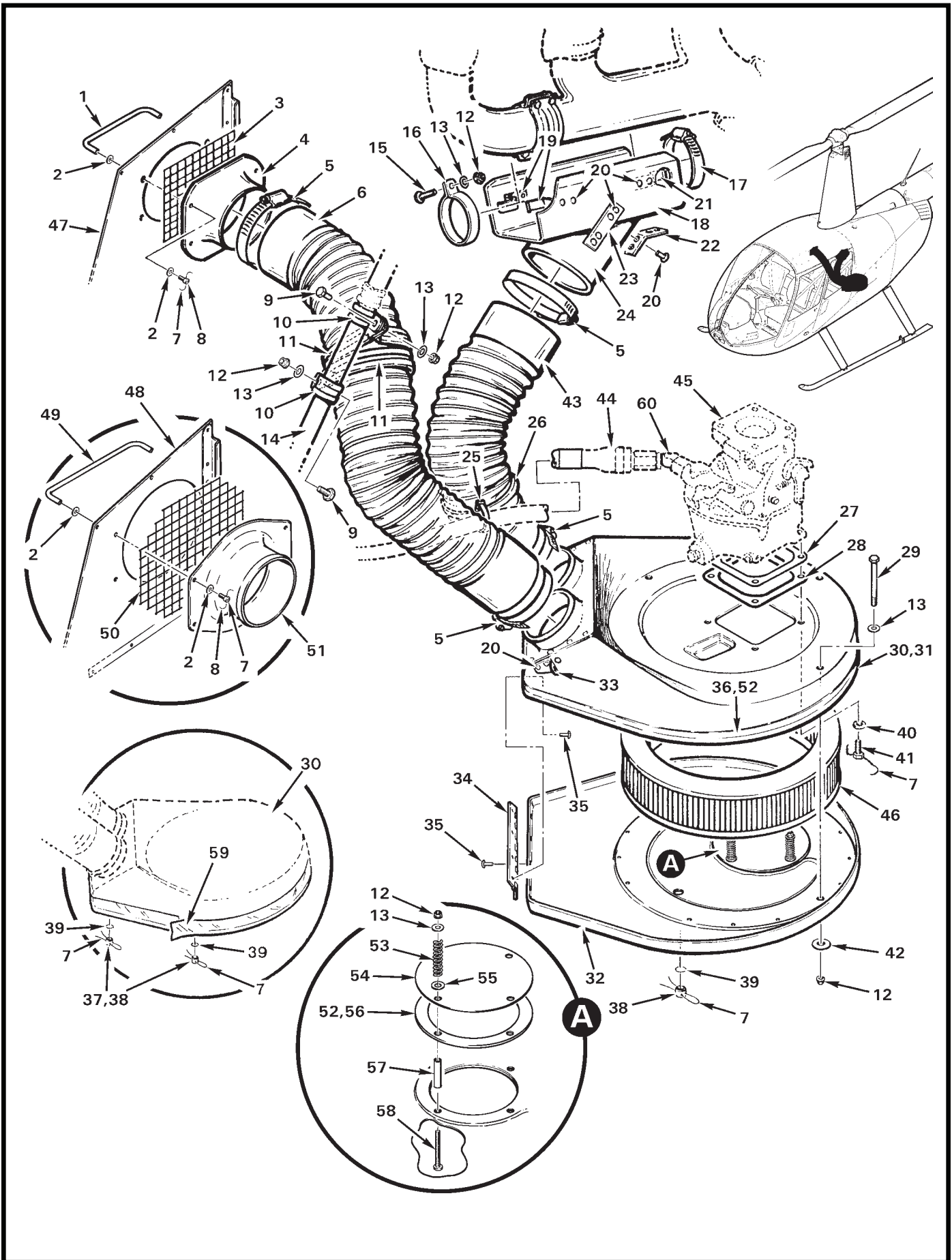


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>AIR INDUCTION SYSTEM</b>				
71-13-1	A580-2*	Guard . . . . .	X	2
2	NAS1149FN416P	Washer . . . . .	X	8
3	A640-2*	Screen . . . . .	X	1
4	C579-1*	Inlet (small) . . . . .	X	1
5	B277-56	Clamp . . . . .	X	4
6	A785-11	Hose . . . . .	X	1
7	MS20995C32	0.032 in. dia. Safety Wire . . . . .	X	A/R
8	AN503-8-6	Screw . . . . .	X	4
9	AN3-4A	Bolt . . . . .	X	2
10	MS21919WDG14	Clamp . . . . .	X	2
11	MS21919DG56	Clamp . . . . .	X	2
12	MS21042L3	Nut . . . . .	X	11
13	NAS1149F0332P	Washer . . . . .	X	11
14	C046-2	Frame Tube (Ref)		
15	MS27039C1-09	Screw . . . . .	X	1
16	A694-1	Clamp . . . . .	X	1
17	B277-36	Clamp . . . . .	X	1
18	C568-1	Scoop Assembly (Incl C568-2 scoop and items 19 thru 24) . . .	X	1
	C568-2	Scoop (scoop only) . . . . .	X	1
19	C568-4	Clip . . . . .	X	2
20	MS20470AD4	Rivet . . . . .	X	20
21	C568-5	Clip . . . . .	X	2
22	C568-7	Clip . . . . .	X	1
23	C568-6	Clip . . . . .	X	2
24	C568-3	Tube (tube only) . . . . .	X	1
25	MS3367-7-9	Ty-Rap (around fuel hose) . . . . .	X	1
26	MS3367-6-0	Ty-Rap (around air hose) . . . . .	X	1
27	C615-2	Gasket (aluminum, [2] maximum) . . . . .	X	A/R
28	C615-1	Gasket (rubber) . . . . .	X	1
29	AN3-30A	Bolt . . . . .	X	4
30	C057-5	Air Box Assembly (Incl items 31, 32, 36, and 52) . . . . .	X	1
31	C957-1	Air Box (Ref, includes items 20 and 33)		
32	C057-8	Bottom Cover Assembly (Incl items 12 [4], 13 [4], 34, 35, 37, and 52 thru 58) . . . . .	X	1
33	A696-2	Angle (install using item 20) . . . . .	X	1

NOTES \* Ship S/N 0001 thru 1300.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>AIR INDUCTION SYSTEM (Cont'd)</b>				
71-13-34	A516-1	Hinge . . . . .	X	1
35	MS20470AD3	Rivet . . . . .	X	4
36	A226-8	Seal (neoprene, 4-ft length; attach using item 52) . . . . .	X	1
37	A290-1	Drain Valve (Incl items 7, 38, and 39) . . . . .	X	2
38	A290-2	Body . . . . .	O	1
39	A290-3	Disc . . . . .	O	1
40	NAS1149F0463P	Washer . . . . .	X	4
41	MS20074-04-04	Bolt . . . . .	X	4
42	AN970-3	Washer . . . . .	X	4
43	A785-10	Hose . . . . .	X	1
44	B283-3	Hose Assembly (gascolator-to-carburetor, Ref)		
45	61C22451	Carburetor (Ref, see also Figure 71-5. Lycoming part no.)		
46	B771-2*	Air Filter (supersedes C771-1 air filter). . . . .	X	1
47	C378-1	Cowling Assembly – RH (Ref, small hole. Ship S/N 0001 thru 1300. No longer available.)		
48	C378-3**	Cowling Assembly – RH (Ref, large hole. Ship S/N 1301 and higher.)		
49	A580-3**	Guard . . . . .	X	2
50	A640-4**	Screen . . . . .	X	1
51	C579-3**	Inlet (large) . . . . .	X	1
52	B270-18	Adhesive . . . . .	X	A/R
53	D774-7	Spring . . . . .	X	4
54	C565-2	Door . . . . .	X	1
55	NAS1149F0432P	Washer . . . . .	X	4
56	B425-1	Gasket (attach using item 52) . . . . .	X	1
57	C130-41	Spacer . . . . .	X	4
58	MS27039DD1-26	Screw . . . . .	X	4
59	A701-1	Tape – Aluminum (seal around bottom cover, 180-foot roll) . . . .	X	A/R
60	AN823-6D	Elbow (Ref; 45°)		

NOTES \* Refer to R44 SB-87. (Revision D and subsequent).  
 \*\* Ship S/N 1301 and higher.



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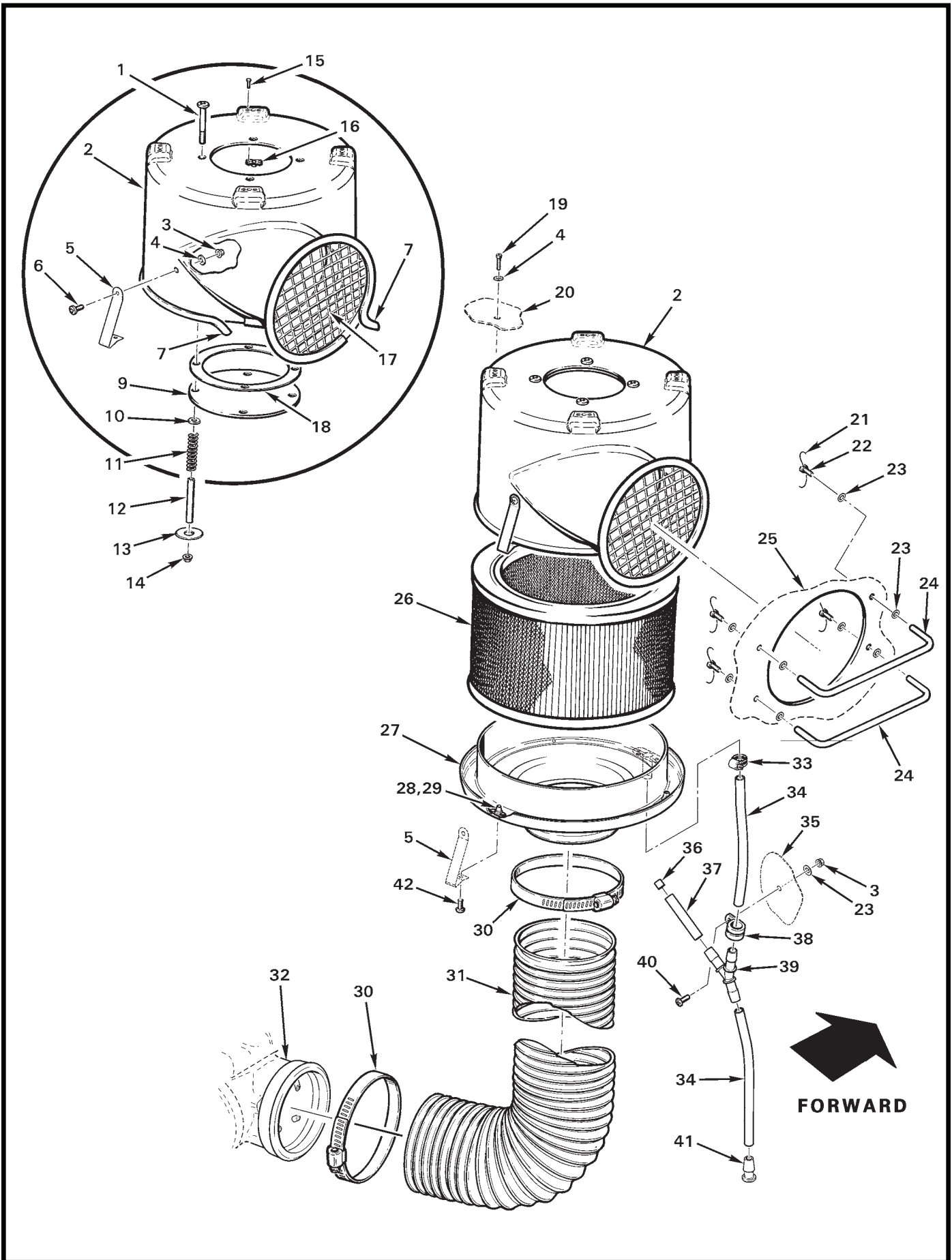


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>AIR INDUCTION SYSTEM*</b>				
71-17-1	MS27039DD1-26	Screw (or AN3-15A) . . . . .	X	4
2	D057-2	Airbox Assembly (Incl items 1, and 3 thru 18) . . . . .	X	1
3	MS21042L08	Nut . . . . .	X	3
4	NAS1149FN832P	Washer . . . . .	X	7
5	D738-1	Clip . . . . .	X	3
6	MS27039C0805	Screw . . . . .	X	3
7	A226-10	Seal (neoprene; install using item 8) . . . . .	X	A/R
8	B270-18	Sealant . . . . .	X	A/R
9	C565-2	Door . . . . .	X	1
10	NAS1149F0432P	Washer . . . . .	X	8
11	D774-7	Spring . . . . .	X	4
12	C130-41	Spacer . . . . .	X	4
13	C141-18	Washer . . . . .	X	4
14	MS21042L3	Nut . . . . .	X	4
15	MS20605R3W4	Rivet . . . . .	X	8
16	MS21075L08E	Nutplate . . . . .	X	4
17	A640-3	Screen (install using item 8) . . . . .	X	1
18	B425-1	Gasket (install using item 8) . . . . .	X	1
19	NAS1352-08-8P	Screw . . . . .	X	4
20	C234-1	Firewall - Horizontal (Ref)		
21	MS20995C20	0.020 in. dia. Safety Wire . . . . .	X	A/R
22	AN503-8-6	Screw . . . . .	X	4
23	NAS1149FN816P	Washer . . . . .	X	8
24	A580-3	Guard . . . . .	X	2
25	C378-3	Cowling Assembly (Ref)		
26	C771-2	Filter - Air . . . . .	X	1
27	D737-3	Cover Assembly (Incl items 28 and 29) . . . . .	X	1
28	MS21069L08	Nutplate (install using item 29) . . . . .	X	3
29	NAS1097AD3	Rivet (not shown) . . . . .	X	6
30	B277-56	Clamp . . . . .	X	2
31	A785-31	Hose . . . . .	X	1

NOTES \* Ship S/N 10001 and subsequent.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>AIR INDUCTION SYSTEM* (Cont'd)</b>				
71-17-32	2576630-4**	Control - Fuel (Ref)		
33	B277-4	Clamp . . . . .	X	1
34	A729-39	Tube . . . . .	X	2
35	D020	Firewall Assembly - Vertical (Ref)		
36	93657A083	Spacer . . . . .	X	1
37	A729-40	Tube . . . . .	X	1
38	MS21919WDG9	Clamp . . . . .	X	1
39	A457-2	Wye . . . . .	X	1
40	MS27039C0807	Screw . . . . .	X	1
41	A457-3	Plug . . . . .	X	1
42	MS27039C0806	Screw . . . . .	X	3

NOTES \* Ship S/N 10001 and subsequent.  
 \*\* Precision Airmotive part no.

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FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		<b>EXHAUST MUFFLER ASSEMBLY</b>		
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.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>EXHAUST MUFFLER ASSEMBLY (Cont'd)</b>				
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.



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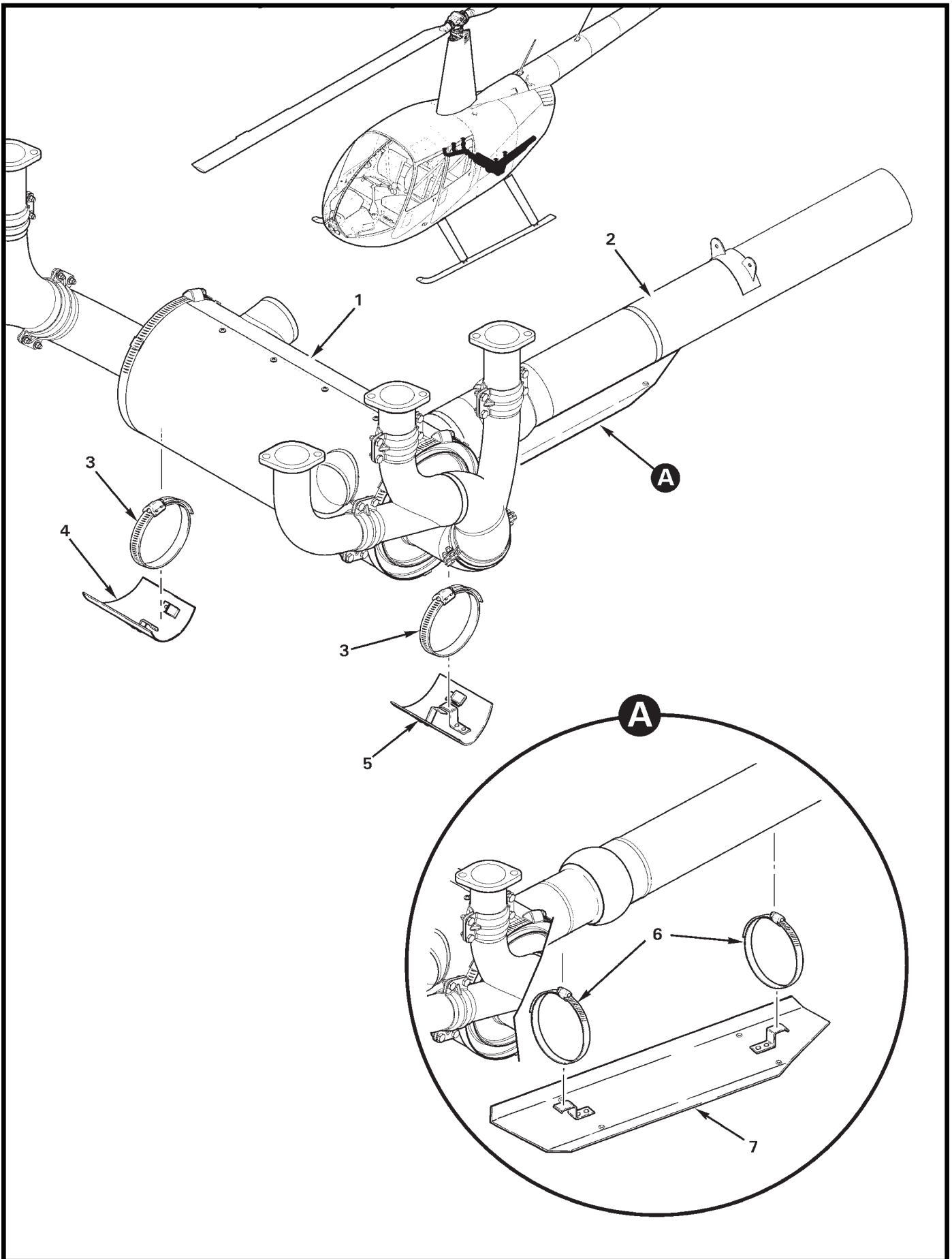


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>EXHAUST MUFFLER SHIELD ASSEMBLY</b>				
71-25-1	C169-35	Exhaust Muffler Assembly (Ref)		
	C169-37	Exhaust Muffler Assembly (Ref, not shown)		
	C169-1 *	Exhaust Muffler Assembly (Ref, not shown)		
	C169-31 *	Exhaust Muffler Assembly (Ref, not shown)		
	2 C169-18	Tail Pipe (Ref)		
	3 B277-036	Clamp . . . . .	X	2
	4 D314-2	Shield Assembly (RH) . . . . .	X	1
5 D314-1	Shield Assembly (LH) . . . . .	X	1	
6 B277-48	Clamp . . . . .	X	2	
7 D317-1	Shield Assembly . . . . .	X	1	

NOTES \* Earlier R44s.

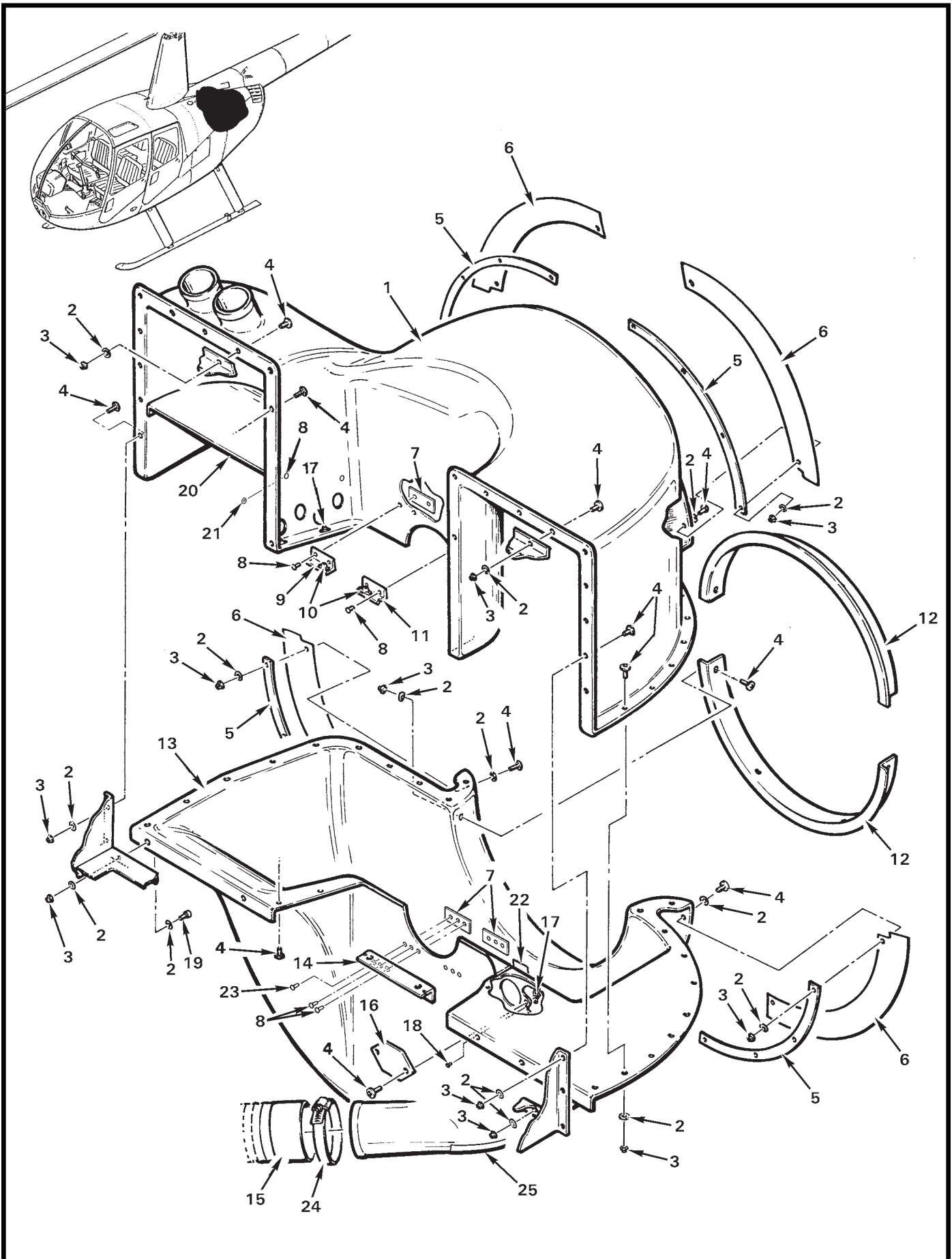


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		<b>SCROLL ASSEMBLY*</b>		
71-27-1	C236-1	Scroll Assembly - Upper (Includes items 7 thru 11, 17, 20, 21 and 23. Not available; to replace order item 26.) . . . . .	X	1
2	NAS1149FN816P	Washer . . . . .	X	66
3	MS21042L08	Nut . . . . .	X	66
4	MS27039C0806	Screw . . . . .	X	63
5	D229-2	Retainer . . . . .	X	4
6	D229-3	Seal . . . . .	X	4
7	A185-3	Plate . . . . .	X	4
8	MS20470AD4	Rivet . . . . .	X	8
9	A185-2	Bracket . . . . .	X	1
10	MS21075L3E	Nutplate (install using item 18) . . . . .	X	2
11	A185-5	Bracket . . . . .	X	1
12	D229-1	Lip . . . . .	X	2
13	C236-2	Scroll Assembly - Lower (Incl items 7, 8, 14, 17, 18, 22, 23, and 25) . . . . .	X	1
14	A185-1	Bracket . . . . .	X	1
15	A785-12	Hose (scroll-to-muffler shroud, Ref; see Figure 21-37)		
16	D229-4	Cover . . . . .	X	1
17	MS21069L08	Nutplate . . . . .	X	4
18	MS20426AD3	Rivet . . . . .	X	16
19	NAS1352-08-8P	Screw . . . . .	X	5
20	D168-1	Vane Assembly (install using item 8) . . . . .	X	1
21	NAS620-5	Washer (for shimming between items 1 and 20, [2] places inboard) . . . . .	X	A/R
22	A701-1	Tape - Aluminum (1 in. width) . . . . .	X	A/R
23	MS20426AD4	Rivet (at outboard positions) . . . . .	X	2
24	B277-36	Clamp (Ref, see Figure 21-37)		
25	A701-2	Tape-Aluminum (6 in. width) . . . . .	X	A/R
26	C027-2A	Scroll Set (Incl items 1, 4, 13, and 16) . . . . .	X	1

NOTES \* Ship S/N 0001 thru 9999.

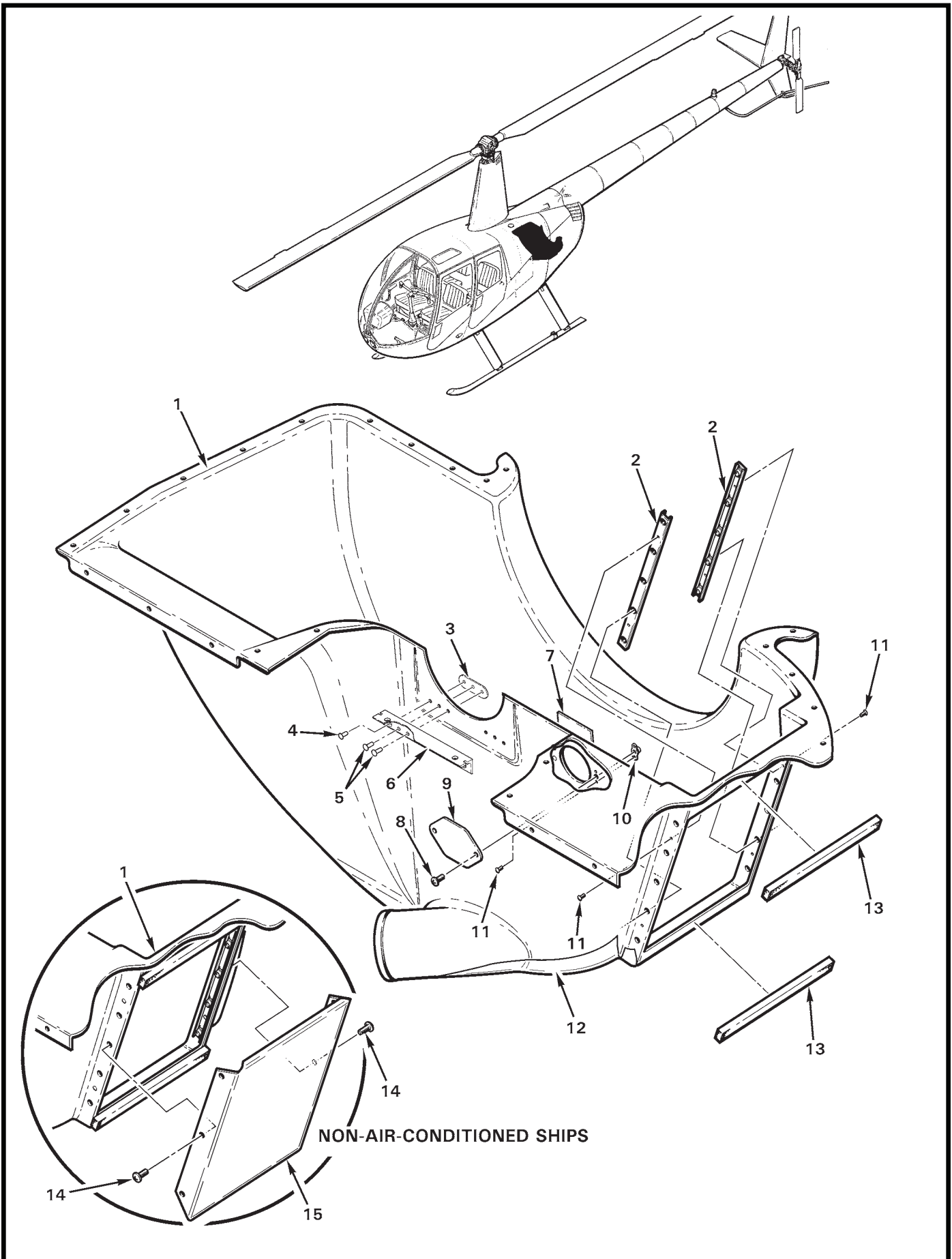


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>SCROLL ASSEMBLY*</b>				
71-29-1	C236-5	Scroll Assembly - Lower (Incl items 2 thru 7, and 10 thru 13) . .	X	1
2	A738-35	Gang Channel . . . . .	X	2
3	A185-3	Plate . . . . .	X	2
4	MS20426AD4	Rivet (at outboard locations) . . . . .	X	2
5	MS20470AD4	Rivet . . . . .	X	4
6	A185-1	Bracket . . . . .	X	1
7	A701-1	Tape . . . . .	X	A/R
8	MS27039C0806	Screw . . . . .	X	2
9	D229-4	Cover . . . . .	X	1
10	MS21069L08	Nutplate . . . . .	X	2
11	MS20426AD3	Rivet . . . . .	X	8
12	A701-2	Tape - Aluminum (6 in. width) . . . . .	X	A/R
13	A260-11	Tape . . . . .	X	2
14	MS27039C1-07	Screw . . . . .	X	6
15	D854-1	Cover (non-air-conditioned ships only) . . . . .	X	1
16	C027-3A/C	Scroll Set (Includes items 1, 8, 9, and item 1 from Figure 71-29.) .	X	1

NOTES \* Ship S/N 10001 and subsequent.

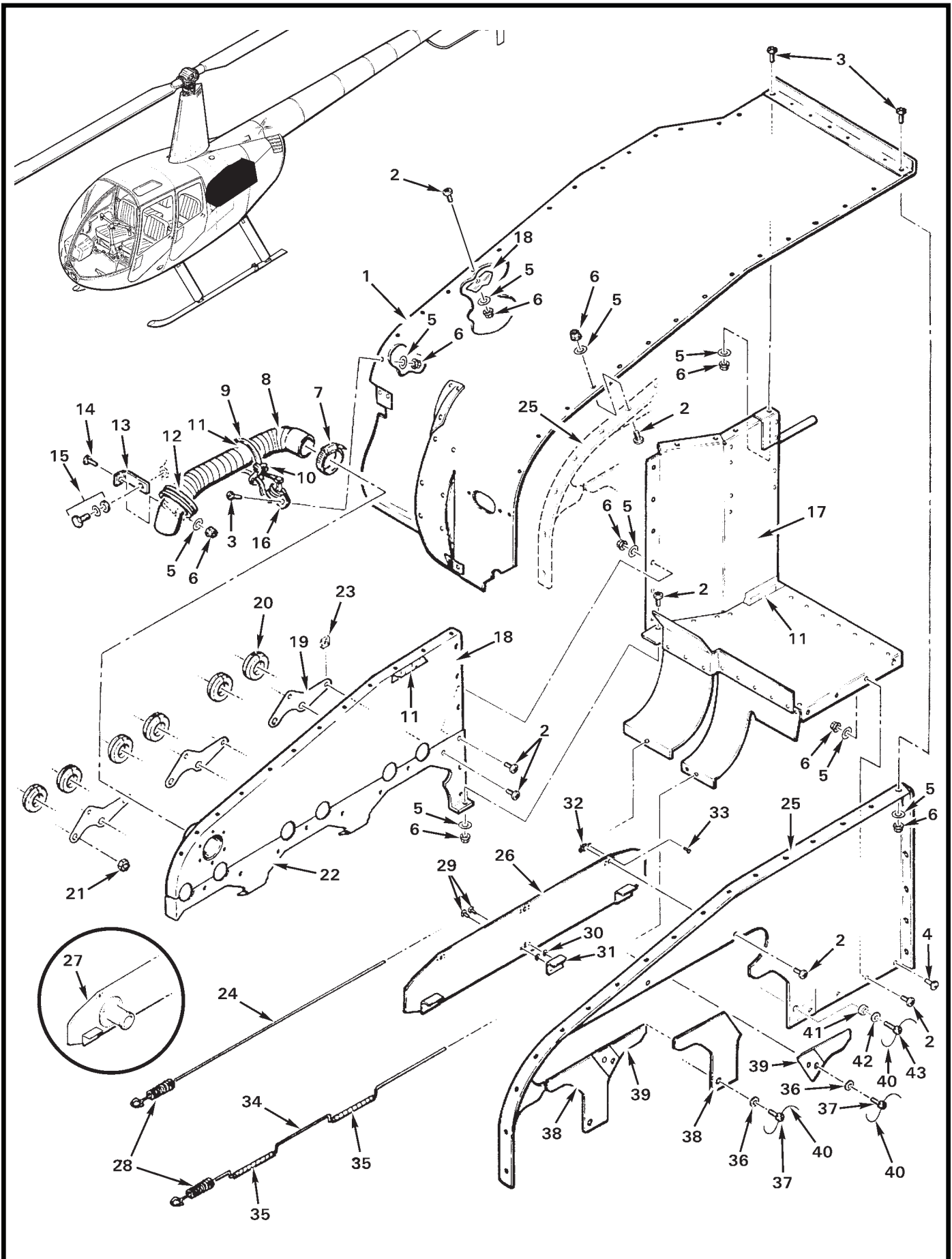




FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>LEFT SIDE COOLING PANELS*</b>				
71-31-1	C312-1	Cover Assembly . . . . .	X	1
2	MS27039C0806	Screw . . . . .	X	3
3	MS27039C0805	Screw . . . . .	X	50
4	MS27039C0806	Screw (aft location as shown) . . . . .	X	1
5	NAS1149FN816P	Washer . . . . .	X	51
6	MS21042L08	Nut . . . . .	X	51
7	B277-16	Clamp . . . . .	X	4
8	A785-19	Hose . . . . .	X	1
9	MS3367-7-9	Ty-Rap . . . . .	X	1
10	MS3367-5-9	Ty-Rap . . . . .	X	1
11	A701-1	Tape - Aluminum . . . . .	X	A/R
12	MS21919WDG20	Clamp . . . . .	X	1
13	C357-1	Clip . . . . .	X	1
14	MS27039C0807	Screw . . . . .	X	1
15	—	Existing Engine Hardware (Ref)		
16	MS21919WDG2	Clamp . . . . .	X	1
17	C313-7	Panel Assembly . . . . .	X	1
18	C310-1	Panel . . . . .	X	1
19	A484-3	Attach Plate . . . . .	X	3
20	B401-1	Grommet . . . . .	X	6
21	—	Nut (Ref, existing)		
22	C310-2	Panel . . . . .	X	1
23	B162-2	Clipnut . . . . .	X	6
24	C487-1	Retainer (straight) . . . . .	X	1
25	C305-11	Panel . . . . .	X	1
26	C449-1	Cover Assembly (Incl items 29 thru 33) . . . . .	X	1
27	C449-3	Cover Assembly (For ships with frame-mounted battery. Includes items 29 thru 33.) . . . . .	X	1
28	D774-13	Spring (alternate part no. C0420-042-1250S) . . . . .	X	2
29	MS20470AD4	Rivet . . . . .	X	6
30	NAS620-5	Washer . . . . .	X	6
31	A449-4	Clip . . . . .	X	3

NOTES \* Ship S/N 0001 thru 9999.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>LEFT SIDE COOLING PANELS* (Cont'd)</b>				
71-31-32	MS21069L08	Nutplate . . . . .	X	3
33	NAS1097AD3	Rivet . . . . .	X	6
34	C487-2	Retainer (bent) . . . . .	X	1
35	B161-102	Spirap . . . . .	X	A/R
36	NAS1149F0432P	Washer . . . . .	X	11
37	NAS1352-4H10P	Screw . . . . .	X	11
38	A305-8	Panel . . . . .	X	2
39	A305-7	Cover . . . . .	X	2
40	MS20995C32	0.032 in. dia. Safety Wire . . . . .	X	A/R
41	C130-9	Spacer . . . . .	X	1
42	A141-11	Washer . . . . .	X	1
43	NAS1352-4H14P	Screw . . . . .	X	1

NOTES \* Ship S/N 0001 thru 9999.

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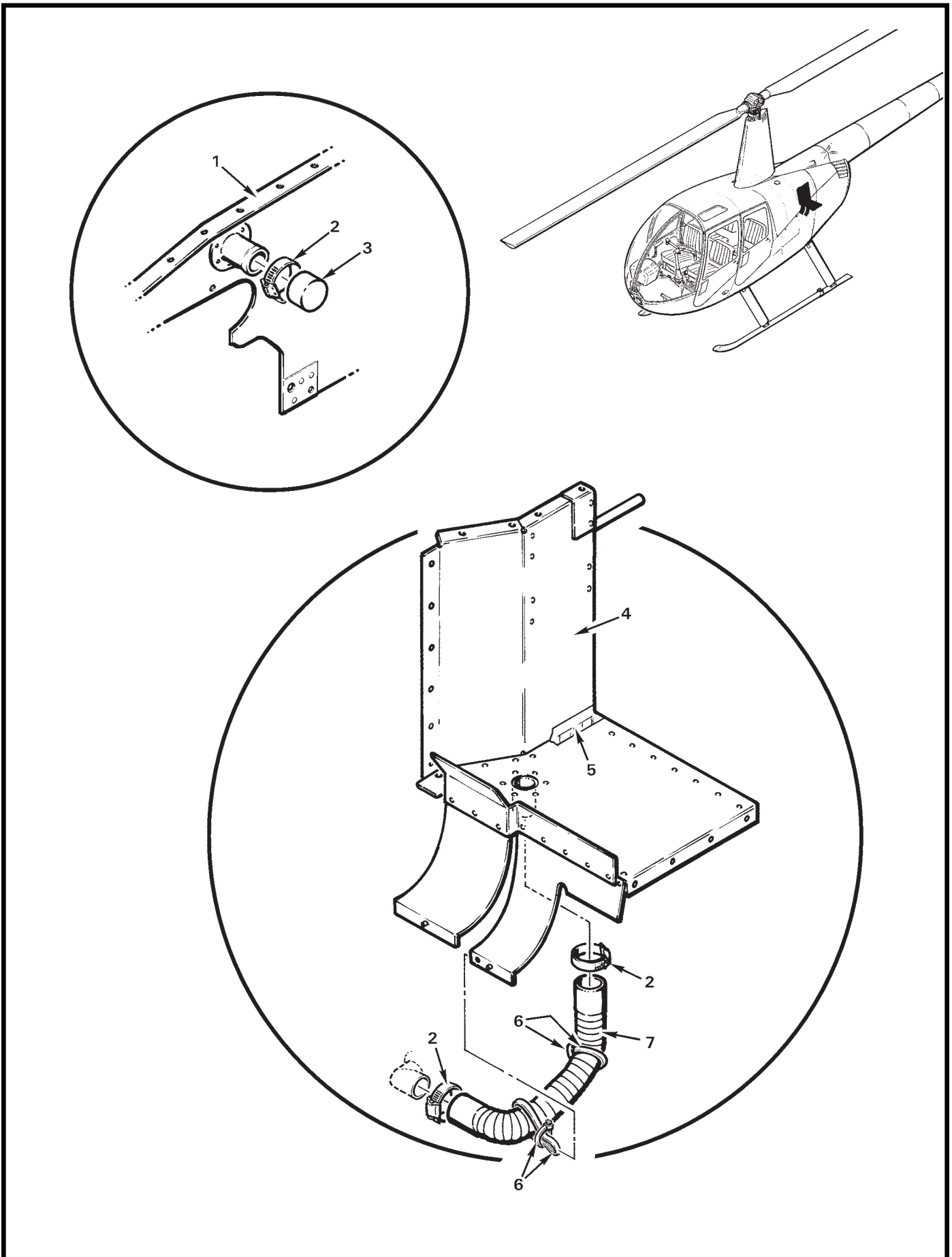


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>LEFT SIDE COOLING PANELS*</b>				
71-35-1	C305-7	Panel Assembly (Ref, no longer available. Superseded by C305-11 panel assembly; see Figure 71-31.)		
2	B277-16	Clamp . . . . .	X	2
3	A959-5	Cap (for R44s with forward or tailcone battery) . . . . .	X	1
4	C313-1	Panel Assembly (for earlier R44s) . . . . .	X	1
5	A701-1	Tape - Aluminum . . . . .	X	A/R
6	MS3367-4-9	Ty-Rap . . . . .	X	4
7	A785-7	Hose (alternator cooling; 1.00 inch dia., 15.00 inch length) . . .	X	1

NOTES \* Ship S/N 0001 thru 9999.

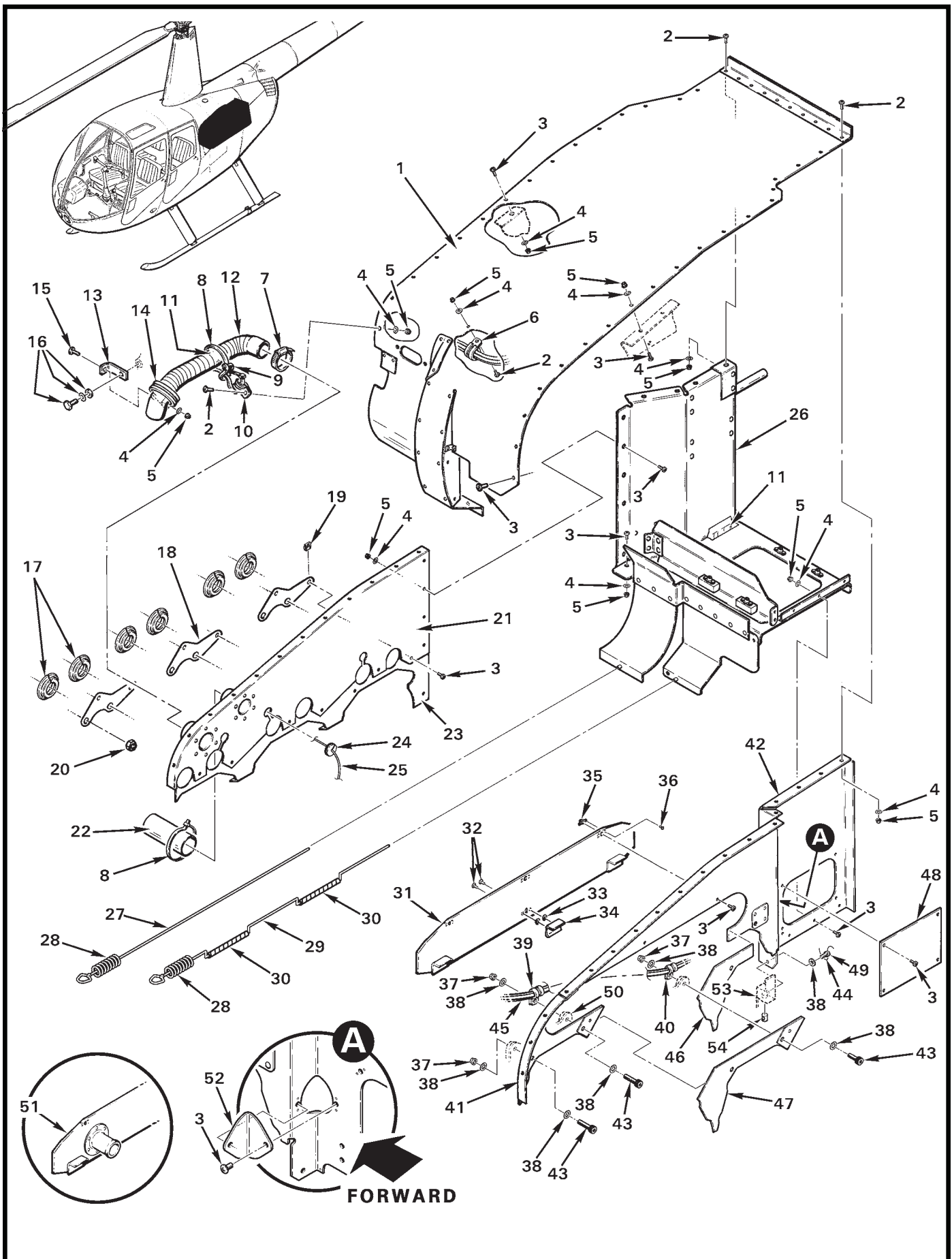


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		LEFT SIDE COOLING PANELS*		
71-37-1	D381-1	Cover . . . . .	X	1
2	MS27039C0806	Screw . . . . .	X	5
3	MS27039C0805	Screw . . . . .	X	58
4	NAS1149FN816P	Washer . . . . .	X	48
5	MS21042L08	Nut . . . . .	X	48
6	MS21919WDG7	Clamp . . . . .	X	1
7	B277-16	Clamp . . . . .	X	1
8	MS3367-7-9	Ty-Rap (large) . . . . .	X	2
9	MS3367-5-9	Ty-Rap (small) . . . . .	X	1
10	MS21919WDG2	Clamp . . . . .	X	1
11	A701-1	Tape - Aluminum . . . . .	X	A/R
12	A785-19	Hose . . . . .	X	1
13	C357-1	Clip . . . . .	X	1
14	MS21919WDG20	Clamp . . . . .	X	1
15	MS27039C0807	Screw . . . . .	X	1
16	—	Existing Engine Hardware (Ref)		
17	B401-2	Grommet . . . . .	X	6
18	A484-3	Plate . . . . .	X	3
19	B162-2	Clipnut . . . . .	X	6
20	383-B	Nut (Ref, supplied with engine) . . . . .	X	6
21	C310-4	Panel (upper) . . . . .	X	1
22	A729-10	Tube . . . . .	X	1
23	C310-5	Panel (lower) . . . . .	X	1
24	MS35489-2	Grommet . . . . .	X	3
25	—	Injector Line (Ref)		
26	D751-1	Panel Assembly . . . . .	X	1
27	C487-1	Retainer (straight) . . . . .	X	1
28	D774-13	Spring (alternate part no. C0420-042-1250S) . . . . .	X	2
29	C487-2	Retainer (bent) . . . . .	X	1
30	B161-102	Spirap . . . . .	X	A/R
31	C449-1	Cover Assembly (Incl items 32 thru 36) . . . . .	X	1

NOTES \* Ship S/N 10001 and subsequent.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>LEFT SIDE COOLING PANELS* (Cont'd)</b>				
71-37-32	MS20470AD4	Rivet . . . . .	X	6
33	NAS620-5	Washer . . . . .	X	6
34	A449-4	Clip . . . . .	X	3
35	MS21069L08K	Nutplate . . . . .	X	6
36	NAS1097AD3	Rivet . . . . .	X	6
37	MS21042L3	Nut . . . . .	X	6
38	NAS1149F0332P	Washer . . . . .	X	12
39	MS21919WDG6	Clamp . . . . .	X	1
40	MS21919WDG4	Clamp . . . . .	X	1
41	D380-7	Panel (forward, small) . . . . .	X	1
42	D380-1	Panel (aft, large) . . . . .	X	1
43	NAS1351-3-16P	Screw . . . . .	X	6
44	MS20995C32	0.032 in. dia. Safety Wire . . . . .	X	A/R
45	—	Ignition Harness (Ref)		
46	D380-9	Panel Assembly . . . . .	X	1
47	D380-3	Panel . . . . .	X	1
48	A412-1	Cover . . . . .	X	1
49	NAS1351-3-6P	Screw . . . . .	X	1
50	—	Engine Cylinder (Ref)		
51	C449-3	Cover Assembly (For ships with engine-compartment battery. Includes items 32 thru 36.) . . . . .	X	1
52	D695-6	Cover . . . . .	X	1
53	C145	Engine Assembly (Ref; IO-540-AE1A5)		
54	D143-1	Nut Assembly (cylinder head) . . . . .	X	1

NOTES \* Ship S/N 10001 and subsequent.



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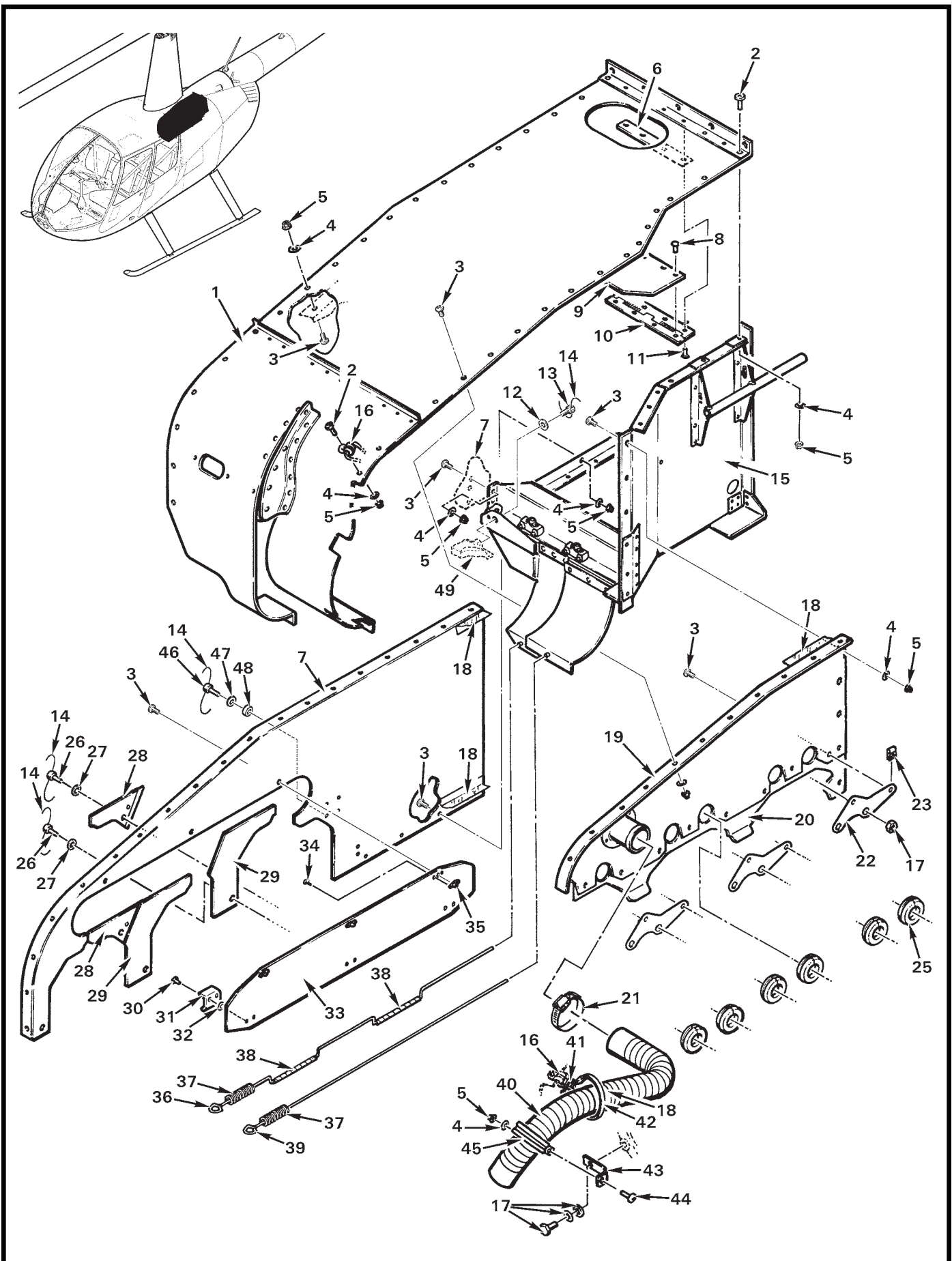


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>RIGHT SIDE COOLING PANELS*</b>				
71-41-1	C308-1	Cover Assembly . . . . .	X	1
2	MS27039C0806	Screw . . . . .	X	3
3	MS27039C0805	Screw . . . . .	X	52
4	NAS1149FN816P	Washer . . . . .	X	51
5	MS21042L08	Nut . . . . .	X	51
6	A775-3	Spacer . . . . .	X	1
7	C305-8	Panel Assembly (use with C649-2 large oil cooler only) . . . . .	X	1
	C305-2	Panel Assembly (use with C649-1 small oil cooler, not shown) . . . . .	X	1
8	MS20426AD3	Rivet . . . . .	X	4
9	A775-1	Cover Assembly (Incl items 8 and 10) . . . . .	X	1
10	A775-2	Hinge . . . . .	X	1
11	MS20470AD3	Rivet . . . . .	X	4
12	NAS1149F0332P	Washer . . . . .	X	1
13	NAS1352-3H6P	Screw (secures item 15 to cylinder head) . . . . .	X	1
14	MS20995C32	0.032 in. dia. Safety Wire . . . . .	X	A/R
15	C309-5	Panel Assembly (use with C649-2 large oil cooler only) . . . . .	X	1
	C309-1	Panel Assembly (use with C649-1 small oil cooler, not shown) . . . . .	X	1
16	MS21919WDG2	Clamp . . . . .	X	1
17	—	Existing Engine Hardware (Ref)		
18	A701-1	Tape - Aluminum . . . . .	X	A/R
19	C306-1	Panel Assembly (upper; includes tube) . . . . .	X	2
20	C306-2	Panel Assembly (lower) . . . . .	X	2
21	B277-16	Clamp . . . . .	X	1
22	A484-3	Attach Plate . . . . .	X	3
23	B162-2	Clipnut . . . . .	X	6
24	—	Existing Engine Nut (Ref)		
25	B401-1	Grommet . . . . .	X	6
26	NAS1352-4H10P	Screw . . . . .	X	11
27	NAS1149F0432P	Washer . . . . .	X	11
28	A305-7	Panel Assembly . . . . .	X	2
29	A305-8	Panel . . . . .	X	2

NOTES \* Ship S/N 0001 thru 9999.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>RIGHT SIDE COOLING PANELS* (Cont'd)</b>				
71-41-30	MS20470AD4	Rivet . . . . .	X	6
31	A449-4	Clip . . . . .	X	3
32	NAS620-5	Washer . . . . .	X	6
33	C449-1	Cover Assembly (Includes items 30 thru 32, and 34) . . . . .	X	1
34	NAS1097AD3	Rivet (flush head) . . . . .	X	6
35	MS21069L08	Nutplate . . . . .	X	3
36	C487-2	Retainer (bent) . . . . .	X	1
37	D774-13	Spring (alternate part no. C0420-042-1250S) . . . . .	X	2
38	B161-102	Spirap . . . . .	X	A/R
39	C487-1	Retainer (straight) . . . . .	X	1
40	A785-19	Hose (magneto cooling) . . . . .	X	1
41	MS3367-5-9	Ty-Rap (around item 42) . . . . .	X	1
42	MS3367-7-9	Ty-Rap . . . . .	X	1
43	C357-1	Clip . . . . .	X	1
44	MS27039C0807	Screw . . . . .	X	1
45	MS21919WDG20	Clamp . . . . .	X	1
46	NAS1352-4H14P	Screw . . . . .	X	1
47	A141-11	Washer . . . . .	X	1
48	C130-9	Spacer . . . . .	X	1
49	C145	Engine Assembly (Ref; O-540-F1B5)		

NOTES \* Ship S/N 0001 thru 9999.

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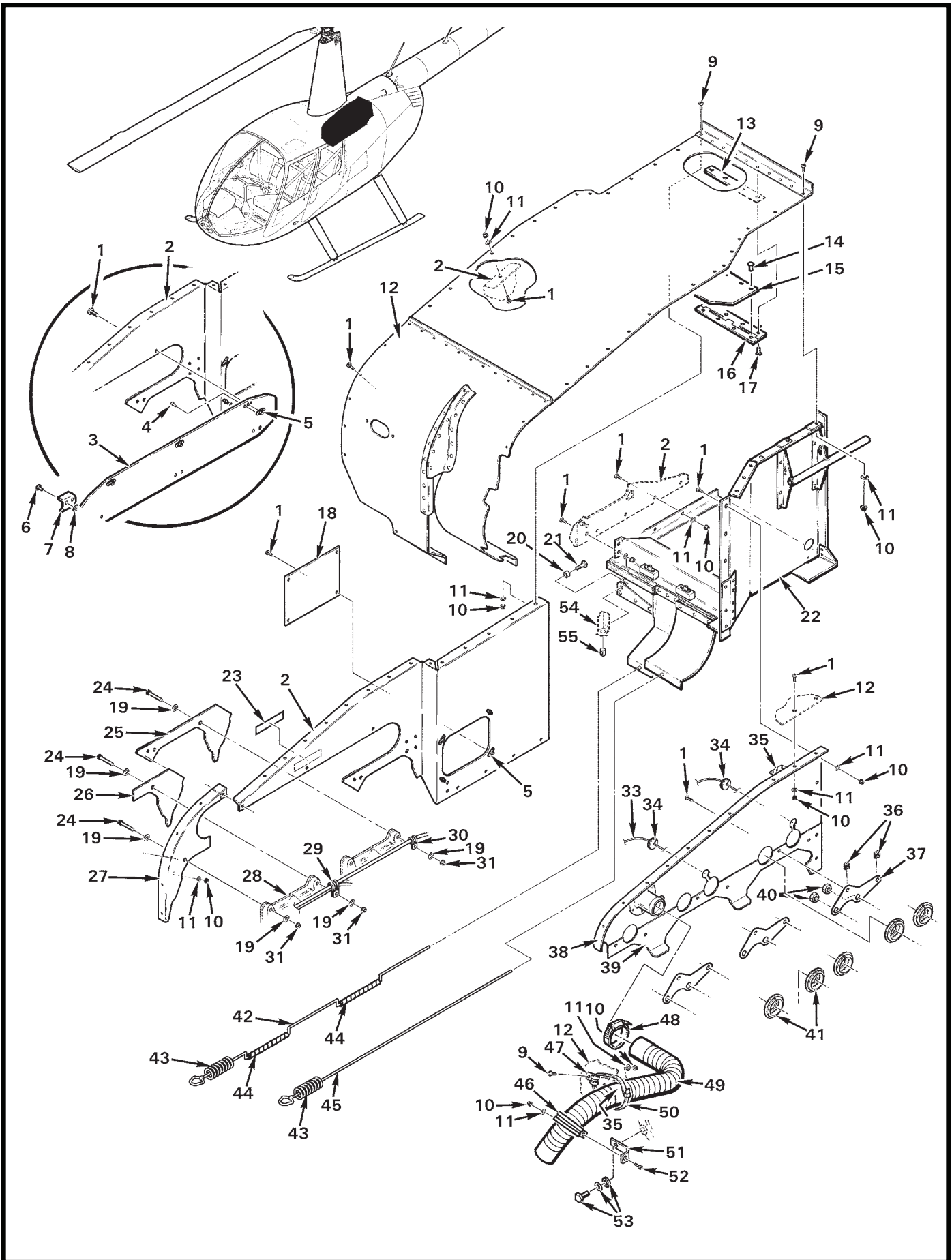


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		<b>RIGHT SIDE COOLING PANELS*</b>		
71-45-1	MS27039C0805	Screw . . . . .	X	56
2	D380-10	Panel Assembly (Incl items 5 and 23) . . . . .	X	1
3	C449-1	Cover Assembly (Incl items 4 thru 8) . . . . .	X	1
4	NAS1097AD3	Rivet (flush head) . . . . .	X	6
5	MS21069L08	Nutplate . . . . .	X	3
6	MS20470AD4	Rivet . . . . .	X	6
7	A449-4	Clip . . . . .	X	3
8	NAS620-5	Washer . . . . .	X	6
9	MS27039C0806	Screw . . . . .	X	3
10	MS21042L08	Nut . . . . .	X	52
11	NAS1149FN816P	Washer . . . . .	X	52
12	D382-1	Cover Assembly (Incl items 13 and 15) . . . . .	X	1
13	A775-3	Spacer . . . . .	O	1
14	MS20426AD3	Rivet . . . . .	X	4
15	A775-1	Cover Assembly (Incl items 14 and 16) . . . . .	X	1
16	A775-2	Hinge . . . . .	X	1
17	MS20470AD3	Rivet . . . . .	X	4
18	A412-1	Cover . . . . .	X	1
19	NAS1149F0332P	Washer . . . . .	X	13
20	A130-51	Spacer . . . . .	X	1
21	NAS6603-5	Bolt . . . . .	X	1
22	C309-6	Panel Assembly . . . . .	X	1
23	D682-18	Decal (spark plug requirements) . . . . .	X	1
24	NAS1351-3-16P	Screw . . . . .	X	6
25	D380-3	Panel Assembly . . . . .	X	1
26	D380-9	Panel . . . . .	X	1
27	D380-12	Panel . . . . .	X	1
28	—	Engine Cylinder (Ref)		
29	MS21919WDG6	Clamp . . . . .	X	1
30	MS21919WDG4	Clamp . . . . .	X	1
31	MS21042L3	Nut . . . . .	X	6

NOTES \* Ship S/N 10001 and subsequent.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
RIGHT SIDE COOLING PANELS* (Cont'd)				
71-45-32	—	Ignition Harness (Ref)		
33	—	Injector Line (Ref)		
34	MS35489-2	Grommet . . . . .	X	3
35	A701-1	Tape - Aluminum . . . . .	X	A/R
36	B162-2	Clipnut . . . . .	X	6
37	A484-3	Plate . . . . .	X	3
38	C306-4	Panel . . . . .	X	1
39	C306-5	Panel . . . . .	X	1
40	383-B**	Nut (supplied with engine) . . . . .	X	6
41	B401-2	Grommet . . . . .	X	5
42	C487-2	Retainer (bent) . . . . .	X	1
43	D774-13	Spring (alternate part no. C0420-042-1250S) . . . . .	X	2
44	B161-102	Spirap . . . . .	X	A/R
45	C487-1	Retainer (straight) . . . . .	X	1
46	MS21919WDG20	Clamp . . . . .	X	1
47	MS21919WDG2	Clamp . . . . .	X	1
48	B277-16	Clamp . . . . .	X	1
49	A785-19	Hose . . . . .	X	1
50	MS3367-7-9	Ty-Rap . . . . .	X	1
51	C357-1	Clip . . . . .	X	1
52	MS27039C0807	Screw . . . . .	X	1
53	—	Existing Engine Hardware (Ref)		
54	C145	Engine Assembly (Ref; IO-540-AE1A5)		
55	D143-1	Nut Assembly (cylinder head) . . . . .	X	1

NOTES \* Ship S/N 10001 and subsequent.  
 \*\* Lycoming part no.



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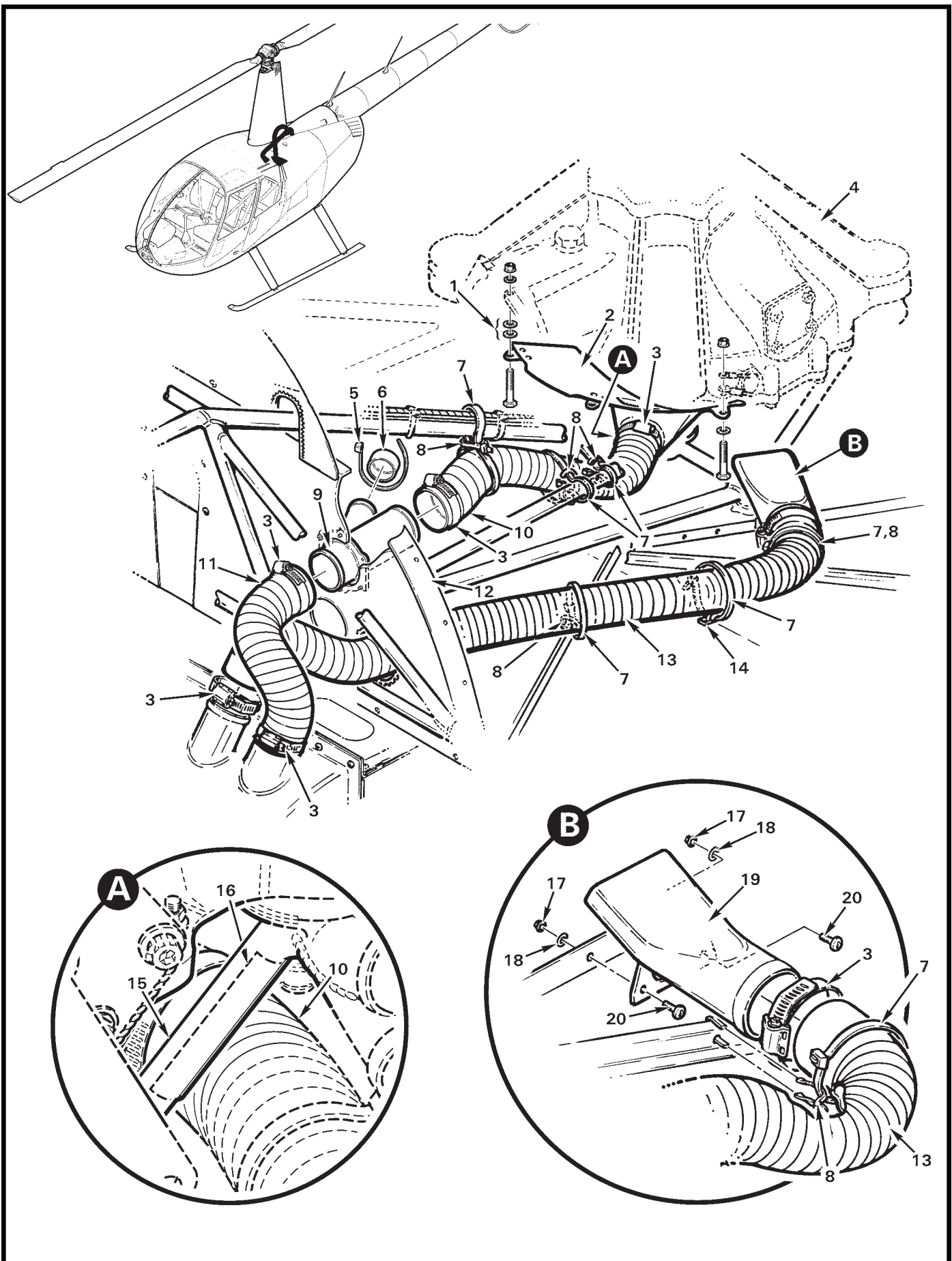


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>MAIN ROTOR GEARBOX COOLING HOSES</b>				
71-49-1	NAS1149F0432P	Washer (or NAS1149F0463P as required to fill gap between item 2 and sump; [2] NAS1149F0463P washers maximum)	X	A/R
2	C747-1	Baffle Assembly . . . . .	X	1
3	B277-28	Clamp . . . . .	X	6
4	C006	Main Rotor Gearbox (Ref, see Figure 63-1)		
5	MS3367-7-9	Ty-Rap . . . . .	X	A/R
6	A959-4	Cap (manual controls only) . . . . .	X	1
7	MS3367-3-9	Ty-Rap . . . . .	X	A/R
8	MS3367-5-9	Ty-Rap . . . . .	X	A/R
9	C371-1	Tube Assembly . . . . .	X	1
10	A785-6	Hose (to main rotor gearbox) . . . . .	X	1
11	A785-17	Hose (to scroll) . . . . .	X	1
12	C723-1	Bulkhead (Ref, see Figure 53-15)		
13	A785-16	Hose (air supply) . . . . .	X	1
14	MS21919WDG4	Clamp . . . . .	X	1
15	C020-1	Upper Frame Assembly (Ref, see Figure 52-19)		
16	A701-3	Tape (0.5 in. wide polyethylene) . . . . .	X	A/R
17	MS21042L08	Nut . . . . .	X	1
18	NAS1149FN816P	Washer . . . . .	X	2
19	C749-1	Nozzle Assembly . . . . .	X	1
20	MS27039C0806	Screw . . . . .	X	2

NOTES

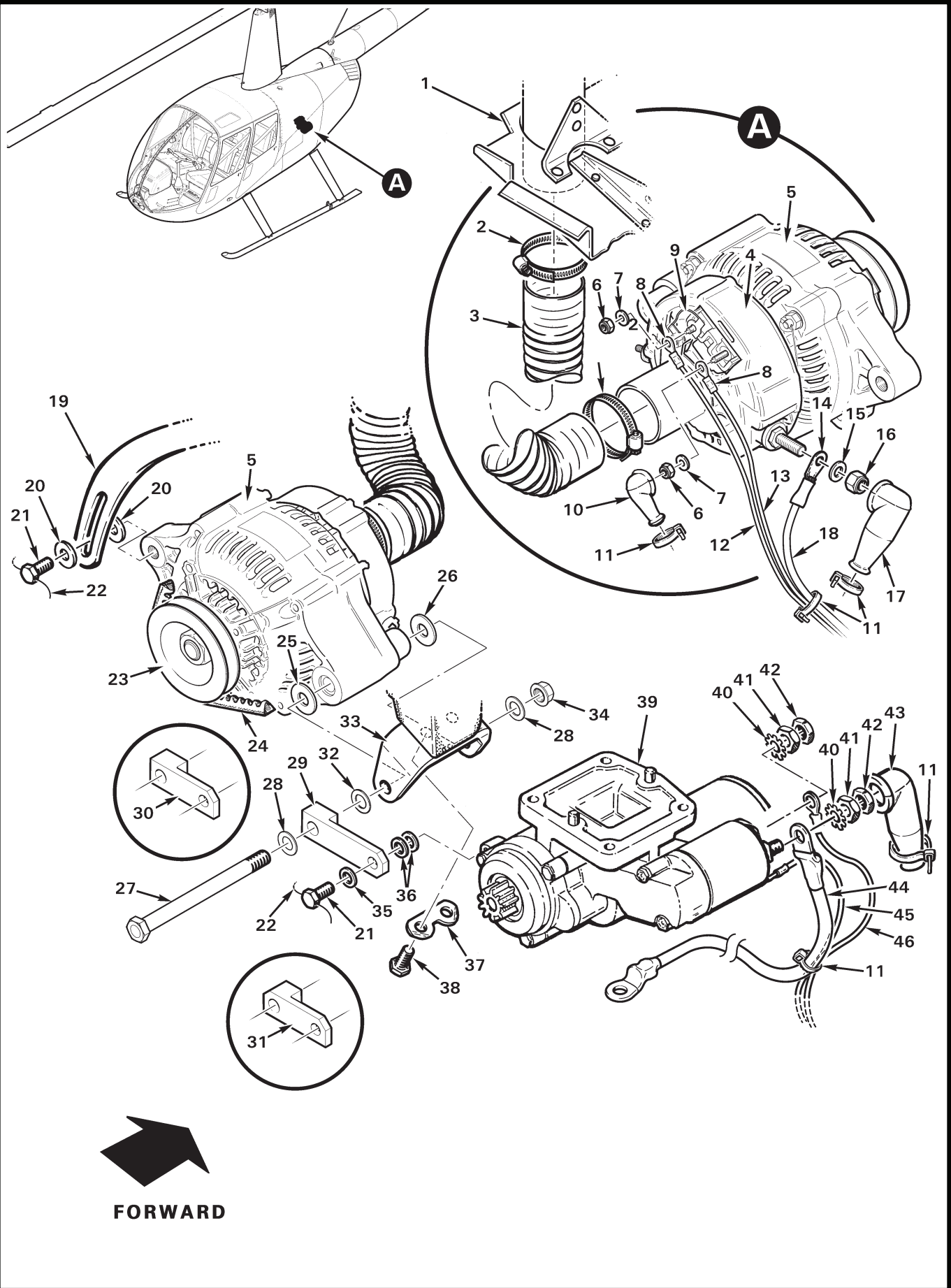


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>ALTERNATOR AND STARTER INSTALLATION</b>				
71-49B-1	D754-4	Baffle Assembly (O-540 ships) . . . . .	X	1
	D754-1	Baffle Assembly (IO-540 ships) . . . . .	X	1
2	B277-24	Clamp . . . . .	X	2
3	A785-32	Hose (1.5-in. dia., 8.25-in. length; see also Figure 71-39) . . .	X	1
4	—	Shroud Weldment . . . . .	O	1
5	D748-5*	Alternator Assembly – 70 Amp (14-volt ships; lightweight. Incl items 4, 9, and 23.) . . . . .	X	1
	D748-6*	Alternator Assembly – 70 Amp (28-volt ships; lightweight. Incl items 4, 9, and 23.) . . . . .	X	1
6	90576A103	Nut . . . . .	X	1
7	NAS1149FN816P	Washer . . . . .	X	1
8	B260-3	Terminal . . . . .	X	1
9	—	Jumper Wire Assembly . . . . .	O	1
10	MS25171-1S	Nipple . . . . .	X	1
11	MS3367-4-9	Ty-Rap . . . . .	X	A/R
12	C859-23	Wire (Ref)		
13	C859-68	Wire (Ref)		
14	B260-26	Terminal . . . . .	X	1
15	NAS1149F0432P	Washer . . . . .	X	1
16	94645A205	Nut . . . . .	X	1
17	MS25171-2S	Nipple . . . . .	X	1
18	A780-36	Cable Assembly (aft and tailcone batteries) . . . . .	X	1
	A780-68	Cable Assembly (under seat battery) . . . . .	X	1
19	B200-3	Arm . . . . .	X	1
20	STD-1727**	Washer . . . . .	X	2
21	NAS6605-5	Bolt . . . . .	X	2
22	MS20995C32	0.032-in. dia. Safety Wire . . . . .	X	A/R
23	B200-5	Pulley . . . . .	X	1
24	B173-6***	V-Belt . . . . .	X	1
25	STD-690**	Washer . . . . .	X	1
26	STD-690**	Washer (NAS1149F0632P, NAS1149F0663P, and/or NAS1149F0663P as required to fill gap) . . . . .	X	A/R

NOTES \* RH-24-70 (24V) and RH12-70A (12V) alternators; Hartzell Engine Technologies, formerly Plane Power.

\*\* Lycoming part no.

\*\*\* Use with 31M22972\* ring gear. Use B173-1 v-belt with 31M21951\* ring gear.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
ALTERNATOR AND STARTER INSTALLATION (Cont'd)				
71-49B-27	AN6-42A	Bolt . . . . .	X	1
28	NAS1149F0632P	Washer . . . . .	X	2
29	B299-3	Link (2.240 inches, center-to-center; for use with Sky-Tech Starters) . . . . .	X	1
30	B299-1	Link (1.600 inches, center-to-center; for use with B&C Starters)	X	1
31	B299-2	Link (1.530 inches, center-to center; earlier R44s) . . . . .	X	1
32	NAS1149F0632P	Washer (or NAS1149D0616J as required to fill gap) . . . . .	X	A/R
33	B200-1	Bracket . . . . .	X	1
34	D210-7	Nut . . . . .	X	2
35	STD-35*	Washer . . . . .	X	1
36	NAS1149F0532P	Washer (or NAS1149F0516P, as required to fill gap) . . . . .	X	A/R
37	73383*	Lockplate . . . . .	X	1
38	LW-31-0.94*	Bolt (supplied with engine) . . . . .	X	2
39	BC315-100-2**	Starter (14-volt ships; includes items 40 and 41.) . . . . .	X	1
	BC315-100-2R	BC315-100-2** Starter (overhaul exchange) . . . . .	X	1
	BC315-100-4**	Starter (28-volt ships; includes items 40 and 41.) . . . . .	X	1
	BC315-100-4R	BC315-100-4** Starter (overhaul exchange) . . . . .	X	1
40	—	Lockwasher (Ref)		
41	—	Nut (Ref)		
42	B330-16	Palnut (14-volt ships only) . . . . .	X	2
43	MS25171-2S	Nipple (14-volt aft battery and all 28-volt ships) . . . . .	X	1
	MS25171-4S	Nipple (14-volt under seat battery, not shown) . . . . .	X	1
44	A780-65	Cable Assembly (14/28-volt aft battery; 53.5 inches, center-to-center. Includes B274-704 wire, [1] B260-20 and B260-22 terminal, and B158-8 heat shrink.) . . . . .	X	1
	A780-24	Cable Assembly (28-volt ENG tailcone battery; IO-540 ships. Includes B274-704 wire, [1] B260-20 terminal, and B158-8 heat shrink) . . . . .	X	1
45	C059-582	Wire (Ref)		
46	B304-20	Fuse Assembly (mates to C859-3115) . . . . .	X	1

NOTES \* Lycoming part no.  
 \*\* B&C Specialty Products part no.

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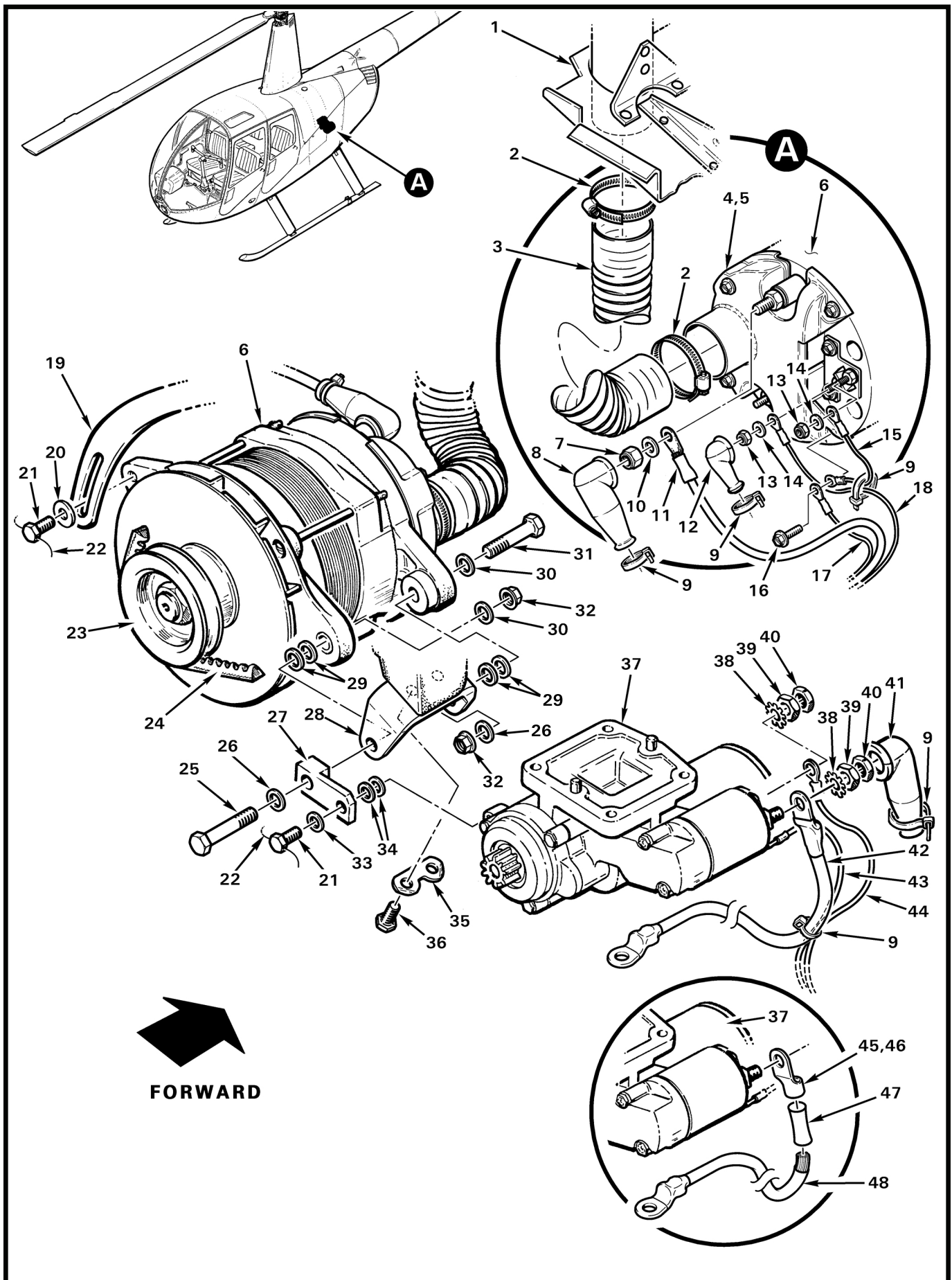




FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>ALTERNATOR AND STARTER INSTALLATION</b>				
71-51-1	D754-4	Baffle Assembly (O-540 ships) . . . . .	X	1
	D754-1	Baffle Assembly (IO-540 ships) . . . . .	X	1
2	B277-24	Clamp . . . . .	X	2
3	A785-32	Hose (1.5 in. dia., 8.25 in. length; also see Figure 71-39) . . . . .	X	1
4	D747-5	Shroud Weldment (install using item 5) . . . . .	X	1
5	B270-20	Adhesive . . . . .	X	A/R
6	D748-2	Alternator Assembly, 70-Amp (14-volt ships. Incl items 4, 5, 7, 10, 13, 14, and 23.) . . . . .	X	1
	D748-2R	D748-2 Alternator Assembly (overhaul exchange) . . . . .	X	1
	D748-1	Alternator Assembly, 70-Amp (28-volt ships. Incl items 4, 5, 7, 10, 13, 14, and 23.) . . . . .	X	1
	D748-1R	D748-1 Alternator Assembly (overhaul exchange) . . . . .	X	1
7	MS21044N4	Nut . . . . .	X	1
8	MS25171-2S	Nipple . . . . .	X	2
9	MS3367-4-9	Ty-Rap . . . . .	X	3
10	NAS1149F0432P	Washer . . . . .	X	1
11	A780-36	Cable Assembly (aft and tailcone battery) . . . . .	X	1
	A780-37	Cable Assembly (forward and under seat battery) . . . . .	X	1
12	MS25171-1S	Nipple . . . . .	X	1
13	MS21044N06	Nut . . . . .	X	2
14	NAS1149FN616P	Washer . . . . .	X	2
15	C059-24	Wire (Ref)		
16	—	Screw (supplied with alternator) . . . . .	O	4
17	C059-33	Wire (Ref)		
18	C059-23	Wire (Ref)		
19	B200-3	Arm . . . . .	X	1
20	STD-1727*	Washer . . . . .	X	1
21	LW-31H0.75*	Bolt (Ref; supplied with engine)		
22	MS20995C32	0.032 in. dia. Safety Wire . . . . .	X	A/R
23	36B19484*	Pulley . . . . .	X	1
24	B173-3**	V-Belt . . . . .	X	1

NOTES \* Lycoming part no.  
 \*\* Use with 31M22972\* ring gear. Use B173-1 v-belt with 31M21951\* ring gear.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
ALTERNATOR AND STARTER INSTALLATION (Cont'd)				
71-51-25	AN6-17A	Bolt (AN6-16A or AN6-20A may be used to obtain 2-4 threads beyond nut.) . . . . .	X	1
26	NAS1149F0632P	Washer . . . . .	X	4
27	B299-1	Link (1.600 inch center-to-center) . . . . .	X	1
	B299-2	Link (1.530 inch center-to-center) . . . . .	X	1
28	B200-1	Bracket . . . . .	X	1
29	NAS1149F0663P	Washer (NAS1149F0632P or NAS1149D0616J as required for shimming; IO-540 ships only) . . . . .	X	A/R
	STD-690*	Washer (76534* shim, as required for shimming; O-540 ships only) . . . . .	X	A/R
30	NAS1149F0632P	Washer (IO-540 ships only) . . . . .	X	2
	STD-690*	Washer (O-540 ships only) . . . . .	X	2
31	AN6-15A	Bolt . . . . .	X	1
32	MS21042L6	Nut . . . . .	X	2
33	STD-35*	Washer . . . . .	X	1
34	NAS1149F0532P	Washer (or NAS1149F0516P, as required for shimming) . . . . .	X	A/R
35	73383*	Lockplate . . . . .	X	1
36	LW-31-0.94*	Bolt (supplied with engine) . . . . .	X	2
37	BC315-100-2**	Starter (14-volt ships. Includes items 38 and 39.) . . . . .	X	1
	BC315-100-2R	BC315-100-2** Starter (overhaul exchange) . . . . .	X	1
	BC315-100-4**	Starter (28-volt ships. Includes items 38 and 39.) . . . . .	X	1
	BC315-100-4R	BC315-100-4** Starter (overhaul exchange) . . . . .	X	1
38	—	Lockwasher (Ref)		
39	—	Nut (Ref)		
40	B330-16	Palnut (14-volt ships only) . . . . .	X	2
41	MS25171-2S	Nipple (14-volt aft battery and all 28-volt ships) . . . . .	X	1
	MS25171-4S	Nipple (14-volt forward/under seat battery not shown) . . . . .	X	1
42	A780-26	Cable Assembly (14/28-volt aft battery [O-540 ships]) . . . . .	X	1
	A780-24	Cable Assembly (28-volt ENG tailcone battery [O-540 ships]) . . . . .	X	1
	A780-39	Cable Assembly (28-volt aft, ENG/Police tailcone battery [IO-540 ships]) . . . . .	X	1
43	C059-582	Wire (Ref)		

NOTES \* Lycoming part no.  
 \*\* B&C Specialty Products part no.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
ALTERNATOR AND STARTER INSTALLATION (Cont'd)				
71-51-44	C059-591	Wire (Ref; O-540 ships)		
	C059-1602	Wire (Ref; IO-540 ships)		
45	B260-23	Terminal . . . . .	X	2
46	B260-20	Terminal . . . . .	X	2
47	B158-8	Heat Shrink . . . . .	X	A/R
48	C067-587	Wire (Ref; 14-volt forward/under seat battery; includes items 45 [1] and 47) . . . . .	X	1
	C067-1386	Wire (Ref; 28-volt forward/under seat battery; includes items 46 [1] and 47) . . . . .	X	1
NOTES				

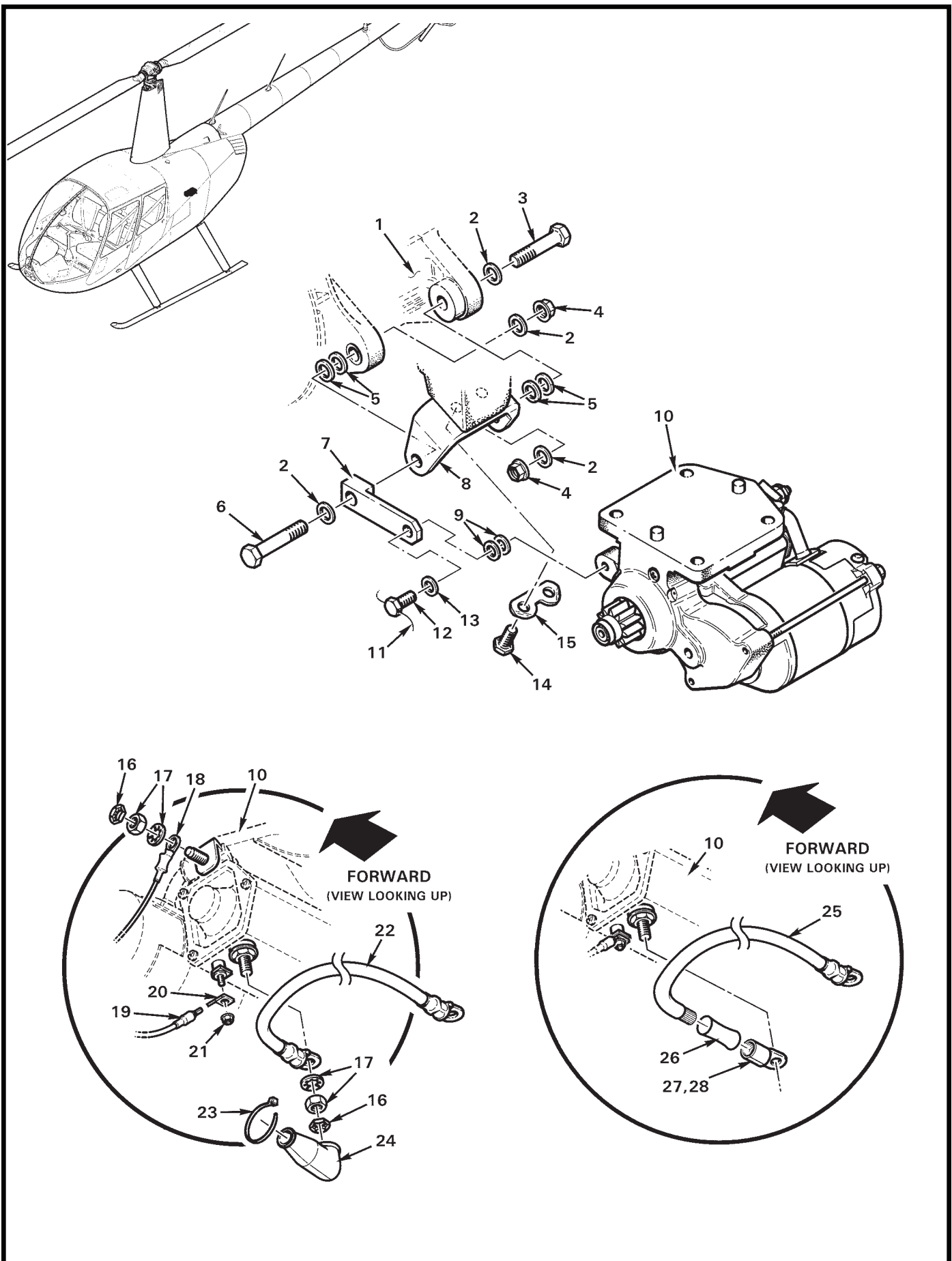


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>STARTER INSTALLATION</b>				
71-55-1	D748	Alternator Assy (Ref; see Figure 71-51)		
2	NAS1149F0632P	Washer . . . . .	X	4
3	AN6-15A	Bolt . . . . .	X	1
4	MS21042L6	Nut . . . . .	X	2
5	NAS1149F0663P	Washer (NAS1149F0632P, NAS1149D0616J as required for shimming) . . . . .	X	A/R
6	AN6-17A	Bolt (AN6-16A or AN6-20A may be used to obtain 2-4 threads beyond nut) . . . . .	X	1
7	B299-3	Link . . . . .	X	1
8	B200-1	Bracket . . . . .	X	1
9	NAS1149F0532P	Washer (or NAS1149F0516P as required for shimming) . . . . .	X	A/R
10	149-12HT/H*	Starter (14-volt ships. Includes items 17, 20, and 21.) . . . . .	O	1
	149-24HT/H*	Starter (28-volt ships. Includes items 17, 20, and 21.) . . . . .	O	1
11	MS20995C32	0.032 in. dia. Safety Wire . . . . .	X	A/R
12	LW-31H0.75**	Bolt (Ref; supplied with engine)		
13	STD-35**	Washer . . . . .	X	1
14	LW-31-0.94**	Bolt . . . . .	X	1
15	73383**	Lockplate . . . . .	X	1
16	B330-16	Palnut . . . . .	X	2
17	—	Washer and Nut (Ref, supplied with starter)		
18	C059-591	Wire (Ref; O-540 ships. C059-1602, IO-540 ships)		
19	C059-582	Wire (Ref)		
20	—	Terminal (Ref)		
21	—	Nut (Ref)		
22	A780-26	Cable Assy (14/28-volt aft battery [O-540 ships]) . . . . .	X	1
	A780-24	Cable Assy (28-volt ENG tailcone battery [O-540 ships]) . . . . .	X	1
	A780-39	Cable Assy (28-volt, ENG/Police tailcone battery [IO-540 ships]) . . . . .	X	1
23	MS3367-4-9	Ty-Rap . . . . .	X	3
24	MS25171-2S	Nipple (14-volt aft battery and all 28-volt ships) . . . . .	X	1
	MS25171-4S	Nipple (14-volt forward/under seat battery; not shown) . . . . .	X	1
25	C067-587	Wire (14-volt forward/under seat battery; incl item 27 [1]) . . . . .	X	1
	C067-1386	Wire (28-volt forward/under seat battery; incl item 28 [1]) . . . . .	X	1

NOTES \* Sky-Tec part no.  
 \*\* Lycoming part no.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
STARTER INSTALLATION (Cont'd)				
71-55-26	B158-8	Heat Shrink . . . . .	X	A/R
27	B260-23	Terminal (for C067-587 wire) . . . . .	X	2
28	B260-20	Terminal (for C067-1386 wire) . . . . .	X	2
NOTES				

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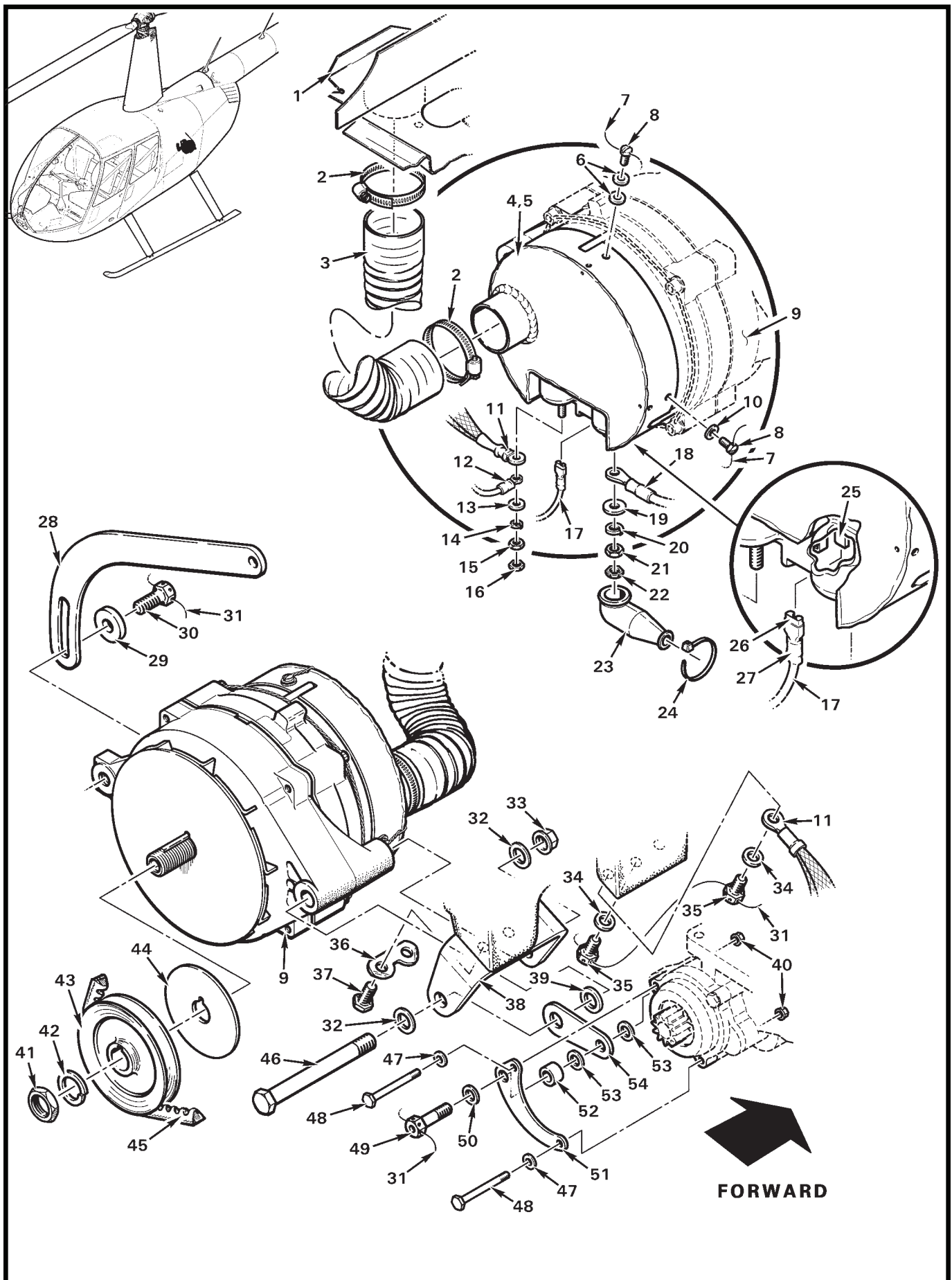




FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>130-AMP 28V ALTERNATOR INSTALLATION</b>				
71-59-1	D754-1	Baffle Assembly . . . . .	X	1
2	B277-24	Clamp . . . . .	X	2
3	A785-32	Hose (1.5 inch dia., 8.25 inch length) . . . . .	X	1
4	D726-1	Shroud Weldment (Used with item 39 [D729-1; O-540], for spares; not shown.) . . . . .	X	1
5	D726-8	Shroud Weldment (Used with item 39 [D729-2; IO-540], for spares; not shown.) . . . . .	X	1
6	NAS1149F0363P	Washer . . . . .	X	2
7	MS20995C20	0.020 in. dia. Safety Wire . . . . .	X	A/R
8	AN503-10-6	Screw . . . . .	X	3
9	D729-2	Alternator Assembly – 130-Amp (28-volt; IO-540 ships. Includes items 5, 7, 8, 10, 13 thru 16, 19 thru 22, 25, and 41 thru 44.) . . . . .	X	1
	D729-1	Alternator Assembly - 130-Amp (28-volt; O-540 ships. Includes items 4, 7, 8, 10, 13 thru 16, 19 thru 22, 25, and 41 thru 44.) . . . . .	X	1
10	NAS1149F0332P	Washer . . . . .	X	2
11	A780-38	Cable Assembly (ground) . . . . .	X	1
12	C059-33	Wire (Ref)		
13	—	Flat Washer . . . . .	O	1
14	—	Lockwasher . . . . .	O	1
15	—	Nut . . . . .	O	1
16	B330-8	Palnut . . . . .	X	1
17	C059-23	Wire (Ref)		
18	A780-36	Cable Assembly (aft and tailcone battery) . . . . .	X	1
	A780-37	Cable Assembly (forward and under seat battery) . . . . .	X	1
19	—	Flat Washer . . . . .	O	1
20	—	Lockwasher . . . . .	O	1
21	—	Nut . . . . .	O	1
22	B330-12	Palnut . . . . .	X	1
23	MS25171-2S	Nipple . . . . .	X	1
24	MS3367-4-9	Ty-Rap . . . . .	X	1
25	—	Terminal (“FLD”; Ref)		

NOTES

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
130-AMP 28V ALTERNATOR INSTALLATION (Cont'd)				
71-59-26	B262-4	Receptacle . . . . .	X	1
27	B158-4	Heat Shrink . . . . .	X	A/R
28	D728-1	Arm . . . . .	X	1
29	A141-9	Washer . . . . .	X	1
30	MS20074-06-07	Bolt . . . . .	X	1
31	MS20995C32	0.032 in. dia. Safety Wire . . . . .	X	A/R
32	NAS1149F0732P	Washer . . . . .	X	2
33	NAS1291-7	Nut . . . . .	X	1
34	NAS1149F0563P	Washer . . . . .	X	2
35	MS20074-05-04	Bolt . . . . .	X	2
36	73383*	Lockplate . . . . .	X	1
37	LW-31-0.94*	Bolt . . . . .	X	2
38	D728-3	Bracket . . . . .	X	1
39	NAS1149F0763P	Washer . . . . .	X	1
40	—	Nut (Ref; supplied with starter)	O	3
41	—**	Nut . . . . .	O	1
42	—**	Lockwasher . . . . .	O	1
43	D727-1	Pulley . . . . .	X	1
44	D728-2	Spacer . . . . .	X	1
45	B173-2	V-Belt . . . . .	X	1
46	AN7-40A	Bolt . . . . .	X	1
47	—	Washer (Ref; supplied with starter)	O	3
48	NAS6603-25	Bolt . . . . .	X	2
49	MS20074-05-11	Bolt . . . . .	X	1
50	NAS1149F0532P	Washer . . . . .	X	1
51	D728-6	Plate . . . . .	X	1
52	C130-42	Spacer . . . . .	X	1
53	NAS1149F0532P	Washer . . . . .	X	A/R
54	D728-5	Link . . . . .	X	1

NOTES \* Lycoming part no.  
 \*\* Items 41 and 42 may be obtained from Kelly Aerospace as part no. 90-33.

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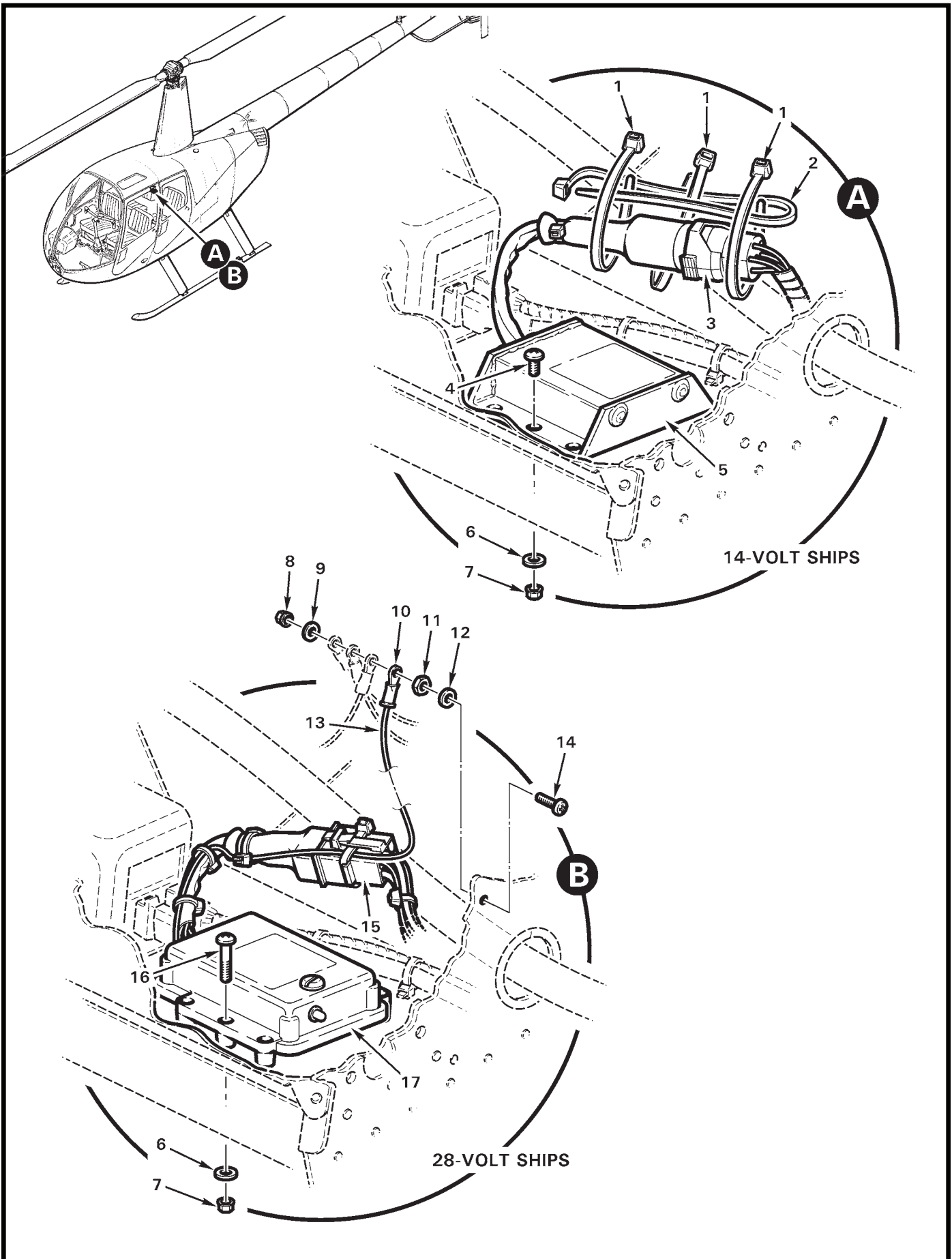


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>ALTERNATOR CONTROL UNIT INSTALLATION</b>				
71-63-1	MS3367-5-9	Ty-Rap . . . . .	X	3
2	MS3367-7-9	Ty-Rap . . . . .	X	1
3	B264-23	Housing . . . . .	X	1
	B264-2	Socket . . . . .	X	2
	B264-4	Socket . . . . .	X	3
4	MS27039C1-06	Screw . . . . .	X	2
5	A942-3	Alternator Control Unit (14-volt ships; includes housing) . . . . .	X	1
6	NAS1149F0332P	Washer . . . . .	X	2
7	MS21042L3	Nut . . . . .	X	2
8	MS21042L08	Nut . . . . .	X	1
9	NAS1149FN816P	Washer . . . . .	X	1
10	—	Terminal – Stud (no. 8) . . . . .	O	1
11	B301-8	Nut (Brass) . . . . .	X	1
12	NAS1149DN832H	Washer . . . . .	X	1
13	—	Wire (ground; Ref)		
14	AN515UB8R10	Screw . . . . .	X	1
15	B263-19	Housing . . . . .	X	1
	B263-2	Socket . . . . .	X	2
	B263-4	Socket . . . . .	X	3
16	MS27039C1-14	Screw . . . . .	X	1
17	A942-4	Alternator Control Unit (28-volt ships; includes items 10, 13, and housing) . . . . .	X	1

NOTES

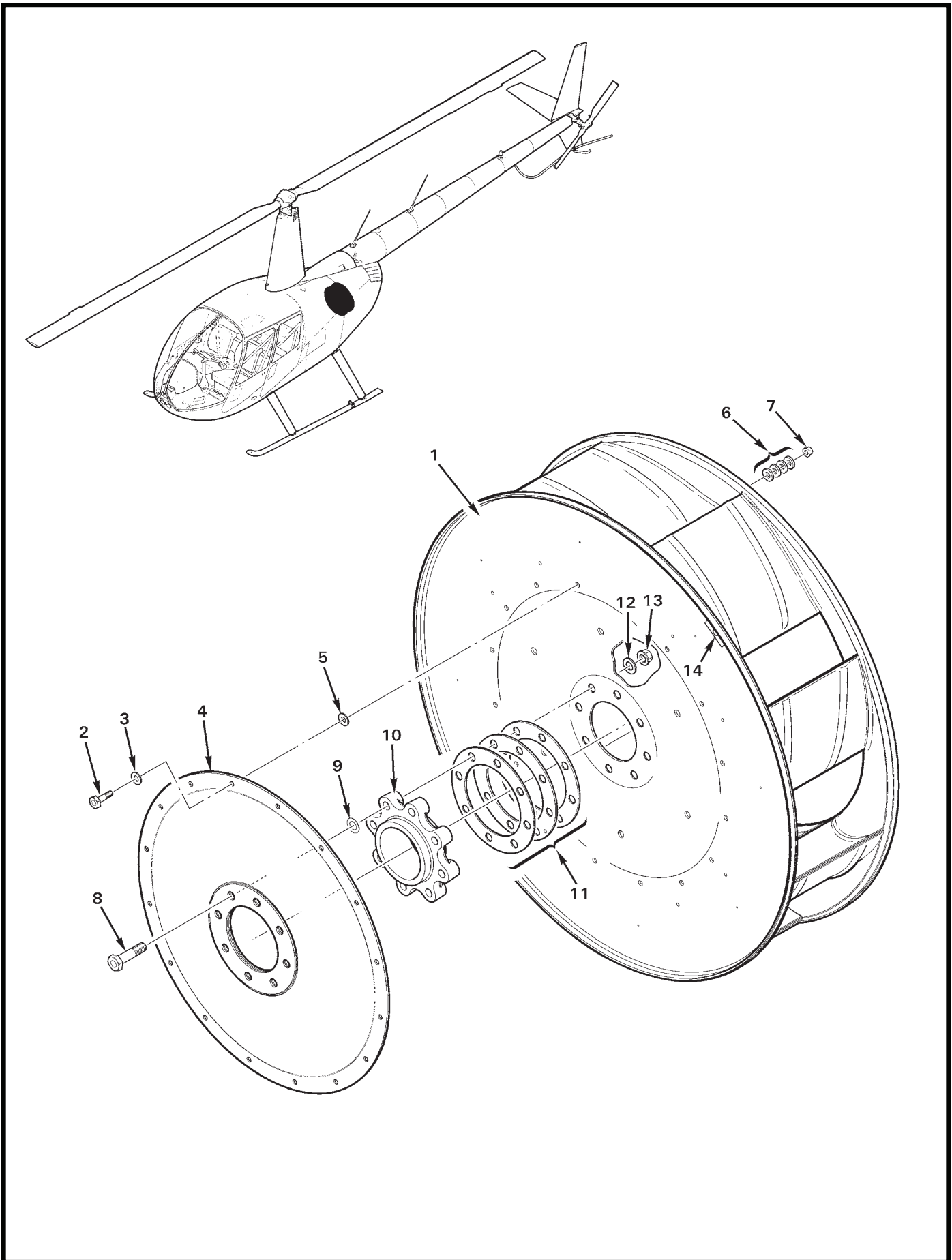


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>D174 FANWHEEL ASSEMBLY</b>				
71-65-1	D174-2*	Fanwheel Assembly (Incl items 2 thru 14) . . . . .	X	1
2	NAS6603-6	Bolt . . . . .	X	16
3	NAS1149F0332P	Washer . . . . .	X	16
4	C187-3	Cone Assembly . . . . .	O	1
5	NAS1149F0316P	Washer . . . . .	X	16
6	NAS1149D0363J**	Washer . . . . .	X	64
7	MS21042L3	Nut . . . . .	X	16
8	NAS6605-12	Bolt (or NAS6605-13 or -14 as required for proper thread engagement) . . . . .	X	8
9	NAS1149C0516R	Washer . . . . .	X	8
10	C186-1	Hub . . . . .	X	1
11	C178-2	Spacer (one, two, or three required for shimming) . . . . .	X	A/R
12	NAS1149F0532P	Washer . . . . .	X	8
13	MS21042L5	Nut . . . . .	X	8
14	NAS620-5	Washer (Ref; installed for balance)		
	B171-1	Weight (Ref; or B171-2 thru B171-6 as required for balance)		

NOTES \* Must be used with C007-5 shaft and bearing assembly; incompatible with C007-3 or C007-4.  
 \*\* See R44 MM § 6.240 for fan dynamic balance procedure.

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