

**CHAPTER 71**

**POWERPLANT**

<i>Figure</i>	<i>Title</i>	<i>Page</i>
71-1	Engine Installation . . . . .	71.0
71-5	Air Induction System . . . . .	71.4
71-9	Air Induction System . . . . .	71.8
71-13	Air Induction System . . . . .	71.12
71-17	Exhaust Muffler Assembly . . . . .	71.16
71-19	Cooling System . . . . .	71.18
71-21B	B174 Fanwheel Assembly . . . . .	71.21A
71-23	Alternator and Starter Installation . . . . .	71.22
71-27	Kelly Aerospace Starter Installation . . . . .	71.26
71-29	Sky-Tec Starter Installation . . . . .	71.28

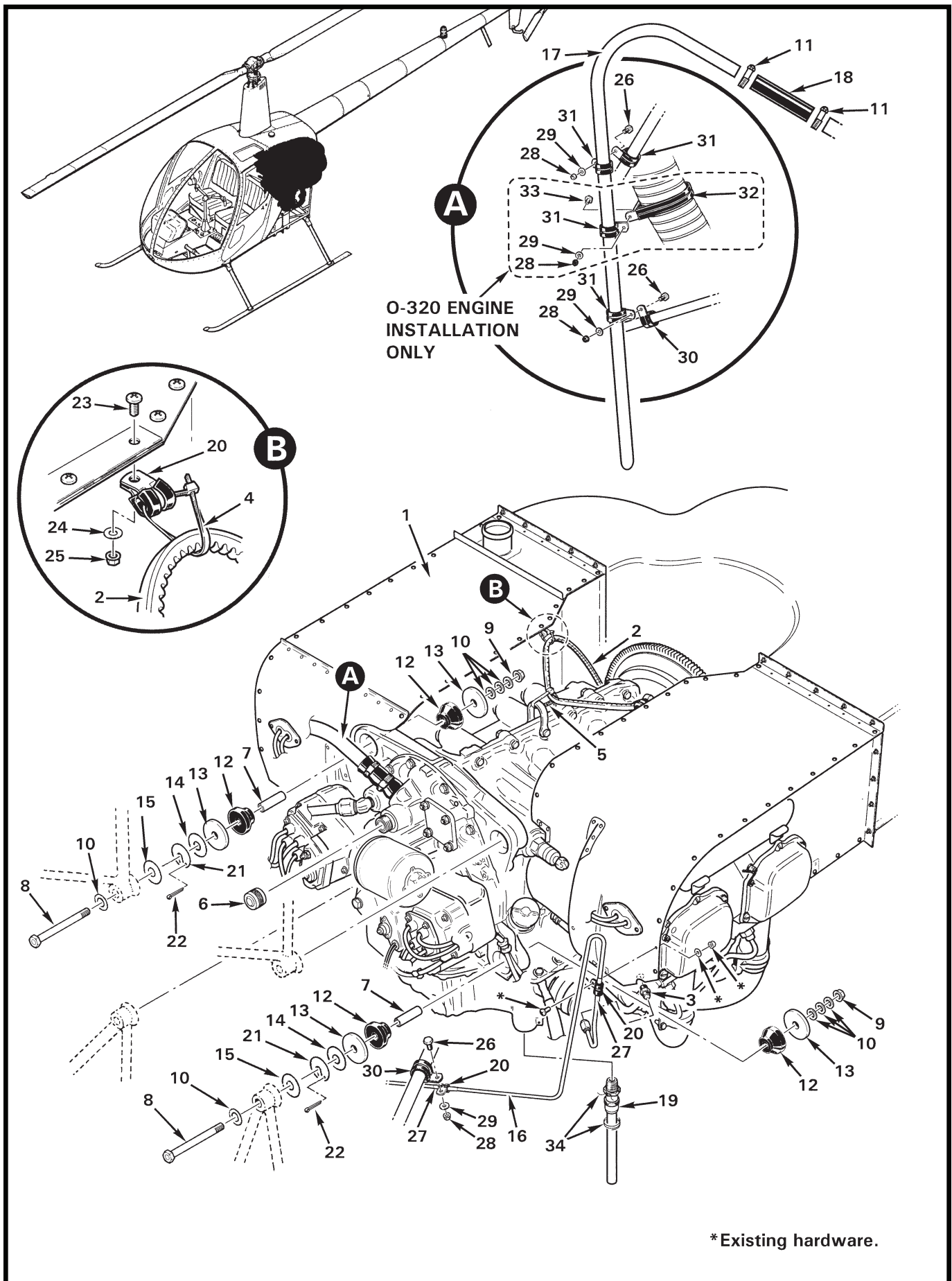


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>ENGINE INSTALLATION</b>				
71-1-1	A145-1	Engine – Textron Lycoming O-320-A2B* (used on Standard) ..	O	1
	A145-2	Engine – Textron Lycoming O-320-A2C* (used on Standard) ..	O	1
	A145-3	Engine – Textron Lycoming O-320-B2C* (used on Alpha, Beta, HP, and Mariner) .....	O	1
	A145-5	Engine – Textron Lycoming O-360-J2A* (used on Beta II and Mariner II) .....	X	1
2	B173-1	Belt – Alternator (emergency, earlier R22s) .....	X	2
3	AN816-3D	Nipple – Manifold Pressure .....	X	1
4	MS3367-4-9	Ty-Rap .....	X	2
5	MS3367-3-9	Ty-Rap .....	X	1
6	62732*	Cap – Tachometer Drive (earlier R22s) .....	X	1
7	A130-3	Spacer (1.860-inch length) .....	X	4
8	NAS6606-54	Bolt .....	X	4
9	D210-6	Nut .....	X	4
10	NAS1149F0663P	Washer .....	X	A/R
11	B277-12	Clamp – Engine Breather .....	X	2
12	71032*	Rubber Pads – Engine Mount .....	X	8
13	A141-12	Washer (engine alignment; 0.190-inch thick) .....	X	A/R
14	A141-24	Washer (engine alignment; 0.032-inch thick) .....	X	A/R
15	A141-25	Washer (engine alignment; 0.063-inch thick) .....	X	A/R
16	A740-1	Manifold Pressure Line (Incl item 27) .....	X	1
17	A727-1	Tube – Engine Breather .....	X	1
18	A729-31	Tube – Engine Breather Coupling .....	X	1
19	B367-1	Drain Valve – Engine Oil .....	X	1
20	MS21919WDG3	Clamp .....	X	4
21	B155-1	Shim (engine alignment; 0.032-inch thick) .....	X	A/R
22	MS24665-132	Cotter Pin .....	X	A/R
23	MS27039C0806	Screw .....	X	2
24	NAS1149FN832P	Washer .....	X	2
25	MS21042L08	Nut .....	X	2
26	AN3-3A	Bolt .....	X	3
27	B158-6	Heat Shrink (black, 3/8 inch dia) .....	X	A/R
28	D210-3	Nut .....	X	A/R
29	NAS1149F0332P	Washer .....	X	A/R
30	MS21919WDG10	Clamp .....	X	2

NOTES \* Lycoming part no.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
ENGINE INSTALLATION (Cont'd)				
71-1-31	MS21919WDG12	Clamp . . . . .	X	A/R
32	MS21919WDG48	Clamp . . . . .	X	A/R
33	AN3-4A	Bolt . . . . .	X	A/R
34	MS20995C32	0.032-inch dia Safety Wire . . . . .	X	A/R
35	A257-16	Oil – Engine (quart, SAE J1966 20W-50) . . . . .	X	A/R
NOTES				

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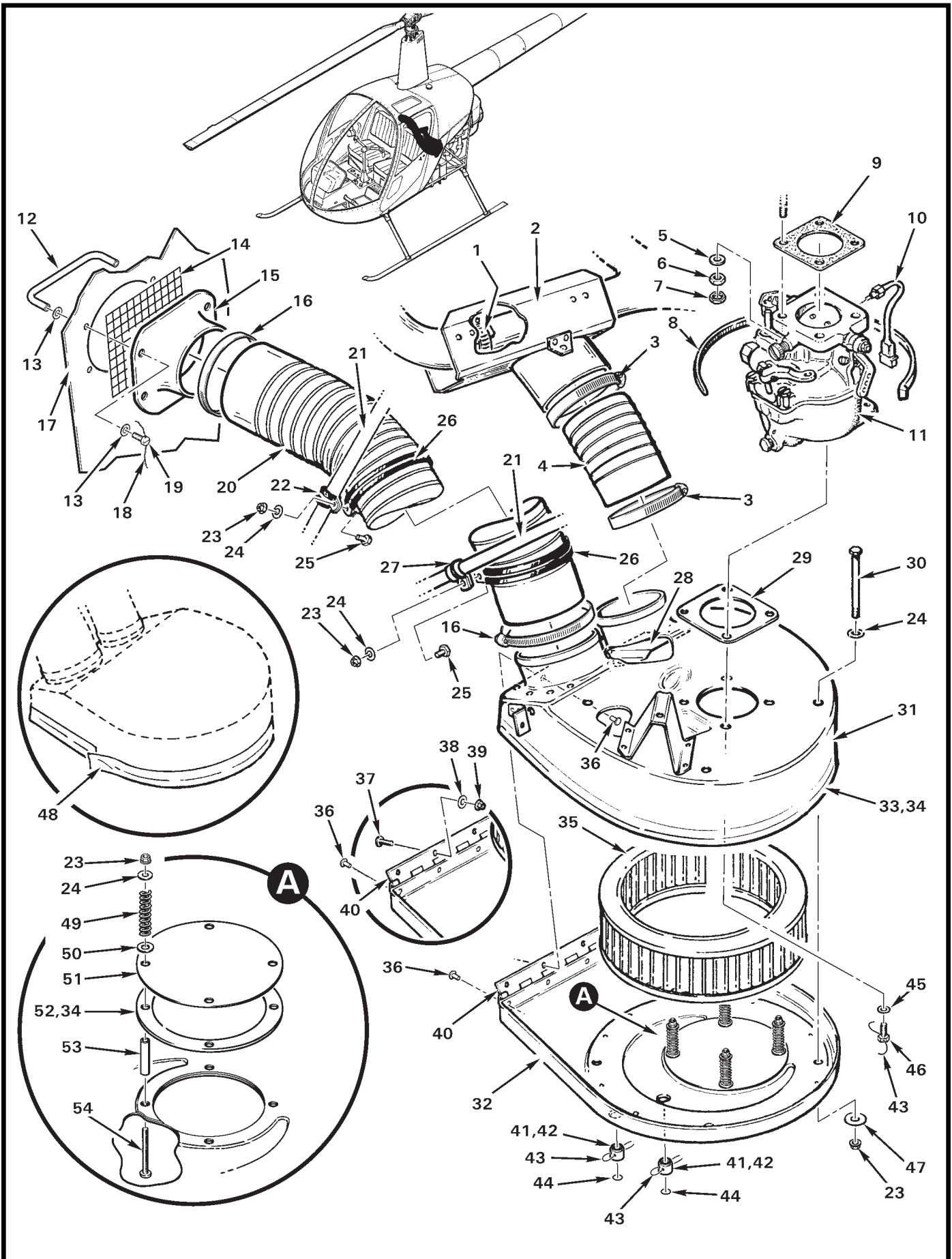


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>AIR INDUCTION SYSTEM*</b>				
71-5-1	B277-024	Clamp . . . . .	X	2
2	B394-1	Scoop Assembly . . . . .	X	1
3	B277-32	Clamp . . . . .	X	2
4	A785-26	Hose . . . . .	X	1
5	STD-35**	Washer . . . . .	X	4
6	STD-1410**	Nut . . . . .	X	4
7	B330-15	Palnut . . . . .	X	4
8	MS3367-6-0	Ty-Rap . . . . .	X	1
9	66224**	Gasket (between engine and carburetor) . . . . .	X	1
10	A058-5	Carb Air Temp Probe . . . . .	X	1
11	LW-15986**	Carburetor (Ref, Avstar Fuel Systems; part no. AV-6110) . . .	X	1
12	A580-2	Guard . . . . .	X	2
13	NAS1149FN832P	Washer . . . . .	X	8
14	A640-2	Screen . . . . .	X	1
15	C579-2	Inlet . . . . .	X	1
16	B277-48	Clamp . . . . .	X	2
17	A378-17	Panel (RH, Ref; see also Figure 53-1)		
18	MS20995C20	0.020-inch dia Safety Wire . . . . .	X	A/R
19	AN503-8-6	Screw . . . . .	X	4
20	A785-1	Hose . . . . .	X	1
21	A046-2	Frame Assembly (lower RH, Ref)		
22	MS21919WDG12	Clamp . . . . .	X	1
23	D210-3	Nut . . . . .	X	6
24	NAS1149F0332P	Washer . . . . .	X	10
25	AN3-4A	Bolt . . . . .	X	2
26	MS21919WDG48	Clamp . . . . .	X	2
27	MS21919WDG10	Clamp . . . . .	X	1
28	A562-1	Slider Valve (carb heat) . . . . .	X	1
29	A615-1	Gasket . . . . .	X	1
30	AN3-35A	Bolt . . . . .	X	4
31	A057-2	Air Box Assembly (Incl items 23 [4], 24 [4], 28, 32 thru 34, 36, and 40) . . . . .	X	1
32	A057-5	Bottom Cover Assembly (Incl items 42, and 49 thru 54) . . . .	X	1
33	A226-8	Seal – Neoprene (4-foot length, install using item 34) . . . . .	X	1
34	B270-18	Adhesive (5-oz tube) . . . . .	X	A/R

NOTES \* Ship S/N 2665 and subsequent.  
 \*\* Lycoming part no.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>AIR INDUCTION SYSTEM (Cont'd)</b>				
71-5-35	B771-1*	Air Filter (cleanable, Rev. D and subsequent; supersedes A771-1 air filter) . . . . .	X	1
36	MS20470AD3	Rivet . . . . .	X	4
37	MS35206-227**	Screw . . . . .	X	4
38	NAS1149FN616P**	Washer . . . . .	X	4
39	MS21042L06**	Nut . . . . .	X	4
40	A516-1	Hinge . . . . .	X	1
41	A290-2	Body . . . . .	O	2
42	A290-1***	Drain Valve (Incl items 41, 43, and 44) . . . . .	X	2
43	MS20995C32	0.032-inch dia Safety Wire . . . . .	X	A/R
44	A290-3	Disc . . . . .	X	2
45	NAS1149F0463P	Washer . . . . .	X	4
46	MS20074-04-04	Bolt . . . . .	X	4
47	AN970-3	Washer . . . . .	X	4
48	A701-1	Foil Tape (seals A057-5 bottom cover, used on Mariner II) . . .	X	A/R
49	D774-7	Spring . . . . .	X	4
50	NAS1149F0432P	Washer . . . . .	X	4
51	C565-2	Door . . . . .	X	1
52	B425-1	Gasket (install using item 34) . . . . .	X	1
53	C130-41	Spacer . . . . .	X	4
54	MS27039DD1-26	Screw . . . . .	X	4

NOTES \* Refer to R22 MM §6.435 for air filter cleaning instructions.  
 \*\* Earlier R22s.  
 \*\*\* Some covers have [1] drain valve only.



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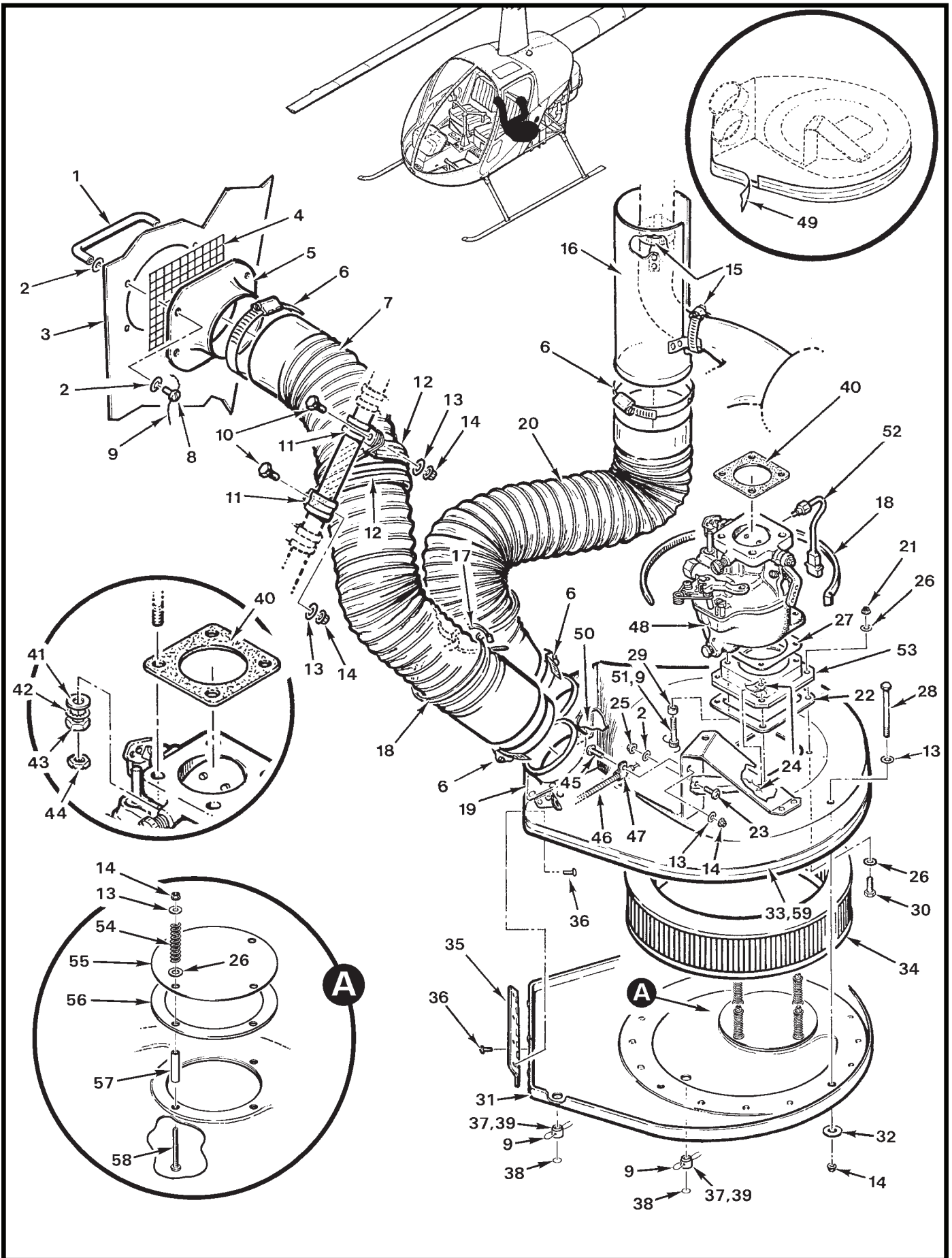


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>AIR INDUCTION SYSTEM*</b>				
71-9-1	A580-2	Guard . . . . .	X	2
2	NAS1149FN816P	Washer . . . . .	X	9
3	A378-17	Panel (Ref)		
4	A640-2	Screen . . . . .	X	1
5	C579-1	Inlet . . . . .	X	1
6	B277-56	Clamp . . . . .	X	4
7	A785-21	Hose . . . . .	X	1
8	AN503-8-6	Screw . . . . .	X	4
9	MS20995C32	0.032-inch dia Safety Wire . . . . .	X	A/R
10	AN3-4A	Bolt . . . . .	X	2
11	MS21919WDG10	Clamp . . . . .	X	2
12	MS21919WDG56	Clamp . . . . .	X	4
13	NAS1149F0332P	Washer . . . . .	X	11
14	MS21042L3	Nut . . . . .	X	11
15	B277-24	Clamp . . . . .	X	2
16	B365-1	Scoop Assembly . . . . .	X	1
17	MS3367-7-9	Ty-Rap . . . . .	X	1
18	MS3367-6-0	Ty-Rap . . . . .	X	2
19	C057-5	Air Box Assembly (Incl items 9, 13 [4], 14 [4], 26 [4], 31, 33, 35 thru 37, 50, and 54 thru 59) . . . . .	X	1
20	A785-20	Hose . . . . .	X	1
21	MS21042L4	Nut . . . . .	X	4
22	C615-1	Gasket . . . . .	X	1
23	MS27039C0806	Screw . . . . .	X	1
24	B820-2	Brace . . . . .	X	1
25	MS21042L08	Nut . . . . .	X	1
26	NAS1149F0432P	Washer . . . . .	X	12
27	A615-1	Gasket . . . . .	X	1
28	AN3-35A	Bolt . . . . .	X	4
29	A130-28	Spacer . . . . .	X	4
30	NAS6604-4	Bolt . . . . .	X	4
31	C956-2	Cover (cover only) . . . . .	O	1
	C057-8	Cover Assembly (For spares; includes items 13 [4], 14 [4], 26 [4], 31, 35, 37, and 54 thru 59.) . . . . .	X	1
32	AN970-3	Washer . . . . .	X	4

NOTES \* Ship S/N 2571 thru 2664.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
AIR INDUCTION SYSTEM (Cont'd)				
71-9-33	A226-8	Neoprene Seal (install using item 59) . . . . .	X	A/R
34	B771-2*	Air Filter (Cleanable, Rev. D and subsequent; supersedes C771-1 air filter.) . . . . .	X	1
35	A516-1	Hinge . . . . .	X	1
36	MS20470AD3	Rivet . . . . .	X	8
37	A290-1	Drain Valve (Incl items 9, 38, and 39) . . . . .	X	2
38	A290-3	Disc . . . . .	O	1
39	A290-2	Body . . . . .	O	1
40	66224**	Gasket . . . . .	X	1
41	STD-35**	Washer . . . . .	X	4
42	STD-475**	Washer (internal lock) . . . . .	X	4
43	STD-1410**	Nut . . . . .	X	4
44	B330-15	Palnut . . . . .	X	4
45	MS27039C1-07	Screw . . . . .	X	1
46	A522-3	Control – Mixture (Ref, see Figure 76-1)		
47	AN742-3	Clamp . . . . .	X	1
48	LW-15986**	Carburetor (Precision Airmotive Corp. part no. 10-5217) . . . . .	O	1
	R9128	Carburetor (overhaul exchange) . . . . .	X	1
49	A701-1	Foil Tape (used on Mariner II) . . . . .	X	A/R
50	C562-1	Slider Valve (Ref)		
51	NAS1352-4H20P	Cap Screw . . . . .	X	4
52	A058-5	Carb Air Temp Probe . . . . .	X	1
53	B819-1	Adapter . . . . .	X	1
54	12686	Spring . . . . .	X	4
55	C565-2	Door . . . . .	X	1
56	B425-1	Gasket (install using item 59) . . . . .	X	1
57	C130-41	Spacer . . . . .	X	4
58	MS27039DD1-26	Screw . . . . .	X	4
59	B270-18	Adhesive (5-oz tube). . . . .	X	A/R

NOTES \* Refer to R22 MM §6.435 for air filter cleaning instructions.  
 \*\* Lycoming part no.

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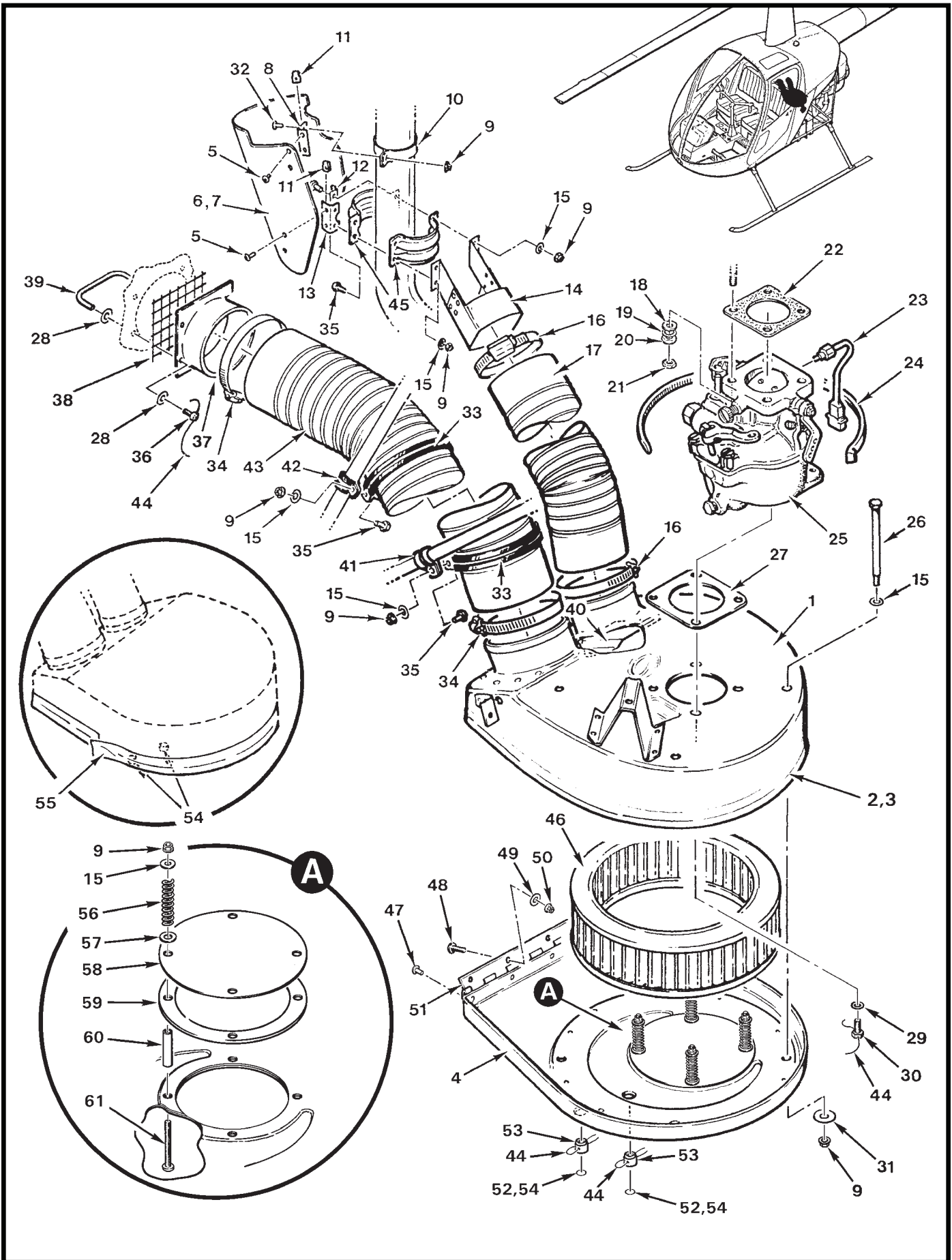


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>AIR INDUCTION SYSTEM*</b>				
71-13-1	A057-2**	Air Box Assembly (Incl items 4, 9 [4], 15 [4], 40, 47 thru 51, 54, and 56 thru 61) . . . . .	X	1
2	A226-8	Seal – Neoprene (4-foot length, install using item 3) . . . . .	X	1
3	B270-18	Sealant (5-oz tube) . . . . .	X	A/R
4	A956-5	Cover (bottom cover only, Ref)		
	A057-5	Bottom Cover Assembly (Incl items 3, 9 [4], 15 [4], 47, 51, 54, and 56 thru 61) . . . . .	X	1
5	MS35206-228	Screw . . . . .	X	6
6	A568-1	Scoop Assembly (large, includes items 7, 8, 12, and 13) . . . .	X	1
7	A568-5	Sheet . . . . .	X	1
8	A568-9	Angle . . . . .	X	1
9	MS21042L3	Nut . . . . .	X	12
10	A694-1	Clamp (scoop assembly) . . . . .	X	1
11	B162-1	Clipnut . . . . .	X	6
12	A568-3	Angle – Carburetor Heat . . . . .	X	1
13	A568-4	Angle – Carburetor Heat . . . . .	X	1
14	A568-2	Scoop Assembly – Carb Heat (small) . . . . .	X	1
15	NAS1149F0332P	Washer . . . . .	X	10
16	B277-36	Clamp . . . . .	X	2
17	A785-2	Hose – Hot Air Inlet . . . . .	X	1
18	STD-35***	Washer . . . . .	X	4
19	STD-475***	Washer (internal lock) . . . . .	X	4
20	STD-1410***	Nut . . . . .	X	4
21	B330-15	Palnut . . . . .	X	4
22	66224***	Gasket (between engine and carburetor) . . . . .	X	1
23	A058-5	Carb Air Temp Probe . . . . .	X	1
24	MS3367-6-0	Ty-Rap . . . . .	X	1
25	LW-15986***	Carburetor (Ref, Precision Airmotive Corp. part no. 10-5217)		
26	AN3-35A	Bolt . . . . .	X	4
27	A615-1	Gasket . . . . .	X	1
28	NAS1149FN816P	Washer . . . . .	X	8
29	NAS1149F0463P	Washer . . . . .	X	4
30	MS20074-04-04	Bolt . . . . .	X	4
31	AN970-3	Washer . . . . .	X	4
32	MS27039C1-06	Screw . . . . .	X	2

NOTES \* Ship S/N 2570 and prior.  
 \*\* Earlier air box assemblies do not have alternate air door or second drain.  
 \*\*\* Lycoming part no.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
AIR INDUCTION SYSTEM (Cont'd)				
71-13-33	MS21919WDG48	Clamp . . . . .	X	2
34	B277-48	Clamp . . . . .	X	2
35	AN3-4A	Bolt . . . . .	X	6
36	AN503-8-6	Screw . . . . .	X	4
37	A579-1	Inlet – Outside Air . . . . .	X	1
38	A640-1	Screen . . . . .	X	1
39	A580-1	Guard . . . . .	X	2
40	A562-1	Slider Valve (carb heat) . . . . .	X	1
41	MS21919WDG10	Clamp . . . . .	X	1
42	MS21919WDG12	Clamp . . . . .	X	1
43	A785-1	Hose . . . . .	X	1
44	MS20995C32	0.032-inch dia Safety Wire . . . . .	X	A/R
45	A169-14	Bead Clamp . . . . .	X	2
46	B771-1*	Air Filter (Cleanable, Rev. D and subsequent; supersedes A771-1 air filter.) . . . . .	X	1
47	MS20470AD3	Rivet . . . . .	X	4
48	MS35206-227**	Screw . . . . .	X	4
49	NAS1149FN616P**	Washer . . . . .	X	4
50	MS21042L06**	Nut . . . . .	X	4
51	A516-1	Hinge . . . . .	X	1
52	A290-3	Disc . . . . .	O	1
53	A290-2	Body . . . . .	O	1
54	A290-1	Drain Valve (Includes items 44, 52, and 53. Some covers only have one [1] drain valve.) . . . . .	X	2
55	A701-1	Foil Tape (seals A057-5 bottom cover, used on Mariner) . . . . .	X	A/R
56	12686***	Spring . . . . .	X	4
57	NAS1149F0432P***	Washer . . . . .	X	4
58	C565-2***	Door . . . . .	X	1
59	B425-1***	Gasket (install using item 3) . . . . .	X	1
60	C130-41***	Spacer . . . . .	X	4
61	MS27039DD1-26***	Screw . . . . .	X	4

NOTES \* Refer to R22 MM §6.435 for air filter cleaning instructions.  
 \*\* Earlier R22s.  
 \*\*\* If installed.



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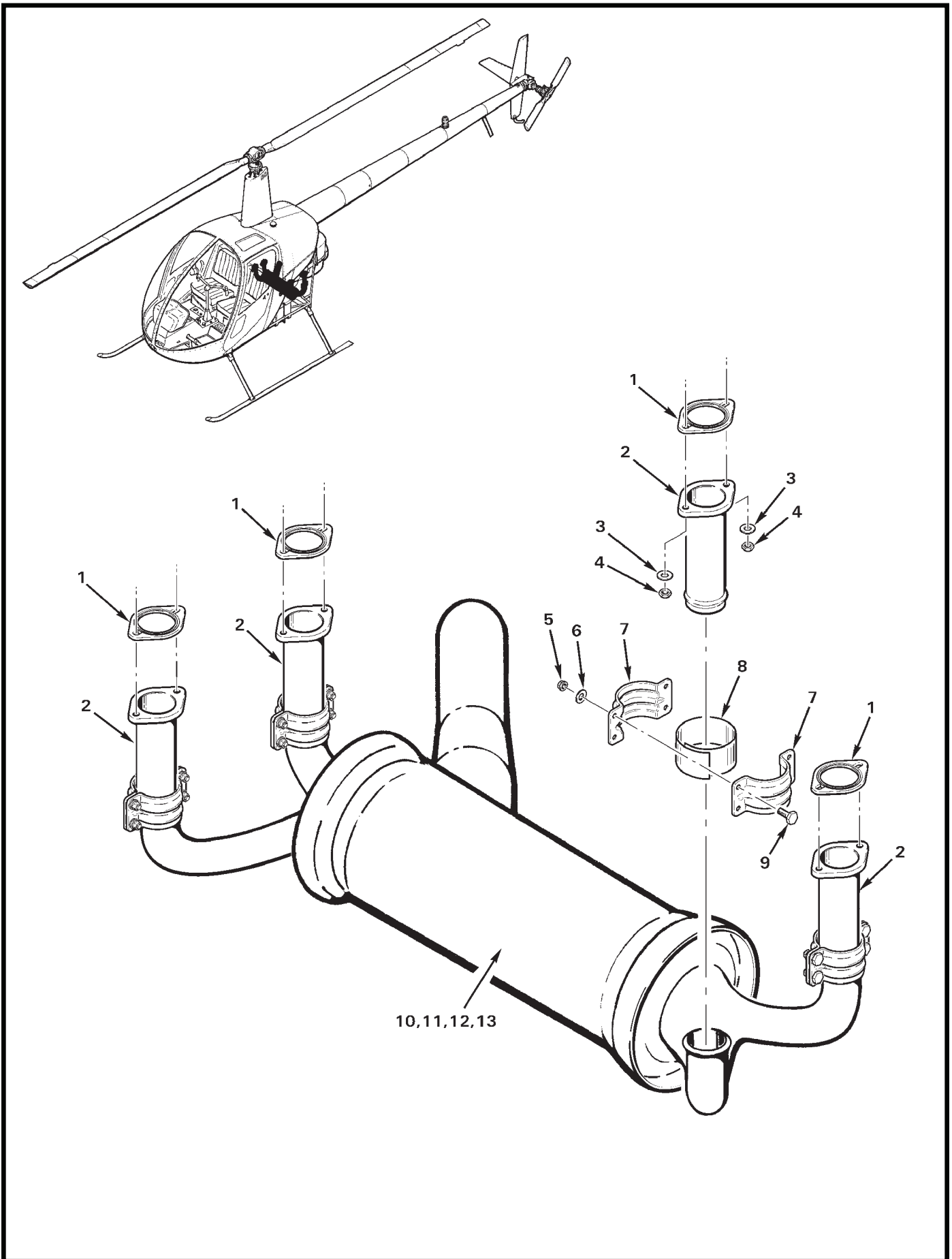


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>EXHAUST MUFFLER ASSEMBLY</b>				
71-17-1	77611*	Gasket . . . . .	X	4
2	A169-23	Riser . . . . .	X	4
3	NAS1149F0532P	Washer . . . . .	X	8
4	21FKF-518	Nut . . . . .	X	8
5	MS21043-3	Nut (or MS21042L3) . . . . .	X	16
6	NAS1149F0332P	Washer . . . . .	X	16
7	A169-14	Bead Clamp . . . . .	X	8
8	A701-10	Tape (stainless steel; not required for use with bead clamps having integral liners) . . . . .	X	A/R
9	AN3-4A	Bolt (or AN3C4A) . . . . .	X	16
10	A169-6**	Muffler Assembly (for O-320 engine; includes items 2, 6 thru 9, and 11) . . . . .	X	1
11	A169-8**	Muffler Assembly (for O-320 engine; welded muffler assembly only) . . . . .	X	1
12	A169-24**	Muffler Assembly (for O-360 engine; includes items 2, 7 thru 9, and 13) . . . . .	X	1
13	A169-25**	Muffler Assembly (for O-360 engine; welded muffler assembly only) . . . . .	X	1

NOTES \* Lycoming part no.  
 \*\* Does not include heater shroud. For heater shroud see Figures 21-3 and 21-9.

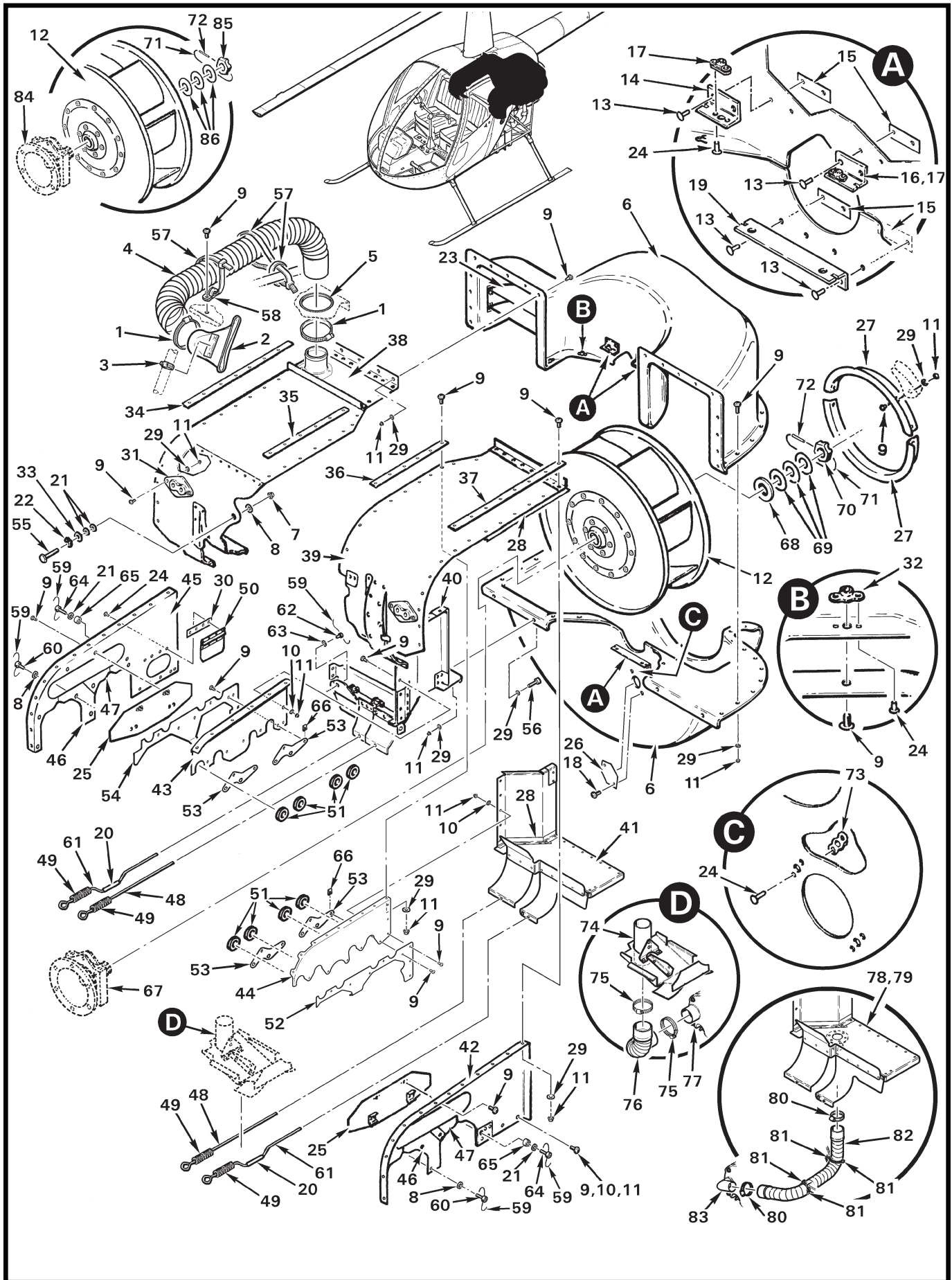


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>COOLING SYSTEM</b>				
71-19-1	B277-28	Clamp (main rotor gearbox cooling hose) . . . . .	X	2
2	A747-1	Nozzle Assembly . . . . .	X	1
3	B277-8	Clamp . . . . .	X	1
4	A785-6	Hose . . . . .	X	1
5	MS21266-1N	Grommet (12-inch length) . . . . .	X	1
	B270-8qt	Adhesive (use to install MS21266-1N grommet) . . . . .	X	A/R
6	R7156	Scroll Set (For R22s with large [A649-2 or C649-1] oil cooler. Includes upper/lower scrolls and items 13 thru 19, 23, 24, 26, 27, and 32.) . . . . .	X	1
7	D210-4	Nut . . . . .	X	1
8	NAS1149F0432P	Washer . . . . .	X	15
9	MS27039C0806	Screw . . . . .	X	130
10	NAS1149FN832P	Washer . . . . .	X	51
11	MS21042L08	Nut . . . . .	X	131
12	B174-1	Fanwheel Assembly . . . . .	X	1
13	MS20470AD4-6	Rivet . . . . .	X	8
14	A185-2	Bracket (LH; without nutplate) . . . . .	X	1
15	A185-3	Plate . . . . .	X	4
16	A185-5	Bracket (LH; without nutplate) . . . . .	X	1
17	MS21075L3E	Nutplate . . . . .	X	2
18	MS35206-227	Screw . . . . .	X	2
19	A185-1	Bracket . . . . .	X	1
20	B161-102	Spirap . . . . .	X	A/R
21	A141-11	Washer . . . . .	X	4
22	A141-14	Washer . . . . .	X	1
23	B169-5	Vane Assembly (install using MS20470AD4 rivets) . . . . .	X	1
24	MS20426AD3	Rivet . . . . .	X	16
25	A449-1	Cover Assembly (spark plug access, LH and RH) . . . . .	X	2
26	D229-4	Cover . . . . .	X	1
27	B229-2	Lip . . . . .	X	2
28	A701-1	Foil Tape . . . . .	X	A/R
29	NAS1149FN816P	Washer . . . . .	X	99
30	A775-3	Spacer . . . . .	O	1
31	LW-M-2375	Harness Plate . . . . .	X	2
32	MS21069L08	Nutplate . . . . .	X	4

NOTES

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FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
COOLING SYSTEM (Cont'd)				
71-19-33	A141-32	Washer . . . . .	X	1
34	A711-1	Strip (Ref, no longer available)		
35	A711-2	Strip (Ref, no longer available)		
36	A711-3	Strip (Ref, no longer available)		
37	A711-4	Strip (Ref, no longer available)		
38	A308-1	Cover (RH, O-320) . . . . .	X	1
	A308-6*	Cover (RH, O-360) . . . . .	X	1
39	A312-1	Cover Assembly (LH) . . . . .	X	1
	A312-6*	Cover Assembly (LH) . . . . .	X	1
40	A309-1	Panel Assembly (RH, required for small [A649-1] oil cooler; used on Standard, HP and Alpha) . . . . .	O	1
	A309-15**	Panel Assembly (RH, O-320 engine. Required for large [A649-2 or C649-1] oil cooler; used on Beta and Mariner.) . . . . .	X	1
	C309-4*	Panel Assembly (RH, O-360 engine; used on Beta II and Mariner II) . . . . .	X	1
41	A313-9	Panel Assembly (LH; ship S/N 3689 and subsequent) . . . . .	X	1
42	A305-5	Panel Assembly – Outboard (LH; order also items 46 and 47)	X	1
43	A306-1	Panel Upper (RH) . . . . .	X	1
44	A310-1	Panel Upper (LH) . . . . .	X	1
45	A305-6	Panel Assembly – Outboard (RH, includes item 50; order also items 46 and 47) . . . . .	X	1
46	A305-8	Panel (LH and RH) . . . . .	X	2
47	A305-7	Panel Assembly (LH and RH) . . . . .	X	2
48	A487-1	Retainer . . . . .	X	2
49	D774-13	Spring . . . . .	X	4
50	A775-1	Cover Assembly (oil cooler access) . . . . .	X	1
51	B401-1	Grommet (push rod housing; install small diameter inboard) . . . . .	X	8
52	A310-2	Panel – Lower (LH) . . . . .	X	1
53	A484-3	Attach Plate . . . . .	X	4
54	A306-2	Panel Lower (RH) . . . . .	X	1
55	NAS6604-6***	Bolt (or NAS6604-7) . . . . .	X	1
56	NAS1352-08-8P	Cap Screw (3 each side) . . . . .	X	6
57	MS3367-3-9	Ty-Rap (main rotor gearbox cooling hose) . . . . .	X	3
58	MS21919WDG5	Clamp . . . . .	X	1
59	MS20995C32	0.032-inch dia Safety Wire . . . . .	X	A/R
60	NAS1352-4H10P	Screw . . . . .	X	8

NOTES \* Ship S/N 2571 and subsequent.  
 \*\* Required on Standard, HP, and Alpha if A649-2 or C649-1 (large) oil cooler is installed.  
 \*\*\* Select bolt which, after correct torque is applied, exposes 2 to 4 threads beyond nut.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>COOLING SYSTEM (Cont'd)</b>				
71-19-61	A487-2	Retainer . . . . .	X	2
62	NAS1352-3H6P	Screw (thru A309 panel to cylinder head) . . . . .	X	1
63	B332-43	Lockwasher (or AN935-10L) . . . . .	X	A/R
64	NAS1352-4H14P	Screw . . . . .	X	2
65	C130-9	Spacer . . . . .	X	2
66	B162-2	Clipnut . . . . .	X	8
67	A007-5*	Fanshaft and Bearing Assembly (Ref)		
68	MS20002-18*	Washer (against fanwheel hub) . . . . .	X	1
69	NAS1149F1832P*	Washer . . . . .	X	A/R
70	AN320-18*	Nut . . . . .	X	1
71	MS20995C41	0.041-inch dia Safety Wire . . . . .	X	A/R
72	B350-2*	Spring Pin (or MS9048-112) . . . . .	X	1
73	MS21069L06	Nutplate . . . . .	X	2
74	D754-4	Baffle Assembly . . . . .	X	1
75	B277-24	Clamp . . . . .	X	2
76	A785-32	Hose (1.5-inch diameter) . . . . .	X	1
77	D747-5	Shroud – Alternator Cooling (Ref, see Figure 71-23)		
78	A313-1	Panel Assembly (LH, ship S/N 2570 and prior) . . . . .	X	1
79	A313-7	Panel Assembly (LH, ship S/N 2571 thru 3688) . . . . .	X	1
80	B277-12	Clamp . . . . .	X	2
81	MS3367-4-9	Ty-Rap (alternator cooling hose) . . . . .	X	4
82	A785-7	Hose – Alternator Cooling (1.0-inch diameter) . . . . .	X	1
83	ALU-1062A**	Shroud – Alternator Cooling (Ref; used only with item 82)		
* * *				
84	A007-3	Fanshaft and Bearing Assembly (Ref, ship S/N 2570 and prior. No longer available. Contact RHC for replacement.)		
85	AN320-15	Nut (spares) . . . . .	X	A/R
86	AN960-1616L	Washer (spares) . . . . .	X	A/R

NOTES \* Ship S/N 2571 and subsequent. See also Figure 63-11.  
 \*\* Kelly Aerospace part no.

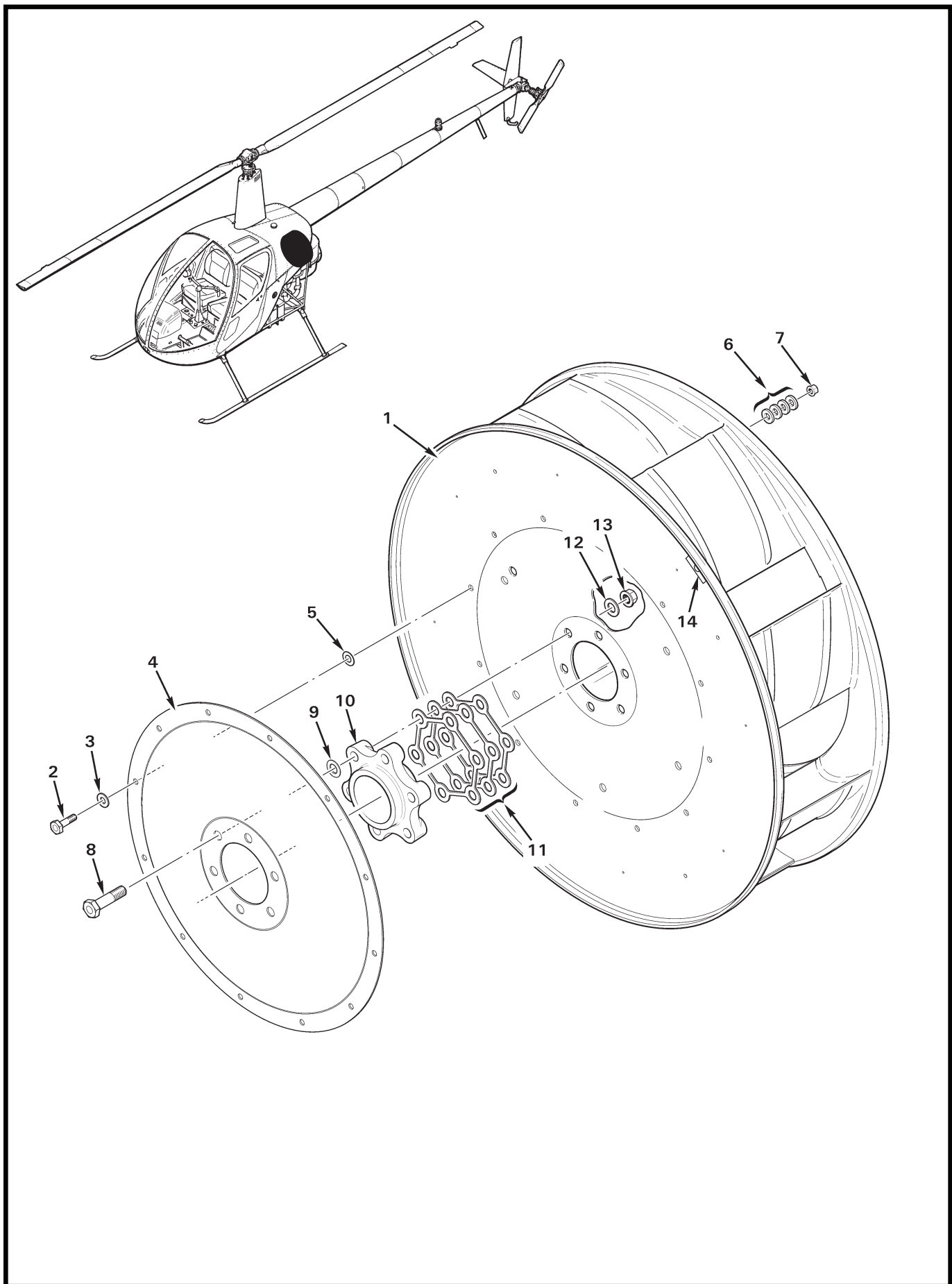




FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>B174 FANWHEEL ASSEMBLY</b>				
71-21B-1	B174-1 *	Fanwheel Assembly (Incl A524-3 Fanwheel, and items 2 thru 14) . . . . .	X	1
	A524-3	Fanwheel (Ref)		
2	NAS6603-6	Bolt . . . . .	X	12
3	NAS1149F0332P	Washer . . . . .	X	12
4	A187-4	Cone Assembly . . . . .	O	1
5	NAS1149F0316P	Washer . . . . .	X	12
6	NAS1149D0363J	Washer (wet prime between washer and fanwheel) . . . . .	X	48
7	D210-3	Nut . . . . .	X	12
8	NAS6605-12	Bolt (or NAS6605-13 or -14 as required for 2-4 threads exposed beyond nut) . . . . .	X	6
9	NAS1149C0516R	Washer . . . . .	X	6
10	A186-2	Hub (wet prime between hub and adjacent components and in bolt hole) . . . . .	X	1
11	A178-2	Spacer (1-3 as required for shimming; wet prime between spacer and fanwheel) . . . . .	X	A/R
12	NAS1149F0532P	Washer (wet prime between washer and fanwheel) . . . . .	X	6
13	D210-5	Nut . . . . .	X	6
14	B171	Weight (Ref; B171-1 thru B171-6 as required for balance)		
	NAS620-5	Washer (Ref; as required for balance, not shown.)		
15	MS20470AD4	Rivet (Ref)		

NOTES \* See R22 MM § 6.240 for dynamic balance procedure.

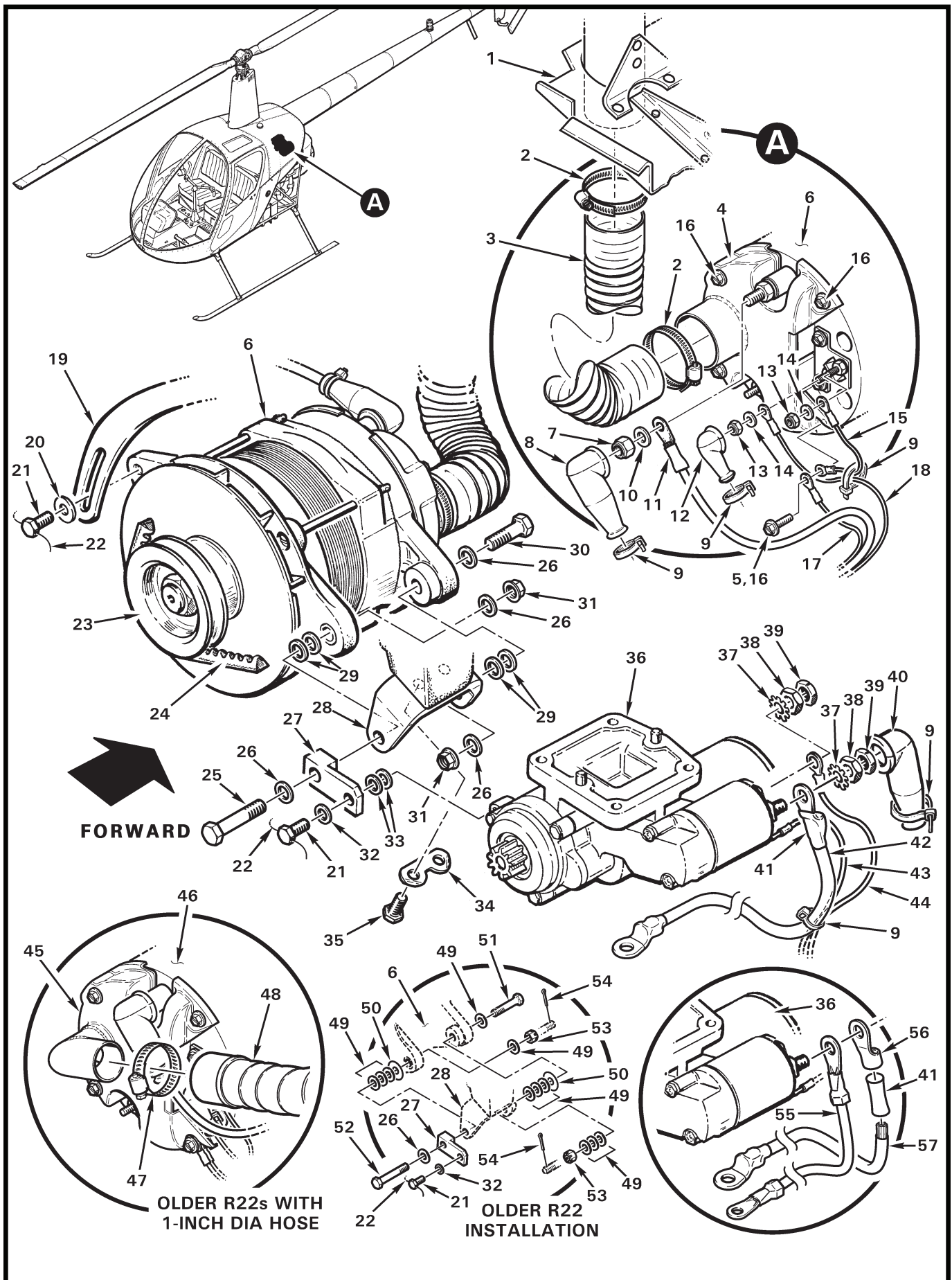


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>ALTERNATOR AND STARTER INSTALLATION</b>				
71-23-1	D754-4	Baffle Assembly (Ref; see Figure 71-19)		
2	B277-24	Clamp (Ref; see Figure 71-19)		
3	A785-32	Hose (1.50-inch dia, Ref; see Figure 71-19)		
4	D747-5	Shroud Weldment (install with item 16; O-360 only) . . . . .	X	1
5	B270-20	Adhesive . . . . .	X	A/R
6	D748-3	Alternator Assembly (Includes [new] ALY-8520LS** alternator, items 4, 5, 7, 10, 13, 14, 16, and 23 [pulley]; O-360 only.) . . . . .	X	1
	LW-14371*	Alternator Assembly (Includes [new] ALY-8520LS** alternator and item 23 [pulley].) . . . . .	X	1
	ALY-8520LS**	Alternator – 60 Amp (new, without pulley) . . . . .	X	1
	D748-3R	Alternator – ALY-8520RS** (Overhaul exchange, without pulley [retain pulley from core unit].) . . . . .	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	A059-22	Cable Assembly . . . . .	X	1
12	MS25171-1S	Nipple . . . . .	X	1
13	MS21044N06	Nut . . . . .	X	2
14	NAS1149FN616P	Washer . . . . .	X	2
15	A059-24	Wire (Ref)		
16	—	Screw (supplied with alternator; install using item 5) . . . . .	O	4
17	A059-33	Wire (Ref)		
18	A059-23	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-inch dia Safety Wire . . . . .	X	A/R
23	36B19484*	Pulley . . . . .	X	1
24	B173-1	V-Belt . . . . .	X	1
25	AN6-16A	Bolt (or AN6-15A, AN6-17A as required for shimming) . . . . .	X	1
26	NAS1149F0632P	Washer . . . . .	X	4
27	B299-1	Link . . . . .	X	1
28	B200-1	Bracket . . . . .	X	1
29	NAS1149F0663P	Washer (or NAS1149F0632P, NAS1149D0616J as required for shimming) . . . . .	X	A/R

NOTES \* Lycoming part no.  
 \*\* Kelly Aerospace part no.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>ALTERNATOR AND STARTER INSTALLATION (Cont'd)</b>				
71-23-30	AN6-11A	Bolt (or AN6-12A as required for shimming) . . . . .	X	1
31	D210-6	Nut . . . . .	X	2
32	STD-35*	Washer . . . . .	X	1
33	NAS1149F0532P	Washer (or NAS1149F0516P as required for shimming) . . . .	X	A/R
34	73383*	Lockplate . . . . .	X	1
35	LW-31-0.94*	Bolt (supplied with engine) . . . . .	X	2
36	BC315-100-2**	Starter (Incl items 37 and 38) . . . . .	X	1
37	—	Lockwasher (Ref; supplied with starter)		
38	—	Nut (Ref; supplied with starter)		
39	B330-16	Palnut . . . . .	X	2
40	MS25171-2S	Nipple (aft battery only) . . . . .	X	1
	MS25171-4S	Nipple (forward battery, not shown) . . . . .	X	1
41	B158-8	Heat Shrink . . . . .	X	A/R
42	A067-581	Cable Assembly (aft battery) . . . . .	X	1
43	A059-582	Wire (Ref)		
44	A059-591	Wire (Ref)		
45	ALU-1062A	Shroud Weldment (Ref)		
46	32B19549*	Alternator Assembly (Includes [new] ALX-8521LS*** alternator and item 23 [pulley]; discontinued option.) . . . . .	O	1
	ALX-8521LS***	Alternator – 70 Amp (New, without pulley; discontinued option.) . . . . .	O	1
	D748-2R	Alternator – ALX-8521RS*** (Overhaul exchange, without pulley; discontinued option.) . . . . .	X	1
47	B277-12	Clamp (Ref; see Figure 71-19)		
48	A785-7	Hose (1.00-inch dia, Ref; see Figure 71-19)		
49	STD-690*	Washer (0.063-inch thick as required for shimming) . . . . .	X	A/R
50	76534*	Shim (0.005-inch thick as required for shimming) . . . . .	X	A/R
51	AN6-16	Bolt . . . . .	X	1
52	AN6-21	Bolt . . . . .	X	1
53	STD-872*	Nut . . . . .	X	2
54	STD-713*	Cotter Pin . . . . .	X	2
55	A067-673	Wire (forward battery) . . . . .	X	1
56	B260-20	Terminal . . . . .	X	1
57	A067-587	Wire (forward battery) . . . . .	X	1

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

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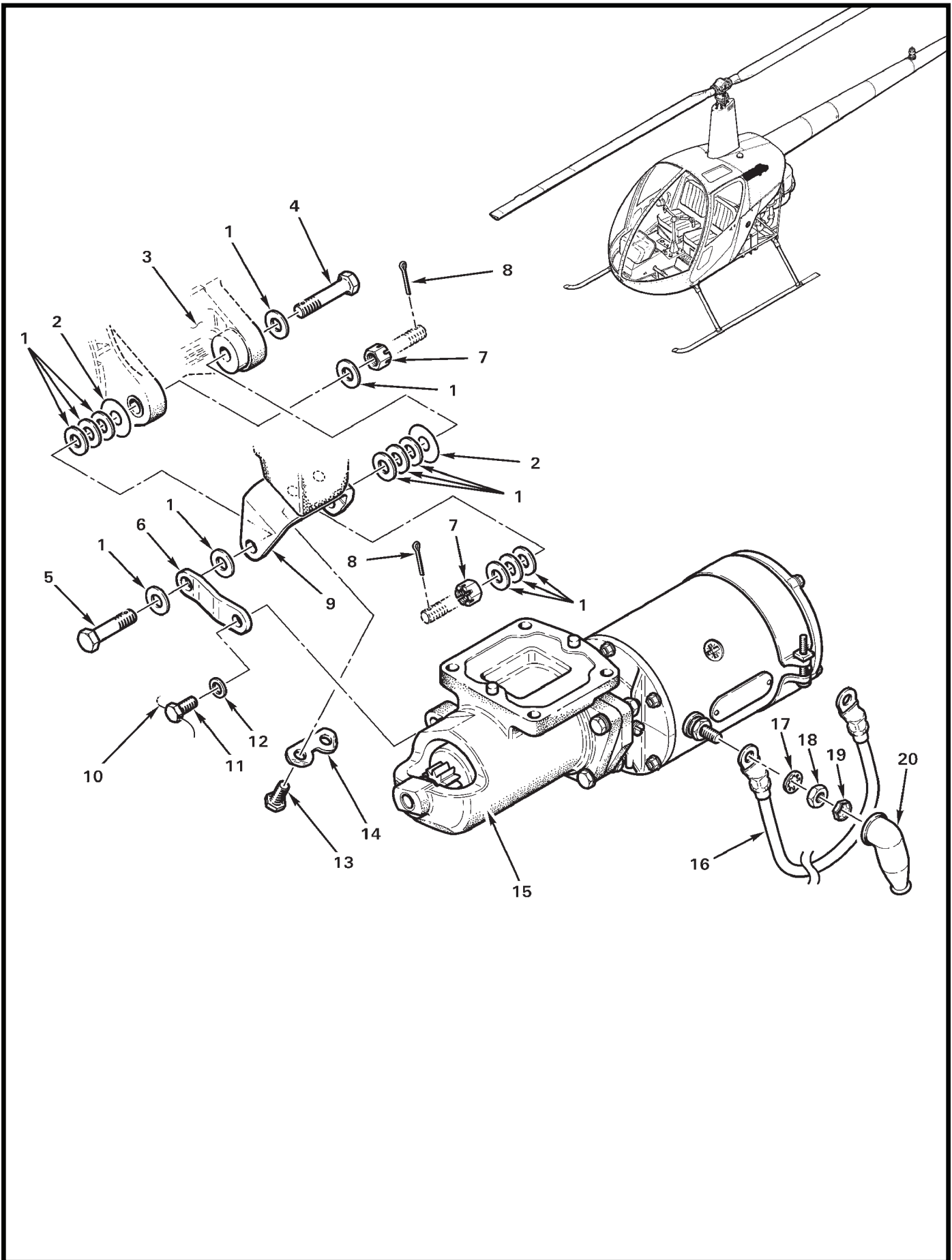


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>KELLY AEROSPACE STARTER INSTALLATION</b>				
71-27-1	STD-690*	Washer (0.063-inch thick as required for shimming) . . . . .	X	A/R
2	76534*	Shim (0.005-inch thick as required for shimming) . . . . .	X	A/R
3	—	Alternator (Ref)		
4	AN6-16	Bolt . . . . .	X	1
5	AN6-14	Bolt . . . . .	X	1
6	74323*	Strut . . . . .	X	1
7	STD-872*	Nut . . . . .	X	2
8	STD-713*	Cotter Pin . . . . .	X	2
9	07A19474*	Bracket . . . . .	X	1
10	MS20995C32	0.032-inch dia Safety Wire . . . . .	X	A/R
11	LW-31H0.75*	Bolt (Ref; supplied with engine)		
12	STD-35*	Washer . . . . .	X	1
13	LW-31-0.94*	Bolt (supplied with engine) . . . . .	X	1
14	73383*	Lockplate . . . . .	X	1
15	MZ4224**	Starter (Incl items 17 and 18) . . . . .	X	1
16	A059-21	Cable (starter relay-to-starter; Kelly Aerospace starter only) . . .	X	1
17	—	Lockwasher (Ref; supplied with starter)		
18	—	Nut (Ref; supplied with starter)		
19	B330-16	Palnut . . . . .	X	1
20	MS25171-2S	Nipple . . . . .	X	1

NOTES \* Lycoming part no.  
 \*\* Kelly Aerospace part no.

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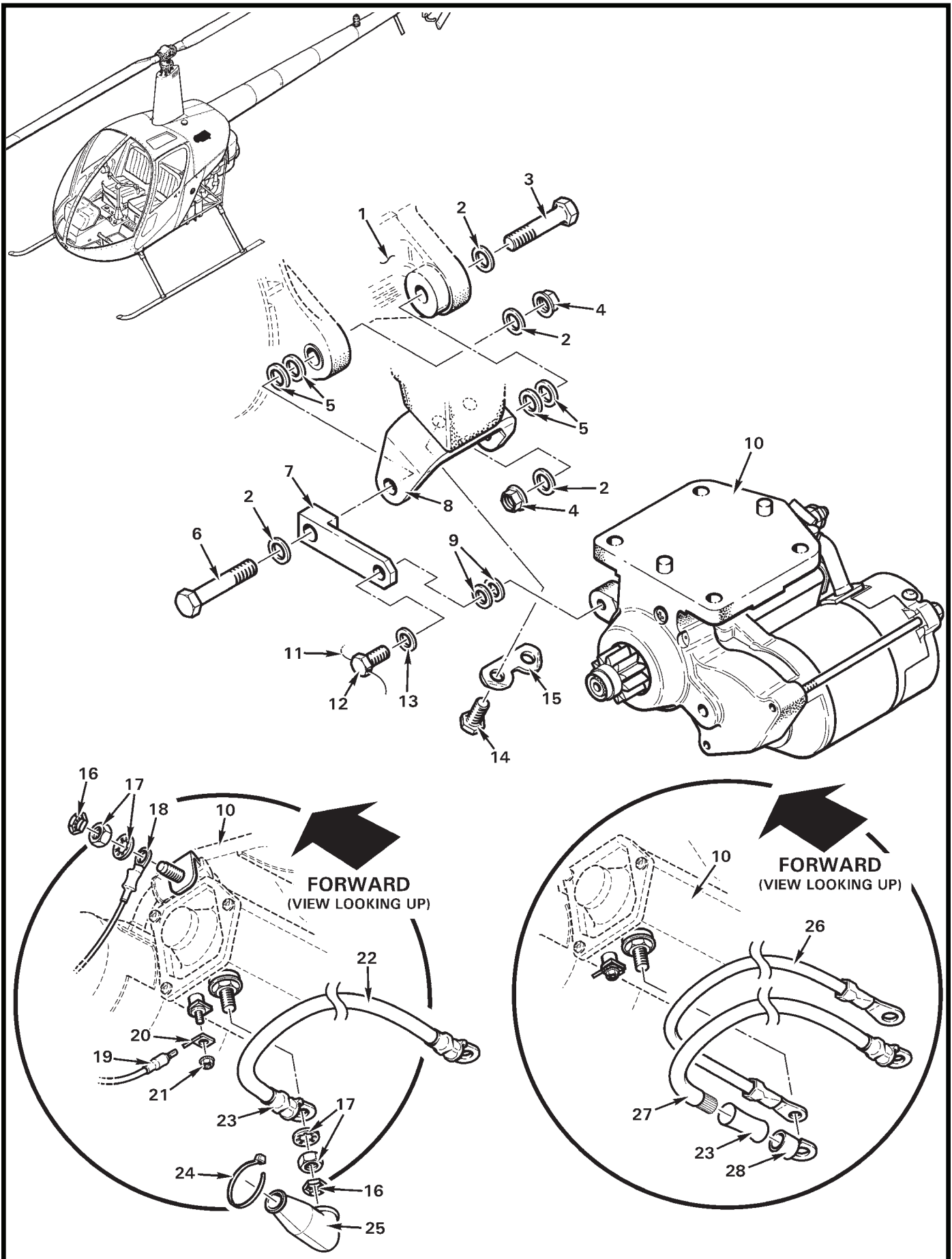




FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
<b>SKY-TEC STARTER INSTALLATION</b>				
71-29-1	D748	Alternator Assembly (Ref; see Figure 71-23)		
2	NAS1149F0632P	Washer . . . . .	X	4
3	AN6-11A*	Bolt (or AN6-12A; as required for shimming) . . . . .	X	1
4	D210-6	Nut . . . . .	X	2
5	NAS1149F0663P*	Washer (or NAS1149F0632P, NAS1149D0616J; as required for shimming) . . . . .	X	A/R
6	AN6-16A*	Bolt (or AN6-15A or AN6-17A) . . . . .	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 (Incl items 17, 20, and 21) . . . . .	O	1
11	MS20995C32	0.032-inch 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 (supplied with engine) . . . . .	X	1
15	73383***	Lockplate . . . . .	X	1
16	B330-16	Palnut . . . . .	X	2
17	—	Washer and Nut (Ref; supplied with starter)		
18	A059-591	Wire (Ref)		
19	A059-582	Wire (Ref)		
20	—	Terminal (Ref; supplied with starter)		
21	—	Nut (Ref; supplied with starter)		
22	A067-581	Cable Assembly (aft battery) . . . . .	X	1
23	B158-8	Heat Shrink . . . . .	X	A/R
24	MS3367-4-9	Ty-Rap . . . . .	X	1
25	MS25171-2S	Nipple (aft battery) . . . . .	X	1
	MS25171-4S	Nipple (forward battery; not shown) . . . . .	X	1
26	A067-673	Wire (forward battery) . . . . .	X	1
27	A067-587	Wire (forward battery) . . . . .	X	1
28	B260-20	Terminal . . . . .	X	1

NOTES \* Select hardware which, after correct torque is applied, exposes 2 to 4 threads beyond nut.  
 \*\* Sky-Tec part no.  
 \*\*\* Lycoming part no.

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