

## GROUP . . . Main Landing Gear

*Constellation*

## Detail Unit . . . Cylinder—M.L.G. Actuating

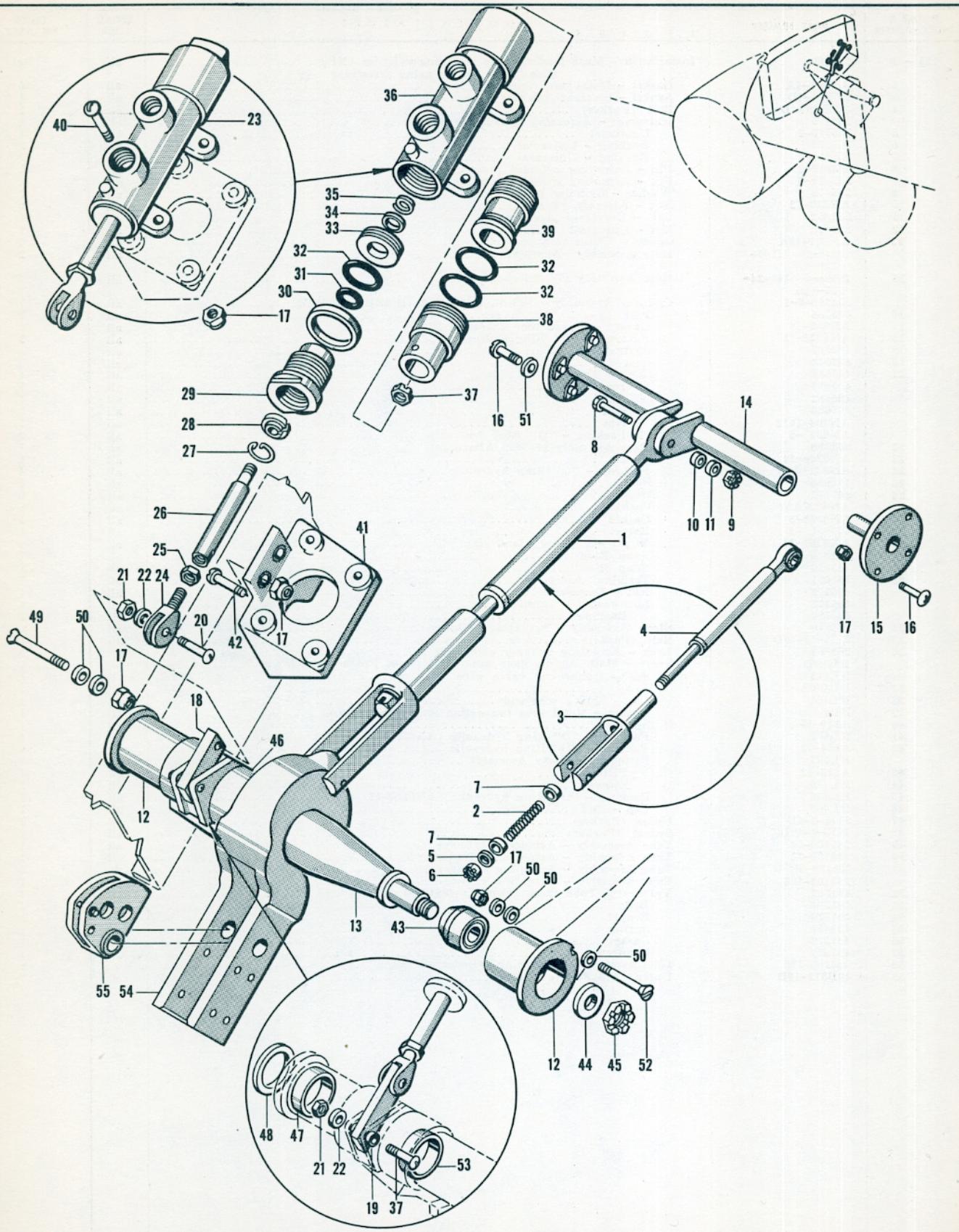
FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6	N O M E N C L A T U R E			SERIAL CODE	U N I T S P E R A S S Y .			
			1	2	3	4	5	6		
155 - 1	280860		Installation - Main landing gear actuating cylinder (NP) . . . . .						all	Ref
			(See figure 151 for using assembly)							
2	AN901-4A		Gasket - Metal tube connecting seal . . . . .						all	6
3	3175-4-4D		Swivel - Straight (Parker) . . . . .						all	1
4	3175-11-4D		Bolt (Parker) . . . . .						all	1
	255175		Universal - Actuating cylinder pivot . . . . .						all	1
5	255175-2		Universal . . . . .						all	1
6	255227		Bushing - Universal . . . . .						all	2
7	255176-2		Bushing - Universal . . . . .						all	1
8	283819-2		Pin + Actuating cylinder pivot . . . . .						all	1
	283819-3		Pin + Actuating cylinder attaching . . . . .						all	1
9	255179		Washer + Cylinder pivot lower . . . . .						all	2
10	AN320-12		Nut - Aircraft, shear . . . . .						all	2
11	283852		Bolt - Universal pivot upper . . . . .						all	1
12	283410		Nut - Universal . . . . .						all	1
13	AN901-10A		Gasket - Connecting seal . . . . .						all	7
14	70099-10-01100-210-27S		Hose Assembly (Weatherhead) . . . . .						all	2
15	70099-4-0140-24-27-2S		Hose Assembly (Weatherhead) . . . . .						all	1
	504308-0-1		Cylinder Assembly - M.L.G. Actuating (Bendix) (663135) . . . . .						all	1
16	403386		Plug . . . . .						all	2
17	AN902-10		Gasket - Flared tube universal fitting . . . . .						all	2
18	AN6227-13		Packing - "O" Ring hydraulic . . . . .						all	2
19	403387		Spring . . . . .						all	1
20	403542		Seat . . . . .						all	2
21	405584		Shuttle Assembly . . . . .						all	1
	405681		Pin . . . . .						all	1
	405682		Guide . . . . .						all	1
	405683		End . . . . .						all	2
	AN364-1032		Nut . . . . .						all	1
	AN6227-5		Packing - "O" Ring hydraulic . . . . .						all	2
22	403398		Base Assembly (403399 Alternate) . . . . .						all	1
23	AN6230-34		Gasket . . . . .						all	1
24	AN6227A56		Packing - "O" Ring hydraulic . . . . .						all	1
25	504636		Rod . . . . .						all	1
26	407452		Bearing . . . . .						all	1
27	AN6227A32		Packing . . . . .						all	1
28	AN6230-8		Gasket . . . . .						all	1
29	407451		Barrel . . . . .						all	1
30	AN6231-21		Wiper - Packing gland ring . . . . .						all	1
31	461846		Snap Ring . . . . .						all	1
32	403943		Snap Ring . . . . .						all	1
33	405671		Terminal Assembly . . . . .						all	1
	405172		Nut - Terminal . . . . .						all	1
	405173		Lockwasher - Terminal . . . . .						all	1
	403382		Hushing . . . . .						all	2
34	285840		Strap Assembly - Actuating cylinder . . . . .						all	1
35	3175-11-10D		Bolt (Parker) . . . . .						all	2
36	283851		Lock - Actuating cylinder pivot bolt . . . . .						all	1
	HL3660		Valve - Main landing gear runaround (Hoof Products) (667560) . . . . .						all	1
	HL413		Seal - Runaround valve wire . . . . .						all	1
37	HL466A		Body . . . . .						all	1
38	HL464		Car + Spring seat end . . . . .						all	1
39	HL4		Gasket - Metal tube connection seat (AN901-10A) . . . . .						all	1
40	A110-15		Spring . . . . .						all	1
41	HL477		Packing - "O" Ring hydraulic (AN6227-14) . . . . .						all	3
42	A164-12		Packing - "O" Ring hydraulic . . . . .						all	1
	HL467		Piston and Sleeve Assembly . . . . .						all	1
43	A123-13		Piston . . . . .						all	1
44	HL476		Sleeve . . . . .						all	1
45	HL446		Packing - "O" Ring hydraulic (AN6227-17) . . . . .						all	1
46	HL469		Cap - End . . . . .						all	1
47	3175-3-4D		Union (Parker) . . . . .						all	3
48	3175-4-10D		Swivel (Parker) . . . . .						all	1
49	285106-74		Tube Assembly - Actuating cylinder . . . . .						all	1
50	285106-72		Tube Assembly - Actuating cylinder . . . . .						all	1
51	285106-76		Tube Assembly - Actuating cylinder . . . . .						k	1
	285106-196		Tube Assembly - Actuating cylinder . . . . .						e	1
52	401567		Valve - % Tube check (Bendix) (667278) . . . . .						all	1
	401568		Body . . . . .						all	1
53	401570		Poppet . . . . .						all	1
54	401571		Spring . . . . .						all	1
55	401572		Gasket . . . . .						all	1
56	401569		Connector . . . . .						all	1
57	285106-198		Tube Assembly - Actuating cylinder . . . . .						e	1
58	40D373-10D		Union (A.A.F. Drawing) . . . . .						e	1
59									e	1

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**GROUP . . . Main Landing Gear**

**Detail Unit . . . Mechanism—M.L.G. Downlock Release**

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**Figure 156 – Mechanism – M.L.G. Downlock Release**

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## GROUP . . . Main Landing Gear

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## Detail Unit . . . Mechanism—M.L.G. Downlock Release

FIGURE & INDEX NUMBER	PART NUMBER		N O M E N C L A T U R E						SERIAL CODE	UNITS PER ASSY.
			1	2	3	4	5	6		
	283710L	Installation - Main landing gear downlock release mechanism (NP) . . . . .							all	Ref
	283710R	Installation - Main landing gear downlock release mechanism (NP) . . . . .							all	Ref
156 - 1	270197	Guide Assembly - Main landing gear downlock . . . . .							all	1
2	282854-6	Spring - Compression . . . . .							all	1
3	270193	Clevis - Main landing gear downlock guide . . . . .							all	1
4	270201	Tube Assembly - Main landing gear downlock guide . . . . .							all	1
	RE4H6	Rod End (Hollow shank) (Fafnir) . . . . .							all	1
5	AN960-416	Washer - Plain . . . . .							all	1
6	AN310-4	Nut - Aircraft castle . . . . .							all	1
7	270191	Bearing - Main landing gear downlock guide . . . . .							all	2
8	AN4-12	Bolt - Aircraft $\frac{3}{4}$ -28 . . . . .							all	1
9	AN310-4	Nut - Aircraft castle . . . . .							all	1
10	AN960-416L	Washer - Plain . . . . .							all	1
11	AN960-416	Washer - Plain . . . . .							all	1
12	283743	Fitting . . . . .							all	2
13	283633	Shaft . . . . .							all	1
14	270202	Tube Assembly + Pivot . . . . .							all	1
		(See figure 5 for attachment to wing ribs)								
15	270200	Support + Main landing gear downlock guide . . . . .							all	1
16	LS560-9	Screw - 10-32 Phillips binding head . . . . .							all	8
17	AN365-1032	Nut - Self-locking . . . . .							all	14
18	283657	Link - Main landing gear downlock release . . . . .							all	1
19	283661	Spacer - Main landing gear downlock release . . . . .							all	1
20	AN24-15	Bolt - Clevis $\frac{3}{4}$ -28 . . . . .							all	1
21	AN320-4	Nut - Aircraft - Shear . . . . .							all	2
22	LS881-3	Washer - Aleclad plain . . . . .							all	2
23	210599	Cylinder Assembly (Gladden Products) (663064) . . . . .							all	1
24	110486	Fitting - Downlock release cylinder . . . . .							all	1
25	AN316-4R	Nut + Aircraft check . . . . .							all	1
26	110487	Rod - Release cylinder piston . . . . .							all	1
27	110678	Ring - Downlock release cylinder . . . . .							all	1
28	110677	Wiper - Downlock release cylinder . . . . .							all	1
29	211345	Plug - Downlock release cylinder . . . . .							all	1
30	110494-2	Ring - Downlock release cylinder . . . . .							all	1
31	AN6227-8	Ring - "O" Hydraulic . . . . .							all	1
32	AN6227-15	Ring - "O" Hydraulic . . . . .							all	3
33	110488	Piston - Downlock release cylinder . . . . .							all	1
34	110494-3	Ring - Square packing . . . . .							all	1
35	110492-3	Washer - Downlock release cylinder . . . . .							all	1
36	310598	Body - Downlock release cylinder . . . . .							all	1
37	AN310-4	Nut - Aircraft castle . . . . .							all	1
38	110489	Piston - Downlock release cylinder . . . . .							all	1
39	110532	Stop - Downlock release cylinder . . . . .							all	1
40	LS560-14	Screw - 10-32 Phillips binding head . . . . .							all	1
41	283717	Bracket + Main landing gear downlock release cylinder . . . . .							all	1
42	LS560-16	Screw - 10-32 Phillips binding head . . . . .							all	4
43	268945	Bushing Assembly - Main landing gear downlock shaft . . . . .							all	2
	275626-4	Bushing . . . . .							all	1
	B1012X	Bearing (Torrington) . . . . .							all	1
44	AN960-816	Washer - Plain . . . . .							all	2
45	AN320-8	Nut - Aircraft - Shear . . . . .							all	2
46	283639L	Sleeve Assembly - Main landing gear downlock release . . . . .							all	1
	283639R	Sleeve Assembly - Main landing gear downlock release . . . . .							all	1
47	283637	Bushing - Main landing gear downlock sleeve . . . . .							all	2
48	283638	Washer - Main landing gear downlock sleeve . . . . .							all	1
	NAS550-168	Ring - Main landing gear downlock sleeve . . . . .							all	1
	283639-5L	Weld Assembly - Sleeve . . . . .							all	1
	283639-5R	Weld Assembly - Sleeve . . . . .							all	1
49	NAS205-32	Screw . . . . .							all	1
50	AN960-316	Washer - Plain . . . . .							all	5
51	AN960-10	Washer - Plain . . . . .							all	4
52	LS560-32	Screw - 10-32 Phillips binding head . . . . .							all	1
53	NAS144A18	Bolt . . . . .							all	1
54	268936	Hook - Main landing gear downlock (Same as index 13 figure 154) . . . . .							all	Ref
55	268938	Latch Assembly - Main landing gear downlock . . . . .							all	Ref
		(Same as index 37, 38 & 39, figure 154)								

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GROUP . . . Main Landing Gear

Detail Unit . . . Wheels and Brakes—M.L.G. and N.L.G.

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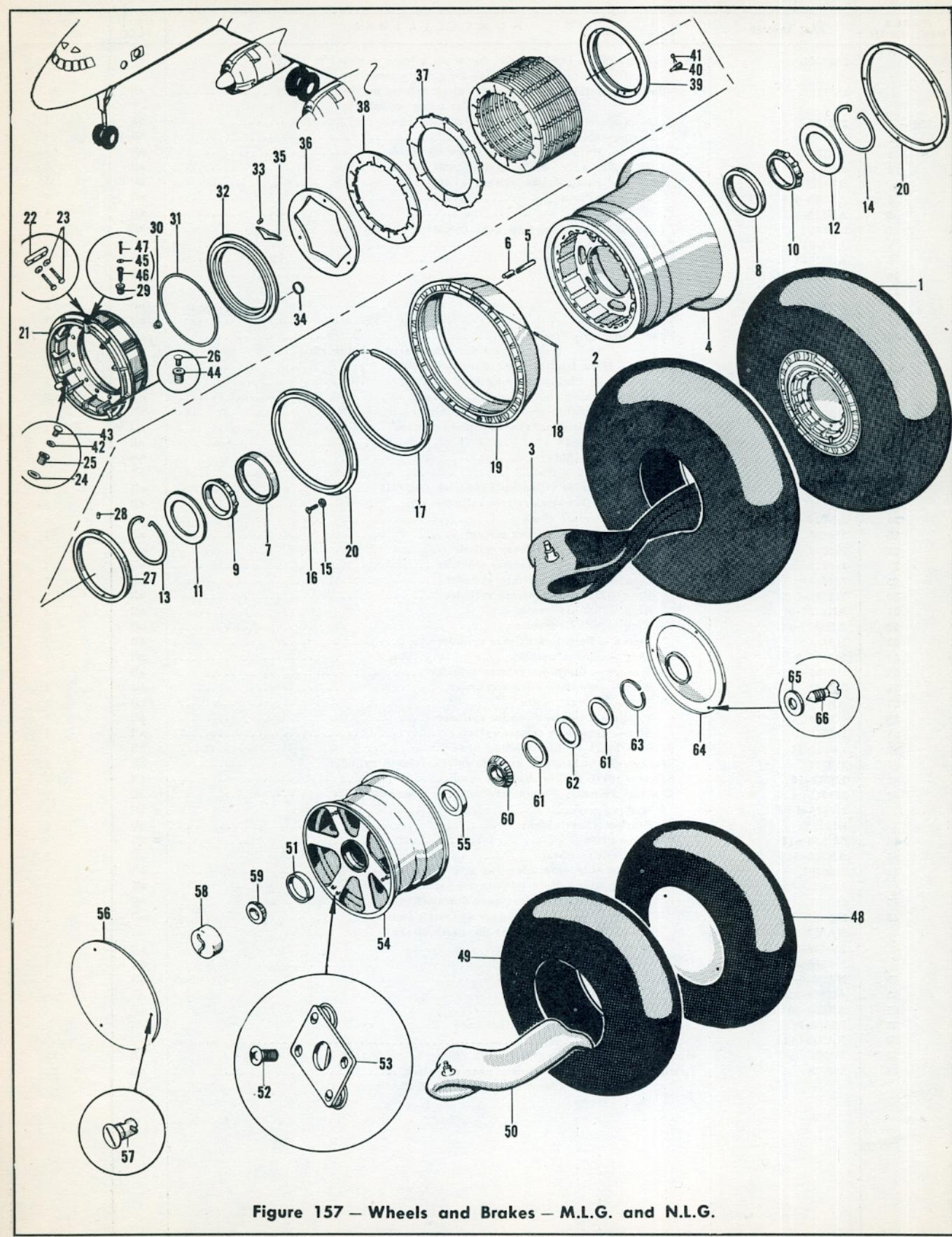


Figure 157 — Wheels and Brakes — M.L.G. and N.L.G.

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## GROUP . . . Main Landing Gear

## Detail Unit . . . Wheels and Brakes—M.L.G. and N.L.G.

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FIGURE & INDEX NUMBER	PART NUMBER		N O M E N C L A T U R E						SERIAL CODE	UNITS PER ASSY.
			1	2	3	4	5	6		
157 - 1	275826	Wheel Assembly - Main landing gear (See figure 151 for using assembly)							all	Ref
	275826-2	Wheel & Tire Assembly - Main landing gear							all	1
2	660067	Tire - 49x17x20, 14-Ply A.W. tread nylon cord (Goodyear)							all	1
3	660078	Tube - 49x17x20 Inner puncture seal tube (Goodyear)							all	1
	530402M	Wheel Assembly - For dual brakes							all	1
	530404M	Wheel - Sub assembly							all	1
4	540022M	Wheel - Detail							all	1
5	510030-2	Insert - Drive spline							all	32
6	218341-5	Pin - Drive spline insert lock							all	32
7	52627	Cup - Inboard bearing (Timken)							all	1
8	42555	Cup - Outboard bearing (Timken)							all	1
9	52400	Cone - Inboard bearing (Timken)							all	1
10	42362	Cone - Outboard bearing (Timken)							all	1
11	218349-15	Ring - Inboard bearing closure							all	1
12	218349-8	Ring - Outboard bearing closure							all	1
13	511598-1	Lock Ring - Inboard bearing closure ring							all	1
14	511598-3	Lock Ring - Outboard bearing closure ring							all	1
15	1210	Washer (Shakeproof commercial)							all	16
16	AN520-10-4	Screw - Round head fine thread							all	16
17	511051-1	Ring - Flange retaining							all	1
18	511253-1	Stud - Torque flange							all	4
19	530735M	Flange - Split							all	1
20	511032-1M	Ring - Labyrinth seal (660066-3)							all	2
	511031M	Brake Assembly - 14.5Wx155/09x9 HP (Goodyear) (660066-4) (For 17.00-20 wheel)							all	2
	511039M	Brake - Sub assembly							all	1
21	530403M	Bracket - Anchor							all	1
22	511034-1	Key - Anchor							all	12
23	H61-251271-51	Screw & Washer - Sems-unit							all	24
24	AN902-8	Gasket - Flared tube universal							all	2
25	511603	Bushing - Inlet							all	1
26	511589	Bushing - Inlet							all	1
27	218361-4	Ring - Reinforcing							all	1
28	216928	Pin - Dowel							all	2
29	218615	Bushing - Bleeder							all	1
30	511584-1	Bushing - Mounting bolt hole							all	1
31	511035	Seal - Piston							all	1
	511036M	Piston Assembly - 14.5W High pressure brake (Goodyear)							all	1
32	530406M	Ring - Piston							all	1
33	218610-2	Pin - Piston							all	3
34	218610-3	Pad - Spring							all	6
35	511037	Spring - Brake release							all	6
36	530407	Disc - Insulating							all	1
37	530400-1	Disc - Rotating							all	9
38	530401-2	Disc - Stationary							all	10
39	530408	Nut - Disc retaining							all	1
40	510863	Screw - Retaining nut locking							all	2
41	AN330-2-2	Pin + Cotter							all	2
42	AN902-6	Gasket - Flared tube universal fittings							all	2
43	218582	Plug - Inlet							all	1
44	510819	Plug - Inlet							all	1
45	AN960-10	Washer - Plain							all	1
46	218613	Plug - Bleeder							all	1
47	AN520-10-6	Screw - Round head fine thread							all	1
48	275821	Wheel Assembly - Nose landing gear (See figure 158 for using assembly)							all	Ref
49	660053	Tire - 33" 8-Ply (Goodyear)							all	1
50	660079	Tube - 33" S.C. Inner (Goodyear)							all	1
	145489	Wheel Assembly Complete - 33" Landing (Bendix Products Division) (660052)							all	1
	57607	Wheel Assembly							all	1
51	39412	Cup + Bearing, outboard (Timken) (Bendix 103S22)							all	1
52	57620	Screw - Self tapping binding head							all	6
53	57606	Spring Assembly - Fairing fastener							all	3
	57605	Plate - Fairing fastener lock							all	1
54	125	Spring - Fairing fastener lock (Dzus) (Bendix 56771)							all	1
55	57595	Wheel - Casting							all	1
55	34478	Cup + Bearing, inboard (Timken) (Bendix 103S24)							all	1
	52930	Fairing Assembly - Outboard							all	1
56	52932	Fairing + Wheel							all	1
57	F6-3-2-50	Fastener - Fairing (Dzus) (Bendix 157S1)							all	3
58	50659	Cup and Spring Assembly							all	1
	50218	Cup - Grease retaining							all	1
	50405	Spring - Grease retaining cup							all	1
	39250	Cone & Roller - Bearing (Timken) (Bendix 103S21)							all	1
60	34300	Cone & Roller - Bearing (Timken) (Bendix 103S23)							all	1
61	107S4	Washer - Grease retaining							all	2
62	108S4	Washer - Grease retaining							all	2
63	109S4	Ring - Grease retaining snap							all	1
64	57416	Fairing Assembly - Inboard							all	1
	57414	Fairing - Wheel							all	1
65	58728	Retainer - Fairing							all	3
66	57294	Screw - Fairing fastener							all	3
	7626	Nameplate - Decalcomania							all	1
	57638	Weight Assembly - Counter balance							all	1

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GROUP . . . . Nose Landing Gear  
Detail Unit . . . . Nose Landing Gear Index

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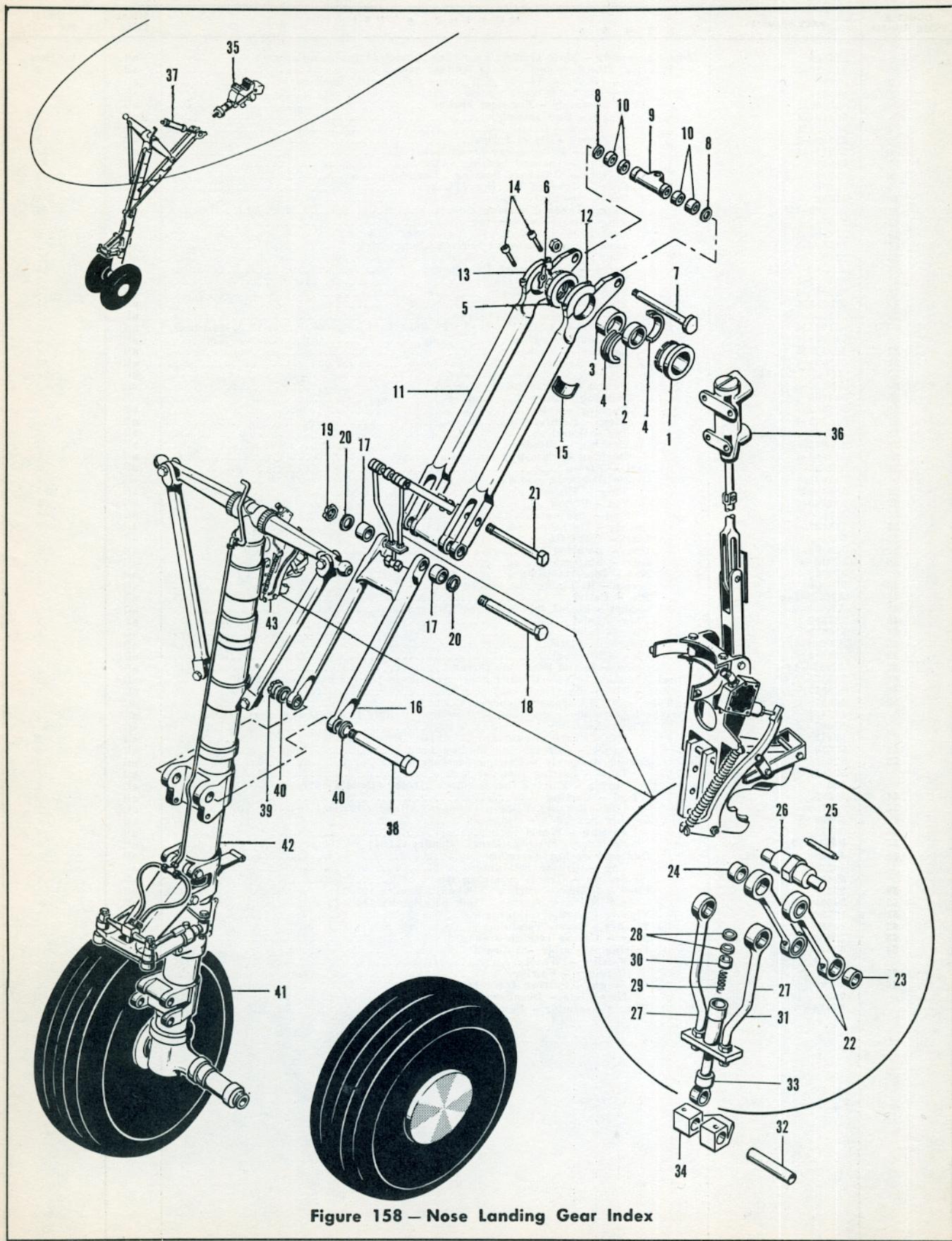


Figure 158 — Nose Landing Gear Index

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LOS ANGELES, CALIFORNIA

## GROUP . . . Nose Landing Gear

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## Detail Unit . . . Nose Landing Gear Index

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6	N O M E N C L A T U R E	SERIAL CODE	UNITS PER ASSY.
				ddd	Ref
	267389		Installation - Nose landing gear (NP) (See figure 1 for using assembly)	ccc	Ref
	285206		Installation - Nose landing gear (NP) (See figure 1 for using assembly) (See Service Bulletins 49/SB-69 and 49/SB-69A for conversion to 68½° steering)		
158 - 1	281983		Seat - Drag strut pivot	all	2
	281978		Ball Assembly - Drag strut link roller	all	2
2	282964		Bearing Assembly - Upper drag link roller	all	1
3	281978-2		Ball	all	1
4	272017		Bushing Assembly - Pivot	all	1
5	281984		Nut - Pivot retainer	all	2
6	272019		Lock - Drag strut pivot upper	all	2
	AN280-609		Key	all	2
	AN4H5A		Bolt	ccc	2
	LS584-5		Bolt	ddd	2
	AN960-416L		Washer	all	2
	272038		Strut Assembly - Nose landing gear drag	f	1
	284924		Strut Assembly - Nose landing gear drag	g	1
7	281981		Bolt - Actuating cylinder crosshead	all	1
8	281982		Washer - Drag strut pivot thrust	all	2
	AN320-14		Nut	all	1
	281979		Crosshead Assembly - Drag strut pivot	all	1
9	281979-2		Crosshead	all	1
10	7193		Bearing (Roller Bearing Co.)	all	4
	NAS2-101		Lubrication Fitting	all	2
11	272010		Strut Assembly - Nose landing gear drag upper	all	1
12	272010-4		Pivot	all	1
13	272010-5		Pivot	all	1
14	272018		Bolt	all	4
	AN380-4-5		Pin	all	4
	AN310-12		Nut	all	4
15	274365		Nameplate - Demagnetizing	all	1
	NAS2-101		Grease Fitting	all	4
16	272020		Strut Assembly - Lower drag	f	1
	284925		Strut Assembly - Lower drag	g	1
17	272023		Bushing - Lower drag strut knee	all	2
18	272013		Bolt - Lower drag strut knee	all	1
19	271926		Nut - Lower drag strut knee	all	1
20	272014		Washer - Lower drag strut knee	all	4
21	272015		Bolt - Drag strut downlock	all	1
	AN320-10		Nut	all	1
	LS580-4-44		Bolt	all	2
	AN320-4		Nut	all	2
22	272029		Strut Assembly - Downlock	all	2
23	272036		Bushing - Downlock strut, upper	all	1
24	272037		Bushing - Downlock strut, lower	all	1
25	272030		Spacer - Downlock strut	all	1
26	272028		Pin - Downlock strut	all	1
27	282291		Strut Assembly - Downlock guide	all	2
28	282296		Washer - Downlock guide strut	all	2
29	275635		Spring - Dopr engaging pin	all	1
	AN4-14A		Bolt	all	2
30	282292		Spacer - Downlock guide strut	all	1
31	282293		Crosshead - Downlock guide strut	all	1
32	282289		Pin - Downlock guide strut	all	1
33	282288		Bolt Assembly - Downlock guide strut	all	1
	282288-2		Bolt	all	1
	282279		Bushing - Downlock guide strut	all	1
34	282290		Support - Downlock guide strut	all	1
35	272681		Installation - Main landing gear uplock (See figure 166 for detailed illustration)	all	1
36	210621		Cylinder - Downlock actuating (Gladden) (663059)	all	1
			(See figure 165 for detailed illustration)		
37	279391		Installation - Actuating cylinder (NP) (See figure 165 for detailed illustration)	all	1
38	272545		Bolt - Lower drag strut pivot	all	1
39	272688		Nut - Lower drag strut pivot	all	1
40	272546		Washer - Lower drag strut pivot	all	2
41	275821		Wheel Assembly - Nose landing gear (See figure 157 for detailed illustration)	all	2
42	267389-2		Gear Assembly - Nose landing gear (See figure 158 for detailed illustration)	ddd	1
	285020		Gear Assembly - Nose landing gear (See figure 160 for detailed illustration)	ccc	1
43	284308		Installation - Nose landing gear downlock (NP)	all	1
			(See figure 165 for detailed illustration)		

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GROUP . . . Nose Landing Gear

Detail Unit . . . Gear Assembly—Nose Landing (Serial 2021-2067)

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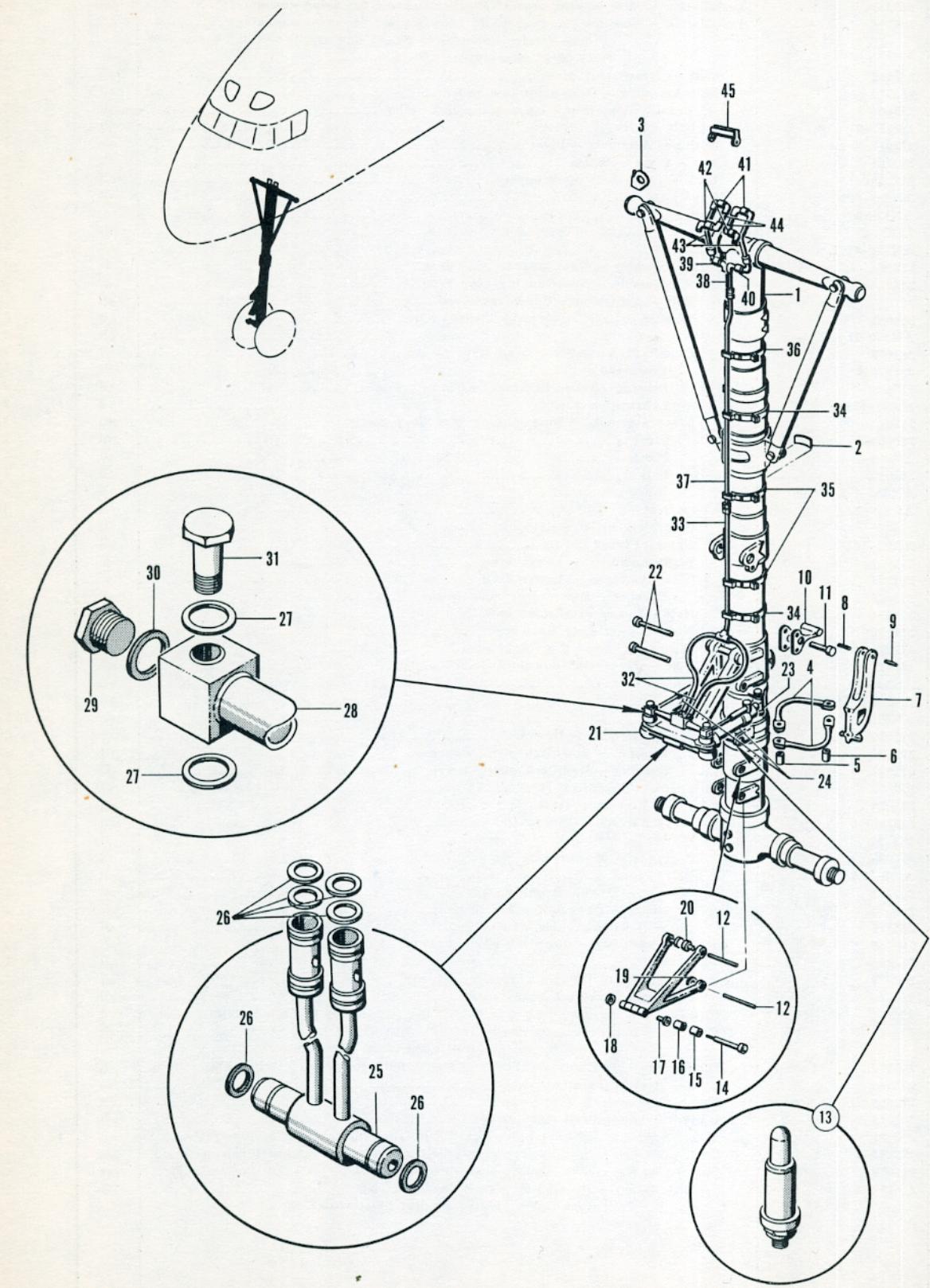


Figure 159 — Gear Assembly — Nose Landing (Serial 2021-2067)

## GROUP . . . Nose Landing Gear

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## Detail Unit . . . Gear Assembly—Nose Landing (Serial 2021-2067)

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6	N O M E N C L A T U R E			SERIAL CODE	UNITS PER ASSY.
159 - 1	267389-2		Gear Assembly	- Nose landing gear (See figure 158 for using assembly) .....		ddd	Ref
	272829		Gear Assembly	+ Nose landing gear .....		ddd	1
	8297B		Strut	Aerol (Cleveland Pneumatic Tool Co.) .....	(See figure 161 for detailed illustration)	f	1
	8297C		Strut	- Aerol (Cleveland Pneumatic Tool Co.) .....	(See figure 161 for detailed illustration)	eee	1
2	274365		Nameplate	- Demagnetizing .....		ddd	1
3	271814-2		Plate Assembly	- Position transmitter .....		bj	1
	LS2802-2		Spacer	(1 Required ddd, 2 required ex) .....		ddd	AR
	AN26-18		Bolt	.....		ddd	2
4	282553		Strap Assembly	- Door actuating mechanism lug .....		ddd	1
	NAS27-5		Turnbuckle	.....		ddd	1
5	282752L		Trunnion:	- Strap .....		ddd	1
6	282752R		Trunnion:	- Strap .....		ddd	1
	NAS2-101		Fitting	- Lubricator .....		ddd	3
7	282462		Lug Assembly	- Door actuating mechanism .....		ddd	1
8	282595		Spacer	- Door actuating mechanism .....		ddd	1
9	282596		Roller	- Door actuating mechanism .....		ddd	1
	AN25-25		Bolt	.....		ddd	1
10	282015		Link	- Uplock .....		ddd	1
11	273389		Bolt	- Uplock .....		ddd	1
	AN7-25		Bolt	.....		ddd	2
	H3004		Lord Mount	(Lord Mfg. Co.) .....		ddd	2
12	272861		Shaft	- Torque arm .....		ddd	2
13	275158		Plug Assembly	- Gear assembly .....		ddd	1
	275159		Bushing	- Plug assembly .....		ddd	1
	AN386-1-6A		Pin	.....		ddd	1
14	255092		Bolt	- Torque arm, outer .....		ddd	1
15	255221		Washer	- Torque arm, outer .....		ddd	1
16	275079		Washer	- Torque arm thrust .....		ddd	1
	272781		Arm Assembly	- Nose landing gear torque .....		ddd	1
	275010		Bushing	+ Torque arm, outer .....		ddd	1
18	275078-2		Shim	- Torque arm, outer .....		ddd	AR
19	275078-3		Shim	- Torque arm attaching .....		ddd	AR
20	273171		Bushing	+ Torque arm attaching .....		ddd	1
	NAS2-101		Lubricator	.....		ddd	4
	01-272852-500		Service Assembly	- Nose landing gear directional control .....	(Consists of index Nos. 21, 25, 26, 28, 29, 32 plus part Nos. 3175-2-3D, 3175-11-4D, 3175-2-4D, 565D4-H-8, 3174-8-6D, AN901-6A, 11JT-8D, R25-99, R25-100)	ddd	Ref
21	272852		Installation	- Nose landing gear directional control .....		ddd	1
22	273155		Bracket	- Directional control .....		ddd	1
23	273199		Bolt	- Directional control .....		ddd	2
24	LS2543-38		Bolt	.....		ddd	2
	H2743		Cylinder	+ Hydraulic assembly directional control mechanism .....	(Pacific Aviation) (663063) (See figure 163 for detailed illustration)	h	2
	R25-99		Cylinder	+ Hydraulic assembly, directional control mechanism, RH .....	(Pacific Aviation) (663114R) (See figure 164 for detailed illustration)	ez	1
	R25-100		Cylinder	+ Hydraulic assembly, directional control mechanism, LH .....	(Pacific Aviation) (663114L) (See figure 164 for detailed illustration)	ez	1
25	273190		Connector	Assembly - Nose landing gear cylinder .....		ddd	1
26	AN6227-7		Packing	+ "O" Ring hydraulic .....		ddd	6
27	40B887-014A022-16		Gasket	- Fluid seal metallic .....		ddd	2
28	271954		Manifold	- Nose landing gear directional control .....		ddd	1
29	AN905-6		Plug	.....		ddd	2
30	40B887-012A020-16		Gasket	- Fluid seal metallic .....		ddd	2
31	40B374-4D		Bolt	- Hydraulic swivel coupling .....		ddd	2
	3175-2-3D		Gasket	.....		ddd	2
	3175-11-4D		Bolt	.....		ddd	2
	3175-2-4D		Gasket	.....		ddd	4
	AN565D4H8		Screw	.....		ddd	4
	285052		Installation	- Shimmy dampener piping (NP) .....		ddd	1
	3174-8-6D		Union (Parker)	.....		ddd	3
32	285106-2		Tube Assembly	- Shimmy dampener .....		ddd	2
33	285106-4		Tube Assembly	- Shimmy dampener .....		ddd	1
	LS560-26		Screw	.....		ddd	10
	LS560-7		Screw	.....		ddd	5
34	272674-3		Strap	Assembly - Shock strut .....		ddd	2
35	272674-11		Strap	Assembly - Shock strut .....		ddd	2
36	272674-2		Strap	Assembly - Shock strut .....		ddd	1
37	285106-6		Tube Assembly	- Shimmy dampener .....		ddd	1
38	285106-24		Tube Assembly	- Shimmy dampener .....		ddd	1
39	41212		Joint	Swing (Chiksan Tool Co.) (667482) .....		ddd	1
40	41213		Joint	Swing (Chiksan Tool Co.) (667483) .....		ddd	1
41	21214		Joint	Swing (Chiksan Tool Co.) (667484) .....		ddd	2
42	21215		Joint	Swing (Chiksan Tool Co.) (667485) .....		ddd	2
	R51D18-74		Coupling	- Ell nipple (Used on 21215 only) .....		ddd	1
	R51D10-74L		Coupling	- Ell nipple (Used on 41212 only) .....		ddd	1
	R51D10-74R		Coupling	- Ell nipple (Used on 41213 only) .....		ddd	1
	R51D9-74		Coupling	- Ell nipple (Used on 21214 only) .....		ddd	1
	R51D1-31B2		Packing	.....		ddd	1
	R51D1-31A2		Packing	+ Outer ring .....		ddd	1
	R51D1-31J		Spacer Ring	.....		ddd	1
	1B3731-F2		Lock Nut	.....		ddd	1
	WC87016		Bearing	- Hoover .....		ddd	1
	1A3731F1		Locknut	.....		ddd	1
	R51D8-75		Swing	- Ell nipple (Used on 21214 and 21215 only) .....		ddd	1
	R51D10-75		Swing	- Ell nipple (Used on 41212 and 41213 only) .....		ddd	1
	AN4-20		Bolt	.....		ddd	4
	AN4-16		Bolt	.....		ddd	2
	3124-121D		Gasket	.....		ddd	2
43	272239-96		Tube Assembly	- Shimmy dampener .....		ddd	2
44	272239-95		Tube Assembly	- Shimmy dampener .....		ddd	2
	11-1039-1-100		Locknut	.....		ddd	2
45	272859-2		Clamp Assembly	- Swing joint .....		ddd	1
	284308		Installation	- Nose landing gear downlock (NP) .....	(See figure 165 for detailed illustration)	ddd	Ref

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GROUP . . . Nose Landing Gear

Detail Unit . . . Gear Assembly—Nose Landing (Serial 2068-2088)

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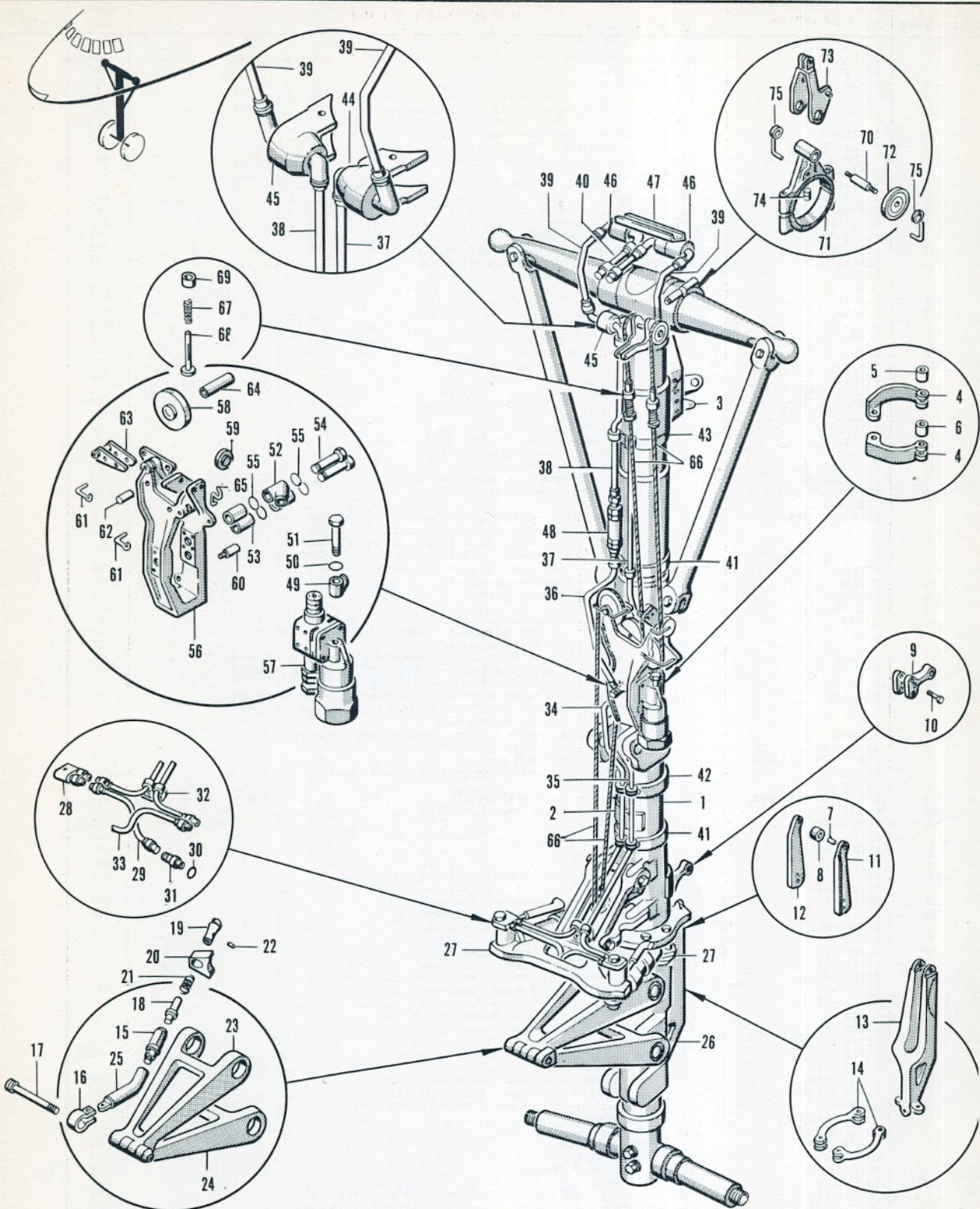


Figure 160—Gear Assembly—Nose Landing (Serial 2068-2088)

## GROUP . . . Nose Landing Gear

Constellation

## Detail Unit . . . Gear Assembly—Nose Landing (Serial 2068-2088)

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6	N O M E N C L A T U R E		SERIAL CODE	UNITS PER ASSY.
160 - 1	285020	Gear Assembly - Nose landing (See figure 158 for using assembly) . . . . .	ccc	Ref		
	8297F	Strut Aerol - Nose landing gear (Cleveland Pneumatic Tool Co.) (661050) . . . . .	da	1		
	8297E	(See figure 162 for detailed illustration)				
2	290398	Strut Aerol - Nose landing gear (Cleveland Pneumatic Tool Co.) (661045) . . . . .	eo	1		
3	284308	(See figure 162 for detailed illustration)				
	LS2802-2	Nameplate - Demagnetizing . . . . .	ccc	1		
4	283902	Installation - Nose landing gear downlock (NP) . . . . .	ccc	Ref		
	NAS27-5	(See figure 165 for detailed illustration)				
5	284752L	Spacer . . . . .	ccc	2		
6	284752R	Strap Assembly - Steering control . . . . .	ccc	4		
7	282595	Turnbuckle . . . . .	ccc	2		
8	282596	Trunnion . . . . .	ccc	2		
9	282015	Trunnion . . . . .	ccc	1		
10	273389	Spacer . . . . .	ccc	1		
	H3004	Roller - Lug . . . . .	ccc	1		
	NAS2-101	Link - U-LOCK . . . . .	ccc	1		
	NAS56H17	Bolt - Link attaching . . . . .	ccc	1		
11	287700L	Bolt . . . . .	ccc	2		
12	287700R	Lord Mount (Lord Mfg. Co.) . . . . .	ccc	2		
13	282462	Lubricator . . . . .	ccc	2		
14	282553	Bolt . . . . .	ccc	2		
15	275158	Arm - Nose door mechanical strut . . . . .	co	1		
	275159	Arm - Nose door mechanical strut . . . . .	co	1		
	288203	Lug Assembly - Door actuating mechanism . . . . .	da	1		
16	288192	Strap Assembly - Door actuating mechanism lug . . . . .	da	2		
17	288189	Plug Assembly - Gear assembly . . . . .	ccc	1		
18	288199	Bushing . . . . .	ccc	1		
19	288201	Arm Assembly - Disconnect torque . . . . .	ccc	1		
20	288197	Cap - Disconnect . . . . .	ccc	1		
21	288200	Bolt - Disconnect . . . . .	ccc	1		
22	Type 1	Pin - Disconnect . . . . .	ccc	1		
	185533	Knob - Disconnect . . . . .	ccc	1		
23	288773-4	Spring Housing - Disconnect . . . . .	ccc	1		
24	288773-5	Spring - Disconnect . . . . .	ccc	1		
25	288195	Groove Pin $\frac{5}{16}$ $\times$ $\frac{3}{8}$ (Groove Pin Corp.) . . . . .	ccc	1		
	288202	Service Assembly - Nose landing gear torque arm . . . . .	ccc	Ref		
	295185	Strut Assembly - Torque . . . . .	ccc	1		
26	272861	Arm Assembly - Torque . . . . .	ccc	1		
	01-287424	Handle Assembly . . . . .	ccc	1		
27	287424	Clamp . . . . .	ccc	2		
		Nameplate . . . . .	ccc	1		
		Shaft . . . . .	ccc	2		
		Service Assembly - Directional control support . . . . .	ccc	2		
		Installation - Directional control support (NP) . . . . .	ccc	Ref		
		(See figure 164 for detailed illustration)	ccc	1		
		Installation - Tube directional control (NP) . . . . .	ccc	1		
28	284026	Manifold Assembly - Directional control cylinder . . . . .	ccc	1		
29	287720	Tube Assembly - Steering pressure . . . . .	ccc	1		
30	285106-100	Packing . . . . .	ccc	2		
	AN6227-7	Adapter - Directional control check valve . . . . .	ccc	1		
31	287721	Support . . . . .	ccc	1		
32	287788	Tube Assembly - Steering pressure . . . . .	ccc	1		
33	285106-98	Tube Assembly - Steering mechanism . . . . .	ccc	1		
34	285106-14	Tube Assembly - Steering mechanism . . . . .	ccc	1		
35	285106-16	Tube Assembly - Steering mechanism . . . . .	ccc	1		
36	285106-12	Tube Assembly - Steering mechanism . . . . .	ccc	2		
37	285106-8	Tube Assembly - Steering mechanism . . . . .	ccc	2		
38	285106-10	Tube Assembly - Steering mechanism . . . . .	ccc	1		
39	285106-104	Tube Assembly - Steering pressure . . . . .	ccc	2		
40	285106-106	Tube Assembly - Steering pressure . . . . .	ccc	2		
41	272674-3	Tube Assembly - Shock strut . . . . .	ccc	2		
42	272674-11	Strap Assembly - Shock strut . . . . .	ccc	1		
43	272674-2	Strap Assembly - Shock strut . . . . .	ccc	1		
44	R251D10	Joint - Swing, lower (Chiksan) (667573) . . . . .	ccc	1		
45	R251D11	Joint - Swing, lower (Chiksan) (667574) . . . . .	ccc	1		
46	R251D9	Joint - Swing, hydraulic (Chiksan) (667572) . . . . .	ccc	2		
47	272859-2	Clamp Assembly - Swing joint . . . . .	ccc	1		
48	475HT6D	Check Valve (Parker) (667100-2) . . . . .	ccc	1		
49	40D372-6D	Swivel - Hydraulic 45° . . . . .	ccc	1		
50	40B887-018A026-16	Gasket . . . . .	ccc	4		
51	40B374-6D	Bolt - Hydraulic swivel coupling . . . . .	ccc	2		
52	40D371-6D	Swivel - Hydraulic 45° . . . . .	ccc	1		
53	1113	Body (Pacific Piston Ring Co.) . . . . .	ccc	2		
54	1114	Bolt (Pacific Piston Ring Co.) . . . . .	ccc	2		
55	40B887-024A100-16	Gasket . . . . .	ccc	4		
	283399	Mechanism Assembly - Steering control . . . . .	ccc	1		
56	283905	Bracket - Steering control mechanism . . . . .	ccc	1		
57	600-80240	Valve Assembly - Steering control (Weatherhead) (664050) . . . . .	ccc	1		
		(See figure 163 for detailed illustration)				
58	AN210-2A	Pulley . . . . .	ccc	4		
59	AN210-1A	Pulley . . . . .	ccc	2		
60	285930	Pin . . . . .	ccc	2		
61	234239-6	Pin - Large pulley $\frac{3}{16}$ bolt guard . . . . .	ccc	2		
62	283906-2	Bushing - Steering valve bracket . . . . .	ccc	1		
63	283900	Shackle Assembly - Steering valve actuating . . . . .	ccc	1		
64	283906-3	Bushing - Steering valve bracket . . . . .	ccc	1		
65	249996-2	Pin - Small pulley $\frac{3}{16}$ bolt guard . . . . .	ccc	2		
66	285633-6	Cable Assembly - Steering control . . . . .	ccc	2		
	RA2490-3	Fitting (American Chain and Cable Co.) . . . . .	ccc	1		
	285191	Fitting - Tail cable lock . . . . .	ccc	1		
67	286351	Spring - Steering cable slack absorber . . . . .	ccc	2		
68	281146	Tube - Steering control take-up mechanism . . . . .	ccc	2		
69	281145	Sleeve - Steering control take-up mechanism . . . . .	ccc	2		
		(See figure 90 for cable connections with nose steering wheel)				
70	283398	Bracket Assembly - Steering control, upper strut . . . . .	ccc	1		
	283907	Stud - Steering control, upper bracket . . . . .	ccc	1		
71	283910	Horn Assembly - Steering control, upper bracket . . . . .	ccc	1		
72	AN210-2A	Pulley . . . . .	ccc	2		
73	283909	Carrier Assembly - Steering bracket pulley guard . . . . .	ccc	1		
74	285929	Pin - Steering control, fulcrum bracket dowel . . . . .	ccc	1		
75	234239-11	Pin - Large pulley $\frac{3}{16}$ bolt guard . . . . .	ccc	2		

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GROUP . . . Nose Landing Gear

Detail Unit . . . Shock Strut—N.L.G. (Serial 2021-2067)

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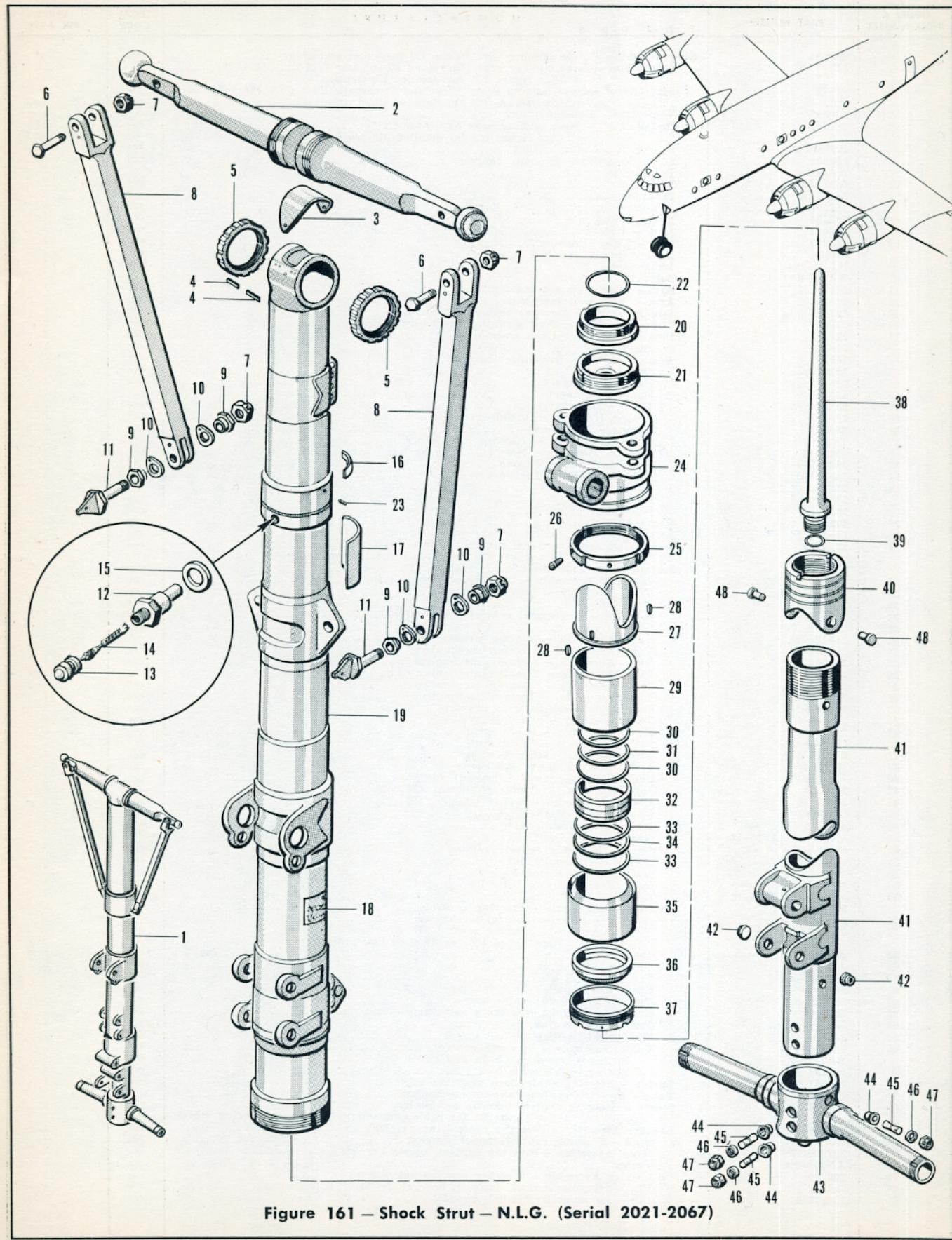


Figure 161 — Shock Strut — N.L.G. (Serial 2021-2067)

## GROUP . . . Nose Landing Gear

## Detail Unit . . . Shock Strut—N.L.G. (Serial 2021-2067)

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FIGURE & INDEX NUMBER	PART NUMBER		N O M E N C L A T U R E						SERIAL CODE	UNITS PER ASSY.
			1	2	3	4	5	6		
161 - 1	8297B	Strut - Aerol (Cleveland Tool Co.) (661024) (See figure 159 for using assembly) . . .							f	Ref
2	8297C	Strut - Aerol (Cleveland Tool Co.) (661042) (See figure 159 for using assembly) . . .							eee	Ref
3	8297-75	Shaft Assembly - Cross . . .							ddd	1
	8297-79	Cover - Plate . . .							ddd	1
	AN501A10-4	Screw . . .							ddd	6
4	8297-88	Lock - Plate . . .							ddd	2
5	8297-36	Nut - Adjusting . . .							ddd	2
6	8297-64	Bolt - Side brace to cross shaft . . .							ddd	2
7	8297-41	Nut - Special . . .							ddd	4
8	8297-72	Brace Assembly - Side . . .							ddd	2
9	8297-58	Bushing - Side brace . . .							ddd	4
10	8297-90	Plate - Special . . .							ddd	4
11	8297-63	Bolt - Side brace special . . .							ddd	2
12	AN812-1	Body - High pressure air valve . . .							ddd	1
13	AN813-1	Cap - High pressure air valve . . .							ddd	1
14	AN809-1	Core - High pressure air valve . . .							ddd	1
15	AN901-5C	Gasket - High pressure air valve . . .							ddd	1
16	EQ748	Nameplate . . .							ddd	2
17	EQ939	Nameplate . . .							ddd	2
18	EQ940	Nameplate . . .							ddd	2
	8297-102	Cylinder Assembly . . .							f	1
	8297C102	Cylinder Assembly . . .							eee	1
	8297-2	Cylinder . . .							f	1
19	8297C2	Cylinder . . .							eee	1
20	8297A22	Bulkhead . . .							ddd	1
21	8297-23	Plate - Orifice . . .							ddd	1
22	AN6230-25	Packing - "O" Ring hydraulic . . .							ddd	1
	8297-57	Bushing . . .							ddd	2
	AN565A416H8	Screw - Set . . .							ddd	1
23	7882A73	Plug . . .							ddd	1
24	8297-33	Collar - Damper . . .							ddd	1
25	8297-82	Nut . . .							ddd	1
26	8297-99	Screw . . .							ddd	1
	8297B104	Piston Assembly - Shock strut . . .							f	1
	8297C104	Piston Assembly - Shock strut . . .							eee	1
	8297-110	Follower and Key Assembly . . .							ddd	1
27	8297-10	Follower . . .							ddd	1
28	8297-68	Key - Follower . . .							ddd	1
	8297-7-1A	Adapter - Bottom . . .							f	1
29	8297C7-1	Adapter - Bottom . . .							eee	1
30	8297C59	Wiper - Leather (Outer) . . .							eee	2
31	AN6227-56	Packing - "O" Ring hydraulic . . .							ddd	1
	8297B54	Adapter - Packing . . .							f	1
32	8297C54	Adapter - Packing . . .							eee	1
33	8297C55	Wiper - Leather (Inner) . . .							eee	2
34	AN6227-59	Packing - "O" Ring hydraulic . . .							ddd	1
35	8297-9A	Bearing . . .							ddd	1
36	AN6231-45	Wiper - Packing gland . . .							ddd	1
37	8297-48	Nut - Gland . . .							ddd	1
38	8297B13	Pin - Metering . . .							ddd	1
39	AN6227-15	Packing - "O" Ring hydraulic . . .							ddd	1
40	8297-3	Head - Piston . . .							ddd	1
41	8297B4	Piston . . .							ddd	1
42	8297-65	Bushing . . .							ddd	2
43	8297B12	Fitting - Axle . . .							ddd	1
44	8297-84	Bushing . . .							ddd	6
45	8297-83	Stud . . .							ddd	6
46	AN960-816	Washer . . .							ddd	6
47	AN510-8	Nut . . .							ddd	6
48	8297-8	Pin - Piston head . . .							ddd	2

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GROUP . . . Nose Landing Gear

Detail Unit . . . Shock Strut—N.L.G. (Serial 2068-2088)

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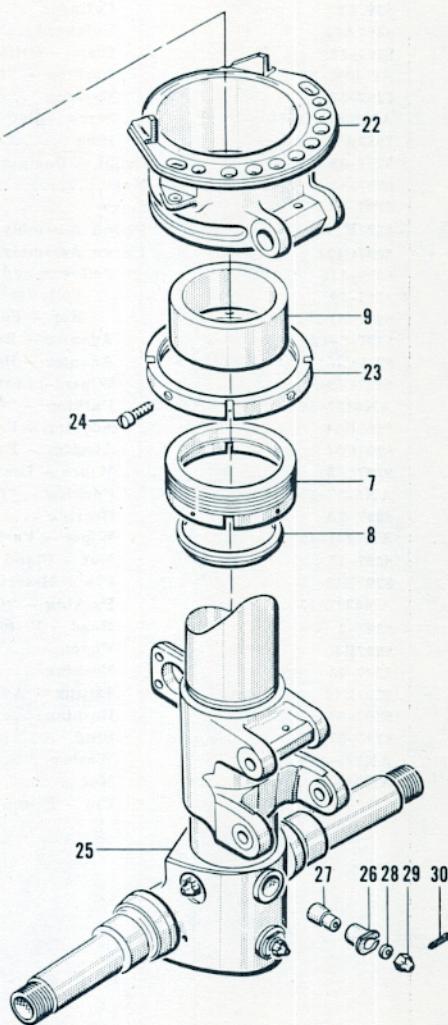
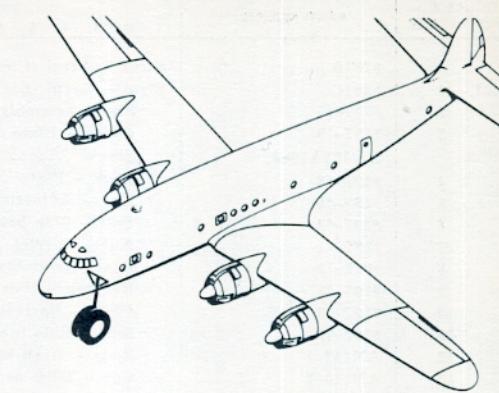
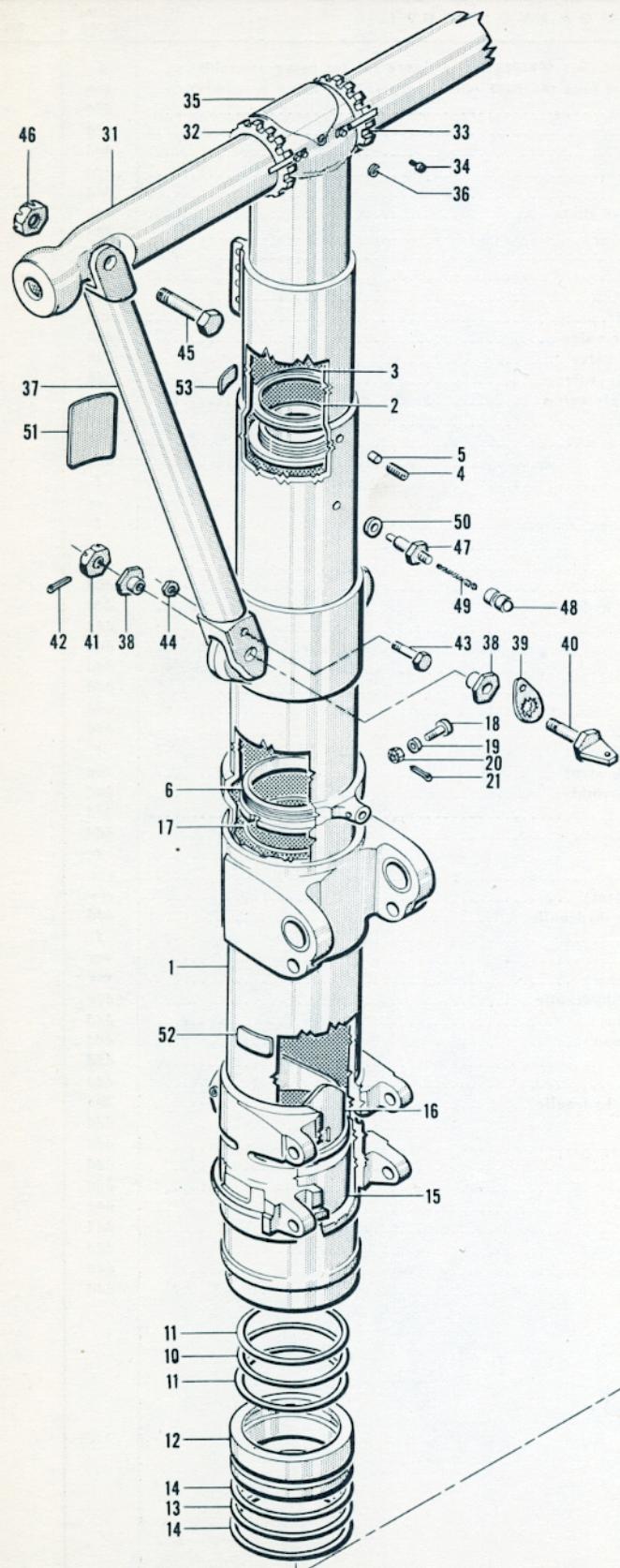


Figure 162 — Shock Strut — N.L.G. (Serial 2068-2088)

## GROUP . . . Nose Landing Gear

*Constellation*

## Detail Unit . . . Shock Strut—N.L.G. (Serial 2068-2088)

FIGURE & INDEX NUMBER	PART NUMBER		N O M E N C L A T U R E						SERIAL CODE	UNITS PER ASSY.
			1	2	3	4	5	6		
	8297E	Strut Assembly - Aerol (Cleveland Pneumatic) (661045) . . . . .							eo	Ref
	8197F	(See figure 160 for using assembly)							da	Ref
162 - 1	8297E102	Strut Assembly - Aerol (Cleveland Pneumatic) (661050) . . . . .							ccc	1
2	8297E2	(See figure 160 for using assembly)							ccc	1
3	8297A22	Cylinder Assembly . . . . .							ccc	1
4	AN6230-25	Cylinder . . . . .							ccc	1
5	AN565A516H8	Bulkhead - Cylinder . . . . .							ccc	1
6	8297E-73	Gasket - Cylinder bulkhead to cylinder . . . . .							ccc	1
7	8297-23	Screw - Set . . . . .							ccc	1
8	8297-57	Plug - Bulkhead set screw . . . . .							ccc	1
9	8297-48	Plate - Orifice . . . . .							ccc	1
10	8297E104	Bushing - Drag brace . . . . .							eo	2
11	8297C104	Piston Assembly . . . . .							da	1
12	8297B4	Piston . . . . .							da	1
13	8297E4	Piston . . . . .							eo	1
14	8297-45	Nut - Gland . . . . .							ccc	1
15	8297-9A	Wiper - Packing gland ring . . . . .							ccc	1
16	8297-56	Bearing - Packing . . . . .							ccc	1
17	8297C54	Packing - "O" Ring (Inner) . . . . .							ccc	1
18	8297C55	Wiper - Leather (Inner) . . . . .							eo	2
19	8297C59	Adapter - "O" Ring . . . . .							ccc	1
20	8297C7-1	Packing - "O" Ring (Outer) . . . . .							ccc	1
21	8297-110	Wiper - Leather (Outer) . . . . .							eo	2
22	8297-68	Wiper - Leather (Outer) . . . . .							da	2
23	8297E13	Wiper - Leather (Inner) . . . . .							da	2
24	8297E13-2	Adapter - Bottom . . . . .							ccc	1
25	8297E13-1	Follower Assembly . . . . .							ccc	1
26	8297-10	Follower . . . . .							ccc	1
27	8297-65	Key - Follower . . . . .							ccc	1
28	8297-65	Metering Pin Assembly . . . . .							co	1
29	8297-48	Pin - Metering . . . . .							co	1
30	8297E8	Plug - Piston tube . . . . .							eo	1
31	8297E7	Pin - Metering . . . . .							eo	1
32	AN6227-56	Head - Piston . . . . .							co	1
33	AN6227-59	Head - Piston . . . . .							co	1
34	AN6246-59	Pin - Piston head . . . . .							co	1
35	8297-85	Bushing - Tow lug . . . . .							ccc	2
36	8297-85	Packing - "O" Ring seal . . . . .							da	1
37	AN6227-48	Gasket - M.P. assembly to piston . . . . .							eo	1
38	8297-82	Bolt - Piston head . . . . .							co	4
39	8297-99	Washer - Piston head bolt . . . . .							co	4
40	8297-68	Nut - Piston head bolt . . . . .							co	4
41	8297-84	Pin - Cotter . . . . .							co	4
42	8297-83	Collar - T.A. and dampener . . . . .							ccc	1
43	8297E33-1	Collar - Rough T.A. and dampener . . . . .							ccc	1
44	8297-82	Nut - Collar lock . . . . .							ccc	1
45	8297-99	Screw - Collar lock nut . . . . .							ccc	4
46	8297B12	Fitting - Axle . . . . .							ccc	1
47	8297-84	Bushing - Piston to axle fitting . . . . .							ccc	6
48	8297-83	Stud - Piston to axle fitting . . . . .							ccc	6
49	AN960-816	Washer - Piston to axle fitting stud . . . . .							ccc	6
50	AN310-8	Nut - Piston to axle fitting stud . . . . .							ccc	6
51	AN380-3-3	Pin - Piston to axle fitting cotter . . . . .							ccc	6
52	8297-75	Cross Shaft Assembly . . . . .							ccc	1
53	8297-36	Nut - Cross shaft adjusting . . . . .							ccc	2
54	8297-88	Plate - Adjusting nut lock . . . . .							ccc	2
55	AN501A10-4	Screw - Lock plate . . . . .							ccc	6
56	8297-79A	Plate - Cross shaft cover . . . . .							ccc	1
57	8297-79	Plate - Cross shaft cover . . . . .							da	1
58	AN935-10L	Washer - Cover plate lock . . . . .							ccc	2
59	8297-72	Side Brace Assembly . . . . .							ccc	2
60	8297-58	Bushing - Side brace to cylinder . . . . .							ccc	4
61	8297-90	Plate - Side brace to cylinder . . . . .							ccc	4
62	8297-63	Bolt - Side brace to cylinder . . . . .							ccc	2
63	8297-41	Nut - Side brace to cylinder . . . . .							ccc	2
64	AN380-4-7	Pin - Side brace to cylinder cotter . . . . .							ccc	4
65	AN3-24A	Bolt - Side brace plate . . . . .							ccc	2
66	AN365-1032	Nut - Side brace plate bolt . . . . .							ccc	2
67	8297-64	Bolt - Side brace to crank shaft . . . . .							ccc	2
68	8297-41	Nut - Side brace to crank shaft bolt . . . . .							ccc	2
69	AN812-1	Body - Air valve . . . . .							ccc	1
70	AN813-1	Cap - Air valve . . . . .							ccc	1
71	AN809-1	Core - Air valve . . . . .							ccc	1
72	AN901-5C	Gasket - Air valve . . . . .							ccc	1
73	EQ939	Plate - Name . . . . .							eo	2
74	EQ1055	Plate - Name . . . . .							da	2
75	EQ940	Plate - "O" Ring installation . . . . .							ccc	2
76	EQ1059	Plate - Oil . . . . .							ccc	2
77	EQ1009	Tag - Oil specification . . . . .							ccc	1

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GROUP . . . Nose Landing Gear

Detail Unit . . . Valve and Cylinder—N.L.G. Directional Control

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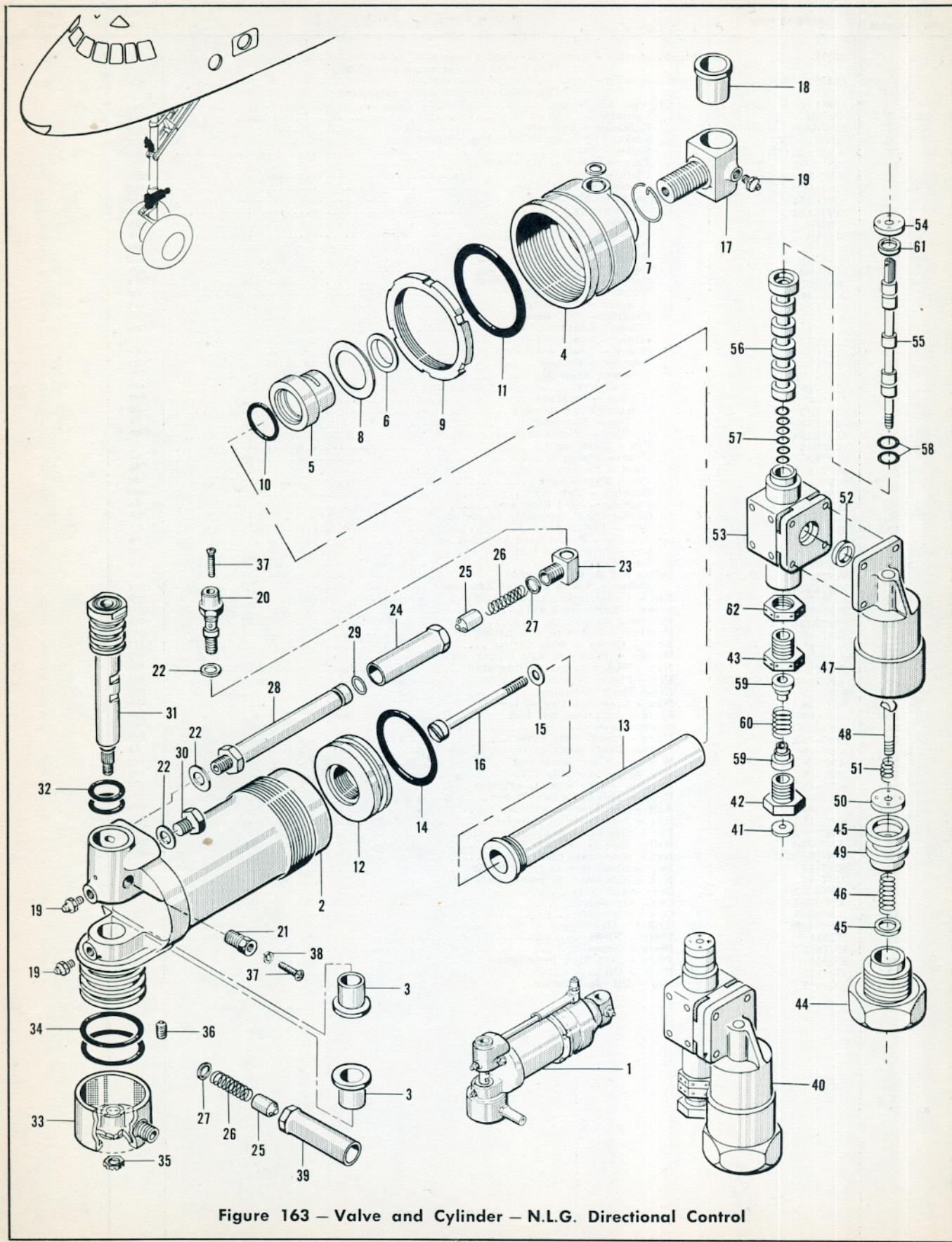


Figure 163 — Valve and Cylinder — N.L.G. Directional Control

## GROUP . . . Nose Landing Gear

*Constellation*

## Detail Unit . . . Valve and Cylinder—N.L.G. Directional Control

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6	N O M E N C L A T U R E			SERIAL CODE	U N I T S P E R A S S Y.
			1	2	3		
163 - 1	H2743		Cylinder - Hydraulic Assembly - Directional control mechanism (663063) . . . . .			h	2
	H3063		(Pacific Aviation) (See figure 159 for using assembly)				
2	H2701		Cylinder Assembly - Directional control mechanism . . . . .			h	1
3	H2716		Cylinder . . . . .			h	1
4	H2702		Bushing - Directional control cylinder . . . . .			h	2
5	H2703		Head - Hydraulic cylinder . . . . .			h	1
6	AN6231-9		Bushing - Hydraulic cylinder . . . . .			h	1
7	AN996-20		Wiper - Packing gland ring (May be substituted by H-2865) . . . . .			h	1
8	H3013-1		Ring - Lock . . . . .			h	1
9	H2714		Gasket . . . . .			h	1
10	AN6227-19		Locknut - Directional control cylinder . . . . .			h	1
11	AN6230-9		Packing - "O" Ring hydraulic . . . . .			h	1
	H2704		Gasket - "O" Ring hydraulic . . . . .			h	1
12	H2706		Piston Assembly - Hydraulic cylinder . . . . .			h	1
13	H2705		Piston . . . . .			h	1
14	AN6227-33		Rod - Piston . . . . .			h	1
15	AN902-3		Packing - "O" Ring hydraulic . . . . .			h	1
16	H2772		Gasket - Flared tube universal fitting . . . . .			h	1
	H2710		Lockscrew - Hydraulic cylinder . . . . .			h	1
17	H3012		Eyebolt Assembly - Directional control cylinder . . . . .			h	1
18	H2717		Eyebolt . . . . .			h	1
19	1641		Bushing . . . . .			h	3
20	H3077		Fitting (Alemite) . . . . .			h	1
21	AN6204-1		Bolt - Hydraulic cylinder . . . . .			h	3
22	AN902-4		Valve - Hydraulic bleeder . . . . .			h	3
23	H2709		Gasket - Flared tube universal fitting . . . . .			h	1
24	H2712-1		Swivel - Hydraulic cylinder . . . . .			h	1
25	H2713		Body - Cylinder valve . . . . .			h	2
26	H2745		Valve - Check hydraulic . . . . .			h	2
27	AN902-5		Spring - Directional control cylinder . . . . .			h	2
28	H2711		Gasket - Flared tube universal fitting . . . . .			h	1
29	AN6227-7		Connector - Directional control cylinder . . . . .			h	1
30	H2748		Packing - "O" Ring hydraulic . . . . .			h	1
31	H2707		Plug - Directional control cylinder . . . . .			h	1
32	AN6227-15		Pin - Cylinder fulcrum . . . . .			h	1
33	H2708		Packing - "O" Ring hydraulic . . . . .			h	2
34	AN6227-27		Cap - Cylinder fulcrum . . . . .			h	1
35	AN320-5		Packing - "O" Ring hydraulic . . . . .			h	2
36	1/4-20x3/8		Nut - Aircraft shear . . . . .			h	1
37	AN520-10-6		Screw - Cup point set . . . . .			h	1
38	AN935-10		Screw - Round head fine thread . . . . .			h	3
39	H2712		Washer - Medium spring lock . . . . .			h	2
40	600-80240		Body - Cylinder valve . . . . .			h	1
			Valve Assembly - Steering control (Weatherhead) (664050) . . . . .			ccc	Ref
			(See figure 160 for using assembly)				
41	600-80251		Washer . . . . .			ccc	1
42	600-80244		Cap . . . . .			ccc	1
43	600-80245		Bushing . . . . .			ccc	1
44	600-80261		Cap . . . . .			ccc	1
45	600-80255		Washer . . . . .			ccc	2
46	600-80262		Spring . . . . .			ccc	1
47	600-80257		Housing . . . . .			ccc	1
48	600-80265		Stem Assembly . . . . .			ccc	1
49	600-80259		Piston . . . . .			ccc	1
	AN6227-31		Packing . . . . .			ccc	1
50	600-80256		Washer . . . . .			ccc	1
51	600-80242		Spring . . . . .			ccc	1
52	AN6227-25		Packing . . . . .			ccc	1
53	600-80254		Housing . . . . .			ccc	1
54	600-80241		Plate . . . . .			ccc	1
	600-80253		Sleeve Shaft Assembly - Steering valve . . . . .			ccc	1
55	600-80247		Shaft . . . . .			ccc	1
56	600-80248		Sleeve . . . . .			ccc	1
57	AN6227-13		Packing . . . . .			ccc	6
58	AN6227-7		Packing . . . . .			ccc	2
59	600-80246		Spacer . . . . .			ccc	2
60	600-80252		Spring . . . . .			ccc	1
61	AN6231-1		Wiper . . . . .			ccc	1
62	600-80243		Nut . . . . .			ccc	1

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GROUP . . . . Nose Landing Gear

Detail Unit . . . Support and Cylinder—N.L.G. Directional

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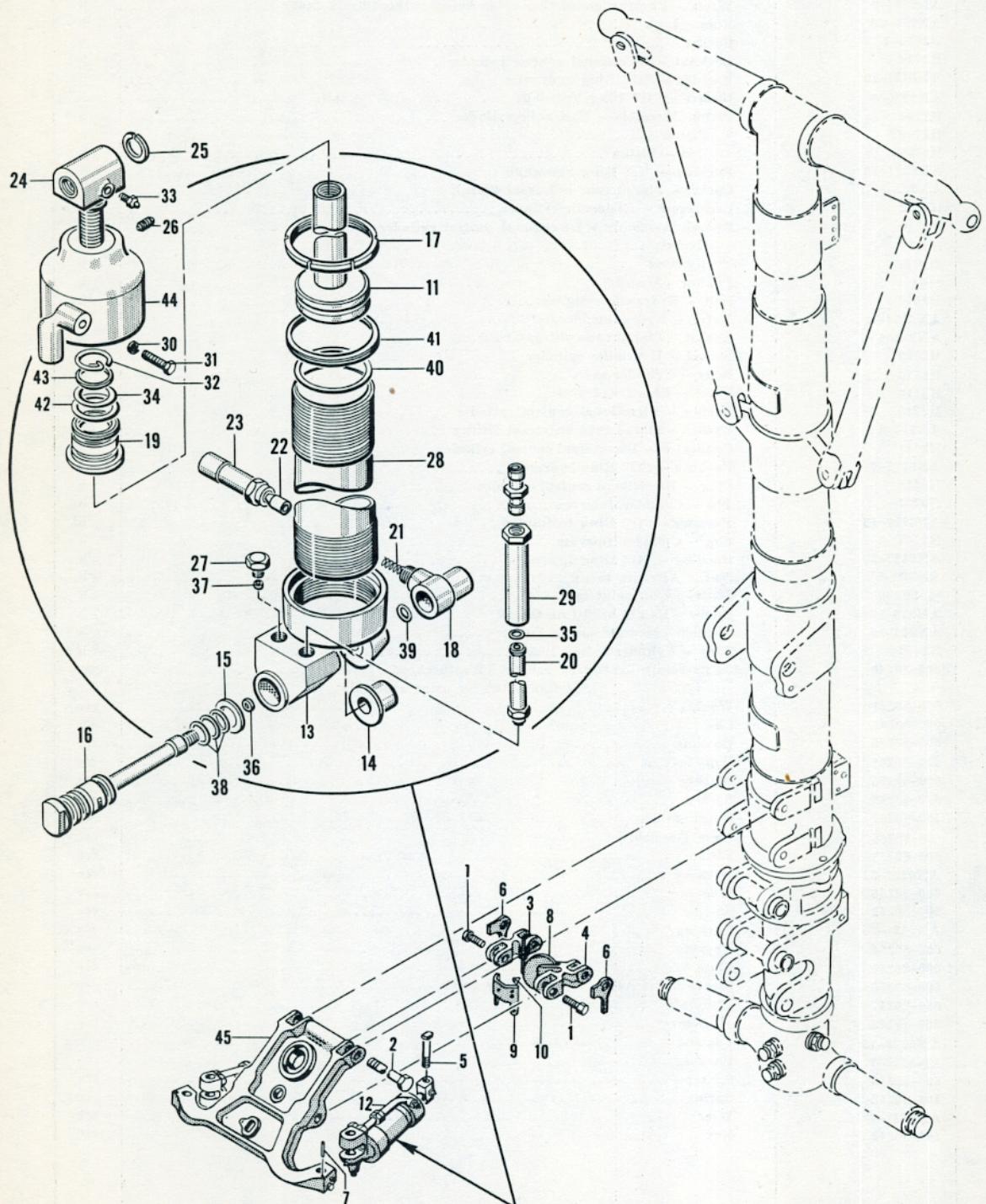


Figure 164 — Support and Cylinder — N.L.G. Directional

## GROUP . . . Nose Landing Gear

## Detail Unit . . . Support and Cylinder—N.L.G. Directional

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER	1	2	3	4	5	6	N O M E N C L A T U R E	SERIAL CODE	U N I T S P E R A S S Y.
	01-287424							Directional control (Consists of the following, assembled per 287424:—Index numbers 1, 3, 4, 7, 8, 45 plus part numbers R25-200, R25-199, AN960D17216 washer, AN365-1216 nut, 287428 guard, AN23-17 bolt, AN960D10 washer, AN310-3 nut, AN380-2-2 cotter. Also the following assembled per 284026 (Fig. 265):—285106-10 tube, 285106-98 tube, 758-6 clip, NAS-221-8 screw, NAS221-13 screw, AN365-1032 nut, 287720 manifold, AN901-4A gasket, 40B374-4NS bolt, 287721 adapter, AN6227-7 packing, 811BT-8W nut, 11-1039-1-10D nut)	ccc	Ref
	287424							Installation — N.L.G. directional control support (NP) . . . . . (See figure 160 for using assembly)	ccc	Ref
164 - 1	287425							Bolt — Link support . . . . .	ccc	4
2	287426							Bolt — Bracket support . . . . .	ccc	1
3	287429L							Link — Bracket support . . . . .	ccc	1
4	287429R							Link — Bracket support . . . . .	ccc	1
5	287811							Bolt — Cylinder rod . . . . .	ccc	2
6	287513							Guard — Collar pulley . . . . .	ccc	2
7	287427							Pin — Bolt lock . . . . .	ccc	2
8	207BB							Pulley (Former insulation) . . . . .	ccc	2
9	287428							Guard Assembly — Nose landing gear directional control lower pulley . . . . .	ccc	1
10	287428-2							Plate . . . . .	ccc	1
	287428-3							Cone . . . . .	ccc	1
	R25-199							Cylinder Assembly — Hydraulic directional control mechanism (Pacific Aviation) (663146R) . . . . .	ccc	1
	R25-200							Cylinder Assembly — Hydraulic directional control mechanism (Pacific Aviation) (663146L) . . . . .	ccc	1
	H3613							Nameplate — RH . . . . .	ccc	1
	H3614							Nameplate — LH . . . . .	ccc	1
	H3615							Plate — Caution . . . . .	ccc	1
11	A25-105							Piston Assembly — Directional control cylinder . . . . .	ccc	1
12	A25-107							Connector . . . . .	ccc	1
13	D25-109							End . . . . .	ccc	1
14	A25-110							Bushing . . . . .	ccc	1
15	A25-111							Washer . . . . .	ccc	1
16	A25-112							Pin . . . . .	ccc	1
17	B25-113							Locknut . . . . .	ccc	2
18	B25-114							Cap . . . . .	ccc	1
19	D25-216							Bushing . . . . .	ccc	1
20	B25-117							Connector . . . . .	ccc	1
21	A25-119							Spring . . . . .	ccc	2
22	A25-120							Valve . . . . .	ccc	2
23	A25-131							Body . . . . .	ccc	1
24	B25-122							Eye-bolt . . . . .	ccc	1
25	A25-123							Lock-ring . . . . .	ccc	1
26	A25-127							Lockscrew . . . . .	ccc	1
27	A25-128							Plug . . . . .	ccc	1
28	D25-129							Cylinder . . . . .	ccc	1
29	A25-121-2							Body . . . . .	ccc	1
30	AN935-10							Lockwasher . . . . .	ccc	3
31	AN6204-1							Valve . . . . .	ccc	3
32	AN996-20							Lock-ring . . . . .	ccc	1
33	1641							Fitting (Alemite) . . . . .	ccc	2
34	AN6227-19							"O" Ring — Packing . . . . .	ccc	1
35	AN6227-7							"O" Ring — Packing . . . . .	ccc	1
36	AN902-5							Gasket . . . . .	ccc	3
37	AN902-4							Gasket . . . . .	ccc	2
38	AN6227-15							"O" Ring — Packing . . . . .	ccc	3
39	AN6227-9							"O" Ring — Packing . . . . .	ccc	1
40	AN6227-33							"O" Ring — Packing . . . . .	ccc	1
41	AN6230-9							"O" Ring — Hydraulic gasket . . . . .	ccc	2
42	AN6227-23							"O" Ring — Packing . . . . .	ccc	1
43	AN6231-9							Wiper . . . . .	ccc	1
44	G25-201							Head (Used on R25-200) . . . . .	ccc	1
	G25-203							Head (Used on R25-199) . . . . .	ccc	1
45	287430							Bracket — N.L.G. directional control cylinder support . . . . .	ccc	1
	R25-99							Cylinder Assembly — Hydraulic directional control mechanism (Pacific Aviation) . . . . . (See figure 159 for using assembly)	ez	Ref
	R25-100							Cylinder Assembly — Hydraulic directional control mechanism (Pacific Aviation) . . . . . (See figure 159 for using assembly)	ez	Ref
	G25-101							Head (Used on R25-100) . . . . .	ez	1
	G25-103							Head (Used on R25-99) . . . . . (Other components of R25-99 and R25-100 are index Nos. 1 thru 43 above — Serial EZ)	ez	1

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GROUP . . . . Nose Landing Gear

Detail Unit . . . Downlock—N.L.G.

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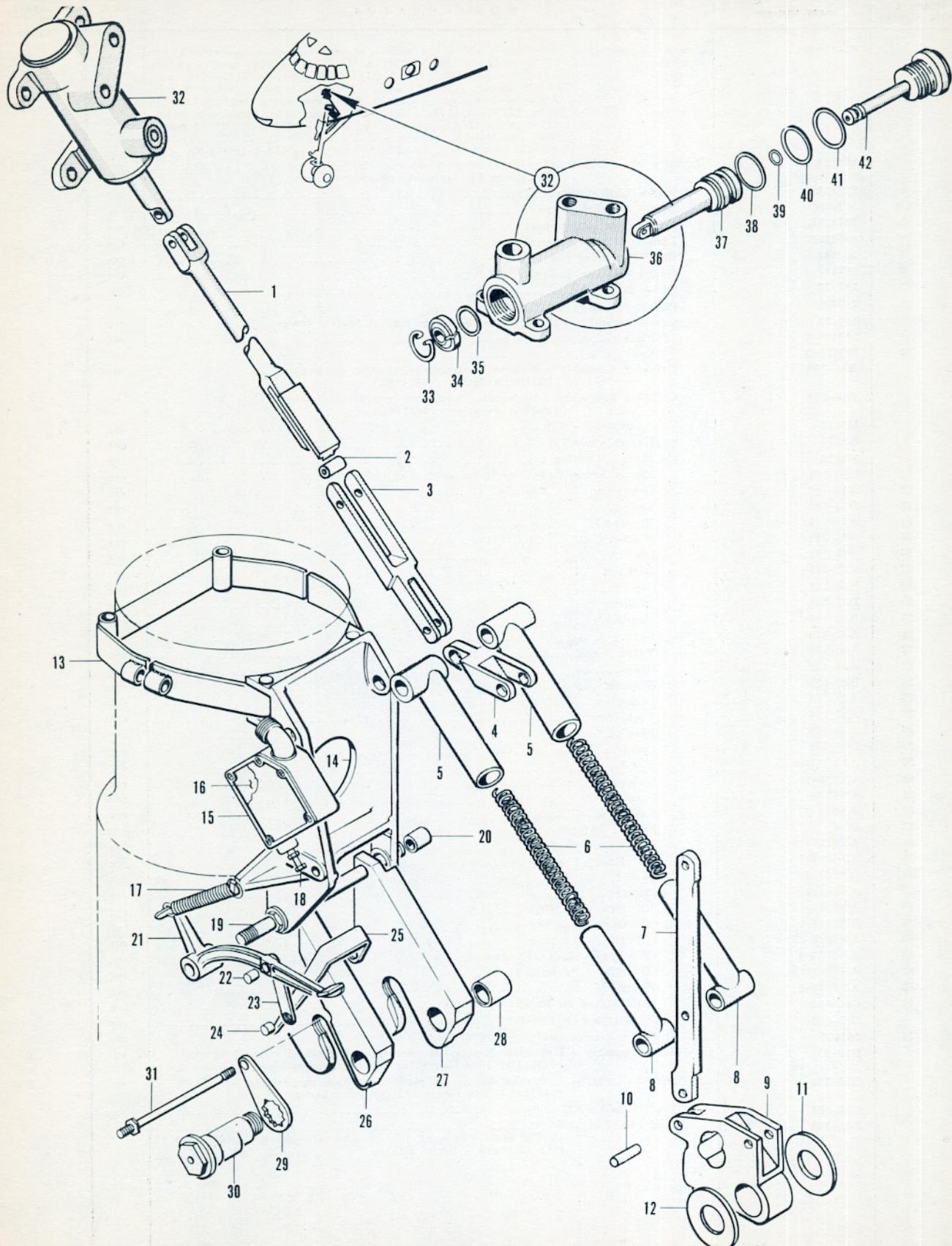


Figure 165 — Downlock — N.L.G.

## GROUP . . . Nose Landing Gear

## Detail Unit . . . Downlock—N.L.G.

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER		N O M E N C L A T U R E						SERIAL CODE	UNITS PER ASSY.
			1	2	3	4	5	6		
	284308	Installation — Nose landing gear downlock (NP) . . . . . (See figures 158 and 160 for using assembly)							all	Ref
165 - 1	283084	Link — Downlock actuating, upper . . . . .							all	1
2	283083	Spacer — Downlock actuating links . . . . .							all	1
3	283085	Link — Downlock actuating, lower . . . . .							all	1
4	271786	Idler — Downlock . . . . .							all	1
5	272410	Tube Assembly — Downlock spring . . . . .							all	2
6	272415	Spring — Lock latch . . . . .							all	2
7	271805	Link — Downlock latch . . . . .							all	1
8	272409	Tube Assembly — Downlock spring . . . . .							all	2
9	272412	Latch — Downlock . . . . .							all	1
10	272420	Pin — Downlock latch . . . . .							all	1
11	272953-3	Spacer — Downlock latch . . . . .							all	1
12	272953-2	Spacer — Downlock latch . . . . .							all	1
13	284307	Strap Assembly — Downlock switch . . . . .							all	1
14	284257	Bracket — Downlock switch . . . . .							all	1
	AN4-17	Bolt . . . . .							all	2
	AN310-4	Nut . . . . .							all	4
	AN24-17	Bolt . . . . .							all	1
	NASS4-34	Bolt . . . . .							all	1
	284478	Spacer — Downlock idler . . . . .							all	1
15	LNN11	Housing — Switch (Micro) (619051-4) . . . . .							all	1
16	BZ3YT	Switch (Micro) (612433) . . . . .							a	1
	AN3210-1	Switch . . . . .							b	1
17	197721	Spring — Downlock switch . . . . .							all	1
18	259405-4	Screw — Switch adjusting . . . . .							all	1
19	284670	Bolt — Downlock switch . . . . .							all	1
20	285359-3	Bushing — Downlock switch mechanism . . . . .							all	1
	LS580-4-51	Bolt . . . . .							all	1
	LS580-4-75	Bolt . . . . .							all	1
	NASS6-31	Bolt . . . . .							all	2
21	284668	Lever — Downlock switch . . . . .							all	1
22	284941-3	Bushing — Downlock switch mechanism bracer . . . . .							all	1
23	284669	Link — Downlock switch . . . . .							all	1
	NASS3-7	Bolt . . . . .							all	1
	NASS3-5	Bolt . . . . .							all	1
	AN310-3	Nut . . . . .							all	2
24	284941-2	Bushing — Downlock switch mechanism bracer . . . . .							all	1
25	284671	Trigger — Downlock switch . . . . .							all	1
26	272407L	Plate — Downlock . . . . .							all	1
27	272407R	Plate — Downlock . . . . .							all	1
28	285359-2	Bushing — Downlock switch mechanism . . . . .							all	1
	AN310-6	Nut . . . . .							all	1
29	272411	Plate — Downlock wrench . . . . .							all	1
30	272416	Bolt — Downlock latch . . . . .							all	1
31	284751	Stop — Downlock . . . . .							all	1
32	210621	Cylinder Assembly — Nose landing gear downlock actuating (Gladden) (663059) . . . . . (See figure 158 for using assembly)							all	1
33	110676	Snap Ring — Cylinder assembly . . . . .							all	1
34	AN6231-1	Wiper — Packing gland ring . . . . .							all	1
35	AN6227-10	Packing — "O" Ring hydraulic . . . . .							all	1
36	310622	Body — Cylinder assembly . . . . .							all	1
37	110624	Piston — Cylinder assembly . . . . .							all	1
38	AN6227-18	Packing — "O" Ring hydraulic . . . . .							all	1
39	AN6227-5	Packing — "O" Ring hydraulic . . . . .							all	1
40	AN6227-19	Packing — "O" Ring hydraulic . . . . .							all	1
41	AN6227-22	Packing — "O" Ring hydraulic . . . . .							all	1
42	110623	Plug — Cylinder assembly . . . . .							all	1

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Detail Unit . . . Uplock—N.L.G.

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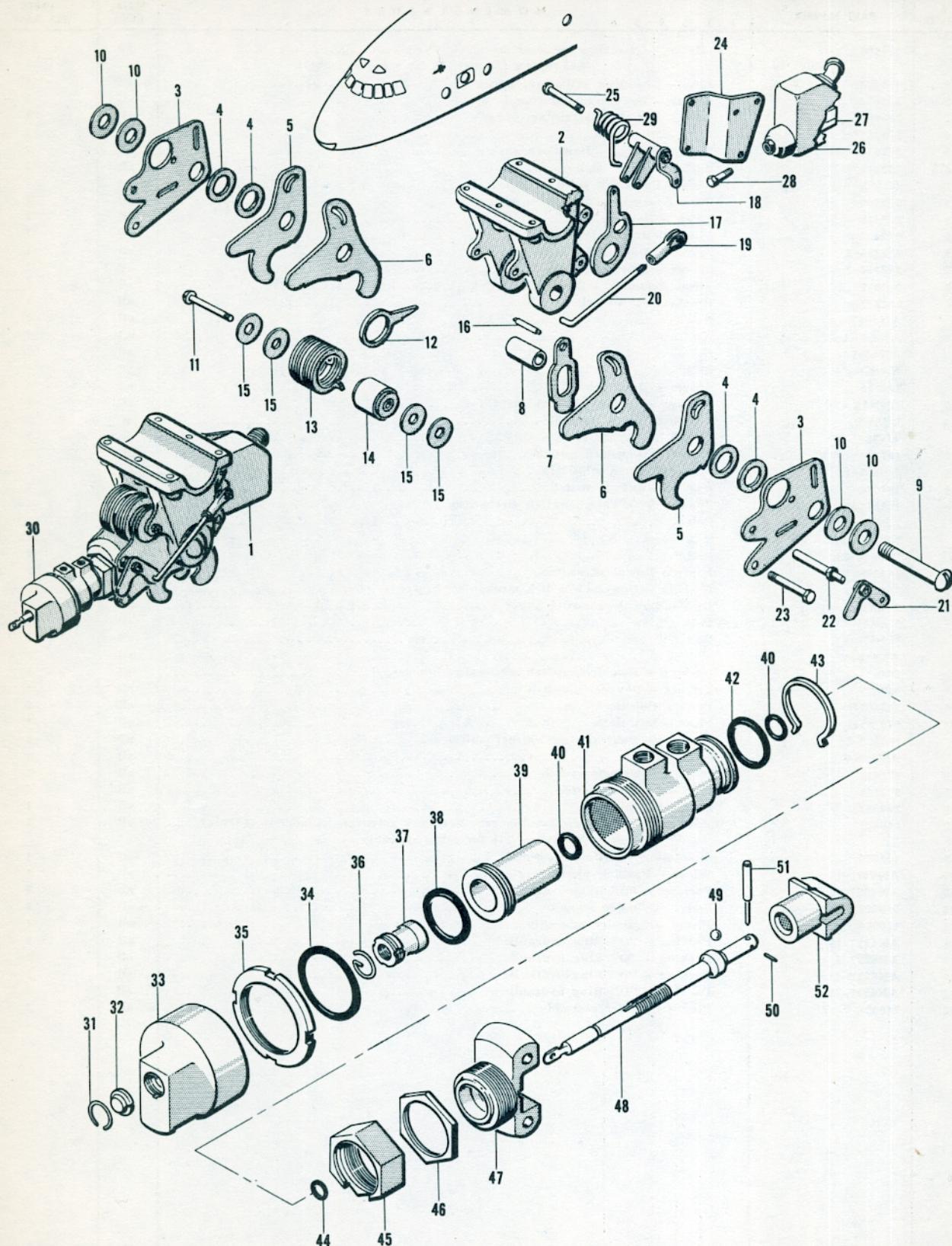


Figure 166 — Uplock — N.L.G.

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## GROUP . . . Nose Landing Gear

## Detail Unit . . . Uplock—N.L.G.

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER		N O M E N C L A T U R E						SERIAL CODE	UNITS PER ASSY.
			1	2	3	4	5	6		
166 - 1	272681	Nose Landing Gear	Uplock - Installation (See figure 158 for using assembly)						all	Ref
	272676	Uplock Assembly	- Nose landing gear						all	1
2	272680	Hanger	- Nose landing gear uplock						all	1
3	272552	Plate	- Landing gear uplock side						all	2
4	272557-3	Washer	- Landing gear uplock						all	4
5	272683	Latch	- Nose landing gear uplock (Outer)						all	2
6	272682	Latch	- Nose landing gear uplock (Inner)						all	2
7	272558	Guide	- Uplock latch						all	1
8	272556	Bushing	- Uplock main pin						all	1
9	AN28-46	Bolt + Clevis	1/2-20						all	1
10	272557-2	Washer							all	4
11	AN24-40	Bolt + Clevis	1/4-28						all	1
12	272554	Lever	- Uplock spring						all	1
13	272563	Spring	- Landing gear uplock						all	1
14	272555	Shaft Assembly	- Landing gear uplock spring						all	1
15	272557-4	Washer							all	4
16	272562	Pin	- Uplock latch guide						all	1
17	272684	Lever	- Uplock switch						all	1
18	272677	Bellcrank Assembly							all	1
19	AN665-21R	Terminal	- Threaded clevis type tie rod						all	1
20	272686	Link	- Uplock switch						all	1
21	272560	Arm Assembly	- Rocker						all	1
22	272569	Shaft	- Rocker arm						all	1
23	AN24-27A	Bolt + Clevis	1/4-28						all	1
24	272678	Bracket	- Uplock switch						all	1
25	AN23-40	Bolt + Clevis	5/16-24						all	1
	RNN-11	Housing (Micro)	(619051)						d	1
26	RN12	Housing (Micro)	(619051-9)						e	1
27	YZR31	Switch (Micro)	(612311)						e	1
	AN3210-1	Switch (Micro)							d	1
28	259405-3	Screw	- Adjusting switch						d	1
	259405-5	Screw	- Adjusting switch						c	1
29	291988	Spring							all	1
30	H2754	Cylinder Assembly	(Pacific Aviation)						all	1
31	H3010	Ring	- Lock						all	1
32	H3007	Wiper	- Landing gear cylinder up-lock						all	1
33	H2765	Cap							all	1
34	AN6227-27	Packing	- "O" Ring hydraulic						all	1
35	H2767	Nut	- Lock						all	1
36	H3009	Lock	- Ring						all	1
37	H3008	Nut							all	1
38	AN6227-21	Packing	- "O" Ring hydraulic						all	1
39	H2768	Piston							all	1
40	AN6227-9	Packing	- "O" Ring hydraulic						all	2
41	H2763	Body							all	1
42	AN6227-19	Packing	- "O" Ring hydraulic						all	1
43	H2757	Ring	- Lock						all	1
44	AN6227-5	Packing	- "O" Ring hydraulic						all	1
45	H2759	Nut							all	1
46	H2766	Nut	- Lock						all	1
47	H2758	Housing							all	1
48	H2761	Rod + Piston							all	1
49	.250 Diam.	Ball	- Chrome steel						all	9
50	H2777	Pin							all	1
51	H2760	Pin							all	1
52	H2756	Wedge							all	1
	H3612	Nameplate							all	1

GROUP . . . . . Nose Landing Gear  
Detail Unit . . . Cylinder—N.L.G. Actuating

Constellation

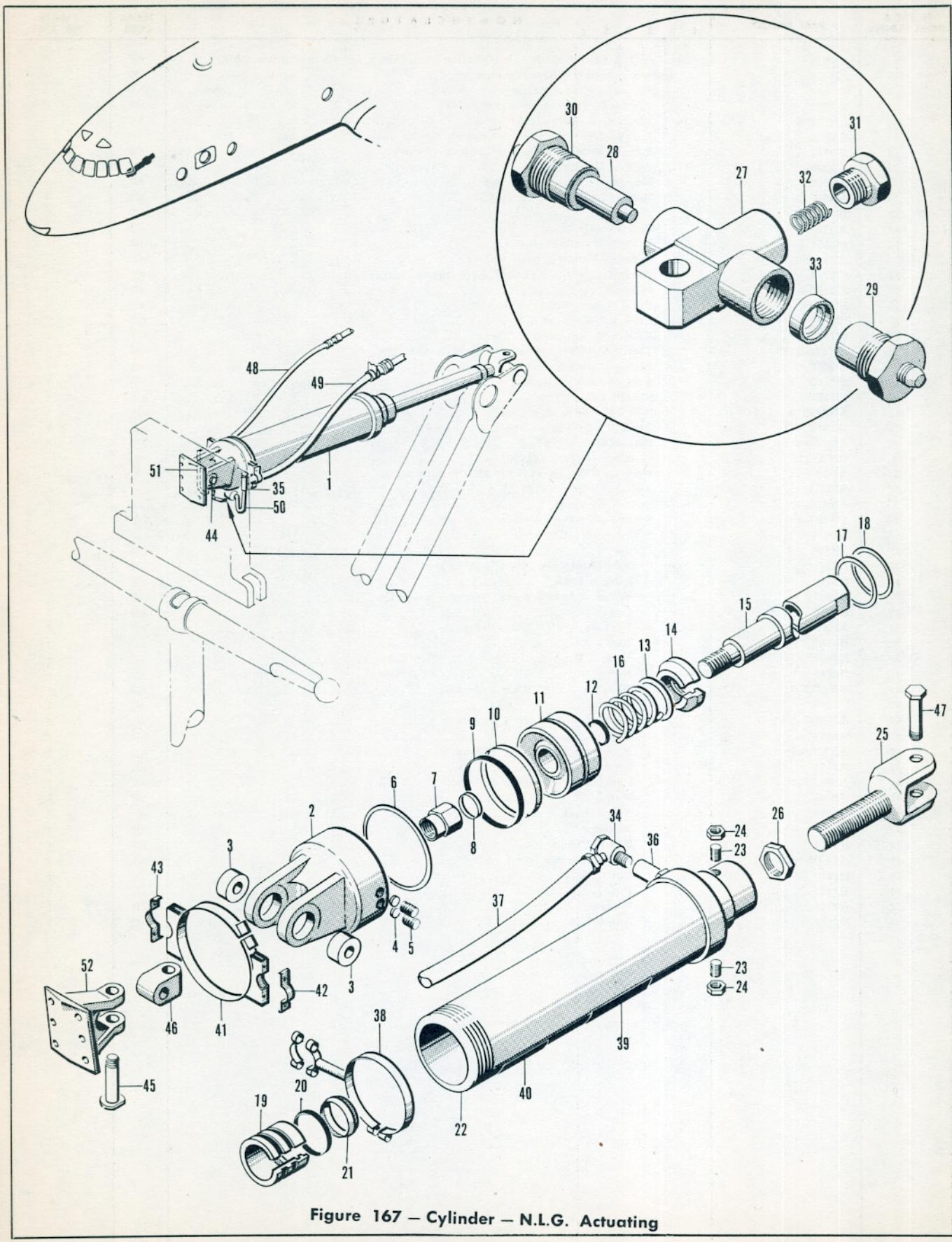


Figure 167 — Cylinder — N.L.G. Actuating

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## GROUP . . . Nose Landing Gear

*Constellation*

## Detail Unit . . . Cylinder—N.L.G. Actuating

FIGURE & INDEX NUMBER	PART NUMBER	NOMENCLATURE						SERIAL CODE	UNITS PER ASSY.
		1	2	3	4	5	6		
	279391	Installation — Nose landing gear actuating cylinder (NP) . . . . .						all	Ref
167 - 1	403904-0-2	(See figure 158 for using assembly)							
	403959	Cylinder — Actuating (Bendix) (668136) . . . . .						all	1
2	403958	Base Assembly — Actuating cylinder . . . . .						all	1
3	10	Base . . . . .						all	1
4	AN6233-4	Bearing (Roller Bearing Co.) . . . . .						all	2
5	404038	Plug (Interchangeable with Bendix 403373) . . . . .						all	2
6	AN6230-22	Screw — Cylinder . . . . .						all	1
7	49E144	Gasket — "O" Ring hydraulic . . . . .						all	1
8	403315	Nut (Elastic Stop Nut Corp.) . . . . .						all	1
9	AN6227-45	Washer — Cylinder . . . . .						all	1
10	AN6246-45	Packing — "O" Ring hydraulic . . . . .						all	1
11	405371	Ring (Interchangeable with Bendix 405369) . . . . .						all	2
12	AN6227-17	Piston — Cylinder . . . . .						all	1
13	AN6227-29	Packing — "O" Ring hydraulic . . . . .						all	1
14	403314	Packing (Winterized) . . . . .						all	1
15	404005	Shaft — Cylinder . . . . .						all	1
16	404036	Rod — Cylinder . . . . .						all	1
17	AN6230-5	Spring — Cylinder . . . . .						all	1
18	405370	Gasket (Winterized) . . . . .						all	1
19	407446	Washer . . . . .						all	1
20	AN6227-30	Bearing . . . . .						all	1
21	AN6231-19	Packing — "O" Ring hydraulic . . . . .						all	1
	459999-19	Wiper — Packing gland ring . . . . .						all	1
22	407445	Wiper — Felt cylinder . . . . .						all	1
23	906980K1	Barrel — Cylinder . . . . .						all	1
24	42TE048	Screw . . . . .						all	2
25	404052	Nut (Elastic Stop Nut Corp.) . . . . .						all	2
26	403311	Terminal — Cylinder . . . . .						all	1
	407447	Nut + Terminal check . . . . .						all	1
	135-00940	Nameplate . . . . .						all	1
27	135-00941	Valve Assembly — 6-4-6 Shuttle (Weatherhead) (662054) . . . . .						all	1
28	135-00943	Body . . . . .						all	1
29	135-00944	Shuttle . . . . .						all	1
30	135-00945	Adapter — No. 6 . . . . .						all	1
31	135-00946	Adapter — No. 4 . . . . .						all	1
32	135-00947	Cap . . . . .						all	1
33	241-00209	Spring . . . . .						all	1
	.375 Diam.	Ring Seal — "T" . . . . .						all	2
	AN902-8	Ball — Commercial grade 1 . . . . .						all	1
	AN902-6	Seal . . . . .						all	1
	Seal . . . . .	Seal . . . . .						all	1
34	3175-4-6D	Swivel (Parker) . . . . .						all	1
	3175-11-6D	Bolt (Parker) . . . . .						all	1
	3175-2-6D	Gasket (Parker) . . . . .						all	2
35	400525	Valve — Restrictor (Bendix) (667070) . . . . .						all	1
36	255456-4	Adapter — Hose . . . . .						all	1
37	70099-6-016016	Hose Assembly — Upline (Weatherhead) . . . . .						all	1
38	279238-2	Bracket Assembly — Upline hose . . . . .						all	1
39	274365	Nameplate — Landing gear demagnetizing . . . . .						all	1
40	277128	Nameplate — Cylinder adjustment . . . . .						all	1
41	272208	Strap Assembly — Cylinder hoses . . . . .						all	1
	NAS221-8	Screw . . . . .						all	4
	NAS221-26	Screw . . . . .						all	1
42	272263-2	Clamp — Cylinder hose, downline . . . . .						all	1
43	272263-4	Clamp — Cylinder hose, emergency . . . . .						all	1
44	272216-2	Bolt — Cylinder attaching . . . . .						all	1
45	272238	Bolt — Cylinder universal attaching . . . . .						all	1
46	272215	Universal — Cylinder . . . . .						all	1
47	272216-3	Bolt — Cylinder attaching . . . . .						all	1
48	83710-4-21	Hose Assembly — Emergency line (Weatherhead) . . . . .						all	1
49	83710-6-21	Hose Assembly — Downline (Weatherhead) . . . . .						all	1
50	284349-422	Tube Assembly — Actuating cylinder . . . . .						all	1
51	284349-420	Tube Assembly — Actuating cylinder . . . . .						all	1
52	270625	Forging — Cylinder attaching (See figure 28 for using assembly) . . . . .						all	Ref

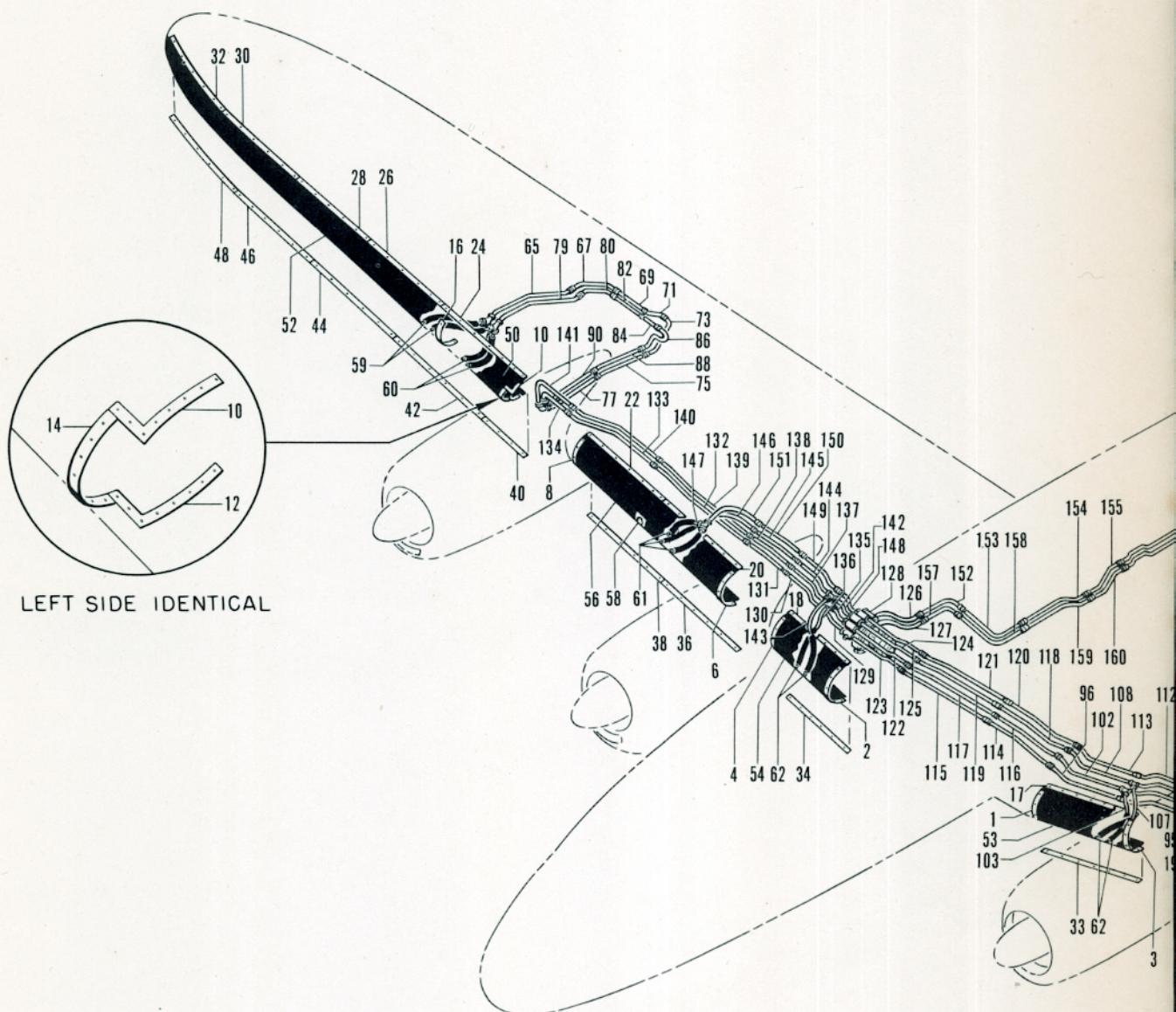
Reissued July, 1947

*Notes*

*Constellation*

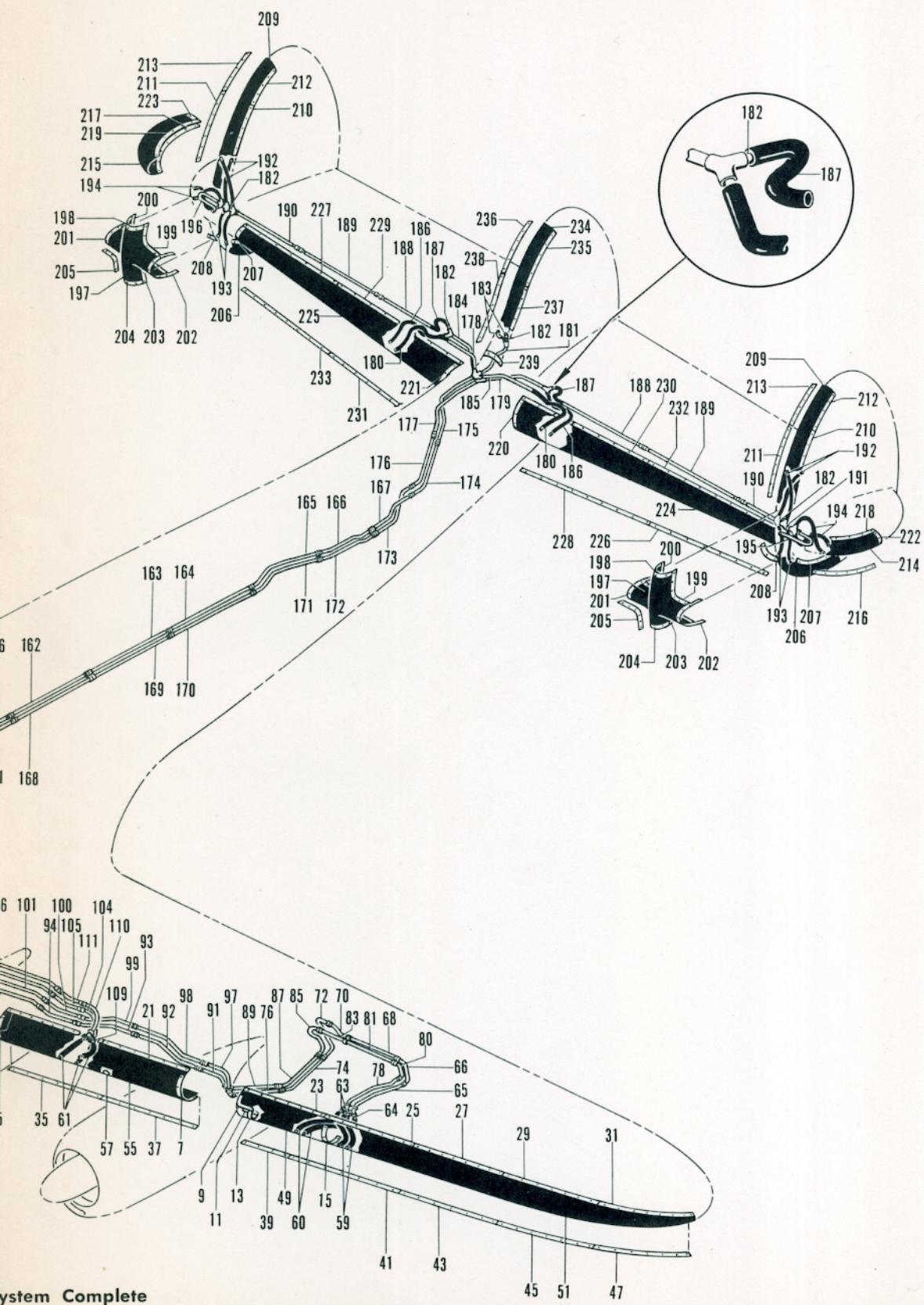
**GROUP . . .** De-icing System

**Detail Unit . . . De-icing System Complete**



**Figure 168 – De-icing**

# Constellation



## GROUP . . . De-icing System

## Detail Unit . . . De-icing System Complete

*Constellation*

DE-ICING

FIGURE & INDEX NUMBER	PART NUMBER		N O M E N C L A T U R E						SERIAL CODE	UNITS PER ASSY.
			1	2	3	4	5	6		
168 - 1	281032	Installation	- De-icer equipment (NP) (See figure 1 for using assembly)						all	Ref
	254659L	Installation	- Wing de-icer boots (NP)						all	1
	254659R	Installation	- Wing de-icer boots (NP)						all	1
2	254659-2L	Strip	- De-icer boot fairing						all	1
3	254659-2R	Strip	- De-icer boot fairing						all	1
4	254659-3L	Strip	- De-icer boot fairing						all	1
5	254659-3R	Strip	- De-icer boot fairing						all	1
6	254659-4L	Strip	- De-icer boot fairing						all	1
7	254659-5L	Strip	- De-icer boot fairing						all	1
8	254659-5R	Strip	- De-icer boot fairing						all	1
9	254659-6L	Strip	- De-icer boot fairing						all	1
10	254659-6R	Strip	- De-icer boot fairing						all	1
11	254659-7L	Strip	- De-icer boot fairing						all	1
12	254659-7R	Strip	- De-icer boot fairing						all	1
13	254659-8L	Strip	- De-icer boot fairing						all	1
14	254659-8R	Strip	- De-icer boot fairing						all	1
15	254659-9L	Strip	- De-icer boot fairing						all	1
16	254659-9R	Strip	- De-icer boot fairing						all	1
17	254659-10L	Strip	- De-icer boot fairing						all	1
18	254659-10R	Strip	- De-icer boot fairing						all	1
19	254659-11L	Strip	- De-icer boot fairing						all	1
20	254659-11R	Strip	- De-icer boot fairing						all	1
21	254659-12L	Strip	- De-icer boot fairing						all	1
22	254659-12R	Strip	- De-icer boot fairing						all	1
23	254659-13L	Strip	- De-icer boot fairing						all	1
24	254659-13R	Strip	- De-icer boot fairing						all	1
25	254659-14L	Strip	- De-icer boot fairing						all	1
26	254659-14R	Strip	- De-icer boot fairing						all	1
27	254659-15L	Strip	- De-icer boot fairing						all	1
28	254659-15R	Strip	- De-icer boot fairing						all	1
29	254659-16L	Strip	- De-icer boot fairing						all	1
30	254659-16R	Strip	- De-icer boot fairing						all	1
31	254659-17L	Strip	- De-icer boot fairing						all	1
32	254659-17R	Strip	- De-icer boot fairing						all	1
33	254659-18L	Strip	- De-icer boot fairing						all	1
34	254659-18R	Strip	- De-icer boot fairing						all	1
35	254659-19L	Strip	- De-icer boot fairing						all	1
36	254659-19R	Strip	- De-icer boot fairing						all	1
37	254659-20L	Strip	- De-icer boot fairing						all	1
38	254659-20R	Strip	- De-icer boot fairing						all	1
39	254659-21L	Strip	- De-icer boot fairing						all	1
40	254659-21R	Strip	- De-icer boot fairing						all	1
41	254659-22L	Strip	- De-icer boot fairing						all	1
42	254659-22R	Strip	- De-icer boot fairing						all	1
43	254659-23L	Strip	- De-icer boot fairing						all	1
44	254659-23R	Strip	- De-icer boot fairing						all	1
45	254659-24L	Strip	- De-icer boot fairing						all	1
46	254659-24R	Strip	- De-icer boot fairing						all	1
47	254659-25L	Strip	- De-icer boot fairing						all	1
48	254659-25R	Strip	- De-icer boot fairing						all	1
49	11-310-29-1	Boot	- LH De-icer (Goodrich) (652118-6)						all	1
50	11-310-29-2	Boot	- RH De-icer (Goodrich) (652118-7)						all	1
51	12-310-30-1	Boot	- LH De-icer (Goodrich) (652118-8)						all	1
52	12-310-30-2	Boot	- RH De-icer (Goodrich) (652118-9)						all	1
53	11-310-27-1	Boot	- LH De-icer (Goodrich) (652118-2)						all	1
54	11-310-27-2	Boot	- RH De-icer (Goodrich) (652118-3)						all	1
55	11-310-28-1	Boot	- LH De-icer (Goodrich) (652118-4)						all	1
56	11-310-28-2	Boot	- RH De-icer (Goodrich) (652118-5)						all	1
57	259905L	Clamp	- Supercharger inlet de-icer boot						all	1
58	259905R	Clamp	- Supercharger inlet de-icer boot						all	1
59	263600-13	Hose	- De-icer boots						all	2
60	263600-14	Hose	- De-icer boots						all	2
61	263600-4	Hose	- De-icer boots						all	3
62	263600-5	Hose	- De-icer boots						all	2
	251000L	Wing Assembly - Inner section (See figure 2 for using assembly)							all	Ref
	251000R	Wing Assembly - Inner section (See figure 2 for using assembly)							all	Ref
	265799-2L	Installation	- Wing de-icer boot fastener						all	1
	265799-2R	Installation	- Wing de-icer boot fastener						all	1
	256101	Nut	- Wing station 396 de-icer boot attaching plate						all	8
	286525	Screw	- De-icer boot attaching special						a	28
	288342	Screw	- De-icer boot attaching special						b	28
	284463L	Installation	- Wing station 379-400 rear shear beam de-icer piping (NP) (See figure 2 for using assembly)						all	Ref
	284463R	Installation	- Wing station 379-400 rear shear beam de-icer piping (NP) (See figure 2 for using assembly) (Effective all serials per optional Service Bulletin 49/SB-5)						all	Ref
63	280230-99	Tube	- De-icer						all	2
64	256635-52	Tube	- De-icer						all	2
	SK420C	Fitting	- "Y" (Goodrich)						all	1
	SK403C	Fitting	- "Y" (Goodrich)						all	1
65	280230-122	Tube Assembly	- De-icer port number 2						all	1
66	280230-124	Tube Assembly	- De-icer port number 2 (LH only)						all	1
67	280230-316	Tube Assembly	- De-icer port number 2 (RH only)						all	1
68	280230-126	Tube Assembly	- De-icer port number 2 (LH only)						all	1
69	280230-128	Tube Assembly	- De-icer port number 2 (RH only)						all	1
70	280230-300	Tube Assembly	- De-icer port number 2 (LH only)						all	1
71	280230-302	Tube Assembly	- De-icer port number 2 (RH only)						all	1
72	280230-130	Tube Assembly	- De-icer port number 2 (LH only)						all	1
73	280230-132	Tube Assembly	- De-icer port number 2 (RH only)						all	1
74	280230-304	Tube Assembly	- De-icer port number 2 (LH only)						all	1
75	280230-306	Tube Assembly	- De-icer port number 2 (RH only)						all	1
76	280230-134	Tube Assembly	- De-icer port number 2 (LH only)						all	1
77	280230-136	Tube Assembly	- De-icer port number 2 (RH only)						all	1
78	280230-100	Tube Assembly	- De-icer port number 1 (LH only)						all	1
79	280230-102	Tube Assembly	- De-icer port number 1 (RH only)						all	1
80	280230-104	Tube Assembly	- De-icer port number 1						all	1
81	280230-106	Tube Assembly	- De-icer port number 1 (LH only)						all	1
82	280230-108	Tube Assembly	- De-icer port number 1 (RH only)						all	1
83	280230-308	Tube Assembly	- De-icer port number 1 (LH only)						all	1
84	280230-310	Tube Assembly	- De-icer port number 1 (RH only)						all	1

(Continued on next page.)

## GROUP . . . De-icing System

*Constellation*

## Detail Unit . . . De-icing System Complete (Continued)

FIGURE & INDEX NUMBER	PART NUMBER	NOMENCLATURE						SERIAL CODE	UNITS PER ASSY.
		1	2	3	4	5	6		
168 - 85	280230-110	Tube Assembly	- De-icer port number 1 (LH only) . . .					all	1
86	280230-112	Tube Assembly	- De-icer port number 1 (RH only) . . .					all	1
87	280230-296	Tube Assembly	- De-icer port number 1 (LH only) . . .					all	1
88	280230-298	Tube Assembly	- De-icer port number 1 (RH only) . . .					all	1
89	280230-114	Tube Assembly	- De-icer port number 1 (LH only) . . .					all	1
90	280230-116	Tube Assembly	- De-icer port number 1 (RH only) . . .					all	1
	267177	Installation - Left wing front beam piping (NP)	(See figure 2 for using assembly) . . .					all	Ref
91	280230-118	Tube Assembly	- De-icer port number 1 . . .					all	1
92	256635-125	Tube Assembly	- De-icer port number 1 . . .					all	1
93	256635-99	Tube Assembly	- De-icer port number 1 . . .					all	1
94	256635-416	Tube Assembly	- De-icer port number 1 . . .					all	1
95	256635-407	Tube Assembly	- De-icer port number 1 . . .					all	1
96	256635-84	Tube Assembly	- De-icer port number 1 . . .					all	1
97	280230-138	Tube Assembly	- De-icer port number 2 . . .					all	1
98	256635-409	Tube Assembly	- De-icer port number 2 . . .					all	1
99	256635-98	Tube Assembly	- De-icer port number 2 . . .					all	1
100	256635-415	Tube Assembly	- De-icer port number 2 . . .					all	1
101	256635-307	Tube Assembly	- De-icer port number 2 . . .					all	1
102	256635-305	Tube Assembly	- De-icer port number 2 . . .					all	1
	SK405C	Fitting - "T" (Goodrich) . . .						all	1
103	280230-211	Tube Assembly	- De-icer port number 2 . . .					all	1
104	256635-110	Tube Assembly	- De-icer port number 3 . . .					all	1
105	256635-414	Tube Assembly	- De-icer port number 3 . . .					all	1
106	256635-306	Tube Assembly	- De-icer port number 3 . . .					all	1
	SK404C	Fitting - "T" (Goodrich) . . .						all	1
107	280230-210	Tube Assembly	- De-icer port number 3 . . .					all	1
108	256635-304	Tube Assembly	- De-icer port number 3 . . .					all	1
109	256635-52	Tube - De-icer port number 4 . . .						all	2
110	256635-109	Tube - De-icer port number 4 . . .						all	1
111	256635-413	Tube - De-icer port number 4 . . .						all	1
112	256635-406	Tube - De-icer port number 4 . . .						all	1
113	256635-85	Tube - De-icer port number 4 . . .						all	1
	281028	Installation - Fuselage stub wing piping (NP) (See figure 1 for using assembly) . . .						all	Ref
114	256635-196	Tube Assembly	- De-icer port number 1 . . .					all	1
115	256635-191	Tube Assembly	- De-icer port number 1 . . .					all	1
116	256635-194	Tube Assembly	- De-icer port number 2 . . .					all	1
117	256635-190	Tube Assembly	- De-icer port number 2 . . .					all	1
118	256635-193	Tube Assembly	- De-icer port number 3 . . .					all	1
119	256635-189	Tube Assembly	- De-icer port number 3 . . .					all	1
120	256635-195	Tube Assembly	- De-icer port number 4 . . .					all	1
121	256635-188	Tube Assembly	- De-icer port number 4 . . .					all	1
	261282	Installation - Right wing stub piping (NP) (See figure 1 for using assembly) . . .						all	Ref
122	256635-174	Tube Assembly	- De-icer port number 1 . . .					all	1
123	256635-175	Tube Assembly	- De-icer port number 2 . . .					all	1
124	256635-176	Tube Assembly	- De-icer port number 3 . . .					all	1
125	256635-177	Tube Assembly	- De-icer port number 4 . . .					all	1
126	256635-53	Tube Assembly	- Empennage de-icer port number 4 . . .					all	1
127	256635-54	Tube Assembly	- Empennage de-icer port number 5 . . .					all	1
	267178	Installation - Right wing front beam piping (NP) (See figure 2 for using assembly) . . .						all	Ref
128	263429	Valve Assembly - De-icer distributor . . .						all	1
	807-2	Valve - De-icer distributor (Eclipse) (652043) . . .	(See figure 169 for detailed illustration)					all	2
	260209	Plug - De-icer valve . . .						all	1
	0364	Resistor (Ohmite) . . .						all	1
	266712	Adapter - De-icer distributor valve . . .						all	6
	266711	Adapter - De-icer distributor valve . . .						all	2
	260208	Adapter - De-icer distributor valve . . .						all	1
	290996	Bracket Assembly - De-icer distributor valve						all	1
	263560	Bracket Assembly - De-icer distributor valve support . . .						all	1
129	256635-181	Tube Assembly	- De-icer port number 1 . . .					all	1
130	256635-369	Tube Assembly	- De-icer port number 1 . . .					all	1
131	256635-373	Tube Assembly	- De-icer port number 1 . . .					all	1
132	256635-138	Tube Assembly	- De-icer port number 1 . . .					all	1
133	256635-140	Tube Assembly	- De-icer port number 1 . . .					all	1
134	280230-120	Tube Assembly	- De-icer port number 1 . . .					all	1
135	256635-257	Tube Assembly	- De-icer port number 2 . . .					all	1
	SK405C	Fitting - "T" (Goodrich) . . .						all	1
136	280230-212	Tube Assembly	- De-icer port number 2 . . .					all	1
137	256635-254	Tube Assembly	- De-icer port number 2 . . .					all	1
138	256635-372	Tube Assembly	- De-icer port number 2 . . .					all	1
139	256635-137	Tube Assembly	- De-icer port number 2 . . .					all	1
140	256635-139	Tube Assembly	- De-icer port number 2 . . .					all	1
141	280230-140	Tube Assembly	- De-icer port number 2 . . .					all	1
142	256635-256	Tube Assembly	- De-icer port number 3 . . .					all	1
	SK404	Fitting - "T" (Goodrich) . . .						all	1
143	128230-213	Tube Assembly	- De-icer port number 3 . . .					all	1
144	256635-253	Tube Assembly	- De-icer port number 3 . . .					all	1
145	256635-371	Tube Assembly	- De-icer port number 3 . . .					all	1
146	256635-28	Tube Assembly	- De-icer port number 3 . . .					all	1
147	256635-52	Tube - De-icer port number 3 . . .						all	2
148	256635-178	Tube Assembly	- De-icer port number 4 . . .					all	1
149	256635-368	Tube Assembly	- De-icer port number 4 . . .					all	1
150	256635-370	Tube Assembly	- De-icer port number 4 . . .					all	1
151	256635-27	Tube Assembly	- De-icer port number 4 . . .					all	1
	272203	Installation - Station 527.6-676.8 fuselage piping (NP) (See figure 1 for using assembly)						all	Ref
152	256635-55	Tube Assembly	- Empennage de-icer port number 4 . . .					all	1
153	256635-333	Tube Assembly	- Empennage de-icer port number 4 . . .					all	1
154	256635-334	Tube Assembly	- Empennage de-icer port number 4 . . .					all	1
155	256635-360	Tube Assembly	- Empennage de-icer port number 4 . . .					all	1
156	256635-64	Tube Assembly	- Empennage de-icer port number 4 . . .					all	1
157	256635-56	Tube Assembly	- Empennage de-icer port number 5 . . .					all	1
158	256635-332	Tube Assembly	- Empennage de-icer port number 5 . . .					all	1
159	256635-335	Tube Assembly	- Empennage de-icer port number 5 . . .					all	1
160	256635-329	Tube Assembly	- Empennage de-icer port number 5 . . .					all	1
161	256635-66	Tube Assembly	- Empennage de-icer port number 5 . . .					all	1
	270209	Installation - Station 676.8-1033 fuselage piping (NP) (See figure 1 for using assembly)						all	Ref
162	256635-29	Tube Assembly	- Empennage de-icer port number 4 . . .					all	1
163	256635-393	Tube Assembly	- Empennage de-icer port number 4 . . .					all	1

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## GROUP . . . De-icing System

## Detail Unit . . . De-icing System Complete (Continued)

*Constellation*

DE-ICING

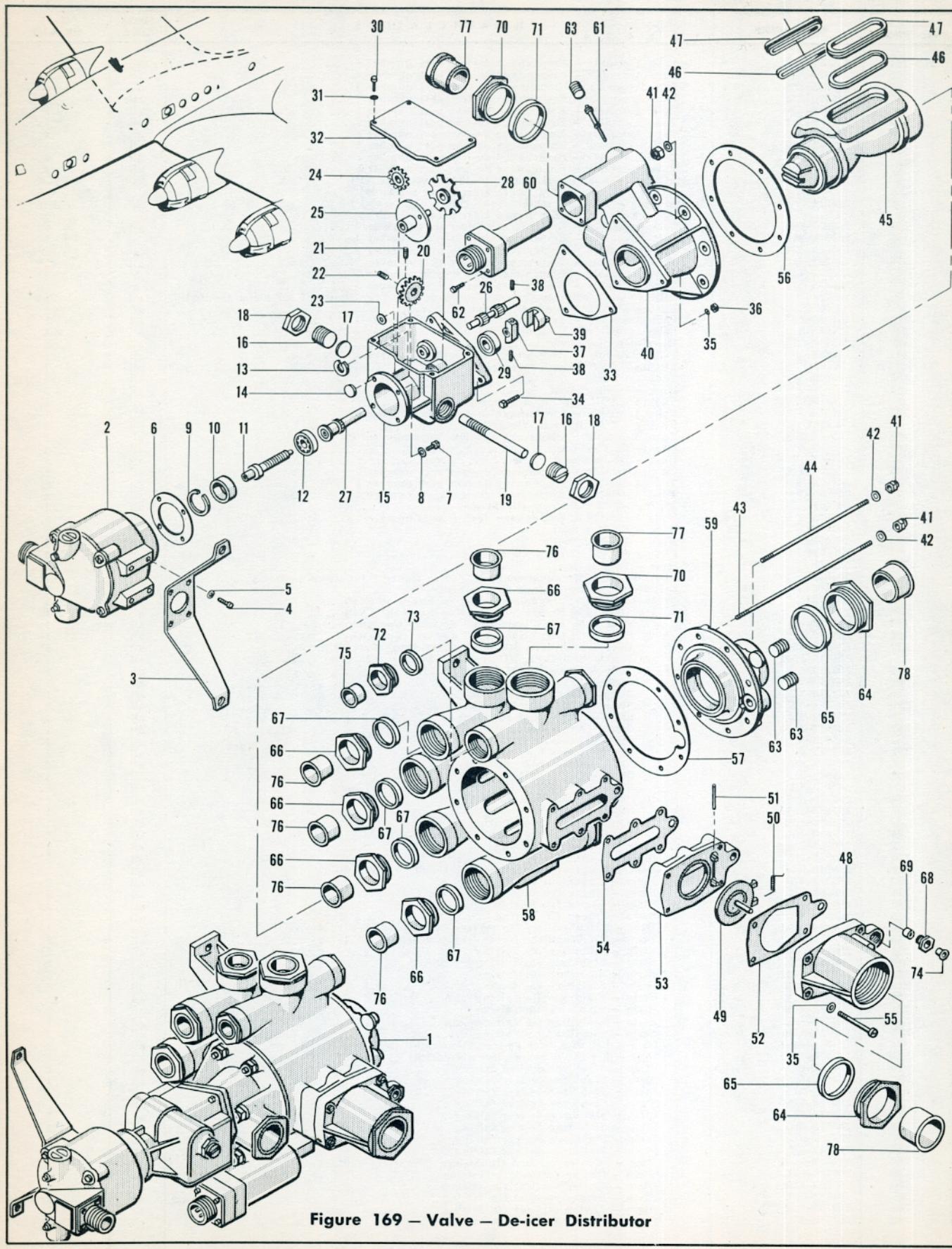
FIGURE & INDEX NUMBER	PART NUMBER		N O M E N C L A T U R E						SERIAL CODE	UNITS PER ASSY.
			1	2	3	4	5	6		
168-164	256635-390		Tube Assembly	+	Empennage de-icer port number 4				all	1
165	256635-388		Tube Assembly	+	Empennage de-icer port number 4				all	1
166	256635-386		Tube Assembly	+	Empennage de-icer port number 4				all	1
167	256635-384		Tube Assembly	+	Empennage de-icer port number 4				all	1
168	256635-45		Tube Assembly	+	Empennage de-icer port number 5				all	1
169	256635-392		Tube Assembly	+	Empennage de-icer port number 5				all	1
170	256635-391		Tube Assembly	+	Empennage de-icer port number 5				all	1
171	256635-389		Tube Assembly	+	Empennage de-icer port number 5				all	1
172	256635-387		Tube Assembly	+	Empennage de-icer port number 5				all	1
173	256635-385		Tube Assembly	+	Empennage de-icer port number 5				all	1
	261214		Installation - Fuse		lage station 1037-1210.7 piping (NP)				a	Ref
	285012		Installation - Fuse		lage station 1037-1210.7 piping (NP)				b	Ref
174	256635-420		Tube Assembly	+	Empennage de-icer port number 4				all	1
175	280230-262		Tube Assembly	+	Empennage de-icer port number 4				b	1
	256635-421		Tube Assembly	+	Empennage de-icer port number 4				a	1
176	256635-422		Tube Assembly	+	Empennage de-icer port number 5				all	1
177	280230-264		Tube Assembly	+	Empennage de-icer port number 5				b	1
	256635-423		Tube Assembly	+	Empennage de-icer port number 5				a	1
	260294		Installation - Empennage de-icer plumbing (NP) (See figure 87 for using assembly)						all	Ref
	SK402C		Fitting - "W"		Branch (Goodrich)				all	
178	256635-50		Tube Assembly	+	Empennage de-icer port number 4				all	1
179	256635-3		Tube Assembly	+	Empennage de-icer port number 4				all	1
180	263600-7		Hose - De-icer	boot					all	2
181	256635-4		Tube Assembly	+	Empennage de-icer port number 4				all	1
	SK403C		Fitting - "Y"		Branch (Goodrich)				all	1
182	256635-52		Tube - De-icer						all	20
183	263600-9		Hose - De-icer	boot					all	2
	SK419C		Fitting - "Y"		Branch (Goodrich)				all	1
184	256635-51		Tube Assembly	+	Empennage de-icer port number 5				all	1
	SK420C		Fitting - "Y"		Branch (Goodrich)				all	2
185	256635-2		Tube Assembly	+	Empennage de-icer port number 5				all	1
186	263600-6		Hose - De-icer	boot					all	2
187	263600-12		Hose - De-icer	boot					all	2
	280230-216		Tube Assembly	+	Empennage de-icer port number 5				all	2
189	256635-6		Tube Assembly	+	Empennage de-icer port number 5				all	2
190	256635-7		Tube Assembly	+	Empennage de-icer port number 5				all	2
	SK400C		Fitting - "W"		Branch (Goodrich)				all	4
191	256635-8		Tube Assembly	+	Empennage de-icer port number 5				all	2
192	263600-10		Hose - De-icer	boot					all	4
193	263600-11		Hose - De-icer	boot					all	4
	SK401C		Fitting - "W"		Branch (Goodrich)				all	2
194	263600-8		Hose - De-icer	boot					all	4
	281032		Installation - De-icer equipment (NP) (See figure 1 for using assembly)						all	Ref
	260752		Installation - Empennage de-icer boots (NP)						all	1
	263973L		Installation - Empennage cross de-icer boot (NP)						all	1
	263973R		Installation - Empennage cross de-icer boot (NP)						all	1
195	263973-2L		Hose - $\frac{1}{2}$ I.D., "Non-kink" de-icer	(Goodrich)					all	1
196	263973-2R		Hose - $\frac{1}{2}$ I.D., "Non-kink" de-icer	(Goodrich)					all	1
197	11-310-32-1		Boot - Stabilizer, LH cross	(Goodrich) (652119L)					all	1
	11-310-32-2		Boot - Stabilizer, RH cross	(Goodrich) (652119R)					all	1
198	263973-6		Strip - Cross boot fairing						all	1
199	263973-7L		Strip - Cross boot fairing						all	1
	263973-7R		Strip - Cross boot fairing						all	1
200	263973-9L		Strip - Cross boot fairing						all	1
	263973-9R		Strip - Cross boot fairing						all	1
201	263973-3L		Strip - Cross boot fairing						all	1
	263973-3R		Strip - Cross boot fairing						all	1
202	263973-4L		Strip - Cross boot fairing						all	1
	263973-4R		Strip - Cross boot fairing						all	1
203	263973-6L		Strip - Cross boot fairing						all	1
	263973-8R		Strip - Cross boot fairing						all	1
204	263973-5		Strip - Cross boot fairing						all	1
205	263973-10L		Strip - Cross boot fairing						all	1
	263973-10R		Strip - Cross boot fairing						all	1
206	11-310-35-1		Boot - Outer lower vertical fin	(Goodrich) (652116-3)					all	2
207	260782-2L		Strip - Lower fin fairing						all	2
208	260782-2R		Strip - Lower fin fairing						all	2
209	11-310-34-1		Boot - Outer upper vertical fin	(Goodrich) (652116-2)					all	2
210	260782-3L		Strip - Upper fin fairing						all	2
211	260782-3R		Strip - Upper fin fairing						all	2
212	260782-4L		Strip - Upper fin fairing						all	2
213	260782-4R		Strip - Upper fin fairing						all	2
214	11-310-33-1		Boot - LH Stabilizer tip de-icer	(Goodrich) (652117-4)					all	1
215	11-310-33-2		Boot - RH Stabilizer tip de-icer	(Goodrich) (652117-5)					all	1
216	260782-5L		Strip - Stabilizer tip fairing						all	2
217	260782-5R		Strip - Stabilizer tip fairing						all	2
218	260782-10L		Strip - Stabilizer tip fairing						all	1
219	260782-10R		Strip - Stabilizer tip fairing						all	1
220	260782-11L		Strip - Stabilizer tip fairing						all	1
221	260782-11R		Strip - Stabilizer tip fairing						all	1
222	260782-12L		Strip - Stabilizer tip fairing						all	1
223	260782-12R		Strip - Stabilizer tip fairing						all	1
224	12-310-31-1		Boot - LH Stabilizer de-icer	(Goodrich) (652117-2)					all	1
225	12-310-31-2		Boot - RH Stabilizer de-icer	(Goodrich) (652117-3)					all	1
226	260782-6L		Strip - Stabilizer de-icer fairing						all	2
227	260782-6R		Strip - Stabilizer de-icer fairing						all	2
228	260782-7L		Strip - Stabilizer de-icer fairing						all	2
229	260782-7R		Strip - Stabilizer de-icer fairing						all	2
230	260782-8L		Strip - Stabilizer de-icer fairing						all	1
231	260782-8R		Strip - Stabilizer de-icer fairing						all	1
232	260782-9L		Strip - Stabilizer de-icer fairing						all	1
233	260782-9R		Strip - Stabilizer de-icer fairing						all	1
234	11-310-36-1		Boot - Center vertical fin de-icer	(Goodrich) (652116-4)					all	1
235	260782-13L		Strip - Center vertical fin fairing						all	1
236	260782-13R		Strip - Center vertical fin fairing						all	1
237	260782-14L		Strip - Center vertical fin fairing						all	1
238	260782-14R		Strip - Center vertical fin fairing						all	1
239	260782-15		Strip - Center vertical fin fairing						all	1

Reissued July, 1947

GROUP . . . De-icing System Units  
Detail Unit . . . Valve—De-icer Distributor

Constellation

DE-ICING



## GROUP . . . De-icing System Units

## Detail Unit . . . Valve—De-icer Distributor

*Constellation*

DE-ICING

FIGURE & INDEX NUMBER	PART NUMBER		NOMENCLATURE						SERIAL CODE	UNITS PER ASSY.
			1	2	3	4	5	6		
169 - 1	807-2	Valve - De-icer distributor (Eclipse Aviation Corp.) . . . . .							all	Ref
2	99804-1	(See figure 168 for using assembly) (652043)							all	1
	109962	Motor Assembly							all	1
3	99806	Brush Assembly							all	1
4	88192	Bracket							all	4
5	7525	Screw							all	4
6	88189	Washer							all	1
7	88190	Gasket							all	4
8	18357	Screw							all	4
	88159	Washer							all	4
	88182	Box Assembly - Gear							all	1
9	88181	Ring - Lock							all	1
10	88177	Spacer							all	1
11	20504-23	Worm Assembly - Shaft drive							all	1
12	88180	Bearing - Ball							all	1
13	88174	Ring - Lock							all	1
14	88174	Plug - Expansion							all	1
15	88160	Housing Assembly - Gear							all	1
16	72467	Screw							all	1
17	72466	Washer							all	2
18	72468	Nut							all	2
19	88175	Shaft - Cross worm							all	1
20	88176	Gear - Wheel worm							all	1
21	37563	Screw - Set							all	1
22	46373	Screw - Set							all	1
23	88173	Washer							all	1
24	88172	Gear - Worm spline							all	1
25	88124	Cam Assembly							all	1
26	88169	Shaft - Counter							all	1
27	88166	Shaft							all	1
28	88168	Wheel - Star							all	1
29	88183	Seal + Oil							all	1
30	101736	Screw							all	4
31	25103	Washer							all	4
32	88185	Cover - Gear box							all	1
33	88187	Gasket							all	1
34	51570	Screw							all	3
35	19128	Washer							all	6
36	45501-6	Nut - Elastic stop							all	3
37	94263	Coupling							all	1
38	94264	Screw							all	2
39	88186	Coupling							all	1
40	88125	Housing - Drive end							all	1
41	45501-1	Nut - Stop							all	16
42	88328	Washer							all	16
43	88144	Bolt							all	2
44	88143	Bolt							all	6
45	88119	Rotor - Valve							all	1
46	94262	Gasket							all	2
47	94261	Seal - Valve port							all	1
48	106506	Housing - Check valve							all	2
49	100320	Flapper							all	1
50	100318	Spring							all	1
51	97112-3	Pin + Flapper hinge							all	1
52	106508	Gasket							all	1
53	106507	Seat - Check valve							all	1
54	88152	Gasket							all	1
55	106516	Screw							all	4
56	88141	Gasket							all	1
57	88142	Gasket							all	1
58	88114	Housing - Valve							all	1
59	88139	Housing - Intake							all	1
60	88135	Switch Assembly							all	1
	YZ-RL	Switch (Micro)							all	1
	AN9534-16S4P	Receptacle							all	1
61	120613	Rod Assembly - Push							all	1
	120633	Screw							all	4
63	47636	Plug							all	3
64	86935	Nut - Gland							all	2
65	86936	Seal - Port							all	2
66	107313-7	Nut - Gland							all	9
67	88116	Seal - Port							all	9
68	106513	Nut - Gland							all	1
69	106512	Seal - Port							all	2
70	88133	Nut - Gland							all	2
71	88132	Seal - Port							all	2
72	88345	Nut - Gland							all	2
73	88346	Seal - Port							all	2
74	107217-3	Plug (Storing and shipping)							all	1
75	107217-5	Plug (Storing and shipping)							all	2
76	107217-7	Plug (Storing and shipping)							all	9
77	107217-8	Plug (Storing and shipping)							all	2
78	107217-9	Plug (Storing and shipping)							all	2

Reissued July, 1947

Notes

*Constellation*

GROUP . . . Anti-icing System

Detail Unit . . . Anti-icing System Complete

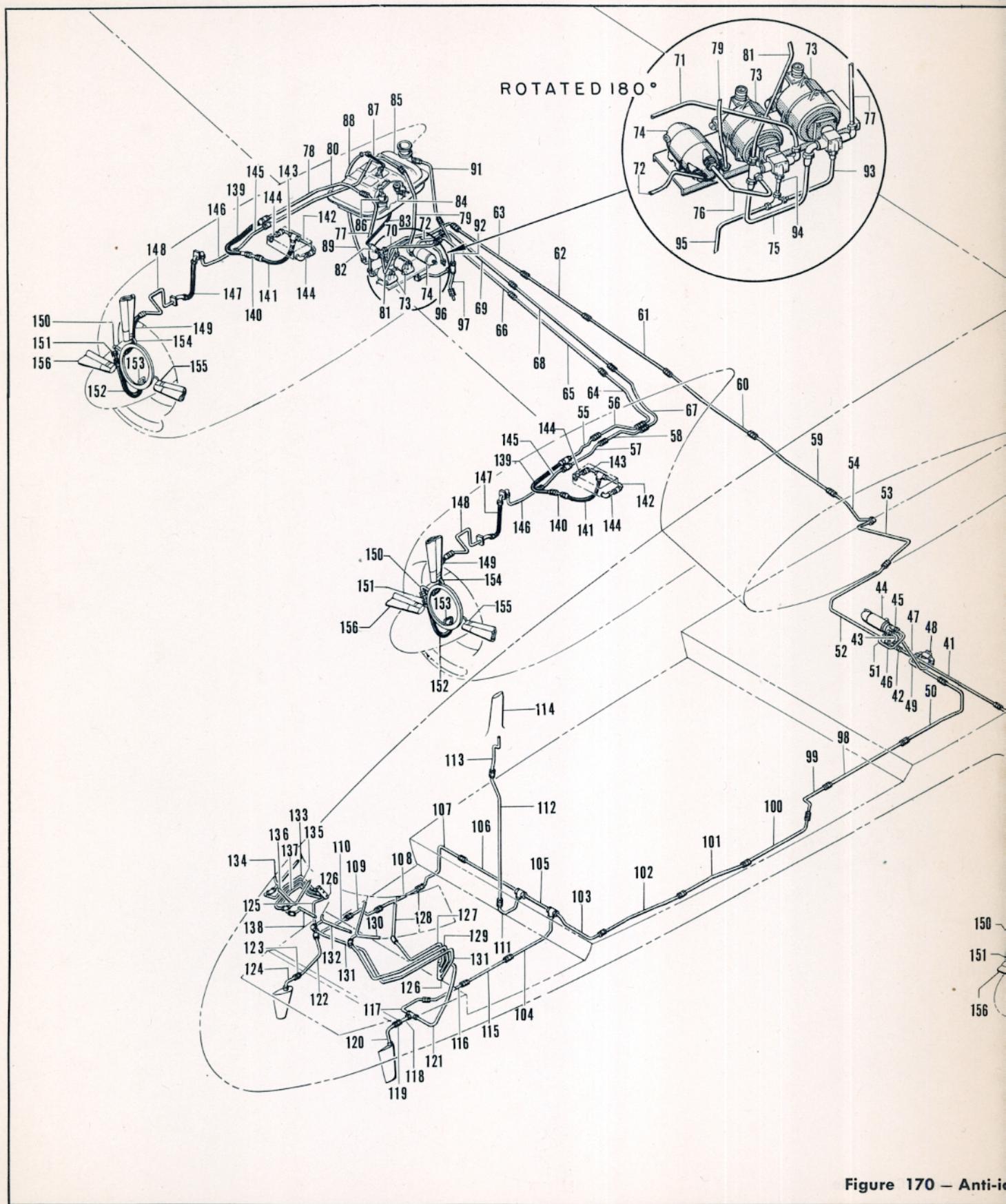
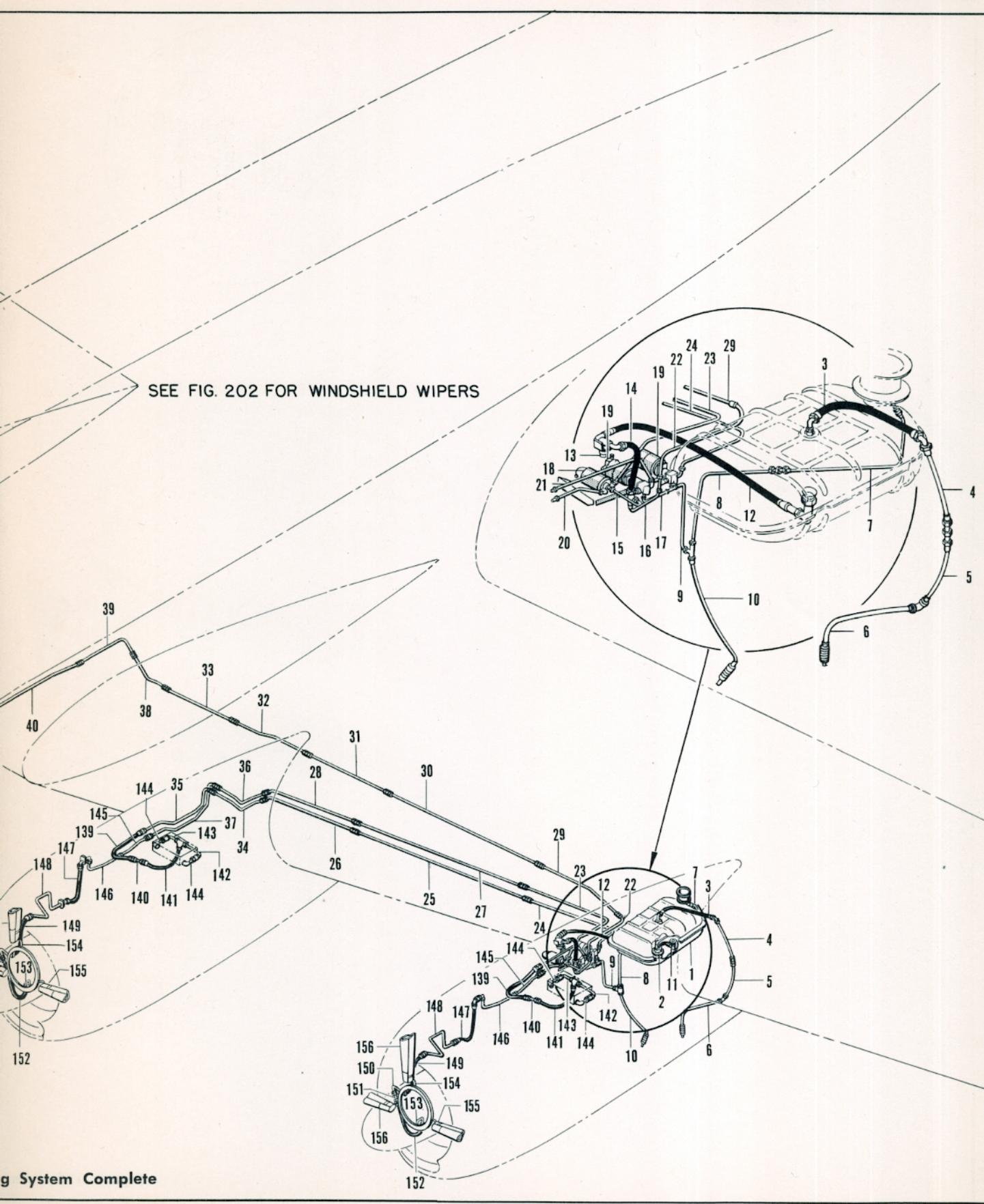


Figure 170 – Anti-ic...

# Constellation



g System Complete

## GROUP . . . Anti-Icing System

## Detail Unit . . . Anti-Icing System Complete

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER		N O M E N C L A T U R E						SERIAL CODE	UNITS PER ASSY.
			1	2	3	4	5	6		
	269400	Installation - Left	outboard engine nacelle piping (N.P.) (See figure 2 for using assembly)						all	Ref
170 - 1	*296424	Tank Assembly	- Anti-icing fluid						all	1
2	EA15B628026	Transmitter	- Fluid quantity (Liquidometer) (628026)						all	1
	*296465	Cradle Assembly	- Anti-icing fluid tank						all	1
	*296467	Rod - Anti-icing fluid tank							all	4
3	290879-	Cap Assembly	- Anti-icing fluid tank						all	1
4	*318-6W22	Hose Assembly	+ Vent line						all	1
5	*295544-4	Tube Assembly	+ Vent line						all	1
6	*295544-3	Tube Assembly	+ Vent line						all	1
	*295544-2	Tube Assembly	+ Vent line						all	1
7	263064	Drain Stub + Vent line							all	1
8	256635-496	Tube Assembly	- Fillerwell drain						all	1
9	256635-497	Tube Assembly	- Fillerwell drain						uu	1
10	280230-184	Tube Assembly	- Fillerwell drain						tt	1
11	256635-472	Tube Assembly	- Pump drain						uu	1
12	256635-495	Tube Assembly	- Pump & fillerwell drain						uu	1
13	255716-3	Stub Tube - Pump & fillerwell drain							uu	1
	717CT6D (Lube 1)	Valve - Plug (Parker) (652044)							all	1
	318-6W29½	Hose Assembly - Tank to filter							all	1
	261708	Spacer - Filter							all	1
	*8200	Filter Assembly (Adel) (652042)							all	1
	B210-1	Cap + Filter							all	1
	18208	Bowl - Filter							all	1
	A8207	Filter							all	1
	S304B1.00-312.050	Washer							all	1
	A8209	Bolt							all	1
	5301D2028-1721-031	Seal - Filter							all	1
	AN3-6A	Bolt							all	1
	AN365-1032	Nut + Self-locking							all	1
14	*318-6W8	Hose Assembly - Filter to tee							uu	1
	*291472-60	Tube Assembly	- Filter to tee						tt	1
	*295534	Tee - Outlet							uu	1
	*6-6-4JT-SS	Tee - Outlet							tt	1
15	*295544-9	Tube Assembly	+ Tee to propeller pump						uu	1
	*291472-61	Tube Assembly	- Tee to propeller pump						tt	1
16	*295544-21	Tube Assembly	+ Tee to carburetor pump						uu	1
	*291472-62	Tube Assembly	- Tee to tee						tt	1
	*291472-63	Tube Assembly	+ Tee to carburetor pump						tt	1
17	256635-79	Tube Assembly	- Pump drain						uu	1
18	8818-2	Pump - Propeller supply (Adel) (652125)							all	1
	8804-2	Housing							all	1
	8872	Pin							all	1
	8871	Cartridge Assembly							all	1
	8841	Spring							all	1
	8840	Coupling							all	1
	8801-2	Motor Assembly							all	1
	8812	Coil Assembly							all	1
	8806-3	Armature							all	1
	8829	Nut							all	1
	8805	End Ball - Motor							all	1
	7845	Bearing							all	1
	8813	Brush Assembly							all	2
	8815	Brush Holder							all	2
	8814	Brush Plug							all	2
	7831	Screw - Set							all	2
	8392	Sleeve							all	1
19	*141001-010-02	Pump - Carburetor supply (Pesco) (652151)							uu	2
	220003-010-01	Motor							uu	1
	EE621	Armature Assembly							uu	1
	EE527	Bearing (Fafnir S1DD7)							uu	1
	EE528	Bearing (Fafnir 34DD)							uu	1
	EE876	Field Assembly							uu	1
	EE682	Brush Assembly							uu	2
	EE517	Cap - Brush							uu	1
	14-3	Seal							uu	1
	14-4	Gasket							uu	1
	14-5	Seal Ring							uu	1
	14-6	Gear - Driven							uu	1
	114-22	Gear Assembly - Drive							uu	1
	101-4	Pump - Carburetor supply (Pesco) (652126)							tt	1
20	280230-274	Tube Assembly	+ Propeller pump to firewall						uu	1
	280230-174	Tube Assembly	+ Propeller pump to firewall						tt	1
21	256635-494	Tube Assembly	- Carburetor pump to firewall						uu	1
	280230-178	Tube Assembly	- Carburetor pump to firewall						tt	1
22	*295544-10	Tube Assembly	- Windshield supply						uu	1
	*291472-64	Tube Assembly	- Windshield supply						tt	1
23	280230-272	Tube Assembly	+ Inboard propeller supply						uu	1
	280230-172	Tube Assembly	+ Inboard propeller supply						tt	1

(Continued on next page.)

## GROUP . . . Anti-Icing System

## Detail Unit . . . Anti-Icing System Complete (Continued)

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6	N O M E N C L A T U R E	SERIAL CODE	U N I T S P E R A S S Y.
					Ref
	267177		Installation - Front beam piping, LH (N.P.) (See figure 2 for using assembly)	all	Ref
170 - 24	256635-231		Tube Assembly - Inboard carburetor supply	uu	1
	280230-168		Tube Assembly - Inboard carburetor supply	tt	1
25	256635-230		Tube Assembly - Inboard carburetor supply	all	1
26	256635-418		Tube Assembly - Inboard carburetor supply	all	1
27	256635-96		Tube Assembly - Inboard propeller supply	all	1
28	256635-419		Tube Assembly - Inboard propeller supply	all	1
29	256635-330		Tube Assembly - Windshield supply	all	1
30	256635-97		Tube Assembly - Windshield supply	all	1
31	256635-417		Tube Assembly - Windshield supply	all	1
32	256635-408		Tube Assembly - Windshield supply	all	1
33	256635-405		Tube Assembly - Windshield supply	all	1
	281027		Installation - Inboard nacelle piping, LH (N.P.) (See figure 2 for using assembly)	all	Ref
34	256635-348		Tube Assembly - Inboard carburetor supply	all	1
35	256635-382		Tube Assembly - Inboard carburetor supply	all	1
36	256635-350		Tube Assembly - Inboard propeller supply	all	1
37	256635-383		Tube Assembly - Inboard propeller supply	all	1
	281028		Installation - Fuselage wing stub piping (N.P.) (See figure 1 for using assembly)	all	Ref
38	256635-242		Tube Assembly - Windshield supply	all	1
39	280230-154		Tube Assembly - Windshield supply	all	1
40	256635-240		Tube Assembly - Windshield supply	all	1
41	*280230-192		Tube Assembly - Windshield supply	all	1
42	525LGT4D		Valve - Swing check (Parker) (644064)	all	1
43	*280230-188		Tube Assembly - Windshield supply	all	1
44	8817-4		Pump - Windshield supply (Adel) (633330)	all	1
	8834-5		Housing	all	1
	8971		Gasket	all	1
	8992		Pin	all	1
	8962		Cartridge Assembly	all	1
	8841		Spring	all	1
	8840		Coupling	all	1
	8801-3		Motor Assembly	all	1
	8812		Coil Assembly	all	1
	8806-2		Armature	all	1
	8829		Nut	all	1
	8805		End Ball - Motor	all	1
	7845		Bearing	all	1
	8813		Brush Assembly	all	2
	8815		Brush Holder	all	2
	8814		Brush Plug	all	2
	7831		Screw - Set	all	2
	8392		Sleeve	all	1
45	A8182-3 (Special)		Valve - Relief (Adel) (652077)	all	1
46	289018-2		Tube Assembly - Relief valve return	all	1
47	*280230-160		Tube Assembly - Windshield supply	mm	1
	280230-342		Tube Assembly - Windshield supply	nn	1
48	8200		Filter Assembly (Adel) (652042) (See index No. 13 for components)	all	1
49	*280230-162		Tube Assembly - Windshield supply	mm	1
	280230-342		Tube Assembly - Windshield supply	nn	1
50	256635-491		Tube Assembly - Windshield supply	all	1
51	525GG14D		Valve - Swing check (Parker) (652076)	all	1
52	289018-3		Tube Assembly - Windshield supply	all	1
53	280230-4		Tube Assembly - Windshield supply	all	1
	261282		Installation - RH Stub wing piping (N.P.) (See figure 1 for using assembly)	all	Ref
54	256635-236		Tube Assembly - Windshield supply	all	1
	281029		Installation - Inboard nacelle piping, LH (N.P.) (See figure 2 for using assembly)	all	Ref
55	256635-429		Tube Assembly - Carburetor supply	all	1
56	256635-430		Tube Assembly - Carburetor supply	all	1
57	256635-427		Tube Assembly - Propeller supply	all	1
58	256635-428		Tube Assembly - Propeller supply	all	1
	267178		Installation - Front beam piping, RH (N.P.) (See figure 2 for using assembly)	all	Ref
59	256635-378		Tube Assembly - Windshield supply	all	1
60	256635-379		Tube Assembly - Windshield supply	all	1
61	256635-376		Tube Assembly - Windshield supply	all	1
62	256635-97		Tube Assembly - Windshield supply	all	1
63	*295544-20		Tube Assembly - Windshield supply	uu	1
	*291472-68		Tube Assembly - Windshield supply	tt	1
64	256635-227		Tube Assembly - Inboard carburetor supply	all	1
65	256635-224		Tube Assembly - Inboard carburetor supply	all	1
66	256635-377		Tube Assembly - Inboard carburetor supply	all	1
67	256635-146		Tube Assembly - Inboard propeller supply	all	1
68	256635-96		Tube Assembly - Inboard propeller supply	all	1
69	256635-375		Tube Assembly - Inboard propeller supply	all	1

(Continued on next page.)

## GROUP . . . Anti-Icing System

## Detail Unit . . . Anti-Icing System Complete (Continued)

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER		N O M E N C L A T U R E						SERIAL CODE	UNITS PER ASSY.
			1	2	3	4	5	6		
	261213	Installation - Right	outboard engine nacelle piping (N.P.) (See figure 2 for using assembly)						all	Ref
179 - 70	*295544-12	Tube: Assembly	- Windshield supply						all	1
71	280230-282	Tube: Assembly	- Inboard carburetor supply						uu	1
	280230-218	Tube: Assembly	- Inboard carburetor supply						tt	1
72	280230-278	Tube: Assembly	- Inboard propeller supply						uu	1
	280230-248	Tube: Assembly	- Inboard propeller supply						tt	1
73	141001-010-02	Pump - Carburetor supply (Pesco) (652151) (See index No. 19 for components)							uu	2
	101-4	Pump - Carburetor supply (Pesco) (652126)							tt	1
74	8818-2	Pump - Propeller supply (Adel) (652123) (See index No. 18 for components)							all	1
75	*295544-11	Tube: Assembly	- Tee to carburetor pump						uu	1
	*291472-66	Tube: Assembly	- Tee to carburetor pump						tt	1
	274696	Tee - Outlet							uu	1
	*6-4-6JT-SS	Tee - Outlet							tt	1
76	*295544-13	Tube: Assembly	- Tee to propeller pump						uu	1
	*291472-67	Tube: Assembly	- Tee to propeller pump						tt	1
77	256635-167	Tube: Assembly	- Carburetor pump to union						uu	1
	280230-252	Tube: Assembly	- Carburetor pump to union						tt	1
78	280230-92	Tube: Assembly	- Union to firewall, carburetor supply						d	1
	256635-394	Tube: Assembly	- Union to firewall, carburetor supply						c	1
79	280230-280	Tube: Assembly	- Propeller pump to union						uu	1
	280230-250	Tube: Assembly	- Propeller pump to union						tt	1
80	256635-399	Tube: Assembly	- Union to firewall, propeller supply						all	1
81	*318-6W28	Hose: Assembly	- Filter to tee						uu	1
	*291472-65	Tube: Assembly	- Filter to tee						tt	1
	*295555	Elbow - Filter outlet							all	1
82	*8200	Filter Assembly (Adel) (652042) (See index No. 13 for components)							all	1
83	*318-6W27½	Hose: Assembly	- Tank to filter						all	1
84	717CT6D (Lube 1)	Valve - Plug (Parker) (652044) (Same as index No. 11)							all	1
85	*296424	Tank: Assembly	- Anti-icing fluid (Same as index No. 1)						all	1
86	EA15B628026	Transmitter - Fluid quantity (Liquidometer) (628026) (Same as index No. 2)							all	1
	*296465	Cradle Assembly - Anti-icing fluid tank (Same as LH)							all	1
	*296467	Rod - Anti-icing fluid tank (Same as LH)							all	4
	290879	Cap Assembly - Anti-icing fluid tank (Same as LH)							all	1
87	*3186W22	Hose: Assembly	- Vent line (Same as index No. 3)						all	1
88	*295544-16	Tube: Assembly	- Vent line						all	1
89	*295544-15	Tube: Assembly	- Vent line						all	1
90	*295544-14	Tube: Assembly	- Vent line						all	1
	263064	Drain Stub - Vent line							all	1
91	256635-444	Tube: Assembly	- Fillerwell drain						all	1
92	256635-490	Tube: Assembly	- Fillerwell drain						uu	1
	280230-254	Tube: Assembly	- Fillerwell drain						tt	1
93	256635-486	Tube: Assembly	- Pump drain						uu	1
	*295554	Tee - Pump drain line							uu	1
94	256635-487	Tube: Assembly	- Pump drain						uu	1
95	256635-488	Tube: Assembly	- Pump drain						uu	1
96	256635-489	Tube: Assembly	- Pump drain						uu	1
97	256635-445	Tube: Assembly	- Pump & fillerwell drain						uu	1
	255716-8	Tube: - Drain line stub							all	1
	280927	Installation - LH Piping, stations 278-456 (N.P.) (See figure 1 for using assembly)							all	Ref
98	256635-362	Tube: Assembly	- Windshield supply						all	1
99	256635-458	Tube: Assembly	- Windshield supply						all	1
100	256635-361	Tube: Assembly	- Windshield supply						all	1
101	256635-457	Tube: Assembly	- Windshield supply						all	1
102	256635-456	Tube: Assembly	- Windshield supply						all	1
	272198	Installation - Fuselage piping, stations 260-278 (N.P.) (See figure 1 for using assembly)							all	Ref
103	280230-256	Tube: Assembly	- Windshield supply						d	1
	256635-32	Tube: Assembly	- Windshield supply						c	1
104	280230-260	Tube: Assembly	- Windshield supply						d	1
	256635-351	Tube: Assembly	- Windshield supply						c	1
105	280230-258	Tube: Assembly	- Windshield supply						d	1
	256635-433	Tube: Assembly	- Windshield supply						c	1
106	256635-435	Tube: Assembly	- Windshield supply						all	1
107	256635-352	Tube: Assembly	- Windshield supply						all	1
108	256635-355	Tube: Assembly	- Windshield supply						all	1
109	256635-357	Tube: Assembly	- Windshield supply						all	1
110	256635-358	Tube: Assembly	- Windshield supply						all	1
111	256635-434	Tube: Assembly	- Antenna mast supply						all	1
112	256635-436	Tube: Assembly	- Antenna mast supply						all	1
113	*280230-166	Tube: Assembly	- Antenna mast supply						all	1
114	267704	Installation - Antenna mast, station 260 (N.P.) (See figure 26 for using assembly)							all	Ref
	270223-2	Fitting - Anti-icer duct							all	1
	271172	Gasket - Anti-icer fitting							all	1
	271135	Duct Assembly - Anti-icer							all	1

(Continued on next page.)

## GROUP . . . Anti-Icing System

## Detail Unit . . . Anti-Icing System Complete (Continued)

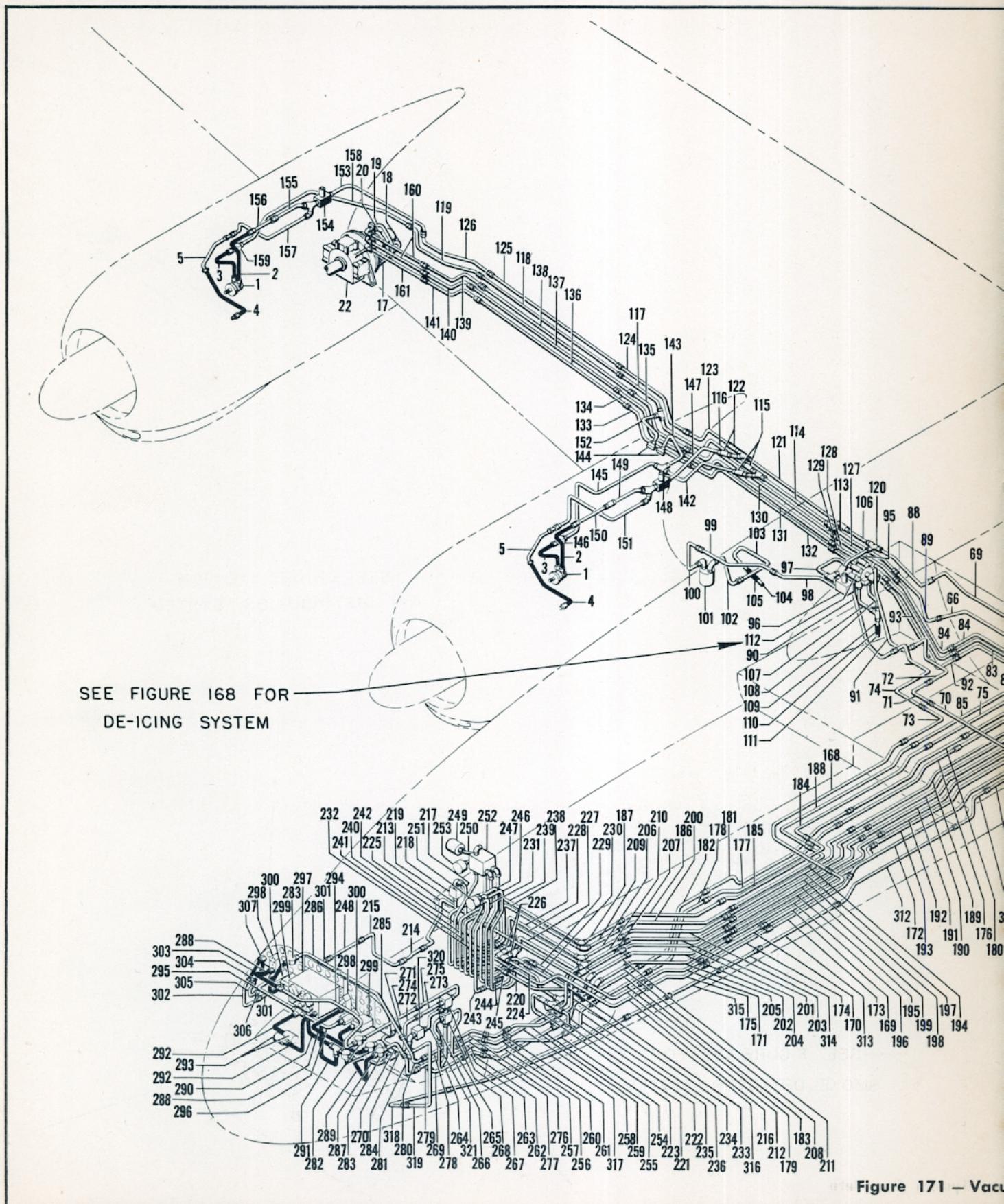
*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER	1    2    3    4    5    6	N O M E N C L A T U R E	SERIAL CODE	U N I T S P E R A S S Y.	
					1	2
	283676		Installation - LH Fuselage piping, stations 212-260 (N.P.) (See figure 1 for using assembly)	all	Ref	
170-115	256635-452		Tube Assembly - Windshield supply	all	1	
116	256635-37		Tube Assembly - Windshield supply	all	1	
	281593		Installation - LH Fuselage piping, stations 150-212 (N.P.) (See figure 1 for using assembly)	ddd	Ref	
	288285		Installation - LH Fuselage piping, stations 150-212 (N.P.) (See figure 1 for using assembly)	ccc	Ref	
	291484		Installation - Flight station anti-icing (Modifies 281593) (See figure 1 for using assembly)	all	Ref	
117	289702-18		Tube Assembly - Windshield supply	all	1	
118	289702-22		Tube Assembly - Pitot mast supply	ddd	1	
	288284-2		Tube Assembly - Pitot mast supply	ccc	1	
119	286395		Valve Assembly - Relief	all	1	
	286395-2		Valve - Relief (Reworked A11502-16, Adel, 652109-5)	all	1	
	286385		Orifice - Relief valve	all	1	
120	289702-20		Tube Assembly - Pitot mast supply	ddd	1	
	288284-50		Tube Assembly - Pitot mast supply	ccc	1	
121	280230-222		Tube Assembly - Windshield supply	all	1	
	283186		Installation - RH Fuselage piping, stations 150-212 (N.P.) (See figure 1 for using assembly)	all	Ref	
	291484		Installation - Flight station anti-icing (Modifies 283186) (See figure 1 for using assembly)	all	Ref	
122	256635-211		Tube Assembly - Pitot mast supply	ex	1	
	289018-4		Tube Assembly - Pitot mast supply	cy	1	
123	286395		Valve Assembly - Relief (See index No. 119 for components)	all	1	
124	256635-210		Tube Assembly - Pitot mast supply	ex	1	
	289018-5		Tube Assembly - Pitot mast supply	cv	1	
125	280230-220		Tube Assembly - Windshield supply	all	1	
	256358		Installation - Windshield anti-icer distribution lines (N.P.) (See figure 1 for using assembly)	all	Ref	
	291484		Installation - Flight station anti-icing (Modifies 256358) (See figure 1 for using assembly)	all	Ref	
126	7-2841-20REW		Valve - Manifold (Parker) (652023)	all	2	
	280230-234		Tube Assembly - Windshield supply	all	1	
128	287218		Tube Assembly - Windshield supply	e	1	
129	280230-232		Tube Assembly - Windshield supply	all	1	
130	287217L		Tube Assembly - Windshield supply	e	1	
131	280230-230		Tube Assembly - Windshield supply	all	1	
132	287216L		Tube Assembly - Windshield supply	e	1	
133	280230-224		Tube Assembly - Windshield supply	all	1	
134	287217R		Tube Assembly - Windshield supply	e	1	
135	280230-226		Tube Assembly - Windshield supply	all	1	
136	287216R		Tube Assembly - Windshield supply	e	1	
137	280230-228		Tube Assembly - Windshield supply	all	1	
138	287219		Tube Assembly - Windshield supply	e	1	
	282867-2		Installation - LH Inboard engine compartment plumbing (N.P.) (See figure 67 for using assembly)	y	Ref	
	282867-3		Installation - LH Outboard engine compartment plumbing (N.P.) (See figure 67 for using assembly)	y	Ref	
	282868-2		Installation - RH Inboard engine compartment plumbing (N.P.) (See figure 67 for using assembly)	y	Ref	
	282868-3		Installation - RH Outboard engine compartment plumbing (N.P.) (See figure 67 for using assembly)	y	Ref	
	288149		Installation - Engine section anti-icer system (N.P.) (See figure 67 for using assembly)	z	Ref	
139	*318-4W21½		Hose Assembly - Carburetor supply	all	1	
	A11502-15		Valve - Relief (Adel) (652109-4)	all	1	
141	*318-4W19		Hose Assembly - Carburetor supply	all	1	
142	256635-481		Tube Assembly - Carburetor supply	all	1	
143	256635-482		Tube Assembly - Carburetor supply	all	1	
144	256635-480		Tube Assembly - Carburetor supply	all	2	
145	282855-4		Tube Assembly - Propeller supply	all	1	
146	282855-6		Tube Assembly - Propeller supply	all	1	
147	3706A4-014014-18		Hose Assembly - Propeller supply	all	1	
148	*295291-12		Tube Assembly - Propeller supply	all	1	
149	3706A4-014014-14		Hose Assembly - Propeller supply	all	1	
150	282855-54		Tube Assembly - Propeller supply	all	1	
151	A11502-14		Valve - Relief (Adel) (652109-3)	all	1	
152	*318-4W9½		Hose Assembly - Propeller supply	all	1	
153	263128		Tube Assembly - Propeller anti-icer feeder (See figure 69 for using assembly)	all	Ref	
154	SK699		Tubing - Propeller anti-icer (Goodrich) (652139) (See figure 67 for using assembly)	all	Ref	
155	E778		Ring Assembly - Propeller anti-icer feed (Goodrich) (652137) (See figure 67 for using assembly)	all	Ref	
	SK703		Shield - Propeller anti-icer (Goodrich) (652140) (See figure 67 for using assembly)	all	Ref	
	SK642		Pad - Propeller anti-icer (Goodrich) (652138) (See figure 67 for using assembly)	all	Ref	
156	37572		Shoe - Propeller anti-icer (Goodrich) (652136) (See figure 67 for using assembly)	all	Ref	
	270135		Installation - Windshield wipers (NP) (See figure 202 for detailed illustration)	all	Ref	
			* Replaces standard part, added or serialized per one or more of the following: Service Instruction 49/SI-22; Service Bulletins 49/SB-14, 49/SB-79, 49/SB-103, 49/SB-108, 49/SB-110, 49/SB-121, 49/SB-123, 49/SB-161; Modification Prints 295551, 288701, 295291.			

Reissued July, 1947

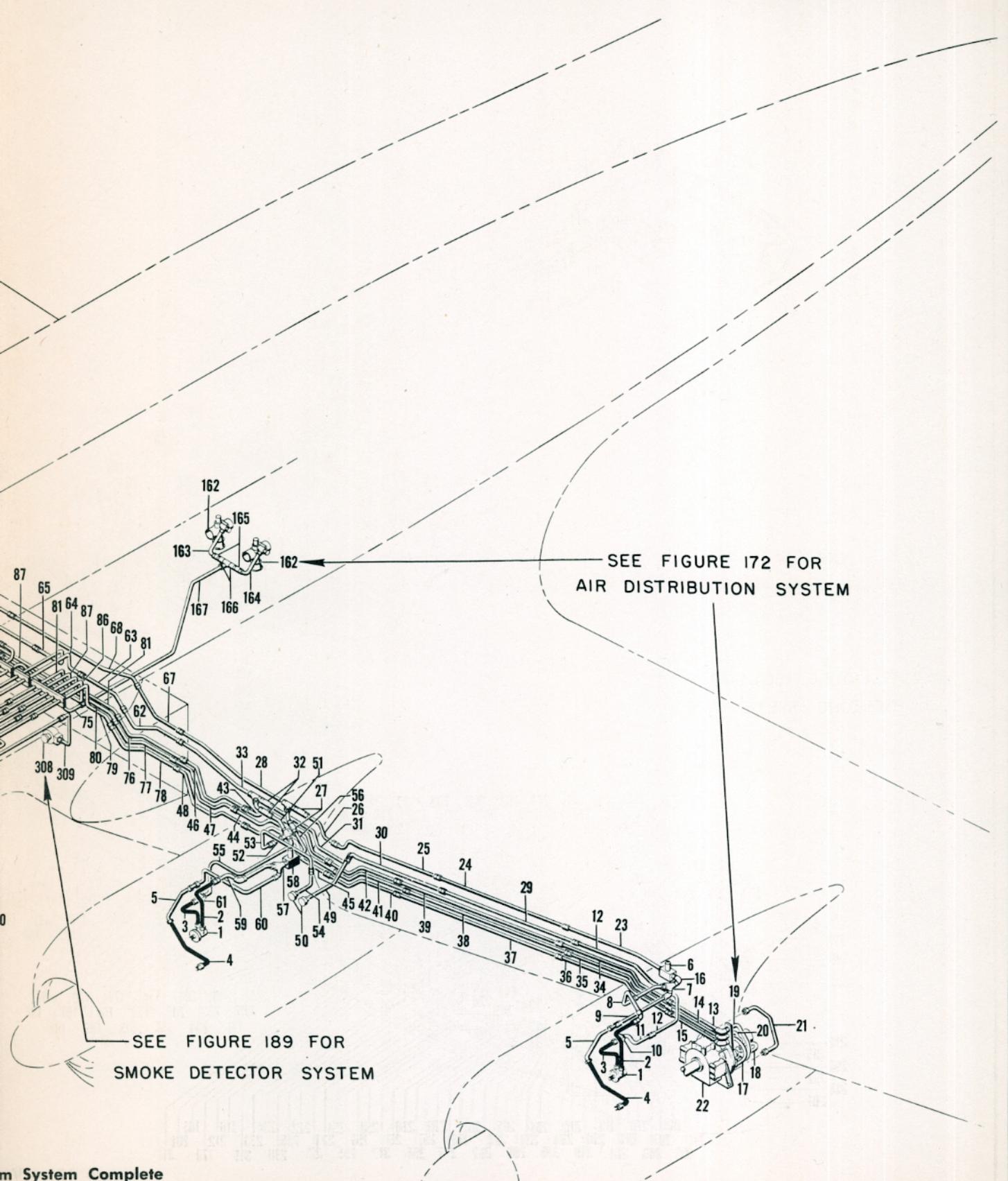
**GROUP . . . Vacuum System**

**Detail Unit . . . Vacuum System Complete**



**Figure 171 – Vacu**

# Constellation



System Complete

## GROUP . . . Vacuum System

*Constellation*

## Detail Unit . . . Vacuum System Complete

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6	N O M E N C L A T U R E			SERIAL CODE	U N I T S P E R A S S Y.
171 - 1	3P485	Pump - Vacuum (Pesco) (631030) (See figure 67 for using assembly)				all	1
	282867-2	Installation - LH Inboard engine compartment plumbing (N.P.) (See figure 67 for using assembly)				y	Ref
	282867-3	Installation - LH Outboard engine compartment plumbing (N.P.) (See figure 67 for using assembly)				y	Ref
	282868-2	Installation - RH Inboard engine compartment plumbing (N.P.) (See figure 67 for using assembly)				y	Ref
	282868-3	Installation - RH Outboard engine compartment plumbing (N.P.) (See figure 67 for using assembly)				y	Ref
	288147-2	Installation - Engine oil system LH (N.P.) (See figure 67 for using assembly)				dv	Ref
	288147-3	Installation - Engine oil system RH (N.P.) (See figure 67 for using assembly)				dv	Ref
	292510-2	Installation - Engine oil system LH (N.P.) (See figure 67 for using assembly)				ccc	Ref
	292510-3	Installation - Engine oil system RH (N.P.) (See figure 67 for using assembly)				ccc	Ref
	288148-2	Installation - Engine instrument pressure transmission system LH (N.P.) (See figure 67 for using assembly)				z	Ref
	288148-3	Installation - Engine instrument pressure transmission RH (N.P.) (See figure 67 for using assembly)				z	Ref
	288150	Installation - Engine section hydraulic and vacuum systems (N.P.) (See figure 67 for using assembly)				z	Ref
2	3706A16QA01160116-27 <sup>1/2</sup>	Hose Assembly - De-icer pressure (Weatherhead)				all	1
3	3706A16-01160116-24	Hose Assembly - Instrument vacuum (Weatherhead)				y	1
	340-16D-23	Hose Assembly - Instrument vacuum (Aeroquip)				z	1
	273597	Elbow - Instrument vacuum				all	1
4	3706A6QA016016-27	Hose Assembly - Oil separator drain (Weatherhead)				all	1
	286597	Elbow Assembly - Oil separator drain				all	1
5	284131-18	Tube Assembly - Oil separator drain				all	1
	269400	Installation - Left outboard engine nacelle piping (N.P.) (See figure 2 for using assembly)				all	Ref
6	291891-2	Valve Assembly - Air pressure relief (Reworked 556-1B Eclipse 607455)				all	1
	31853	Lock - Screen retaining ring (Eclipse)				all	1
	45808	Nut + Valve adjusting (Eclipse)				all	2
	51663	Retainer - Spring cup (Eclipse)				all	1
	51665	Screen - Valve housing (Eclipse)				all	1
	68812	Housing - Valve (Eclipse)				all	1
	68813	Valve (Eclipse)				all	1
	68814	Cap - Housing (Eclipse)				all	1
	834925	Spring + Valve (Eclipse)				all	1
7	1123-3	Separator - Oil (Technical Products) (631025-3)				all	1
	1099	Valve - Oil separator				all	1
	1097	Spring - Oil separator				all	1
	1100	Guide - Oil separator				all	1
	1101	Gage - Valve guide				all	1
	1096	Lock - Oil separator				all	1
	1098	Nut - Oil separator				all	1
	1125	Strainer - Oil separator				all	1
	AN966-12	Ring - Lock				all	1
8	*280230-374	Tube Assembly - De-icer pressure				all	1
9	284131-24	Tube Assembly - Oil separator drain line				all	1
10	3V216A	Valve Assembly - Suction relief (Pesco) (631011) (See index No. 37 for breakdown)				all	1
11	279308-23	Tube Assembly - Instrument vacuum				all	1
12	279308-26	Tube Assembly - Instrument vacuum				all	1
13	257326-72	Tube Assembly - Supercharger overload control LH				all	1
14	257326-73	Tube Assembly - Supercharger flow				all	1
	AN884-6-12	Hose control - LH				all	2
15	257326-74	Tube Assembly - Supercharger				all	1
	AN884-4-12	Hose - Venturi gauge LH				all	1
16	AN914-8D	Elbow - De-icer pressure				all	1
	264031	Installation - LH Cabin supercharger (N.P.) (See figure 1 for using assembly)				all	Ref
	264032	Installation - RH Cabin supercharger (N.P.) (See figure 1 for using assembly)				all	Ref
	264061-3	Support Assembly - Cabin supercharger upper LH				rrr	1
	264061-2	Support Assembly - Cabin supercharger upper RH				rrr	1
	294430	Support Assembly - Cabin supercharger upper adjustment				sss	1
	294646	Yoke - Cabin supercharger upper adjustment support				sss	1
	257404	Installation - Cabin supercharger piping (N.P.)				all	1
17	257326-130	Tube Assembly - Supercharger venturi gauge LH				all	1
18	257326-131	Tube Assembly - Supercharger				all	1
19	257326-132	Tube Assembly - Supercharger overload control LH				all	1
20	257326-133	Tube Assembly - Supercharger flow control LH				all	1
21	257326-2	Tube Assembly - Supercharger				all	1
22	644155B	Supercharger Assembly (BH change) (See figure 173 for detailed illustration)				all	1
	267177	Installation - Left wing front beam piping (N.P.) (See figure 2 for using assembly)				all	Ref
23	280230-142	Tube Assembly - De-icer pressure				all	1
24	256635-310	Tube Assembly - De-icer pressure				all	1
25	280230-7	Tube Assembly - De-icer pressure				all	1
26	256635-309	Tube Assembly - De-icer pressure				all	1
27	5251GT16D	Valve - Check (Parker) (652050)				all	2
	SK421C	Fitting - "T" Angle (Goodrich)				all	1
28	256635-308	Tube Assembly - De-icer pressure				all	1
29	258861-180	Tube Assembly - Instrument vacuum				all	1
30	258861-326	Tube Assembly - Instrument vacuum				all	1
31	258861-325	Tube Assembly - Instrument vacuum				all	1
32	525GT16D	Valve - Check (Parker) (631037)				all	1
	SK422C	Fitting - "T" Angle (Goodrich)				all	1
33	258861-324	Tube Assembly - Instrument vacuum				all	1
34	257326-225	Tube Assembly - Supercharger overload control LH				all	1
35	257326-226	Tube Assembly - Supercharger flow control LH				all	1

(Continued on next page)

## GROUP . . . Vacuum System

## Detail Unit . . . Vacuum System Complete (Continued)

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER	N O M E N C L A T U R E						SERIAL CODE	UNITS PER ASSY.
		1	2	3	4	5	6		
171 - 36	257326-227	Tube Assembly	- Supercharger venturi gauge LH					all	1
37	257326-84	Tube Assembly	- Supercharger venturi gauge LH					all	1
38	257326-85	Tube Assembly	+ Supercharger flow control LH					all	1
39	257326-86	Tube Assembly	+ Supercharger overload control LH					all	1
40	257326-145	Tube Assembly	+ Supercharger venturi gauge LH					all	1
41	257326-146	Tube Assembly	+ Supercharger flow control LH					all	1
42	257326-147	Tube Assembly	+ Supercharger overload control LH					all	1
43	257326-142	Tube Assembly	+ Supercharger overload control LH					all	1
44	257326-143	Tube Assembly	+ Supercharger flow control LH					all	1
45	257326-144	Tube Assembly	+ Supercharger venturi gauge LH					all	1
46	257326-222	Tube Assembly	+ Supercharger overload control LH					all	1
47	257326-223	Tube Assembly	+ Supercharger flow control LH					all	1
48	257326-224	Tube Assembly	+ Supercharger venturi gauge LH					all	1
	281027	Installation - Left wing inboard nacelle piping (N.P.) (See figure 2 for using assembly)						all	Ref
49	258861-283	Tube Assembly	- Vacuum warning unit					all	1
50	3124-1	Unit - Vacuum	warning (Pioneer) (626060)					all	2
51	258861-327	Tube Assembly	+ Instrument vacuum					all	1
52	258861-281	Tube Assembly	+ Vacuum warning unit					all	1
53	258861-362	Tube Assembly	+ Vacuum warning unit					all	1
54	258861-279	Tube Assembly	- Vacuum warning unit					all	1
55	279308-27	Tube Assembly	- Instrument vacuum					all	1
56	256635-380	Tube Assembly	- De-icer pressure					all	1
57	1123-3	Separator - Oil	(Technical Products) (631025-3) (See index No. 7 for breakdown)					all	1
58	291891-2	Valve Assembly	- Air pressure relief (See index No. 6 for breakdown)					all	1
59	280230-152	Tube Assembly	- De-icer pressure					all	1
60	284131-30	Tube Assembly	+ Oil separator drain					rrr	1
	284131-81	Tube Assembly	+ Oil separator drain					sss	1
61	3V216A	Valve Assembly	- Suction relief (Pesco) (631011)					all	1
	216-9	Gasket - Seat assembly						all	1
	216-11	Guide						all	1
	216-10	Body						all	1
	216-13A	Spring						all	1
	195-4	Screw						all	1
	195-12	Gasket - Adjusting nut						all	1
	195-2	Nut - Adjusting						all	1
	R400-29	Nut - Lock						all	1
	216-2	Seat Assembly						all	1
	216-12	Valve						all	1
	281028	Installation - Fuselage stub wing piping (N.P.) (See figure 1 for using assembly)						all	Ref
62	258861-422	Tube Assembly	- Instrument vacuum					all	1
63	258861-217	Tube Assembly	- Instrument vacuum					all	1
64	258861-221	Tube Assembly	- Instrument vacuum					all	1
65	258861-222	Tube Assembly	- Instrument vacuum					all	1
66	258861-209	Tube Assembly	- De-icer pressure					all	1
67	256635-198	Tube Assembly	- De-icer pressure					all	1
68	256635-192	Tube Assembly	- De-icer pressure					all	1
69	256635-187	Tube Assembly	- De-icer pressure					all	1
70	258861-286	Tube Assembly	- De-icer suction					all	1
71	279308-24	Tube Assembly	- De-icer suction					all	1
72	279308-89	Tube Assembly	- De-icer suction					d	1
	279308-25	Tube Assembly	- De-icer suction					c	1
73	256635-47	Tube Assembly	+ De-icer pressure gauge					all	1
74	256635-404	Tube Assembly	+ De-icer pressure gauge					all	1
75	257326-129	Tube Assembly	- Cabin air outflow					all	1
76	257326-211	Tube Assembly	+ Supercharger overload control LH					all	1
77	257326-212	Tube Assembly	+ Supercharger flow control LH					all	1
78	257326-213	Tube Assembly	+ Supercharger venturi gauge LH					all	1
79	257326-118	Tube Assembly	+ Supercharger venturi gauge LH					all	1
80	257326-120	Tube Assembly	+ Supercharger flow control LH					all	1
81	257326-217	Tube Assembly	+ Supercharger overload control LH					all	1
82	257326-107	Tube Assembly	+ Supercharger venturi gauge RH					all	1
83	257326-108	Tube Assembly	+ Supercharger flow control RH					all	1
84	257326-214	Tube Assembly	+ Supercharger overload control RH					all	1
85	257326-215	Tube Assembly	+ Supercharger venturi gauge RH					all	1
86	257326-119	Tube Assembly	+ Supercharger venturi gauge RH					all	1
87	257326-121	Tube Assembly	+ Supercharger flow control RH					all	1
	261282	Installation - Right stub wing piping (N.P.) (See figure 1 for using assembly)						all	Ref
88	256635-337	Tube Assembly	- De-icer pressure					all	1
89	258861-207	Tube Assembly	- Instrument vacuum					all	1
90	258861-284	Tube Assembly	- De-icer suction					all	1
91	256635-172	Tube Assembly	- De-icer pressure gauge					all	1
92	257326-219	Tube Assembly	+ Supercharger venturi gauge RH					all	1
93	257326-220	Tube Assembly	+ Supercharger flow control RH					all	1
94	257326-221	Tube Assembly	+ Supercharger overload control RH					all	1
	261718	Installation - Right wing front beam piping (N.P.) (See figure 2 for using assembly)						all	Ref
	SK454C	Fitting - "Y" Branch (Goodrich)						all	1
95	1123-2	Separator - Oil	(Technical Products) (631025-2) (See index No. 7 for breakdown)					all	1
96	291891-3	Valve Assembly	- Pressure relief (Eclipse) (See index No. 6 for breakdown)					all	1
97	256635-202	Tube Assembly	- De-icer pressure					all	1
98	*294813-2	Tube Assembly	- Oil separator drain					all	1
99	*294813-3	Tube Assembly	- Oil separator drain					all	1
100	*296800-2	Tube Assembly	- Oil separator drain					all	1
101	*296823	Sump Assembly	- Oil separator drain					all	1
102	*296800-3	Tube Assembly	- Oil separator drain					all	1
103	*294813-5	Tube Assembly	- Oil separator drain					all	1
104	*294813-6	Stub	- Oil separator drain					all	1
105	*294813-8	Hose	- Oil separator drain					all	1

(Continued on next page)

## GROUP . . . Vacuum System

## Detail Unit . . . Vacuum System Complete (Continued)

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER	1	2	3	4	5	6	N O M E N C L A T U R E		SERIAL CODE	UNITS PER ASSY.
								Tube	Assembly		
171-106	256635-301							De-icer pressure		all	1
107	256635-203							De-icer pressure		all	1
108	256635-204							De-icer pressure		all	1
109	256635-148							De-icer pressure		all	1
110	882-20-12							Hose - De-icer pressure		all	1
111	263742							Tube - De-icer pressure		all	1
112	263429							Valve Assembly - De-icer distributor (See figure 168 for using assembly)		all	Ref
113	258861-479							Tube Assembly - Instrument vacuum		all	1
114	258861-318							Tube Assembly - Instrument vacuum		all	1
	SK422C							Fitting - "T" Angle (Goodrich)		all	1
115	525GT16D							Valve - Check (Parker) (631037)		all	2
116	258861-319							Tube Assembly - Instrument vacuum		all	1
117	258861-323							Tube Assembly - Instrument vacuum		all	1
118	258861-180							Tube Assembly - Instrument vacuum		all	1
119	258861-416							Fitting - "Y" Angle (Goodrich)		all	1
120	SK454							Valve - Check (Parker) (632050)		all	1
121	256635-255							Tube Assembly - De-icer pressure		all	1
	SK421C							Fitting - "T" Angle (Goodrich)		all	1
122	255LGT16D							Valve - Check (Parker) (632050)		all	2
123	256635-260							Tube Assembly - De-icer pressure		all	1
124	280230-22							Tube Assembly - De-icer pressure		all	1
125	280230-23							Tube Assembly - De-icer pressure		all	1
126	256635-374							Tube Assembly - De-icer pressure		all	1
127	257326-200							Supercharger overload control RH		all	1
128	257326-201							Supercharger flow control RH		all	1
129	257326-202							Supercharger venturi gauge RH		all	1
130	257326-134							Supercharger overload control RH		all	1
131	257326-135							Supercharger flow control RH		all	1
132	257326-136							Supercharger venturi gauge RH		all	1
133	257326-137							Supercharger flow control RH		all	1
134	257326-138							Supercharger overload control RH		all	1
135	257326-139							Supercharger venturi gauge RH		all	1
136	257326-84							Supercharger flow control RH		all	1
137	257326-85							Supercharger overload control RH		all	1
138	257326-86							Supercharger venturi gauge RH		all	1
139	257326-197							Supercharger flow control RH		all	1
140	257326-198							Supercharger venturi gauge RH		all	1
141	257326-199							Supercharger flow control RH		all	1
	281029							wing inboard nacelle piping (N.P.)		all	1
								(See figure 2 for using assembly)			
142	258861-434							Tube Assembly - Instrument vacuum		all	1
143	258861-435							Vacuum warning unit		all	1
144	3124-1A							Unit - Vacuum warning (Pioneer) (626060)		all	2
145	258861-433							Tube Assembly - Instrument vacuum		all	1
146	3V216A							Valve - Relief (Fesco) (631011) (See index No. 37 for breakdown)		all	1
147	280230-144							Tube Assembly - De-icer pressure		all	1
148	291891-2							Valve Assembly - Air pressure relief (See index No. 6 for breakdown)		all	1
149	1123-3							Separator - Oil (Technical Products) (631025-3)		all	1
								(See index No. 7 for breakdown)			
150	280230-146							Tube Assembly - De-icer pressure		all	1
151	284131-32							Tube Assembly - Oil separator drain		rrr	1
	280230-425							Tube Assembly - Oil separator drain		sss	1
152	258861-420							Tube Assembly - Vacuum warning unit		all	1
	261213							Installation - Right wing outboard engine nacelle piping (N.P.)		all	Ref
								(See figure 2 for using assembly)			
153	280230-150							Tube Assembly - De-icer pressure		all	1
154	291891-2							Valve Assembly - Air pressure relief (See index No. 6 for breakdown)		all	1
155	1123-3							Separator - Oil (Technical Products) (631025-3)		all	1
								(See index No. 7 for breakdown)			
156	256635-426							Tube Assembly - De-icer pressure		all	1
157	284131-34							Tube Assembly - Oil separator drain		all	1
158	258861-432							Tube Assembly - Instrument vacuum		all	1
159	3V216A							Valve Assembly - Suction relief (Fesco) (631011)		all	1
								(See index No. 37 for breakdown)			
160	257326-99							Tube Assembly - Supercharger overload and flow control RH		all	2
	AN884-6-10							Hose		all	4
161	257326-100							Tube Assembly - Supercharger venturi gauge RH		all	1
	AN884-4-10							Hose		all	2
162	257980							Installation - Cabin pressure outflow control valve (N.P.)		all	1
								(See figure 172 for using assembly)			
163	257326-231							Installation - Station 527.6 to 676.8 fuselage piping (N.P.)		all	Ref
	272203-50							(See figure 1 for using assembly)			
164	257326-232							Tube Assembly - Cabin air outflow		a	1
	272203-51							Tube Assembly - Cabin air outflow		b	1
165	400525							Tube Assembly - Cabin air outflow		a	1
	3175-2-6D							Tube Assembly - Cabin air outflow		b	1
	3124-91D							Tube Assembly - Cabin air outflow		b	2
166	525LTG6D							Valve - Restrictor (Bendix) (667070A)		b	6
167	257326-204							Gasket (Parker)		a	1
	272203-52							Valve - Check (Parker) (644053)		a	2
	280927							Tube Assembly - Cabin air outflow		a	1
								Tube Assembly - Cabin air outflow		b	1
								Installation - Station 278-456 LH fuselage piping (N.P.)		all	Ref
								(See figure 1 for using assembly)			
168	256635-363							Tube Assembly - De-icer pressure gauge		all	1
169	256635-364							Tube Assembly - De-icer pressure gauge		all	1
170	256635-48							Tube Assembly - De-icer pressure gauge		all	1
171	256635-46							Tube Assembly - De-icer pressure gauge		all	1

(Continued on next page)

## GROUP . . . Vacuum System

## Detail Unit . . . Vacuum System Complete (Continued)

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER	N O M E N C L A T U R E	SERIAL CODE	UNITS PER ASSY.
171-172	258861-410	Tube Assembly - De-icer suction	all	1
173	258861-409	Tube Assembly - De-icer suction	all	1
174	258861-288	Tube Assembly - De-icer suction	all	1
175	258861-287	Tube Assembly - De-icer suction	all	1
176	258861-43	Tube Assembly - Instrument vacuum LH	all	1
177	258861-399	Tube Assembly - Instrument vacuum LH	all	1
178	258861-404	Tube Assembly - Instrument vacuum LH	all	1
179	258861-75	Tube Assembly - Instrument vacuum LH	all	1
180	258861-395	Tube Assembly - Instrument vacuum RH	all	1
181	258861-398	Tube Assembly - Instrument vacuum RH	all	1
182	258861-76	Tube Assembly - Instrument vacuum RH	all	1
183	258861-74	Tube Assembly - Instrument vacuum RH	all	1
184	257326-175	Tube Assembly - Cabin air outflow control	all	1
185	257326-177	Tube Assembly - Cabin air outflow control	all	1
186	257326-234	Tube Assembly - Cabin air outflow control	all	1
187	257326-18	Tube Assembly - Cabin air outflow control	all	1
188	257326-174	Tube Assembly - Supercharger overload control RH	all	1
189	257326-6	Tube Assembly - Supercharger overload control LH	all	1
190	257326-7	Tube Assembly - Supercharger flow control RH	all	1
191	257326-8	Tube Assembly - Supercharger flow control LH	all	1
192	257326-9	Tube Assembly - Supercharger venturi gauge RH	all	1
193	257326-10	Tube Assembly - Supercharger venturi gauge LH	all	1
194	257326-176	Tube Assembly - Supercharger overload control RH	all	1
195	257326-178	Tube Assembly - Supercharger venturi gauge LH	all	1
196	257326-179	Tube Assembly - Supercharger venturi gauge RH	all	1
197	257326-180	Tube Assembly - Supercharger overload control LH	all	1
198	257326-181	Tube Assembly - Supercharger flow control RH	all	1
199	257326-182	Tube Assembly - Supercharger flow control LH	all	1
200	257326-186	Tube Assembly - Supercharger overload control RH	all	1
201	257326-187	Tube Assembly - Supercharger flow control RH	all	1
202	257326-188	Tube Assembly - Supercharger venturi gauge LH	all	1
203	257326-27	Tube Assembly - Supercharger overload control LH	all	1
204	257326-29	Tube Assembly - Supercharger flow control LH	all	1
205	257326-31	Tube Assembly - Supercharger venturi gauge RH	all	1
206	257326-20	Tube Assembly - Supercharger overload control LH	all	1
207	257326-22	Tube Assembly - Supercharger flow control LH	all	1
208	257326-24	Tube Assembly - Supercharger venturi gauge RH	all	1
209	257326-183	Tube Assembly - Supercharger overload control RH	all	1
210	257326-184	Tube Assembly - Supercharger flow control RH	all	1
211	257326-185	Tube Assembly - Supercharger venturi gauge LH	all	1
	272198	Installation - Fuselage station 278.4 to 260 plumbing (N.P.) (See figure 1 for using assembly)	Ref	
	290664	Installation - Fuselage station 278.4 to 260 piping (N.P.) (Modifies 272198) (See figure 1 for using assembly)	Ref	
212	256635-58	Tube Assembly - De-icer pressure gauge	all	1
213	256635-353	Tube Assembly - De-icer pressure gauge	all	1
214	256635-356	Tube Assembly - De-icer pressure gauge	all	1
215	256635-354	Tube Assembly - De-icer pressure gauge	all	1
216	290611-2	Tube Assembly - De-icer suction	all	1
217	290611-4	Tube Assembly - De-icer suction	all	1
218	710-13-8D (Lube 3)	Valve Assembly - Vacuum selector (Parker) (629053)	all	1
219	290611-5	Tube Assembly - De-icer suction	all	1
220	290611-3	Tube Assembly - De-icer suction	all	1
221	525GT-6D	Valve - Swing check (Parker) (644033)	all	2
222	257326-62	Tube Assembly - De-icer suction	all	1
223	257326-63	Tube Assembly - De-icer suction	all	1
224	257326-61	Tube Assembly - De-icer suction	all	1
225	257326-173	Tube Assembly - De-icer suction	all	1
226	525-GG-1/4D	Valve - Check (Parker) (644032)	all	2
227	257326-192	Tube Assembly - Supercharger flow control LH	all	1
228	257326-193	Tube Assembly - Supercharger flow control RH	all	1
229	257326-170	Tube Assembly - Supercharger venturi gauge LH	all	1
230	257326-171	Tube Assembly - Supercharger venturi gauge RH	all	1
231	257326-161	Tube Assembly - Supercharger venturi gauge RH	all	1
232	257326-163	Tube Assembly - Supercharger venturi gauge LH	all	1
233	258861-366	Tube Assembly - Supercharger flow control RH	all	1
234	258861-367	Tube Assembly - Supercharger flow control LH	all	1
235	258861-118	Tube Assembly - Instrument vacuum LH	all	1
236	258861-119	Tube Assembly - Instrument vacuum RH	all	1
237	257326-194	Tube Assembly - Supercharger overload control LH	all	1
238	257326-195	Tube Assembly - Supercharger overload control RH	all	1
239	257326-196	Tube Assembly - Cabin air outflow control	all	1
240	257326-190	Tube Assembly - Supercharger overload control RH	all	1
241	257326-191	Tube Assembly - Supercharger overload control LH	all	1
242	257326-189	Tube Assembly - Cabin air outflow control	all	1
243	257326-160	Tube Assembly - Supercharger vacuum gage atmospheric pressure	all	1
244	257326-233	Tube Assembly - Supercharger vacuum gage atmospheric pressure	all	1
245	2-1039-12(2-4)	Strainer - Finger (Parker) (644033)	all	1
246	257326-162	Tube Assembly - Supercharger flow control RH	all	1
247	257326-164	Tube Assembly - Supercharger flow control LH	all	1
248	256635-359	Tube Assembly - De-icer pressure gauge	all	1
249	237042	Tank Assembly - Supercharger expansion	all	1
	292201	Installation - Expansion tank and plumbing (See figure 1 for using assembly)	a"	Ref
250	288273-54	Tube Assembly - Supercharger expansion tank	all	1
251	11-2540-20	Valve Assembly - Suction (Parker) (629074) (See figure 194 for using assembly)	all	Ref
252	644062	Panel Assembly - Control (See figure 194 for using assembly)	all	Ref
253	644102	Filter Assembly - Cabin pressure control (See figure 194 for using assembly)	all	Ref
	283676	Installation - Station 212-260 LH fuselage piping (N.P.) (See figure 1 for using assembly)	all	Ref
254	258861-438	Tube Assembly - Instrument vacuum LH	all	1

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## GROUP . . . Vacuum System

## Detail Unit . . . Vacuum System Complete (Continued)

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER		N O M E N C L A T U R E						SERIAL CODE	UNITS PER ASSY.
			1	2	3	4	5	6		
171-255	258861-437	Tube Assembly	- Instrument vacuum RH						all	1
	258861-236	Tube Assembly	- Instrument vacuum LH						all	1
257	258861-237	Tube Assembly	- Instrument vacuum RH						all	1
258	258861-439	Tube Assembly	- Alternate turn and bank vacuum LH						all	1
259	258861-440	Tube Assembly	- Alternate turn and bank vacuum RH						all	1
260	258861-235	Tube Assembly	- Alternate turn and bank vacuum LH						all	1
261	258861-234	Tube Assembly	- Alternate turn and bank vacuum RH						all	1
	281593	Installation - Station 150-212 LH fuselage piping (N.P.)	(See figure 1 for using assembly) (Modified by 292006)						ddd	Ref
	292006	Installation - 49-25 and 49-26 Vacuum lines (N.P.) (See figure 1 for using assembly)	(See figure 1 for using assembly)						all	Ref
	288285	Installation - Station 150-212 LH fuselage piping (N.P.)	(See figure 1 for using assembly)						ccc	Ref
262	279308-17	Tube Assembly	- Instrument vacuum LH						all	1
263	279308-18	Tube Assembly	- Instrument vacuum RH						all	1
264	288284-8	Tube Assembly	- Instrument vacuum RH						ccc	1
	279308-30	Tube Assembly	- Instrument vacuum RH						ddd	1
265	288284-14	Tube Assembly	- Instrument vacuum LH						ccc	1
	258861-468	Tube Assembly	- Instrument vacuum LH						ddd	1
	289702-16	Tube Assembly	- Instrument vacuum LH						ddd	1
*296587-64		Tube Assembly	- Instrument vacuum LH						ddd	1
266	288284-10	Tube Assembly	- Instrument vacuum RH						ccc	1
*296587-65		Tube Assembly	- Instrument vacuum RH						ddd	1
267	3-2540-26	Valve Assembly	- Instrument vacuum selector (Parker) (629047)						all	1
	8-2340-11	Handle - Pointer locking type							all	1
	9-1042-11	Pin + Flat head (Handle)							all	1
	9-1140-30	Spring - Torsion (Handle)							all	1
	11-742-26	Sub-Assembly - Body and plug							all	1
	10-140-32-2	Body - Valve							all	1
	8-2340-10	Plug - Valve							all	1
	3-2841-11	Screw - Phillips head							all	4
	12-1836-12	Cap - Valve							all	1
	1-234-1	Gasket - Cap							all	1
	1-1040-11	Spring - Valve plug							all	1
	12-1836-2-16	Button - Spring							all	1
	288080-3	Nameplate - Selector valve							all	1
268	3-2540-27	Valve Assembly - Vacuum pump selector (Parker) (629048)							all	1
	8-2340-11	Handle - Pointer locking type							all	1
	6-2140-13	Pin + Handle							all	1
	9-1140-30	Spring - Torsion (Handle)							all	1
	11-642-64	Sub-Assembly - Body and plug							all	1
	9-2640-17-2	Body - Valve							all	1
	8-2340-12	Plug - Valve							all	1
	3-2841-11	Screw - Phillips head							all	4
	12-1836-12	Cap - Valve							all	1
	1-234-1	Gasket - Cap							all	1
	1-1040-11	Spring - Valve plug							all	1
	12-1836-2-16	Button - Spring							all	1
	288080-2	Nameplate - Selector valve							all	1
	288176	Panel - Vacuum selector valve							ccc	1
	288284-12	Tube Assembly - Vacuum altimeter source							ccc	1
269	*296587-66	Tube Assembly - Vacuum altimeter source							ddd	1
270	258861-447	Tube Assembly - Vacuum altimeter source							all	1
271	2-1039-12(2-16)	Strainer (Parker) (633177-2)							all	1
272	288284-16	Tube Assembly - Pilot instrument vacuum							ccc	1
273	288284-46	Tube Assembly - Pilot instrument vacuum							ccc	1
274	288284-18	Tube Assembly - Co-pilot instrument vacuum							ccc	1
275	296587-34	Tube Assembly - Co-pilot instrument vacuum							ccc	1
276	258861-238	Tube Assembly - Alternate turn and bank right							all	1
277	258861-239	Tube Assembly - Alternate turn and bank left							all	1
278	258861-242	Tube Assembly - Alternate turn and bank right							all	1
279	258861-243	Tube Assembly - Alternate turn and bank left							all	1
280	279308-21	Tube Assembly - Alternate turn and bank right							all	1
281	279308-22	Tube Assembly - Alternate turn and bank left							all	1
	281592	Installation - Fuselage station 135-165 upper piping (N.P.)	(See figure 1 for using assembly) (Modified by 292006)						Ref	
	292006	Installation - 49-25 and 49-26 Vacuum lines (N.P.)	(See figure 1 for using assembly)						all	Ref
	*296587-63	Tube Assembly - Pilot instrument vacuum	(Replaced by 288284-16, index No. 272)						ddd	1
	289702-6	Tube Assembly - Co-pilot instrument vacuum	(Replaced by 288284-18, index No. 274)						ddd	1
	*296587-62	Tube Assembly - Co-pilot instrument vacuum	(Replaced by 288284-18, index No. 274)						ddd	1
282	2760A (4.1 to 6.0 C.F.M.)	Valve Assembly - Vacuum regulating (Schwien) (652051)							all	3
283	2550	Valve Assembly - Vacuum regulating (Schwien) (652052)							all	2
284	279308-39	Tube Assembly - Alternate source turn and bank left							all	1
285	279308-19	Tube Assembly - Alternate source turn and bank right							all	1
286	279308-78	Tube Assembly - Alternate source turn and bank right							all	1
287	279308-56	Tube Assembly - Pilot instrument vacuum							all	1
288	318-SD-17	Hose Assembly - Pilot and co-pilot instrument vacuum (Aeroquip)							all	2
289	318-4-15	Hose Assembly - Alternate source turn and bank left (Aeroquip)							all	1
290	318-SD-15	Hose Assembly - Gyro-pilot vacuum (Aeroquip)							all	1
291	318-6-17	Hose Assembly - Gyro-pilot vacuum (Aeroquip)							all	1
292	318-10D-16	Hose Assembly - Gyro-pilot filter vacuum (Aeroquip)							all	2
293	AN5822-1	Filter - Air							all	2
294	279308-61	Tube Assembly - Co-pilot instrument vacuum							all	1
295	279308-40	Tube Assembly - Co-pilot instrument vacuum							all	1
296	279308-41	Tube Assembly - Pilot instrument vacuum							all	1

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## GROUP . . . Vacuum System

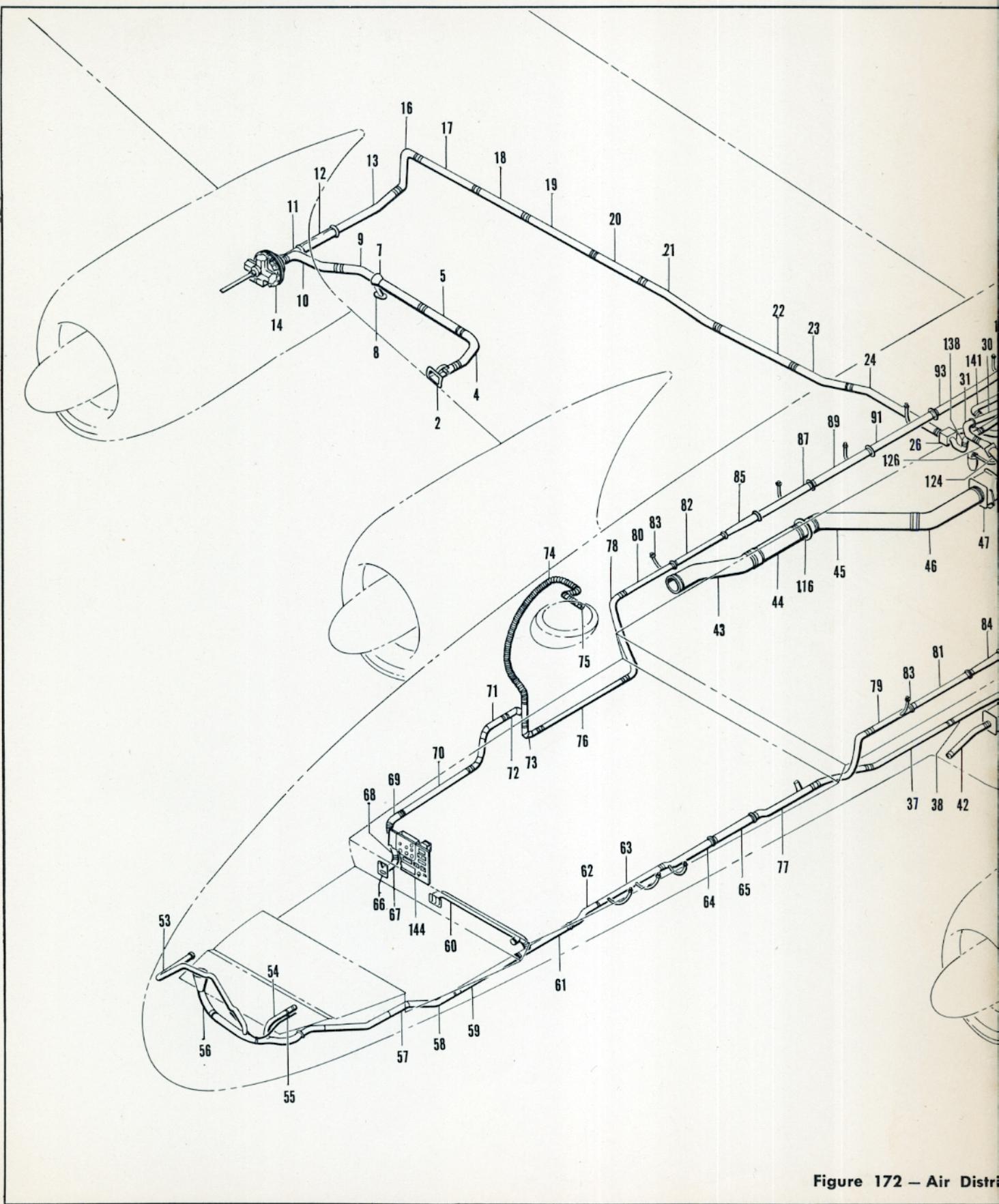
## Detail Unit . . . Vacuum System Complete (Continued)

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6	N O M E N C L A T U R E	SERIAL CODE	U N I T S P E R A S S Y.	
					Ref	Ref
171-297	281168		Unit Assembly - Gyro pilot (See figure 191 for using assembly)	all		
298	256202		Manifold Assembly - Vacuum instrument (See figure 191 for using assembly)	all		
299	256201		Manifold - Air instrument (See figure 191 for using assembly)	all		
300	274381		Manifold - Vacuum instruments (See figure 191 for using assembly)	all		
	283186		Installation - RH Fuselage station 150-212 piping (N.P.) (See figure 1 for using assembly)	all		
301	256635-209		Tube Assembly - De-icer pressure gauge	all	1	
302	256635-214		Tube Assembly - De-icer pressure gauge	all	1	
303	3752A4QA014014-9 $\frac{3}{4}$ D		Hose Assembly - De-icer pressure gauge (Weatherhead)	all	1	
304	43D2474-4-106		Hose Assembly - De-icer pressure gauge	all	1	
305	256635-215		Tube Assembly - De-icer pressure gauge	all	1	
306	2CD5160		Outlet Assembly (Alfite) (See figure 88 for using assembly)	all		Ref
307	AW1 $\frac{1}{4}$ -16W		Gauge - De-icer pressure (626059) (See figure 191 for using assembly)	all		Ref
	49/SB-183B		Service Bulletin - Smoke detectors	all		
308	V1A		Valve Assembly - Vacuum regulating (Schwien) (650155)	all	1	
309	296587-31		Tube Assembly - Smoke detector vacuum	all	1	
310	296587-30		Tube Assembly - Smoke detector vacuum	all	1	
311	296587-70		Tube Assembly - Smoke detector vacuum	all	1	
312	296587-29		Tube Assembly - Smoke detector vacuum	all	1	
313	296587-28		Tube Assembly - Smoke detector vacuum	all	1	
314	296587-22		Tube Assembly - Smoke detector vacuum	all	1	
315	296587-23		Tube Assembly - Smoke detector vacuum	all	1	
316	296587-24		Tube Assembly - Smoke detector vacuum	all	1	
317	296587-25		Tube Assembly - Smoke detector vacuum	all	1	
318	296587-27		Tube Assembly - Smoke detector vacuum	all	1	
319	296587-33		Tube Assembly - Smoke detector vacuum	ccc	1	
	296587-68		Tube Assembly - Smoke detector vacuum	ddd-du	1	
320	709GG8D (Lube 1)		Valve Assembly - Two-way flanged plug (Parker) (633126)	all	1	
321	296587-32		Tube Assembly - Smoke detector vacuum	ccc	1	
	296587-67		Tube Assembly - Smoke detector vacuum	ddd-du	1	

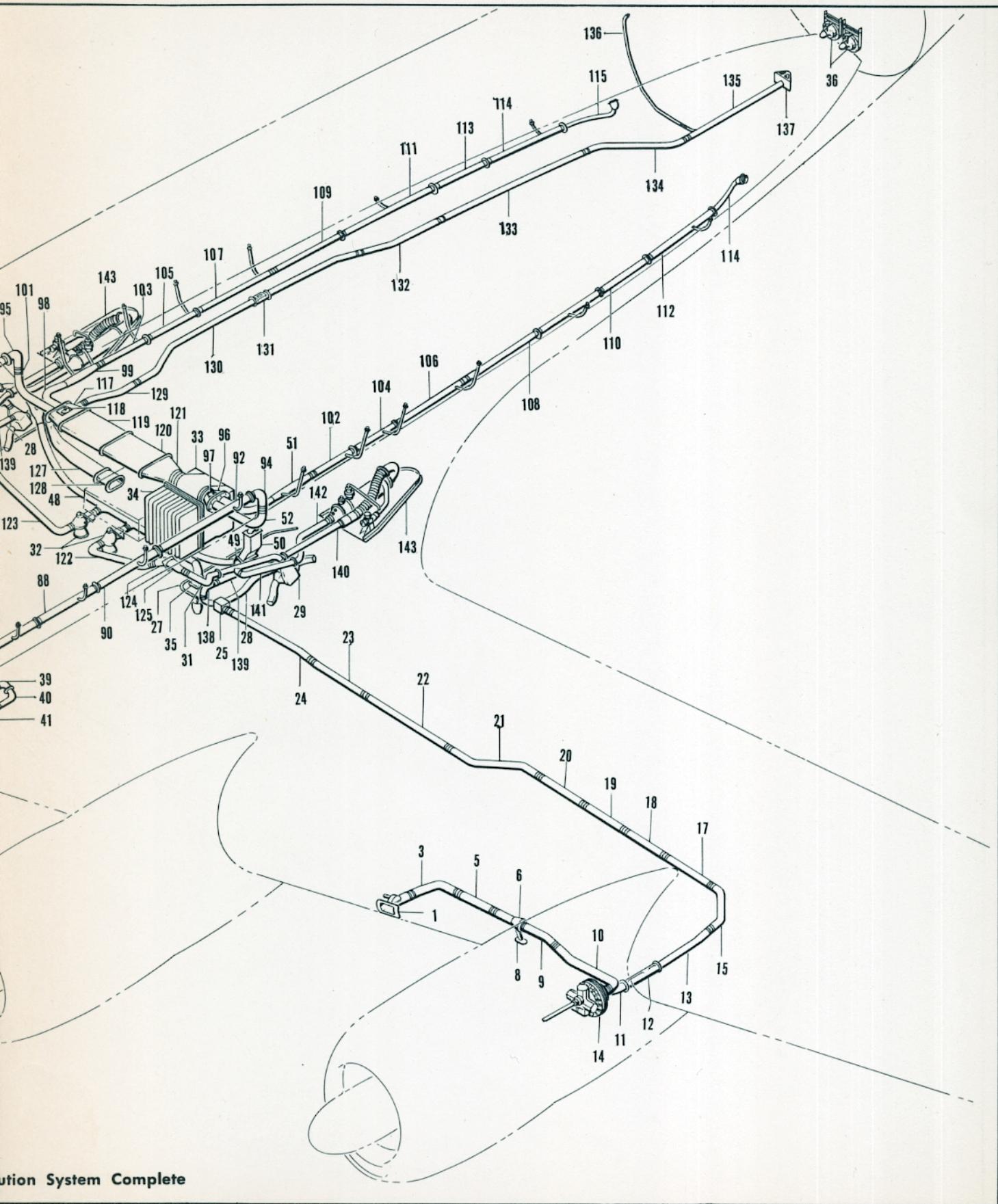
\* Replaces standard part, added or serialized per one or more of the following:  
Service Bulletins 49/SB-14, 49/SB-121, 49/SB-131, 49/SB-131A, 49/SB-183B;  
Mod. Print 294813.

**G R O U P . . .** Air Distribution System  
**D e t a i l   U n i t . . .** Air Distribution System Complete



**Figure 172 – Air Distr**

# Constellation



tion System Complete

## GROUP . . . Air Distribution System

*Constellation*

## Detail Unit . . . Air Distribution System Complete

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6	N O M E N C L A T U R E			SERIAL CODE	UNITS PER ASSY.
	279646		Installation - Supercharger induction system LH (N.P.) (See figure 2 for using assembly)			all	Ref
	279645		Installation - Supercharger induction system RH (N.P.) (See figure 2 for using assembly)			all	Ref
172 - 1	279647L		Installation - Supercharger induction system scoop			all	1
2	279647R		Cup Assembly - Air intake center leading edge			all	1
	279326L		Cup Assembly - Air intake center leading edge			all	1
	279326R		Duct Assembly - Scoop attaching			all	1
3	264355L		Duct Assembly + Scoop attaching			all	1
4	264355R		Clamp Assembly (Marman Products)			all	4
	360-625-5-3755		Duct Assembly - Induction system			all	1
5	280823		Vane - Water separator			all	1
	257080		Separator Assembly - Induction system water			all	1
6	264354L		Separator Assembly - Induction system water			all	1
7	264354R		Outlet Assembly - Induction system water			all	1
8	257137		Duct Assembly + Induction system separator attaching LH			all	1
9	264353		Outlet Assembly - Induction system water RH			all	1
	264352		Duct Assembly - Induction system supercharger attaching LH			all	1
10	261697		Duct Assembly - Induction system supercharger attaching RH			all	1
	264356		Duct Assembly - Induction system supercharger outflow			all	1
	264215		Duct Assembly + Induction system heat attaching forward			all	1
11	264351		Duct Assembly + Induction system			all	1
12	284719		Clamp - Induction system			all	1
	257917-4		Gasket - Induction system			all	2
	264216		Duct Assembly - Induction system			all	1
13	255554		Gasket - Cabin supercharger outflow duct			all	1
	284635		Installation - Cabin supercharger LH (N.P.) (See figure 1 for using assembly)			all	Ref
	264031		Installation - Cabin supercharger RH (N.P.) (See figure 1 for using assembly)			all	Ref
	264032		Installation - Cabin supercharger piping (N.P.)			all	1
	257404		Supercharge Assembly (See figure 173 for detailed illustration)			all	1
14	644155 (B)		Installation + Stations 80 to 358 supercharger inflow duct (N.P.)			all	Ref
	261710L		(See figure 2 for using assembly)			all	Ref
	261710R		Installation - Stations 80 to 358 supercharger inflow duct (N.P.)			all	Ref
			(See figure 2 for using assembly)				
15	282507L		Duct Assembly - Induction system			all	1
16	282507R		Duct Assembly - Induction system			all	1
17	258445-8		Duct Assembly - Induction system			all	1
18	258445-9		Duct Assembly - Induction system			all	1
19	258445-10		Duct Assembly - Induction system			all	1
20	258445-11		Duct Assembly - Induction system			all	1
21	258445-12		Duct Assembly - Induction system			all	1
22	258445-13		Duct Assembly - Induction system			all	1
23	258445-3		Duct Assembly - Induction system			all	1
24	258445-4		Duct Assembly - Induction system			all	1
	267443		Installation + Air conditioning (N.P.) (See figure 1 for using assembly)			all	Ref
	282314L		Installation + Intercooler by-pass valve (N.P.)			all	1
	282314R		(See figure 176 for detailed illustration)			all	1
			Installation - Intercooler by-pass valve (N.P.)			all	1
25	282394L		Valve Assembly - Intercooler by-pass			all	1
26	282394R		Valve Assembly - Intercooler by-pass			all	1
	282423L		Installation + Intercooler by-pass valve flexible control (N.P.)			all	1
			(See figure 176 for detailed illustration)				
	282423R		Installation - Intercooler by-pass valve flexible control (N.P.)			all	1
			(See figure 176 for detailed illustration)				
27	282477		Control Assembly - By-pass valve and intercooler damper			all	1
	272509L		Installation - Cabin air intercooler (N.P.) (See figure 176 for detailed illustration)			all	1
	272509R		Installation - Cabin air intercooler (N.P.) (See figure 176 for detailed illustration)			all	1
28	270503-10L		Duct Assembly - To intercooler			all	1
	270503-10R		Duct Assembly - To intercooler			all	1
29	270503-12		Intercooler Assembly (May be made from AS506992 Harrison Radiator Div.)			all	1
30	270503-8L		Duct Assembly - To control valve			all	1
	270503-8R		Duct Assembly - To control valve			all	1
31	270503-9L		Duct Assembly - To control valve			all	1
	270503-9R		Duct Assembly - To control valve			all	1
	257980		Installation - Cabin pressure outflow control valve (N.P.)			all	1
			(See figure 177 for detailed illustration)				
32	298432		Valve Assembly - Regulating control (See figure 180 for detailed illustration) (Replaces 644005 and 257980-50 for spares per service bulletin 49/SB-278)			all	2
	272842		Installation - Fan and filter unit (N.P.) (See figure 179 for detailed illustration)			all	1
33	257791		Housing Assembly - Unit fan (Not recommended as a saleable spare)			all	1
34	14081		Filter Assembly - Air conditioning (Airmaze Corp.) (644118)			all	1
	258758		Installation - Ground air connection assembly (N.P.)			all	1
			(See figure 178 for detailed illustration)				
35	258666		Holder Assembly - Ground air connection			all	1
	267165		Installation - Cabin pressure relief valve (N.P.)			all	1
			(See figure 177 for detailed illustration)				
36	644071		Valve Assembly - Cabin emergency pressure relief			all	2
	282738		Installation - Auxiliary vent LH (N.P.)			all	1
37	282738-4		Duct - Flight station auxiliary			all	1
38	282738-3		Duct - Flight station auxiliary			all	1
39	282741-3		Duct Assembly - Flight station auxiliary			all	1
40	282741-4		Duct Assembly - Flight station auxiliary			all	1
41	282740-24		Installation - Auxiliary vent LH valve (N.P.)			all	1
			(See figure 178 for detailed illustration)				
42	282738-2		Duct Assembly - Flight station auxiliary			all	1
	282732		Installation - Auxiliary vent forward RH (N.P.)			all	1
43	282732-2		Duct Assembly - Auxiliary vent RH			all	1
44	282732-4		Duct Assembly - Auxiliary vent RH			all	1
	282733		Installation - Auxiliary vent aft RH (N.P.)			all	1
45	282733-4		Duct Assembly - Auxiliary vent RH			all	1
46	282733-2		Duct Assembly - Auxiliary vent RH			all	1
47	282736-2		Valve Assembly - Auxiliary vent aft RH			all	1
			(See figure 178 for detailed illustration)				
	288482		Installation - Flight station heat and vent (N.P.) (See figure 1 for using assembly)			dy	Ref
	288484		Installation - Flight station diverter valve (N.P.)			dy	1
48	288484-30		Duct Assembly - To diverter			dy	1

(Continued on next page)

AIR  
DISTRIBUTION

## GROUP . . . Air Distribution System

## Detail Unit . . . Air Distribution System Complete (Continued)

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER	N O M E N C L A T U R E						SERIAL CODE	UNITS PER ASSY.
		1	2	3	4	5	6		
	01-288484-6	Valve Service Assembly - Flight station diverter (Note - This service assembly consists of parts 288486-6, 16, 17, 37, 41, and 43)						dy	Ref
172 - 49	288484-6	Valve Assembly - Flight station diverter						dy	1
	288484-14	Lever - Control						dy	1
	288484-57	Link Assembly - Control						dy	1
	BYLC2091	Gear Box - Electric motor driven (Barber Coleman) (644105)						dy	1
	283441	Mount Assembly - Auxiliary vent valve control motor						dy	2
	288484-37	Vane Assembly - Diverter						dy	1
	288484-16	Pivot - Diverter valve vane						dy	1
	288484-17	Gasket - Diverter valve vane						dy	1
	288484-41	Gasket - Diverter valve vane						dy	1
	288484-43	Cover Assembly						dy	1
50	288484-23	Duct Assembly - Flight station						dy	1
	288484-64	Duct Assembly - Flight station diverter valve						dy	1
51	288484-47	Duct Assembly						dy	1
52	288484-46	Duct Assembly						dy	1
	288348	Installation - Station 135 - 352 flight station duct (N.P.)						dy	1
53	288348-11	Duct Assembly - Flight station (Co-pilots)						dy	1
54	288348-7	Duct Assembly - Flight station (Pilots)						dy	1
	288348-10	Tube (-11 only)						dy	1
	288348-12	Tube (-7 only)						dy	1
	262241-4	Cap - Air conditioning duct						dy	1
	262232	Pin - Adjusting air outlet retainer						dy	1
	262234	Retainer - Adjusting spring						dy	1
	262235	Spring - Adjusting air outlet						dy	1
	262236L	Outlet Assembly - Adjusting air (-7 only)						dy	1
	262236R	Outlet Assembly - Adjusting air (-11 only)						dy	1
	262233	Nameplate - LH adjusting air outlet (-7 only)						dy	1
	266312	Nameplate - RH adjusting air outlet (-11 only)						dy	1
55	640144	Control (Arebs control) (640144)						dy	1
56	288348-4	Duct Assembly - Flight station						dy	1
	265813	Structure Assembly - Fuselage front section (N.P.) (See figure 1 for using assembly)						all	Ref
	270290	Installation - Station 205 - 260 air condition duct (N.P.)						all	1
57	270399	Duct Assembly						all	1
58	270400	Duct Assembly						all	1
59	272604	Duct Assembly						all	1
	270291	Installation - Station 260 - 278.4 air condition (N.P.)						all	1
	02-270446	Duct Service Assembly (270446 duct less 272604-3 flange)						all	Ref
60	270446	Duct Assembly						all	1
61	270447	Duct Assembly						all	1
	281044	Grille Assembly						all	1
	266903	Installation - Stations 278.4 to 333.6 air duct LH (N.P.)						all	1
	270405	Elbow Assembly						all	1
62	267848	Duct Assembly						all	1
63	258087-2	Seal - Duct to former						all	1
	266904	Installation - Station 333.6 - 407.2 air duct LH (N.P.)						all	1
64	267430-2	Duct Assembly						all	1
65	267692	Duct Assembly						all	1
	287671	Installation - Flight station and astral dome air line (N.P.) (See figure 1 for using assembly)						dy	Ref
	287670	Installation - Station 260 RH vent control valve (N.P.)						dy	1
66	287670-3	Plate - Vent control valve						dy	1
	287670-2	Plate - Vent control valve						dy	1
	287670-4	Door - Vent control valve						dy	1
	287670-5	Boss - Vent control valve						dy	1
67	287671-20	Elbow Assembly - Duct						bj	hk-du
68	287673-3	Duct Assembly - Flexible						dy	1
69	287671-38	Duct Assembly - Flexible						dy	1
	287671-18	Elbow Assembly - Duct						dy	1
	287671-34	Sleeve - Duct						dy	1
	287671-33	Seal - Duct						dy	1
70	287671-15	Duct Assembly - Flight station						dy	1
	288271	Installation - Astral dome and flight station duct (N.P.)						dy	1
71	288271-4	Duct Assembly - Flight station						dy	1
	288271-23	Sleeve - Duct						xx	2
72	288271-3	Duct Assembly - Flight station						dy	1
73	288271-2	Elbow Assembly - Flight station and astral dome						dy	1
	288271-22	Sleeve - Duct						dy	2
	288271-21	Seal						dy	4
74	287671-2	Duct Assembly - Astral dome						xx	1
	287673-2	Duct - Flexible						xx	1
75	287671-3	Nozzle Assembly - Duct						xx	1
	287671-30	Support Assembly - Nozzle						xx	1
76	287671-8	Duct Assembly - Flight station and astral dome						dy	1
	287671-10	Adapter - Duct						dy	2
	293896	Installation - Station 407.2 - 425.6 air conditioning duct modification (N.P.) (See figure 1 for using assembly)						sss	Ref
77	293896-2L	Duct Assembly - Stations 407.2 - 425.6						sss	1
78	283896-2R	Duct Assembly - Stations 407.2 - 425.6						sss	1
	265844	Structure Assembly - Fuselage center section (See figure 1 for using assembly)						all	Ref
	267374L	Installation - Stations 407.2 - 425.6 air duct (N.P.)						all	1
	267374R	Installation - Stations 407.2 - 425.6 air duct (N.P.)						all	1
	267825L	Duct Assembly (See index 77)						rrr	1
	267825R	Duct Assembly (See index 78)						rrr	1
	267141L	Installation - Stations 425.6 - 490.7 air duct (N.P.)						all	1
79	267869L	Duct Assembly						all	1
80	267869R	Duct Assembly						all	1
81	267868L	Duct Assembly						all	1
82	267868R	Duct Assembly						all	1
83	258087-2	Seal - Duct to former						all	1
	267373L	Installation + Stations 490.7 - 566.4 air duct (NP)						all	1
	267373R	Installation + Stations 490.7 - 566.4 air duct (NP)						all	1
84	267385-2L	Duct Assembly						all	1
85	267385-2R	Duct Assembly						all	1
86	267681L	Duct Assembly						all	1
87	267681R	Duct Assembly						all	1

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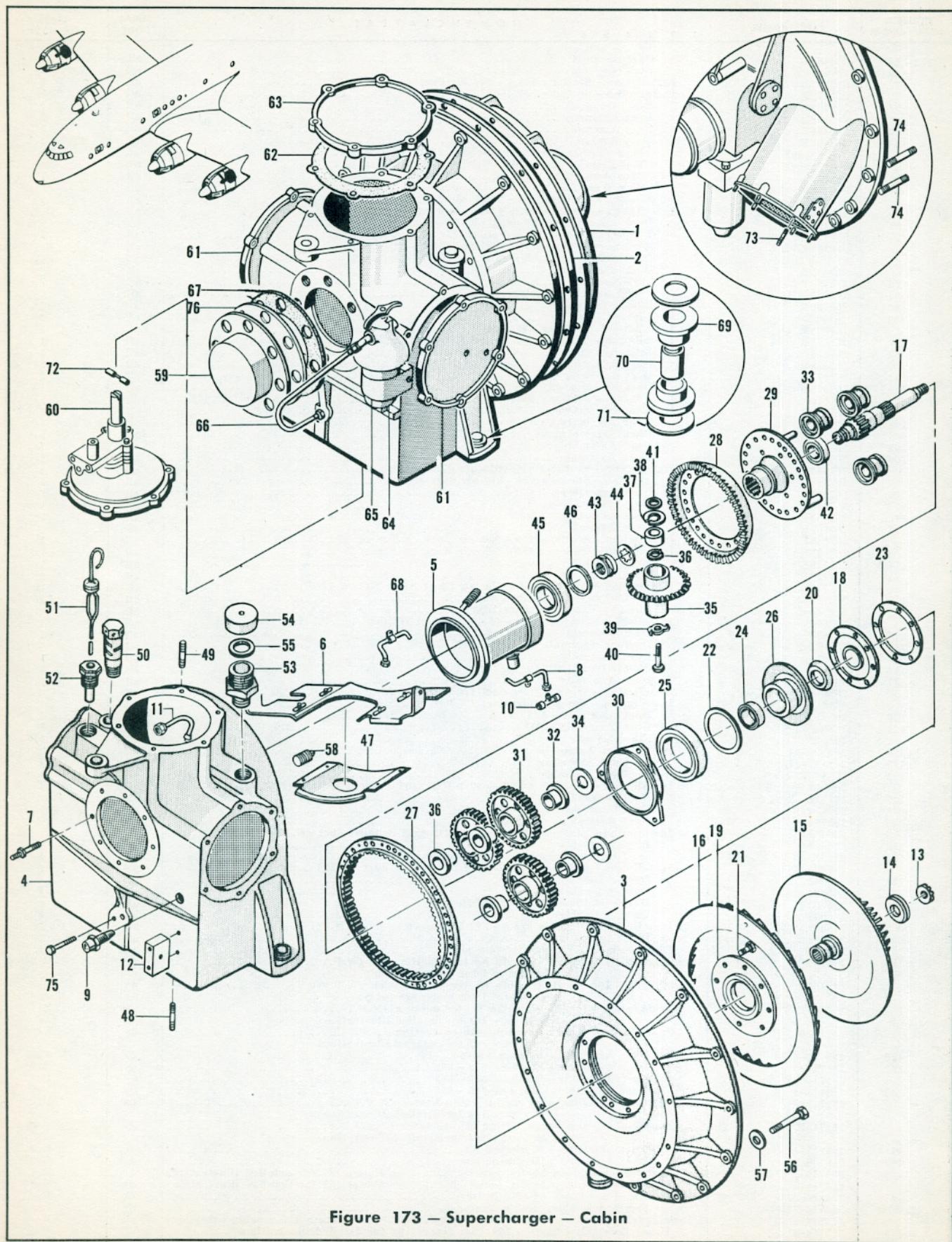
## GROUP . . . Air Distribution System

## Detail Unit . . . Air Distribution System Complete (Continued)

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER		N O M E N C L A T U R E						SERIAL CODE	UNITS PER ASSY.
			1	2	3	4	5	6		
172 - 88	267680L		Duct Assembly						all	1
89	267680R		Duct Assembly						all	1
	267372L		Installation - Stations 566.4 - 640 air duct (N.P.)						all	1
	267372R		Installation - Stations 566.4 - 640 air duct (N.P.)						all	1
90	267198L		Duct Assembly						all	1
91	267498R		Duct Assembly						all	1
92	267497L		Duct Assembly						all	1
93	267497R		Duct Assembly						all	1
	01-265150L		Elbow Service Assembly (Deletes 267497-3 riser)						all	Ref
	01-265150R		Elbow Service Assembly (Deletes 267497-3 riser)						all	Ref
94	265150L		Elbow Assembly						all	1
95	265150R		Elbow Assembly						all	1
	267140L		Installation - Stations 640 - 676.8 air duct (N.P.)						all	1
	267140R		Installation - Stations 640 - 676.8 air duct (N.P.)						all	1
96	258191		Duct Assembly - Outboard LH (Used on 267140L)						all	1
97	268994		Damper Assembly (Used on 267140L)						all	1
	01-267429L		Duct Service Assembly (Deletes 261016-13 clamp)						all	Ref
	01-267429R		Duct Service Assembly (Deletes 261016-13 clamp)						all	Ref
98	267429R		Duct Assembly						all	1
99	267429-3R		Elbow						all	1
100	265199R		Elbow						all	1
101	261016-9		Elbow Assembly						all	2
	267371L		Installation - Stations 676.8 - 750.4 air duct (N.P.)						all	1
	267371R		Installation - Stations 676.8 - 750.4 air duct (N.P.)						all	1
102	267679L		Duct Assembly						all	1
103	267679R		Duct Assembly						all	1
104	267678L		Duct Assembly						all	1
105	267678R		Duct Assembly						all	1
	267370L		Installation - Stations 750.4 - 824 air duct (N.P.)						all	1
	267370R		Installation - Stations 750.4 - 824 air duct (N.P.)						all	1
106	267832L		Duct Assembly						all	1
107	267832R		Duct Assembly						all	1
108	267833L		Duct Assembly						all	1
109	267833R		Duct Assembly						all	1
	267369L		Installation - Stations 824 - 919 air duct (N.P.)						all	1
	267369R		Installation - Stations 824 - 919 air duct (N.P.)						all	1
110	267683L		Duct Assembly						all	1
111	267683R		Duct Assembly						all	1
112	267682L		Duct Assembly						all	1
113	267682R		Duct Assembly						all	1
	267029L		Installation - Stations 919 - 956 air duct (N.P.)						all	1
	267029R		Installation - Stations 919 - 956 air duct (N.P.)						all	1
114	267428L		Duct Assembly						all	1
115	267428R		Duct Assembly						all	1
	282735		Installation - Auxiliary ventilation front beam fitting (N.P.)						all	1
116	282735-4		Duct - Front beam auxiliary						all	2
	282735-3		Flange - Front beam auxiliary						all	1
	267032		Installation - Stations 640 - 658.4 air duct (N.P.)						all	1
117	267033		Duct Assembly						all	1
118	270605		Damper Assembly - RH						all	1
119	267031		Duct Assembly						all	1
120	267030		Duct Assembly						all	1
121	258189		Duct Assembly						all	1
	268652L		Installation - Wing inflow duct (N.P.)						all	1
	268652R		Installation - Wing inflow duct (N.P.)						all	1
122	268952-2		Duct Assembly - LH						all	1
123	268952-3		Duct Assembly - RH						all	1
	268565		Elbow Assembly						all	1
124	268565-3		Duct Assembly						all	2
125	268565-2L		Duct Assembly						all	1
126	268565-2R		Duct Assembly						all	1
	260736		Installation - Stations 603.2 - 695.2 RH vent exhaust system (N.P.)						all	1
127	261722		Duct Assembly						all	1
128	260429		Duct Assembly						all	1
129	262185		Duct Assembly						all	1
	260389		Installation - Stations 695.2 - 805.6 RH vent exhaust duct (N.P.)						all	1
130	260484		Duct Assembly						all	1
131	270532		Damper Assembly - Toilet exhaust check						all	1
	265530		Installation - Stations 805.6 - 1016.75 exhaust duct (N.P.)						all	1
132	265532		Duct Assembly						all	1
133	265534		Duct Assembly						all	1
134	265587		Duct - Stations 919 - 956 exhaust						all	1
135	265833		Duct Assembly						all	1
	266098		Installation - Stations 976.5 - 996.5 transverse duct (N.P.)						all	1
136	266099		Duct Assembly						all	1
137	265829		Box Assembly - Exhaust system aft						all	1
	284707L		Installation - 100,000 BTU cabin heater modification (N.P.)						dy	Ref
	284707R		(See figure 1 for using assembly)						dy	Ref
	284715L		Installation - 100,000 BTU cabin heater modification (N.P.)						dy	Ref
	284715R		(See figure 1 for using assembly)						dy	Ref
138	284715-2		Installation - Intake air cabin heater ducting (N.P.)						dy	Ref
139	284715-5L		(See figure 182 for detailed illustration)						dy	Ref
	284715-5R		Installation - Intake air cabin heater ducting (N.P.)						dy	Ref
140	284715-6		(See figure 182 for detailed illustration)						dy	Ref
	284710L		Installation - Discharge airline cabin heater (N.P.)						dy	Ref
	284710R		(See figure 182 for detailed illustration)						dy	Ref
141	284710-4		Duct Assembly - By-pass valve						dy	Ref
142	296707-9		Duct Assembly - Stations 623 - 662						dy	Ref
	284716L		Duct Assembly - Stations 623 - 662						dy	Ref
	284716R		Duct Assembly - Stations 662 - 690						dy	Ref
	284716-28L		Installation - Discharge airline cabin heater (N.P.)						dy	Ref
	284716-28R		(See figure 182 for detailed illustration)						dy	Ref
	273702		Installation - Discharge airline cabin heater (N.P.)						all	Ref
144	273702-4		(See figure 182 for detailed illustration)						all	Ref
	273702-4		Panel Assembly - Cabin heater						dy	Ref
	273702-4		Panel Assembly - Cabin heater						all	Ref
	273702-4		Panel Assembly - Station 260 instrument panel (N.P.) (See figure 1 for using assembly)						all	Ref
	273702-4		Panel Assembly - Station 260 (See figure 194 for detailed illustration)						all	Ref

Reissued July 1947



**Figure 173 – Supercharger – Cabin**

## GROUP . . . Air Distribution Units

## Detail Unit . . . Supercharger—Cabin

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER		N O M E N C L A T U R E						SERIAL CODE	UNITS PER ASSY.
			1	2	3	4	5	6		
	185523	Supercharger Overhaul Kit							all	Ref
173 - 1	*644155B	Supercharger Assembly (BH change) (See figure 172 for using assembly)							all	Ref
2	644001	Valve Assembly - Inflow control (See figure 174 for detailed illustration)							all	1
	282881	Gasket - Impeller							all	1
	294695	Gear Box Assembly - Supercharger							all	1
3	257354	Housing Assembly - Planetary							all	1
	294398	Housing Assembly - Gear box							all	1
4	294399	Housing - Gear box							all	1
5	294343	Hub Assembly - Bevel gear							all	1
6	267196	Baffle Assembly - Oil							all	1
7	270452	Stud - Bevel gear hub							all	8
8	294337	Tube Assembly - Slinger							all	1
9	294342	Fitting - Oil filter							all	1
10	294341	Tee - Internal oil line							all	1
11	294338	Tube Assembly - Clutch							all	1
12	294732	Block - Filter mounting							all	1
13	257164	Nut - Impeller drive shaft front							all	1
14	283495	Washer - Impeller							all	1
15	257344	Impeller Assembly - Main							all	1
16	257163	Diffuser Assembly - Supercharger							all	1
17	280496	Shaft - Impeller							all	1
18	274802	Plate - Oil seal guide							all	1
19	279832	Guide - Oil seal							all	1
20	279833	Disc - Oil slinger							all	1
		(Use Dash No. of disc to insure noted clearance between 257354 and 257344 with .002 end play. Thicknesses of discs are: -2, .040; -3, .044; -4, .048; -5, .052; -6, .056; -7, .060; -8, .064; -9, .068; -10, .072)								
21	267827	Bolt - Planetary bearing retainer							all	8
22	267758	Shim - Torque tube bearing							all	1
23	267760	Shim - Inner oil guard							all	1
24	MRC304R	Bearing - Super precision (Marlin-Rockwell)							all	1
25	MRC211CT	Bearing - Clutch throwout (Marlin-Rockwell)							all	1
26	257356	Retainer Assembly - Torque tube bearing							all	1
27	257370	Gear - Ring							all	1
	185193	Service Assembly - Spider gear and auxiliary bevel gear assembly (Consists of 288624, 288731 and MRC302R)							all	1
28	288624	Gear Assembly - Spider							all	1
	257365	Gear - Outer Spider (Sold only with 288731-2)							all	1
29	288622	Hub + Outer spider gear							all	1
30	257355	Retainer Assembly - Planetary gear (288622 and 257355 sold together)							all	1
31	293694	Gear - Planetary (Sold only in sets of 3)							all	3
32	293693	Bushing - Planetary gear (Sold only in sets of 6)							all	6
33	280506	Sleeve - Gear adapter (Sold only in sets of 3)							all	3
34	280510-7	Plate - Planetary gear retainer							all	3
	288731	Gear Assembly - Outer auxiliary bevel							all	1
35	288731-2	Gear - Bevel (Sold only with 257365)							all	1
36	267485	Stop Washer Assembly - Bevel gear							all	1
37	MRC5203SB	Bearing + Bevel gear (Marlin-Rockwell)							all	1
38	MRC3	Ring - Snap (Marlin-Rockwell)							all	1
39	267486	Washer - Bevel gear lock							all	1
40	AN5-6A	Bolt							all	1
41	267759	Shim - Auxiliary bevel gear							all	1
42	MRC302R	Bearing - Super precision (Marlin-Rockwell)							all	1
43	N02	Bearing - Locknut (Fafnir)							all	1
44	W02	Washer + Lock (Fafnir)							all	1
45	MRC208S	Bearing (Marlin-Rockwell)							all	1
46	288623	Shim - Spider gear							all	1
47	267197	Cover - Oil baffle							all	1
48	257815	Stud - Oil pump							all	6
49	257862	Stud - Housing flange							all	18
50	257384	Breather Assembly - Gear box							all	1
51	279834	Dip Stick - Oil gage							all	1
52	279835	Plug Assembly - Oil gage							all	1
53	278625	Neck - Oil filler							all	1
	278623	Cap Assembly - Oil filler							all	1
54	278626	Cap - Oil filler							all	1
55	45262	Gasket - Oil filler cap							all	1
56	257857-16	Screw - Aero cap							all	16
57	257861	Washer - Aero cap screw							all	16
58	2091D2	Plug - Drain (Wright Aeronautical)							all	1
	298384	Gasket - Supercharger oil seal plate							all	1
59	288652	Clutch Assembly - Free wheeling (See figure 175 for detailed illustration)							all	1
60	288536	Pump Assembly - Oil (See figure 174 for detailed illustration)							all	1
61	267890-3	Plate - Gear box housing cover							all	2
62	267891	Gasket - Housing cover plate							all	3
63	267890-4	Plate - Gear box housing cover							all	1
	*ST18H5	Thermocouple (Lewis) (629156)							all	1
64	27072	Filter (Purolator) (667151) (See figure 174 for detailed illustration)							all	1
65	294344	Bracket - Oil filter mounting							all	1
66	294339	Tube Assembly + External oil line							all	1
67	267657	Gasket - Drive shaft							all	1
68	293696	Tube Assembly + Upper by-pass							all	1
69	257955	Grommet - Mounting bracket							all	4
70	257956	Sleeve - Mounting bracket							all	2
71	257957	Washer - Mounting bracket							all	4
72	288625	Pin - Oil pump drive							all	1
73	257318-2	Stud - Relief valve housing							all	6
74	257318-4	Stud - Relief valve housing							all	2
75	257857-7	Screw - Aero cap							all	1
76	294340	Spacer (Replaces 270778 - not interchangeable)							all	1

\* Replaces standard part per Service Bulletins 49/SB-141 and 49/SB-156.

GROUP . . . Air Distribution Units

Detail Unit . . . Pump, Filter and Inflow Valve—Supercharger

Constellation

AIR  
DISTRIBUTION

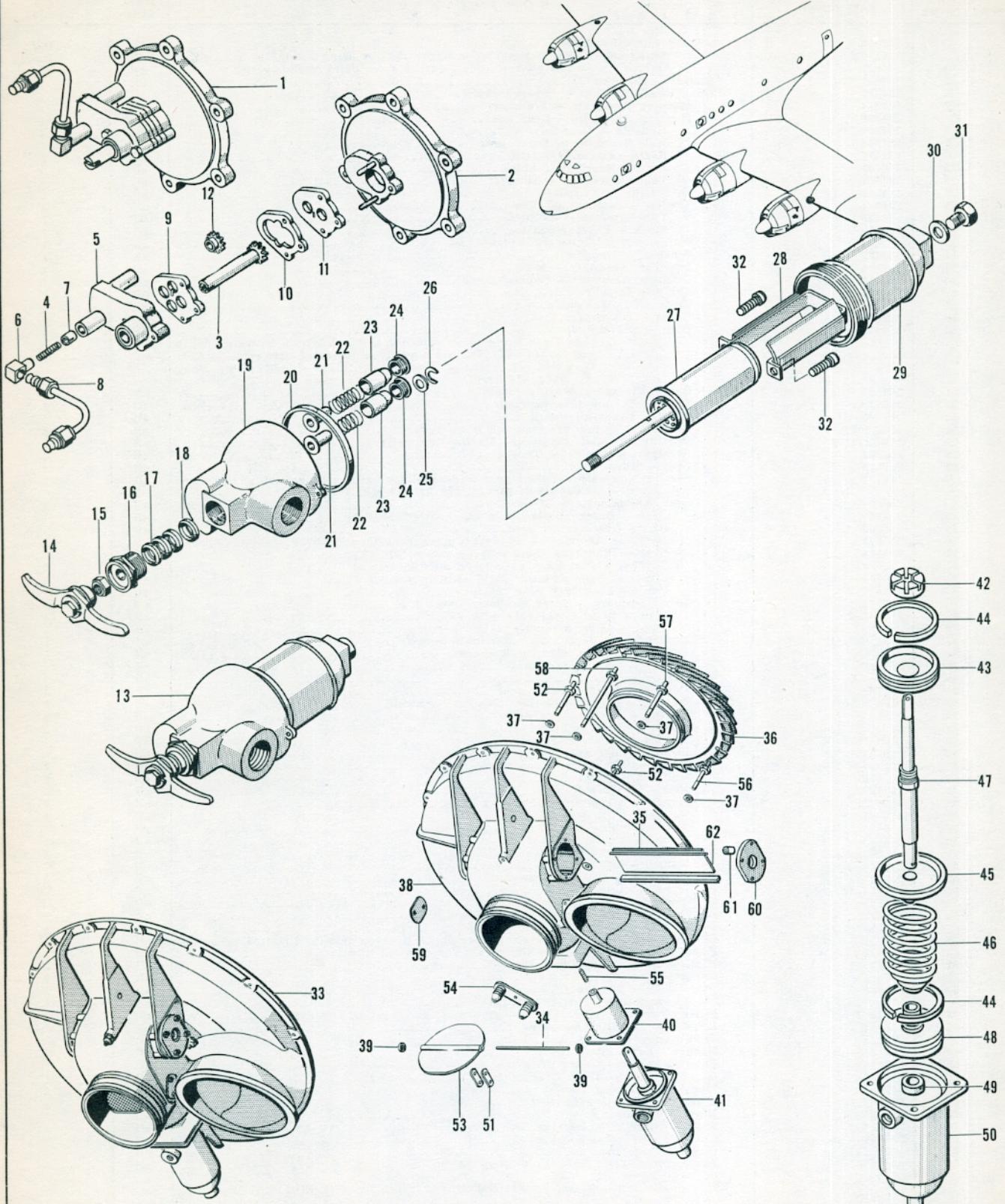


Figure 174 — Pump, Filter and Inflow Valve — Supercharger

## GROUP . . . Air Distribution Units

## Detail Unit . . . Pump, Filter and Inflow Valve—Supercharger

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER		N O M E N C L A T U R E						SERIAL CODE	UNITS PER ASSY.
			1	2	3	4	5	6		
174 - 1	288536	Pump Assembly - Supercharger gear box oil (See figure 173 for using assembly) . . .							all	Ref
2	288539	Frame Assembly - Supercharger oil pump . . .							all	1
3	288541	Gear Assembly . . .							all	1
4	257893	Spring - Supercharger oil pump relief valve . . .							all	1
5	288542	Outlet Assembly - Supercharger oil pump . . .							all	1
	288535	Bushing - Supercharger oil pump . . .							all	1
6	293501	Adapter - Oil pump by-pass . . .							all	1
7	293692	Poppet - Oil pump relief valve . . .							all	1
8	293697	Tube Assembly - By-pass lower . . .							all	1
9	288538-3	Plate - Supercharger oil pump bearing . . .							all	1
10	288537	Plate - Supercharger oil pump bearing . . .							all	1
11	288538-2	Plate - Supercharger oil pump bearing . . .							all	1
12	288540	Gear - Supercharger oil pump drive shaft cap . . .							all	1
	294170	Screw - Set . . .							all	1
13	27072	Filter (Purolator) (667151) (See figure 173 for using assembly) . . .							all	1
14	24412	Handle Assembly . . .							all	1
15	24335	Nut . . .							all	1
16	26488	Plug - Stuffing box packing . . .							all	1
17	27048	Packing - . . .							all	1
18	25669	Adapter . . .							all	1
19	27074	Head . . .							all	1
20	25666	Gasket . . .							all	1
21	25660	Spring - Relief valve . . .							all	1
22	25663	Guide - Spring . . .							all	1
23	25664	Piston - Relief valve . . .							all	1
24	25665	Seal - Valve . . .							all	1
25	25320	Cap + Retainer . . .							all	1
26	25321	Retainer - Drive shaft . . .							all	1
27	25444	Element Assembly . . .							all	1
28	25449	Knife and Frame . . .							all	1
29	25286	Case . . .							all	1
30	25667	Gasket - Drain plug . . .							all	1
31	25668	Plug - Drain . . .							all	1
32	25447	Screw - Fillister head . . .							all	2
	25473	Bracket . . .							all	1
33	644001	Valve Assembly - Supercharger inflow control (See figure 173 for using assembly) . . .							all	Ref
34	257166	Shaft - Supercharger butterfly valve . . .							all	1
35	267212	Stop - Supercharger inlet check valve . . .							all	1
36	267628	Plate - Supercharger nozzle . . .							all	1
37	267971	Shim - Supercharger nozzle plate . . .							all	5
38	257145	Housing Assembly - Supercharger . . .							all	1
	287247	Bushing - Cabin supercharger inflow housing . . .							all	1
39	33-3	Cylinder - Supercharger control motor . . .							all	2
40	267191	Bearing (Fafnir) . . .							all	1
41	267195	Valve Assembly - Supercharger inflow control pilot . . .							all	1
42	AN320-7	Nut - Aircraft shear . . .							all	1
43	267189	Piston - Supercharger control motor . . .							all	1
44	267201	Piston Ring - Supercharger control . . .							all	2
45	267187	Guide - Supercharger control shaft . . .							all	1
46	267184	Spring - Supercharger control motor piston . . .							all	1
47	267198	Shaft Assembly - Supercharger control . . .							all	1
48	267192	Piston - Supercharger control valve . . .							all	1
49	268171	Washer - Supercharger control piston stop . . .							all	1
50	267194	Cylinder - Supercharger control valve . . .							all	1
51	267186	Link - Supercharger control . . .							all	2
52	268218-3	Stud - Supercharger nozzle plate . . .							all	2
53	267188	Valve Assembly - Supercharger control butterfly . . .							all	1
54	267470	Tap Assembly - Supercharger diffuser . . .							all	1
55	257318-4	Stud - Supercharger relief valve housing . . .							all	4
56	268218-2	Stud - Supercharger nozzle plate . . .							all	1
57	268218-4	Stud - Supercharger nozzle plate . . .							all	1
58	268218-5	Stud - Supercharger nozzle plate . . .							all	1
59	267208	Cover - Supercharger butterfly valve bearing . . .							all	2
60	257169	Cover Assembly - Supercharger inlet check valve . . .							all	2
61	257169-3	Bushing + Inlet valve cover . . .							all	1
62	257167	Valve Assembly - Supercharger inlet check . . .							all	1

AIR DISTRIBUTION

GROUP . . . Air Distribution Units

Detail Unit . . . Clutch, Drive Shaft and Shields—Supercharger

*Constellation*

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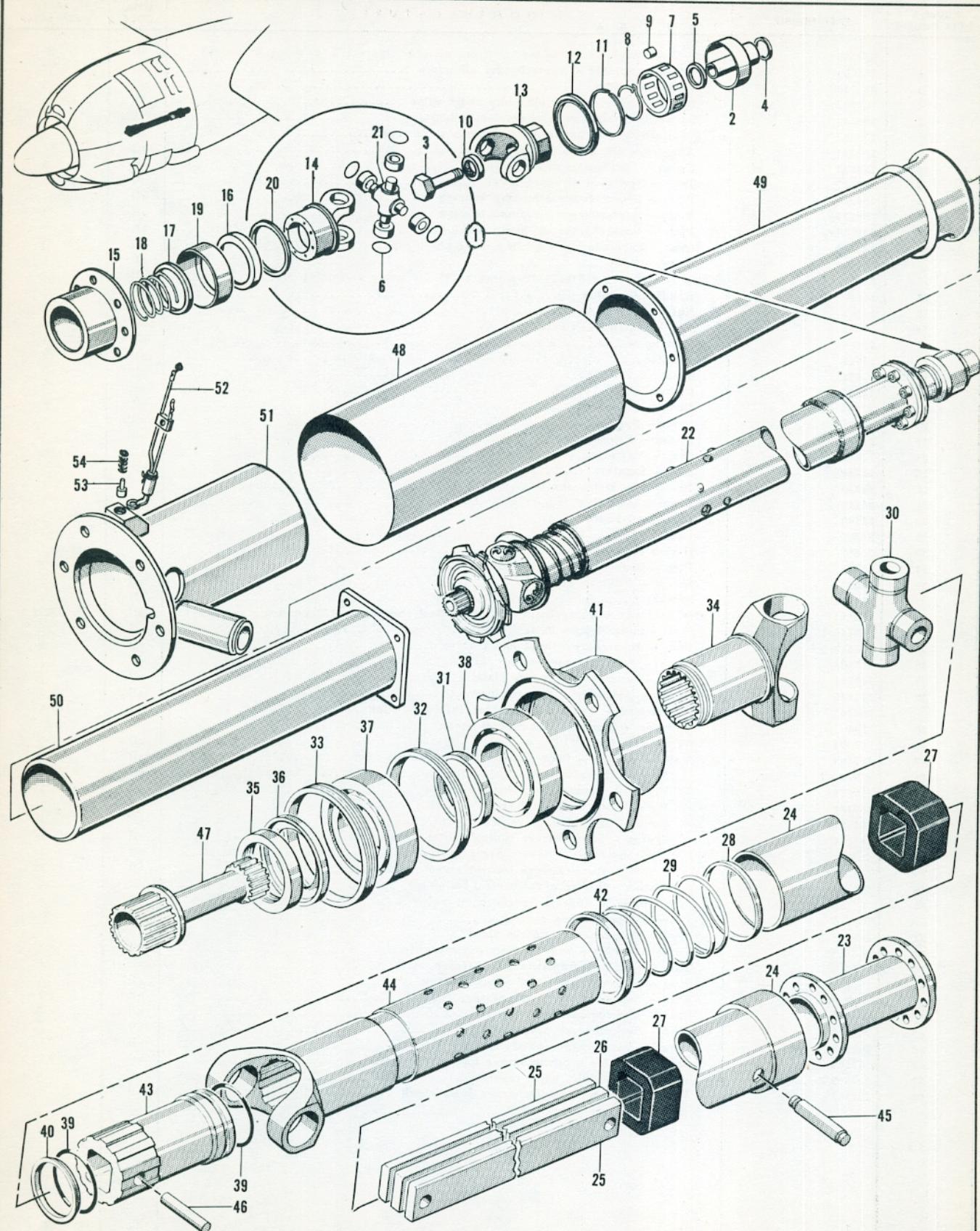


Figure 175 – Clutch, Drive Shaft and Shields – Supercharger

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## GROUP . . . Air Distribution Units

## Detail Unit . . . Clutch, Drive Shaft and Shields—Supercharger

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER		N O M E N C L A T U R E						SERIAL CODE	UNITS PER ASSY.
			1	2	3	4	5	6		
	185522	Service Assembly	Retainer and shield - Supercharger clutch .....						all	Ref
175 - 1	288652	Clutch Assembly	(Consists of Index Nos. 15, 17, 18, 19)						all	Ref
2	288206	Housing	Cabin supercharger free wheeling .....						all	1
3	288207	Bolt Assembly	(See figure 174 for using assembly)						all	1
4	288290	Shim	Supercharger universal joint .....						all	1
5	288208	Bearing	Supercharger clutch thrust .....						all	1
6	268918	Shim	Supercharger drive shaft universal .....						all	1
7	257634	Retainer	Supercharger drive shaft clutch .....						all	1
8	257633	Spring	Supercharger drive shaft clutch .....						all	1
9	190917	Roller	(Studebaker Motor Car Co.) .....						all	10
10	S6R	Bearing	(Federal Bearing Co.) .....						all	2
11	268997	Ring	.....						all	1
12	111GE	Bearing	(Fafnir Bearing Co.) .....						all	1
13	288205	Hub	Supercharger drive shaft rear .....						all	1
14	288742	Universal	Supercharger drive shaft rear .....						all	1
15	288743	Retainer Assembly	Supercharger drive shaft seal .....						all	1
16	A3310	Ring	Mating (Sealol Corp.) .....						all	1
17	A3308	Washer	(Sealol Corp.) .....						all	1
18	A3309	Spring	(Sealol Corp.) .....						all	1
19	B3307	Seal Ring Assembly	(Sealol Corp.) .....						all	1
20	A3311	Packing	(Sealol Corp.) .....						all	1
21	5-53X	Unit Package	(Spicer Mfg.) .....						all	1
	185513	Service Assembly	Supercharger drive shaft .....						all	Ref
			(Consists of Index Nos. 24, 25, 26 and 43)							
22	*644280	Shaft Assembly	Supercharger drive (See figure 67 for using assembly) .....						all	Ref
23	268891	Coupling	Supercharger drive shaft .....						all	1
24	270108	Bolt	Supercharger drive shaft coupling .....						all	16
	295129	Tube Assembly	Supercharger drive shaft .....						all	1
	295128	Leaf Assembly	.....						all	1
25	295128-2	Leaf	.....						all	2
26	295128-3	Leaf	.....						all	1
27	286807	Support	.....						all	2
28	295460	Washer	.....						all	1
29	295463	Spring	.....						all	1
30	5-53X	Unit Package	(Spicer Mfg.) .....						all	1
31	295306-2	Spacer	.....						all	1
32	295306-3	Spacer	.....						all	1
33	295304	Nut	.....						all	1
34	295130	Hub	.....						all	1
35	N08	Locknut (SKF)	.....						all	1
36	W08	Lockwasher (SKF)	.....						all	1
37	R140(00)	Bearing	(Norma-Hoffman) (Alternates: SKF Nos. N208C3 or NU208C3) .....						all	1
38	6208C3	Bearing	(SKF) (Alternate: Norma-Hoffman No. 208MF) .....						all	1
39	AN6227-25	Packing	"O" Ring .....						all	2
40	295355	Retainer	.....						all	1
41	295303	Housing	.....						all	1
42	295487	Washer	.....						all	1
43	295354	Spline Assembly	Supercharger drive shaft .....						all	1
44	295317	Universal Assembly	.....						all	1
	295405	Sleeve	Supercharger drive shaft .....						all	1
45	268886	Pin	Supercharger drive shaft inner .....						all	1
46	270305	Pin	Supercharger drive shaft spline .....						all	1
47	295302	Shaft	Supercharger drive shaft rear .....						all	1
48	*295638	Shield Assembly	Drive shaft (See figure 67 for using assembly) .....						all	Ref
49	261035	Shield Assembly	Drive shaft (See figure 67 for using assembly) .....						all	Ref
50	261086	Shield Assembly	Drive shaft (See figure 67 for using assembly) .....						all	Ref
	*295504	Shield Assembly	Drive shaft (See figure 67 for using assembly) .....						all	Ref
51	*295504-2	Weld Assembly	Drive shaft shield .....						all	1
52	*295170	Thermocouple Assembly	Drive shaft .....						all	1
53	*295179	Plunger	Thermocouple retainer .....						all	1
54	*295180	Spring	Thermocouple plunger .....						all	1
		* Replaces standard part per Service Bulletin 49/SB-107.								

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GROUP . . . . Air Distribution Units

Detail Unit . . . Intercooler and By-pass Valves

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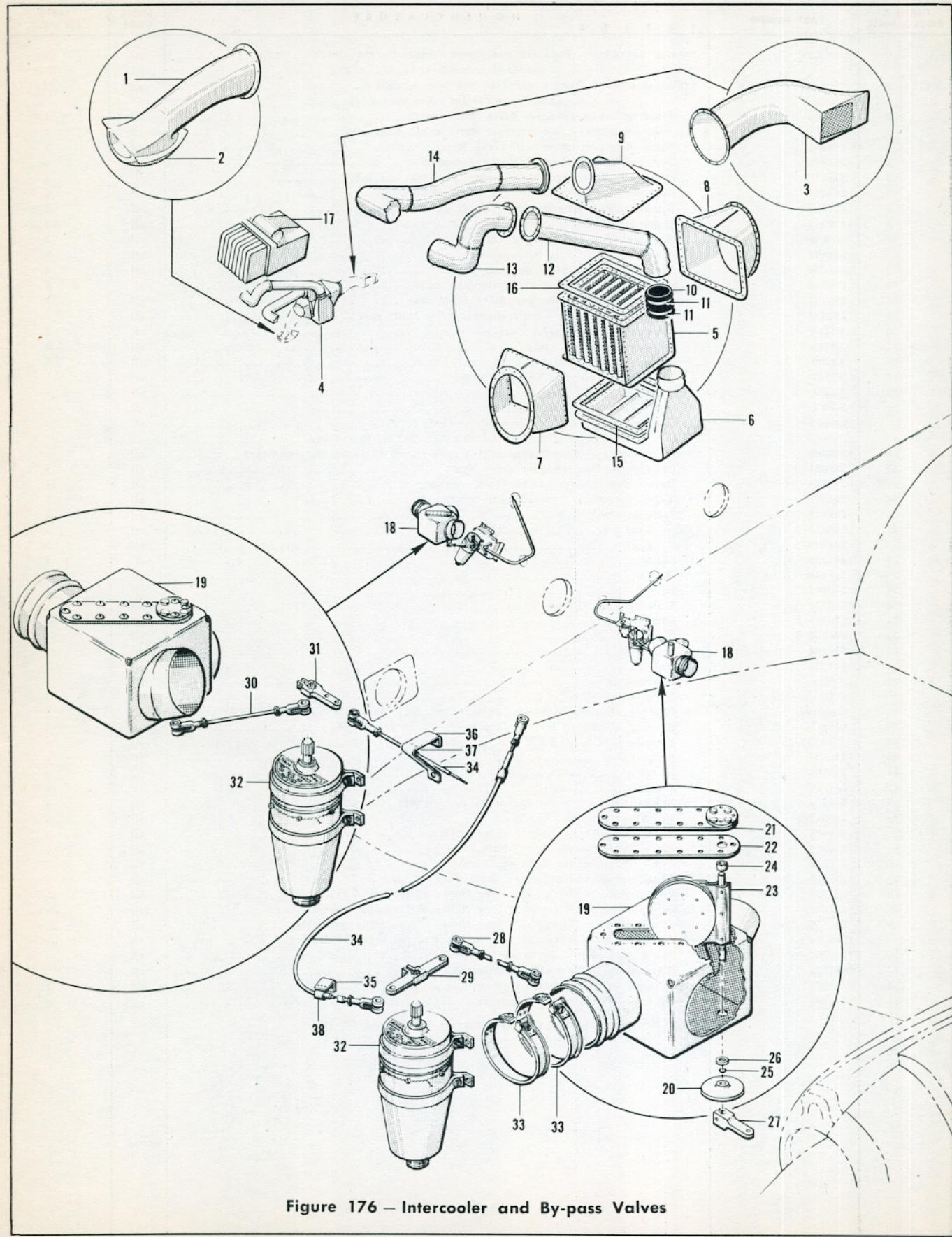


Figure 176 – Intercooler and By-pass Valves

## GROUP . . . Air Distribution Units

## Detail Unit . . . Intercooler and Bypass Valves

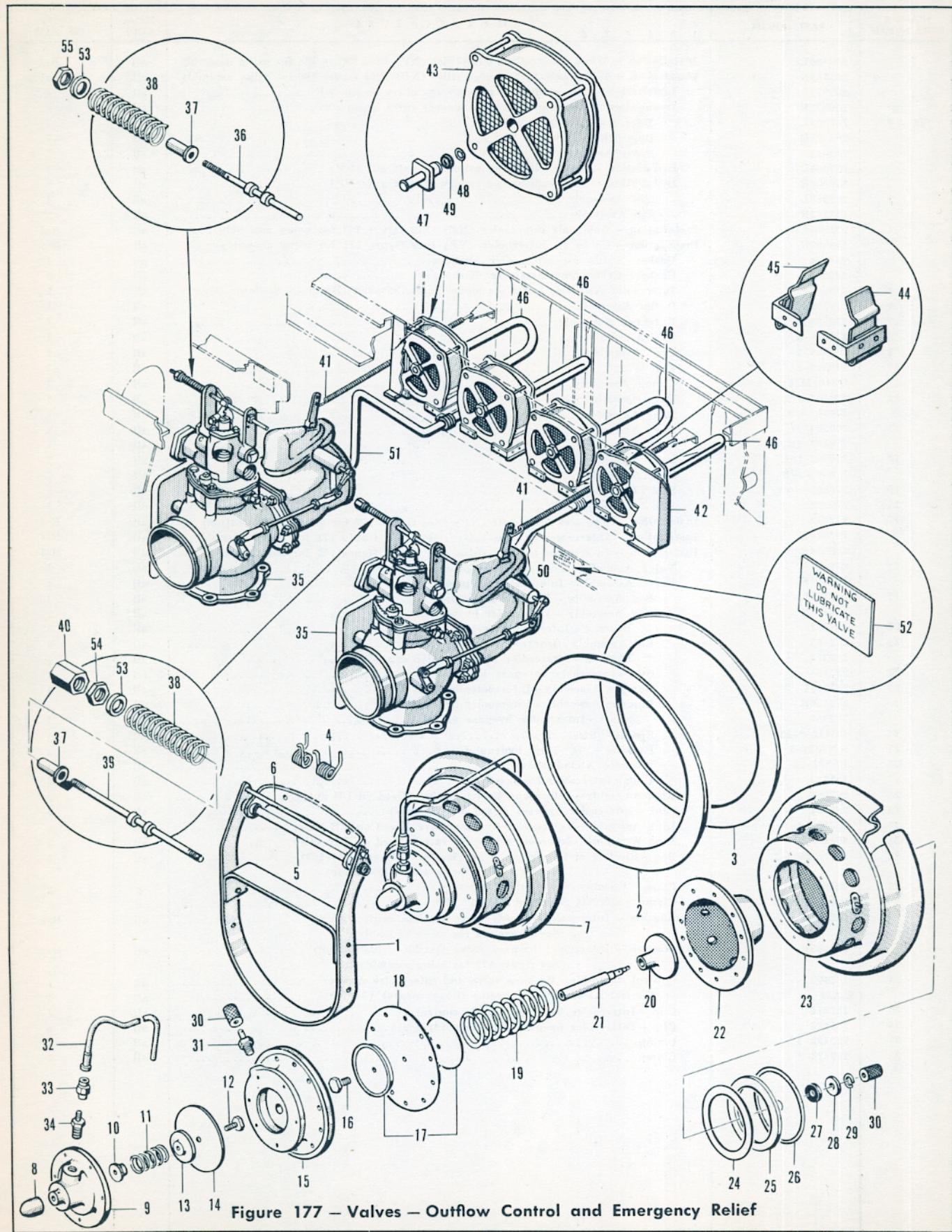
FIGURE & INDEX NUMBER	PART NUMBER	N O M E N C L A T U R E						SERIAL CODE	UNITS PER ASSY.
		1	2	3	4	5	6		
	269589L	Installation - Wing stub trailing edge fillet (NP) (See figure 188 for using assembly)						all	Ref
	269589R	Installation - Wing stub trailing edge fillet (NP) (See figure 188 for using assembly)						all	Ref
	259972L	Installation - Air conditioning condenser entry scoop (NP) .....						all	1
	259972R	Installation - Air conditioning condenser entry scoop (NP) .....						all	1
176 - 1	263324L	Duct Assembly .....						all	1
	263324R	Duct Assembly .....						all	1
2	263211	Scoop Assembly .....						all	1
	259964L	Installation - Air conditioning condenser exit gill (NP) .....						all	1
	259964R	Installation - Air conditioning condenser exit gill (NP) .....						all	1
3	263212L	Gill Assembly .....						all	1
	263212R	Gill Assembly .....						all	1
4	272509L	Installation - Cabin air intercooler (NP) (See figure 172 for using assembly) .....						all	Ref
	272509R	Installation - Cabin air intercooler (NP) (See figure 172 for using assembly) .....						all	Ref
	286056	Gasket - Cabin air aftercooler discharge .....						all	4
	285938	Gasket - Cabin air aftercooler discharge .....						all	2
5	270503-12	Intercooler Assembly - May be made from AS506992 (Harrison Radiator Div.) .....						all	1
6	270503-2	Outlet Assembly .....						all	1
7	270503-7	Entrance Assembly .....						all	1
8	270503-5	Exit Assembly .....						all	1
9	270503-3	Inlet Assembly .....						all	1
10	270503-4	Seal .....						all	1
11	QS100M56	Clamp Assembly .....						all	2
12	270503-8L	Duct Assembly .....						all	1
	270503-8R	Duct Assembly .....						all	1
13	270503-9L	Duct Assembly .....						all	1
	270503-9R	Duct Assembly .....						all	1
14	270503-10L	Duct Assembly .....						all	1
	270503-10R	Duct Assembly .....						all	1
15	270991	Seal - Intercooler .....						all	1
16	270992	Seal - Intercooler .....						all	1
17	272842	Installation - Fan and filter unit (NP) (See figure 179 for detailed illustration) .....						all	Ref
	282314L	Installation - Intercooler by-pass valve (NP) (See figure 172 for using assembly) .....						all	Ref
	282314R	Installation - Intercooler by-pass valve (NP) (See figure 172 for using assembly) .....						all	Ref
18	282394L	Valve Assembly - Intercooler by-pass .....						all	1
	282394R	Valve Assembly - Intercooler by-pass .....						all	1
19	282315L	Box Assembly - Intercooler by-pass .....						all	1
	282315R	Box Assembly - Intercooler by-pass .....						all	1
20	282321	Bearing - Intercooler by-pass valve .....						all	1
21	282405	Lid Assembly - Intercooler by-pass valve .....						all	1
	282320	Bearing - Intercooler by-pass valve cap .....						all	1
22	282408	Seal - Intercooler by-pass valve .....						all	1
23	282350L	Damper Assembly - Intercooler by-pass valve .....						all	1
	282350R	Damper Assembly - Intercooler by-pass valve .....						all	1
	282380	Shaft - Intercooler by-pass valve .....						all	1
24	LS642-8-12	Spacer - Steel .....						all	1
25	AN6227-5	Packing - "O" Ring hydraulic .....						all	1
26	LS881-20	Washer - Alelad plain .....						all	1
27	282333	Link - Intercooler by-pass valve .....						all	1
28	282393-2	Link Assembly - Intercooler by-pass valve (Used on LH only) .....						all	1
29	282354	Link - Intercooler by-pass (Used on LH only) .....						all	1
30	282393-3	Link Assembly - Intercooler by-pass valve (Used on RH only) .....						all	1
31	282465	Link Assembly - Intercooler by-pass valve (Used on RH only) .....						all	1
32	BYLC2004-2	Box - Electric motor driven gear (Barber-Colman) (644189) .....	(See figure 181 for detailed illustration)					all	1
33	261016-6	Clamp Assembly - Ventilating system .....						c	2
	QS100M56	Clamp (Aircraft Standard Parts) .....						d	2
	282423L	Installation - Intercooler by-pass valve flexible control (NP) .....	(See figure 172 for using assembly)					all	Ref
	282423R	Installation - Intercooler by-pass valve flexible control (NP) .....	(See figure 172 for using assembly)					all	Ref
34	282477	Control Assembly - By-pass valve and intercooler damper .....						all	1
	3A32	Control Assembly - Connector (Shakespeare) (644103) .....						all	1
35	282916	Clip - Intercooler by-pass flexible control .....						all	1
36	282922	Clip - Intercooler by-pass flexible control .....						all	4
37	282423-2	Clamp .....						all	1
38	282423-3	Clamp .....						all	1

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GROUP . . . Air Distribution Units

Detail Unit . . . Valves—Outflow Control and Emergency Relief

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## GROUP . . . Air Distribution Units

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## Detail Unit . . . Valves—Outflow Control and Emergency Relief

FIGURE & INDEX NUMBER	PART NUMBER		N O M E N C L A T U R E						SERIAL CODE	UNITS PER ASSY.
			1	2	3	4	5	6		
	267165	Installation - Cabin pressure emergency relief valve (NP) . . . . . (See figure 172 for using assembly)							all	Ref
177 - 1	283140-2	Yoke Assembly - Cabin relief valve . . . . .							all	2
2	257969	Seat - Cabin relief valve inlet . . . . .							all	2
3	257971	Seal - Cabin relief valve inlet (Synthetic rubber) . . . . .							all	2
4	271335L	Spring - Cabin relief valve hinge . . . . .							all	2
	271335R	Spring - Cabin relief valve hinge . . . . .							all	2
5	283139	Pin - Cabin relief valve hinge . . . . .							all	2
6	LS825-168	Pin - Cabin relief valve hinge . . . . .							all	2
7	644071	Valve Assembly - Cabin emergency pressure relief . . . . .							all	2
8	271826	Lid - Pilot valve . . . . .							all	1
9	271548	Cap - Pilot valve . . . . .							all	1
10	271550	Retainer - Pilot valve spring . . . . .							all	1
11	271549	Spring - Pilot valve . . . . .							all	1
12	271553	Stud - Pilot valve . . . . .							all	1
13	271552	Washer - Pilot valve diaphragm . . . . .							all	1
14	271551	Diaphragm - Pilot valve . . . . .							all	1
15	271547	Base Assembly - Pilot valve . . . . .							all	1
	271639	Seat . . . . .							all	1
16	271578	Orifice - Relief valve . . . . .							all	1
17	271581	Washer - Relief valve diaphragm . . . . .							all	2
18	271583	Diaphragm - Relief valve . . . . .							all	1
19	271579	Spring - Relief valve . . . . .							all	1
20	271580	Guide - Relief valve . . . . .							all	1
21	271577	Shaft Assembly - Relief valve . . . . .							all	1
22	271586	Retainer - Relief valve . . . . .							all	1
23	267040	Flap Assembly - Cabin relief valve . . . . .							all	1
24	257970	Seat - Cabin relief valve outlet . . . . .							all	1
25	257972	Seal - Cabin relief valve outlet (Synthetic rubber) . . . . .							all	1
26	257958	Cap - Cabin relief valve outlet . . . . .							all	1
27	271582	Washer - Relief valve shaft (Synthetic rubber) . . . . .							all	1
28	AN940-516	Washer . . . . .							all	1
29	NAS51-31	Ring - Retainer external type for bearings and shafting . . . . .							all	1
30	271585	Filter Assembly - Relief valve . . . . .							all	2
31	271627	Nipple - Pilot valve filter . . . . .							all	1
32	271576	Vent Assembly - Relief valve . . . . .							all	1
33	AN811BT2D	Nut (Parker) . . . . .							all	1
34	AN811FT2D	Nipple (Parker) . . . . .							all	1
	257980	Installation - Cabin pressure outflow control valve (NP) . . . . . (See figure 172 for using assembly)							all	Ref
35	298432	Valve Assembly - Regulating control (See figure 180 for detailed illustration) (Replaces 644005 and 257980-50 for spares per Service Bulletin 49/SB-278)							all	2
36	257223	Rod Assembly - Closing pull . . . . .							all	1
37	257366	Sleeve - Pull rod spring . . . . .							all	2
38	257228	Spring - Bellcrank return . . . . .							all	2
39	260637	Rod Assembly - Closing pull RH . . . . .							all	1
40	260092	Nut - Control mechanism . . . . .							all	1
41	260752	Spring - Outflow valves . . . . .						a	2	
	289637	Spring - Outflow valves . . . . .						b	2	
	281171	Installation - Outflow valve filters (N.P.) . . . . .						all	1	
42	281254	Panel Assembly - Valve filters . . . . .						all	1	
43	641102	Filter Assembly - Cabin pressure control (See fig. 194 for detailed illustration)						all	4	
44	281009L	Bracket Assembly - Control panel filter . . . . .						all	4	
45	281009R	Bracket Assembly - Control panel filter . . . . .						all	4	
	281010	Spring - Filter mounting . . . . .						all	1	
46	281473	Hose Assembly - Tar filter . . . . .						all	4	
	281252	Connector Assembly - Control panel filter . . . . .						all	4	
47	281252-2	Connector . . . . .						all	1	
48	280998	Ring - Control panel filter snap . . . . .						all	1	
49	AN6227-7	Packing - "O" Ring hydraulic . . . . .						all	1	
50	257326-235	Tube . . . . .						all	1	
51	257326-236	Tube . . . . .						all	1	
52	281681	Nameplate - Valve warning . . . . .						all	1	
53	LS881-6	Washer - Alclad plain . . . . .						all	2	
54	AN345-10	Nut - Light hexagon . . . . .						all	1	
55	AN365-1032	Nut - Self-locking . . . . .						all	1	

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GROUP . . . Air Distribution Units

Detail Unit . . . Auxiliary Vents and Ground Air Connection

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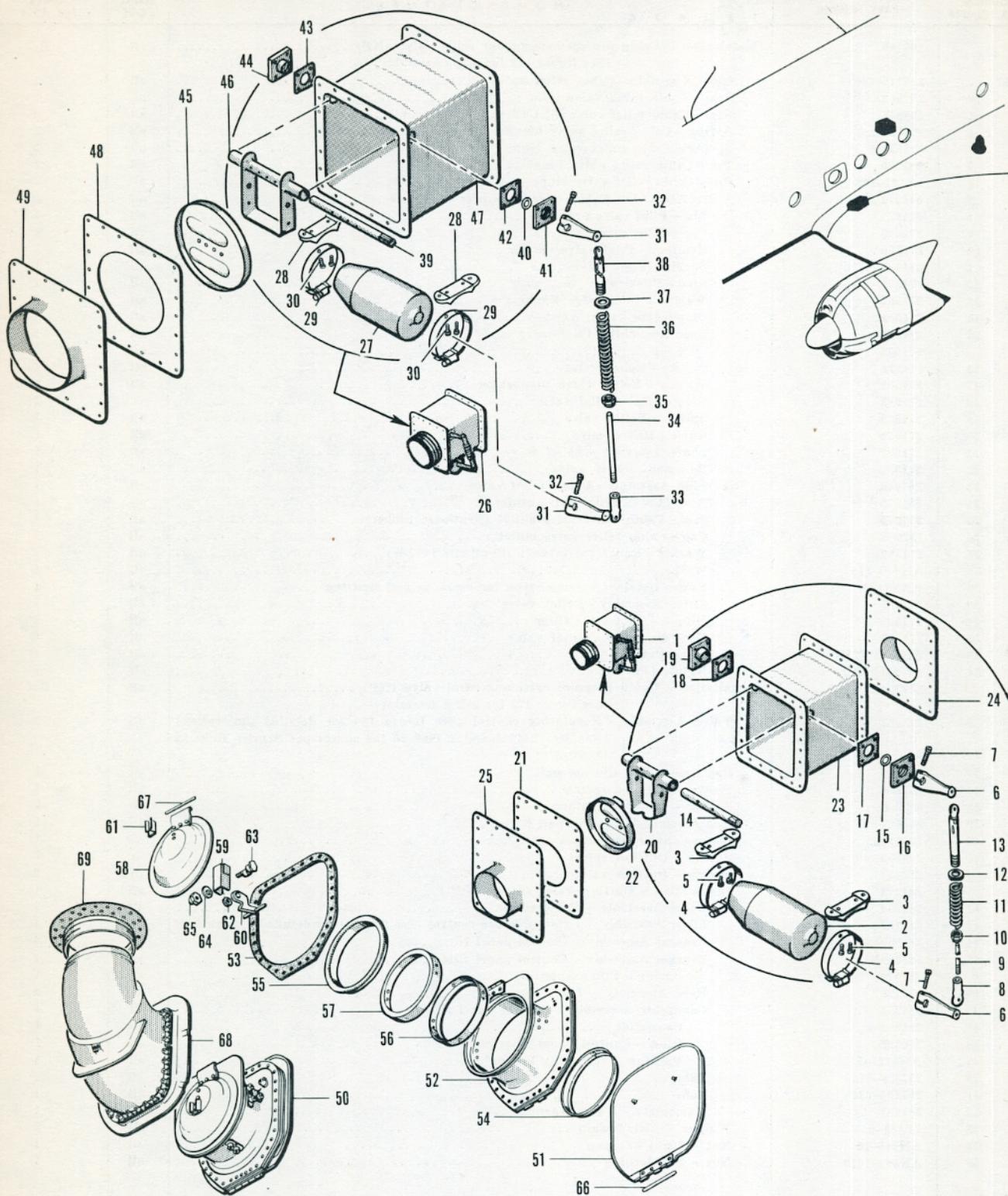


Figure 178 – Auxiliary Vents and Ground Air Connection

**GROUP . . . : Air Distribution Units**

**Detail Unit . . . Auxiliary Vents & Ground Air Connection**

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LOCKHEED AIRCRAFT CORPORATION

455

GROUP . . . Air Distribution Units

Detail Unit . . . Fan, Filter and Outflow Vent Control

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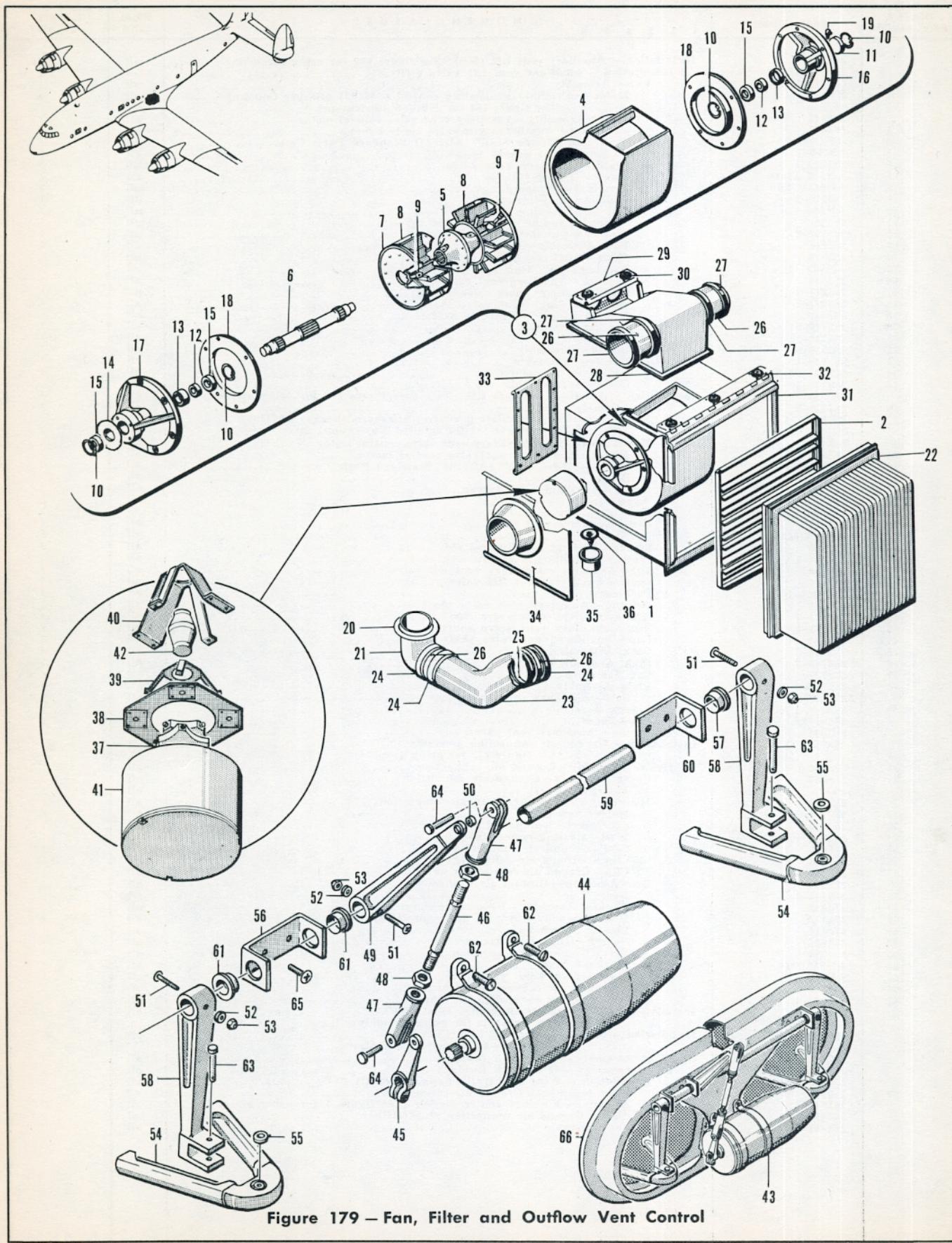


Figure 179 – Fan, Filter and Outflow Vent Control

## GROUP . . . Air Distribution Units

## Detail Unit . . . Fan, Filter and Outflow Vent Control

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6	NOMENCLATURE	SERIAL CODE	UNITS PER ASSY.
				1	2
	02-272842		Service Assembly - Cabin air fan and housing	all	Ref
	272842		Installation - Fan and filter unit (NP) (See figure 172 for using assembly)	all	Ref
	257791		Housing Assembly - Unit fan (Not recommended as a saleable spare)	all	1
179 - 1	257792		Box Assembly	all	1
2	284706		Valve Assembly - Air conditioning box	all	1
3	162-09002-0000		Blower - Double width air condition unit (Doak Aircraft) (644022) (Component of 02-272842)	all	1
4	162-09002-0001		Scroll Assembly	all	1
	185530		Service Assembly - Recirculating fan wheel	all	Ref
	162-09002-0006		Wheel Assembly (Component of 185530)	all	1
5	162-09002-0009		Hub Assembly	all	1
6	*296108		Shaft - Impeller (Component of 185530)	all	1
7	162-09002-0007		Ring	all	2
8	162-09002-0008		Blade	all	24
9	*296101		Spider Assembly - Cabin fan rotor (Component of 185530)	all	2
10	*NAS50-175		Ring - Locking	all	4
11	162-09002-0027		Cap	all	1
12	*296102-5		Bearing	all	2
13	*296107		Retainer - Bearing	all	2
14	255981		Gasket	all	2
15	13723		Seal - Grease (Chicago Rawhide Co.)	all	3
16	*296106-3		Support - Left	all	1
17	*296106-2		Support - Right	all	1
18	162-09002-0018		Inlet	all	2
19	1636		Fitting - Alemite (Stewart-Warner)	all	1
20	261029		Gasket - Ground air connection elbow (Component of 02-272842)	all	1
21	273399		Elbow Assembly - Air conditioning box	all	1
22	14081		Filter Assembly - Air conditioning (Airmaze Corp.) (644118) (Component of 02-272842)	all	1
23	258655		Elbow Assembly - Ground air connector	all	1
24	QS100M80		Clamp Assembly - Ventilating system (Aircraft Std. Parts Co.)	all	5
25	261398		Ring - Ground air connecting seal	all	1
26	272842-2		Seal	all	4
27	QS100M112		Clamp Assembly - Ventilating system (Aircraft Std. Parts Co.)	all	4
28	260948		Inter-Connector Assembly - Air condition unit	all	1
29	260951		Mounting Assembly	all	1
30	150P12		Mount (Lord Mfg. Co.)	all	2
31	260947		Mounting Assembly - Station 640	all	1
32	150P12		Mount (Lord Mfg. Co.)	all	3
33	261463		Door Assembly - Fan housing end	all	1
34	260945		Door Assembly - Fan housing side	all	1
35	260952		Cup Assembly - Air condition unit drain	all	1
36	260953		Strainer Assembly - Air condition unit drain (Component of 02-272842)	all	1
37	*296102		Installation - Fan motor drive (NP) (See figure 1 for using assembly)	all	1
	EB283-1		Motor - Piston type hydraulic (Reworked to 296102-4) (R. A. Hawkes) (667444) (See figure 150 for detailed illustration)	all	Ref
38	*294932		Mount Assembly - Cabin fan motor	all	1
39	*294835		Spider - Cabin fan motor	all	1
40	*294836		Support Assembly - Cabin fan motor diaphragm	all	1
41	*294933		Hood Assembly - Cabin fan	all	1
42	*296105		Coupling Assembly - Fan motor drive	all	1
	*J1211-6		Coupling (Lord Mfg. Co.)	all	1
	*296103		Adapter - Motor drive coupling	all	1
	*296104		Adapter - Motor drive coupling	all	1
	*296120		Plug - Fan motor drive	all	2
	281073		Key - Fan motor drive	all	2
	283073		Bulkhead Assembly - Fuselage station 1037 (See figure 41 for using assembly)	all	Ref
43	283199		Installation - Auxiliary vent outflow control (NP)	all	1
44	BYLC2091		Motor (Barber Colman Co.) (644105) (See figure 181 for detailed illustration)	all	1
45	AYLC155		Lever (Barber Colman Co.)	all	1
	283208		Link Assembly - Auxiliary vent outflow control	all	1
46	283208-2		Rod	all	1
47	AN486-3		Clevis - Rod end adjustment	all	2
48	AN316-4R		Nut - Check - Aircraft	all	2
	283206		Lever Assembly - Auxiliary vent outflow control torque	all	1
49	283206-2		Lever	all	1
50	283229		Spacer	all	1
51	LS560-22		Screw - 10-32 Phillips binding head	all	3
52	AN960-10L		Washer - Plain	all	3
53	AN365-1032		Nut - Self-locking	all	3
54	283201		Yoke - Auxiliary vent outflow control	all	2
55	AN6227-8		Packing - "O" Ring hydraulic	all	2
	283202		Bracket Assembly - Auxiliary vent outflow control double	all	1
56	283202-2		Bracket	all	1
57	283204		Bushing - Auxiliary vent outflow control	all	2
58	283207		Lever - Auxiliary vent outflow control	all	1
59	283205		Shaft - Auxiliary vent outflow control torque	all	1
	283203		Bracket Assembly - Auxiliary vent outflow control single	all	1
60	283203-2		Bracket	all	1
61	283204		Bushing - Auxiliary vent outflow control	all	1
62	AN502-10-12		Screw - Drilled fillister head machine (fine thread)	all	4
63	AN393-29		Pin - Flat head 3/16	all	2
64	AN393-17		Pin - Flat head 3/16	all	2
65	LS560-9		Screw - No. 10-32 Phillips binding head	all	4
66	283200		Pan Assembly - Auxiliary vent outflow control	all	1

\* Replaces standard part per Service Bulletin 49/SB-50 and Mod. Print 294806.

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GROUP . . . Air Distribution Units  
Detail Unit . . . Valve—Pressure Regulating

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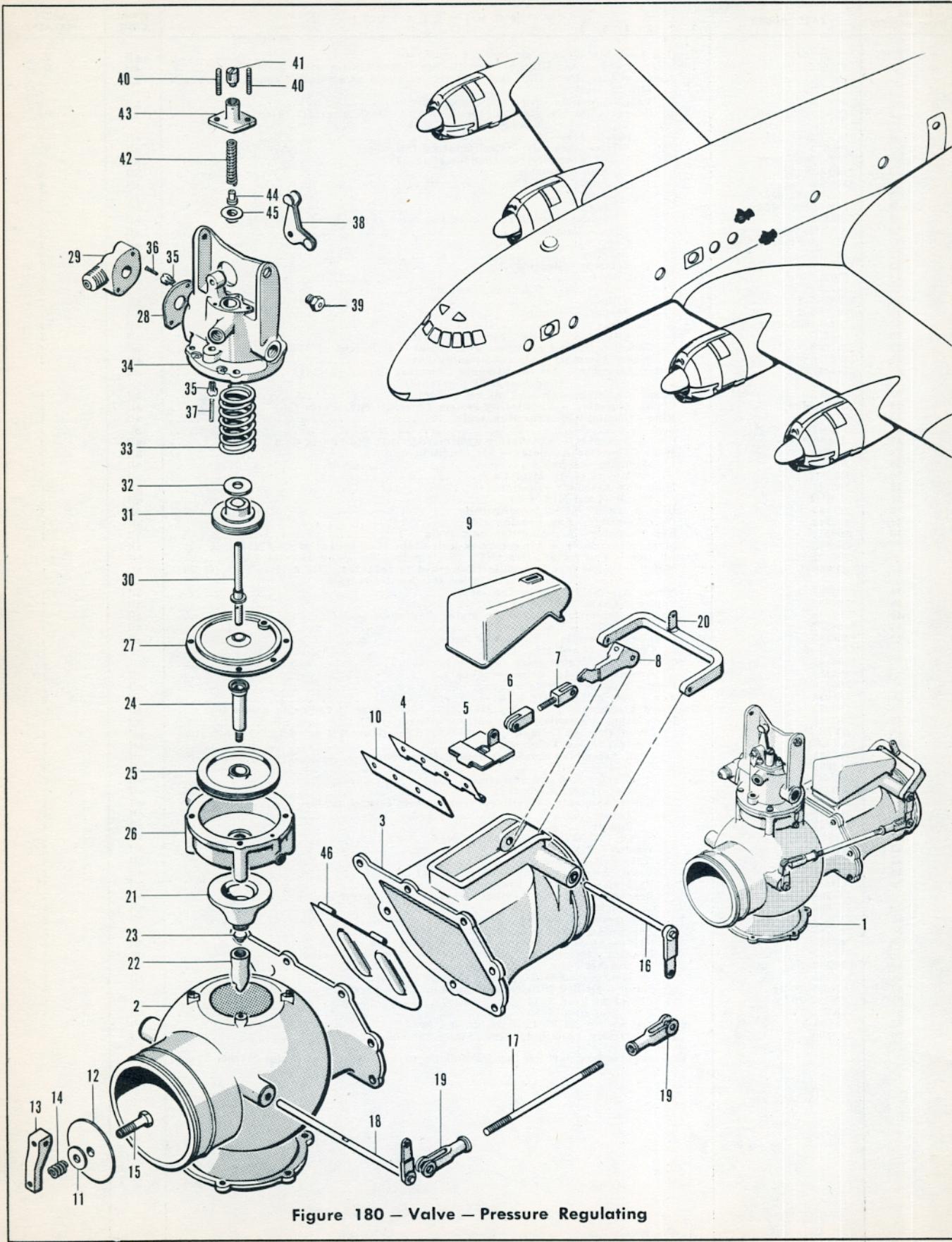


Figure 180 — Valve — Pressure Regulating

## GROUP . . . Air Distribution Units

*Constellation*

## Detail Unit . . . Valve—Pressure Regulating

FIGURE & INDEX NUMBER	PART NUMBER		N O M E N C L A T U R E						SERIAL CODE	UNITS PER ASSY.
			1	2	3	4	5	6		
180 - 1	298432		Valve Assembly - Cabin pressure regulating outflow control .....						all	Ref
			(Replaces 257980-50 and 644005 for spares per Service Bulletin 49/SB-278) (See figure 177 for using assembly)							
2	257190		Manifold - Air control .....						all	1
3	257191		Housing - Air check valve .....						all	1
4	257192		Hinge - Check valve master half .....						all	1
5	257199		Flange Assembly - Air check valve .....						all	1
6	257200		Link - Closing gear female half .....						all	1
7	257201		Link - Closing gear male half .....						all	1
8	294062		Bellcrank - Supercharger dump valve .....						all	1
9	294061		Boot - Outflow control valve .....						all	1
10	268366		Shim - Check valve hinge .....						all	1
11	276657		Washer - Dump valve stem .....						all	1
12	270989		Valve - Supercharger dump .....						all	1
13	270987		Arm - Supercharger dump valve .....						all	1
14	270990		Spring - Supercharger dump valve .....						all	1
15	271012		Bolt - Supercharger dump valve .....						all	1
16	294060		Shaft Assembly - Dump valve bellcrank .....						all	1
	294059		Shaft - Dump valve bellcrank .....						all	1
	270983		Lever - Dump valve long .....						all	1
17	270988		Rod - Supercharger dump valve .....						all	1
18	270985		Shaft Assembly - Dump valve .....						all	1
	270980		Shaft - Dump valve .....						all	1
19	AN486-4		Clevis - Rod end adjusting .....						all	2
20	292875		Bellcrank Assembly - Supercharger dump valve .....						all	1
	298430		Head Assembly - Cabin pressure outflow control valve .....						all	1
	266894		Valve Assembly - Outflow control .....						all	1
	266894-2		Valve Assembly .....						all	1
21	266890		Valve - Outflow control upper half .....						all	1
22	266889		Valve - Outflow control lower half .....						all	1
23	266888		Valve - Outflow control check .....						all	1
	266893		Piston Assembly - Outflow valve motor .....						all	1
24	266891		Rod - Outflow valve motor piston .....						all	1
25	266892		Piston - Outflow valve motor cylinder .....						all	1
26	266948		Cylinder Assembly - Outflow valve motor .....						all	1
	266895		Bushing - Valve motor cylinder .....						all	1
27	266886		Separator - Cabin pressure control valve cylinder .....						all	1
28	293610		Gasket - Elbow hose fitting .....						all	1
29	281172		Elbow - Hose fitting .....						all	1
	266898		Piston Assembly - Differential control cylinder .....						all	1
30	266899		Rod - Differential control cylinder .....						all	1
31	266900		Piston - Differential control cylinder .....						all	1
32	266897		Valve - Differential control cylinder .....						all	1
33	266949		Spring - Differential piston inner balance .....						all	1
	298431		Cylinder Assembly - Outflow valve control differential pressure .....						all	1
34	298431-2		Cylinder .....						all	1
	298099		Bushing - Pressure regulator valve bleed .....						all	2
36	298100		Screw - Valve main cylinder bleed .....						all	1
37	298101		Screw - Valve main cylinder bleed .....						all	1
38	266946		Bellcrank Assembly - Outflow air valve closing .....						all	1
39	257222		Guide - Outflow valve closing pull rod .....						all	1
40	257318-2		Stud - Valve housing .....						all	2
41	257587		Plug - Pressure adjusting valve cylinder .....						all	1
42	257588		Spring - Pressure adjusting valve .....						all	1
43	266943		Cylinder - Pressure adjusting valve .....						all	1
44	266901		Button - Pressure adjusting valve .....						all	1
45	266902		Valve - Pressure adjustment .....						all	1
	293609		Gasket - Separator plate .....						all	2
46	266945		Plate Assembly - Check valve .....						all	1

GROUP . . . . Air Distribution Units

Detail Unit . . . Motors—Ventilating Control

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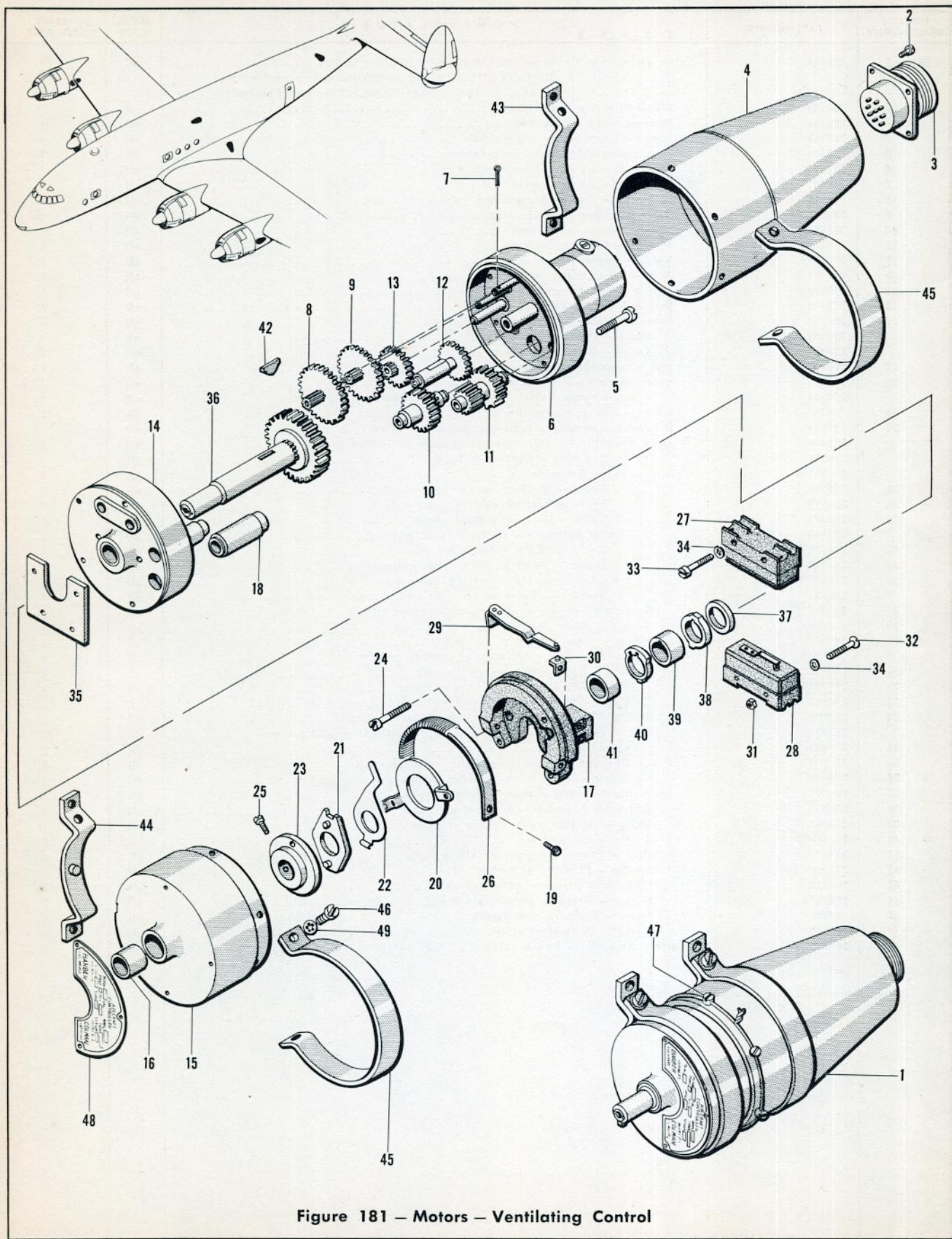


Figure 181 — Motors — Ventilating Control

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LOCKHEED AIRCRAFT CORPORATION

## GROUP . . . Air Distribution Units

## Detail Unit . . . Motors—Ventilating Control

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6	N O M E N C L A T U R E	SERIAL CODE	UNITS PER ASSY.
				dy	Ref
181 - 1	#BYLC2003-2		Motor - Heater control (Barber-Colman) (644188). (See figure 182 for using assembly)	dy	Ref
	#BYLC2004-2		Motor - Intercooler by-pass valve control (Barber-Colman) (644189). (See figure 176 for using assembly)	dy	Ref
	#BYLC2091		Motor - Auxiliary ventilating control (Barber-Colman) (644105). (See figures 172 and 179 for using assembly)	dy	Ref
2	BYLC117		Screw - Connector	dy	4
3	BYLC99		Connector - 8 Prong (Used on BYLC2003-2 and BYLC2004-2 only)	dy	1
	BYLC133		Connector - 7 Prong (Used on BYLC2091 only)	dy	1
4	BYLC96		Cover Assembly - Connector (Used on BYLC2003-2 and BYLC2004-2 only)	dy	1
	BYLC168		Cover Assembly - Connector (Used on BYLC2091 only)	dy	1
5	AYLC188		Screw - Clamping	dy	5
6	AYLC226		Motor (24V)	dy	1
7	AYRF9		Pin - Cotter	dy	2
8	AYLC171-2		Gear Assembly	dy	1
9	AYLC172-2		Gear Assembly	dy	1
10	AYLC175-4		Gear Assembly	dy	1
11	AYLC233		Gear Assembly (Used on BYLC2003-2 and BYLC2004-2 only)	dy	1
	AYLC176-4		Gear Assembly (Used on BYLC2091 only)	dy	1
12	AYLC174-2		Gear Assembly	dy	1
13	AYLC173-1		Gear Assembly	dy	1
14	AYLC225		Plate Assembly - Drive and gear	dy	1
15	BYLC115		Cap - End	dy	1
16	AYLC182		Bearing - Oilite	dy	1
17	BYLC75		Block - Switch and rheostat	dy	1
18	AYLC227		Spacer - Lead	dy	1
19	BYRF111		Screw - Binding	dy	7
20	AYCG269-1		Plate - Contact	dy	1
21	BYLC87		Holder - Contact	dy	1
22	BYLC88		Arm - Contact	dy	1
23	BYLC86		Driver - Rheostat	dy	1
24	BYLC138		Screw - Fillister head	dy	2
25	BYLC118		Screw - Rheostat drive	dy	2
26	BYLC122-1		Card Assembly - Resistance (Used on BYLC2003-2 and BYLC2004-2 only)	dy	1
	BYLC150-1		Card Assembly - Resistance (Used on BYLC2091 only)	dy	1
27	AYLC204-1		Switch - Upper limit (Micro) (Used on BYLC2003-2 and BYLC2004-2 only)	dy	1
	AYLC272		Switch - Upper limit (Micro) (Used on BYLC2091 only)	dy	1
28	BYLC164-1		Switch - Lower limit (Micro) (Used on BYLC2003-2 and BYLC2004-2 only)	dy	1
	AYLC307		Switch - Lower limit (Micro) (Used on BYLC2091 only)	dy	1
29	BYLC93		Spring Assembly - Contact (Used on BYLC2003-2 and BYLC2091 only)	dy	1
30	BYLC90		Anchor Assembly - Contact (Used on BYLC2003-2 and BYLC2091 only)	dy	1
31	DYRF19		Nut - Terminal block	dy	2
32	AYLC190		Screw - Fastening	dy	2
33	BYRF274		Screw - Mounting	dy	2
34	CYRD38		Washer - Shakeproof	dy	8
35	AYLC235		Plate - Micro Switch	dy	1
36	BYLC105-1		Shaft Assembly - Main (Used on BYLC2003-2 only)	dy	1
	BYLC79-1		Shaft Assembly - Main (Used on BYLC2004-2 only)	dy	1
	BYLC202		Shaft Assembly - Main (Used on BYLC2091 only)	dy	1
37	BYLC81		Spacer - Cam (Short)	dy	1
38	BYLC103		Cam - Limit (Used on BYLC2003-2 only)	dy	1
39	BYLC83		Spacer - Middle cam (Used on BYLC2003-2 only)	dy	1
	BYLC83-1		Spacer - Middle cam (Used on BYLC2004-2 and BYLC2091 only)	dy	1
40	BYLC84		Cam - Limit (Used on BYLC2003-2 and BYLC2004-2 only)	dy	1
	BYLC226-1		Cam - Limit (Used on BYLC2091 only)	dy	1
41	BYLC85		Spacer - Cam (Long)	dy	1
42	BYLC80-1		Key - Cam	dy	1
43	BYLC77-4		Foot	dy	1
44	BYLC107-1		Foot	dy	1
45	BYLC108-1		Band - Holding	dy	2
46	BYRF84		Screw - Fillister head	dy	4
47	AYLC241		Screw - Cover	dy	6
48	BYLC12-1		Nameplate (Used on BYLC2003-2 and BYLC2004-2 only)	dy	1
	BYLC224		Nameplate (Used on BYLC2091 only)	dy	1
49	CYRD87		Washer - Lock	dy	1
	AYLC155		Lever (Used on BYLC2004-2 only)	dy	1
	AYLC155-1		Lever (Used on BYLC2091 only)	dy	1
	BYRF77		Screw - Fillister head	dy	1
	CYZR62		Condenser (Used on BYLC2091 only)	dy	1
	CYZR63		Resistor (Used on BYLC2091 only)	dy	1
	BYLC165		Support - Band (Used on BYLC2091 only)	dy	1
	DYRF2		Nut - Hexagonal yoke screw (Used on BYLC2091 only)	dy	1
	BYRF172		Screw - Terminal lug (Used on BYLC2091 only)	dy	1
	CYRD31		Washer - Shakeproof (No. 1206) (Used on BYLC2091 only)	dy	1

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GROUP . . . Air Distribution Units

Detail Unit . . . Heater—Cabin

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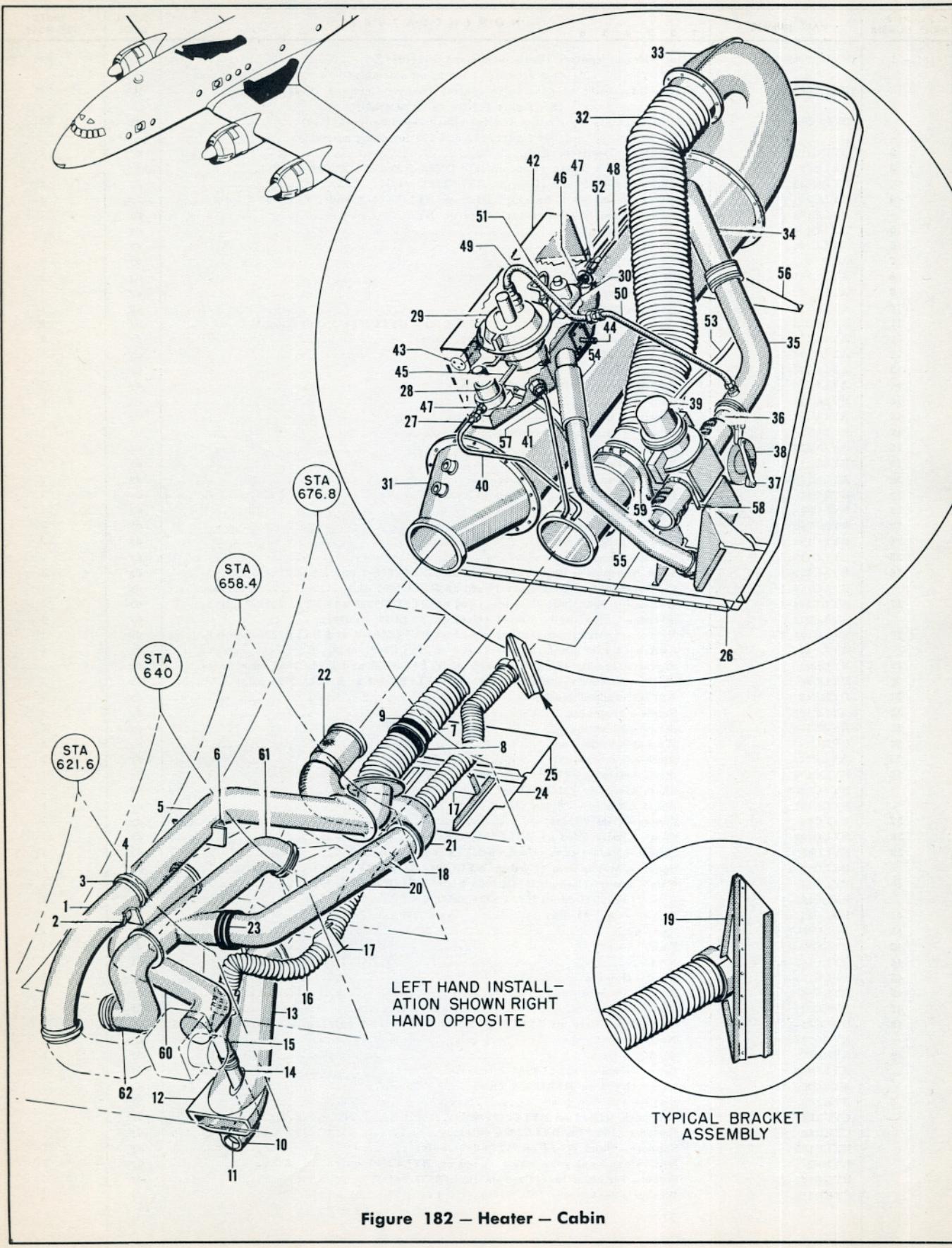


Figure 182 – Heater – Cabin

## GROUP . . . Air Distribution Units

## Detail Unit . . . Heater—Cabin

FIGURE & INDEX NUMBER	PART NUMBER	1    2    3    4    5    6	N O M E N C L A T U R E	SERIAL CODE	UNITS PER ASSY.
				1	2
	284707L		Installation - 100,000 BTU cabin heater modification (N.P.) (See figure 1 for using assembly)	dy	Ref
	284707R		Installation - 100,000 BTU cabin heater modification (N.P.) (See figure 1 for using assembly)	dy	Ref
	284715L		Installation - Intake air cabin heater ducting (LH) (N.P.)	dy	1
	284715R		Installation - Intake air cabin heater ducting (RH) (N.P.)	dy	1
182 - 1	284715-2		Duct Assembly - By-pass valve	dy	1
2	284715-10L		Bracket Assembly - Station 621.6	dy	1
	284715-10R		Bracket Assembly - Station 621.6	dy	1
3	284715-13		Seal (LAC Spec. 1852 rubber coated fabric)	dy	2
4	QS100M56		Clamp - Aero seal (Aircraft Stds. Parts Co.)	dy	6
	01-284715-5L		Service Assembly - Duct, station 623-662	dy	Ref
	01-284715-5R		Service Assembly - Duct, station 623-662	dy	Ref
5	284715-5L		Duct Assembly - Station 623-662	dy	1
	284715-5R		Duct Assembly - Station 623-662	dy	1
6	284715-8L		Bracket Assembly - Station 640	dy	1
	285715-8R		Bracket Assembly - Station 640	dy	1
7	284715-6		Duct Assembly - Station 662-690	dy	1
8	QS100M80		Clamp - Aero seal (Aircraft Stds. Parts Co.)	dy	1
9	284715-15		Pad - .25 x 1.00 x 14.91 synthetic rubber	dy	1
	293112L		Installation - Combustion air scoop (N.P.)	sss	1
	293112R		Installation - Combustion air scoop (N.P.)	sss	1
10	293112-2		Scoop Assembly - Combustion air	sss	1
11	293112-4		Nozzle - Scoop assembly	sss	1
12	293112-12		Scoop Assembly - Air conditioning entry	sss	1
13	293112-11		Duct Assembly - Air conditioning entry	sss	1
14	293112-5		Tube Assembly - Combustion air	sss	1
15	293112-8		Tube - Combustion air	sss	1
	284709L		Installation - Combustion airline cabin heater (N.P.)	dy	1
	284709R		Installation - Combustion airline cabin heater (N.P.)	dy	1
16	284709-4		Duct Assembly - Station 632-695.2	dy	1
	284955		Duct - Flexible	dy	1
17	284709-7		Bracket Assembly - Stations 640 and 676.8	dy	2
	QS100M36		Clamp - Aero seal (Aircraft Stds. Parts Co.)	dy	1
18	284709-10L		Bracket Assembly - Station 658.4	dy	1
	284709-10R		Bracket Assembly - Station 658.4	dy	1
19	284709-14L		Bracket Assembly - Station 695.2	dy	1
	284709-14R		Bracket Assembly - Station 695.2	dy	1
	284710L		Installation - Discharge airline cabin heater (LH) (N.P.)	dy	1
	284710R		Installation - Discharge airline cabin heater (RH) (N.P.)	dy	1
20	284710-4		Duct Assembly - Discharge line	dy	1
21	*296707-9		Duct Assembly - Station 658-676 discharge line	dy	1
22	*296707-3L		Damper Assembly - Discharge airline fire	dy	1
	*296707-3R		Damper Assembly - Discharge airline fire	dy	1
	*AN3216-1		Switch - Micro	dy	1
	*296707-25		Gasket	dy	1
	*296707-16		Link - Fusible	dy	1
	QS100M56		Clamp - Aero seal (Aircraft Stds. Parts Co.)	dy	2
23	284710-15		Seal - Synthetic rubber coated fabric	dy	1
	284708L		Installation - Access panel (LH) (N.P.)	dy	1
	284708R		Installation - Access panel (RH) (N.P.)	dy	1
24	252493L		Door Assembly - LH Access	dy	1
	252493R		Door Assembly - RH Access	dy	1
25	284708-2L		Door Assembly - LH Aft access	dy	1
	284708-2R		Door Assembly - RH Aft access	dy	1
	284716L		Installation - Cabin heater panel (LH) (N.P.)	dy	Ref
	284716R		Installation - Cabin heater panel (RH) (N.P.)	dy	Ref
	185532L		Service Assembly - Spark spray heater	†	Ref
	185532R		Service Assembly - Spark spray heater	†	Ref
			(Optional installation composed primarily of items called out in Service Bulletins 49/SB-38, 49/SB-188 and modification prints 292863L/R, 296732L/R)		
	02-284716-28L		Service Assembly - Cabin heater panel	††	Ref
	02-284716-28R		Service Assembly - Cabin heater panel	††	Ref
			(Continued on next page.)		

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## GROUP . . . Air Distribution Units

## Detail Unit . . . Heater—Cabin (Continued)

FIGURE & INDEX NUMBER	PART NUMBER	1	2	3	4	5	6	NOMENCLATURE	SERIAL CODE	UNITS PER ASSY.
182 - 26	284716-28L			Panel	Assembly - Cabin heater				++	1
	284716-28R			Panel	Assembly - Cabin heater				++	1
	292863-9L			Panel	Assembly - Cabin heater				++	1
	292863-9R			Panel	Assembly - Cabin heater				+	1
	284964L				Installation - Cabin heater equipment (N.P.)				dy	1
	284964R				Installation - Cabin heater equipment (N.P.)				dy	1
	284964-79				Heater Assembly - Cabin				dy	1
27	74A66				Heater Assembly (Surface Combustion) (644253)				++	1
	78A33				Heater Assembly (Surface Combustion) (644292)				+	1
28	450				Filter Assembly - Fuel (Skinner Purifiers) (644107)				+++	1
	26422				Element Assembly - Fuel filter				+++	1
	26405				Gasket - Fuel filter				+++	1
29	B54A20				Regulator Assembly - Fuel flow (Surface Combustion) (644250)				+++	1
	52A35				Seat Assembly Group				+++	1
	S1041-2-5				Gasket - Cover cap				+++	1
	S1070-2-18				Spring - Outlet pressure				+++	1
	S1070-11-7				Spring - Valve				+++	1
	58138C				Diaphragm Assembly - Control (Small)				+++	1
	58199C				Diaphragm Assembly - Control (Large)				+++	1
30	A40A31				Valve - Fuel solenoid (Surface Combustion) (644135)				+++	1
	406706A				Armature Assembly				+++	1
	405935				Coil - 24 Volt				+++	1
	406702				Spring				+++	1
	406728				Gasket				+++	1
	69A01				Plug Assembly - Sealed glow (Replaces 52A53)				++	1
	54A35				Plug - Ignition spark				+	1
	H36A55				Orifice - Fuel metering				++	1
	J36A47				Tip and Strainer Assembly - Spray nozzle				+	1
	39A19				Strainer - Fuel				+	1
	41A08				Cartridge Assembly - Vaporizer				++	1
	83A36				Feed Assembly - Fuel and air				+	1
	51A05				Electrode Assembly - Ground				+	1
	A78A21				Gasket - Air inlet and outlet				+	2
	B78A21				Gasket - Fuel inlet				+	1
	52A02				Gasket - Head				+	1
	78A21				Gasket - Fuel inlet				+	1
	78A71				Gasket - Nozzle holder				+	1
	83A45				Gasket - Spark spray housing				+	1
31	284954				Duct Assembly - Transition				++	1
	292862				Duct Assembly - Transition				+	1
32	284964-44				Duct Assembly - Supercharger air intake, flexible				+++	1
33	284964-2				Elbow Assembly - Large aft				+++	1
34	284964-16				Elbow - Air intake, LH				+++	1
	284964-19				Elbow - Air intake, RH				+++	1
35	284964-17L				Elbow Assembly - Forward air intake				++	1
	284964-17R				Elbow Assembly - Forward air intake				++	1
	292863-7L				Tube Assembly - Forward air intake				+	1
	292863-7R				Tube Assembly - Forward air intake				+	1
36	55A38				Valve - Butterfly (Surface Combustion) (644151)				++	1
37	285017				Link Assembly - Butterfly valve				++	1
	285021-2				Lever - Lower				++	1
	285021-3				Lever - Upper				++	1
	285017-2				Rod - Lever connecting				++	1
38	BYLC2003-2				Motor - Heater control (Barber Colman) (644188)				++	1
	292863-18L				Installation - Heater control box				+	1
	292863-18R				Installation - Heater control box				+	1
	CYLZZ2350				Control Box - Heater (Barber Colman) (644265)				+	1
39	74A44				Regulator - Air pressure (Surface Combustion) (644251)				++	1
	C41A90-8.5				Regulator - Air pressure (Surface Combustion) (644138)				+	1
	S1070-13-2				Spring - Hold open valve				+	1
	S1070-11-3				Spring - Outlet pressure valve				+	1
	57630B				Gasket - Diaphragm case				+	1
	57868B				Coupling - Diaphragm to valve stem				+	1
	S1041-2-3				Gasket - Top cover				+	1
	57869B				Bushing - Long				+	1
	57644B				Bushing - Channel				+	1
	57652C				Diaphragm Assembly - Large				+	1
	57653C				Diaphragm Assembly - Pilot				+	1

(Continued on next page.)

## GROUP . . . Air Distribution Units

## Detail Unit . . . Heater—Cabin (Continued)

FIGURE & INDEX NUMBER	PART NUMBER	1	2	3	4	5	6	N O M E N C L A T U R E	SERIAL CODE	U N I T S P E R A S S Y.
182 - 40	*296732-4							Tube Assembly - Fuel intake, LH ..... (See figure 183 for heater fuel system connection)	+++	1
	*296732-18							Tube Assembly - Fuel intake, RH .....	+++	1
41	*296732-8							Tube Assembly - Fire extinguisher, LH ..... (See figure 188 for fire extinguisher connections)	+++	1
42	*296918L							Box Assembly - Fireproof .....	+++	1
	*296918R							Box Assembly - Fireproof .....	+++	1
43	*17343-6-450							Thermoswitch - Inverse type (Fenwall) (650144-2) .....	+++	1
44	*296732-27							Gland Assembly .....	+++	1
45	*E41A04							Nipple .....	+++	1
46	*C41A04							Nipple .....	++	1
	*K41A04							Nipple .....	+	1
47	*296919							Fitting .....	+++	2
48	*296732-5							Tube Assembly - Solenoid to vaporizer, LH .....	++	1
	*296732-19							Tube Assembly - Solenoid to vaporizer, RH .....	++	1
	*297188-2							Tube Assembly - Solenoid to spray nozzle, LH .....	+	1
	*297188-3							Tube Assembly - Solenoid to spray nozzle, RH .....	+	1
49	*296732-6							Tube Assembly - Fuel flow regulator to nipple, LH .....	+++	1
	*296732-20							Tube Assembly - Fuel flow regulator to nipple, RH .....	+++	1
50	*296732-9							Tube Assembly - Nipple to air intake elbow, LH .....	+++	1
	*296732-23							Tube Assembly - Nipple to air intake elbow, RH .....	+++	1
51	*296732-7							Tube Assembly - Fuel line to nipple, LH .....	+++	1
	*296732-21							Tube Assembly - Fuel line to nipple, RH .....	+++	1
52	*296732-10							Tube Assembly - Nipple to heater exhaust, LH .....	++	1
	*296732-24							Tube Assembly - Nipple to heater exhaust, RH .....	++	1
	*297188-4							Tube Assembly - Nipple to heater exhaust .....	+	1
	*297188-5							Tube Assembly - Nipple to heater exhaust .....	+	1
53	284964-73							Tube Assembly - Heater exhaust to air flow regulator .....	++	1
	284964-74							Tube Assembly - Heater exhaust to air flow regulator .....	++	1
	292863-12							Tube Assembly - Heater exhaust to air flow regulator .....	+	1
	292863-16							Tube Assembly - Heater exhaust to air flow regulator .....	+	1
54	*296732-15							Hose - Box vent .....	+++	1
55	*296732-12							Tube Assembly - Box vent, LH .....	+++	1
	*296732-26							Tube Assembly - Box vent, RH .....	+++	1
56	284716-10L							Bracket Assembly - Heater aft support .....	dy	2
	284716-10R							Bracket Assembly - Heater aft support .....	dy	2
	284716-30							Clamp Assembly - Heater securing .....	dy	2
57	284716-31							Clamp Assembly - Heater securing .....	dy	2
	285003-2							Clamp Assembly - Airscoop airline .....	+++	1
58	285008-3							Clamp Assembly - Airscoop airline .....	dy	1
	285008-4							Clamp Assembly - Supercharger airline .....	dy	1
59	285008-5							Clamp Assembly - Supercharger airline .....	dy	1
	272509L							Installation - Cabin air intercooler (See figure 172 for using assembly) .....	dy	Ref
	272509R							Installation - Cabin air intercooler (See figure 172 for using assembly) .....	dy	Ref
60	270503-10L							Duct Assembly - Intercooler LH .....	dy	Ref
	270503-10R							Duct Assembly - Intercooler RH .....	dy	Ref
61	270503-8L							Duct Assembly - Heater supply line .....	dy	Ref
	270503-8R							Duct Assembly - Heater supply line .....	dy	Ref
62	270503-9L							Duct Assembly - Heater supply line .....	dy	Ref
	270503-9R							Duct Assembly - Heater supply line .....	dy	Ref
								* Replaces standard part, added or serialized per Service Bulletins 49/SB-188 and 49/SB-190		
								† Used on Spark Spray heater installation only.		
								‡ Used on Glow Plug heater installation only.		
								+++ Used on both Spark Spray and Glow Plug heater installations.		

GROUP . . . . Air Distribution Units  
Detail Unit . . . Cabin Heater Fuel System

# Constellation

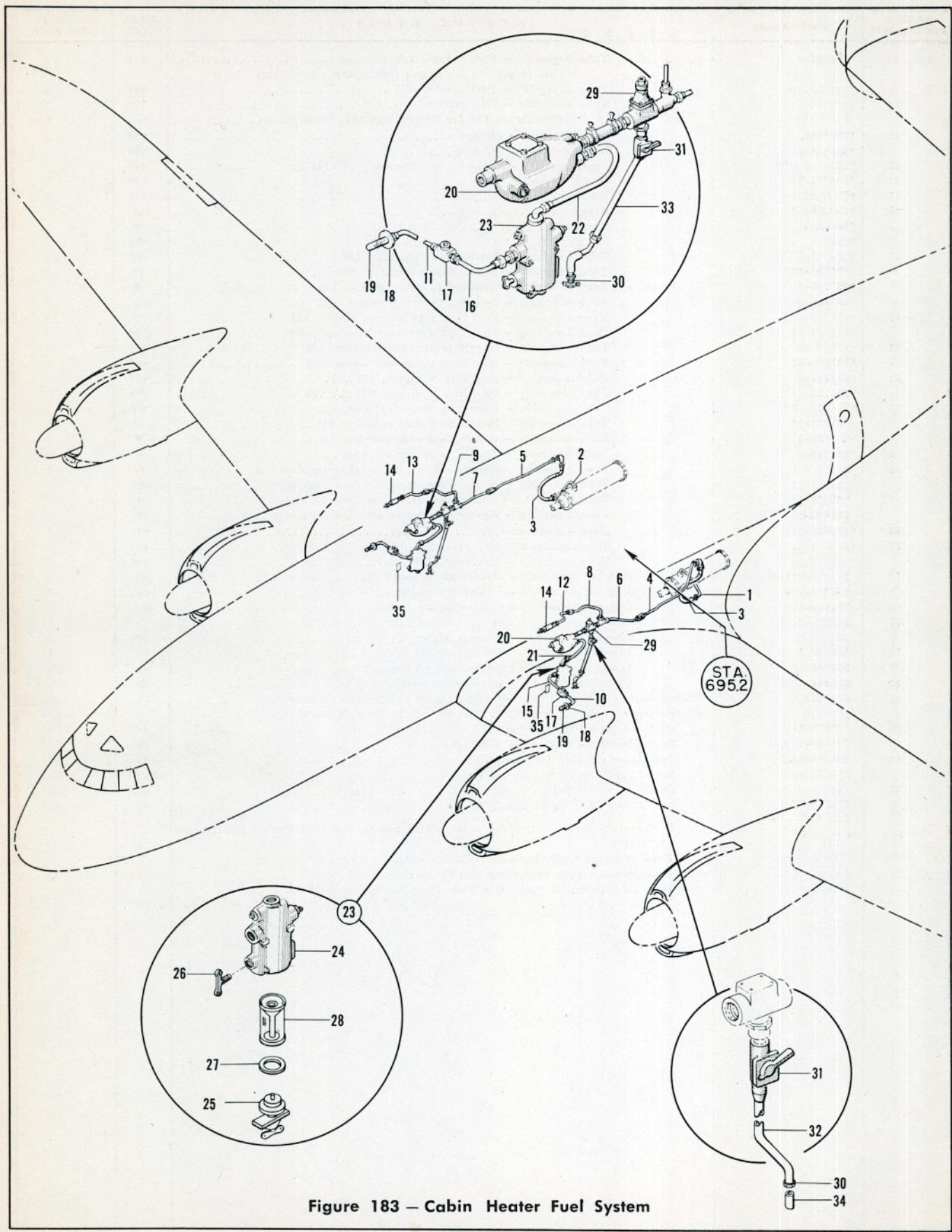


Figure 183 – Cabin Heater Fuel System

Reissued July 1947

LOCKHEED AIRCRAFT CORPORATION

## GROUP . . . Air Distribution Units

## Detail Unit . . . Cabin Heater Fuel System

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER	1	2	3	4	5	6	N O M E N C L A T U R E		SERIAL CODE	U N I T S P E R A S S Y.
183 - 1	284926L							Installation - Cabin heater fuel system LH (NP) (See figure 1 for using assembly)		dy	Ref
	284926R							Installation - Cabin heater fuel system RH (NP) (See figure 1 for using assembly)		dy	Ref
	284943L							Installation - Cabin heater door fuel system LH (NP) .....		dy	1
	284943R							Installation - Cabin heater door fuel system RH (NP) .....		dy	1
	*296732-4							Tube Assembly - Cabin heater fuel LH .....		dy	1
	2 *296732-18							Tube Assembly - Cabin heater fuel RH .....		dy	1
	3 *3706A4QA01414-33							Hose Assembly (Weatherhead) .....		dy	1
	4 285237-54							Tube Assembly + Cabin heater fuel LH .....		dy	1
	5 285237-52							Tube Assembly - Cabin heater fuel RH .....		dy	1
	6 285237-50							Tube Assembly - Cabin heater fuel LH .....		dy	1
	7 285237-56							Tube Assembly - Cabin heater fuel RH .....		dy	1
	8 *295362-6							Tube Assembly + Cabin heater fuel LH .....		dy	1
	9 *295362-7							Tube Assembly - Cabin heater fuel RH .....		dy	1
	10 285237-18							Tube Assembly + Cabin heater fuel LH .....		dy	1
	11 285237-20							Tube Assembly - Cabin heater fuel RH .....		dy	1
	12 *295362-4							Tube Assembly + Cabin heater fuel LH .....		dy	1
	13 *295362-5							Tube Assembly - Cabin heater fuel RH .....		dy	1
	14 W52234D							Valve - Fuel relief (Wm. Whittaker Co.) (633441) .....		dy	1
	15 285237-14							Tube Assembly + Cabin heater fuel LH .....		dy	1
	16 285237-16							Tube Assembly - Cabin heater fuel RH .....		dy	1
	17 W6100-1/4D							Valve - Plug - Flanged (Wm. Whittaker Co.) (667469) .....		dy	1
	18 284071							Fitting - Cabin heater fuel .....		dy	1
	19 284072							Screen - Cabin heater fuel .....		dy	1
	285042L							Panel Assembly - Cabin heater fuel LH .....		dy	1
	285042R							Panel Assembly - Cabin heater fuel RH .....		dy	1
	20 N8817-4							Pump - Electric driven fuel (Adel Precision Corp.) (633330) .....		dy	1
	21 285237-58							Tube Assembly - Cabin heater fuel LH .....		dy	1
	22 285237-60							Tube Assembly - Cabin heater fuel RH .....		dy	1
	23 1239-1/4							Strainer (Lunkenheimer) (633249) .....		rrr	1
	1239-9/8							Strainer (Lunkenheimer) (633439) .....		sss	1
	24 A6054A							Body (Lunkenheimer) .....		dy	1
	25 Su 1523B							Cap Assembly (Lunkenheimer) .....		dy	1
	26 B27210							Valve Disc (Lunkenheimer) .....		dy	1
	27 R131M							Gasket (Lunkenheimer) .....		dy	1
	28 Su 1533D							Strainer Assembly (Lunkenheimer) .....		dy	1
	29 40R715A							Valve - Solenoid fuel (General Controls) (633335) .....		dy	1
	100466E							Valve Seat and Body Assembly .....		dy	1
	100371-10S2P							Connector - Electrical .....		dy	1
	30 *262666							Flange - Drain line .....		dy	1
	31 *W7010-4D							Valve (633429) (Wm. Whittaker Co.) .....		dy	1
	32 *295362-2							Tube Assembly + Fuel drain LH .....		dy	1
	33 *295362-3							Tube Assembly - Fuel drain RH .....		dy	1
	34 *263063							Stub - Fuel pump drain .....		dy	1
	35 *291966							Nameplate - Fuel drain .....		dy	3

\* Replaces standard part per Service Bulletins 49/SB-73, 49/SB-136, 49/SB-188 and Service Instruction 49/SI-10.

GROUP . . . Oxygen System

Detail Unit . . . Oxygen System Complete (Serials BQ—CCC)

*Constellation*

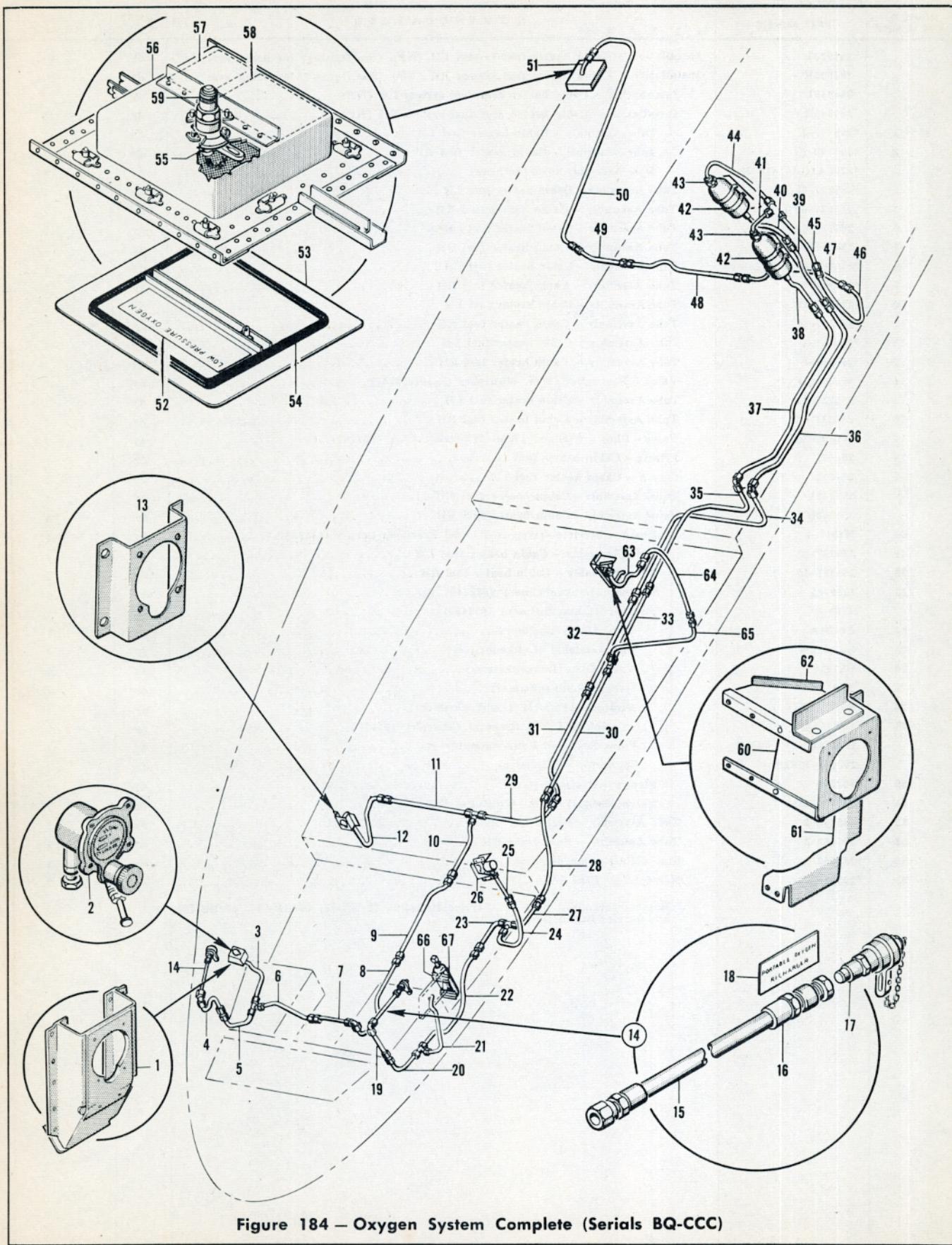


Figure 184 — Oxygen System Complete (Serials BQ-CCC)

## GROUP . . . Oxygen System

*Constellation*

## Detail Unit . . . Oxygen System Complete (Serials BQ-CCC)

FIGURE & INDEX NUMBER	PART NUMBER	1	2	3	4	5	6	N O M E N C L A T U R E		SERIAL CODE	UNITS PER ASSY.
184 - 1	287487							Installation - Flight station plumbing (N.P.) (See figure 1 for using assembly) . . .	bq-ccc	Ref	
	287487-10L							Installation - Pilot's oxygen regulator bracket (N.P.) . . .	bq-ccc	1	
	287487-10R							Installation - Copilot's oxygen regulator bracket (N.P.) . . .	bq-ccc	1	
2	287487-8							Bracket - Oxygen regulator . . .	bq-ccc	1	
	A9A							Regulator - Oxygen continuous flow (Eclipse Pioneer) . . .	bq-ccc	5	
	41A9199							Adapter - Oxygen regulator . . .	bq-ccc	5	
3	287266-138							Tube - Oxygen . . .	bq-bv	1	
	287266-366							Tube - Oxygen . . .	sss	1	
4	287266-142							Tube - Oxygen . . .	bq-ccc	1	
5	287266-140							Tube - Oxygen . . .	bq-bv	1	
	287266-335							Tube - Oxygen . . .	sss	1	
6	287266-136							Tube - Oxygen . . .	bq-bv	1	
	287266-337							Tube - Oxygen . . .	sss	1	
7	287266-10							Tube - Oxygen . . .	bq-ccc	1	
8	287266-12							Tube - Oxygen . . .	bq-ccc	1	
9	287266-14							Tube - Oxygen . . .	bq-ccc	1	
10	287266-34							Tube - Oxygen . . .	bq-ccc	1	
11	287266-144							Tube - Oxygen . . .	bq-ccc	1	
12	287266-150							Tube - Oxygen . . .	bq-ccc	1	
	286320-4							Installation - Flight engineer's oxygen regulator bracket (N.P.) . . .	bq-ccc	1	
13	286320-11							Bracket - Oxygen regulator . . .	bq-ccc	1	
	286269-5L							Installation - Pilot's recharger (N.P.) . . .	bq-ccc	1	
	286269-5R							Installation - Copilot's recharger (N.P.) . . .	bq-ccc	1	
14	AN6041-1							Recharger - Walk around unit (2480BFA) (A. Schrader) . . .	bq-ccc	1	
15	42D19277-5-24							Hose Assembly - Recharger . . .	bq-ccc	1	
16	42A19075							Adapter - Orifice . . .	bq-ccc	1	
17	AN6024-2							Valve - Low pressure oxygen filler . . .	bq-ccc	1	
18	286809-8							Decal - Portable oxygen recharger . . .	bq-ccc	1	
19	287266-134							Tube - Oxygen . . .	bq-ccc	1	
20	287266-132							Tube - Oxygen . . .	bq-ccc	1	
21	287266-130							Tube - Oxygen . . .	bq-ccc	1	
	290008-18							Tube - Oxygen (See 13 PS on 290008) . . .	fk	1	
	290008-17							Tube - Oxygen (See 13 PS on 290008) . . .	bx	1	
22	287266-128							Tube - Oxygen . . .	bq-ccc	1	
23	287266-126							Tube - Oxygen . . .	bq-ccc	1	
24	287266-30							Tube - Oxygen . . .	fk	1	
	290008-16							Tube - Oxygen (See 13 PS on 290008) . . .	bx	1	
25	287266-32							Tube - Oxygen (See 13 PS on 290008) . . .	fk	1	
	290008-15							Tube - Oxygen (See 13 PS on 290008) . . .	bx	1	
26	287487-7							Installation - Radio operator's oxygen regulator bracket (N.P.) . . .	fk	1	
	287487-6							Bracket - Oxygen regulator . . .	fk	1	
	290008-21							Bracket Assembly - Radio operator's oxygen regulator (See 13 PS on 290008) . . .	bx	1	
	290008-20							Bracket - Oxygen regulator . . .	bx	1	
27	287266-124							Tube - Oxygen . . .	bq-ccc	1	
28	287266-148							Tube - Oxygen . . .	bq-ccc	1	
29	287266-282							Tube - Oxygen . . .	bq-ccc	1	
30	287266-146							Tube - Oxygen . . .	bq-ccc	1	
31	287266-284							Tube - Oxygen . . .	bq-ccc	1	
32	287266-286							Tube - Oxygen . . .	bq-ccc	1	
33	287266-154							Tube - Oxygen . . .	bq-ccc	1	
34	287266-156							Tube - Oxygen . . .	bq-ccc	1	
35	287266-288							Tube - Oxygen . . .	bq-ccc	1	
36	287266-158							Tube - Oxygen . . .	bq-ccc	1	
37	287266-290							Tube - Oxygen . . .	bq-ccc	1	
38	287266-292							Tube - Oxygen . . .	bq-ccc	1	
39	287266-294							Tube - Oxygen . . .	bq-ccc	1	
40	287266-296							Tube - Oxygen . . .	bq-ccc	1	
41	287266-318							Tube - Oxygen . . .	bq-ccc	1	
42	Type F1							Cylinder - Oxygen low pressure (Spec. 94-40330) (RA6770) (Firestone Stl. Prod.)	bq-ccc	2	
43	AN6036-1							Valve - Low pressure oxygen check-style G (A. Schrader 2292) . . .	bq-ccc	2	
44	287266-320							Tube - Oxygen . . .	bq-ccc	1	
45	287266-316							Tube - Oxygen . . .	bq-ccc	1	
46	287266-314							Tube - Oxygen . . .	bq-ccc	1	
47	287266-312							Tube - Oxygen . . .	bq-ccc	1	
48	287266-310							Tube - Oxygen . . .	bq-ccc	1	
49	287266-308							Tube - Oxygen . . .	bq-ccc	1	
50	287266-306							Tube - Oxygen . . .	bq-ccc	1	
51	287266-160							Installation - Oxygen recharger assembly (N.P.) . . .	bq-ccc	1	
	286445							Decal . . .	bq-ccc	1	
	286809-6							Cover . . .	bq-ccc	1	
53	286445-6							Gasket . . .	bq-ccc	1	
54	286445-5							Gasket . . .	bq-ccc	1	
55	286445-13							Box Assembly . . .	bq-ccc	1	
56	286445-2							Box . . .	bq-ccc	1	
57	286445-3							Decal - Filler valve adapter . . .	bq-ccc	1	
58	286809-5							Decal - Oxygen line valve location . . .	bq-ccc	1	
59	AN6024-3							Valve - Oxygen filler with handle and mounting flange . . .	bq-ccc	1	
60	286269-4							Installation - Navigator's oxygen regulator bracket (N.P.) . . .	bq-ccc	1	
61	286269-13							Box Assembly - Detachable . . .	bq-ccc	1	
62	286269-17							Bracket - Box assembly . . .	bq-ccc	1	
63	287266-46							Bracket Assembly . . .	bq-ccc	1	
64	287266-44							Tube - Oxygen . . .	bq-ccc	1	
65	287266-152							Tube - Oxygen . . .	bq-ccc	1	
	287266-298							Tube - Oxygen . . .	bq-ccc	1	
	287487-5							Installation - Flight station emergency oxygen bottle . . .	bq-ccc	1	
66	44B24621							Bracket Assembly - Oxygen bottle . . .	bq-ccc	1	
67	44B24619							Cylinder Assembly - Oxygen . . .	bq-ccc	1	
	286809-11							Decal - Portable oxygen unit . . .	bq-ccc	1	
	185524							Service Assembly - Low pressure oxygen cylinder . . .	bq-ccc	1	
	44B24619							(Assembled per 44B24619)	bq-ccc	2	
								Cylinder Assembly - Low pressure oxygen (Installed in aft lounge per M290341) . . .	bq-ccc	2	
							(See figure 186 for detailed illustration)				

Reissued July, 1947

# Constellation

GROUP . . . Oxygen System

Detail Unit . . . Oxygen System Complete (Serials BT—DU)

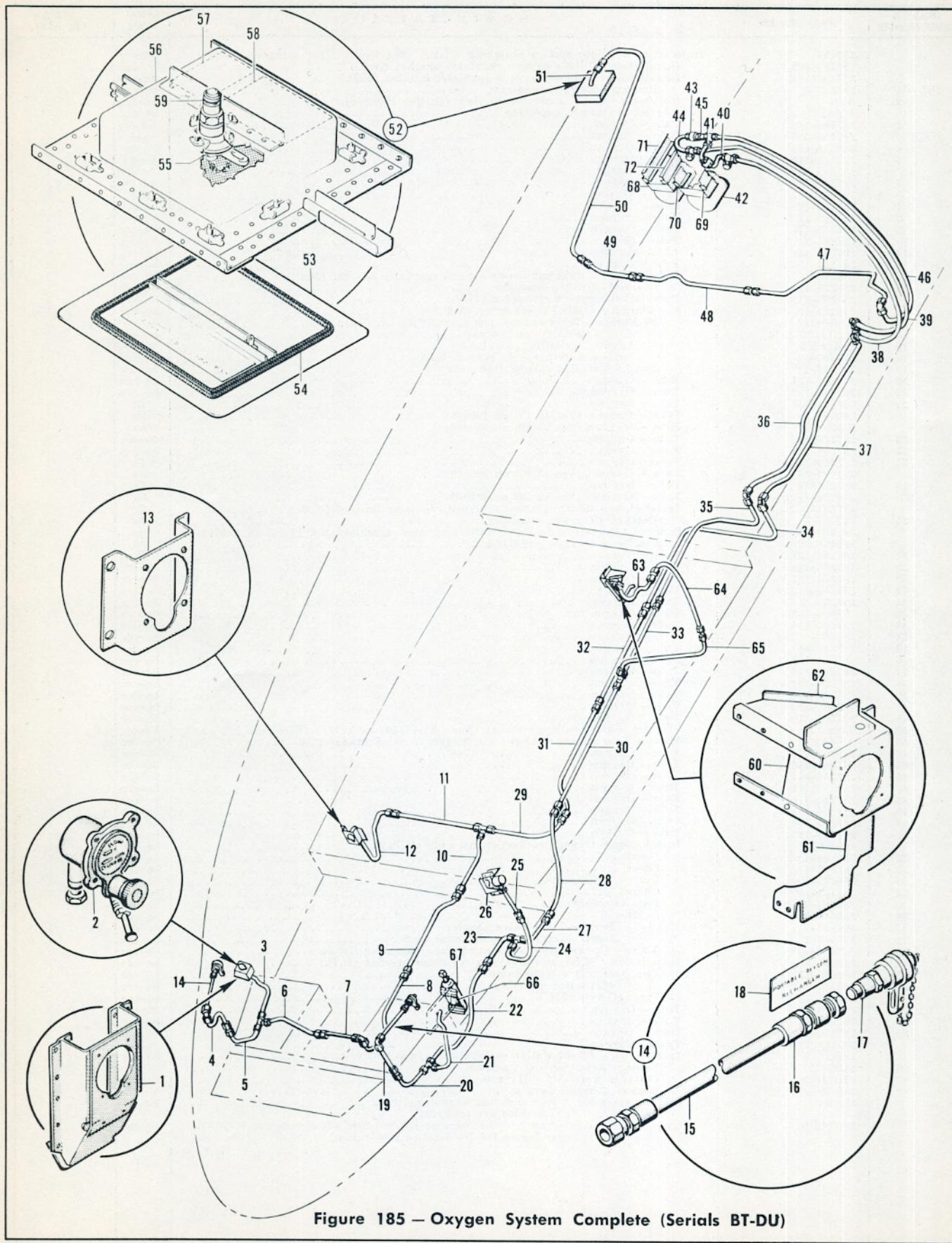


Figure 185 — Oxygen System Complete (Serials BT-DU)

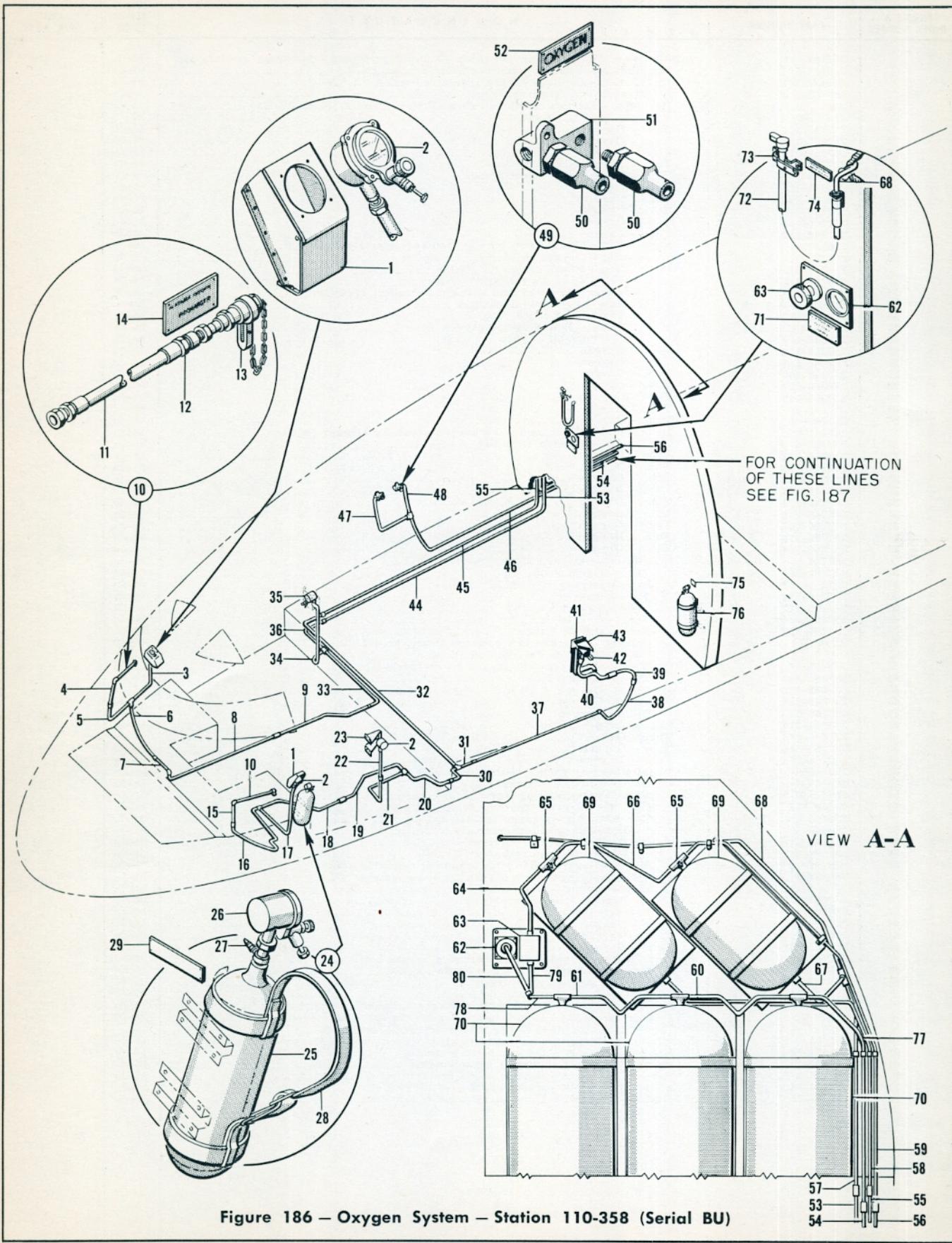
Reissued July 1947

LOCKHEED AIRCRAFT CORPORATION

## GROUP . . . Oxygen System

## Detail Unit . . . Oxygen System Complete (Serials BT-DU)

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6	N O M E N C L A T U R E	SERIAL CODE	UNITS PER ASSY.
	287487		Installation - Flight station plumbing (N.P.) (See figure 1 for using assembly) . . .	bt-du	Ref
	287487-10L		Installation - Pilot's oxygen regulator bracket (N.P.) . . .	bt-du	1
	287487-10R		Installation - Copilot's oxygen regulator bracket (N.P.) . . .	bt-du	1
185 - 1	287487-8		Bracket - Oxygen regulator . . .	bt-du	1
2	A9A		Regulator - Oxygen continuous flow (Eclipse-Bendix) (2805-3B-B1) . . .	bt-du	5
	41A9199		Adapter - Oxygen regulator . . .	bt-du	5
3	287266-138		Tube - Oxygen . . .	bt-du	1
4	287266-142		Tube - Oxygen . . .	bt-du	1
5	287266-140		Tube - Oxygen . . .	bt-du	1
6	287266-136		Tube - Oxygen . . .	bt-du	1
7	287266-10		Tube - Oxygen . . .	bt-du	1
8	287266-12		Tube - Oxygen . . .	bt-du	1
9	287266-14		Tube - Oxygen . . .	bt-du	1
10	287266-34		Tube - Oxygen . . .	bt-du	1
11	287266-144		Tube - Oxygen . . .	bt-du	1
12	287266-150		Tube - Oxygen . . .	bt-du	1
	286320-4		Installation - Flight engineer's oxygen regulator bracket (N.P.) . . .	bt-du	1
13	286320-11		Bracket - Oxygen regulator . . .	bt-du	1
	286269-5L		Installation - Pilot's recharger (N.P.) . . .	bt-du	1
	286269-5R		Installation - Copilot's recharger (N.P.) . . .	bt-du	1
14	AN6041-1		Recharger - Walk around unit (A. Schrader) (2460BFA) . . .	bt-du	1
15	42D19277-5-24		Hose Assembly - Recharger . . .	bt-du	1
16	42A19075		Adapter - Orifice . . .	bt-du	1
17	AN6024-2		Valve - Low pressure oxygen filler . . .	bt-du	1
18	286809-8		Decal - Portable oxygen recharger . . .	bt-du	1
19	287266-134		Tube - Oxygen . . .	bt-du	1
20	287266-132		Tube - Oxygen . . .	bt-du	1
21	287266-130		Tube - Oxygen . . .	bt-du	1
22	287266-128		Tube - Oxygen . . .	bt-du	1
23	287266-126		Tube - Oxygen . . .	bt-du	1
24	287266-30		Tube - Oxygen . . .	bt-du	1
25	287266-32		Tube - Oxygen . . .	bt-du	1
	287487-7		Installation - Radio operator's oxygen regulator bracket (N.P.) . . .	bt-du	1
	287487-6		Bracket - Oxygen regulator . . .	bt-du	1
27	287266-121		Tube - Oxygen . . .	bt-du	1
28	287266-148		Tube - Oxygen . . .	bt-du	1
29	287266-282		Tube - Oxygen . . .	bt-du	1
30	287266-146		Tube - Oxygen . . .	bt-du	1
31	287266-284		Tube - Oxygen . . .	bt-du	1
32	287266-286		Tube - Oxygen . . .	bt-du	1
33	287266-154		Tube - Oxygen . . .	bt-du	1
34	287266-156		Tube - Oxygen . . .	bt-du	1
35	287266-288		Tube - Oxygen . . .	bt-du	1
	291744		Installation - Oxygen system interior (N.P.) . . .	bt-du	1
36	287266-304		Tube - Oxygen . . .	bt-du	1
37	287266-302		Tube - Oxygen . . .	bt-du	1
38	287266-324		Tube - Oxygen . . .	bt-du	1
39	287266-322		Tube - Oxygen . . .	bt-du	1
40	287266-334		Tube - Oxygen . . .	bt-du	1
41	287266-332		Tube - Oxygen . . .	bt-du	1
42	Type F1		Cylinder - Oxygen low pressure (Spec. 94-40330) (RA6770) . . . (Firestone Steel Prod.)	bt-du	2
	AN6030-1		Valve - Low pressure oxygen check (Style A) . . .	bt-du	2
44	287266-330		Tube - Oxygen . . .	bt-du	1
45	487266-328		Tube - Oxygen . . .	bt-du	1
46	287266-326		Tube - Oxygen . . .	bt-du	1
47	287266-300		Tube - Oxygen . . .	bt-du	1
48	287266-310		Tube - Oxygen . . .	bt-du	1
49	287266-308		Tube - Oxygen . . .	bt-du	1
50	287266-306		Tube - Oxygen . . .	bt-du	1
51	287266-160		Tube - Oxygen . . .	bt-du	1
52	286445		Installation - Oxygen recharger assembly (N.P.) . . .	bt-du	1
53	286445-6		Cover - Oxygen recharger . . .	bt-du	1
54	286445-5		Gasket - Oxygen recharger . . .	bt-du	1
55	286445-13		Gasket - Oxygen recharger . . .	bt-du	1
	286445-2		Box Assembly - Oxygen recharger . . .	bt-du	1
56	286445-3		Box - Oxygen recharger . . .	bt-du	1
57	286809-5		Decal - Oxygen recharger . . .	bt-du	1
58	286809-2		Decal - Oxygen recharger . . .	bt-du	1
59	AN6024-3		Valve - Oxygen filler with handle & mounting flange . . .	bt-du	1
	286269-4		Installation - Navigator's oxygen regulator bracket (N.P.) . . .	bt-du	1
60	286269-13		Box Assembly - Detachable . . .	bt-du	1
61	286269-17		Bracket + Box assembly . . .	bt-du	1
62	286269-12		Bracket Assembly . . .	bt-du	1
63	287266-46		Tube - Oxygen . . .	bt-du	1
64	287266-44		Tube - Oxygen . . .	bt-du	1
65	287266-152		Tube - Oxygen . . .	bt-du	1
	287487-5		Installation + Flight station emergency oxygen bottle . . .	bt-du	1
66	44B24621		Bracket Assembly - Oxygen bottle . . .	bt-du	1
67	44B24619		Cylinder Assembly - Oxygen . . .	bt-du	1
	286809-11		Decal . . .	bt-du	1
	185524		Service Assembly - Low pressure oxygen cylinder (Assembled per 44B24619) . . .	bt-du	Ref
	44B24619		Cylinder Assembly - Low pressure oxygen (Installed in aft lounge per M290341) . . . (See figure 186 for detailed illustration)	bt-du	2
68	291433		Installation - Oxygen bottle supports (N.P.) (See figure 1 for using assembly) . . .	bt-du	Ref
	291433-10		Bracket Assembly - Oxygen bottle supports . . .	bt-du	2
69	291433-8		Support Assembly - Oxygen bottle bracket . . .	bt-du	1
70	291433-9		Support Assembly - Oxygen bottle bracket . . .	bt-du	1
71	291433-7L		Support Assembly - Upper oxygen bottle bracket . . .	bt-du	1
72	291433-7R		Support Assembly - Upper oxygen bottle bracket . . .	bt-du	1



**Figure 186 – Oxygen System – Station 110-358 (Serial BU)**

## GROUP . . . Oxygen System

## Detail Unit . . . Oxygen System—Stations 110 to 358 (Serial BU)

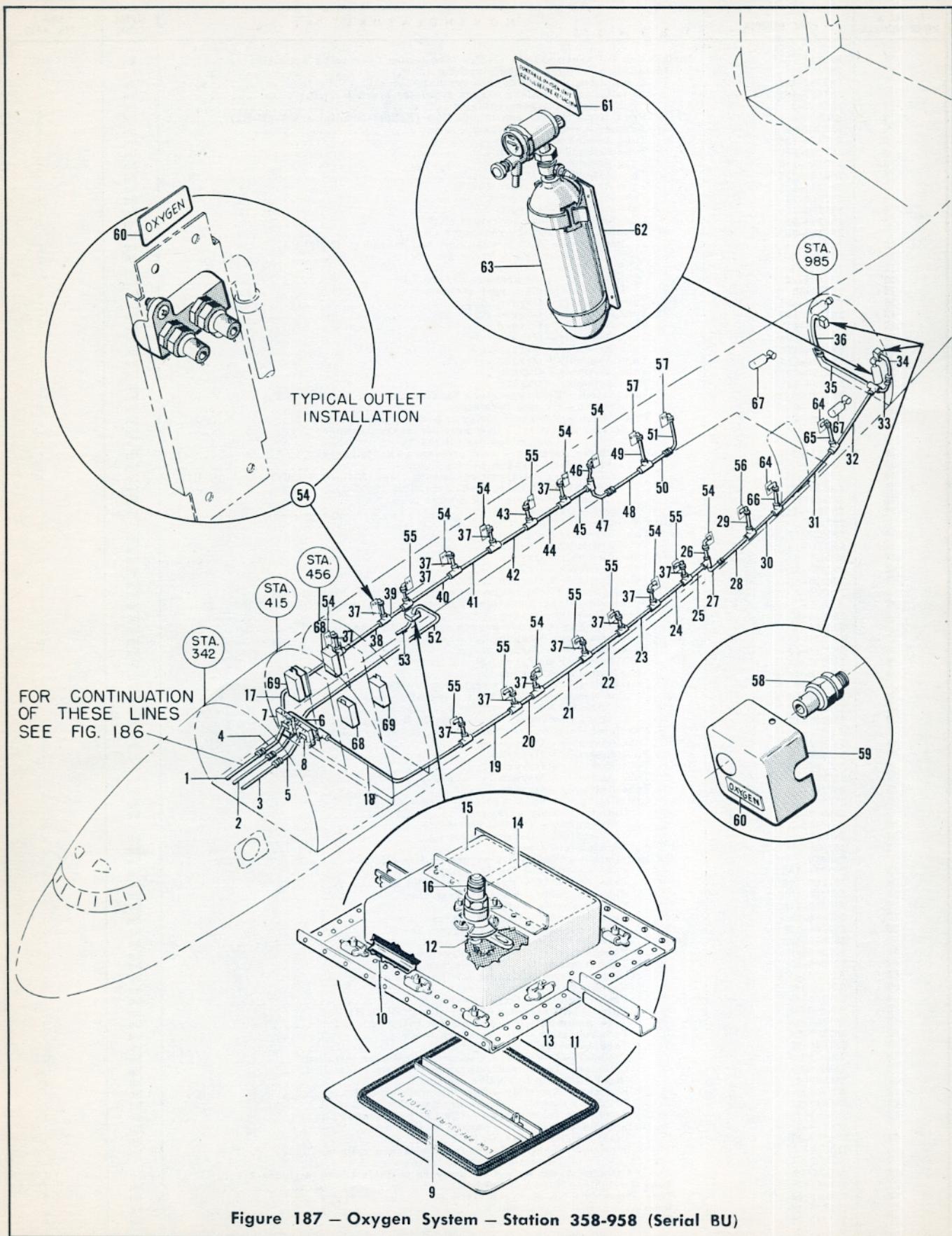
FIGURE & INDEX NUMBER	PART NUMBER	1	2	3	4	5	6	N O M E N C L A T U R E	SERIAL CODE	U N I T S P E R A S S Y.
186 - 1	291845							Installation - Oxygen system (N.P.) (See figure 1 for using assembly)	bu	Ref
	287487							Installation - Flight station plumbing (N.P.)	bu	1
	287487-10L							Installation - Pilot's oxygen regulator bracket (N.P.)	bu	1
	287487-10R							Installation - Copilot's oxygen regulator bracket (N.P.)	bu	1
2	287487-8							Bracket + Oxygen regulator	bu	1
2	A9A							Regulator - Oxygen continuous flow (Eclipse-Bendix) (2805-3B-B1)	bu	3
3	41A9199							Adapter - Oxygen regulator	bu	3
4	287266-138							Tube Assembly - Oxygen	bu	1
5	287266-142							Tube Assembly - Oxygen	bu	1
6	287266-140							Tube Assembly - Oxygen	bu	1
7	287266-136							Tube Assembly - Oxygen	bu	1
8	287266-10							Tube Assembly - Oxygen	bu	1
9	287266-12							Tube Assembly - Oxygen	bu	1
	287266-14							Installation + Pilot's recharger (N.P.)	bu	1
	286269-5L							Installation + Copilot's recharger (N.P.)	bu	1
	286269-5R							Recharger - Walk around unit (A. Schrader) (2460BFA)	bu	1
10	AN6041-1							Hose Assembly - Recharger	bu	1
11	42D19277-5-24							Adapter - Orifice	bu	1
12	42A19075							Valve - Low pressure oxygen filler	bu	1
13	AN6024-2							Decal - Portable oxygen recharger	bu	1
14	286809-8							Tube Assembly - Oxygen	bu	1
15	287266-134							Tube Assembly - Oxygen	bu	1
16	287266-132							Tube Assembly - Oxygen	bu	1
17	287266-130							Tube Assembly - Oxygen	bu	1
18	287266-128							Tube Assembly - Oxygen	bu	1
19	287266-126							Tube Assembly - Oxygen	bu	1
20	287266-124							Tube Assembly - Oxygen	bu	1
21	287266-30							Tube Assembly - Oxygen	bu	1
22	287266-32							Tube Assembly - Oxygen	bu	1
	287487-7							Installation - Radio operator's oxygen regulator bracket (N.P.)	bu	1
23	287487-6							Bracket + Oxygen regulator	bu	1
	287487-5							Installation + Emergency oxygen bottle (N.P.)	bu	1
	185524							Service Assembly - Low pressure oxygen cylinder (Assembled per 44B24619)	bu	Ref
24	44B24619							Cylinder Assembly - Low pressure portable oxygen	bu	1
25	A6							Cylinder - Oxygen (Mines Equip.)	bu	1
26	A9A							Regulator - Oxygen continuous flow (Eclipse-Bendix) (2805-3B-B1)	bu	1
27	44A13703							Adapter - Regulator (A. Schrader) (9607-1)	bu	1
28	44G26170							Sling - Portable walk around	bu	1
29	286809-11							Decal - Oxygen bottle	bu	1
	292038							Installation + Oxygen system (N.P.)	bu	1
30	292037-11							Tube Assembly - Oxygen	bu	1
31	292037-10							Tube Assembly - Oxygen	bu	1
32	292037-9							Tube Assembly - Oxygen	bu	1
33	292037-7							Tube Assembly - Oxygen	bu	1
34	292037-8							Tube Assembly - Oxygen	bu	1
35	286320-4							Installation + Flight engineer's oxygen regulator bracket (N.P.)	bu	1
36	A9A							Regulator - Oxygen continuous flow (Eclipse-Bendix) (Same as index 2)	bu	1
	292037-6							Tube Assembly - Oxygen	bu	1
	286698							Installation + Flight station oxygen system - 19 interior (N.P.)	bu	1
37	287266-40							Tube Assembly - Oxygen	bu	1
38	287266-42							Tube Assembly - Oxygen	bu	1
39	287266-44							Tube Assembly - Oxygen	bu	1
40	287266-46							Tube Assembly - Oxygen	bu	1
41	286269-4							Installation + Navigator's regulator bracket (N.P.)	bu	1
42	286269-13							Box Assembly - Regulator detachable	bu	1
43	286269-17							Bracket - Box Assembly	bu	1
	286269-12							Bracket Assembly - Box Assembly top support	bu	1
	A9A							Regulator - Oxygen continuous flow (Same as index 2)	bu	1
44	287266-58							Tube Assembly - Oxygen	bu	1
45	287266-60							Tube Assembly - Oxygen	bu	1
46	287266-66							Tube Assembly - Oxygen	bu	1
47	287266-64							Tube Assembly - Oxygen	bu	1
48	287266-62							Tube Assembly - Oxygen	bu	1
49	286903-7							Installation + Oxygen manifold block (N.P.)	bu	2
50	286903-5							Outlet Assembly - Oxygen	bu	1
51	AN6009-2							Coupling - Oxygen outlet	bu	2
52	286935							Manifold - Oxygen outlet	bu	1
	267839							Nameplate - Oxygen	bu	1
	286640							Installation + Station 342 oxygen bottles (N.P.)	bu	1
53	287266-104							Tube Assembly - Copilot's oxygen line	bu	1
54	287266-106							Tube Assembly - Passenger's outlet line	bu	1
55	287266-108							Tube Assembly - Pilot's oxygen line	bu	1
56	287266-110							Tube Assembly - Filler line	bu	1
57	287266-96							Tube Assembly - Copilot's oxygen line	bu	1
58	287266-100							Tube Assembly - Pilot's oxygen line	bu	1
59	287266-102							Tube Assembly - Filler line	bu	1
60	287266-82							Tube Assembly - No. 4-5 oxygen bottles	bu	1
61	287266-80							Tube Assembly - No. 3-4 oxygen bottles	bu	1
62	AN621-1A							Gauge - Panel mounting low pressure oxygen	bu	1
63	AN94-40386							Valve - Low pressure oxygen	bu	1
64	287266-86							Tube Assembly - Oxygen valve	bu	1
65	AN6037-1							Valve - Low pressure oxygen (Check Style H)	bu	2
66	287266-88							Tube Assembly - No. 2-1 oxygen bottles	bu	1
67	287266-90							Tube Assembly - No. 1 oxygen bottle	bu	1
68	287266-92							Tube Assembly - Recharger line	bu	1
69	Type F1							Cylinder - Low pressure oxygen (Customer installed)	bu	Ref
70	Type G1							Cylinder - Low pressure oxygen (Customer installed)	bu	Ref
71	286809-4							Decal - Oxygen line valve open, etc.	bu	1
72	AN6041							Recharger Assembly - Portable walk around	bu	1
73	286640-11							Bracket Assembly - Recharger assembly	bu	1
74	286809-7							Decal - Portable oxygen recharger nameplate	bu	1
	286320-2							Installation + Navigator's oxygen bottle	bu	1
75	286809-11							Decal - Portable oxygen unit	bu	1
	185524							Service Assembly - Low pressure oxygen cylinder (Assembled per 44B24619)	bu	Ref
76	44B24619							Cylinder Assembly - Low pressure portable (Same as index 24)	bu	1
77	291845-9								bu	1
78	291845-12								bu	1
79	291845-10								bu	1
80	291845-11								bu	1

OXYGEN

GROUP . . . Oxygen System

Detail Unit . . . Oxygen System—Station 358-985 (Serial BU)

Constellation



## GROUP . . . Oxygen System

## Detail Unit . . . Oxygen System—Stations 358 to 985 (Serial BU)

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6	N O M E N C L A T U R E			SERIAL CODE	UNITS PER ASSY.
187 - 1	291845		Installation - Oxygen system (N.P.) (See figure 1 for using assembly)			bu	Ref
	286698		Installation + Flight station oxygen system - 19 interior (N.P.)			bu	1
2	287266-68		Tube Assembly - Passenger outlets line			bu	1
3	287266-70		Tube Assembly - Filler line			bu	1
4	287266-72		Tube Assembly - High pressure recharger valves line			bu	1
5	287266-276		Tube Assembly - Low pressure passenger outlets line			bu	1
6	287266-274		Tube Assembly - High pressure recharger valves line			bu	1
	287266-262		Tube Assembly - High pressure recharger valves line			bu	1
	286902		Installation - Oxygen equipment baggage compartment station 415.4 (N.P.)			bu	1
7	287193		Box Assembly - Oxygen regulator			bu	2
	Type A11		Regulator - Low pressure automatic continuous flow oxygen (A-100) (American Gas)			bu	3
8	286809-9		Nameplate - Oxygen regulators inside			bu	2
	286445		Decal - Low pressure oxygen			bu	1
9	286809-6		Gasket - Cover			bu	1
10	286445-5		Cover - Box assembly			bu	1
11	286445-6		Gasket - Oxygen filler valve			bu	1
12	286445-13		Box Assembly - Recharger			bu	1
13	286445-2		Box			bu	1
14	286809-5		Decal - Filler valve adapter			bu	1
15	286809-2		Decal - Oxygen line valve location			bu	1
16	AN6024-3		Valve - Oxygen filler with handle and mounting flange			bu	1
17	291845-2		Tube Assembly - RH Passenger low pressure outlets			bu	1
18	281845-4		Tube Assembly - LH Passenger low pressure outlets			bu	1
	286913		Installation - Cabin oxygen system (N.P.)			bu	1
19	287266-192		Tube Assembly - LH Oxygen line			bu	1
20	287266-198		Tube Assembly - LH Oxygen line			bu	1
21	287266-202		Tube Assembly - LH Oxygen line			bu	1
22	287266-204		Tube Assembly - LH Oxygen line			bu	1
23	287266-208		Tube Assembly - LH Oxygen line			bu	1
24	287266-210		Tube Assembly - LH Oxygen line			bu	1
25	287266-214		Tube Assembly - LH Oxygen line			bu	1
26	287266-180		Tube Assembly - LH Oxygen line			bu	1
27	287266-216		Tube Assembly - LH Oxygen line			bu	1
28	287266-218		Tube Assembly - LH Oxygen line			bu	1
29	287266-222		Tube Assembly - LH Oxygen line			bu	1
30	287266-230		Tube Assembly - LH Oxygen line			bu	1
31	287266-234		Tube Assembly - LH Oxygen line			bu	1
32	287266-238		Tube Assembly - LH Oxygen line			bu	1
33	287266-240		Tube Assembly - LH Oxygen line			bu	1
34	287266-242		Tube Assembly - LH Oxygen line			bu	1
35	287266-244		Tube Assembly - Station 984 oxygen line			bu	1
36	287266-242		Tube Assembly - Station 984 oxygen line			bu	1
37	287266-162		Tube Assembly - Passenger outlets			bu	13
38	287266-166		Tube Assembly - RH Passenger outlets line			bu	1
39	287266-168		Tube Assembly - RH Passenger outlets line			bu	1
40	287266-170		Tube Assembly - RH Passenger outlets line			bu	1
41	287266-172		Tube Assembly - RH Passenger outlets line			bu	1
42	287266-174		Tube Assembly - RH Passenger outlets line			bu	1
43	287266-280		Tube Assembly - Passenger outlet			bu	1
44	287266-176		Tube Assembly - RH Passenger outlets line			bu	1
45	287266-178		Tube Assembly - RH Passenger outlets line			bu	1
46	287266-180		Tube Assembly - Passenger outlet			bu	1
47	287266-182		Tube Assembly - RH Passenger outlets line			bu	1
48	287266-184		Tube Assembly - RH Passenger outlets line			bu	1
49	287266-186		Tube Assembly - RH Passenger outlets line			bu	1
50	287266-188		Tube Assembly - RH Passenger outlets line			bu	1
51	287266-190		Tube Assembly - RH Passenger outlets line			bu	1
52	287266-278		Tube Assembly - Filler line			bu	1
53	287266-160		Tube Assembly - Filler line			bu	1
	286903-6		Installation - Cabin oxygen outlet			bu	8
	286903-7		Installation + Cabin oxygen outlet			bu	8
	286903-13		Installation + Cabin oxygen outlet			bu	1
	286903-14		Installation + Cabin oxygen outlet			bu	2
54	286903-4		Outlet Assembly - Oxygen (Used on -6 only)			bu	1
55	286903-5		Outlet Assembly - Oxygen (Used on -7 only)			bu	1
56	286903-11		Outlet Assembly - Oxygen (Used on -13 only)			bu	1
57	287903-12		Outlet Assembly - Oxygen (Used on -14 only)			bu	1
	286935		Manifold - Oxygen outlet (Used on all outlets)			bu	1
	AN6024-2		Coupling - Automatic oxygen (1 only required on -6)			bu	2
	267839		Nameplate - Emergency oxygen outlet (All installations) (Same as index 60)			bu	1
	286902-5		Installation + Station 985 oxygen outlets (N.P.)			bu	2
58	AN6024-2		Coupling - Automatic oxygen			bu	1
59	286902-4		Cover - Oxygen coupling			bu	1
60	267839		Nameplate - Emergency oxygen outlet			bu	1
	286901		Installation + Oxygen equipment - Station 985 (N.P.)			bu	1
61	286809-3		Decal - Portable oxygen unit refill			bu	2
62	44B24621		Bracket Assembly - Oxygen bottle			bu	2
	185524		Service Assembly - Low pressure oxygen cylinder (Assembled per 44B24619)			bu	Ref
63	44B24619		Cylinder Assembly - Low pressure portable oxygen (See figure 186 for detailed illustration)			bu	2
	291845-7		Installation + Station 815 oxygen outlet LH			bu	1
	291845-5		Installation + Station 910 oxygen outlet LH			bu	1
64	286935		Manifold - Oxygen outlet			bu	1
	AN6024-2		Coupling - Oxygen outlet			bu	2
	267839		Nameplate - Oxygen outlet (Same as index 60)			bu	1
65	291845-6		Tube Assembly - Station 910 oxygen outlet			bu	1
66	291845-8		Tube Assembly - Station 815 oxygen outlet			bu	1
	185524		Service Assembly - Low pressure oxygen cylinder (Assembled per 44B24619)			bu	Ref
67	44B24619		Cylinder Assembly - Low pressure portable oxygen (Installed per 290341)			bu	2
	291846		Installation - Oxygen mask container (N.P.) (See figure 1 for using assembly)			bu	1
68	287608-2		Container - Oxygen mask			bu	3
69	287608-3		Container - Oxygen mask			bu	2
	291851-2		Nameplate - Box 1 mask container			bu	3
	291851-3		Nameplate - Box 2 mask container			bu	2

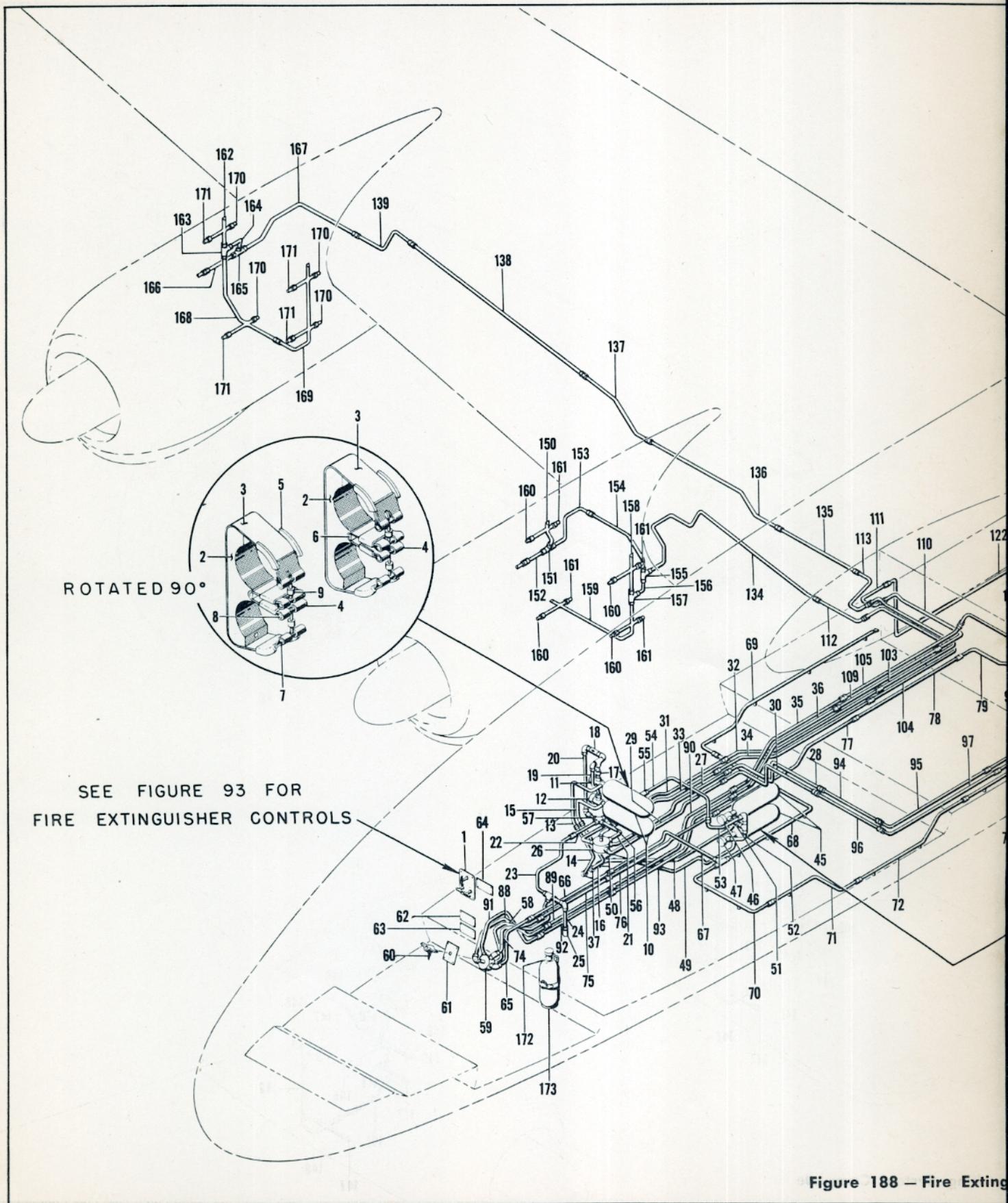
OXYGEN

*Notes*

*Constellation*

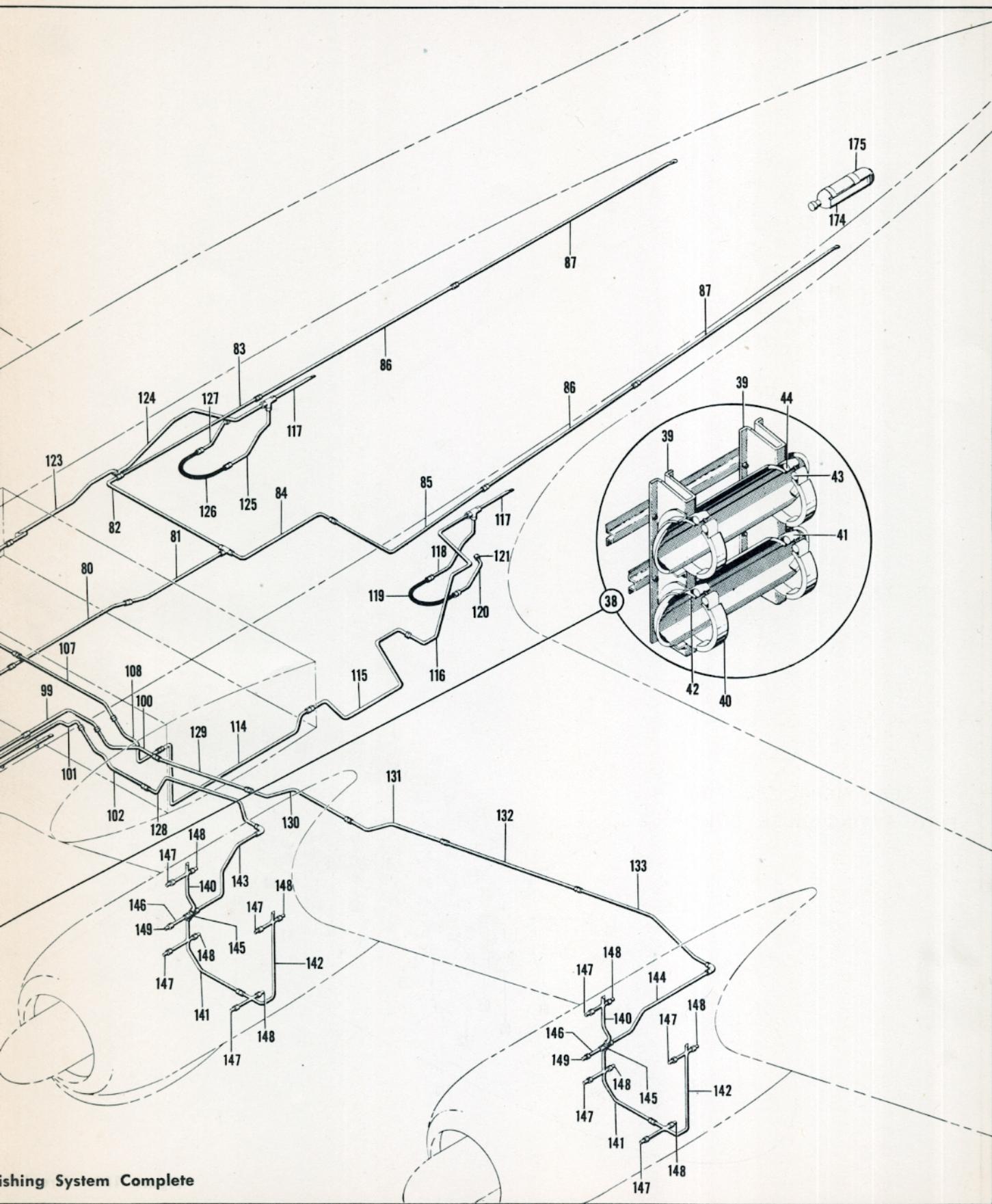
**GROUP . . . Fire Warning and Extinguishing Systems**

**Detail Unit . . . Fire Extinguishing System Complete**



**Figure 188 – Fire Exting**

# Constellation



ishing System Complete

## GROUP . . . Fire Warning and Extinguishing Systems

*Constellation*

## Detail Unit . . . Fire Extinguishing System Complete

FIGURE & INDEX NUMBER	PART NUMBER		N O M E N C L A T U R E						SERIAL CODE	UNITS PER ASSY.
			1	2	3	4	5	6		
188 - 1	285598	Installation	Fire extinguisher control panel (N.P.) .....						ca	Ref
	295767	Installation	Fire extinguisher control panel (N.P.) .....						du-bu	Ref
	265942	Installation	Fusebox piping stations 278-527 RH (N.P.) .....						dy	Ref
2	279483	Cradle	Cylinder .....						dy	2
3	279495-4	Strap	Cylinder cradle .....						dy	2
4	279495-2	Strap	Cylinder cradle .....						dy	2
5	279561-2	Cushion	Cylinder cradle .....						dy	8
6	279492	Washer	Half round .....						dy	2
7	LS321-2L	Trunnion	Tank strap .....						dy	4
8	LS321-2R	Trunnion	Tank strap .....						dy	4
9	LS320-2	Screw	Tank strap .....						dy	4
10	*2CD5516	Cylinder	15 lb. Fire extinguisher (American La France) (650098) .....						dy	2
	28X695	Cylinder	.....						dy	1
	2CD5041	Plug Assembly	- Cylinder .....						dy	1
	2CD576	Gasket	- Safety disc .....						dy	1
	28X481	Disc	+ Safety .....						dy	1
	2CD1686	Plug	- Safety disc .....						dy	1
	2CD2206	Plug	- Safety .....						dy	1
	2CD5044	Plug Assembly	- Sealing .....						dy	1
11	*2CD5152	Head	Upper cylinder operating (American La France) (650058-2) .....						dy	1
	2CD2846	Retainer	- Swivel nut .....						dy	1
	2CD2844	Gasket	- Swivel nut retainer .....						dy	1
	2CD2845	Nut	- Swivel .....						dy	1
	2CD5189	Eliminator Assembly	.....						dy	1
	2T584	Screw	- Set .....						dy	1
	2CD5025	Cutter Assembly	- Operating head .....						dy	1
	2CD2762	Packing	.....						dy	1
	2CD2851	Spring	- Cutter .....						dy	1
	2CD2838	Gasket	- Cap .....						dy	1
	2CD2828	Packing	- Cutter plunger .....						dy	1
	2CD2758	Sheave	- Operating head .....						dy	1
	2CD2247	Clamp	- Cable .....						dy	1
	2CD2841	Ring	- Lock .....						dy	1
	2CD2865	Spring	- Indicator .....						dy	1
12	*2CD5393	Head	Lower cylinder operating (American La France) (650146) .....						dy	1
	2CD3681	Cap	- Discharge head .....						dy	1
	2CD2338	Gasket	- Cap .....						dy	1
	2CD5025	Cutter Assembly	.....						dy	1
	2CD2851	Spring	- Cutter .....						dy	1
	2CD2762	Packing	- Cutter stem .....						dy	1
	2CD2844	Gasket	- Swivel nut .....						dy	1
13	256721-85	Tube Assembly	+ Discharge indicator, upper cylinder .....						dy	1
14	256721-87	Tube Assembly	+ Discharge indicator, upper cylinder .....						dy	1
15	256721-86	Tube Assembly	+ Discharge indicator, lower cylinder .....						dy	1
16	256721-88	Tube Assembly	+ Discharge indicator, lower cylinder .....						dy	1
17	2CD3115	Adapter	+ Head; discharge (American La France) (650062) .....						dy	1
18	475GC34D	Valve	- Cone check (Parker) (650067) .....						dy	1
19	*295820-5	Tube Assembly	+ Lower to upper cylinder .....						dy	1
20	*295820-2	Tube Assembly	Cylinder to selector line .....						dy	1
	*295820-3	Tube Assembly	Cylinder to selector line .....						dy	1
21	*295820-4	Tube Assembly	Cylinder to selector line .....						dy	1
22	*295820-17	Tube Assembly	+ Ground connector line .....						dy	1
23	*29583-12	Tube Assembly	+ Ground connector line .....						dy	1
24	296583-7	Tube Assembly	Bulkhead fitting to tee, ground connection line .....						dy	1
25	*295820-16	Tube Assembly	Ground connector line .....						dy	1
26	2CD5308	Tail Piece	- Auxiliary ground connector (American La France) (650068-2) .....						dy	1
	267386	Valve Assembly	- Fire extinguisher selector .....						dy	1
	2CD5100C	Valve	- Engine selector (American La France) (650056) .....						dy	1
	2CD2989	Gasket	- Selector valve .....						dy	1
	2CD3125	Screw	- Disc retaining .....						dy	1
	2CD2815	Disc	- Selector valve .....						dy	1
	2CD2161	Washer	.....						dy	1
	2CD3053	Stem	- Selector valve .....						dy	1
	2CD2140	Washer	- Spring .....						dy	1
	2CD3051	Head	- Selector valve .....						dy	1
	2CD2813	Packing	- Stem .....						dy	1
	2CD2812	Screw	- Packing .....						dy	1
	2CD3054	Washer	- Position .....						dy	1
	2CD3083	Airm	- Selector valve .....						dy	1
	125233	Nut	.....						dy	1
	2T591	Screw	- Hexagon socket cap .....						dy	2
	2CD2401	Ball	- Lock .....						dy	1
	2CD3305	Spring	- Position .....						dy	1
	102375	Screw	- Round point set .....						dy	4
	5W303	Washer	- Lock .....						dy	7
	2T590	Screw	- Hexagon socket cap .....						dy	5
	261746	Drum Assembly	- Selector valve remote control .....						dy	1
27	256721-34	Tube Assembly	No. 1 Engine .....						dy	1
28	256721-56	Tube Assembly	No. 1 Engine .....						dy	1
29	256721-35	Tube Assembly	No. 2 Engine .....						dy	1
30	256721-57	Tube Assembly	No. 2 Engine .....						dy	1
31	256721-60	Tube Assembly	No. 3 Engine .....						dy	1
32	256721-36	Tube Assembly	No. 3 Engine .....						dy	1
33	256721-37	Tube Assembly	No. 4 Engine .....						dy	1
34	256721-84	Tube Assembly	No. 4 Engine .....						dy	1
35	256721-178	Tube Assembly	LH Cabin heater .....						dy	1
36	256721-181	Tube Assembly	RH Cabin heater .....						dy	1
	268505	Panel Assembly	- Stations 278-407, bottom RH (See figure 26 for using assembly) .....						dy	Ref
37	2CD1976	Indicator	- Discharge (American La France) (650061) .....						dy	2
	28X389	Seal	- "Cell-O-Seal" .....						dy	1

(Continued on next page)

FIRE EXTINGUISHER

GROUP . . . . Fire Warning and Extinguishing Systems  
 Detail Unit . . . . Fire Extinguishing System Complete (Continued)

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6	N O M E N C L A T U R E	SERIAL CODE	U N I T S P E R A S S Y.	
					Ref	
	*295805		Installation - Four 15 lb. fire extinguisher cylinders (N.P.) (Replaces 293166) ....	dy		
	*295807		(See figure 1 for using assembly)			
188 - 38	*295807-7		Installation - Fire extinguisher cylinder brackets (N.P.) .....	dy	1	
39	*295807-4		Support Assembly - Fire extinguisher cylinders .....	dy	1	
	*295807-2		Bracket Assembly - Cylinder supports .....	dy	2	
40	*266500		Pan Assembly - Cylinder support .....	dy	2	
41	*265941-3		Strap Assembly - Cylinder support .....	dy	2	
42	*293875-5		Cylinder Strap .....	dy	2	
43	*LS321-2L		Pad - Cylinder strap .....	dy	2	
44	*LS321-2R		Trunnion - Cylinder strap .....	dy	2	
45	*2CD5516		Trunnion - Cylinder strap .....	dy	2	
46	*2CD5152		Cylinder (American La France) (650098) (Same as index 10) .....	dy	1	
47	*2CD5393		Head - Upper cylinder operating (American La France) (650058-2) .....	dy	1	
			(Same as index 11) .....	dy	1	
48	*295820-14		Head - Lower cylinder operating (American La France) (650146) .....	dy	1	
49	*295820-13		(Same as index 12) .....	dy	1	
50	*2CD1976		Tube Assembly - Discharge indicator line, upper cylinder .....	dy	1	
	28X389		Tube Assembly - Discharge indicator line, lower cylinder .....	dy	1	
51	*2CD3115		Indicator - Discharge (American La France) (650061) .....	dy	2	
52	*295820-7		Seal - "Cell-O-Seal" .....	dy	1	
53	*296583-22		Adapter - Head discharge (American La France) (650062) .....	dy	1	
54	*295820-19		Tube Assembly - Lower to upper cylinder .....	dy	1	
55	*475GG%4D		Tube Assembly - Cylinder forward .....	dy	1	
56	*295820-18		Tube Assembly - Union to cone check valve .....	dy	1	
57	*16KT-D		Valve - Cone check (Parker) (650067) .....	dy	1	
	49/SB-184		Tube Assembly - Cone check valve to cross .....	dy	1	
58	296583-4		Cross (Parker) .....	dy	1	
59	2CD5038		Service Bulletin - Installation CO <sub>2</sub> provisions in cargo compartment .....	dy	1	
60	2CD2868		Tube Assembly - Tee to selector valve .....	dy	1	
	2CD2946		Valvè - Fire extinguisher selector (American La France) (650129) .....	dy	1	
	2CD2948		Handle - Selector valve (American La France) (650138-4) .....	dy	1	
61	296740		Spring (American La France) (650138-2) .....	dy	1	
	296949		Nut (American La France) (650138-3) .....	dy	1	
62	296749-2		Nameplate - Selector .....	du-ce	1	
	297038-2		Nameplate - Selector (French) .....	bx	1	
63	296749-3		Nameplate - Cargo compartment .....	du-ce	1	
	297038-3		Nameplate - Cargo compartment (French) .....	bx	1	
64	296785		Nameplate - Cabin heater procedure .....	du-ce	1	
	296951		Nameplate - Cabin heater (French) .....	bx	1	
65	296583-2		Nameplate - Engine procedure .....	du-ce	1	
66	296583-8		Nameplate - Engine procedure (French) .....	bx	1	
67	296583-19		Tube Assembly - Forward baggage compartment fire extinguisher .....	dy	1	
68	296586-5		Tube Assembly - Forward baggage compartment fire extinguisher .....	dy	1	
	296521		Tube Assembly - Forward baggage compartment fire extinguisher .....	dy	1	
69	296586-6		Nozzle - Discharge .....	dy	3	
	296521		Tube Assembly - Discharge .....	dy	1	
70	296586-4		Nozzle - Discharge .....	dy	4	
	296521		Tube Assembly - Discharge .....	dy	1	
71	296586-3		Nozzle - Discharge .....	dy	2	
	296521		Tube Assembly - Discharge .....	dy	1	
72	296586-2		Nozzle - Discharge .....	dy	1	
	296521		Tube Assembly - Discharge .....	dy	1	
73	296586-7		Nozzle - Discharge .....	dy	1	
	296521		Tube Assembly - Discharge .....	dy	3	
74	296583-3		Nozzle - Discharge .....	dy	1	
75	296583-9		Tube Assembly - Aft baggage compartment fire extinguisher .....	dy	1	
76	296583-18		Tube Assembly - Aft baggage compartment fire extinguisher .....	dy	1	
77	296583-17		Tube Assembly - Aft baggage compartment fire extinguisher .....	dy	1	
78	296583-16		Tube Assembly - Aft baggage compartment fire extinguisher .....	dy	1	
79	296583-15		Tube Assembly - Aft baggage compartment fire extinguisher .....	dy	1	
80	296583-14		Tube Assembly - Aft baggage compartment fire extinguisher .....	dy	1	
81	296583-13		Tube Assembly - Aft baggage compartment fire extinguisher .....	dy	1	
82	296585-5		Tube Assembly - Aft baggage compartment fire extinguisher .....	dy	1	
83	296585-8		Tube Assembly - Aft cargo discharge .....	dy	1	
84	296585-9		Tube Assembly - Aft cargo discharge .....	dy	1	
85	296585-4		Tube Assembly - Aft cargo discharge .....	dy	1	
86	296585-7		Tube Assembly - Aft cargo discharge .....	dy	2	
87	296585-3		Tube Assembly - Aft cargo discharge .....	dy	2	
88	296585-5		Tube Assembly - Aft cargo discharge .....	dy	1	
89	296583-10		Tube Assembly - LH Cabin heater fire extinguisher .....	dy	1	
90	296583-21		Tube Assembly - LH Cabin heater fire extinguisher .....	dy	1	
91	296583-6		Tube Assembly - LH Cabin heater fire extinguisher .....	dy	1	
92	296583-12		Tube Assembly - RH Cabin heater fire extinguisher .....	dy	1	
93	296583-20		Tube Assembly - RH Cabin heater fire extinguisher .....	dy	1	
	280927		Tube Assembly - RH Cabin heater fire extinguisher .....	dy	1	
			Installation - Fuselage piping stations 278-456 LH (N.P.) .....	dy	Ref	
			(See figure 1 for using assembly)			
94	256721-73		Tube Assembly - No. 1 Engine .....	dy	1	
95	256721-91		Tube Assembly - No. 1 Engine .....	dy	1	
96	256721-74		Tube Assembly - No. 2 Engine .....	dy	1	
97	256721-92		Tube Assembly - No. 2 Engine .....	dy	1	
	281028		Installation - Fuselage piping, stub wing (N.P.) (See figure 1 for using assembly) .....	dy	Ref	
98	256721-67		Tube Assembly - No. 1 Engine .....	dy	1	
99	256721-65		Tube Assembly - No. 1 Engine .....	dy	1	
100	256721-77		Tube Assembly - No. 1 Engine .....	dy	1	
101	256721-72		Tube Assembly - No. 2 Engine .....	dy	1	
102	256721-71		Tube Assembly - No. 2 Engine .....	dy	1	
103	256721-208		Tube Assembly - No. 3 Engine .....	dy	1	
104	256721-209		Tube Assembly - No. 4 Engine .....	dy	1	
105	256721-213		Tube Assembly - LH Cabin heater fire extinguisher .....	dy	1	
106	256721-211		Tube Assembly - LH Cabin heater fire extinguisher .....	dy	1	
107	256721-210		Tube Assembly - LH Cabin heater fire extinguisher .....	dy	1	
108	288033-38		Tube Assembly - LH Cabin heater fire extinguisher .....	p	1	
	288033-2		Tube Assembly - LH Cabin heater fire extinguisher .....	o-du	1	
109	256721-214		Tube Assembly - RH Cabin heater fire extinguisher .....	dy	1	
110	256721-165		Tube Assembly - RH Cabin heater fire extinguisher .....	dy	1	

(Continued on next page)

Reissued July, 1947

## GROUP . . . Fire Warning and Extinguishing Systems

## Detail Unit . . . Fire Extinguishing System Complete (Continued)

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6	N O M E N C L A T U R E		SERIAL CODE	UNITS PER ASSY.
188-111	261282 288033-40 288033-4	Installation - Right wing stub piping (N.P.) (See figure 1 for using assembly) . . .	dy	Ref		
112	256721-76	Tube Assembly - RH Cabin heater fire extinguisher . . .	p	1		
113	256721-75 292211L	Tube Assembly - RH Cabin heater fire extinguisher . . .	o-du	1		
		Tube Assembly - To No. 3 engine . . .	dy	1		
		Tube Assembly - To No. 4 engine . . .	dy	1		
		Installation - Janitrol cabin heater fire extinguisher (N.P.) . . .	ao-du	Ref		
		(See figure 1 for using assembly)				
	292211R	Installation - Janitrol cabin heater fire extinguisher (N.P.) . . .	ao-du	Ref		
		(See figure 1 for using assembly)				
	288107L	Installation - Janitrol cabin heater fire extinguisher (N.P.) . . .	ap	Ref		
		(See figure 1 for using assembly)	ap	Ref		
	288107R	Installation - Janitrol cabin heater fire extinguisher (N.P.) . . .	ap	Ref		
		(See figure 1 for using assembly)				
114	288033-6 288033-22	Tube Assembly - LH Heater . . .	ao-du	1		
115	*296733-4	Tube Assembly - LH Heater . . .	ap	1		
116	*296733-2	Tube Assembly - LH Heater . . .	dy	1		
117	*296733-6	Tube Assembly - LH Heater . . .	dy	1		
118	*296732-11	Tube Assembly - LH Heater . . .	dy	2		
119	*296732-13	Hose Assembly - LH Heater . . .	dy	1		
120	*296732-8	Tube Assembly - LH Heater . . .	dy	1		
121	*296732-2	Nozzle - Cabin heater control box outlet . . .	dy	1		
122	288033-8	Tube Assembly - RH Heater . . .	ao-du	1		
	288033-24	Tube Assembly - RH Heater . . .	ap	1		
123	*296733-5	Tube Assembly - RH Heater . . .	dy	1		
124	296733-3	Tube Assembly - RH Heater . . .	dy	1		
125	296732-25	Tube Assembly - RH Heater . . .	dy	1		
126	296732-13	Tube Assembly - RH Heater . . .	dy	1		
127	296732-22	Tube Assembly - RH Heater . . .	dy	1		
	296732-2	Nozzle - Cabin heater control box outlet . . .	dy	1		
	267177	Installation - Front beam piping LH wing (N.P.) (See figure 2 for using assembly)	dy	Ref		
128	256721-48	Tube Assembly - LH Inboard engine fire extinguisher . . .	dy	1		
129	256721-49	Tube Assembly - LH Outboard engine fire extinguisher . . .	dy	1		
130	*295545-4	Tube Assembly - LH Outboard engine fire extinguisher . . .	dy	1		
131	*295545-5	Tube Assembly - LH Outboard engine fire extinguisher . . .	dy	1		
132	256721-52	Tube Assembly - LH Outboard engine fire extinguisher . . .	dy	1		
133	*295545-6	Tube Assembly - LH Outboard engine fire extinguisher . . .	dy	1		
	267178	Installation - Front beam piping RH wing (N.P.) (See figure 2 for using assembly)	dy	Ref		
134	256721-78	Tube Assembly - RH Inboard engine fire extinguisher . . .	dy	1		
135	256721-79	Tube Assembly - RH Outboard engine fire extinguisher . . .	dy	1		
136	*295545-3	Tube Assembly - RH Outboard engine fire extinguisher . . .	dy	1		
137	*295545-2	Tube Assembly - RH Outboard engine fire extinguisher . . .	dy	1		
138	256721-52	Tube Assembly - RH Outboard engine fire extinguisher . . .	dy	1		
139	*295545-7	Tube Assembly - RH Outboard engine fire extinguisher . . .	dy	1		
	*294725	Installation - Nacelle fire extinguisher (N.P.) (See figure 1 for using assembly)	dy	Ref		
	294694-2	Installation - LH Inboard nacelle fire extinguisher (N.P.)	dy	1		
	294694-3	Installation - LH Outboard nacelle fire extinguisher (N.P.)	dy	1		
140	294694-6	Tube Assembly - Nozzle to cross . . .	dy	1		
141	294694-5	Tube Assembly - Wing to inboard nacelle . . .	dy	1		
142	294694-4	Tube Assembly - Cross to union . . .	dy	1		
143	292608-6	Tube Assembly - Union to nozzle . . .	dy	1		
144	292608-8	Tube Assembly - Wing to outboard nacelle . . .	dy	1		
145	16-16-10-10KT-SS	Cross (Parker) . . .	dy	1		
146	292608-5	Tube Assembly - Cross to firewall . . .	dy	1		
147	292490	Nozzle - Zone 3 fire extinguisher . . .	dy	4		
148	292491	Nozzle - Zone 2 fire extinguisher . . .	dy	4		
149	293852	Fitting - Bulkhead flanged . . .	dy	4		
	294692	Installation - RH Inboard nacelle fire extinguisher (N.P.)	dy	1		
150	294692-2	Tube Assembly - Nozzle to tee . . .	dy	1		
151	16-16-10JT-SS	Tee (Parker) . . .	dy	1		
152	292607-6	Tube Assembly - Tee to firewall . . .	dy	1		
153	292607-7	Tube Assembly - Tee to union . . .	dy	1		
154	292607-8	Tube Assembly - Union to tee . . .	dy	1		
155	3115-2JT16SS	Tee (Parker) . . .	dy	1		
156	292607-9	Tube Assembly - Tee to tee . . .	dy	1		
157	10-10-16JT-SS	Tee (Parker) . . .	dy	1		
158	294692-3	Tube Assembly - Tee to nozzle . . .	dy	1		
159	294692-4	Tube Assembly - Tee to nozzle . . .	dy	1		
160	292490	Nozzle - Zone 3 fire extinguisher . . .	dy	4		
161	292491	Nozzle - Zone 2 fire extinguisher . . .	dy	4		
	294693	Installation - RH Outboard nacelle fire extinguisher (N.P.)	dy	1		
162	294693-2	Tube Assembly - Nozzle to tee . . .	dy	1		
163	10-10-16JT-SS	Tee (Parker) . . .	dy	1		
164	294693-6	Tube Assembly - Tee to tee . . .	dy	1		
165	JT16SS	Tee (Parker) . . .	dy	1		
166	292698-2	Tube Assembly - Tee to firewall . . .	dy	1		
167	292698-3	Tube Assembly - Wing to nacelle . . .	dy	1		
168	294693-3	Tube Assembly - Tee to union . . .	dy	1		
169	294693-4	Tube Assembly - Union to nozzle . . .	dy	1		
170	292490	Nozzle - Zone 3 fire extinguisher . . .	dy	4		
171	292491	Nozzle - Zone 2 fire extinguisher . . .	dy	4		
	288802	Installation - Bracket assembly fire extinguisher station 260 (N.P.)	ce-du	Ref		
		(See figure 1 for using assembly)				
172	286859	Bracket Assembly - Flight station hand fire extinguisher . . .	ce-du	1		
173	FF2W 294140	Extinguisher - Hand fire (Randolph Laboratories) (650097-3) . . .	ce-du bx	1		
		Installation - Hand fire extinguisher station 220 (N.P.)	bx	Ref		
		(See figure 1 for using assembly)				
	286859 FF2W	Bracket Assembly - Flight station hand fire extinguisher . . .	bx	1		
		Extinguisher - Hand fire (Randolph Laboratories) (650097-3) . . .	bx	1		
		(See index 173)				
174	290288 13X-1204	Installation - Fire extinguisher bracket (N.P.) (See figure 1 for using assembly) . . .	dy	Ref		
175	0	Bracket (Alfite 650096-6) . . .	dy	1		
		Extinguisher - Hand, fire (Alfite) (650096-3) . . .	dy	1		

\* Replaces standard part, added or serialized per one or more of the following:  
Service Bulletins: 49/SB-14, 49/SB-122, 49/SB-138, 49/SB-184, 49/SB-188 and  
Mod. Prints 294725, 295545 295805.

FIRE EXTINGUISHER

GROUP . . . Fire Warning and Extinguishing Systems

Detail Unit . . . Smoke Detector System Complete

*Constellation*

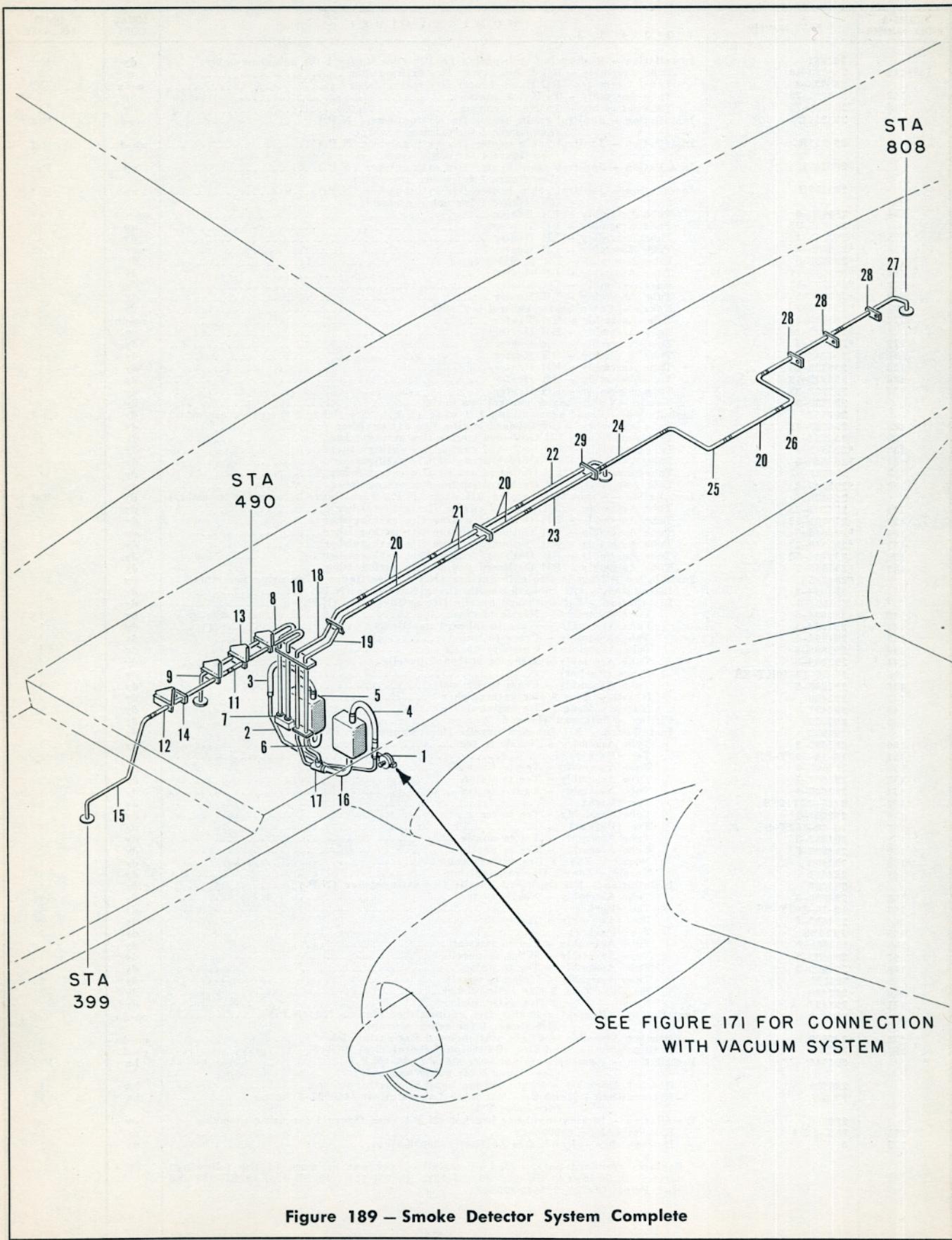


Figure 189 – Smoke Detector System Complete

## GROUP . . . Fire Warning and Extinguishing Systems

## Detail Unit . . . Smoke Detector System Complete

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER	1    2    3    4    5    6	N O M E N C L A T U R E	SERIAL CODE	U N I T S P E R A S S Y.	
189 - 1	49/SB-183B V1-A		Service Bulletin - Smoke detector installation .....	dy	1	
	296798-5		Regulator - Vacuum (Schwien Engineering Co.) (650155) .....	dy	1	
2	296587-73		(See figure 171 for illustration)			
3	3752A4QA014-		Bracket - Regulator mounting .....	dy	1	
	014-18D		Tube Assembly - Vacuum .....	dy	1	
4	3752A4QA014-		Hose Assembly - Vacuum .....	dy	1	
	014-22D		Hose Assembly - Vacuum .....	dy	1	
5	DR45878		Detector - CO and fire (Mine Safety Appliance Co.) (644296) .....	dy	2	
6	3752A4QA014-		Hose Assembly - Forward smoke detector .....	dy	1	
	614-13D					
7	9-2746-76		Manifold (Parker) .....	dy	1	
8	296798-23		Tube Assembly + Forward detector .....	dy	1	
9	296798-19		Tube Assembly + Forward detector .....	dy	1	
10	296798-24		Tube Assembly + Forward detector .....	dy	1	
11	296587-44		Tube Assembly + Forward detector .....	dy	1	
12	296587-43		Tube Assembly + Forward detector .....	dy	1	
13	296798-3		Bracket + Smoke detector tube .....	dy	5	
14	279877		Clamp Block - Smoke detector tube .....	dy	9	
15	296798-17		Tube Assembly + Forward .....	dy	1	
16	3752A4QA014-		Hose Assembly - Aft smoke detector .....	dy	1	
	014-8D					
17	811RT-4D		Tee (Parker) .....	dy	1	
18	296798-25		Tube Assembly - Aft detector .....	dy	1	
19	296798-26		Tube Assembly - Aft detector .....	dy	1	
20	296587-2		Tube Assembly - Aft detector .....	dy	6	
21	296587-3		Tube Assembly - Aft detector .....	dy	2	
22	296587-15		Tube Assembly - Aft detector .....	dy	1	
23	296587-4		Tube Assembly - Aft detector .....	dy	1	
24	296587-14		Tube Assembly - Aft detector .....	dy	1	
25	296588-26		Tube Assembly - Aft detector .....	dy	1	
26	296587-11		Tube Assembly - Aft detector .....	dy	1	
27	296588-21		Tube Assembly - Aft detector .....	dy	1	
28	296588-2		Bracket + Smoke detector tube clamp block .....	dy	3	
29	279877		Clamp Block .....	dy	32	
	272820-7		Panel Assembly - Flight engineer's upper left (See figure 198 for using assembly) .....	dy	Ref	
			(See panel for detector warning lights)			
	709-GG-8D (Lube 1)		Valve - CO Detector shut-off (Schwien Engineering) (633126) .....	dy	Ref	
			(See figure 171 for detailed illustration)			

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LOCKHEED AIRCRAFT CORPORATION

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FIRE  
EXTINGUISHER

GROUP . . . Wash Water System

Detail Unit . . . Wash Water System Complete

Constellation

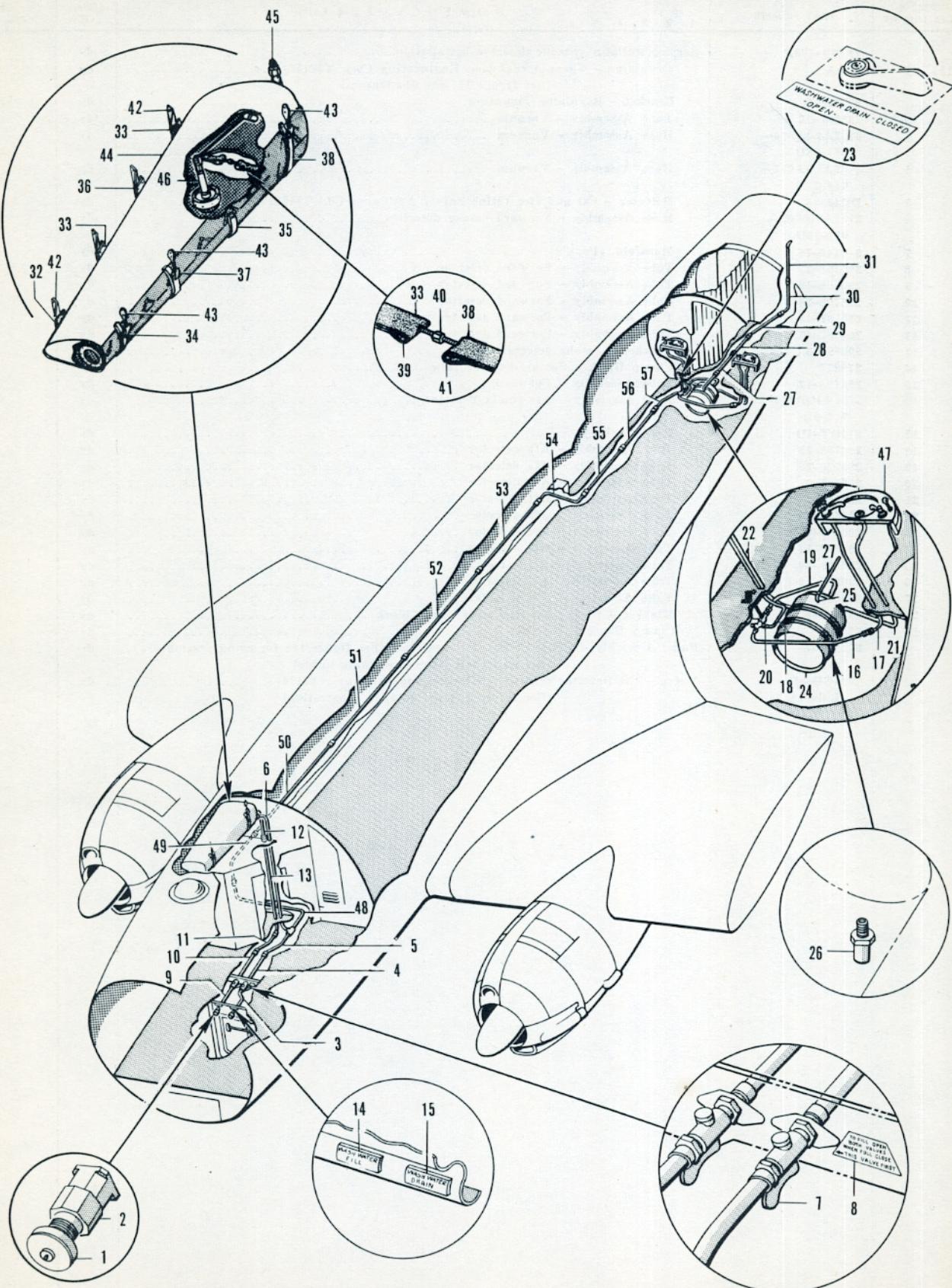


Figure 190 — Wash Water System Complete

## GROUP . . . Wash Water System

## Detail Unit . . . Wash Water System Complete

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6	N O M E N C L A T U R E			SERIAL CODE	UNITS PER ASSY.
			7	8	9		
190 - 1	265351		Installation - Wash water system (N.P.) (See figure 1 for using assembly)			dy	Ref
	263589		Plug Assembly - Wash water line			dy	2
	2M3377-8 $\frac{1}{4}$		Washer (Union Hardware)			dy	2
2	288178		Connector - Water hose			dy	2
3	265352-57		Tube Assembly + Drain line			dy	1
4	265352-52		Tube Assembly + Drain line			dy	1
5	265352-4		Tube Assembly + Drain line			dy	1
6	*289702-36		Tube Assembly + Drain line			ca-du	1
	*291852-8		Tube Assembly + Drain line			bu	1
7	715FT6D		Valve - 2-way Plug (Parker) (633056)			dy	2
8	279323		Nameplate - Wash water filler and overflow valves			dy	1
9	265352-2		Tube Assembly + Filler line			dy	1
10	265352-48		Tube Assembly + Filler line			dy	1
11	265352-8		Tube Assembly + Filler line			dy	1
12	*285649-4		Tube Assembly + Filler line			ca-du	1
13	*285649-3		Tube Assembly + Filler line			ca-du	1
	*291852-9		Tube Assembly + Filler line			bu	1
14	279321		Nameplate - Drain plug			dy	1
15	288283		Nameplate - Filler plug			dy	1
16	265352-50		Tube Assembly + Basin supply LH			ea-du	1
17	265352-13		Tube Assembly + Basin supply LH			ea-du	1
	*291852-10		Tube Assembly + Basin supply LH			bu	1
	*291852-12		Tube Assembly + Basin supply LH			bu	1
	*291852-14		Tube Assembly + Basin supply LH			bu	1
	*291838		Tank Assembly - 1½ gal. Hot water			bu	2
18	265352-51		Tube Assembly - Basin supply RH			ca-du	1
	*291852-16		Tube Assembly - 1½ gal. RH			bu	1
	*291852-18		Tube Assembly - 1½ gal. RH			bu	1
	*291852-20		Tube Assembly - 1½ gal. RH			dy	1
19	265352-49		Tube Assembly - Wash water line drain			dy	1
20	279324		Valve Assembly - Wash water drain			dy	1
	279325		Socket - Wash water drain valve handle			dy	2
	702F10D		Valve - 2-way Plug (Parker)			dy	1
21	265352-10		Tube Assembly - Basin drain LH			dy	1
22	265352-9		Tube Assembly - Basin drain RH			dy	1
23	286271		Nameplate - Wash water drain valve			dy	1
24	266750-2		Tank and Support - Wash water sump			dy	1
25	266936		Elbow - Sump tank vent			dy	1
	270712		Flange - Sump tank			dy	1
26	288177		Adapter - Sump tank drain			dy	2
27	265352-16		Tube Assembly - Sump tank vent			dy	2
28	265352-21		Tube Assembly - Sump tank vent			dy	1
29	265352-17		Tube Assembly - Sump tank vent			dy	1
30	265352-18		Tube Assembly - Sump tank vent			dy	1
31	265352-19		Tube Assembly - Sump tank vent			dy	2
	265000		Installation - Wash water tank (N.P.) (See figure 1 for using assembly)			dy	Ref
			(Serial BC converted to this installation per 49/SI-40)				
32	258064-6		Strap Assembly - Wash water tank outboard			dy	1
33	258064-3		Strap Assembly - Wash water tank inboard			dy	1
34	257585-3		Strap Assembly - Wash water tank inboard			dy	1
35	257585-5		Strap Assembly - Wash water tank inboard			dy	1
36	258064-2		Strap Assembly - Wash water tank			dy	1
37	257585-6		Strap Assembly - Wash water tank			dy	1
38	257585-7		Strap Assembly - Wash water tank			dy	1
39	LS321R		Trunnion - Tank strap			dy	8
40	LS320		Screw - Tank strap			dy	4
41	LS321L		Trunnion - Tank strap			dy	4
42	265007		Support + Wash water tank			dy	4
43	257586		Terminal - Wash water tank support			dy	4
	288143		Tank Assembly - Complete wash water (Reworked per 49/SB-246)			dy	1
44	288143-29		Tank Assembly - Wash water, 34 gallons			dy	1
45	287851		Air Vent Assembly			all	1
	288282		Inlet Assembly			all	1
46	S106LXI		Gauge - Wash water tank (Boston Auto Gauge Co.) (629142)			dy	1
	11023		Head and Pivot Assembly			all	1
	237EEEEEAX		Dial			all	1
	888AX		Screw - Dial retaining			all	2
	2155EX.05		Pointer - Magnetic			all	1
	760A		Window			all	1
	503EALBX		Bezel			all	1
	1389EBX		Body			all	1
	2293		Bearing			all	1
	2290A		Bearing			all	2
	1798EBX3 $\frac{1}{16}$		Tube - Extension			all	1
	1616EEBX		Stop			all	2
	15272EBX		Magnet Assembly			all	1
	896EEA		Screw - Set			all	2
	1147E		Pinion			all	1
	1427EA		Taper Pin			all	1
	15270E9 $\frac{1}{16}$		Float Assembly			all	1
	1432E		Pivot			all	2
	650EA		Washer - Lock			all	2
	1425EBRBX		Pin - Stop			all	2
47	284819		Basin Assembly - Wash (See figure 61 for using assembly)			dy	Ref
	265942		Installation - Fuselage piping station 278.4-527.6 RH (See figure 1 for using assembly)			all	Ref
48	265352-38		Tube Assembly - Water supply			all	1
	279019		Installation - Wash water line fuselage station 425.6-919.0 (N.P.)			dy	Ref
			(See figure 1 for using assembly)				
49	265352-39		Tube Assembly - Water supply			dy	1
50	265352-40		Tube Assembly - Water supply			dy	1
51	265352-41		Tube Assembly - Water supply			dy	1
52	265352-42		Tube Assembly - Water supply			dy	1
53	265352-43		Tube Assembly - Water supply			dy	1
54	265352-44		Tube Assembly - Water supply			dy	1
55	265352-45		Tube Assembly - Water supply			dy	1
56	265352-46		Tube Assembly - Water supply			dy	1
57	265352-47		Tube Assembly - Water supply			dy	1
	294137		Installation - Wash water system insulation (See figure 1 for using assembly)			sss	Ref
			* Replaces standard part per Mod. Prints 285649 and 291852.				

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GROUP . . . Instruments

Detail Unit . . . Panel—Pilot's and Co-Pilot's Instrument

*Constellation*

INSTRUMENTS

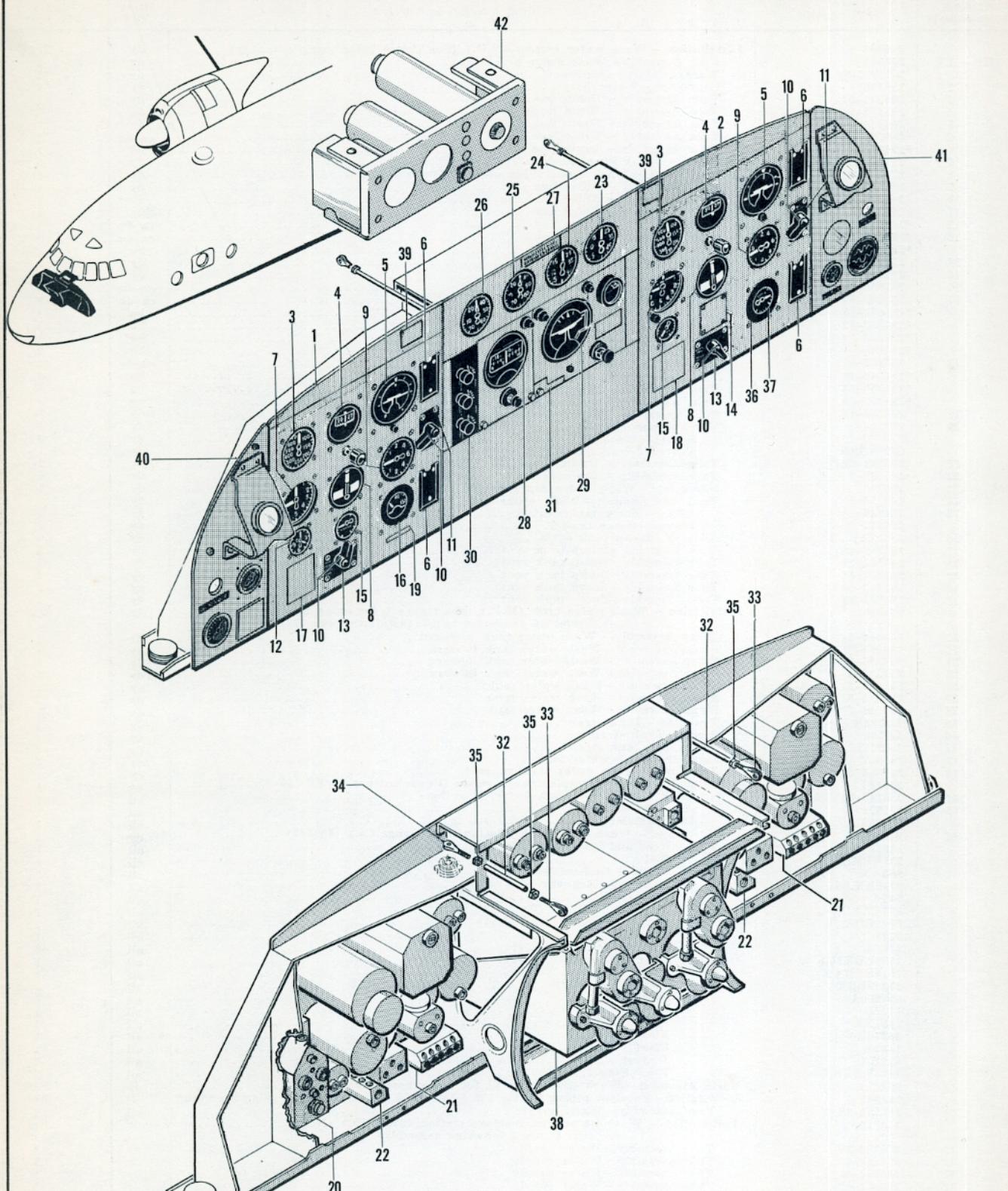


Figure 191 — Panel — Pilot's and Co-pilot's Instrument

Reissued July 1947

LOCKHEED AIRCRAFT CORPORATION

## GROUP . . . Instruments

## Detail Unit . . . Panel—Pilot's and Co-Pilot's Instrument

*Constellation*

INSTRUMENTS

FIGURE & INDEX NUMBER	PART NUMBER		NOMENCLATURE						SERIAL CODE	UNITS PER ASSY.
			1	2	3	4	5	6		
	279945		Installation - Pilot's instrument panel (See figure 1 for using assembly) .....						all	Ref
	284062-2		Panel Assembly - Pilot's flight instrument .....						rrr	1
	284062-3		Panel Assembly - Pilot's flight instrument .....						rrr	1
	294789-2		Panel Assembly - Pilot's flight instrument (See figure 195 for using assembly) .....						sss	Ref
	294789-3		Panel Assembly - Pilot's flight instrument (See figure 195 for using assembly) .....						sss	Ref
191 - 1	284063-2		Panel - Pilot's flight instrument .....						all	1
2	284063-3		Panel - Pilot's flight instrument .....						all	1
3	94-27335B		Indicator - Airspeed (Type F2) .....						all	1
4	AN5735-1A		Gyro - Directional (620153) .....						all	1
5	AN5736-1A		Gyro - Horizon (620154-2) .....						all	1
6	AN5800-1		Holder Assembly - Correction card .....						all	2
7	AN5760-2		Altimeter - Pressure .....						all	1
8	AN5820-1		Indicator - Turn and bank .....						all	1
9	AN5825-5		Indicator - Rate of climb (716K011-Kollsman) .....						all	1
10	298521		Valve - Static pressure selector .....						all	2
11	292601		Nameplate - Altimeter static selector valve .....						p	1
12	AN5743-1		Clock - 7 Jewel-unlighted (Used on 284062-2 only) .....						all	1
13	284195		Nameplate - Vacuum selector valve .....						all	1
14	238251		Plug - Instrument panel (Used on 284062-3 only) .....						all	1
15	AN5771-5A		Gauge - Suction .....						all	1
16	AN5790-6		Indicator - Thermometer - Electrical resistance type 2½ dial .....	(Used on 248062-2 only)					all	1
	267877-4		Plug Assembly .....						all	1
17	279285		Nameplate - Pilot's speed limit (Used on 284062-2 only) .....						all	1
18	286553		Nameplate - Pilot's speed limit (Used on 284062-3 only) .....						all	1
19	270571		Nameplate - Thermometer - Free air (Used on 284062-2 only) .....						all	1
20	256202		Manifold Assembly - Vacuum instrument .....						all	1
	256203		Fitting - ½ Male .....						all	2
	AN6227-15		Ring - ¾ Sealing .....						all	4
	260099		Plug - Manifold restriction ½ .....						all	2
	260100		Plug - Manifold restriction ¾ .....						all	1
21	256201		Manifold - Air instrument .....						all	1
	259637		Fitting - ¾ Male .....						all	5
	AN6227-5		Packing - "O" Ring hydraulic .....						all	10
22	274381		Manifold - Vacuum instruments .....						all	1
	279818-7		Panel Assembly .....						all	1
23	740CK05		Indicator - Dual tachometer, engines 1 and 2 (Kollsman) (622108) .....						all	1
24	740CK04		Indicator - Dual tachometer, engines 3 and 4 (Kollsman) (622107) .....						all	1
25	Type 728-05		Gauge - Dual manifold pressure (Kollsman) (622106) .....						all	1
26	Type 728-04		Gauge - Dual manifold pressure (Kollsman) (622105) .....						all	1
27	279270		Nameplate - Fuel octane .....						all	1
	279947		Frame Assembly - Pilot's instrument panels .....						all	1
	258811		Block - Air instrument manifold .....						all	2
	256200		Block - Vacuum instrument manifold .....						all	2
	274380		Manifold - Pilot's instrument panel frame .....						all	2
	267224		Bracket - Trim gauge mounting .....						all	1
28	661071		Gyro - Directional (Sperry) (620032) .....						all	1
29	661072		Gyro - Turn and bank (Sperry) (620033) .....						all	1
30	644424		Valve - Speed control (Sperry) (629018) .....						all	1
31	282397		Nameplate .....						all	1
32	258981		Rod - Upper installation panel support .....						all	2
33	258980-2		End - Upper installation panel support rod .....						all	2
34	258980-3		End - Upper installation panel support rod .....						all	2
35	620529		Nut - Upper installation panel support rod .....						all	4
36	267586		Filler - Trim gauge mounting .....						all	1
37	AW1½-28A		Gauge - Elevator trim (U. S. Gauge Co.) (620168) .....						all	1
38	281168		Unit Assembly - Gyro pilot mounting .....						all	1
	664119		Adapter - Remote control (Sperry) (629051) .....						all	2
	643917		Mounting Unit - Gyro pilot (Sperry) (629019) .....						all	1
	290140		Nameplate - Main landing gear wood door .....						c	1
39	291652		Nameplate - Speed limit .....						ggg	2
40	286844-2		Panel Assembly - Pilot's auxiliary (See figure 200 for using assembly) .....						all	Ref
41	286844-3		Panel Assembly - Co-pilot's auxiliary (See figure 200 for using assembly) .....						all	Ref
42	284739-7		Panel Assembly - Auxiliary instrument (See figure 200 for using assembly) .....						all	Ref

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GROUP . . . Instruments

Detail Unit . . . Panel—Flight Engineer's Middle Instrument

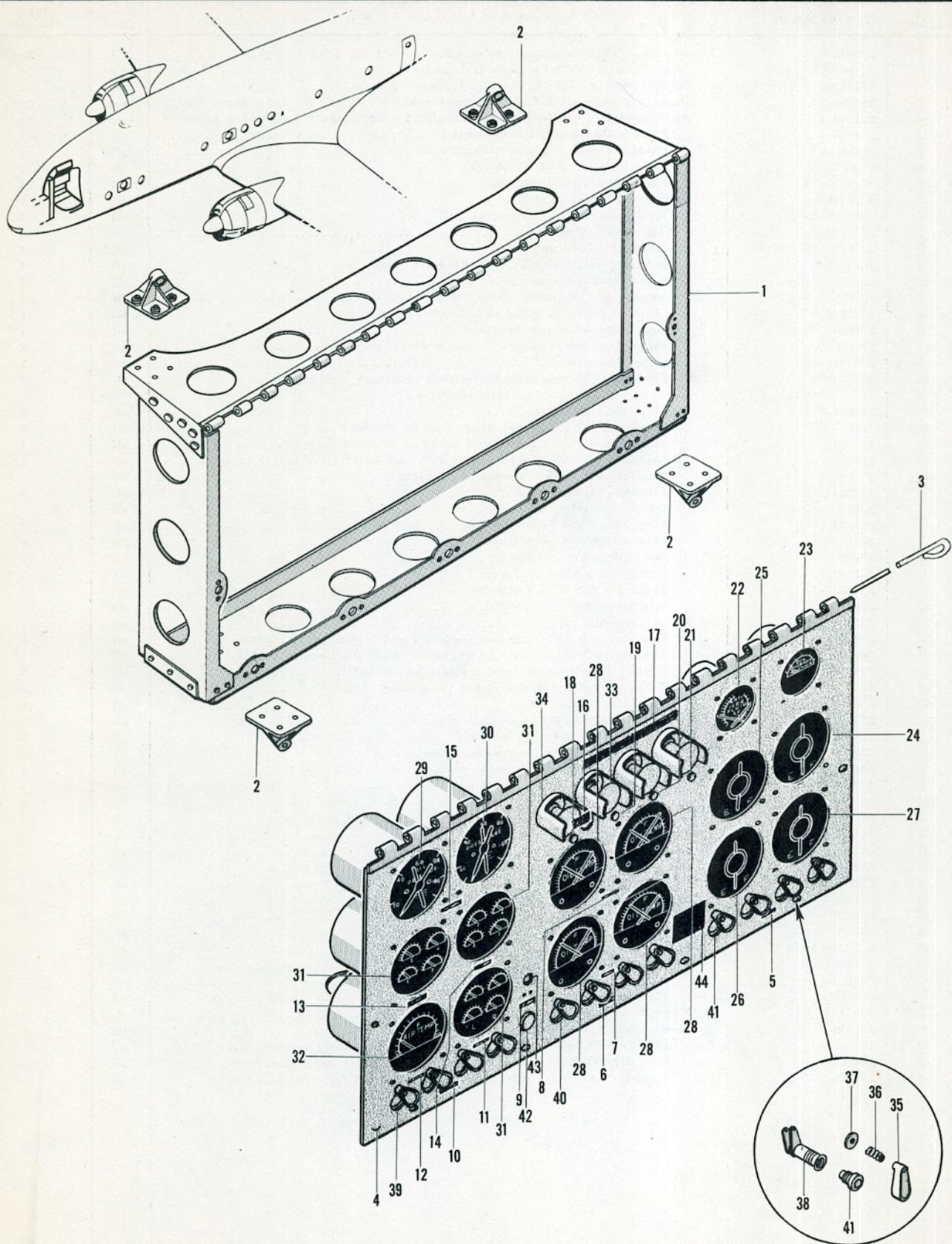
*Constellation*

Figure 192 — Panel — Flight Engineer's Middle Instrument

## GROUP . . . Instruments

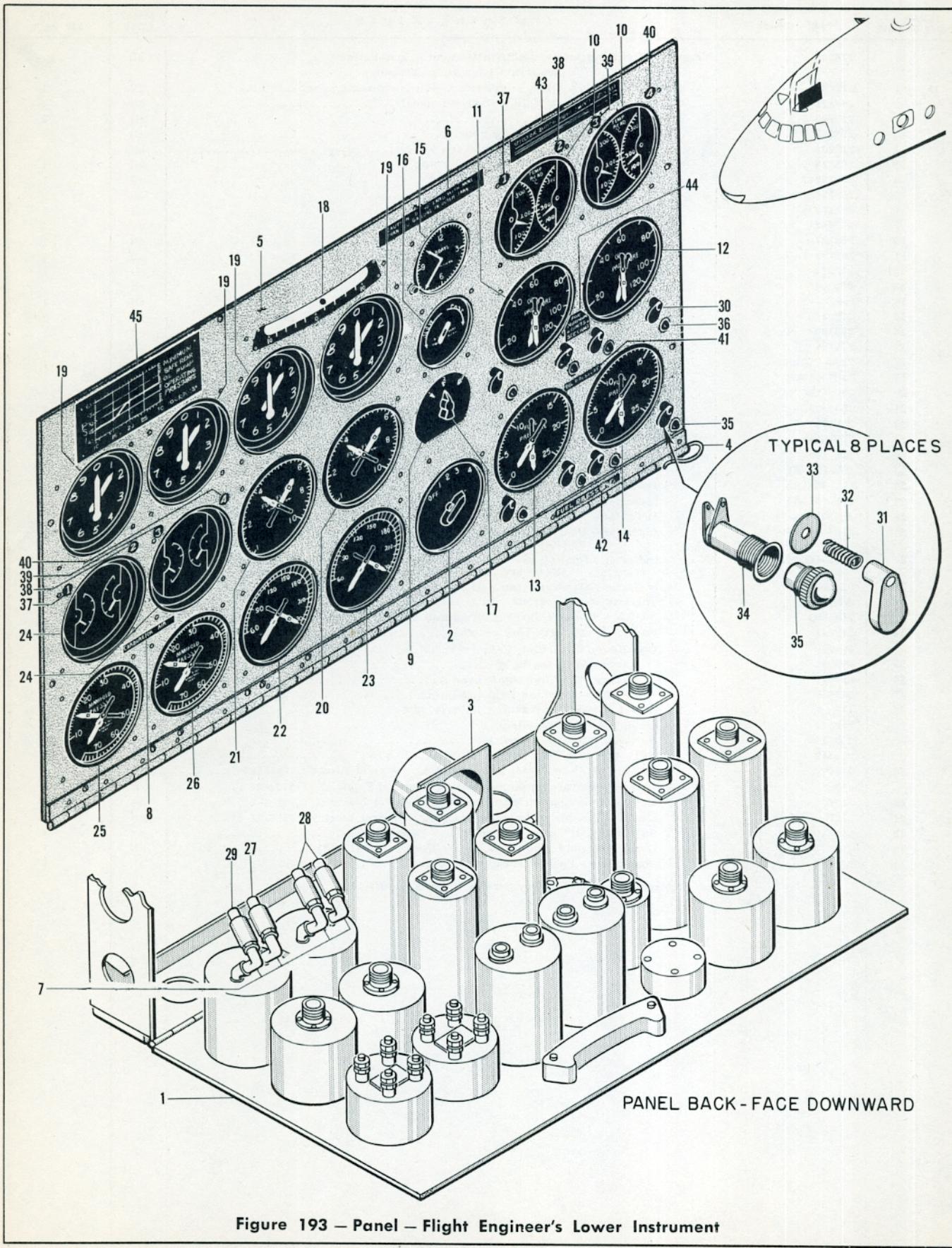
## Detail Unit . . . Panel—Flight Engineer's Middle Instrument

*Constellation*

INSTRUMENTS

FIGURE & INDEX NUMBER	PART NUMBER	1    2    3    4    5    6	N O M E N C L A T U R E	SERIAL CODE	UNITS PER ASSY.
				all	Ref
	256332		Panel - Flight engineer's middle instrument - Installation .....	all	
			(See figure 1 for using assembly)		
192 - 1	272732		Frame Assembly - Flight engineer's middle instrument panel.....	all	1
2	260571		Bracket Assembly - Middle instrument panel.....	all	4
3	227900-7		Pin - Locking hinge .....	all	1
	273706		Instrument Assembly - Middle panel .....	all	1
4	273704		Panel Assembly - Flight engineer's middle.....	all	1
5	268128		Nameplate - Hydraulic pumps warning .....	all	1
6	268129		Nameplate - Propeller pitch warning .....	all	1
7	268176		Nameplate - Oil out .....	all	1
8	268175		Nameplate - Oil in .....	all	1
9	267547		Nameplate - Interphone call light .....	av	1
10	268127		Nameplate - Vacuum pumps warning .....	all	1
11	*294700-3		Nameplate - RH Cowl flaps position indicator .....	all	1
12	270571		Nameplate - Thermometer free air .....	all	1
13	260974		Nameplate - Oil cooler flap .....	all	1
14	*294700-2		Nameplate - LH Cowl flaps position indicator .....	all	1
15	279746		Nameplate - Front pumps .....	all	1
16	268130		Nameplate - Propeller Feathering Switch .....	all	1
17	279488		Nameplate - Propeller Feathering Warning .....	all	1
18	7300-296401		Decal - Engine No. 1 .....	all	1
19	7300-296402		Decal - Engine No. 2 .....	all	1
20	7300-296403		Decal - Engine No. 3 .....	all	1
21	7300-296404		Decal - Engine No. 4 .....	all	1
22	EA108		Indicator - Anti-icer fluid quantity (Liquidometer) (626045) .....	all	1
23	EA102-9		Indicator - Hydraulic fluid quantity (Liquidometer) (626072) .....	all	1
24	EA-155-B2		Indicator - Oil quantity (Liquidometer) (624118) .....	all	1
25	EA-155-B1		Indicator - Oil quantity (Liquidometer) (624117) .....	all	1
26	EA-155-B3		Indicator - Fuel quantity (Liquidometer) (624123) .....	all	1
27	EA-155-B4		Indicator - Fuel quantity (Liquidometer) (624124) .....	all	1
28	AN5795-6		Indicator - Thermometer, oil temperature .....	all	4
29	6007-4H27B		Indicator - Dual oil pressure (Pioneer Instrument Division) (624115) .....	all	1
			(Reworked per Service Bulletin 49/SB-231)		
30	6007-4H28B		Indicator - Dual oil pressure (Pioneer Instrument Division) (624116) .....	all	1
			(Reworked per Service Bulletin 49/SB-231)		
31	8DJ20AAF		Indicator - Quadrant flap position (General Electric) (629109) .....	all	3
32	AN5790-6		Thermometer - Free air .....	all	1
33	2CC1B4		Switch - Prop. feathering (Hamilton Standard Propeller Co.) (612001) .....	all	4
34	259057		Guard - Prop. feathering switch .....	all	4
	264020		Installation - Warning light cover (N.P.) .....	all	1
35	263362		Cover - Warning light .....	all	1
36	264021		Spring - Warning light cover .....	all	1
37	272870		Washer - Warning light insulating .....	all	1
38	17L1A		Socket Assembly - Warning light (610028) .....	all	12
	259514		Insulator - Warning light .....	all	12
	258721		Insulator - Warning light nut .....	all	12
	259513		Nut - Warning light lock .....	all	12
39	319P		Lamp - Purple, vacuum pump warning (General Electric) (618124-7) .....	r	4
	319R		Lamp - Red, vacuum pump warning (General Electric) (618124-3) .....	s	4
40	319A		Lamp - Amber, prop. pitch warning (General Electric) (618124-2) .....	all	4
41	319B		Lamp - Blue, hydraulic pump warning (General Electric) (618124-6) .....	all	4
42	265		Switch - "Call" push (Edwards and Co.) (612022-3) .....	av	1
43	710S		Lamp Assembly (Signal Indicator Corp.) (618111-12) .....	all	1
44	292316		Nameplate - Fuel tank capacity .....	all	1

\* Replaces standard part per Service Bulletin 49/SB-14.



**Figure 193 – Panel – Flight Engineer's Lower Instrument**

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