

CHAPTER 28**FUEL SYSTEM**

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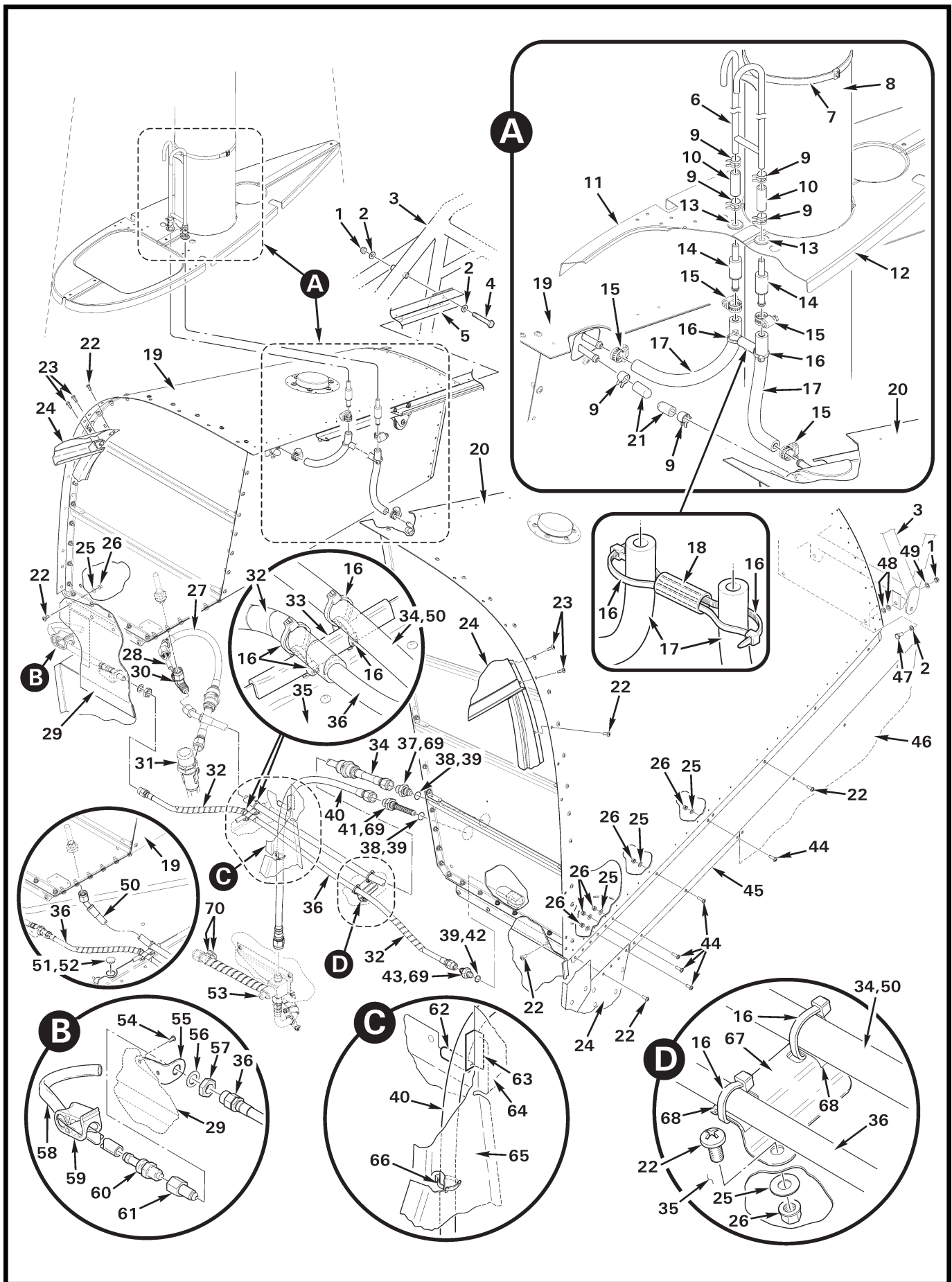


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
FUEL SYSTEM INSTALLATION				
28-1-1	D210-4	Nut	X	3
2	NAS1149F0432P	Washer	X	3
3	C020-1	Upper Frame Assembly (Ref)		
4	NAS6604-22	Bolt	X	1
5	C245-1	Channel (Ref)		
6	A731-10	Tube Assembly	X	1
7	MS3367-6-0	Ty-Rap	X	1
8	C006	Main Rotor Gearbox Assembly (Ref)		
9	D277-6	Clamp	X	A/R
10	A729-79	Tube	X	2
11	C261-14*	Rib Assembly – Lower (RH, small mast; Ref)		
	C261-20*	Rib Assembly – Lower (RH, large mast; Ref, not shown)		
12	C261-13*	Rib Assembly – Lower (LH, small mast; Ref)		
	C261-19*	Rib Assembly – Lower (LH, large mast; Ref, not shown)		
13	MS35489-6	Grommet (Ref)		
14	D251-1	Valve Assembly – Rollover (Vent)	X	2
15	B277-4	Clamp	X	6
16	MS3367-4-9	Ty-Rap	X	8
17	A729-48	Tube	X	2
18	A729-63	Tube	X	1
19	D043-5	Auxiliary Tank Assembly (Ref, see Figure 28-13)		
20	C010-6	Main Fuel Tank Assembly (Ref, see Figure 28-9)		
21	A457-19	Cap (earlier R44s, if lower vent is present)	X	2
22	MS27039C0806	Screw	X	23
23	MS27039C0808	Screw	X	4
24	C015	Cabin Assembly (Ref)		
25	NAS1149FN816P	Washer	X	10
26	MS21042L08	Nut	X	10
27	C595-4	Hose Assembly (IO-540 ships)	X	1
28	D453-5	Jet (IO-540 ships)	X	1
29	C259-2	Panel - Bulkhead (RH, Ref)		
30	D453-4	Tee (IO-540 ships)	X	1
31	D321-1	Valve Assembly (IO-540 ships, see Figure 28-33; Ref)		
32	B161-4	Spirap	X	A/R
33	A226-11	Trim	X	A/R

NOTES * See Figure 53-11 for mast fairing assembly.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
FUEL SYSTEM INSTALLATION (Cont'd)				
28-1-34	C595-3	Hose Assembly (IO-540 ships)	X	1
35	C234-1	Firewall (Ref, LH fwd horizontal)		
36	D205-30	Hose Assembly	X	1
37	A880-936*	Union (or A880-966)	X	1
38	MS29512-06	Packing (install using item 39)	X	2
39	A257-6	Grease	X	A/R
40	D205-38	Hose Assembly	X	1
41	B254-3	Strainer Assembly – Fuel	X	1
42	MS29512-03	Packing (install using item 39)	X	1
43	A880-933*	Union (or A880-963)	X	1
44	MS27039C0807	Screw	X	4
45	C380-7	Strip (Ref; LH)		
	C364-6	Strip (Ref; RH, not shown)		
46	C377-1	Cowling Assembly (Ref, LH)		
47	NAS6604-2	Bolt	X	2
48	NAS1149F0432P	Washer (or NAS1149D0416J; as required to fill gap between tank assembly and frame)	X	A/R
49	NAS1149F0463P	Washer (or NAS1149F0432P)	X	2
50	C595-2	Hose Assembly (O-540 ships)	X	1
51	B209-7	Plug (O-540 ships; install using item 52)	X	1
52	B270-1	Sealant	X	A/R
53	C670-1	Shut-Off Valve – Fuel (Ref)		
54	MS20470AD3	Rivet	X	2
55	D255-2	Angle	X	1
56	NAS1149F0632P	Washer	X	1
57	A880-1003	Nut	X	1
58	A729-17	Tube	X	1
59	D663-1	Clamp	X	1
60	A761-1	Drain Valve	X	1
61	D255-1	Connector	X	1
62	A226-15	Trim	X	A/R
63	A701-1	Tape – Aluminum	X	A/R
64	C259-1	Panel - Bulkhead (LH, Ref)		
65	C351-1	Brace (Ref)		
66	MS3367-5-9	Ty-Rap	X	1

NOTES * Apply item 69 to threads.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
FUEL SYSTEM INSTALLATION (Cont'd)				
28-1-67	D255-5	Support Assembly	X	1
68	A701-3	Tape – Urethane (0.3125" wide)	X	1
69	A457-9	Anti-seize	X	A/R
70	B161-8	Spirap (IO-540 ships)	X	A/R
NOTES				

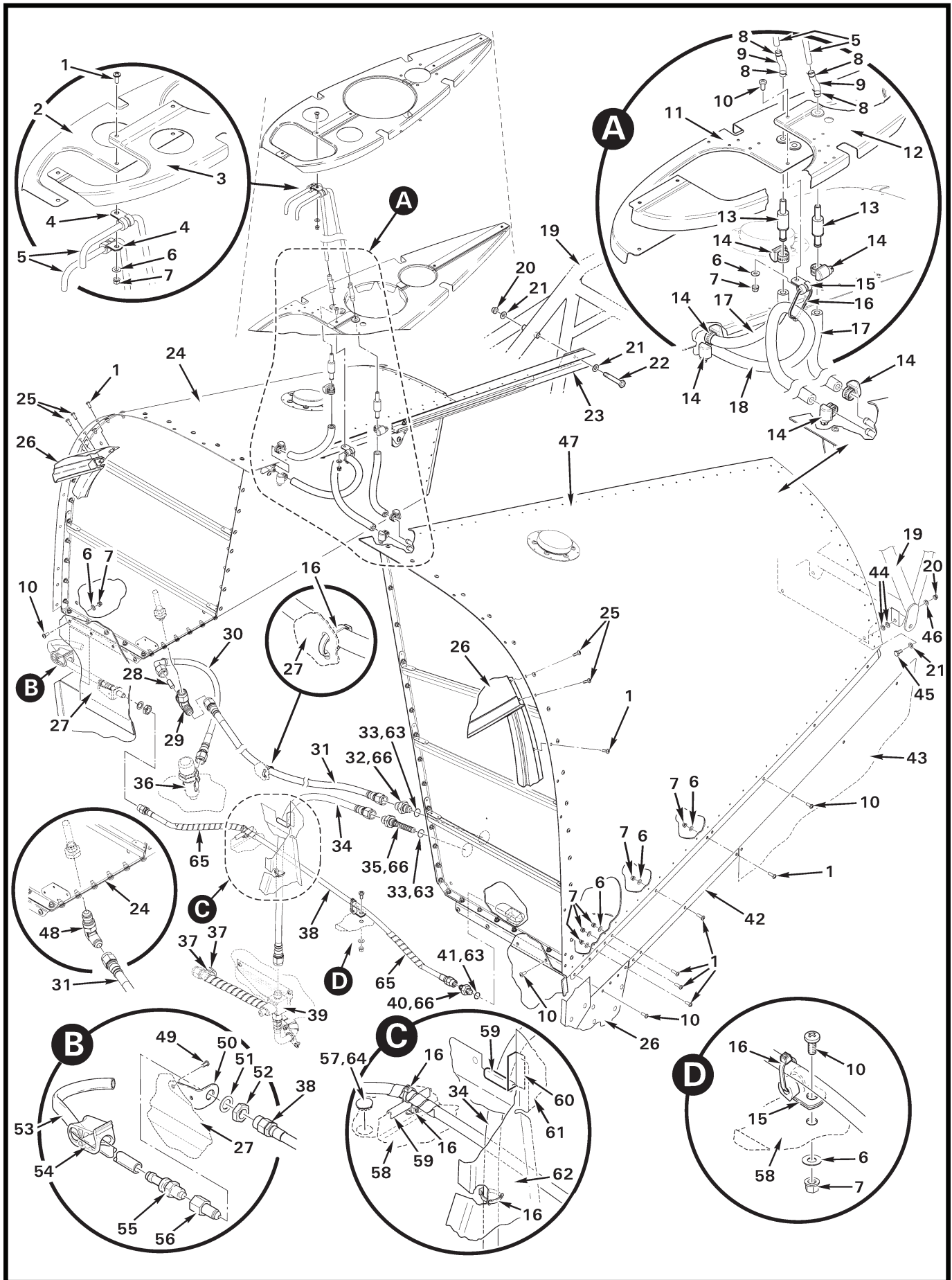


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
FUEL SYSTEM INSTALLATION				
28-5-1	MS27039C0807	Screw	X	35
2	C261-18*	Rib Assembly – Middle (RH, Ref)		
3	C261-17*	Rib Assembly – Middle (LH, Ref)		
4	MS21919WDG4	Clamp	X	2
5	C731-2	Line – Vent (earlier R44s)	X	2
6	NAS1149FN816P	Washer	X	15
7	MS21042L08	Nut	X	15
8	MS20995C32	0.032-in. dia. Safety Wire	X	A/R
9	A729-47	Tube (earlier R44s).	X	2
10	MS27039C0806	Screw	X	15
11	C261-14*	Rib Assembly – Lower (RH, small mast; Ref)		
	C261-20*	Rib Assembly – Lower (RH, large mast; Ref, not shown)		
12	C261-13*	Rib Assembly – Lower (LH, small mast; Ref)		
	C261-19*	Rib Assembly – Lower (LH, large mast; Ref, not shown)		
13	D251-1	Valve Assembly – Rollover (Vent)	X	2
14	B277-4	Clamp	X	6
15	MS21919WDG3	Clamp	X	2
16	MS3367-5-9	Ty-Rap	X	A/R
17	A729-48	Tube	X	2
18	A729-49	Tube (earlier R44s).	X	1
19	C020-1	Upper Frame Assembly (Ref)		
20	D210-4	Nut	X	3
21	NAS1149F0432P	Washer	X	4
22	NAS6604-22	Bolt	X	1
23	C245-1	Channel (Ref)		
24	D043-5	Auxiliary Tank Assembly (Ref, see Figure 28-9)		
25	MS27039C0808	Screw	X	4
26	C015	Cabin Assembly (Ref)		
27	C259-2	Panel - Bulkhead (RH, Ref)		
28	D453-2	Jet (IO-540 ships; earlier R44s)	X	1
29	D453-3	Tee (IO-540 ships; earlier R44s)	X	1
30	D205-31	Hose Assembly IO-540 ships; earlier R44s)	X	1
31	D205-29	Hose Assembly (earlier R44s)	X	1
32	A880-936**	Union (or A880-966)	X	1
33	MS29512-06	Packing (install using item 63)	X	1

NOTES * See Figure 53-11 for mast fairing assembly.

** Apply item 66 to threads.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
FUEL SYSTEM INSTALLATION (Cont'd)				
28-5-34	D205-28	Hose Assembly	X	1
35	B254-3	Strainer Assembly – Fuel (Ref)		
36	D321-1	Valve Assembly (IO-540 ships, see Figure 28-33; Ref)		
37	B161-8	Spirap (IO-540 ships)	X	A/R
38	D205-30	Hose Assembly	X	1
39	C670-1	Shut-Off Valve – Fuel (Ref)		
40	A880-933*	Union (or A880-963)	X	1
41	MS29512-03	Packing (lubricate using item 63)	X	1
42	C380-7	Strip (Ref; LH)		
	C364-6	Strip (Ref; RH, not shown)		
43	C377-1	Cowling Assembly (Ref, LH)		
44	NAS1149F0432P	Washer (or NAS1149D0416J as required to fill gap between tank assembly and frame)	X	A/R
45	NAS6604-2	Bolt	X	2
46	NAS1149F0463P	Washer (or NAS1149F0432P)	X	2
47	C010-6	Main Fuel Tank Assembly (Ref, see Figure 28-9)		
48	A457-12	Elbow (O-540 ships)	X	1
49	MS20470AD3	Rivet	X	2
50	D255-2	Angle	X	1
51	NAS1149F0632P	Washer	X	1
52	A880-1003	Nut	X	1
53	A729-17	Tube	X	1
54	D663-1	Clamp	X	1
55	A761-1	Drain Valve	X	1
56	D255-1	Connector	X	1
57	B209-7	Plug (O-540 ships; seal using item 64)	X	1
58	C234-1	Firewall – Horizontal (Ref)		
59	A226-11	Trim	X	A/R
60	A701-1	Tape – Aluminum	X	A/R
61	C259-1	Panel - Bulkhead (LH, Ref)		
62	C351-1	Brace (Ref)		
63	A257-6	Grease	X	A/R
64	B270-1	Sealant	X	A/R
65	B161-4	Spirap	X	A/R
66	A457-9	Anti-seize	X	A/R

NOTES * Apply item 66 to threads.

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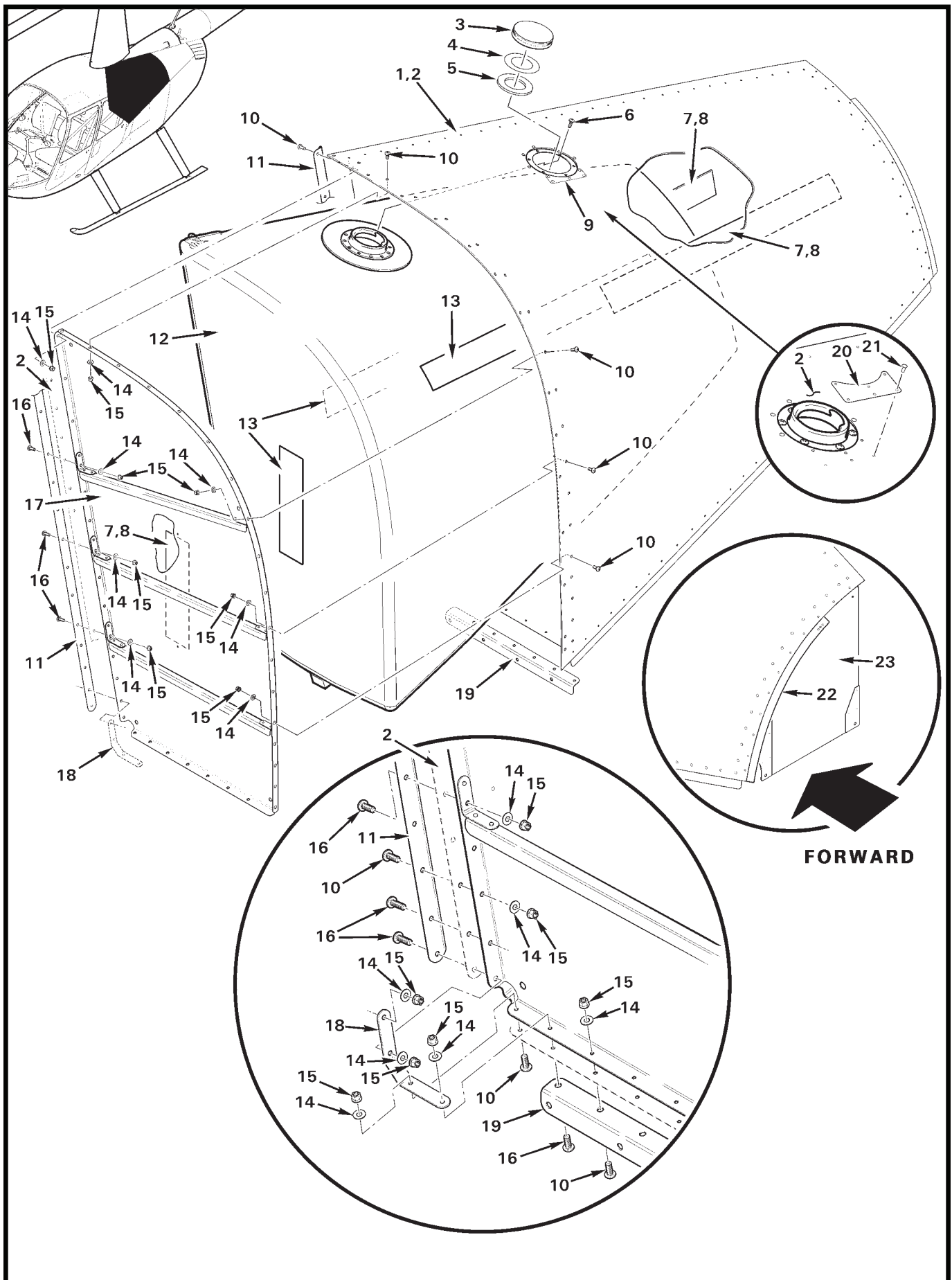


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
MAIN TANK ASSEMBLY				
28-9-1	C010-6	Main Tank Assembly (Includes items 2, 3, 6, 12, and 14 thru 16. Also items 2 thru 5, 8 thru 10, 12 thru 16, 18, 19, 21, 23, 25, 26, 28, and 29 from Figure 28-7.)	X	1
2	D029-1	Tank Assembly (Aluminum enclosure; includes item 7 thru 9, 11, 14 thru 19, 22, and 23.)	X	1
3	A689-6*	Cap Assembly (Incl items 4 and 5; unpainted)	X	1
	R7295**	Cap Assembly (Incl items 4 and 5; painted white)	X	1
	R7998**	Cap Assembly (Incl items 4 and 5; primer only)	X	1
4	A689-8	Washer (plastic)	X	1
5	A689-7	Gasket (rubber)	X	1
6	A142-1	Screw	X	6
7	B175-4	Loop Tape (install using item 8)	X	A/R
8	B270-8qt	Adhesive	X	A/R
9	D249-13	Doubler	X	1
10	MS27039C0806	Screw	X	34
11	D248-9	Angle	X	1
12	D028-1	Bladder Assembly (Incl item 13)	X	1
13	B175-3	Hook Tape (three places; Ref)		
14	NAS1149FN816P	Washer	X	39
15	MS21042L08	Nut	X	39
16	MS27039C0807	Screw	X	5
17	D247-1	Bulkhead Assembly	X	1
18	D249-6	Angle	X	1
19	D248-8	Angle	X	1
20	D827-1	Doubler (repair; for fuel tanks <u>without</u> item 9 installed)	X	1
21	MS20470AD3	Rivet	X	6
22	C028-10	Strip (Ref)		
23	C028-7	Web (Ref)		

NOTES * If replacing cap assembly, order D682-44 decal and refer to R44 Service Bulletin SB-84.
 ** Includes D682-44 decal.

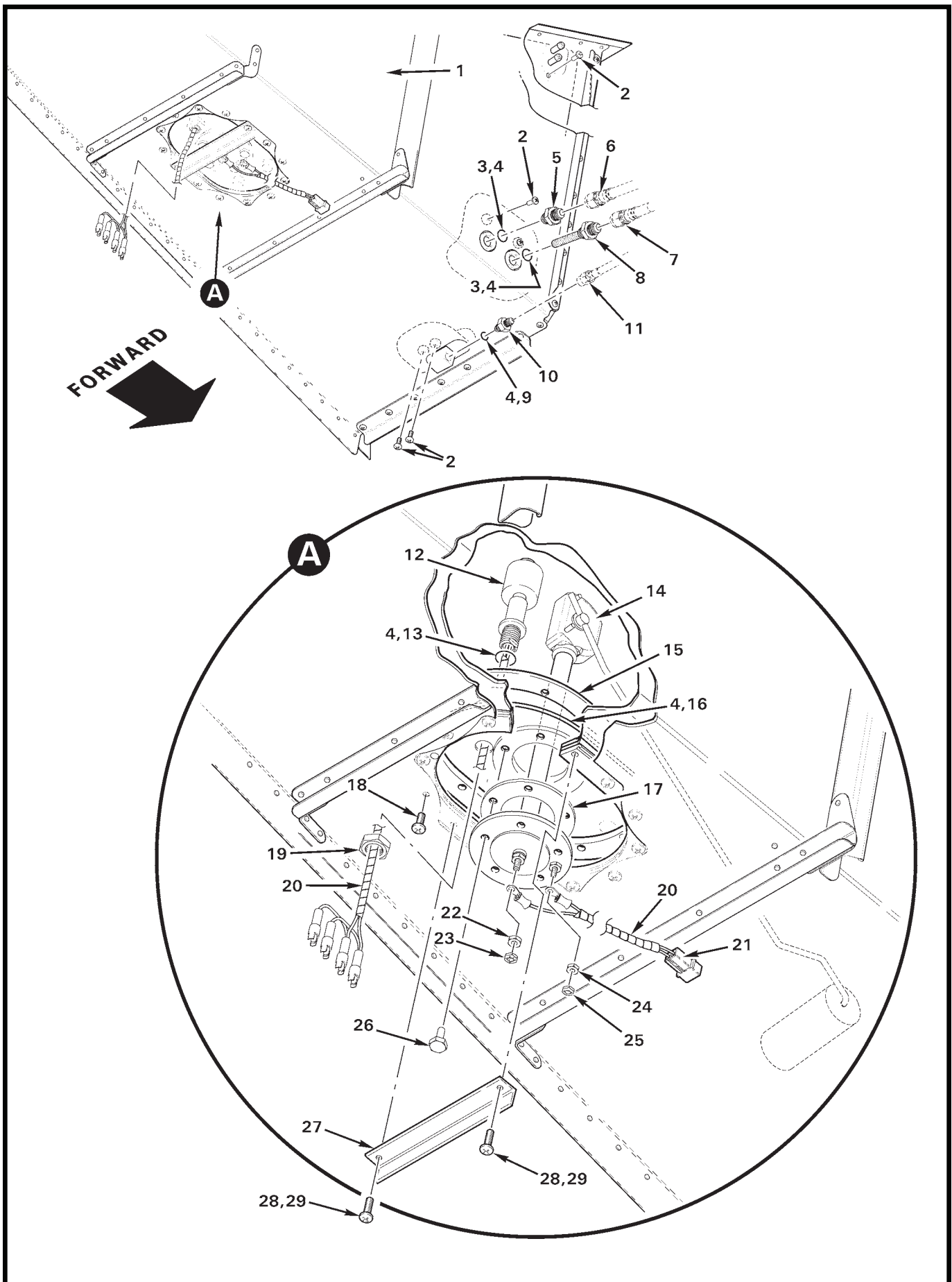


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
MAIN TANK ASSEMBLY				
28-11-1	C010-6	Main Tank Assembly (Ref; includes items 2 thru 5, 8 thru 10, 12 thru 16, 18, 19, 21, 23, 25 thru 29; also items 2, 3, 6, and 11 from Figure 28-9.)		
2	MS29039C1-06	Screw	X	5
3	MS29512-06	Packing (install using item 4)	X	2
4	A257-6	Grease	X	A/R
5	AN815-6D	Union	X	1
6	D205-29	Hose Assembly (Ref)		
7	D205-28	Hose Assembly (Ref)		
8	B254-3	Strainer Assembly	X	1
9	MS29512-03	Packing (install using item 4)	X	1
10	AN815-3D	Union	X	1
11	D205-30	Hose Assembly (Ref)		
12	A521-1	Switch Assembly – Low Fuel (Includes item 20, wires, housings, and pins; assembled as shown.)	X	1
13	MS29512-05	Packing (install using item 4)	X	1
14	D252-1	Sender – Fuel Quantity (Incl items 17, 22, and 24)	X	1
15	D250-1	Cover Assembly	X	1
16	MS29513-260	Packing (install using item 4)	X	1
17	15-423	Gasket	X	1
18	MS27039C1-08	Screw (install using item 29)	X	12
19	AN924-5D	Nut	X	1
20	B161-2	Spirap	X	A/R
21	C049-11	Wire Harness Assembly (Includes item 20, wires, housing, and pins; assembled as shown.)	X	1
22	0044-00408	Nut (large; Ref)		
23	B330-6	Palnut	X	1
24	44-121	Nut (small; Ref)		
25	B330-5	Palnut	X	1
26	B289-1	Bolt	X	5
27	A374-5	Angle	X	1
28	MS27039C1-09	Screw (install using item 29)	X	2
29	A257-9	Anti-seize	X	A/R

NOTES

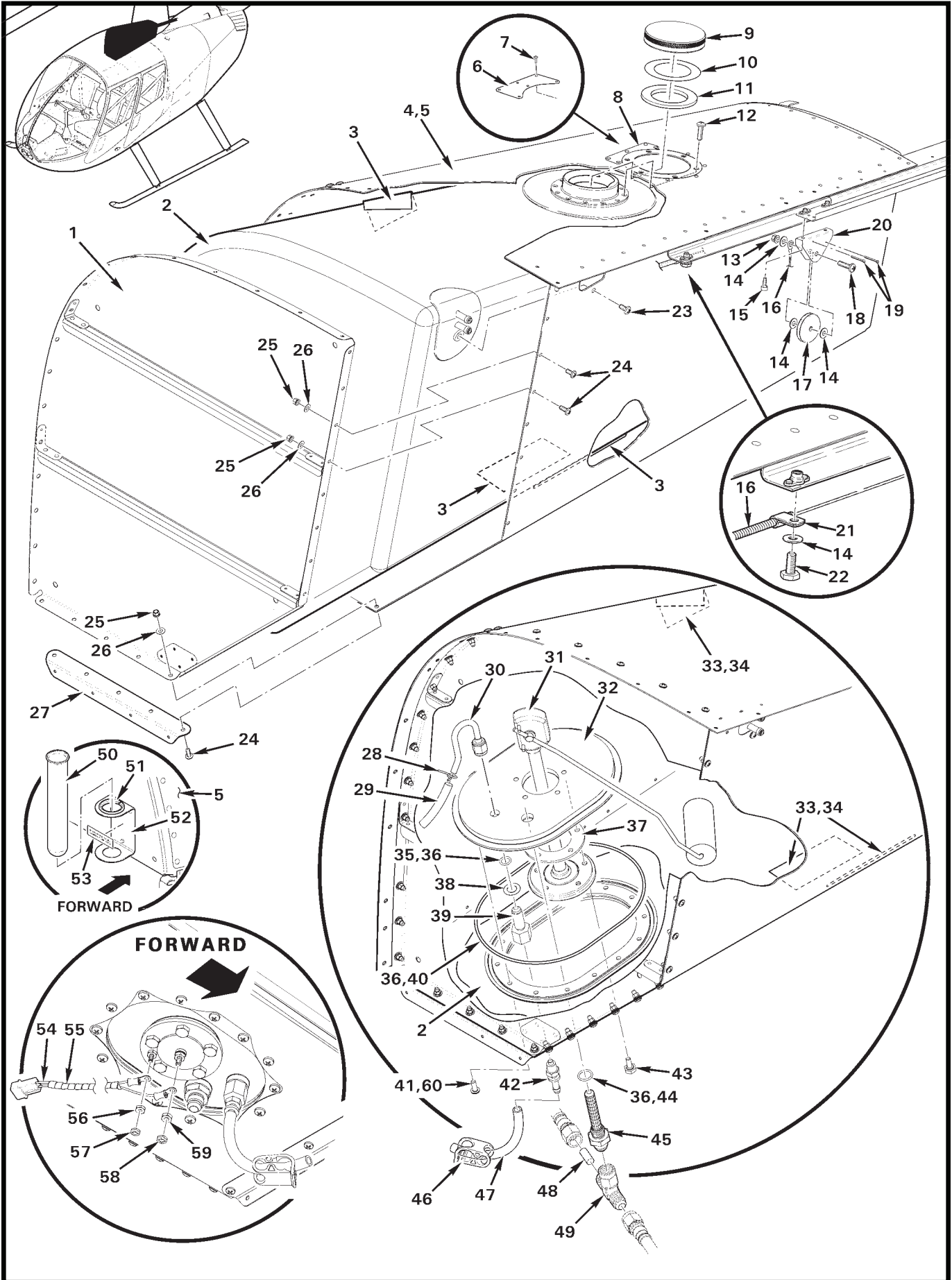


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
AUXILIARY TANK ASSEMBLY				
28-13-1	D247-2	Bulkhead Assembly	X	1
2	D028-2	Bladder Assembly (Incl item 3)	X	1
3	B175-3	Hook Tape (three places; Ref)		
4	D043-5	Aux Fuel Tank Assembly (Incl items 2, 5, 9, 12 thru 15, 17 thru 21, 23, 28 thru 32, 35, 36, 38 thru 47, 54, 57, 58, and 60)	X	1
5	D045-1	Tank Assembly (aluminum enclosure; includes items 1, 7, 8, 24 thru 27, 33, 34, and 52)	X	1
6	D827-1	Doubler (for fuel tanks <u>without</u> item 8 installed)	X	1
7	MS20470AD3	Rivet	X	6
8	D249-13	Doubler	X	1
9	A689-6*	Cap Assembly (Incl item 10 and 11)	X	1
	R7295**	Cap Assembly (Incl items 10 and 11; painted white)	X	1
	R7998**	Cap Assembly (Incl items 10 and 11; primer only)	X	1
10	A689-8	Washer (plastic)	X	1
11	A689-7	Gasket (rubber)	X	1
12	A142-1	Screw	X	6
13	MS21042L3	Nut	X	1
14	NAS1149F0332P	Washer	X	4
15	NAS1352N06-6	Screw	X	2
16	D126-1	Cable Assembly (Ref)		
17	MS24566-1B	Pulley (alternate part no. AN210-1A)	X	1
18	MS27039C1-11	Screw	X	1
19	MS24665-134	Cotter Pin	X	2
20	B157-1	Mount	X	1
21	AN742-3	Clamp	X	1
22	NAS6603-2	Bolt	X	1
23	MS27039C1-06	Screw	X	1
24	MS27039C0806	Screw	X	36
25	MS21042L08	Nut	X	36
26	NAS1149FN816P	Washer	X	36
27	D253-3	Angle	X	1
28	D277-6	Clamp	X	1
29	A729-50	Tube	X	1
30	D255-3	Siphon Assembly	X	1

NOTES * If replacing cap assembly, order D682-44 decal and refer to R44 Service Bulletin SB-84.
 ** Includes D682-44 decal.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
AUXILIARY TANK ASSEMBLY (Cont'd)				
28-13-31	D252-2	Sender – Fuel Quantity (Incl items 37, 56, and 59)	X	1
32	D250-2	Cover Assembly	X	1
33	B270-8qt	Adhesive	X	A/R
34	B175-4	Loop Tape (install using item 33)	X	A/R
35	MS29512-04	Packing (install using item 36)	X	1
36	A257-6	Grease	X	A/R
37	15-423	Gasket	X	1
38	NAS1149F0732P	Washer	X	1
39	D255-4	Connector	X	1
40	MS29513-260	Packing (install using item 36)	X	1
41	MS27039C1-08	Screw (install using item 60)	X	14
42	A761-1	Drain Valve Assembly	X	1
43	B289-1	Bolt	X	5
44	MS29512-06	Packing (install using item 36)	X	1
45	B254-3	Strainer Assembly	X	1
46	D663-1	Clamp	X	1
47	A729-43	Tube	X	1
48	D453-5	Jet (Ref, see Figure 28-1)		
49	D453-4	Tee (Ref, see Figure 28-1)		
50	MT106-3	Tube – Fuel Sample (glass)	X	1
51	NAS557-16A	Grommet	X	1
52	G926-7	Holder (Ref)	O	1
53	G682-21	Decal – “STOW MT106-3 FUEL SAMPLE TUBE HERE”	X	1
54	C049-11	Wire Harness Assembly (Includes item 55, wires, housing pins, assembled as shown.)	X	1
55	B161-2	Spirap	X	A/R
56	44-121	Nut (small; Ref)		
57	B330-5	Palnut	X	1
58	B330-6	Palnut	X	1
59	0044-00408	Nut (large; Ref)		
60	A257-9	Anti-Seize	X	A/R

NOTES

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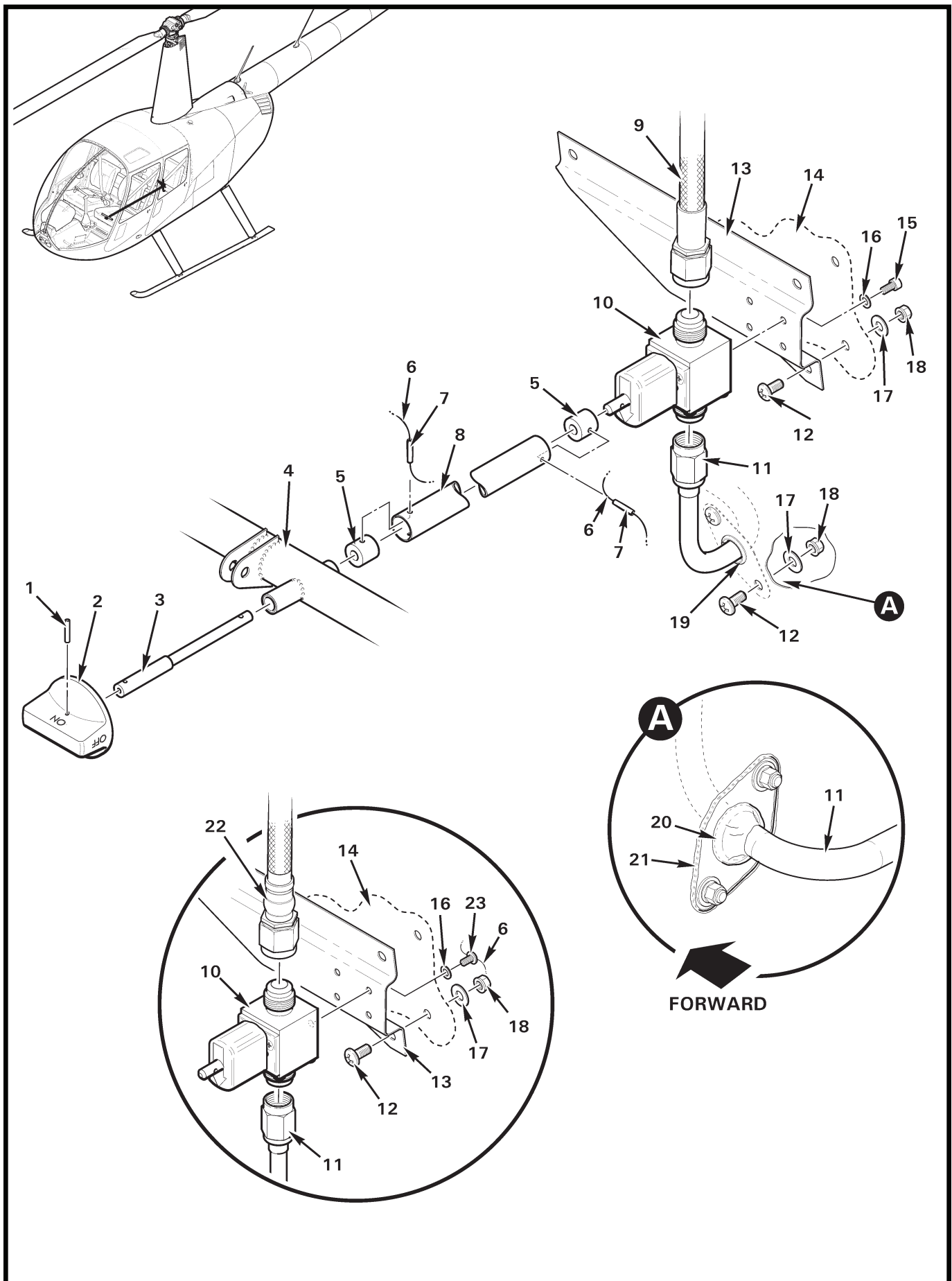


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
FUEL SHUT-OFF VALVE INSTALLATION				
28-17-1	MS16562-5	Spring Pin	X	1
2	C499-1	Knob	X	1
3	C791-3	Shaft	X	1
4	C348-1	Anchor Assembly (collective stop)	X	1
5	C791-4	Spacer	X	2
6	MS20995C32	0.032-in. dia. Safety Wire	X	A/R
7	MS16562-16	Spring Pin	X	2
8	C791-2	Tube	X	1
9	D205-38	Hose Assembly	X	1
10	C670-1	Fuel Valve	X	1
11	C741-1	Fuel Line Assembly	X	1
12	MS27039C0805	Screw	X	3
13	C798-3	Bracket (supersedes C798-2)	X	1
14	C233-1	Vertical Firewall (Ref)		
15	NAS1352-04LB3P	Screw (or NAS1352-04LE3P)	X	4
16	NAS620-4	Washer	X	4
17	NAS1149FN832P	Washer	X	4
18	MS21042L08	Nut	X	4
19	NAS557-8A	Grommet	X	1
20	B270-5	Sealant (7.5-oz. tube)	X	A/R
21	B270-1	Sealant (2-part)	X	A/R
22	D205-28	Hose Assembly (earlier R44s)	X	1
23	AN500A4-3	Screw (earlier R44s)	X	4

NOTES

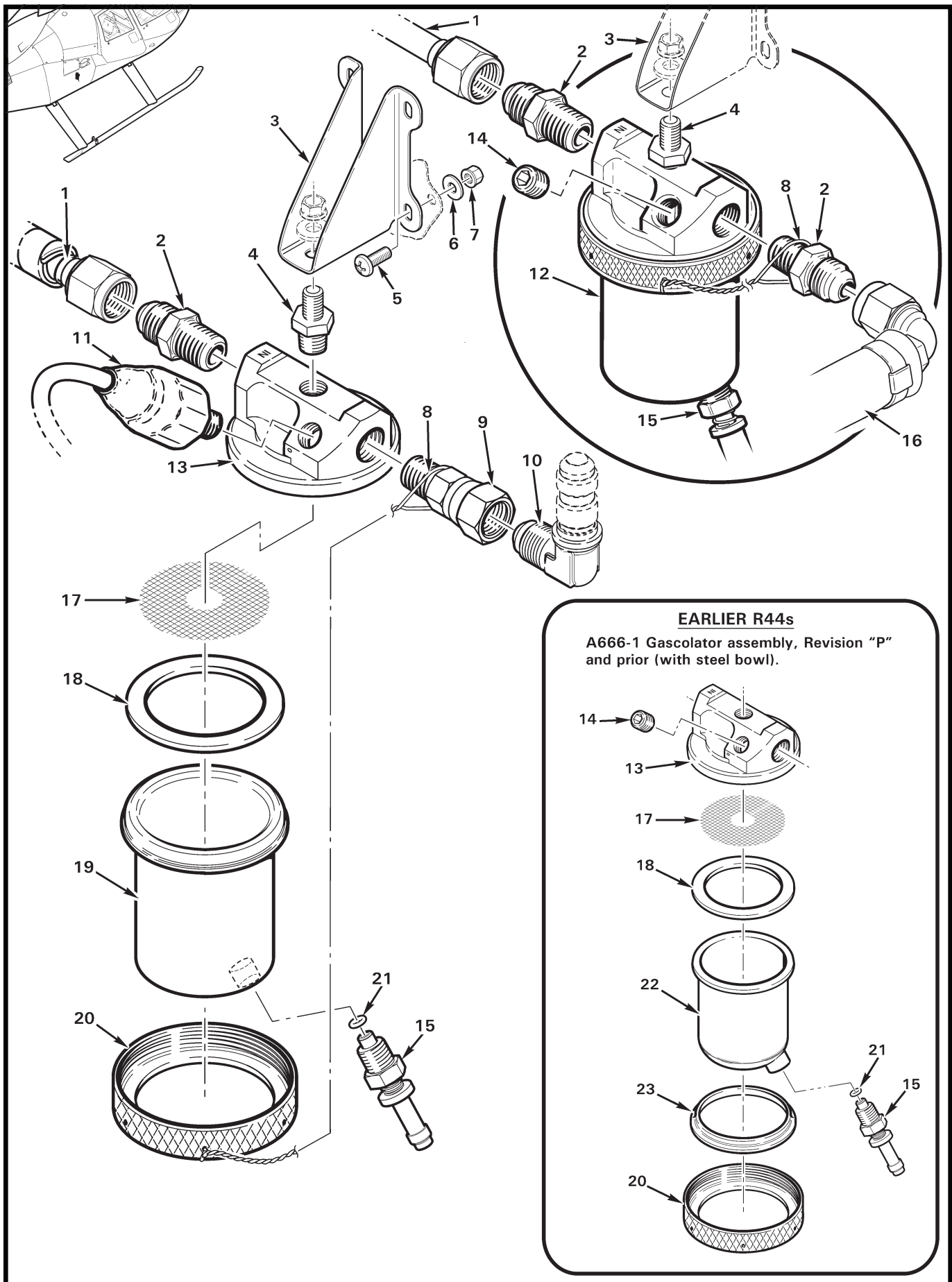


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		GASCOLATOR ASSEMBLY		
28-19-1	C741-1	Line Assembly (Ref)		
2	A880-536	Adapter*** (or A880-566)	X	A/R
3	A454-1	Support	X	1
4	A455-1	Plug***	X	1
5	MS27039C0806	Screw	X	4
6	NAS1149FN832P	Washer	X	4
7	MS21042L08	Nut	X	4
8	MS20995C32	0.032-in. dia. Safety Wire	X	A/R
9	A457-11*	Adapter (Ref; IO-540 ships)		
	6505-04-06-SS*	Adapter (Ref, see also Figures 28-21 and 28-25; IO-540 ships)		
10	A880-836*	Elbow (or A880-866; Ref, IO-540 ships)		
11	D745-1	Switch Assembly (Ref; IO-540 ships)		
12	A666-1	Gascolator Assembly (Revision "Q" and subsequent. Includes items 4, 13, 15, 17 thru 20, and 24.)	X	1
13	B402-3	Top	O	1
14	MS27769D2*	Plug (O-540 ships)	X	1
15	A761-1*	Drain Valve – Gascolator (Incl item 21)	X	1
	CAV-110H-4**	Drain Valve – Gascolator	O	1
16	B283-3	Hose Assembly (Ref, see also Figures 28-21 and 28-25)		
17	10543-2	Screen	X	1
18	10536-1	Gasket (supersedes 10536)	X	1
19	B416-3	Bowl (aluminum)	X	1
20	B416-1	Collar	O	1
21	A215-006	O-Ring	X	1
22	10541	Bowl (steel)	X	1
23	B416-2	Ring (Ref)		
24	B270-6	Sealant	X	A/R

NOTES * Install using item 24.
 ** Saf-Air part no., installed in A666-1 gascolator assembly. Order A761-1 when replacing valve.

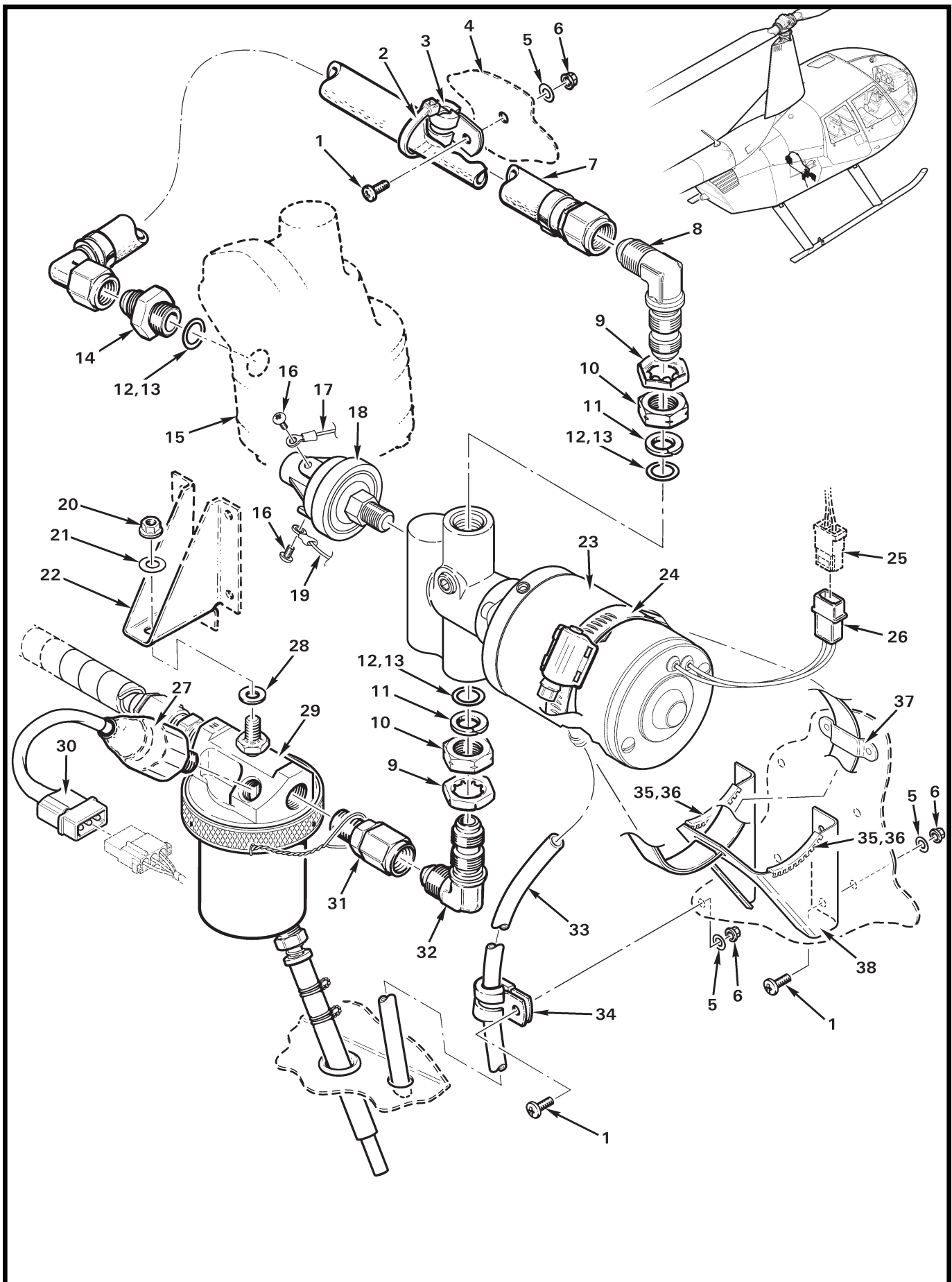


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
ELECTRIC FUEL PUMP INSTALLATION*				
28-21-1	MS27039C0806	Screw	X	6
2	MS3367-5-9	Ty-Rap	X	1
3	MS21919WDG3	Clamp	X	1
4	C233-1	Firewall – Vertical (Ref)		
5	NAS1149FN816P	Washer	X	6
6	MS21042L08	Nut	X	6
7	B283-3	Hose Assembly	X	1
8	AN833-6D	Elbow (aluminum, blue)	X	1
9	B330-25	Palnut	X	2
10	D452-6	Nut	X	2
11	D454-6	Retainer	X	2
12	MS29512-06	Packing (o-ring; lubricate with item 13)	X	3
13	A257-6	Grease	X	A/R
14	MS21900D6	Adapter	X	1
15	—	Fuel Pump (engine-driven; Ref)		
16	—	Screw	O	2
17	C859-1530	Wire (Ref)		
18	B426-2	Pressure Switch (Incl Item 16)	X	1
19	C859-1542	Wire (Ref)		
20	MS21042L4	Nut (Ref)		
21	NAS1149F0463P	Washer (Ref)		
22	A454-1	Support (Ref)		
23	D743-3	Pump Assembly (Incl item 26)	X	1
24	HTM-300	Clamp	X	1
25	B263-13	Housing (Ref)		
26	B263-12	Housing	X	1
	B263-1	Pin	X	2
27	D745-1	Switch Assembly – Vacuum (Incl item 30)	X	1
28	NAS1149F0432P	Washer	X	A/R
29	A666-1	Gascolator (Ref; see Figure 28-15)		
30	B263-14	Housing	X	1
	B263-1	Pin (pins 1 and 3)	X	2
	B263-3	Pin (pin 2)	X	1

NOTES * Ship S/N 13159 and subsequent.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
ELECTRIC FUEL PUMP INSTALLATION* (Cont'd)				
28-21-31	6505-04-06-SS	Adapter	X	1
32	AN833-6	Elbow (steel, black)	X	1
33	A729-33	Tube	X	1
34	MS21919WDG5	Clamp	X	1
35	MS21266-1N	Grommet (install using item 36)	X	A/R
36	B270-8qt	Adhesive	X	A/R
37	D288-1	Clip (Ref)		
38	D742-1	Support Assembly (Incl item 35)	X	1

NOTES * Ship S/N 13159 and subsequent.

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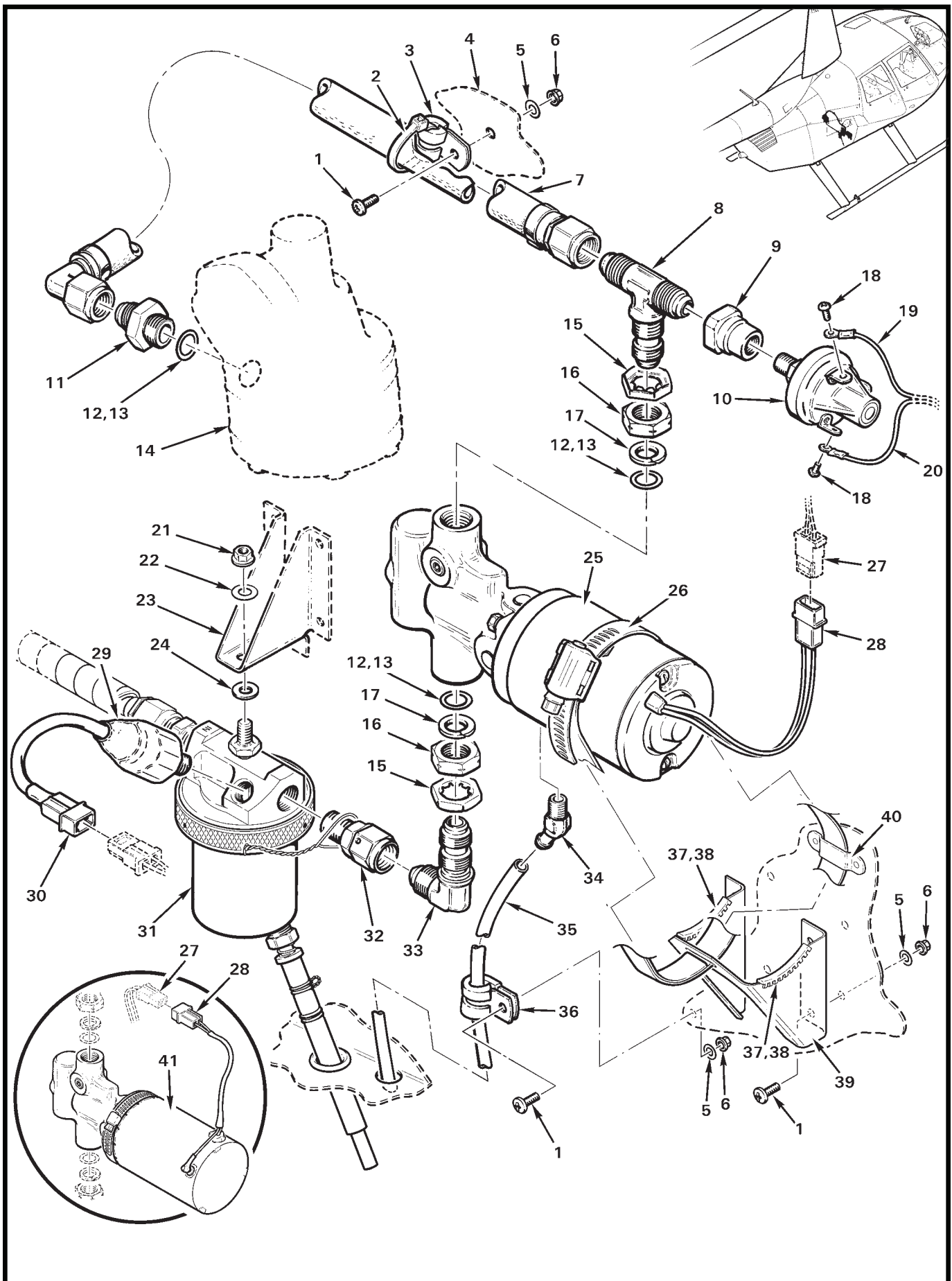


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
ELECTRIC FUEL PUMP INSTALLATION*				
28-25-1	MS27039C0806	Screw	X	6
2	MS3367-5-9	Ty-Rap	X	1
3	MS21919WDG3	Clamp	X	1
4	C233-1	Firewall – Vertical (Ref)		
5	NAS1149FN816P	Washer	X	6
6	MS21042L08	Nut	X	6
7	B283-3	Hose Assembly	X	1
8	AN834-6D	Tee	X	1
9	D744-1	Adapter	X	1
10	B426-2	Pressure Switch (Incl item 18)	X	1
11	MS21900D6	Adapter	X	1
12	MS29512-06	Packing (o-ring; lubricate with item 13)	X	3
13	A257-6	Grease	X	A/R
14	—	Fuel Pump (engine-driven; Ref)		
15	B330-25	Palnut	X	2
16	D452-6	Nut	X	2
17	D454-6	Retainer	X	2
18	—	Screw	O	2
19	C059-1542	Wire (Ref)		
20	C059-1530	Wire (Ref)		
21	MS21042L4	Nut (Ref)		
22	NAS1149F0463P	Washer (Ref)		
23	A454-1	Support (Ref)		
24	NAS1149F0432P	Washer	X	A/R
25	D743-1 **	Pump Assembly (Ref)		
26	HTM-300	Clamp	X	1
27	B263-13	Housing (Ref)		
28	B263-12	Housing	X	1
	B263-1	Pin	X	2
29	D745-1	Switch Assembly – Vacuum (Incl item 30)	X	1
30	B263-12	Housing	X	1
	B263-1	Pin	X	2

NOTES * Originally installed in ship S/N 10001 thru 13158.
 ** No longer available. Order KI-206-3 Kit for replacement.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
ELECTRIC FUEL PUMP INSTALLATION* (Cont'd)				
28-25-31	A666-1	Gascolator (Ref; see Figure 28-19)		
32	6505-04-06-SS	Adapter	X	1
33	AN833-6D	Elbow	X	1
34	AN844-4D	Elbow	X	1
35	A729-33	Tube	X	1
36	MS21919WDG5	Clamp	X	1
37	MS21266-1N	Grommet (install using item 38)	X	A/R
38	B270 8qt	Adhesive	X	A/R
39	D742-1	Support (Incl item 37)	X	1
40	D288-1	Clip (Ref)		
41	D743-2**	Pump Assembly with shield (Ref; ENG/Police ships only)		

NOTES * Originally installed in ship S/N 10001 thru 13158.
 ** No longer available. Order KI-206-6 Kit for replacement.

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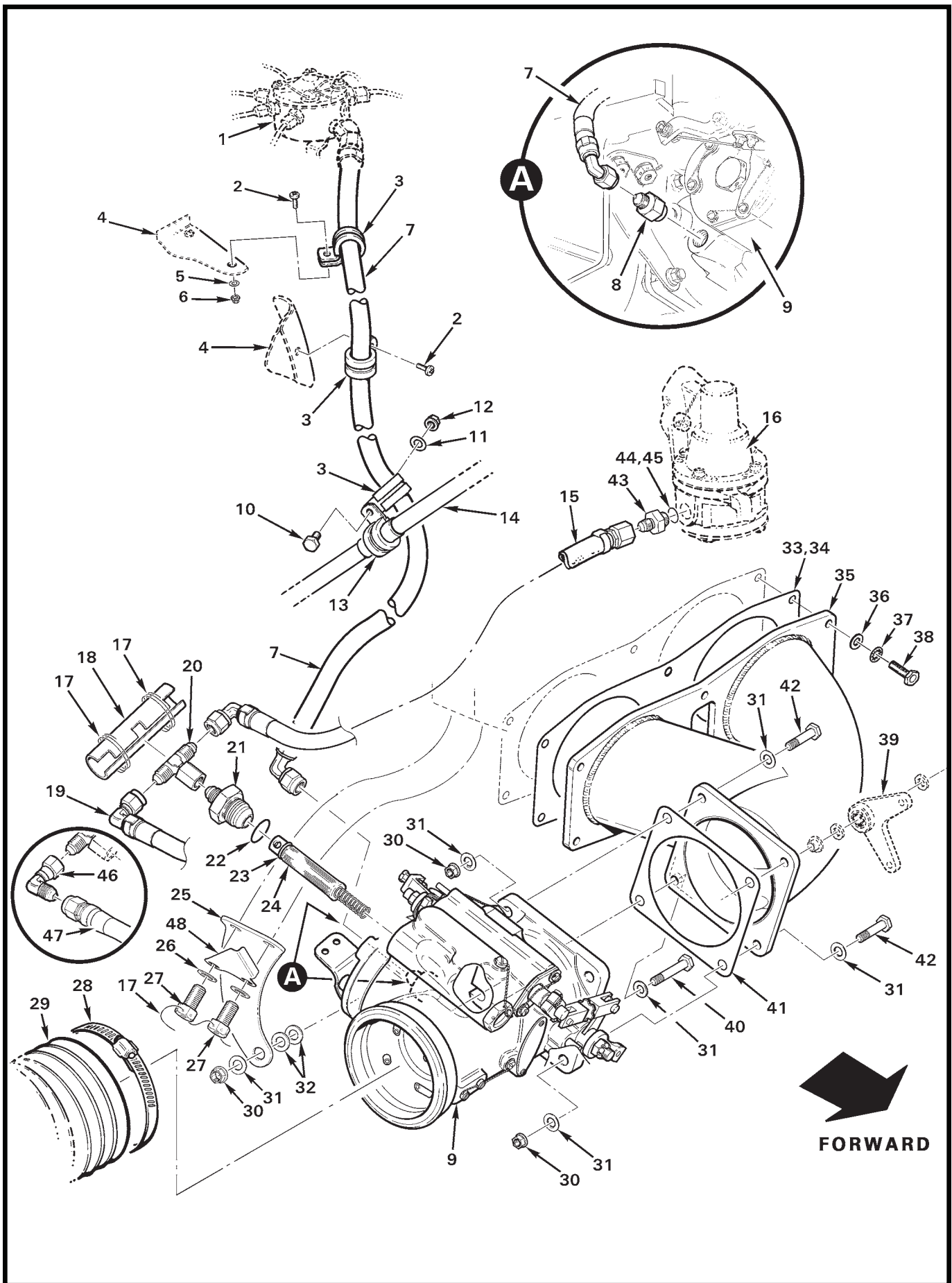


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		FUEL CONTROL (SERVO) INSTALLATION*		
28-29-1	63B26710**	Manifold Assembly – Fuel (Ref)		
	2576526-1***	Flow Divider (Ref)		
2	MS27039C0806	Screw	X	1
3	MS21919WDG9	Clamp (or MS21919WDG11 as required to fit)	X	2
4	D382-1	Cover Assembly (RH, Ref)		
5	NAS1149FN816P	Washer	X	1
6	MS21042L08	Nut	X	1
7	B283-7	Hose (outlet, to flow divider)	X	1
8	2522710	Fitting – Outlet	X	1
9	2576630-4***	Fuel Control (Ref)		
10	AN3-3A	Bolt	X	1
11	NAS1149F0332P	Washer	X	1
12	MS21042L3	Nut	X	1
13	NAS1715C8SW	Clamp	X	1
14	A723-15	Oil Line (Ref)		
15	B283-10	Hose (inlet, from engine-driven fuel pump)	X	1
16	—	Fuel Pump (engine-driven; Ref)		
17	MS20995C32	0.032 in. dia. Safety Wire	X	A/R
18	D735-1	Sleeve	X	1
19	B283-11	Hose (fuel return, Ref; see Figure 28-33)		
20	A457-9	Tee	X	1
21	2577202***	Fitting (Ref)		
22	951790***	O-Ring	X	1
23	951392***	O-Ring	X	1
24	—	Screen/Filter (Ref)		
25	D730-8	Brace	X	1
26	NAS1149F0632P	Washer	X	2
27	MS20074-06-05	Bolt	X	2
28	B277-56	Clamp (Ref, see Figure 71-17)		
29	A785-31	Hose (Ref, see Figure 71-17)		
30	MS21042L5	Nut	X	3

NOTES * Ship S/N 10001 thru 29999.
 ** Lycoming part no.
 *** Avstar Fuel Systems part no.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
FUEL CONTROL (SERVO) INSTALLATION* (Cont'd)				
28-29-31	NAS1149F0532P	Washer	X	6
32	NAS1149F0563P	Washer	X	2
33	72210**	Gasket (install using item 34)	X	1
34	B270-23	Sealant	X	A/R
35	D730-1	Intake Manifold Weldment	X	1
36	STD-8*	Washer	X	6
37	STD-160**	Washer (internal teeth)	X	6
38	LW-25-0.81**	Bolt	X	6
39	D731-9	Bellcrank (Ref, see Figure 76-5)		
40	NAS6605-13	Bolt	X	1
41	73032**	Gasket	X	1
42	NAS6605-11	Bolt	X	2
43	LW-16561	Nipple	X	1
44	MS29512-06	Packing (o-ring; install using item 45)	X	1
45	A257-6	Grease	X	A/R
46	6500-04-04-SS***	Elbow	X	1
47	B283-9***	Hose (fuel return; Ref)		
48	C730-1	Guard	X	1

NOTES * Ship S/N 10001 thru 29999.
 ** Lycoming part no.
 *** Installed on earlier R44s.

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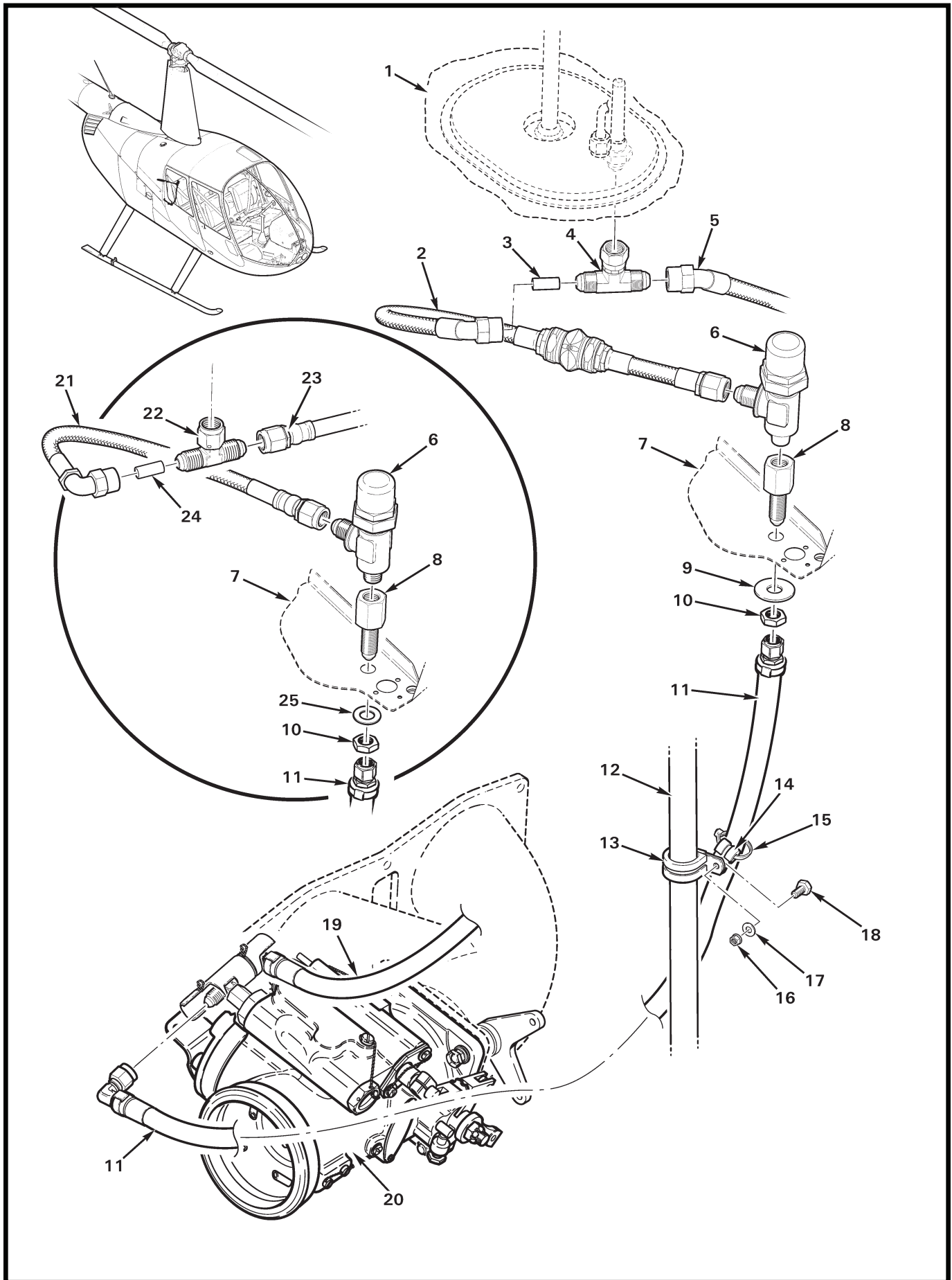


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		RETURN HOSE INSTALLATION*		
28-33-1	D043-5	Aux Fuel Tank Assembly (Ref)		
2	C595-4	Hose Assembly (Ref)		
3	D453-5	Jet (Ref)		
4	D453-4	Tee	X	1
5	C595-3	Hose Assembly (Ref)		
6	D321-1	Valve Assembly – Pressure Relief	X	1
7	C234-1	Firewall – Horizontal (Ref)		
8	A457-13	Connector	X	1
	2705-04-04	Connector	O	1
	4-4WGTX-S	Connector	O	1
9	C141-5	Washer	X	1
10	AN316-7R	Nut	X	1
11	B283-11	Hose Assembly (fuel return)	X	1
12	C046-2	Lower Frame Assembly (RH, Ref)		
13	MS21919WDG14	Clamp	X	1
14	MS21919WDG3	Clamp	X	1
15	MS3367-5-9	Ty-Rap	X	1
16	D210-3	Nut	X	1
17	NAS1149F0332P	Washer	X	1
18	AN3-3A	Bolt	X	1
19	B283-10	Hose Assembly (inlet, from engine driven fuel pump; Ref)		
20	AV2576630-4	Fuel Control (Ref)		
	2576630-4	Fuel Control (Ref)		
21	D205-31	Hose Assembly (Ref)		
22	D453-3	Tee	X	1
23	D205-29	Hose Assembly (Ref)		
24	D453-2	Jet (Ref)		
25	NAS1149F0732P	Washer	X	1

NOTES * Ship S/N 10001 thru 29999.

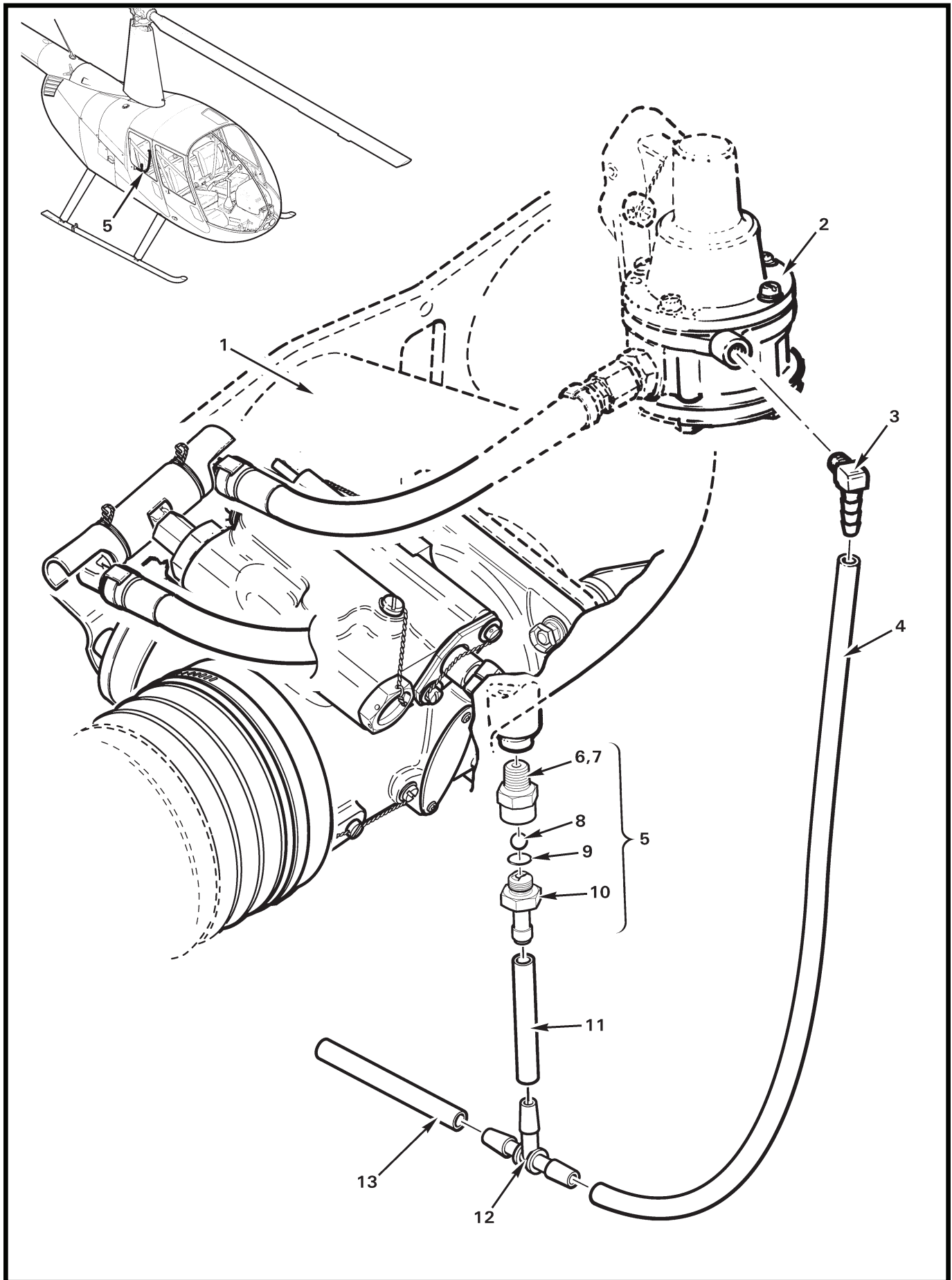


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
INTAKE MANIFOLD DRAIN INSTALLATION*				
28-35-1	D730-1	Manifold Weldment (Ref)		
2	62B26931**	Fuel Pump – Mechanical (Ref)		
	LW-15473**	Fuel Pump – Mechanical (Ref)		
3	A457-10	Elbow	X	1
	129HB-4-2	Elbow (superseded by A457-10)	O	1
4	A729-34	Tube	X	1
5	D775-1	Drain Valve – Fuel (Incl items 7 thru 10; apply item 6 to pipe threads)	X	1
6	B270-6	Sealant	X	A/R
7	D775-2	Housing	X	1
8	B208-4	Ball	X	1
9	MS28775-011	Packing	X	1
10	D775-3	Drain (torque to 90 in.-lb)	X	1
11	A729-35	Tube	X	1
12	A457-6	Tee	X	1
13	A729-36	Tube	X	1

NOTES * Ship S/N 10001 thru 29999.
 ** Lycoming part no.

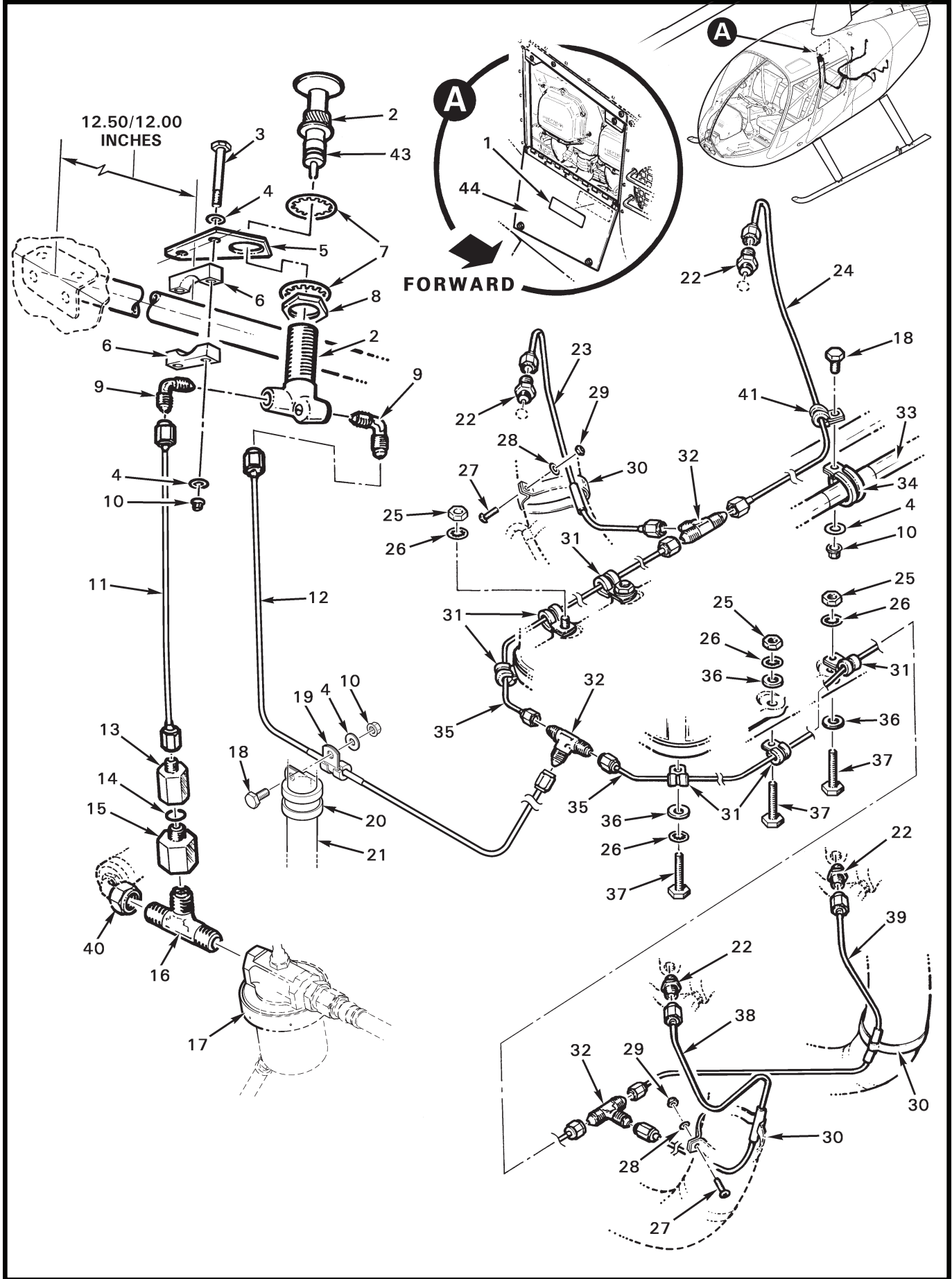


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
		PRIMER SYSTEM*		
28-37-1	C654-49	Decal ("Caution")	X	1
2	10950	Pump (Incl item 8 and 43)	X	1
3	NAS6603-26	Bolt	X	2
4	NAS1149F0332P	Washer	X	6
5	D420-3	Plate	X	1
6	D420-1	Block	X	2
7	MS35333-46	Lockwasher	X	2
8	—	Nut	O	1
9	A880-602	Elbow (install using item 42)	X	2
10	D210-3	Nut	X	6
11	D101-3	Line Assembly	X	1
12	D102-4	Line Assembly	X	1
13	AN894D4-2	Bushing	X	1
14	MS29512-4	Gasket	X	1
15	AN894D6-4	Bushing	X	1
16	A880-1136	Tee (or A880-1166; install using item 42)	X	1
17	A666-1	Gascolator (Ref)		
18	AN3-3A	Bolt	X	1
19	MS21919WDG4	Clamp	X	1
20	MS21919WDG12	Clamp	X	1
21	C727-2	Engine Breather Tube (Ref)		
	C728-2	Separator Assembly (Ref, not shown)		
22	B310-2	Injector	X	4
23	D104-3	Line Assembly	X	1
24	D105-3	Line Assembly	X	1
25	—	Nut (Ref; supplied with engine)		
26	—	Lockwasher (Ref; supplied with engine)		
27	MS35206-230	Screw	X	3
28	NAS1149FN616P	Washer	X	3
29	MS21042L06	Nut	X	3
30	LW-18959-175-25**	Clamp	X	3

NOTES * Frame-mounted primer pump, ship S/N 0358 and subsequent.
 ** Lycoming part no.

Continues

FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
PRIMER SYSTEM* (Cont'd)				
28-37-31	MS21333-96	Clamp (install using items 25, 26, 36, and 37 as required) . . .	X	6
32	MS24402-2D	Tee	X	3
33	A723-16	Oil Line (Ref)		
	A723-10	Oil Line (Ref; superseded by A723-16)		
34	MS21919WCH8	Clamp	X	1
35	D103-3	Line Assembly	X	2
36	—	Washer – Flat (Ref, supplied with engine)		
37	—	Bolt (Ref, supplied with engine)		
38	D106-3	Line Assembly	X	1
39	D107-3	Line Assembly	X	1
40	B283-3	Hose Assembly – Fuel (Ref, see also Figures 28-21 and 28-25)		
41	MS21919WDG2	Clamp	X	1
42	B270-6	Sealant	X	A/R
43	—	O-Ring	O	2
44	C364-7	Door – Cowl (Ref)		
* * *				
45	KI-127	R44 Primer Pump Location Upgrade Kit (Fuel Primer; Ship S/N 0001 thru 0357. Includes items 1 thru 7, 9 thru 12, 18 thru 20, 28, 29, 42, and 46 thru 51.)	X	1
46	2590**	Hole Plug	X	10
47	2617**	Hole Plug	X	1
48	2633**	Hole Plug	X	1
49	A231-5**	Cover	X	1
50	A231-8**	Retainer	X	1
51	MS35206-227**	Screw	X	1

NOTES * Frame-mounted primer pump, ship S/N 0358 and subsequent.
 ** Not shown; included in KI-127 kit.

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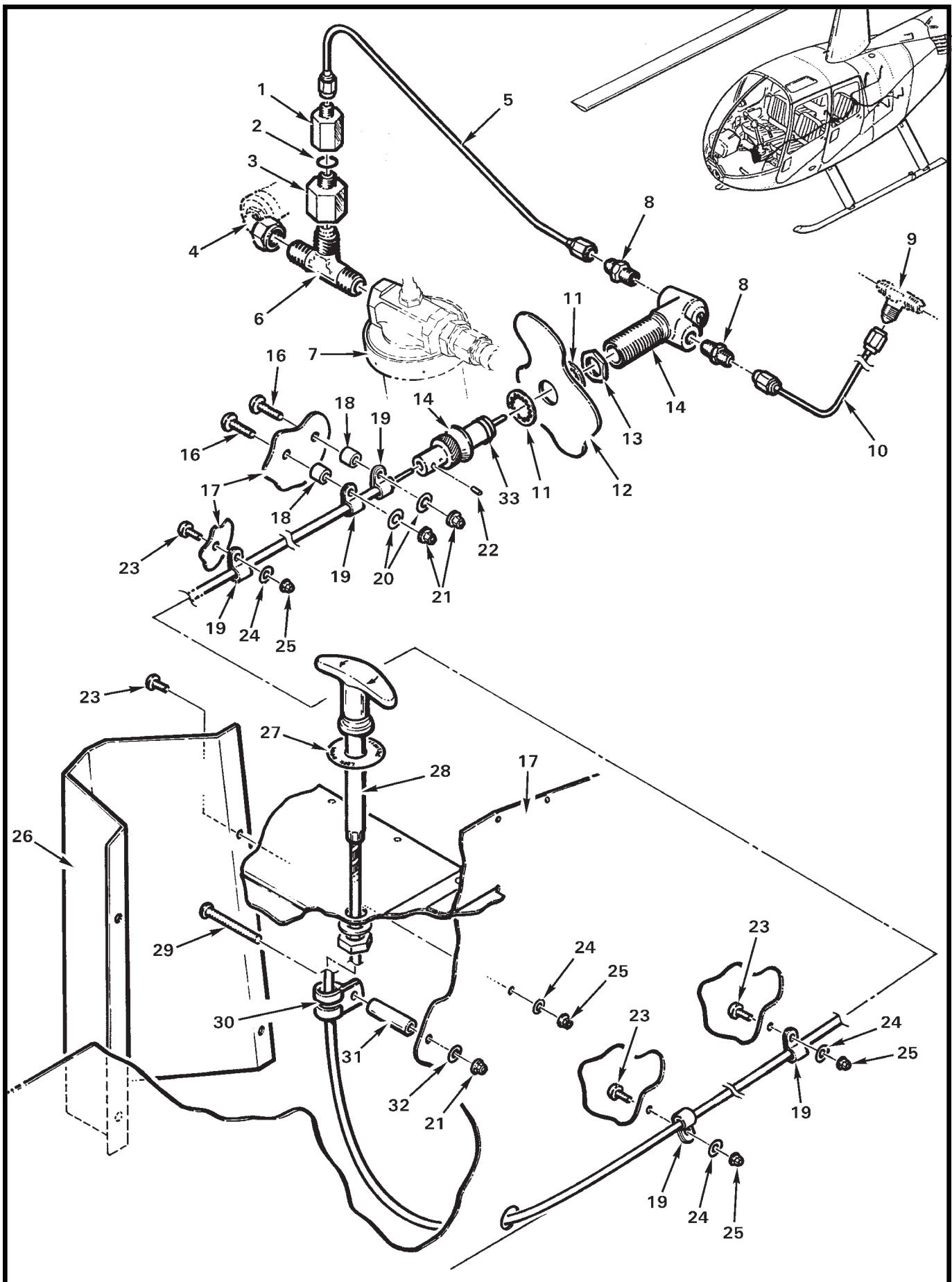


FIGURE AND INDEX NUMBER	PART NUMBER	DESCRIPTION	PARTS AVAIL	QTY PER ASSY
PRIMER PUMP INSTALLATION*				
28-41-1	AN894D4-2	Bushing	X	1
2	MS29512-04	Gasket	X	1
3	AN894D6-4	Bushing	X	1
4	B283-3	Hose Assembly Fuel (Ref)		
5	D101-1	Line Assembly	X	1
6	MS20826-6D	Tee (install using item 15)	X	1
7	A666-1	Gascolator (Ref)		
8	AN816-2D	Nipple (Ref, no longer available)		
9	MS24402-2D	Tee (Ref, see Figure 28-37)		
10	D102-3	Line Assembly	X	1
11	MS35333-46	Lockwasher	X	2
12	—	Firewall (Ref)		
13	—	Nut	O	1
14	D120-1**	Pump (Ref, includes item 33)		
15	B270-6	Sealant (4-oz tube, for pipe threads)	X	A/R
16	MS27039C1-14	Screw	X	2
17	C292-2	Keel Panel (Ref)		
18	A130-35	Spacer	X	2
19	AN742-3	Clamp	X	5
20	NAS1149F0363P	Washer	X	2
21	MS21042L3	Nut	X	3
22	28704L-98C-3	Set Screw	X	1
23	MS27039C0806	Screw	X	7
24	NAS1149FN816P	Washer	X	7
25	MS21042L08	Nut	X	7
26	D121-1**	Cover (Ref)		
27	D121-2	Escutcheon (Ref, no longer available)		
28	D522-1**	Control (Ref)		
29	MS27039C1-27	Screw	X	1
30	MS21919WDG6	Clamp	X	1
31	A130-27	Spacer	X	1
32	NAS1149F0332P	Washer	X	1
33	AS568-012	O-Ring (Ref)	O	2

NOTES * Ship S/N 0001 thru 0357. See Figure 28-37.
 ** No long available; order KI-127 Location Upgrade Kit. See Figure 28-37 (item 45).

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