

## GROUP . . . Instruments

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

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	
	256333	Panel Flight Engineer's Lower Instrument - Installation (See figure 1 for using assembly)	all	Ref					
193 - 1	272731-10	Frame Assembly	all	1					
2	3786C2	Switch - Thermocouple elector (Lewis Engineering Co.) (629073)	all	1					
3	267314	Bracket Assembly - Mounting	all	1					
4	227900-7	Pin - Locking hinge	all	1					
	273705	Instrument Assembly - Flight engineer's lower	all	1					
5	273703	Panel Assembly - Flight engineer's lower instrument	all	1					
6	281209	Nameplate - Outer tank fuel limit	all	1					
7	AC811CT4D	Elbow	all	4					
8	270572	Nameplate - Thermometer carburetor air	all	1					
9	268123	Nameplate - Synchroscope switch	all	1					
10	5536-2A	Thermometer - Cylinder temperature (Type B11)	all	2					
11	6007-4H27B	Indicator - Dual oil pressure (Autosyn) (Pioneer Instrument Divn.) (624115) (Reworked per service bulletin 49/SB-231)	all	1					
12	6007-4H28B	Indicator - Dual oil pressure (Autosyn) (Pioneer Instrument Divn.) (624116) (Reworked per service bulletin 49/SB-231)	all	1					
13	6007-14F1	Indicator - Dual fuel pressure (Autosyn) (Pioneer Instrument Divn.) (624121)	all	1					
14	6007-14F2	Indicator - Dual fuel pressure (Autosyn) (Pioneer Instrument Divn.) (624122)	all	1					
15	94-27970	Clock - Type A11	all	1					
16	549B09	Synchroscope - Engine fluorescent (Kollsman Instrument Co.) (622088)	rrr	1					
	SDJ15AAH	Synchroscope - Engine fluorescent (General Electric) (622159)	sss	1					
	272095	Installation - Lower panel wiring (N.P.)	all	1					
	272443	Plug Assembly	all	1					
17	6280	Switch - Non-shorting selector (Centralab Division) (612317)	all	1					
18	1017	Inclinometer - Ball-Bank (Air Associates Inc.) (620163) (See figure 200 for installation other serials)	ec	1					
19	AN5530-1A	Indicator - Tachometer	all	4					
20	6007-51C20	Indicator - Fuel flow (Pioneer Instrument Division) (624120)	all	1					
21	6007-51C21	Indicator - Fuel flow (Pioneer Instrument Division) (624119)	all	1					
22	6007-41B20	Indicator - Torquemeter (Pioneer Instrument Division) (622102)	all	1					
23	6007-41B21	Indicator - Torquemeter (Pioneer Instrument Division) (622101)	all	1					
24	AN5795-6	Indicator - Thermometer, carburetor air	all	2					
25	728BK04	Gauge - Manifold pressure, engines 1 and 2 (Kollsman) (622105)	all	1					
26	728BK05	Gauge - Manifold pressure, engines 3 and 4 (Kollsman) (622106)	all	1					
27	3752A4QA014014-19D	Hose Assembly (Weatherhead)	all	1					
28	3752A4QA014014-18D	Hose Assembly (Weatherhead)	all	2					
29	3752A4QA014014-20D	Hose Assembly (Weatherhead)	all	1					
30	261020	Installation - Warning light cover (N.P.)	all	1					
31	263362	Cover - Warning light	all	1					
32	264021	Spring - Warning light cover	all	1					
33	272870	Washer - Warning light insulating	all	1					
34	17L1A	Socket Assembly - Warning light (610028)	all	8					
	259514	Insulator - Warning light	all	8					
	258721	Insulator - Warning light nut	all	8					
	259513	Nut - Warning light lock	all	8					
35	319R	Lamp - Red, fuel pressure warning (General Electric) (618124-3)	all	4					
36	319A	Lamp - Amber, oil pressure warning (General Electric) (618124-2)	all	4					
37	274160	Nameplate - Engine No. 1	bg	2					
38	274161	Nameplate - Engine No. 2	bg	2					
39	274162	Nameplate - Engine No. 3	bg	2					
40	274163	Nameplate - Engine No. 4	bg	2					
41	292315	Nameplate - Oil pressure warning lights	all	1					
42	267150	Nameplate - Fuel pressure warning lights	all	1					
	284513	Instrument Assembly - Eng. blower fire warning	bb	1					
	284512	Decal	bb	1					
	76AT3D	Indicator Assembly (Lewis Eng. Co.) (622059)	bb	1					
43	295391	Nameplate - Supercharger shaft temperature	ce-du	1					
	295311	Nameplate - Supercharger shaft temperature	bx	1					
44	*296761	Nameplate - Oil pressure chart reference	ce-du	1					
	*296818	Nameplate - Oil pressure chart reference	bx	1					
45	*296995	Nameplate - Minimum safe rear oil pressure	fu	1					
	*296819	Nameplate - Minimum safe rear oil pressure	bx	1					
	296770	Nameplate - Minimum safe rear oil pressure	sss	1					

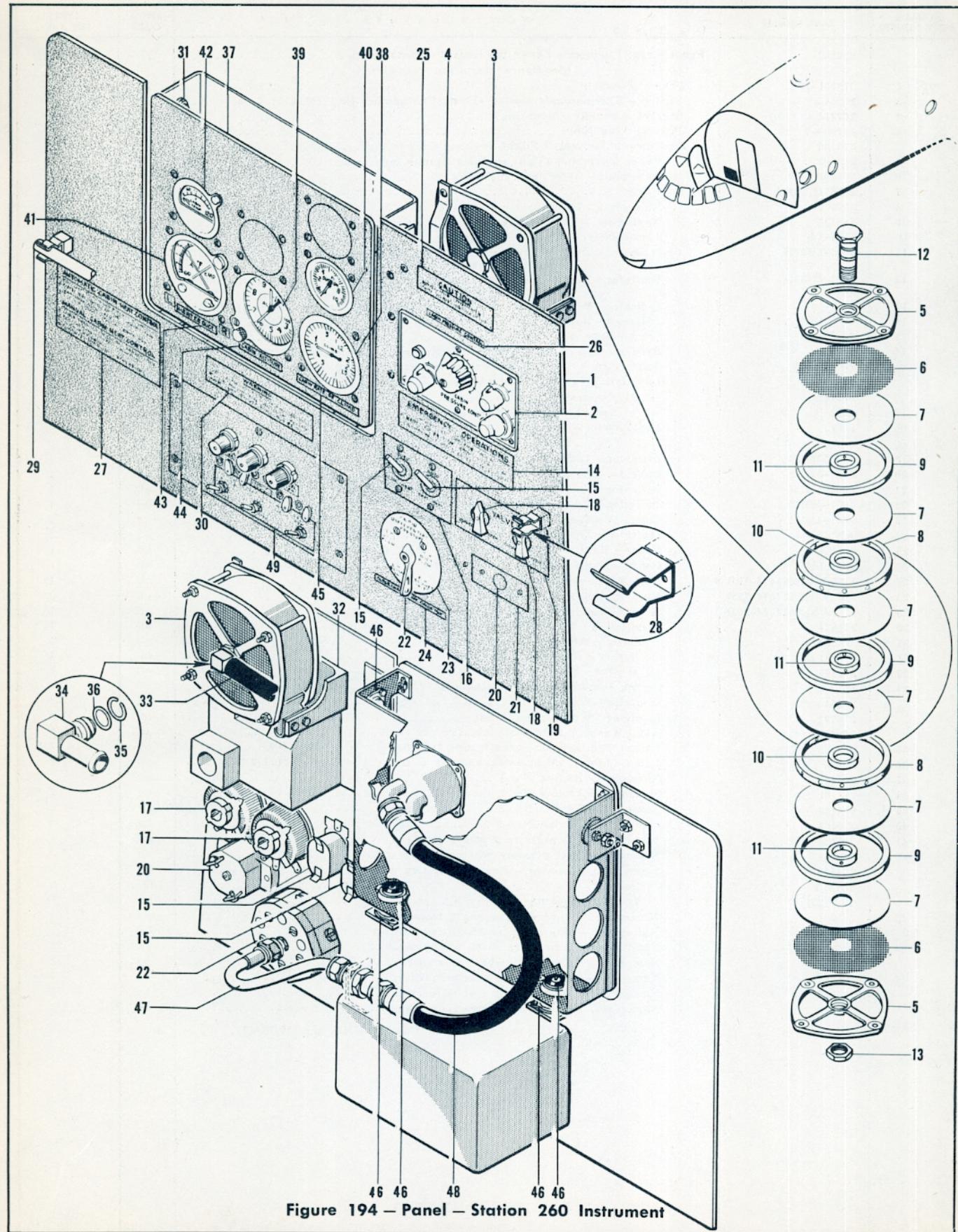
\* Added per Service Bulletins 49/SB-107 and 49/SB-231.

GROUP . . . Instruments

Detail Unit . . . Panel—Station 260 Instrument

# Constellation

INSTRUMENTS



Reissued July 1947

## GROUP . . . Instruments

## Detail Unit . . . Panel—Station 260 Instrument

*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.
194 - 1	273702		Panel Station 260 Instrument - Installation (See figure 1 for using assembly) . . . . .		all	Ref
	273702-4		Panel Assembly - Instrument . . . . .		all	1
2	825B900		Panel Assembly - Control (Kollsman) (644062) . . . . . (See figure 102 for detailed illustration)		all	1
3	644102		Filter Assembly - Cabin pressure control . . . . .		all	1
4	284205		Strap - Control panel filter . . . . .		all	1
5	281008		Flange - Control panel filter . . . . .		all	2
6	281007		Screen - Control panel filter . . . . .		all	2
7	281006		Paper - Control panel filter (6 pads, 4 sheets per pad) . . . . .		all	24
8	281005		Spacer - Control panel filter outer . . . . .		all	2
9	281003		Spacer - Control panel filter outer . . . . .		all	3
10	281002		Spacer - Control panel filter inner . . . . .		all	2
11	281004		Spacer - Control panel filter inner . . . . .		all	3
12	281001		Bolt - Control panel filter . . . . .		all	1
13	281000		Nut - Control panel filter . . . . .		all	1
14	258200		Nameplate - Emergency operations . . . . .		all	1
15	8905K515		Switch - Cabin temperature control (Cutler-Hammer) (612366-2) . . . . .		all	2
16	277270		Nameplate - Cabin temperature control . . . . .		all	1
17	0154		Rheostat - Type 346 auxiliary ventilation control (Ohmite) (612412) Model "H" . . . . .		all	2
18	5116		Knob - Rheostat (Ohmite) . . . . .		all	2
19	283037		Nameplate - Auxiliary vent control . . . . .		all	1
20	PSM5		Protector - Circuit (Spencer Thermostat) (612350-3) . . . . .		all	1
21	283105		Nameplate - Auxiliary vent . . . . .		all	1
22	11-2540-20		Valve Assembly - Supercharger suction gage selector (Parker) (629074) . . . . .		all	1
23	260359		Nameplate - Suction valve . . . . .		all	1
24	279460		Nameplate - Suction gauge . . . . .		all	1
25	260287		Nameplate - Cabin pressure warning . . . . .		all	1
26	279468		Nameplate - Cabin pressure control . . . . .		all	1
27	279464		Nameplate - Cabin heater instructions . . . . .		all	1
28	168806		Clip - Guard rail . . . . .		all	2
29	271570-20		Guard Rail Assembly . . . . .		all	1
30	279462		Nameplate - Cabin heater warning . . . . .		all	1
31	100PD2		Mount (Monel) (Lord) . . . . .		all	4
32	281259L		Bracket Assembly - Filter . . . . .		all	1
	281259R		Bracket Assembly - Filter . . . . .		all	1
33	281473		Hose Assembly - Filter . . . . .		all	1
34	280999		Elbow Assembly - Control panel filter . . . . .		all	1
35	280998		Ring - Lock . . . . .		all	1
36	AN6227-7		Packing - Hydraulic "O" ring . . . . .		all	1
37	273702-3		Panel and Frame Assembly . . . . .		all	1
38	AN5825-5		Indicator - Rate of climb (Kollsman 716K011) . . . . .		all	1
39	AN5760-1A		Altimeter - Pressure (Kollsman) . . . . .		all	1
40	AN5771-5		Gauge - Differential pressure suction (Type F4) . . . . .		all	1
41	AN5795-6		Indicator - Dual air thermometer, inlet duct temperature . . . . .		all	1
42	AN5790-6		Indicator - Single thermometer, cabin air temperature . . . . .		all	1
43	270901		Nameplate - Heater duct thermometer . . . . .		all	1
44	279466		Nameplate - Cabin altitude . . . . .		all	1
45	279467		Nameplate - Rate of climb . . . . .		all	1
46	100PD4		Mount (Monel) (Lord) . . . . .		all	4
47	257326-140		Tube Assembly - Selector valve . . . . .		all	1
48	318-4-14½		Hose Assembly - Suction gauge (Aeroquip) . . . . .		all	1
49	291289		Installation - Station 260 instrument panel electrical equipment . . . . . (See figure 196 for detailed illustration)		all	Ref

Reissued July, 1947

GROUP . . . Instruments

Detail Unit . . . Pitot System

# Constellation

INSTRUMENTS

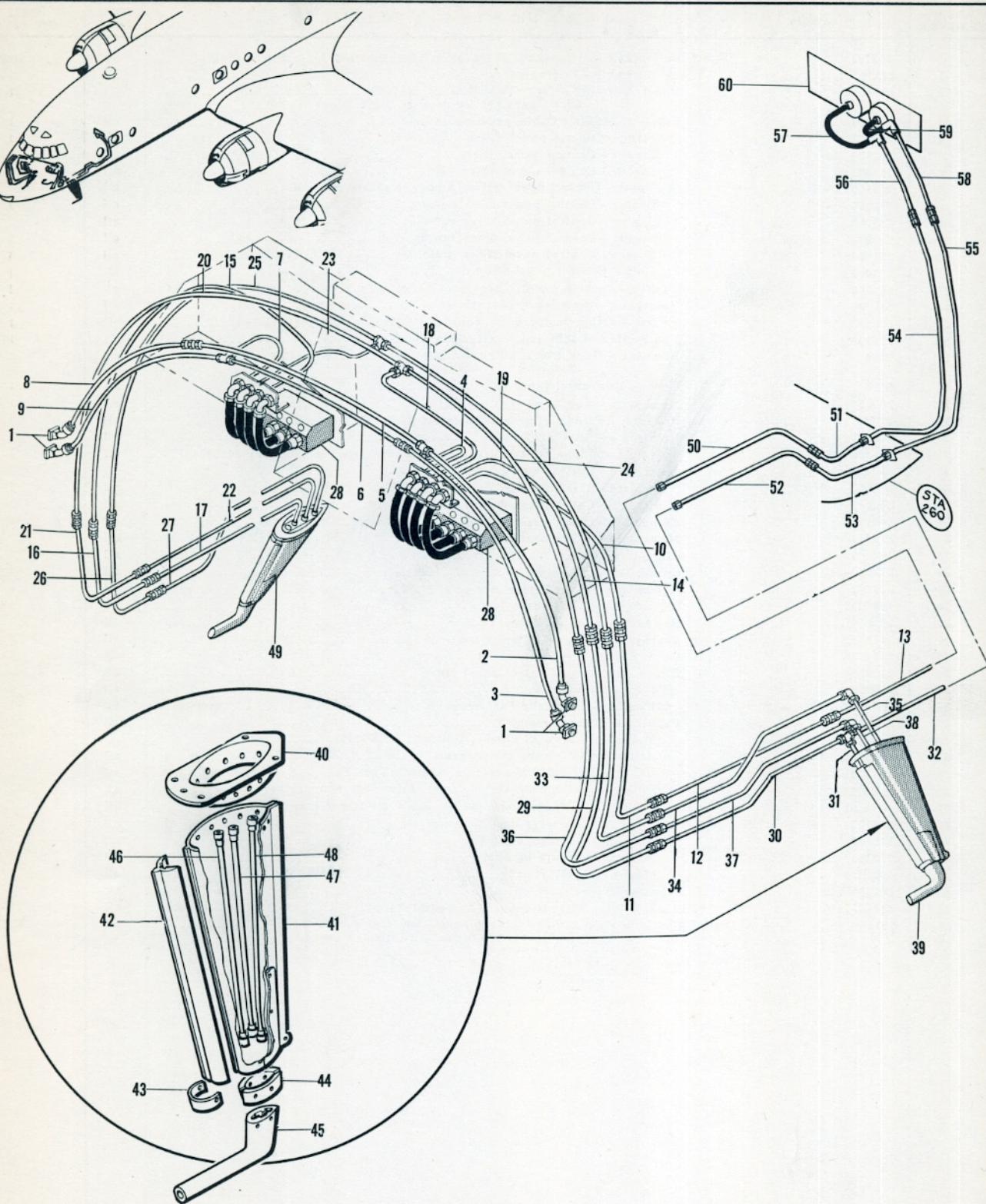


Figure 195 — Pitot System

Reissued July 1947

LOCKHEED AIRCRAFT CORPORATION

**GROUP . . . Instruments**

**Detail Unit . . . Pitot System**

**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		
195 - 1	*294787	Installation	+	Pitot system (See figure 1 for using assembly)				dy	Ref
	294822	Fitting	-	Pitot flush static				dy	4
2	294788-22	Tube Assembly	+	Flush static				dy	
3	294788-23	Tube Assembly	+	Flush static				dy	1
4	294788-24	Tube Assembly	+	Flush static				dy	1
5	294788-20	Tube Assembly	+	Flush static				dy	1
6	294788-21	Tube Assembly	+	Flush static				dy	1
7	294788-26	Tube Assembly	+	Flush static				dy	1
8	294788-19	Tube Assembly	+	Flush static				dy	1
9	294788-18	Tube Assembly	+	Flush static				dy	1
10	294788-12	Tube Assembly	+	Airspeed static				dy	1
11	294788-11	Tube Assembly	+	Airspeed static				dy	1
12	294788-10	Tube Assembly	+	Airspeed static				dy	1
13	294788-9	Tube Assembly	+	Airspeed static				dy	1
14	294788-37	Tube Assembly	+	Pitot pressure LH				dy	1
15	294788-13	Tube Assembly	+	Pitot pressure RH				dy	1
16	294788-29	Tube Assembly	+	Pitot pressure RH				dy	1
17	294788-34	Tube Assembly	+	Pitot pressure RH				dy	1
18	294788-25	Tube Assembly	+	Pitot static				dy	1
19	294788-15	Tube Assembly	+	Pitot static				dy	1
20	294788-17	Tube Assembly	+	Pitot static				dy	1
21	294788-28	Tube Assembly	+	Pitot static				dy	1
22	294788-33	Tube Assembly	+	Pitot static				dy	1
23	294788-31	Tube Assembly	+	Pitot static				dy	1
24	294788-14	Tube Assembly	+	Pitot static				dy	1
25	294788-16	Tube Assembly	+	Pitot static				dy	1
26	294788-30	Tube Assembly	+	Pitot static				dy	1
27	294788-32	Tube Assembly	+	Pitot static				dy	1
	294789-2	Panel Assembly	-	Pilot's flight instrument (See figure 191 for detailed illustration)				sss	1
	294789-3	Panel Assembly	-	Pilot's flight instrument (See figure 191 for detailed illustration)				sss	1
28	256201	Manifold	-	Air instrument (See figure 191 for using assembly)				dy	Ref
	281593	Installation	+	LH Fuselage piping, stations 150-212 (See figure 1 for using assembly)				ddd-du	Ref
	288285	Installation	+	LH Fuselage piping, stations 150-212 (See figure 1 for using assembly)				ccc	Ref
29	258861-162	Tube Assembly	+	Pitot pressure				dy	1
30	258861-453	Tube Assembly	+	Pitot pressure				dy	1
31	258861-292	Tube Assembly	+	Pitot pressure				dy	1
32	258861-295	Tube Assembly	+	Pitot pressure				dy	1
33	258861-161	Tube Assembly	+	Pitot static				dy	1
34	258861-155	Tube Assembly	+	Pitot static				dy	1
35	258861-35	Tube Assembly	+	Pitot static				dy	1
36	258861-463	Tube Assembly	+	Pitot static				dy	1
37	258861-454	Tube Assembly	+	Pitot static				dy	1
38	258861-291	Tube Assembly	+	Pitot static				dy	1
39	256162	Mast Assembly	+	Pitot				rrr	1
	291231	Mast Assembly	+	Pitot				sss	1
40	258806	Bracket	-	Pitot mast supporting				sss	1
41	266177	Mast	-	Pitot supporting				dy	1
42	256162-2	Duct	-	Anti-icer				dy	1
43	271861	Retainer	-	Anti-icer duct				dy	1
44	266398	Spacer	-	Pitot head attaching				dy	1
45	372E012	Tube	-	Pitot static (Kollsman) (620140)				dy	1
46	258861-4	Tube Assembly	+	Pitot pressure				rrr	1
	279303-93	Tube Assembly	+	Pitot pressure				sss	1
47	258861-3	Tube Assembly	+	Pitot static				rrr	1
	279308-92	Tube Assembly	+	Pitot static				sss	1
48	258861-2	Tube Assembly	+	Pitot static				rrr	1
	279308-91	Tube Assembly	+	Pitot static				sss	1
	283186	Installation	-	RH Fuselage piping stations 150-212 (See figure 1 for using assembly)				all	Ref
49	256162	Mast Assembly	+	Pitot				rrr	1
	291231	Mast Assembly	+	Pitot				sss	1
	283676	Installation	+	LH Fuselage piping stations 212-260 (See figure 1 for using assembly)				dy	Ref
50	258861-446	Tube Assembly	+	Airspeed static				fv	1
51	258861-442	Tube Assembly	+	Airspeed static				fv	1
52	258861-445	Tube Assembly	+	Pitot pressure				fv	1
53	258861-441	Tube Assembly	+	Pitot pressure				fv	1
	272198	Installation	+	Stations 278.4-260 fuselage piping (See figure 1 for using assembly)				dy	Ref
54	279308-33	Tube Assembly	+	Airspeed static				fv	1
55	279308-32	Tube Assembly	+	Pitot pressure				fv	1
	291287	Installation	-	Navigator's pitot lines (See figure 1 for using assembly)				fv	Ref
56	289702-54	Tube Assembly	+	Airspeed static				fv	1
57	43D2474-4-146	Hose Assembly	+	Airspeed static				fv	1
58	289702-50	Tube Assembly	+	Pitot pressure				fv	1
59	43D2474-4-124	Hose Assembly	+	Pitot pressure				fv	1
60	285420-18	Panel	-	Navigator's instrument (See figure 204 for using assembly)				fw-fx	Ref
	292552-5	Panel	-	Navigator's instrument (See figure 204 for using assembly)				bx	Ref

\* Replaces standard installation per Service Bulletin 49/SB-47

*Notes*

*Constellation*

GROUP . . . Electrical System

Detail Unit . . . Electrical System Complete

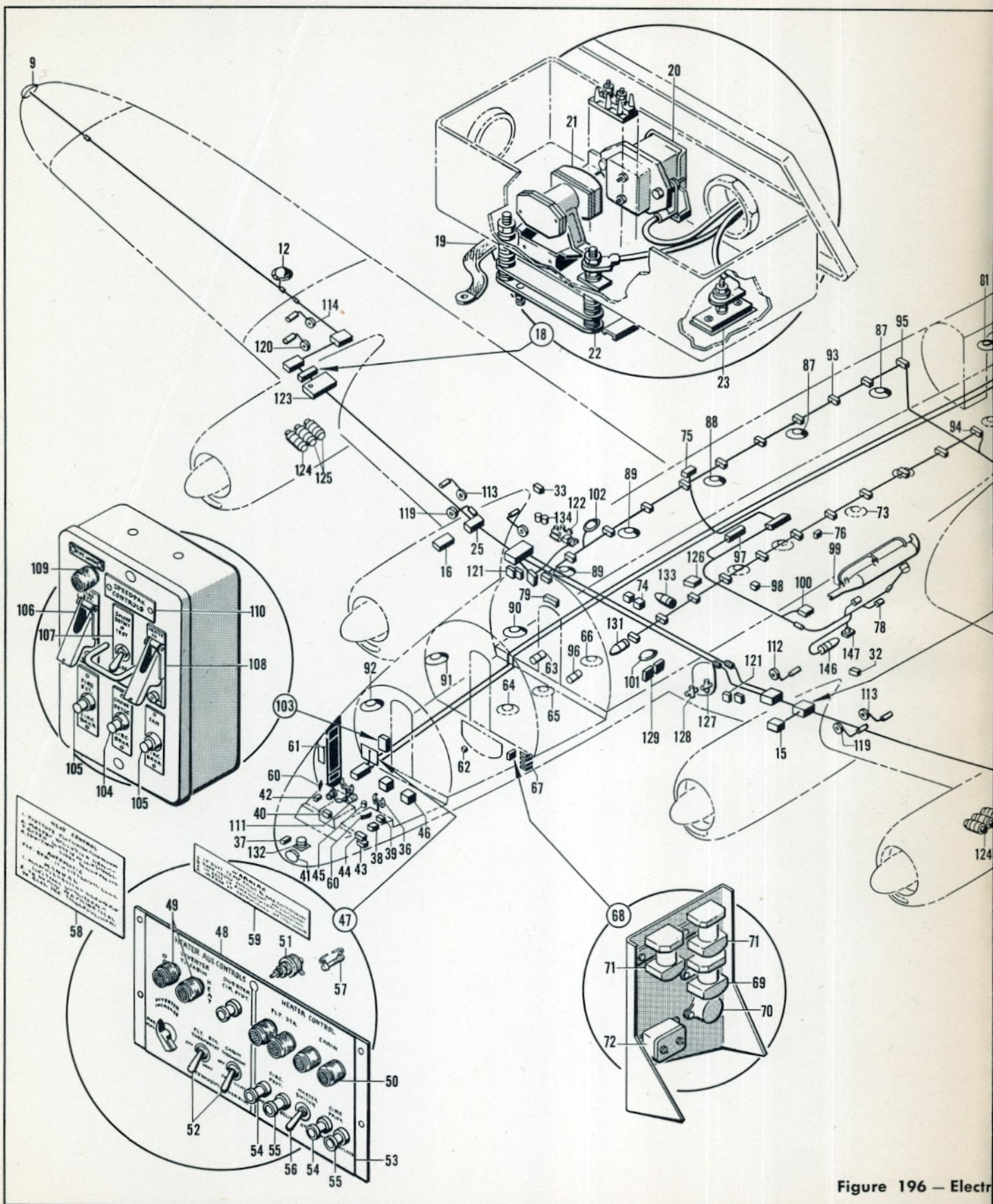
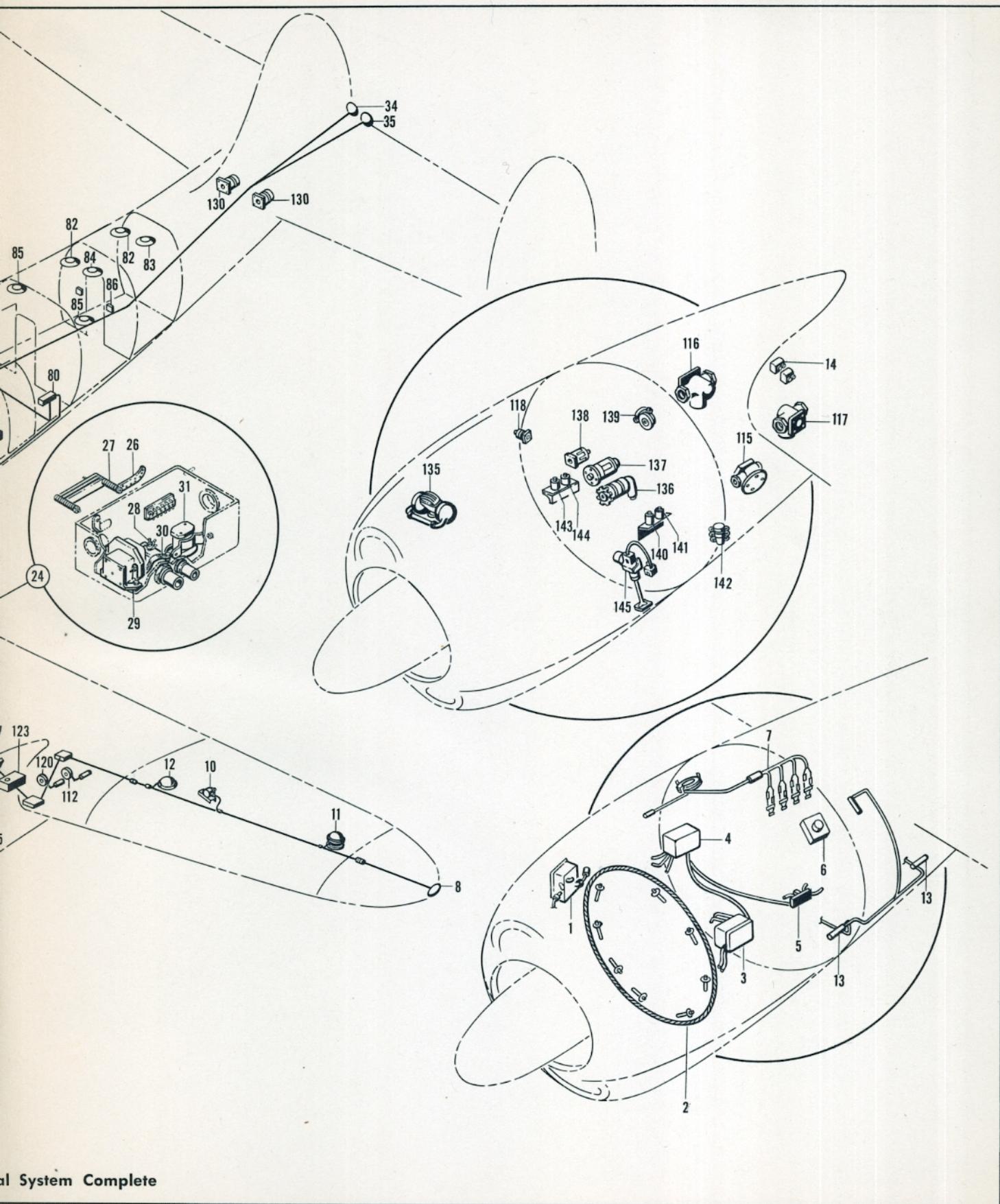


Figure 196 — Electr.

# Constellation



al System Complete

**GROUP . . .** Electrical System

**Detail Unit . . .** Electrical System Complete

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6	NOMENCLATURE			SERIAL CODE	UNITS PER ASSY.
			1	2	3		
196 - 1	281300-2 283872 1150-6CN-112 10-15010 266667-13 *283405-601 283406 283405-3 263897-35 190452-48 279807 WC2-1 190452-90 285272-16 235762-14 283233-3		Installation - Engine electrical equipment (N.P.) (See figure 67 for using assembly) Equipment Assembly - Magneto ground connection Conduit Assembly - Type II (Searle Aero) Box + Junction (Scintilla) (Furnished with engine) Conduit Assembly Electrical Equipment Assembly - Forward engine junction box Box Assembly - Forward engine junction Wire Assembly Conduit Assembly Conduit Assembly - To propeller control Wire Assembly - Propeller control disconnection Tee (Kollsman) Conduit Assembly Conduit Assembly Conduit Assembly Installation - Power plant fire detectors (N.P.) Thermoswitch - Inverse type, 350° F setting (Fenwall) (650144-2) Clamp - Nozzle support Unit - Fire detector, installed in No. 5 cylinder intake duct (Fenwall) (650112-2)			all	Ref
2	*17343-3-450 271892 S2402 AN5525-1 277508-7 281312 281312-500 281312-19 281312-21 267017 267019-115 281312-7 77187-76 281312-6 234958-56 281312-5 234958-72 281312-4 77187-122 281312-2 281312-22 234958-102 1150-6AB-120 281312-3 234958-95		Bulb - Carburetor temperature resistance Bracket Assembly - Engine electrical section Electrical Equipment Assembly - Engine junction boxes and conduit Electrical Equipment Assembly - Engine junction boxes and conduit Electrical Equipment Assembly - Lower engine junction box Electrical Equipment Assembly - Lower engine junction box Box Assembly - Lower engine junction Conduit Assembly - To upper right engine junction box Wire Assembly - To oil out temperature bulb Conduit Assembly Wire Assembly - To tachometer generator plug Conduit Assembly Wire Assembly - To lower flap drive Conduit Assembly Wire Assembly - To oil in temperature bulb Conduit Assembly Wire Assembly - To oil temperature control Wire Assembly - To oil temperature control Conduit Assembly Conduit Assembly (Searle Aero) Wire Assembly - To oil flap drive Conduit Assembly			all	3
3	281312-21 267017 267019-115 281312-7 77187-76 281312-6 234958-56 281312-5 234958-72 281312-4 77187-122 281312-2 281312-22 234958-102 1150-6AB-120 281312-3 234958-95					all	1
4	281312-17 276809-6 1150-3AB-64 281312-20 1150-3AA30 281312-15 1150-6AA62 281312-8 263897-58 281312-13 1150-6AA62 281312-11 77187-42 281312-12 77187-30 281312-18 281314-2 1150-10AA224 281312-9 1150-6AA37 281312-14 1150-6AA41 281312-16 1150-6AA41 281312-10 234958-74 1150-4BN51 1150-3AB36					ddd	1
5						ccc	1
6	284214 286842-2					ccc	1
7	AN5540-1 286841-2 286842-3 286841-3 284532 284532-2 284576 270840-500L 270840-500R					ddd	1
8	270881 AN3033-3 AN3033-4 291413L 291413R 287846					ccc	1
9						ccc	1
10	287928-2 287928-3 285049 287225 AN5754-2 PC24431-1-110					ccc	1
						aa	8
						aa	1
						aa	1

(Continued on next page)

## GROUP . . . Electrical System

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

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER	1	2	3	4	5	6	NOMENCLATURE	SERIAL CODE	UNITS PER ASSY.
196 - 11	AN5751-1 259343L 259343R 262827 259338 259337							Transmitter - Flux gate compass . . . Installation - Landing light (N.P.) . . . Installation - Landing light . . . Doubler - Landing light . . . Collar - Landing light . . . Clamp - Landing light . . .	dy	1
12	AN3095-3 B2689 A1470 A1560 B2685 AN3130-4560 A2854 A1724 B2490A A1579 A1728 A1726 A1727 A2713 G2905-24 G2905-1 A2691 A2487 G2905-2 D2895-1 D2895-2 D2895-3 D2895-4 287818-2 287818-3 287828 287829 290816-2 290816-3 290816-4 290816-5							Light Assembly - Sealed beam, landing (Grimes-G3001) (618019-6) Outer Canopy & Drive Housing Assembly . . . Gear & Pinion Assembly . . . Rubber Bumper . . . Light Unit Assembly . . . Lamp - Sealed beam (600W-24V) Retainer Ring Assembly . . . Trunnion Pin . . . Sliding Contact & Cover Assembly . . . Contact Assembly - Extend circuit . . . Nut + Contact assembly mounting . . . Contact Assembly - Retract, stationary . . . Contact Assembly - Retract, movable . . . Sliding Contact Assembly - Movable . . . Power Unit Assembly . . . Motor Assembly . . . Field & Block Assembly . . . Armature Assembly . . . Reduction Assembly . . . Gear Assembly - First reduction . . . Gear Assembly - Second reduction . . . Gear Assembly - Third reduction . . . Gear Assembly . . .	dy	1
								Installation - Inner wing electrical equipment LH (N.P.) . . . Installation - Inner wing electrical equipment RH (N.P.) . . . Installation - LH Inner wing forward electrical equipment (N.P.) . . . Installation - RH Inner wing forward electrical equipment (N.P.) . . . Installation - LH Outboard nacelle fire detectors (N.P.) . . . Installation - LH Inboard nacelle fire detectors (N.P.) . . . Installation - RH Inboard nacelle fire detectors (N.P.) . . . Installation - RH Outboard nacelle fire detectors (N.P.) . . . Detectors - Fire (Fenwall) (650144-2) . . .	dy	1
13	*17343-3-450 *292626 *292745 *296300 *293552 280409 280408 9-10831							Detectors - Fire (Fenwall) (650144-2) . . . Installation - Propeller feather motor conduit (N.P.) . . . Junction Box - Propeller feather motor . . . Insulator . . . Conduit Assembly - Fireproof . . .	dy	25
								Installation - LH Inboard nacelle fuel shut-off switch (N.P.) . . . Installation - RH Inboard nacelle fuel shut-off switch (N.P.) . . . Actuator (Micro) (619048) . . . Switch - Fuel shut-off . . .	sss	2
14	AN3210-1 VJR24C6 *296932							Vibrator - Induction (American Bosch) . . .	dy	1
15	287831							Cover Assembly - Fire detector in firewall (5 Required each nacelle) . . .	dy	10
16	287833							Equipment Assembly - LH inboard magneto junction box . . .	dy	1
	*1150-6AA128 *1150-20BB160 *1150-12AA168							Equipment Assembly - RH Inboard magneto junction box . . .	dy	1
								Conduit - Magneto line; aft of fireseal No. 2 nacelle (Searle - Type I) . . .	dy	1
	*1150-6AA160 *1150-20BB196 *1150-12AA160							Conduit - Generator line; aft of fireseal No. 2 nacelle (Searle - Type I) . . .	dy	1
17	287836-2							Conduit - Propeller feathering line; aft of fireseal No. 2 nacelle (Searle - Type I) . . .	dy	1
18	287836-3							Conduit - Magneto line; aft of fireseal No. 3 nacelle (Searle - Type I) . . .	dy	1
19	276128-12							Conduit - Generator line; aft of fireseal No. 3 nacelle (Searle - Type I) . . .	dy	1
20	B8A							Conduit - Propeller feathering line; aft of fireseal No. 3 nacelle (Searle - Type I) . . .	dy	1
21	60464-1							Equipment Assembly - Outboard nacelle junction box LH . . .	dy	1
22	505							Equipment Assembly - Outboard nacelle junction box RH . . .	dy	1
23	287936							Link Assembly - Connecting . . .	dy	1
24	287840							Relay (Leach Relay Co.) (612518) . . .	dy	1
25	287841							Relay - Propeller feathering (Hamilton Standard) . . .	dy	1
26	276128-20							Resistor Unit - Generator equalizing (Norris) (619075) . . .	dy	1
27	505							Generator Terminal Assembly . . .	dy	1
28	287936							Equipment Assembly - LH Inboard nacelle junction box . . .	dy	1
29	B8A							Equipment Assembly - RH Inboard nacelle junction box . . .	dy	1
30	276128-14							Link Assembly - Connecting . . .	dy	1
31	60464-1							Relay - Propeller feathering (Hamilton Standard) . . .	dy	1
	288306							Installation - LH Inboard nacelle aft electrical equipment (N.P.) . . .	dy	1
	286996							Installation - LH Inboard nacelle aft electrical equipment (N.P.) . . .	c-du	1
							(Modified by 293874 - Serial AB, components are not changed)	d	1	
	288307							Installation - RH Inboard nacelle electrical equipment (N.P.) . . .	c-du	1
	286997							Installation - RH Inboard nacelle electrical equipment (N.P.) . . .	d	1
	LNN-11							Housing - Micro switch (Micro) (619051-4) . . .	c-du	1
	AN3216-1							Switch - Down lock, S.P.S.T. . . .	d	1
	259405-3							Screw - Adjusting, down lock switch . . .	c-du	1
32	286998-2							Electrical Equipment Assembly - Down lock switch LH . . .	c-du	1
33	286998-3							Electrical Equipment Assembly - Down lock switch RH . . .	d	1
	LNN-11							Housing - Micro switch (Micro) (619051-4) . . .	d	1
	AN3216-1							Switch - Micro . . .	d	1
	259405-3							Screw - Adjusting, micro switch . . .	d	1
	283809-2							Electrical Equipment Assembly - Main landing gear up lock switch LH . . .	dy	1
	283809-3							Electrical Equipment Assembly - Main landing gear up lock switch RH . . .	dy	1
	RNN11							Housing - Micro switch (Micro) (619051-9) . . .	dy	1
	AN3210-1							Switch - Micro . . .	dy	1
	259405-3							Screw - Adjusting . . .	dy	1
	6621-1A							Transmitter - Wheel position (Pioneer) (628034) . . .	c-du	1
	287929							Installation - Tail section wiring (N.P.) . . .	dy	1
	*279924							Terminal Assembly - Pressure bulkhead . . .	dy	2
	*279924-2							Insulator . . .	dy	1
	282301-501							Installation - Tail cone wiring (N.P.) . . .	dy	1
	290465-2							Wire Assembly - Tail light . . .	dy	1
	A1943-3							Light Assembly (Grimes) (618005-6) . . .	dy	1
	309							Lamp - Mazda . . .	dy	1
										1

(Continued on next page)











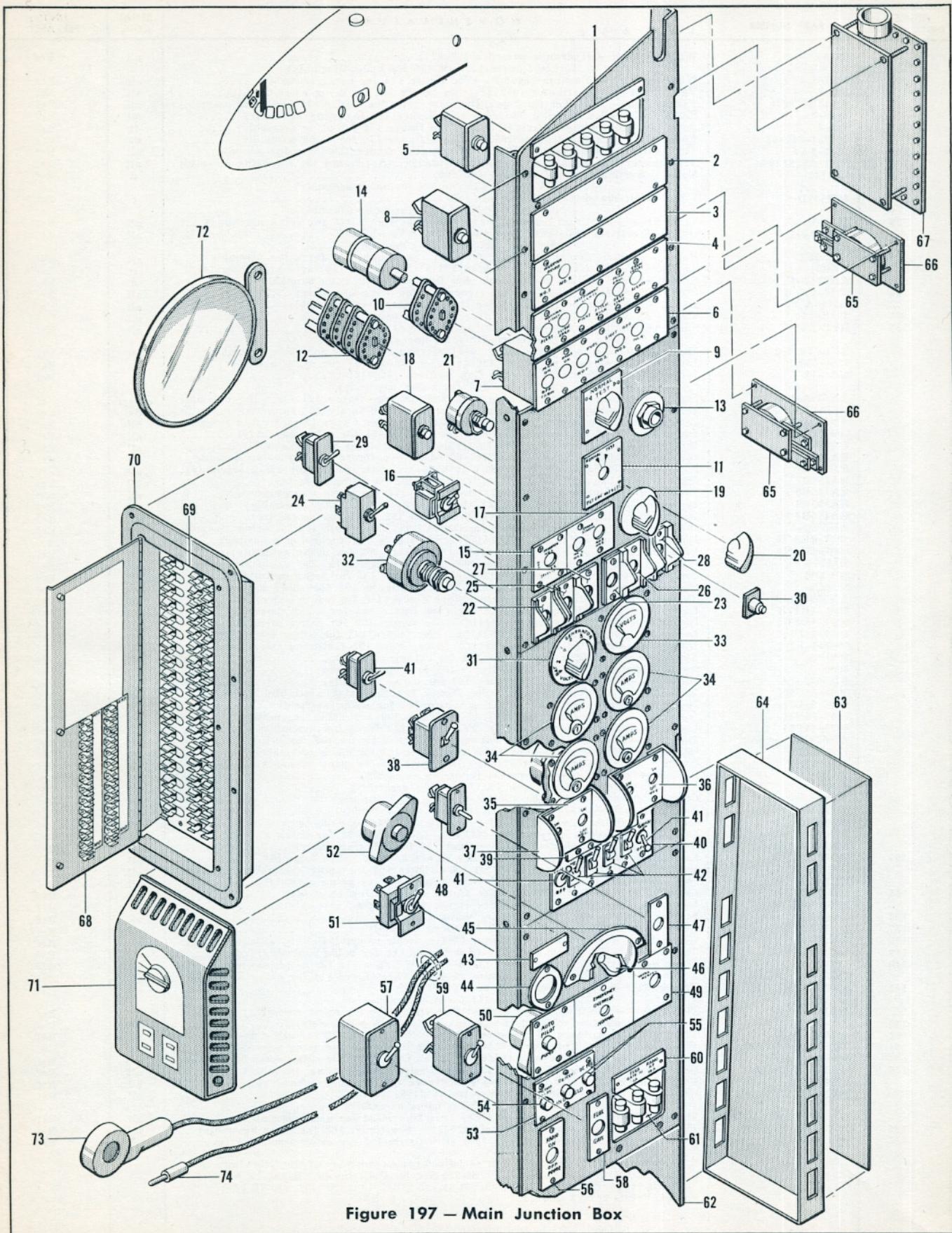


Figure 197 — Main Junction Box

## GROUP . . . Electrical System

## Detail Unit . . . Main Junction Box

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6	NOMENCLATURE						SERIAL CODE	UNITS PER ASSY.				
197 - 1	287958 287891 287847-6 F1564 2 287677-4 3 287677-3 4 287677-2 5 AN3161-5 6 287677-12 7 AN3160-5 8 AN3161-10 287892 9 287847-13 10 4BHGX7809 11 287847-12 12 7BHGX7808 13 288514 14 SA26/U 15 287677-7 16 8742K5 17 287677-6 18 AN3161-20 19 287847-7 20 AN3220-1 21 0149H352 22 284041 23 284042 24 8834K1 25 283828 26 283827 27 284040 28 284039 29 AN3022-7 30 49-1384 287893 31 287847-18 32 AN3211-1 33 606-138P1 34 606-168P 35 287677-9 36 287677-10 37 284761 38 AN3023-2 39 *295623 40 295624 *295625 41 AN3022-2 42 *C6363-1-10 287894 287894-500 43 287847-8 44 7526 45 168716 46 304 DCF-D-0 47 287847-10 48 AN3022-2 49 287847-14 287847-16 50 PLM70 51 8884 52 PLM50 53 287847-17 AN3161-P5 AN3161-P50 56 287847-2 57 9300-100B 58 287847-8 59 AN3161P5 60 287847-15 61 287861 165 E392 62 274149 63 288215 64 274151 37A5222-11 65 5053-3 66 266009 67 1029-187 259142-500 292425 68 266477 292424 69 266410-500 70 266411 280462 71 280642-2 72 LA1001-555 T17 74 CD307 248224 292943 292983 Type 265													
			Installation - Main junction box (N.P.) (See figure 196 for using assembly)	Panel Assembly - Main junction box No. 1 switch	Nameplate - Autosyn fuses	Holder - Spare fuses (Kirkhill Rubber Co.)	Nameplate - Upper main junction box breakers	Nameplate - Upper main junction box breakers	Circuit Breaker - Push button non-trip free	Nameplate - Upper main junction box breakers	Circuit Breakers - Switch type non-trip free, dome light	Circuit Breaker - Push button non-trip free, fuel shut-off	dy	Ref
			Panel Assembly - Main junction box No. 2 switch	Nameplate - Warning light test	Switch - Non-shorting selector (Centralab) (612461)	Nameplate - Warning light test	Switch - Non-shorting selector (Centralab) (612462)	Nameplate - Call switch	Switch - Call	Nameplate - Inverter selector	Switch - 3 P. D. T. Inverter selector (Cutler-Hammer) (612283-3)	ce-du	1	
			Panel Assembly - Main junction box No. 3 switch	Nameplate - Voltage selector	Switch - Voltage selector	Voltmeter (Weston) (627022)	Ammeter (Weston) (627005)	Nameplate - Generator switch	Nameplate - Generator switch	Guard - Generator switch	Switch - D.P.S.T. Generator	Guard Assembly - Generator field switch	dy	1
			Panel Assembly - Main junction box No. 4 switch	Nameplate - Signal lamp	Receptacle - Wall mounting, flush type (Harvey Hubbell)	Hood - Auxiliary control light	Lamp - Type G-6 (General Electric) (618071-2)	Socket - Lamp (Cannon Electric) (610025-2)	Nameplate - Light switch	Switch - S.P.S.T. toggle	Switch - S.P.S.T. toggle, battery & battery cart	Circuit Breaker - Generator field (Spencer Thermostat) (612457-6)	dy	1
			Panel Assembly - Main junction box No. 4 switch	Nameplate - Auto pilot pump	Nameplate - Auto pilot pump	Nameplate - Windshield control	Circuit Breaker - Thermo relay	Circuit Breaker - De-icer & De-fog	Nameplate - Radio power	Circuit Breaker (Square "D" Co.) (612539-4)	Circuit Breaker - Non-trip free, push button	Circuit Breaker - S.P.S.T. Push button (Spencer Thermostat) (612357-7)	dy	1
			Panel Assembly - Lower fuse	Bell - Audible fire warning (Edwards Co.)	Bushing - Bell (Edwards Co.)	Panel Assembly - Warning light dimming resistors	Panel Assembly - Main junction box resistor panel	Cover Assembly - Resistor panel	Resistor	Door Assembly - No. 2 Fuse panel	Door Assembly - No. 2 Fuse panel	Door Assembly - No. 2 Fuse panel	dy	2
			Relay - Landing light, S.P.D.T. (Leach Relay) (612190)	Plate - Landing light relay backing	Relay - 4 P.D.T. (Leach) (612456)	Panel Assembly - Main junction box station 205 fuse	Panel Assembly - Main junction box station 205 fuse	Panel Assembly - Main junction box station 205 fuse	Door Assembly - No. 2 Fuse panel	Door Assembly - No. 2 Fuse panel	Door Assembly - No. 2 Fuse panel	dy	31	
			Installation - Heated flying suit rheostat	Rheostat - Type QIB reworked	Mirror - Rear view (Acme Specialty Mfg. Co.) (640098)	Microphone	Cord - Interphone	Cord Assembly	Installation - Radio equipment (N.P.) (See figure 1 for using assembly)	Installation - Tach shafts & flux gate wiring (N.P.)	Serials authorized per Service Bulletins 49/SB-22 and 49/SB-116.	sss-du	Ref	
												bx	1	
												bx	1	
												bx	1	

Reissued July, 1947

GROUP . . . Electrical System

Detail Unit . . . Flight Engineer's Station Electrical

*Constellation*

ELECTRICAL

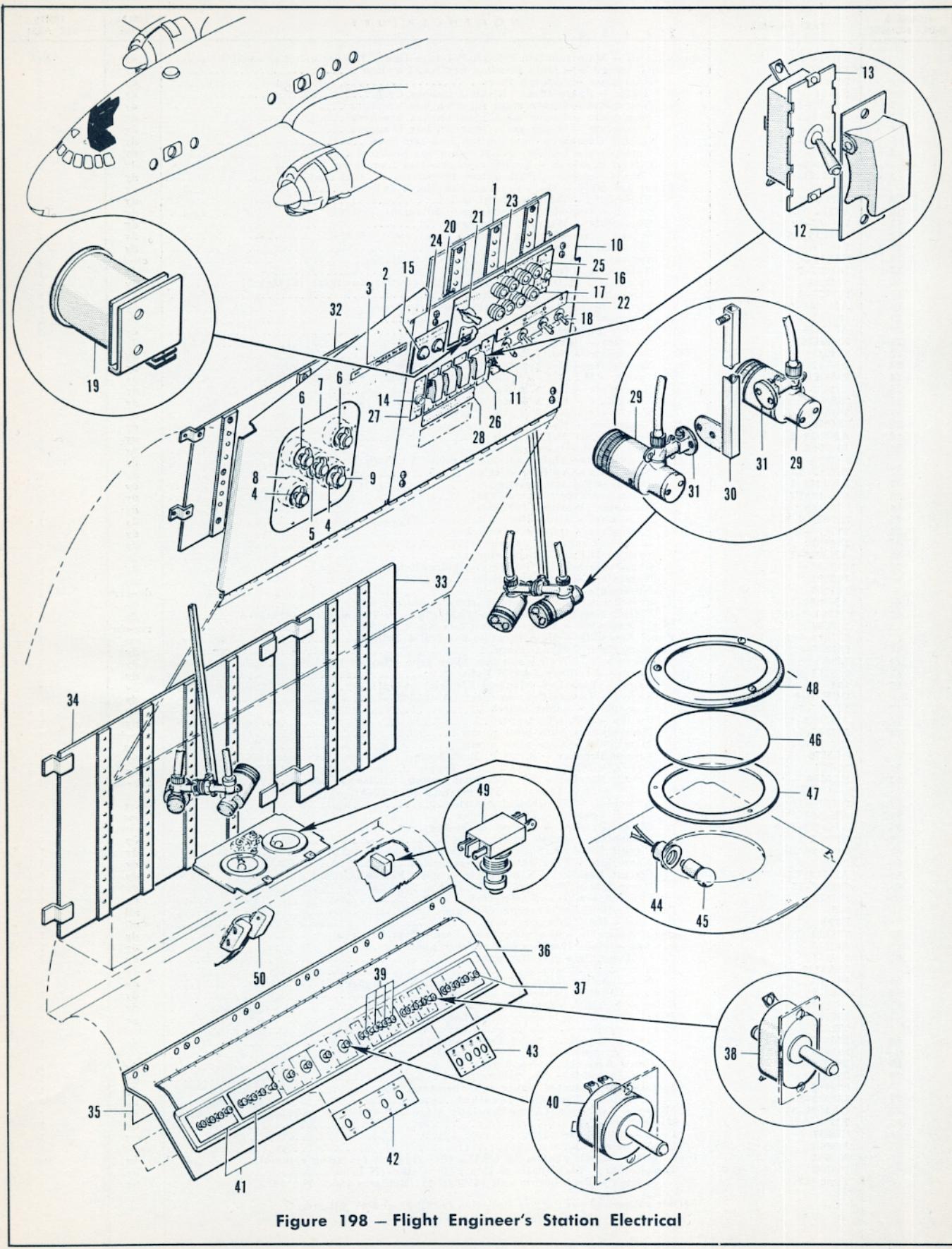


Figure 198 – Flight Engineer's Station Electrical

Reissued July 1947

LOCKHEED AIRCRAFT CORPORATION

## GROUP . . . Electrical System

## Detail Unit . . . Flight Engineer's Station Electrical

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		
198 - 1	287931 233088 273283	Installation - Flight engineer's station wiring (NP) (See fig. 1 for using assembly) Panel Assembly - Flight engineer's	dy dy dy	Ref 1 1
2	272820-7	Installation - Engineer's upper LH panel. Panel Assembly - Engineer's LH upper.	dy dy	1 1
3	280712 *298227-4 *298227-5 *AN3021-7	Nameplate - Master switch control. Nameplate - Baggage compartment fire warning. Nameplate - Baggage compartment fire warning. Switch - Warning light.	dy dy dy dy	1 1 1 2
4	*130R 291502 287957 287951-2	Ligh Assembly - Warning (Korry) (618179-2) Wire Assembly - Flight engineer's upper LH panel. Plate Assembly - Flight engineer's upper LH panel. Nameplate - Lower instrument light.	dy dy dy dy	1 1 1 1
5	257951-3	Nameplate - Panel instrument light.	dy	2
6	257951-4	Nameplate - Center instrument light.	dy	1
7	257957-2	Plate - Flight engineer's upper LH panel.	dy	2
8	10819	Rheostat (Ohmite) (612310) ...	dy	1
9	AN3220-1 291504 291504-2 291504-3	Knob - Pointer Equipment Assembly - Flight engineer's upper RH panel. Equipment Assembly - Flight engineer's upper RH panel.	dy dy dy dy	5 1 1 1
10	PSM-15 281726-50	Equipment Assembly - Flight engineer's upper RH panel. Circuit Protector - Oil dilution (Spencer Thermostat) (612350-5)	c-du d	1 1
11	AN3028-3 AN3022-7	Guard - Switch (On -2 only) Guard - Switch (On -3 only)	c-du d	4 4
12	8210	Switch - Hydraulic suction shutoff (On -2 only)	c-du	4
13	PSM-20 A3151-2 PSM-5	Switch (On -3 only) (Cutler-Hammer) (612016) Circuit Protector - Emergency hydraulic (Spencer Thermostat) (612350-6)	d d	4 4
14	103A AN3121-313 AN3023-8	Ligh Assembly - Cabin heater warning.	dy	1
15	A3325	Circuit Protector - Fire warning (Spencer Thermostat) (612350-3)	dy	1
16	7204	Ligh Assembly - Red, engine fire warning (Korry) (618197-7)	dy	8
17	281199	Lamp - Light assembly	dy	8
18	293588	Switch - Oil dilution	dy	4
19	295594	Relay - Type G (C. P. Clare) (612139)	dy	1
20	237677-13 291732-2 291732-3 291732-4	Switch - Selector, engine test light (Centralab) (612403) Knob	dy dy	1 1
21	AN3220-1 291506-8	Nameplate - Oil dilution switches	dy	1
22	291506-9	Nameplate - Engine fire warning unit detector	dy	1
23	291506-10	Nameplate - Nacelle fire warning lights	dy	1
24	291506-11	Nameplate - Cabin heater fire warning	ssss	1
25	291506-12	Nameplate - Fire warning circuit breaker	dy	1
26	D2332 273562-2	Nameplate - Oil dilution circuit breaker	dy	1
27	273562-4	Nameplate - Emergency hydraulic circuit breaker	dy	1
28	A2886	Nameplate - Hydraulic suction shut-off (On -3 only)	d	1
29	272492-2 272493-7 272493-2 272734	Light Assembly - Fluorescent	dy	1
30	291505 293585 259095	Light Assembly - Fluorescent	dy	1
31	293892	Light Assembly - Fluorescent	dy	1
32	293992	Light Assembly - Fluorescent	dy	1
33	294537	Light Assembly - Fluorescent	dy	1
34	259108	Light Assembly - Fluorescent (Grimes) (Used on -8, -9, -10, -11 & -12)	dy	1
35	AN3022-5 AN3022-8 AN3022-7	Arm Assembly - Fluorescent light Arm - Fluorescent light	dy dy	2 1
36	8905K514 AN3022-1	Base - Light mounting	dy	4
37	259197	Panel Assembly - Flight engineer's middle terminal	dy	1
38	294053 293345-82	Panel Assembly - Flight engineer's lower	dy	1
39	281200	Panel Assembly - Engineer's lower terminal	dy	1
40	293345-70	Chart - Flight engineer's switch and fuse panel	dy	1
41	*293891-5 *293891-6 *293891-7 *293891-8	Panel Assembly - Flight engineer's switch and fuse panel	dy	1
42	275050 275048 273242	Panel Assembly - Flight engineer's switch and fuse	sss q-du es	1 1 1
43	1941 304	Panel Assembly - Flight engineer's switch and fuse	bx	1
44	259375	Panel Assembly - Flight engineer's switch and fuse	sss	1
45	259375-2 259375-3	Panel - Flight engineer's switch and fuse	dy	1
46	259375-4	Switch - S.P.S.T. toggle, aux. fuel pump	dy	4
47	259375-5	Switch - S.P.S.T. toggle, carburetor vapor solenoid	dy	4
48	259375-6	Switch - S.P.S.T. toggle, propeller governor	dy	4
49	259375-7	Switch - S.P.S.T. toggle, oil flap motor (Cutler-Hammer) (612262-2)	dy	4
50	259375-8 273242 YZ-RLL12	Switch - S.P.S.T. toggle, cowl flap fuse Nameplate - Oil cooler switch	dy q-du es-sss bx ce-du bx ce-du ce-du bx bx Harness Assembly - Flight engineer's middle panel	8 1 1 1 1 1 1 1 1 1 1
	281988 3594P 264940 273492	Hinge Assembly - Multiple switch lever - top	dy	1
	281988 3594P 264940 273492	Hinge Assembly - Multiple switch lever - lower	dy	1
	281988 3594P 264940 273492	Hinge Assembly - Multiple switch lever - top	dy	1
	281988 3594P 264940 273492	Hinge Assembly - Multiple switch lever - lower	dy	1
	281988 3594P 264940 273492	Harness Assembly - Flight engineer's desk	dy	1
	281988 3594P 264940 273492	Lamp Assembly - Flight engineer's desk	dy	1
	281988 3594P 264940 273492	Lens	dy	2
	281988 3594P 264940 273492	Gasket	dy	2
	281988 3594P 264940 273492	Cover Assembly - Flight engineer's lamp	dy	1
	281988 3594P 264940 273492	Cover	dy	1
	281988 3594P 264940 273492	Switch Assembly - Crew door	dy	2
	281988 3594P 264940 273492	Switch - Push button (Arrow-Hart & Hegeman) (612125)	dd-du	1
	281988 3594P 264940 273492	Installation - Throttle switches engineer's control stand (NP) (See figure 1 for using assembly)	dd-du	1
	281988 3594P 264940 273492	Equipment Assembly - Engineer's control stand throttle switch	dy	Ref
	281988 3594P 264940 273492	Switch - Micro throttle (612275)	dy	2

\* Serials authorized by Service Bulletins 49/SB-10, 49/SB-14, 49/SB-183B.

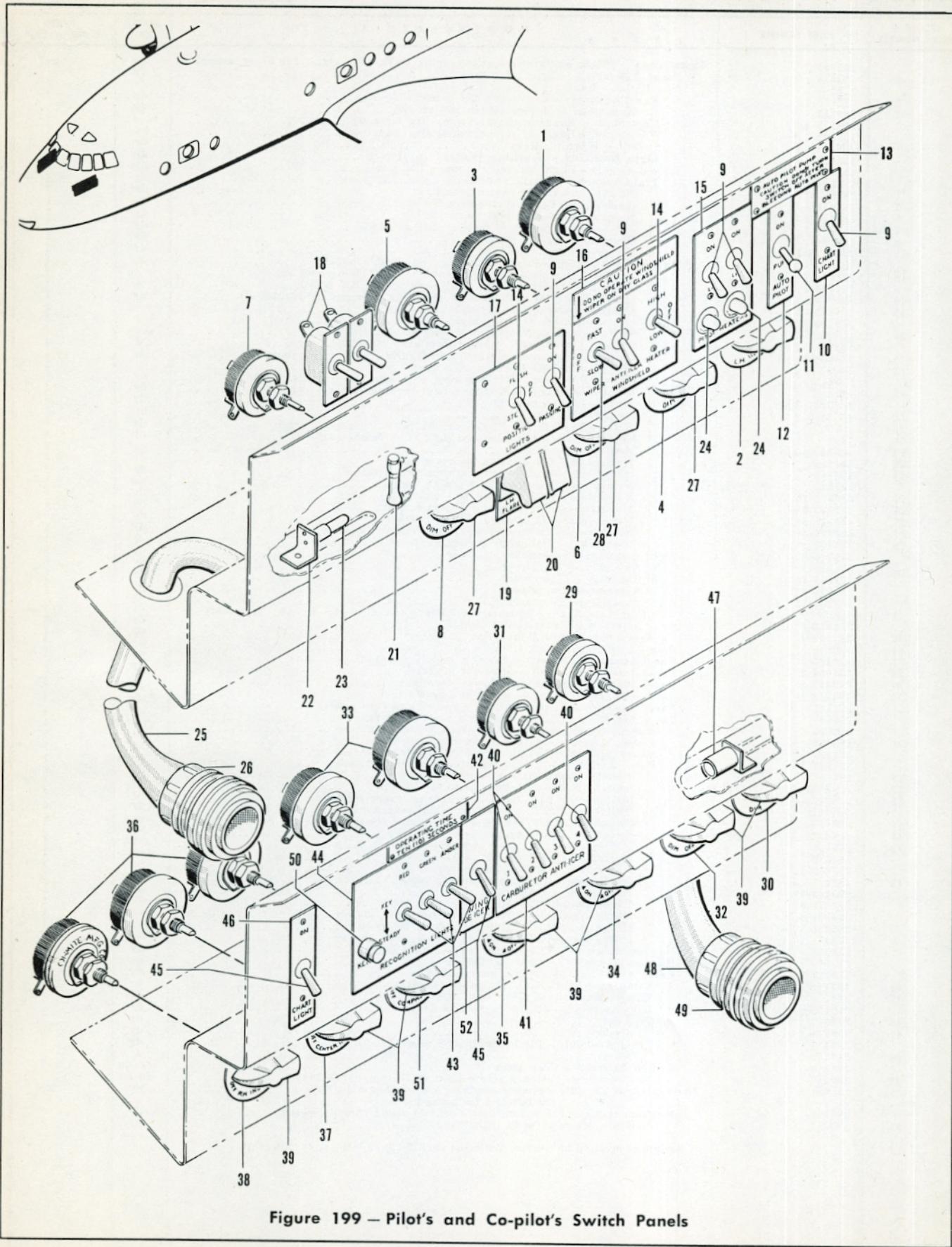


Figure 199 — Pilot's and Co-pilot's Switch Panels

## GROUP . . . Electrical System

## Detail Unit . . . Pilot's and Copilot's Switch Panels

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.
	285739L		Installation - Pilot's switch panel (See figure 196 for using assembly)						dy	Ref
	285739R		Installation - Co-pilot's switch panel (See figure 196 for using assembly)						dy	Ref
	285738-2		Panel Assembly - Pilot's switch (LH Only)						dy	1
199 - 1	10819J		Rheostat - LH instrument light (Ohmite Model J) (612310)						dy	1
2	285743-2		Nameplate - LH Instrument light						dy	1
3	0154H		Rheostat - Chart light (Ohmite Model H) (612152-2)						dy	1
4	285743-3		Nameplate - Chart light						dy	1
5	0317J		Rheostat - Panel lights (Ohmite Model J) (612011)						dy	1
6	285743-17		Nameplate - Panel lights						dy	1
7	0154H		Rheostat - Compass light (Ohmite Model H) (612152-4)						dy	1
8	285743-25		Nameplate - Compass light						dy	1
9	AN3022-2		Switch - S.P.S.T. toggle						dy	5
10	285743-5		Nameplate - Chart light						dy	1
11	AN3160-5		Circuit Breaker - Auto pilot pump, toggle						dy	1
12	285743-6		Nameplate - Automatic pilot pump						dy	1
13	285743-21		Nameplate - Automatic pilot pump caution						dy	1
14	AN3023-1		Switch - D.P.D.T. toggle						dy	2
15	285743-7		Nameplate - Pilot's heaters						dy	1
16	285743-8		Nameplate - Windshield wiper						dy	1
17	285743-24		Nameplate - Position lights						dy	1
18	AN3022-8		Switch - Flare release						dy	2
19	285743-4		Nameplate - Flare release						dy	1
20	AN3028-2		Guard - Toggle switch						dy	2
21	BROLO		Resistor - 125 Ohm 10 watt (Ohmite)						dy	1
22	708		Socket Assembly (Dial Light Co.) (610057)						dy	6
23	AN3121-313		Lamp - Pilot's and copilot's switch panel						dy	6
24	42B3593-1		Lamp Assembly - Pilot's and copilot's switch panel						dy	2
25	285738-10		Wire Assembly - Pilot's and copilot's switch panels						dy	1
26	AN3106-36-7P		Plug - Electrical connector						dy	1
27	AN3220-1		Knob - Pointer (Rheostats)						dy	3
28	AN3022-1		Switch - Wiper fast - slow						dy	1
	PH9		Relay - S.P.D.T. (Leach) (612132)						dy	1
	285738-3		Panel Assembly - Copilot's switch (RH Only)						dy	1
29	0154H		Rheostat - Chart light (Ohmite Model H) (612152-2)						dy	1
30	285743-3		Nameplate - Chart light						dy	1
31	0317J		Rheostat - Panel light (Ohmite Model J) (612011)						dy	1
32	285743-17		Nameplate - Panel lights						dy	1
33	0315J352		Rheostat - Snap off, propeller anti-icer (Ohmite) (612015-4)						dy	2
34	285743-11		Nameplate - RH Propeller anti-icer						dy	1
35	285743-12		Nameplate - LH Propeller anti-icer						dy	1
36	10819J		Rheostat - Instrument light (Ohmite Model J) (612310)						dy	1
37	285743-16		Nameplate - Center instrument light						dy	3
38	285743-14		Nameplate - RH Instrument light						dy	1
39	AN3220-1		Knob - Pointer, rheostats						dy	1
40	AN3022-8		Switch - Carburetor anti-icers						rrr	7
41	285743-15		Nameplate - Carburetor anti-icer						rrr	4
42	285743-22		Nameplate - Operating time 10 seconds						rrr	1
43	AN3022-1		Switch - Recognition lights						rrr	3
44	285743-10		Nameplate - Recognition lights						rrr	1
	285738-14		Nameplate - Recognition lights						sss-du	1
45	AN3022-2		Switch - S.P.S.T. toggle						dy	2
46	285743-5		Nameplate - Chart light						dy	1
47	708		Socket Assembly (Dial Light Co.) (610057)						dy	6
48	285738-11		Wire Assembly - Pilot's and copilot's switch panel						dy	1
49	AN3106-36-7P		Plug - Electrical connector						dy	1
50	8586		Switch - Keying (Micro) (612512)						rrr	1
51	245743-13		Nameplate - Compass light						dy	1
52	285743-20		Nameplate - Wing de-icer						dy	1

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GROUP . . . Electrical System

Detail Unit . . . Pilot's Radio and Electrical Equipment

# Constellation

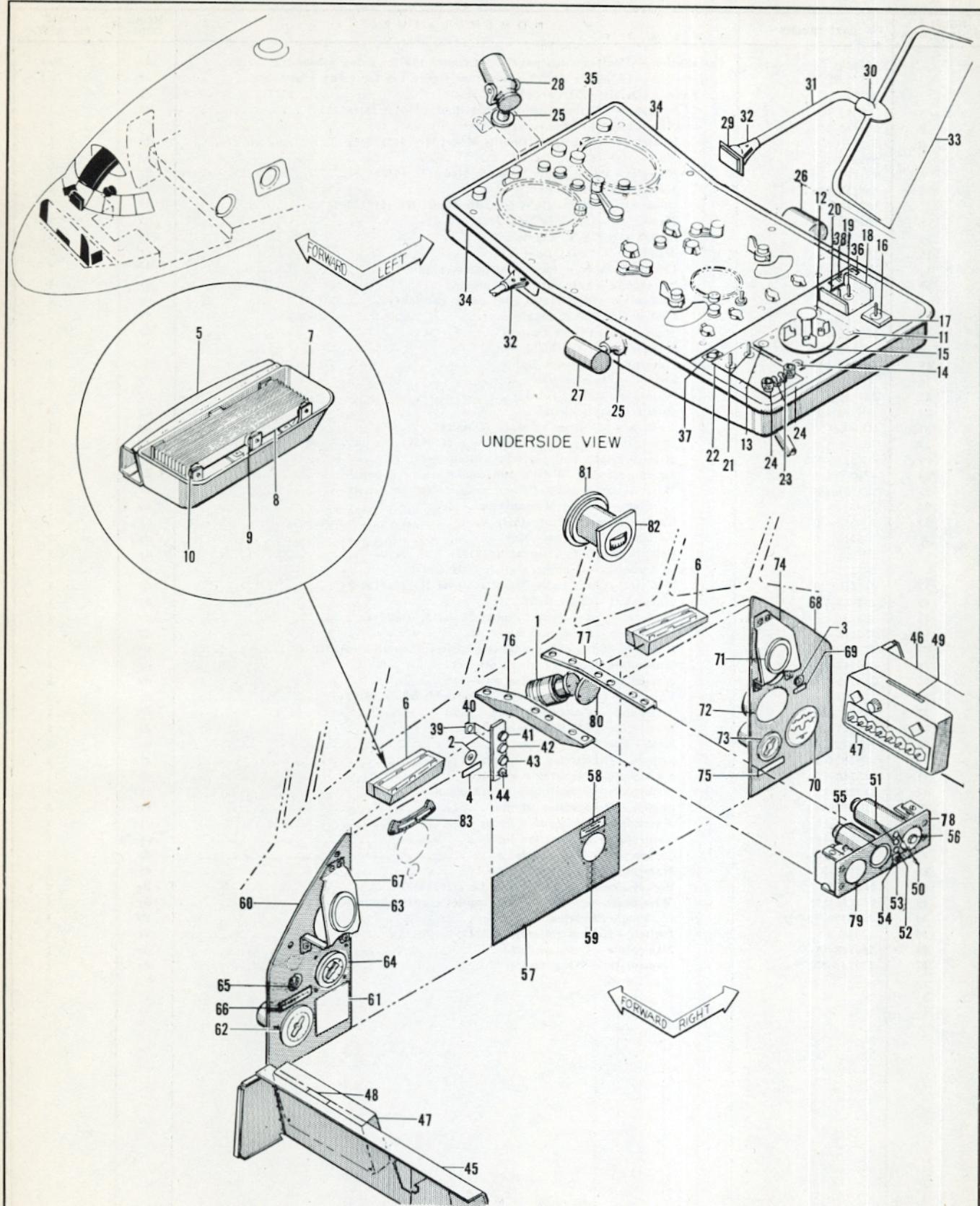


Figure 200 — Pilot's Radio and Electrical Equipment

## GROUP . . . Electrical System

## Detail Unit . . . Pilot's Radio and Electrical Equipment

*Constellation*

ELECTRICAL

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		
	288935	Wire Assembly - Pilot's & co-pilot's instrument panel . . . . . (See figure 196 for using assembly)							dy	Ref
	288935-2	Wire Assembly - Pilot's & co-pilot's instrument panel . . . . .							c	1
	288935-3	Wire Assembly - Pilot's & co-pilot's instrument panel . . . . .							d	1
200 - 1	291506-2	Light Assembly - Center instrument panel fluorescent . . . . .							dy	1
	D2332	Light Assembly (Grimes) (618117-3) . . . . .							dy	1
	42B3593-1	Light Assembly - Parking brake warning (618122-1) . . . . .							sss	1
2	103A	Light Assembly - Master fire warning (Korry) (618197-7) . . . . .							ds-du	1
3	42B3593-2	Light Assembly - Master door warning (618122-2) . . . . .							dy	1
4	288370	Nameplate - Master fire warning light (See figure 1 for using assembly) . . . . .							dy	Ref
5	284570L	Bracket Assembly - Windshield heater (See figure 1 for using assembly) . . . . .							dy	Ref
	284570R	Bracket Assembly - Windshield heater (See figure 1 for using assembly) . . . . .							dy	Ref
6	652120	Heater Assembly - Windshield infra-red (See figure 1 for using assembly) . . . . .							dy	Ref
7	652120-9	Reflector - Heater . . . . .							dy	1
8	652120-2	Strip (Nichrome Ribbon) . . . . .							dy	1
9	652120-6	Washer (Nichrome) . . . . .							dy	65
10	652120-4	Insulator (Ceramic) . . . . .							dy	72
	652120-5	Insulator (Ceramic) . . . . .							dy	4
	288320	Installation - Windshield heater embedded wiring (NP) (See figure 1 for using assembly) . . . . .							sss	Ref
	AN3022-2	Switch - Windshield anti-icer (On pilot's switch panel) . . . . .							sss	1
	285743-26	Nameplate - Windshield wiper caution (On pilot's switch panel) . . . . .							sss	1
	CD101	De-icer Control (Paul Henry Co.) (652133) (On center lower windshield frame) . . . . .							sss	1
	7220-4-24	Relay - De-icer control (Leach) (612369-3) (In main junction box) . . . . .							sss	1
	285927	Installation - Pilot's overhead controls (See figure 1 for using assembly) . . . . .							dy	Ref
11	289561-2	Numberplate - Ignition switch . . . . .							dy	1
12	289561-3	Numberplate - Ignition switch . . . . .							dy	1
13	289561-4	Numberplate - Ignition switch . . . . .							dy	1
14	289561-5	Numberplate - Ignition switch . . . . .							dy	1
	285927-20	Box Assembly - Ignition switch . . . . .							dy	1
15	A804CDL	Switch - Ignition, 4 engine (Joseph Pollak) (612508) . . . . .							dy	1
16	AN3023-1	Switch - Three hole mounting double pole toggle, ordinance light . . . . .							dy	1
17	285743-23	Nameplate - Ordinance light switch . . . . .							dy	1
18	291486	Guard - Landing light switch . . . . .							dy	1
19	8905K540	Switch - Landing lights, S.P.D.T. (Special Lever) (Cutler-Hammer) (612270-2) . . . . .							dy	2
20	285743-18	Nameplate - Landing light switches . . . . .							dy	1
21	*AN3023-6	Switch - Elevator & rudder booster double pole toggle . . . . .							dy	2
22	*285743-27	Nameplate - Booster switches . . . . .							dy	1
23	*8750	Circuit Breaker - Non-luminous (Cutler-Hammer) (612623) . . . . .							dy	2
	42A12348	Holder Assembly - Lamp . . . . .							dy	2
24	*42A12349-4	Lamp Retainer - Amber jeweled . . . . .							dy	2
	*AN3121-313	Lamp . . . . .							dy	1
25	A2886	Mounting Base (Grimes) (618117-4) . . . . .							dy	3
26	291506-6	Light Assembly - Pilot's chart . . . . .							dy	1
27	291506-7	Light Assembly - Co-pilot's chart . . . . .							dy	1
	SA2212D	Lamp Assembly - Type C4 (Standard Products) (610039-2) (1 Required on 291506-6 & -7) . . . . .							dy	1
	SA1015	Lens - Focusing . . . . .							dy	1
	SA1596	Cap - Lens focusing . . . . .							dy	1
	SA2732	Ring - Snap . . . . .							dy	1
	SA3949	Reflector . . . . .							dy	1
	SA3985	Socket Assembly . . . . .							dy	1
28	291506-5	Light Assembly - Pilot's compass . . . . .							dy	1
	D2332	Light Assembly (Grimes) (618117-3) . . . . .							dy	1
	1540A	Visor - Adjustable sun (Fulton) (640066) . . . . .							dy	2
29	V1-3083	Ball Assembly - Visor . . . . .							dy	1
30	V1-2911	Clamp - Visor arm . . . . .							dy	2
31	V1-2722	Arm - Visor . . . . .							dy	1
32	V1-7701	Clamp - Ball . . . . .							dy	1
33	V1-10302	Blade - Visor (Tenite) . . . . .							dy	1
34	M285927-10	Crash Pad Assembly - Overhead panel . . . . .							dy	1
35	96627	Panel Assembly - Pilot's overhead radio (Bendix) (616023) . . . . .							eu	1
	96621-2	Panel Assembly - Pilot's overhead radio (Bendix) (616034-2) . . . . .							al	1
	96621-3	Panel Assembly - Pilot's overhead radio (Bendix) (616034-3) (See M293663) . . . . .							sss	1
	96621-4	Panel Assembly - Pilot's overhead radio (Bendix) (616034-4) . . . . .							bt	1
	96621-5	Panel Assembly - Pilot's overhead radio (Bendix) (616034-5) . . . . .							bx	1
	293663	Panel Assembly - Pilot's overhead radio control (Reworks 96621-3) . . . . . (See figure 1 for using assembly)							sss	Ref
	293510	Installation - Pilot's overhead radio panel lights (NP) . . . . . (See figure 1 for using assembly)							sss	Ref
36	293510-3L	Light Assembly - Overhead panel . . . . .							sss	1

(Continued on next page.)

## GROUP . . . Electrical System

## Detail Unit . . . Pilot's Radio and Electrical Equipment (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.
				sss	1
200 - 37	293510-3R		Light Assembly - Overhead panel .....	sss	1
	293510-2L		Reflector .....	sss	1
	293510-2R		Reflector .....	sss	1
	285743-28		Nameplate - Panel lights .....	sss	1
38	0154H		Rheostat - Panel light (Ohmite) (612152-2) .....	sss	1
	292910		Installation - Marker beacon lights (See figure 1 for using assembly) .....	bx	Ref
39	292910-2		Bracket Assembly - Beacon lights .....	bx	1
40	WK6-32S		Receptacle (Cannon) .....	bx	1
41	130		Light Assembly - Blue (Korry) (618179-5) .....	bx	1
42	130		Light Assembly - Amber (Korry) (618179-4) .....	bx	1
43	130		Light Assembly - White (Korry) (618179-1) .....	bx	1
	1810		Lamp (General Electric) (618204-1) .....	bx	1
44	AN3021-2		Switch - Marker beacon lights, S.P.S.T. ....	bx	1
	292939		Installation - Pilot's M.R.I.B. control unit (See figure 1 for using assembly) (Located in control stand-Radio components are CFE) .....	bx	Ref
	285740L		Installation - Pilot's interphone bracket (See figure 1 for using assembly) .....	dy	Ref
	285740R		Installation - Co-pilot's interphone bracket (See figure 1 for using assembly) .....	dy	Ref
45	285740-4		Bracket Assembly - Pilot's interphone box LH .....	dy	1
46	285740-5		Bracket Assembly - Co-pilot's interphone box RH .....	dy	1
47	C166/A1C3		Box - Interphone control .....	cb-du	1
48	292940-3		Nameplate - Pilot's interphone connection .....	bx	1
49	292940-4		Nameplate - Co-pilot's interphone connection .....	bx	1
	290872		Nameplate - Control box .....	ddd-sss	1
	F21/ARA9		Filter - Interphone .....	dy	1
	294094		Installation - Headset extension cord (NP) (See figure 1 for using assembly) .....	bm	Ref
	248224		Cord Assembly - Headset extension .....	bm	1
	292944		Installation - Radio & interphone equipment wiring (See figure 1 for using assembly) .....	bx	Ref
	292992-2		Harness Assembly - AN/APN1 Altimeter .....	bx	1
50	130		Light Assembly - Green (Korry) (618179-3) .....	bx	1
51	130		Light Assembly - Amber (Korry) (618179-4) .....	bx	1
52	130		Light Assembly - Red (Korry) (618179-2) .....	bx	1
	291553		Installation - AN/APN1 Altimeter indicator (Modifies 284739) .....	bx	Ref
	(See figure 1 for using assembly)				
53	AN3027-3		Switch - Altimeter changeover, D.P.D.T. ....	bx	1
54	286764		Nameplate - Radio altimeter changeover switch .....	bx	1
55	ID14/APN1		Altimeter Indicator (CFE) .....	bx	1
56	SA/ARN1		Altitude Limit Switch (CFE) .....	bx	1
	286906		Installation - Pilot's station radio instruments (See figure 1 for using assembly) .....	dy	Ref
	286844		Installation - Flight station auxiliary panels .....	dy	1
57	286844-10		Panel Assembly - Pilot's auxiliary instrument .....	ce	1
58	283555		Nameplate - Auto pilot oil pressure gage .....	ce	1
59	AN5771-6		Gage - Auto pilot oil pressure .....	ce	1
60	286844-2		Panel Assembly - Pilot's auxiliary instrument .....	dy	1
61	292892		Nameplate - Gross weight .....	zzz	1
	291670		Nameplate - Gross weight .....	dz	1
	278840		Nameplate - Gross weight .....	k	1
62	AW17 $\frac{1}{2}$ -16W		De-icer Pressure Gage (U.S. Gauge Co.) (626059) .....	dy	1
63	I101C		Indicator - Radio blind landing .....	cb	1
64	IN4A		Indicator - Radio .....	cb	1
65	44A18454-4		Light - Marker beacon warning .....	ev	1
	AN3121-313		Lamp - Marker beacon warning light .....	ev	1
66	284137		Nameplate - Marker beacon light .....	ev	1
	AN3022-2		Switch - Marker beacon receiver (Replaces marker beacon light) .....	al-dx	1
	292355		Nameplate - Marker beacon control switch .....	al-dx	1
67	286844-8L		Bracket - Radio indicator .....	dy	1
68	286844-3		Panel Assembly - Co-pilot's auxiliary instrument .....	dy	1
69	284093		Nameplate - Door warning light .....	dy	1
70	6531-1L		Indicator - Landing gear & flap position .....	dy	1
71	I101C		Indicator - Radio blind landing .....	cb	1
72	IN4A		Indicator - Radio .....	cb	1
73	5950-53B1		Indicator - Hydraulic pressure .....	dy	1
74	286844-8R		Bracket - Radio indicator .....	dy	1
75	283556		Nameplate - Hydraulic pressure .....	dy	1
	284739		Installation - Auxiliary compass-altimeter panel .....	dy	1
76	284739-2L		Bracket Assembly - Auxiliary panel .....	dy	1
77	284739-2R		Bracket Assembly - Auxiliary panel .....	dy	1
78	284739-7		Panel Assembly - Auxiliary instrument .....	dy	1
79	AN5730-6		Indicator - Remote compass (CFE) .....	dy	1

(Continued on next page.)

## GROUP . . . Electrical System

## Detail Unit . . . Pilot's Radio and Electrical Equipment (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		
200 - 80	A2886								dy	1
	100PD1AL	Mounting Base - Spotlight (Grimes) (618117-4) . . . . .							dy	1
	1D14/APN1	Mount - Instrument panel (Lord) . . . . .							br	1
	SAI/ARN1	Altimeter Indicator (CFE) (Same as index No. 55) . . . . .							br	1
	293070	Altitude Limit Switch (CFE) (Same as index No. 56) . . . . .							sss	Ref
	MI19644	Installation - Radio altimeter indicator (NP) (See figure 1 for using assembly) . . . . .							sss	1
	MI19642	Indicator - Altitude (Replaces index No. 55) . . . . .							sss	1
	284889	Switch - Altitude limit (Replaces index No. 56) . . . . .							cb	1
81	AN5733-1	Installation - Magnetic compass bracket . . . . .							cb	1
82	284889-2	Compass - Pilot's card type magnetic (Alternate: Kollsman 758 or 758LZ-01)							cb	1
	291004	Plate - Compass support . . . . .							cb	1
83	1017	Installation - Pilot's ball bank inclinometer (NP) . . . . . (See figure 1 for using assembly)							bq-sss	Ref
		Inclinometer - Ball bank (Air Associates, Inc.) (620163) . . . . .							bq-sss	1
		* Replaces standard part per Service Bulletin 49/SB-22.								

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GROUP . . . Electrical System  
Detail Unit . . . Hostess Panel

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ELECTRICAL

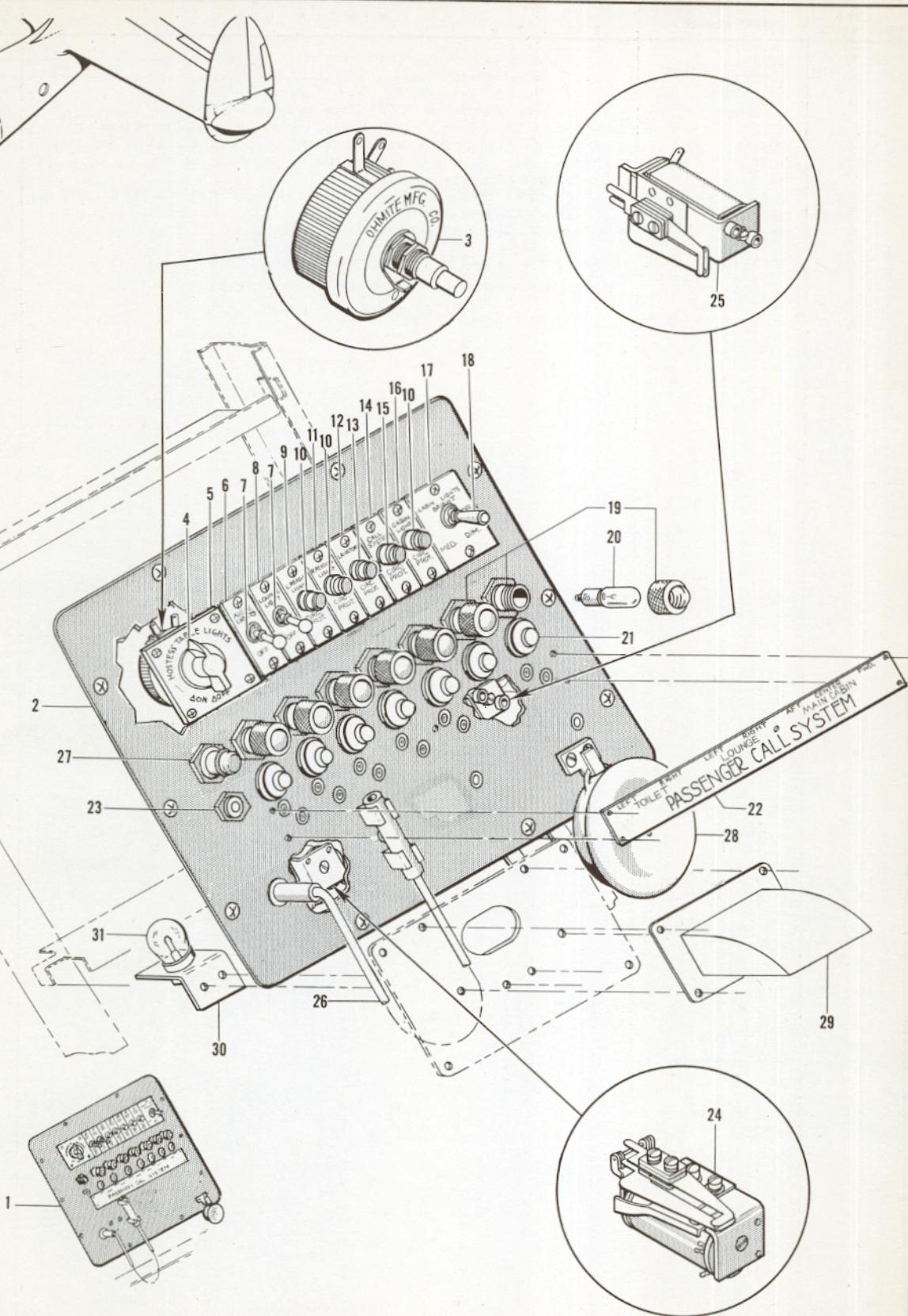


Figure 201 — Hostess Panel

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## GROUP . . . Electrical System

## Detail Unit . . . Hostess Panel

*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		
	286889		Installation - Interphone and cabin light switch panel..... (See figure 196 for using assembly)						dy	Ref
201 - 1	286889-2		Equipment Assembly .....						dy	1
2	286889-3		Panel Assembly .....						dy	1
3	0149H352		Rheostat - Snap off position (table lights) (Ohmite) (612109-4) .....						dy	1
4	AN3220-1		Knob - Rheostat .....						dy	1
5	287191-14		Nameplate - Hostess table lights.....						dy	1
	293296-2		Nameplate - Coatroom light switch.....						sss	1
6	287191-4		Nameplate - Aisle lights circuit protector.....						dy	1
7	AN3160-5		Circuit Protector - Aisle, lounge and coat closet lights .....						dy	3
8	287191-5		Nameplate - Lounge lights circuit protector.....						dy	1
9	287191-6		Nameplate - LH Reading lights circuit protector.....						dy	1
10	AN3161-20		Circuit Protector - LH, RH Reading and cabin lights.....						dy	1
11	287191-7		Nameplate - RH Reading lights circuit protector.....						dy	3
12	287191-8		Nameplate - Lavatory light circuit protector.....						dy	1
13	AN3161-10		Circuit Protector - Lavatory light .....						dy	1
14	287191-11		Nameplate - Call system lights circuit protector.....						dy	1
15	AN3161-5		Circuit Protector - Call system lights.....						dy	1
16	287191-12		Nameplate - Cabin lights circuit protector.....						dy	1
17	287191-13		Nameplate - Cabin lights switch.....						dy	1
18	8905K515		Switch - Cabin lights (Cutler-Hammer) (612366-2) .....						dy	1
19	44A18454-4		Lamp Assembly - Passenger call system (618150-4) .....						dy	7
20	AN3121-313		Lamp - Passenger call system.....						dy	7
21	JR-P-O (closed)		Switch - Passenger call system (Robert Hetherington & Son) (612527-3) .....						dy	A.R.
			(7 Req., Serial rrr-du - 8 req., Serial sss)							
22	287191-2		Nameplate - Passenger call system.....						di	1
	293477		Nameplate - Passenger call system .....						bx	1
	1-40009		Nameplate - Passenger call system.....						bm	1
23	SCA-2B		Jack (P. R. Mallory & Co.) .....						dy	1
24	A3325		Relay - Type G (C. P. Clare) (612139) .....						dg-du	1
25	1023		Relay (Raitronics Co.) (612523) .....						dy	7
26	CD-307-72		Extension - Headset (G.F.E.) .....						dy	1
27	SA-26/U		Switch - Jack (G.F.E.) (Micro).....						ce-du	1
28	Type T17		Microphone (G.F.E.) .....						dy	1
	290502		Installation - Hostess light (See figure 1 for using assembly) .....						dy	Ref
	290503		Light Assembly - Hostess .....						dy	1
29	290503-2		Shade Assembly - Hostess light .....						dy	1
30	1941		Light Assembly - Hostess (H. A. Douglas) (610033) .....						dy	1
31	AN3132-308		Lamp - Hostess light .....						dy	1
	292983		Installation - Tach shafts and flux gate wiring .....						bx	Ref
			(See figure 1 for using assembly)							
	Type 265		Switch - Push button call (Edwards & Co.) (612022-3) (Replaces index 27) .....						bx	1

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GROUP . . . Electrical System  
Detail Unit . . . Windshield Wipers

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ELECTRICAL

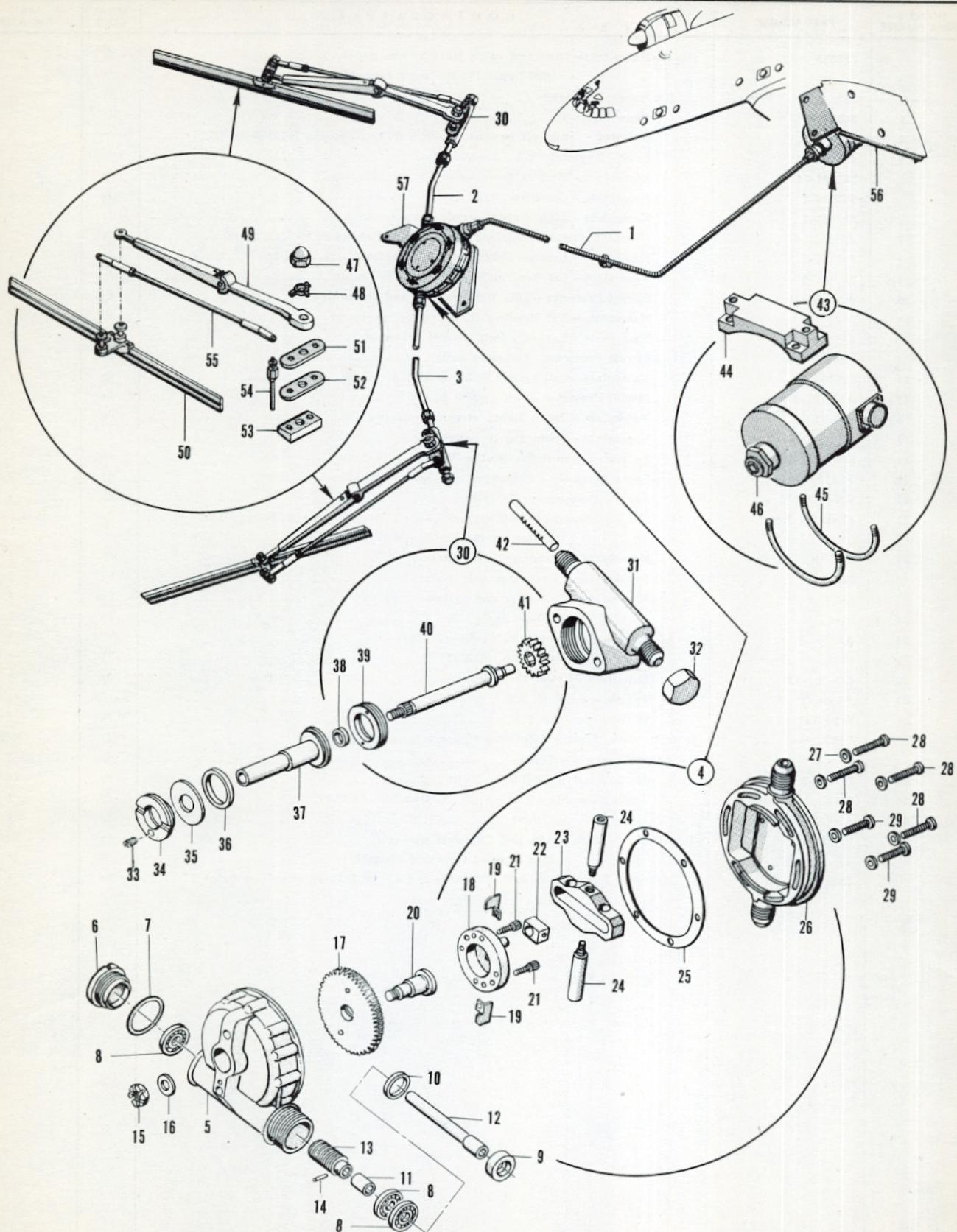


Figure 202 — Windshield Wipers

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LOCKHEED AIRCRAFT CORPORATION

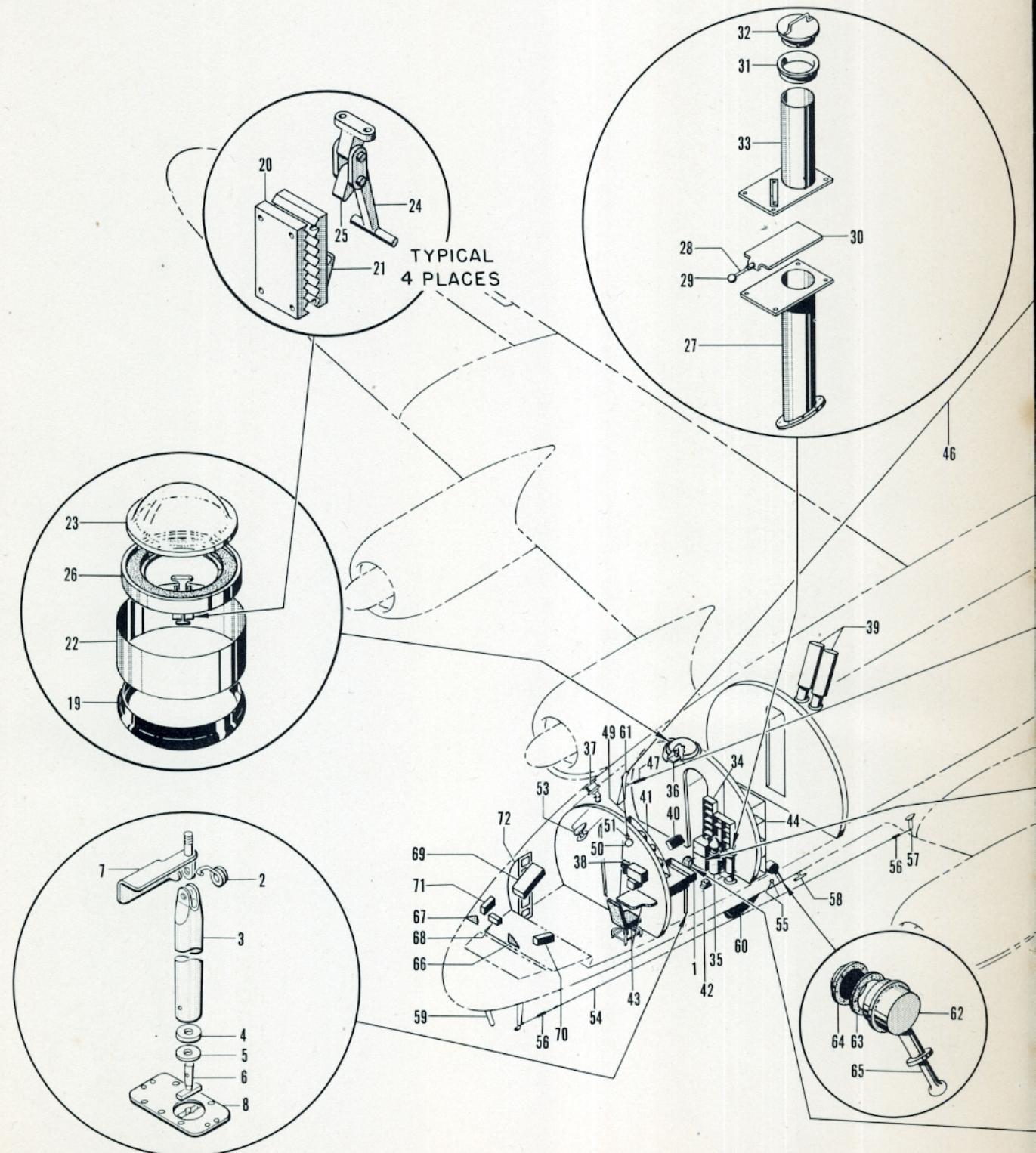


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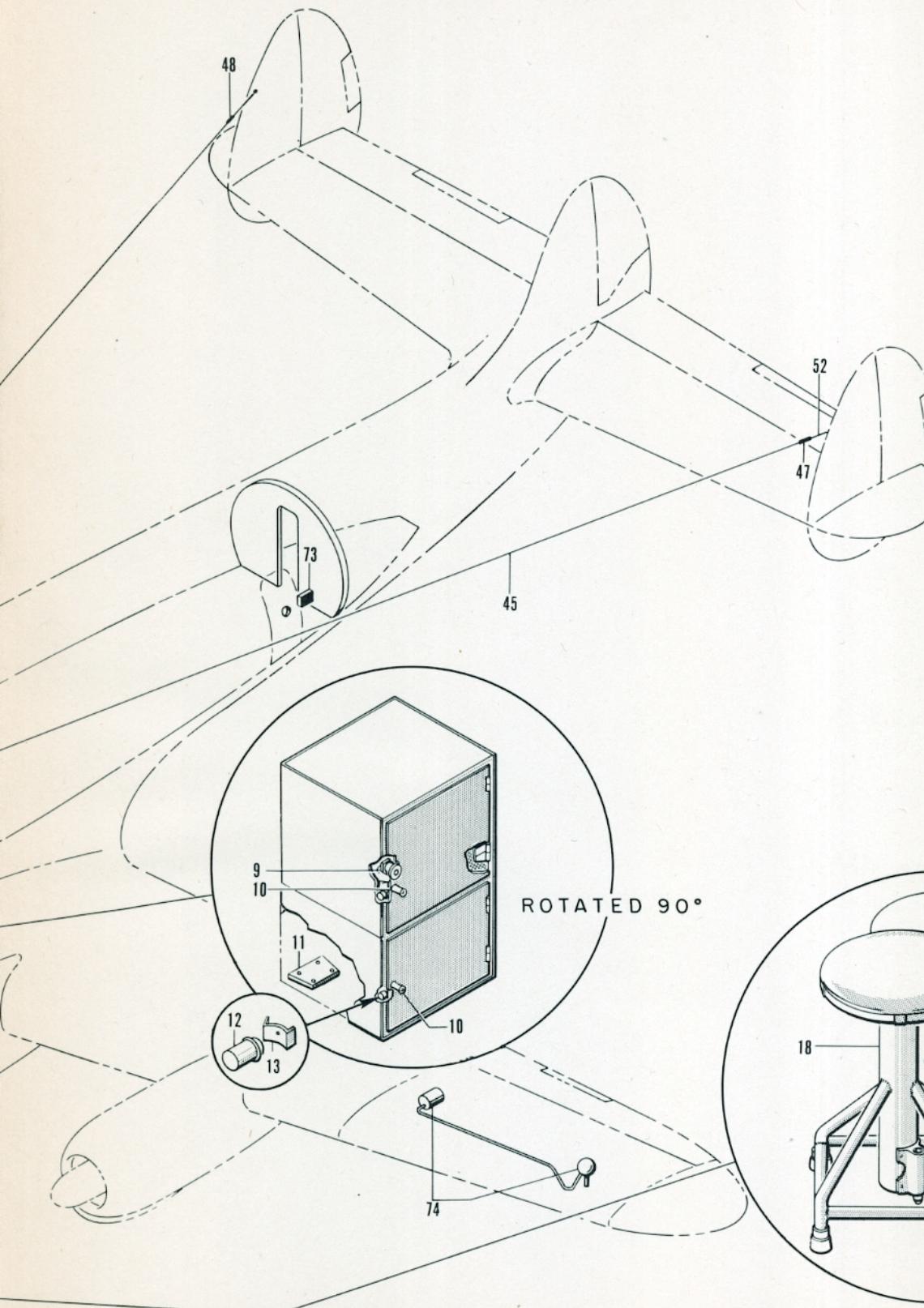
**GROUP . . . . Navigational Equipment**

**Detail Unit . . . Navigator's and Radio Operator's Equipment Index**



**Figure 203 — Navigator's and Ra**

*Constellation*



## GROUP . . . Navigational Equipment

## Detail Unit . . . Navigator's and Radio Operator's Equipment Index

*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		
	290954	Installation - Navigator's table (N.P.) (See figure 1 for using assembly)							gb	Ref
	291837	Installation - Navigator's table (N.P.) (See figure 1 for using assembly)							bu	Ref
	291837-7	Drawer Assembly - Navigator's table							bu	1
	01-290954-29	Service Assembly - Navigator's table							fv	Ref
	290954-29	Table Assembly - Navigator's							gb	1
	291837-3	Table Assembly - Navigator's							bu	1
	290954-31	Spring - Navigator's table							fv	1
203 - 1	267563	Drawer Assembly - Navigator's table							gb	1
	267564	Drawer - Chronometer							fv	1
	290954-22	Leg Assembly - Navigator's table (LH)							fv	1
	290954-23	Leg Assembly - Navigator's table (RH)							fv	1
2	290954-24	Spring - Table leg							fv	1
3	290954-27	Leg - Navigator's table							fv	1
4	290954-21	Cushion - Table leg							fv	1
5	290954-25	Shim - Table leg							fv	1
6	290954-19	Key + Table leg							fv	1
7	290954-4	Handle Assembly - Table leg (LH)							fv	1
	290954-5	Handle Assembly - Table leg (RH)							fv	1
	290954-20	Cylinder - Table leg							fv	1
	290954-11	Hinge - Navigator's Table							fv	1
8	290954-2	Plate Assembly - Table leg (LH)							fv	1
	290954-3	Plate Assembly - Table leg (RH)							fv	1
	292149	Installation + Navigator's locker (N.P.) (See figure 1 for using assembly)							fv	Ref
9	108	Lock - Door (Yale & Towne)							fv	1
10	LS1502	Knob - Locker doors							fv	2
	292149-2	Locker Assembly - Navigator's							fv	1
11	114448	Wedge Plate - Navigator's locker							fv	1
12	3673	Catch - Locker doors (American Cabinet & Hardware Co.)							fv	2
13	3673B	Strike - Locker doors (American Cabinet & Hardware Co.)							fv	2
	291850	Installation - Navigator's stool (N.P.) (See figure 1 for using assembly)							fv	Ref
14	640162-2	Buckle Assembly - Navigator's safety belt							gb	1
15	640162-3	Tip Assembly - Navigator's safety belt							gb	1
	260984-3	Hook - Navigator's safety belt							fv	1
	292375	Stool Assembly - Navigator's							fv	1
16	292053	Back Assembly - Navigator's stool							fv	1
17	291849	Fitting Assembly - Navigator's stool tie-down							fv	1
	291849-3	Stud - Tie-down fitting							fv	1
	291849-4	Handle - Tie-down fitting							fv	1
	291849-5	Housing - Tie-down fitting							fv	1
	291849-6	Spring - Tie-down fitting							fv	1
18	640060	Stool - Navigator's							fv	1
	640163-2	Buckle Assembly - Navigator's safety belt							bu	1
	640163-3	Tip Assembly - Navigator's safety belt							bu	1
	292630	Installation - Air supply grills (N.P.) (See figure 1 for using assembly)							bk	Ref
	267325	Grill - Air supply							bk	2
	268960	Installation - Navigator's dome (N.P.) (See figure 26 for using assembly)							fv	Ref
19	271035	Pad Assembly - Navigator's dome							fv	1
20	280000	Plate - Serrated							fv	4
21	280001	Plate - Latch adjustable							fv	4
22	268960-5	Cylinder - Navigator's dome							fv	1
	298679	Dome Assembly - Astral (Replaces 268960-23 for spares purposes per 49/SB-324)							fv	1
23	298571	Dome Assembly - Navigator's plastic							fv	1
	280002	Latch Assembly - Navigator's dome							fv	4
24	280003	Handle - Navigator's dome latch							fv	1
25	280004	Latch - Navigator's dome							fv	1
26	298679-7	Retainer Assembly - Navigator's dome							fv	1
	270677-5	Chute Assembly - Driftmeter signal (See figure 26 for using assembly)							fv	Ref
27	270677-2	Tube Assembly - Driftmeter signal chute							fv	1
28	270677-10	Rod Assembly - Driftmeter signal chute							ge	1
29	270737	Knob - Push rod							ge	1
30	270739	Slide - Driftmeter chute							fv	1
31	270744	Seal - Driftmeter signal chute cap							fv	1
32	270677-7	Cap Assembly - Driftmeter signal chute							fv	1
33	270677-4	Tube Assembly - Driftmeter signal chute							fv	1

(Continued on next page.)

## GROUP . . . Navigational Equipment

*Constellation*

## Detail Unit . . . Navigator's and Radio Operator's Equipment Index (Cont.)

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.
203 - 34	292232							Installation - Flare racks (N.P.) (See figure 1 for using assembly) .....	fv	Ref
35	283882							Installation - Driftmeter (N.P.) (See figure 204 for detailed illustration) .....	fv	Ref
36	271094							Installation - Astro compass (N.P.) (See figure 204 for detailed illustration) .....	fv	Ref
37	274755							Installation - Very pistol mount (N.P.) (See figure 205 for detailed illustration) .....	fv	Ref
38	267807							Installation - Pyrotechnics (N.P.) (See figure 205 for detailed illustration) .....	fv	Ref
39	285064							Installation - Landing flare chutes (N.P.) (See figure 205 for detailed illustration) .....	fv	Ref
40	286109							Installation - Navigator's interphone panel (N.P.) .....	fv	Ref
							(See figure 204 for detailed illustration)			
41	291093							Installation - Navigator's panel (N.P.) (See figure 204 for detailed illustration) .....	fw	Ref
	285420							Installation - Navigator's panel (N.P.) (See figure 204 for detailed illustration) .....	fx	Ref
	292952							Installation - Navigator's panel (N.P.) (See figure 204 for detailed illustration) .....	bx	Ref
42	292150							Installation - Flux gate caging switch (N.P.) (See figure 1 for using assembly) .....	gd	Ref
	AN5756-2						Switch - Caging .....	gd	1	
43	291095							Installation - Radio operator's station (N.P.) .....	bq	Ref
	291270							(See figure 206 for detailed illustration)	dx	Ref
	293060							Installation - Radio operator's station (N.P.) .....	bm	Ref
	291554							(See figure 206 for detailed illustration)	bt	Ref
	286087							Installation - Radio operator's station (N.P.) .....	bu-du	Ref
	292721							(See figure 206 for detailed illustration)	bv	Ref
	292943							Installation - Radio operator's station (N.P.) .....	bx	Ref
	291649							Installation - Flight station and navigator's ash trays (N.P.) .....	dy	Ref
							(See figure 1 for using assembly)			
44	1444							Receiver - Ash (Sierra Mfg. Co.) (641022) .....	dy	AR
	291094							Installation - Radio rack and equipment (N.P.) (See figure 1 for using assembly) .....	bq	Ref
	291278							Installation - Radio rack and equipment (N.P.) (See figure 1 for using assembly) .....	dx	Ref
	293063							Installation - Radio rack and equipment (N.P.) (See figure 1 for using assembly) .....	bm	Ref
	291555							Installation - Radio rack and equipment (N.P.) (See figure 1 for using assembly) .....	bt	Ref
	286644							Installation - Radio rack and equipment (N.P.) (See figure 1 for using assembly) .....	bu-du	Ref
	292938							Installation - Radio rack and equipment (N.P.) (See figure 1 for using assembly) .....	bx	Ref
	285160							Installation - Radio rack and equipment (N.P.) (See figure 1 for using assembly) .....	bv	Ref
	286264							Installation - Radio antennae (N.P.) (See figure 1 for using assembly) .....	fu	Ref
	292946							Installation - Radio antennae (N.P.) (See figure 1 for using assembly) .....	bx	Ref
	291271							Installation - Radio antennae (N.P.) (See figure 1 for using assembly) .....	sss	Ref
45	286264-2							Antenna Assembly - HF Command radio (LH) .....	ee-du	1
46	286264-3							Antenna Assembly - Liaison and loran radio (RH) .....	ee-du	1
	292946-2							Antenna Assembly - HF Command radio (LH) .....	bx	1
	292946-3							Antenna Assembly - Liaison and loran radio (RH) .....	bx	1
47	IN88							Insulator - LH Main antenna .....	dy	2
48	MT48C							Insulator - RH Main antenna .....	dy	1
49	286264-20							Antenna Assembly - RH Main lead-in .....	ce-du	1
	292946-20							Antenna Assembly - RH Main lead-in .....	bx	1
50	285270							Installation - RH Main antenna lead-in window .....	dy	1
	292947							Installation - LH Main antenna lead-in window .....	bx	1
	292909							Installation - Spark gap and antenna lead-in .....	bx	2
	4525							Gap - Antenna spark (Audio Prod. Co.) (615760) .....	bx	1
51	IN84							Insulator - Main antenna lead-in .....	ce-du	2
52	286365L							Installation - Outboard fin antenna attachment (N.P.) .....	dy	1
	286365R							Installation - Outboard fin antenna attachment (N.P.) .....	dy	1
	270859							Spring - Outboard fin antenna attachment (N.P.) .....	dy	1
53	AS27-() / ARN5							Antenna - Instrument approach .....	dy	1
	277798							Gasket - Instrument approach antenna .....	dy	1
	277797							Spacer - Instrument approach antenna .....	dy	1
54	286264-4							Antenna Assembly - Manual radio compass sense (LH belly) .....	fu	1
	286264-5							Antenna Assembly - Automatic radio compass and marker beacon receiver sense (RH belly) .....	fu	1
	292946-4							Antenna Assembly - Manual radio compass and marker beacon receiver sense (LH belly) .....	bx	1
							(Continued on next page.)			

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## GROUP . . . Navigational Equipment

## Detail Unit . . . Navigator's and Radio Operator's Equipment Index (Cont.)



NAVIGATIONAL  
EQUIPMENT

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		
203 - 55	292946-5		Antenna Assembly - Automatic radio compass sense (RH belly) .....						bx	1
	IN79		Insulator - LH sense antenna lead-in .....						rrr	1
56	IN88		Insulator - Sense antennae (3 required RH; 2 required LH) .....						rrr	AR
	TM201		Terminal - RH Sense antenna aft lead-in .....						dy	1
	IN79		Insulator - RH Sense antenna forward lead-in .....						dy	1
	266803-2		Gasket (Used with IN79 insulator) .....						dy	2
	286638L		Installation - Sense antenna mast (N.P.) .....						rrr	1
	286638R		Installation - Sense antenna mast (N.P.) .....						rrr	1
57	286638-2		Mast Assembly - Sense antenna .....						rrr	1
	270859		Spring - Sense antenna tension .....						rrr	1
	296592-13		Installation - Manual radio compass sense antenna (LH belly) .....						sss	1
	296592-14		Installation - Automatic radio compass sense antenna (RH belly) .....						sss	1
	296592-12		Antenna Assembly - Sense .....						sss	1
	IN88		Insulator - Sense antenna .....						sss	1
	290899-2		Mast Assembly - Sense antenna .....						sss	1
	296592-6		Mast Assembly - Marker beacon antenna .....						sss	1
	291271-3		Antenna Assembly - Marker beacon receiver .....						sss	1
	286621		Installation - Radio altimeter dipole antennae .....						dy	1
58	MI19643		Antenna Assembly - Radio altimeter dipole .....						dy	2
59	284823		Installation - VHF Command radio antenna .....						dy	1
	194687		Clamp - Antenna mast, forward .....						dy	2
	194688-2		Clamp - Antenna mast, aft .....						dy	2
	285558		Installation - Radio compass loops .....						rrr	1
60	285558-2		Housing Assembly - Radio double loop .....						rrr	1
	MN20C		Loop - Manual radio compass antenna, forward .....						rrr	1
	LP31(A)		Loop - Automatic radio compass antenna, aft .....						rrr	1
	291272L		Installation - Radio compass loops (N.P.) .....						sss	1
	291272R		Installation - Radio compass loops (N.P.) .....						sss	1
	MN60A		Loop - Radio compass antennae .....						sss	1
	293948		Installation - External power receptacle (N.P.) (RH only) .....						sss	1
	292972		Installation - Antenna tuning unit and reel (N.P.) .....						bx	1
	BC959T2		Tuning unit .....						bx	1
	FT959 ( )		Mounting .....						bx	1
	MC215		Tuning shaft .....						bx	1
	RL42-8		Reel .....						bx	1
	MC163A		Connector .....						bx	1
	W106A		Antenna Wire (3000 inches) .....						bx	1
	MC476		Ball .....						bx	1
	FT470		Mounting .....						bx	1
	WT7A		Weight .....						bx	1
	267704		Installation - Antenna mast, station 260 (N.P.) (See figure 26 for using assembly)						dy	Ref
61	267704-2		Mast Assembly - Main antenna .....						dy	1
	270225		Insulator - Antenna mast .....						dy	1
	270221		Cap - Antenna mast .....						dy	1
	271715		Installation - Identification receiver antenna reel (N.P.) .....						ce-du	Ref
			(See figure 26 for using assembly)							
	271715-2		Housing Assembly - Antenna reel .....						ce-du	1
	271715-13		Gasket - Antenna reel .....						ce-du	1
	271715-5		Cover - Antenna reel housing .....						ce-du	1
	271860		Fairlead Assembly - Antenna reel .....						ce-du	1
62	286844-2		Panel Assembly - Pilot's auxiliary instrument (See figure 200 for using assembly) .....						dy	Ref
63	286844-3		Panel Assembly - Co-pilot's auxiliary instrument (See figure 200 for using assembly) .....						dy	Ref
64	284739		Installation - Auxiliary compass altimeter panel (See figure 200 for using assembly) .....						dy	Ref
65	285927		Installation - Pilot's overhead controls (See figure 200 for using assembly) .....						dy	Ref
66	285740L		Installation - Pilot's interphone bracket (See figure 200 for using assembly) .....						dy	Ref
71	285740R		Installation - Co-pilot's interphone bracket (See figure 200 for using assembly) .....						dy	Ref
72	287958		Installation - Main junction box (See figure 196 for using assembly) .....						dy	Ref
73	286889		Installation - Interphone and cabin light switch panel .....						dy	Ref
			(See figure 196 for using assembly)							
74	285049		Installation - Flux gate compass transmitter (See figure 196 for using assembly) .....						dy	Ref

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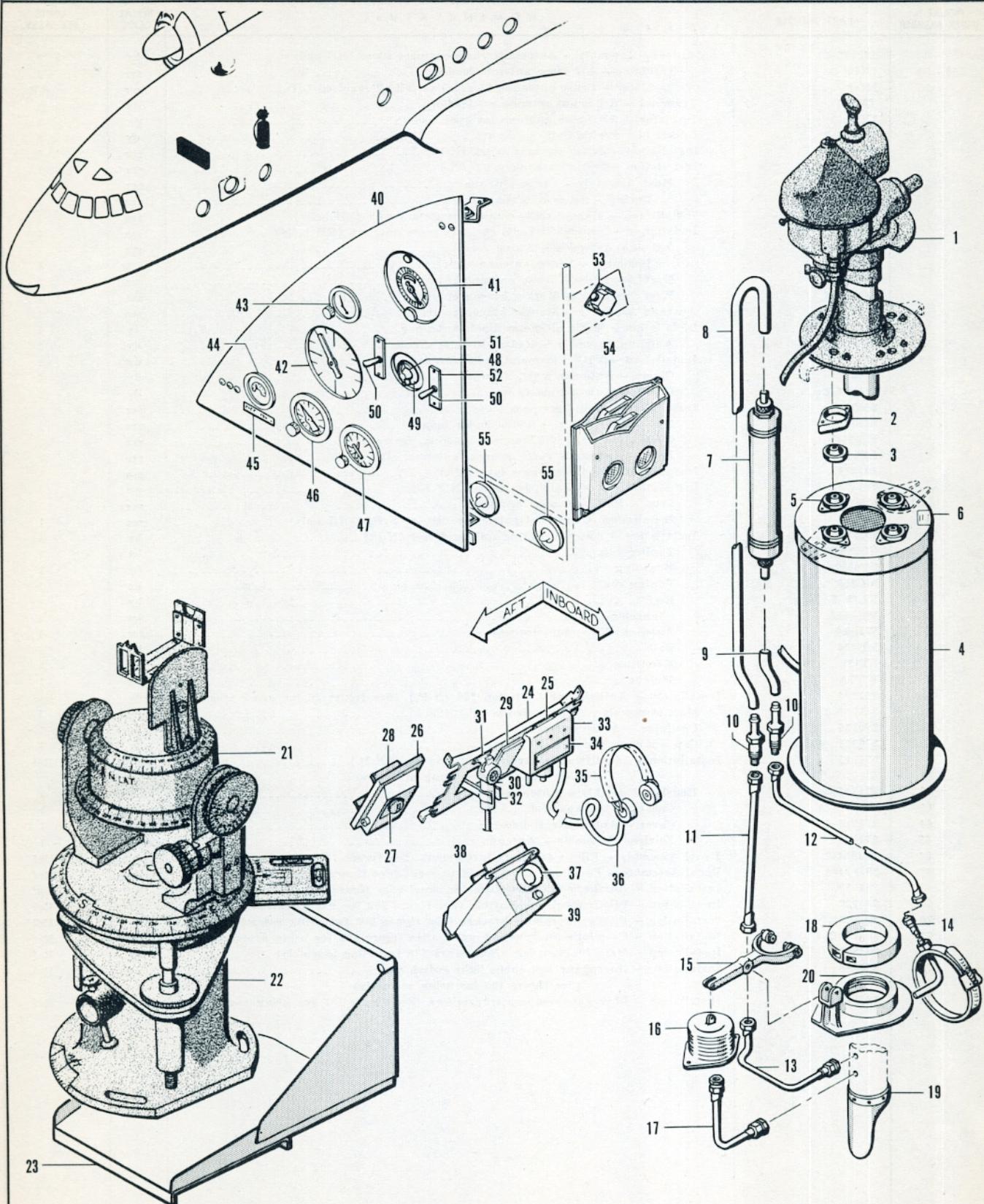


Figure 204 – Driftmeter, Astro Compass and Navigator's Panels



GROUP . . . Navigational Equipment  
Detail Unit . . . Pyrotechnic Equipment

# Constellation

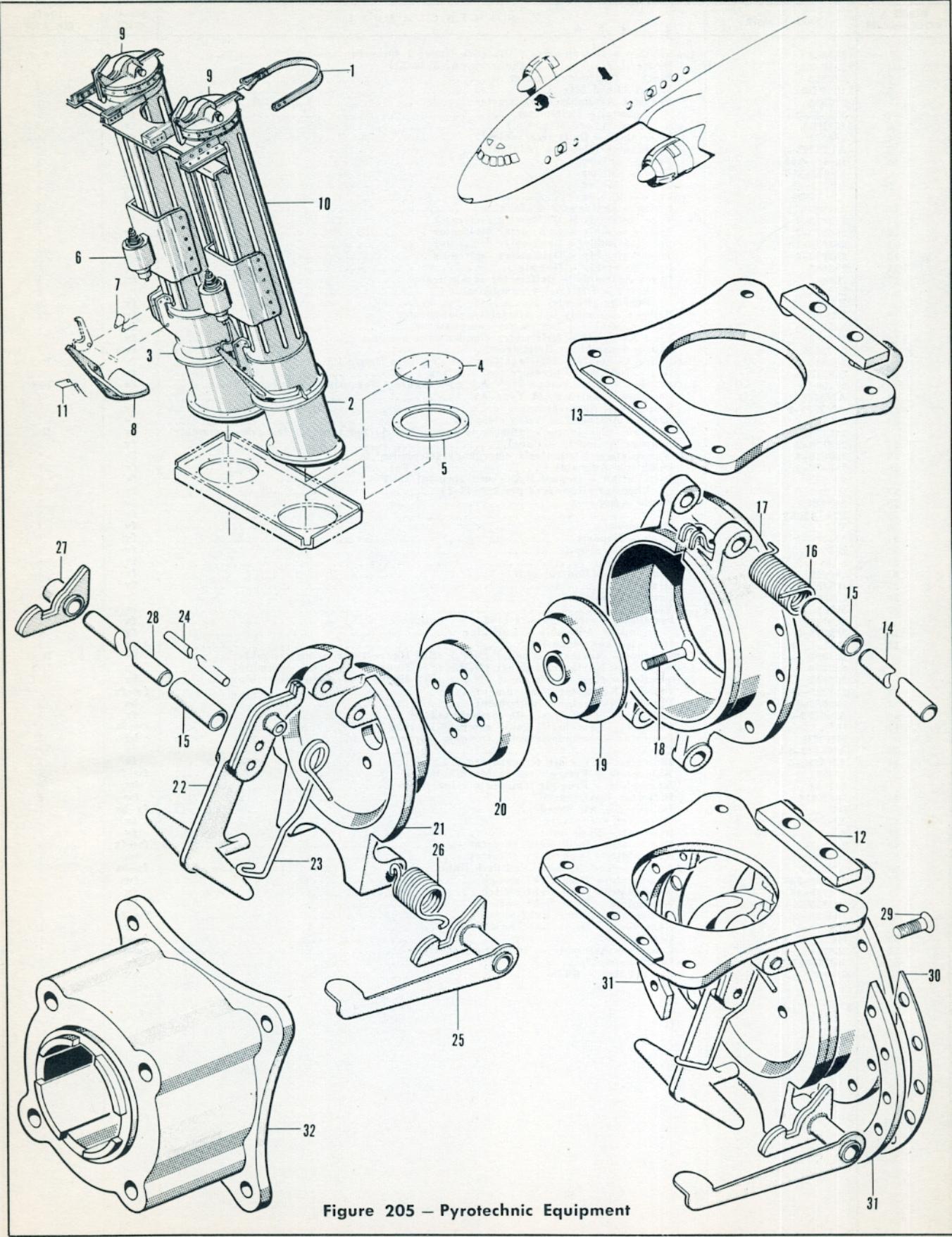


Figure 205 – Pyrotechnic Equipment

## GROUP . . . Navigational Equipment

## Detail Unit . . . Pyrotechnic Equipment

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER		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		
205 - 1	285064	Installation - Landing flare chutes (N.P.) (See figure 33 for using assembly) . . . . .							fv	Ref
	285169	Strap Assembly - Landing flare chute . . . . .							fv	2
2	285064-3	Base Assembly - Landing flare chute . . . . .							fv	2
3	285024	Collar - Landing flare chute base . . . . .							fv	1
4	258005	Cover - Landing flare chute . . . . .							fv	2
5	258006	Retainer - Landing flare chute . . . . .							fv	2
	WM210	Chute Assembly - Landing flare (Air Associates) (601005) . . . . .							fv	2
6	60-251	Solenoid . . . . .							fv	1
7	37A3634	Spring - Flare chute locking lever . . . . .							fv	1
8	37D3632	Support - Flare chute . . . . .							fv	1
9	37D3638	Cover Assembly - Flare chute . . . . .							fv	1
10	37G3629	Container & Base Assembly - Flare chute . . . . .							fv	1
11	38A3180	Spring - Flare support . . . . .							fv	1
	267807	Installation - Pyrotechnics (N.P.) (See figure 1 for using assembly) . . . . .							fv	Ref
	271792	Installation - Landing flares (N.P.) . . . . .							fv	1
	SA8	Flare - Wiley (Pioneer) (601002) . . . . .							fv	2
	278681	Installation - Very pistol holster and signal flare container (N.P.) . . . . .							ga	1
	278717	Holder Assembly - Very pistol . . . . .							fv	1
	42H11969	Container Assembly - Signal flare . . . . .							fv	1
	292005	Installation - Very pistol holster and signal flare container (N.P.) . . . . .							fw-du	Ref
		(Components are same as 278681) (See figure 1 for using assembly)								
	265843	Structure Assembly - Fuselage front section (See figure 1 for using assembly) . . . . .							dy	Ref
	274755	Installation - MI Pistol mount (N.P.) . . . . .							fv	1
12	274756	Adapter Assembly - AN-M8 pistol and MI mount . . . . .							fv	1
13	274759-2	Door Assembly - Pistol mount yoke . . . . .							fv	1
14	279745-3	Pin - Pistol mount . . . . .							fv	1
15	277686	Sleeve - Pistol mount . . . . .							fv	2
16	274765	Spring - Adapter hinge . . . . .							fv	1
17	274759-10	Base Assembly - Pistol mount . . . . .							fv	1
18	NAS200-632-14	Screw - Flush head 100° countersunk, Phillips head . . . . .							fv	4
	AN364-632	Nut - Self-locking, thin . . . . .							fv	4
19	274779	Block - Self-retainer . . . . .							fv	1
20	274780	Seal - Porthole door . . . . .							fv	1
21	274778	Door - Pistol porthole . . . . .							fv	1
22	274759-6	Arm Assembly - Pistol mount . . . . .							fv	1
23	279839	Spring - Lever . . . . .							fv	1
24	279745-4	Pin - Pistol mount . . . . .							fv	1
25	274764	Lever Assembly - Pistol mount . . . . .							fv	1
26	279837	Spring - Pistol mount door hinge . . . . .							fv	1
27	274760	Catch Assembly - Pistol mount . . . . .							fv	1
28	279745-2	Pin - Pistol mount . . . . .							fv	1
29	LS576-9	Screw - 100° Countersunk head . . . . .							fv	10
30	279852	Spacer - Pistol mount . . . . .							fv	2
31	279814	Plate - Pistol mount tap . . . . .							fv	2
32	H42B10666	Mount - MI Pistol . . . . .							fv	1
	AN-M8	Pistol - Signal flare (See loose equipment list) . . . . .							fv	Ref

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GROUP . . . . Navigational Equipment

Detail Unit . . . Radio Operator's Equipment (Serials CE-DU)

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NAVIGATIONAL  
EQUIPMENT

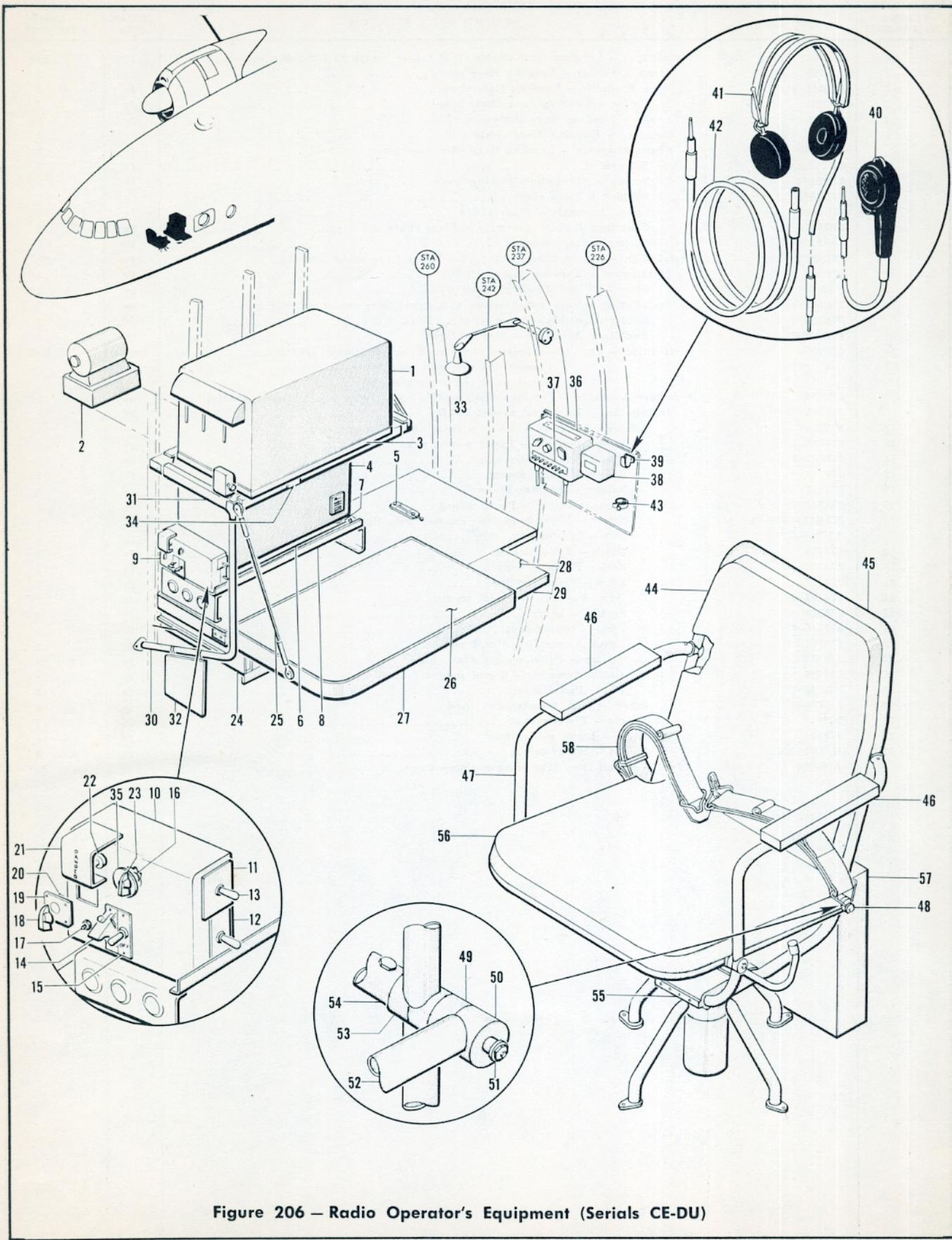


Figure 206 – Radio Operator's Equipment (Serials CE-DU)

## GROUP . . . Navigational Equipment

## Detail Unit . . . Radio Operator's Equipment (Serial CE-DU)

*Constellation*

NAVIGATIONAL EQUIPMENT

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.
	291095		Installation - Radio equipment - TWA (N.P.) (See figure 1 for using assembly) . . .	bq	Ref
	291270		Installation - Baggage blister radio modification (N.P.) . . . (See figure 1 for using assembly)	dx	Ref
	293060		Installation - TWA (-25) Speedpalk radio modification (N.P.) . . . (See figure 1 for using assembly)	bm	Ref
	291554		Installation - Radio Equipment - PAA (N.P.) (See figure 1 for using assembly) . . .	bt-bw	Ref
	292721		Installation - Radio Equipment - KLM (N.P.) (See figure 1 for using assembly) . . .	bv	Ref
	286087		Installation - ATC Equipment (N.P.) (See figure 1 for using assembly) . . .	bu-du	Ref
	284789		Installation - Radio operator's station (N.P.) . . .	fz	1
206 - 1	T47A/ART13		Transmitter - Radio . . .	fz	1
	No Number		Handbook - Calibration . . .	fz	1
2	DM28( )		Dynamotor . . .	fz	1
3	T284/ART13		Mounting Base - Transmitter . . .	fz	1
4	BC348E		Receiver . . .	fz	1
5	J37		Key . . .	fz	1
6	FT154( )		Mounting - Receiver . . .	fz	1
7	FT167		Mounting Plate - Receiver . . .	fz	1
	1-21961-1		Terminal Hood (Premier Rubber Co.) . . .	fz	1
8	284789-38		Pan Assembly - Receiver mounting . . .	fz	1
9	284789-41		Box Assembly - Operator's control . . .	fz	1
10	284789-42		Box - Control . . .	fz	1
11	284789-45		Nameplate - Monitor switch . . .	fz	1
12	284789-46		Nameplate - Desk light . . .	fz	1
13	AN3023-3		Switch - 3 Hole mounting double pole toggle . . .	fz	1
14	AN3022-2		Switch - 3 Hole mounting single pole toggle . . .	fz	3
15	284789-44		Nameplate - I.F.F. . .	fz	1
16	0151H		Rheostat - 100 Ohm - Less knob (Ohmite) (612113-2) . . .	fz	1
17	SC1		Jack - Phone . . .	ge-du	1
18	SCS2Z5822-22		Knob - Switch . . .	ge-du	1
19	284789-72		Plate - Escutcheon . . .	ge-du	1
20	SCS3Z9825-22		Switch - Operator's control box . . .	ge-du	1
21	284789-43		Guard - Push button switch . . .	ge-du	1
22	SW180		Switch - Push button (Signal Corps Reference No.) . . .	ge-du	2
23	AN3220-1		Knob - Rheostat . . .	fz	1
24	284789-66		Drawer Assembly - Radio operator's . . .	fz	1
25	284789-74		Support Assembly - Radio operator's table leaf . . .	fz	1
	284789-79		Support $\frac{1}{16}$ Diameter by 135 inches long 7x7) (Preformed Steel Cable) . . .	fz	1
26	284789-3		Table Top - Leaf assembly . . .	fz	1
27	284789-29		Leaf Assembly - Table . . .	fz	1
28	284789-2		Shelf Top - Radio operator's table . . .	fz	1
29	284789-10		Shelf Assembly - Main . . .	fz	1
30	284789-4		Support Assembly - Main shelf . . .	fz	1
31	284789-50		Shelf Assembly - Top . . .	fz	1
32	Type A2		Holder - Flight report (Air Associates) (640017) . . .	fz	1
	284789-76		Mounting Panel . . .	fz	1
33	26K0077-4		Light - Radio operator's overhead (Bardwell & McAllister) (610022-2) . . .	fz	1
34	236087		Plate - Radio call . . .	fz	1
35	288272		Nameplate - Desk light . . .	fz	1
	T47A/ART13		Transmitter - Radio (CFE) (Same as index No. 1) . . .	bs-dx	1
	No Number		Handbook - Calibration (CFE) . . .	bs-dx	1
	DM28( )		Dynamotor (CFE) (Same as index No. 2) . . .	bs-dx	1
	MT284/ART13		Mounting Base + Transmitter (CFE) (Same as index No. 3) . . .	bs-dx	1
	BC348E		Receiver (CFE) (Same as index No. 4) . . .	bs-dx	1
	J37		Key (CFE) (Same as index No. 5) . . .	bs-dx	1
	FT154( )		Mounting - Receiver (CFE) (Same as index No. 6) . . .	bs-dx	1
	FT167		Mounting Plate - Receiver (CFE) (Same as index No. 7) . . .	bs-dx	1
	1-21961-1		Terminal Hood (Premier Rubber Co.) (CFE) . . .	bs-dx	1

(Continued on next page)

## GROUP . . . Navigational Equipment

## Detail Unit . . . Radio Operator's Equipment (Serial CE-DU) (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.
				bq-sss	1
	284789-38		Pan Assembly - Receiver mounting (Same as index No. 8)	bq	1
	284789-41		Box Assembly - Operator's control (Same as index No. 9)	sss	1
	291578-2		Box Assembly - Operator's control	bq	1
	284789-42		Box - Control (Same as index No. 10)	sss	1
	291578-3		Box - Control	bq-sss	1
	284789-45		Nameplate - Monitor switch (Same as index No. 11)	bq-sss	1
	284789-46		Nameplate - Desk light (Same as index No. 12)	bq-sss	1
	AN3023-3		Switch - 3 Hole mounting double pole toggle (Same as index No. 13)	bq-sss	1
	AN3022-2		Switch - 3 Hole mounting single pole toggle (Same as index No. 14)	bq-sss	3
	284789-44		Nameplate - I.F.F. (Same as index No. 15)	bq	1
	0151H		Rheostat - 100 Ohm - Less knob (Ohmite) (612113-2)	bq-sss	1
			(Same as index No. 16)		
	SC1		Jack - Phone (Same as index No. 17)	bq	1
	SCS2Z5822-22		Knob - Switch (Same as index No. 18)	bq	1
	284789-72		Plate - Escutcheon (Same as index No. 19)	bq	1
	SCS3Z9825-22		Switch - Operator's control box (Same as index No. 20)	bq	1
	284789-43		Guard - Push button switch (Same as index No. 21)	bq	1
	SW180		Switch - Push button (Signal Corps Reference No.)	bq	2
			(Same as index No. 22)		
	AN3220-1		Knob - Rheostat (Same as index No. 23)	bq-sss	1
	284789-66		Drawer Assembly - Radio operator's (Same as index No. 24)	bq-sss	1
	284789-74		Support Assembly - Radio operator's table leaf (Same as index No. 25)	bq-sss	1
	284789-79		Support (1/16 Diameter by 135 inches long 7x7) (Preformed Steel Cable)	bq-sss	1
	291092-3		Leaf Assembly - Radio operator's table	bq-sss	1
	284789-3		Table Top - Leaf assembly (Same as index No. 26)	bq-sss	1
	284789-29		Leaf Assembly - Table (Same as index No. 27)	bq-sss	1
	291092-2		Shelf Assembly - Radio operator's table	bq-sss	1
	284789-2		Shelf Top - Radio operator's table (Same as index No. 28)	bq-sss	1
	284789-10		Shelf Assembly - Main (Same as index No. 29)	bq-sss	1
	284789-4		Support Assembly - Main shelf (Same as index No. 30)	bq-sss	1
	284789-50		Shelf Assembly - Top (Same as index No. 31)	bq-sss	1
	291092-4		Box Assembly - Radio operator's switch	bq-sss	1
	Type A2		Holder - Flight report (Air Associates) (640017) (Same as index No. 32)	bq-sss	1
	284789-76		Mounting Panel	bq-sss	1
	26K00077-4		Light - Radio operator's overhead (Bardwell & McAllister (610022-2)	bq-sss	1
			(Same as index No. 33)		
	291092		Installation - Radio operator's table (N.P.)	bq-sss	1
	236087		Plate - Radio call (Same as index No. 34)	bq-sss	1
	288272		Nameplate - Desk light (Same as index No. 35)	bq-sss	1
	286632		Installation - Radio operator's station interphone (N.P.)	ce-du	1
206 - 36	C-166( )/A1C-3		Control Unit - Interphone	ce-du	1
37	290872		Nameplate - Identification	ce-du	1
38	F21/ARA9		Filter - Interphone	ce-du	1
39	271086-3		Hook - Microphone	ce-du	1
40	T-17		Microphone	ce-du	1
41	HS-33		Headset	ce-du	1
42	CD307-72		Cord - Extension	ce-du	1
43	167169-2		Clip - Headset	ce-du	1
	285584		Installation - Radio operator's chair (N.P.)	ce-du	1
	175-2AS1		Seat Assembly (Warren McArthur) (640038)	ce-du	1
44	175AS5		Back Cushion Assembly	ce-du	1
45	175-1		Tube - Back	ce-du	1
46	163AS20		Arm Bracket Assembly	ce-du	2
	163-9		Support - Arm	ce-du	2
	163-13		Filler - Rubberized hair	ce-du	2
	163-71		Cover - Green	ce-du	2
47	175-2		Tube - Side (LH and RH)	ce-du	2
48	175-2AS3		Joint Assembly (LH and RH)	ce-du	2

(Continued on next page)

## GROUP . . . Navigational Equipment

## Detail Unit . . . Radio Operator's Equipment (Serial CE-DU) (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.
49	175-15							Washer (LH and RH) .....		ce-du	2
50	175-17							Washer (LH and RH) .....		ce-du	2
51	163-55							Washer .....		ce-du	2
	191-18							Washer Tube .....		ce-du	4
	175-14							Washer Plug .....		ce-du	2
	175-6							Washer + Front seal (LH and RH) .....		ce-du	2
52	175-2-5							Tube - Seat frame .....		ce-du	1
53	175-2-6							Plug - Washer .....		ce-du	2
54	175-2-2							Tube - Seat stretcher .....		ce-du	1
	42D10-D48							Nut - Elastic spline .....		ce-du	2
	175-11							Washer + Seat .....		ce-du	2
55	174-2AS2							Lock Assembly - Base and swivel .....		ce-du	1
	175-2AS4							Handle Assembly - Lock .....		ce-du	1
	WM21							Knob - Handle .....		ce-du	1
	175AS8							Base Plate Assembly .....		ce-du	1
	163AS4							Hold Down Assembly .....		ce-du	1
	250-14							Spring - Swivel lock .....		ce-du	1
	163-31							Pin - Lock .....		ce-du	1
	163-32							Lift Arm - Lock .....		ce-du	1
56	175AS7							Seat Cushion Assembly (N.P.) .....		ce-du	1
	175-19							Filler - Seat cushion .....		ce-du	1
	175-24							Cover - Seat cushion .....		ce-du	1
	163-45							Crab Assembly .....		ce-du	1
57	270081							Receptacle Assembly - Navigator's waste .....		ce-du	1
58	Type B-14							Belt - Safety (AC Spec. 3067-A) .....		ce-du	1

NAVIGATIONAL  
EQUIPMENT

GROUP . . . . Navigational Equipment  
Detail Unit . . . Radio Operator's Equipment (Serial BX)

*Constellation*

EQUIPMENT

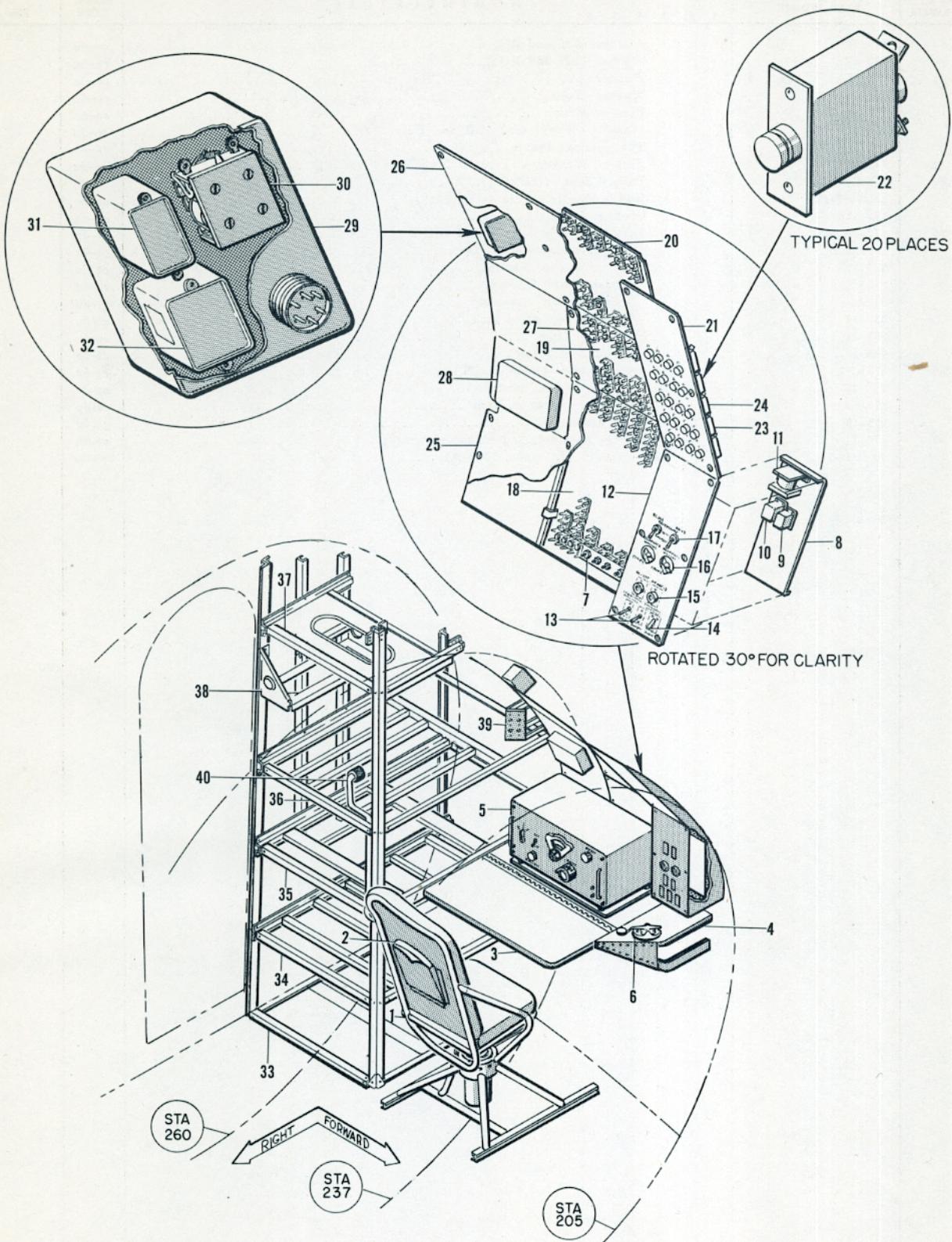


Figure 207 — Radio Operator's Equipment (Serial BX)

## GROUP . . . Navigational Equipment

## Detail Unit . . . Radio Operator's Equipment—(Serial BX)

*Constellation*

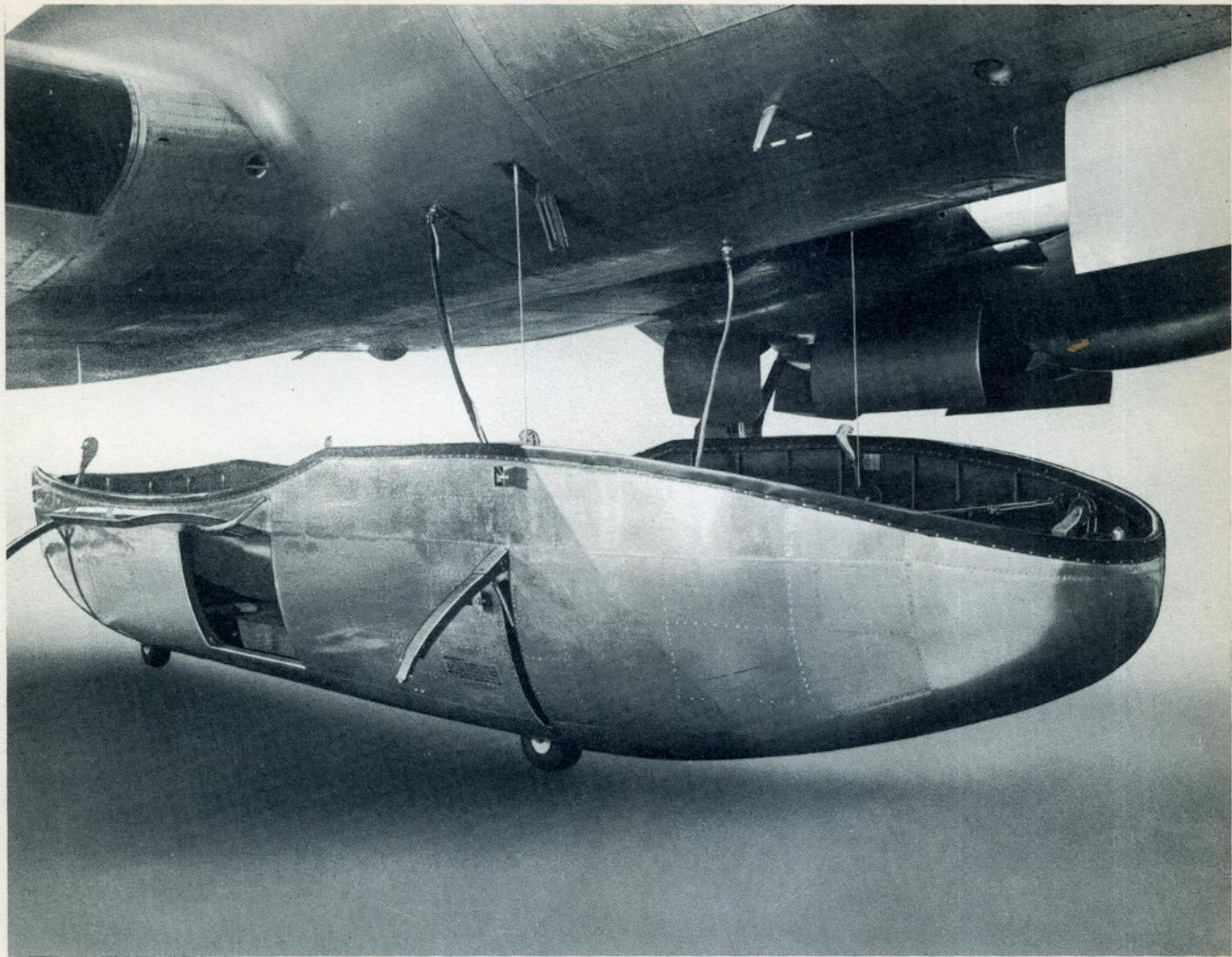
FIGURE & INDEX NUMBER	PART NUMBER		N O M E N C L A T U R E						SERIAL CODE	UNITS PER ASSY.
			1	2	3	4	5	6		
207 - 1	292943	Installation - Radio equipment (N.P.) (See figure 1 for using assembly)							bx	Ref
	292936	Installation - Radio operator's station (N.P.)							bx	1
	292948	Installation - Radio operator's chair and rack supports (N.P.)							bx	1
	337	Chair Assembly - Radio operator's (Warren McArthur) (640151-3)							bx	1
	337AS117	Cushion Assembly - Back							bx	1
	337AS103	Cover - Back slip							bx	1
	337AS118	Cushion - Seat							bx	1
	337AS107	Cover - Seat slip							bx	1
	290-1AS6-1	Safety Belt Assembly							bx	1
	337AS2	Seat Assembly - Upper							bx	1
	163-16	Clamp - Crab							bx	2
	163-32	Arm - Swivel lock lift							bx	1
	163-34	Spring - Swivel lock pin							bx	1
	163-45	Rod - Crab front							bx	2
	175-11	Washer							bx	4
	191-18	Washer							bx	2
	292894-3	Track - Chair assembly							bx	1
2	268784	Container Assembly - Message							bx	2
	270349	Spring - Message container assembly							bx	1
3	292935-2	Installation - Radio operator's table (N.P.)							bx	1
4	292935-29	Shelf Assembly - Front							bx	1
	292935-3	Shelf Top							bx	1
	FT154J	Shelf Assembly - Back							bx	1
5	BC348( )	Mounting - BC348 Radio receiver							bx	1
6	H39B3362	Receiver - Radio (CFE)							bx	1
	292982	Key - Radio operator's (Type J37)							bx	1
	BC979-T2	Installation - BC979-T2 Control unit (N.P.)							eo	1
	293544	Control Unit - Antenna							eo	1
	292945	Installation - Radio junction box and equipment (N.P.)							bx	1
7	293542-10	Installation - Main radio junction box structure							bx	1
	293546-2	Panel Assembly - Radio junction box lower							bx	1
	293546-3	Terminal Assembly							bx	1
8	293542-8	Insulator							bx	1
9	1016	Panel Assembly							bx	1
10	AN3320-1	Relay (Leach Relay Co.) (612595)							bx	1
11	B6B	Relay							bx	1
12	292978-4	Relay (Spec. 94-32352B)							bx	1
	708	Panel Assembly - Lower circuit breaker							bx	1
	AN3121-313	Socket - Dial light (Dial Light Co.) (610066)							bx	1
13	AN3022-2	Bulb - Light							bx	2
14	D6364-1-120	Switch - Three hole mounting single pole toggle							bx	1
15	D6750-2-50	Switch (Interrupteur se cour) (Spencer Thermostat Co.) (612458-11)							bx	2
	16	Circuit Breaker (BC375 and AN/ART-13) (Spencer Thermostat Co.) (612600-9)							bx	1
	0149 (50 ohm)	Rheostat - Model H - Type 352 (Ohmite) (612109-4)							bx	2
	AN3027-3	Switch - One hole mounting double pole toggle							bx	2
18	293542-6	Panel Assembly - Lower connector							bx	1
19	293542-4	Panel Assembly - Center connector							bx	1
20	293542-2	Panel Assembly - Upper connector							bx	1
21	292978-5	Panel Assembly - Upper circuit breaker							bx	1
	708	Socket - Dial light (Dial Light Co.) (610066)							bx	1
	AN3121-313	Bulb - Light							bx	1
22	D6751-1-5	Circuit Breaker (Spencer Thermostat Co.) (612586-2)							bx	18
23	D6751-1-10	Circuit Breaker (Haut Parleur Amplifier) (Spencer Thermostat Co.) (612586-5)							bx	1
24	D6751-1-25	Circuit Breaker (Commandement ARC-1) (Spencer Thermostat Co.) (612586-8)							bx	1
25	293548	Cover Assembly - Main radio junction box lower							bx	1
26	293549	Cover Assembly - Main radio junction box upper							bx	1
27	293547	Cover Assembly - Main radio junction box middle							bx	1
	293550	Bracket Assembly - Relay box (Air France)							bx	1
	293545	Support Assembly - Radio and interphone control panel							bx	1
	F21/ARA9	Filter							bx	1
28	MN67A	Relay (Bendix Radio Corp.) (612636)							bx	1
29	C166/A1C-3	Control Box - Radio operator's interphone							bx	1
	292959	Box Equipment Assembly - Interphone relay							bx	1
	292959-2	Box Assembly - Relay (1364-116-4N) (Poulson and Nardon)							bx	1
	BW1	Resistor - 1 Watt 100 ohm (International Resistance Co.)							bx	1
	BT1 (27000 OHM)	Resistor - 1 Watt 27,000 ohm (International Resistance Co.)							bx	2
	BT1 (3900 OHM)	Resistor - 1 Watt 3900 ohm (International Resistance Co.)							bx	1
30	292959-4	Cover Assembly - Interphone relay box							bx	1
	1027	Relay - Type de (Leach Relay Co.) (612637)							bx	1
	AN3102-16S-1D	Receptacle							bx	1
31	BS39	Condenser (R. R. Mallory)							bx	1
32	DA4100	Capacitor (Cornell Dubilier Electric Co.)							bx	1
	292934	Installation - Radio operator's rack (N.P.)							bx	1
	292975	Installation - Floor shelf (N.P.)							bx	1
34	292964	First Shelf Assembly							bx	1
35	292965	Second Shelf Assembly							bx	1
36	293137	Third Shelf Assembly							bx	1
37	292967	Top Shelf Assembly							bx	1
	MN62A	Receiver - Compass (Bendix Radio Corp.) (616036)							bx	1
38	292966	Sub Shelf Assembly							bx	1
	292942	Installation - Antenna transfer switch (N.P.)							bx	1
39	292942-8	Switch Assembly - Antenna transfer							bx	1
	4469	Jack Assembly - Antenna transfer switch (Bendix Aviation)							bx	4
	B-RL2	(2 Red and 2 black)							bx	1
	292973	Microswitch (Microswitch Corp.) (612655)							bx	1
	292970	Nameplate - Antenna transfer switch							bx	1
	AN3047-2	Plug Assembly - Antenna transfer switch							bx	1
	292944	Light Assembly - Work table							bx	1
40	29293-4	Installation - Radio and interphone equipment wiring (N.P.)							bx	1
	292991-3	Harness Assembly - BC375E Transmitter							bx	1
	292989-2	Harness Assembly - Altimeter transceiver to M.R.J.B.							bx	1
	294127	Harness Assembly - BC348 Receiver to M.R.J.B.							bx	1
	AN/CRT3	Installation - Emergency radio transmitter (N.P.) (See figure 1 for using assembly)							bx	1
		Radio Transmitter - Emergency (CFE) (Stowed in coat closet)							bx	1

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Notes

*Constellation*

*Constellation*



# *Constellation Cargo Speedpak*

*Section Four*

GROUP . . . Speedpak

Detail Unit . . . Fuselage Structure Provisions

*Constellation*

SPEEDPAK

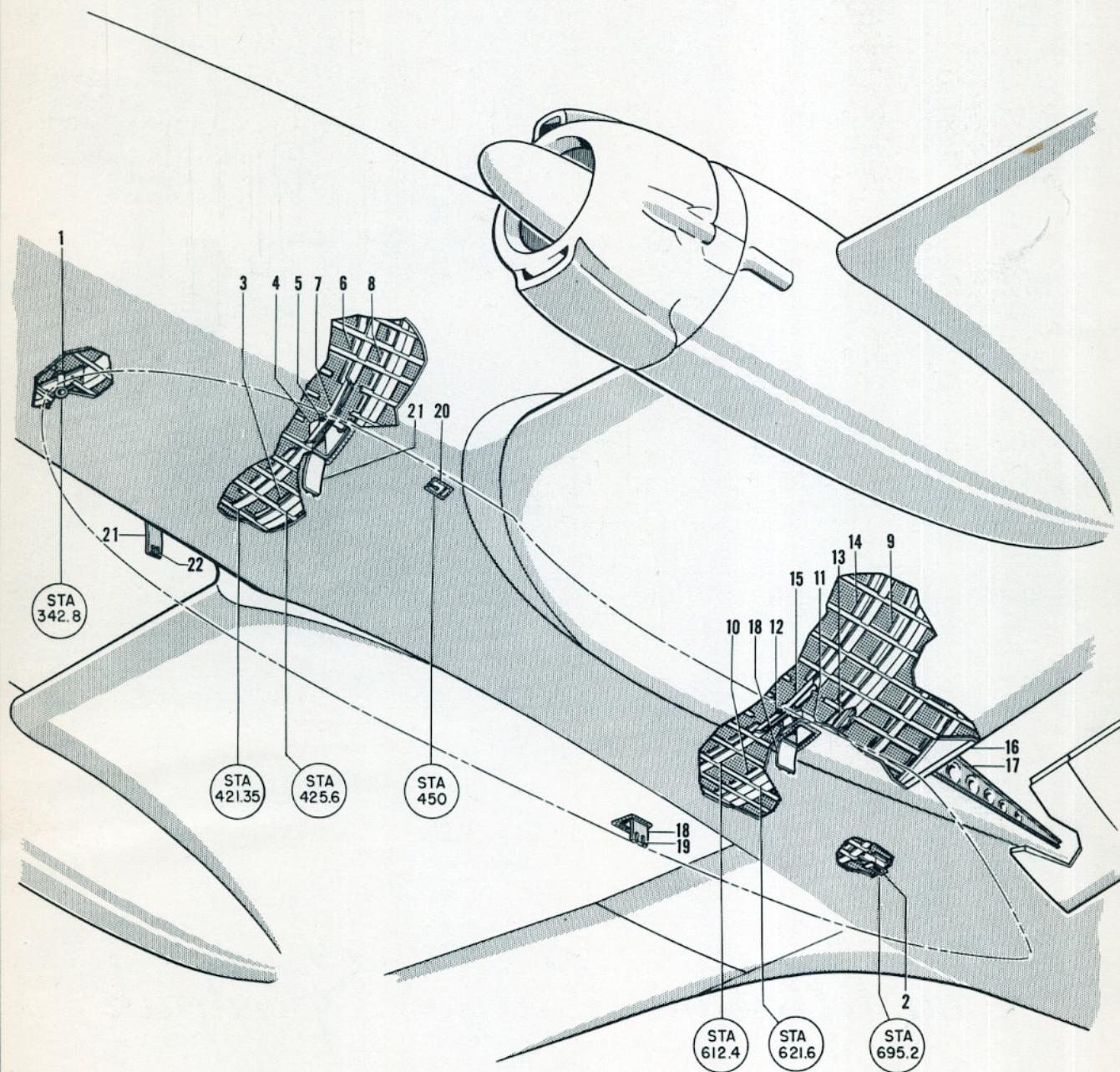


Figure 208 — Fuselage Structure Provisions

Reissued July 1947

LOCKHEED AIRCRAFT CORPORATION

## GROUP . . . Speedpak

## Detail Unit . . . Fuselage Structure Provisions

*Constellation*

FIGURE & INDEX NUMBER	PART NUMBER		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		
	49B200	Fuselage Structure Provisions (NP) . . .							*	Ref
	293404	Installation - Speedpak structure provisions . . .							***	Ref
	293867	Installation - Forward socket, station 342.8 (NP) . . .							*	Ref
208 - 1	293865	Socket Assembly - Station 342.8 . . .							*	1
	293868	Installation - Aft socket, station 695.2 (NP) . . .							*	Ref
2	293866	Socket Assembly - Station 695.2 . . .							*	1
	49B199	Installation - Fuselage Speedpak attaching structure-forward (NP) . . .							*	Ref
	49B61	Bulkhead Assembly - Station 425.6 (NP) . . .							**	Ref
	292369	Installation - Segments, station 425.6 (NP) . . .							***	Ref
3	49B61-4L	Bulkhead Section - Station 425.6 . . .							**	1
	49B61-4R	Bulkhead Section - Station 425.6 . . .							**	1
	292369-7L	Segment - Bulkhead, station 425.6 . . .							***	1
	292369-7R	Segment - Bulkhead, station 425.6 . . .							***	1
4	293069	Box Assembly - Forward attachment . . .							*	2
5	292370	Spindle - Forward attachment . . .							*	2
6	291340-2	Segment - Bulkhead reinforcement, station 421.35 LH . . .							*	1
	291340-3	Segment - Bulkhead reinforcement, station 421.35 RH . . .							*	1
7	291341-2	Fitting - Attaching bulkheads, stations 421.35 and 425.6 . . .							*	4
8	291427L	Segment - Bulkhead reinforcement, station 425.6 . . .							*	1
	291427R	Segment - Bulkhead reinforcement, station 425.6 . . .							*	1
	49B79	Bulkhead Assembly - Station 621.6 . . .							**	Ref
	291342	Installation - Segments, station 621.6 . . .							***	Ref
9	49B76L	Segment - Bulkhead reinforcement, station 621.6 . . .							**	1
	49B76R	Segment - Bulkhead reinforcement, station 621.6 . . .							**	1
	291342-6	Segment - Bulkhead reinforcement, station 621.6 LH . . .							***	1
	291342-5	Segment - Bulkhead reinforcement, station 621.6 RH . . .							***	1
10	49B77L	Segment - Bulkhead reinforcement, station 621.6 . . .							**	1
	49B77R	Segment - Bulkhead reinforcement, station 621.6 . . .							**	1
	291342-7	Segment - Bulkhead, station 621.6 . . .							***	1
11	289902L	Box Assembly - Aft attachment . . .							*	1
	289902R	Box Assembly - Aft attachment . . .							*	1
12	292284	Spindle Assembly - Aft attachment . . .							*	2
	292808	Stud - Aft spindle . . .							*	2
13	291341-2	Fitting - Bulkhead, station 621.6 . . .							*	2
14	49B78L	Segment - Bulkhead reinforcement, station 612.4 . . .							**	1
	49B78R	Segment - Bulkhead reinforcement, station 612.4 . . .							**	1
	291342-2	Segment - Bulkhead, station 612.4 LH . . .							***	1
	291342-4	Segment - Bulkhead, station 612.4 RH . . .							***	1
	291342-3	Segment - Bulkhead, station 612.4 . . .							***	1
15	291341-3	Fitting - Bulkhead, station 612.4 . . .							*	2
16	288894L	Installation - Wing stub inboard bulkhead, fuselage station 638.125 . . .							*	1
	288894R	Installation - Wing stub inboard bulkhead, fuselage station 638.125 . . .							*	1
17	291683	Fillet Beam - Fuselage station 638.125 to 695.2 LH & RH . . .							*	2
	49B105L	Installation - Wing stub trailing edge lower forward skin . . .							**	Ref
	49B105R	Installation - Wing stub trailing edge lower forward skin . . .							**	Ref
	288662L	Installation - Wing stub trailing edge lower forward skin . . .							***	Ref
	288662R	Installation - Wing stub trailing edge lower forward skin . . .							***	Ref
18	49B106-6	Cover Assembly - Aft attachment, station 621.6 . . .							**	1
	292139	Cover Assembly - Aft attachment, station 621.6 . . .							***	1
	293599	Spring - Cover . . .							*	2
19	H4600-032-.064	Latch - Cover (Hartwell) . . .							*	2
20	49B81	Installation - Electrical outlet, station 450 . . .							****	1
	49B81-4	Door - Electrical outlet . . .							****	1
	AN3102-32PR6T	Receptacle - Electrical outlet . . .							****	1
	49B81-2	Box - Electrical outlet . . .							****	1
	H4600-051-.115	Latch - Electrical outlet door . . .							****	1
	49B82	Installation - Forward attachment door, station 425.6 . . .							**	Ref
	290449	Installation - Forward attachment door, station 425.6 . . .							**	Ref
21	49B82-8	Door Assembly - Forward attachment . . .							**	2
	290449-7	Door Assembly - Forward attachment . . .							**	2
	49B82-4	Door - Forward attachment . . .							**	1
	290449-4	Door - Forward attachment . . .							**	1
22	H4600-051-.091	Latch - Door (Hartwell) . . .							**	1
	H4600-072-.072	Latch - Door (Hartwell) . . .							**	1
	292402	Spring - Door . . .							*	2
	49B82-5	Hinge - Door half . . .							**	1
	49B82-9	Hinge - Door half . . .							**	1
	*	Serials 1975 and up.								
	**	Serials 1975 thru 2088.								
	***	Serials 2501 and up.								
	****	See Electrical Installations for Customer Variations.								

GROUP . . . Speedpak  
Detail Unit . . . Speedpak Index

# Constellation

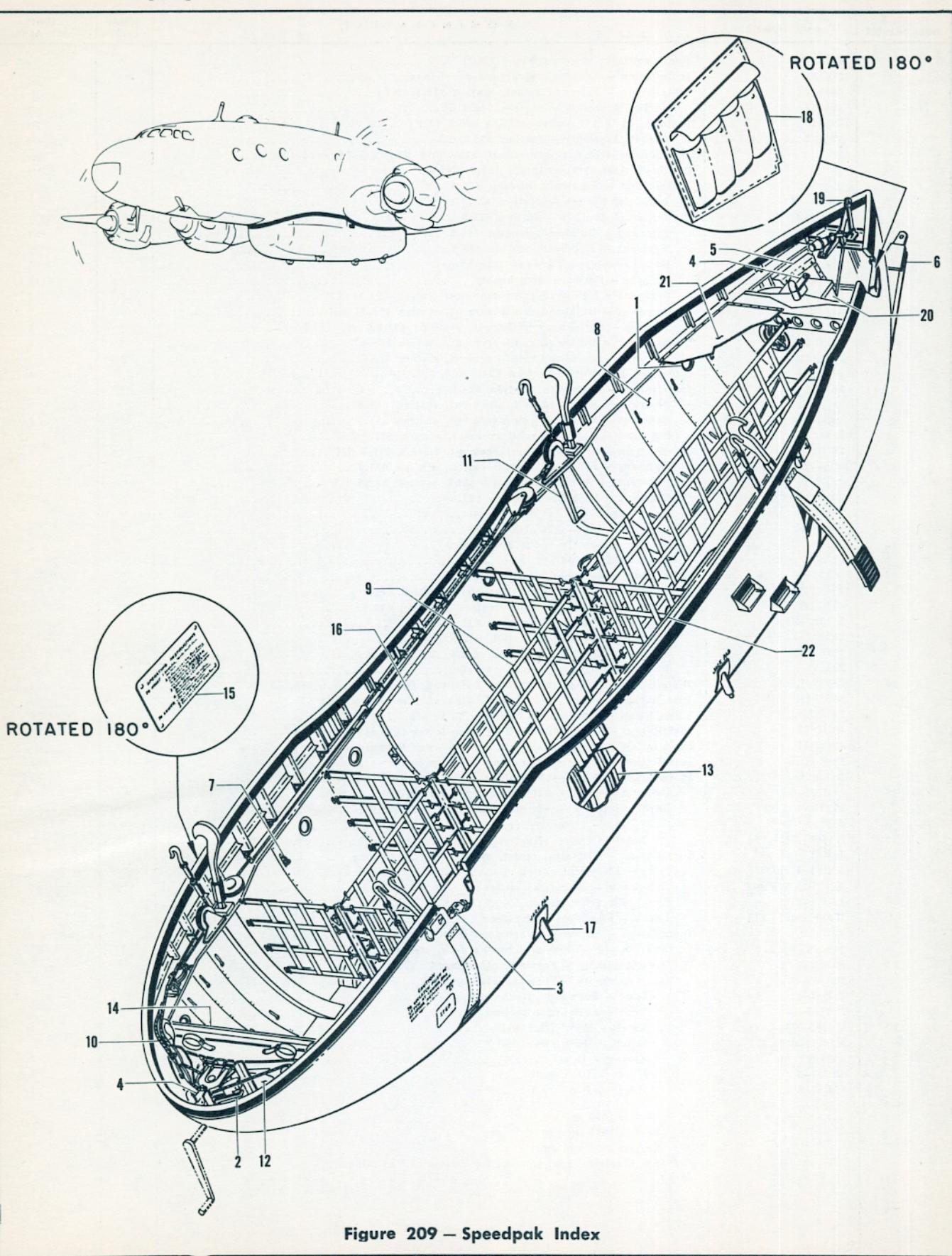


Figure 209 — Speedpak Index

GROUP . . . Speedpak  
Detail Unit . . . Speedpak Index

*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	UNITS
				CODE	PER ASSY.
209 - 1	49B319		Speedpak - Final installation (NP) .....	all	1
	49B80		Installation - Speedpak electrical equipment (NP) .....	all	1
			(See figure 216 for detailed illustration)		
2	49B312		Installation - Down limit switch assembly (NP) .....	all	1
			(See figure 216 for detailed illustration)		
3	49B165		Installation - Recognition light (NP) .....	all	1
			(See figure 216 for detailed illustration)		
4	49B135		Installation - Speedpak limit switches (NP) .....	all	2
			(See figure 216 for detailed illustration)		
	49B180		Installation - Speedpak wiring (NP) (No spares included) .....	all	1
	49B311		Installation - Speedpak wire clipping (NP) (No spares included) .....	all	1
	49B318L		Installation - Hook safety switch conduit (NP) (No spares included) .....	all	1
	49B318R		Installation - Hook safety switch conduit (NP) (No spares included) .....	all	1
5	49B247		Holder - Electric harness .....	all	1
6	49B39		Tow Bar - Panhier (See figure 228 for detailed illustration) .....	all	1
7	49B331		Installation - Cargo tie down rings (NP) .....	all	1
			(See figure 214 for detailed illustration)		
8	49B332		Installation - Baggage liners (NP) (See figure 214 for detailed illustration) .....	all	1
9	49B330		Installation - Baggage compartmentation (NP) .....	all	1
			(See figure 214 for detailed illustration)		
10	49B62		Installation - Hoisting system (NP) (See figure 213 for detailed illustration) .....	all	1
	49B258		Installation - Hoisting drum cable guides (NP) .....	all	1
			(See figure 213 for detailed illustration)		
	49B253-3		Installation - Hand crank support (NP) (See figure 213 for detailed illustration) .....	all	1
11	49B87		Installation - Hand crank hoist (NP) (Stowed position) .....	all	1
			(See figure 213 for detailed illustration)		
12	49B298		Installation and Details - CO <sub>2</sub> Bottle (NP) .....	all	1
			(See figure 215 for detailed illustration)		
	49B313		Installation - CO <sub>2</sub> System (NP) (See figure 215 for detailed illustration) .....	all	1
13	49B31		Structure Assembly - Speedpak (See figure 210 for detailed illustration) .....	all	1
	49B181		Cover Assembly - Hoist mechanism (See figure 210 for detailed illustration) .....	all	1
14	49B219		Installation - Assembly and details, bulkhead panel station 371 (NP) .....	all	1
			(See figure 210 for detailed illustration)		
	49B48		Skin Diagram (NP) (No spares included) .....	all	1
	49B269		Insulation - Firewall bulkhead station 693 (NP) .....	all	1
			(See figure 210 for detailed illustration)		
	49B224		Cover - Heater compartment (See figure 210 for detailed illustration) .....	all	1
15	49B229		Nameplate - Operating instructions .....	all	1
	49B6		Installation - Speedpak door (NP) (See figure 212 for detailed illustration) .....	all	1
16	(10)49B6		Door Assembly - Speedpak (Production Illustration) .....	all	1
			(See figure 212 for detailed illustration)		
	49B97		Installation - Jack pad (NP) .....	all	4
17	49B96		Pad - Jack .....	all	1
	49B274		Plug - Jack pad attaching holes .....	all	16
18	49B273		Holder - Jack pad stowage .....	all	1
	AN7510-1		Nameplate - Airplane identification .....	all	1
19	49B114		Lever Assembly - Brake (See figure 211 for detailed illustration) .....	all	1
	49B63		Installation - Brake cable (NP) (No spares included) .....	all	1
20	49B132		Installation - Heater and fire detector (NP) .....	all	1
			(See figure 215 for detailed illustration)		
	49B324		Installation - Speedpak cover (NP) .....	all	1
21	49B324-9		Cover Assembly - Speedpak .....	all	1
22	49B133		Installation - Hot air duct (NP) (See figure 215 for detailed illustration) .....	all	1
	49B270		Insulation - Hot air duct (NP) (No spares included) .....	all	1

SPEEDPAK

GROUP . . . Speedpak  
Detail Unit . . . Structure

# Constellation

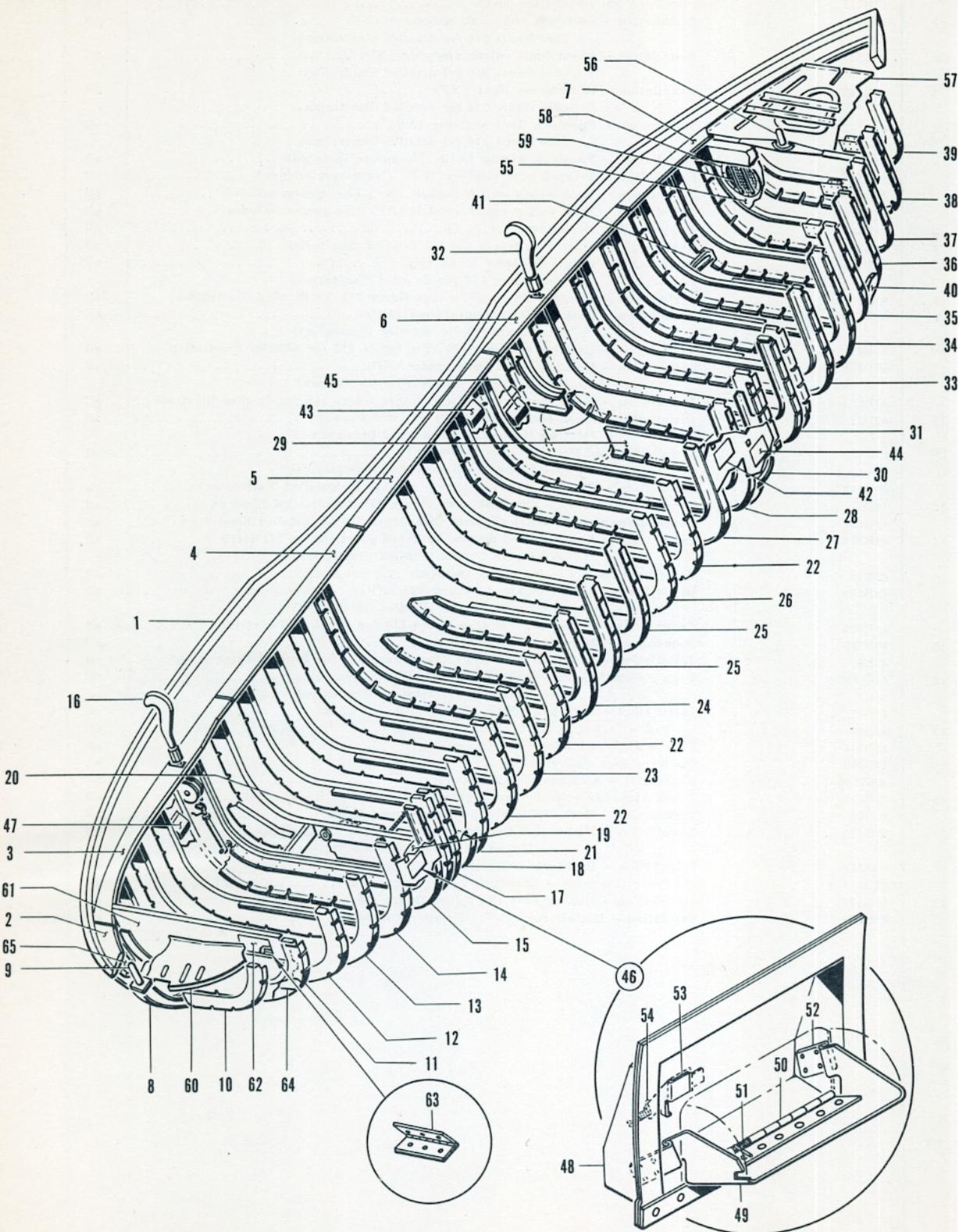


Figure 210 – Structure

## GROUP . . . Speedpak

## Detail Unit . . . Structure

*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.
210 - 1	49B31		Structure Assembly - Speedpak (See figure 209 for using assembly)	all	Ref
	49B58		Channel Assembly - Rubber seal	all	1
2	49B3		Longeron Assembly - Speedpak	all	1
	49B3-2		Channel + Longeron	all	1
	49B3-3L		Channel + Longeron	all	1
3	49B3-3R		Channel + Longeron	all	1
	49B3-4L		Channel + Longeron	all	1
4	49B3-4R		Channel + Longeron	all	1
	49B3-24L		Channel + Longeron	all	1
5	49B3-24R		Channel + Longeron	all	1
	49B3-5L		Channel + Longeron	all	1
6	49B3-5R		Channel + Longeron	all	1
	49B3-6L		Channel + Longeron	all	1
7	49B3-6R		Channel + Longeron	all	1
8	49B56		Channel Assembly - Nose section former	all	1
9	49B93		Pin Assembly - Forward speedpak locating	all	1
10	49B7-2		Segment Assembly - Station 356.5	all	1
11	49B219-2		Bulkhead Panel Assembly - Station 371	all	1
12	49B17-3		Bulkhead Assembly - Station 385.5	all	1
13	49B17-4		Bulkhead Assembly - Station 400	all	1
14	49B17-5		Bulkhead Assembly - Station 411.4	all	1
15	49B25-19		Bulkhead Assembly - Speedpak hook stations 422.91-425.79	all	1
	49B24-48L		Hook Mechanism Assembly - Speedpak attaching, forward (See figure 212 for detailed illustration)	all	1
16	49B24-48R		Hook Mechanism Assembly - Speedpak attaching, forward (See figure 212 for detailed illustration)	all	1
17	49B18-3		Segment Assembly - Station 430.5	all	1
18	49B26		Ring Assembly - Partial, station 437.5	all	1
19	49B15L		Wheel Assembly - Front (See figure 211 for detailed illustration)	all	1
	49B15R		Wheel Assembly - Front (See figure 211 for detailed illustration)	all	1
20	49B49		Brake Assembly - Front wheel (See figure 211 for detailed illustration)	all	1
21	49B18-2		Segment Assembly - Station 445	all	1
22	49B5-2		Ring Assembly - Bulkhead stations 459.5, 488.5 & 561	all	3
23	49B5-10		Segment Assembly - Station 474	all	1
24	49B34-2		Bulkhead Assembly - Station 503	all	1
25	49B43-2		Ring Assembly + Bulkhead, stations 517.5 & 532	all	2
26	49B34-3		Bulkhead Assembly - Station 546.5	all	1
27	49B5-7		Segment Assembly - Station 575.5	all	1
28	49B44-2		Ring Assembly + Bulkhead, station 590	all	1
	49B23L		Frame Assembly - Caster support, station 604.5	all	1
	49B23R		Frame Assembly - Caster support, station 604.5	all	1
	49B33L		Caster Support Assembly - Stations 590-618.84	all	1
	49B33R		Caster Support Assembly - Stations 590-618.84	all	1
29	49B55-2		Former Assembly - Station 604.5	all	1
30	49B8L		Wheel Assembly - Rear swivel (See figure 211 for detailed illustration)	all	1
	49B8R		Wheel Assembly - Rear swivel (See figure 211 for detailed illustration)	all	1
31	49B25-18		Bulkhead Assembly - Speedpak hook, station 618.91-621.79	all	1
	49B24-20L		Hook Mechanism Assembly - Speedpak attaching, aft (See figure 212 for detailed illustration)	all	1
32	49B24-20R		Hook Mechanism Assembly - Speedpak attaching, aft (See figure 212 for detailed illustration)	all	1
33	49B17-6		Bulkhead Assembly - Station 635	all	1
34	49B17-7		Bulkhead Assembly - Station 649.5	all	1
35	49B17-8		Bulkhead Assembly - Station 664	all	1
36	49B17-9		Bulkhead Assembly - Station 678.5	all	1
37	49B4-4		Ring Assembly + Bulkhead, station 693	all	1
38	49B4-5		Ring Assembly + Bulkhead, station 707.5	all	1
39	49B4-6		Ring Assembly + Bulkhead, station 722	all	1
	49B32L		Installation + Towing structure	all	1
	49B32R		Installation + Towing structure	all	1
40	49B32-2L		Fitting Assembly - Towing	all	1
41	49B32-2R		Fitting Assembly - Towing	all	1
42	49B195-2		Installation + Step, Speedpak (Upper LH)	all	1
43	49B195-22		Installation + Step, Speedpak (Upper RH)	all	1
44	49B195-3		Installation + Step, Speedpak (Lower LH)	all	1
45	49B195-23		Installation + Step, Speedpak (Lower RH)	all	1
46	49B277-2L		Installation + Step, Speedpak, forward	all	1
47	49B277-2R		Installation + Step, Speedpak, forward	all	1
48	49B195-4		Box Assembly - Step (Required on 49B195-2 & 49B195-22 & 49B277-2L/R)	all	1
	49B195-5		Box Assembly - Step (Required on 49B195-3 & 49B195-23)	all	1
49	49B195-8		Step	all	1
50	59R195-7		Hinge - Step	all	1
	49B195-13		Hinge	all	1
51	49B202		Spring - Step	all	1
52	49B195-16		Stop + Step	all	2
53	49B195-15		Latch - Step	all	1
54	49B201		Spring - Step	all	1
55	49B131		Firewall Assembly - Speedpak heater (See figure 215 for using assembly & continuation of breakdown)	all	Ref
	49B99 (10)49B99		Pin Assembly - Aft Speedpak locating	all	1
56	49B224		Pin Assembly - Aft Speedpak locating (Production assembly)	all	1
	49B269		Cover Assembly - Heater compartment (See figure 209 for using assembly)	all	Ref
			Insulation - Firewall bulkhead station 693 (NP) (See figure 209 for using assembly)	all	Ref
58	49B252		Screen - Heater air intake	all	1
59	49B184		Guard - Heater air intake screen	all	2
60	49B181		Cover Assembly - Hoist mechanism (See figure 209 for using assembly)	all	Ref
	49B219		Installation - Assembly & details bulkhead panel station 371 (NP) (See figure 209 for using assembly)	all	Ref
61	49B219-2		Panel Assembly - Bulkhead station 371	all	1
62	49B219-5		Door Assembly - Station 371 panel	all	2
63	49B219-24		Hinge - Door	all	4
64	49B219-34		Ring - Attaching	all	2
65	49B298-61		Door Assembly - CO <sub>2</sub> Cylinder entrance (See figure 215 for using assembly)	all	Ref

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GROUP . . . Speedpak

Detail Unit . . . Wheel Assemblies and Brake System

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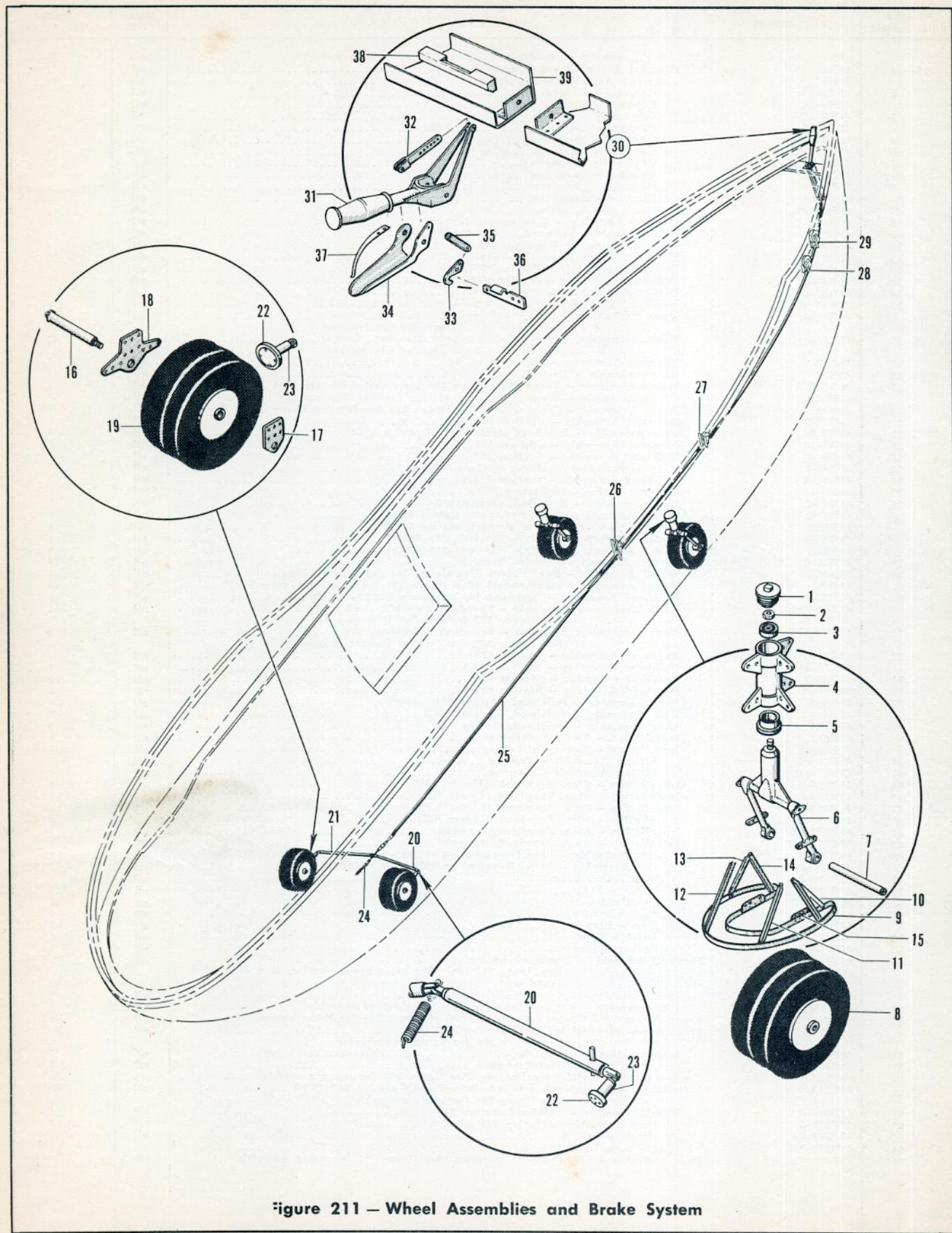


Figure 211 – Wheel Assemblies and Brake System

GROUP . . . Speedpak

Constellation

Detail Unit . . . Wheel Assemblies and Brake System

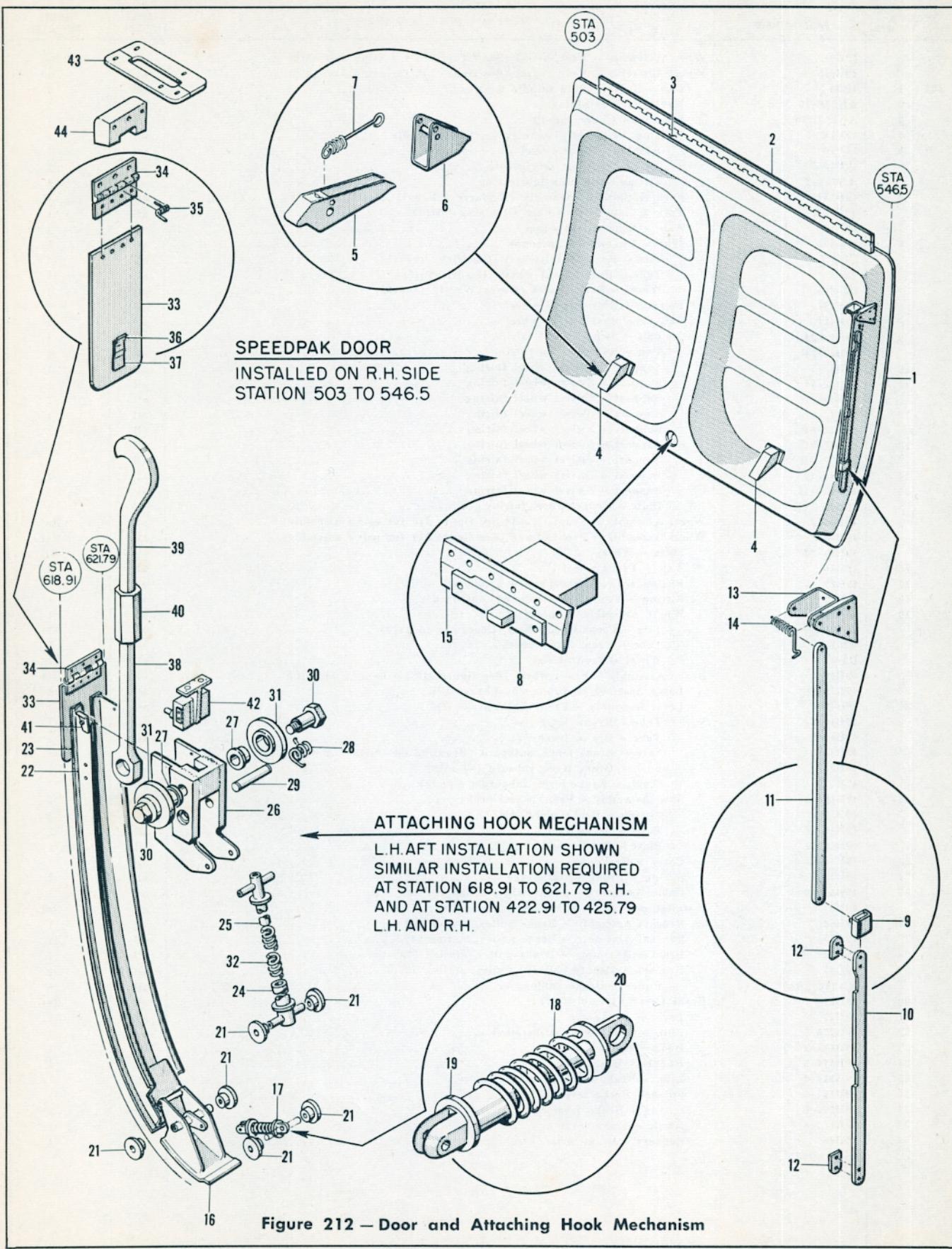
FIGURE & INDEX NUMBER	PART NUMBER	NOMENCLATURE						SERIAL CODE	UNITS PER ASSY.
		1	2	3	4	5	6		
	49B8L	Wheel Assembly - Rear swivel (See figure 210 for using assembly)						all	Ref
	49B8R	Wheel Assembly - Rear swivel (See figure 210 for using assembly)						all	Ref
211 - 1	49B9	Cap - Swivel wheel spindle housing						all	1
2	AN320-10	Nut - Fork retaining						all	1
3	AN200K10	Bearing - Upper spindle						all	1
4	49B14	Housing Assembly - Rear swivel wheel spindle						all	1
5	49B10	Bushing - Rear swivel wheel spindle						all	1
	49B14-2	Tube - Bushing lubricating						all	1
	AN286-1	Fitting - Bushing lubricating						all	1
6	49B13L	Fork & Spindle Assembly (Replaces 49B280)						all	1
	49B13R	Fork & Spindle Assembly (Replaces 49B280)						all	1
7	49B11	Axle - Rear swivel wheel						all	1
8	49B263	Wheel Assembly - Speedpak						all	1
	C169N	Tire - Rear swivel wheel (Goodrich) (660110)						all	1
	T268	Tube + Rear swivel wheel (Goodrich) (660111)						all	1
	D3-425	Wheel - Rear swivel (Hayes Wheel) (660112)						all	1
	49B42L	Fairing - Rear swivel wheel						all	1
	49B42R	Fairing - Rear swivel wheel						all	1
9	49B42-2L	Pan - Swivel wheel fairing						all	1
	49B42-2R	Pan - Swivel wheel fairing						all	1
10	49B42-5	Support - Swivel wheel fairing						all	1
11	49B42-7L	Support - Swivel wheel fairing						all	1
	49B42-7R	Support - Swivel wheel fairing						all	1
12	49B42-8L	Support - Swivel wheel fairing						all	1
	49B42-8R	Support - Swivel wheel fairing						all	1
13	49B42-9L	Support - Swivel wheel fairing						all	1
	49B42-9R	Support - Swivel wheel fairing						all	1
14	49B42-10	Support - Swivel wheel fairing						all	1
15	49B42-11L	Support - Swivel wheel fairing						all	1
	49B42-11R	Plate - Swivel wheel fairing						all	1
	49B15L	Wheel Assembly - Front, fixed (See figure 210 for using assembly)						all	Ref
	49B15R	Wheel Assembly - Front, fixed (See figure 210 for using assembly)						all	Ref
	49B15-13	Shim - Wheel						all	AR
16	49B16	Axle - Front wheel						all	1
17	49B21	Fitting - Front wheel support, inboard						all	1
18	49B22	Fitting - Front wheel support, outboard						all	1
19	49B263	Wheel Assembly - Speedpak						all	1
	C169N	Tire - Front fixed wheel (Goodrich) (660110)						all	1
	T268	Tube + Front fixed wheel						all	1
	D3-425	Wheel - Front fixed						all	1
	49B49	Brake Assembly - Front wheel (See figure 210 for using assembly)						all	Ref
20	49B49-7	Lever Assembly - Front wheel brake LH						all	1
21	49B49-8	Lever Assembly - Front wheel brake RH						all	1
	49B49-6	Tube - Brake lever						all	1
	49B49-5	Tube - Brake lever						all	1
	49B53	Fork - Brake lever, outboard (Required on 49B49-7 & 49B49-8)						all	1
	49B52	Fork - Brake lever, inboard (-8 only)						all	1
	49B51	Clevis - Brake lever, inboard (-8 only)						all	1
22	49B49-13	Shoe Assembly - Front wheel brake						all	2
	49B54	Fitting - Brake plate end						all	1
	49B49-10	Tube - Brake shoe						all	1
	49B49-11	Plate - Brake shoe						all	1
23	49B49-12	Cover - Brake shoe						all	1
24	49B203	Spring - Front wheel brake						all	1
25	49B49-19	Cable Assembly - Front wheel brake						all	1
	49B63	Installation - Brake cable (NP)						all	Ref
26	49B64	Bracket Assembly - Brake pulley, station 590						all	1
27	49B65	Bracket Assembly - Brake pulley, station 649.5						all	1
28	49B66	Bracket Assembly - Brake pulley, station 693						all	1
29	49B57	Bracket Assembly - Brake pulley, station 707.5						all	1
	AN210-2A	Pulley - Brake cable						all	1
30	49B114	Brake Lever Assembly						all	Ref
31	49B47	Lever - Brake						all	1
32	49B276	Link - Brake lever adjustment						all	1
33	49B114-2	Hook - Brake lever						all	1
34	49B114-3	Handle - Brake lever						all	1
35	49B114-4	Link - Brake lever						all	1
36	49B114-5	Catch - Brake lever						all	1
37	49B114-6	Spring - Brake lever						all	1
38	49B114-8	Block - Brake lever						all	1
39	49B46	Support - Brake lever						all	1

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GROUP . . . Speedpak

Detail Unit . . . Door and Attaching Hook Mechanism

Constellation



## GROUP . . . Speedpak

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## Detail Unit . . . Door and Attaching Hook Mechanism

FIGURE & INDEX NUMBER	PART NUMBER	1 2 3 4 5 6	NOMENCLATURE	SERIAL CODE	UNITS PER ASSY.
	49B6 (10)49B6		Installation - Speedpak door (NP) (See figure 209 for using assembly) Door Assembly - Speedpak (Production Assembly) . . . . . (See figure 209 for using assembly)	all all	Ref Ref
212 - 1	49B6-30		Skin Assembly - Door . . . . .	all	1
	49B6-2		Skin - Outer . . . . .	all	1
	49B6-3		Skin - Inner . . . . .	all	1
	49B6-19		Hinge Assembly - Door . . . . .	all	1
2	49B6-17		Hinge - Half . . . . .	all	1
3	49B6-20		Hinge - Half . . . . .	all	1
4	49B6-31		Latch Assembly - Door . . . . .	all	1
	49B6-29		Latch Assembly - Door . . . . .	all	2
5	49B6-5		Latch - Door . . . . .	all	1
	49B6-7		Pin - Door latch . . . . .	all	1
	49B6-6		Block - Door latch . . . . .	all	1
6	49B6-28		Catch Assembly - Door latch . . . . .	all	1
	49B6-8		Catch - Door latch . . . . .	all	1
	49B6-9		Pin - Door catch . . . . .	all	1
7	49B206		Spring - Tension . . . . .	all	1
	49B6-4		Casting . . . . .	all	1
8	49B288		Lock Assembly - Door (Rite Hdwe.) (Type 133B) . . . . .	all	1
9	49B6-44		Slide Assembly - Door . . . . .	all	1
	49B42		Fitting - Slide . . . . .	all	1
10	49B6-40		Guide - Door . . . . .	all	1
11	49B6-39		Brace - Door . . . . .	all	1
12	49B6-41		Spacer - Brace . . . . .	all	1
13	49B6-38		Support Assembly - Door . . . . .	all	1
	49B6-35		Plate - Door support . . . . .	all	1
14	49B198		Spring - Door support . . . . .	all	1
15	49B6-34		Plate - Door . . . . .	all	1
	49B6-32		Spacer - Door lock . . . . .	all	1
	49B6-33		Washer - Door lock . . . . .	all	1
	49M24-20L		Installation - Latch, aft stations 618.91-621.79 (NP) . . . . . (See figure 210 for using assembly)	all	Ref
	49B24-20R		Installation - Latch, aft stations 618.91-61.79 (NP) . . . . . (See figure 210 for using assembly)	all	Ref
	49B24-48L		Installation - Latch, forward stations 422.91-425.79 (NP) . . . . . (See figure 210 for using assembly)	all	Ref
	49B24-48R		Installation - Latch, forward stations 422.91-425.79 (NP) . . . . . (See figure 210 for using assembly)	all	Ref
16	49B24-89L		Latch Assembly - Hook mechanism, aft . . . . .	all	1
	49B24-89R		Latch Assembly - Hook mechanism, aft . . . . .	all	1
	49B24-90L		Latch Assembly - Hook mechanism, forward . . . . .	all	1
	49B24-90R		Latch Assembly - Hook mechanism, forward . . . . .	all	1
17	49B24-78		Spring Assembly - Latch . . . . .	all	1
18	292120		Spring - Latch . . . . .	all	1
19	292117		Clevis - Latch spring . . . . .	all	1
20	49B24-77		Eye Bolt - Latch spring . . . . .	all	1
21	49B24-33		Bearing . . . . .	all	1
	49B24-24L		Lever Assembly - Hook mechanism (-20L only) . . . . .	all	4
	49B24-24R		Lever Assembly - Hook mechanism (-20R only) . . . . .	all	1
	49B24-50L		Lever Assembly - Hook mechanism (-48L only) . . . . .	all	1
	49B24-50R		Lever Assembly - Hook mechanism (-48R only) . . . . .	all	1
	49B24-58		Bulkhead - Lever (On -24L & R only) . . . . .	all	1
	49B24-62		Bulkhead - Lever (On -50L & R only) . . . . .	all	1
	49M24-26		Channel - Lever . . . . .	all	1
22	49B24-23L		Lever (-24L only) . . . . .	all	1
	49B24-23R		Lever (-24R only) . . . . .	all	1
	49B24-49L		Lever (-50L only) . . . . .	all	1
	49B24-49R		Lever (-50R only) . . . . .	all	1
23	49B24-25		Plate (-24L & R only) . . . . .	all	1
	49B24-51		Plate (-50L & R only) . . . . .	all	1
24	49B24-19		Tube Assembly - Hook mechanism . . . . .	all	1
25	49B24-16		Tube Assembly + Hook mechanism . . . . .	all	1
26	49B24-9		Plate Assembly - Hook mechanism . . . . .	all	1
27	49B24-12		Bushing - Hook mechanism . . . . .	all	1
28	49B211		Spring - Hook assembly . . . . .	all	2
29	49B24-39		Pin - Hook mechanism . . . . .	all	1
30	49B24-13		Bolt - Hook mechanism . . . . .	all	2
31	49B24-11		Disk - Hook mechanism . . . . .	all	2
32	49B204		Spring - Hook mechanism . . . . .	all	1
	49B24-34		Hinge Plate Assembly . . . . .	all	1
33	49B24-64		Plate - Hinge . . . . .	all	1
34	49B24-76		Hinge . . . . .	all	1
35	49B192		Spring - Hinge plate . . . . .	all	1
36	49B24-94		Spring Assembly - Hinge plate . . . . .	all	1
37	49B24-63		Clip + Spring . . . . .	all	1
	49B24-2		Hook Assembly (-20L & 20R only) . . . . .	all	1
	(10)49B24-2		Hook Assembly (Production Assembly) (Includes -4 hook, -7 bushing & -52 tube) . . . . .	all	1
	49B24-46		Hook Assembly (-48L & -48R only) . . . . .	all	1
	(10)49B24-46		Hook Assembly (Production Assembly) (Includes -47 hook, -7 bushing & -52 tube) . . . . .	all	1
38	49B24-4		Hook - Lower (-2 only) . . . . .	all	1
	49B24-47		Hook - Lower (-46 only) . . . . .	all	1
39	49B24-3		Hook - Attaching . . . . .	all	1
	49B24-7		Bushing - Hook mechanism . . . . .	all	1
	49B24-52		Tube - Hook mechanism . . . . .	all	1
40	49B24-5		Nut - Hex . . . . .	all	1
41	49B24-97L		Angle - Actuating switch . . . . .	all	1
	49B24-97R		Angle - Actuating switch . . . . .	all	1
42	49B246		Switch Assembly - Speedpak safety . . . . .	all	1
	YZ7RQ1T		Switch - S. P. S. T. (Micro) (612337) . . . . .	all	2
43	49B24-92		Guide - Phenolic resin (Required on -20L & -20R) . . . . .	all	1
	49B24-41		Guide - Phenolic resin (Required on -20L & -20R) . . . . .	all	1
	49B24-93		Guide - Phenolic resin (Required on -48L & 48R) . . . . .	all	1
	49B24-80		Guide - Phenolic resin (Required on -48L & 48R) . . . . .	all	1
44	49B24-42L		Stop - Phenolic resin (Required on -20L) . . . . .	all	1
	49B24-42R		Stop - Phenolic resin (Required on -20R) . . . . .	all	1
	49B24-96		Stop - Phenolic resin (Required on -48L & -48R) . . . . .	all	1

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GROUP . . . Speedpak

Detail Unit . . . Hoisting Mechanism

# Constellation

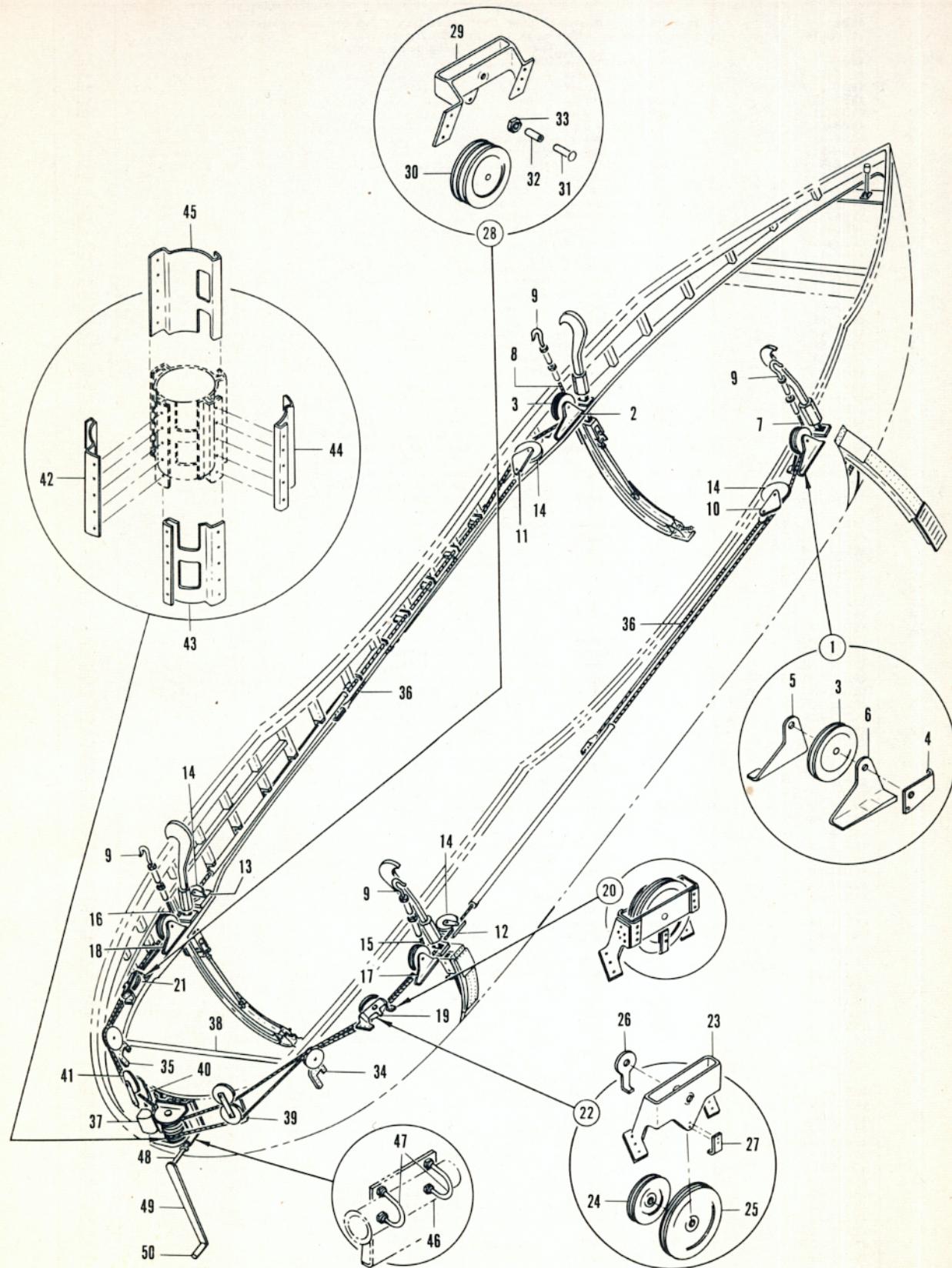


Figure 213 — Hoisting Mechanism

## GROUP . . . Speedpak

## Detail Unit . . . Hoisting Mechanism

*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
213 - 1	49B62		Installation - Hoisting system (NP) (See figure 209 for using assembly)	all	
	49B259L		Bracket Assembly - Aft hoist pulley	all	1
2	49B259R		Bracket Assembly - Aft hoist pulley	all	1
3	49B29		Pulley Assembly - Hoist	all	1
	AN200K10		Bearing - Pulley	all	1
4	49B336R		Guide - Cable (Required on LH)	all	1
	49B336L		Guide - Cable (Required on RH)	all	1
5	49B259-2L		Angle - Pulley bracket	all	1
	49B259-2R		Angle - Pulley bracket	all	1
6	49B259-3L		Angle - Pulley bracket	all	1
	49B259-3R		Angle - Pulley bracket	all	1
7	49B62-34		Cable Assembly - LH Aft	all	1
8	49B62-24		Cable Assembly - RH Aft	all	1
9	49B62-25		Hook - Attaching	all	4
10	49B163L		Bracket - Aft horizontal pulley	all	1
11	49B163R		Bracket - Aft horizontal pulley	all	1
12	49B155L		Bracket Assembly - Station 425.75 pulley	all	1
13	49B155R		Bracket Assembly - Station 425.75 pulley	all	1
14	49B264		Pulley Assembly - Idler	all	1
	49B163-6		Washer + Pulley bearing safety	all	1
	AN200K10		Bearing - Pulley	all	1
15	49B62-21		Cable Assembly - LH Forward	all	1
16	49B62-23		Cable Assembly - RH Forward	all	1
17	49B260L		Bracket Assembly - Forward hoist pulley	all	1
18	49B260R		Bracket Assembly - Forward hoist pulley	all	1
	49B260-2L		Angle - Pulley bracket (Similar to index 5 or 6)	all	1
	49B260-2R		Angle - Pulley bracket (Similar to index 5 or 6)	all	1
	49B29		Pulley Assembly - Forward hoist (Same as index 3)	all	1
	49B336R		Guide - Cable (Required on LH) (Same as index 4)	all	1
	49B336L		Guide - Cable (Required on RH) (Same as index 4)	all	1
19	49B156L		Bracket Assembly - Idler pulley, forward	001-016	1
20	49B306		Bracket Assembly - Idler pulley, forward (LH only)	017-031	1
21	49B156R		Bracket Assembly - Idler pulley, forward	001-031	1
	49B29		Pulley Assembly - Hoist (Same as index 3) (Required on 49B156 L/)	001-031	2
	49B264		Pulley Assembly - Idler, forward (Same as index 14 & 24) . . . . . (Required on 49B306)	017-031	1
	49B266		Pulley Assembly - Idler, forward (Same as index 25) (Required on 49B306)	017-031	1
22	49B307		Bracket Assembly - Idler pulley, forward (LH only)	032 & up	1
23	49B307-2		Bracket - Idler pulley	032 & up	1
24	49B264		Pulley Assembly - Idler pulley	032 & up	1
	AN200K10		Bearing - Pulley	032 & up	1
25	49B266		Pulley Assembly - Idler pulley	032 & up	1
	AN200K10		Bearing - Pulley	032 & up	1
26	49B307-3		Guard - Cable	032 & up	1
27	49B307-4		Guard - Cable	032 & up	1
28	49B279		Bracket Assembly - Idler pulley, forward (RH only)	032 & up	1
29	49B279-2		Bracket - Idler pulley	032 & up	1
30	49B29		Pulley Assembly - Idler pulley	032 & up	2
	AN200K10		Bearing - Pulley	032 & up	1
31	NAS222-28		Screw - Cable guard	032 & up	1
32	NAS43DD480		Spacer - Cable guard	032 & up	1
33	AN364-428		Nut - Cable guard	032 & up	1
34	49B303		Bracket Assembly - Hoist pulley, forward (LH)	all	1
	49B29		Pulley Assembly - Pulley bracket (Same as index 30)	all	1
	49B266		Pulley Assembly - Pulley bracket (Same as index 25)	all	1
35	49B302		Bracket Assembly - Hoist pulley, forward (RH)	all	1
	49B29		Pulley Assembly - Pulley bracket (Same as index 30)	all	2
36	49B62-40		Cord Assembly - Shock absorber	all	2
37	130400		Hoist - Complete with electric motor & reduction gear (Western Gear)	all	1
	110703		Motor - Hoist (Western Gear) (Westinghouse 1171420A)	all	1
	102848		Seal - Oil (Westinghouse 9D8582)	all	1
	102849		Brush - Motor (Westinghouse S9D8417)	all	1
	102850		Ring - Rocker (Westinghouse 14D3260)	all	1
	110919		Bearing - Rear (Westinghouse S1025300)	all	1
	110920		Bearing - Front (Westinghouse S1188926)	all	1
	121015		Armature Assembly - Motor (Westinghouse 14B1830)	all	1
	121016		Bracket - Rear (Westinghouse 14B1836)	all	1
	121017		Bracket Assembly - Motor (Westinghouse 14B1845)	all	1
	121018		Bracket - Front (Westinghouse 14B1848)	all	1
	121019		Stator - Motor (Westinghouse 14B1877)	all	1
	404		Key - Hoist (Woodruff)	all	1
38	49B30		Support Assembly - Hoist	all	1
39	49B27		Bracket - Pulley LH	all	1
	49B29		Pulley - Support (Same as index 30)	all	2
	AN30-54		Bolt - Pulley	all	2
	49B266		Pulley - Support (Same as index 25)	all	1
	49B30-94		Bolt - Pulley	all	1
40	49B28		Bracket - Pulley RH	all	1
41	49B265		Pulley - Support	all	1
	AN200K10		Bearing - Pulley	all	1
	AN30-44		Bolt - Pulley	all	1
	49B30-29		Strap - Pulley bracket	all	2
	49B87		Installation - Hoist hand crank (NP) (See figure 209 for using assembly)	all	Ref
	49B258		Installation - Hoisting drum cable guides (NP) (See figure 209 for using assembly)	all	Ref
42	49B258-2		Guide - Cable, hoisting	all	1
43	49B258-3		Guide - Cable, hoisting	all	1
44	49B258-4		Guide - Cable, hoisting	all	1
45	49B258-5		Guide - Cable, hoisting	all	1
	49B253-3		Installation - Hand crank support (NP) (See figure 209 for using assembly)	all	Ref
46	49B253-7		Tube - Hand crank support	all	1
47	49B253-9		Bolt - "U" Retaining	all	2
48	49B87-3		Tube - Hand crank	all	1
49	49B87-4		Arm - Hand crank	all	1
50	49B87-5		Handle - Hand crank	all	1

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GROUP . . . Speedpak

Detail Unit . . . Flooring and Baggage Compartment

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SPEEDPAK

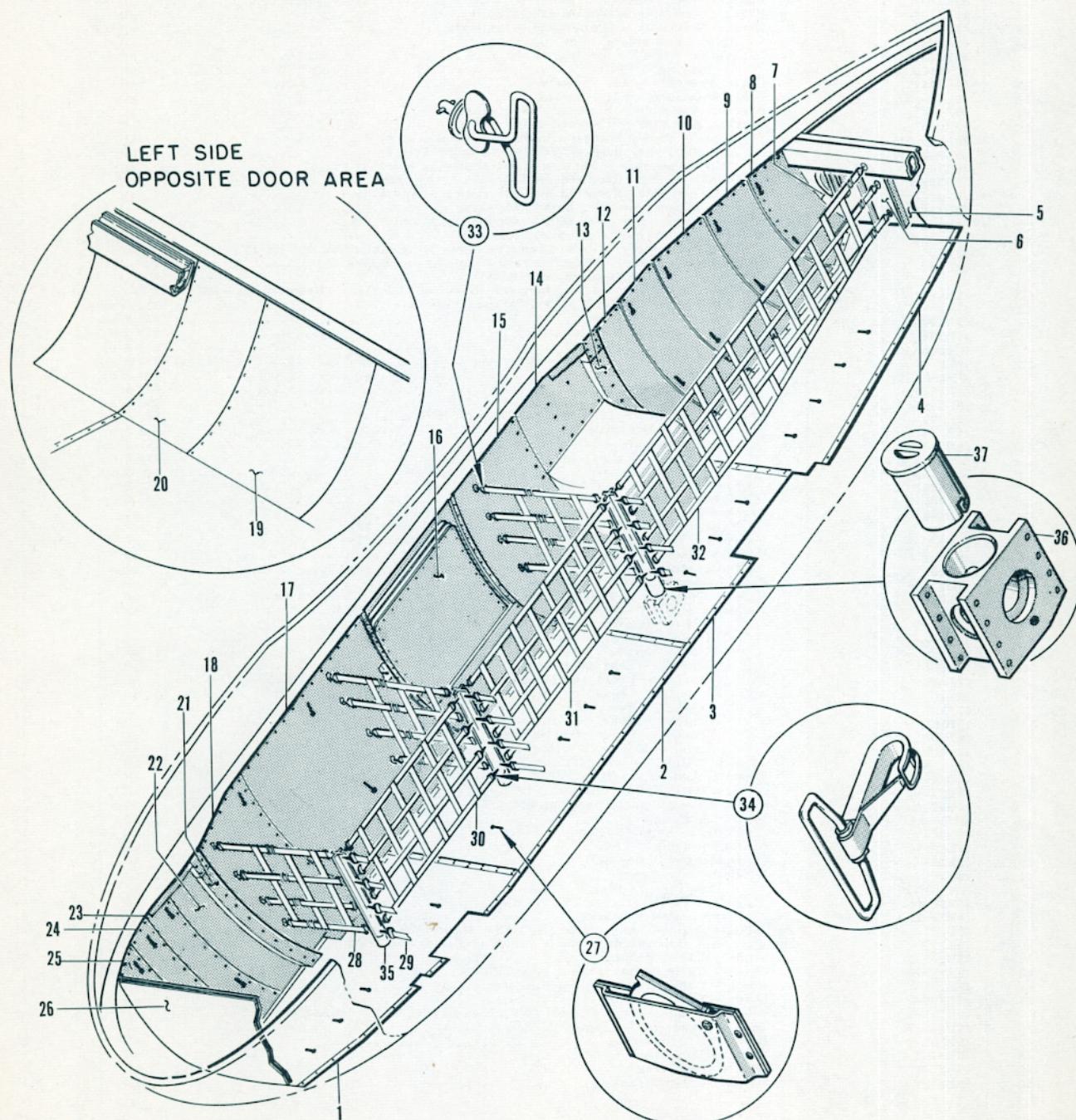


Figure 214 – Flooring and Baggage Compartment

## GROUP . . . Speedpak

## Detail Unit . . . Flooring and Baggage Compartmentation

*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
	49B332		Installation - Baggage liners (NP) (See figure 209 for using assembly)	all	Ref
	49B281		Floor Assembly - Speedpak	all	1
214 - 1	49B281-2		Floor Assembly - Speedpak, forward	all	1
	49B281-6		Panel - Flooring (Plywood)	all	1
	49B281-16		Cover - Flooring (Fiberglas)	all	1
2	49B281-3		Floor Assembly - Speedpak, center	all	1
	49B281-7		Panel - Flooring (Plywood)	all	1
	49B281-21		Cover - Flooring (Fiberglas)	all	1
3	49B281-4		Floor Assembly - Speedpak, center	all	1
	49B281-8		Panel - Flooring (Plywood)	all	1
	49B281-28		Cover - Flooring (Fiberglas)	all	1
4	49B281-5		Floor Assembly - Speedpak, aft	all	1
	49B281-9		Panel - Flooring (Plywood)	all	1
	49B281-33		Cover - Flooring (Plywood)	all	1
5	49B83-40		Liner - Firewall, LH	all	1
6	49B83-41		Liner - Firewall, center	all	1
7	49B83-42		Liner - Firewall, RH	all	1
	49B83-34L		Liner - Speedpak, wall	all	1
8	49B83-34R		Liner - Speedpak, wall	all	1
	49B83-33L		Liner - Speedpak, wall	all	1
9	49B83-33R		Liner - Speedpak, wall	all	1
	49B83-32L		Liner - Speedpak, wall	all	1
10	49B83-32R		Liner - Speedpak, wall	all	1
	49B83-31L		Liner - Speedpak, wall	all	1
11	49B83-31R		Liner - Speedpak, wall	all	1
	49B83-22L		Liner - Speedpak, wall	all	1
12	49B83-22R		Liner - Speedpak, wall	all	1
	49B262L		Cover Assembly - Aft hook bulkhead	all	1
13	49B262R		Cover Assembly - Aft hook bulkhead	all	1
	49B83-19L		Liner - Speedpak, wall	all	1
14	49B83-19R		Liner - Speedpak, wall	all	1
	49B332-4L		Liner - Speedpak, wall	all	1
15	49B332-4R		Liner - Speedpak, wall	all	1
16	49B83-16		Liner - Speedpak, door	all	1
17	49B332-3		Liner - Speedpak, wall	all	1
	49B332-2L		Liner - Speedpak, wall	all	1
18	49B332-2R		Liner - Speedpak, wall	all	1
19	49B332-5		Liner - Speedpak, wall, LH stations 445-517	all	1
20	49B332-6		Liner - Speedpak, wall, LH stations 517-546	all	1
	49B254L		Cover Assembly - Forward hook bulkhead	all	1
21	49B254R		Cover Assembly - Forward hook bulkhead	all	1
	49B83-9L		Liner - Speedpak, wall	all	1
22	49B83-9R		Liner - Speedpak, wall	all	1
	49B83-8L		Liner - Speedpak, wall	all	1
23	49B83-8R		Liner - Speedpak, wall	all	1
	49B83-7L		Liner - Speedpak, wall	all	1
24	49B83-7R		Liner - Speedpak, wall	all	1
	49B83-5L		Liner - Speedpak, wall	all	1
25	49B83-5R		Liner - Speedpak, wall	all	1
	49B219		Installation - Assembly & details bulkhead panel station 371 (NP) (See figure 209 for using assembly)	all	Ref
26	49B219-3		Liner - Bulkhead panel	all	1
	49B331		Installation - Cargo tie down rings (NP) (See figure 209 for using assembly)	all	Ref
27	49B147		Ring Assembly - Cargo tie down	all	53
	49B330		Installation - Baggage compartmentation (NP) (See figure 209 for using assembly)	all	Ref
28	49B330-28		Web Assembly - Compartmentation	all	3
29	49B330-39		Web Assembly - Compartmentation	all	3
30	49B330-2		Web Assembly - Compartmentation	all	1
31	49B330-5		Web Assembly - Compartmentation	all	1
32	49B330-7		Web Assembly - Compartmentation	all	1
33	49B327		Link Assembly - Webbing	all	AR
34	4940-1½		Snap - Harness (North & Judd)	all	AR
35	49B326		Post - Webbing support	all	3
	49B329		Installation - Post support structure (NP)	all	1
36	49B328		Socket Assembly - Baggage post	all	3
37	49B325		Plug - Webbing support post socket	all	3

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GROUP . . . Speedpak

Detail Unit . . . Fire Extinguishing and Heating Systems

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SPEEDPAK

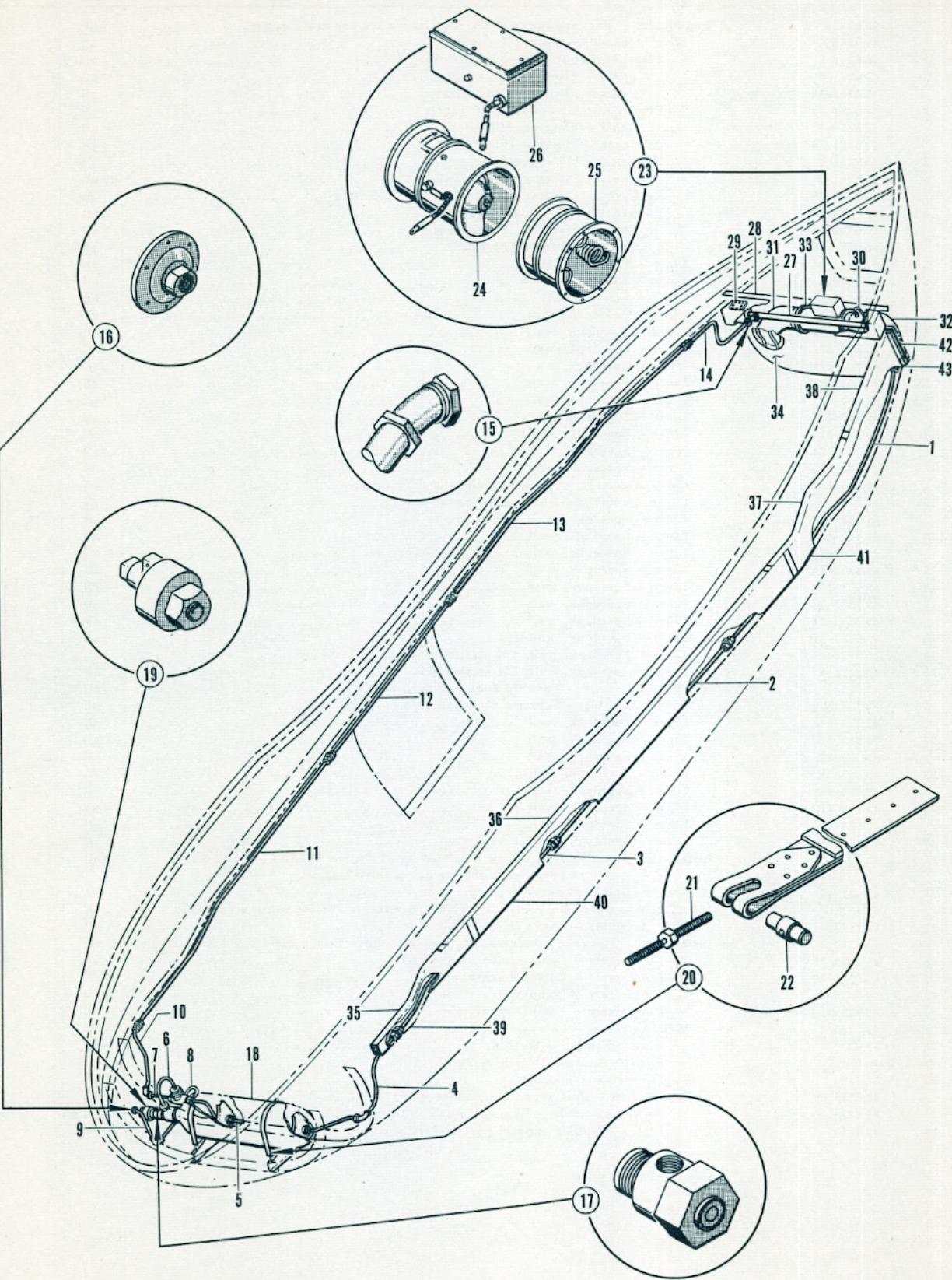


Figure 215 – Fire Extinguishing and Heating Systems

GROUP . . . Speedpak

Detail Unit . . . Fire Extinguishing and Heating Systems

*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.
215 - 1	49B313		Installation - CO <sub>2</sub> System (NP) (See figure 209 for using assembly)			all	Ref
2	49B313-2		Tube Assembly - CO <sub>2</sub> System			all	1
3	49B146-4		Tube Assembly - CO <sub>2</sub> System			all	1
4	49B313-3		Tube Assembly - CO <sub>2</sub> System			all	1
5	49B313-4		Tube Assembly - CO <sub>2</sub> System			all	1
6	49B313-5		Tube Assembly - CO <sub>2</sub> System			all	1
7	49B313-6		Tube Assembly - CO <sub>2</sub> System			all	1
8	49B313-7		Tube Assembly - CO <sub>2</sub> System			all	1
9	49B313-8		Tube Assembly - CO <sub>2</sub> System			all	1
10	49B313-9		Tube Assembly - CO <sub>2</sub> System			all	1
11	49B313-10		Tube Assembly - CO <sub>2</sub> System			all	1
12	49B313-11		Tube Assembly - CO <sub>2</sub> System			all	1
13	49B313-12		Tube Assembly - CO <sub>2</sub> System			all	1
14	49B313-13		Tube Assembly - CO <sub>2</sub> System			all	1
15	49B313-14		Tube Assembly - CO <sub>2</sub> System			all	1
16	49B313-15		Cap - CO <sub>2</sub> System			all	1
	922315		Indicator Assembly - Outboard discharge (Walter Kidde) (650081)			all	1
	49B298		Installation & Details - CO <sub>2</sub> Bottle (NP) (See figure 209 for using assembly)			all	Ref
17	967098		Interconnector - Fire extinguisher control (Walter Kidde) (650134)			all	1
	30696		Retainer - Control valve			all	1
	23220		Nut - Mounting			all	1
	23219		Spring - Control valve			all	1
	24413		Plunger - Control valve			all	1
	30765		Gasket - Control valve			all	1
18	982576		Cylinder - CO <sub>2</sub> Fire extinguishing (Walter Kidde) (650136)			all	1
19	966129		Solenoid - Fire extinguisher control head (Walter Kidde) (650135)			all	1
	49B298-58		Bracket Assembly - CO <sub>2</sub> Cylinder retaining			all	1
	49B298-59		Bracket Assembly - CO <sub>2</sub> Cylinder retaining			all	1
20	49B298-16		Strap Assembly - CO <sub>2</sub> Cylinder retaining			all	1
21	NAS27-3		Turnbuckle - Strap assembly			all	1
22	NAS25-3L		Trunnion - Strap assembly			all	1
	49B298-61		Door Assembly - CO <sub>2</sub> Cylinder entrance (See figure 210 for detailed illustration)			all	1
	49B132		Installation - Heater & fire detector (NP) (See figure 209 for using assembly)			all	Ref
23	2356		Heater - Axial flow speedpak (Dynamic Air) (644298)			all	1
24	1359B		Fan Assembly - Heater			all	1
	593D11		Propeller - Discharge			all	1
	2063		Thermostat - Heater fan			all	1
	987-11		Motor Assembly - Heater fan			all	1
	417H3		Brush Cap - Fan motor			all	1
	3410L29		Armature Assembly - Fan motor			all	1
	K271-200L		Bearing - Fan motor			all	1
	1366-23		Stator Assembly - Fan motor			all	1
	420A10		Brush Assembly - Fan motor			all	1
	461		Slinger Ring - Fan motor			all	1
25	1361A		Heater Assembly - Speedpak (Dynamic Air)			all	1
	829A3		Element - Heater			all	1
26	1630		Junction Box Assembly - Heater (Dynamic Air)			all	1
	K419-2		Relay - Junction box			all	1
27	800095		Detector - Smoke (Walter Kidde) (650125-3)			all	1
28	49B182		Cover - Smoke detector			all	1
29	49B225		Door Assembly - Inspection			all	1
30	49B189		Tube - Smoke detector			all	1
31	49B186		Duct - Heater air intake			all	1
32	49B188		Duct - Heater air outlet			all	1
33	49B187		Flange - Heater duct end			all	2
34	49B131		Firewall Assembly - Heater (See figure 210 for detailed illustration)			all	1
	49B133		Installation - Hot air duct (NP) (See figure 209 for using assembly)			all	Ref
35	49B133-5		Channel - Hot air duct (Top)			all	1
	49B133-85		Channel - Hot air duct (Bottom)			all	1
36	49B133-6		Channel - Hot air duct (Top)			all	1
	49B133-86		Channel - Hot air duct (Bottom)			all	1
37	49B133-7		Channel - Hot air duct (Top)			all	1
	49B133-87		Channel - Hot air duct (Bottom)			all	1
38	49B133-8		Channel - Hot air duct (Top)			all	1
	49B133-88		Channel - Hot air duct (Bottom)			all	1
39	49B133-2		Side - Hot air duct (Outboard)			all	1
	49B133-19		Side - Hot air duct (Inboard)			all	1
40	49B133-3		Side - Hot air duct (Outboard)			all	1
	49B133-18		Side - Hot air duct (Inboard)			all	1
41	49B133-4		Side - Hot air duct (Outboard)			all	1
	49B133-17		Side - Hot air duct (Inboard)			all	1
42	49B133-30		Seal - Rubber, hot air duct			all	1
43	49B133-31		Plate - Hot air duct			all	1

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GROUP . . . Speedpak

Detail Unit . . . Electrical System

# Constellation

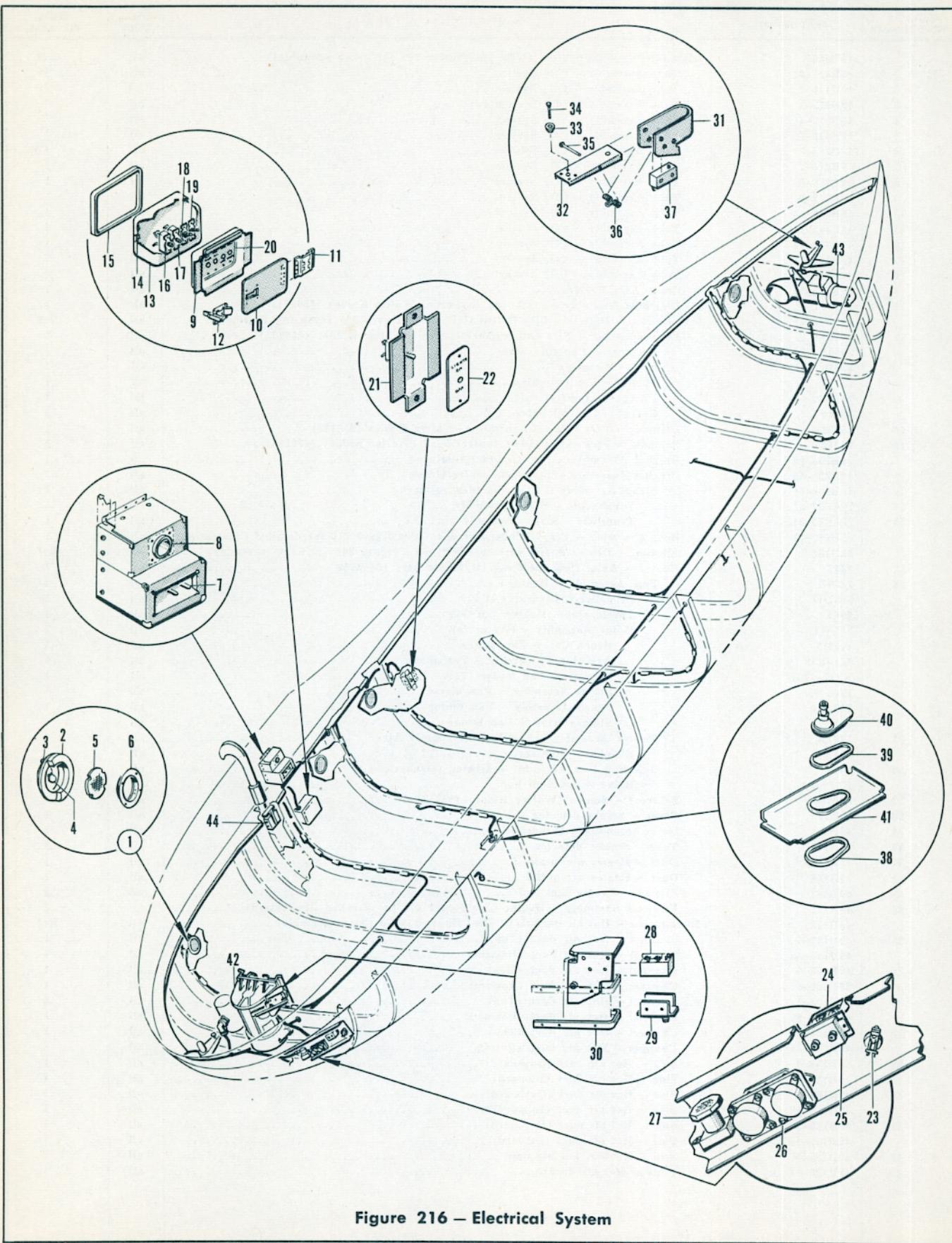


Figure 216 – Electrical System

## GROUP . . . Speedpak

## Detail Unit . . . Electrical System

*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		
	49B80		Installation - Speedpak electrical equipment (NP) . . . . .	(See figure 209 for using assembly)					all	Ref
216 - 1	49B285		Light Assembly - Speedpak (4 Required on LH, 5 required on RH)						all	9
2	49B285-2		Reflector Assembly - Light						all	9
3	404		Light - Dome (Boeing & Dunlap) (610003-8)						all	1
4	AN3132-308		Bulb - Domelight						all	1
5	49B285-5		Guard - Mesh						all	1
6	49B285-6		Flange - Domelight						all	1
7	3A437M3A		Receptacle - External power (Mines Equipment Co.)						all	1
8	AN3102-24-7P		Receptacle - Internal power						all	1
9	49B80-3		Bracket - Switch box						all	1
10	49B80-7		Door - Switch box						all	1
11	H6081D1.8-.032-064		Hinge - Switch box door (Hartwell)						all	1
12	H4600-.032-.064		Latch - Switch box door (Hartwell)						all	1
13	49B80-4		Box + Switch						all	1
14	99808-90°		Receptacle (Airloc)						all	2
15	49B80-5		Cover - Switch box						all	1
16	612350-3		Protector - Circuit (Spencer Thermostat)						all	1
17	612350-4		Protector - Circuit (Spencer Thermostat)						all	1
18	612383-2		Switch - Heater & lights (Cutler-Hammer) (AN3022-2)						all	2
19	612383-7		Switch - Hoist (Cutler-Hammer) (AN3022-7)						all	1
20	49B191		Plate - Name, switch box						all	1
	49B337-3		Plate - Name, switch box (Air France)						all	1
21	49B80-8		Bracket + Light switch						all	1
22	49B228		Plate - Name, light switch						all	1
	49B337-2		Plate - Name, light switch (Air France)						all	1
	49B249-3		Installation - Hoist panel motor relays (NP)						all	1
	49B249-19		Equipment Assembly - Relays						all	1
23	1088		Relay - Double pole (Advance) (612361)						all	1
24	LC1782		Relay Assembly - Hoist panel (Leach) (612197)						all	1
25	PGA200		Protector - Circuit (Spencer Thermostat) (612647-2)						all	1
26	6046H3		Relay - Hoist panel (Cutler-Hammer) (612566)						all	1
27	LC1947		Relay - Hoist panel (Leach) (612369-3)						all	1
	49B312		Installation - Down limit switch assembly (NP) (See figure 209 for using assembly)						all	Ref
	49B312-2		Switch Assembly - Down limit						all	1
28	AN3216-1		Switch - Down limit						all	1
29	AN3166-1		Adapter - Dwn limit						all	1
30	49B312-3		Lever - Down limit						all	1
	49B135		Installation - Up limit switches (NP) (See figure 209 for using assembly)						all	Ref
31	49B135-2		Bracket - Up limit switch						all	1
32	49B135-3		Lever - Up limit switch						all	1
33	49B135-4		Knob - Up limit switch						all	1
34	NAS200-1032-40		Screw - Up limit switch						all	1
35	AN393-55		Pin - Up limit switch						all	1
36	49B282		Spring - Up limit switch						all	1
37	AN3216-1		Switch - Up limit switch						all	1
	49B165		Installation - Recognition light (NP) (See figure 209 for using assembly)						all	Ref
38	268058-5		Doubler - Recognition light						all	1
39	24B601		Gasket - Recognition light						all	1
40	AN3097-3		Lamp Assembly - Recognition light						all	1
	AN3124-307		Lamp - Lamp assembly						all	1
	AN3099-1		Cover - Lamp assembly						all	1
41	49B165-2		Doubler - Recognition light						all	1
42	130400		Hoist - Complete with electric motor (Western Gear) . . . . .	(See figure 213 for detailed illustration)					all	Ref
43	2356		Heater - Axial flow (Dynamicair) (644298) (See figure 215 for detailed illustration)						all	Ref
44	49B246		Switch Assembly - Safety hook mechanism (See figure 212 for detailed illustration)						all	Ref

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*Notes*

*Constellation*



# *Service Tools and Ground Handling Equipment*

## *Section Five*

THE FOLLOWING TOOLS AND EQUIPMENT MUST BE OBTAINED FROM AIRQUIPMENT COMPANY,  
2820 ONTARIO STREET, BURBANK, CALIFORNIA - A DIVISION OF LOCKHEED AIRCRAFT CORPORATION.

## GROUP . . . Service Tools &amp; Ground Handling Equipment

## Detail Unit . . . Service Tools

*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		
1	S-10404		Hammer - Slide (For removing wing connecting pins, fulcrum pin and hinge pins) (See figure 217 for detailed illustration)							1
2	S-10501		Wrench - Brake adjustment spanner (For adjusting thickness of clearance between brake disc) (See figure 217 for detailed illustration)							1
3	S-12102		Wrench - 2 1/2 Hex socket (For removal or installation of nose gear axle nut) (See figure 217 for detailed illustration)							1
4	S-12301		Tool - M.L.G. actuating cylinder installation (To hold actuating cylinder in place while installing attaching bolts) (See fig. 217 for detailed illus.)							1
5	S-11601		Strap - Wrench (For installation or removal of thin cannon plug nuts, or holding round shafts or cylinders) (See fig. 217 for detailed illustration)							1
	S-11602		Strap - Wrench (For installation or removal of thick cannon plug nuts, or for .... holding round shaft or cylinder) (Same as index 5)							1
6	S-34802		Puller - Hinge pin aileron and elevator (For removing aileron and elevator hinge pins) (See figure 217 for detailed illustration)							1
7	S-35701		Adapter - Oil cooler flex shaft lubrication (For lubricating oil cooler flex driveshaft) (See figure 217 for detailed illustration)							1
8	S-36401		Pin - M.L.G. drag strut pivot bolt align (Aligning M.L.G. drag strut lower pivot pin) (See figure 217 for detailed illustration)							1
9	S-21902		Extractor - Screw (To set screws to the maximum tightness or to remove them) (See figure 217 for detailed illustration)							1
10	S-12601		Wrench - Booster control valve nut spanner (For adjusting and removal or installa- tion of shaft nut when overhauling valve) (See figure 217 for detailed illustration)							1
11	S-12604		Wrench - N.L.G. drag strut pivot adjusting seat spanner (For assembly and dis- assembly of drag strut pivot ball) (See figure 217 for detailed illustration)							1
12	S-12702		Wrench - Booster cylinder valve seat nut spanner (For assembly and disassembly or installation of valve seat nut) (See fig. 217 for detailed illus.)							1
13	S-11800		Handle (Used with all square drive tools) .....							1
	S-11500		Handle - Nut spinning (Used with 1/2 square drive tools) .....							1
14	S-13501		Wrench - Supercharger impeller driveshaft nut spanner (For assembly or disassembly of impeller to driveshaft) (See fig. 218 for detailed illustration)							1
15	S-13502		Wrench - Hydraulic hand pump piston valve seat spanner (For adjustment, removal and installation of hand pump piston valve seat) (See figure 218 for detailed illustration)							1
16	S-20101 thru S-20148		Wrench Set - Double open end (For work on conduit and plumbing lines) (See figure 218 for detailed illustration)							1
17	S-12704		Wrench - Fire system operation head packing screw spanner (For assembly and dis- assembly operating head cutter packing screw) (See figure 218 for detailed illustration)							1
18	S-20501 thru S-20542		Wrench Set - Universal crowfoot (Where difficult accessibility might occur on hexa- gon nuts from multiple approach) (See figure 218 for detailed illustration)							1
19	S-37301 thru S-37307		Pin - Wing alignment (For aligning bolt holes in wing surface with bracket bolt holes in stub wing and aligning wing brackets with stub wing brackets) (See figure 218 for detailed illustration)							1
20	S-31704		Wrench - Operating head swivel nut retainer spanner (For assembly and disassembly swivel nut retainer fire system) (See fig. 218 for detailed illus.)							1
21	S-32601		Wrench - Chicksan swivel J. packing nut spanner (For adjustment or removal and installation of hydraulic pressure system to brakes) (See figure 218 for detailed illustration)							1
22	S-42506 thru S-42538		Wrench Set - Obstruction plumbing box type socket (See fig. 218 for detailed illus.)							1

## GROUP . . . Service Tools &amp; Ground Handling Equipment

*Constellation*

## Detail Unit . . . Service Tools (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	UNITS PER ASSY.
23	S-23205		Wrench - Spanner 5" (To separate accumulator halves) (See figure 219 for detailed illustration)		1
24	S-23206		Wrench - Spanner 5" (To be used with S-23205) (See figure 219 for detailed illus.)		1
25	S-32603		Wrench - M.L.G. piston upper bearing spanner (For removal or installation of M.L.G. piston upper bearing) (See figure 219 for detailed illus.)		1
26	S-35201 thru S-35206		Gage - Brake (For adjusting brake disc gap) (See figure 219 for detailed illustration)		1
27	S-36201		Wrench - Booster joint fittings spanner (For aileron booster hydraulic fittings) (See figure 219 for detailed illustration)		1
28	S-36301		Wrench - Booster joint fitting spanner (For rudder booster fittings) (See figure 219 for detailed illustration)		1
29	S-36501		Drift Pin - M.L.G. alignment (Actuating cylinder universal pivot) (See figure 219 for detailed illustration)		1
	S-36602		Drift Pin - M.L.G. alignment (Attaching bolt) (See fig. 219 for detailed illustration)		1
	S-36603		Drift Pin - M.L.G. alignment (Torque arm bolt) (See fig. 219 for detailed illustration)		1
	S-36604		Drift Pin - M.L.G. alignment (Torque arm) (See figure 219 for detailed illustration)		1
	S-36605		Drift Pin - M.L.G. alignment (Side strut) (See figure 219 for detailed illustration)		1
	S-36606		Drift Pin - M.L.G. alignment (Drag strut) (See figure 219 for detailed illustration)		1
	S-36607		Drift Pin - N.L.G. alignment (Actuating cylinder) (See fig. 219 for detailed illus.)		1
30	S-36608		Pin - M.L.G. drag strut aligning (See figure 219 for detailed illustration) .....		1
31	S-37401		Wrench - M.L.G. torque arm (Torque arm bolt) (See figure 219 for detailed illus.)		1
	S-37402		Wrench - M.L.G. torque arm (Torque arm bolt) (See figure 219 for detailed illus.)		1
32	S-37501		Wrench - Auxiliary oil line gland nut spanner (For removal or installation of oil line packing gland nut) (See figure 219 for detailed illustration)		1
33	S-37801		Tool - De-icer boot installation (To facilitate de-icer boot installation) (See figure 219 for detailed illustration)	6	
34	S-20607/-20006		Wrench - Rudder relief valve packing nut hook spanner (See figure 219 for detailed illustration)		1
	S-20610/-20020		Wrench - M.L.G. uplock cylinder barrel lock nut hook spanner (See figure 219 for detailed illustration)		1
	S-20614/-20006		Wrench - Aileron booster cylinder lock nut hook spanner (See figure 219 for detailed illustration)		1
	S-20615/-20021		Wrench - M.L.G. fulcrum bearing nut hook spanner (See fig. 219 for detailed illus.)		1
	S-20619/-20007/-20020		Wrench - Elevator and rudder booster and directional control cylinder hook spanner (See figure 219 for detailed illustration)		1
	S-20621/-20011/-20021		Wrench - Center rudder torque tube retaining nut hook spanner (See figure 219 for detailed illustration)		1
	S-20632/-20029		Wrench - N.L.G. strut horizontal adjusting nut hook spanner (See figure 219 for detailed illustration)		1
	S-20651/-20025		Wrench - N.L.G. collar lock nut hook spanner (See fig. 219 for detailed illustration)		1
	S-20667/-20024		Wrench - M.L.G. strut gland nut spanner (See figure 219 for detailed illustration)		1
35	S-20403/-20044		Wrench - Hydraulic fluid reservoir filler neck "U" spanner (See figure 219 for detailed illustration)		1
	S-20405/-20029		Wrench - M.L.G. torque arm bolt "U" spanner (See fig. 219 for detailed illus.)		1
	S-20408/-20036		Wrench - Tail bumper shock strut bearing "U" spanner (See figure 219 for detailed illustration)		1
	S-20409/-20043		Wrench - Fluid reservoir drip pan lock nut "U" spanner (See figure 219 for detailed illustration)		1
	S-20411/-20036		Wrench - Tail bumper shock strut bearing "U" spanner (See figure 219 for detailed illustration)		1
	S-20413/-20035		Wrench - Accumulator retaining nut "U" spanner (See fig. 219 for detailed illus.)		1
	S-20429/-20037		Wrench - N.L.G. strut piston head "U" spanner (See fig. 219 for detailed illus.)		1
	S-20445/-20040		Wrench - M.L.G. strut upper bearing "U" spanner (See fig. 219 for detailed illus.)		1
36	S-38301		Wrench - M.L.G. axle nut spanner (Installation and removal of M.L.G. axle nuts) (See figure 220 for detailed illustration)		1
37	S-38402		Wrench - N.L.G. strut gland nut spanner (For turning N.L.G. packing gland nut) (See figure 220 for detailed illustration)		1
38	S-13401		Puller - Lord mount link rods (For removing torque link from engine lord bolt).... (See figure 220 for detailed illustration)		1
39	S-38502		Wrench - M.L.G. strut follower nut spanner (For removal or installation of M.L.G. strut follower nut) (See figure 220 for detailed illustration)		1
40	S-40602		Wrench - N.L.G. strut orifice plate spanner (For removal and installation of N.L.G. strut orifice plate) (See figure 220 for detailed illustration)		1
41	S-40701		Wrench - M.L.G. strut orifice plate spanner (For removal and installation of M.L.G. strut orifice plate) (See figure 220 for detailed illustration)		1
42	S-42702		Gage - N.L.G. and M.L.G. uplock adjustment (Adjustment of uplocks) (See figure 220 for detailed illustration)		1
43	S-42703		Gage - Booster valve adjustment (To check settings of aileron booster linkage) (See figure 220 for detailed illustration)		1
44	S-43301		Protector - M.L.G. axle thread (To prevent thread damage while removing and installing wheels) (See figure 220 for detailed illustration)	4	
45	S-83202		Adapter - Towing - M.L.G. (See figure 220 for detailed illustration) .....		1
46	S-34601		Clamp - $\frac{3}{16}$ Turnbuckle (Used for adjusting turnbuckle for cable tension) .....	2	
	S-34602		Clamp - $\frac{1}{4}$ Turnbuckle (Used for adjusting turnbuckle for cable tension) .....	2	
	S-34603		Clamp - $\frac{3}{8}$ Turnbuckle (Used for adjusting turnbuckle for cable tension) .....	2	
47	S-38102		Wrench - Motor mount adapter (Used on motor bolts) (See fig. 220 for detailed illus.)	1	
48	S-38201		Wrench - Brake drum (For installation and removal of brake bolts) (See figure 220 for detailed illustration)	1	
	S-38202		Wrench - Brake drum (For installation and removal of brake bolts) (See figure 220 for detailed illustration)	1	

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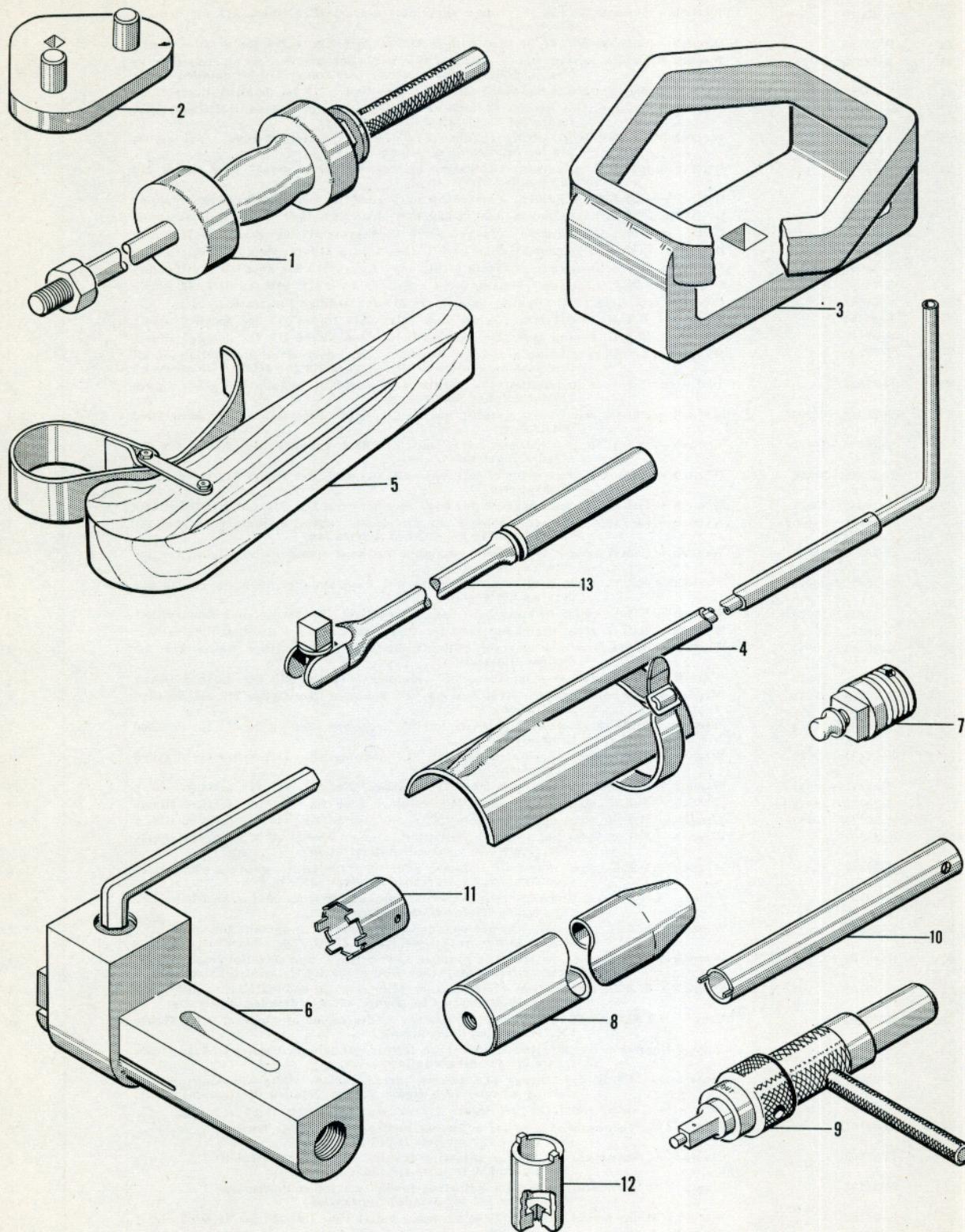
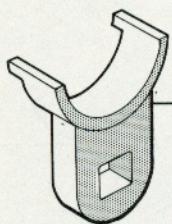
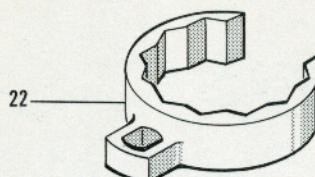


Figure 217 — Service Tools

PART No.	SIZE
S-42506	$\frac{1}{2}$
S-42507	$\frac{9}{16}$
S-42508	$\frac{5}{8}$
S-42509	$\frac{11}{16}$
S-42510	$\frac{3}{4}$
S-42511	$\frac{13}{16}$
S-42512	$\frac{7}{8}$
S-42513	$\frac{15}{16}$
S-42514	1
S-42515	$1\frac{1}{16}$
S-42516	$1\frac{1}{8}$



PART No.	SIZE	PART No.	SIZE
S-20542	3	S-20532	$2\frac{3}{8}$
S-20541	$2\frac{15}{16}$	S-20531	$2\frac{5}{16}$
S-20540	$2\frac{7}{8}$	S-20530	$2\frac{1}{4}$
S-20539	$2\frac{13}{16}$	S-20529	$2\frac{3}{16}$
S-20538	$2\frac{3}{4}$	S-20528	$2\frac{1}{8}$
S-20537	$2\frac{11}{16}$	S-20527	$2\frac{1}{16}$
S-20536	$2\frac{5}{8}$	S-20526	2
S-20535	$2\frac{1}{16}$	S-20525	$1\frac{15}{16}$
S-20534	$2\frac{1}{2}$	S-20524	$1\frac{7}{8}$
S-20533	$2\frac{7}{16}$	S-20523	$1\frac{13}{16}$
		S-20522	$1\frac{1}{4}$

## PART No. SIZE

S-20134	$2\frac{3}{8}$	$2\frac{7}{16}$
S-20135	$2\frac{7}{16}$	$2\frac{1}{2}$
S-20136	$2\frac{1}{2}$	$2\frac{5}{16}$
S-20137	$2\frac{3}{16}$	$2\frac{5}{8}$
S-20138	$2\frac{3}{8}$	$2\frac{11}{16}$
S-20139	$2\frac{11}{16}$	$2\frac{3}{4}$
S-20140	$2\frac{3}{4}$	$2\frac{13}{16}$
S-20141	$2\frac{13}{16}$	$2\frac{7}{8}$
S-20142	$2\frac{7}{8}$	$2\frac{15}{16}$
S-20143	$2\frac{15}{16}$	3

PART No.	SIZE
S-42517	$1\frac{3}{16}$
S-42518	$1\frac{1}{4}$
S-42519	$1\frac{5}{8}$
S-42520	$1\frac{3}{8}$
S-42521	$1\frac{7}{16}$
S-42522	$1\frac{1}{2}$
S-42523	$1\frac{1}{16}$
S-42524	$1\frac{5}{8}$
S-42525	$1\frac{1}{16}$
S-42526	$1\frac{3}{4}$
S-42527	$1\frac{13}{16}$

PART No.	SIZE
S-42528	$1\frac{7}{8}$
S-42529	$1\frac{15}{16}$
S-42530	2
S-42531	$2\frac{1}{16}$
S-42532	$2\frac{1}{8}$
S-42533	$2\frac{3}{16}$
S-42534	$2\frac{1}{4}$
S-42535	$2\frac{5}{16}$
S-42536	$2\frac{3}{8}$
S-42537	$2\frac{7}{16}$
S-42538	$2\frac{1}{2}$

## PART No. SIZE

S-20511	$1\frac{11}{16}$
S-20510	1
S-20509	$1\frac{1}{16}$
S-20508	$\frac{7}{8}$
S-20507	$1\frac{3}{16}$
S-20506	$\frac{3}{4}$
S-20505	$1\frac{1}{16}$
S-20504	$\frac{5}{8}$
S-20503	$\frac{9}{16}$
S-20502	$\frac{1}{2}$
S-20501	$\frac{7}{16}$

## PART No. SIZE

S-20116	$1\frac{5}{16}$	$1\frac{1}{4}$
S-20115	$1\frac{1}{4}$	$1\frac{1}{16}$
S-20114	$1\frac{1}{16}$	$1\frac{1}{8}$
S-20113	$1\frac{1}{8}$	$1\frac{1}{16}$
S-20112	$1\frac{1}{16}$	1
S-20111	1	$1\frac{5}{16}$
S-20110	$1\frac{5}{16}$	$\frac{7}{8}$
S-20109	$\frac{7}{8}$	$1\frac{5}{16}$
S-20108	$1\frac{3}{16}$	$\frac{3}{4}$
S-20107	$\frac{3}{4}$	$1\frac{1}{16}$
S-20106	$\frac{5}{8}$	$1\frac{1}{16}$
S-20105	$\frac{9}{16}$	$\frac{5}{8}$
S-20104	$\frac{1}{2}$	$\frac{9}{16}$
S-20103	$\frac{7}{16}$	$\frac{1}{2}$
S-20102	$\frac{3}{8}$	$\frac{7}{16}$
S-20101	$1\frac{1}{32}$	$\frac{3}{8}$

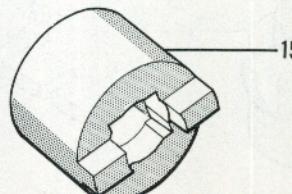
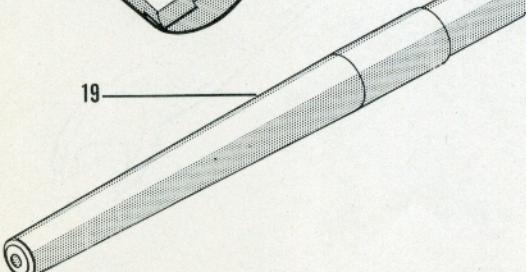
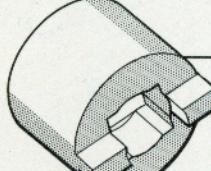
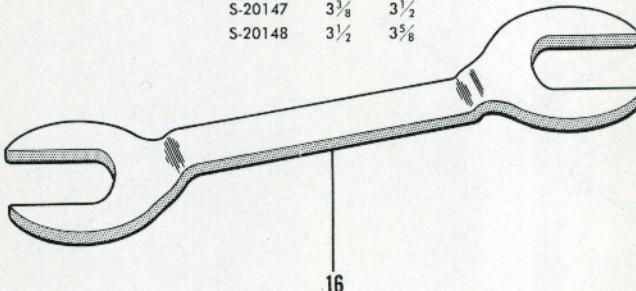


Figure 218 — Service Tools

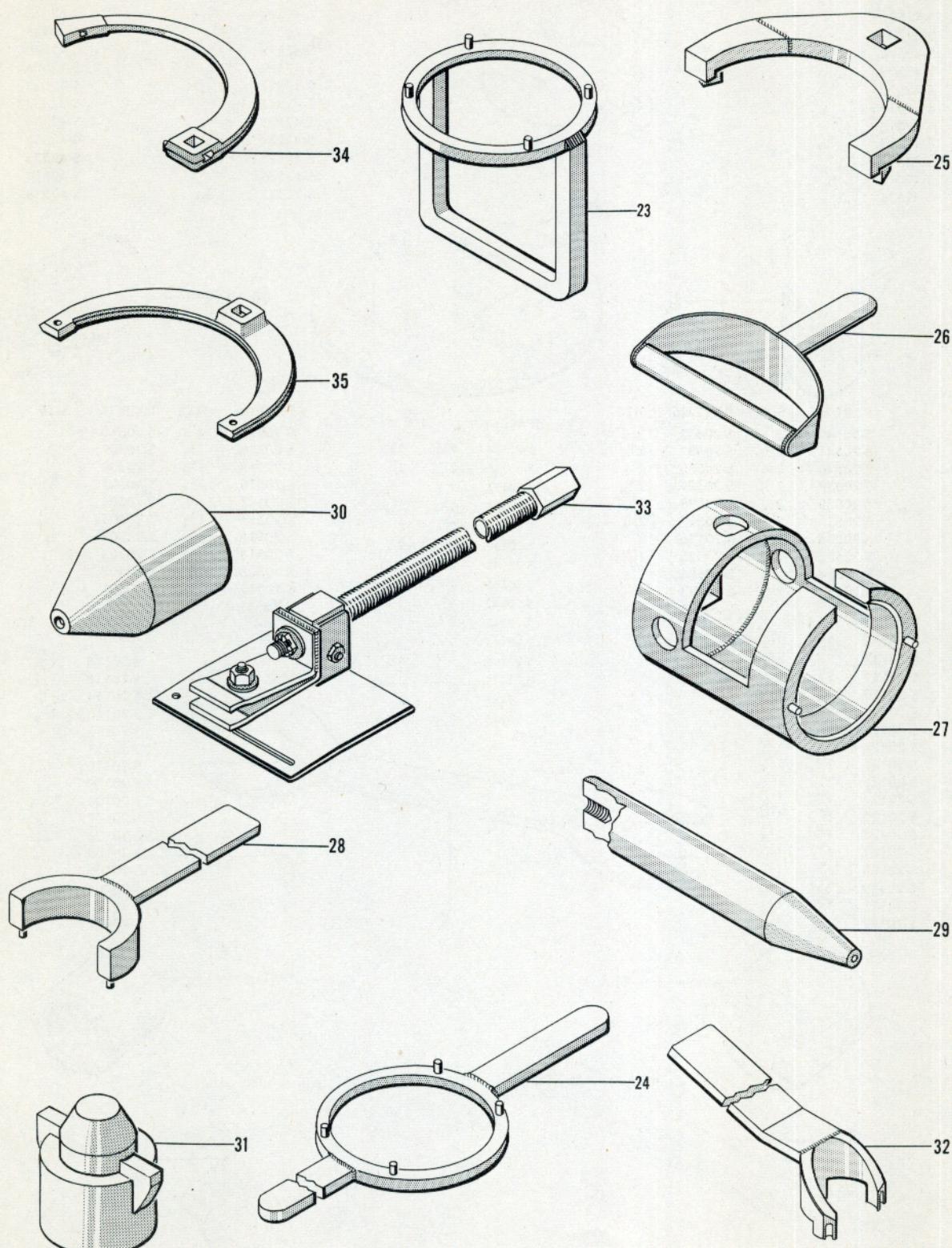


Figure 219 — Service Tools

GROUP . . . Service Tools and Ground Handling Equipment

Detail Unit . . . Service Tools

*Constellation*

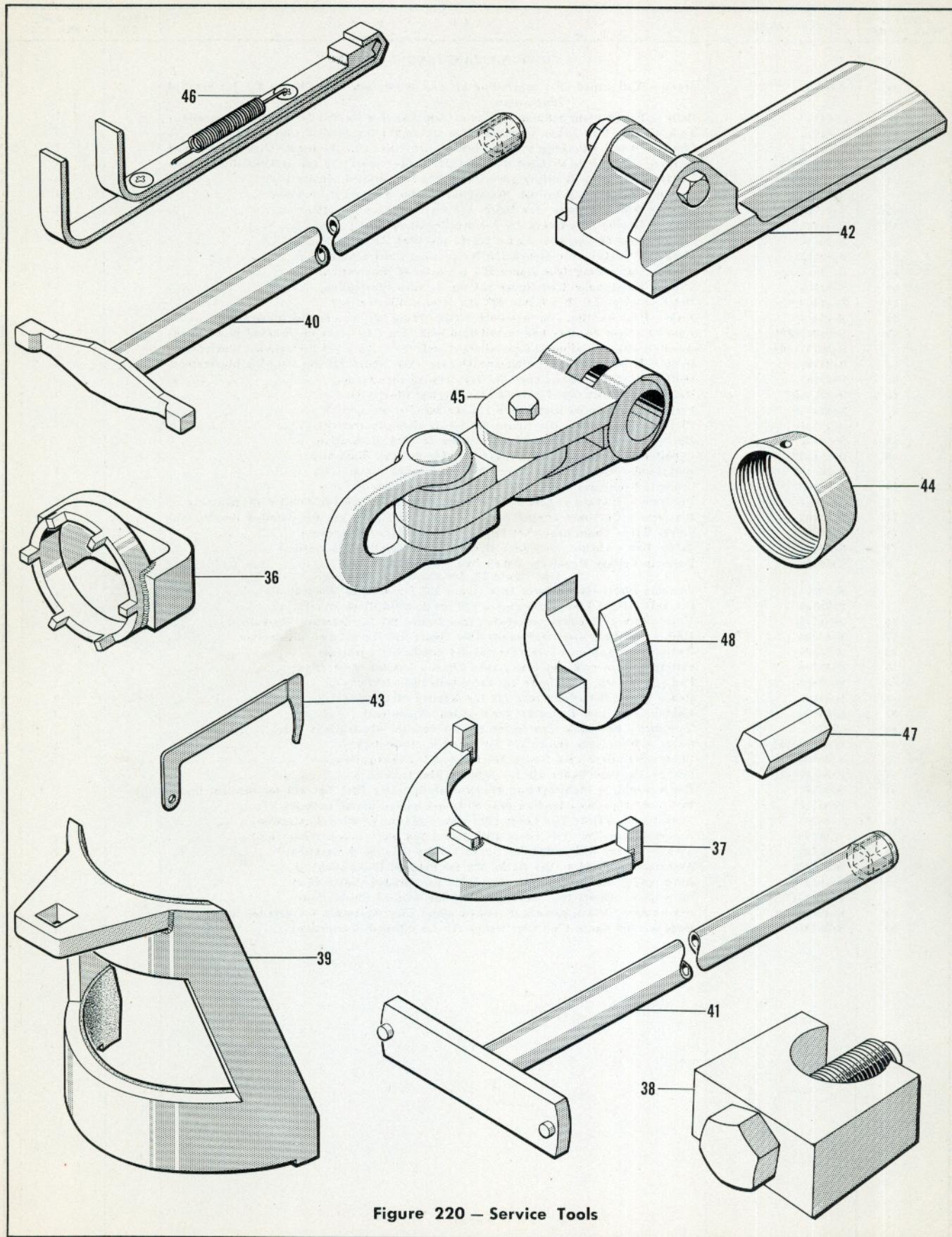


Figure 220 — Service Tools

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## Detail Unit . . . Ground Handling Equipment

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.			
			GROUND HANDLING EQUIPMENT					
49	S-81350		Stand - Tail tripod (For supporting aft end of airplane) (See figure 221 for detailed illustration)		1			
50	S-83705		Dolly - Power plant buildup storage & transport (See fig. 221 for detailed illustration)		1			
51	S-83900		Jack - Model "A" 20 ton universal (See figure 221 for detailed illustration) .....		3			
52	S-85105		Chock - Wheel (Blocking wheels when parked) (See fig. 222 for detailed illustration)		2			
53	S-83902		Adapter - 20 ton jack (Used with S-83900) (See figure 222 for detailed illustration) .....		1			
54	S-93507		Ladder - Refueling & utility (See figure 222 for detailed illustration) .....		1			
	S-93508		Ladder - Refueling & utility (See figure 222 for detailed illustration) .....		1			
55	S-84708		Dolly - Wheel removal (See figure 222 for detailed illustration) .....		1			
56	S-84105		Sling - Engine (See figure 223 for detailed illustration) .....		1			
57	S-96700		Sling - Nose section (See figure 223 for detailed illustration) .....		1			
58	S-89105		Sling - Propeller (See figure 223 for detailed illustration) .....		1			
59	S-84405		Sling - Outer wing (See figure 223 for detailed illustration) .....		1			
60	S-84500		Sling - Empennage (See figure 223 for detailed illustration) .....		1			
61	S-84600		Hoist - Rudder fin (See figure 223 for detailed illustration) .....		1			
62	S-96400		Jack - Gear hoisting and installation (See figure 224 for detailed illustration) .....		1			
63	S-96401-201		Adapter - Gear hoisting and installation jack (See figure 224 for detailed illustration) .....		1			
	S-96401-301		Adapter - Gear hoisting and installation jack (See figure 224 for detailed illustration) .....		1			
64	S-96100		Dolly - M.L.G. transportation and storage (See figure 224 for detailed illustration) .....		2			
65	S-85300		Dolly - Propeller (See figure 224 for detailed illustration) .....		2			
66	S-302003		Hoist Attachment (See figure 224 for detailed illustration) .....		1			
67	S-401718		Platform Extensions (See figure 224 for detailed illustration) .....		1			
	S-401719		Platform Extensions (See figure 224 for detailed illustration) .....		1			
68	S-86401		Bar - Nose gear tow (See figure 225 for detailed illustration) .....		1			
69	S-501137		Aerostand - Model 20-L (See figure 225 for detailed illustration) .....		1			
	S-500896		Aerostand - Model 20 (See figure 225 for detailed illustration) .....		1			
70	S-85400		Crane - 2 ton (See figure 225 for detailed illustration) .....		1			
71	S-97401		Platform - Inboard engine nacelle work (See figure 226 for detailed illustration)...		2			
72	S-97402		Platform - Outboard engine nacelle work (See figure 226 for detailed illustration) .....		2			
73	S-96902		Safety Bar - Cabin door (See figure 226 for detailed illustration) .....		1			
74	S-96901		Safety Bar - Cockpit door (See figure 226 for detailed illustration) .....		1			
75	S-70007		Portable Voltage Regulator Paralleling Instrument .....		1			
	S-70008		(See figure 227 for detailed illustration)					
	S-70009		Portable Electrical Analyzer (See figure 227 for detailed illustration) .....		1			
76	S-94610		Portable Midget Tester (See figure 227 for detailed illustration) .....		1			
77	S-88505		Unit - Fire extinguisher extension (See figure 227 for detailed illustration) .....		1			
78	S-86500		Unit - Auxiliary electrical power (See figure 227 for detailed illustration) .....		1			
79	S-86700		Pad - Wing and nose jack (See 228 for detailed illustration) .....		5			
80	S-85800		Fitting - Nose jack pad (See figure 228 for detailed illustration) .....		1			
81	S-86102		Pad - Tail jack (See figure 228 for detailed illustration) .....		1			
82	S-85700		Pad - Nose hoist (See figure 228 for detailed illustration) .....		2			
83	49B39		Engine Cover (See figure 228 for detailed illustration) .....		4			
84	S-89800-101		Tow Bar - Speedpak (See figure 228 for detailed illustration) .....		1			
85	S-89800-107		Cover - Wing (See figure 228 for detailed illustration) .....		1			
86	S-89800-116		Cover - Stabilizer (See figure 228 for detailed illustration) .....		1			
87	S-85201		Cover - Tip (See figure 228 for detailed illustration) .....		1			
	S-85203		Pin Assembly - Main landing gear downlock safety (See fig. 228 for detailed illus.)		2			
88	S-85705		Pin Assembly - Nose landing gear downlock safety (Same as index 87) .....		1			
89	S-85706		Main Landing Gear Tire Cover (See figure 228 for detailed illustration) .....		4			
90	S-85500		Nose Landing Gear Tire Cover (See figure 228 for detailed illustration) .....		4			
91	S-500922		Jack - 7½ ton hydraulic (See figure 229 for detailed illustration) .....		1			
92	S-502377		Aerostand - Model 4 (See figure 229 for detailed illustration) .....		1			
	S-402241		Aerostand - Model 10A (See figure 229 for detailed illustration) .....		1			
93	S-402231		Aerostand - Model 10C (See figure 229 for detailed illustration) .....		1			
94	S-96205		Aeroramp - Deluxe passenger loading stand (See figure 229 for detailed illustration) .....		1			
			Baggage and Cargo Cart (See figure 229 for detailed illustration) .....		1			

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GROUP . . . Service Tools and Ground Handling Equipment

Detail Unit . . . Ground Handling Equipment

*Constellation*

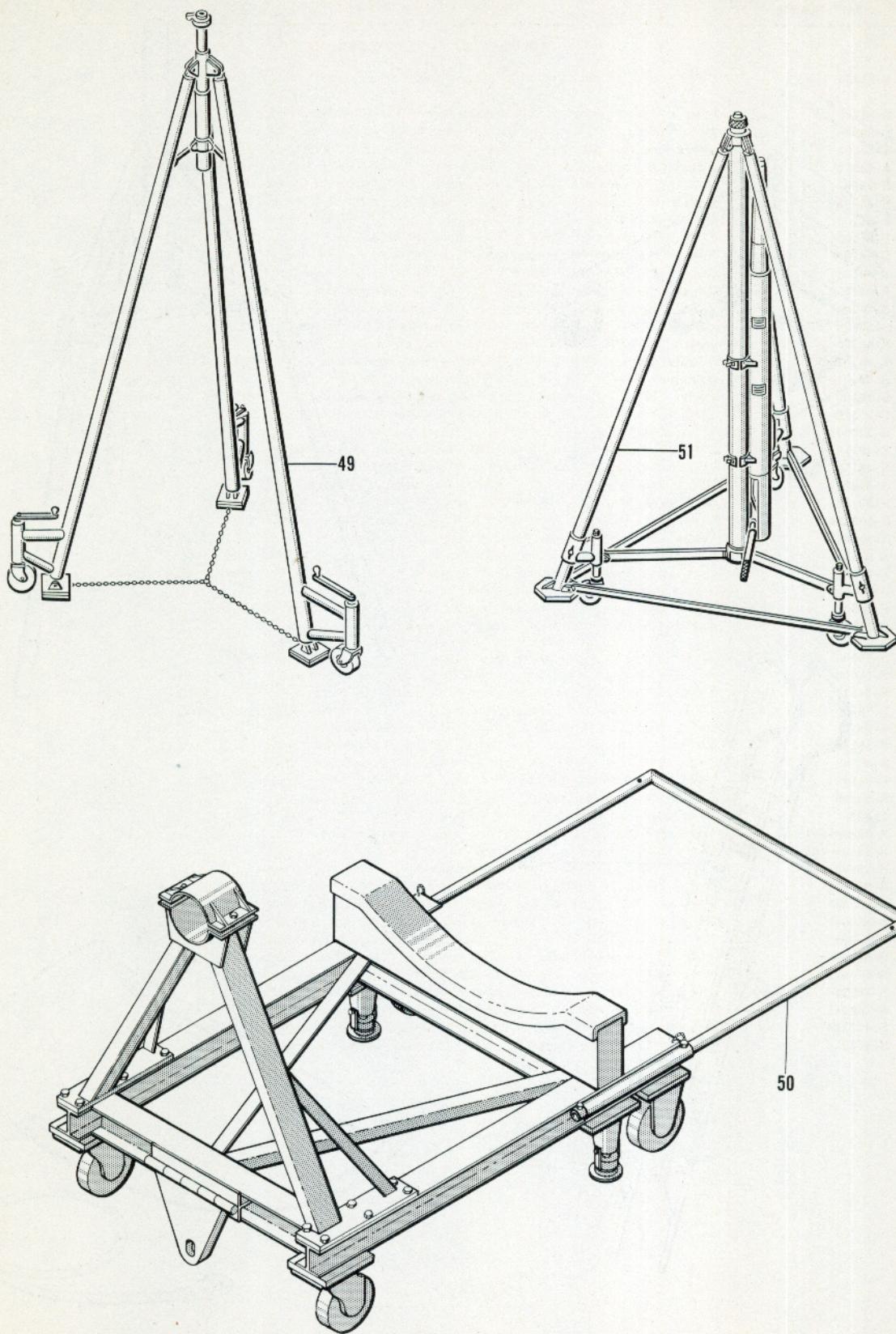


Figure 221 — Ground Handling Equipment

SERVICE TOOLS

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GROUP . . . Service Tools and Ground Handling Equipment  
Detail Unit . . . Ground Handling Equipment

*Constellation*

SERVICE TOOLS

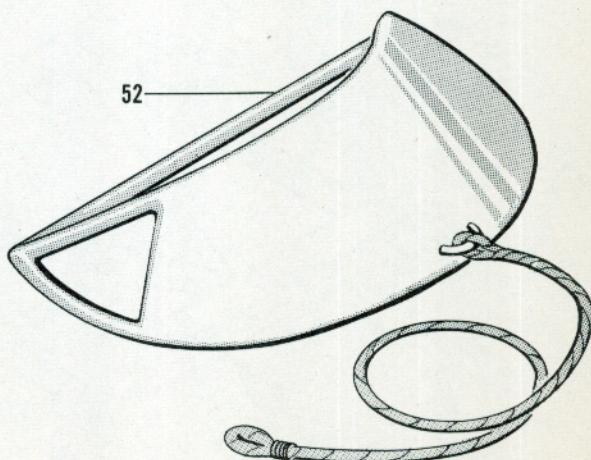
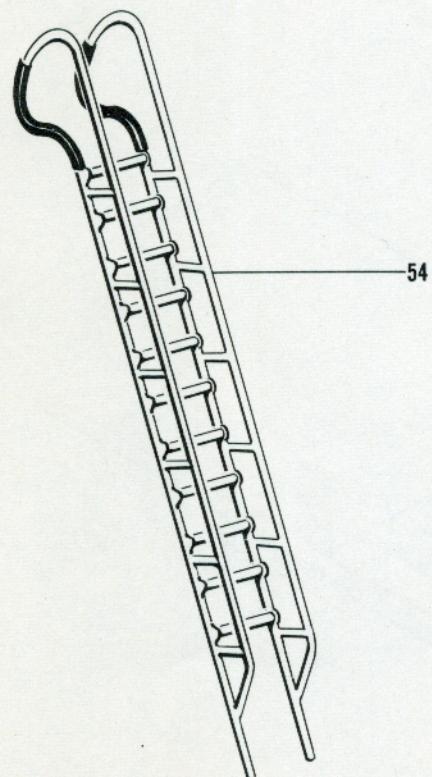
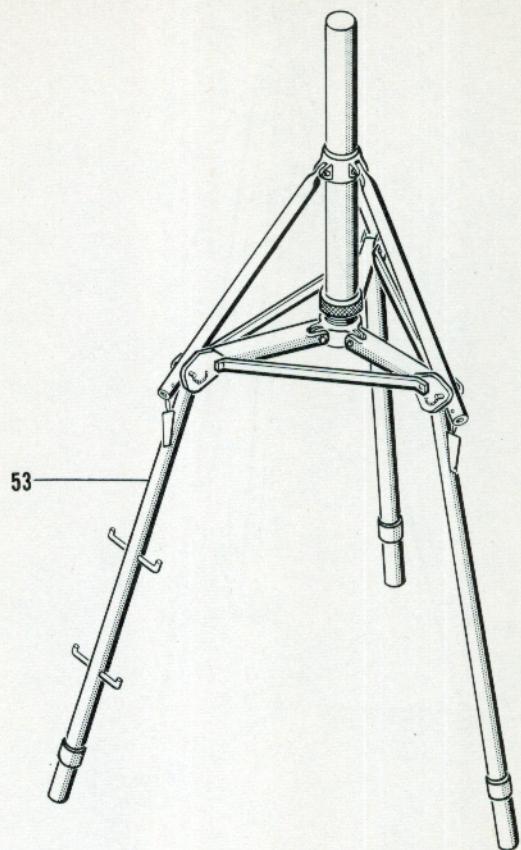
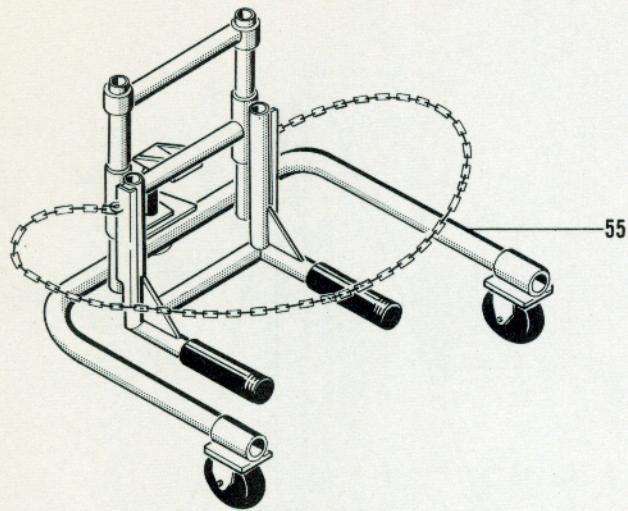


Figure 222 — Ground Handling Equipment

GROUP . . . Service Tools and Ground Handling Equipment

Detail Unit . . . Ground Handling Equipment

*Constellation*

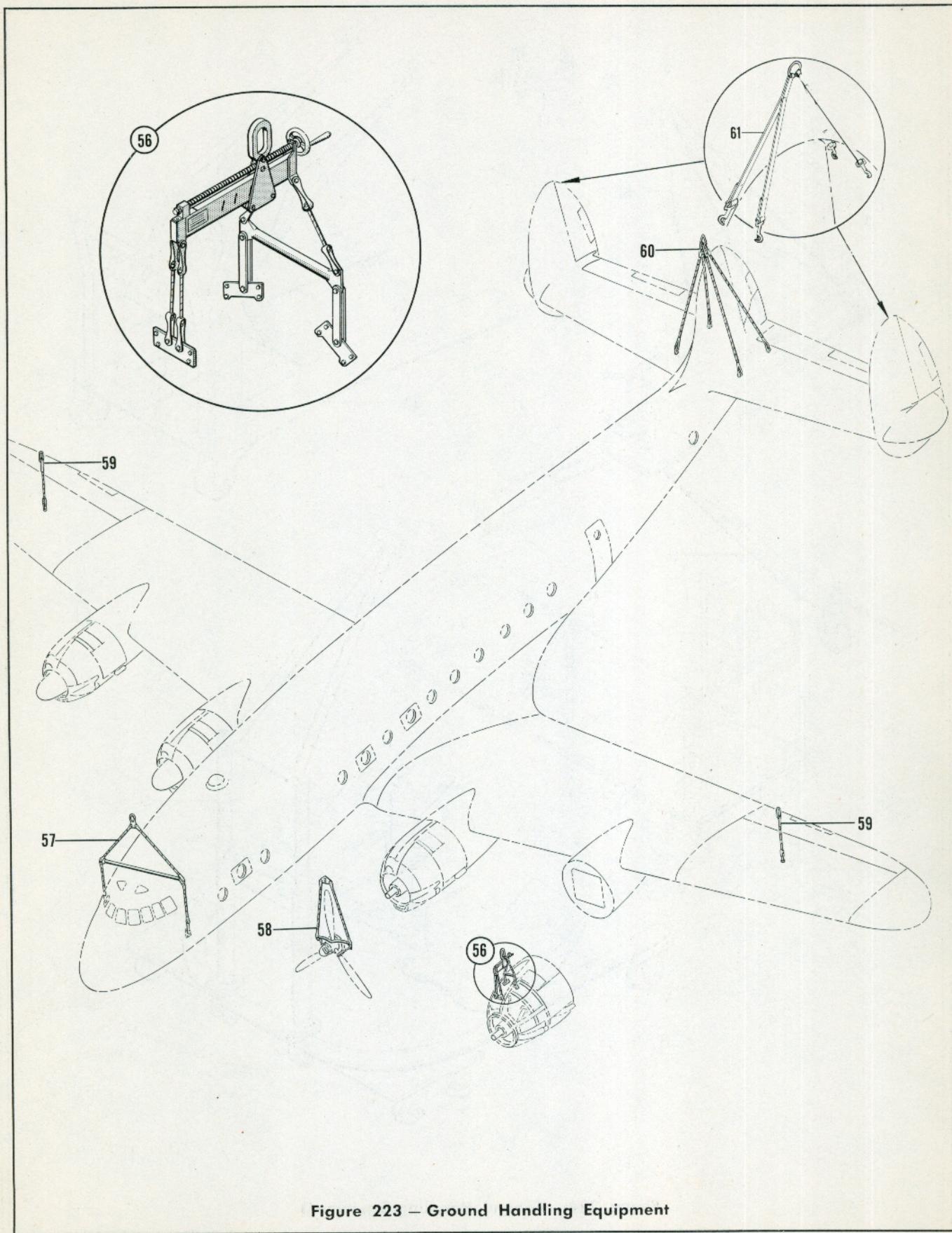


Figure 223 — Ground Handling Equipment

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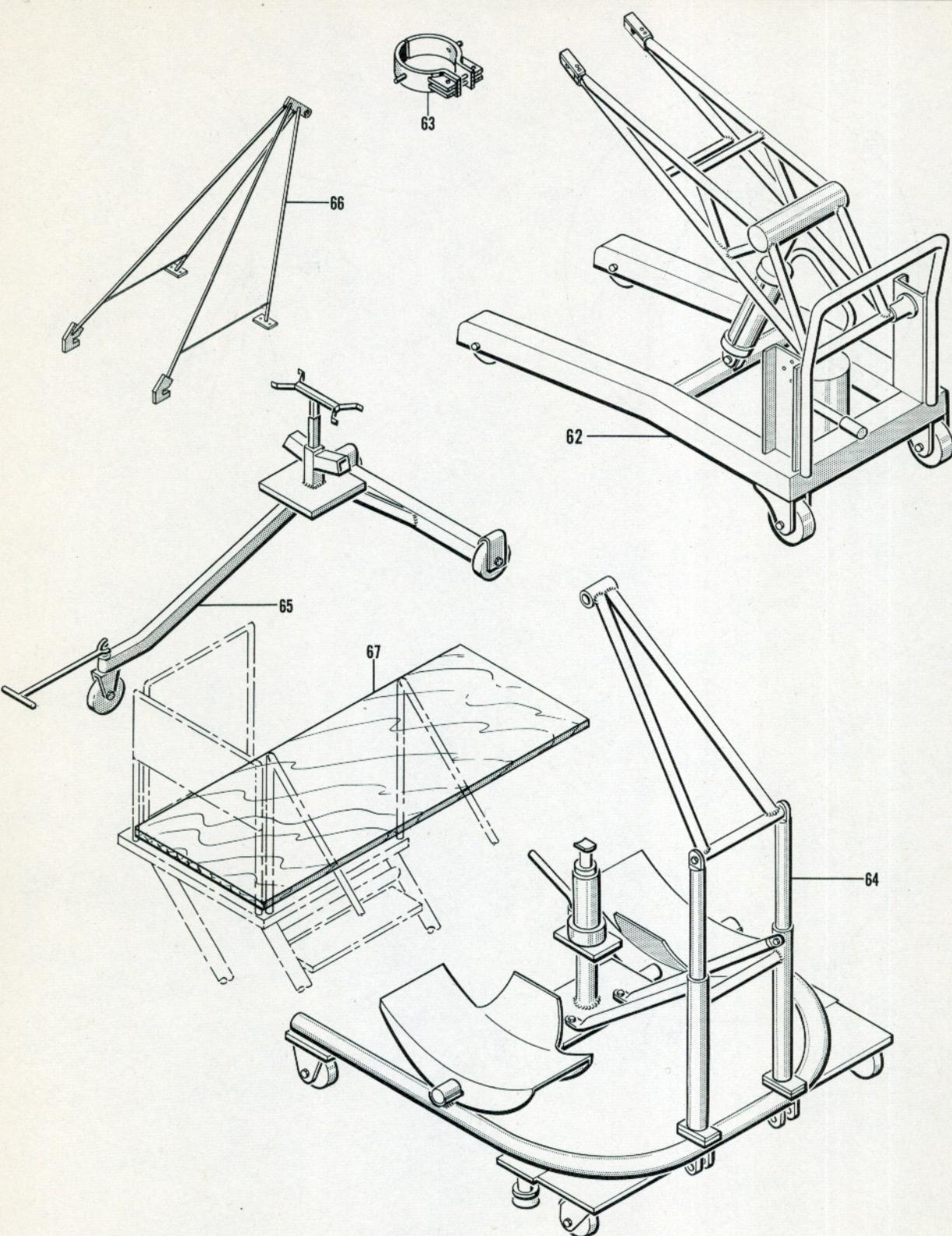


Figure 224 — Ground Handling Equipment

GROUP . . . Service Tools and Ground Handling Equipment

Detail Unit . . . Ground Handling Equipment

*Constellation*

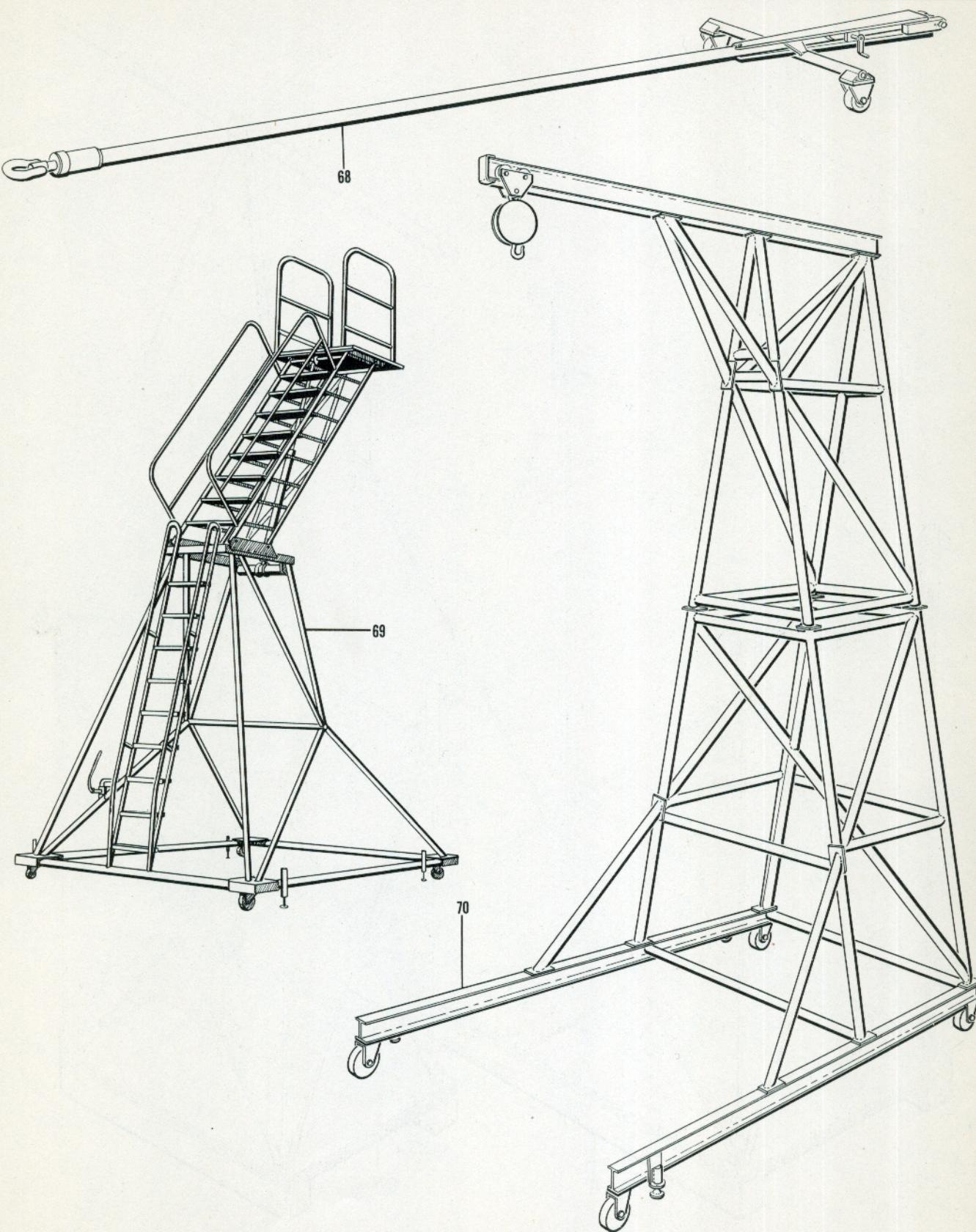


Figure 225 — Ground Handling Equipment

GROUP . . . Service Tools and Ground Handling Equipment

Detail Unit . . . Ground Handling Equipment

*Constellation*

SERVICE TOOLS

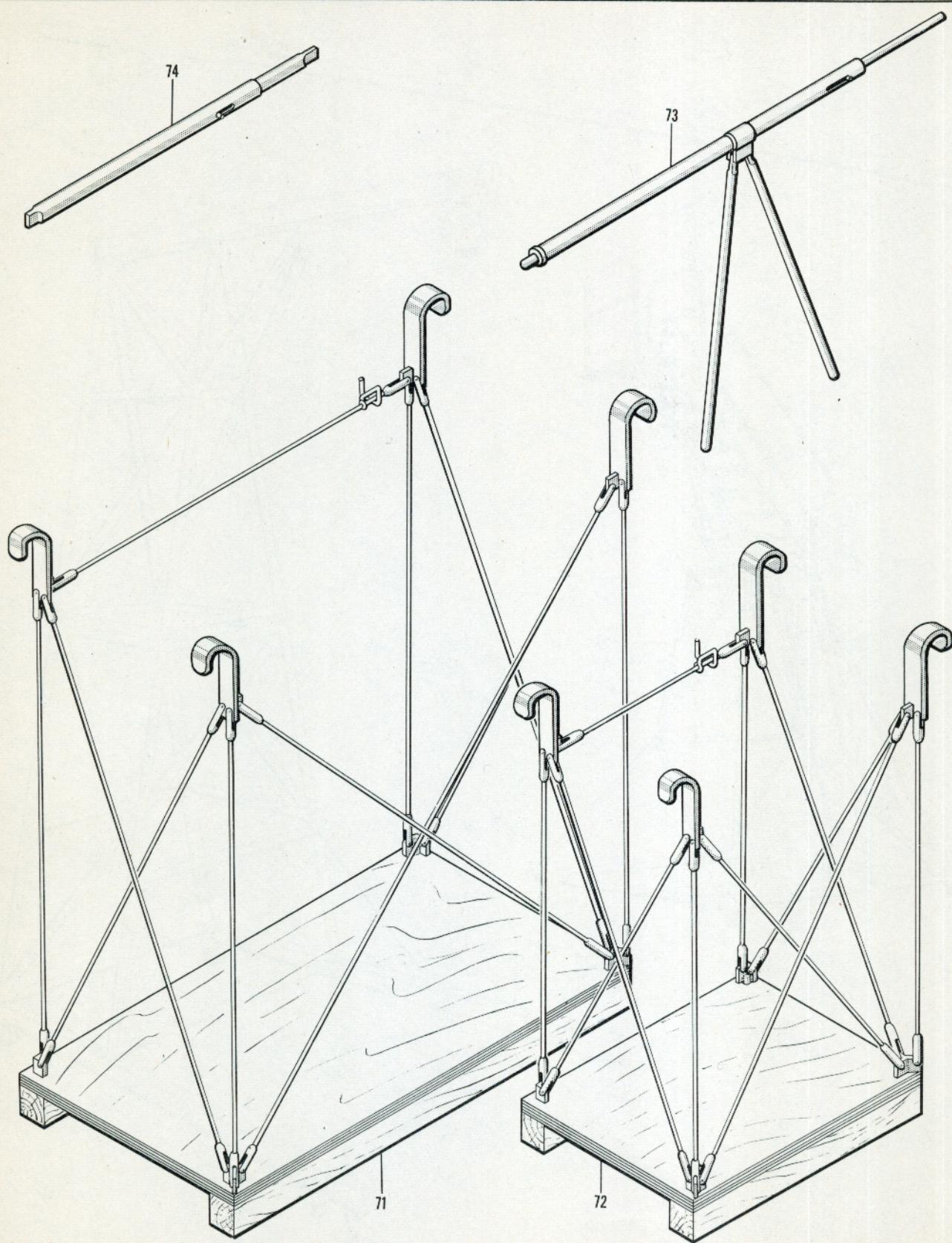


Figure 226 — Ground Handling Equipment

**GROUP** . . . Service Tools and Ground Handling Equipment

**Detail Unit** . . . Ground Handling Equipment

*Constellation*

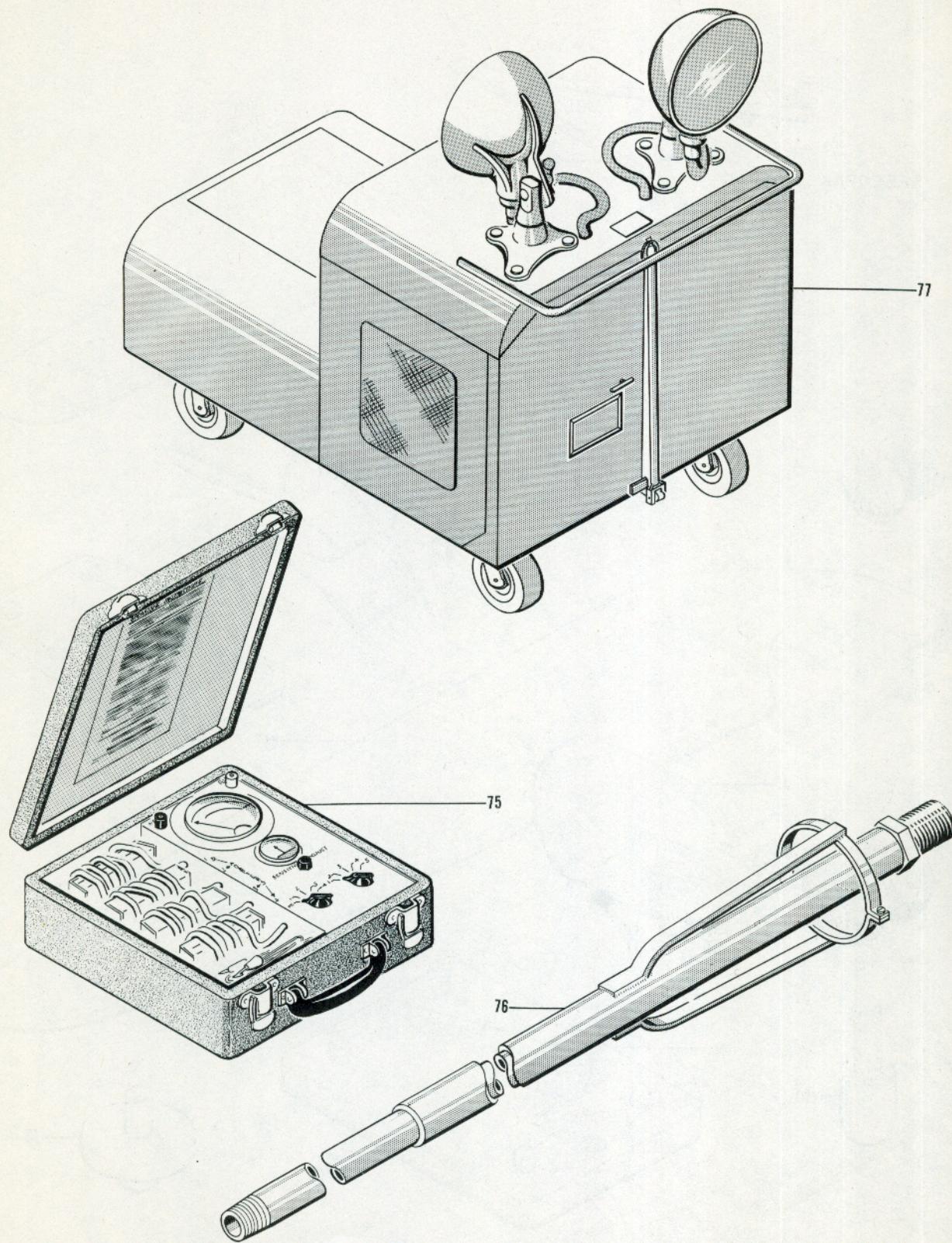


Figure 227 — Ground Handling Equipment

GROUP . . . Service Tools and Ground Handling Equipment

Detail Unit . . . Ground Handling Equipment

*Constellation*

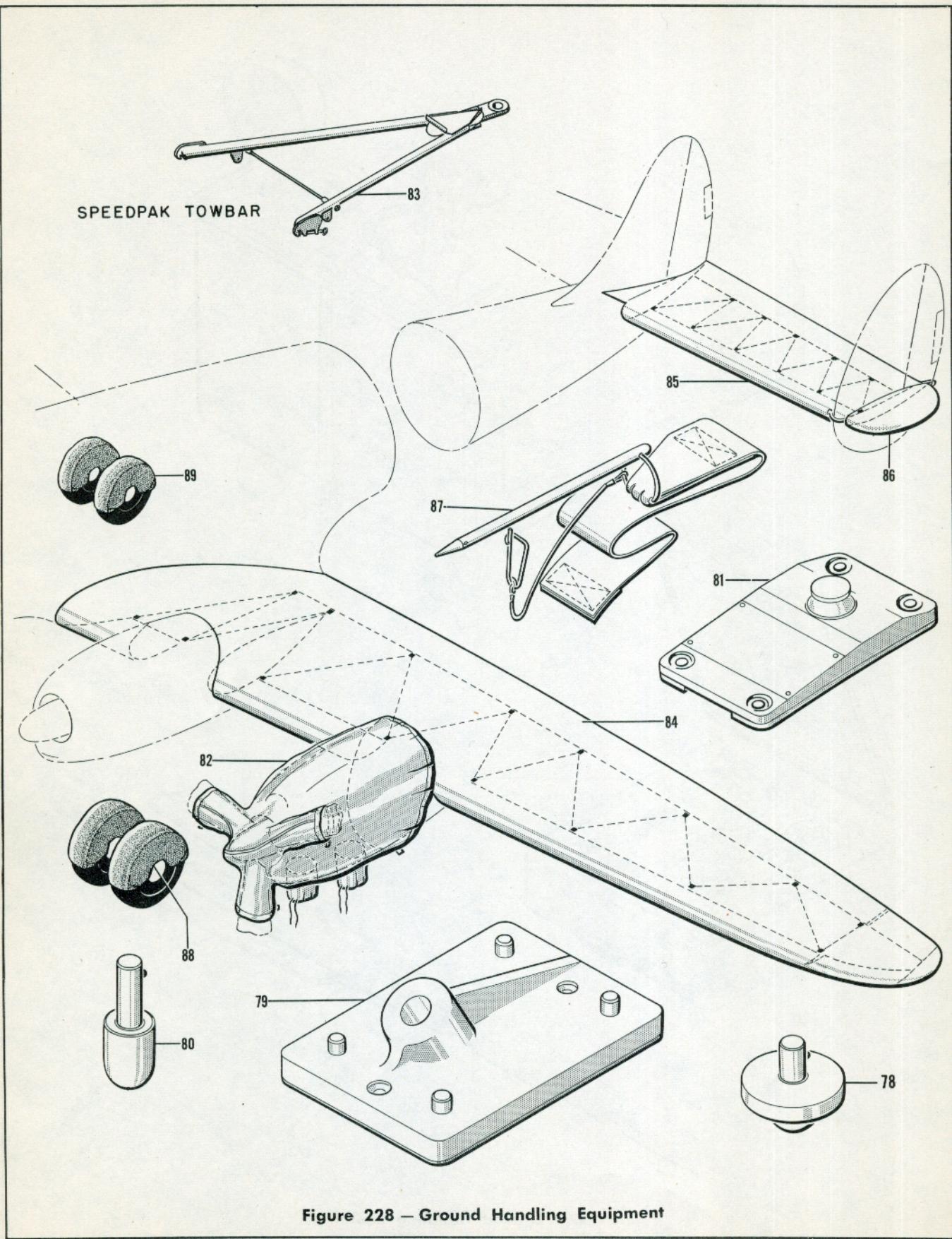


Figure 228 — Ground Handling Equipment

GROUP . . . Service Tools and Ground Handling Equipment

Detail Unit . . . Ground Handling Equipment

*Constellation*

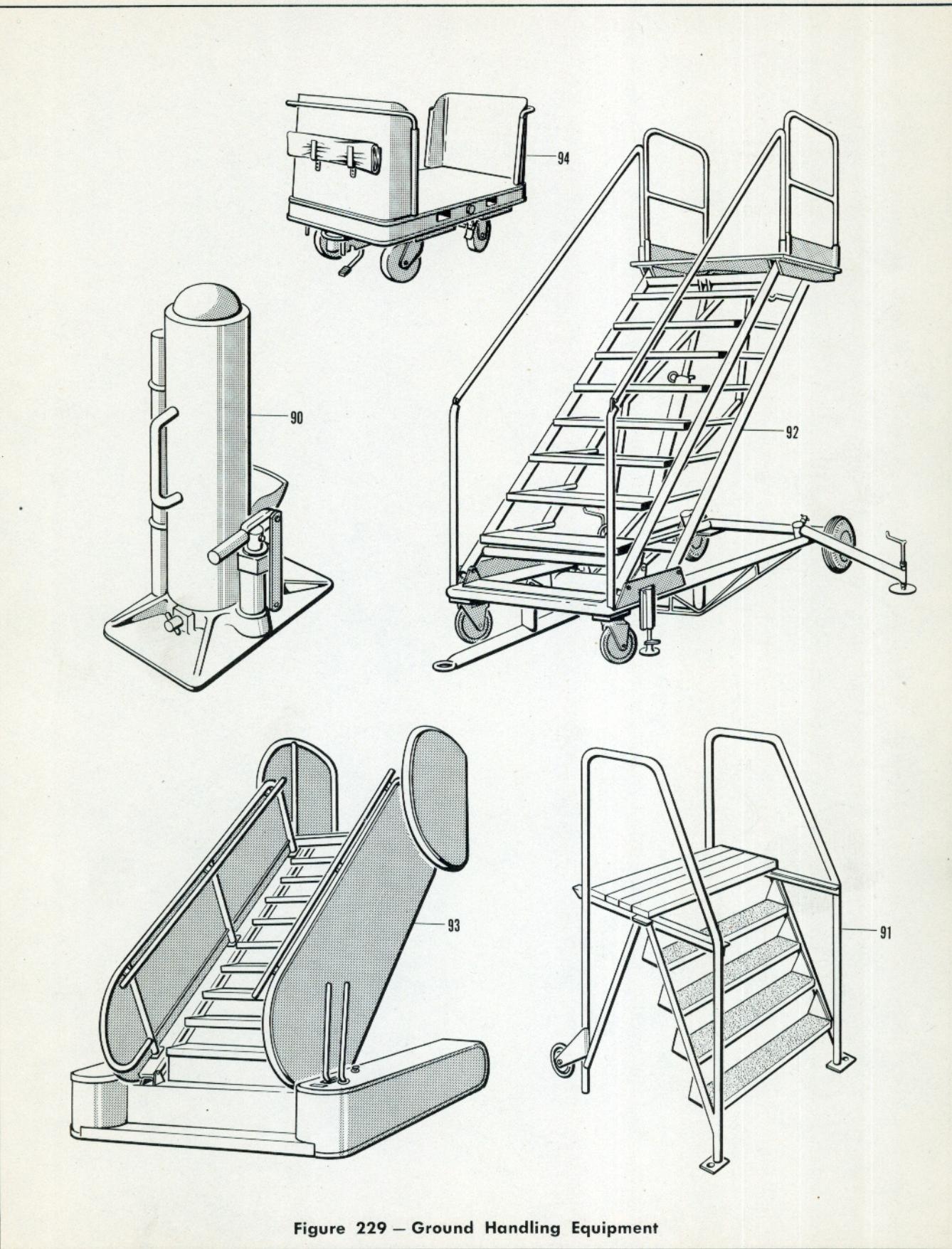


Figure 229 — Ground Handling Equipment

SERVICE TOOLS

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*Notes*

*Constellation*