

TO: ALL HOLDERS FLIGHT CONTROLS MODULE ASSEMBLY (P5-3) OVERHAUL MANUAL,  
 31-36-04

REVISION NO. 43, DATED NOV 1/08

HIGHLIGHTS

DESCRIPTION OF CHANGE	TOPICS AFFECTED												
	D & O	D / A s s y	C l e a n i n g	I n s p / C h k	R e p a i r	A s s y	F / C	T e s t	T / S h o o t i n g	S / T o o l s	S t o r a g e	I P L	L / O v e r h a u l
<p>Changed required results for test steps 136, 137, 139, 141, 143, 145, 148, 151, 153 and 156 on pages 715 and 716 of Figure 703A (Sheets 5 and 6)</p>								X					

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 HIGHLIGHT  
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# FLIGHT CONTROL MODULE ASSEMBLY P5-3

31-36-04

BOEING P/N 69-37313-32, -35 thru -41, -44, -46, -48 thru -51, -58, -61 thru -64, -67 thru -70, -74, -78, -86 thru -98, -102, -400, -409, -429 thru -464, -529 thru -564

AIRLINE P/N

THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT:

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT
		PRR 3035	Aug 15/68
		PRR 30429	Aug 15/68
		PRR 30956	May 15/69
33-1013, Rev 1		PRR 31143	May 15/69
		PRR 31253	May 15/69
22-1009		PRR 31707	Mar 10/70
		PRR 32373	Jun 25/75
29-1039R1		PRR 33099	Dec 5/85
		PRR 33329	Dec 5/83
		PRR 33337	Dec 5/83
		PRR 33341	Jun 5/84
		PRR 33377	Jun 5/84
		PRR 33446	Jun 5/84
CSB 69-37313-31-02			Mar 1/03
CSB 69-37313-31-03			Mar 1/03
	31-29		Jul 1/03
	31-31		Nov 1/03

Nov 1/03

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## LIST OF EFFECTIVE PAGES

\* Indicates pages revised, added or deleted in latest revision  
 F Indicates foldout pages - print one side only

PAGE	DATE	PAGE	DATE	PAGE	DATE
31-36-04		806	BLANK	850	BLANK
T-1	Nov 1/03	807	BLANK	F 851	Nov 1/03
T-2	BLANK	F 808	Dec 5/85	852	BLANK
* LEP-1	Nov 1/08	F 809	Dec 5/85	F 853	Nov 1/03
* LEP-2	Nov 1/08	810	BLANK	854	BLANK
T/C-1	Mar 25/75	811	BLANK	855	Nov 1/03
T/C-2	BLANK	F 812	Jan 5/81	856	BLANK
1	Mar 25/75	F 813	Dec 5/83	F 857	Nov 1/03
2	Nov 1/03	814	BLANK	858	BLANK
3	Nov 1/03	815	BLANK	F 859	Nov 1/03
4	Nov 1/03	F 816	Jun 1/97	860	BLANK
5	Mar 1/03	F 817	Dec 5/83	861	Nov 1/03
6	Nov 1/03	818	BLANK	862	BLANK
7	Nov 1/03	819	BLANK	F 863	Nov 1/03
8	BLANK	F 820	Jul 5/83	864	BLANK
401	Jul 1/08	F 821	Dec 5/83	F 865	Nov 1/03
402	Jul 1/08	822	BLANK	866	BLANK
701	Jul 1/07	823	BLANK	867	Nov 1/03
702	Nov 1/03	F 824	Dec 5/83	868	BLANK
703	Nov 1/03	F 825	Dec 5/83	F 869	Mar 1/03
704	Mar 1/03	826	BLANK	870	BLANK
705	Nov 1/03	F 827	Mar 5/92	F 871	Mar 1/03
706	Jul 1/03	828	BLANK	872	BLANK
707	Nov 1/03	829	BLANK	F 873	Mar 1/03
708	Nov 1/03	F 830	Mar 5/92	874	BLANK
709	Nov 1/03	F 831	Mar 5/92	875	Mar 1/03
710	Nov 1/03	832	BLANK	876	BLANK
710A	Nov 1/03	F 833	DELETED	1101	Jul 1/08
710B	BLANK	834	DELETED	1102	Dec 5/83
711	Mar 1/03	F 835	Nov 1/03	1103	Jul 1/07
712	Jul 1/03	836	BLANK	1104	Mar 1/03
713	Jul 1/03	F 837	Nov 1/03	1105	Jul 1/07
714	Jul 1/03	838	BLANK	1106	Mar 1/03
* 715	Nov 1/08	F 839	Nov 1/03	1106A	Sep 1/94
* 716	Nov 1/08	840	BLANK	1106B	Mar 1/01
717	Jul 1/04	F 841	Nov 1/03	1107	Sep 1/94
718	Nov 1/03	842	BLANK	1108	Jul 1/07
719	Jul 1/04	843	Nov 1/03	1109	Jul 1/07
720	Nov 1/03	844	BLANK	1110	Jun 5/84
801	Nov 1/03	F 845	Nov 1/03	1111	Jul 1/07
802	Nov 1/03	846	BLANK	1112	Jul 1/08
803	BLANK	F 847	Nov 1/03	1113	Mar 5/92
804	BLANK	848	BLANK	1114	Mar 1/03
F 805	Dec 5/85	849	Nov 1/03	1115	Mar 1/03

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PAGE	DATE	PAGE	DATE	PAGE	DATE
31-36-04 (cont)					
1116	Mar 1/03				
1116A	Nov 1/03				
1116B	Nov 1/03				
1116C	Nov 1/03				
1116D	Nov 1/03				
1116E	Nov 1/03				
1116F	Nov 1/03				
1116G	Nov 1/03				
1116H	Nov 1/03				
1117	Nov 1/03				
1118	Nov 1/03				
1119	Jul 1/07				
1120	Nov 1/03				
1121	Nov 1/03				
1122	Jul 1/07				
1123	Jul 1/07				
1124	Mar 1/03				
1125	Nov 1/03				
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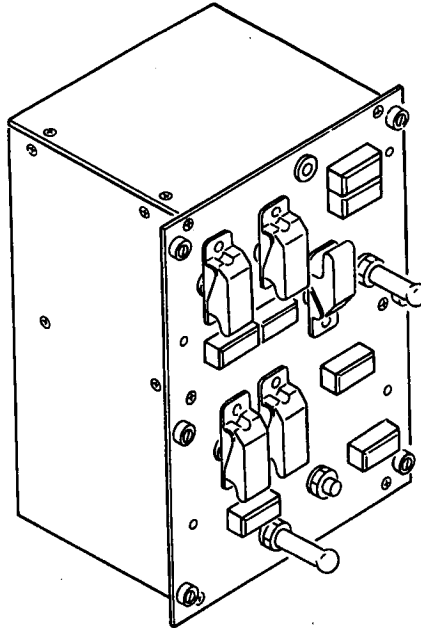
**BOEING**   
**COMMERCIAL JET**  
**OVERHAUL MANUAL**

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\*[1] Use applicable procedures in 20-11-04, 31-10-01 and standard industry practices.

\*[2] Special instructions not required.

FLIGHT CONTROLS MODULE ASSEMBLY (P5-3)

(69-37313-35 SHOWN)

Flight Controls Module Assembly  
Figure 1

DESCRIPTION AND OPERATION

## 1. Description

- A. The flight controls module assembly consists of printed circuit assemblies, indicator light assemblies, control switches, and a wire bundle assembly. The module assembly is located in the pilot's forward overhead panel and may be removed by loosening the six quick-release screws on the baseplate and by disconnecting the primary power connectors.

## 2. Operation

- A. The flight controls module assembly contains controls and indicators for operation of the primary and auxiliary flight control system hydraulic supply valves. The module contains lamps and switches as follows:

### (1) Lamps

**NOTE:** On assemblies 69-37313-44, -51, -87, -88, -437, -442, -453, -454, -537, -542, -553 and -554 only, lamp reference designators DS1 thru DS6, DS8 and DS11 correspond to L1 thru L6, L8 and L11 as listed in text.

- (a) L1 - ELEVATOR AND RUDDER FEEL DIFF PRESSURE
- (b) L2 - LOW PRESSURE STANDBY HYDRAULIC
- (c) L3 - LOW PRESSURE FLIGHT CONTROL SYSTEM "A"
- (d) L4 - LOW QUANTITY STANDBY HYDRAULIC SYSTEM
- (e) L5 - LOW PRESSURE FLIGHT CONTROL SYSTEM "B"
- (f) L6 - YAW DAMPER
- (g) L8 - MACH TRIM FAIL
- (h) L9 - SPEED TRIM FAIL (69-37313-74, -78, -102, -400, -409, -452, -552 only)
- (i) L10 - AUTO SLAT FAIL (69-37313-78, -102, -400, -409 only)
- (j) L11 - STBY RUD ON (69-37313-400, -409, -429 thru -464, -529 thru -564)

### (2) Switches

- (a) S1 - ALT FLAP MASTER ARMING
- (b) S2 - ALT FLAP DRIVE SWITCH
- (c) S3 - FLIGHT CONTROL SYSTEM "A" SWITCH
- (d) S4 - FLIGHT CONTROL SYSTEM "B" SWITCH
- (e) S5 - SPOILER SHUTOFF SWITCH SYSTEM "B"
- (f) S6 - SPOILER SHUTOFF SWITCH SYSTEM "A"
- (g) S7 - YAW DAMPER ENGAGE SWITCH
- (h) S9 - MACH TRIM TEST SWITCH (ALL EXCEPT 69-37313-74, -78, -102, -400, -409, -452, -552)

3. Functional Description

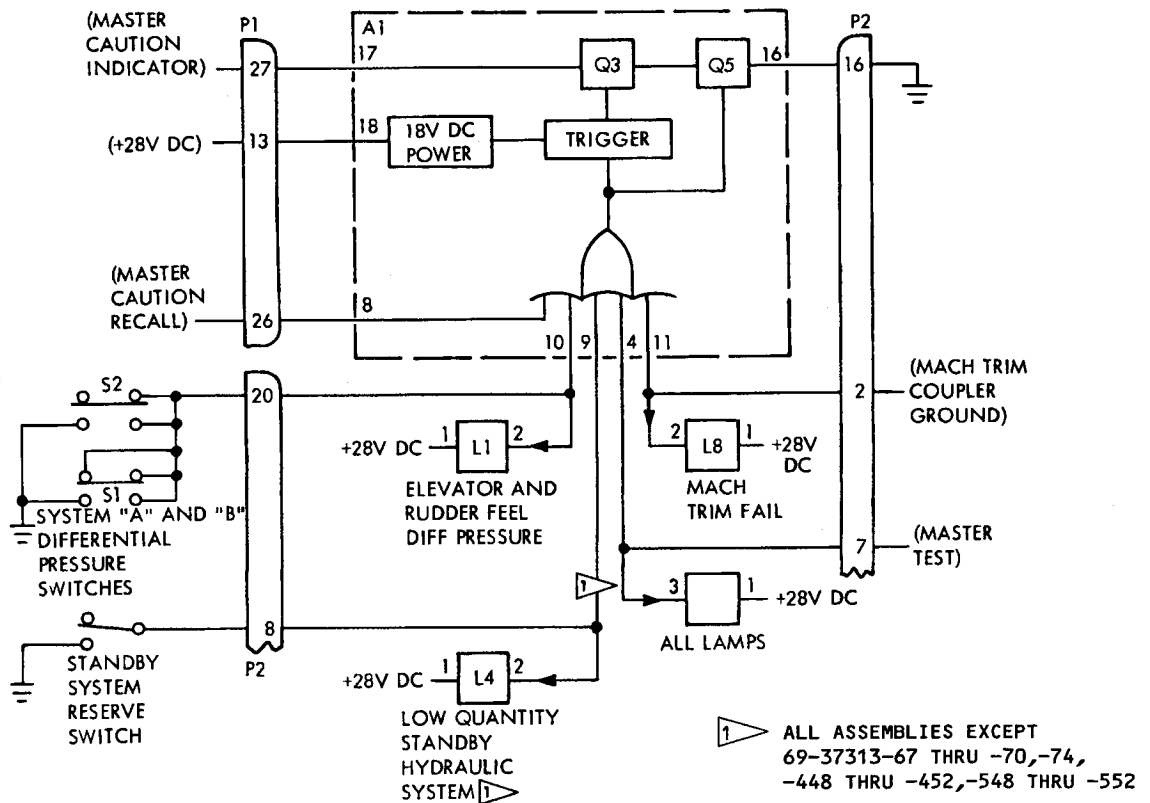
A. Indicator Lamps

(1) All the indicator lamps have +28-volt dc power connected at the No. 1 terminal from pin P2-18 and require a ground input to illuminate. The No. 4 terminals are grounded at pin P2-16 so that when the lamps are pressed they will illuminate individually. The No. 3 terminal of all lamps may be connected to ground through the external master test switch connected at pin P2-7 to illuminate them all at once. The lamps serve their indicator function when the No. 2 terminals are grounded.

B. The external master caution indicator is connected at pin P1-27. Pins P1-13 and P2-18 are supplied +28 volts dc and pin P2-16 is grounded (Ref 31-36-07 for description of A1 operation).

(1) Master Caution, L1, L4, L8, and (69-37313-74, -452, -552 only) L9 Indicators (Fig. 2)

(a) Grounding pins P2-20, P2-8, P2-2 or (69-37313-74, -452, -552 only) P2-1 will illuminate lamps L1, L4, L8 or (69-37313-74, -452, -552 only) L9 respectively. Also printed circuit assembly A1 circuitry is activated, completing a ground path from pin P1-27 to pin P2-16, illuminating the master caution indicator. For assemblies 69-37313-67, -68, -69, -70, -74, -78, -86 thru -98, -102, -409, -448 thru -464, -548 thru -564, the signal that activates L4 is delayed by A2 before being passed on the A1 (Fig. 3, Sheet 2).



Master Caution, L1, L4, L8 and L9 (69-37313-74, -452, -552 only)  
Indicator Diagram  
Figure 2



## (2) Master Caution, L8, L9 and L10 Indicators (69-37313-78, -102, -400, -409 only) (Fig. 2A)

- (a) Grounding of pin P2-2 will illuminate lamp L8. Ungrounding of pins P1-28 and P1-31 will illuminate lamp L10 and ungrounding of pins P1-38 and P2-1 will illuminate lamp L9. Also printed circuit assembly A1 circuitry is activated, completing a ground path from pin P1-27 to pin P2-16, illuminating the master caution indicator.

## (3) Master Caution, L2, L3, L5, and L6 Indicators (Fig. 3)

- (a) Grounding pins P1-20 (through S1, S3 or S4), P1-24 or P1-7 (through S3 or S3 and K1), P2-10 or P1-7 (through S4 or S4 and K1), or P2-19 will illuminate lamps L2, L3, L5, or L6, respectively. Grounding of the foregoing pins supplies an input to printed circuit assembly A2 or A3. A2 or A3 circuits arm the A1 circuit and after 0.5 to 2 second delay triggers A1 causing it to illuminate the master caution indicator. The time delay eliminates nuisance triggering of the master caution indicator. (Refer to 31-36-06 for description of A2 or A3 operation.)

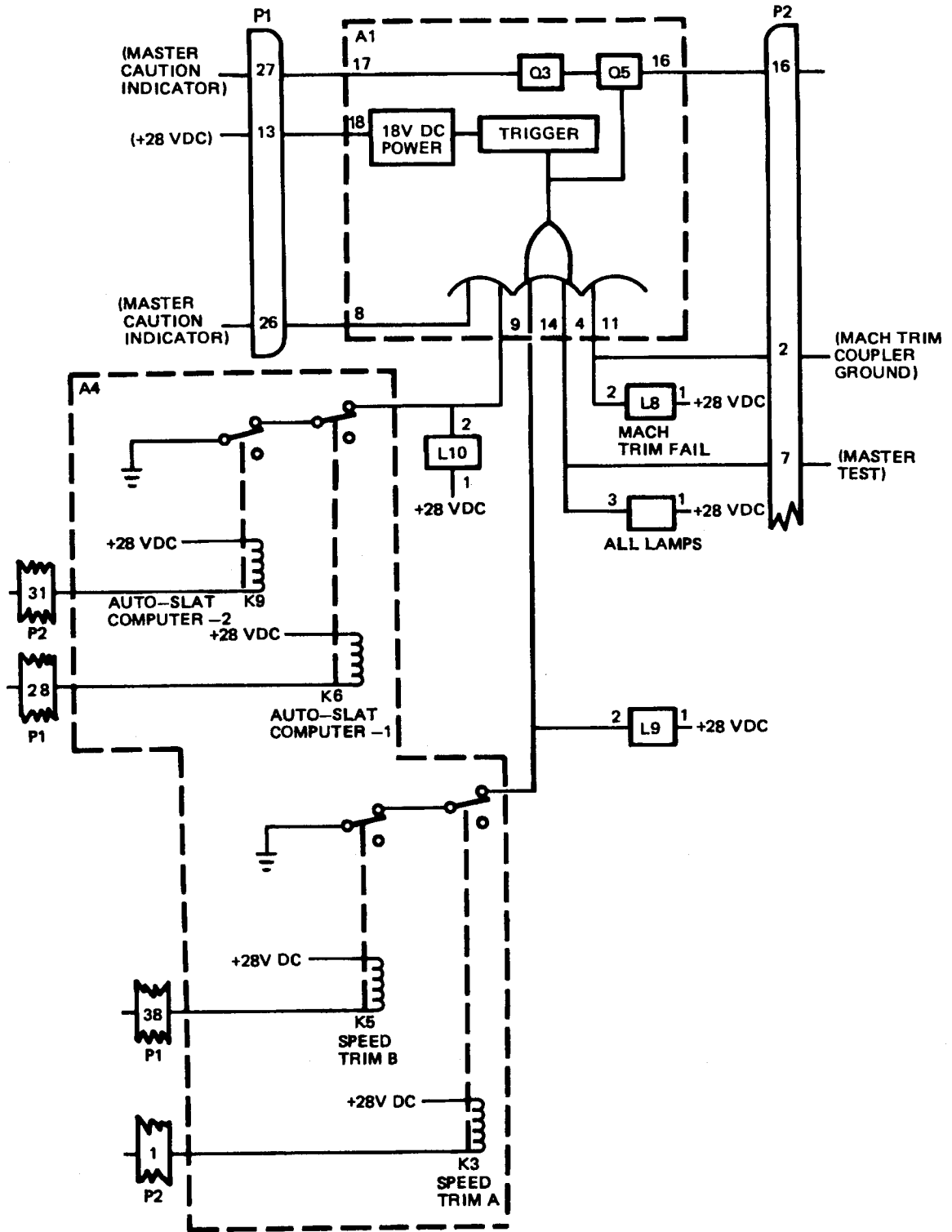
## C. Master Caution Recall (Fig. 2, 2A and 3).

- (1) The master caution indicator, when illuminated, may be extinguished by opening the ground path from pin P1-27 through A1 to pin P2-16. At a later time, activating the external master caution recall, which momentarily grounds pin P1-26, will illuminate the master caution indicator provided one or more of the ground inputs to pins P1-7, P1-20, P1-24, P2-2, P2-8, P2-10, P2-19, or P2-20 are present.

## D. Master Test (Fig. 2, 2A).

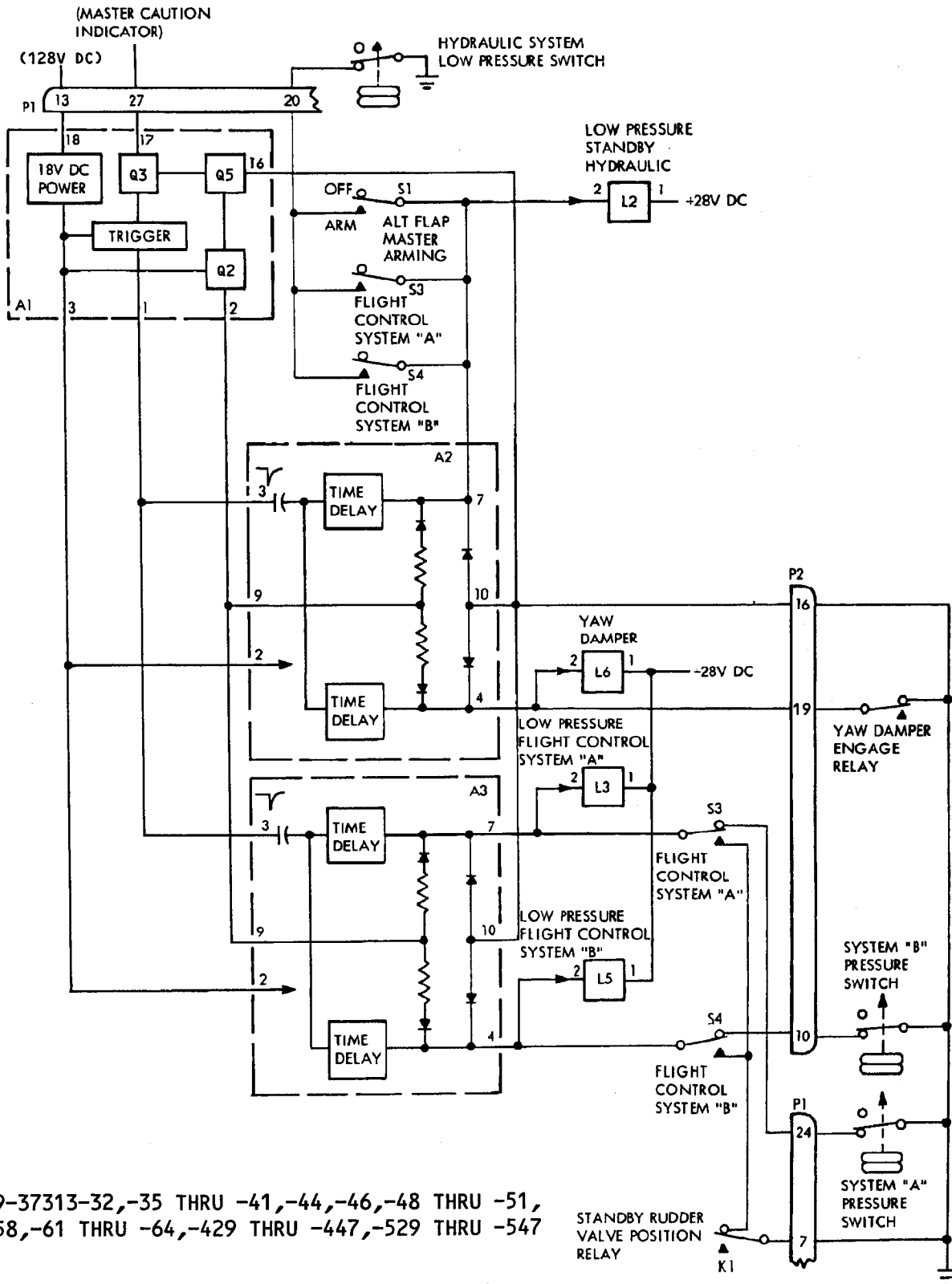
- (1) Activating master test, which grounds pin P2-7, will illuminate all of lamps L1 through L6, L8, \*[1]L9, \*[2]L10, \*[3]L11 and the master caution indicator by providing a ground input to each of the module lamps at terminal No. 3 and completing the ground path through A1 for the master caution indicator.

- | \*[1] 69-37313-74, -78, -102, -400, -409, -452, -552 only  
| \*[2] 69-37313-78, -102, -400, -409 only  
| \*[3] 69-37313-400, -409, -429 thru -464, -529 thru -564



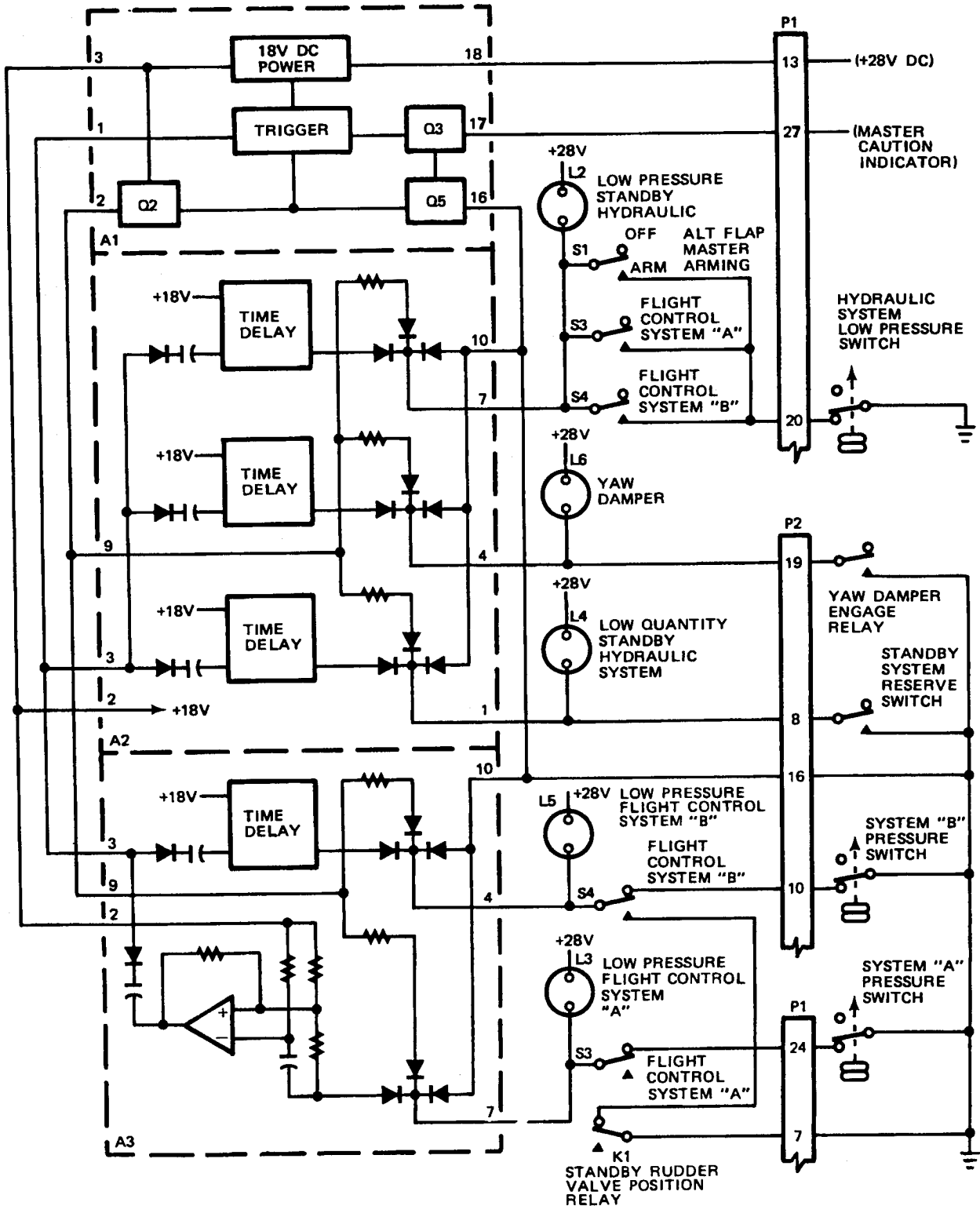
(69-37313-78,-102,-400,-409 ONLY)

Master Caution, L8, L9 and L10 Indicator Diagram  
Figure 2A



69-37313-32, -35 THRU -41, -44, -46, -48 THRU -51,  
-58, -61 THRU -64, -429 THRU -447, -529 THRU -547

Master Caution, L2, L3, L5, and L6 Indicator  
Figure 3 (Sheet 1)



69-37313-67,-68,-70,-74,-78,-86 THRU -98,-102,-400,-448 THRU -464,-548 THRU -564

Master Caution, L2, L3, L4, L5, and L6 Indicator  
Figure 3 (Sheet 2)

REPAIR

1. Materials

A. Plastic tying straps

(1) TY-RAP TY903-5 (Thomas and Betts Corp., 36 Butler St., Elizabeth, NJ 07206)

(a) Optional plastic tying straps are available per Boeing Part Standard BACS38K4F from the following manufactures:

1) Panduit Corp.  
17301 Ridgeland Ave.  
Tinley Park, IL 60477-0981  
V06383

2) Tyton Corp.  
7930 N. Faulkner Rd.  
P.O. Box 23055  
Milwaukee, WI 53223  
V53421

(2) String ties (green), 3/32 wide flat braid P/N 50D0F17G (Western Filament, Inc., 4680 San Fernando Rd., Glendale, CA 91204)

2. All repair may be accomplished with standard shop procedures and information contained in SOPM 20-11-04 except as noted in the following:

A. If keying plugs (29, Fig. 1101) are to be replaced, install in connector position:

(1) P3 and P4 (XA3 and XA2), position 5.

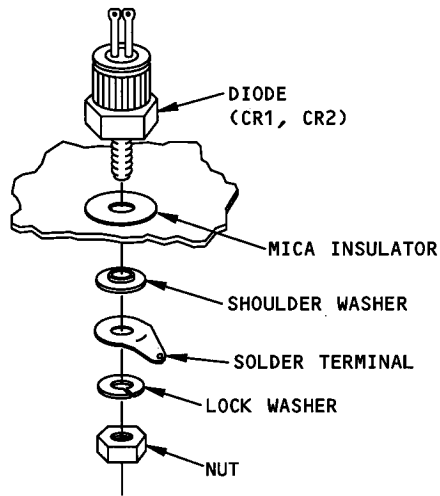
(2) P5 (XA1), position 6.

(3) (XA4), between positions 17 and 18.

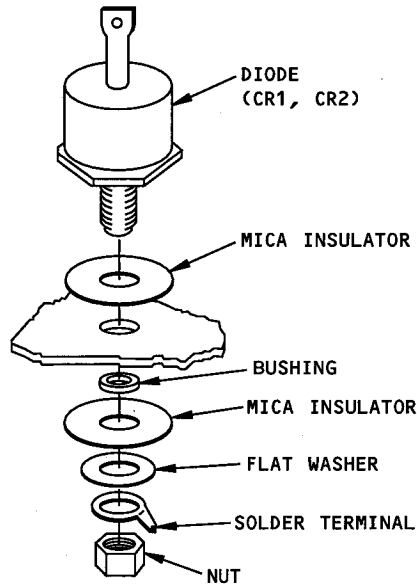
B. If wires color-coded G (green) on schematic diagrams are replaced, bundle together using plastic tying straps.

C. When replacing lightplate (Fig. 1103, item 78 and Fig. 1104, item 335), do not use a powered screwdriver or tighten the captive screws too much. Excessive force can cause cracks on the lightplate adjacent to and under the captive screws. Tighten the captive screws slowly and carefully in a cross pattern until flush on the baseplate at each screw. Tighten each screw no more than a quarter (1/4) turn.

D. When replacing diodes (Fig. 1102, item 175 and Fig. 1104, item 175), use mounting kit, if required, (Fig. 1102, item 176 and Fig. 1104, item 176). Install diode per Fig. 401.



4729 KEYSTONE MOUNTING KIT



4860 THERMALLOY MOUNTING KIT

Details for Mounting Diodes CR1, CR2  
Figure 401

TESTING

1. Test Equipment

A. Power Supplies:

- (1) 28 volts dc at 2.0 ampere
- (2) 115  $\pm$ 3 volts ac, 400 Hz

B. Volt-Ohm-Multimeter: Tripplett model 630 NA, or equivalent

C. Connectors (with pigtail leads):

- (1) BACC45FT18-31S6 (Mate with P1) (all except 69-37313-78, -102, -400, -409)
- (2) BACC45FT22-55S6 with pigtail leads (Mate with P1) (69-37313-78, -102, -400, -409)
- (3) BACC45FT18-31S (Mate with P2) (all except 69-37313-78, -102, -400, -409)
- (4) BACC45FT22-55S with pigtail leads (Mate with P2) (69-37313-78, -102, -400, -409)
- (5) BACC45FT12-12S (Mate with P3) (69-37313-4XX, -5XX only)

D. Test light: 28 volts dc, 80 ma (two 387 in parallel), label L12

E. Switches, Pushbutton:

- (1) Normally closed, momentary open, label S10
- (2) Normally open, momentary closed, label S11

2. Functional Test

A. Mate test connectors to connectors P1 and P2. Set all module switches to OFF.

B. Test continuity per Fig. 701A (all except 69-37313-78, -102, -400, -409) or 701B (69-37313-78, -102, -400, -409 only). If lightplate is not with module, direction of switch movement may be determined from Fig. 701.

**NOTE:** Actuate switches S3 and S4 slowly to prevent contact bounce. Also, avoid snapping switch guard down when switching S3 and S4 to ON, OFF and STBY RUD positions once the guard has been placed in the UP position.

	All Except 69-37313-35,-37,-38,-46,-49,-61,-68,-70,-93,-95,-96,-430,-432,-433,-438,-440,-444,-449,-451,-459,-461,-462,-530,-532,-533,-538,-540,-549,-551,-559,-561,-562				69-37313-35,-37,-38,-46,-49,-61,-68,-70,-93,-95,-96,-430,-432,-433,-438,-440,-444,-449,-451,-459,-461,-462,-530,-532,-533,-538,-540,-549,-551,-559,-561,-562			
	S1	S2	S3,S4	S5,S6,S7	S1	S2	S3,S4	S5,S6,S7
Up	OFF	UP	STBY RD	OFF	ARM	UP	ON	ON
Center		OFF	OFF			OFF	OFF	
Down	ARM	DOWN	ON	ON	OFF	DOWN	STBY RUD	OFF

Direction of Switch Movement  
 Figure 701



Switch		Continuity		No Continuity	
Number	Position	From	To	From	To
S1	OFF	P1-4	P1-17	P1-4	P1-15
		P1-4	P1-5	P1-4	P1-30
		P1-21	P1-25		
		*[2] P3-6	P3-10		
S1	ARM	P1-4	P1-15	P1-4	P1-5
		P1-15	P1-17	P1-21	P1-25
S4	STBY RUD	P1-11	P1-21		
S1	OFF				
S2	DOWN	P1-15	P1-16	P1-6	P1-15
S2	UP	P1-6	P1-15	P1-15	P1-16
S3	OFF	P1-12	P1-22	P1-3	P1-22
S1	ARM	P1-11	P1-21	P1-9	P1-11
		P1-11	P1-25	P1-9	P1-25
		P1-21	P1-25		
S4	ON	P1-12	P2-21		
S4	OFF	P1-12	P2-9	P1-11	P1-25
		P1-11	P2-22	P1-12	P2-21
S3	ON	P1-3	P1-22	P1-12	P1-22
		P1-3	P2-9	P1-3	P2-21
S4	ON	P1-3	P2-21	P1-3	P2-9
S4	OFF				
S3	STBY RUD	P1-11	P1-25		
S3	OFF				
S4	ON	P1-22	P2-21	P1-22	P2-9
				P1-11	P1-25
S4	OFF	P1-22	P2-9	P1-22	P2-21
		P1-12	P2-9	P1-3	P2-9
S4	STBY RUD	P1-11	P1-21	P1-11	P2-22
		P1-11	P1-25		
S5	OFF	P2-11	P2-24	P2-3	P2-24
S6	OFF	P1-31	P2-11	P1-19	P2-11
S5	ON	P2-3	P2-24		
		P1-31	P2-3	P1-19	P2-3
S5	OFF				
S6	ON	P1-19	P2-11	P1-31	P2-11
S7	OFF	P2-17	P2-27	P2-26	P2-27
		P2-13	P2-17	P2-13	P2-25
S7	ON	P2-26	P2-27		
		P2-13	P2-25		
		P2-29	P2-30	P2-30	P2-31
S9*[1]	OFF	P2-29	P2-30	P2-29	P2-30
S9*[1]	TEST	P2-30	P2-31		
ALL	OFF				

\*[1] All except 69-37313-74, -452, -552  
\*[2] 69-37313-429 thru -464, -529 thru -564

Continuity Test (ALL EXCEPT 69-37313-78, -102, -400, -409)  
Figure 701A

Switch		Continuity		No Continuity	
Number	Position	From	To	From	To
S1	OFF	P1-4	P1-17	P1-4	P1-15
		P1-4	P1-5	P1-4	P1-30
		P1-21	P1-25	P1-11	P1-21
		*[2] P1-53	P2-53		
S1	ARM	P1-4	P1-15	P1-4	P1-5
		P1-15	P1-17	P1-21	P1-25
S4	STBY RUD	P1-11	P1-21		
S1	OFF				
S2	DOWN	P1-15	P1-16	P1-6	P1-15
S2	UP	P1-6	P1-15	P1-15	P1-16
S3	OFF	P1-44	P1-45	P1-43	P1-45
		P1-46	P1-50	P1-14	P1-50
S1	ARM	P1-11	P1-21	P1-9	P1-11
		P1-11	P1-25	P1-9	P1-25
		P1-21	P1-25		
S4	ON	P1-12	P2-21		
		P2-4	P1-47	P2-4	P1-48
S4	OFF	P1-12	P2-9	P1-11	P1-25
		P1-11	P2-22	P1-12	P2-21
S3	ON	P1-14	P1-50	P1-46	P1-50
		P1-3	P2-9	P1-3	P2-21
S4	ON	P1-3	P2-21	P1-3	P2-9
S4	OFF				
S3	STBY RUD	P1-11	P1-25	P1-11	P2-2
		P1-43	P1-45	P1-44	P1-45
S3	OFF				
S4	ON	P2-14	P1-23	P2-14	P2-44
S4	OFF	*[1] P1-22	P2-9(-)	P1-22	P2-21
		(+)			
		P1-12	P2-9	P1-3	P2-9
		P2-14	P2-44	P2-14	P1-23
S4	STBY RUD	P1-11	P1-21	P1-11	P2-22
		P1-11	P1-25		
S5	OFF	P2-11	P2-24	P2-3	P2-24
S6	OFF	P1-31	P2-11	P1-19	P2-11
S5	ON	P2-3	P2-24		
		P1-31	P2-3	P1-19	P2-3
S5	OFF				
S6	ON	P1-19	P2-11	P1-31	P2-11
S7	OFF	P2-17	P2-27	P2-26	P2-27
		P2-13	P2-17	P2-13	P2-25
S7	ON	P2-26	P2-27		
		P2-13	P2-25		
ALL	OFF				

\*[1] DIODE IN CIRCUIT, OBSERVE POLARITY NOTED AND VERIFY LESS THAN 100 OHMS.

\*[2] 69-37313-400, -409 only.

Continuity Test (69-37313-78, -102, -400, -409 only)

Figure 701B

C. (69-37313-38, -40, -41, -44, -46, -48, -49, -50, -51, -58, -61, -64, -67, -68, -69, -70, -74, -86, -87, -88, -91, -96, -98, -433, -435 thru -444, -447 thru -454, -457, -462, -464, -533, -535 thru -544, -547 thru -554, -557, -562, -564 -- Perform continuity check per Fig. 702.

Switch		Continuity		No Continuity	
Number	Position	From	To	From	To
S3	ON	P1-14 P2-23 P2-15 (+) *[1]	P2-14 P2-5 P2-12 (-) *[1]	P1-14 P2-23 P2-15 P2-12 (+) *[2]	P1-23 P2-6 P2-4 P2-15 (-) *[2]
S3	OFF				
S4	ON	P1-23 P2-4 (+) *[1]	P2-14 P2-12 (-) *[1]	P2-23 P2-4	P1-14 P2-15
S4	OFF	P2-6	P2-5	P2-6	P2-23

\*[1] Diode in circuit, observe polarity noted and verify less than 100 ohms.

\*[2] Diode in circuit, observe polarity noted and verify more than 200 ohms and less than 300 ohms.

Continuity Test  
Figure 702

D. (69-37313-78, -102, -400, -409): Perform continuity check per Fig. 702A.

Switch		Continuity		No Continuity	
Number	Position	From (+)	To (-)	From (+)	To (-)
S3	ON	*[1] P1-22	P1-3	P1-3	P1-22
		*[1] P1-48	P2-12	*[2] P2-12	P1-12
S4	ON	*[1] P1-22	P2-21	P1-47	P1-48
		*[1] P2-41	P2-21	P2-21	P2-12
		*[1] P2-4	P2-12	*[2] P2-12	P1-22
S3	OFF	*[1] P1-22	P2-4	P2-41	P2-41
		*[1] P1-47	P1-12	P1-12	P2-9
			P2-12	*[2] P2-12	P1-22
S4	OFF			P1-48	P1-47
		*[1] P1-22	P2-9	P1-22	P2-12
		*[1] P2-41	P2-9	P2-9	P1-3
				P2-9	P1-22
				P2-4	P2-41
				P2-41	P2-21
		*[1] P2-40	P2-10	P2-4	P2-12
		*[1] P2-40	P1-24	P2-10	P2-21
				P1-24	P2-40

\*[1] Diode in circuit, observe polarity noted and verify less than 100 ohms.

\*[2] Diode in circuit, observe polarity noted and verify more than 200 ohms and less than 300 ohms.

 Continuity Test  
 Figure 702A

E. Perform test steps listed in Fig. 703 (all except 69-37313-78, -102, -400, -409). Start with all module switches OFF.

**NOTE:** P/N 69-37313-36 WITH SB 737 22-1009 INCORPORATED IS EQUIVALENT TO P/N 69-37313-40.

P/N 69-37313-39 WITH SB 737 22-1009 INCORPORATED IS EQUIVALENT TO P/N 69-37313-40.

Step	Procedure	Required Results
	69-37313-32,-35,-36,-37,-39,-62,-63,-89,-90,-92,-93,-94,-95,-97,-429 thru -432,-434,-445,-446,-445,-456,-458 thru -461,-463,-529 thru -532,-534,-545,-546,-558 thru -561,-563	
1	Measure P2-4(+) to P2-12	100 ohms maximum
2	Measure P2-12(+) to P2-14	200 ohms minimum
3	Connect P2-4 to ground	Verify S7 will not remain at ON
4	Connect 28 vdc to P2-12	Verify S7 will remain at ON
5	Disconnect P2-12	Verify S7 returns to OFF
6	Disconnect P2-4	
	69-37313-38,-40,-41,-44,-46,-48 thru -51,-58,-61,-64,-67 thru -70,-433,-435 thru -444,-447,-448 thru -451,-533,-535 thru -544,-547,-548 thru -551	
7	Connect P2-4 and P2-15 to ground	Verify S7 will not remain at ON
8	Set S3, S4 to OFF	
9	Connect 28 vdc to P2-12	Verify S7 will not remain at ON
10	Set S3 to ON	Verify S7 will remain at ON
11	Set S3 to OFF	Verify S7 returns to OFF
12	Set S4 to ON	Verify S7 will remain at ON
13	Set S4 to OFF	Verify S7 returns to OFF
14	Remove all connections	
	All assemblies	
15	Connect P1-13 to 28 vdc	
16	Connect P2-18 to 28 vdc	
17	Connect test lamp L12 and test switch S10 in series between P1-27 and 28 vdc	
18	Connect test switch S11 between P1-26 and ground	
19	Connect P1-7, P2-16 to ground	
20	Set S3 to STBY RUD (start timing)	L3 (DS3) illuminated
21	Between 0.5 and 2.0 seconds	L12 illuminated
22	Connect P1-18 to 28 vdc	L3 (DS3), L12 extinguished
23	Set S3 to OFF	
24	Disconnect P1-18	

Functional Tests  
Figure 703 (Sheet 1)

Step	Procedure	Required Results
25	Set S1 to OFF	
26	Measure between P1-21 and P1-25	Continuity
27	Connect 115 v ac between P1-8 and P1-10	
28	Measure between P1-25 and P1-9 P1-25 and P1-21	Continuity No Continuity
29	Disconnect 115 v ac	
30	Connect P1-4 to 28 v dc	
31	Measure P1-17 to ground	28 v dc
32	Measure P1-30 to ground	0 v dc
33	Set S1 to ARM	
34	Set S2 to DOWN, release	
35	Measure P1-30 to ground	28 v dc
36	Measure P1-17 to ground	0 v dc
37	Set S1 to OFF and back to ARM	
38	Measure P1-17 to ground	28 v dc
38A	Set S1 to OFF	
38B	Disconnect P1-7	
	<b>NOTE:</b> For 69-37313-44, -51, -87, -88, -437, -442, -453, -454, -537, -542, -553, -554 substitute DS for L where indicators are listed.	
39	Connect P2-7 to ground	All module lamps illuminated L12 illuminated
40	Deleted	
41	Depress each module lamp, release	Each illuminated when depressed (momentarily extinguished while depressing)
42	Deleted	
43	Disconnect P2-7	Lamps extinguished
44	Deleted	
44	Connect P2-20 to ground	L1, L12 illuminated
45	Depress S10, release	L1 illuminated
46	Depress S11, release	L1, L12 illuminated
47	Disconnect P2-20	Lamps extinguished
48	Set S3 to STBY RUD	
49	Connect P1-20 to ground (Start timing)	L2 illuminated
50	After 0.5 to 2.0 seconds --	L2, L12 illuminated
51	Depress S10, release	L2 illuminated
52	Depress S11, release	L2, L12 illuminated
53	Set S3 to OFF	Lamps extinguished
54	Set S4 to STBY RUD	L2, L12 illuminated (L12 delayed)
55	Set S4 to OFF	Lamps extinguished
56	Set S1 to ARM	L2, L12 illuminated (L12 delayed)
57	Set S1 to OFF	Lamps extinguished

 Functional Tests  
 Figure 703 (Sheet 2)

Step	Procedure	Required Results
58	Disconnect P1-20	
59	Connect P2-8 to ground *[1]	L4, L12 illuminated
60	Depress S10, release	L4 illuminated
61	Depress S11, release	L4, L12 illuminated
62	Disconnect P2-8	Lamps extinguished
63	Connect P2-10 to ground (start timing)	L5 illuminated
64	After 0.5 to 2.0 seconds	L5, L12 illuminated
65	Depress S10, release	L5 illuminated
66	Depress S11, release	L5, L12 illuminated
67	Set S4 to STBY RUD	Lamps extinguished
68	Disconnect P2-10, Set S4 to OFF	
68A	Connect P1-7 to ground	
68B	Set S4 to STBY RUD (start timing)	L5 illuminated
	After 0.5 to 2.0 seconds --	L12 illuminated
68C	Set S4 to OFF	L5, L12 extinguished
68D	Disconnect P1-7	
69	Connect P2-19 to ground (start timing)	L6 illuminated
70	After 0.5 to 2.0 seconds	L6, L12 illuminated
71	Depress S10, release	L6 illuminated
72	Depress S11, release	L6, L12 illuminated
73	Disconnect P2-19	Lamps extinguished
74	Depress and hold S11	L12 illuminated
75	Release S11	L12 extinguished
76	Connect P2-2 to ground	L8, L12 illuminated
77	Depress S10, release	L8 illuminated
78	Depress S11, release	L8, L12 illuminated
79	Disconnect P2-2	Lamps extinguished
80	Connect P1-24 to ground (start timing)	L3 illuminated
81	After 0.5 to 2.0 seconds	L3, L12 illuminated
82	Depress S10, release	L3 illuminated
83	Depress S11, release	L3, L12 illuminated
84	Set S3 to STBY RUD	Lamps extinguished
85	Disconnect P1-24, Set S3 to OFF	
86	Measure power connector L7 (J7) center to pin P1-2 *[2]	Continuity
87	Measure L7 (J7) rim to P1-1 *[2]	Continuity
88	Measure P1-2 to P1-1 *[2]	No Continuity
	<u>69-37313-74, -452, -552 only</u>	
89	Connect P2-1 to ground	L9, L12 illuminated
90	Depress S10, release	L9 illuminated
91	Depress S11, release	L9, L12 illuminated
92	Disconnect P2-1	Lamps extinguished

Functional Tests  
Figure 703 (Sheet 3)

Step	Procedure	Required Results
	<b>NOTE:</b> Steps 93 thru 128 apply to the 69-37313-429 thru -464 and -529 thru -564.	
93	Ensure all 28 VDC power is off and connect a jumper wire from P3-6 to P3-7	
94	All UUT switches should be in the OFF position	
95	Connect ground to P2-16, P3-2, P3-3	
96	Apply 28 VDC to P2-18, P1-11, P1-13, P1-22 and through the test lamp, L12, to pin P1-27	L11, L12 off
97	Measure the voltage at P1-25	0 VDC
98	Measure the voltage at P2-22	28 VDC
99	Set S3 to STBY RUD	L11, L12 on
100	Measure the voltage at P1-25	28 VDC
101	Measure the voltage at P2-22	0 VDC
102	Connect a jumper from P1-20 to ground. *[3]	L2 on
103	Remove jumper from P1-20. *[3]	L2 off
104	Set S3 to OFF	L11, L12 off
105	Measure the voltage at P1-25	0 VDC
106	Set S4 to STBY RUD	L11, L12 on
107	Measure the voltage at P1-25	28 VDC
108	Connect a jumper from P1-20 to ground. *[3]	L2 on
109	Remove jumper from P1-20. *[3]	L2 off
110	Set S4 to OFF	L11, L12 off
111	Measure the voltage at P1-25	0 VDC
112	Remove 28 VDC at each point of application in step 96	
113	Remove the jumper from P3-6 to P3-7	
114	Connect a jumper from P3-10 to P3-11	
115	Apply 28 VDC to P2-18, P1-11, P1-13, P1-22 and through the test lamp, L12, to pin P1-27	L11, L12 off
116	Measure the voltage at P1-25	0 VDC
117	Measure the voltage at P2-22	28 VDC
118	Connect P3-1 to ground	L11, L12 off
119	Measure the voltage at P1-25	0 VDC
120	Set S4 to ON	L11, L12 on
121	Measure the voltage at P1-25	28 VDC
122	Connect a jumper from P1-20 to ground. *[3]	L2 on
123	Remove jumper from P1-20. *[3]	L2 off
124	Remove P3-1 from ground	L11, L12 off
125	Measure the voltage at P1-25	0 VDC

 Functional Tests  
 Figure 703 (Sheet 4)



Step	Procedure	Required Results
126	Set S1 to ARM. *[3]	L2, L12 off
127	Connect a jumper from P1-20 to ground. *[3]	L2, L12 on
128	Remove jumper from P1-20. *[3]	L2, L12 off
129	Remove all connections from the UUT	

\*[1] For 69-37313-67, -68, -69, -70, -74, -86 thru -98, -448 thru -464, -548 thru 564 start timing.  
After 0.5 to 2.0 seconds, L12 will be illuminated.

\*[2] All except 69-37313-429 thru -464 and -529 thru -564.

\*[3] For 69-37313-529 thru -564.

F. (69-37313-78, -102, -400, -409 only). Perform functional test per Fig. 703A.

Step	Procedure	Required Results
1	Connect P2-4 and P1-48 to ground	Verify S7 will not be at ON
2	Set S3, S4 to OFF	
3	Connect P2-12 to 28 vdc	Verify S7 will not latch ON when pressed ON
4	Set S3 to ON	Verify S7 will latch ON when pressed ON
5	Set S3 to OFF	Verify S7 will return to OFF
6	Set S4 to ON	Verify S7 will latch ON when pressed ON
7	Set S4 to OFF	Verify S7 will return to OFF
8	Remove all connections	
9	Connect P1-28, P1-29, P1-36, P1-38, P2-1, P2-2, and P2-31 to ground	
10	Connect P1-13, P2-18, and P2-29 to 28 vdc	
11	Connect test lamp (L12) and test switch (S10) in series between P1-27 and 28 vdc	
12	Connect test switch (S11) between P1-26 and ground	
13	Connect P1-7, and P2-16 to ground	
14	Set S3 to STBY RUD *[1]	L3, L12 ON
15	Connect P1-18 to 28 vdc	L3, L12 OFF
16	Set S3 to OFF	
17	Disconnect P1-18 from 28 vdc	
18	Check that S1 is OFF	
19	Measure ohms between: P1-21 and P1-25	Continuity
20	Connect 115 vac between P1-8 (hi) and P1-10 (com)	
21	Measure ohms between: P1-9 and P1-25 P1-21 and P1-25	Continuity No Continuity
22	Disconnect 115 vac from P1-8 and P1-10	
23	Connect P1-4 to 28 vdc	
24	Measure voltage between: P1-17 and ground P1-30 and ground	28 vdc 0 vdc

Functional Test, 69-37313-78, -102, -400, -409 only  
Figure 703A (Sheet 1)

Step	Procedure	Required Results
25	Set S2 to DOWN (hold)	
26	Set S1 to ARM	
27	Measure voltage between: P1-17 and ground P1-30 and ground	0 vdc 28 vdc
28	Release S2 to OFF	
29	Measure voltage between: P1-17 and ground P1-30 and ground	0 vdc 28 vdc
30	Set S1 to OFF	
31	Measure voltage between: P1-17 and ground P1-30 and ground	28 vdc 0 vdc
32	Disconnect P1-7 from ground	
33	Connect P1-22 and P2-41 to 28 vdc	
34	Connect P1-40 to ground	
35	Check that S1, S3, and S4 are OFF	
36	Measure ohms between: P1-11 and P2-22	Continuity
37	Connect P1-20 to ground	
38	Set S3 to ON *[1]	L2, L12 ON
39	Measure ohms between: P1-11 and P2-22	No Continuity
40	Set S3 to OFF	L2, L12 OFF
41	Measure ohms between: P1-11 and P2-22	Continuity
42	Set S4 to ON *[1]	L2, L12 ON
43	Measure ohms between: P1-11 and P2-22	No Continuity
44	Set S4 to OFF	L2, L12 OFF
45	Measure ohms between: P1-11 and P2-22	Continuity
46	Disconnect P1-22, and P2-41 from 28 vdc	
47	Disconnect P1-20, and P1-40 from ground	
48	Connect P2-7 to ground	L1 thru L6, L8, L9, L10, L11 and L12 ON
49	Disconnect P2-7 from ground	L1 thru L6, L8, L9, L10, L11 and L12 OFF
50	Press each module lamp, release	Each lamp illuminated while pressed

Functional Test, 69-37313-78, -102, -400, -409 only  
 Figure 703A (Sheet 2)

Step	Procedure	Required Results
51	Connect P2-20 to ground	L1, L12 ON
52	Press test switch S10, release	L12 OFF
53	Press test switch S11, release	L12 ON
54	Disconnect P2-20 from ground	L1, L12 OFF
55	Connect P1-20 to ground	
56	Set S3 to STBY RUD *[1]	L2, L12 ON
57	Press test switch S10, release	L12 OFF
58	Press test switch S11, release	L12 ON
59	Set S3 to OFF	L2, L12 OFF
60	Repeat test steps 56 thru 59, use S1 to ARM in place of S3 to STBY RUD	
60A	Repeat test steps 56 thru 59, use S4 in place of S3	
61	Disconnect P1-20 from ground	
62	Connect P2-8 to ground *[1]	L4, L12 ON
63	Press test switch S10, release	L12 OFF
64	Press test switch S11, release	L12 ON
65	Disconnect P2-8 from ground	L4, L12 OFF
65A	Set S4 to STBY RUD	
66	Connect P2-10 to ground	
67	Set S4 to OFF *[1]	L5, L12 ON
68	Press S10, release	L12 OFF
69	Press S11, release	L12 ON
70	Set S4 to STBY RUD	L5, L12 OFF
71	Disconnect P2-10 from ground	
72	Set S4 to OFF	
73	Connect P1-7 to ground	
74	Set S4 to STBY RUD *[1]	L5, L12 ON
75	Set S4 to OFF	L5, L12 OFF
76	Disconnect P1-7 from ground	
77	Connect P2-19 to ground *[1]	L6, L12 ON
78	Press S10, release	L12 OFF
79	Press S11, release	L12 ON
80	Disconnect P2-19 from ground	L6, L12 OFF
81	Press and hold S11	L12 ON
82	Release S11	L12 OFF
	<b>NOTE:</b> Use pin in parenthesis when repeating test per following instructions.	
83	Disconnect P2-2 (P1-36) and P1-36 (P2-2) from ground	L8, L12 ON

Functional Test, 69-37313-78, -102, -400, -409 only  
Figure 703A (Sheet 3)

Step	Procedure	Required Results
84	Press S10, release	L12 OFF
85	Press S11, release	L12 ON
86	Connect P2-2 (P1-36) to ground	L8, L12 remain ON
87	Connect P1-36 (P2-2) to ground	L8, L12 OFF
88	Disconnect P2-2 (P1-36) from ground	
89	Press S11, release	L8, L12 ON
90	Disconnect P2-29 from 28 vdc	L8, L12 OFF
91	Connect P2-29 to 28 vdc	L8, L12 remain OFF
92	Connect P2-2 (P1-36) to ground	
93	Repeat test steps 83 thru 92 except use pin in parenthesis	
94	Disconnect P2-1 (P1-38) and P1-38 (P2-1) from ground	L9, L12 ON
95	Press S10, release	L12 OFF
96	Press S11, release	L12 ON
97	Connect P2-1 (P1-38) to ground	L9, L12 remain ON
98	Connect P1-38 (P2-1) to ground	L9, L12 OFF
99	Disconnect P2-1 (P1-38) from ground	
100	Press S11, release	L9, L12 ON
101	Disconnect P2-29 from 28 vdc	L9, L12 OFF
102	Connect P2-29 to 28 vdc	L9, L12 remain OFF
103	Connect P2-1 (P1-38) to ground	
104	Repeat test steps 94 thru 103 except use pin in parenthesis	
105	Disconnect P1-28 (P2-31) and P2-31 (P1-28) from ground	L10, L12 ON
106	Press S10, release	L12 OFF
107	Press S11, release	L12 ON
108	Connect P1-28 (P2-31) to ground	L10, L12 remain ON
109	Connect P2-31 (P1-28) to ground	L10, L12 OFF
110	Disconnect P1-28 (P2-31) from ground	
111	Press S11, release	L10, L12 ON
112	Disconnect P2-29 from 28 vdc	L10, L12 OFF
113	Connect P2-29 to 28 vdc	L10, L12 remain OFF
114	Connect P1-28 (P2-31) to ground	
115	Repeat test steps 105 thru 114 except use pin in parenthesis	

Functional Test, 69-37313-78, -102, -400, -409 only  
 Figure 703A (Sheet 4)

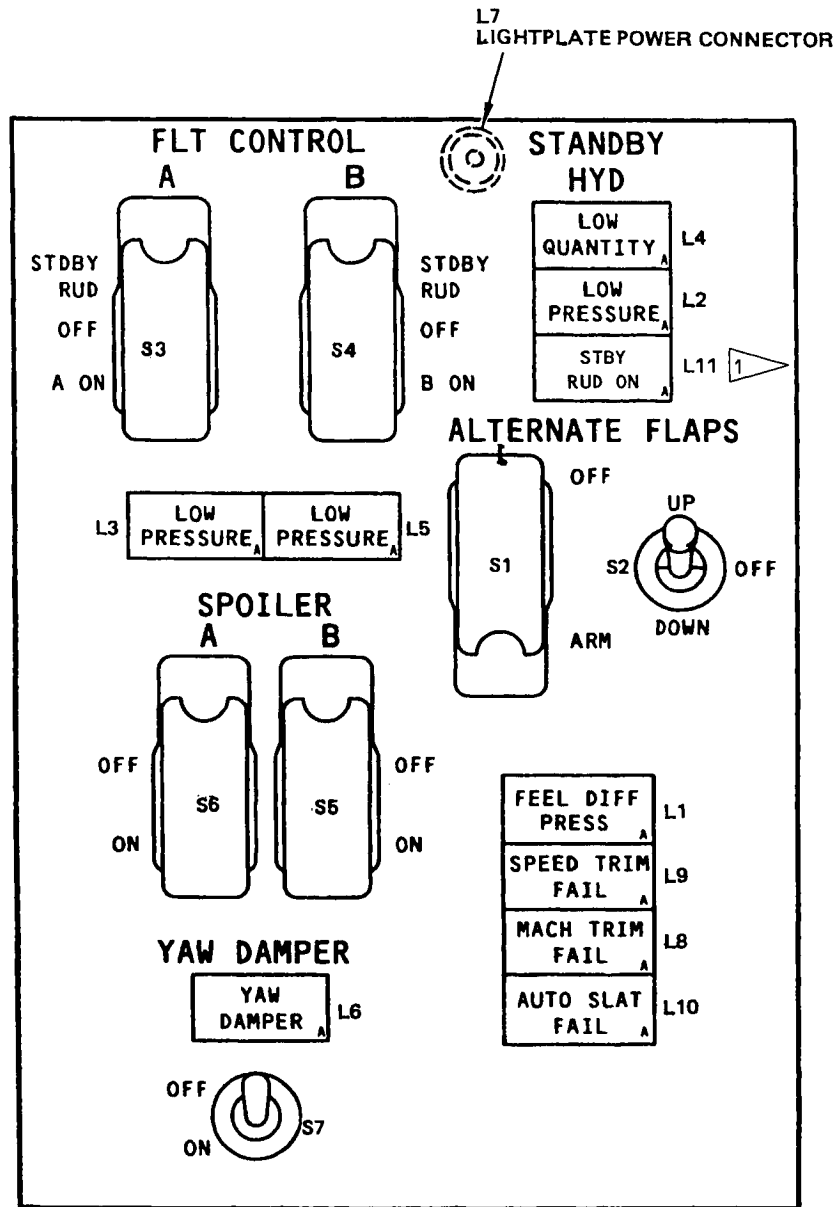
Step	Procedure	Required Results
116	Disconnect P1-29 from ground	
117	Press S11, release	L10, L12 ON
118	Press S10, release	L12 OFF
119	Press S11, release	L12 ON
120	Disconnect P2-29 from 28 vdc	L10, L12 OFF
121	Connect P2-29 to 28 vdc	L10, L12 remain OFF
122	Connect P1-29 to ground	
122A	Set S3 to STBY RUD	
123	Connect P1-24 to ground	
124	Set S3 to OFF *[1]	L3, L12 ON
125	Set S3 to ON	L3, L12 remain ON
126	Press S10, release	L12 OFF
127	Press S11, release	L12 ON
128	Set S3 to STBY RUD	L3, L12 OFF
129	Disconnect P1-24 from ground	
130	Set S3 to OFF	
131	Measure ohms between: P1-1 and L7 rim P1-2 and L7 center P1-1 and P1-2	Continuity Continuity No Continuity
131A	Remove all connections	
132	<u>Steps 133 thru 156 apply to the 69-37313-400 and -409</u>	
133	Ensure all 28 vdc power is off and connect a jumper wire from P2-52 to P2-53	
134	All UUT switches should be in the OFF position	
135	Apply 28 vdc to P2-18, P1-11, P1-13, P1-22 and through the test lamp, L12, to pin P1-27	
136	Connect ground to P2-16, P1-37, P2-37	L8, L9, L10, L12 ON
137	Set S3 to STBY RUD	L11 ON
138	Measure the voltage at P1-25	28 vdc
139	Set S3 to OFF	L11 OFF
140	Measure the voltage at P1-25	0 vdc
141	Set S4 to STBY RUD	L11 ON
142	Measure the voltage at P1-25	28 vdc
143	Set S4 to OFF	L11 OFF
144	Measure the voltage at P1-25	0 vdc
145	Remove 28 vdc at each point of application in step 135	L8, L9, L10, L12 OFF
146	Remove the jumper from P2-52 to P2-53	
147	Connect a jumper from P1-52 to P1-53	
148	Apply 28 vdc to P2-18, P1-11, P1-13, P1-22 and through the test lamp, L12, to pin P1-27	L8, L9, L10, L12 ON

Functional Test, 69-37313-78, -102, -400, -409 only  
Figure 703A (Sheet 5)

Step	Procedure	Required Results
149	Set S3 and S4 to ON	
150	Measure the voltage at P1-25	0 vdc
151	Connect P1-40 to ground	L11 ON
152	Measure the voltage at P1-25	28 vdc
153	Disconnect P1-40 from ground	L11 OFF
154	Measure the voltage at P1-25	0 vdc
155	Apply ground to P1-1	
156	Apply +5 vdc to P1-2	Lightplate ON
157	Remove all connections from the UUT	

\*[1] Start timing, test lamp (L12) is turned on after 0.5 to 2.0 second delay

Functional Test, 69-37313-78, -102, -400, -409 only  
 Figure 703A (Sheet 6)

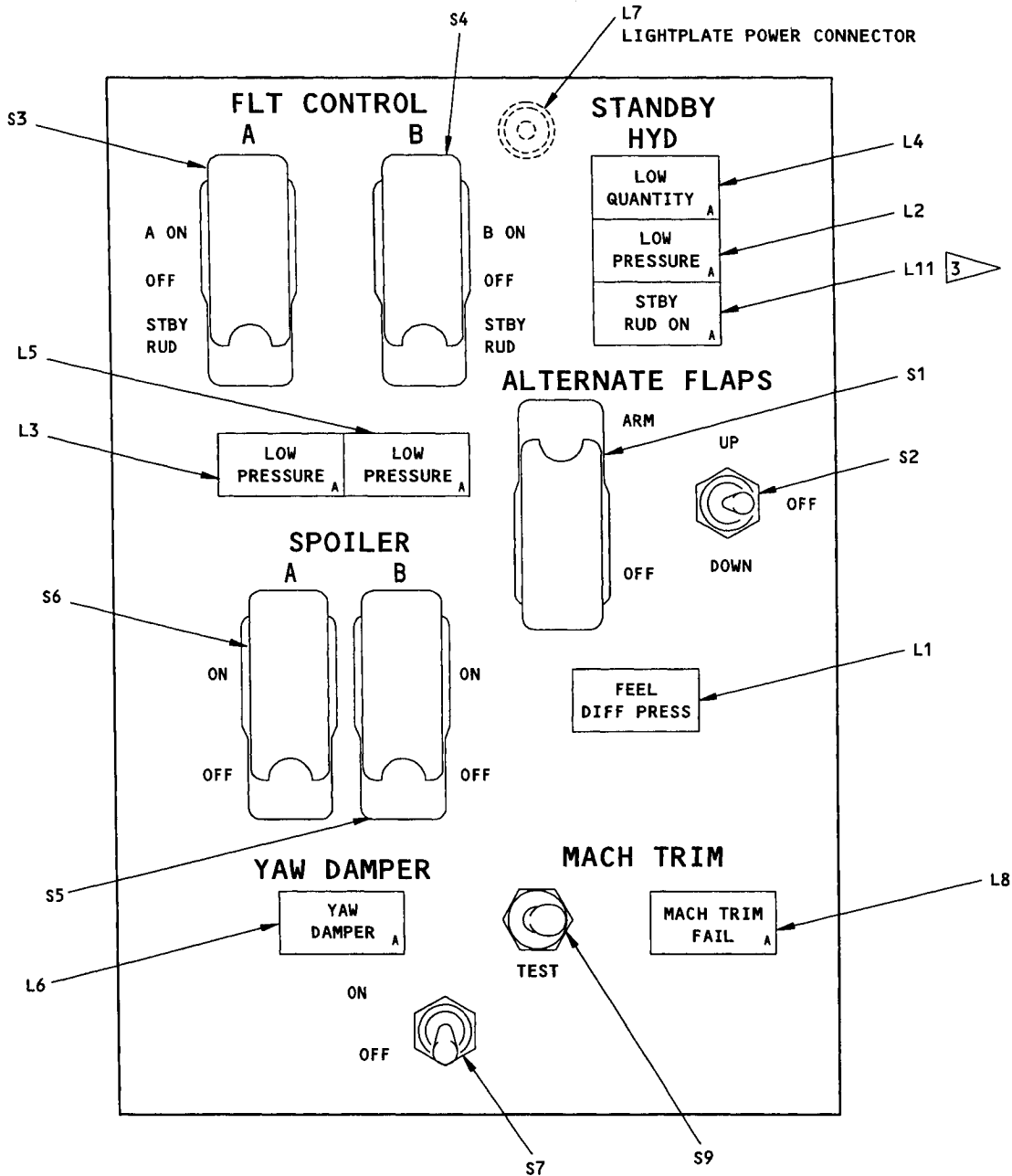


1 -400,-409,-452,-552

69-37313-74,-78,-102,-400,-409,-452,-552

Front Panel Component Locations  
Figure 704

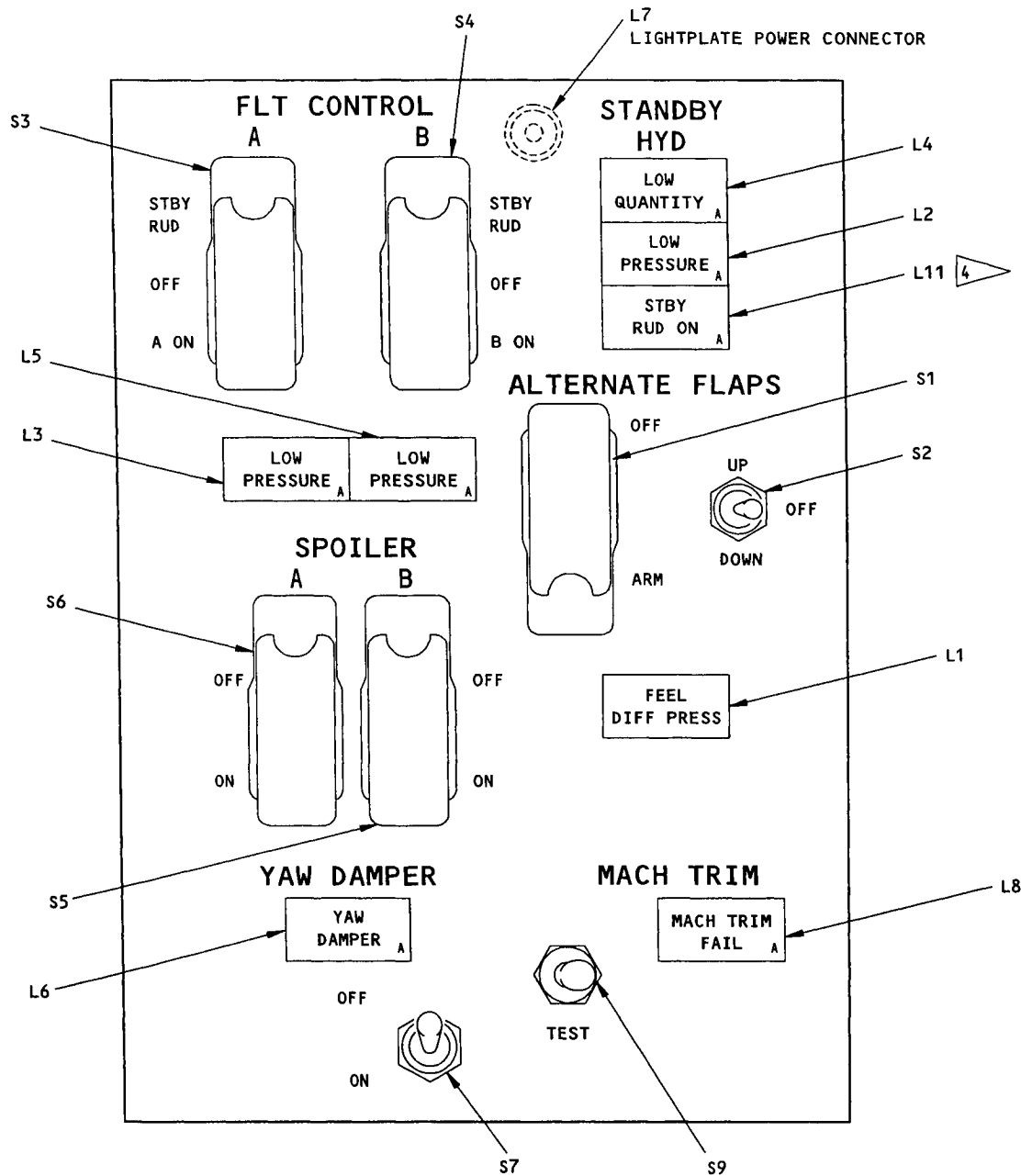




69-37313-35,-37,-38,-46,-49,-61,-68,-70,-93,-95,-96,  
-430,-432,-433,-438,-440,-444,-449,-451,-459,-461,-462,  
-530,-532,-533,-538,-540,-544,-549,-551,-559,-561,-562

3 69-37313-430,-432,-433,-438,-440,-444,-449,-451,-459,-461,-462,  
-530,-532,-533,-538,-540,-544,-549,-551,-559,-561,-562

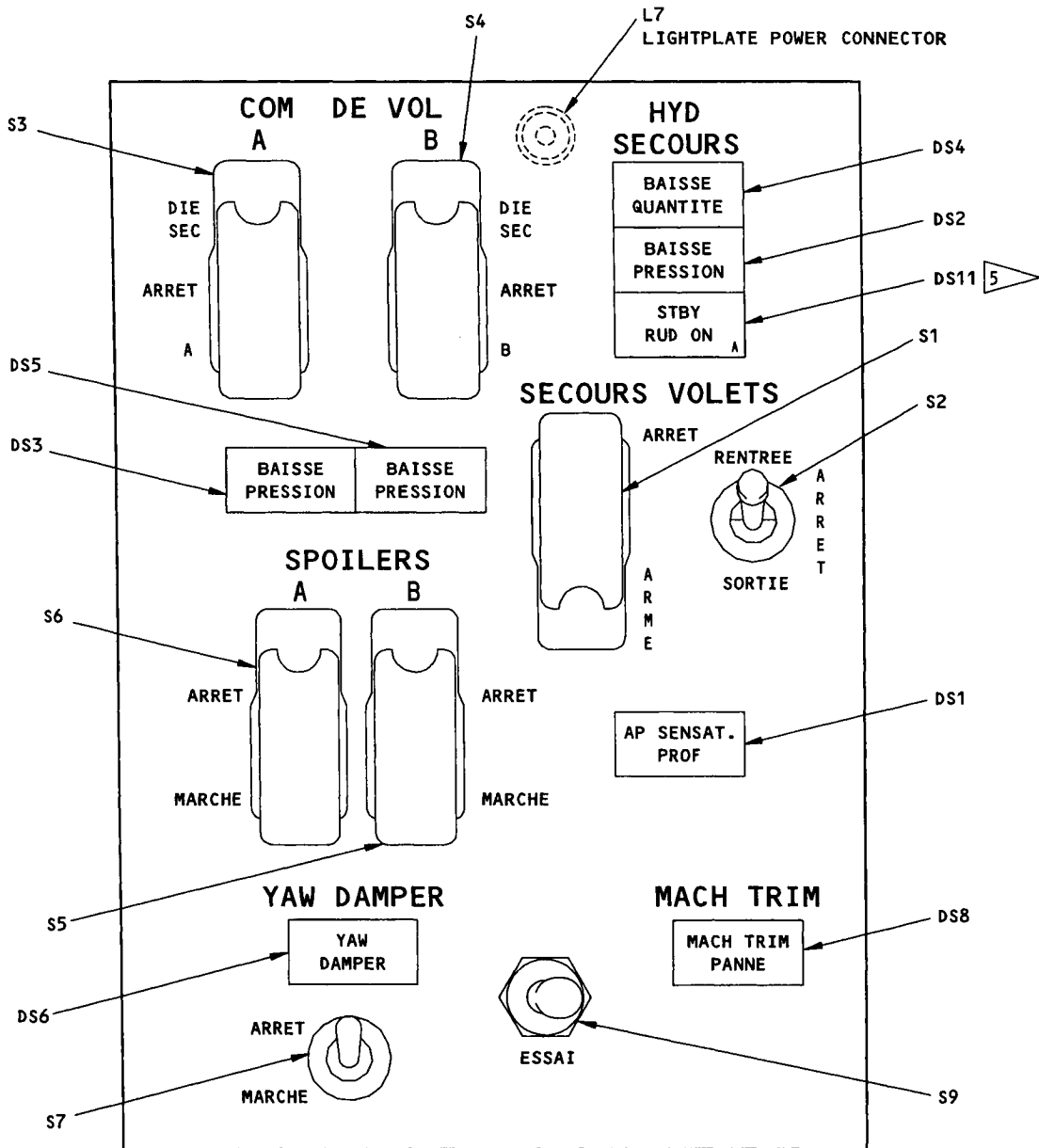
Front Panel Component Locations  
Figure 704A



69-37313-32,-36,-39,-40,-41,-48,-50,-58,-62,-63,-64,-67,  
-69,-89 THRU -92,-94,-97,-98,-429,-431,-434,-435,-436,-439,  
-441,-443,-445,-446,-447,-448,-450,-455 THRU -458,-460,-463,-464,  
-529,-531,-534,-535,-536,-539,-541,-543,-546,-547,-548,-550,  
-555 THRU -558,-560,-563,-564

4 69-37313-429,-431,-434,-435,-436,-439,-441,-443,-446,-447,-448,-450,-455 THRU -458,-460,-463,-464,  
-529,-531,-534,-535,-536,-539,-541,-543,-546,-547,-548,-550,-555 THRU -558,-560,-563,-564

Front Panel Component Locations  
Figure 704B



69-37313-44,-51,-87,-88,-437,-442,-453,-454,  
-537,-542,-553,-554

5 69-37313-437,-442,-453,-454,-537,-542,-553,-554

Front Panel Component Locations  
Figure 704C

TROUBLE SHOOTING

1. If failure of a test occurs, check for defective connections, incorrect wiring connections, and defective components.

NOTE: Trouble shooting is keyed to functional test procedure.

On assembly 69-37313-44, -437, -537 only, lamp designators L1 thru L6 and L8 have been replaced with DS1 thru DS6 and DS8.

<u>Trouble</u>	<u>Possible Cause and Correction</u>
Fig. 701, 702	Listed switch. At some tests, relay contacts are involved. Check schematic diagram before replacing switch.
Fig. 703	
Steps 1, 2	CR1
3-5	S7
7	S7
9	S3, S4
10, 11	S3, S7
12, 13	S4
Step 20 and on	If fault occurs, continue through test, recording steps that fail.
Steps 39 thru 44, lamp fault	Replace module lamp
Module lamp illuminates, but L10 fails to illuminate	If fault is with L3 or L5, A3 or A1 may be defective.  If fault is with L2 or L6, A2 or A1 may be defective.  If fault is with L1, L4, or L8, A1 may be defective.  For 69-37313-67, -68, -69, -70, -74, -86 thru -98, -448 thru -464, -548 thru -564. If fault involves L4, A2 may be defective.  For 69-37313-74 and -452, -552, if fault is with L9, A1 may be defective.

Trouble

Possible Cause and Correction

L10 will not reset  
L10 will not illuminate when S11 actuated  
Module lamp and L10 fail to illuminate

A1 defective.  
A1 defective.  
Defective switch, trace input ground through switches.

Time delay fault

If L3 or L5 involved, A3 may be defective.  
If L2 or L6 involved, A2 may be defective.  
For 69-37313-67, -68, -69, -70, -74, -86 thru -98, -448 thru -464, -548 thru -564. If L4 is involved, A2 may be defective.

L10 illuminates, but module lamp fails

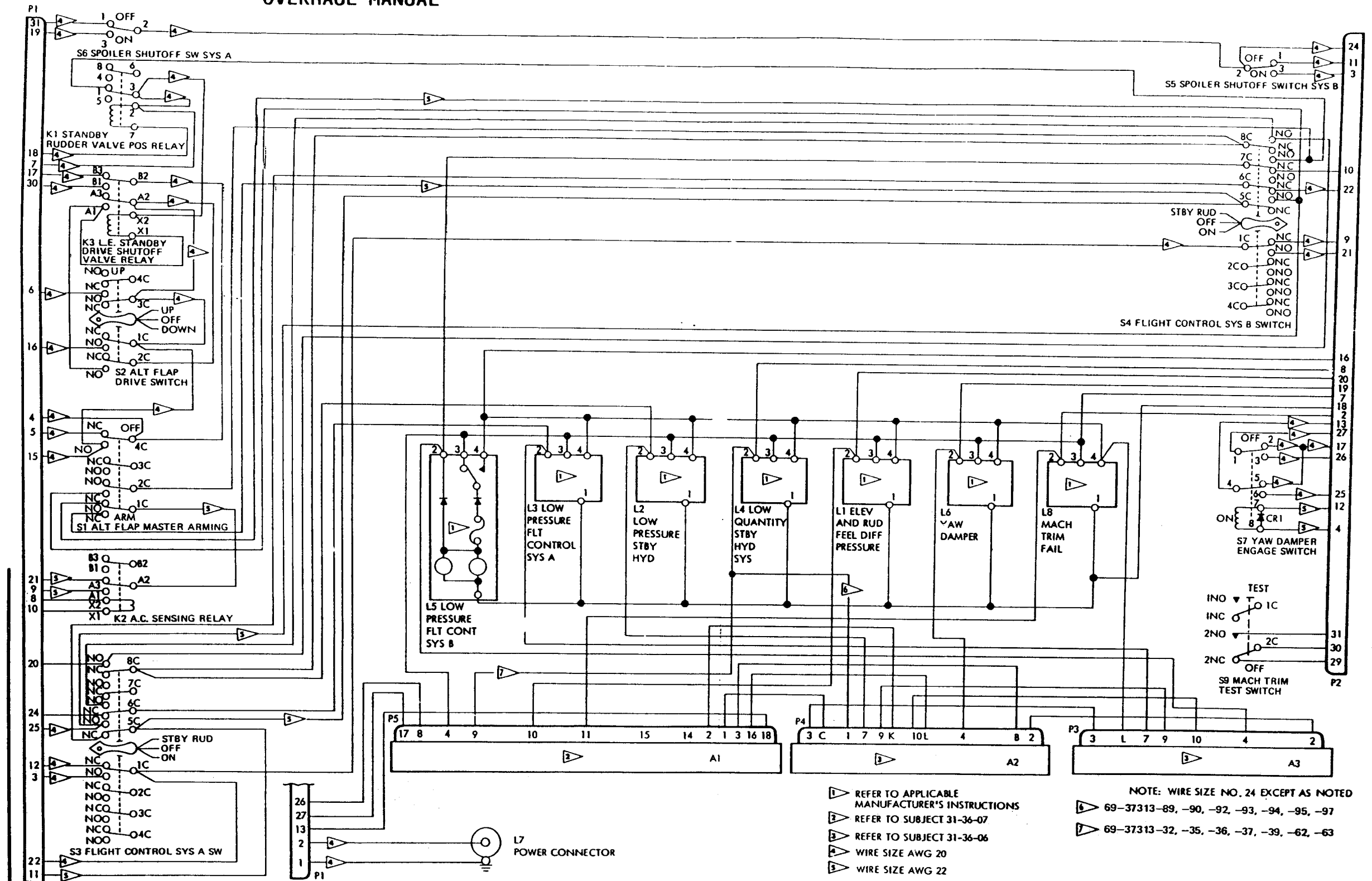
Replace module lamp.

Step 26  
27-28  
31-38

S7  
K2  
S1, S2, or K3. If step 31 works, S2 or K3.

**BOEING**  
**COMMERCIAL JET**  
**OVERHAUL MANUAL**

69-37313



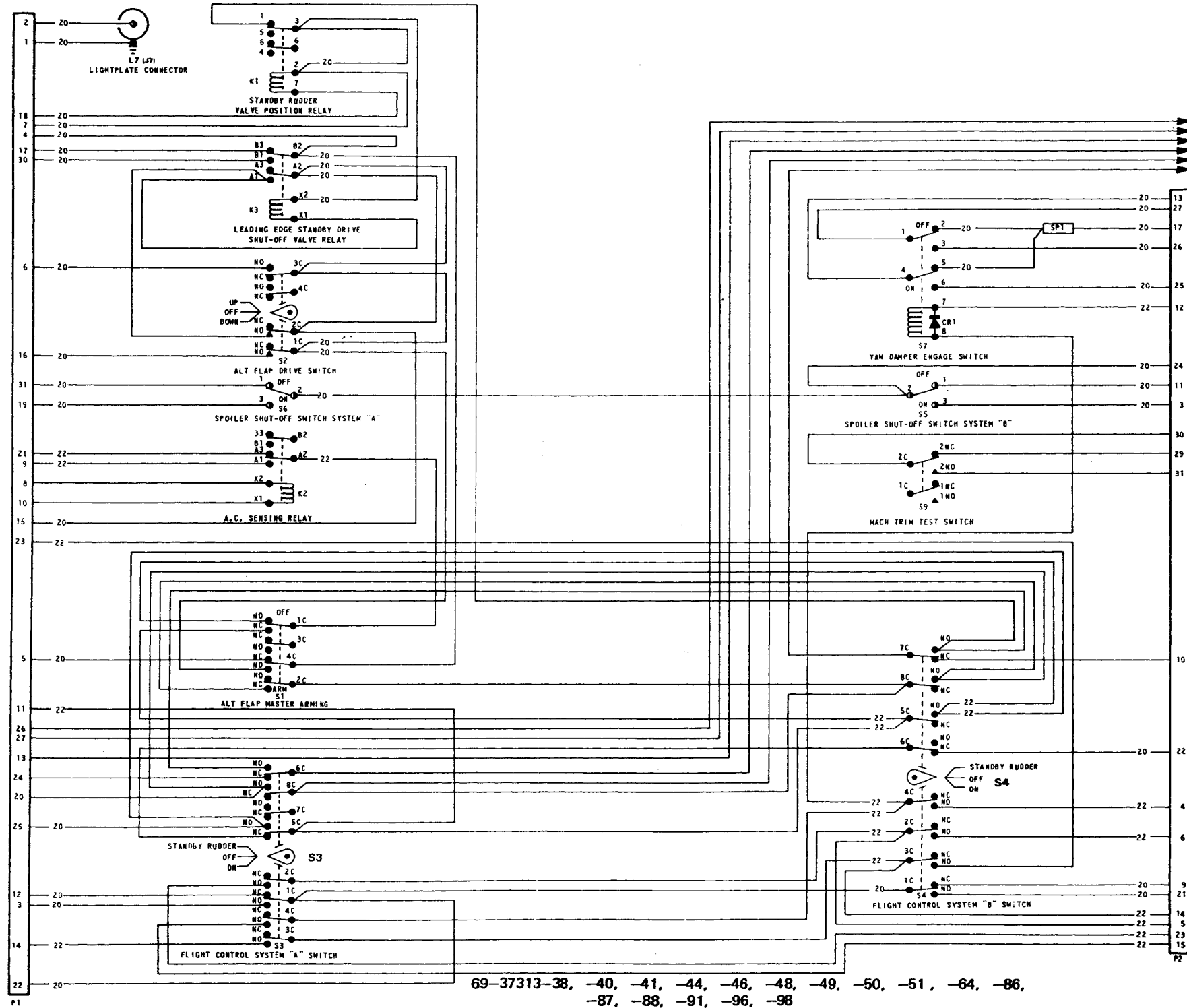
69-37313-32, -35, -36, -37, -39, -62, -63, -89,  
 -90, -92, -93, -94, -95, -97

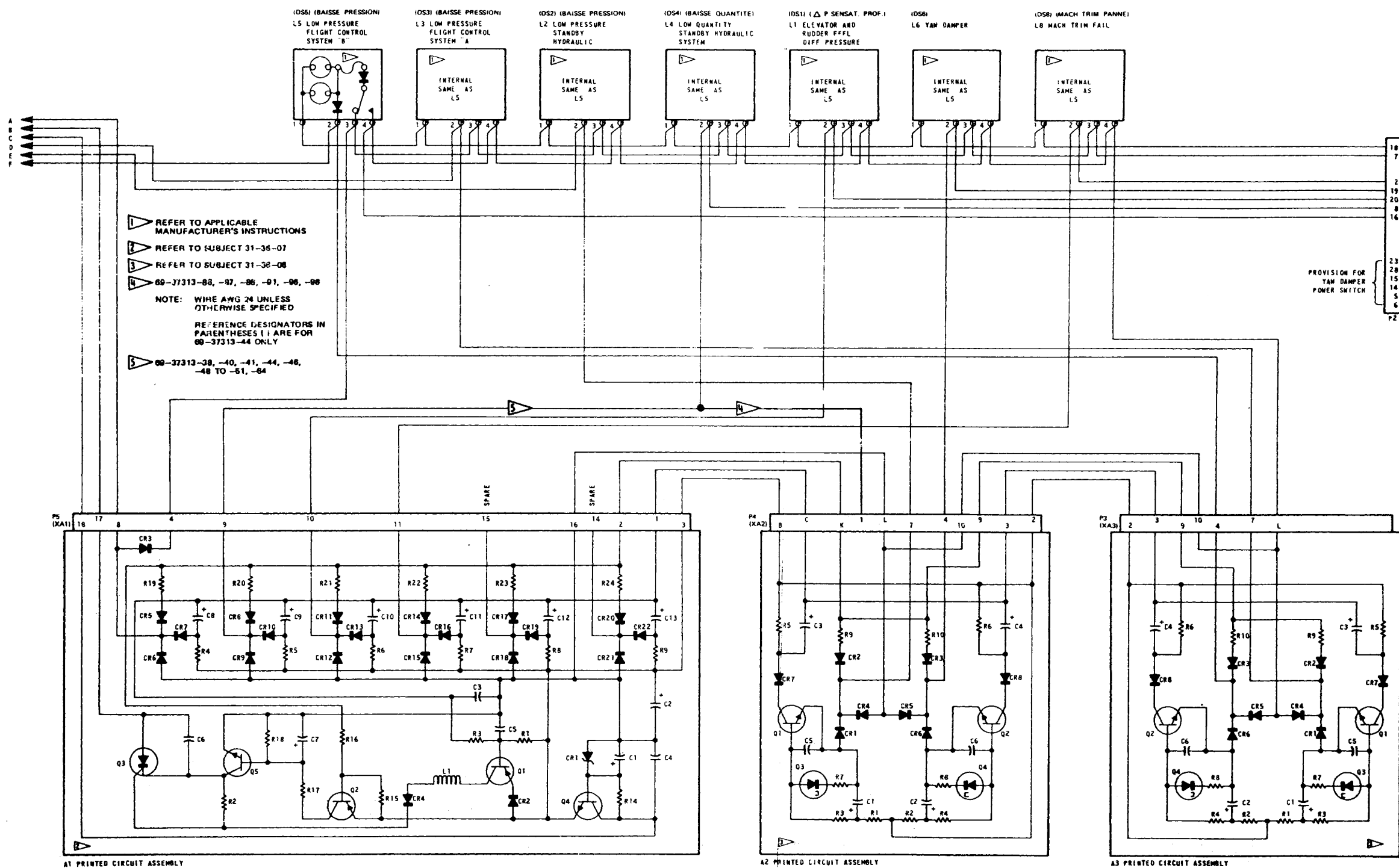
Schematic Diagram  
 Figure 801

- ▷ REFER TO APPLICABLE MANUFACTURER'S INSTRUCTIONS
- ▷ REFER TO SUBJECT 31-36-07
- ▷ REFER TO SUBJECT 31-36-06
- ▷ WIRE SIZE AWG 20
- ▷ WIRE SIZE AWG 22

NOTE: WIRE SIZE NO. 24 EXCEPT AS NOTED  
 ▷ 69-37313-89, -90, -92, -93, -94, -95, -97  
 ▷ 69-37313-32, -35, -36, -37, -39, -62, -63

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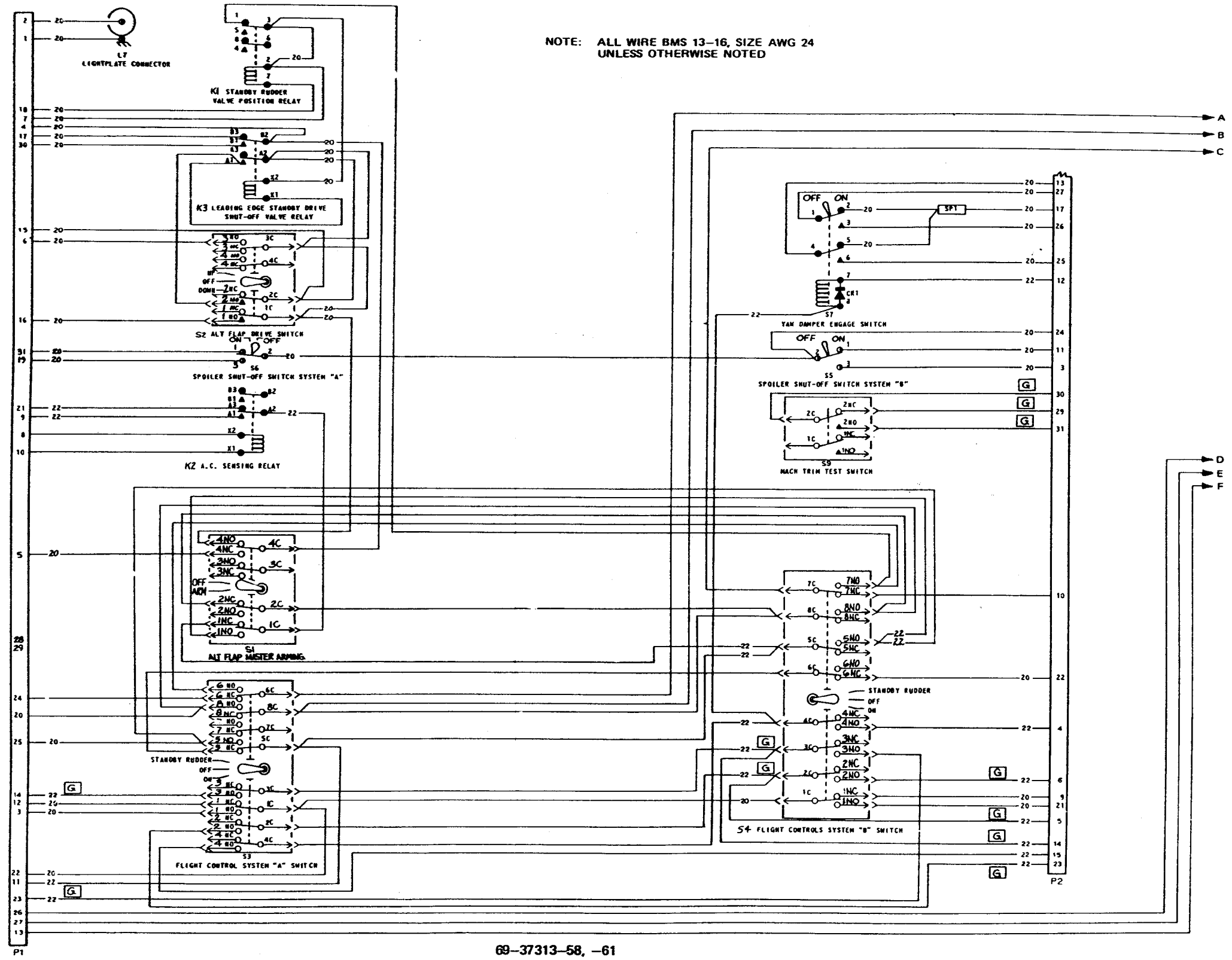


69-37313-38, -40, -41, -44, -46, -48, -49, -50, -51, -64,  
-86, -87, -88, -91, -96, -98

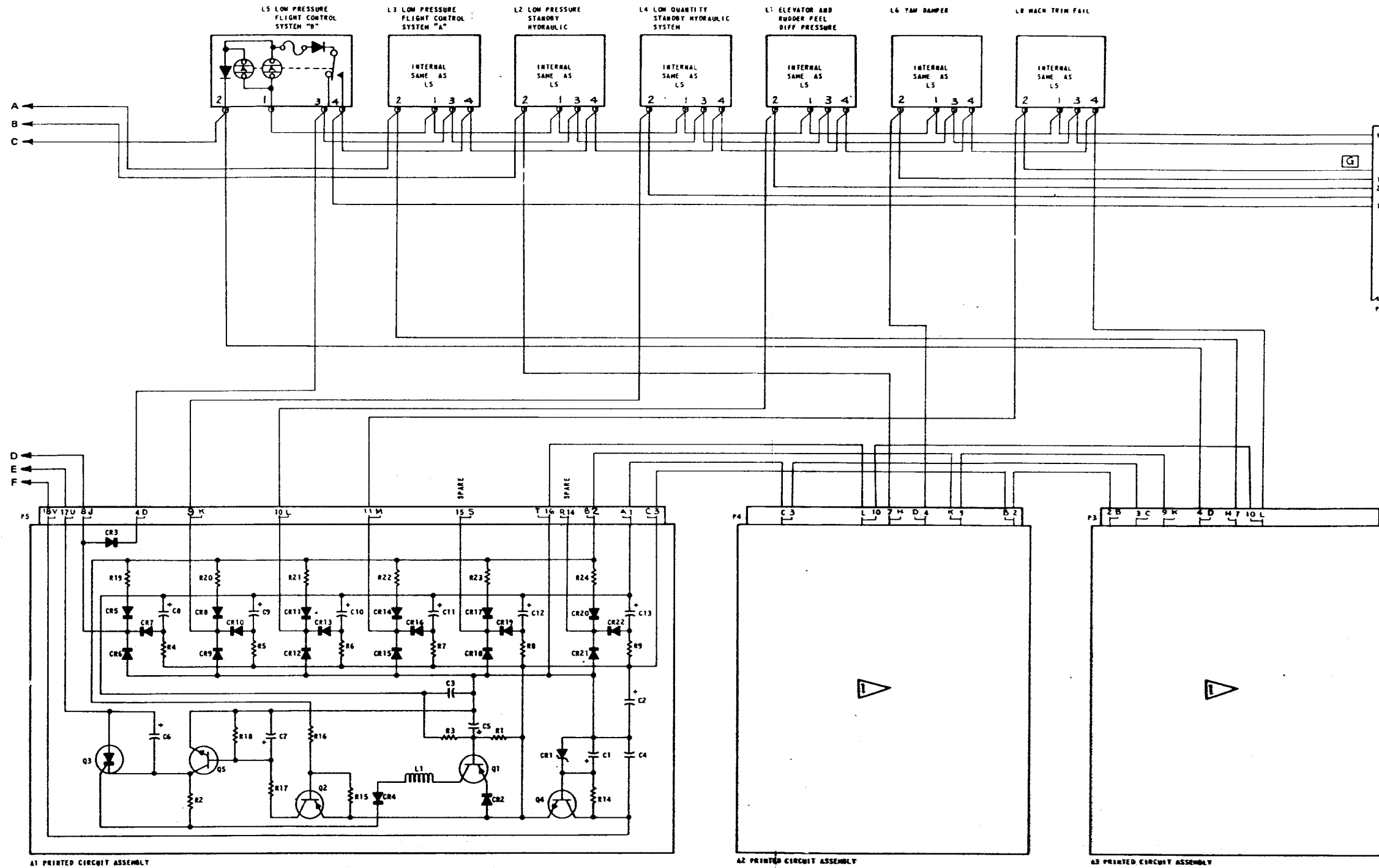
Schematic Diagram  
Figure 802 (Sheet 2)



NOTE: ALL WIRE BMS 13-16, SIZE AWG 24  
 UNLESS OTHERWISE NOTED



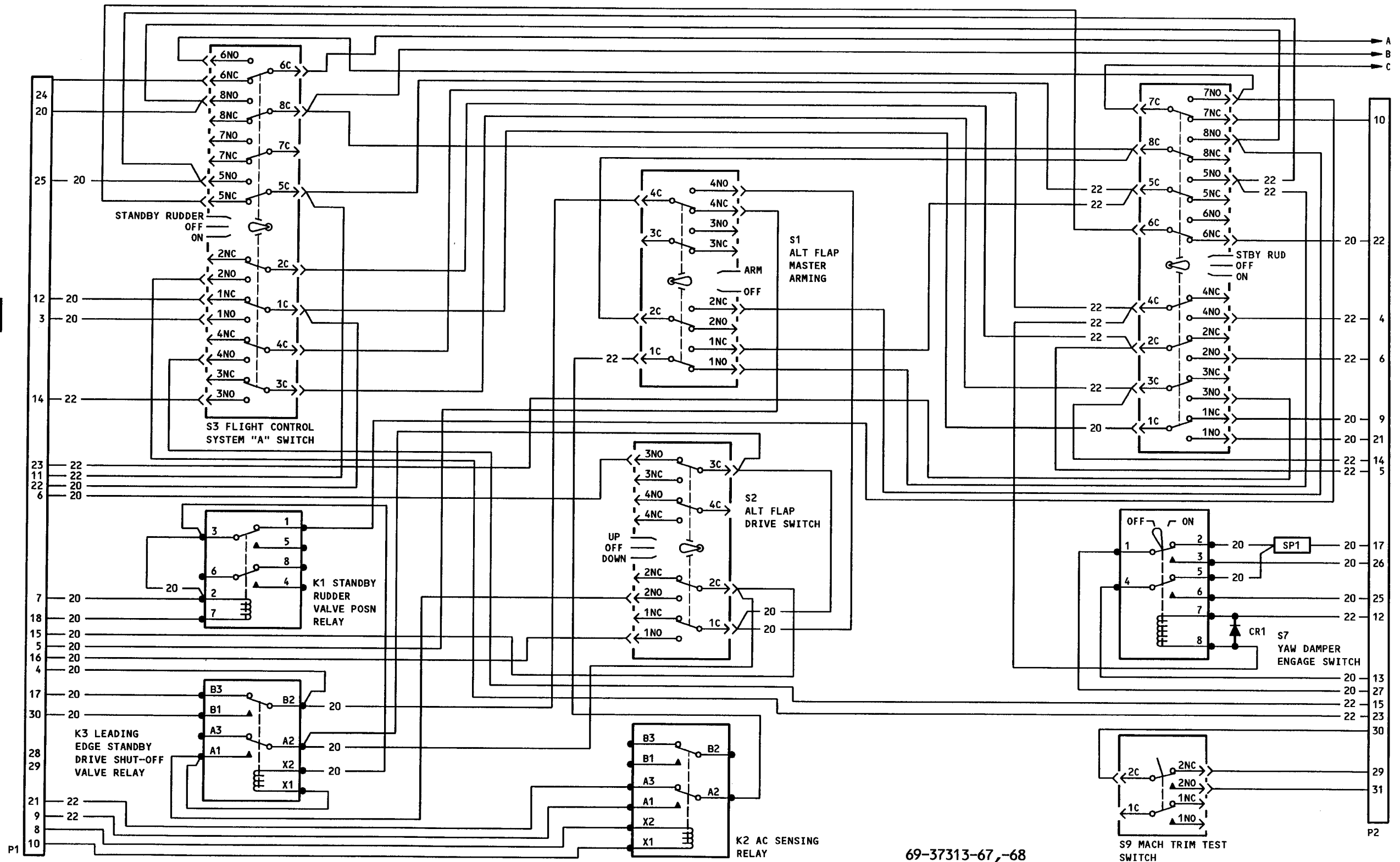
**BOEING**  
**COMMERCIAL JET**  
**OVERHAUL MANUAL**



NOTE: ALL WIRE BMS 13-16 TYPE 1, CLASS 1,  
SIZE AWG 24 EXCEPT AS NOTED

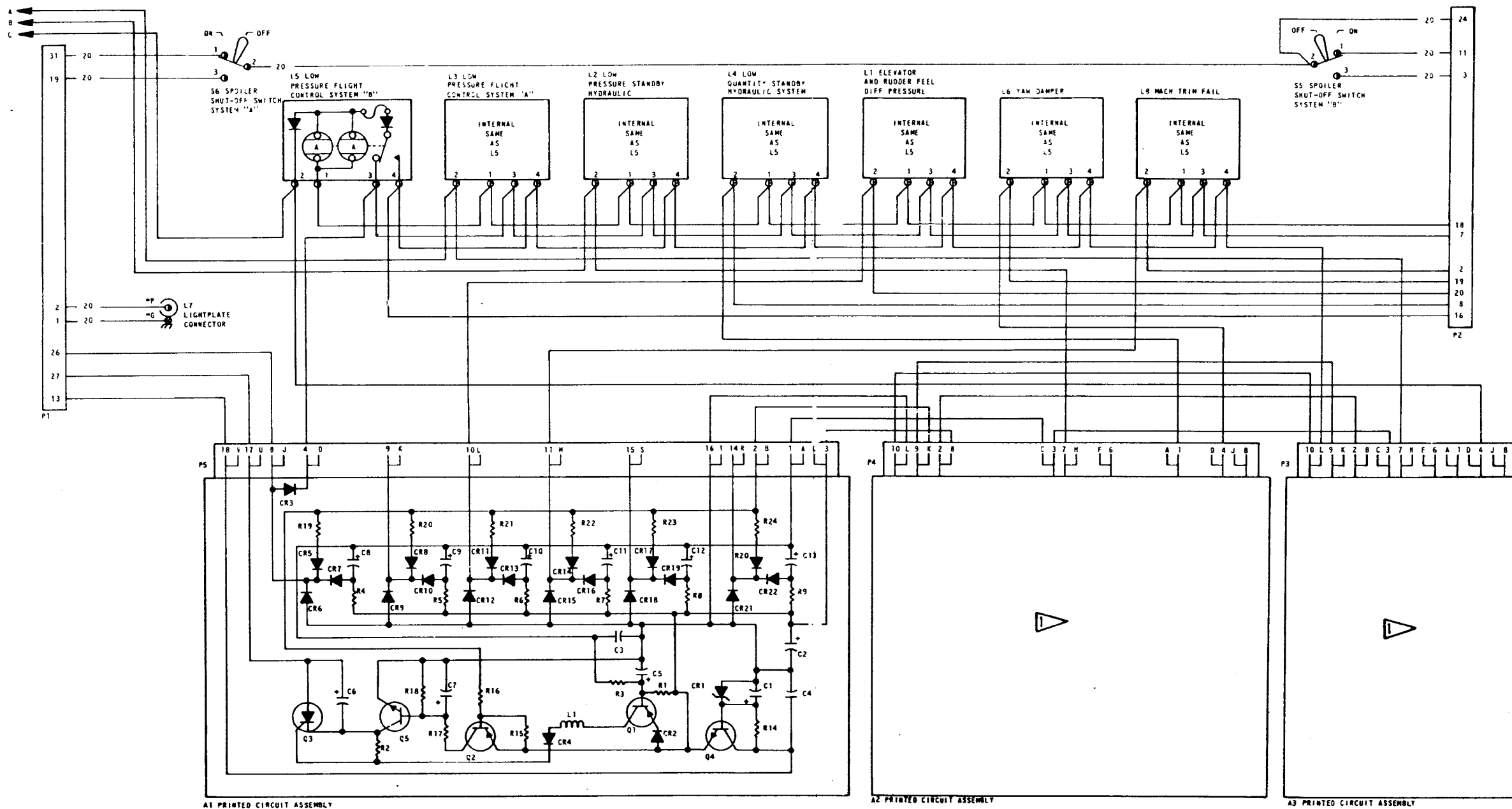
69-37313-58, -61

REFER TO SUBJECT 31-36-06



69-37313-67,-68

Schematic Diagram  
 Figure 804 (Sheet 1)



A1 PRINTED CIRCUIT ASSEMBLY

A2 PRINTED CIRCUIT ASSEMBLY

A3 PRINTED CIRCUIT ASSEMBLY

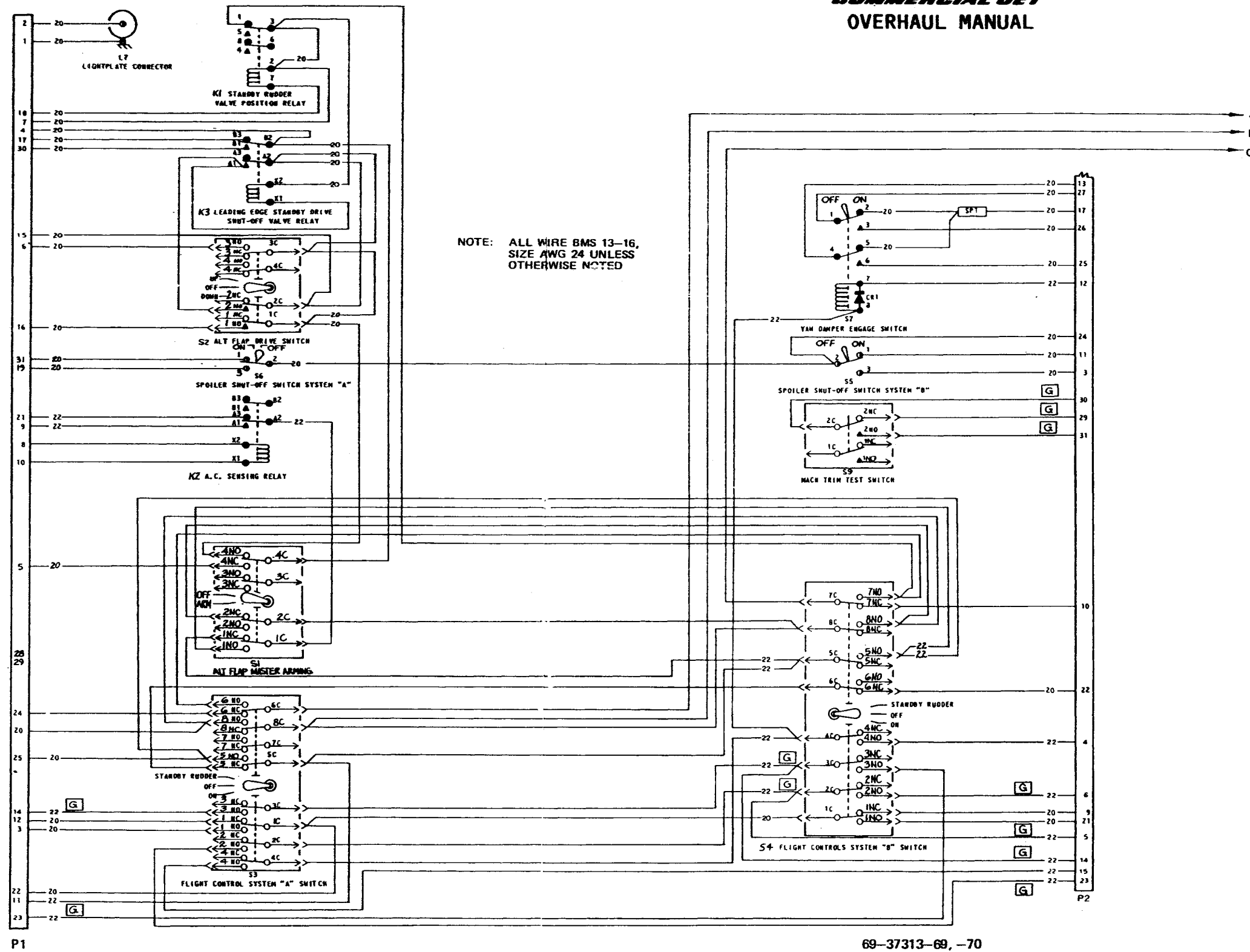
▷ REFER TO SUBJECT 31-36-06

NOTE: ALL WIRE BMS 13-16, TYPE 1, CLASS 1,  
SIZE AWG 24 EXCEPT AS NOTED

69-37313-67,-68

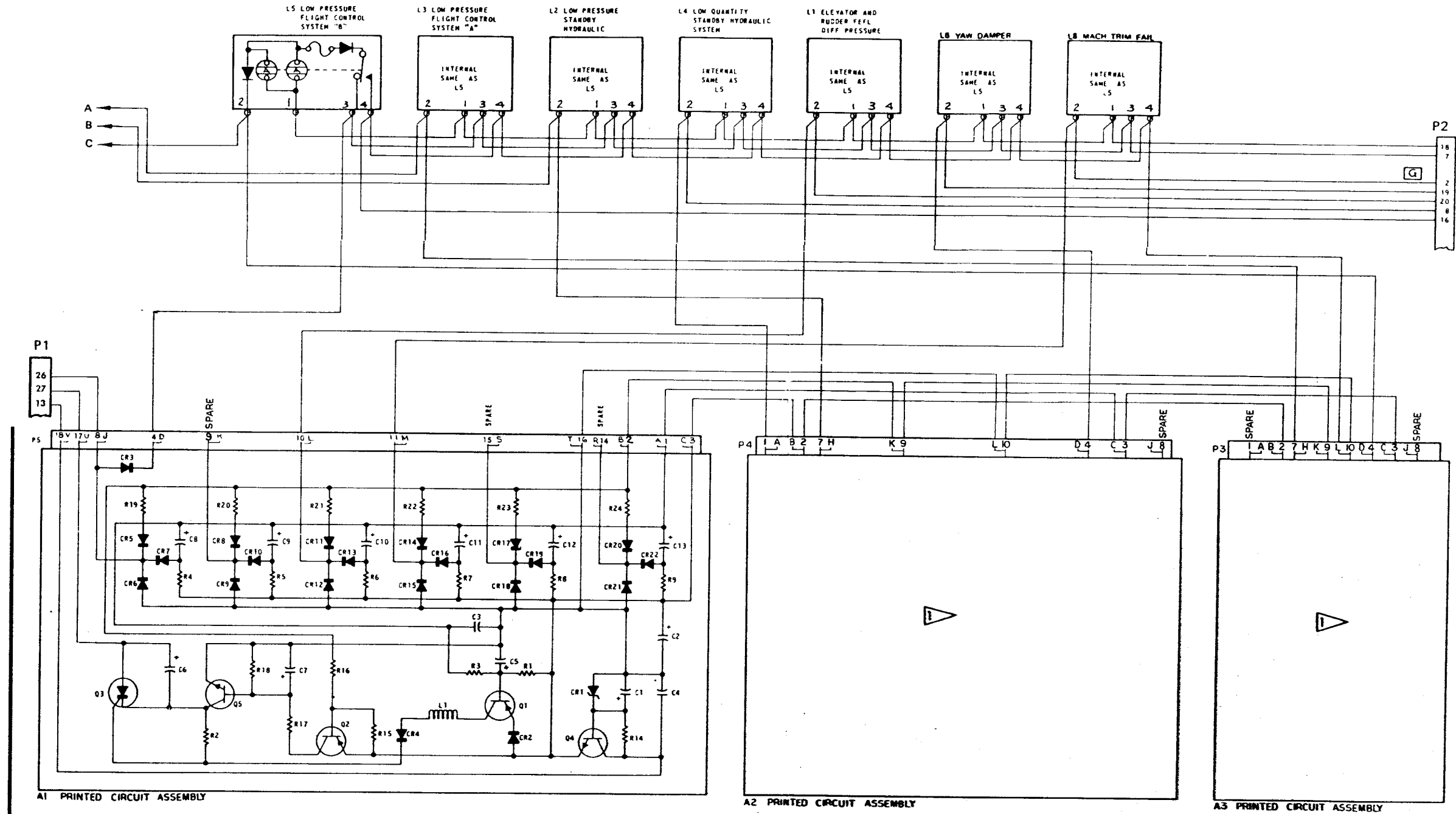
Schematic Diagram  
Figure 804 (Sheet 2)

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Page 817



69-37313-69, -70

**BOEING**  
**COMMERCIAL JET**  
**OVERHAUL MANUAL**



NOTE: ALL WIRE BMS 13-16,  
 SIZE AWG 24 UNLESS  
 OTHERWISE NOTED

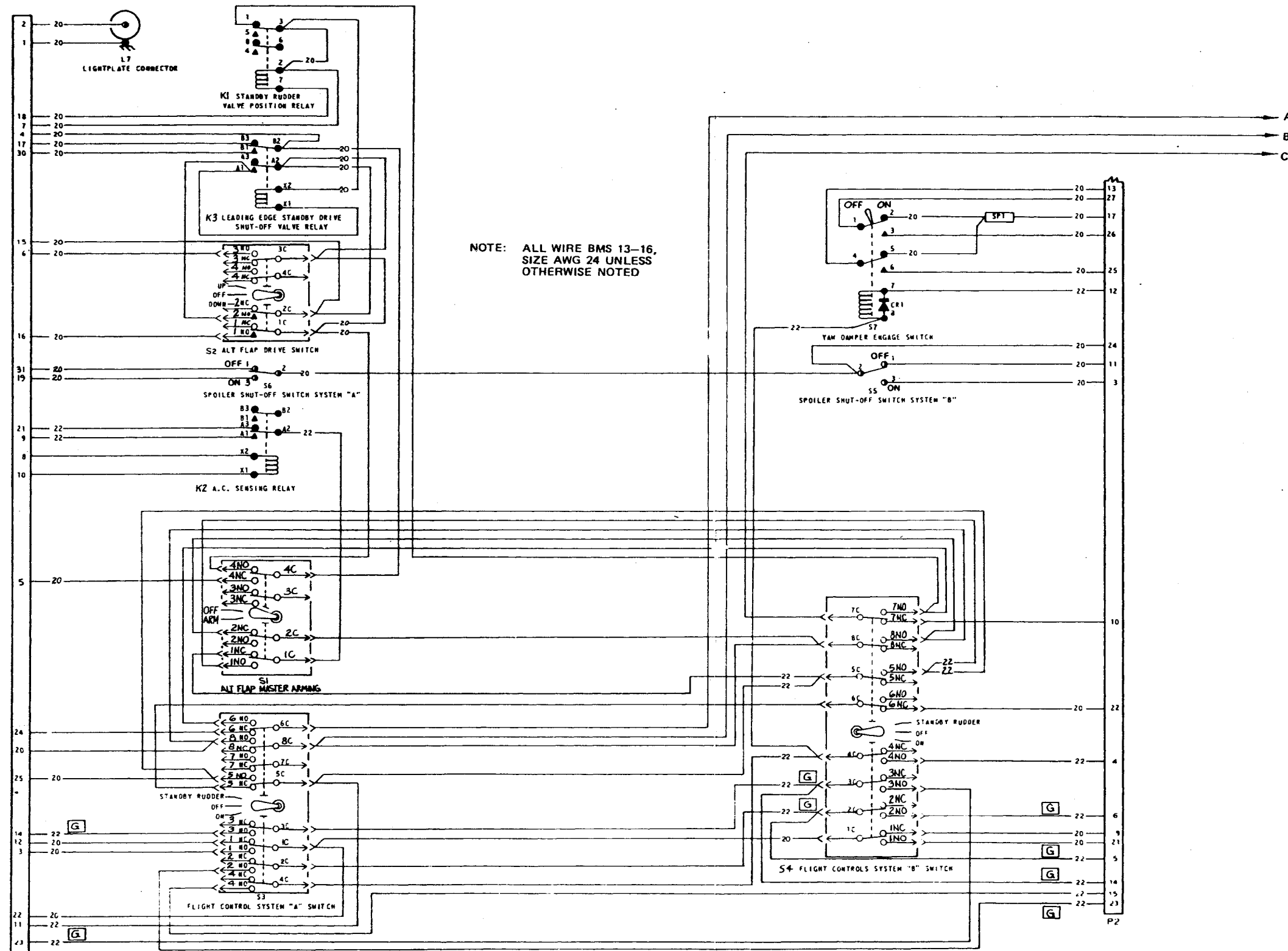
REFER TO SUBJECT 31-36-06

69-37313-69, -70

Schematic Diagram  
 Figure 805 (Sheet 2)

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NOTE: ALL WIRE BMS 13-16,  
 SIZE AWG 24 UNLESS  
 OTHERWISE NOTED

P1

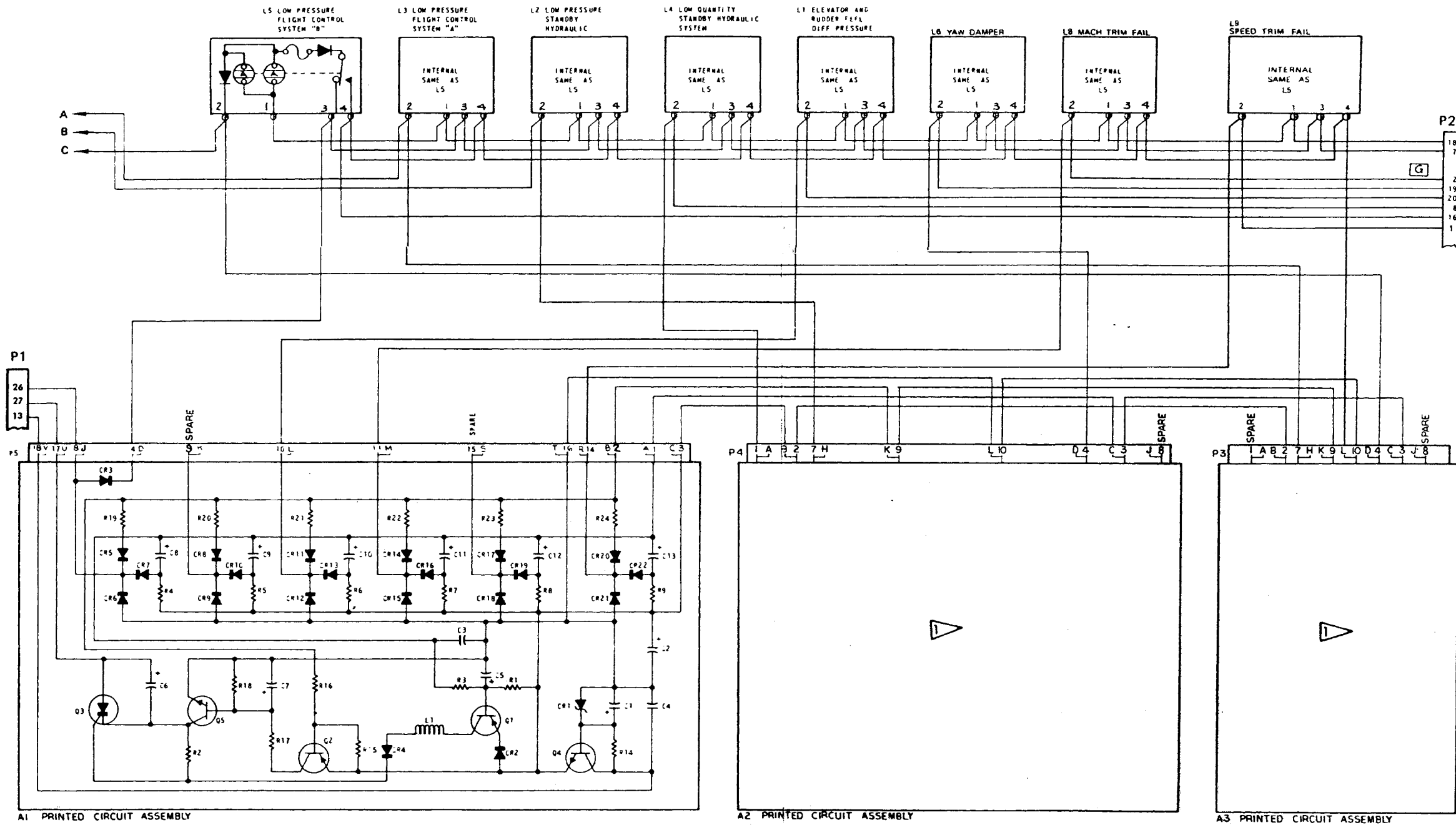
69-37313-74

31-36-04  
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Schematic Diagram  
 Figure 806 (Sheet 1)

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**BOEING**  
**COMMERCIAL JET**  
**OVERHAUL MANUAL**



NOTE: ALL WIRE BMS 13-16,  
SIZE AWG 24 UNLESS  
OTHERWISE NOTED

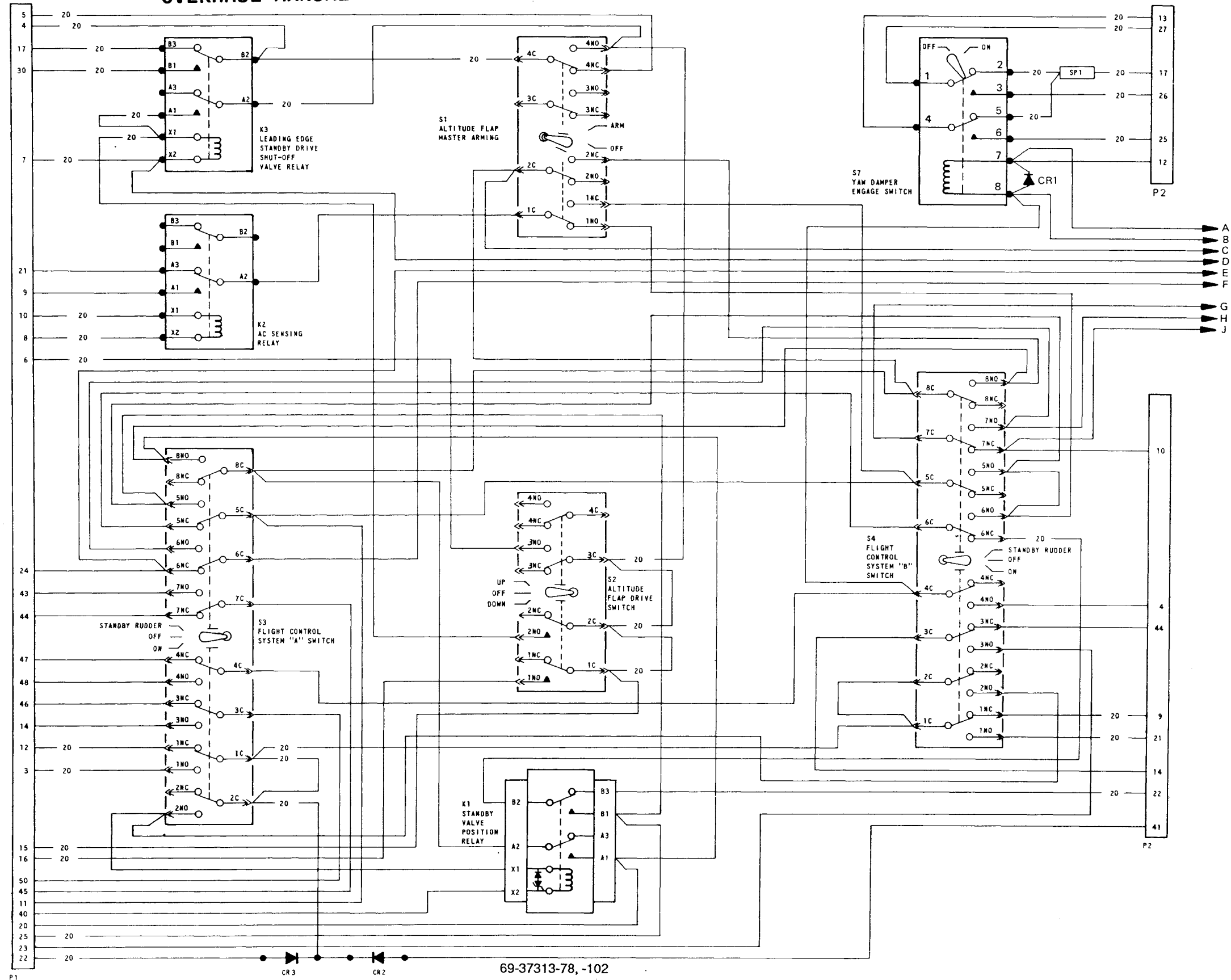
▷ REFER TO SUBJECT 31-36-06

69-37313-74

Schematic Diagram  
Figure 806 (Sheet 2)

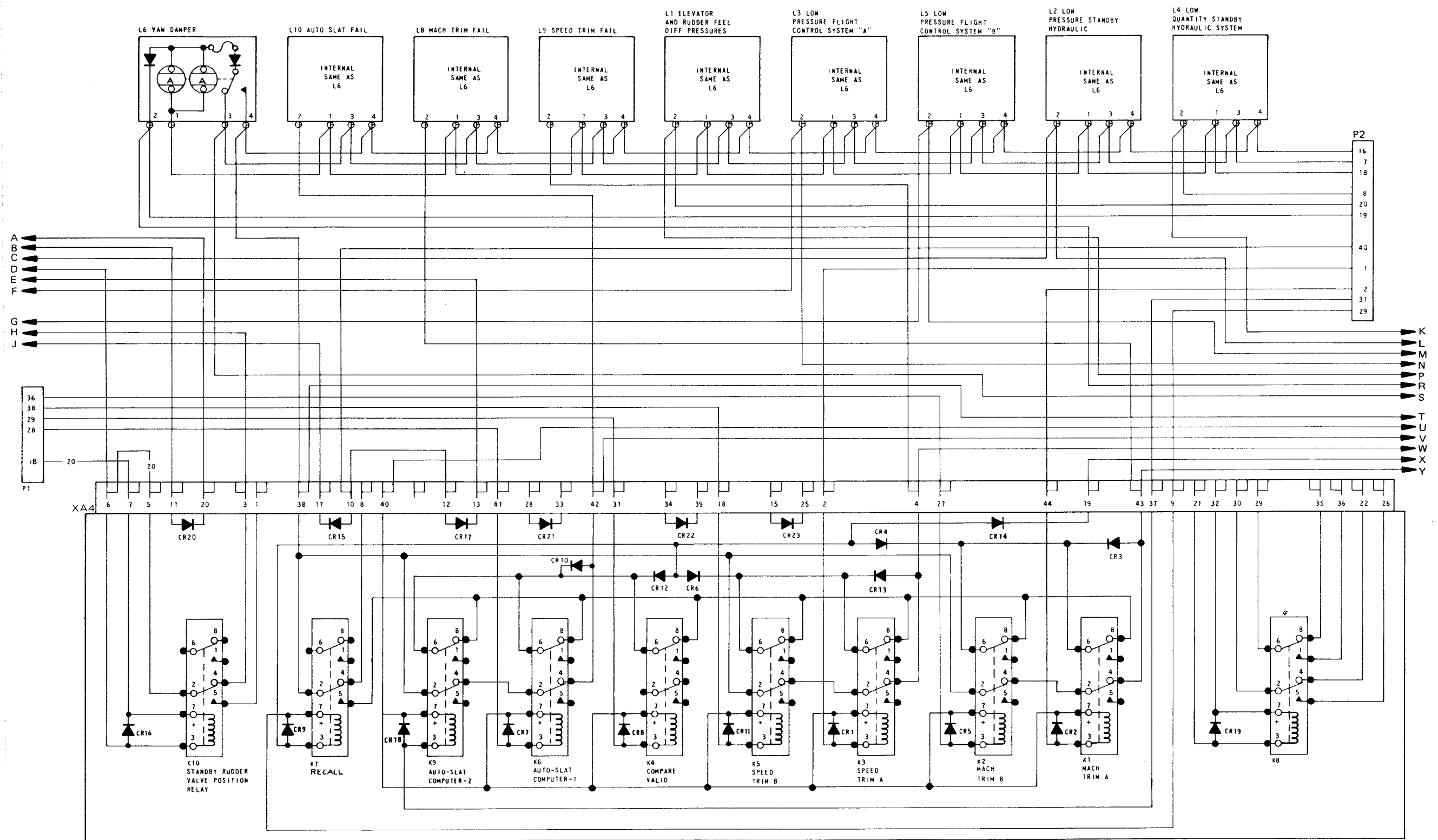


**BOEING**  
**COMMERCIAL JET**  
**OVERHAUL MANUAL**



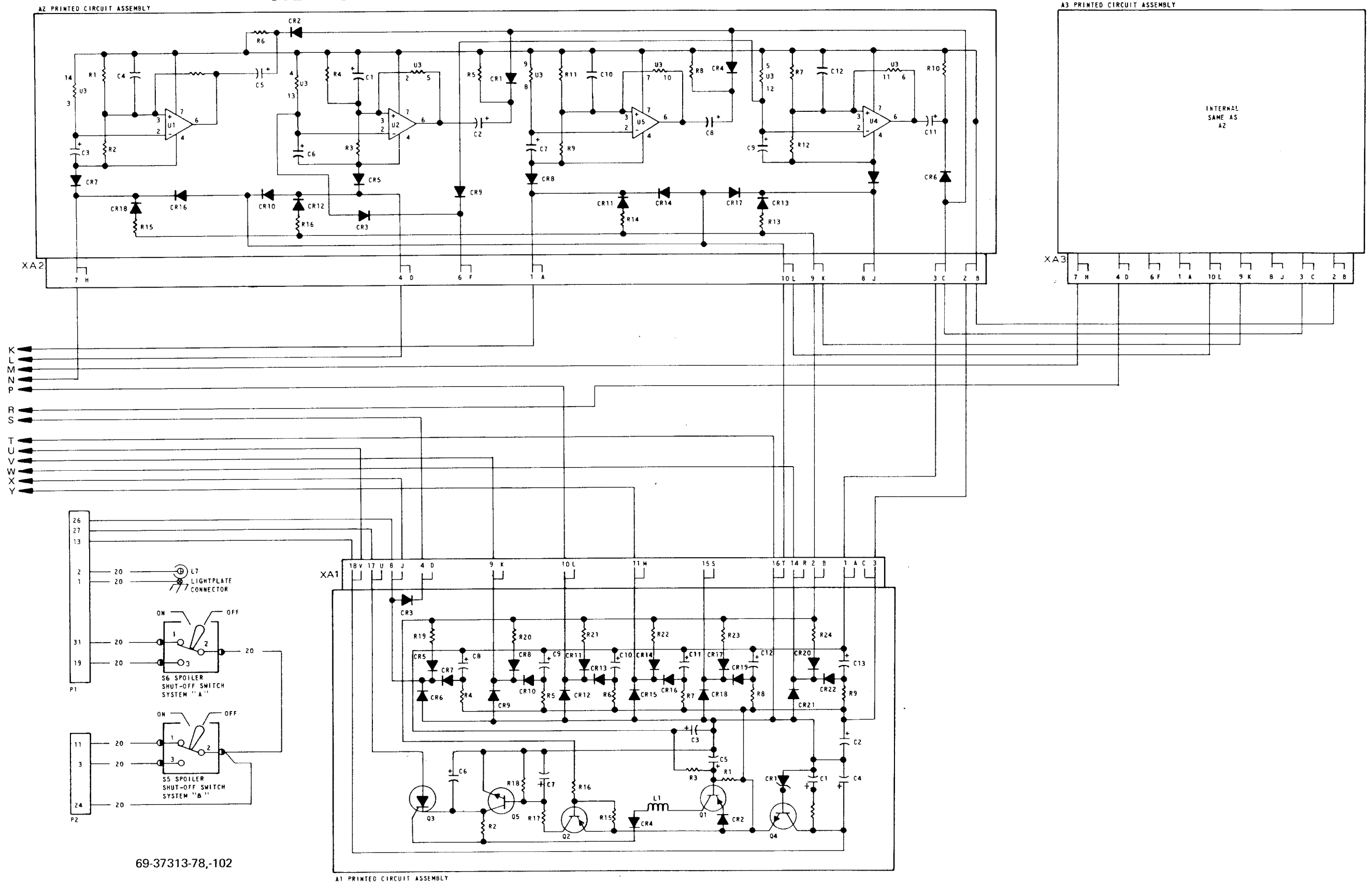
69-37313-78, -102

Schematic Diagram  
Figure 807 (Sheet 1)



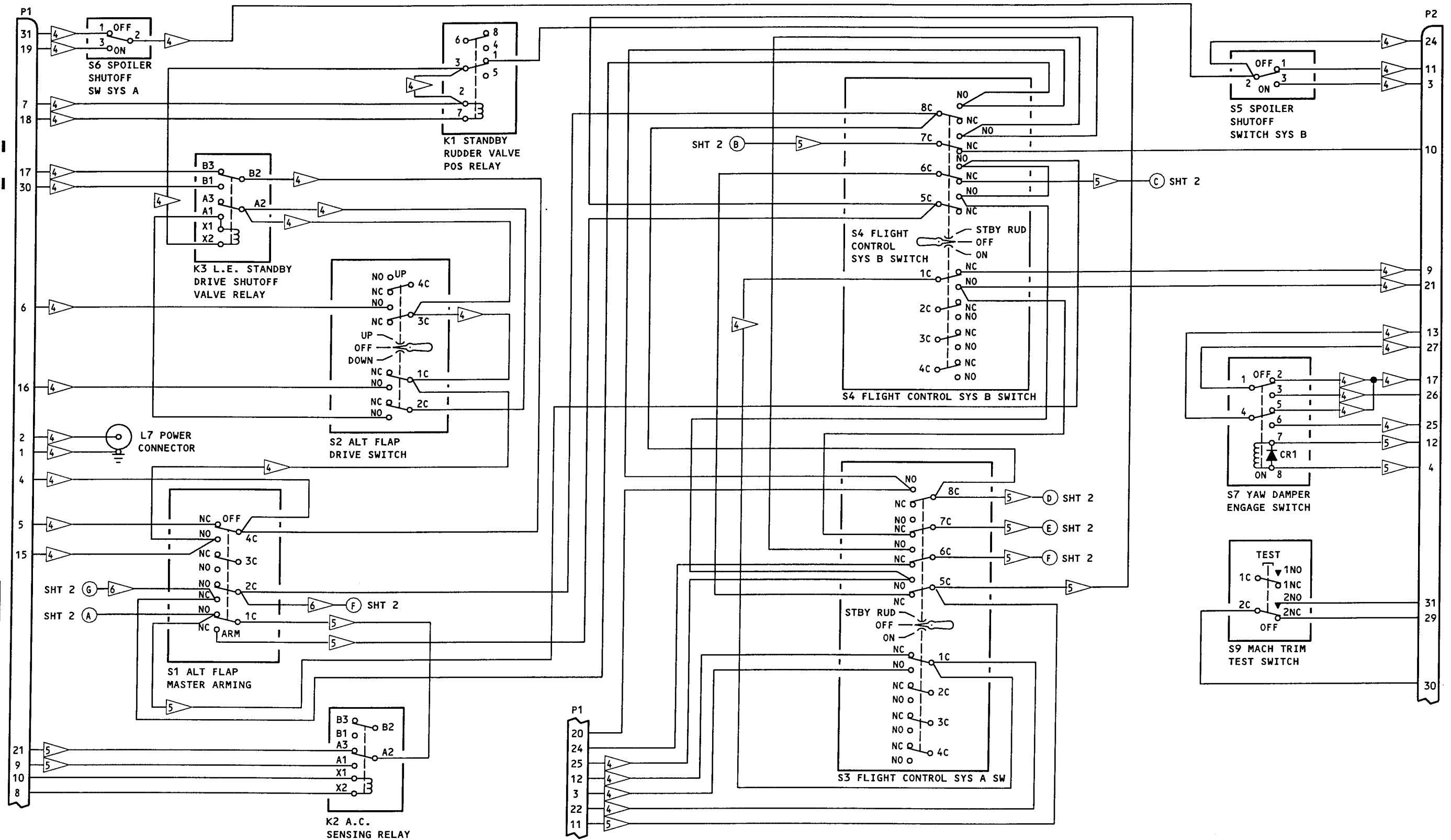
A4 PRINTED CIRCUIT ASSEMBLY

69-37313-78, -102



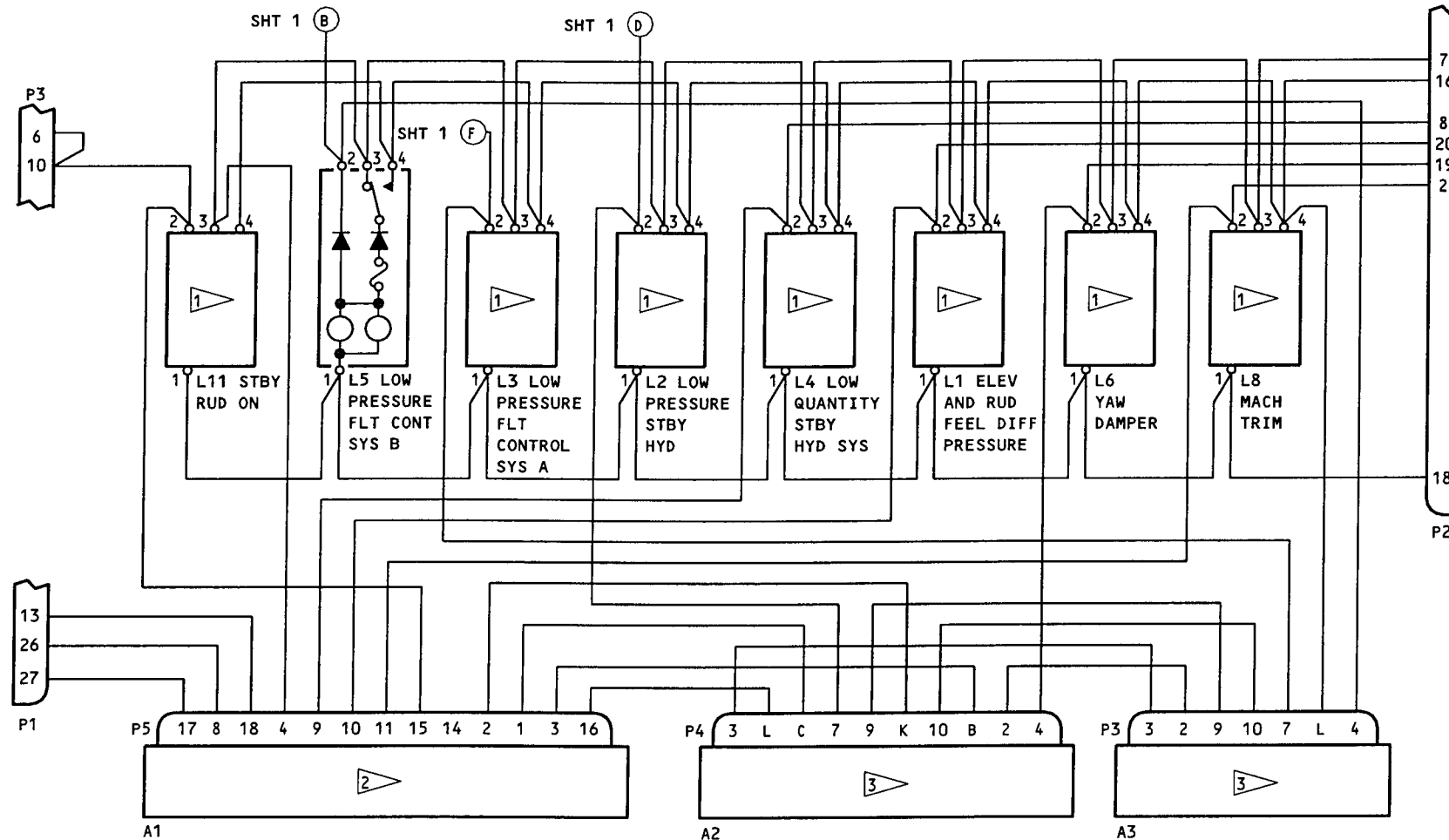
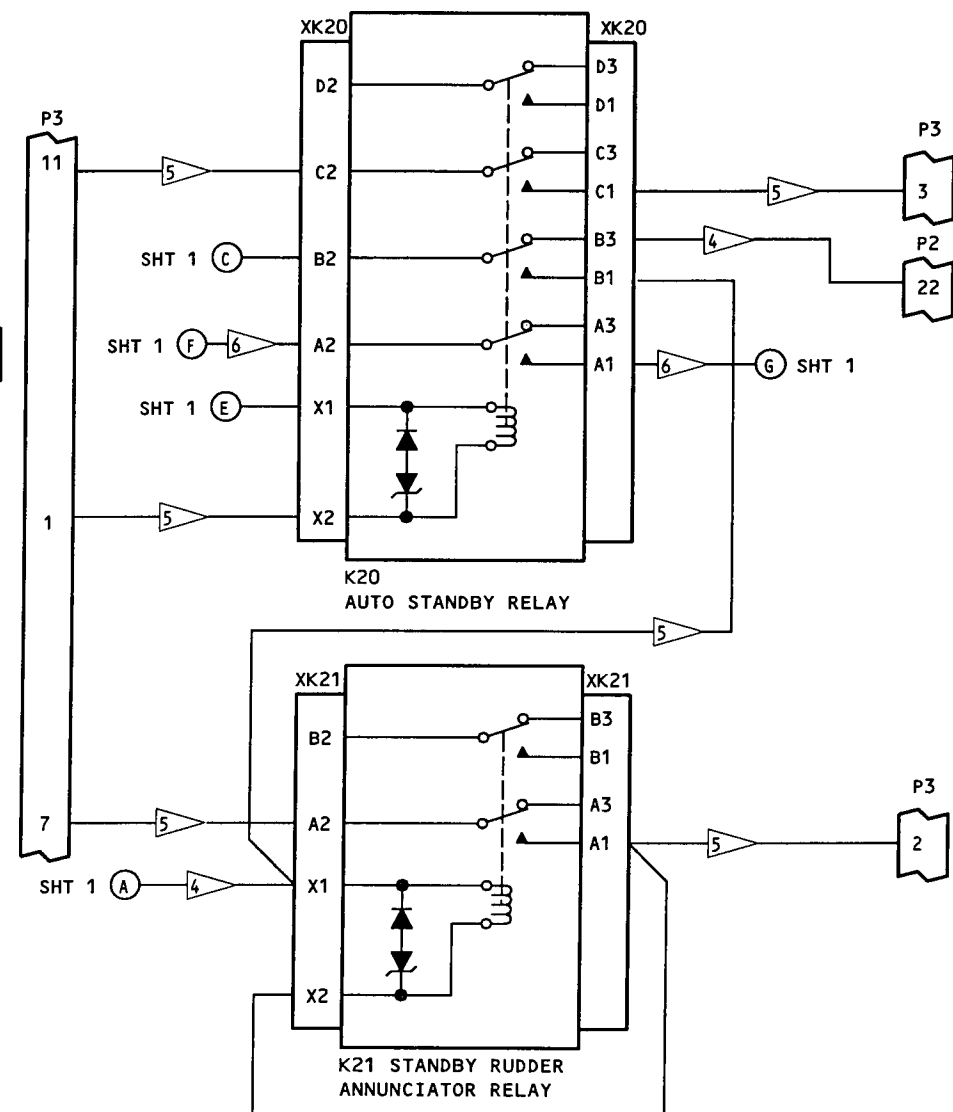
69-37313-78,-102

Schematic Diagram  
Figure 807 (Sheet 3)



69-37313-430 THRU -432, -434, -438, -439, -445, -446, -455, -456, -458 THRU -461, -463, -530 THRU -532, -534, -538, -539, -545, -546, -555, -556, -558 THRU -561, -563

Schematic Diagram  
Figure 808 (Sheet 1)

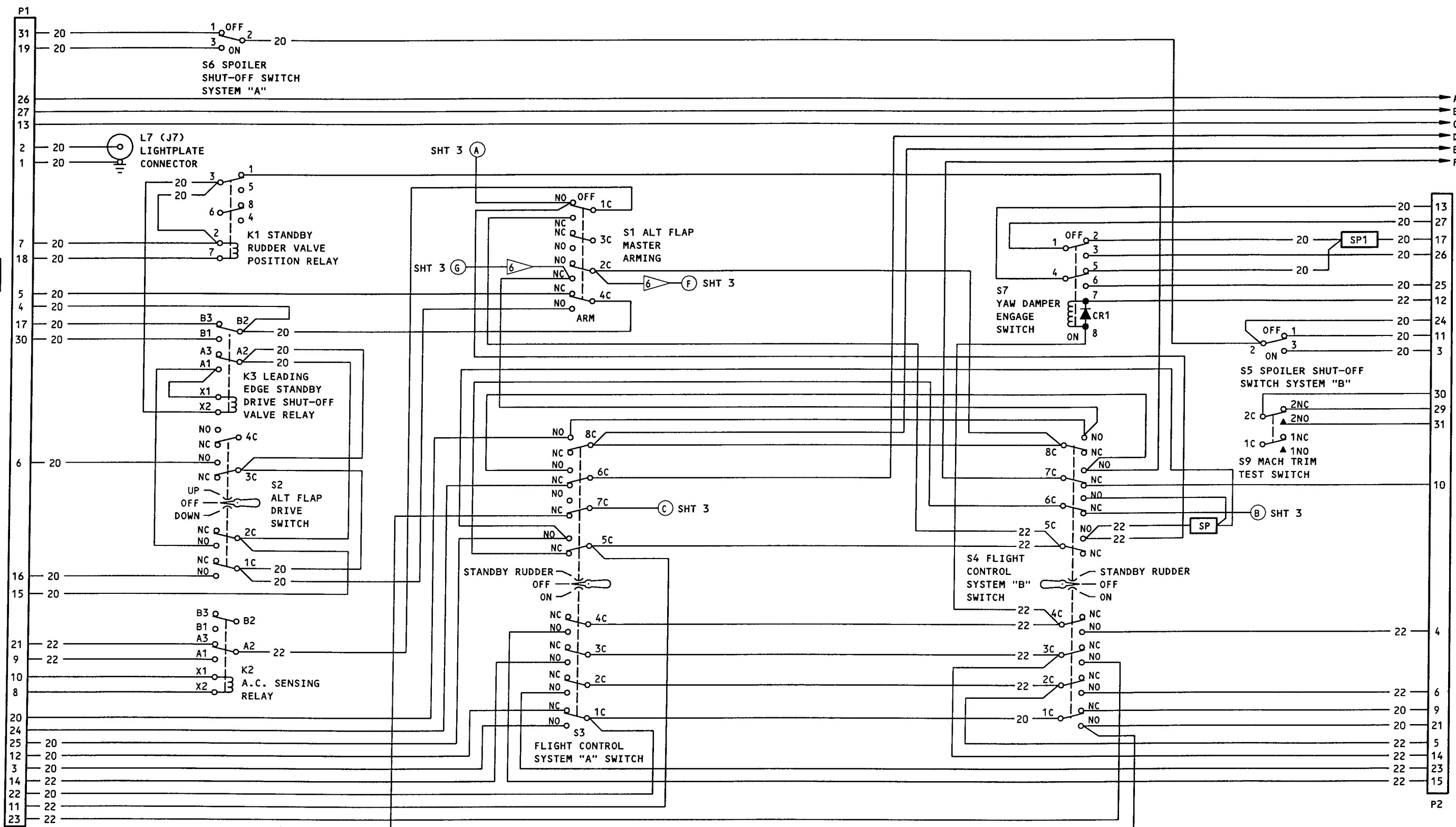


NOTE: WIRE SIZE NO. 24 EXCEPT AS NOTED.

- 1 REFER TO APPLICABLE MANUFACTURER'S INSTRUCTIONS
- 2 REFER TO SUBJECT 33-15-11
- 3 REFER TO SUBJECT 31-36-06
- 4 WIRE SIZE AWG 20
- 5 WIRE SIZE AWG 22
- 6 69-37313-530 THRU -532,-534,-538,-539,-545,-546,-555,-556,-558 THRU -561,-563

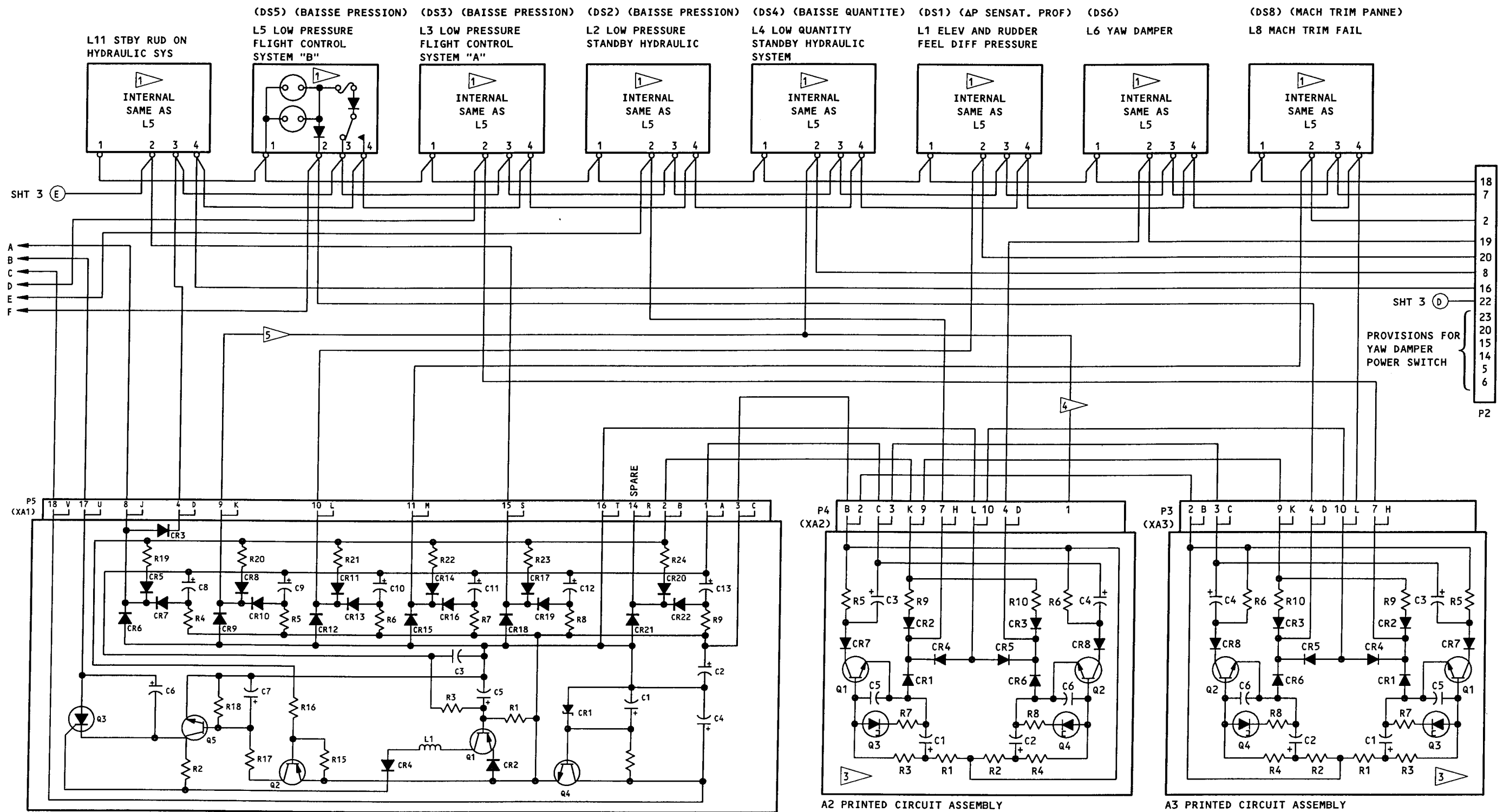
69-37313-430 THRU -432,-434,-438,-439,-445,-446,-455,-456,-458 THRU -461,-463,-530 THRU -532,-534,-538,-539,-545,-546,-555,-556,-558 THRU -561,-563

Schematic Diagram  
Figure 808 (Sheet 2)



69-37313-433,-435 THRU -437,-440 THRU -442,-447,-453,-454,-462,-464,  
-533,-535 THRU -537,-540 THRU -542,-547,-553,-554,-562,-564

Schematic Diagram  
Figure 809 (Sheet 1)



A1 PRINTED CIRCUIT ASSEMBLY

A2 PRINTED CIRCUIT ASSEMBLY

A3 PRINTED CIRCUIT ASSEMBLY

NOTE: WIRE AWG 24 UNLESS OTHERWISE SPECIFIED.  
REFERENCE DESIGNATORS IN PARENTHESIS ( )  
ARE FOR 69-37313-437,-442,-453,-454

1 REFER TO APPLICABLE  
MANUFACTURER'S INSTRUCTIONS

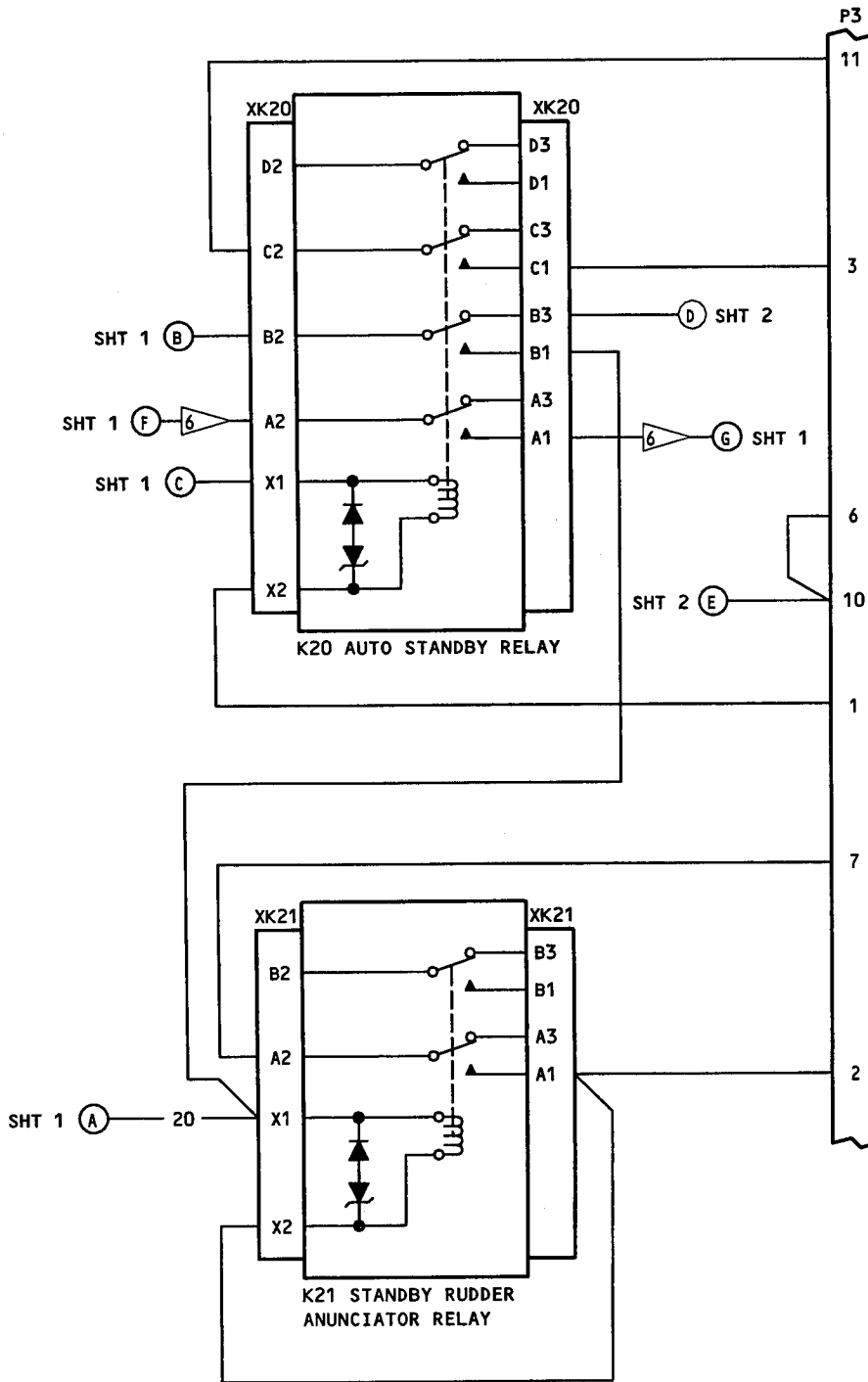
2 REFER TO SUBJECT 33-15-11  
3 REFER TO SUBJECT 31-36-06

4 69-37313-453,-454,-457,-462,-464  
5 69-37313-433,-435 THRU -442,-447

6 69-37313-533,-535 THRU -537,-540 THRU -542,-  
-547,-553,-554,-557,-562,-564

69-37313-433,-435 THRU -437,-440 THRU -442,-447,-453,-454,-457,-462,-464,-533,-535 THRU -537,-540 THRU -542,-547,-553,-554,-557,-562,-564

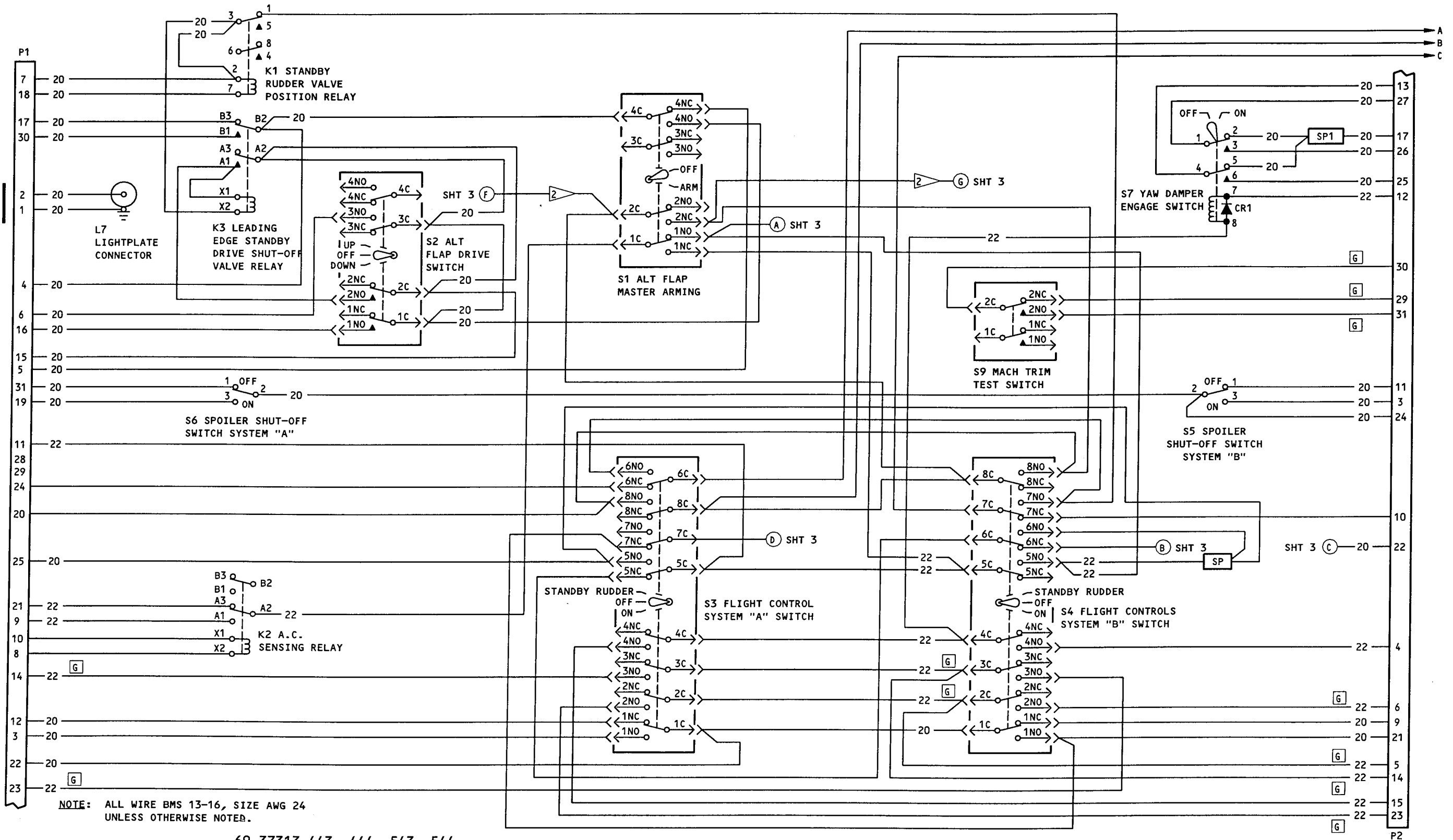
Schematic Diagram  
Figure 809 (Sheet 2)



69-37313-433,-435 THRU -437,-440 THRU -442,-447,-453,-454,-457,-462,-464,  
-533,-535 THRU -537,-540 THRU -542,-547,-553,-554,-557,-562,-564

Schematic Diagram  
Figure 809 (Sheet 3)





NOTE: ALL WIRE BMS 13-16, SIZE AWG 24  
UNLESS OTHERWISE NOTED.

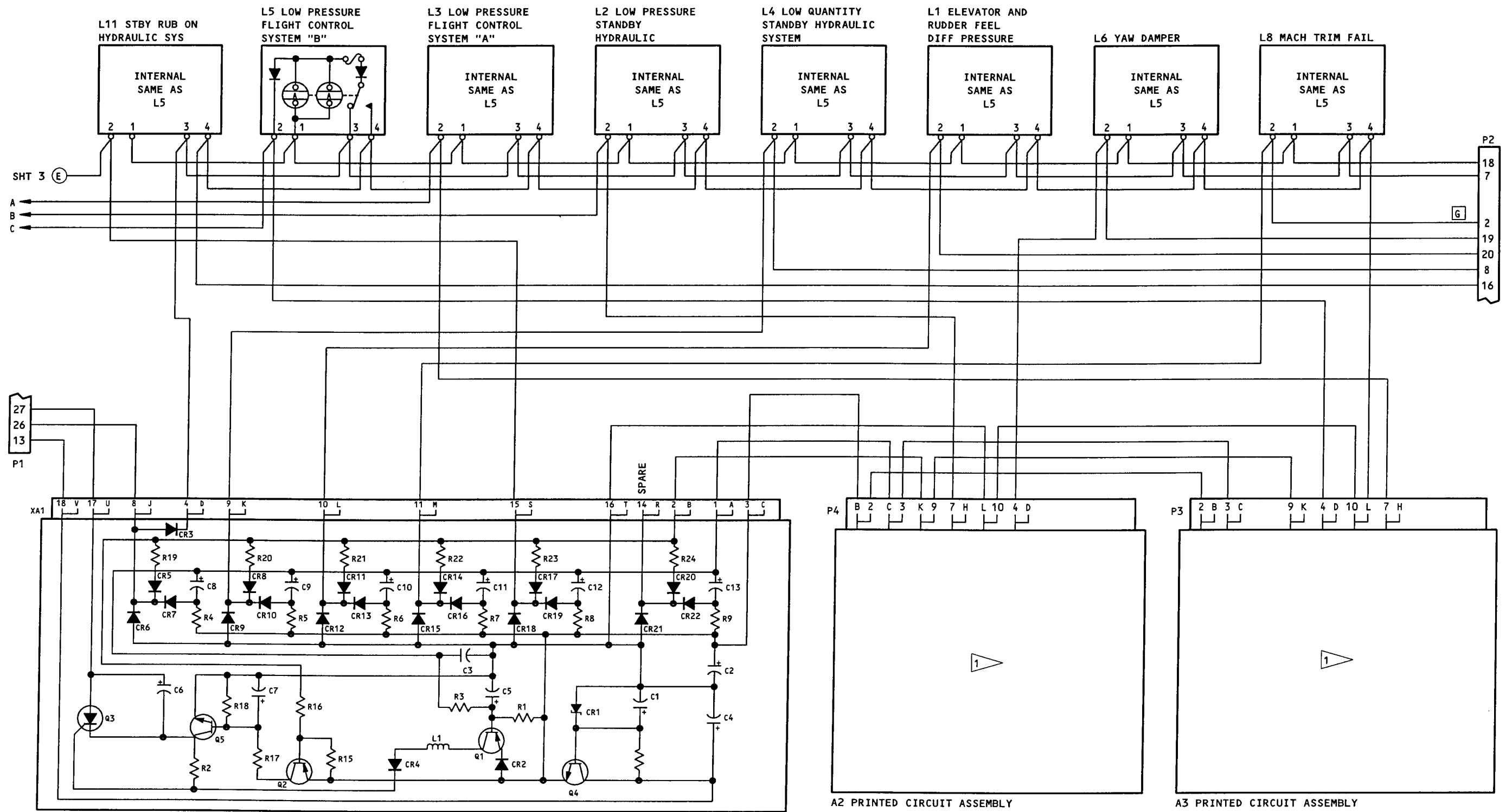
69-37313-443,-444,-543,-544

Schematic Diagram  
Figure 810 (Sheet 1)

187543

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A1 PRINTED CIRCUIT ASSEMBLY  
NOTE: ALL WIRE BMS 13-16 TYPE 1, CLASS 1, SIZE AWG 24 EXCEPT AS NOTED. 1 REFER TO SUBJECT 31-36-06 2 69-3713-543,-544

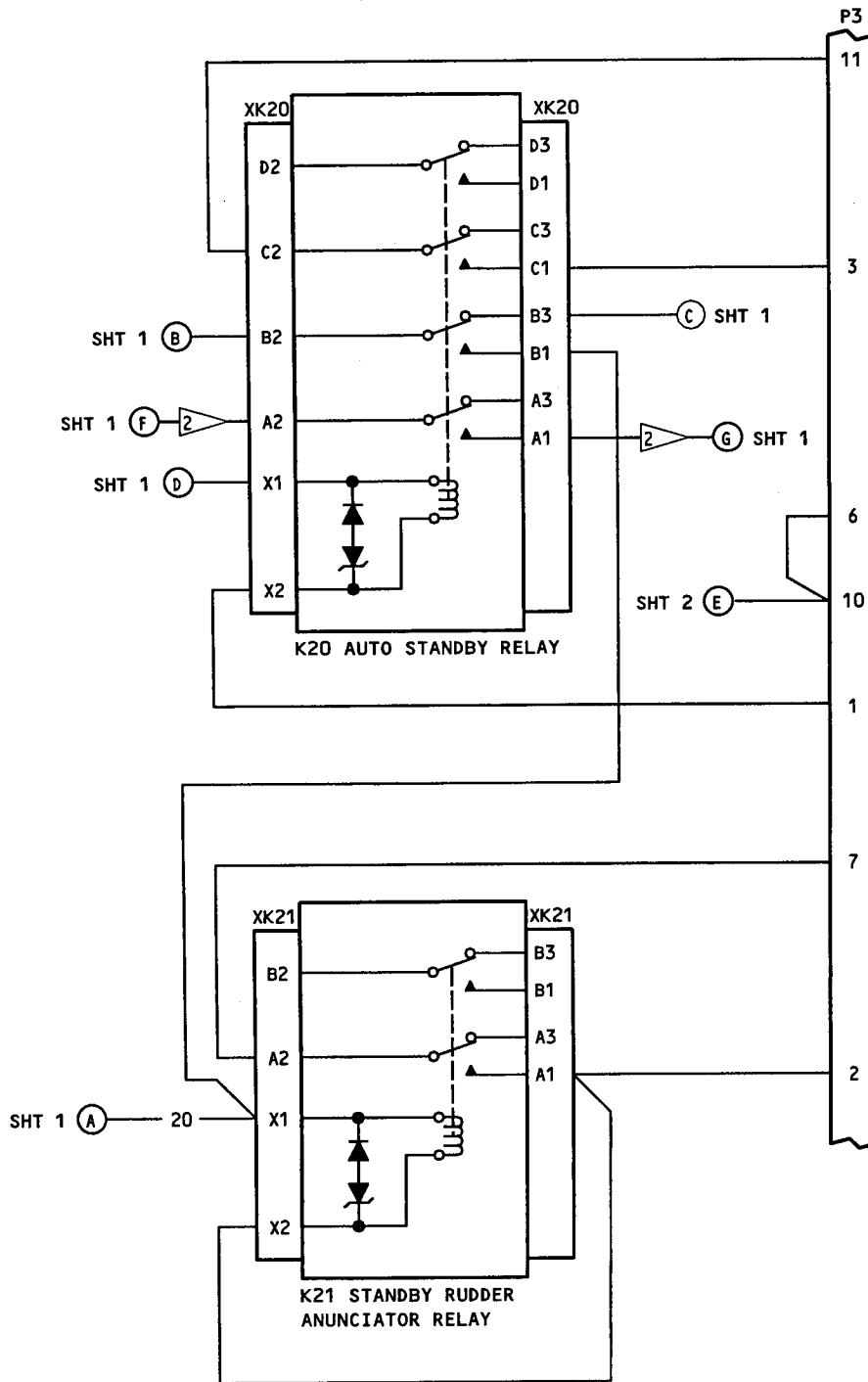
69-37313-443,-444,-543,-544

Schematic Diagram  
Figure 810 (Sheet 2)

NR7822

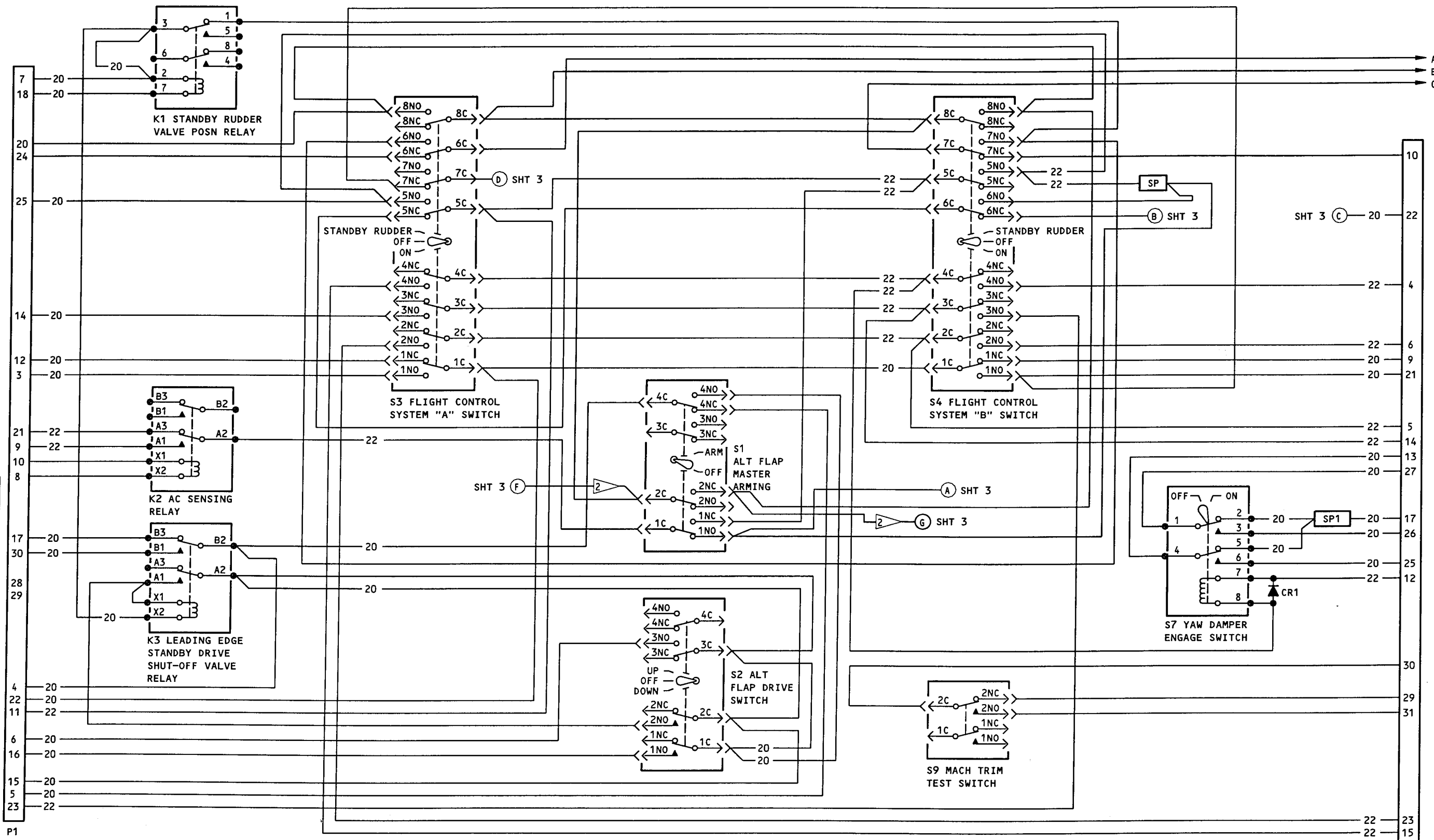
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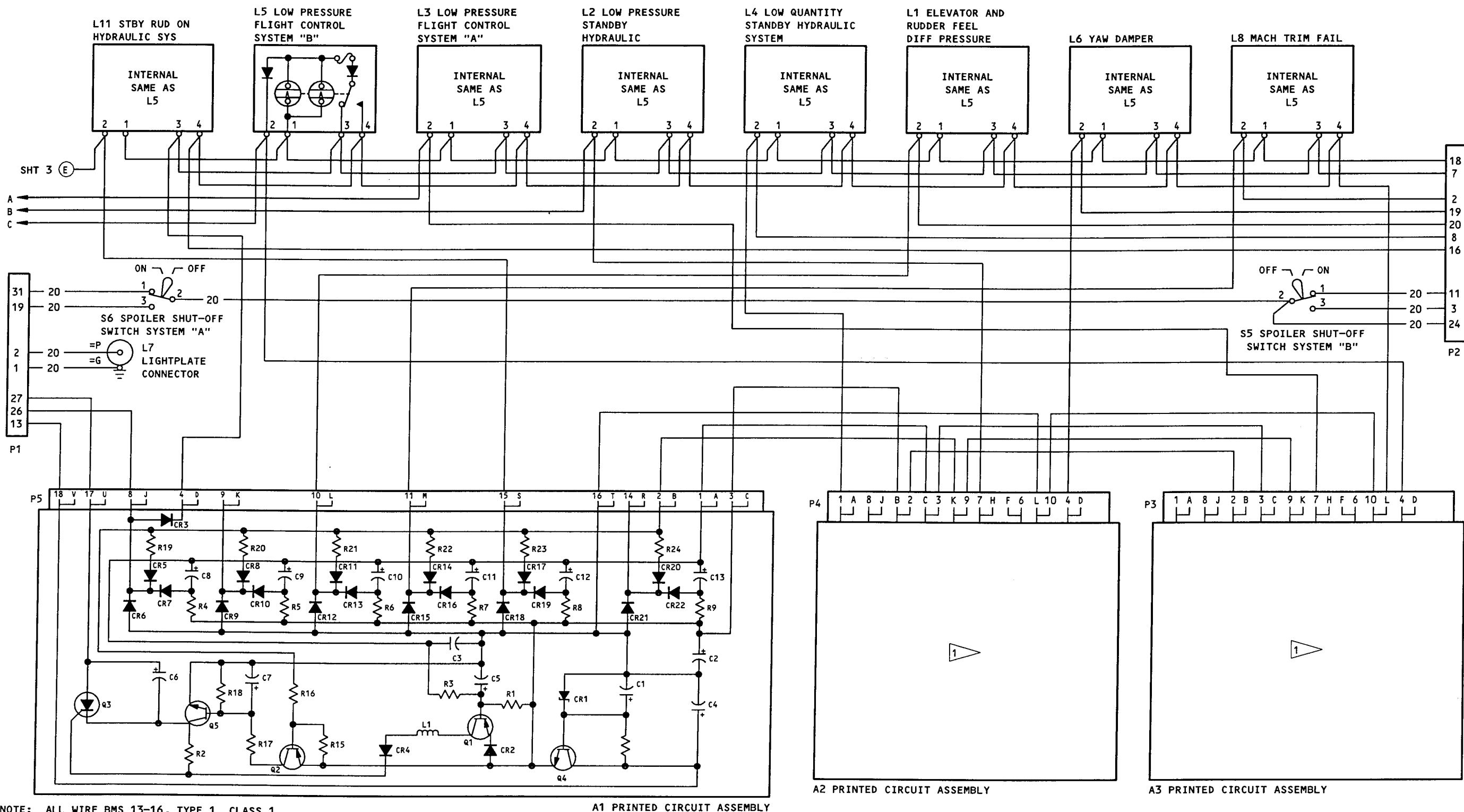


69-37313-443,-444,-543,-544

Schematic Diagram  
Figure 810 (Sheet 3)



69-37313-448,-449,-548,-549  
Schematic Diagram  
Figure 811 (Sheet 1)

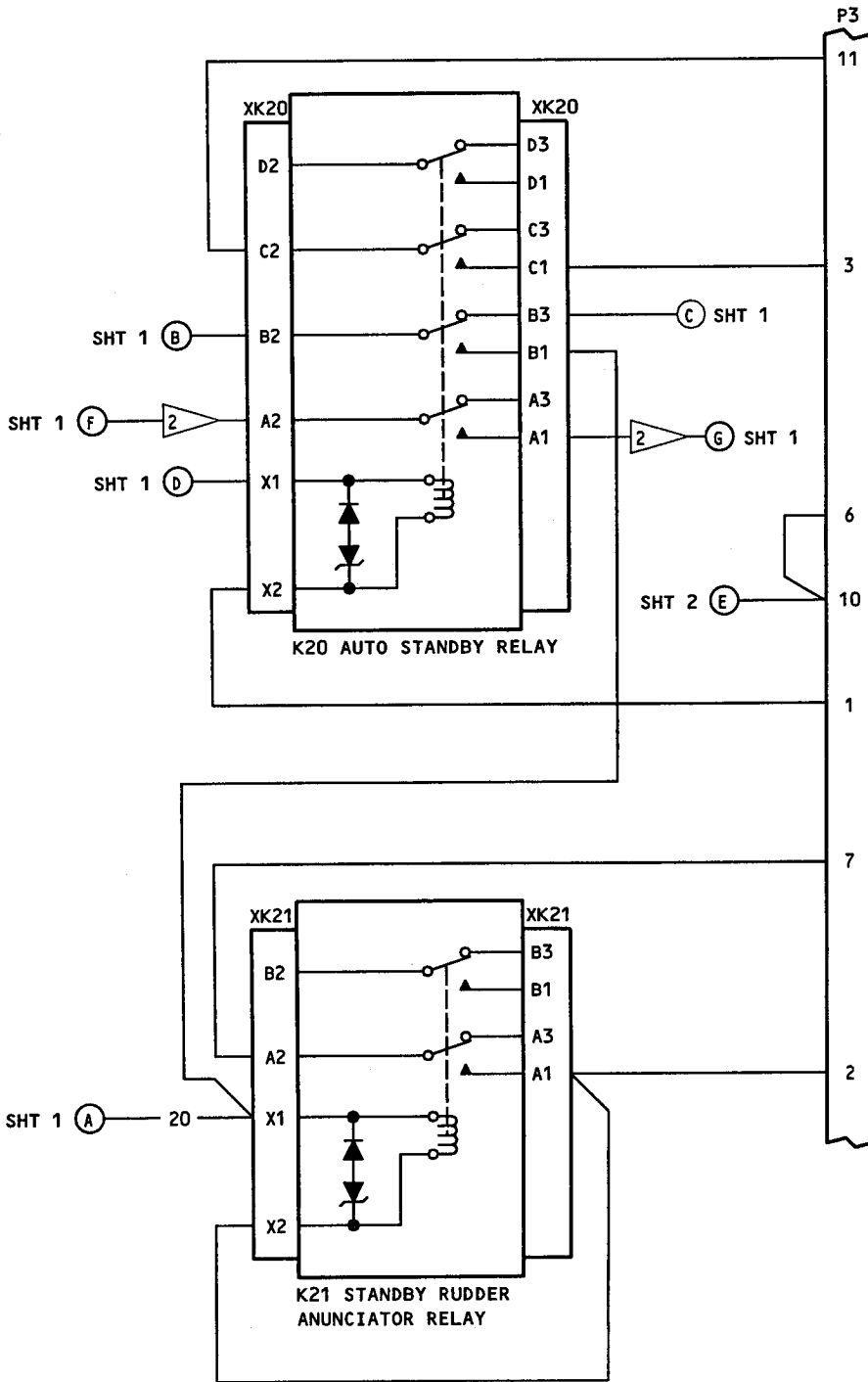


NOTE: ALL WIRE BMS 13-16, TYPE 1, CLASS 1,  
SIZE AWG 24 EXCEPT AS NOTED.

- 1 REFER TO SUBJECT 31-36-06
- 2 69-37313-548,-549

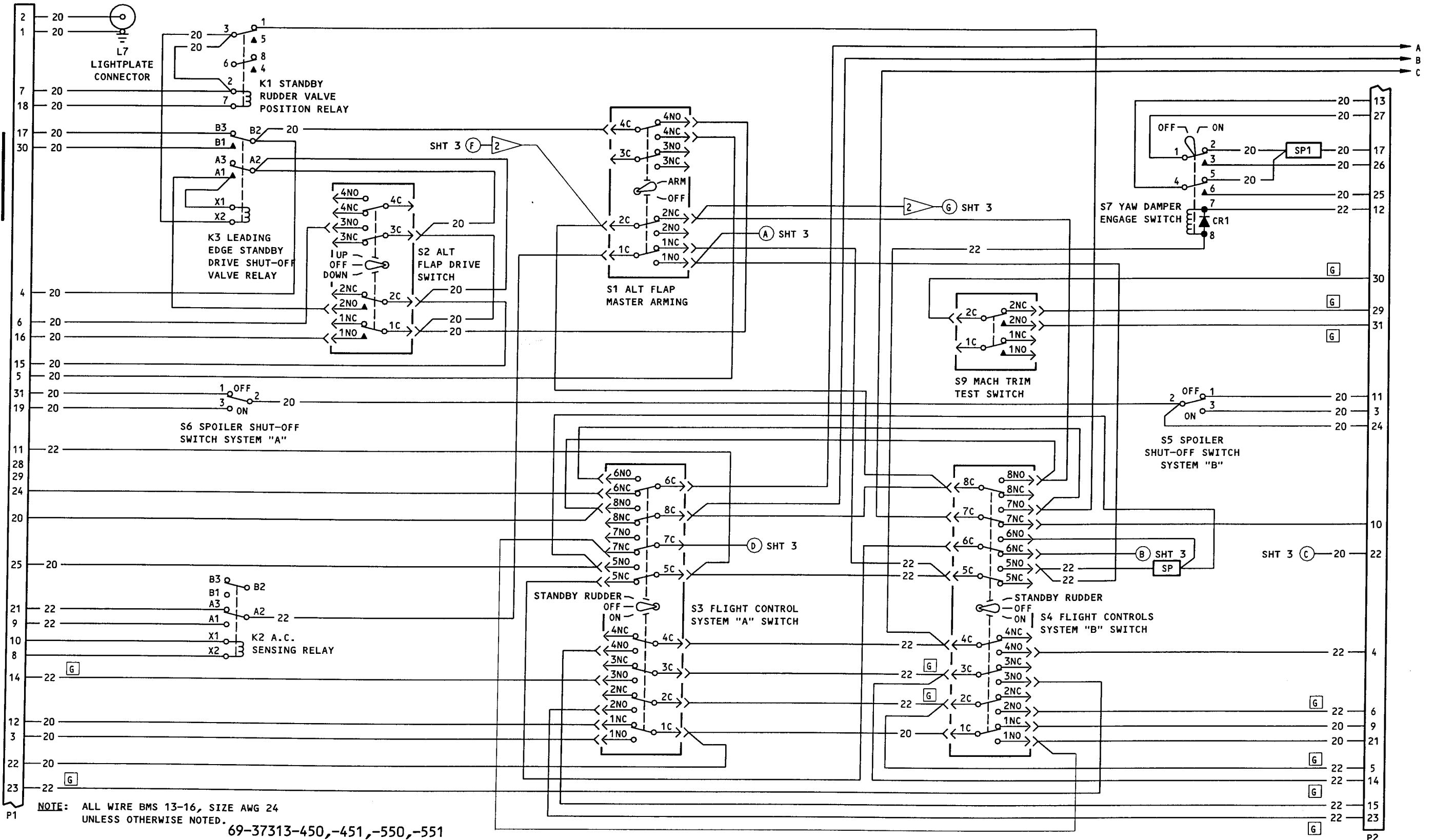
69-37313-448,-449,-548,-549

Schematic Diagram  
Figure 811 (Sheet 2)

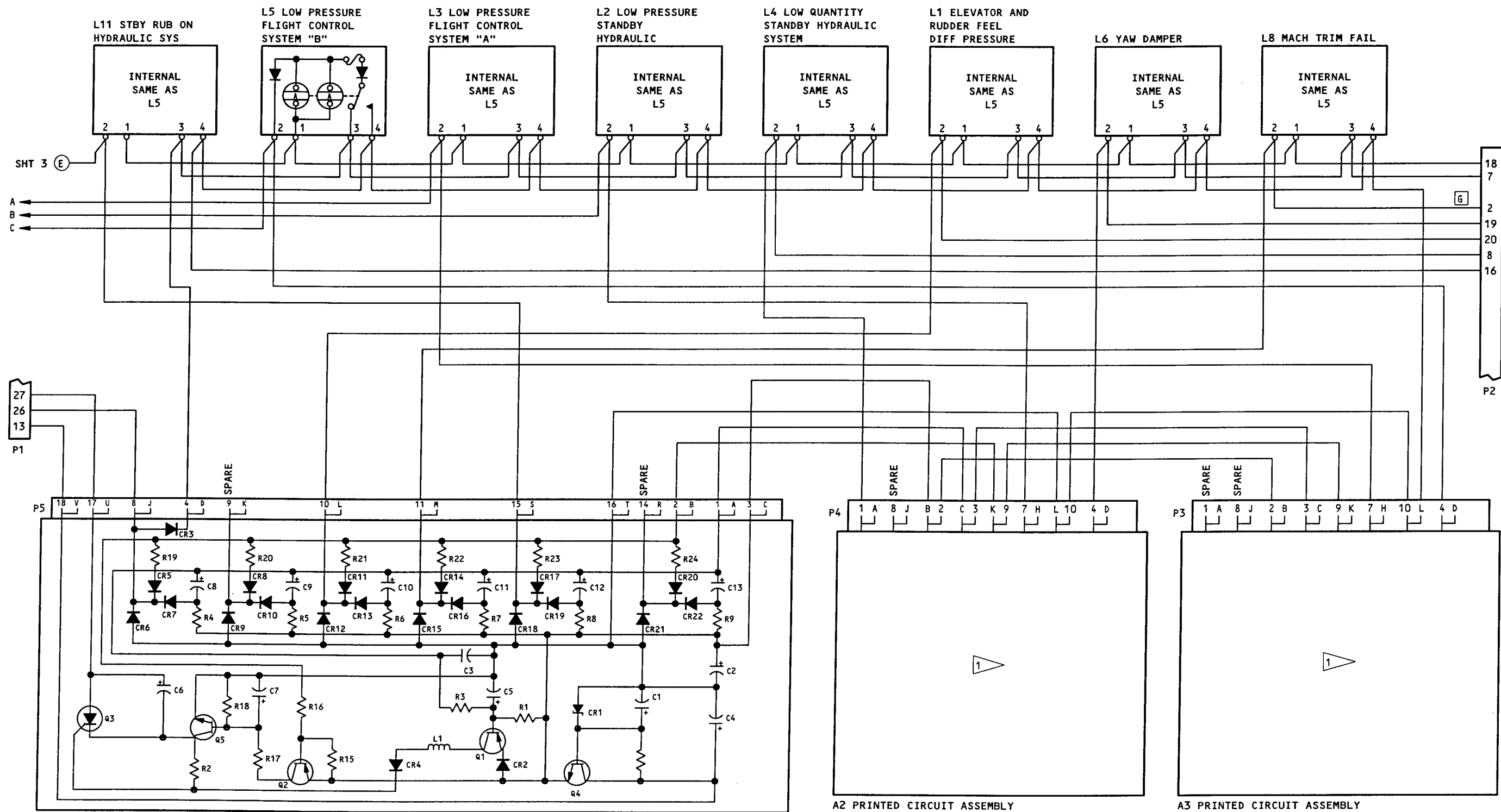


69-37313-448,-449,-548,-549

Schematic Diagram  
Figure 811 (Sheet 3)



Schematic Diagram  
Figure 812 (Sheet 1)



A1 PRINTED CIRCUIT ASSEMBLY  
NOTE: ALL WIRE BMS 13-16, SIZE AWG 24  
UNLESS OTHERWISE NOTED.

1 REFER TO SUBJECT 31-36-06      2 69-37313-550,-551

69-37313-450,-451,-550,-551

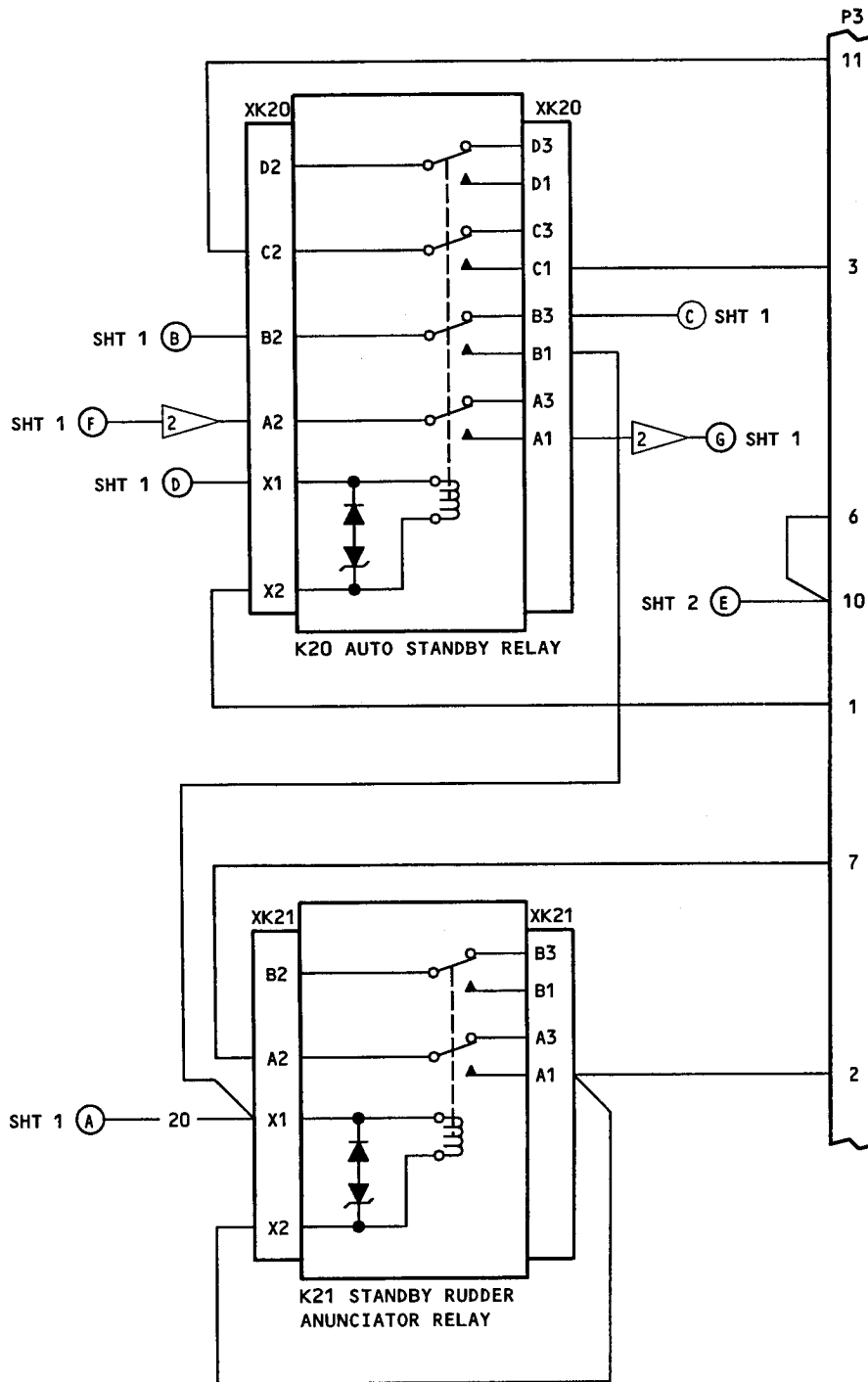
Schematic Diagram  
Figure 812 (Sheet 2)

NB7845

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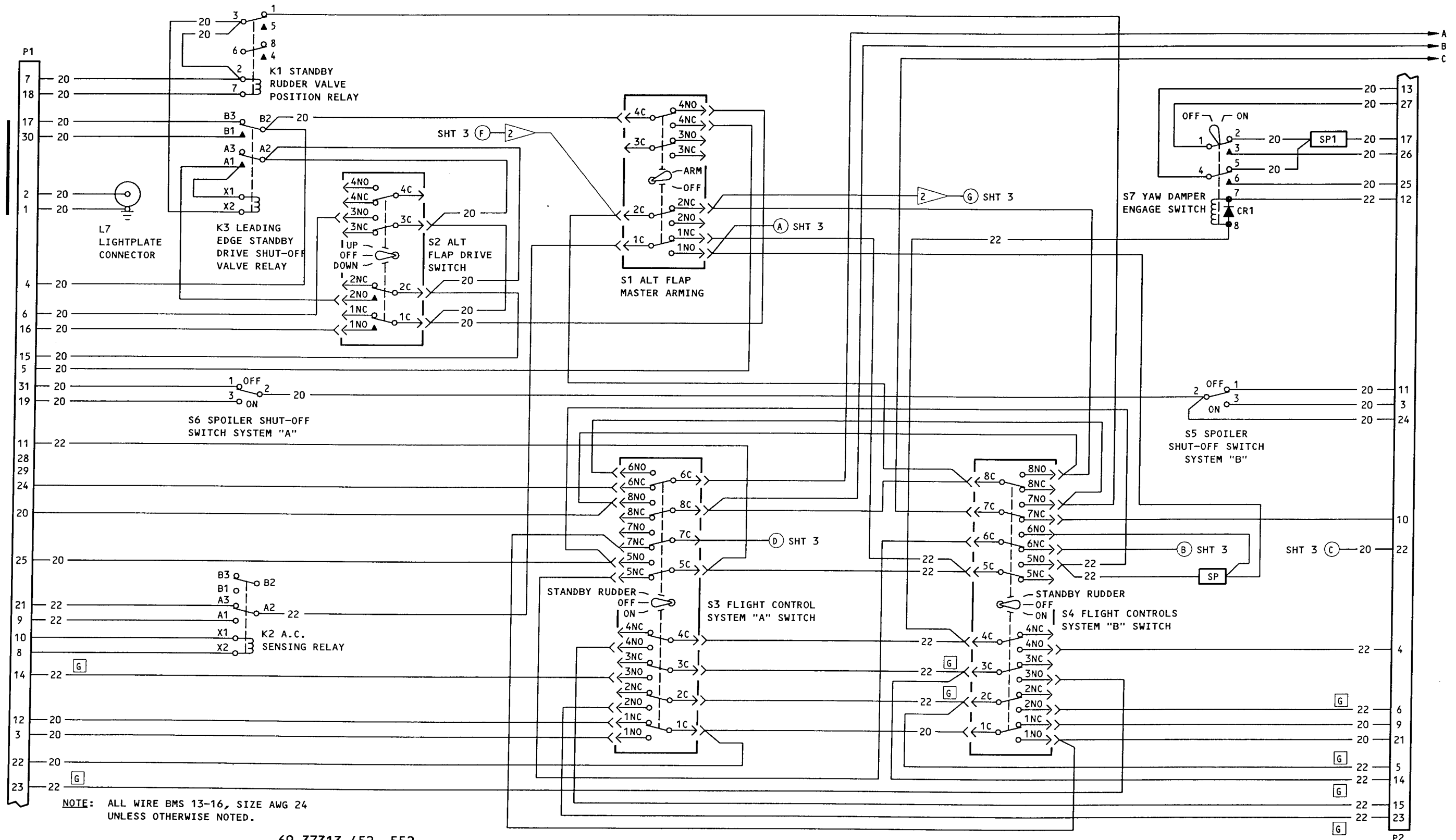
31-36-04  
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69-37313-450,-451,-550,-551

Schematic Diagram  
Figure 812 (Sheet 3)

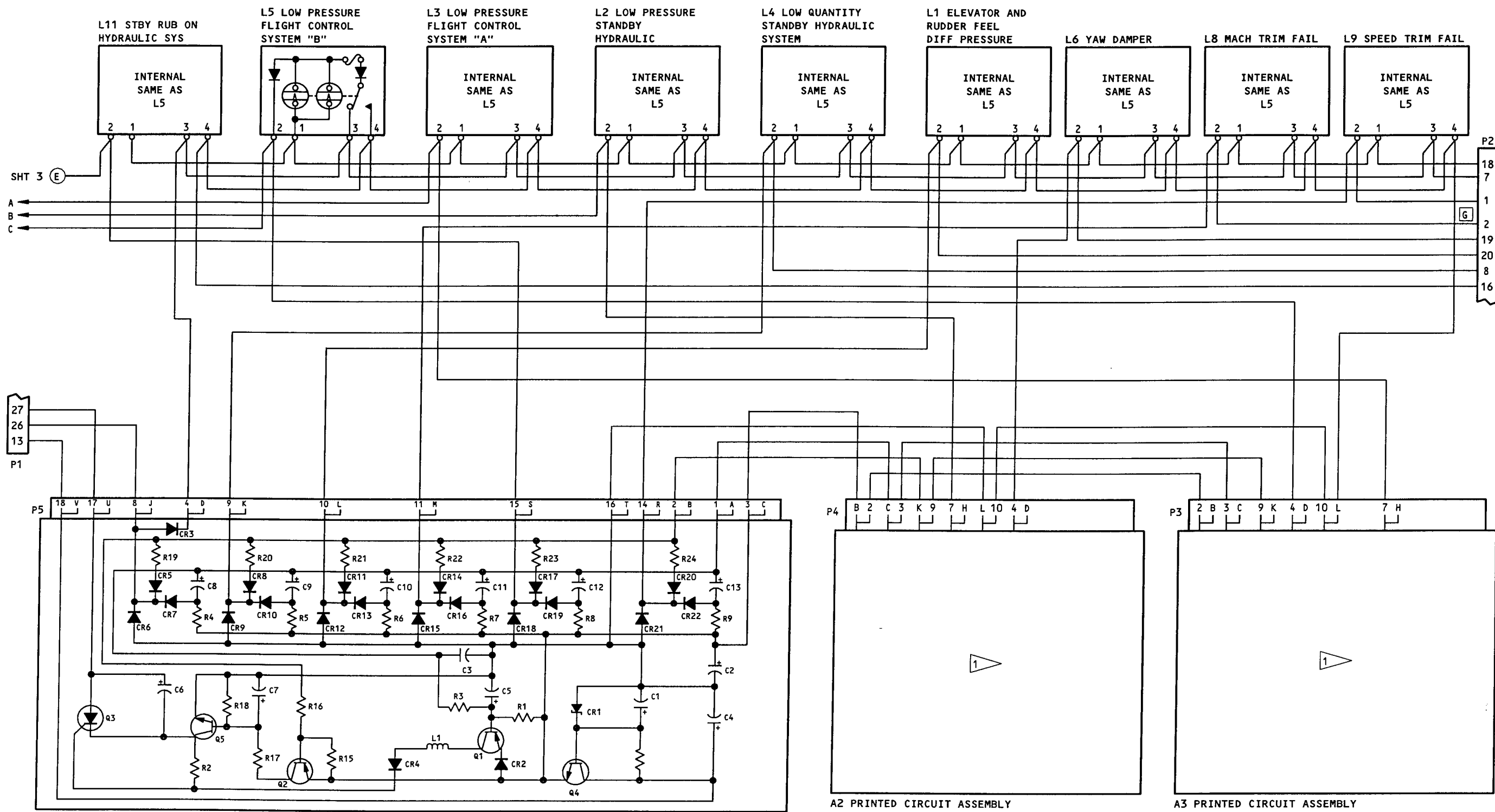


69-37313-452,-552  
Schematic Diagram  
Figure 813 (Sheet 1)

NR7792

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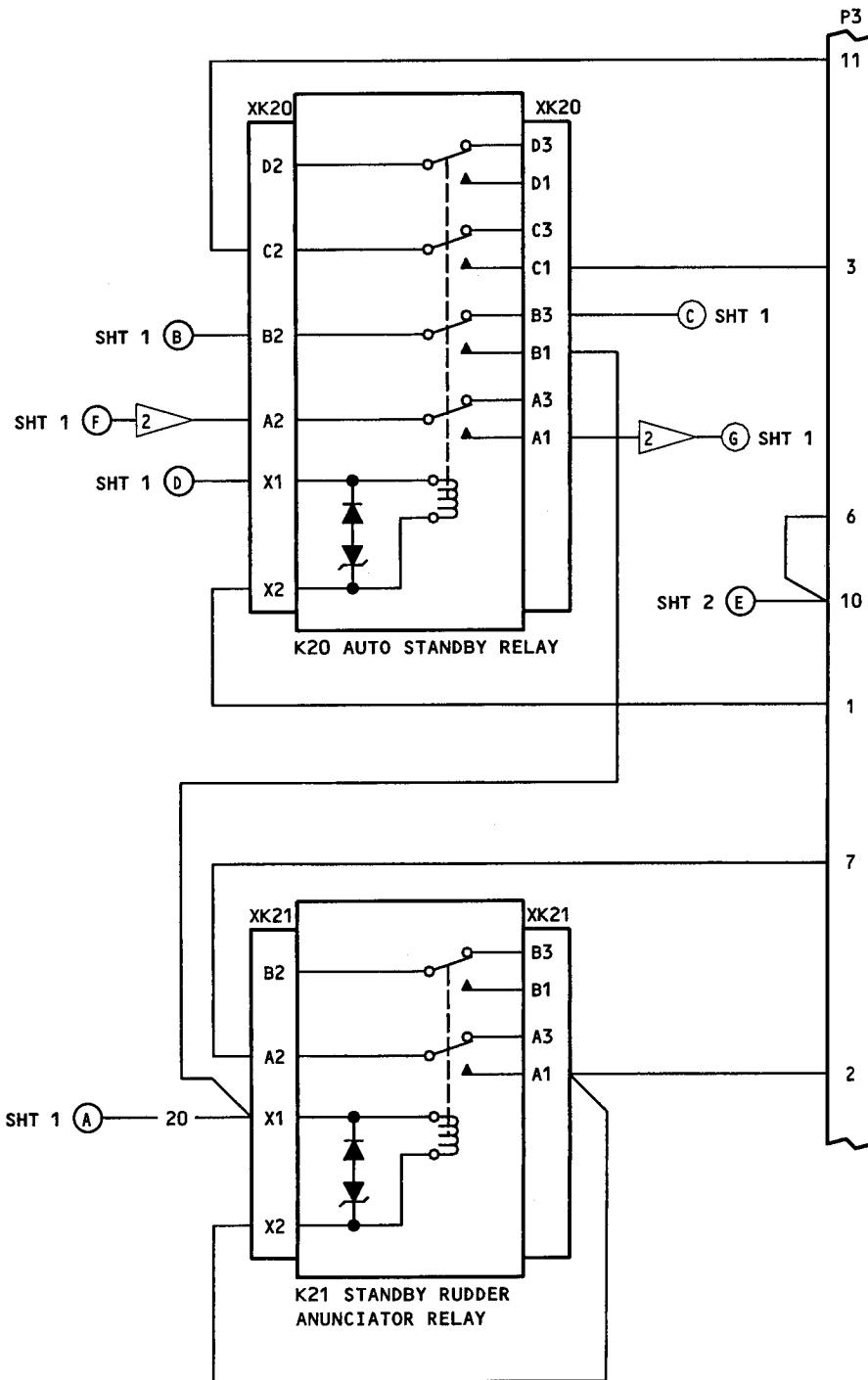
**NOTE:** ALL WIRE BMS 13-16 TYPE 1, CLASS 1, SIZE AWG 24 EXCEPT AS NOTED. 1 REFER TO SUBJECT 31-36-06 2 69-37313-552

69-37313-452,-552  
Schematic Diagram  
Figure 813 (Sheet 2)

N87852

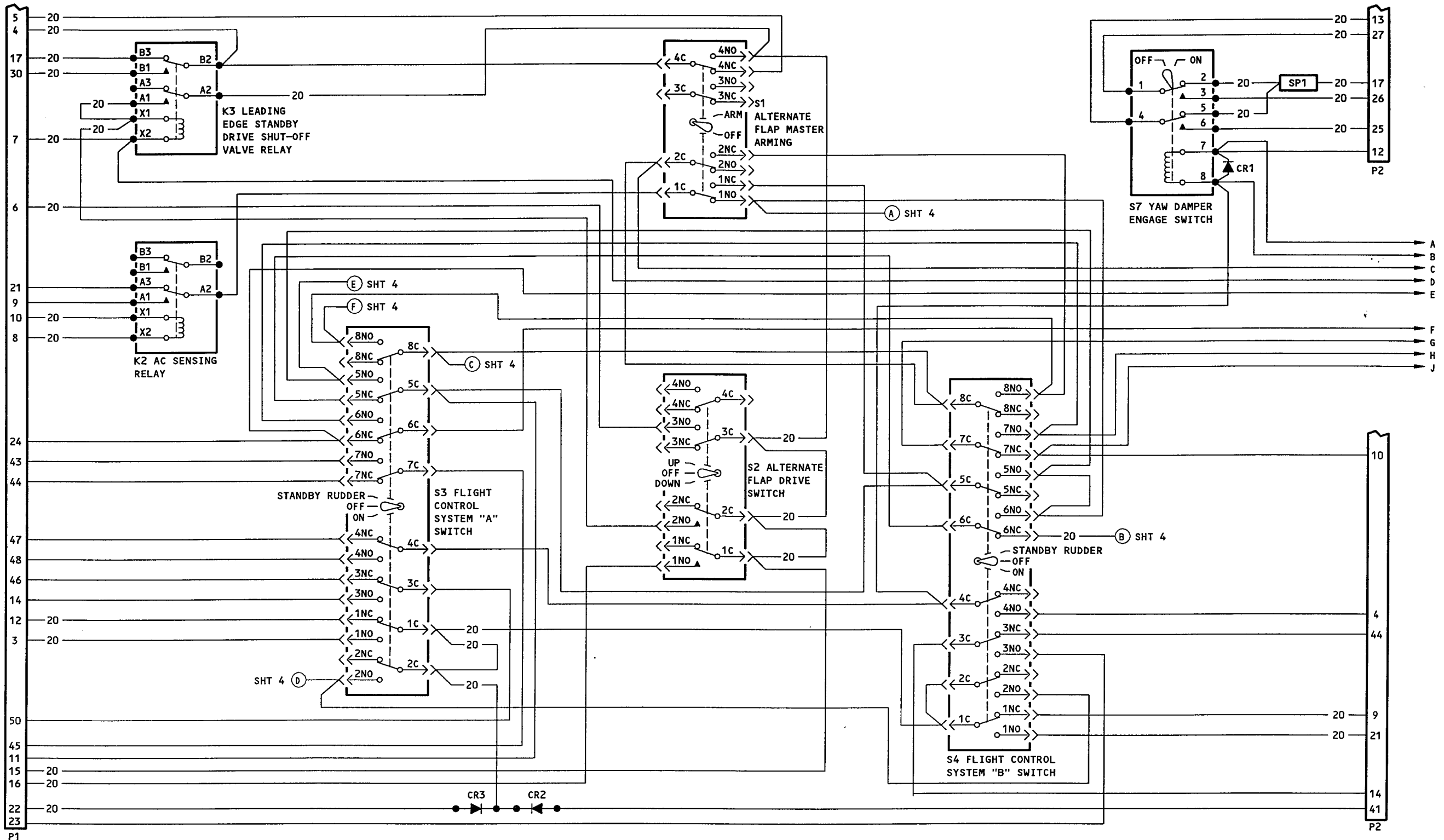
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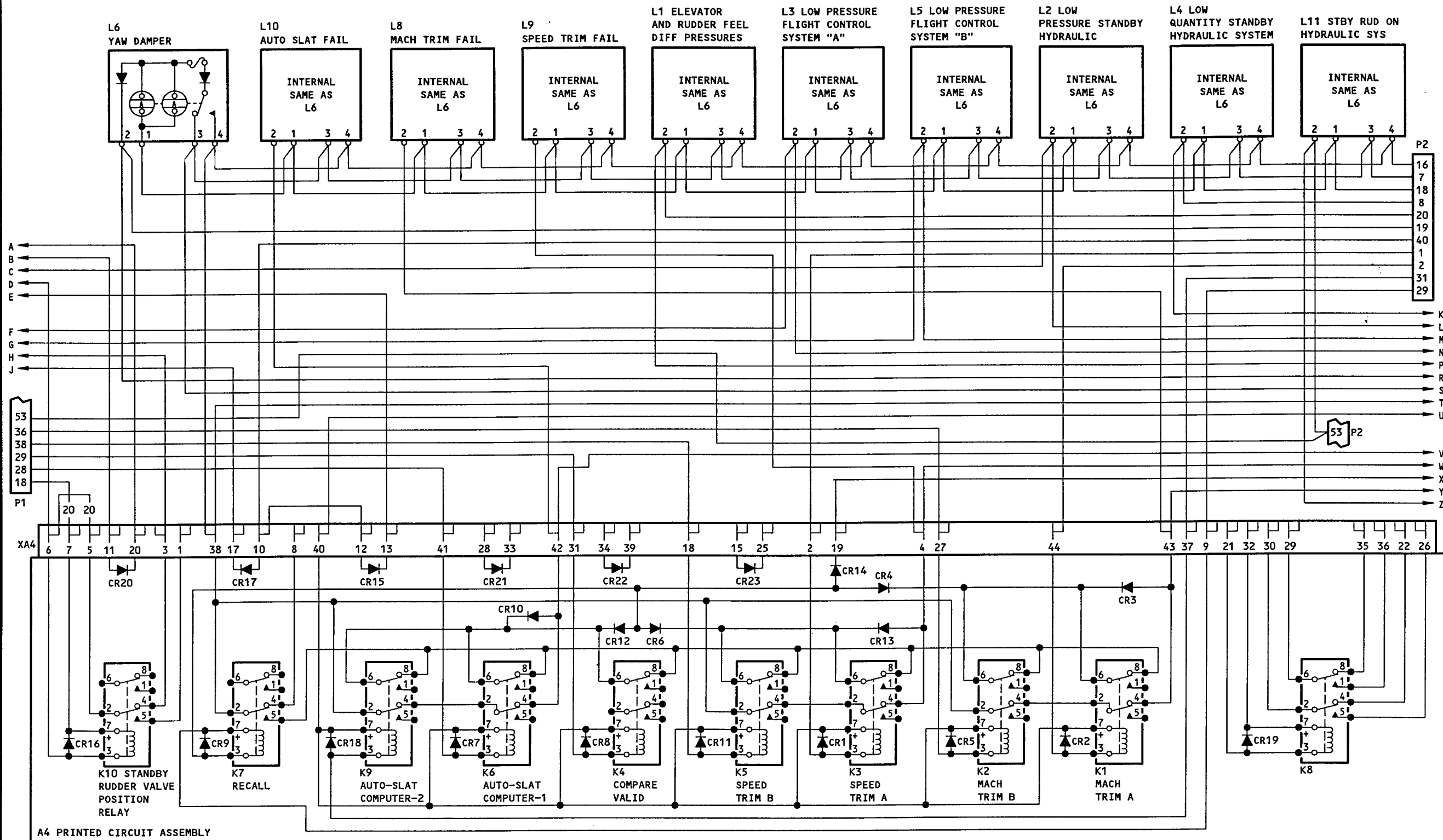


69-37313-452,-552

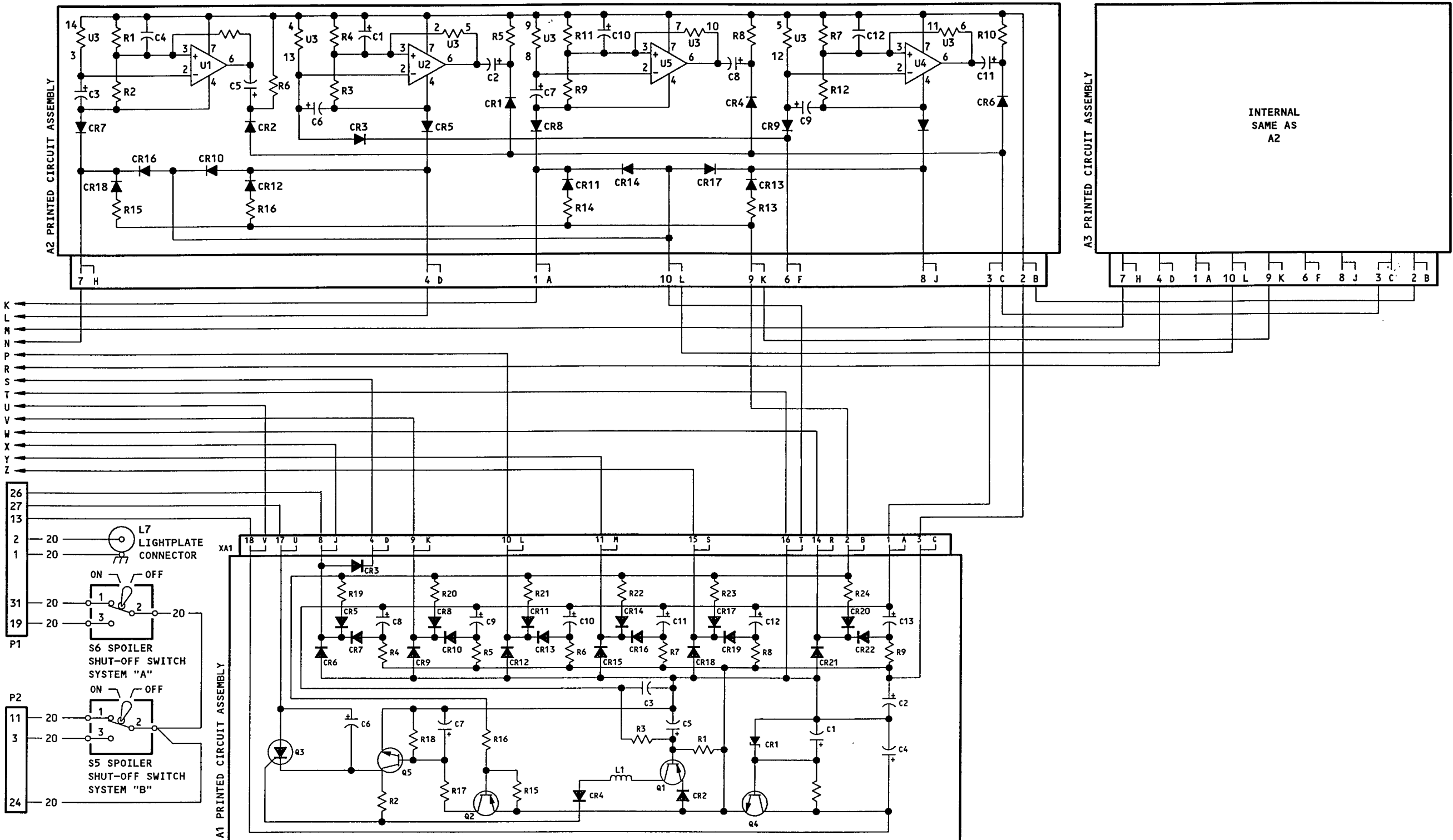
Schematic Diagram  
Figure 813 (Sheet 3)



69-37313-400,-409  
Schematic Diagram  
Figure 814 (Sheet 1)



69-37313-400,-409  
Schematic Diagram  
Figure 814 (Sheet 2)



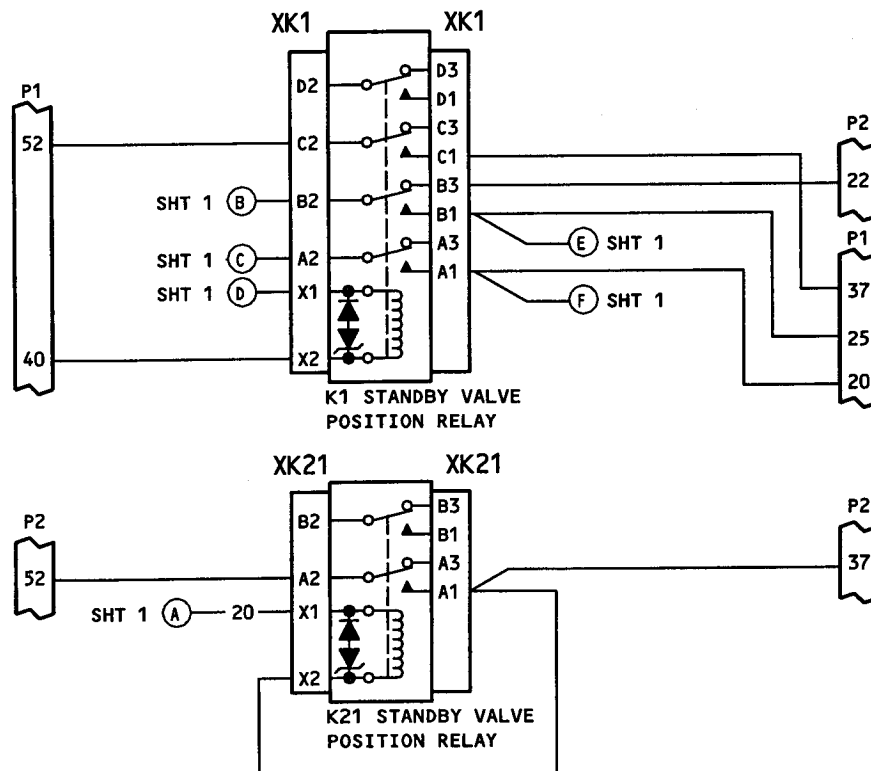
69-37313-400,-409  
Schematic Diagram  
Figure 814 (Sheet 3)

N87861

Mar 1/03

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69-37313-400,-409

Schematic Diagram  
Figure 814 (Sheet 4)



VENDORS

V00779 TYCO ELECTRONICS CORP., 2800 FULLING MILL RD., BLDG-38, MIDDLETOWN,  
PENNSYLVANIA 17057-3142

V05617 IDD AEROSPACE CORP., 18225 N.E. 76TH ST., REDMOND, WASHINGTON  
98052-5021

V14936 GENERAL SEMICONDUCTOR, INC., 10 MELVILLE PARK RD., MELVILLE, NEW YORK  
11747-3113

V1N6F3 AAVID THERMALLOY LLC, 70 COMMERCIAL ST., CONCORD, NEW HAMPSHIRE  
03301-5031

V28277 DEXTER-WILSON CORP., 4133 STONE WAY N., SEATTLE, WASHINGTON  
98103-8013

V35344 LEACH INTERNATIONAL CORP., 6900 ORANGETHORPE AVE., BUENA PARK,  
CALIFORNIA 90620-1351

V51896 SPECTRA LUX CORP., 12335 134<sup>TH</sup> CT. N.E., REDMOND, WASHINGTON 98052-2433

V56623 BABCOCK, INC., 14930 ALONDRA BLVD., LA MIRADA, CALIFORNIA 90638-5752

V59096 KYOCERA INTERNATIONAL, INC., 8611 BALBOA, SAN DIEGO, CALIFORNIA  
92123-1501

V72914 GRIMES AEROSPACE CO., 550 STATE RTE. 55, URBANA, OHIO 43078-9482

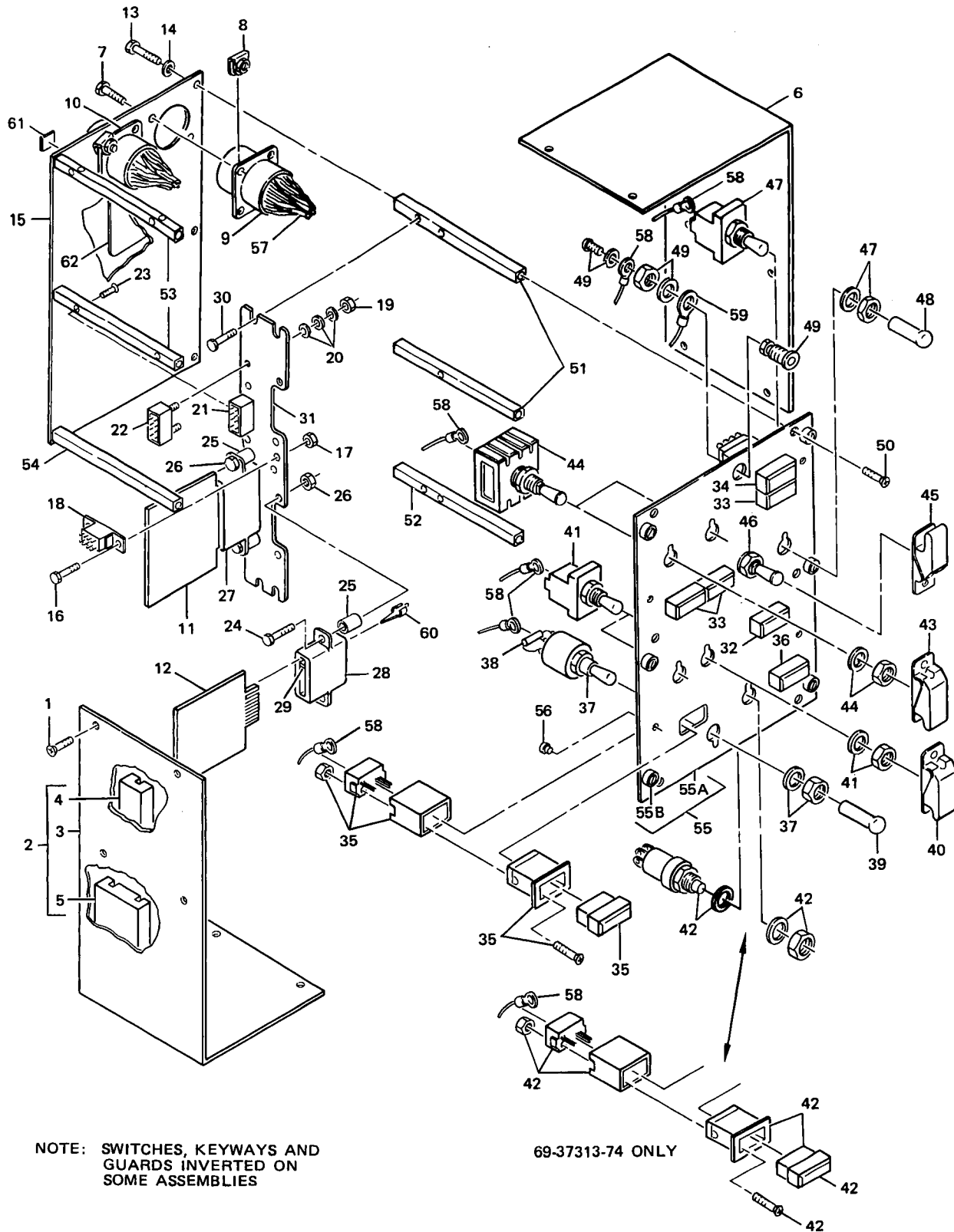
V81590 KORRY ELECTRONIC, INC., 901 DEXTER AVE. N., SEATTLE, WASHINGTON  
98109-3515

V81640 EATON CORP., 2250 WHITFIELD AVE., SARASOTA, FLORIDA 34243-3926

V91833 KEYSTONE ELECTRONICS CORP., 31-07 20<sup>TH</sup> RD., ASTORIA, NEW YORK  
11105-2017

V91929 HONEYWELL INTERNATIONAL, INC., 11 W. SPRING ST., FREEPORT, ILLINOIS  
61032-4316

V95354 METHODE ELECTRONICS, INC., 4001 INDUSTRIAL AVE., ROLLING MEADOWS,  
ILLINOIS 60008-1025



NOTE: SWITCHES, KEYWAYS AND GUARDS INVERTED ON SOME ASSEMBLIES

69-37313-74 ONLY

Flight Controls Module Assembly (P5-3)  
Figure 1101

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1101-	69-37313-32		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (PRE SB 69-37313-31-02)							A	
	69-37313-35		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (PRE SB 69-37313-31-02)							B	
	69-37313-36		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 33-1013 R1) (PRE SB 69-37313-31-01) *[1] (PRE SB 69-37313-31-02)							C	
	69-37313-37		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 33-1013 R1) (PRE SB 69-37313-31-01) *[1] (PRE SB 69-37313-31-02)							D	
	69-37313-38		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (PRE SB 69-37313-31-02)							E	
	69-37313-39		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (PRE SB 69-37313-31-02)							F	
	69-37313-40		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 22-1009 R1) (PRE SB 69-37313-31-01) *[1] (PRE SB 69-37313-31-02)							G	
	69-37313-41		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 22-1009 R1) (PRE SB 69-37313-31-01) *[1] (PRE SB 69-37313-31-02)							H	
	69-37313-44		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (PRE SB 69-37313-31-02)							I	
	69-37313-46		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 22-1009 R1) (PRE SB 69-37313-31-02)							J	
	69-37313-48		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 22-1009 R1) (PRE SB 69-37313-31-02)							K	
	69-37313-49		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (PRE SB 69-37313-31-02)							L	
	69-37313-50		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (PRE SB 69-37313-31-02)							M	
	69-37313-51		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (PRE SB 69-37313-31-02)							N	
	69-37313-58		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (PRE SB 69-37313-31-02)							P	
69-37313-61		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (PRE SB 69-37313-31-02)							Q		

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1101-	69-37313-62		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-02)							R	
	69-37313-63		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-02)							S	
	69-37313-64		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-02)							T	
	69-37313-67		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (PRE SB 69-37313-31-01) *[1] (PRE SB 69-37313-31-02)							U	
	69-37313-68		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (PRE SB 69-37313-31-01) *[1] (PRE SB 69-37313-31-02)							V	
	69-37313-69		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (PRE SB 69-37313-31-01) *[1] (PRE SB 69-37313-31-02)							W	
	69-37313-70		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (PRE SB 69-37313-31-01) *[1] (PRE SB 69-37313-31-02)							X	
	69-37313-74		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-02)							Y	
	69-37313-86		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1)							Z	
	69-37313-87		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (PRE SB 69-37313-31-02)							BA	
	69-37313-88		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (PRE SB 69-37313-31-02)							CA	
	69-37313-89		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (PRE SB 69-37313-31-02)							DA	
	69-37313-90		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (PRE SB 69-37313-31-02)							EA	
	69-37313-91		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (PRE SB 69-37313-31-02)							FA	
	69-37313-92		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (PRE SB 69-37313-31-02)							GA	
	69-37313-93		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (PRE SB 69-37313-31-02)							HA	
	69-37313-94		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (PRE SB 69-37313-31-02)							IA	
	69-37313-95		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (PRE SB 69-37313-31-02)							JA	
	69-37313-96		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (PRE SB 69-37313-31-02)							KA	
69-37313-97		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (PRE SB 69-37313-31-02)							LA		
69-37313-98		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (PRE SB 69-37313-31-02)							MA		

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1101-1	NAS514P440-4		.								10
2	69-53883-1		.							A-PRST	1
2	69-53883-8		.							Z-MA	
3	69-53883-2		.	.						QU-Y	1
3	69-53883-9		.	.						A-PRST	1
4	69-53883-5		.	.						Z-MA	
5	69-53883-7		.	.						QU-Y	1
5	69-53883-6		.	.						A-PRST	1
5	69-53883-6		.	.						Z-MA	
6	69-53883-2		.	.						A-PRST	1
6	69-53883-9		.	.						QU-Y	1
7	BACS12CB04-5		.							A-PRST	1
8	BACN10NW1		.							Z-MA	
9	BACC45FN18-31P6		.							QU-Y	1
10	BACC45FN18-31P		.								1
11	69-51813-9		.								1
11	69-51813-3		.							ABKGA	1
12	69-51812-1		.							HA	
12	65-51812-1		.							J-MPQ	2
12	65-51812-5		.							A-I	2
12	65-51812-5		.							NRST	
12	65-51812-5		.							A-I	2
12	65-51812-5		.							NRST	
13	BACS12CB06-5		.							Z-MA	
14	MS35338-41		.							U-Y	2
15	69-53883-3		.								6
16	BACS12CB04-4		.								6
17	NAS679A04W		.								1
17	BACN10JC04		.								2
17	BACN10JC04		.							A-LNRS	2
17	BACN10DN40		.							TZ-MA	
18	BR16-900B11-26V		.							A-LNRS	2
18	BR16-900B11-26VRO		.							TZ-MA	
19	NAS679A06W		.							MPQ	2
19	NAS679A06W		.							U-Y	
19	NAS679A06W		.								1
19	NAS679A06W		.								1
19	NAS679A06W		.								4

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1101-19	BACN10JC06		.								4
20	AN960D8		.								12
21	JG2F009		.								1
22	BACR13CF4		.								1
22	JG2A		.						A-KRST Z-MA		1
22	BACR13CF4A		.						A-KRST Z-MA LMNPQ U-Y		1
23	NAS514P632-14		.								1
24	BACS12CB06-14		.								5
25	NAS43DD1-17		.								6
26	NAS679A06W		.								6
26	BACN10JC06		.								6
27	582555-1		.								1
28	582551-1		.								2
29	582507-1		.								3
30	BACS12CB04-4		.								5
31	69-53883-4		.								1
32	319-619-1001-018		.							A-DG JKRZDA	1
32	318-630-1001-017		.							GA-JA EFHLM PQS-Y EA KA-MA	1
32	318-630-1001-164		.							INBA	1
33	319-619-1001-019		.							A-DG JKRZDA	3
33	318-630-1001-018		.							GA-JA EFHLM PQS-Y EA KA-MA	3
33	318-630-1001-162		.							INBA	3
34	319-619-1001-012		.							A-DG JKRZDA	1
34	318-630-1001-012		.							GA-JA EFHLM PQS-Y EA KA-MA	1
34	318-630-1001-163		.							INBA	1
35	319-619-1001-002		.							A-DG JKRZDA GA-JA	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	N O M E N C L A T U R E							USE CODE	QTY PER ASSY	
			1	2	3	4	5	6	7			
1101-35	318-630-1001-002		.								EFHIL MNPQ S-Y BAEA KA-MA A-DG	1
36	319-619-1001-075		.								JKRZDA GA-JA	1
36	318-630-1001-072		.								EFHLM PQS-Y EAKA -MA INBA	1
36	318-630-1001-165		.									1
37	26ET61T		.									1
37	26ET1-1		.									1
37	6ET1T		.									1
38	1N5061		.									1
38	1N4384		.									1
39	69-44578-2		.									1
40	11170-1		.									2
41	MS24523-23		.									2
42	2PB11T2		.								A-KRST Z-MA	1
42	2PB11H58		.								L-Q U-X Y	1
42	318-630-1001-324		.									1
43	60-0730-9		.									2
44	BACS30ES11		.								A-KZBA GA-MA	2
44	68AT11-1		.								A-KZBA GA-MA	2
44	68AT22-1		.								RST DA-FA	2
44	A3-1114-01-1		.								RST DA-FA	2
44	A3-1114-01-1		.								L-Q U-YCA	2
45	11170		.									1
46	A3-127T7		.								A-KZBA GA-MA	1
46	64AT11-3		.								A-KZBA GA-MA	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY	
			1	2	3	4	5	6	7			
1101-46	64AT22-3		.								L-Y	1
46	A3-1110-05-1		.								CA-FA L-Y	1
47	64AT11-514		.								CA-FA A-KZBA	1
47	64AT22-514		.								GA-MA L-Y	1
47	A3-1110-03-1		.								CA-FA L-Y CA-FA	1
48	69-44578-2		.									1
49	SCN001		.								A-PRST Z-MA	1
49	800000121-1		.								QU-Y	1
50	NAS514P632-5		.									6
51	69-37313-4		.									2
52	69-37313-6		.									1
53	69-37268-13		.									2
54	69-37268-14		.									1
55	69-37313-33		.								ACF-I KMNPRS	1
55	69-37313-34		.								TUWZ- FAGAIA LAMA BDEJL QVXHA JAKA Y	1
55	69-37313-75		.									1
55A	BACP10U0825G		.	.								1
55B	BACS21DD1G		.	.								6
56	BACN10PA06-6		.									4
57	69-37313-30		.								A-DF JKRS	1
57	69-37313-30		.								DAEA GA-JA LA	1
57	69-37313-42		.								ZFA KAMA	1
57	69-37313-42		.								EGHT	1
57	69-37313-45		.								I	1
57	69-37313-45		.								BA	1
57	69-37313-53		.								L	1
57	69-37313-54		.								M	1
57	69-37313-52		.								N	1



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FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	N O M E N C L A T U R E							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1101-											
57	69-37313-52		.	WIRE BUNDLE (SB 29-1039 R1)					CA	1	
57	69-37313-59		.	WIRE BUNDLE					PQ	1	
57	69-37313-65		.	WIRE BUNDLE					UV	1	
57	69-37313-66		.	WIRE BUNDLE					WX	1	
57	69-37313-76		.	WIRE BUNDLE					Y	1	
58	BACT12AC		.	.	TERMINAL LUG					AR	
59	BACT12S		.	.	TERMINAL LUG					AR	
60	66143-2		.	.	TAB TERMINAL, V00779					27	
61	BACM10L00-1CU		.	MARKER					A-PRST	1	
									Z-MA		
62	BAC27DCC227		.	MARKER					A-PRST	1	
									Z-MA		

\*[1] REFER TO COMPONENT MAINTENANCE MANUAL 31-37-04, FOR POST SERVICE BULLETIN ASSEMBLIES.

FIGURE 1103 REFERENCE DESIGNATION INDEX (SEE SCHEMATIC DIAGRAM)		
REFERENCE DESIGNATION	PART NUMBER	ITEM NO.
A1	*69-51813-9	11
A1	69-51813-3	11
A2, A3	69-51812-1	12
A2, A3	69-51812-5	12
CR1	*1N5061	38
CR1	1N4384	38
DS1	318-630-1001-164	32
DS2, DS3, DS5	318-630-1001-162	33
DS4	318-630-1001-163	34
DS6	318-630-1001-002	35
DS8	318-630-1001-165	36
K1	*BR16-900B11-26V	18
K1	BR16-900B11-26VRO	18
K2	JG2F009	21
K3	*BACR13CF4	22
K3	JG2A	22
K3	BACR13CF4A	22
L1	319-619-1001-018	32
L1	318-630-1001-017	32
L2, L3, L5	319-619-1001-019	33
L2, L3, L5	318-630-1001-018	33
L4	319-619-1001-012	34
L4	318-630-1001-012	34
L6	319-619-1001-012	35
L6	318-630-1001-012	35
L7	SCN001	49
L7	800000121-1	49
L8	319-619-1001-075	36
L8	318-630-1001-072	36
L9	318-630-1001-324	42
P1	BACC45FN18-31P6	9
P2	BACC45FN18-31P	10
P3, P4 *[1]	582551-1	28
P5 *[2]	582551-1	27
S1	*A3-127T7	46
S1	64AT11-3	46
S1	*64AT22-3	46
S1	A3-1110-05-1	46
S2	64AT11-514	47

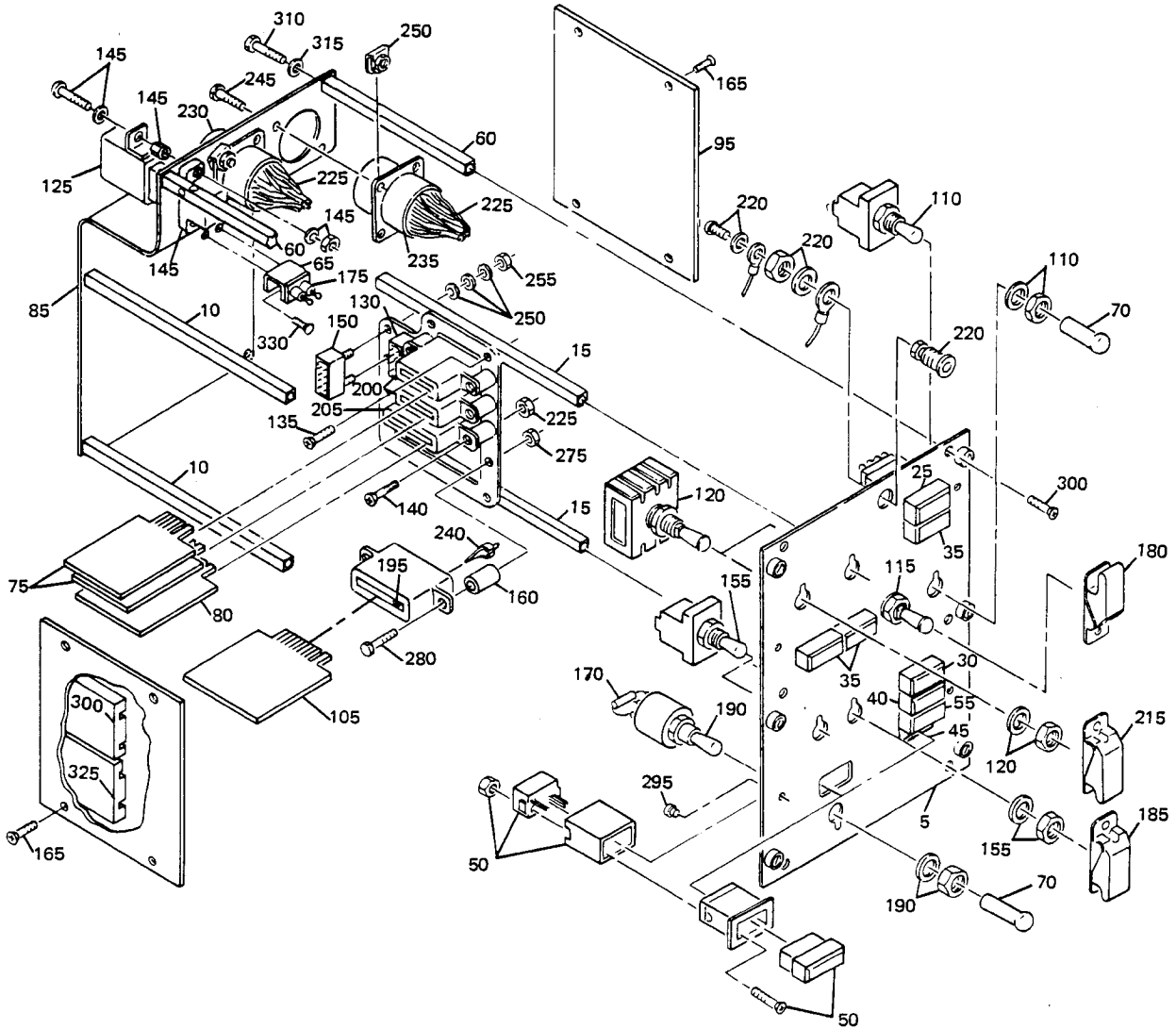
FIGURE 1103 REFERENCE DESIGNATION INDEX (SEE SCHEMATIC DIAGRAM)		
REFERENCE DESIGNATION	PART NUMBER	ITEM NO.
S2	*64AT22-514	47
S2	A3-1110-03-1	47
S3, S4	68AT11-1	44
S3, S4	*68AT22-1	44
S3, S4	A3-1114-01-1	44
S3, S4	BACS30ES11	44
S5, S6	MS24523-23	41
S7	*26ET61T	37
S7	26ET1-1	37
S7	6ET1T	37
S9	2PB11T2	42
S9	2PB11H58	42
XA1	582555-1	27
XA2, XA3	582551-1	28

\* PREFERRED PART

\*[1] CONNECTS WITH THE A2 AND A3 CARD CONNECTORS

\*[2] CONNECTS WITH THE A1 CARD CONNECTOR

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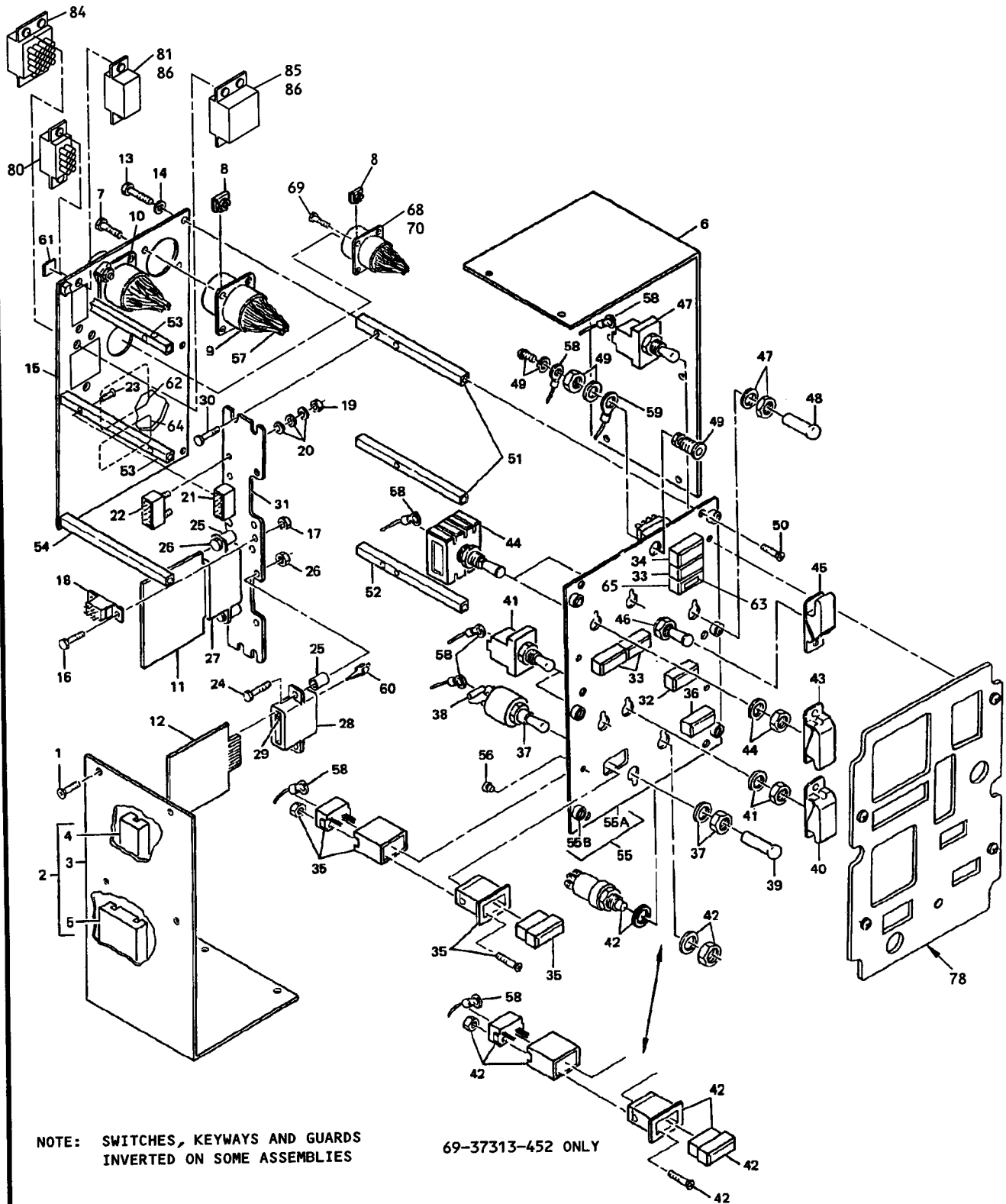
Flight Controls Module Assembly (P5-3)  
Figure 1102

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1102-1	69-37313-78		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) (PRE SB 69-37313-31-03)							A	RF
1	69-37313-102		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) (PRE SB 69-37313-31-03)							B	RF
1	69-37313-105		DELETED								
1	69-37313-107		DELETED								
5	69-37313-80		. BASEPLATE								1
10	69-37313-82		. STAND-OFF								2
15	69-37317-83		. STAND-OFF								1
20	69-37313-84		. STAND-OFF								1
25	10-61803-17		. INDICATOR LIGHT								1
30	10-61803-24		. INDICATOR LIGHT								1
35	10-61803-25		. INDICATOR LIGHT								1
40	10-61803-395		. INDICATOR LIGHT								1
45	10-61803-398		. INDICATOR LIGHT								1
50	10-61803-5		. INDICATOR LIGHT								1
55	10-61803-96		. INDICATOR LIGHT								1
60	69-37268-14		. STANDOFF								2
65	69-37302-273		. CHANNEL-DIODE MOUNTING								1
70	69-44578-2		. CAP-SWITCH								2
75	69-51812-5		. PRINTED CIRCUIT ASSY (REF 31-36-06)								2
80	69-51813-9		. PRINTED CIRCUIT ASSY (REF 31-36-07)								1
80	69-78285-1		DELETED								
85	69-53883-11		. BACKPLATE								1
85	69-53883-17		. BACKPLATE (OPT)								1
90	69-53883-12		. MOUNTING PLATE								1
95	69-53883-15		. COVER								1
100	69-53883-16		. COVER ASSY								1
105	69-73639-1		. PRINTED CIRCUIT ASSY (REF 31-36-95)								1
110	64A722-514		. SWITCH TOGGLE (PREF) V91929								1
110	A3-1110-05-1		. SWITCH TOGGLE (OPT) V81640								1
115	64AT22-3		. SWITCH TOGGLE (PREF) V91929								1
115	A3-1110-03-1		. SWITCH TOGGLE (OPT) V81640								1
120	A3-1114-01-1		. SWITCH TOGGLE, V81640								2
125	BACR13CF2AB		. RELAY								1
130	BACR13CF4A		. RELAY								1
135	BACS12CB04-4		DELETED								
135	NAS1801-04-4		. SCREW								4
140	BACS12CB06-14		DELETED								
140	NAS1801-06-14		. SCREW								6
145	BACS16X1A		. SOCKET								1
150	JG2F009		. RELAY, V35344								1
155	MS24523-23		. SWITCH TOGGLE								2
160	NAS43DD1-17		. SPACER								8
165	NAS514P440-4		. SCREW								8

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1102-											
170	1N5061		.								1
170	1N4383		.								1
175	1N5331		.								2
-176	4729		.								1
-176	4860		.								1
180	11170		.								1
185	11170-1		.								2
190	26ET61T		.								1
190	26ET1T		.								1
190	6ET1T		.								1
195	582507-1		.								4
200	582551-1		.								2
205	582555-1		.								1
210	582589-1		.								1
215	60-0730-9		.						A		2
215	406-122										
215	11170-1								B		2
220	800000121-1		.								1
225	69-37313-81		.								1
230	BACC45FN22-55P		.								1
235	BACC45FN22-55P6		.								1
240	66143-2		.								2
245	BACS12CB04-5										
245	NAS1801-04-5		.								4
250	BACN10NW1		.								4
255	BACN10JC06		.								10
260	AN960D8 (3)		.								4
270	NAS43DD1-17		.								6
275	BACN10JC04		.								2
280	NAS600-14P		.								2
295	BACN10PA06-6		.								4
300	NAS514P632-5		.								6
310	BACS12CB06-5		.								6
315	MS35338-41		.								6
320	69-53883-13										
325	69-53883-15										
330	BACR15BB5D		.								2

FIGURE 1102 REFERENCE DESIGNATION INDEX (SEE SCHEMATIC DIAGRAM)		
REFERENCE DESIGNATION	PART NUMBER	ITEM NO.
A1	69-51813-9	80
A2,A3	69-51812-5	75
A4	69-73639-1	105
CR1,CR2	1N5331	175
K1	BACR13CF2AB	125
K2	JG2F009	150
K3	BACR13CF4A	130
L1	10-61803-17	25
L2,L3,L5	10-61803-25	35
L4	10-61803-17	25
L6	10-61803-5	50
L7	800000121-1	220
L8	10-61803-96	55
L9	10-61803-395	40
L10	10-61803-398	45
P1	BACC45FN22-55P6	235
P2	BACC45FN22-55P	230
S1	*64AT22-3	115
S1	A3-1110-05-1	115
S2	*64AT22-514	110
S2	A3-1110-03-1	110
S3,S4	A3-1114-01-1	120
S5,S6	MS24523-23	155
S7	*26ET61T	190
S7	26ET1T	190
S7	6ET1T	190
XA1	582555-1	205
XA2,XA3	582551-1	200
XA4	582589-1	210

\* PREFERRED PARTS



Flight Controls Module Assembly (P5-3)  
Figure 1103



FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1103-	69-37313-429		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							A	
	69-37313-430		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							B	
	69-37313-431		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 33-1013 R1) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							C	
	69-37313-432		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 33-1013 R1) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							D	
	69-37313-433		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							E	
	69-37313-434		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							F	
	69-37313-435		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 22-1009) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							G	
	69-37313-436		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 22-1009) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							H	
	69-37313-437		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							I	
	69-37313-438		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 22-1009) (POST SB 69-37313-31-02)							J	
	69-37313-439		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 22-1009)							K	
	69-37313-440		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1]							L	
	69-37313-441		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							M	
	69-37313-442		MODULE ASSY, FLIGHT CONTROLS (P5-3) (POST SB 69-37313-31-02)							N	
	69-37313-443		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							P	
	69-37313-444		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							Q	

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1103-	69-37313-445		MODULE ASSY, FLIGHT CONTROLS (P5-3) (POST SB 69-37313-31-02)							R	
	69-37313-446		MODULE ASSY, FLIGHT CONTROLS (P5-3) (POST SB 69-37313-31-02)							S	
	69-37313-447		MODULE ASSY, FLIGHT CONTROLS (P5-3) (POST SB 69-37313-31-02)							T	
	69-37313-448		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							U	
	69-37313-449		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							V	
	69-37313-450		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							W	
	69-37313-451		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							X	
	69-37313-452		MODULE ASSY, FLIGHT CONTROLS (P5-3) (POST SB 69-37313-31-02)							Y	
	69-37313-453		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (POST SB 69-37313-31-02)							BA	
	69-37313-454		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (POST SB 69-37313-31-02)							CA	
	69-37313-455		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (POST SB 69-37313-31-02)							DA	
	69-37313-456		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (POST SB 69-37313-31-02)							EA	
	69-37313-457		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (POST SB 69-37313-31-02)							FA	
	69-37313-458		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (POST SB 69-37313-31-02)							GA	
	69-37313-459		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (POST SB 69-37313-31-02)							HA	
	69-37313-460		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (POST SB 69-37313-31-02)							IA	
	69-37313-461		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (POST SB 69-37313-31-02)							JA	
	69-37313-462		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (POST SB 69-37313-31-02)							KA	
	69-37313-463		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (POST SB 69-37313-31-02)							LA	
	69-37313-464		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (POST SB 69-37313-31-02)							MA	

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1103-	69-37313-529		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							NA	
	69-37313-530		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							PA	
	69-37313-531		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 33-1013 R1) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							QA	
	69-37313-532		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 33-1013 R1) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							RA	
	69-37313-533		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							SA	
	69-37313-534		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							TA	
	69-37313-535		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 22-1009) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							UA	
	69-37313-536		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 22-1009) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							VA	
	69-37313-537		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							WA	
	69-37313-538		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 22-1009) (POST SB 69-37313-31-02)							XA	
	69-37313-539		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 22-1009)							YA	
	69-37313-540		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1]							AB	
	69-37313-541		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							CB	
	69-37313-542		MODULE ASSY, FLIGHT CONTROLS (P5-3) (POST SB 69-37313-31-02)							DB	
	69-37313-543		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							EB	
69-37313-544		MODULE ASSY, FLIGHT CONTROLS (P5-3) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							FB		



FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1103-	69-37313-545		MODULE ASSY, FLIGHT CONTROLS (P5-3) (POST SB 69-37313-31-02)							GB	
	69-37313-546		MODULE ASSY, FLIGHT CONTROLS (P5-3) (POST SB 69-37313-31-02)							HB	
	69-37313-547		MODULE ASSY, FLIGHT CONTROLS (P5-3) (POST SB 69-37313-31-02)							IB	
	69-37313-548		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							JB	
	69-37313-549		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							KB	
	69-37313-550		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							LB	
	69-37313-551		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (PRE SB 69-37313-31-01) *[1] (POST SB 69-37313-31-02)							MB	
	69-37313-552		MODULE ASSY, FLIGHT CONTROLS (P5-3) (POST SB 69-37313-31-02)							NB	
	69-37313-553		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (POST SB 69-37313-31-02)							PB	
	69-37313-554		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (POST SB 69-37313-31-02)							QB	
	69-37313-555		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (POST SB 69-37313-31-02)							RB	
	69-37313-556		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (POST SB 69-37313-31-02)							SB	
	69-37313-557		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (POST SB 69-37313-31-02)							TB	
	69-37313-558		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (POST SB 69-37313-31-02)							UB	
	69-37313-559		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (POST SB 69-37313-31-02)							VB	
	69-37313-560		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (POST SB 69-37313-31-02)							WB	
	69-37313-561		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (POST SB 69-37313-31-02)							XB	
69-37313-562		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (POST SB 69-37313-31-02)							YB		
69-37313-563		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (POST SB 69-37313-31-02)							AC		
69-37313-564		MODULE ASSY, FLIGHT CONTROLS (P5-3) (SB 29-1039 R1) (POST SB 69-37313-31-02)							BC		

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1103-1	NAS514P440-4		.	.	.	.	.	.	.	.	10
	69-53883-1		.	.	.	.	.	.	.	.	1
2	69-53883-8		.	.	.	.	.	.	.	.	1
			.	.	.	.	.	.	.	.	1
3	69-53883-2		.	.	.	.	.	.	.	.	1
			.	.	.	.	.	.	.	.	1
3	69-53883-9		.	.	.	.	.	.	.	.	1
			.	.	.	.	.	.	.	.	1
4	69-53883-5		.	.	.	.	.	.	.	.	1
			.	.	.	.	.	.	.	.	1
5	69-53883-6		.	.	.	.	.	.	.	.	1
			.	.	.	.	.	.	.	.	1
5	69-53883-6		.	.	.	.	.	.	.	.	1
			.	.	.	.	.	.	.	.	1
6	69-53883-2		.	.	.	.	.	.	.	.	1
			.	.	.	.	.	.	.	.	1
6	69-53883-9		.	.	.	.	.	.	.	.	1
			.	.	.	.	.	.	.	.	1
7	BACS12CB04-5		.	.	.	.	.	.	.	.	4
8	BACN10NW1		.	.	.	.	.	.	.	.	8
9	BACC45FN18-31P6		.	.	.	.	.	.	.	.	1
10	BACC45FN18-31P		.	.	.	.	.	.	.	.	1
11	69-51813-9		.	.	.	.	.	.	.	.	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY	
			1	2	3	4	5	6	7			
1103-11	69-51813-3		.								ABK GA HA NA PA VA UB VB	1
12	69-51812-1		.								J-MPQ XA-CB, EB FB	2
12	69-51812-1		.								A-I NA- WA NRSTDB GB HB IB	2
12	69-51812-5		.								A-I NA- WA NRST DB GB HB IB	2
12	69-51812-5		.								BA-MA PB-BC U-Y JB- NB	2
13	BACS12CB06-5		.									6
14	MS35338-41		.									6
15	69-53883-20		.									1
16	BACS12CB04-4		.									2
17	NAS679A04W		.								A-LNR ST BA- MA NA- AB DB GB HB IB	2
17	BACN10JC04		.								PB-BC A-LNR ST BA-MA NA-AB DB GB HB IB PB-BC	2
17	BACN10DN40		.								MPQ U-Y CB EB FB JB-NB	2
18	BR16-900B11-26V		.									1
18	BR16-900B11-26VO		.									1
19	NAS679A06W		.									4
19	BACN10JC06		.									4



FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY	
			1	2	3	4	5	6	7			
1103-32	318-630-1001-017		.							INDICATOR LIGHT ASSY, V81590 (BOEING 10-61803-24)	EFHLMP QS-Y EA KA-MA SA TA VA AB CB EB FB HB- NB SB YB-BC	1
32	318-630-1001-164		.							INDICATOR LIGHT ASSY, V81590 (BOEING 10-61803-206)	INBA WA DB PB	1
33	319-619-1001-019		.							INDICATOR LIGHT ASSY, V81590 (BOEING 10-61305-25)	A-DG JKRDA GA-JA NA-PA UA XA YA GB RB UB- XB	3
33	318-630-1001-018		.							INDICATOR LIGHT ASSY, V81590 (BOEING 10-61803-25)	EFHLMP QS-Y EA KA-MA SA TA VA AB CB EB FB HB- NB SB YB-BC	3
33	318-630-1001-162		.							INDICATOR LIGHT ASSY, V81590 (BOEING 10-61803-204)	INBA WA DB PB	3
34	319-619-1001-012		.							INDICATOR LIGHT ASSY, V81590 (BOEING 10-61305-17)	A-DG JKRDA GA-JA NA-PA UA XA YA GB RB UB- XB	1



FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1103-34			. INDICATOR LIGHT ASSY, V81590 (BOEING 10-61803-17)							EFHLM QS-Y EA KA-MA SA TA VA AB CB EB FB HB- NB SB YB-BC	1
34	318-630-1001-163		. INDICATOR LIGHT ASSY, V81590 (BOEING 10-61803-205)							INBA WA	1
35	319-619-1001-002		. INDICATOR LIGHT ASSY, V81590 (BOEING 10-61305-5)							DB PB A-DG JKRDA GA-JA NA-RA UA XA YA GB RB UB- XB	
35	318-630-1001-002		. INDICATOR LIGHT ASSY, V81590 (BOEING 10-61803-5)							EFHILMN PQS-Y BAEA KA-MA SA TA VA AB CB EB FB HB- NB SB YB-BC	1
36	319-619-1001-075		. INDICATOR LIGHT ASSY, V81590 (BOEING 10-61305-96)							A-DG JKRDA GA-JA NA-RA UA XA YA GB RB UB- XB	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY	
			1	2	3	4	5	6	7			
1103-36	318-630-1001-072		.								EFHLMP QS-Y EA KA-MA SA TA VA AB CB EB FB HB- NB SB YB-BC	1
36	318-630-1001-165		.								INBA WA DB PB	1
37	26ET61T		.									1
37	26ET1-1		.									1
37	6ET1T		.									1
38	1N5061		.									1
38	1N4384		.									1
39	69-44578-2		.									1
40	11170-1		.									2
41	MS24523-23		.									2
42	2PB11T2		.								A-KRST BA-MA NA-YA GB IB PB-BC	1
42	2PB11H58		.								L-Q U-X AB-FB JB-MB	1
42	318-630-1001-324		.								Y NB	1
43	60-0730-9		.									2
44	BACS30ES11		.								A-KBA GA-MA NA-YA PB UB- BC	2
44	68AT11-1		.								A-KBA GA-MA NA-YA PB UB- BC	2
44	68AT22-1		.								RST DA-FA GB HB IB RB-TB	2

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY	
			1	2	3	4	5	6	7			
1103-44	A3-1114-01-1		.								RST DA-FA GB HB IB RB-TB	2
44	A3-1114-01-1		.								L-Q U-YCA AB-FB JB-NB QB	2
45	11170		.								A-KBA	1
46	A3-127T7		.								GA-MA NA-YA PB UB- BC	1
46	64AT11-3		.								A-KBA GA-MA NA-YA PB UB- BC	1
46	64AT22-3		.								L-Y CA-FA AB-NB QB-TB	1
46	A3-1110-05-1		.								L-Y CA-FA AB-NB QB-TB	1
47	64AT11-514		.								A-KBA GA-MA NA-YA PB UB- BC	1
47	64AT22-514		.								L-Y CA-FA AB-NB QB-TB	1
47	A3-1110-03-1		.								L-Y CA-FA AB-NB QB-TB	1
48	69-44578-2		.									1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY	
			1	2	3	4	5	6	7			
1103-49	SCN001		.								A-PRST BA-MA NA-EB GB HB IB PB-BC QU-Y FB JB-NB	1
49	8000000121-1		.									1
50	NAS514P632-5		.									6
51	69-37313-4		.									2
52	69-37313-4		.									1
53	69-37268-13		.									2
54	69-37268-14		.									1
55	69-37313-203		.									1
55	69-37313-204		.								ACF-I KMNPRS TUW- FAGAIAL AMA NA QA TA- WA VA CB DB EB GB JB LB TB UB WB AC BC BDEJLQ VXHAJA KA PA RA SA XA AB FB KB MB VB XB YB Y NB	1
55	69-37313-205		.									1
55A	BACP10U0825G		.	.								1
55B	BACS21DD1G		.	.								6
56	BACN10PA06-6		.									4
57	69-37313-30		.									1
			.								A-DF JKRS NA-RA TA XA YA GB HB	1
			.									

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY	
			1	2	3	4	5	6	7			
1103-57	69-37313-30		.	WIRE BUNDLE (SB 29-1039 R1)							DAEA GA-JA LA RB SB UB-XB AC	1
57	69-37313-42		.	WIRE BUNDLE (SB 29-1039 R1)							FA KA MA TB YB BC	1
57	69-37313-42		.	WIRE BUNDLE (SB 69-37313-31-02)							EGHT SA UA VA IB	1
57	69-37313-45		.	WIRE BUNDLE (SB 69-37313-31-02)							I WA	1
57	69-37313-45		.	WIRE BUNDLE (SB 29-1039 R1)							BA PB	1
57	69-37313-53		.	WIRE BUNDLE (SB 69-37313-31-02)							L AB	1
57	69-37313-54		.	WIRE BUNDLE (SB 69-37313-31-02)							M CB	1
57	69-37313-52		.	WIRE BUNDLE (SB 69-37313-31-02)							N DB	1
57	69-37313-52		.	WIRE BUNDLE (SB 29-1039 R1)							CA QA	1
57	69-37313-59		.	WIRE BUNDLE (SB 69-37313-31-02)							PQ GB FB	1
57	69-37313-65		.	WIRE BUNDLE (SB 69-37313-31-02)							UV JB KB	1
57	69-37313-66		.	WIRE BUNDLE (SB 69-37313-31-02)							WX LB MB	1
57	69-37313-76		.	WIRE BUNDLE (SB 69-37313-31-02)							Y NB	1
58	BACT12AC		.	TERMINAL LUG								AR
59	BACT12S		.	TERMINAL LUG								AR
60	66143-2		.	TAB TERMINAL, V00779								30
61	BACM10L00-1CU		.	MARKER							A-PRST BA-MA NA-EB GB HB IB PB-BC	1
62	BAC27DCC227		.	MARKER							A-PRST BA-MA NA-EB GB HB IB PB-BC	1
63	BAC27DCC351		.	MARKER "INOP"								1
64	BAC27EEX-510		.	VINYL DECAL								1
65	318-630-1001-421		.	LIGHT ASSY, V81590								1
68	BACC45FN12-12P		.	CONNECTOR, P3								1
69	MS51957-15		.	SCREW								4
70	BACC47CN1A		.	CONTACT PIN								8

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY	
			1	2	3	4	5	6	7			
1103-78	425-6		.								IN BA CA WA DB QB	1
78	SLCA002-6		.								IN BA CA WA DB QB	1
78	425-7		.								ACFGHK MPRSTW DA-GA IA LA MA NA QA TA UA VA YA CB EE GB HB IB LB RB- UB WB AC BC	1
78	SLCA002-7		.								ACFGHK MPRSTW DA-GA IA LA MA NA QA TA UA VA YA CB EE GB HB IB LB RB- UB WB AC BC	1
78	425-8		.								BDEJLQ VX HA JA KA PA RA SA XA AB FB KB MB VB XB	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY	
			1	2	3	4	5	6	7			
1103-78	SLCA002-8		.							BDEJLQ VX HA JA KA PA RA SA XA AB FB KB MB VB XB	1	
80	BACR13CF2AB		.									1
81	BACS16X1A		.									1
84	BACR13CG2AB		.									1
85	BACS16W1A		.									1
86	BACC47DJ2		.									9

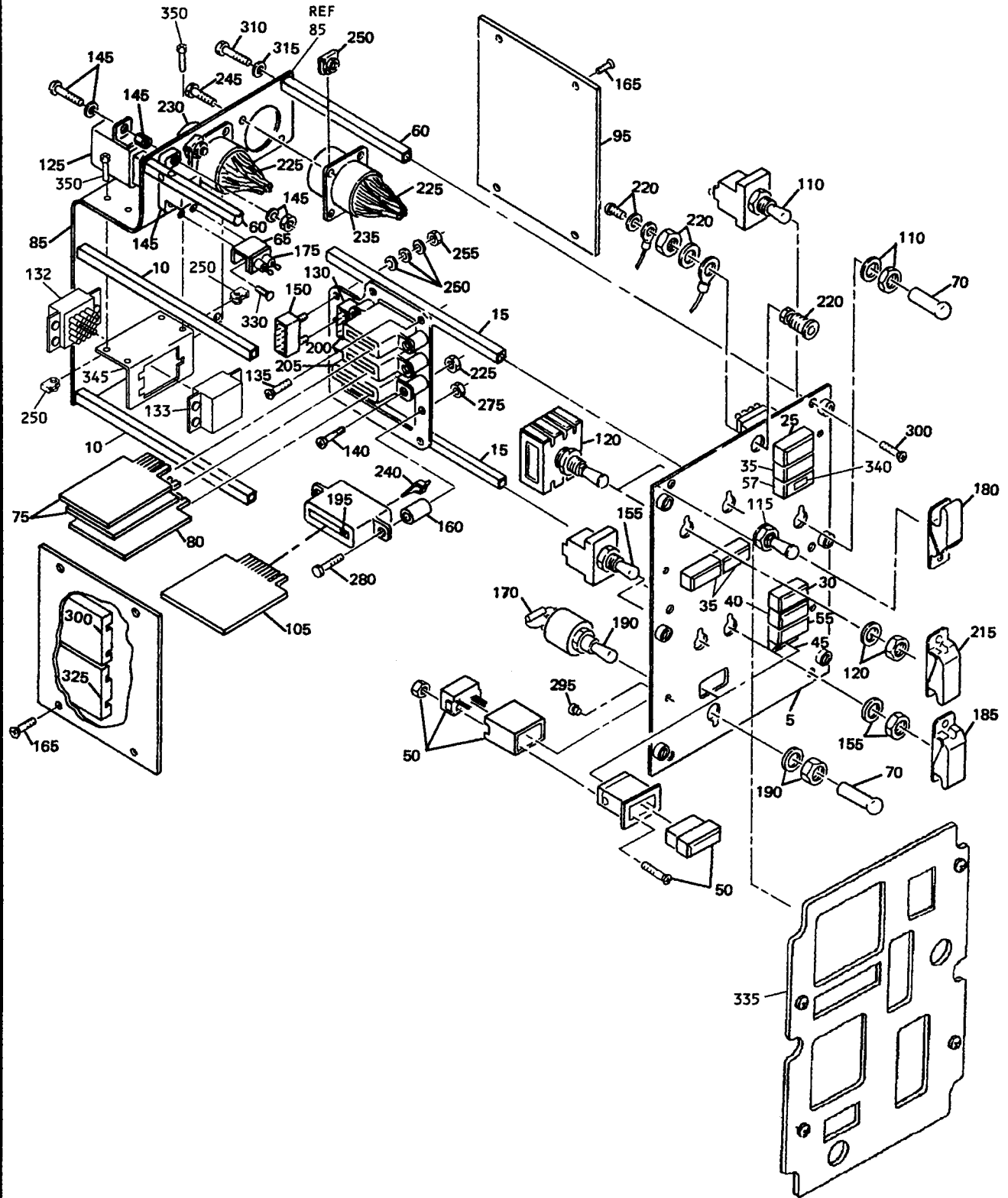
FIGURE 1103 REFERENCE DESIGNATION INDEX (SEE SCHEMATIC DIAGRAM)		
REFERENCE DESIGNATION	PART NUMBER	ITEM NO.
A1	*69-51813-9	11
A1	69-51813-3	11
A2, A3	69-51812-1	12
A2, A3	69-51812-5	12
CR1	*1N5061	38
CR1	1N4384	38
DS1	318-630-1001-164	32
DS2, DS3, DS5	318-630-1001-162	33
DS4	318-630-1001-163	34
DS6	318-630-1001-002	35
DS8	318-630-1001-165	36
K1	*BR16-900B11-26V	18
K1	BR16-900B11-26VRO	18
K2	JG2F009	21
K3	*BACR13CF4	22
K3	JG2A	22
K3	BACR13CF4A	22
K20	BACR13CG2AB	84
K21	BACR13CF2AB	80
L1	319-619-1001-018	32
L1	318-630-1001-017	32
L2, L3, L5	319-619-1001-019	33
L2, L3, L5	318-630-1001-018	33
L4	319-619-1001-012	34
L4	318-630-1001-012	34
L6	319-619-1001-012	35
L6	318-630-1001-012	35
L7	SCN001	49
L7	800000121-1	49
L8	319-619-1001-075	36
L8	318-630-1001-072	36
L9	318-630-1001-324	42
L11	318-630-1001-421	65
P1	BACC45FN18-31P6	9
P2	BACC45FN18-31P	10
P3	BACC45FN12-12P	68
P3, P4 *[1]	582551-1	28
P5 *[2]	582551-1	27
S1	*A3-127T7	46



FIGURE 1103 REFERENCE DESIGNATION INDEX (SEE SCHEMATIC DIAGRAM)		
REFERENCE DESIGNATION	PART NUMBER	ITEM NO.
S1	64AT11-3	46
S1	*64AT22-3	46
S1	A3-1110-05-1	46
S2	64AT11-514	47
S2	*64AT22-514	47
S3	A3-1110-03-1	47
S3, S4	68AT11-1	44
S3, S4	*68AT22-1	44
S3, S4	A3-1114-01-1	44
S3, S4	BACS30ES11	44
S5, S6	MS24523-23	41
S7	*26ET61T	37
S7	26ET1-1	37
S7	6ET1T	37
S9	2PB11T2	42
S9	2PB11H58	42
XA1	582555-1	27
XA2, XA3	582551-1	28

\* PREFERRED PART

- \*[1] CONNECTS WITH THE A2 AND A3 CARD CONNECTORS
- \*[2] CONNECTS WITH THE A1 CARD CONNECTOR



Flight Controls Module Assembly (P5-3)  
Figure 1104

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1104-1	69-37313-409		MODULE ASSY, FLIGHT CONTROLS (P5-3) (POST SB 69-37313-31-03)							A	RF
1	69-37313-400		MODULE ASSY, FLIGHT CONTROLS (P5-3) (POST SB 69-37313-31-03)							B	RF
5	69-37313-200		. BASEPLATE								1
10	69-37313-82		. STAND-OFF								2
15	69-37317-83		. STAND-OFF								1
20	69-37313-84		. STAND-OFF								1
25	10-61803-17		. INDICATOR LIGHT								1
30	10-61803-24		. INDICATOR LIGHT								1
35	10-61803-25		. INDICATOR LIGHT								1
40	10-61803-395		. INDICATOR LIGHT								1
45	10-61803-398		. INDICATOR LIGHT								1
50	10-61803-5		. INDICATOR LIGHT								1
55	10-61803-96		. INDICATOR LIGHT								1
57	318-630-1001-421		. INDICATOR LIGHT								1
60	69-37268-14		. STANDOFF								2
65	69-37302-273		. CHANNEL-DIODE MOUNTING								1
70	69-44578-2		. CAP-SWITCH								2
75	69-51812-5		. PRINTED CIRCUIT ASSY (REF 31-36-06)								2
80	69-51813-9		. PRINTED CIRCUIT ASSY (REF 31-36-07)								1
80	69-78285-1		DELETED								
85	69-37313-202		. BACKPLATE								1
90	69-53883-12		. MOUNTING PLATE								1
95	69-53883-15		. COVER								1
100	69-53883-16		. COVER ASSY								1
105	69-73639-1		. PRINTED CIRCUIT ASSY (OPT) (REF 31-36-95)								1
105	69-73639-5		. PRINTED CIRCUIT ASSY (OPT) (REF 31-36-95)								1
110	64A722-514		. SWITCH TOGGLE (PREF) V91929								1
110	A3-1110-05-1		. SWITCH TOGGLE (OPT) V81640								1
115	64AT22-3		. SWITCH TOGGLE (PREF) V91929								1
115	A3-1110-03-1		. SWITCH TOGGLE (OPT) V81640								1
120	A3-1114-01-1		. SWITCH TOGGLE, V81640								2
125	BACR13CF2AB		. RELAY								1
130	BACR13CF4A		. RELAY								1
132	BACR13CG2AB		. RELAY								1
133	BACS16W1A		. SOCKET								1
135	BACS12CB04-4		DELETED								
135	NAS1801-04-4		. SCREW								4
140	BACS12CB06-14		DELETED								
140	NAS1801-06-14		. SCREW								6
145	BACS16X1A		. SOCKET								1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1104-150	JG2F009		.								1
155	MS24523-23		.								2
160	NAS43DD1-17		.								8
165	NAS514P440-4		.								8
170	1N5061		.								1
170	1N4383		.								1
175	1N5331		.								2
-176	4729		.								1
-176	4860		.								1
180	11170		.								1
185	11170-1		.								2
190	26ET61T		.								1
190	26ET1T		.								1
190	6ET1T		.								1
195	582507-1		.								4
200	582551-1		.								2
205	582555-1		.								1
210	582589-1		.								1
215	60-0730-9		.						A		2
215	406-122										
215	11170-1		.						B		2
220	800000121-1		.								1
225	69-37313-81		.								1
230	BACC45FN22-55P		.								1
235	BACC45FN22-55P6		.								1
240	66143-2		.								2
245	BACS12CB04-5										
245	NAS1801-04-5		.								4
250	BACN10NW1		.								6
255	BACN10JC06		.								10
260	AN960D8 (3)		.								4
270	NAS43DD1-17		.								6
275	BACN10JC04		.								2
280	NAS600-14P		.								2
295	BACN10PA06-6		.								4
300	NAS514P632-5		.								6
310	BACS12CB06-5		.								6
315	MS35338-41		.								6
320	69-53883-13										
325	69-53883-15										
330	BACR15BB5D		.								2
335	425-4		.								1
335	SLCA002-4		.								1
340	BAC27DCC351		.								1
345	233A3209-409		.								1
350	BACS12HN04-5		.								2

FIGURE 1104 REFERENCE DESIGNATION INDEX (SEE SCHEMATIC DIAGRAM)

REFERENCE DESIGNATION	PART NUMBER	ITEM NO.
A1	69-51813-9	80
A2, A3	69-51812-5	75
A4	69-73639-1	105
CR1, CR2	1N5331	175
K21	BACR13CF2AB	125
K1	BACR13CG2AB	132
K2	JG2F009	150
K3	BACR13CF4A	130
L1	10-61803-17	25
L2, L3, L5	10-61803-25	35
L4	10-61803-17	25
L6	10-61803-5	50
L7	800000121-1	220
L8	10-61803-96	55
L9	10-61803-395	40
L10	10-61803-398	45
L11	318-630-1001-421	57
P1	BACC45FN22-55P6	235
P2	BACC45FN22-55P	230
S1	*64AT22-3	115
S1	A3-1110-05-1	115
S2	*64AT22-514	110
S2	A3-1110-03-1	110
S3, S4	A3-1114-01-1	120
S5, S6	MS24523-23	155
S7	*26ET61T	190
S7	26ET1T	190
S7	6ET1T	190
XA1	582555-1	205
XA2, XA3	582551-1	200
XA4	582589-1	210

\* PREFERRED PART