



# **COMPONENT MAINTENANCE MANUAL WITH ILLUSTRATED PARTS LIST**

## **FLIGHT CONTROLS MODULE ASSEMBLY, P5-3**

### **PART NUMBER**

**69-37313-105, -107, -109, -110, -111, -112, -113,  
-114, -115, -116, -117, -118, -119, -120, -121, -122,  
-123, -124, -125, -126, -300, -301, -302, -402, -404,**

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## COMPONENT MAINTENANCE MANUAL

Revision No. 27  
Jul 01/2009

To: All holders of FLIGHT CONTROLS MODULE ASSEMBLY, P5-3 31-37-04.

Attached is the current revision to this COMPONENT MAINTENANCE MANUAL

The COMPONENT MAINTENANCE MANUAL is furnished either as a printed manual, on microfilm, or digital products, or any combination of the three. This revision replaces all previous microfilm cartridges or digital products. All microfilm and digital products are reissued with all obsolete data deleted and all updated pages added.

For printed manuals, changes are indicated on the List of Effective Pages (LEP). The pages which are revised will be identified on the LEP by an R (Revised), A (Added), O (Overflow, i.e. changes to the document structure and/or page layout), or D (Deleted). Each page in the LEP is identified by Chapter-Section-Subject number, page number and page date.

Pages replaced or made obsolete by this revision should be removed and destroyed.

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TRANSMITTAL LETTER

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Location of Change

Description of Change

NO HIGHLIGHTS

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		PRR 34766	MAR 05/92
69-37313-31-01		PRR 34766R	MAR 05/92
		PRR 35323	JUN 01/97
69-37313-31-02			MAR 01/03
69-37313-31-03			MAR 01/03
	31-30		JUL 01/03
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All revisions to this manual will be accompanied by transmittal sheet bearing the revision number. Enter the revision number in numerical order, together with the revision date, the date filed and the initials of the person filing.

Revision		Filed		Revision		Filed	
Number	Date	Date	Initials	Number	Date	Date	Initials



### COMPONENT MAINTENANCE MANUAL

Revision		Filed		Revision		Filed	
Number	Date	Date	Initials	Number	Date	Date	Initials



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Temporary Revision		Inserted		Removed	
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## COMPONENT MAINTENANCE MANUAL

### INTRODUCTION

#### 1. General

- A. The instructions in this manual supply the data necessary to do the maintenance functions together with the test, fault isolation, repair, and replacement of the defective parts.
- B. This manual is divided into different parts:
  - (1) Title Page
  - (2) Transmittal Letter
  - (3) Highlights
  - (4) List of Effective Pages
  - (5) Table of Contents
  - (6) Temporary Revision & Service Bulletin Record
  - (7) Record of Revisions
  - (8) Record of Temporary Revisions
  - (9) Introduction
  - (10) Procedures & IPL Sections
- C. Refer to the Table of Contents for the page location of the applicable procedures.
- D. All dimensions, measures, quantities and weights included are in English units. When metric equivalents are given they will be in the parentheses that follow the English units.
- E. The introduction to the Illustrated Parts List (IPL) shows how the IPL data is used.
- F. Design changes, optional parts, configuration differences and Service Bulletin modifications may cause different part numbers. These part numbers are identified in the IPL with an alphabetical letter which is added to the end of the basic item number. This new item number is referred to as an alpha-variant. Throughout the manual, IPL basic item number references also apply to alpha-variants unless shown differently.
- G. Verification:

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### FLIGHT CONTROLS MODULE ASSEMBLY P5-3 - 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

**CAUTION:** OBEY THE PROCEDURE IN SUBJECT 20-12-02, HANDLING OF ELECTROSTATIC SENSITIVE DEVICES. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THIS COMPONENT.

- 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

- (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 (69-37313-105, -107, -300, -301, -302)
- (i) L10 - AUTO SLAT FAIL (69-37313-105, -107, -300, -301, -302)
- (j) L11 - STANDBY RUDDER ON (69-37313-402, -404, -406 THRU -408, 411 THRU -428, -511 thru -528)

##### (2) Switches

- (a) S1 - ALTERNATE FLAP MASTER ARMING
- (b) S2 - ALTERNATE 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 69-37313-105, -107, 300, -301, -302, -402, -404, -406, -407, -408)

#### 3. Functional Description

- A. Indicator Lamps

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- (1) All the indicator lamps have +28-volt dc power connected at the No. 1 terminal from pin 2-18 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 33-15-11 for description of A1 operation).
- (1) Master Caution, L1, L4, and L8 Indicators (DESCRIPTION AND OPERATION, Figure 1)
    - (a) Grounding pins P2-20, P2-8 or P2-2 will illuminate lamps L1 or L8 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 69-37313-105, -107, -123 thru -126, -301, -302, 402, -404, -407 and -408, the signal that activates L4 is delayed by A2 before being passed on to A1 (DESCRIPTION AND OPERATION, Figure 3, Sheet 2).
  - (2) Master Caution, L8, L9 and L10 Indicators (69-37313-105, -107, -301, 302, -402, -404, -407, -408 only (DESCRIPTION AND OPERATION, Figure 2)
    - (a) Grounding of pin P2-2 will illuminate lamp L8. Ungrounding of pins P1-28 and P2-31 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 (DESCRIPTION AND OPERATION, Figure 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 an 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 Subject 31-36-06 for description of A2 or A3 operation.)
- C. Master Caution Recall (DESCRIPTION AND OPERATION, Figure 1, 2 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 (DESCRIPTION AND OPERATION, Figure 1 and 2).
- (1) Activating master test, which grounds pin P2-7, will illuminate all of lamps L1 through L6, L8, \*[1]L9, \*[1]L10, \*[2]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] 69-37313-105, -107, -301, -302, -402, -404, -407, -408 only
    - [2] 69-37313-402, -404, -407, -408, -411 thru -428, -511 thru -528

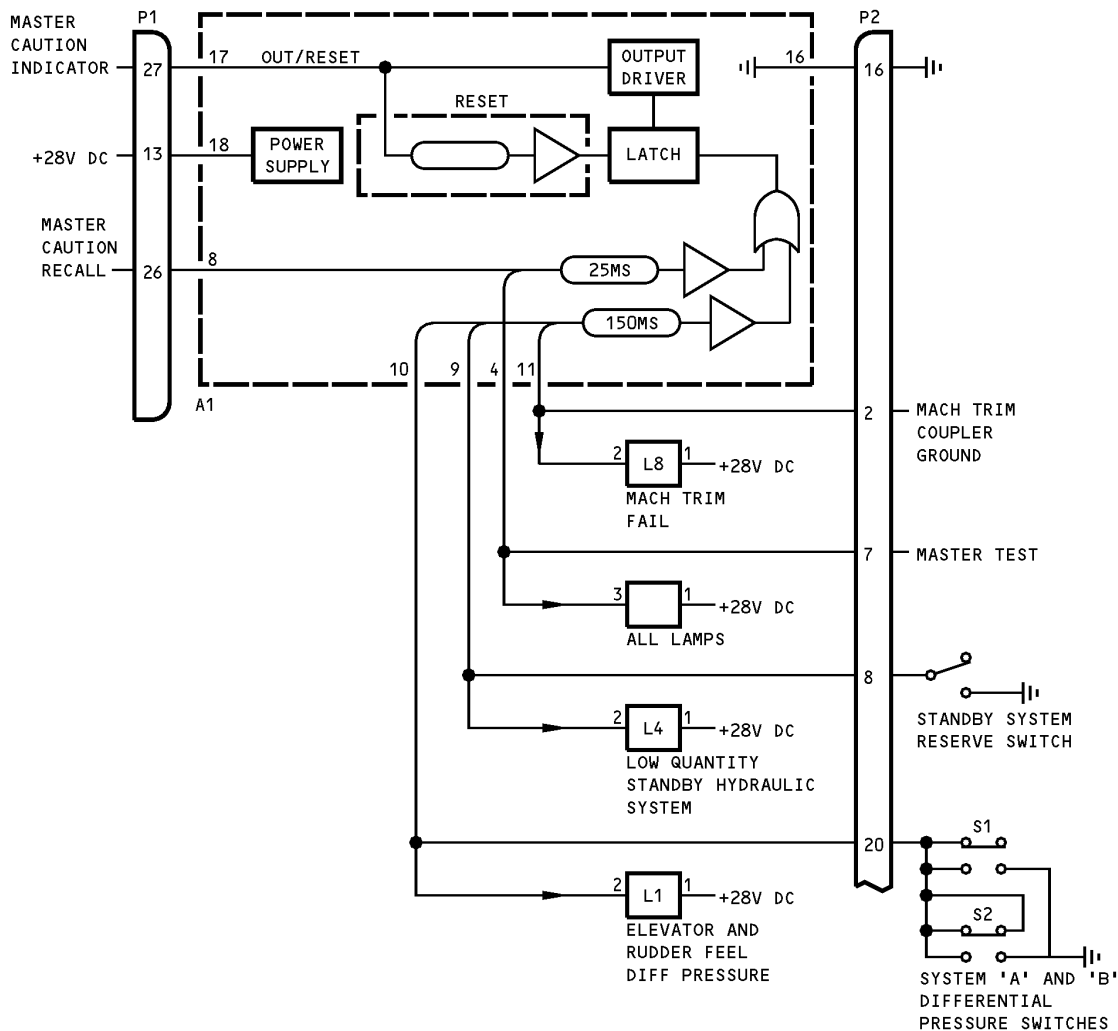
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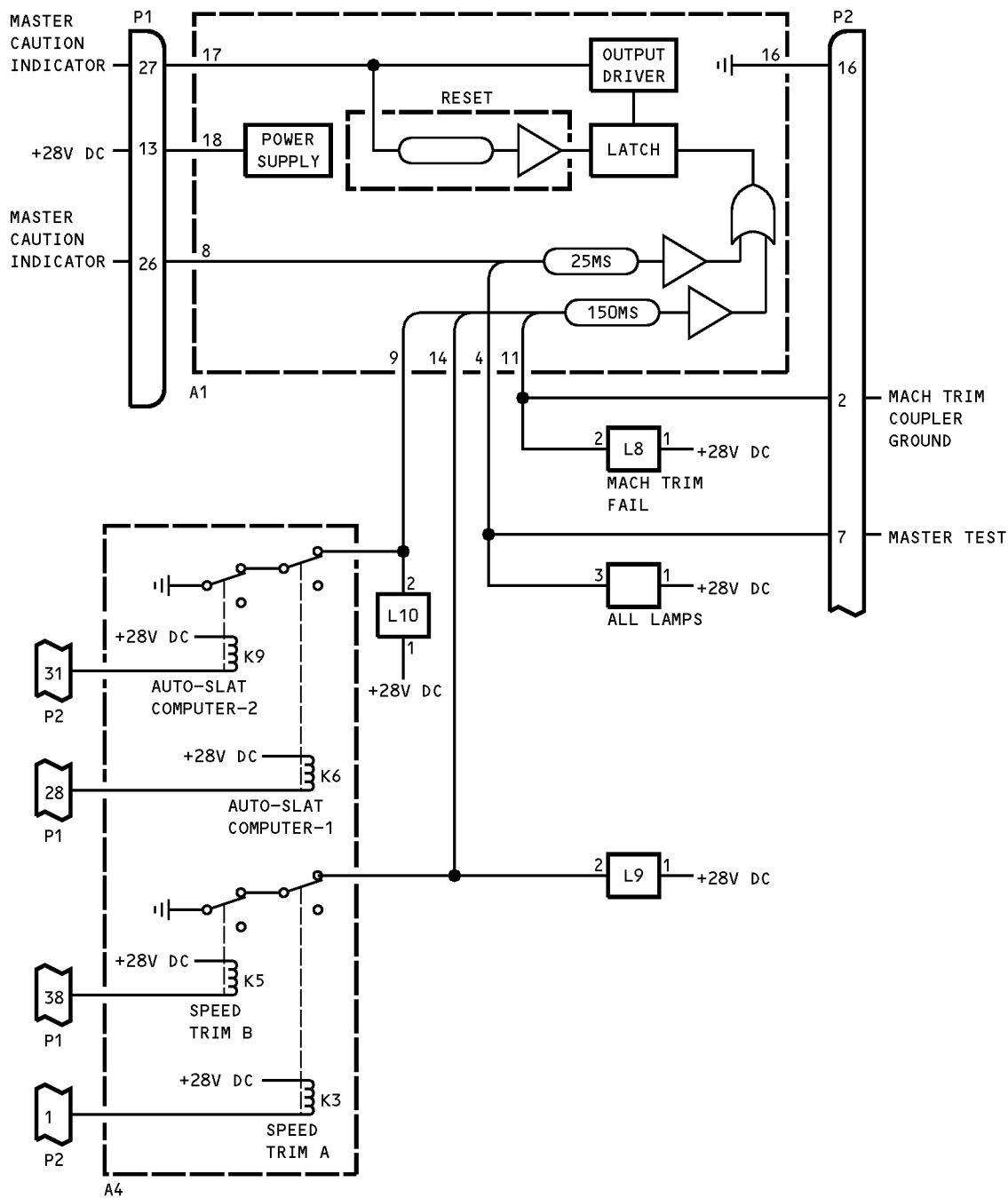
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Master Caution, L1, L4, and L8 Indicator Diagram  
Figure 1



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69-37313-105,-107,-402,-404 Master Caution, L8, L9, and L10 Indicator Diagram  
Figure 2

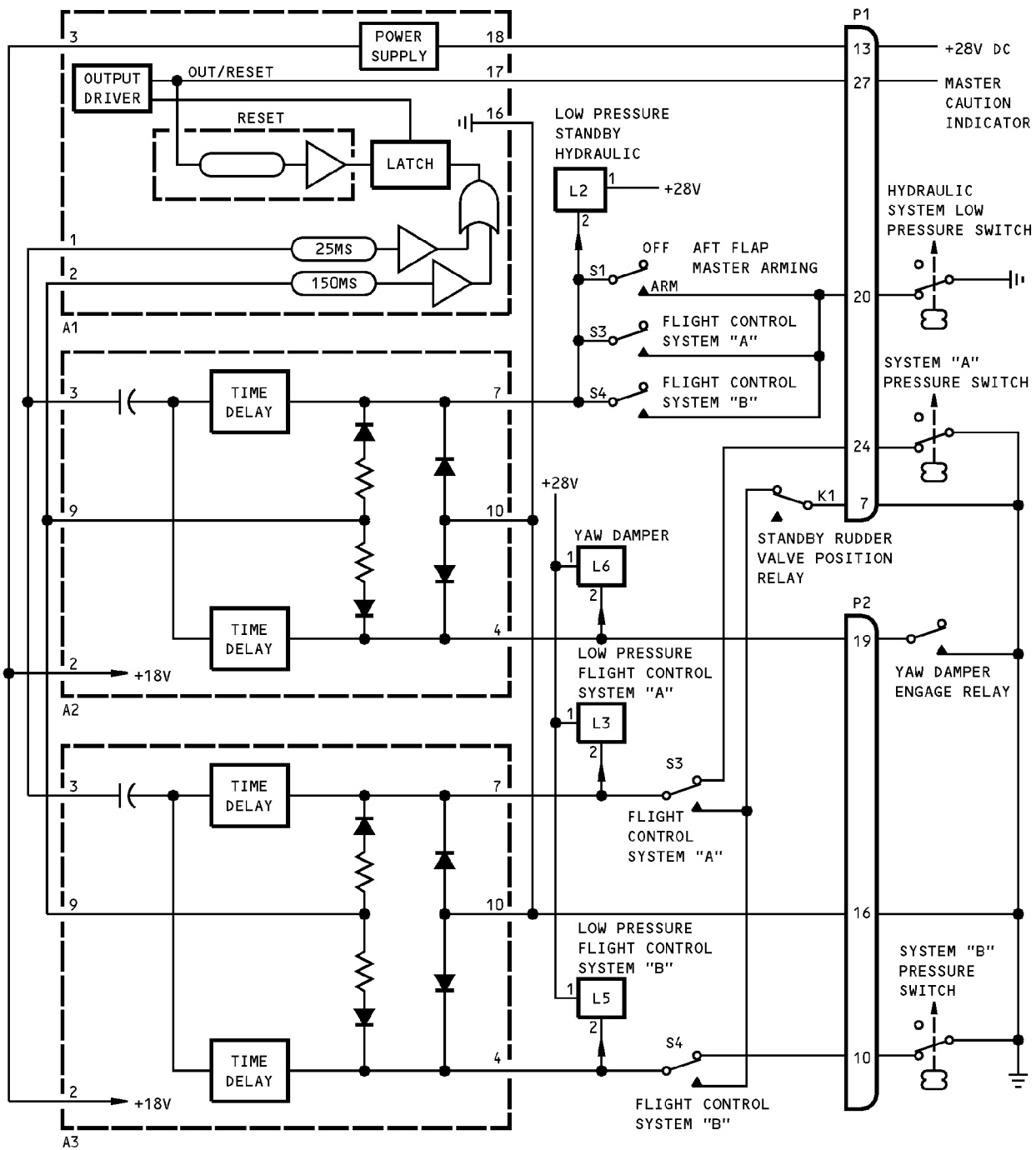
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69-37313-109 THRU -122,-125,-411 THRU -424,-428,-511 THRU -524,-528

Master Caution, L2,L3,L4,L5, and L6 Indicator Diagram  
Figure 3 (Sheet 1 of 2)

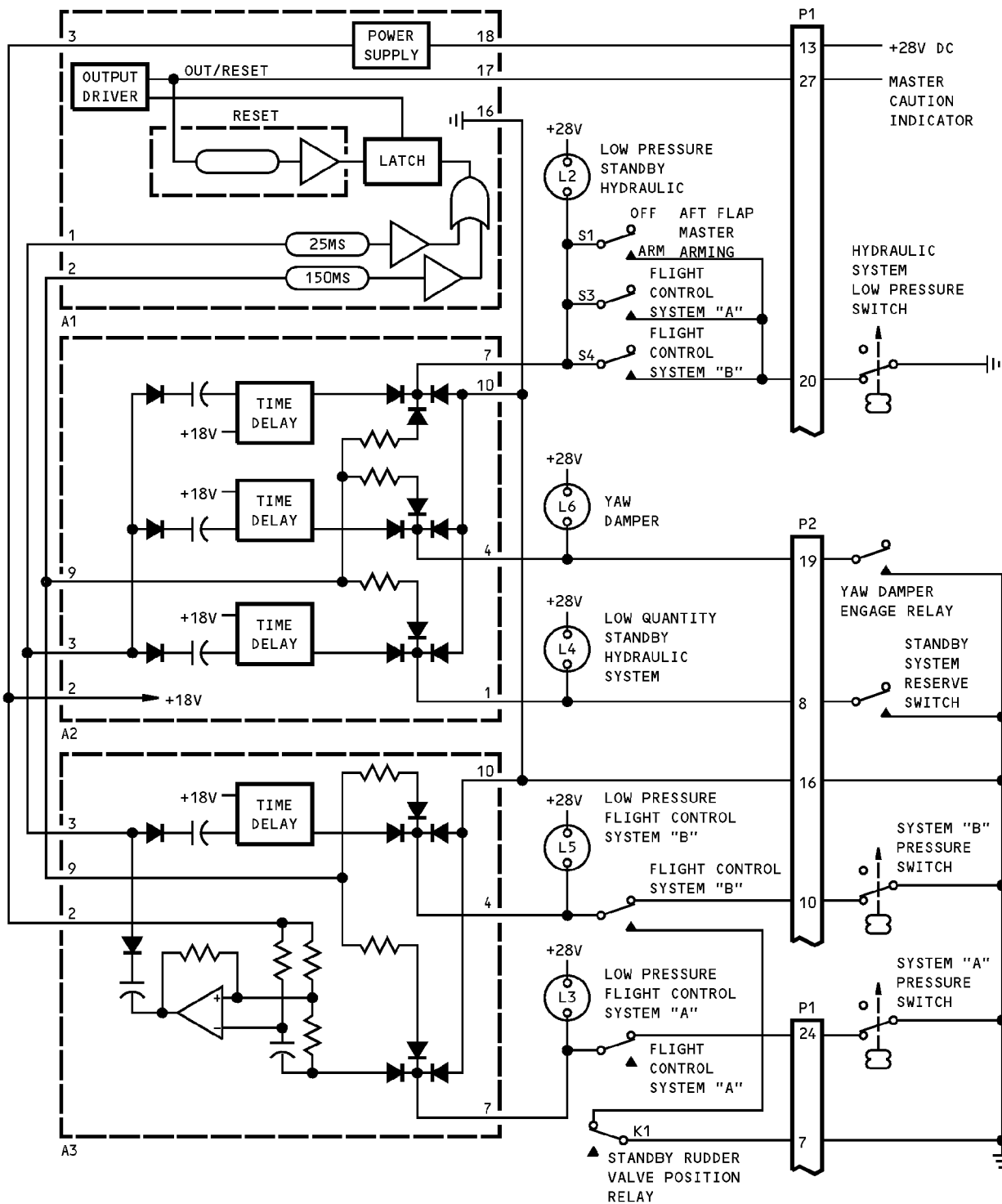
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Master Caution, L2,L3,L4,L5, and L6 Indicator Diagram  
Figure 3 (Sheet 2 of 2)

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## COMPONENT MAINTENANCE MANUAL

### TESTING AND FAULT ISOLATION

#### 1. Test Equipment

**NOTE:** Equivalent substitute may be used.

##### A. Power Supplies:

- (1) 28  $\pm$  1.0v dc, 2.0A max power supply, STD-5471
- (2) 115 VAC power supply, STD-685 (400 Hz)

##### B. Multimeter: model 260 simpson voltmeter, STD-3946

##### C. Test Connectors (with pigtail leads):

- (1) BACC45FT18-31S6 (Mate with P1) (all except 69-37313-105, -107, -300 thru -302, -402, -404, -406 thru -408)
- (2) BACC45FT22-55S6 connector, SPL-5760 (Mate with P1) (69-37313-105, -107, -300 thru -302, -402, -404, -406 thru -408 only)
- (3) BACC45FT18-31S Test Connector, SPL-5367 (Mate with P2) (all except 69-37313 -105, -107, -300 thru -302, -402, -404, -406 thru -408)
- (4) BACC45FT22-55S test connector, SPL-5369 (Mate with P2) (69-37313-105, -107, -300 thru -302, -402, -404, -406 thru -408 only)
- (5) BACC45FT12-12S mating connector, SPL-4517 (Mate with P3) (69-37313-4XX and -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

##### F. Oscilloscope: Capable of measuring timings of 10-300 milliseconds (accuracy of $\pm$ 10%) and voltage of 50v dc (accuracy of $\pm$ 10%)

#### 2. Functional Test

**CAUTION:** OBEY THE PROCEDURE IN SUBJECT 20-12-02, HANDLING OF ELECTROSTATIC SENSITIVE DEVICES. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THIS COMPONENT.

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

##### B. Test continuity per TESTING AND FAULT ISOLATION, Table 102 (all except 69-37313-105, -107, -300 thru -302, -402, -404, -406 thru -408 only), TESTING AND FAULT ISOLATION, Table 103 (all except 69-37313-105, -107, -300 thru -302, -402, -404, -406 thru -408 only), TESTING AND FAULT ISOLATION, Table 104 (69-37313-105, -107, -402, -404 only), TESTING AND FAULT ISOLATION, Table 105 (69-37313-300 thru -302, -406 thru -408), and TESTING AND FAULT ISOLATION, Table 106 (69-37313-105, -107, -402, -404).

- (1) Unless otherwise specified, "Continuity" shall be defined as less than 100 ohms, and "No Continuity" is defined as greater than 100K ohms.
- (2) If lightplate is not with module, direction of switch movement may be determined from TESTING AND FAULT ISOLATION, Table 101 or TESTING AND FAULT ISOLATION, Figure 101.

**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.

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**Table 101:** Direction of Switch Movement

	All Except 69-37313-110 , -112, -113, -122, -124, -126, -300, -406, -412, -414, -415, -424, -426, -428, -512, -514, -515, -524, -526, -528				69-37313-110, -113, -122, -124, -126, -112, -300, -406, -412, -414, -415, -424, -426, -428, -512, -514, -515, -524, -526, -528			
	S1	S2	S3, S4	S5, S6, S7	S1	S2	S3, S4	S5, S6 S7
Up	OFF	UP	STBY RUD	OFF	ARM	UP	ON	ON
Center		OFF	OFF			OFF	OFF	
Down	ARM	DOWN	ON	ON	OFF	DOWN	STBY RUD	OFF

**Table 102:** Continuity Test

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		
		P3-6 <sup>†</sup> [1]	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	P1-11	P2-22
S3	OFF				
S4	ON	P1-22	P2-21	P1-22	P2-9
				P1-11	P1-25

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**Table 102: Continuity Test (Continued)**

SWITCH		CONTINUITY		NO CONTINUITY	
NUMBER	POSITION	FROM	TO	FROM	TO
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		
S9	OFF	P2-29	P2-30	P2-30	P2-31
S9	TEST	P2-30	P2-31	P2-29	P2-30
ALL	OFF				

\*[1] 69-37313-411 thru -428, -511 thru -528 only

C. 69-37313-113, -115 thru -126, -415, -417 thru -428, -515, -517 thru -528 – Perform diode check per TESTING AND FAULT ISOLATION, Table 103.

**Table 103: Diode Test**

SWITCH		CONTINUITY		NO CONTINUITY	
NUMBER	POSITION	FROM	TO	FROM	TO
S3	ON	P1-14	P2-14	P1-14	P1-23
		P2-23	P2-5	P2-23	P2-6
		*[1]P2-15(+)	*[1]P2-12(-)	P2-12	P2-4
				*[2]P2-12(+)	*[2]P2-15(-)
S3	OFF				
S4	ON	P1-23	P2-14	P2-23	P1-14
		*[1]P2-4(+)	*[1]P2-12(-)	P2-4	P2-15
S4	ON	P2-6	P2-5	P2-6	P2-23

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

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**Table 103: Diode Test (Continued)**

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

D. 69-37313-105, -107, -402, -404 – Perform Continuity check per TESTING AND FAULT ISOLATION, Table 104.

**Table 104: Continuity Test**

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
		P1-53 <sup>*[1]</sup>	P2-53		
S1	ARM	P1-4	P1-15	P1-9	P1-11
		P1-15	P1-17	P1-4	P1-5
		P1-11	P1-21	P1-21	P1-25
S2	DOWN	P1-15	P1-16	P1-6	P1-15
	UP	P1-6	P1-15	P1-15	P1-16
S3	OFF	P1-46	P1-50	P1-3	P1-22
		P1-44	P1-45		
S4	STBY RUD	P1-11	P1-25		
S4	ON	P1-12	P2-21		
		P1-47	P2-4		
S4	OFF	P1-12	P2-9	P1-11	P1-25
		P1-11	P2-22	P1-12	P2-21
				P1-47	P2-4
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
		P1-48	P2-4		
S4	OFF				
S3	STBY RUD	P1-11	P1-25	P1-11	P2-22
		P1-43	P1-45		
S3	ON	P2-14	P2-44		
S3	OFF				
S4	ON	P1-23	P2-14		
S4	OFF				

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**Table 104:** Continuity Test (Continued)

SWITCH		CONTINUITY		NO CONTINUITY	
NUMBER	POSITION	FROM	TO	FROM	TO
S5	ON	P2-3	P2-24	P2-11	P2-24
S5	OFF	P2-11	P2-24	P2-3	P2-24
S6	ON	P1-19	P2-24	P1-31	P2-24
S6	OFF	P1-31	P2-24	P1-19	P2-24
S7	ON	P2-13	P2-25	P2-13	P2-17
		P2-27	P2-26	P2-27	P2-17
S7	OFF	P2-13	P2-17	P2-13	P2-25
		P2-27	P2-17	P2-27	P2-26

\*[1] 69-37313-402, -404

- E. 69-37313-300 thru -302, -406 thru -408 – Perform Continuity check per TESTING AND FAULT ISOLATION, Table 105.

**Table 105:** Continuity Test

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	P1-21	P1-11
		P1-53 <sup>*[4]</sup>	P2-53		
	ARM	P1-4	P1-15	P1-4	P1-5
		P1-15	P1-17	P1-21	P1-25
S4	STBY RUD	P1-21	P1-11		
S1	OFF				
S4	OFF				
S2	DOWN	P1-15	P1-16	P1-15	P1-6
	UP	P1-15	P1-6	P1-15	P1-16
S3	OFF	P1-46	P1-50	P1-22	P1-3
		P1-22 <sup>*[1]</sup>	P1-12	P1-12	P1-22
		P1-44	P1-45		
S1	ARM				
S4	STBY RUD	P1-25	P1-21	P1-11	P1-9
		P1-11	P1-25	P1-25	P1-9
S4	ON	P1-12	P2-21		

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**Table 105: Continuity Test (Continued)**

SWITCH		CONTINUITY		NO CONTINUITY	
NUMBER	POSITION	FROM	TO	FROM	TO
S4	OFF	P1-47	P2-4		
S1	OFF	P1-12	P2-9	P1-11	P1-25
S3	OFF	P1-11	P2-22	P1-12 P1-47	P2-21 P2-4
K1 <sup>*[3]</sup>	ON				
	energized	P1-32	P1-20		
K1 <sup>*[3]</sup>	de-energized	P1-14	P1-50	P1-12	P1-22
		<sup>*[1]</sup> P1-22	P1-3	P1-3	P1-22
		<sup>*[1]</sup> P1-48	P2-12	P1-46	P1-50
		P2-14	P2-44	<sup>*[2]</sup> P2-12	P1-48
		P1-3	P2-9	P2-4	P2-12
S4	ON	P1-3	P2-21	P1-3	P2-9
S4	OFF				
S3	STBY RUD	P1-11	P1-25	P1-11	P2-22
		P1-43	P1-45		
S3	OFF	<sup>*[1]</sup> P2-40	P1-24	P1-24	P2-40
		<sup>*[1]</sup> P2-40	P2-10	P2-10	P2-40
		<sup>*[1]</sup> P2-41	P2-9	P2-9	P2-41
		P2-24	P2-11	P2-11	P2-3
		P2-11	P1-31	P2-11	P1-19
		P1-12	P2-9	P1-22	P2-21
		<sup>*[1]</sup> P1-22	P2-9	P1-3	P2-9
S4	STBY RUD	P1-11	P1-21	P1-11	P2-22
		P1-11	P1-25		
S4	ON	P1-23	P2-14	P1-11	P1-25
		<sup>*[1]</sup> P1-22	P2-21	<sup>*[2]</sup> P2-12	P1-47
		<sup>*[1]</sup> P2-4	P2-12	P1-22	P2-9
S4	OFF				
S5	ON	P2-24	P2-3	P2-24	P2-11
		P2-3	P1-31	P2-3	P1-19
S5	OFF				
S6	ON	P2-11	P1-19	P2-11	P1-31
S7	OFF	P2-27	P2-17	P2-27	P2-26
		P2-13	P2-17	P2-13	P2-25

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## COMPONENT MAINTENANCE MANUAL

**Table 105: Continuity Test (Continued)**

SWITCH		CONTINUITY		NO CONTINUITY	
NUMBER	POSITION	FROM	TO	FROM	TO
S7	ON	P2-27	P2-26	P2-27	P2-17
		P2-13	P2-25	P2-13	P2-17

\*[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.

\*[3] To energize K1 relay, connect P1-40 to GND and P1-22 to 28v dc.

\*[4] 69-37313-406 thru -408

F. 69-37313-105, -107, -402, -404; Perform diode check per TESTING AND FAULT ISOLATION, Table 106

**Table 106: Diode Check for 69-37313-105, -107, -402, -404**

		CONTINUITY		NO CONTINUITY	
DIODE TESTED	PRINTED CIRCUIT	FROM	TO	FROM	TO
CR3		*[1]P1-22	P1-12	P1-12	P1-22
CR2		*[1]P2-41	P2-9	P2-9	P2-41
CR17	A4	*[1]P2-40	P2-10	P2-10	P2-40
CR15	A4	*[1]P2-40	P1-24	P1-24	P2-40
CR1		*[1]P1-47	P2-12	*[2]P2-12	P1-47

\*[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.

G. Perform test steps listed in TESTING AND FAULT ISOLATION, Table 107. Start with all module switches OFF. All voltage applications and measurements shall have a tolerance of  $\pm 1.0v$  dc.

**Table 107: Functional Test for all except 69-37313-105, -107, -300 thru -302, -402, -404, -406 thru -408**

STEP	PROCEDURE	REQUIRED RESULTS
69-37313-109 thru -112, -114, -411 thru -414, -416, -511 thru -514, -516		
1	Measure P2-4(+) to P2-12.	100 ohms maximum
2	Measure P2-12(+) to P2-4.	200 ohms minimum
3	Connect P2-4 to ground.	Verify S7 will not remain at ON
4	Connect 28V dc to P2-12.	Verify S7 will remain at ON
5	Disconnect P2-12.	Verify S7 returns to OFF
6	Disconnect P2-4.	
69-37313-113, -115 thru -126, -415, -417 thru -428, -515, -517 thru -528		
7	Connect P2-4 and P2-15 to ground.	Verify S7 will not remain at ON
8	Set S3, S4 to OFF.	

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## COMPONENT MAINTENANCE MANUAL

**Table 107:** Functional Test for all except 69-37313-105, -107, -300 thru -302, -402, -404, -406 thru -408  
(Continued)

STEP	PROCEDURE	REQUIRED RESULTS
9	Connect 28V dc 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 28V dc.	
16	Connect P2-18 to 28V dc.	
17	Connect test lamp L12 and test switch S10 in series between P1-27 and 28V dc.	
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 28V dc.	L3 (DS3), L12 extinguished
23	Set S3 to OFF.	
24	Disconnect P1-18.	
25	Set S1 to OFF.	
26	Measure between P1-21 and P1-25.	Continuity
27	Connect 115V 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 115V ac.	
30	Connect P1-4 to 28V dc.	
31	Measure P1-17 to ground.	28V dc
32	Measure P1-30 to ground.	0V dc
33	Set S1 to ARM.	
34	Set S2 to DOWN, release.	
35	Measure P1-30 to ground.	28V dc
36	Measure P1-17 to ground.	0V dc
37	Set S1 to OFF and back to ARM.	
38	Measure P1-17 to ground.	28V dc
38A	Set S1 to OFF.	
38B	Disconnect P1-7.	

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**Table 107:** Functional Test for all except 69-37313-105, -107, -300 thru -302, -402, -404, -406 thru -408  
(Continued)

STEP	PROCEDURE	REQUIRED RESULTS
<b>NOTE:</b> For 69-37313-117, -120, -419, -422, -519, -522 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	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
58	Disconnect P1-20.	
59	Connect P2-8 to ground <sup>*[1]</sup> .	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.	

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**Table 107:** Functional Test for all except 69-37313-105, -107, -300 thru -302, -402, -404, -406 thru -408  
(Continued)

STEP	PROCEDURE	REQUIRED RESULTS
68A	Connect P1-7 to ground.	
68B	Set S4 to STBY RUD (start timing). After 0.5 to 2.0 seconds	L5 illuminated 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.	
	Steps 86 thru 88, 69-37313-109 thru -126 only	
86	Measure power connector L7(J7) center to pin P1-2.	Continuity
87	Measure L7(J7) rim to P1-1.	Continuity
88	Measure P1-2 to P1-1.	No Continuity
	Steps 89 thru 120, 69-37313-411 thru -428, -511 thru -528 only	
89	Connect P1-1 to GND.	
90	Apply 5v dc to P1-2.	Lightplate is illuminated
91	Remove all connections.	
92	Ensure all 28 VDC power is off and connect a jumper wire from P3-6 to P3-7.	
93	All UUT switches should be in the OFF position.	

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**Table 107:** Functional Test for all except 69-37313-105, -107, -300 thru -302, -402, -404, -406 thru -408  
(Continued)

STEP	PROCEDURE	REQUIRED RESULTS
94	Connect ground to P2-16, P3-2, P3-3.	
95	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
95A	Measure the voltage at P1-25.	0 VDC
95B	Measure the voltage at P2-22.	28 VDC
96	Set S3 to STBY RUD.	L11, L12 on
97	Measure the voltage at P1-25.	28 VDC
97A	Measure the voltage at P2-22.	0 VDC
97B	Connect a jumper from P1-20 to DC ground. <sup>[2]</sup>	L2 on
97C	Remove jumper from P1-20. <sup>[2]</sup>	L2 off
98	Set S3 to OFF.	L11, L12 off
99	Measure the voltage at P1-25.	0 VDC
100	Set S4 to STBY RUD.	L11, L12 on
101	Measure the voltage at P1-25.	28 VDC
101A	Connect a jumper from P1-20 to DC ground. <sup>[2]</sup>	L2 on
101B	Remove jumper from P1-20. <sup>[2]</sup>	L2 off
102	Set S4 to OFF.	L11, L12 off
103	Measure the voltage at P1-25.	0 VDC
104	Remove 28 VDC at each point of application in step 95.	
105	Remove the jumper from P3-6 to P3-7.	
106	Connect a jumper from P3-10 to P3-11.	
107	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
108	Measure the voltage at P2-22.	28 VDC
109	Measure the voltage at P1-25.	0 VDC
110	Connect P3-1 to ground.	L11, L12 off
111	Measure the voltage at P1-25.	0 VDC
112	Set S4 to ON.	L11, L12 on
113	Measure the voltage at P1-25.	28 VDC
114	Connect a jumper P1-20 to ground. <sup>[2]</sup>	L2 on
115	Remove jumper from P1-20. <sup>[2]</sup>	L2 off
116	Disconnect P3-1 from ground.	L11, L12 off
117	Measure the voltage at P1-25.	0 VDC
118	Set S1 to ARM.	L2, L12 off

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## COMPONENT MAINTENANCE MANUAL

**Table 107:** Functional Test for all except 69-37313-105, -107, -300 thru -302, -402, -404, -406 thru -408  
(Continued)

STEP	PROCEDURE	REQUIRED RESULTS
119	Connect a jumper from P1-20 to ground. <sup>*[2]</sup>	L2, L12 on
120	Remove the jumper from P1-20. <sup>*[2]</sup>	L2, L12 off
121	Remove all connections from the UUT.	

\*[1] For 69-37313-123 thru -126, -425 thru -428 start timing. After 0.5 to 2.0 seconds, L12 will be illuminated.

\*[2] 69-37313-511 thru -528 only.

H. Perform functional test per TESTING AND FAULT ISOLATION, Table 108.

**Table 108:** Functional Test for 69-37313-105, -107, -300, -301, -302, -402, -404, -406 thru -408

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 28V dc.	Verify S7 will not latch ON when pressed ON
4	Set S3 to ON.	Verify S7 will latch ON when pressed
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 28V dc.	
11	Connect test lamp (L12) and test switch (S10) in series between P1-27 and 28V dc.	
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 <sup>*[1]</sup> .	L3, L12 on
15	Connect P1-18 to 28V dc.	L3, L12 off
16	Set S3 to OFF.	
17	Disconnect P1-18 from 28V dc	
18	Check that S1 is OFF.	
19	Measure ohms between: P1-21 and P1-25	Continuity
20	Connect 115V ac between P1-8 (hi) and P1-10 (com).	
21	Measure ohms between: P1-9 and P1-25	Continuity

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**Table 108:** Functional Test for 69-37313-105, -107, -300, -301, -302, -402, -404, -406 thru -408 (Continued)

STEP	PROCEDURE	REQUIRED RESULTS
	P1-21 and P1-25	No Continuity
22	Disconnect 115V ac from P1-8 and P1-10.	
23	Connect P1-4 to 28V dc.	
24	Measure voltage between:	
	P1-17 and ground	28V dc
	P1-30 and ground	0V dc
25	Set S2 to DOWN (hold).	
26	Set S1, to ARM.	
27	Measure voltage between:	
	P1-17 and ground	0V dc
	P1-30 and ground	28V dc
28	Release S2 to OFF.	
29	Measure voltage between:	
	P1-17 and ground	0V dc
	P1-30 and ground	28V dc
30	Set S1 to OFF.	
29	Measure voltage between:	
	P1-17 and ground	28V dc
	P1-30 and ground	0V dc
32	Disconnect P1-7 from ground.	
33	Connect P1-22 and P2-41 to 28V dc.	
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 <sup>*[1]</sup> .	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 <sup>*[1]</sup>	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 28V dc.	

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## COMPONENT MAINTENANCE MANUAL

**Table 108:** Functional Test for 69-37313-105, -107, -300, -301, -302, -402, -404, -406 thru -408 (Continued)

STEP	PROCEDURE	REQUIRED RESULTS
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.
51	Connect oscilloscope trigger 1 to P2-20 and trigger 2 to P1-27. Connect P2-20 to ground and measure the time required for the voltage at P2-20 to fall below 10 ± 1 volts and the voltage at P1-27 to fall below 10 ± 1 volts. <sup>*(2)</sup>	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 <sup>*(1)</sup>	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 substituting S1 to ARM position and then substituting S4 to STBY RUD position (instead of S3 to STBY RUD).	
61	Disconnect P1-20 from ground.	
62	Connect P2-8 to ground <sup>*(1)</sup> .	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 <sup>*(1)</sup> .	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.	

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## COMPONENT MAINTENANCE MANUAL

**Table 108:** Functional Test for 69-37313-105, -107, -300, -301, -302, -402, -404, -406 thru -408 (Continued)

STEP	PROCEDURE	REQUIRED RESULTS
74	Set S4 to STBY RUD <sup>*[1]</sup> .	L5, L12 on
75	Set S4 to OFF.	L5, L12 off
76	Disconnect P1-7 from ground.	
77	Connect P2-19 to ground <sup>*[1]</sup> .	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
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 28V dc.	L8, L12 off
91	Connect P2-29 to 28V dc.	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 28V dc	L9, L12 off
102	Connect P2-29 to 28V dc	L9, L12 remain off
103	Connect P2-1 (P1-38) to ground.	

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## COMPONENT MAINTENANCE MANUAL

**Table 108:** Functional Test for 69-37313-105, -107, -300, -301, -302, -402, -404, -406 thru -408 (Continued)

STEP	PROCEDURE	REQUIRED RESULTS
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 28V dc.	L10, L12 off
113	Connect P2-29 to 28V dc.	L10, L12 remain off
114	Connect P1-28 (P2-31) to ground.	
115	Repeat test steps 105 thru 114 except use pin in parenthesis.	
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 28V dc.	L10, L12 off
121	Connect P2-29 to 28V dc.	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 <sup>*[1]</sup> .	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.	
	69-37313-105, -107, -402, -404 (Step 131)	
<b>NOTE:</b> Step 131 shall be accomplished with lightplate removed.		
131	Measure ohms between:	

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## COMPONENT MAINTENANCE MANUAL

**Table 108:** Functional Test for 69-37313-105, -107, -300, -301, -302, -402, -404, -406 thru -408 (Continued)

STEP	PROCEDURE	REQUIRED RESULTS
	P1-1 and L7 rim P1-2 and L7 center P1-1 and P1-2	Continuity Continuity No Continuity
	69-37313-300, -301, -302, -406 thru -408 (Steps 132 and 133)	
<b>NOTE:</b> Lightplate is present for steps 132 and 133.		
132	Connect P1-1 to GND.	Lightplate is illuminated
133	Apply 5VDC to P1-2.	
134	Deleted	
<b>NOTE:</b> Steps 135 thru 157 apply to the 69-37313-402, -404, -406 thru -408.		
135	Ensure all 28 VDC power is off and connect a jumper wire from P2-52 to P2-53.	
136	All UUT switches should be in the OFF position.	
137	Apply 28 VDC to P2-18, P1-11, P1-13, P1-22 and through test switch S10 and test lamp L12 in series to pin P1-27.	
138	Connect ground to P2-16, P1-37, P2-37.	
139	Set S3 to STBY RUD <sup>*[1]</sup> .	
140	Measure the voltage at P1-25.	
141	Set S3 to OFF.	
142	Measure the voltage at P1-25.	
142A	Momentarily press S10, release	
143	Set S4 to STBY RUD <sup>*[1]</sup> .	
144	Measure the voltage at P1-25.	
145	Set S4 to OFF.	
146	Measure the voltage at P1-25.	
146A	Momentarily press S10, release	
147	Remove 28 VDC at each point of application in step 137.	
148	Remove the jumper from P2-52 to P2-53.	
149	Connect a jumper from P1-52 to P1-53.	
150	Apply 28 VDC to P2-18, P1-11, P1-13, P1-22 and through test switch S10 and test lamp L12 in series to pin P1-27.	

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## COMPONENT MAINTENANCE MANUAL

**Table 108:** Functional Test for 69-37313-105, -107, -300, -301, -302, -402, -404, -406 thru -408 (Continued)

STEP	PROCEDURE	REQUIRED RESULTS
151	Set S3 and S4 to ON.	L11, L12 off
152	Measure the voltage at P1-25.	0 VDC
153	Connect P1-40 to ground <sup>*[1]</sup> .	L11, L12 on
154	Measure the voltage at P1-25.	28 VDC
155	Disconnect P1-40 from ground.	L11, L12 off <sup>*[3]</sup>
156	Measure the voltage at P1-25.	0 VDC
156A	Momentarily press S10, release	
157	Remove all connections from the UUT.	

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

\*[2] Start timing, test lamp (L12) is turned on after within 175 to 285 msec for 69-37313-105, -107, -402, -404 or within 20 to 50 msec for 69-37313-300, -301,-302, -406 thru -408.

\*[3] Momentary press and release S10 if L12 stays on.

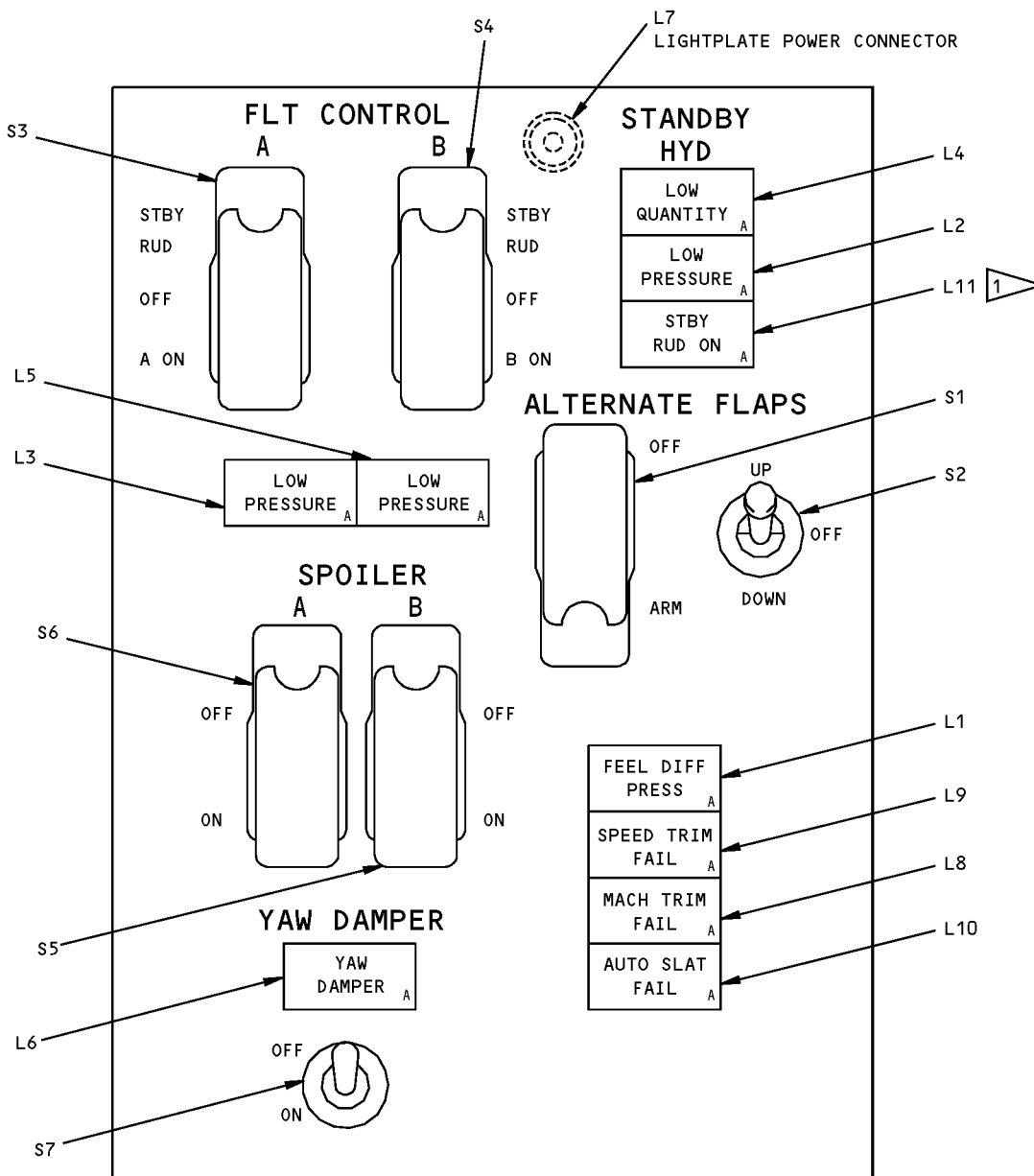
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69-37313-105,-107,-301,-302,-402,-404,-407,-408

1 69-37313-402,-404,-407,-408

Front Panel Component Locations  
Figure 101 (Sheet 1 of 5)

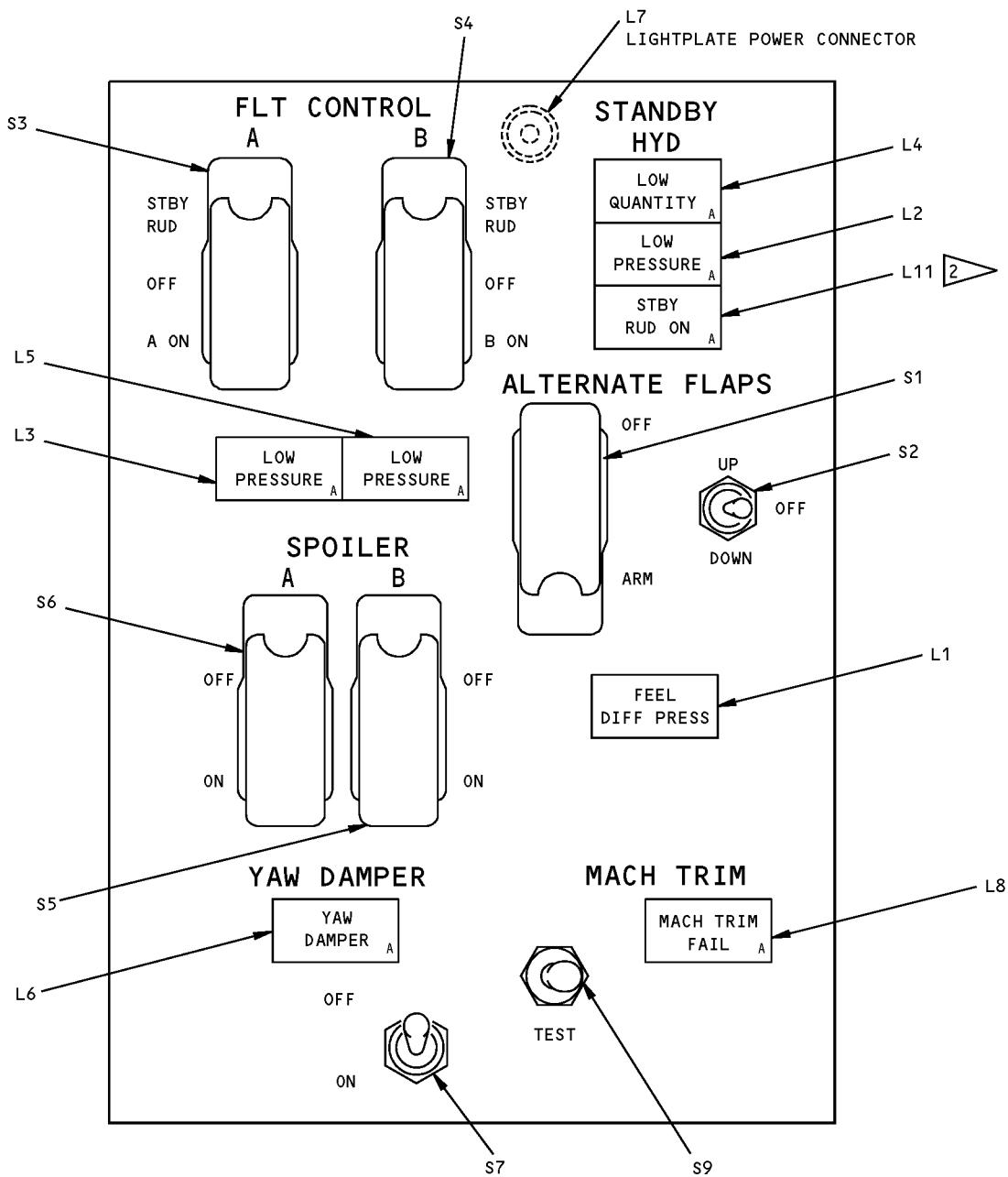
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69-37313-109,-111,-114,-115,-116,-119,-121,-123,-125,-411,-413,-416,-417,-418,-421,-423,-425,-427,-511,-513,-516,-517,-518,-521,-523,-525,-527

2 69-37313-411,-413,-416,-417,-418,-421,-423,-425,-427,-511,-513,-516,-517,-518,-521,-523,-525,-527

Front Panel Component Locations  
Figure 101 (Sheet 2 of 5)

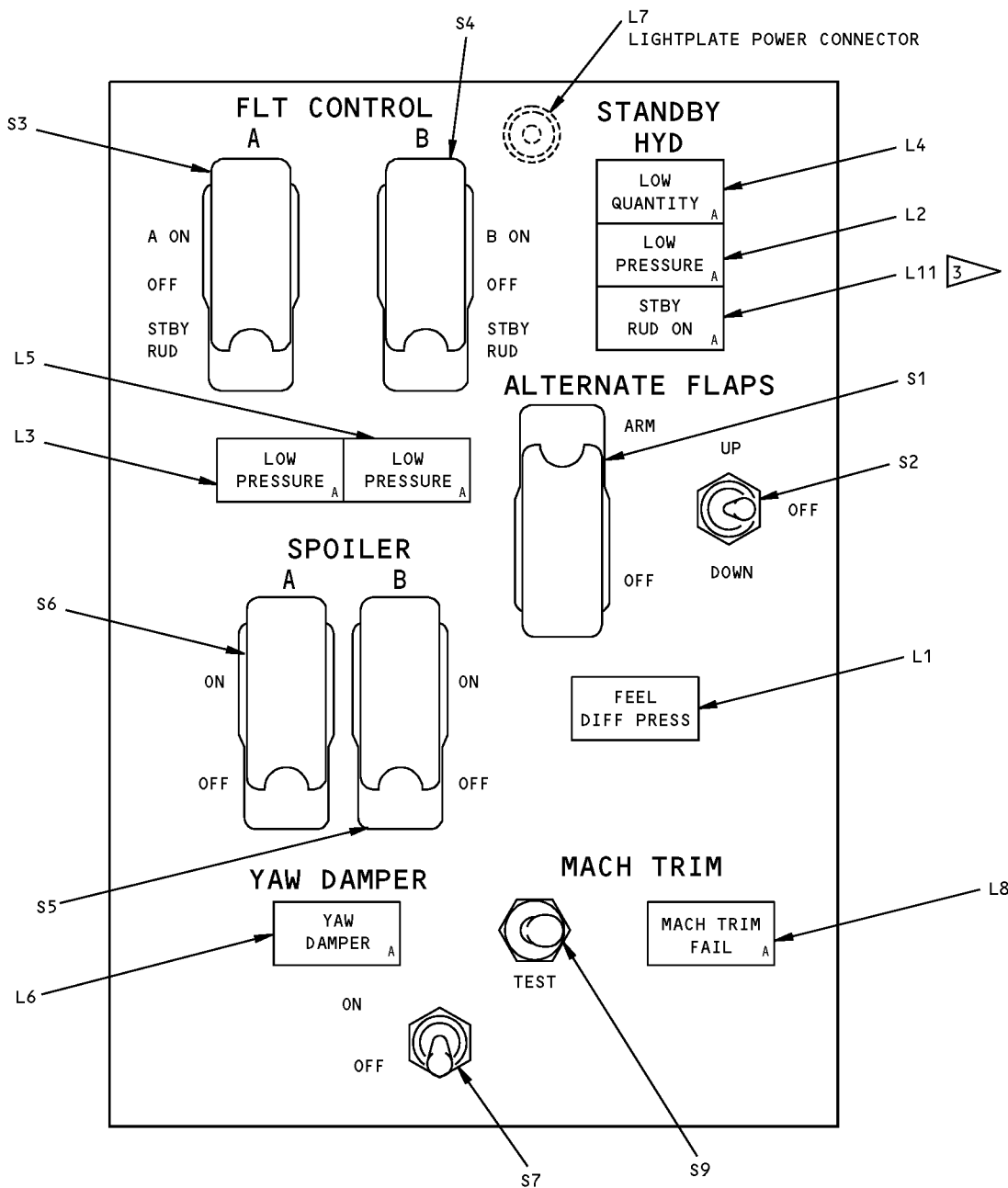
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69-37313-110,-112,-113,-122,-124,-126,-412,-414,-415,-424,-426,-428,-512,-514,-515,-524,-526,-528

3 69-37313-412,-414,-415,-424,-426,-428,-512,-514,-515,-524,-526,-528

Front Panel Component Locations  
Figure 101 (Sheet 3 of 5)

**31-37-04**

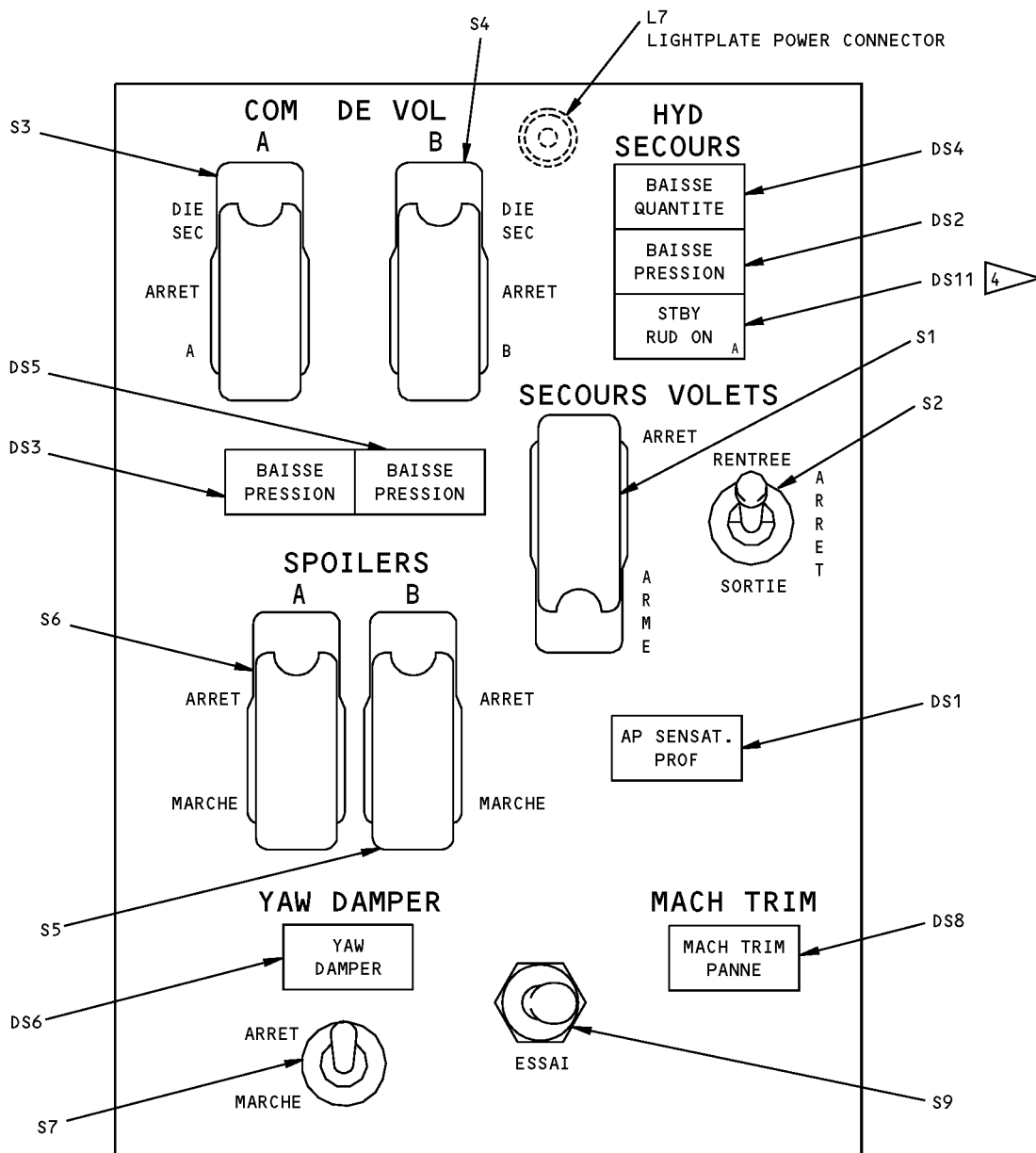
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69-37313-117,-120,-419,-422,-519,-522

4 69-37313-419,-422,-519,-522

Front Panel Component Locations  
Figure 101 (Sheet 4 of 5)

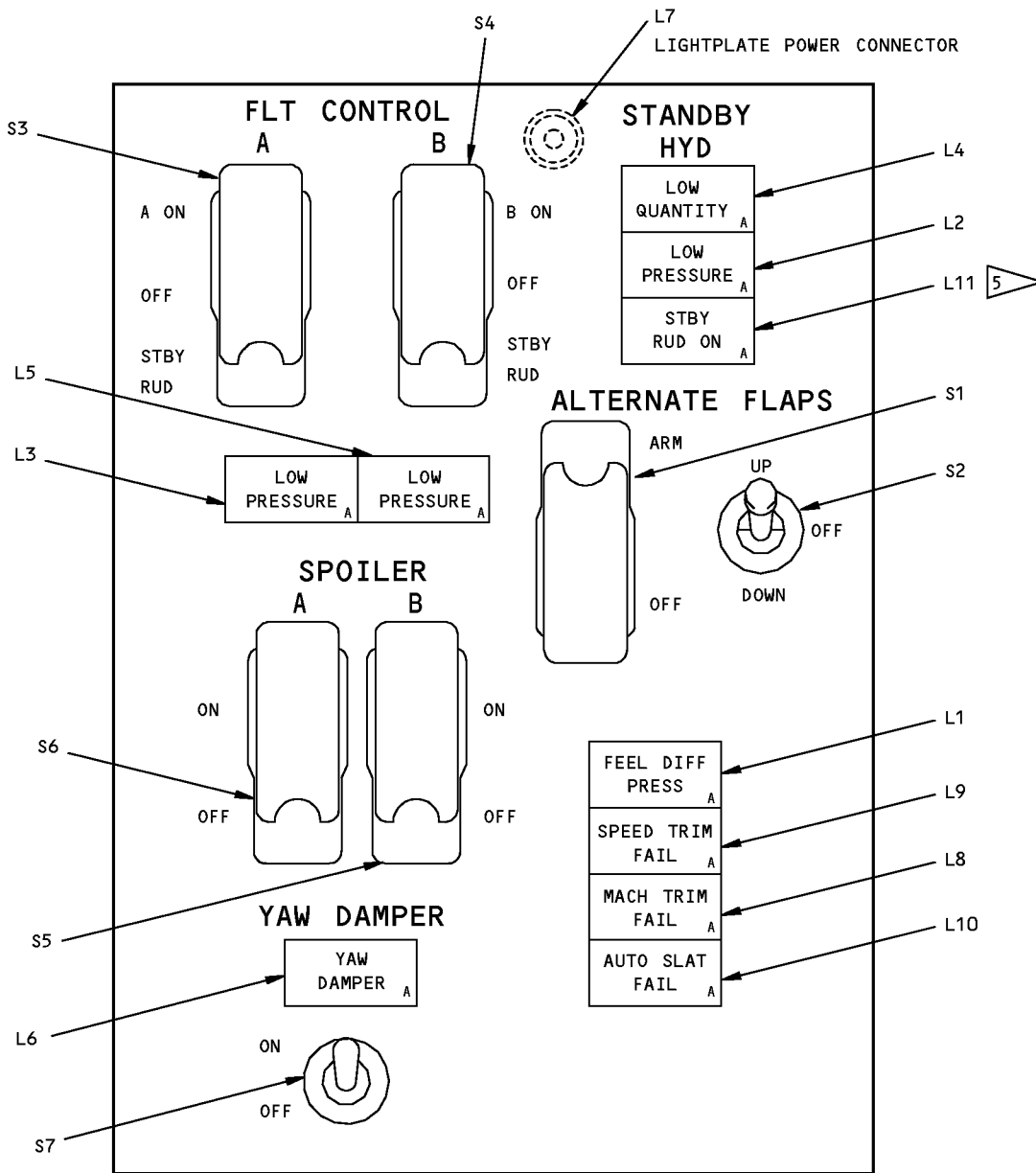
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69-37313-300,-406

5 69-37313-406

G48093 S0004996546\_V2

Front Panel Component Locations  
Figure 101 (Sheet 5 of 5)

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## COMPONENT MAINTENANCE MANUAL

### 3. Trouble Shooting

- A. 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 assemblies 69-37313-117, -419 and -519 only, lamp designators L1 thru L6 and L8 have been replaced with DS1 thru DS6 and DS8.

**Table 109:**

TROUBLE	POSSIBLE CAUSE AND CORRECTION
TESTING AND FAULT ISOLATION, Table 102, TESTING AND FAULT ISOLATION, Table 103, TESTING AND FAULT ISOLATION, Table 104, TESTING AND FAULT ISOLATION, Table 105, TESTING AND FAULT ISOLATION, Table 106	Listed switch. At some tests, relay contacts are involved. Check schematic diagram before replacing switch.
TESTING AND FAULT ISOLATION, Table 107, TESTING AND FAULT ISOLATION, Table 108: Step 1, 2 Steps 3-5 Step 7 Step 9 Steps 10, 11 Steps 12, 13 Steps 20 and on Steps 39 thru 44, lamp fault	CR1 S7 S7 S3, S4 S3, S7 S4 If fault occurs, continue through test, recording steps that fail. Replace module lamp.
Module lamp illuminates, but L12 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 69-37325-123 thru -126, -425 thru -428, -525 thru -528 If fault involves L4, A2 may be defective.
L12 will not reset	A1 defective
L12 will not illuminate when S11 actuated	A1 defective
Module lamp and L12 fail to illuminate	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 69-37313-123 thru -126, -425 thru -428, -525 thru -528 If L4 is involved, A2 may be defective
L12 illuminates, but module lamp fails	Replace module lamp.
Step 26	S7
Steps 27, 28	K2

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<b>TROUBLE</b>	<b>POSSIBLE CAUSE AND CORRECTION</b>
Steps 31, 38	S1, S2, or K3. If step 31 works, S2 or K3.
Steps 139 thru 146	S3, S4, K21, L11 (DS11)
Steps 151 thru 156	S3, S4, K1

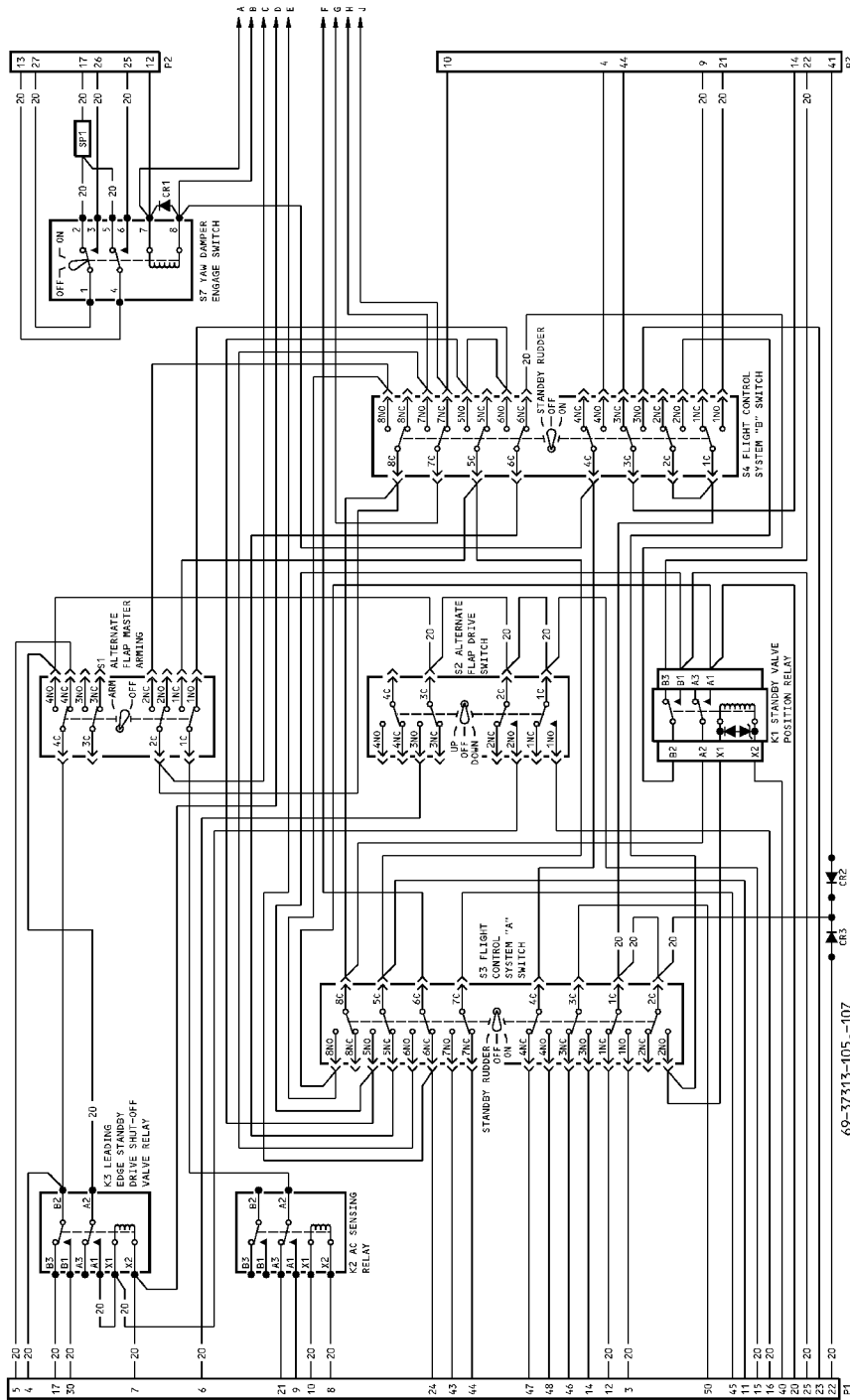
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69-37313-105, -107

Schematic Diagram  
Figure 102 (Sheet 1 of 3)

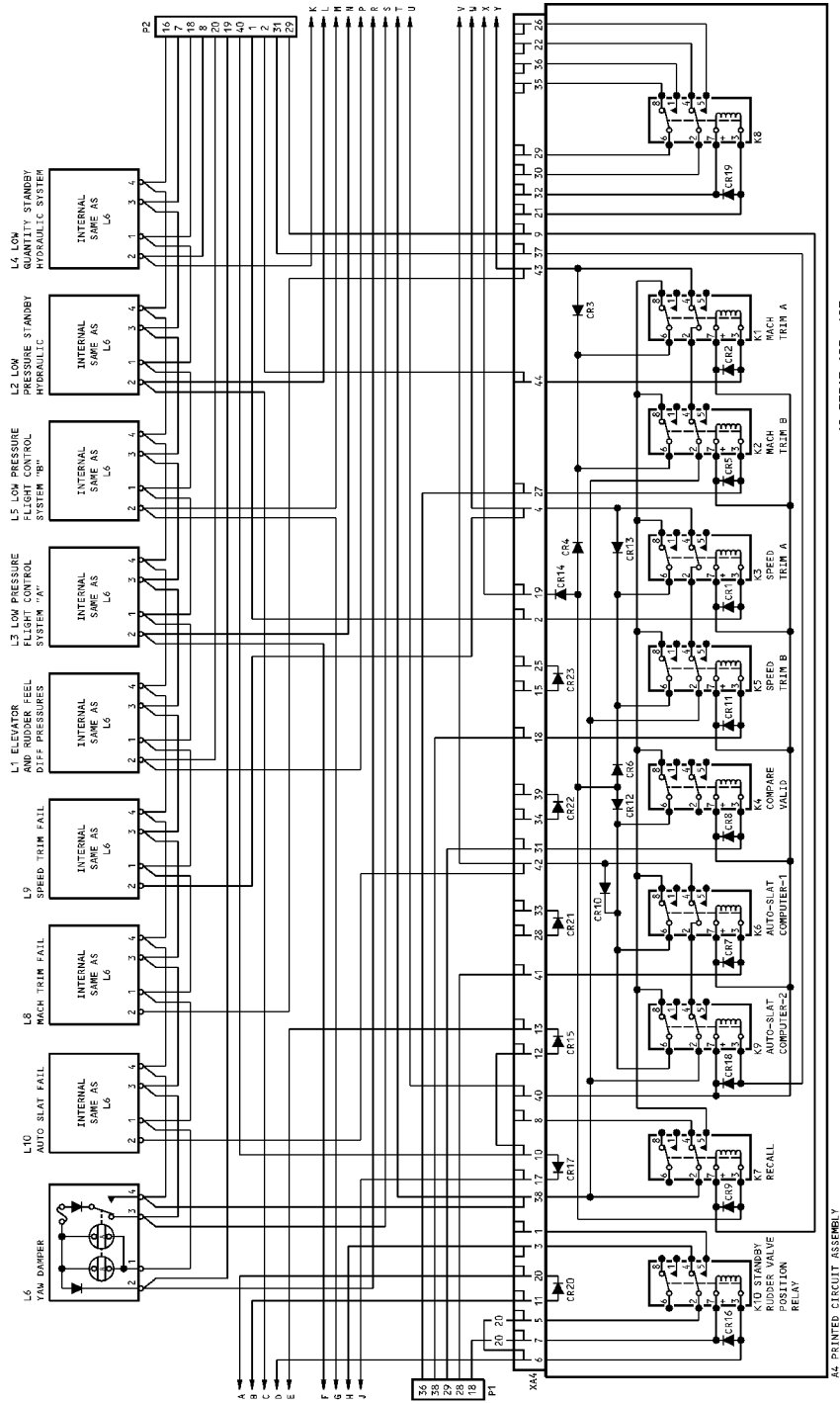
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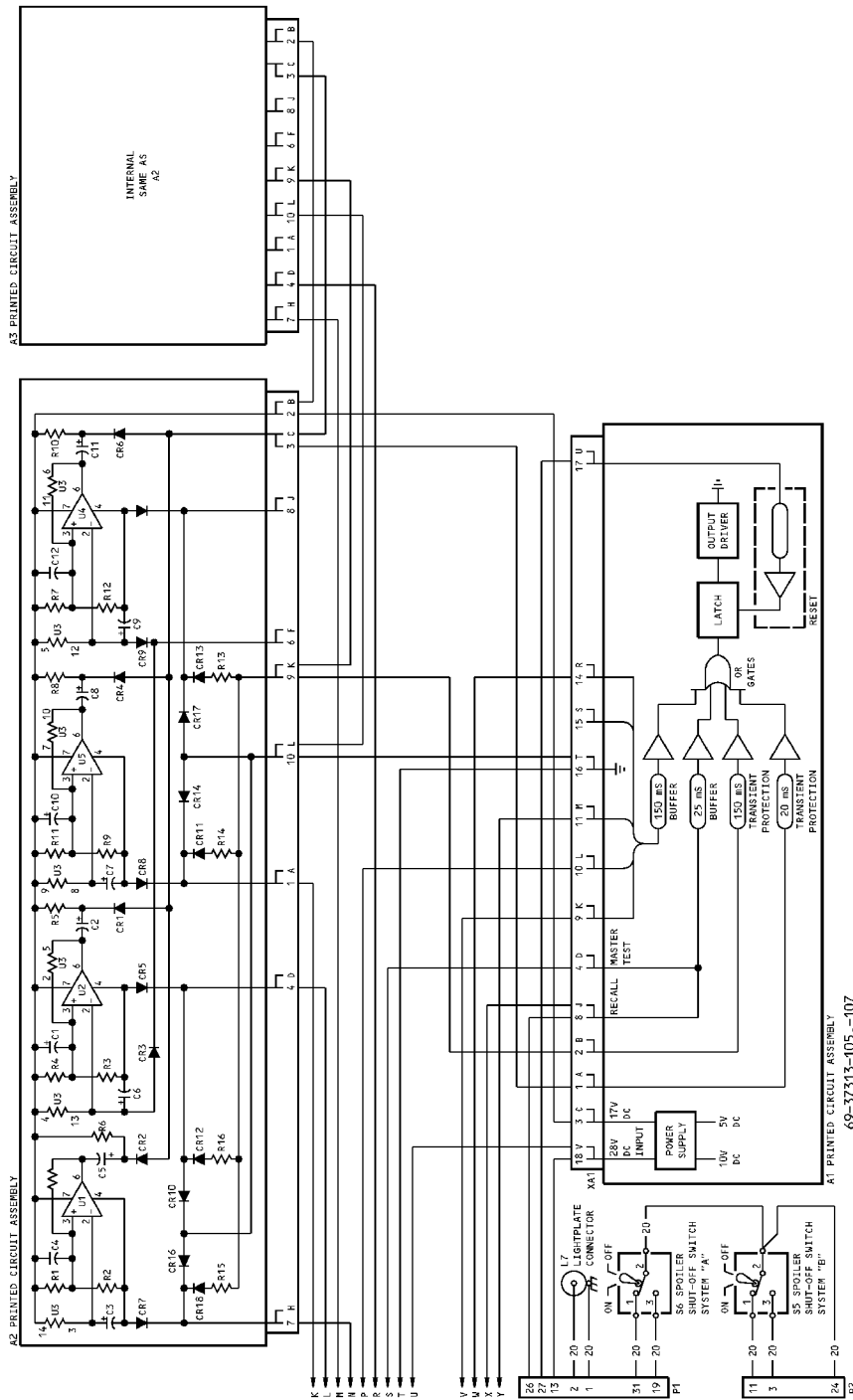
COMPONENT MAINTENANCE MANUAL



69-37313-105,-107

Schematic Diagram  
Figure 102 (Sheet 2 of 3)

# COMPONENT MAINTENANCE MANUAL



Schematic Diagram  
Figure 102 (Sheet 3 of 3)

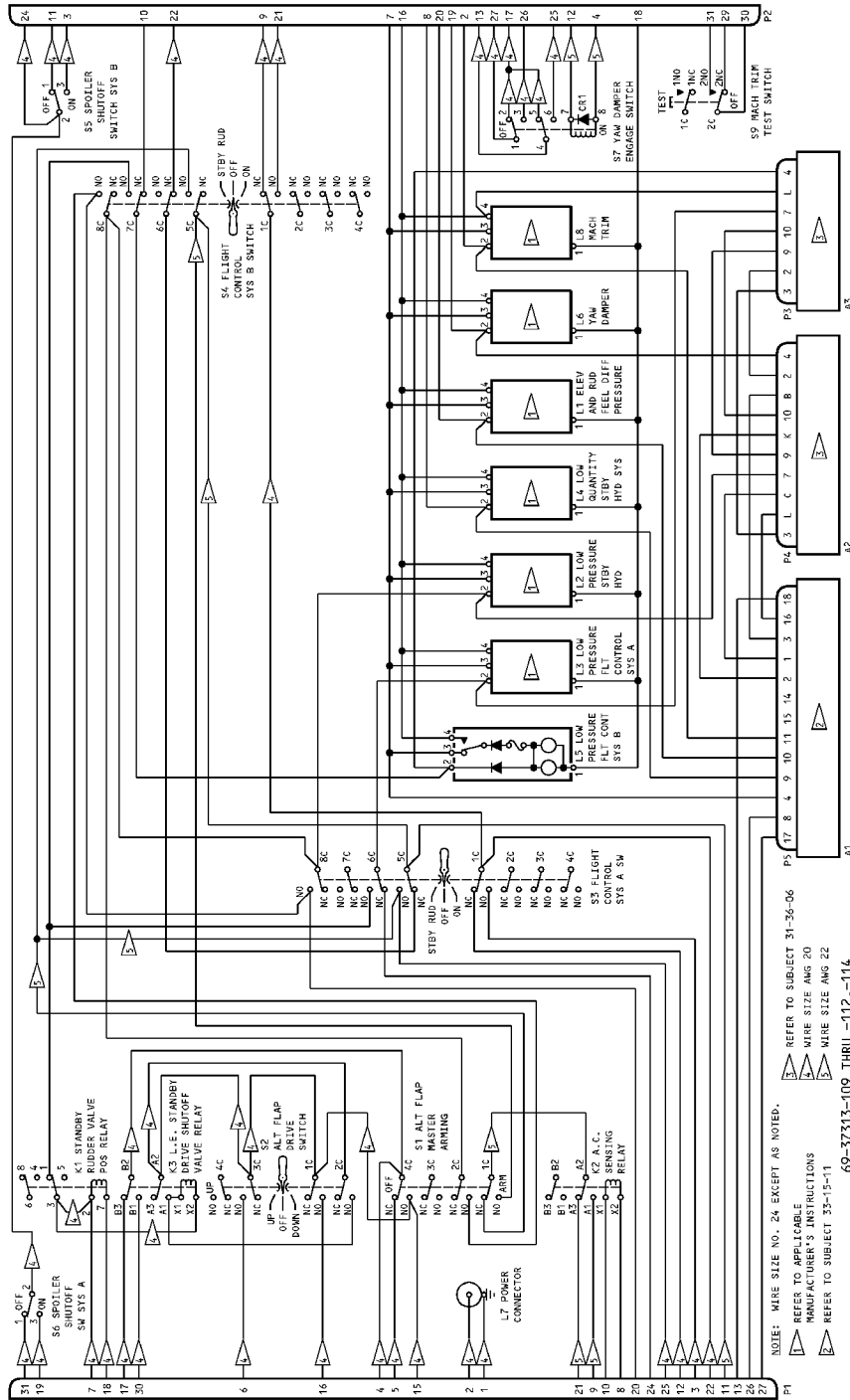
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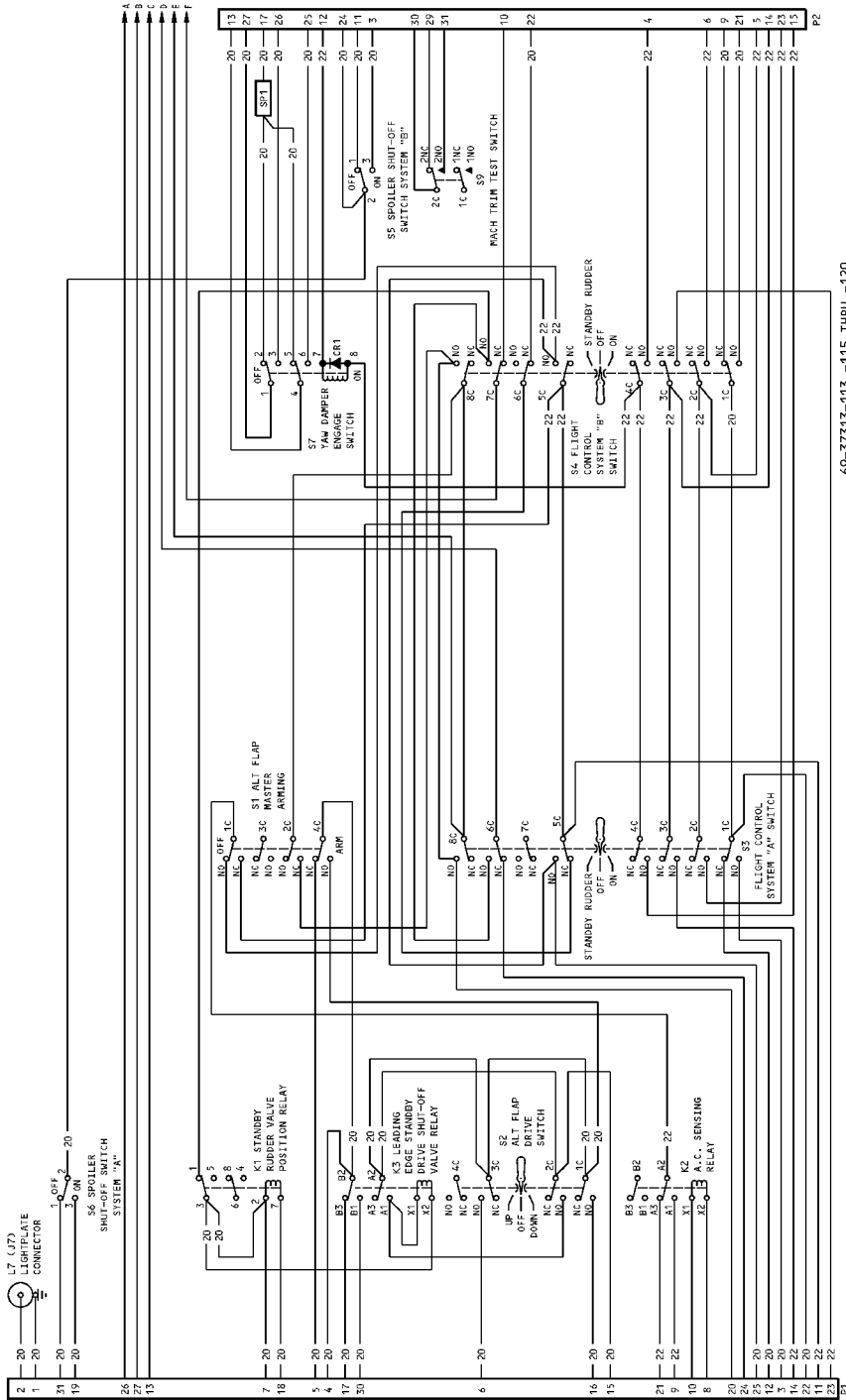


Schematic Diagram  
Figure 103

NOTE: WIRE SIZE NO. 24 EXCEPT AS NOTED.  
 REFERS TO APPLICABLE MANUFACTURER'S INSTRUCTIONS  
 REFERS TO SUBJECT 35-15-11  
 REFERS TO SUBJECT 31-25-06  
 WIRE SIZE ANG 20  
 WIRE SIZE ANG 22  
 69-37313-109 THRU -112, -114



# COMPONENT MAINTENANCE MANUAL



69-37313-113, -115 THRU -120

Schematic Diagram  
Figure 104 (Sheet 1 of 2)

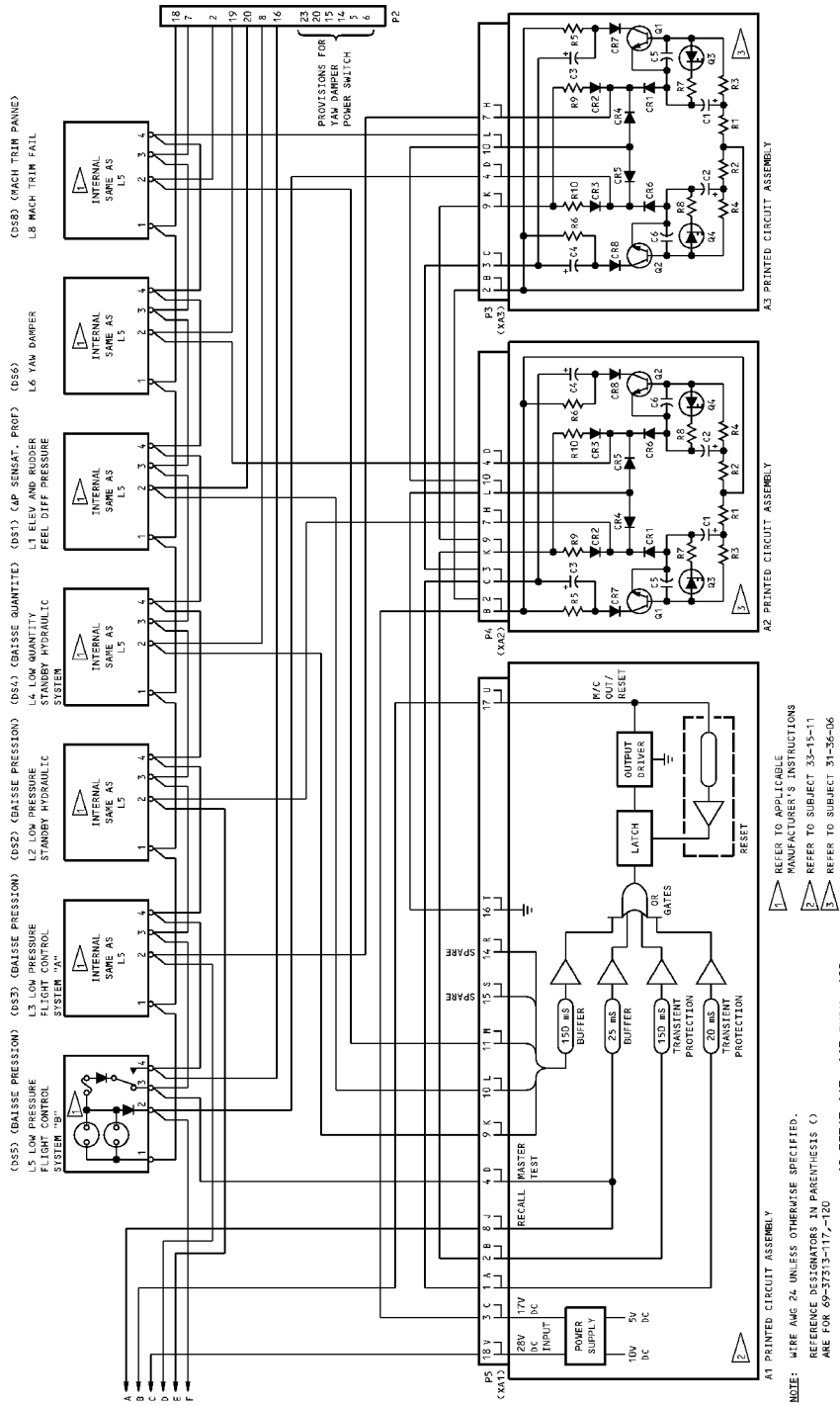
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# COMPONENT MAINTENANCE MANUAL



Schematic Diagram  
Figure 104 (Sheet 2 of 2)

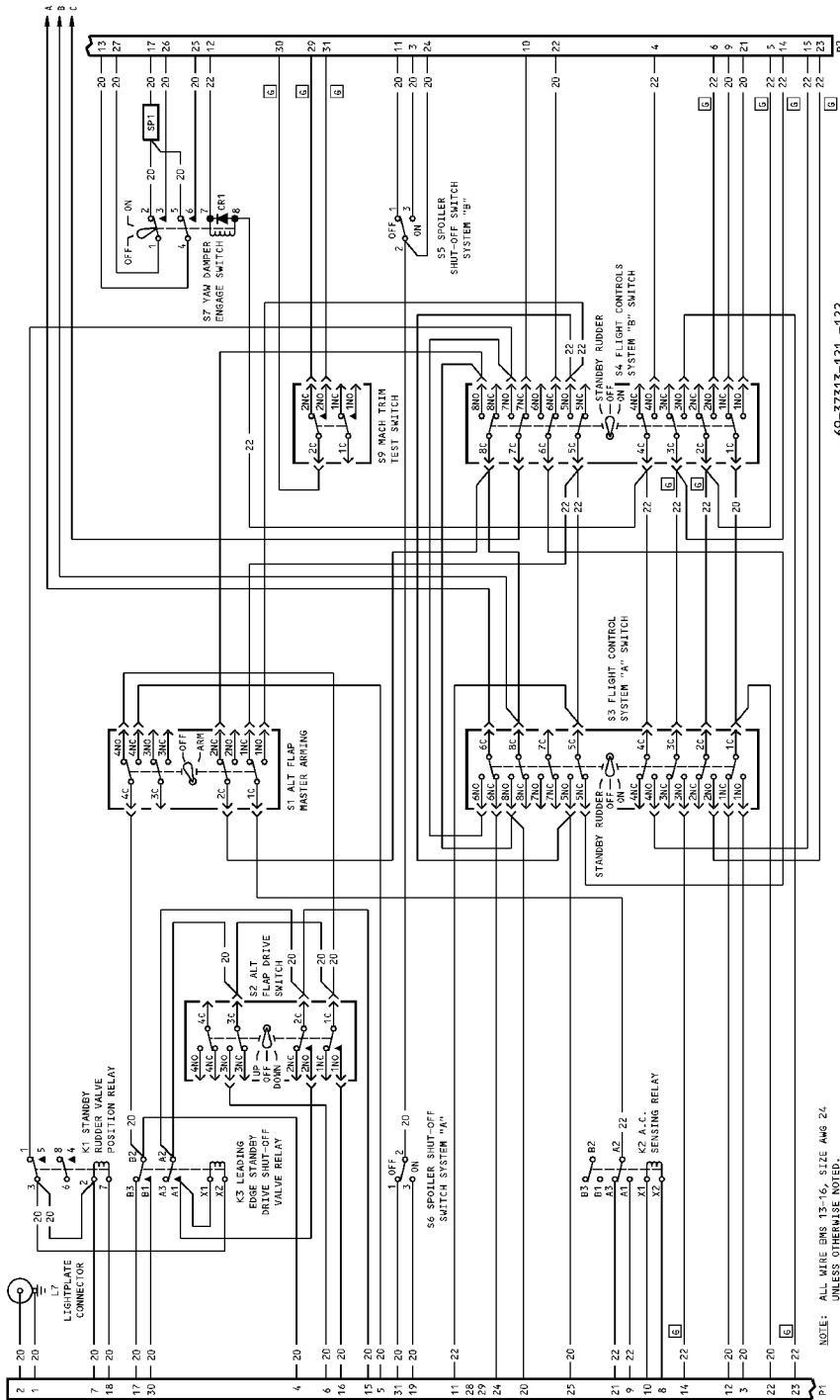
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# COMPONENT MAINTENANCE MANUAL



Schematic Diagram  
Figure 105 (Sheet 1 of 2)

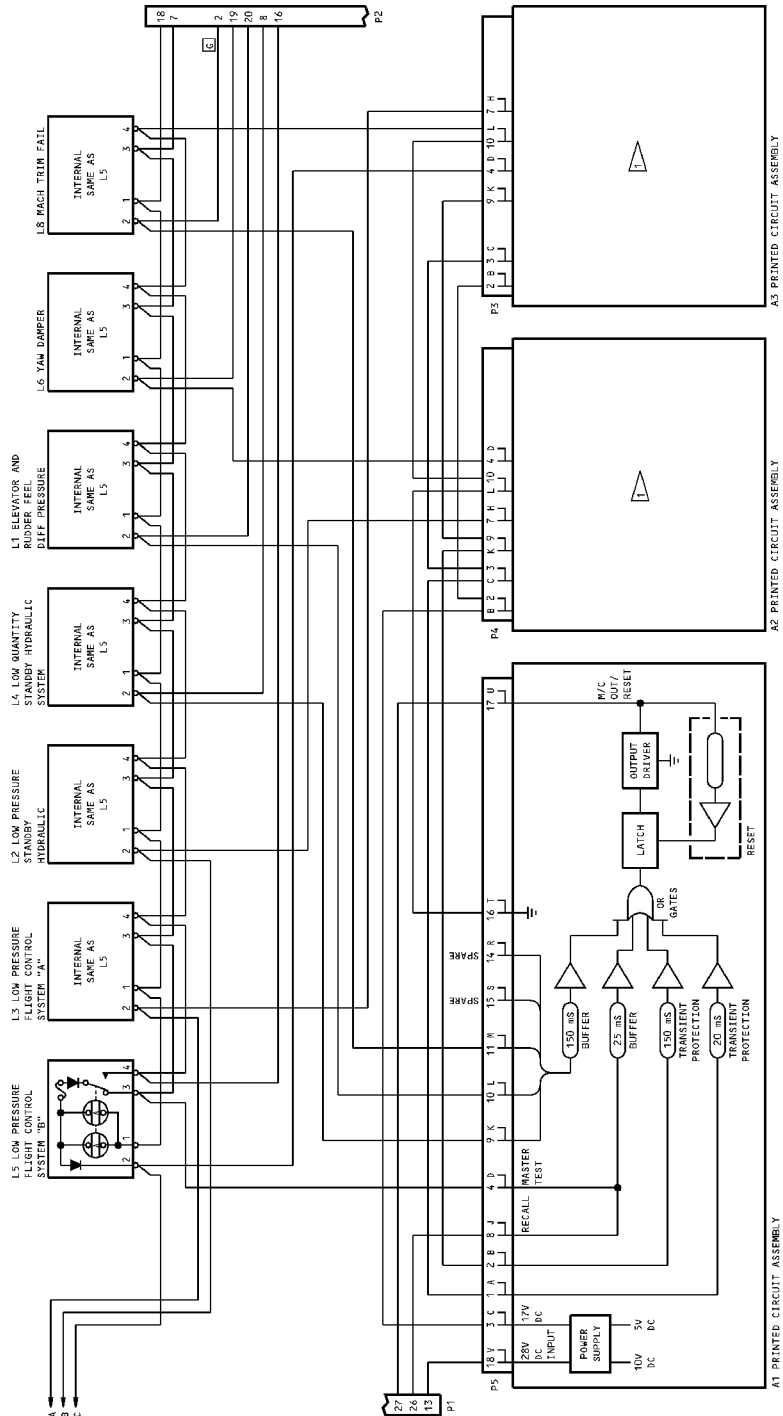
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Schematic Diagram  
Figure 105 (Sheet 2 of 2)

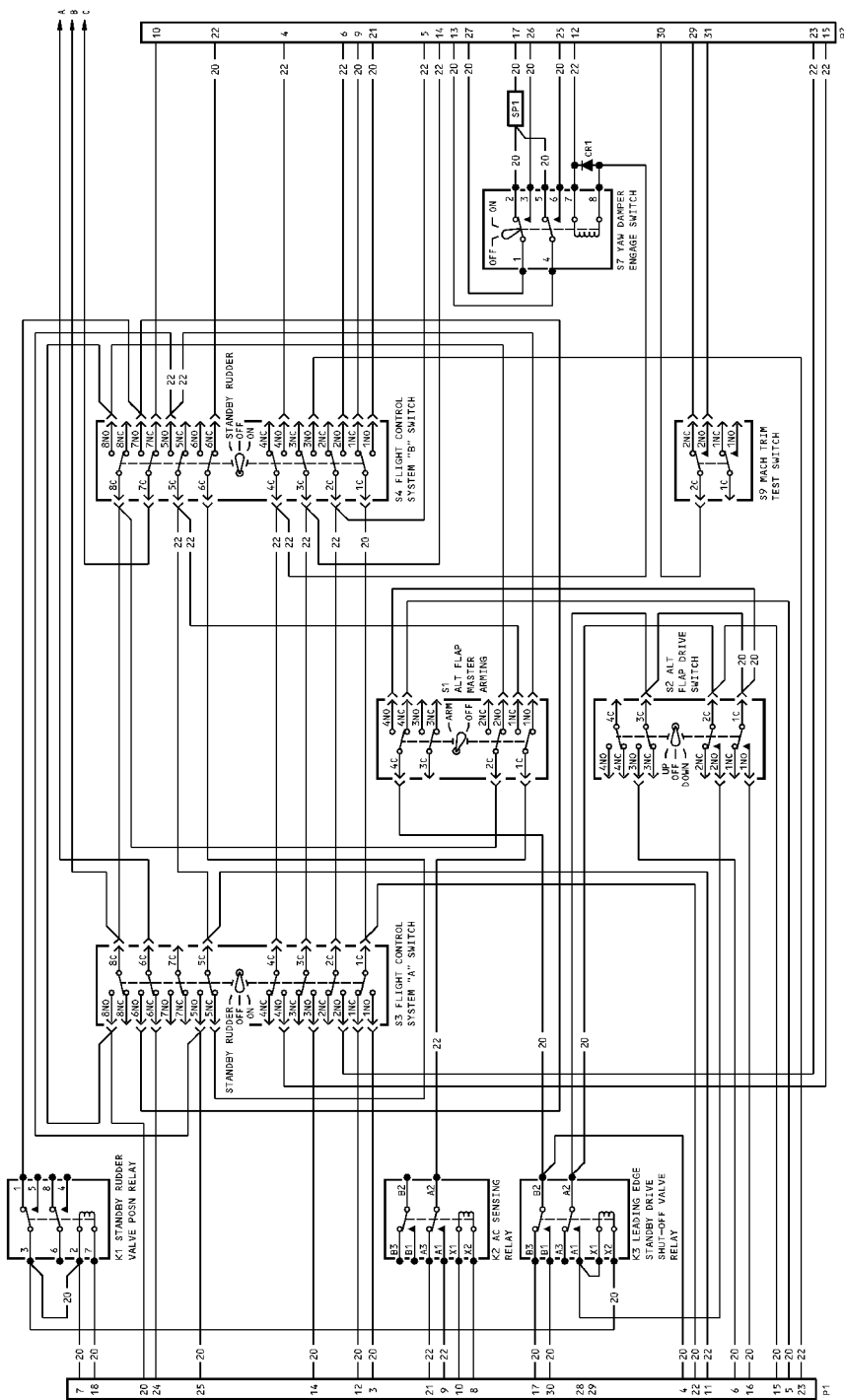
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# COMPONENT MAINTENANCE MANUAL



69-37313-123,-124 Schematic Diagram  
Figure 106 (Sheet 1 of 2)

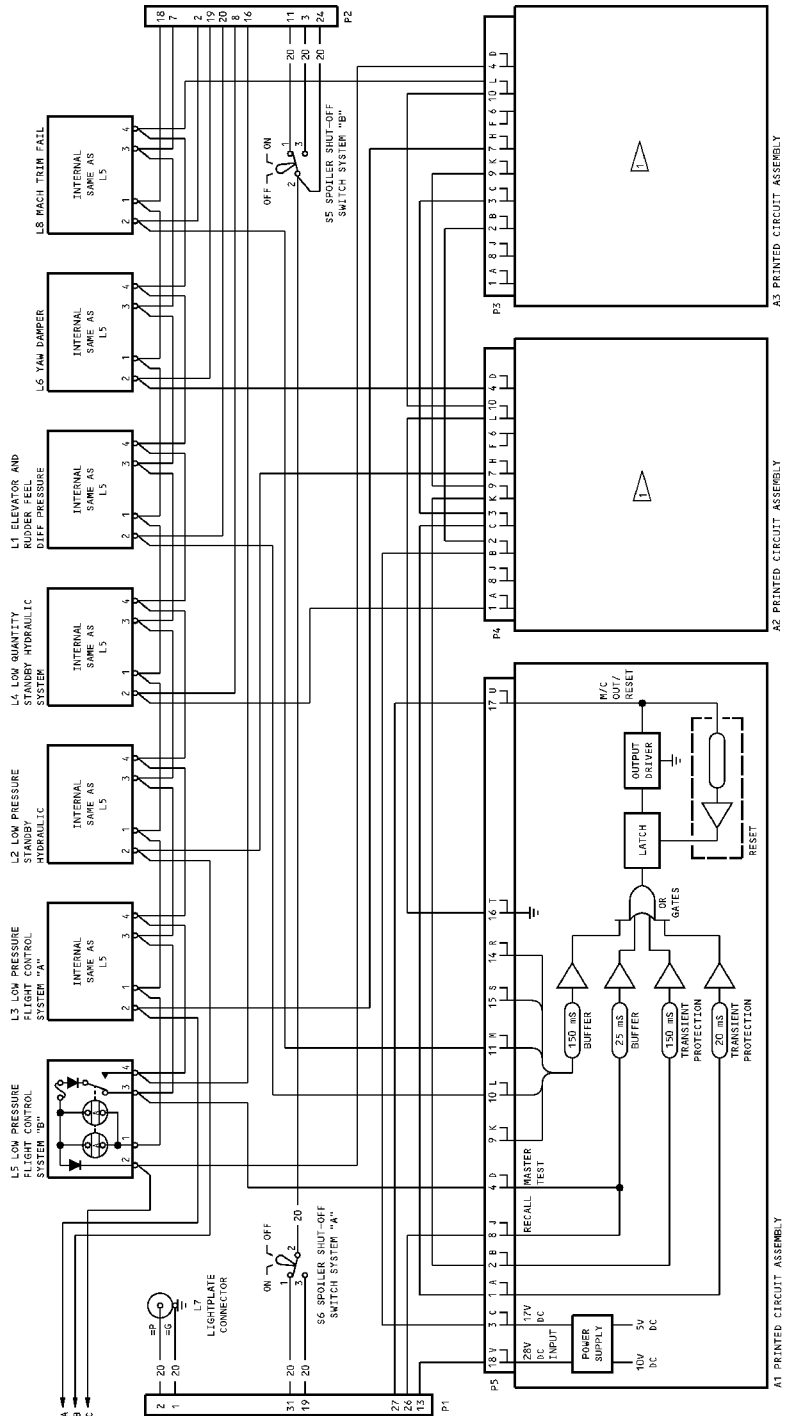
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69-37313-123,-124 Schematic Diagram  
Figure 106 (Sheet 2 of 2)

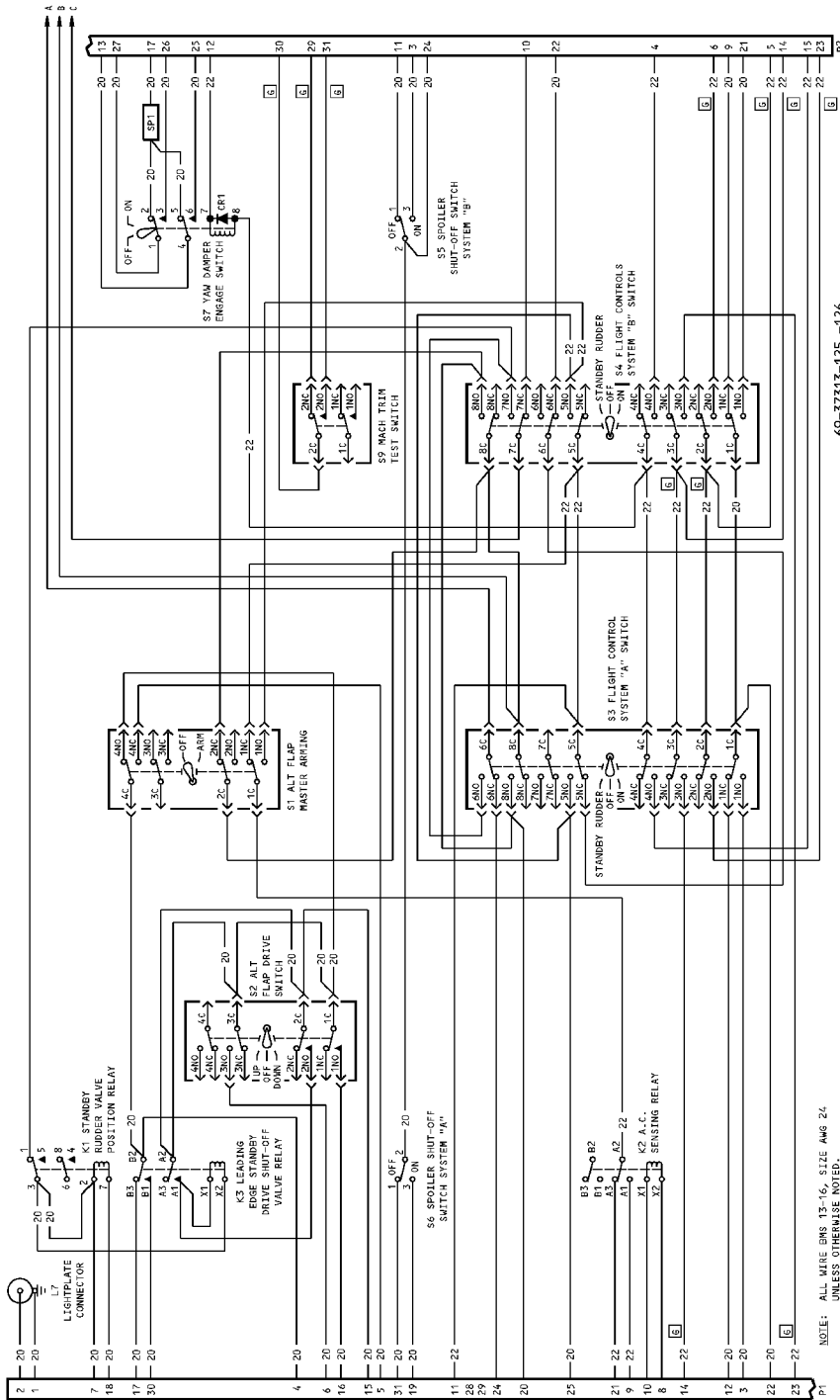
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69-37313-125,-126

NOTE: ALL WIRE GNS 12-16 SIZE AWG 24 UNLESS OTHERWISE NOTED.

Schematic Diagram  
Figure 107 (Sheet 1 of 2)

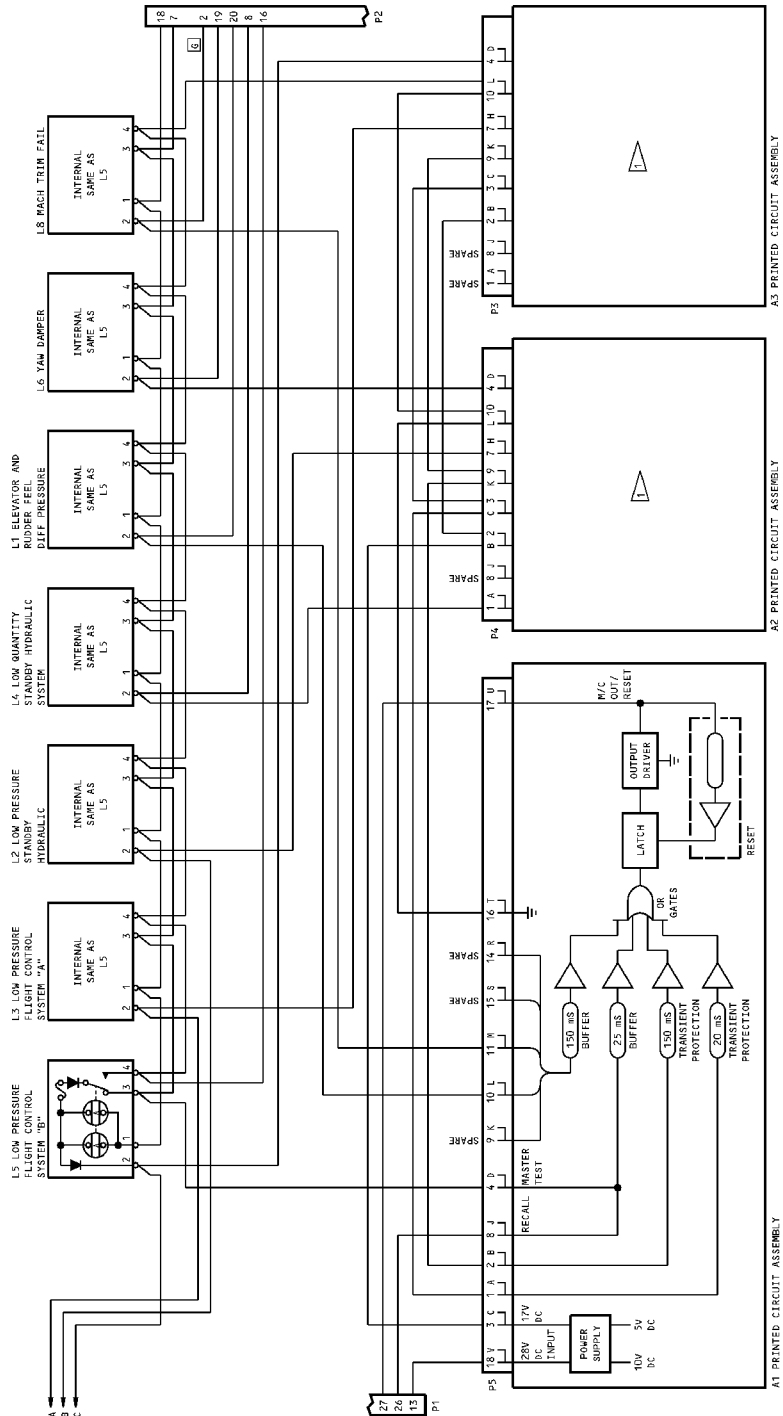
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Schematic Diagram  
Figure 107 (Sheet 2 of 2)

NOTE: ALL USES DIM 17, 16, SIZE ANG 24 UNLESS OTHERWISE NOTED.  
REFER TO SUBJECT 31-56-06

69-37313-125,-126

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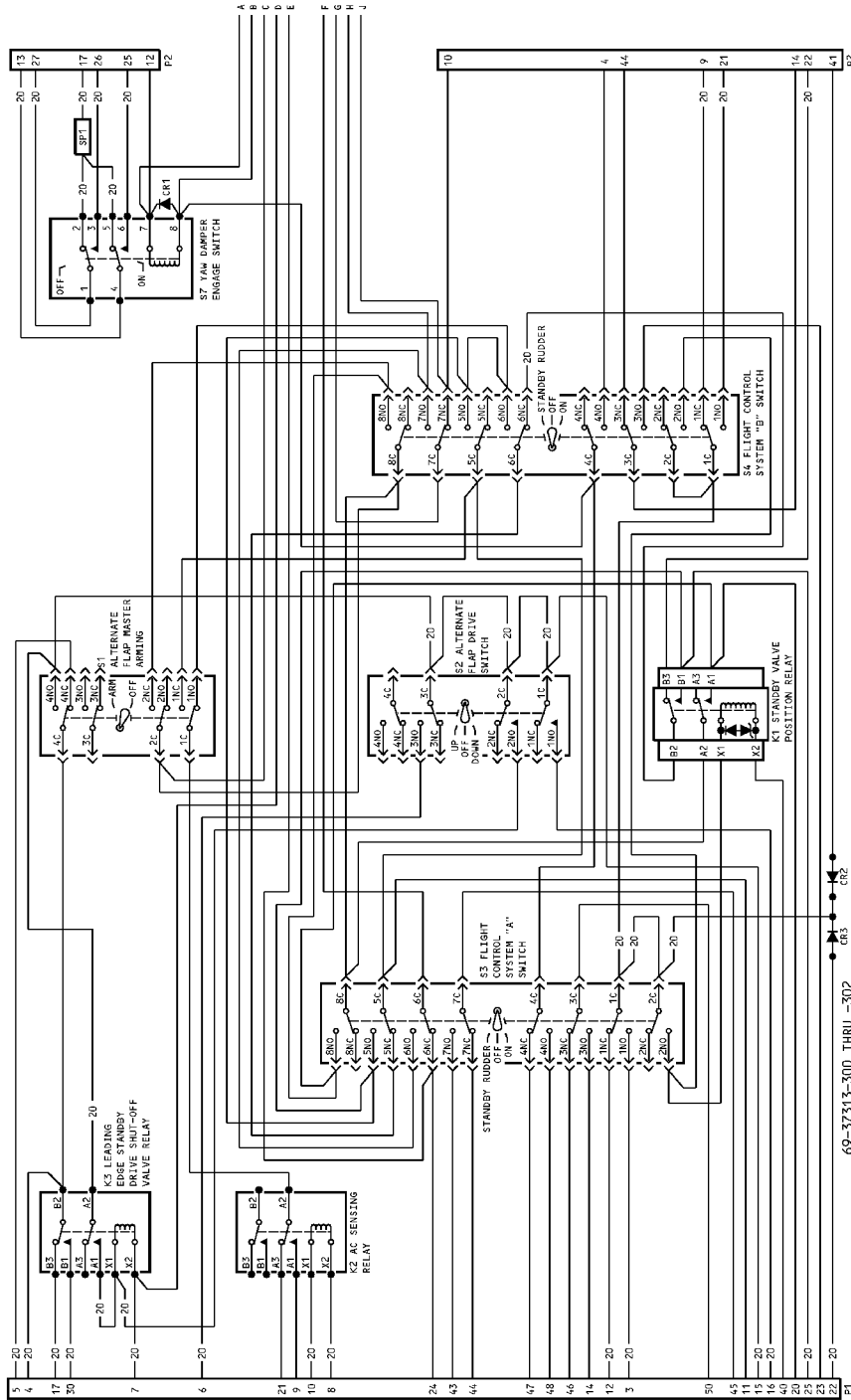
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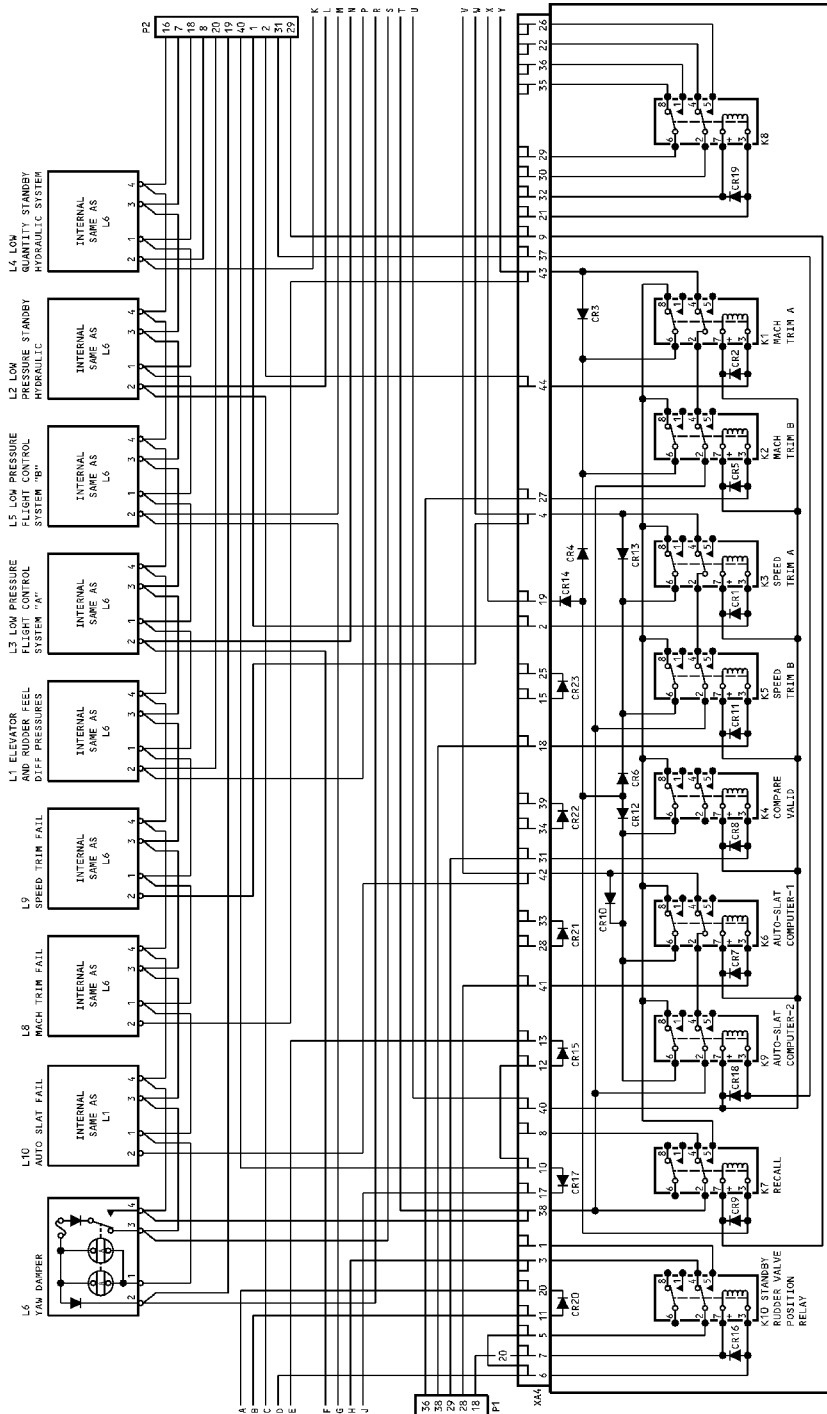


# COMPONENT MAINTENANCE MANUAL



Schematic Diagram  
Figure 108 (Sheet 1 of 3)

# COMPONENT MAINTENANCE MANUAL



69-37313-300 THRU -302  
A4-PRINTED CIRCUIT ASSEMBLY

Schematic Diagram  
Figure 108 (Sheet 2 of 3)

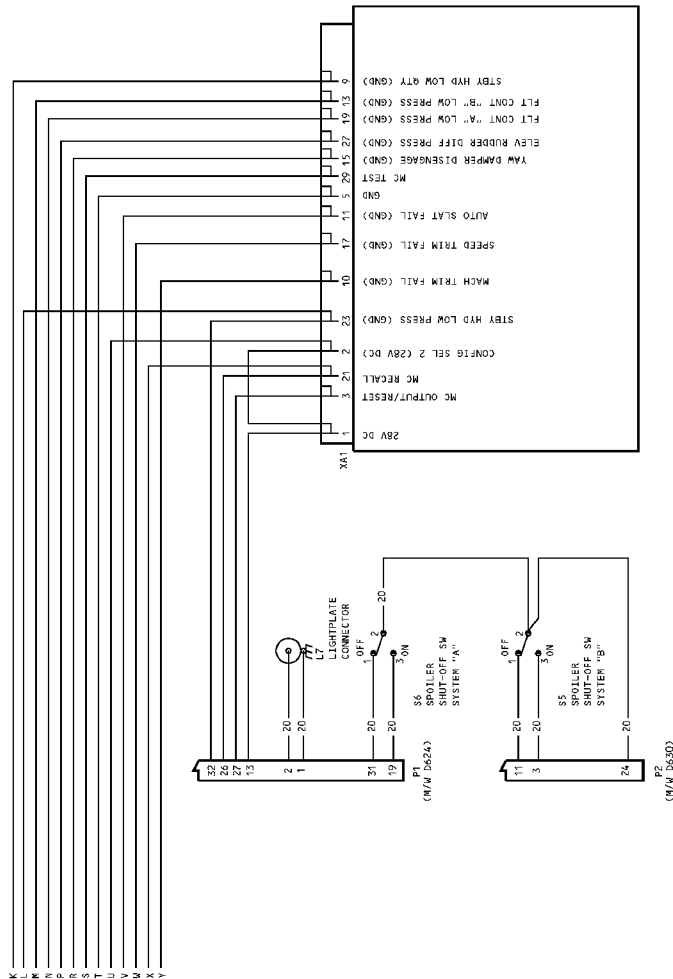
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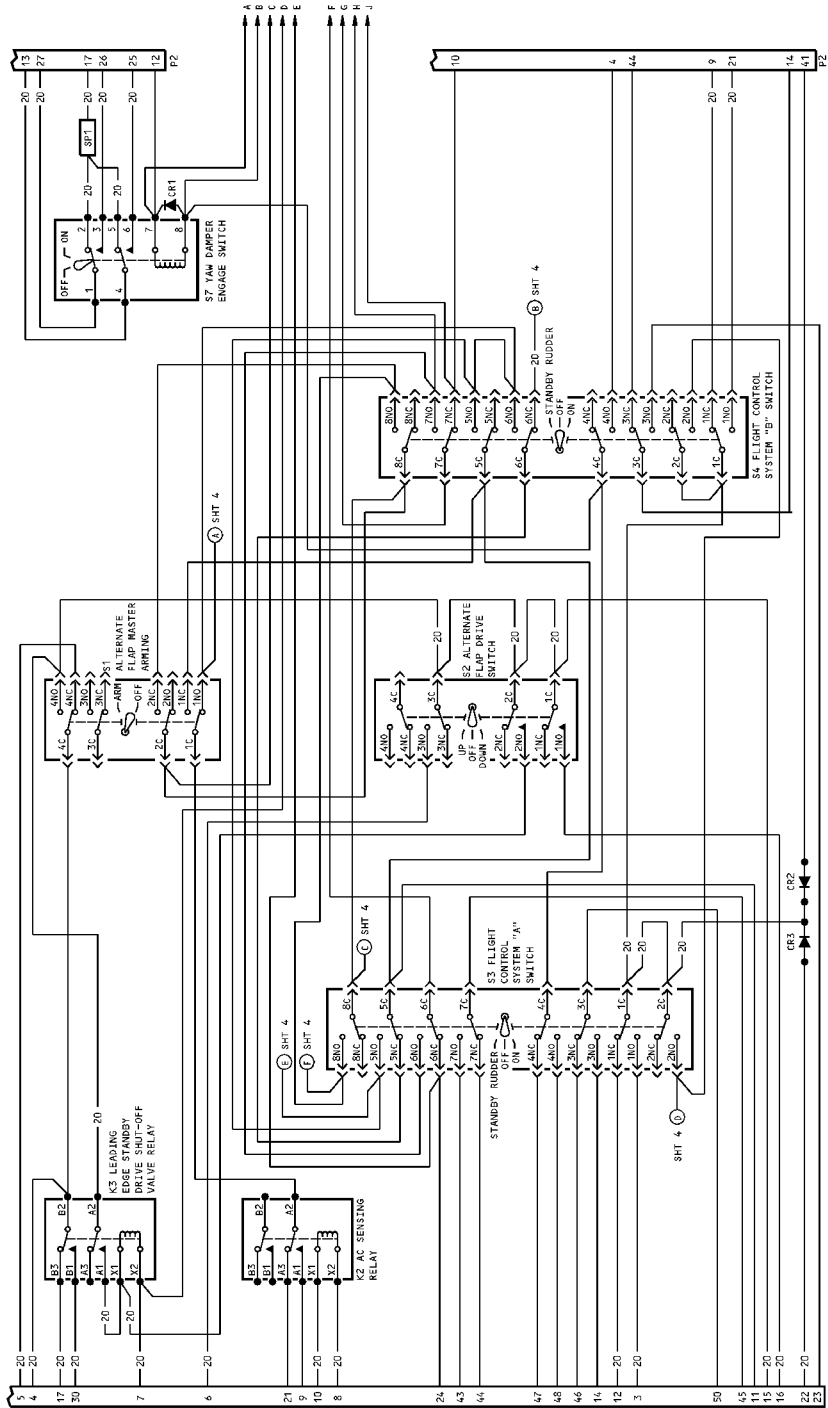
COMPONENT MAINTENANCE MANUAL



69-37313-300 THRU -302

Schematic Diagram  
Figure 108 (Sheet 3 of 3)

# COMPONENT MAINTENANCE MANUAL



69-37313-402,-404 Schematic Diagram  
Figure 109 (Sheet 1 of 4)

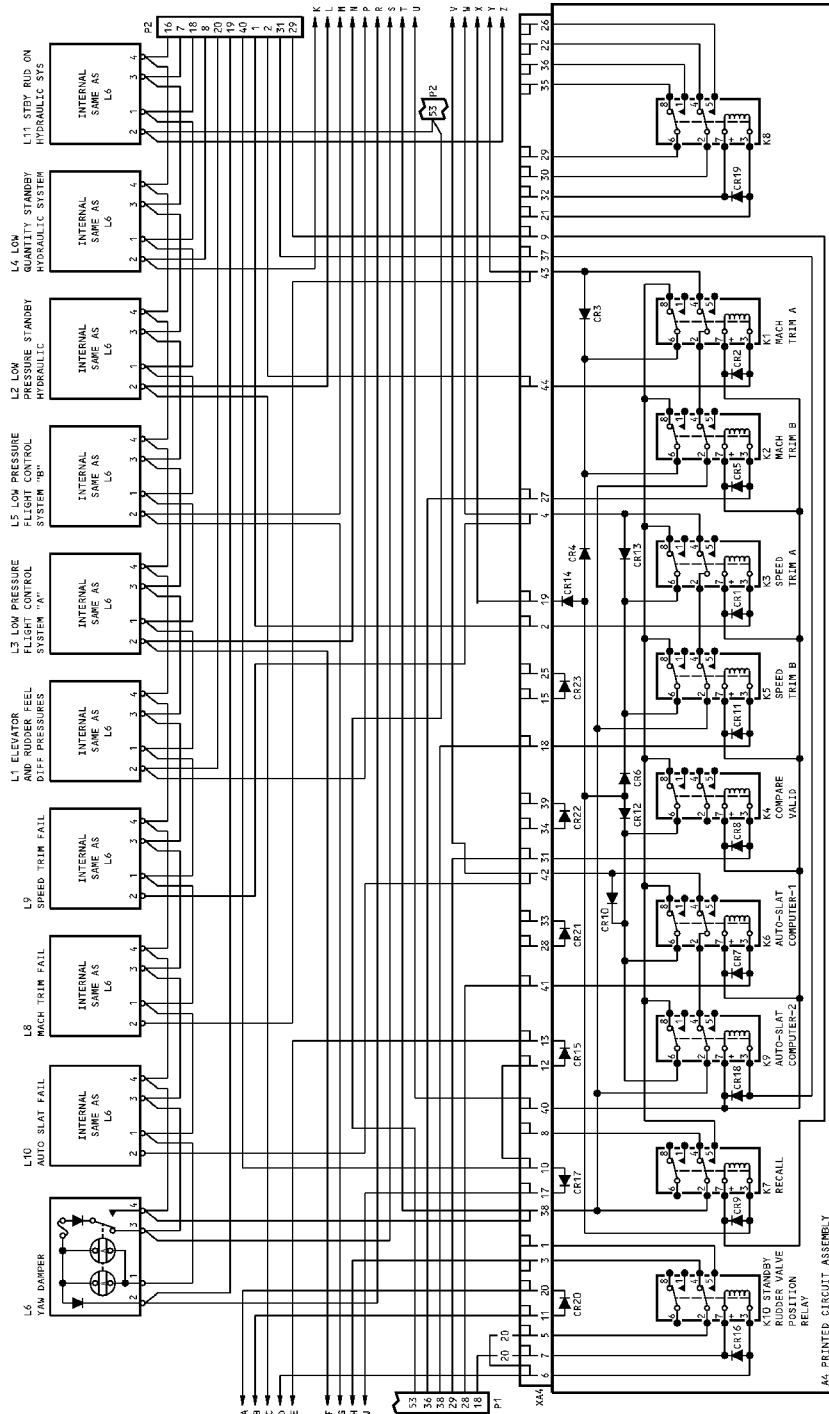
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69-37313-402,-404 Schematic Diagram  
Figure 109 (Sheet 2 of 4)

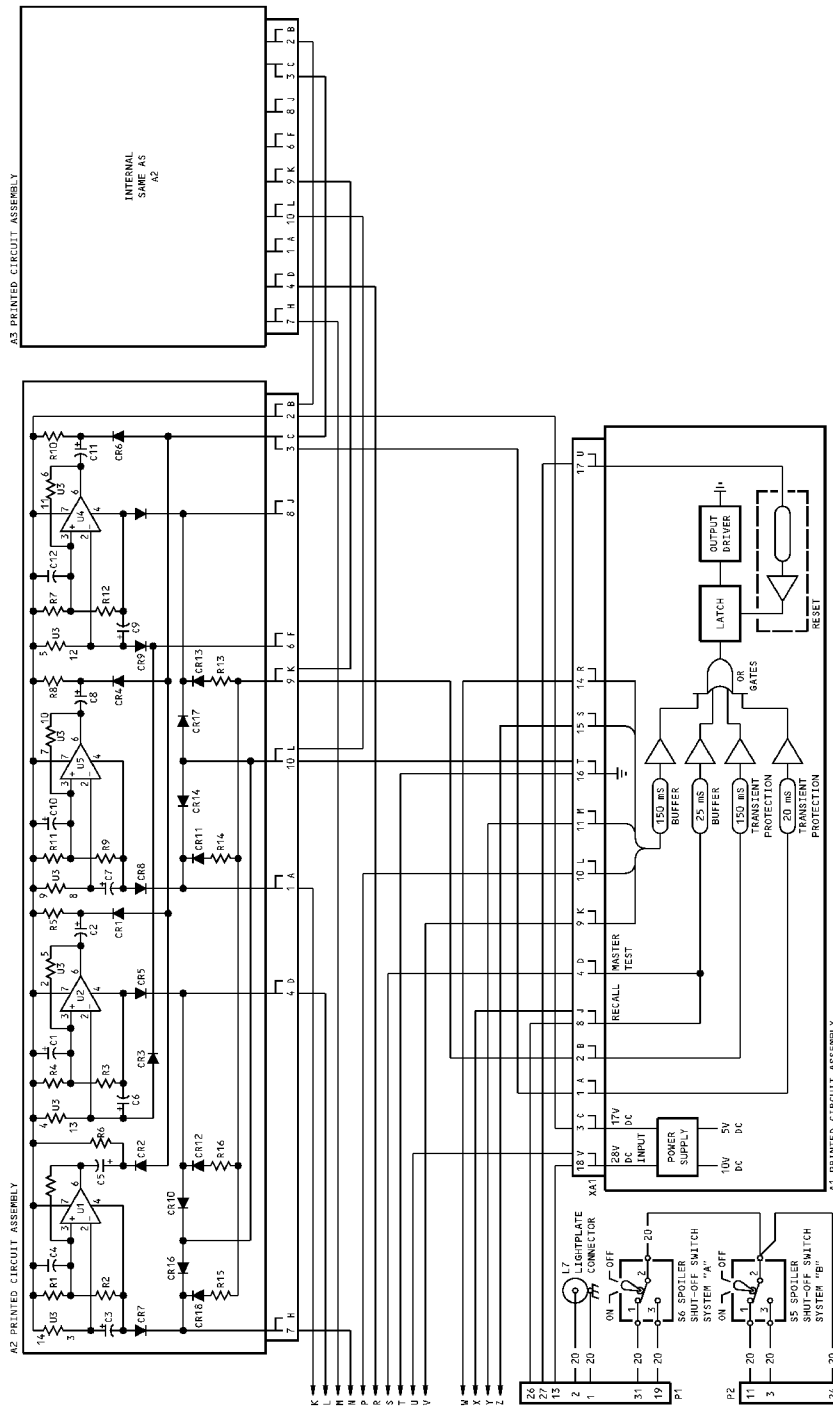
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69-37313-402,-404 Schematic Diagram  
Figure 109 (Sheet 3 of 4)

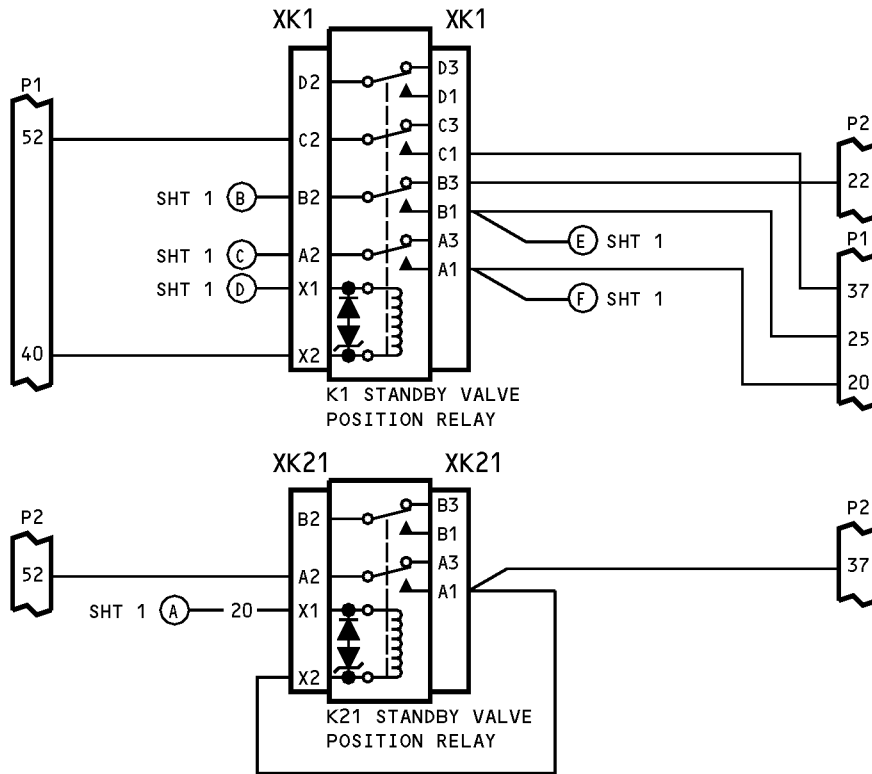
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69-37313-402,-404 Schematic Diagram  
 Figure 109 (Sheet 4 of 4)

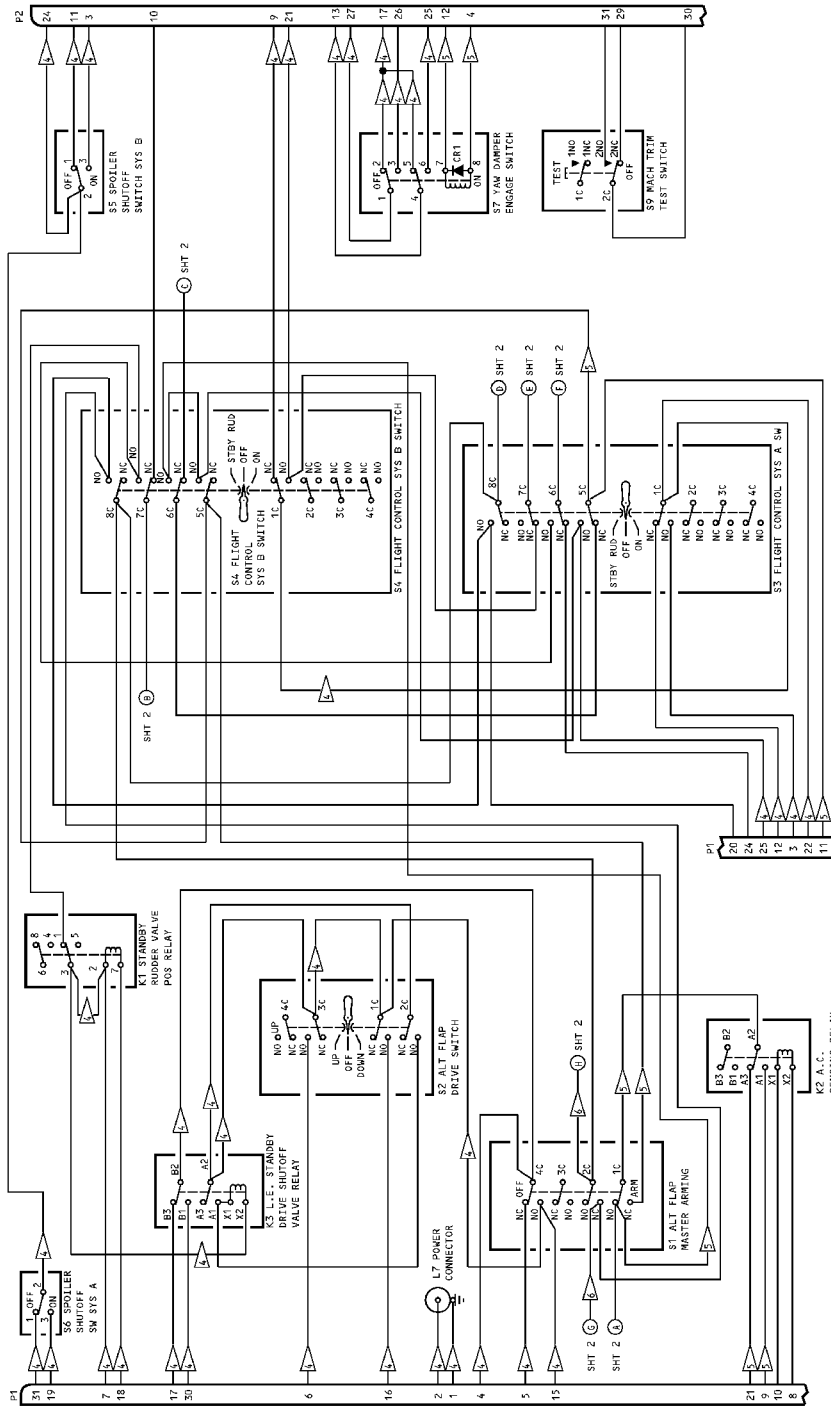
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69-37313-411 thru -414,-416,-511 thru -514,-516 Schematic Diagram  
Figure 110 (Sheet 1 of 2)

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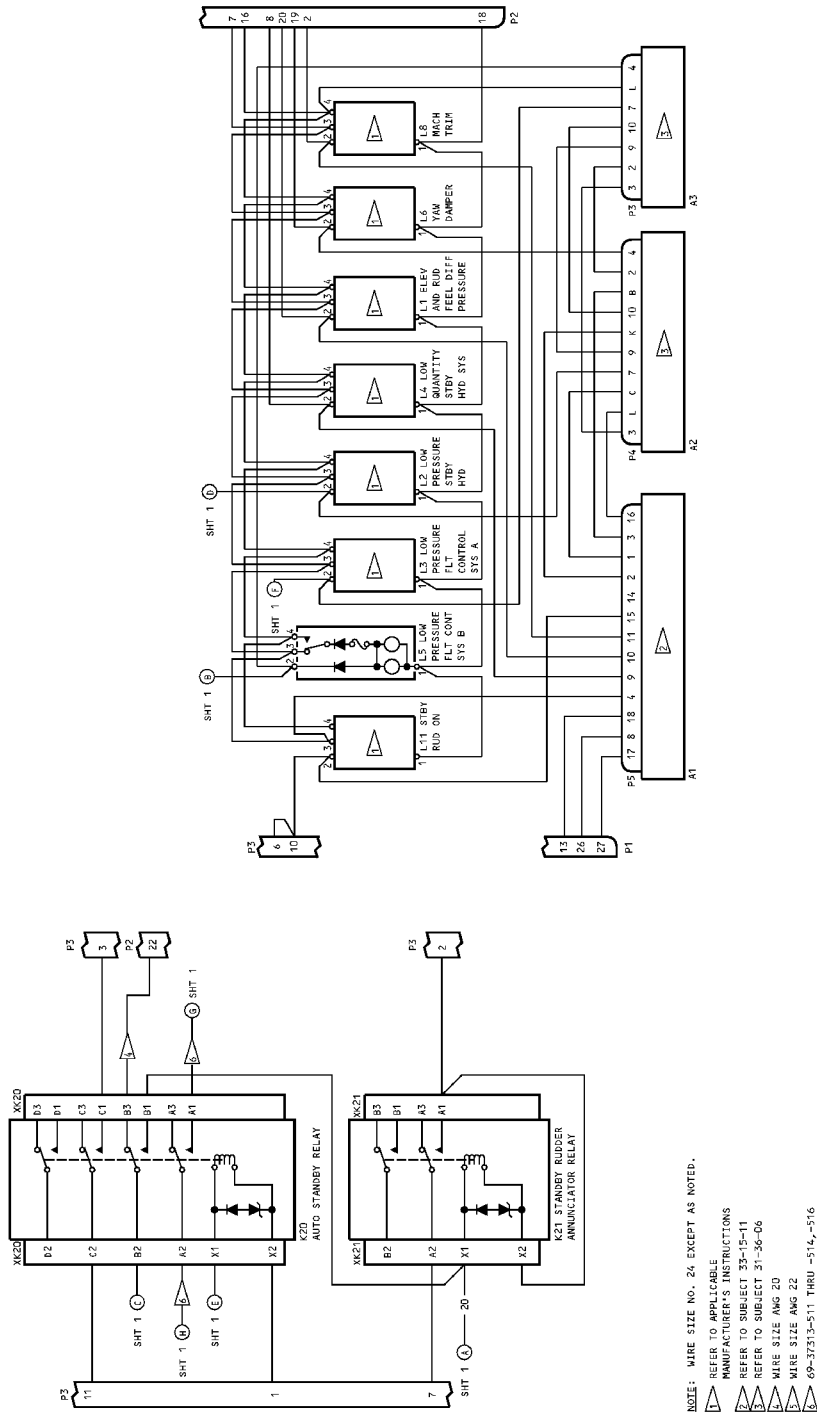
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COMPONENT MAINTENANCE MANUAL



69-37313-411 thru -414,-416,-511 thru -514,-516 Schematic Diagram  
 Figure 110 (Sheet 2 of 2)

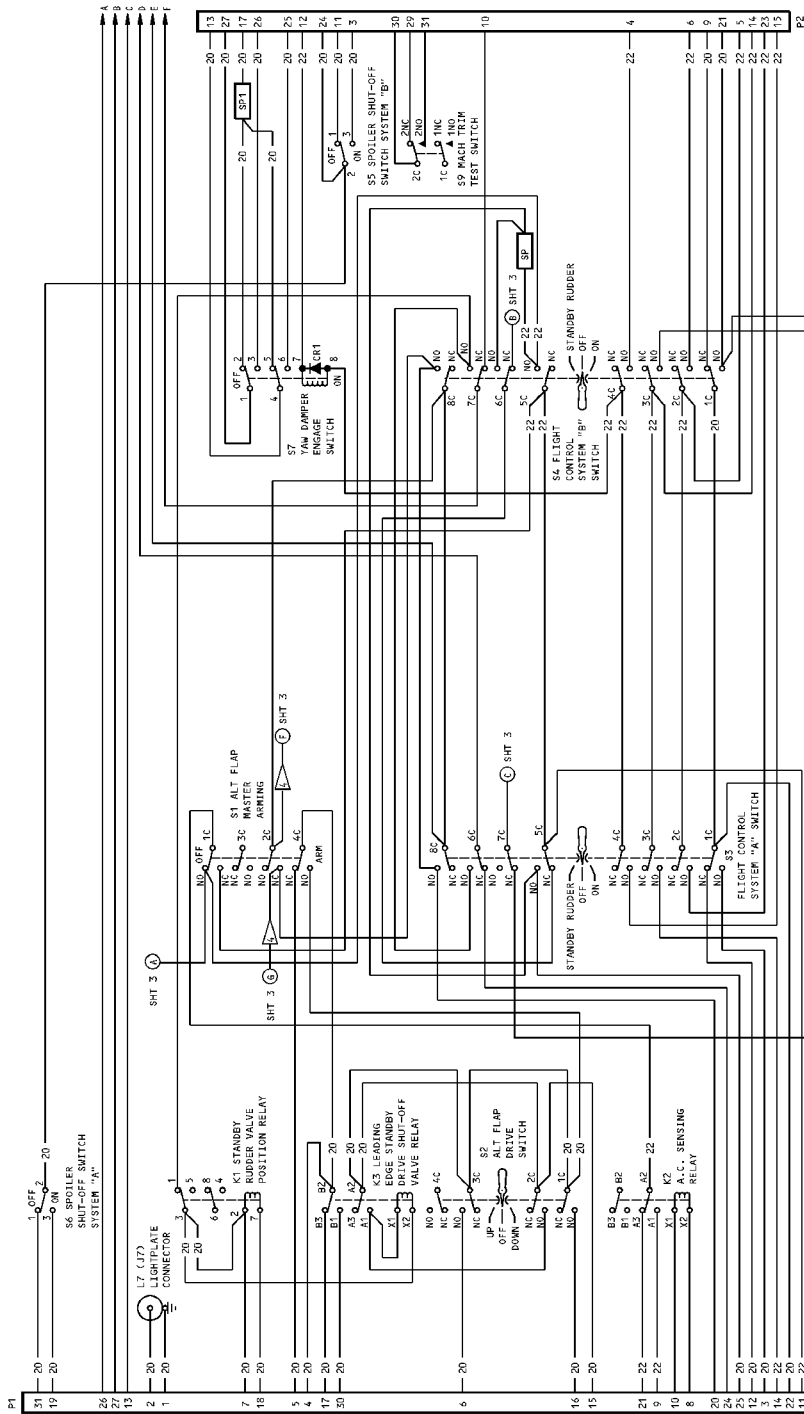
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COMPONENT MAINTENANCE MANUAL



69-37313-415,-417 thru -422,-515,-517 thru -522 Schematic Diagram  
Figure 111 (Sheet 1 of 3)

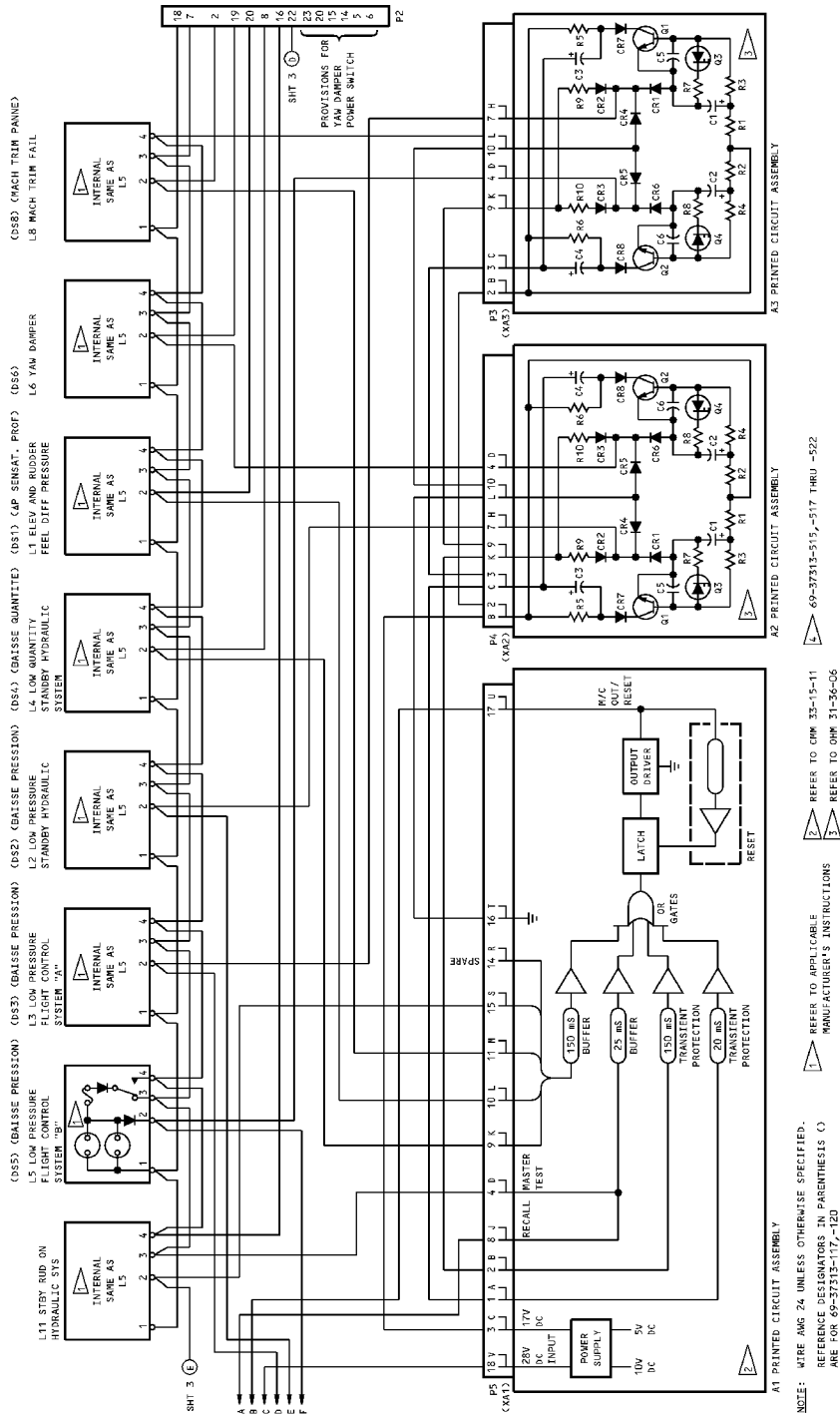
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COMPONENT MAINTENANCE MANUAL



69-37313-415,-417 thru -422,-515,-517 thru -522 Schematic Diagram  
Figure 111 (Sheet 2 of 3)

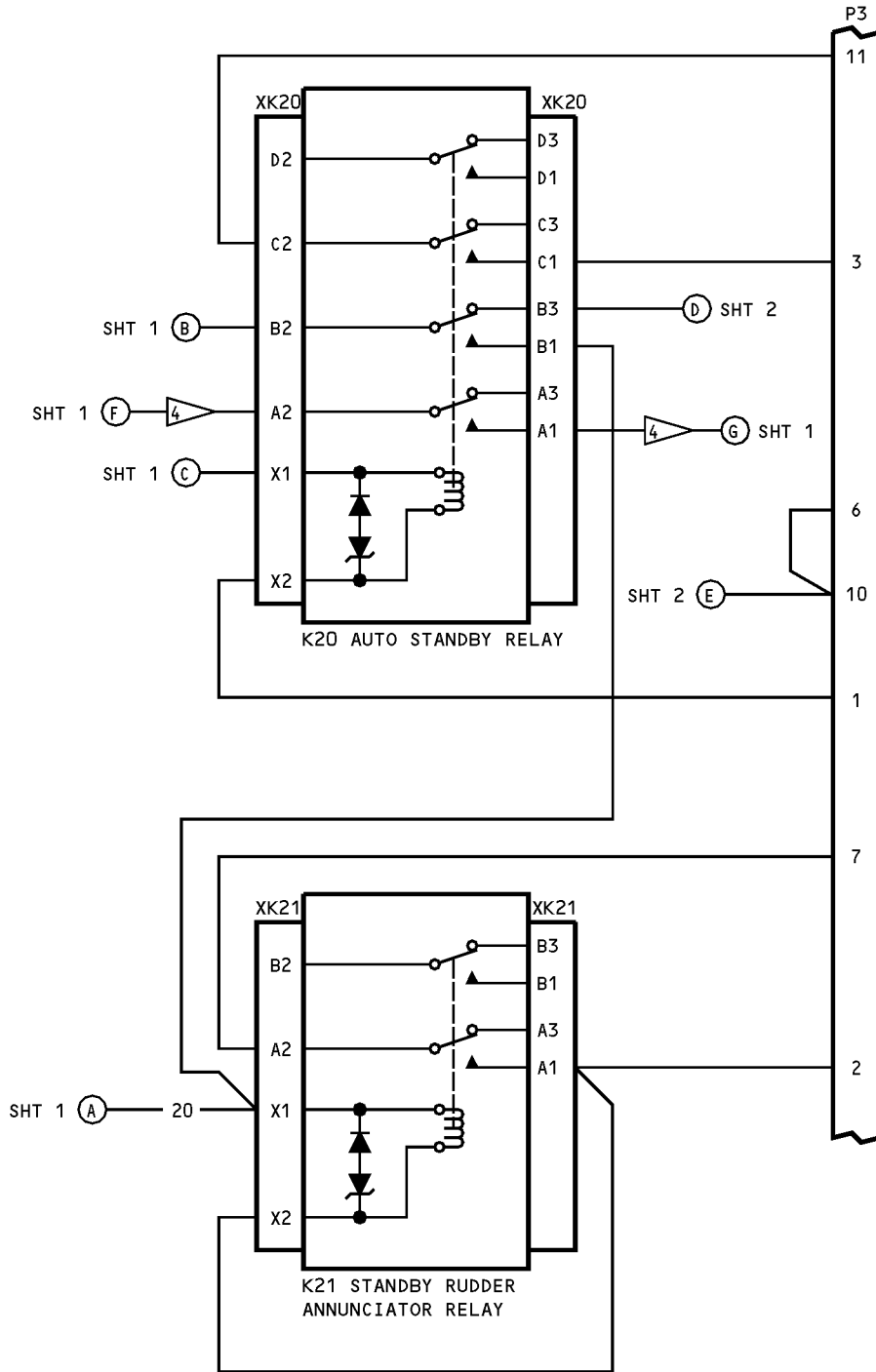
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COMPONENT MAINTENANCE MANUAL



69-37313-415,-417 thru -422,-515,-517 thru -522 Schematic Diagram  
 Figure 111 (Sheet 3 of 3)

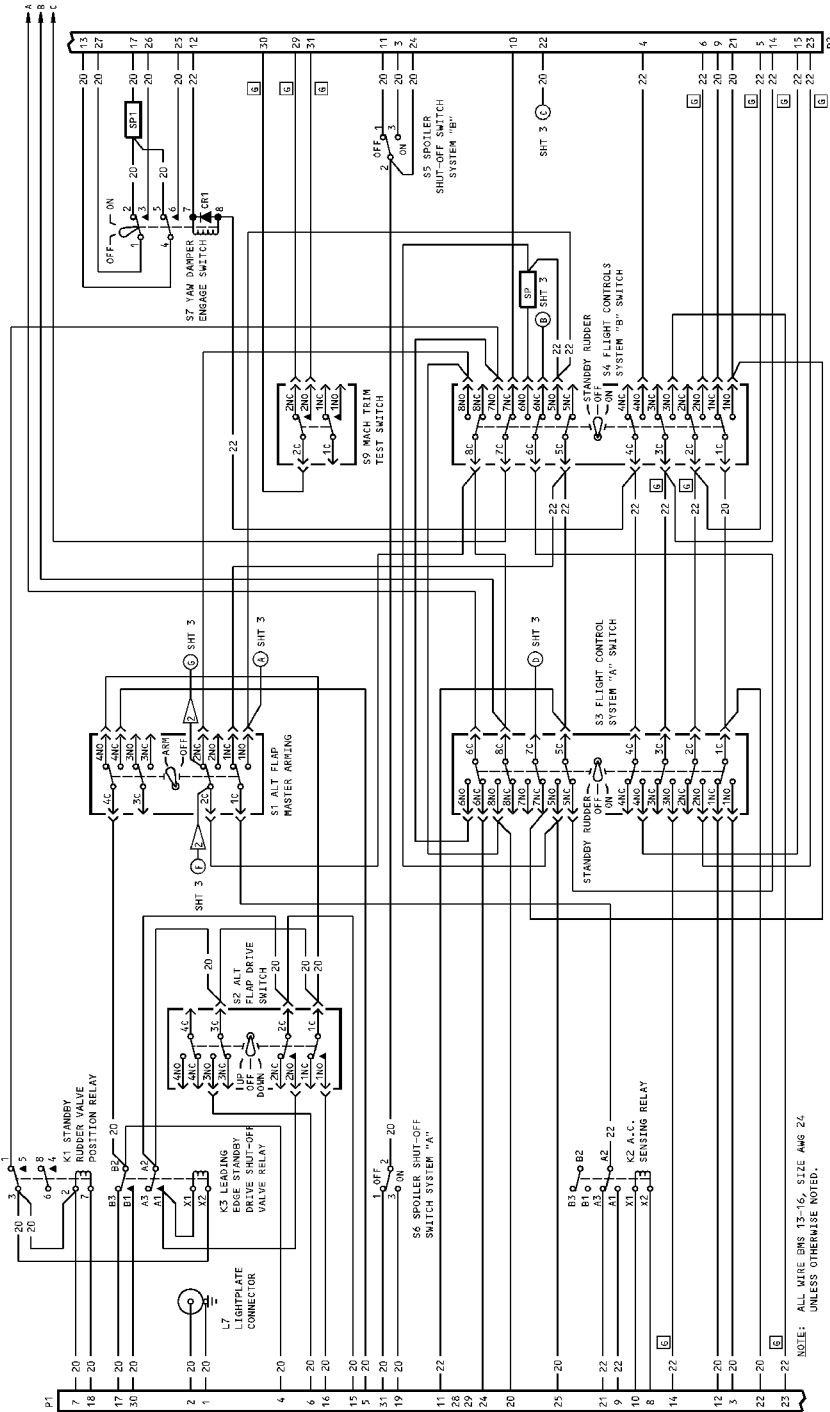
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# COMPONENT MAINTENANCE MANUAL



69-37313-423,-424,-523,-524 Schematic Diagram  
Figure 112 (Sheet 1 of 3)

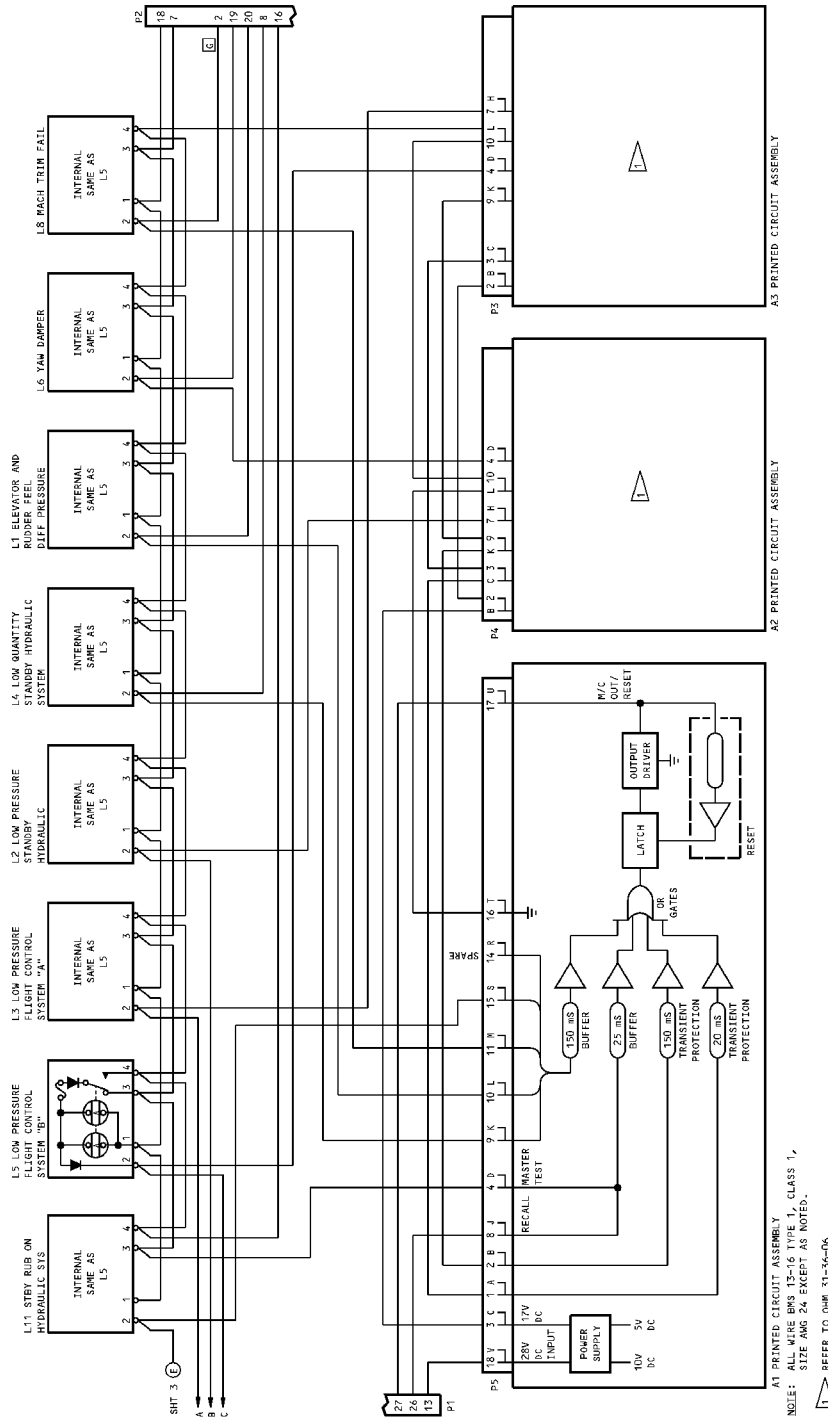
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COMPONENT MAINTENANCE MANUAL



69-37313-423,-424,-523,-524 Schematic Diagram  
Figure 112 (Sheet 2 of 3)

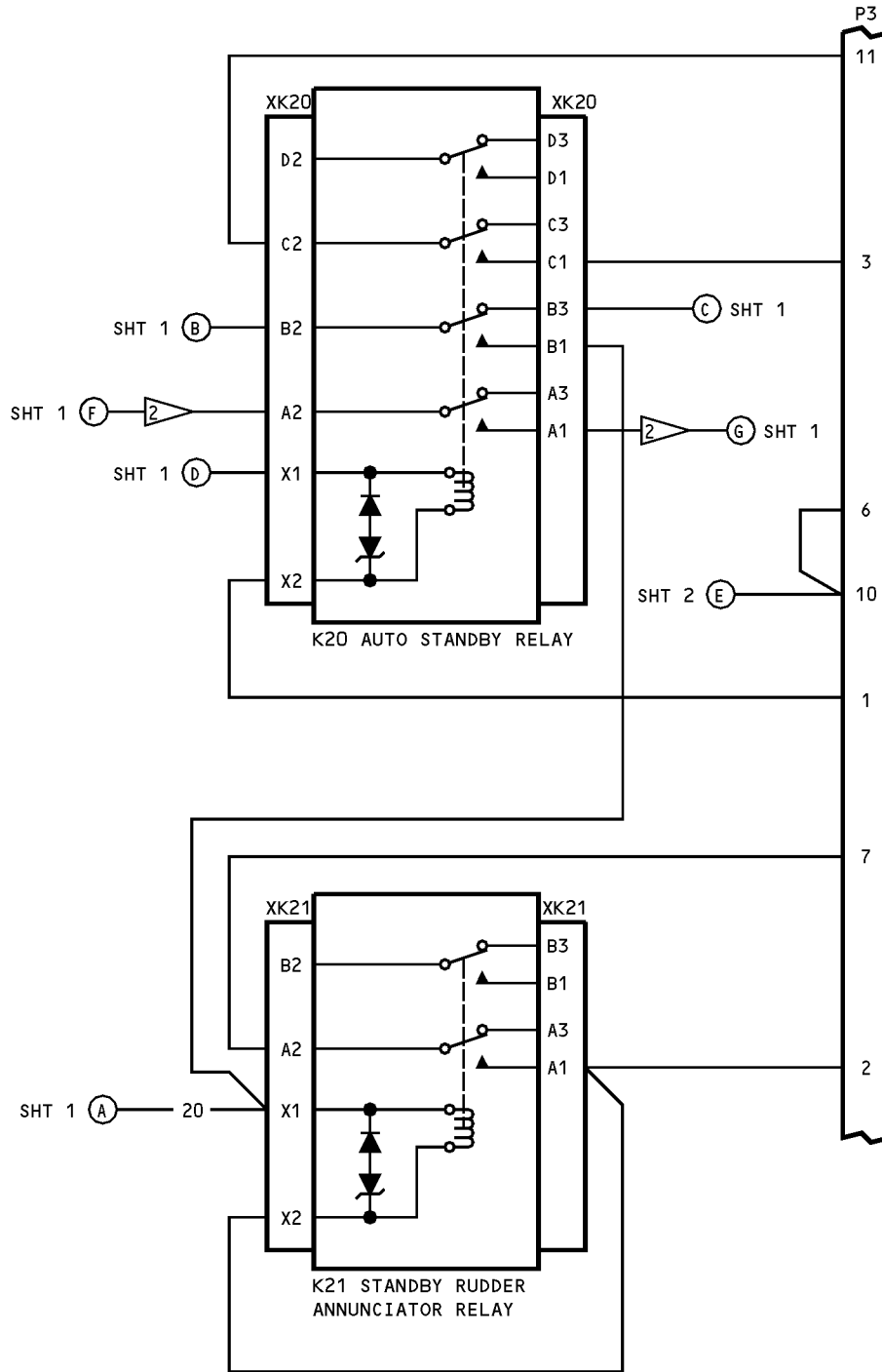
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69-37313-523,-524

69-37313-423,-424,-523,-524 Schematic Diagram  
Figure 112 (Sheet 3 of 3)

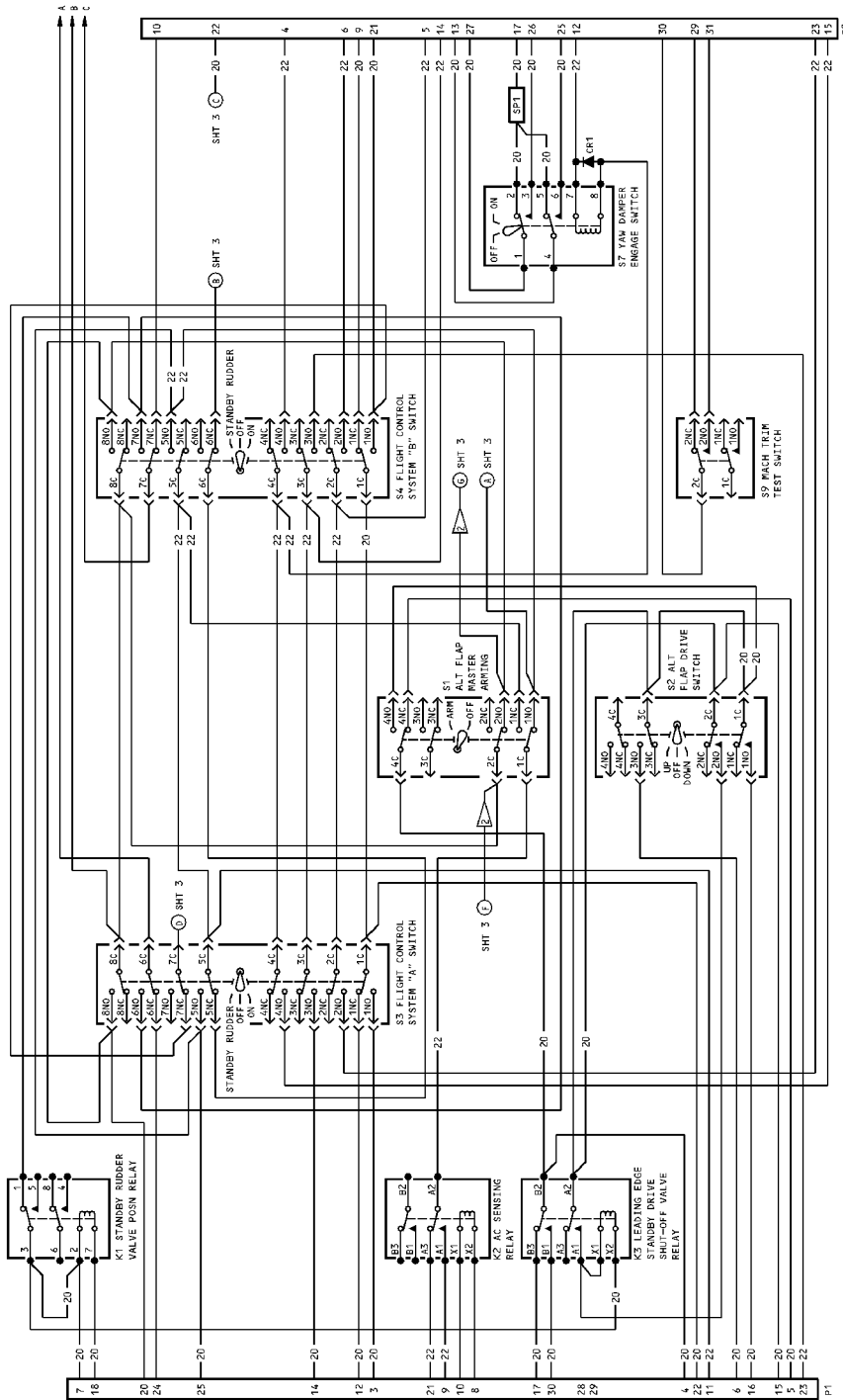
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# COMPONENT MAINTENANCE MANUAL



69-37313-425,-426,-525,-526 Schematic Diagram  
Figure 113 (Sheet 1 of 3)

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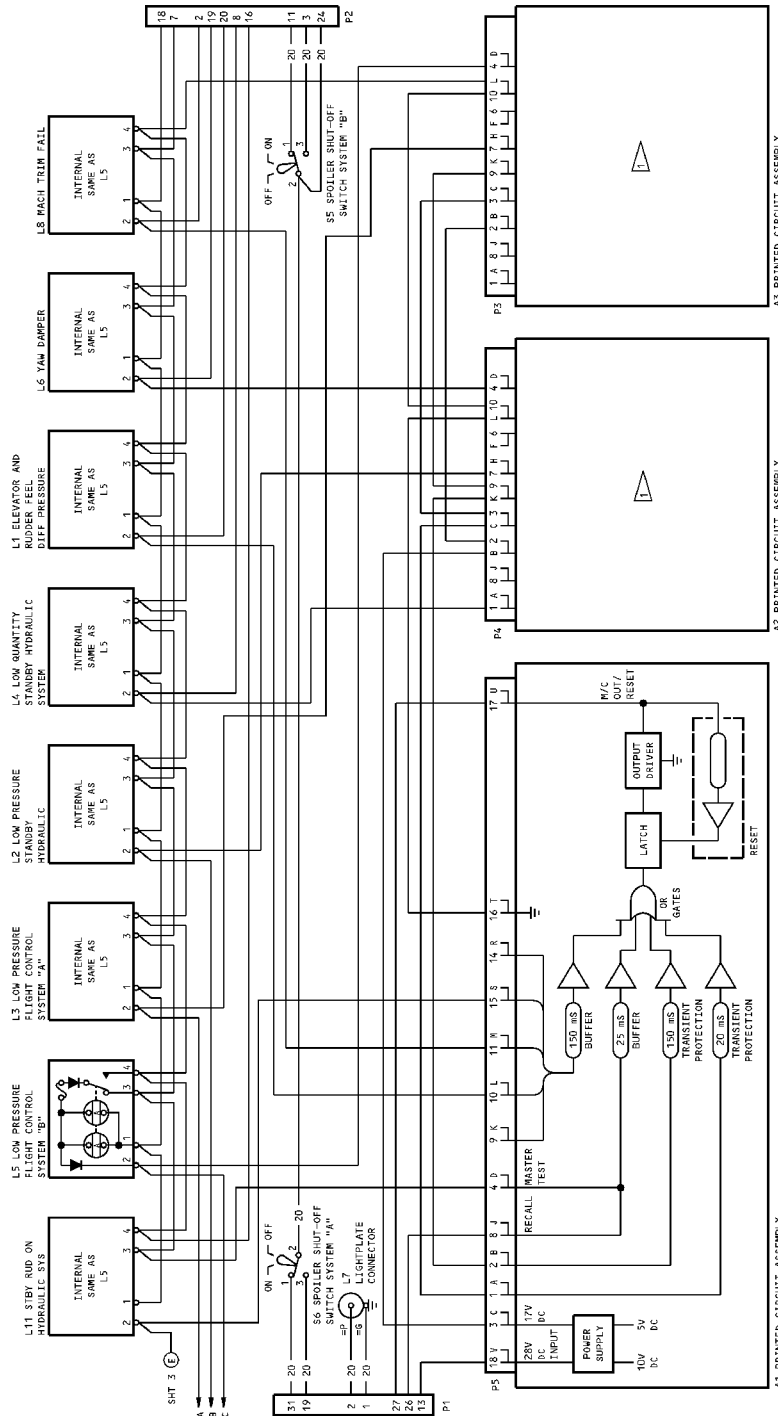
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COMPONENT MAINTENANCE MANUAL



69-37313-425,-426,-525,-526 Schematic Diagram  
Figure 113 (Sheet 2 of 3)

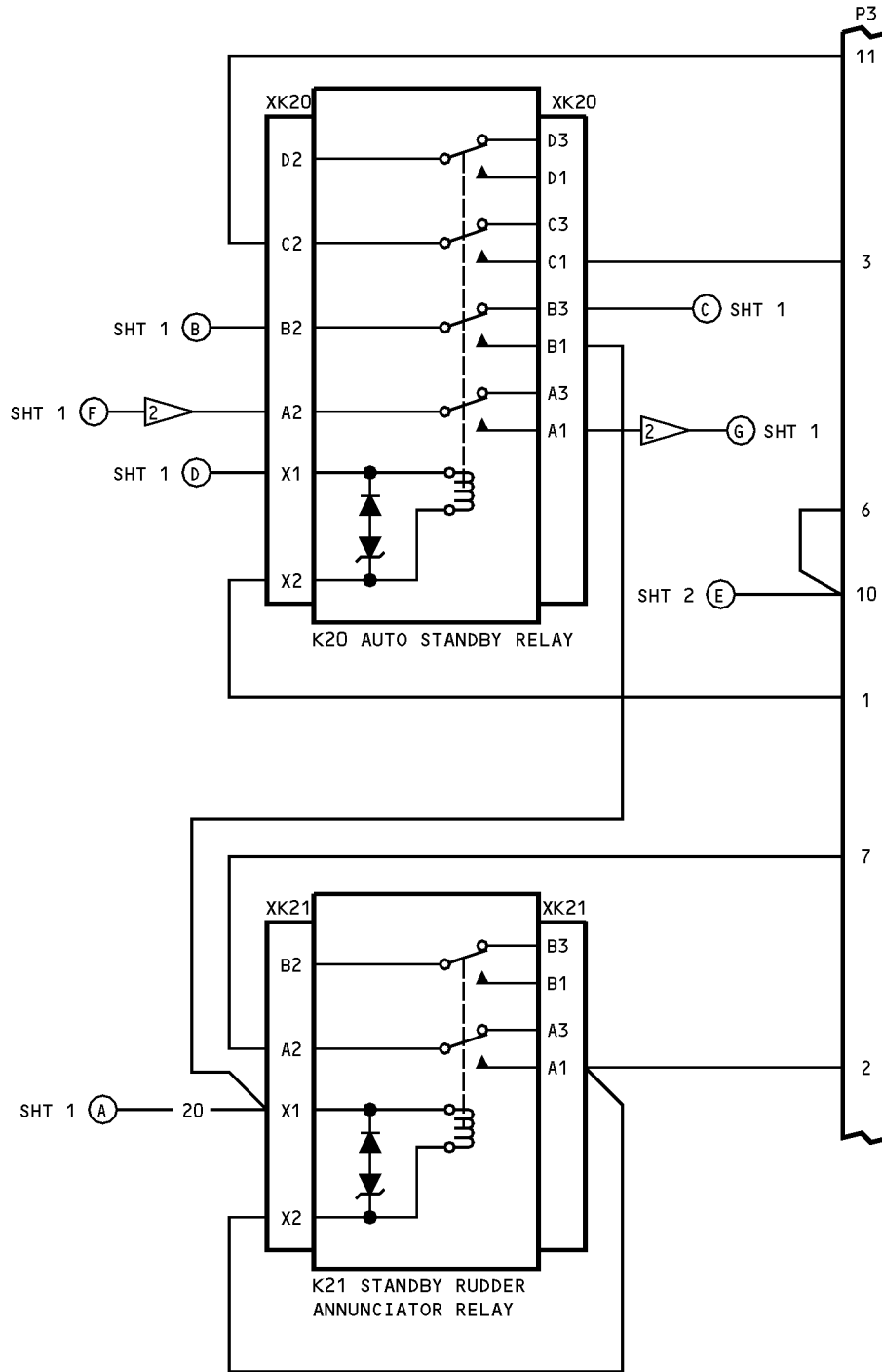
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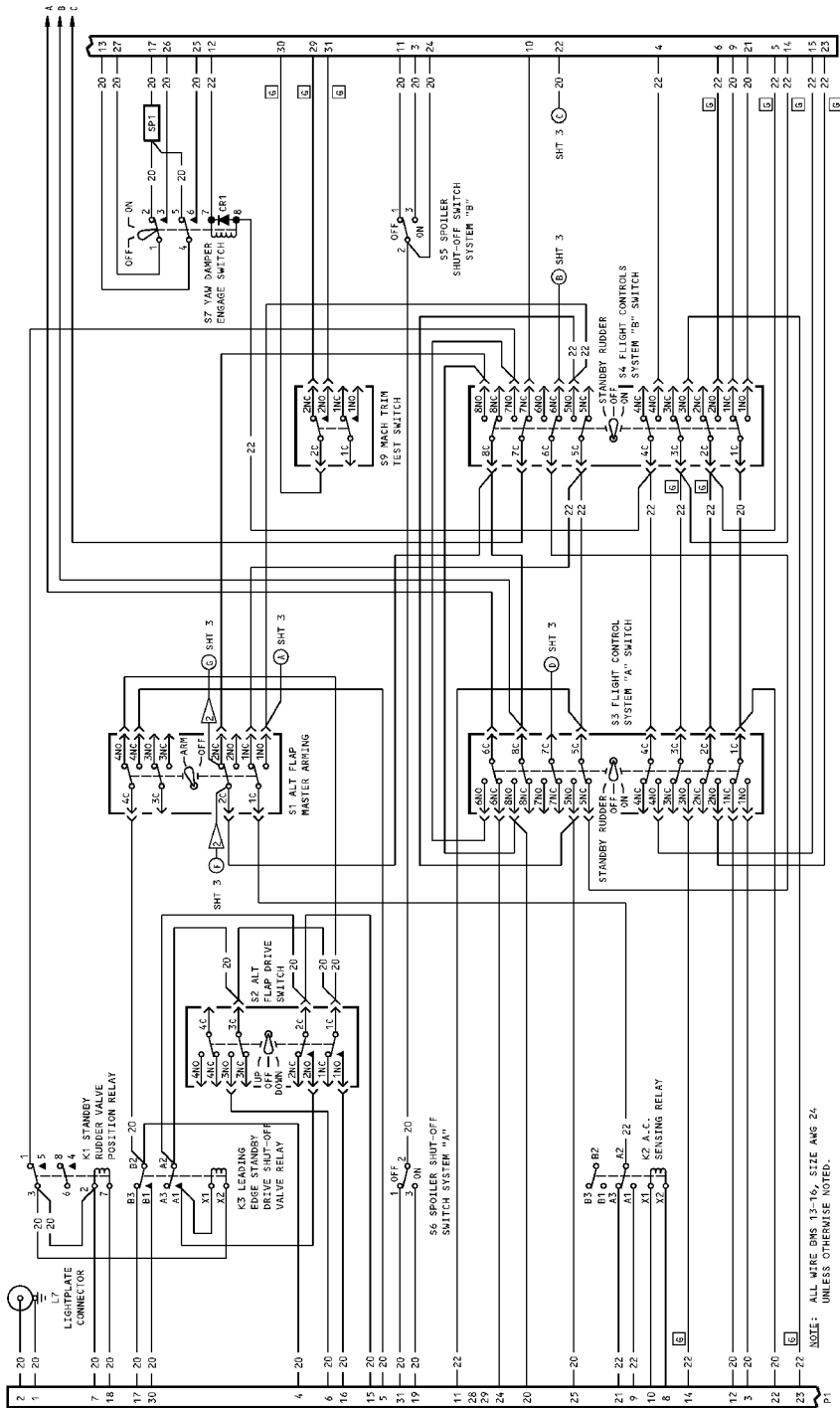
COMPONENT MAINTENANCE MANUAL



69-37313-525, -526

69-37313-425,-426,-525,-526 Schematic Diagram  
 Figure 113 (Sheet 3 of 3)

# COMPONENT MAINTENANCE MANUAL



69-37313-427,-428,-527,-528 Schematic Diagram  
Figure 114 (Sheet 1 of 3)

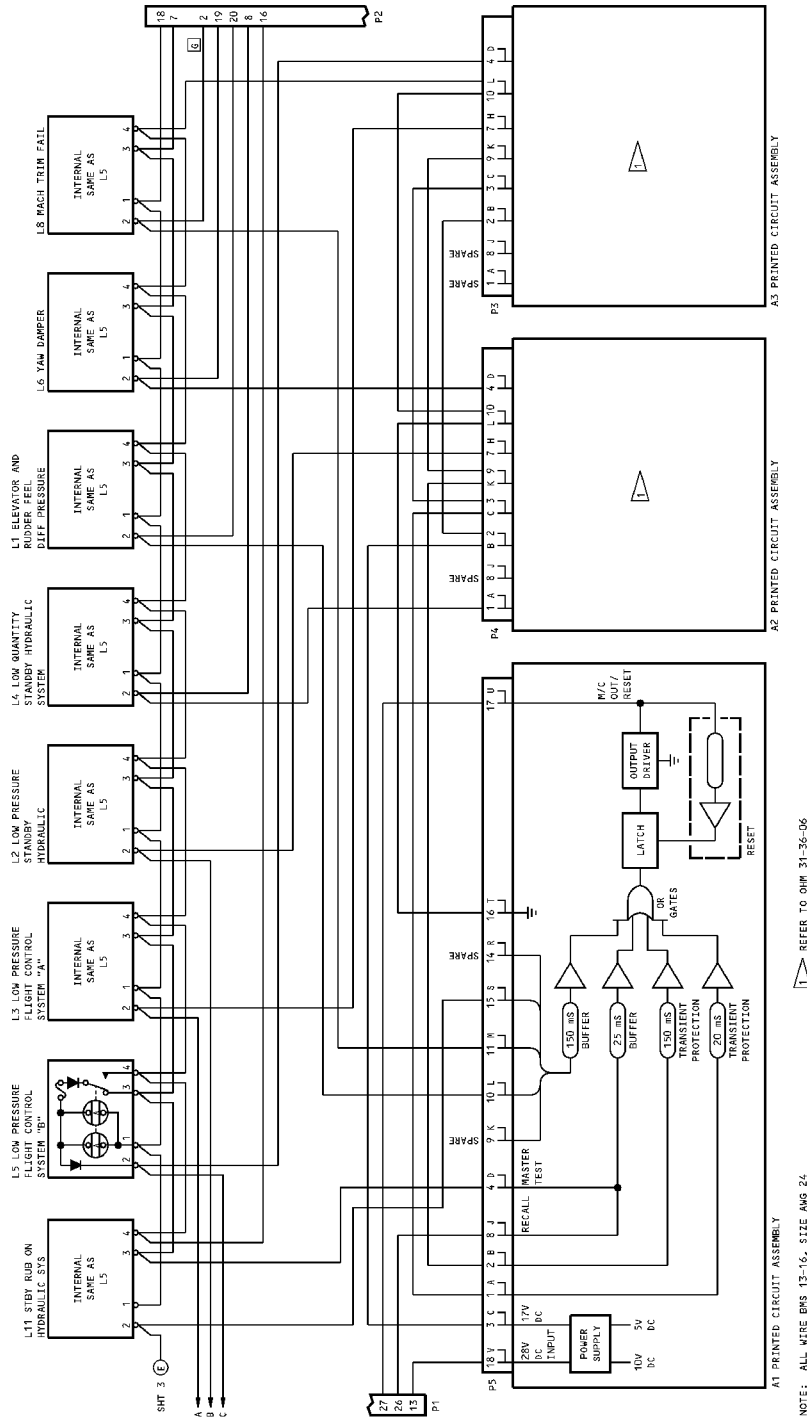
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69-37313-427,-428,-527,-528 Schematic Diagram  
Figure 114 (Sheet 2 of 3)

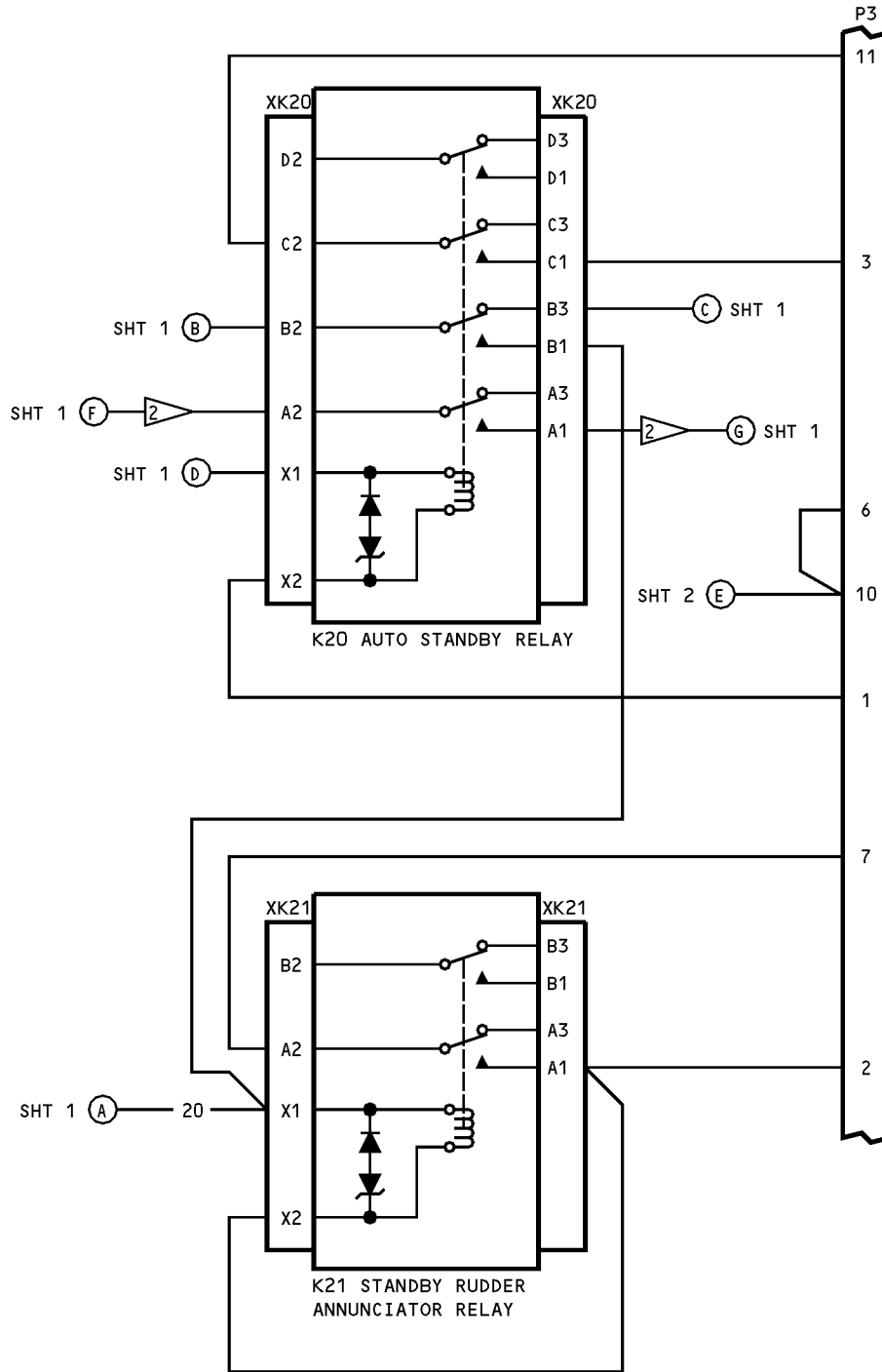
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COMPONENT MAINTENANCE MANUAL



2 69-37313-527,-528

69-37313-427,-428,-527,-528 Schematic Diagram  
 Figure 114 (Sheet 3 of 3)

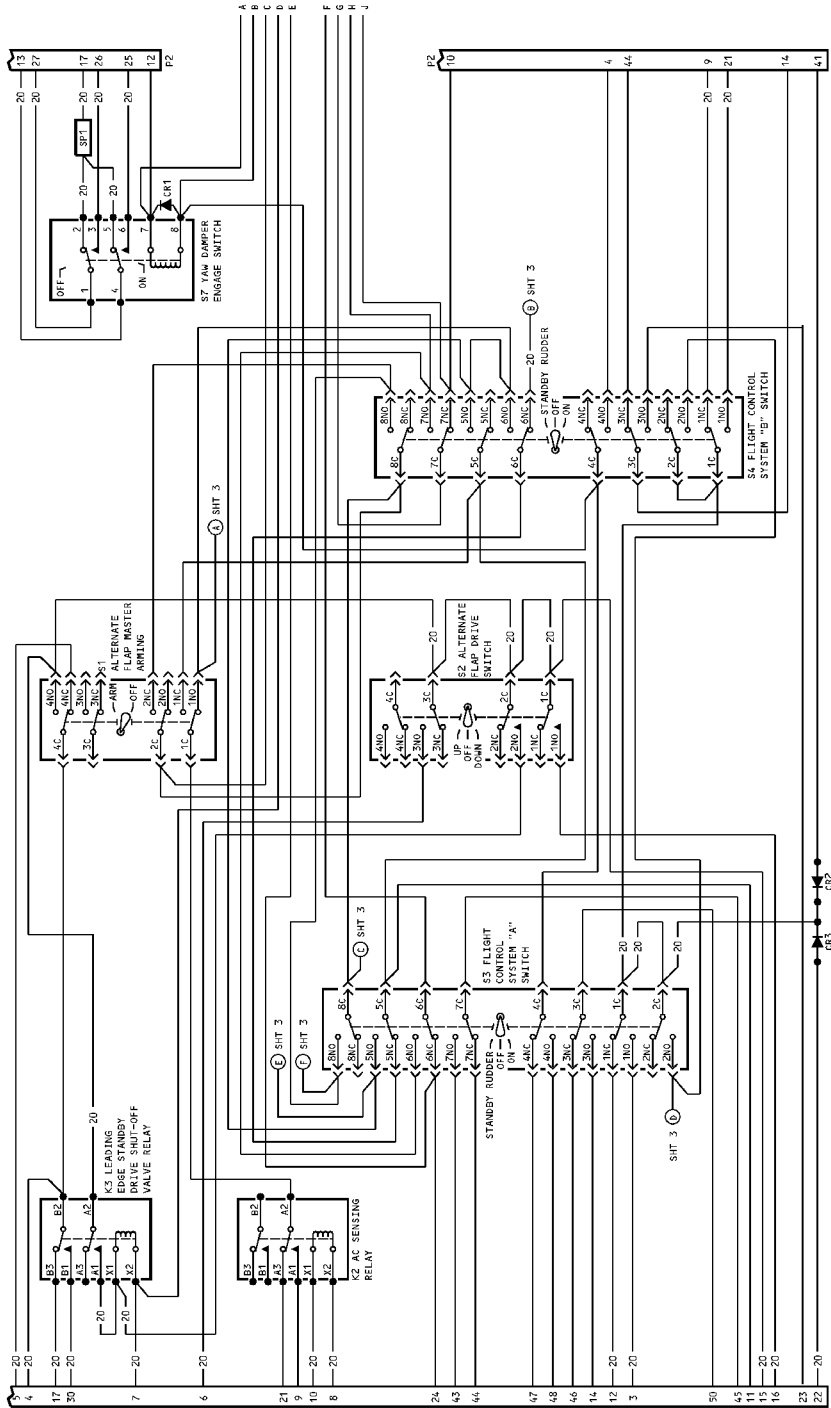
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COMPONENT MAINTENANCE MANUAL



69-37313-406 thru -408 Schematic Diagram  
Figure 115 (Sheet 1 of 3)

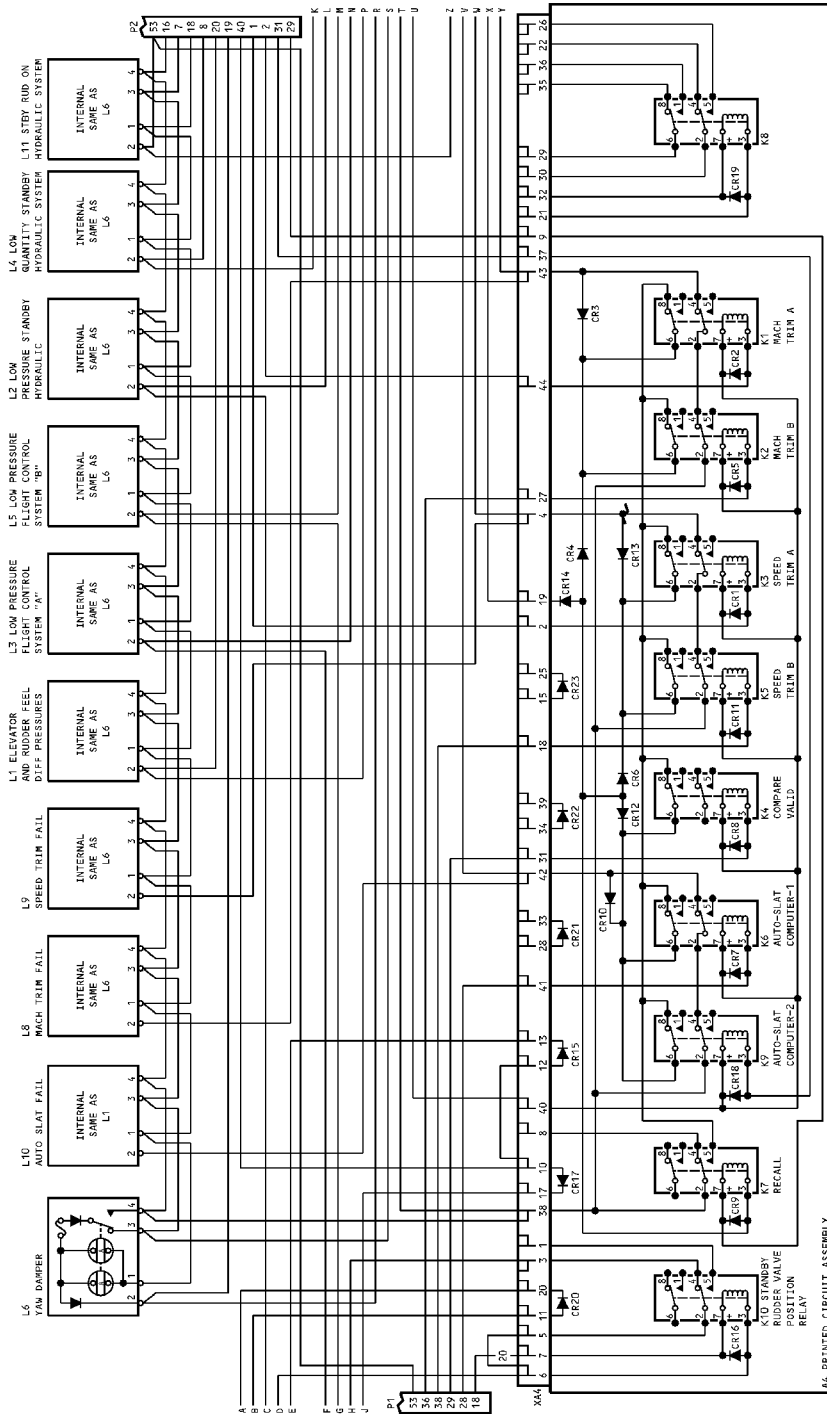
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# COMPONENT MAINTENANCE MANUAL



69-37313-406 thru -408 Schematic Diagram  
Figure 115 (Sheet 2 of 3)

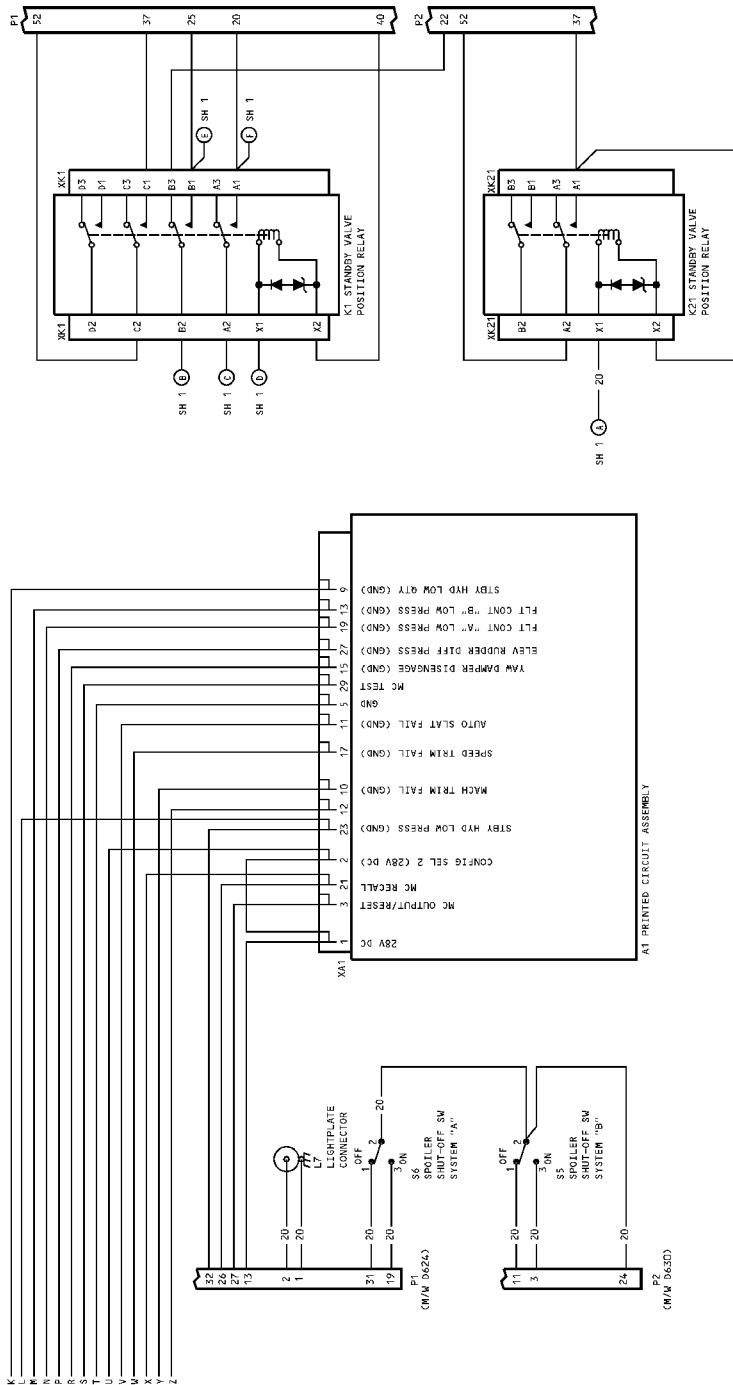
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69-37313-406 thru -408 Schematic Diagram  
Figure 115 (Sheet 3 of 3)

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COMPONENT MAINTENANCE MANUAL

DISASSEMBLY

**(NOT APPLICABLE)**

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DISASSEMBLY

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COMPONENT MAINTENANCE MANUAL

CLEANING

**(NOT APPLICABLE)**

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CLEANING

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COMPONENT MAINTENANCE MANUAL

CHECK

**(NOT APPLICABLE)**

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CHECK  
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## COMPONENT MAINTENANCE MANUAL

### REPAIR

#### 1. Materials

##### A. Plastic Tying Straps

- (1) TY-RAP TY903-5 (Thomas and Betts Corp, 36 Butler Street, Elizabeth, NJ 07206)
  - (a) Optional plastic tying straps are available per Boeing Part Standard BACS38K4F from the following manufacturers:
    - 1) Panduit Corp. 17301 Ridgeland Avenue Tinley Park, IL 60477-0981 V06383
    - 2) Tyton Corp. 7930 North Faulkner Road 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 Road, Glendale, California 91204)

#### 2. Procedure

**CAUTION:** OBEY THE PROCEDURE IN SUBJECT 20-12-02, HANDLING OF ELECTROSTATIC SENSITIVE DEVICES. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THIS COMPONENT.

- A. All repair may be accomplished with standard shop procedures and information contained in SOPM 20-11-04 except as noted in the following:
- B. If keying plug (IPL Figure 1, Item 125) 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.
- C. If wires color-coded [G] (Green) on schematic diagrams are replace, bundle together using plastic tying straps.
- D. When replacing lightplate (IPL Figure 1, Items 4, 4A, 4B, and 4C), 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.

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REPAIR - GENERAL

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**COMPONENT MAINTENANCE MANUAL**

**ASSEMBLY**

**(NOT APPLICABLE)**

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ASSEMBLY

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**COMPONENT MAINTENANCE MANUAL**

**FITS AND CLEARANCES**

**(NOT APPLICABLE)**

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FITS AND CLEARANCES

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## COMPONENT MAINTENANCE MANUAL

### SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

#### 1. General

A. This section lists the special tools, fixtures, and equipment necessary for maintenance.

**NOTE:** Equivalent substitutes may be used.

#### Special Tools

Reference	Description	Part Number	Supplier
SPL-4517	Mating Connector	BACC45FT12-12S	81205
SPL-5367	Test Connector	BACC45FT18-31S	81205
SPL-5369	Test Connector	BACC45FT22-55S	81205
SPL-5760	Connector	BACC45FT22-55S6	81205

#### Tool Supplier Information

CAGE Code	Supplier Name	Supplier Address
81205	THE BOEING COMPANY	17930 INTERNATIONAL BLVD. SOUTH SEATAC, WA 98188-4321 Telephone: 206-662-6650 Facsimile: 206-662-7145

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SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

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## COMPONENT MAINTENANCE MANUAL

### ILLUSTRATED PARTS LIST

#### 1. Introduction

- A. The Illustrated Parts List (IPL) contains an illustration and a list of component parts you can repair or replace. The Illustrated Parts Catalog (IPC) shows how to use the Boeing part number system.
- B. This shows how parts are related: The relation of each item to its next higher assembly (NHA) is shown in the NOMENCLATURE column. Use the indenture system that follows:

1	2	3	4	5	6	7
.	Assembly					
.	Attaching parts for assembly					
.	.	Detail parts for assembly				
.	.	Subassembly				
.	.	Attaching parts for subassembly				
.	.	.	Detail parts for subassembly			
.	.	.	Sub-subassembly			
.	.	.	Attaching parts for subassembly			
.	.	.	.	Details parts for sub-subassembly		
						Detail Installation Parts (Included only if installation parts may be sent to the shop as part of assembly)

- C. Each top assembly is given one use code letter (A, B, C, etc.) in the USAGE CODE column. All subsequent component parts in the list can have one or more of the use code letters to show effectivity to top assemblies. A component part without a use code applies to all top assemblies.
- D. An alphabetical letter is added after the item number for optional parts, parts changed by a Service Bulletin, configuration differences (except left-handed and right-handed parts), last engineering releases, and parts added between item numbers in a sequence. The alphabetical letter will not be shown on the illustration for equivalent parts of the same part number.
- E. Color-coded parts are identified with a single digit alpha following the dash number or with "SP" suffix. If the "SP" suffix is used, it represents consolidation of all color codes applicable for a given usage which are not separately listed. Orders for color-coded parts should include the registry number of the airplane for which the parts are ordered.
- F. If a part number is 15 characters long but will not fit in the part number column, the part number will be displayed with a "~" at the end of the line and will be continued on the next line. The "~" denotes that the part number continues on the next line.
- G. Parts changed by a Service Bulletin are shown by PRE SB XXXX and POST SB XXXX added to the NOMENCLATURE column.
- (1) When a new top assembly is added by a Service Bulletin, PRE SB XXXX and POST SB XXXX will be added at the top assembly level only. The configuration differences at the detail part level are shown by use code letters.
- (2) When the top assembly part number is not changed by the Service Bulletin, PRE SB XXXX and POST SB XXXX will be added at the detail level.
- H. Interchangeable Parts

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## COMPONENT MAINTENANCE MANUAL

Optional (OPT)	The part is optional to and interchangeable with other parts that have the same item number.
Replaces, Replaced by and not interchangeable with (REPLACES, REPLACED BY AND NOT INTCHG/W)	The part replaces and is not interchangeable with the initial part.
Replaces, Replaced by (REPLACES, REPLACED BY)	The part replaces and is interchangeable with, or is an alternative to, the initial part.

### VENDOR CODES

Code	Name
00768	WESTERN FILAMENT INC 630 HOLLINGSWORTH DRIVE GRAND JUNCTION, COLORADO 81505 FORMERLY IN GLENDALE, CALIFORNIA
00779	TYCO ELECTRONICS CORP 2800 FULLING MILL ROAD PO BOX 3608 MIDDLETOWN, PENNSYLVANIA 17057 FORMERLY AMP INC; FORMERLY V04618 FORMERLY GENICOM COMP V01526
02660	AMPHENOL CORP INDUSTRIAL TECHNOLOGY DIV 358 HALL AVENUE PO BOX 384 WALLINGFORD, CONNECTICUT 06492 FORMERLY BUNKER RAMO CORP, ELTRA CORP AMPHENOL AND AMPHENOL CORP COMM AND IND DIV
05574	VIKING ELECTRONICS INC. 5455 ENDEAVOUR CT MOORPARK, CALIFORNIA 93021 FORMERLY VIKING IND DATACON DIV; VIKING SPECIAL PROD V53156; FORMERLY VIKING CONN SUB OF CRITON CORP; ARIZONA INTEGRATED ELEC V0P9C6; FORMERLY IN CHATSWORTH, CA
05617	IDD AEROSPACE CORP 18225 NORTHEAST 76TH STREET PO BOX 97056 REDMOND, WASHINGTON 98073-9756 FORMERLY FARWEST ELEC INC; FORMERLY IN BELLEVUE, WA; FORMERLY BELL IND FARWEST MFG DIV; FORMERLY BELL IND ILLUMINATED DISPLAYS DIV

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## COMPONENT MAINTENANCE MANUAL

Code	Name
06383	PANDUIT CORPORATION 17301 RIDGELAND AVENUE TINLEY PARK, ILLINOIS 60477-3048
09922	SOURIAU USA INC 25 GRUMBACHER DR YORK, PENNSYLVANNIA 17402-9417 FORMERLY FRAMATOME CONNECTORS FRANCE FORMERLY V59610 IIN VALENCIA, CALIFORNIA
11815	CHERRY AEROSPACE FASTENERS DIV OF TEXTRON 1224 EAST WARNER AVENUE PO BOX 2157 SANTA ANA, CALIFORNIA 92707-0157 FORMERLY IN LOS ANGELES, CALIF , FORMERLY CHERRY FASTENERS TOWNSEND DIV OF TEXTRON INC V71087
12324	DUPREE INC STAKE FASTENER CO 14395 RAMONA PO BOX 1797 CHINO, CALIFORNIA 91708 FORMERLY DUPREE MFG CO IN SOUTH EL MONTE, CALIFORNIA FORMERLY STAKE FASTENER CO DIV OF DUPREE INC
14726	WEARNES HOLLINGSWORTH CORP 1601 NORTH POWERLINE ROAD POMPANO BEACH, FLORIDA 33060-1622 FORMERLY MIDLAND ROSS CORP ELECTRONIC CONNECTOR DIV FORMERLY INTERCONNECTION PRODUCTS INC POMPANO PLANT
15653	ALCOA GLOBAL FASTENERS INC DIV KAYNAR PRODUCTS 800 S STATE COLLEGE BLVD FULLERTON, CALIFORNIA 92831-3001 FORMERLY VK6405 MICRODOT AEROSP LTD; FORMERLY KAYNAR TECH FORMERLY FAIRCHILD FASTENERS KAYNAR DIV
35344	Replaced: [V35344] LEACH CORP RELAY DIV SEE LEACH CORP CONTROL PROD DIV V58657 by Code: Name and Address below 58657: LEACH INTERNATIONAL OF NORTH AMERICA 6900 ORANGETHORPE AVE PO BOX 5032 BUENA PARK, CALIFORNIA 90622-5032 FORMERLY LEACH CORP V35344 AND V00614 FORMERLY LEACH CORP

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## COMPONENT MAINTENANCE MANUAL

Code	Name
49367	AMPHENOL CORP AMPHENOL AEROSPACE PYLE-NATIONAL CONNECTORS 40-60 DELAWARE AVE SIDNEY, NEW YORK 13838-1395
51896	SPECTRA LUX CORP 12335 134TH COURT NE REDMOND, WASHINGTON 98052 FORMERLY IN KIRKLAND, WA
52828	REPUBLIC FASTENER MFG CORP 1300 RANCHO CONEJO BLVD NEWBURY PARK, CALIFORNIA 91320-1405 FORMERLY IN SYLMAR, CALIFORNIA
55104	TRI-STAR ELECTRONICS INC 2201 ROSECRANS AVENUE EL SEGUNDO, CALIFORNIA 90245 FORMERLY IN VENICE, CA; FORMERLY V71771 CORY COMPONENTS
56623	BABCOCK INC 14930 E ALONDRA BLVD LA MIRADA, CALIFORNIA 90638-5752 FORMERLY IN COSTS MESA, CA & IN ORANGE, CA
58657	LEACH INTERNATIONAL INC 6900 ORANGETHORPE AVE PO BOX 5032 BUENA PARK, CALIFORNIA 90622-5032 FORMERLY LEACH CORP V35344 AND V00614
58982	PRECISION CONNECTOR DESIGNS INC CENTENNIAL PARK 2 TECHNOLOGY DRIVE PEABODY, MASSACHUSETTS 01960 FORMERLY IN WINCHESTER, MASSACHUSETTS
59610	Replaced: [V59610] SOURIAU INC by Code: Name and Address below 09922: SOURIAU USA INC 25 GRUMBACHER DR YORK, PENNSYLVANNIA 17402-9417 FORMERLY FRAMATOME CONNECTORS FRANCE FORMERLY V59610 IN VALENCIA, CALIFORNIA

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## COMPONENT MAINTENANCE MANUAL

Code	Name
60119	<p>MONADNOCK CO THE            18301 ARENTH AVENUE            ROWLAND HEIGHTS, CALIFORNIA 91748-1288            FORMERLY UNITED CARR FASTENER CORP VB0051 VB0056 VB0076            FORMERLY TRW ELECTRONIC COMPONENTS CINCH-MONADNOCK DIV            FORMERLY CINCH-MONADNOCK DIV OF TRW INC V76530            FORMERLY IN CITY OF INDUSTRY, CALIFORNIA</p>
72914	<p>HONEYWELL/GRIMES AEROSPACE            550 STATE RT 55            URBANA, OHIO 43078            FORMERLY AERO-FLOW V70128; MIDLAND-ROSS JANITROL AERO DIV;            FORMERLY FL AEROSP CORP V89513; ALLIEDSIGNAL/GRIMES AEROSP            FORMERLY GRIMES AEROSPACE V00672 AND HONEYWELL V60187</p>
72962	<p>HARVARD INDUSTRIES INC            3 WERNER WAY SUITE 210            LEBANON, NEW JERSEY 08833            FORMERLY ESNA V7A079            FORMERLY ELASTIC STOP NUT IN UNION, NJ</p>
77820	<p>ALLIED AMPHENOL PRODUCTS BENDIX CONNECTOR OPERATIONS            40-60 DELAWARE ST            SIDNEY, NEW YORK 13838            FORMERLY BENDIX CORP THE SCINTILLA DIV AND ELECT COMP DIV            FORMERLY BENDIX CORP ELECT CMPNT DIV SANTA ANA PLANT V12143</p>
78290	<p>STRUTHERS-DUNN INC            SOUTH WINDSOR, CONNECTICUT 06074            OBSOLETE - SEE V00213</p>
80539	<p>SPS TECHNOLOGIES INC DIV AERPSOACE - SANTA ANA            2701 SOUTH HARBOR BOULEVARD            SANTA ANA, CALIFORNIA 92704-5803            FORMERLY NUTT-SHEL DIV OF SPC WESTERN CO V80539            AND STANDARD PRESSED STEEL WESTERN DIV V17279</p>
81590	<p>KORRY ELECTRONIC INC SUB OF CRITON CORP            901 DEXTER AVENUE NORTH            SEATTLE, WASHINGTON 98109-3515            FORMERLY KORRY, BORIS VB0021 AND KORRY MFG CO</p>

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## COMPONENT MAINTENANCE MANUAL

Code	Name
81640	EATON CORP AEROSPACE AND COMMERCIAL CONTROLS DIV 2250 WHITFIELD AVENUE EAST SARASOTA, FLORIDA 34243-9703 FORMERLY SINGER CO CONTROLS DIV AND CONTROLS CO OF AMERICA AND CONTROL SWITCH A CUTLER-HAMMER CO AND EATON CORP CUTLER-HAMMER GROUP V97198, V81641 IN FOLCROFT, PENNSYLVANIA INFO FROMVDR THRU M2880 FEB 1987 SWITCHES
89954	BAE SYSTEMS CONTROL 600 MAIN STREET JOHNSON CITY, NEW YORK 13790 FORMERLY MARTIN MARIETTA AIRCRAFT CONTROL SYSTEMS; FORMERLY LOCKHEED MARTIN CONTROL SYSTEMS
91929	HONEYWELL INC MICRO SWITCH DIV 11 WEST SPRING STREET FREEPORT, ILLINOIS 61032 FORMERLY MICRO SWITCH A DIV OF HONEYWELL FORMERLY V74059 AND V40228
92215	FAIRCHILD IND INC FAIRCHILD AEROSPACE FASTENER DIV 3010 W LOMITA BLVD TORRANCE, CALIFORNIA 90505-5102 FORMERLY VOI-SHAN IN CULVER CITY, CALIF
98410	ETC-MOLEX SUB OF MOLEX INC 4820 PARK BLVD PINELLAS PARK, FLORIDA 33565-7246 FORMERLY ETC DIV OF ITT IN SOLON, OHIO
98927	ELECSPEC CORP ELECTRONIC SPECIALITY DIV 14511 NORTHEAST 13TH AVENUE PO BOX 3501 VANCOUVER, WASHINTON 98668-3501 FORMERLY ELECTRONIC SPECIALTY CO PROTLAND ELECTRONCI DIV FORMERLY DATRON SYSTEMS INC ELECTRONIC SPECIALITY DIV FORMERLY IN PORTLAND, OREGON

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Code	Name
99699	DEUTSCH RELAYS INC 55 ENGINEERS RD HAUPPAUGE, NEW YORK 11788 FORMERLY DEUTSCH CO ELECTRONIC COMPONENTS DIV DEUTSCH RELAY

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### REFERENCE DESIGNATOR INDEX

REFERENCE DESIGNATOR	PART NUMBER	FIG-ITEM
A1	69-78285-1	1-115
A1	69-78285-1	1-325
A1	69-78809-3	2-190
A1	69-78809-4	2-190A
A1	69-78809-3	2-190B
A1	69-78809-4	2-190C
A1	69-78809-5	2-190D
A2	69-51812-5	1-110
A3	69-51812-5	1-110
A4	69-73639-1	1-120
A4	69-73639-5	1-120A
A4	69-73639-5	2-195
CR1	1N5061	2-60
CR2	1N5331	1-35
CR2	1N5331	2-230
CR3	1N5331	1-35
CR3	1N5331	2-230
K1	61GB2319-1A320	1-15
K1	ES410-1538	1-17
K1	ES410-1538	2-238
K1	61GB2319-1A320	2-240
K2	JG2F009	1-55
K2	JG2F009	2-165
K20	BACR13CG2AB	1-430
K21	ES210-1632	1-18
K21	BACR13CF2AB	1-425
K21	ES210-1632	2-237
K3	BACR13CF4A	1-60
K3	BACR13CF4A	2-170
L1	BCREF2586	1-205
L1	BCREF2586	2-85
L10	BCREF7981	1-220
L10	BCREF7981	2-100
L11	BCREF23240	1-227

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REFERENCE DESIGNATOR	PART NUMBER	FIG-ITEM
L11	BCREF23240	1-370
L11	BCREF23240	2-107
L2	BCREF2587	1-200
L2	BCREF2587	2-80
L3	BCREF2587	1-200
L3	BCREF2587	2-80
L4	BCREF2583	1-195
L4	BCREF2583	2-75
L5	BCREF2587	1-200
L5	BCREF2587	2-80
L6	BCREF2573	1-225
L6	BCREF2573	2-105
L7	800000121-1	2-70
L8	BCREF2620	1-215
L8	BCREF2620	2-95
L9	BCREF7980	1-210
L9	BCREF7980	2-90
P3	BACC45FN12-12P	1-400
S1	64AT22-3	1-245
S1	A3-1110-05-1	1-245A
S1	64AT22-3	2-50
S2	64AT22-514	2-55
S3	A3-1114-01-1	1-235
S3	A3-1114-01-1	2-40A
S4	A3-1114-01-1	1-235
S4	A3-1114-01-1	2-40A
S5	MS24523-23	1-270
S5	MS24523-23	2-45
S6	MS24523-23	1-270
S6	MS24523-23	2-45
S7	26ET61T	1-260
S7	26ET1T	1-260A
S7	6ET1T	1-260B
S7	26ET61T	2-65
XA1	582555-1	1-100
XA1	582587-1	2-205

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<b>REFERENCE DESIGNATOR</b>	<b>PART NUMBER</b>	<b>FIG-ITEM</b>
XA2	582551-1	1-95
XA3	582551-1	1-95
XA4	582589-1	1-105
XA4	582589-1	2-210
XK1	000300-1538	1-20
XK1	RSF116400	1-21
XK1	RSF116400	2-243
XK1	000300-1538	2-245
XK20	BACS16W1A	1-435
XK21	RSF116200	1-22
XK21	BACS16X1A	1-440
XK21	RSF116200	2-242

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### NUMERICAL INDEX

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
000300-1538		1	20	1
		1	22	1
		2	242	1
		2	245	1
000300-1539		1	21	1
		2	243	1
019-0248-000		1	107	15
10-61800-1504		2	10	1
		2	10	1
10-61800-1562		2	5	1
		2	5	1
10-61803-17		1	195	1
		2	75	1
10-61803-24		1	205	1
		2	85	1
10-61803-25		1	200	3
		2	80	3
10-61803-395		1	210	1
		2	90	1
10-61803-398		1	220	1
		2	100	1
10-61803-5		1	225	1
		2	105	1
10-61803-96		1	215	1
		2	95	1
101-015-1DJ5		1	107	15
102-006-1		1	20	1
		1	22	1
		2	242	1
		2	245	1
102-009-1		1	21	1
		2	243	1
11170		1	240	1
		2	30	1

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
11170-1		1	230A	2
		1	265	2
		2	20A	2
		2	25	2
1N4384		1	275C	1
1N5061		1	275B	1
		2	60	1
1N5331		1	35	2
		2	230	2
233A3209-409		1	27	1
		2	248	1
26ET1T		1	260A	1
26ET61T		1	260	1
		2	65	1
293162		1	26	4
		1	290	4
		2	247	4
		2	255	4
317-2020-901		1	106	10
318-1616-802		1	107	15
318-610-1001-421		1	370	1
318-630-1001-002		1	225	1
		2	105	1
318-630-1001-012		1	195	1
		2	75	1
318-630-1001-017		1	205	1
		2	85	1
318-630-1001-018		1	200	3
		2	80	3
318-630-1001-072		1	215	1
		2	95	1
318-630-1001-324		1	210	1
		2	90	1
318-630-1001-327		1	220	1
318-630-1001-398		2	100	1

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
318-630-1001-421		1	227	1
		2	107	1
320553		1	108	10
415-1504		2	10	1
415-1562		2	5	1
425-4		1	283	1
		2	12	1
425-5		2	7	1
425-7		1	4	1
425-8		1	4B	1
48-2335-09		1	106	10
		1	106	10
50D0F17G		2	310A	AR
582507-1		1	125	4
		2	200	2
582551-1		1	95	2
582555-1		1	100	1
582587-1		2	205	1
582589-1		1	105	1
		2	210	1
60-0730-9		1	230	2
		2	20	2
61GB2319-1A320		1	15	1
		1	18	1
		2	237	1
		2	240	1
640024-1		1	375	10
64AT22-3		1	245	1
		2	50	1
64AT22-514		1	255	1
		2	55	1
65C38432-7		1	365	1
66143-2		1	350	AR
		2	315	AR
66168-2		1	109	3

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		1	380	3
69-37268-14		1	165	2
		2	280	2
69-37302-273		1	30	1
		2	235	1
69-37313-100		2	120	1
69-37313-105		1	1	RF
69-37313-107		1	1A	RF
69-37313-109		1	1B	RF
69-37313-110		1	1C	RF
69-37313-111		1	1D	RF
69-37313-112		1	1E	RF
69-37313-113		1	1F	RF
69-37313-114		1	1G	RF
69-37313-115		1	1H	RF
69-37313-116		1	1J	RF
69-37313-117		1	1K	RF
69-37313-118		1	1L	RF
69-37313-119		1	1M	RF
69-37313-120		1	1N	RF
69-37313-121		1	1P	RF
69-37313-122		1	1Q	RF
69-37313-123		1	1R	RF
69-37313-124		1	1S	RF
69-37313-125		1	1T	RF
69-37313-126		1	1U	RF
69-37313-127		2	15	1
69-37313-128		2	15A	1
69-37313-129		2	15B	1
69-37313-130		2	320	1
69-37313-131		2	320A	1
69-37313-300		1	1V	RF
		2	1A	RF
69-37313-301		1	1W	RF
		2	1B	RF

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## COMPONENT MAINTENANCE MANUAL

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
69-37313-302		1	1X	RF
		2	1C	RF
69-37313-32		1	3	1
69-37313-35		1	3A	1
69-37313-36		1	3B	1
69-37313-37		1	3C	1
69-37313-38		1	3D	1
69-37313-39		1	3E	1
69-37313-40		1	3F	1
69-37313-402		1	1Y	RF
69-37313-404		1	1Z	RF
69-37313-406		1	2	RF
		2	1D	RF
69-37313-407		1	2A	RF
		2	1E	RF
69-37313-408		1	2B	RF
		2	1F	RF
69-37313-41		1	3G	1
69-37313-411		1	2C	RF
69-37313-412		1	2D	RF
69-37313-413		1	2E	RF
69-37313-414		1	2F	RF
69-37313-415		1	2G	RF
69-37313-416		1	2H	RF
69-37313-417		1	2J	RF
69-37313-418		1	2K	RF
69-37313-419		1	2L	RF
69-37313-420		1	2M	RF
69-37313-421		1	2N	RF
69-37313-422		1	2P	RF
69-37313-423		1	2Q	RF
69-37313-424		1	2R	RF
69-37313-425		1	2S	RF
69-37313-426		1	2T	RF
69-37313-427		1	2U	RF

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## COMPONENT MAINTENANCE MANUAL

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
69-37313-428		1	2V	RF
69-37313-44		1	3H	1
69-37313-49		1	3J	1
69-37313-50		1	3K	1
69-37313-51		1	3L	1
69-37313-511		1	2W	RF
69-37313-512		1	2X	RF
69-37313-513		1	2Y	RF
69-37313-514		1	2Z	RF
69-37313-515		1	2AA	RF
69-37313-516		1	2AB	RF
69-37313-517		1	2AC	RF
69-37313-518		1	2AD	RF
69-37313-519		1	2AE	RF
69-37313-520		1	2AF	RF
69-37313-521		1	2AG	RF
69-37313-522		1	2AH	RF
69-37313-523		1	2AJ	RF
69-37313-524		1	2AK	RF
69-37313-525		1	2AL	RF
69-37313-526		1	2AM	RF
69-37313-527		1	2AN	RF
69-37313-528		1	2AP	RF
69-37313-58		1	3M	1
69-37313-61		1	3N	1
69-37313-67		1	3P	1
69-37313-68		1	3Q	1
69-37313-69		1	3R	1
69-37313-70		1	3S	1
69-37313-80		1	280	1
		2	120A	1
69-37313-81		1	335	1
69-37313-82		1	170	2
		2	285	2
69-37313-83		1	180	1

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		2	290	1
69-37313-84		1	175	1
		2	295	1
69-37329-7		2	220	1
69-44578-2		1	250	2
		2	35	2
69-51812-5		1	110	2
69-53883-11		1	40	1
69-53883-12		1	140	1
69-53883-13		1	152	1
		2	135	1
69-53883-14		1	153	1
		2	140	1
69-53883-15		1	135	1
		1	155	1
		2	145	1
		2	150	1
69-53883-16		1	150	1
		2	130	1
69-53883-17		1	40A	1
		2	300	1
69-53883-20		1	385	1
69-73639-1		1	120	1
69-73639-5		1	120A	1
		2	195	1
69-78285-1		1	115	1
		1	325	1
69-78601-1		1	320	1
69-78809-3		2	190	1
		2	190B	1
69-78809-4		2	190A	1
		2	190C	1
69-78809-5		2	190D	1
6ET1T		1	260B	1
800000121-1		1	190	1

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## COMPONENT MAINTENANCE MANUAL

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		2	70	1
8500-5171		1	106	10
96-40		1	90	2
96-62		1	50	4
		1	75	6
A3-1110-03-1		1	255A	1
A3-1110-05-1		1	245A	1
A3-1114-01-1		1	235	2
		2	40A	2
AA820-04		1	108	10
AN960D8		1	45	12
		2	155	12
BAC27DCC227		1	390	1
BAC27DCC351		1	360	1
		2	330	1
BAC27EEX510		1	330	1
		1	355	1
		1	395	1
		2	325	1
BACC45FN12-12P		1	400	1
BACC45FN22-55P		1	345	1
		2	265	1
BACC45FN22-55P6		1	340	1
		2	260	1
BACC47CN1A		1	106	10
		1	405	10
BACC47DJ1		1	410	12
BACC47DJ2		1	107	15
		1	415	3
BACN10JC04		1	90	2
BACN10JC06		1	50	4
		1	75	6
BACN10NW1		1	26	4
		1	290	4
		1	420	4

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
		2	247	4
		2	255	4
BACN10PA06-6		1	185	4
BACR13CF2AB		1	15	1
		1	18	1
		1	425	1
		2	237	1
		2	240	1
BACR13CF4A		1	60	1
		2	170	1
BACR13CG2AB		1	17	1
		1	430	1
		2	238	1
BACR15BB5D		1	28	2
		2	225	2
BACS12CB06-5		1	5	6
BACS12HN04-5		1	24	4
		2	246	4
BACS16W1A		1	21	1
		1	435	1
		2	243	1
BACS16X1A		1	20	1
		1	22	1
		1	440	1
		2	242	1
		2	245	1
BACS38K12		1	445	30
BACS38K4F		2	310B	AR
BACT12AC48		1	108	10
		1	450	10
BCREF23240		1	227	1
		1	370	1
		2	107	1
BCREF2573		1	225	1
		2	105	1

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
BCREF2583		1	195	1
		2	75	1
BCREF2586		1	205	1
		2	85	1
BCREF2587		1	200	3
		2	80	3
BCREF2620		1	215	1
		2	95	1
BCREF7980		1	210	1
		2	90	1
BCREF7981		1	220	1
		2	100	1
BR230DS0115		1	17	1
		2	238	1
BR246S0111		1	15	1
		1	18	1
		2	237	1
		2	240	1
BR64S105		1	15	1
		1	18	1
		2	237	1
		2	240	1
BRH10A04		1	90	2
BRH10A06		1	50	4
		1	75	6
ES210-1632		1	15	1
		1	18	1
		2	237	1
		2	240	1
ES410-1538		1	17	1
		2	238	1
FCA210-71		1	15	1
		1	18	1
		2	237	1
		2	240	1

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## COMPONENT MAINTENANCE MANUAL

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
FCA410-63		1	17	1
		2	238	1
H10-04BAC		1	90	2
H10-06BAC		1	50	4
		1	75	6
JD4L018		1	15	1
		1	18	1
		2	237	1
		2	240	1
JD4L031		1	15	1
		1	18	1
		2	237	1
		2	240	1
JG2F009		1	55	1
		2	165	1
K19798-04		1	26	4
		1	290	4
		2	247	4
		2	255	4
KD4L018		1	17	1
		2	238	1
KD4L036		1	17	1
		2	238	1
LRM20W16DJ5		1	106	10
MS24523-23		1	270	2
		2	45	2
MS24693C2		2	110	4
		2	125	4
MS24693C25		2	115	6
MS27488-20		1	455	10
MS35338-136		2	275	6
MS35338-41		1	10	6
MS51957-13		2	215	4
MS51957-15		1	460	4
		2	250	4

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
MS51957-20		2	175	4
MS51957-27		2	270	6
NAS1291C04M		2	185	4
NAS1291C06M		2	160	4
NAS1801-04-4		1	130	4
NAS1801-04-5		1	285	4
NAS1801-06-14		1	65	6
NAS43DD0-17		2	180	4
NAS43DD1-17		1	70	6
		1	85	2
NAS514P440-4		1	145	4
NAS514P632-5		1	160	6
NAS600-14P		1	80	2
NS202101-40		1	90	2
NS202101-62		1	50	4
		1	75	6
R1880SN		1	108	10
RMA4812-160-40		1	26	4
		1	290	4
		2	247	4
		2	255	4
RMLH9075-40W		1	90	2
RMLH9075-62W		1	50	4
		1	75	6
RSF116200		1	20	1
		1	22	1
		2	242	1
		2	245	1
RSF116400		1	21	1
		2	243	1
SF6G6CBB5D		1	185	4
SLCA002-4		1	283A	1
		2	12A	1
SLCA002-5		2	7A	1
SLCA002-7		1	4A	1

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PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
SLCA002-8		1	4C	1
T6S440J		1	90	2
T6S632J		1	50	4
		1	75	6
TY903-5		2	310	AR
VN303A40		1	90	2
VN303A62		1	50	4
		1	75	6
ZZL4020-36LD		1	106	10
ZZL4020-36LDH13		1	106	10

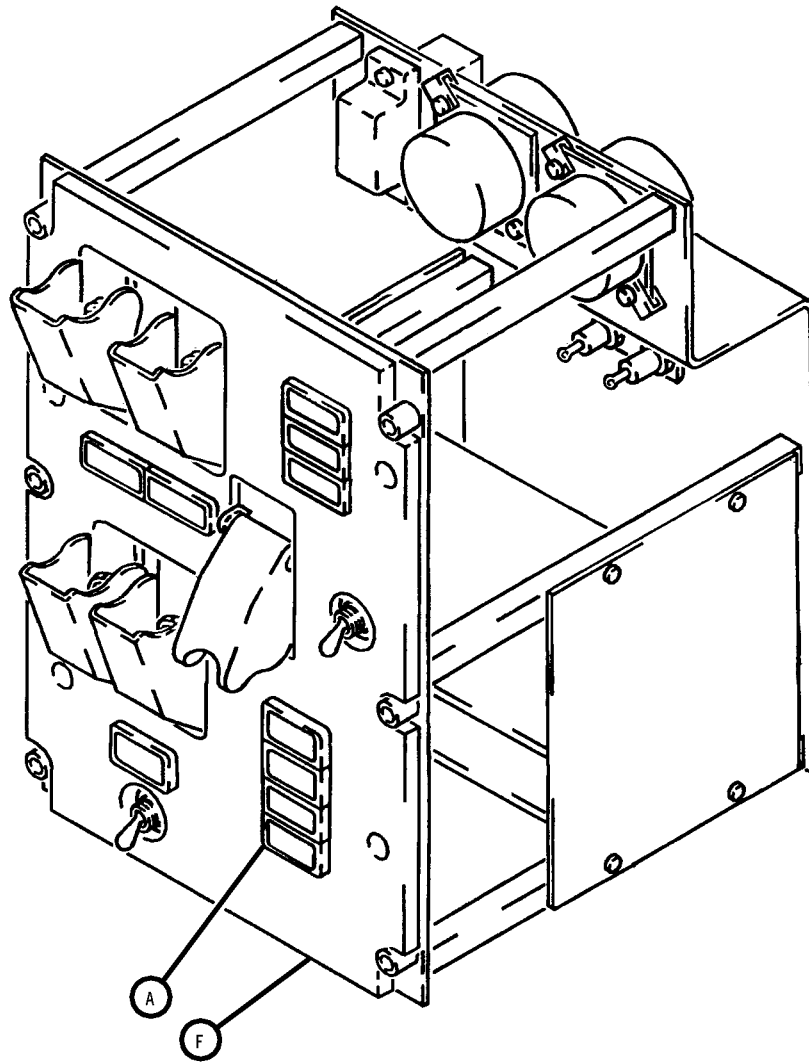
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Flight Controls Module Assembly, P5-3  
IPL Figure 1 (Sheet 1 of 6)

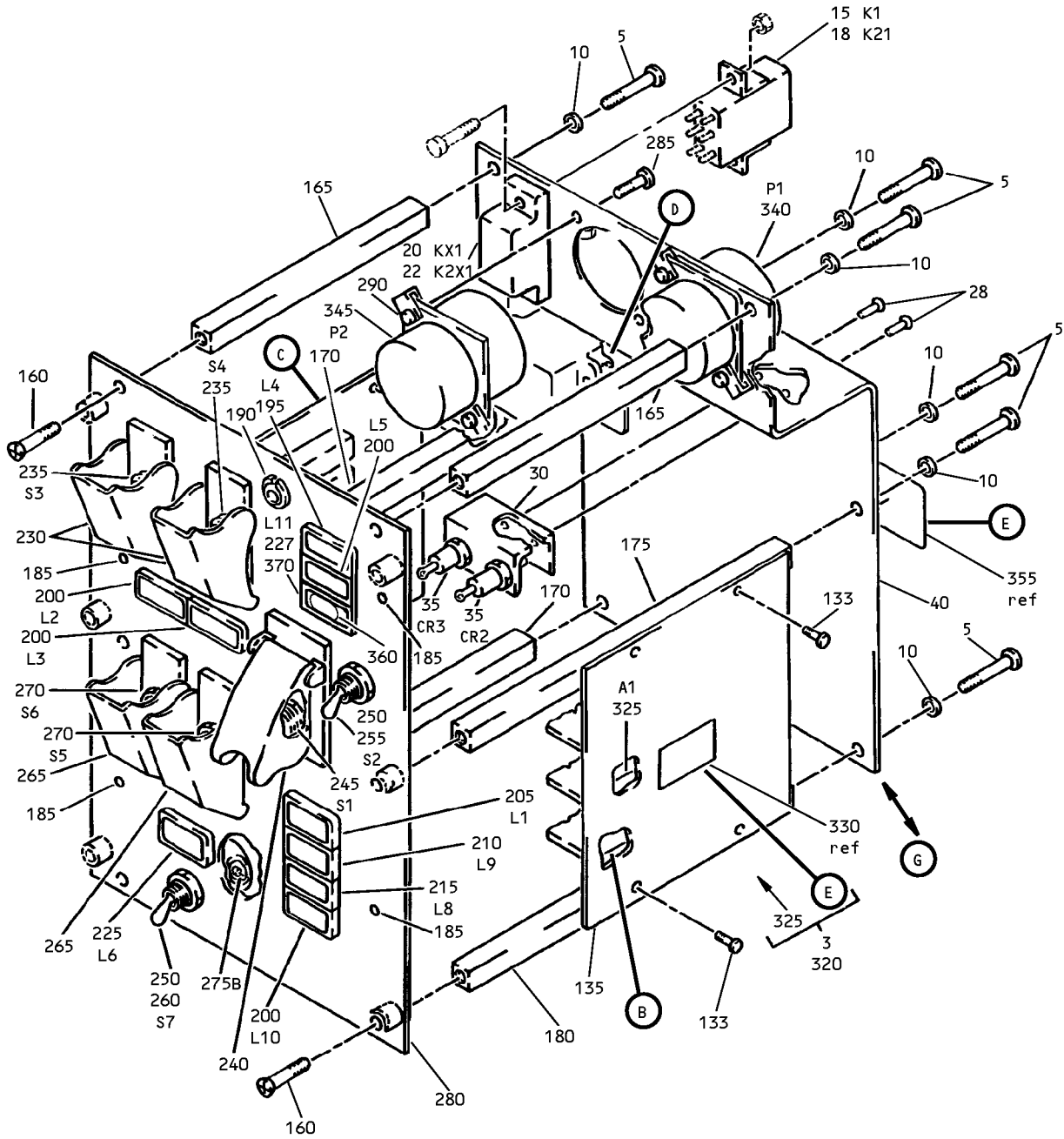
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A

992089 S0004996590\_V2

Flight Controls Module Assembly, P5-3  
IPL Figure 1 (Sheet 2 of 6)

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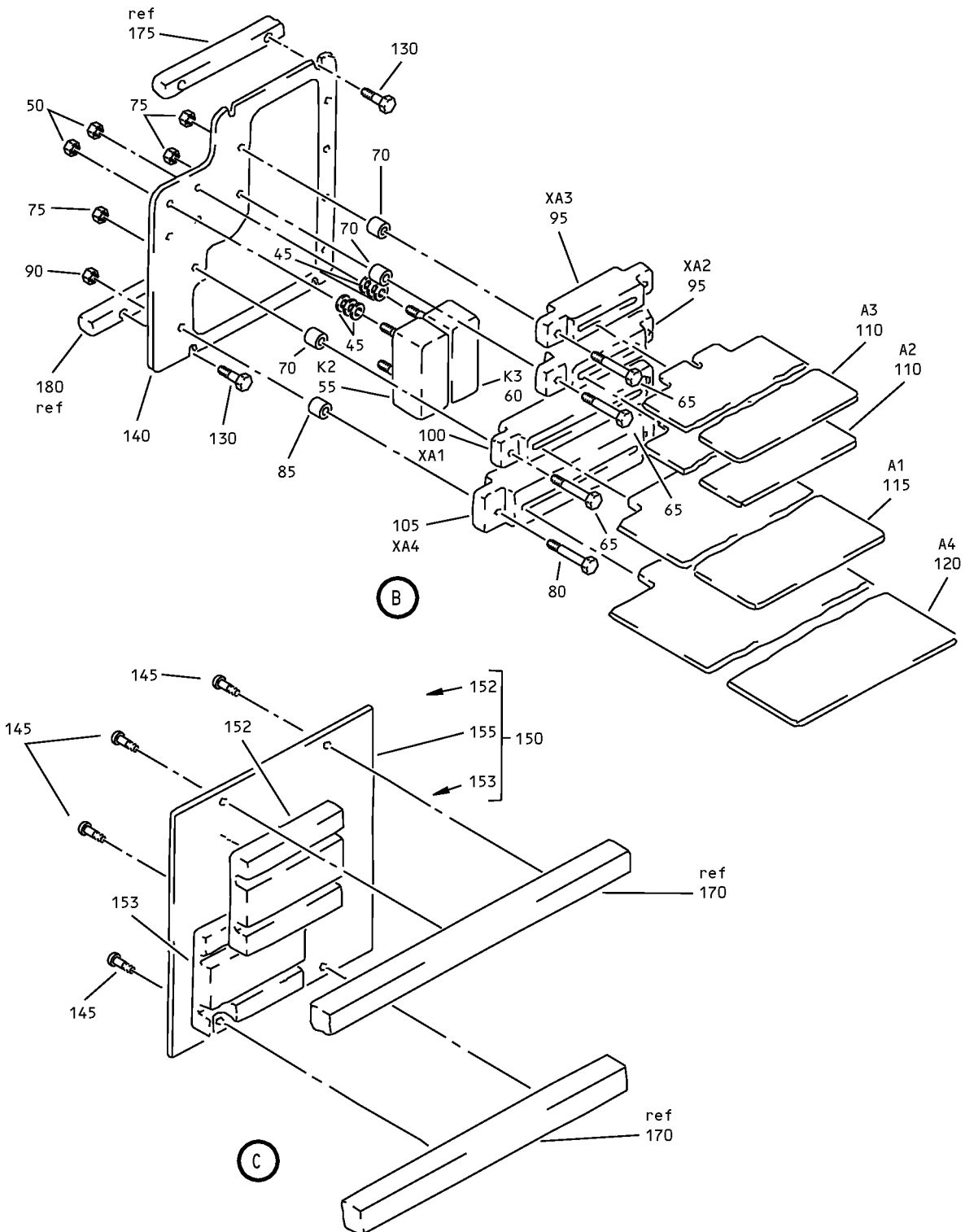
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Flight Controls Module Assembly, P5-3  
IPL Figure 1 (Sheet 3 of 6)

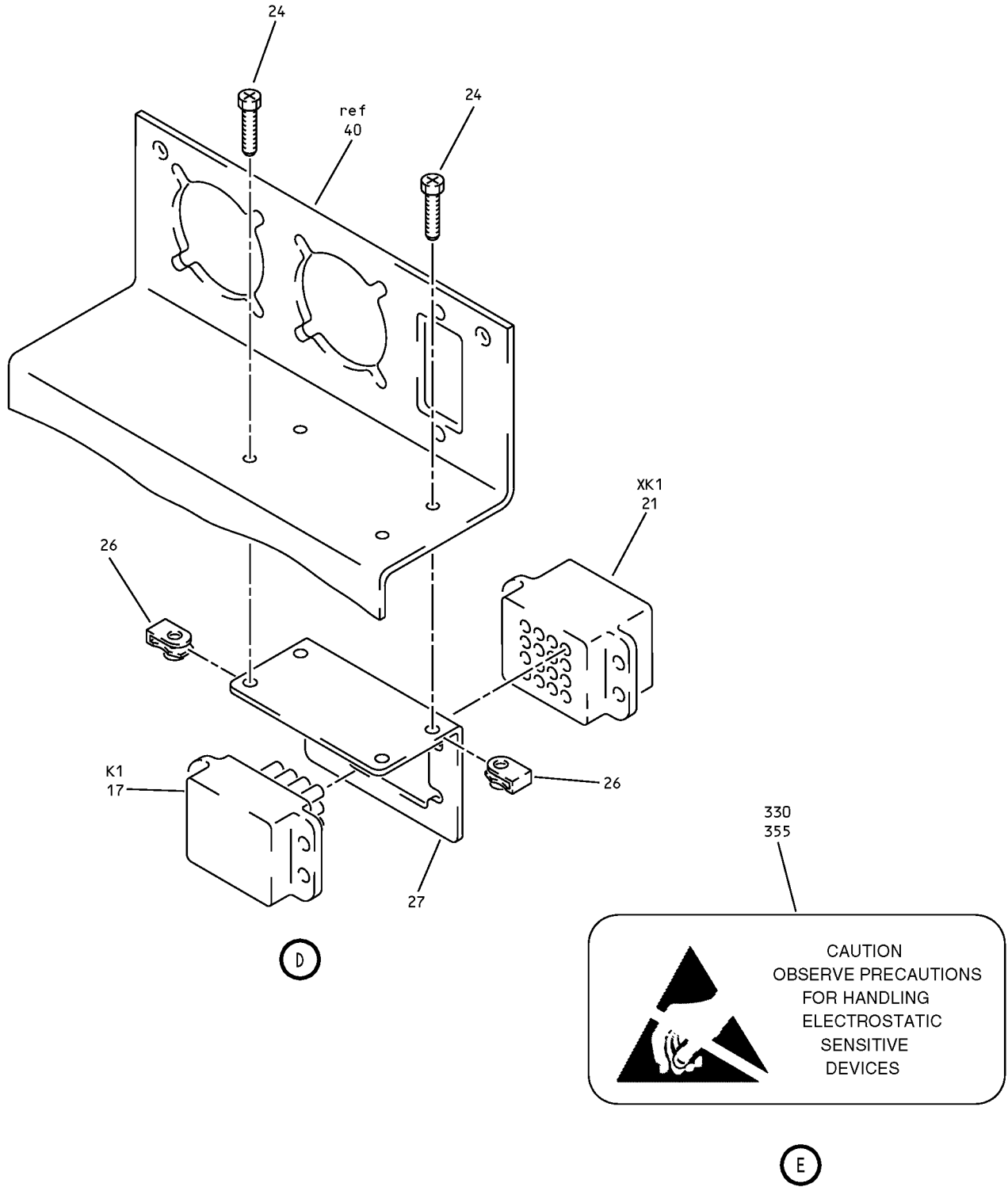
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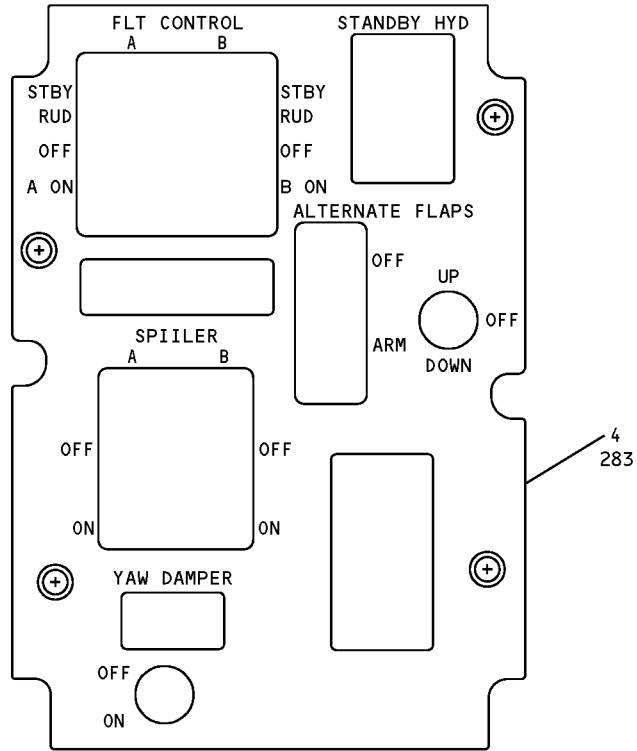


Flight Controls Module Assembly, P5-3  
IPL Figure 1 (Sheet 4 of 6)

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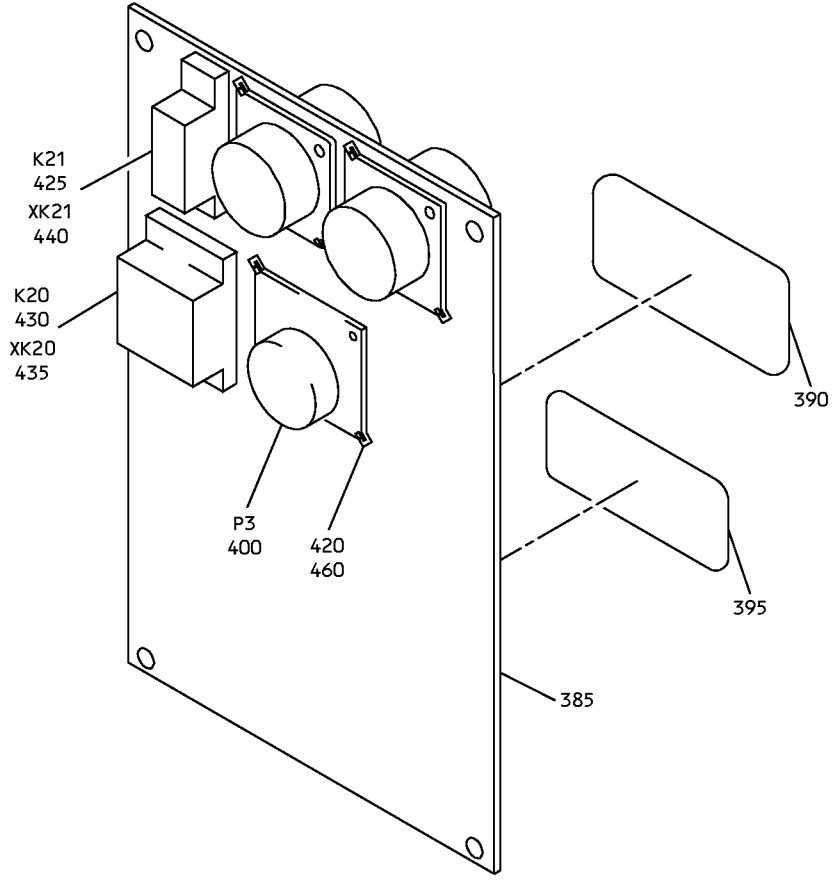


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Flight Controls Module Assembly, P5-3  
IPL Figure 1 (Sheet 5 of 6)

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G

1632195 S0000298716\_V1

Flight Controls Module Assembly, P5-3  
IPL Figure 1 (Sheet 6 of 6)

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
-1	69-37313-105									A	RF
-1A	69-37313-107									B	RF
-1B	69-37313-109									C	RF
-1C	69-37313-110									D	RF
-1D	69-37313-111									E	RF
-1E	69-37313-112									F	RF
-1F	69-37313-113									G	RF
-1G	69-37313-114									H	RF
-1H	69-37313-115									J	RF
-1J	69-37313-116									K	RF

-Item not Illustrated

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
-1K	69-37313-117									L	RF
-1L	69-37313-118									M	RF
-1M	69-37313-119									N	RF
-1N	69-37313-120									P	RF
-1P	69-37313-121									Q	RF
-1Q	69-37313-122									R	RF
-1R	69-37313-123									S	RF
-1S	69-37313-124									T	RF
-1T	69-37313-125									U	RF
-1U	69-37313-126									V	RF

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
-1V	69-37313-300									W	RF
-1W	69-37313-301									X	RF
-1X	69-37313-302									Y	RF
-1Y	69-37313-402									Z	RF
-1Z	69-37313-404									AA	RF
-2	69-37313-406									AB	RF
-2A	69-37313-407									AC	RF
-2B	69-37313-408									AD	RF
-2C	69-37313-411									AE	RF
-2D	69-37313-412									AF	RF

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
-2E	69-37313-413									AG	RF
-2F	69-37313-414									AH	RF
-2G	69-37313-415									AJ	RF
-2H	69-37313-416									AK	RF
-2J	69-37313-417									AL	RF
-2K	69-37313-418									AM	RF
-2L	69-37313-419									AN	RF
-2M	69-37313-420									AP	RF
-2N	69-37313-421									AQ	RF
-2P	69-37313-422									AR	RF

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
-2Q	69-37313-423									AS	RF
-2R	69-37313-424									AT	RF
-2S	69-37313-425									AU	RF
-2T	69-37313-426									AV	RF
-2U	69-37313-427									AW	RF
-2V	69-37313-428									AX	RF
-2W	69-37313-511									AY	RF
-2X	69-37313-512									AZ	RF
-2Y	69-37313-513									BA	RF
-2Z	69-37313-514									BB	RF

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
-2AA	69-37313-515									BC	RF
-2AB	69-37313-516									BD	RF
-2AC	69-37313-517									BE	RF
-2AD	69-37313-518									BF	RF
-2AE	69-37313-519									BG	RF
-2AF	69-37313-520									BH	RF
-2AG	69-37313-521									BJ	RF
-2AH	69-37313-522									BK	RF
-2AJ	69-37313-523									BL	RF
-2AK	69-37313-524									BM	RF

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1- -2AL	69-37313-525									BN	RF
-2AM	69-37313-526									BP	RF
-2AN	69-37313-527									BQ	RF
-2AP	69-37313-528									BR	RF
3	69-37313-32									C, AE, AY	1
-3A	69-37313-35									D, AF, AZ	1
-3B	69-37313-36									E, AG, BA	1
-3C	69-37313-37									F, AH, BB	1

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USAGE CODE	UNITS PER ASSY
1- -3D	69-37313-38		. MODULE ASSY (PRE COMPONENT SB 69-37313-31-01) (PRE COMPONENT SB 69-37313-31-02) (REF OHM 31-36-04)	G, AJ, BC	1
-3E	69-37313-39		. MODULE ASSY (PRE COMPONENT SB 69-37313-31-01) (PRE COMPONENT SB 69-37313-31-02) (REF OHM 31-36-04)	H, AK, BD	1
-3F	69-37313-40		. MODULE ASSY (PRE COMPONENT SB 69-37313-31-01) (PRE COMPONENT SB 69-37313-31-02) (REF OHM 31-36-04)	J, AL, BE	1
-3G	69-37313-41		. MODULE ASSY (PRE COMPONENT SB 69-37313-31-01) (PRE COMPONENT SB 69-37313-31-02) (REF OHM 31-36-04)	K, AM, BF	1
-3H	69-37313-44		. MODULE ASSY (PRE COMPONENT SB 69-37313-31-01) (PRE COMPONENT SB 69-37313-31-02) (REF OHM 31-36-04)	L, AN, BG	1
-3J	69-37313-49		. MODULE ASSY (PRE COMPONENT SB 69-37313-31-01) (PRE COMPONENT SB 69-37313-31-02) (REF OHM 31-36-04)	M, AP, BH	1
-3K	69-37313-50		. MODULE ASSY (PRE COMPONENT SB 69-37313-31-01) (PRE COMPONENT SB 69-37313-31-02) (REF OHM 31-36-04)	N, AQ, BJ	1

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1- -3L	69-37313-51		.	MODULE ASSY (PRE COMPONENT SB 69-37313-31-01) (PRE COMPONENT SB 69-37313-31-02) (REF OHM 31-36-04)						P, AR, BK	1
-3M	69-37313-58		.	MODULE ASSY (PRE COMPONENT SB 69-37313-31-01) (PRE COMPONENT SB 69-37313-31-02) (REF OHM 31-36-04)						Q, A, BL	1
-3N	69-37313-61		.	MODULE ASSY (PRE COMPONENT SB 69-37313-31-01) (PRE COMPONENT SB 69-37313-31-02) (REF OHM 31-36-04)						R, AT, BM	1
-3P	69-37313-67		.	MODULE ASSY (PRE COMPONENT SB 69-37313-31-01) (PRE COMPONENT SB 69-37313-31-02) (REF OHM 31-36-04)						S, AU, BN	1
-3Q	69-37313-68		.	MODULE ASSY (PRE COMPONENT SB 69-37313-31-01) (PRE COMPONENT SB 69-37313-31-02) (REF OHM 31-36-04)						T, AV, BP	1
-3R	69-37313-69		.	MODULE ASSY (PRE COMPONENT SB 69-37313-31-01) (PRE COMPONENT SB 69-37313-31-02) (REF OHM 31-36-04)						U, AW, BQ	1
-3S	69-37313-70		.	MODULE ASSY (PRE COMPONENT SB 69-37313-31-01) (PRE COMPONENT SB 69-37313-31-02) (REF OHM 31-36-04)						V, AX, BR	1

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1- 4	425-7		.	LIGHTPLATE (V05617) (OPT ITEM 4A)						AE, AG, AK-AN, AQ-AS, AU-AX, AY, BA, BD-BG, BJ-BL, BN-BR	1
-4A	SLCA002-7		.	LIGHTPLATE (V51896) (OPT ITEM 4)						AE, AG, AK-AN, AQ-AS, AU-AX, AY, BA, BD-BG, BJ-BL, BN-BR	1
-4B	425-8		.	LIGHTPLATE (V05617) (OPT ITEM 4C)						AF, AH, AJ, AP, AT, AZ, BB, BC, BH, BM	1
-4C	SLCA002-8		.	LIGHTPLATE (V51896) (OPT ITEM 4B)						AF, AH, AJ, AP, AT, AZ, BB, BC, BH, BM	1
5	BACS12CB06-5		.	SCREW						A, B, Z, AA	6
10	MS35338-41		.	WASHER						A, B, Z, AA	6
15	61GB2319-1A320		.	RELAY (V98927) (SPEC BACR13CF2AB) (OPT FCA210-71 (V78290)) (OPT BR64S105 (V56623)) (OPT JD4L018 (V35344)) (OPT JD4L031 (V35344)) (OPT BR246S0111 (V56623)) (OPT ES210-1632 (V99699)) (K1)						A, B	1

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
17	ES410-1538		.	RELAY						Z, AA	1
				(V99699)							
				(SPEC BACR13CG2AB)							
				(OPT KD4L018 (V35344))							
				(OPT BR230DS0115 (V56623))							
				(OPT KD4L036 (V58657))							
				(OPT FCA410-63 (V78290))							
				(K1)							
18	ES210-1632		.	RELAY						Z, AA	1
				(V99699)							
				(SPEC BACR13CF2AB)							
				(OPT JD4L018 (V35344))							
				(OPT JD4L031 (V35344))							
				(OPT BR246S0111 (V56623))							
				(OPT BR64S105 (V56623))							
				(OPT FCA210-71 (V78290))							
				(OPT 61GB2319-1A320 (V98927))							
				(K21)							
19	ES410-1538			DELETED							
20	000300-1538		.	SOCKET						A, B	1
				(V05574)							
				(SPEC BACS16X1A)							
				(OPT 102-006-1 (V09922))							
				(OPT RSF116200 (V58982))							
				(XK1)							
21	RSF116400		.	SOCKET						Z, AA	1
				(V58982)							
				(SPEC BACS16W1A)							
				(OPT 102-009-1 (V09922))							
				(OPT 000300-1539 (V05574))							
				(XK1)							
22	RSF116200		.	SOCKET						Z, AA	1
				(V58982)							
				(SPEC BACS16X1A)							
				(OPT 102-006-1 (V09922))							
				(OPT 000300-1538 (V05574))							
				(XK21)							
23	RSF116400			DELETED							
24	BACS12HN04-5		.	SCREW						Z, AA	4
25	BACR15BB5D			DELETED							

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1- 26	K19798-04		.	NUT-CLIP (V15653) (SPEC BACN10NW1) (OPT RMA4812-160-40 (V72962)) (OPT 293162 (V60119))						Z, AA	4
27	233A3209-409		.	BRACKET-RELAY						Z, AA	1
28	BACR15BB5D		.	RIVET (SIZE DETERMINED ON INST)						A, B, Z, AA	2
30	69-37302-273		.	CHANNEL-DIODE, MTG						A, B, Z, AA	1
35	1N5331		.	DIODE (CR2, CR3)						A, B, Z, AA	2
40	69-53883-11		.	BACKPLATE (OPT ITEM 40A)						A, B, Z, AA	1
-40A	69-53883-17		.	BACKPLATE (OPT ITEM 40)						A, B, Z, AA	1
45	AN960D8		.	WASHER						A, B, Z, AA	12
50	H10-06BAC		.	NUT (V15653) (SPEC BACN10JC06) (OPT RMLH9075-62W (V72962)) (OPT T6S632J (V11815)) (OPT VN303A62 (V92215)) (OPT 96-62 (V80539)) (OPT BRH10A06 (V52828)) (OPT NS202101-62 (V80539))						A, B, Z, AA	4
55	JG2F009		.	RELAY (V35344) (K2)						A, B, Z, AA	1
60	BACR13CF4A		.	RELAY (K3)						A, B, Z, AA	1
65	NAS1801-06-14		.	SCREW						A, B, Z, AA	6
70	NAS43DD1-17		.	SPACER						A, B, Z, AA	6

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY	
			1	2	3	4	5	6	7			
1- 75	H10-06BAC		.	NUT							A, B, Z, AA	6
				(V15653)								
				(SPEC BACN10JC06)								
				(OPT RMLH9075-62W (V72962))								
				(OPT T6S632J (V11815))								
				(OPT VN303A62 (V92215))								
				(OPT 96-62 (V80539))								
				(OPT BRH10A06 (V52828))								
				(OPT NS202101-62 (V80539))								
80	NAS600-14P		.	SCREW							A, B, Z, AA	2
85	NAS43DD1-17		.	SPACER							A, B, Z, AA	2
90	H10-04BAC		.	NUT							A, B, Z, AA	2
				(V15653)								
				(SPEC BACN10JC04)								
				(OPT NS202101-40 (V80539))								
				(OPT RMLH9075-40W (V72962))								
				(OPT T6S440J (V11815))								
				(OPT VN303A40 (V92215))								
				(OPT 96-40 (V80539))								
				(OPT BRH10A04 (V52828))								
95	582551-1		.	CONNECTOR							A, B, Z, AA	2
				(V00779)								
				(XA2, XA3)								
100	582555-1		.	CONNECTOR							A, B, Z, AA	1
				(V00779)								
				(XA1)								
105	582589-1		.	CONNECTOR							A, B, Z, AA	1
				(V00779)								
				(XA4)								
-106	48-2335-09		.	CONTACT-PIN							Z, AA, AE-AX, AY-BR	10
				(V77820)								
				(SPEC BACC47CN1A)								
				(OPT 48-2335-09 (V02660))								
				(OPT 8500-5171 (V59610))								
				(OPT ZZL4020-36LD (V49367))								
				(OPT 317-2020-901 (V55104))								
				(OPT ZZL4020-36LDH13 (V49367))								
				(OPT LRM20W16DJ5 (V09922))								

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
-107	318-1616-802		.	CONTACT-SOCKET						Z, AA, AE-AX, AY-BR	15
				(V55104)							
				(SPEC BACC47DJ2)							
				(OPT 101-015-1DJ5 (V09922))							
				(OPT 019-0248-000 (V05574))							
-108	AA820-04		.	TERMINAL-LUG						Z, AA, AE-AX, AY-BR	10
				(V98410)							
				(SPEC BACT12AC48)							
				(OPT R1880SN (V14726))							
				(OPT 320553 (V00779))							
-109	66168-2		.	TERMINAL-TAB						Z, AA, AE-AX, AY-BR	3
110	69-51812-5		.	PRINTED CIRCUIT ASSY						A, B, Z, AA	2
				(A2, A3)							
				(V89954)							
115	69-78285-1		.	PRINTED CIRCUIT ASSY						A, B, Z, AA	1
				(STATIC SENSITIVE PART)							
				(A1)							
				(V89954)							
120	69-73639-1		.	PRINTED CIRCUIT ASSY						A, B, Z, AA	1
				(A4)							
				(OPT ITEM 120A)							
				(V89954)							
-120A	69-73639-5		.	PRINTED CIRCUIT ASSY-RELAY						A, B, Z, AA	1
				BOARD							
				(A4)							
				(OPT ITEM 120)							
				(V89954)							
-125	582507-1		.	PLUG-KEYING						A, B, Z, AA	4
				(V00779)							
130	NAS1801-04-4		.	SCREW						A, B, Z, AA	4
135	69-53883-15		.	COVER						A, B, Z, AA	1
140	69-53883-12		.	PLATE-MTG						A, B, Z, AA	1
145	NAS514P440-4		.	SCREW						A, B, Z, AA	4
150	69-53883-16		.	COVER ASSY						A, B, Z, AA	1

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
152	69-53883-13		.	.						A, B, Z, AA	1
153	69-53883-14		.	.						A, B, Z, AA	1
155	69-53883-15		.	.						A, B, Z, AA	1
160	NAS514P632-5		.							A, B, Z, AA	6
165	69-37268-14		.							A, B, Z, AA	2
170	69-37313-82		.							A, B, Z, AA	2
175	69-37313-84		.							A, B, Z, AA	1
180	69-37313-83		.							A, B, Z, AA	1
185	SF6G6CBB5D		.							A, B, Z, AA	4
190	800000121-1		.							A, B, Z, AA	1
195	BCREF2583		.							A, B, Z, AA	1
200	BCREF2587		.							A, B, Z, AA	3
205	BCREF2586		.							A, B, Z, AA	1

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1- 210	BCREF7980		.	LIGHT ASSY-IND (SPEED TRIM FAIL) (V81590) (318-630-1001-324) (L9) (SPEC 10-61803-395)						A, B, Z, AA	1
215	BCREF2620		.	LIGHT ASSY-IND (MACH TRIM FAIL) (V81590) (318-630-1001-072) (L8) (SPEC 10-61803-96)						A, B, Z, AA	1
220	BCREF7981		.	LIGHT ASSY-IND (AUTO SLAT FAIL) (V81590) (318-630-1001-327) (L10) (SPEC 10-61803-398)						A, B, Z, AA	1
225	BCREF2573		.	LIGHT ASSY-IND (YAW DAMPER) (V81590) (318-630-1001-002) (L6) (SPEC 10-61803-5)						A, B, Z, AA	1
227	BCREF23240		.	LIGHT ASSY-IND PRESS TO TEST (V81590) (318-630-1001-421) (L11)						Z, AA	1
230	60-0730-9		.	GUARD-BLACK (V72914)						A, Z	2
-230A	11170-1		.	GUARD-BLACK (V72914)						B, AA	2
235	A3-1114-01-1		.	SWITCH-TG (V81640) (S3, S4)						A, B, Z, AA	2
240	11170		.	GUARD-RED (V72914)						A, B, Z, AA	1
245	64AT22-3		.	SWITCH-TG (V91929) (S1) (OPT ITEM 245A)						A, B, Z, AA	1

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY					
			1	2	3	4	5	6	7							
1-																
-245A	A3-1110-05-1		.	S	W	I	T	C	H	-	T	A	B	Z	AA	1
250	69-44578-2		.	C	A	P	-	S	W			A	B	Z	AA	2
255	64AT22-514		.	S	W	I	T	C	H	-	T	A	B	Z	AA	1
-255A	A3-1110-03-1		.	S	W	I	T	C	H	-	T	A	B	Z	AA	1
260	26ET61T		.	S	W	I	T	C	H			A	B	Z	AA	1
-260A	26ET1T		.	S	W	I	T	C	H			A	B	Z	AA	1
-260B	6ET1T		.	S	W	I	T	C	H			A	B	Z	AA	1
265	11170-1		.	G	U	A	R	D	-	B	L	A	C	K		2
270	MS24523-23		.	S	W	I	T	C	H			A	B	Z	AA	2
275	IN5061															
-275A	IN4384															
275B	1N5061		.	D	I	O	D	E			A	B	Z	AA	1	
-275C	1N4384		.	D	I	O	D	E			A	B	Z	AA	1	
280	69-37313-80		.	B	A	S	E	P	L	A	T	A	B	Z	AA	1

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1- 283	425-4		.	LIGHTPLATE (V05617) (OPT ITEM 22A) (POST COMPONENT SB 69-37313-31-03)						Z, AA	1
-283A	SLCA002-4		.	LIGHTPLATE (V51896) (OPT ITEM 22) (POST COMPONENT SB 69-37313-31-03)						Z, AA	1
285	NAS1801-04-5		.	SCREW						A, B, Z, AA	4
290	K19798-04		.	NUT (V15653) (SPEC BACN10NW1) (OPT RMA4812-160-40 (V72962)) (OPT 293162 (V60119))						A, B, Z, AA	4
-295	69-37313-81			DELETED							
300	BACC45FN22-55P6			DELETED							
305	BACC45FN22-55P			DELETED							
-310	66143-2			DELETED							
315	BAC27EEX510			DELETED							
320	69-78601-1		.	MODULE ASSY-MASTER CAUTION (REWORK)						C-V, AE- AX, AY- BR	1
325	69-78285-1		.	PRINTED CIRCUIT ASSY (STATIC SENSITIVE PART) (A1) (V89954)						C-V, AE- AX, AY- BR	1
330	BAC27EEX510		.	DECAL						C-V, AE- AX, AY- BR	1
-335	69-37313-81		.	WIRE BUNDLE ASSY						A, B, Z, AA	1
340	BACC45FN22-55P6		.	CONNECTOR-(P1)						A, B, Z, AA	1
345	BACC45FN22-55P		.	CONNECTOR-(P2)						A, B, Z, AA	1
-350	66143-2		.	TERMINAL (V00779)						A, B, Z, AA	AR

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
355	BAC27EEX510		.	DECAL						A, B, Z, AA	1
360	BAC27DCC351		.	MARKER-INOP						Z, AA, AE-AX, AY-BR	1
365	65C38432-7		.	COMPONENT KIT-FLIGHT CONTROL ASSU, P5-3 (THESE KIT PARTS ARE INSTALLED ON -4XX AND -5XX SERIES DASH NUMBERS CREATED PER CSB 69- 37313-31-02)						AE-BR	1
370	BCREF23240		.	LIGHT ASSY (V81590) (318-610-1001-421) (L11)						AE-BR	1
-375	640024-1		.	CONTACT						AE-BR	10
-380	66168-2		.	TAB TERMINAL						AE-BR	3
385	69-53883-20		.	BACKPLATE						AE-BR	1
390	BAC27DCC227		.	ALUMINUM FOIL MARKER						AE-BR	1
395	BAC27EEX510		.	VINYL DECAL						AE-BR	1
400	BACC45FN12-12P		.	CONNECTOR (P3)						AE-BR	1
-405	BACC47CN1A		.	CONTACT-PIN						AE-BR	10
-410	BACC47DJ1		.	CONTACT-SOCKET						AE-BR	12
-415	BACC47DJ2		.	CONTACT-SOCKET						AE-BR	3
420	BACN10NW1		.	CLIP NUT						AE-BR	4
425	BACR13CF2AB		.	RELAY (K21)						AE-BR	1
430	BACR13CG2AB		.	RELAY (K20)						AE-BR	1
435	BACS16W1A		.	SOCKET-RELAY (XK20)						AE-BR	1
440	BACS16X1A		.	SOCKET-RELAY (XK21)						AE-BR	1
-445	BACS38K12		.	STRAP-PLASTIC						AE-BR	30
-450	BACT12AC48		.	TERMINAL LUG						AE-BR	10
-455	MS27488-20		.	PLUG						AE-BR	10

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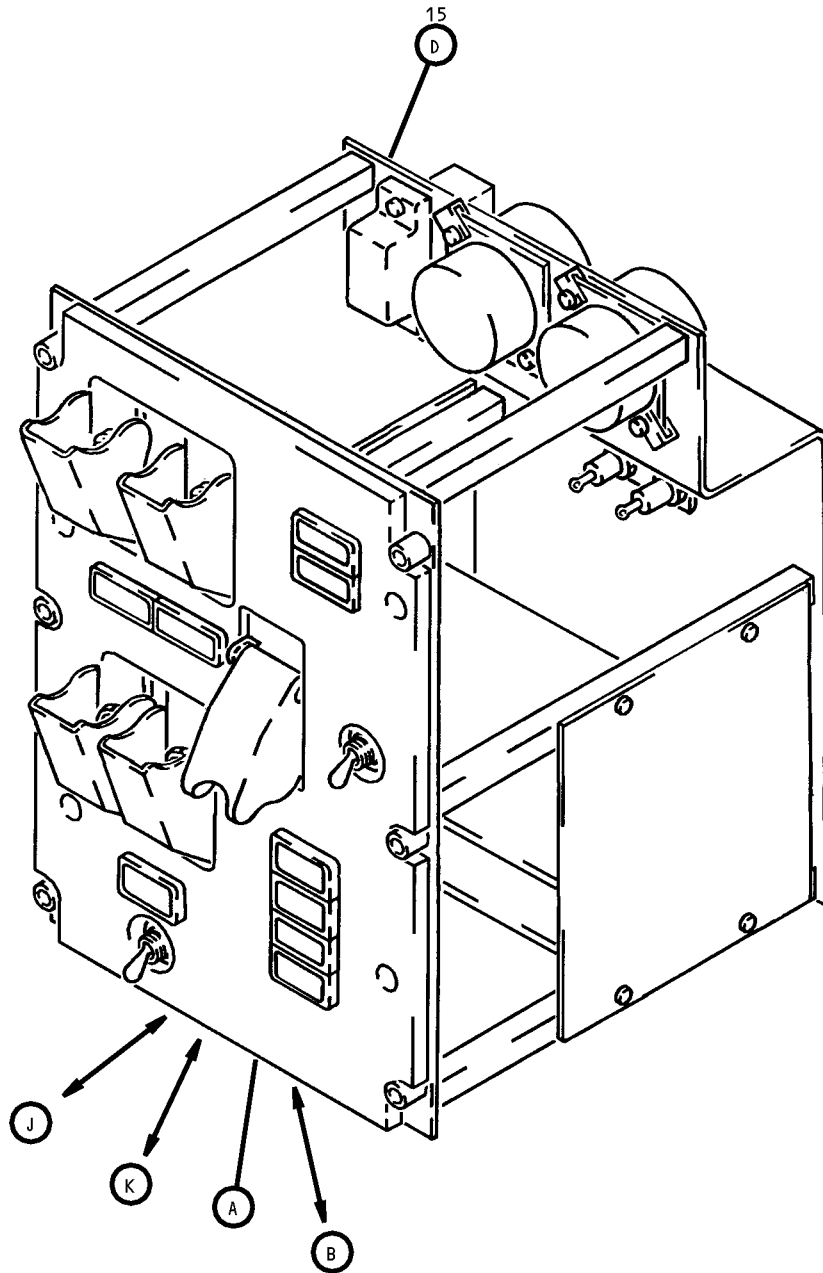
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			1	2	3	4	5	6	7		
1- 460	MS51957-15		.	.	SCREW-PAN HEAD					AE-BR	4

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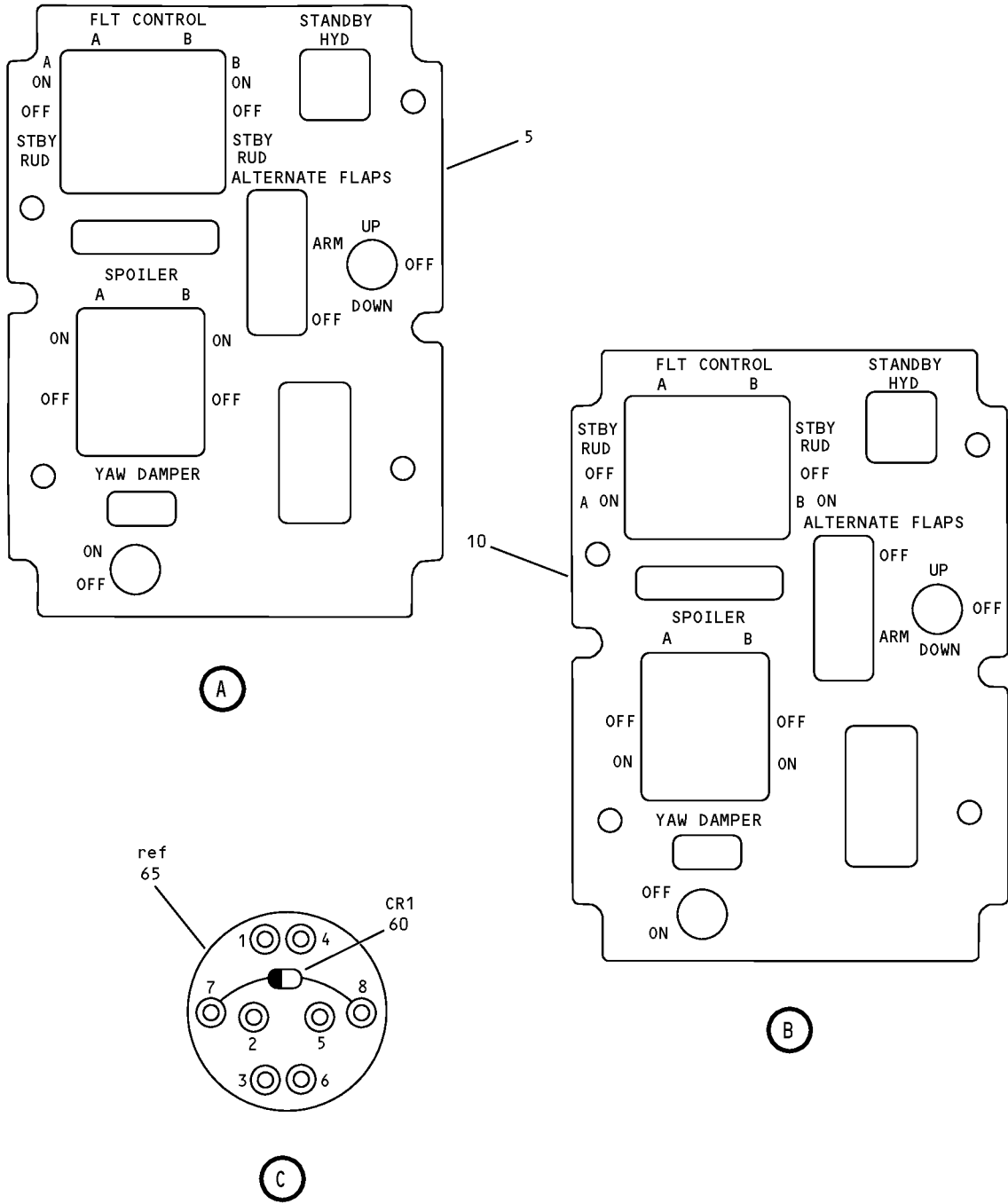
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Flight Controls Module Assembly, P5-3  
IPL Figure 2 (Sheet 1 of 6)

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Flight Controls Module Assembly, P5-3  
IPL Figure 2 (Sheet 2 of 6)

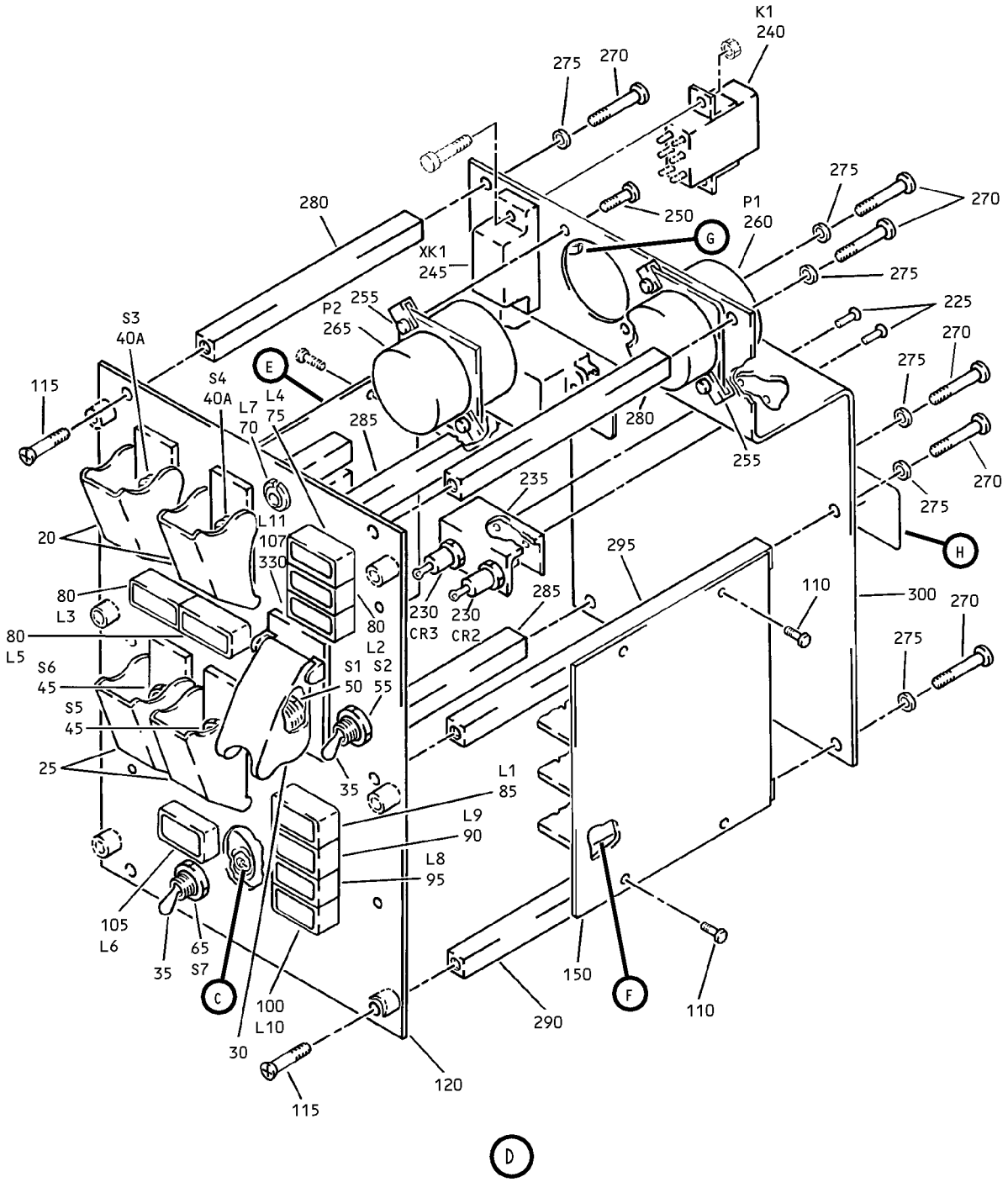
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Flight Controls Module Assembly, P5-3  
IPL Figure 2 (Sheet 3 of 6)

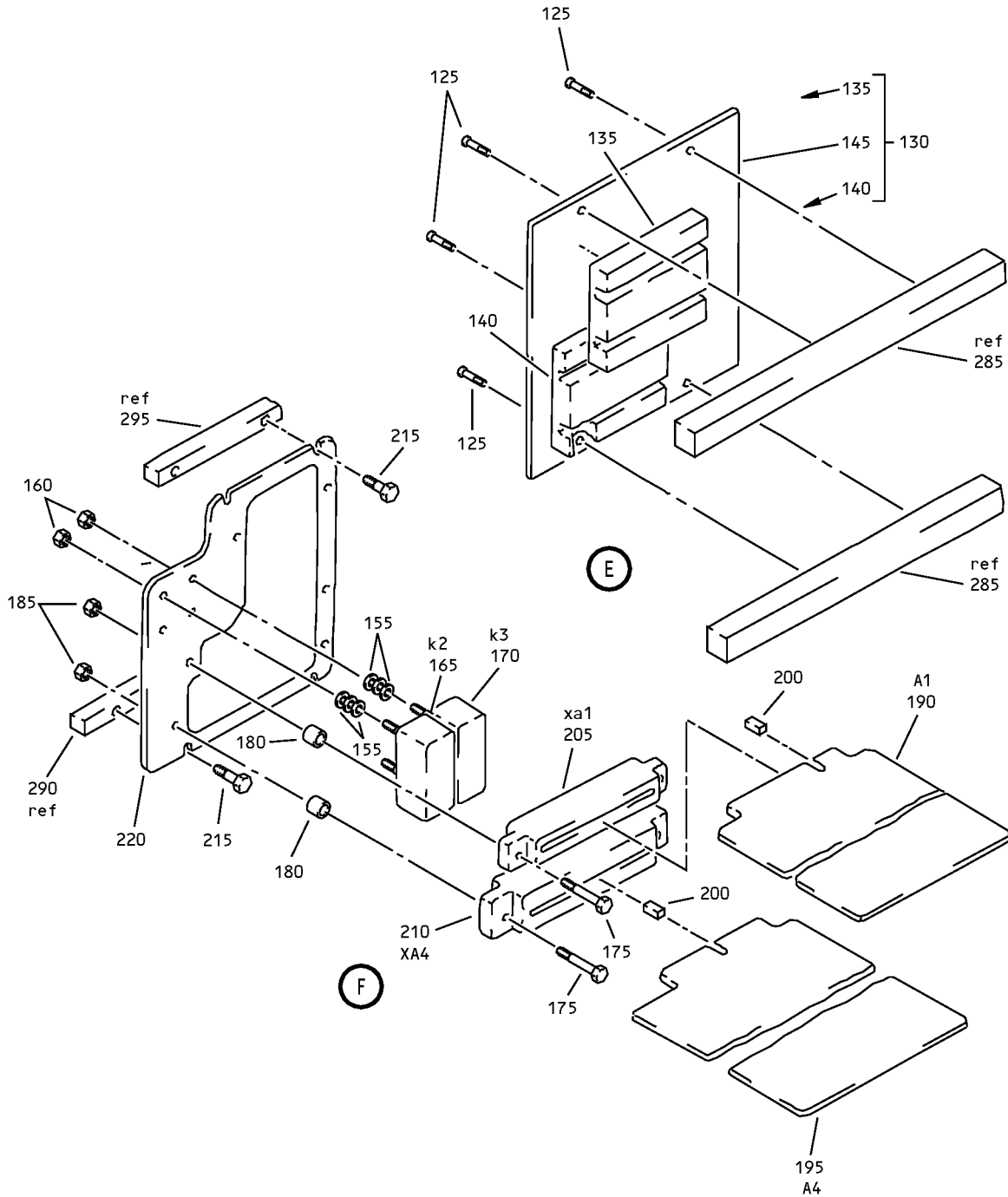
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Flight Controls Module Assembly, P5-3  
IPL Figure 2 (Sheet 4 of 6)

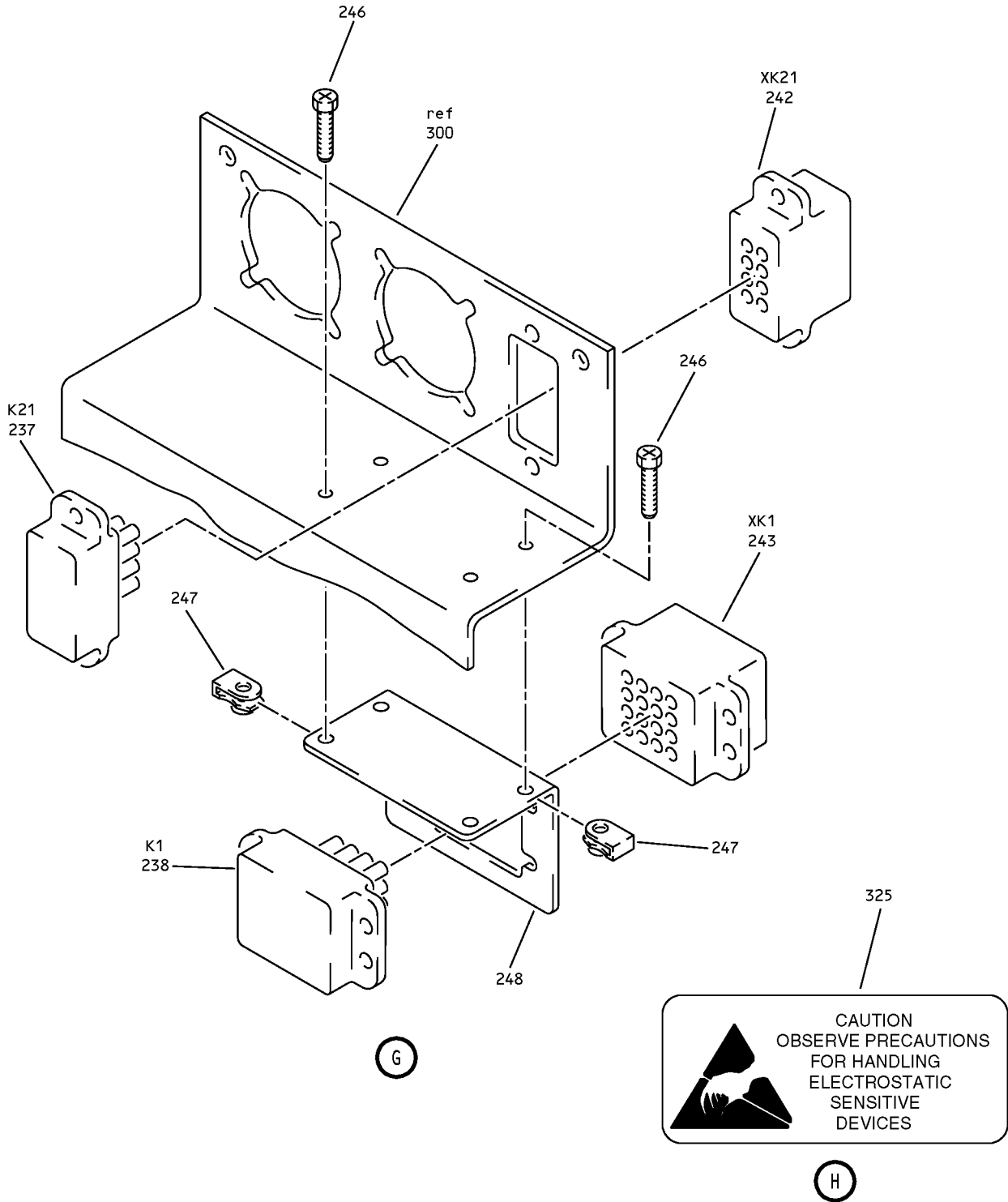
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Flight Controls Module Assembly, P5-3  
IPL Figure 2 (Sheet 5 of 6)

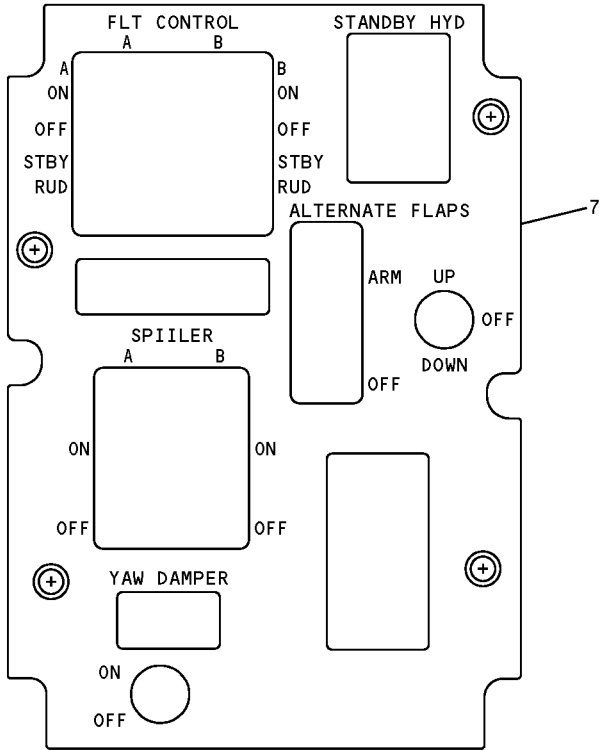
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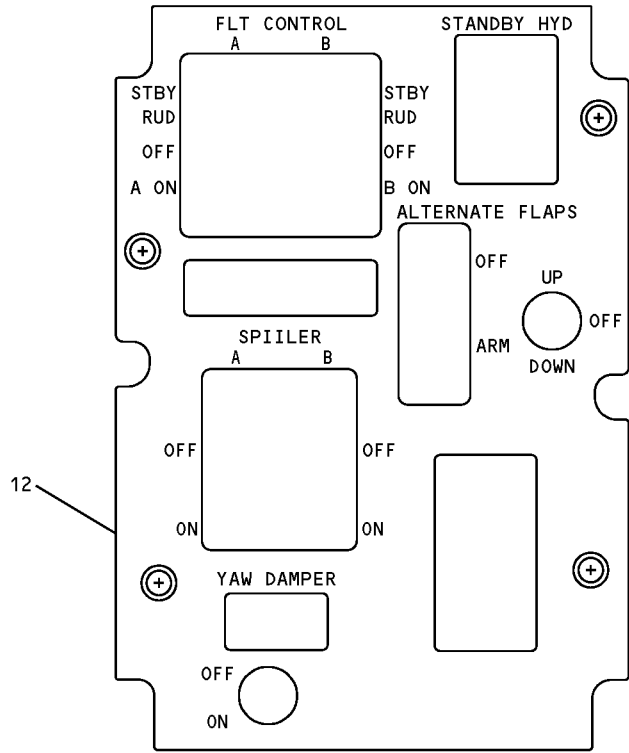
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Flight Controls Module Assembly, P5-3  
IPL Figure 2 (Sheet 6 of 6)

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
2-											
-1A	69-37313-300									W	RF
-1B	69-37313-301									X	RF
-1C	69-37313-302									Y	RF
-1D	69-37313-406									AB	RF
-1E	69-37313-407									AC	RF
-1F	69-37313-408									AD	RF
5	415-1562									W	1
7	425-5									AB	1
-7A	SLCA002-5									AB	1
10	415-1504									X, Y	1
12	425-4									AC, AD	1

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
2- -12A	SLCA002-4		.	LIGHTPLATE (V51896) (OPT ITEM 12) (POST SB 69-37313-31-03)						AC, AD	1
15	69-37313-127		.	MODULE ASSY (STATIC SENSITIVE PART)						W, AB	1
-15A	69-37313-128		.	MODULE ASSY (STATIC SENSITIVE PART)						X, AC	1
-15B	69-37313-129		.	MODULE ASSY (STATIC SENSITIVE PART)						Y, AD	1
20	60-0730-9		. .	GUARD-SWITCH, BLK (V72914)						W, Y, AB, AD	2
-20A	11170-1		. .	GUARD-SWITCH, BLK (V72914)						X, AC	2
25	11170-1		. .	GUARD-SWITCH, BLK (V72914)						W-Y, AB- AD	2
30	11170		. .	GUARD-SWITCH, RED (V72914)						W-Y, AB- AD	1
35	69-44578-2		. .	CAP-SWITCH						W-Y, AB- AD	2
40	A31114-01-1			DELETED							
40A	A3-1114-01-1		. .	SWITCH-TG (V81640) (S3, S4)						W-Y, AB- AD	2
45	MS24523-23		. .	SWITCH-TG (S5, S6)						W-Y, AB- AD	2
50	64AT22-3		. .	SWITCH-TG (V91929) (S1)						W-Y, AB- AD	1
55	64AT22-514		. .	SWITCH-TG (V91929) (S2)						W-Y, AB- AD	1
60	1N5061		. .	DIODE (CR1)						W-Y, AB- AD	1
65	26ET61T		. .	SWITCH (V91929) (S7)						W-Y, AB- AD	1

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY	
			1	2	3	4	5	6	7			
2- 70	800000121-1		.	.	CONNECTOR (V05617) (L7)						W-Y, AB- AD	1
75	BCREF2583		.	.	LIGHT ASSY-IND, LOW QTY (V81590) (318-630-1001-012) (L4) (SPEC 10-61803-17)						W-Y, AB- AD	1
80	BCREF2587		.	.	LIGHT ASSY-IND, LOW PRESSURE (V81590) (318-630-1001-018) (L2, L3, L5) (SPEC 10-61803-25)						W-Y, AB- AD	3
85	BCREF2586		.	.	LIGHT ASSY-IND, FEEL DIFF PRESSURE (V81590) (318-630-1001-017) (L1) (SPEC 10-61803-24)						W-Y, AB- AD	1
90	BCREF7980		.	.	LIGHT ASSY-IND, SPEED TRIM FAIL (V81590) (318-630-1001-324) (L9) (SPEC 10-61803-395)						W-Y, AB- AD	1
95	BCREF2620		.	.	LIGHT ASSY-IND, MACH TRIM FAIL (V81590) (318-630-1001-072) (L8) (SPEC 10-61803-96)						W-Y, AB- AD	1
100	BCREF7981		.	.	LIGHT ASSY-IND, AUTO SLAT FAIL (V81590) (318-630-1001-398) (L10) (SPEC 10-61803-398)						W-Y, AB- AD	1
105	BCREF2573		.	.	LIGHT ASSY-IND, YAW DAMPER (V81590) (318-630-1001-002) (L6) (SPEC 10-61803-5)						W-Y, AB- AD	1
107	BCREF23240		.	.	LIGHT ASSY-IND PRESS TO TEST (V81590) (318-630-1001-421) (L11)						AB-AD	1

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
2-											
110	MS24693C2		.	.	SCREW					W-Y, AB- AD	4
115	MS24693C25		.	.	SCREW					W-Y, AB- AD	6
120	69-37313-100		.	.	BASEPLATE					W, AB	1
-120A	69-37313-80		.	.	BASEPLATE					X, Y, AC, AD	1
125	MS24693C2		.	.	SCREW					W-Y, AB- AD	4
130	69-53883-16		.	.	COVER ASSY					W-Y, AB- AD	1
135	69-53883-13		.	.	FOAM					W-Y, AB- AD	1
140	69-53883-14		.	.	FOAM					W-Y, AB- AD	1
145	69-53883-15		.	.	COVER					W-Y, AB- AD	1
150	69-53883-15		.	.	COVER					W-Y, AB- AD	1
155	AN960D8		.	.	WASHER					W-Y, AB- AD	12
160	NAS1291C06M		.	.	NUT					W-Y, AB- AD	4
165	JG2F009		.	.	RELAY (V35344) (K2)					W-Y, AB- AD	1
170	BACR13CF4A		.	.	RELAY (K3)					W-Y, AB- AD	1
175	MS51957-20		.	.	SCREW					W-Y, AB- AD	4
180	NAS43DD0-17		.	.	SPACER					W-Y, AB- AD	4
185	NAS1291C04M		.	.	NUT					W-Y, AB- AD	4

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY	
			1	2	3	4	5	6	7			
2- 190	69-78809-3		.	.	PRINTED WIRING ASSY-UNIVERSAL MASTER CAUTION (STATIC SENSITIVE PART) (A1) (OPT ITEM 190A) (V89954)						X, Y, AC, AD	1
-190A	69-78809-4		.	.	PRINTED WIRING ASSY-UNIVERSAL MASTER CAUTION (STATIC SENSITIVE PART) (A1) (OPT ITEM 190) (V89954)						X, Y, AC, AD	1
-190B	69-78809-3		.	.	PRINTED WIRING ASSY-UNIVERSAL MASTER CAUTION (STATIC SENSITIVE PART) (A1) (OPT ITEM 190C, 190D) (V89954)						W, AB	1
-190C	69-78809-4		.	.	PRINTED WIRING ASSY-UNIVERSAL MASTER CAUTION (STATIC SENSITIVE PART) (A1) (OPT ITEM 190B, 190D) (V89954)						W, AB	1
-190D	69-78809-5		.	.	PRINTED WIRING ASSY-UNIVERSAL MASTER CAUTION (STATIC SENSITIVE PART) (A1) (OPT ITEM 190B, 190C) (V89954)						W, AB	1
195	69-73639-5		.	.	PRINTED CIRCUIT ASSY-RELAY BOARD (A4) (V89954)						W-Y, AB- AD	1
200	582507-1		.	.	PLUG-KEYING (V00779)						W-Y, AB- AD	2
205	582587-1		.	.	CONNECTOR (V00779) (XA1)						W-Y, AB- AD	1
210	582589-1		.	.	CONNECTOR (V00779) (XA4)						W-Y, AB- AD	1

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
2-											
215	MS51957-13		.	.	SCREW					W-Y, AB- AD	4
220	69-37329-7		.	.	PLATE-SUPPORT					W-Y, AB- AD	1
225	BACR15BB5D		.	.	RIVET (SIZE DETERMINED ON INST)					W-Y, AB- AD	2
230	1N5331		.	.	DIODE (CR2, CR3)					W-Y, AB- AD	2
235	69-37302-273		.	.	CHANNEL-DIODE MOUNTING					W-Y, AB- AD	1
237	ES210-1632		.	.	RELAY (V99699) (SPEC BACR13CF2AB) (OPT JD4L018 (V35344)) (OPT JD4L031 (V35344)) (OPT BR246S0111 (V56623)) (OPT BR64S105 (V56623)) (OPT FCA210-71 (V78290)) (OPT 61GB2319-1A320 (V98927)) (K21)					AB-AD	1
238	ES410-1538		.	.	RELAY (V99699) (SPEC BACR13CG2AB) (OPT KD4L018 (V35344)) (OPT BR230DS0115 (V56623)) (OPT KD4L036 (V58657)) (OPT FCA410-63 (V78290)) (K1)					AB-AD	1
240	61GB2319-1A320		.	.	RELAY (V98927) (SPEC BACR13CF2AB) (OPT FCA210-71 (V78290)) (OPT BR64S105 (V56623)) (OPT JD4L018 (V35344)) (OPT JD4L031 (V35344)) (OPT BR246S0111 (V56623)) (OPT ES210-1632 (V99699)) (K1)					W-Y	1

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE	USAGE CODE	UNITS PER ASSY
2-					
242	RSF116200		. . SOCKET (V58982) (SPEC BACS16X1A) (OPT 102-006-1 (V09922)) (OPT 000300-1538 (V05574)) (XK21)	AB-AD	1
243	RSF116400		. . SOCKET (V58982) (SPEC BACS16W1A) (OPT 102-009-1 (V09922)) (OPT 000300-1539 (V05574)) (XK1)	AB-AD	1
245	000300-1538		. . SOCKET (V05574) (SPEC BACS16X1A) (OPT 102-006-1 (V09922)) (OPT RSF116200 (V58982)) (XK1)	W-Y	1
246	BACS12HN04-5		. . SCREW	AB-AD	4
247	K19798-04		. . NUT-CLIP (V15653) (SPEC BACN10NW1) (OPT RMA4812-160-40 (V72962)) (OPT 293162 (V60119))	AB-AD	4
248	233A3209-409		. . BRACKET-RELAY	AB-AD	1
250	MS51957-15		. . SCREW	W-Y, AB- AD	4
255	K19798-04		. . NUT-CLIP (V15653) (SPEC BACN10NW1) (OPT RMA4812-160-40 (V72962)) (OPT 293162 (V60119))	W-Y, AB- AD	4
260	BACC45FN22-55P6		. . CONNECTOR-(P1)	W-Y, AB- AD	1
265	BACC45FN22-55P		. . CONNECTOR-(P2)	W-Y, AB- AD	1
270	MS51957-27		. . SCREW	W-Y, AB- AD	6
275	MS35338-136		. . WASHER	W-Y, AB- AD	6

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FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY	
			1	2	3	4	5	6	7			
2-												
280	69-37268-14		. .							STANDOFF	W-Y, AB- AD	2
285	69-37313-82		. .							STANDOFF	W-Y, AB- AD	2
290	69-37313-83		. .							STANDOFF	W-Y, AB- AD	1
295	69-37313-84		. .							STANDOFF	W-Y, AB- AD	1
300	69-53883-17		. .							BACKPLATE	W-Y, AB- AD	1
305	BAC27EEX510									DELETED		
-310	TY903-5		. .							CLAMP-NYLON (V06383) (OPT ITEM 310A,310B)	W-Y, AB- AD	AR
-310A	50D0F17G		. .							CLAMP-STRING, GREEN (V00768) (OPT ITEM 310,310B)	W-Y, AB- AD	AR
-310B	BACS38K4F		. .							CLAMP (OPT ITEM 310,310A)	W-Y, AB- AD	AR
-315	66143-2		. .							TERMINAL-TAB (V00779)	W-Y, AB- AD	AR
-320	69-37313-130		. .							WIRE BUNDLE ASSY	W, Y, AB, AD	1
-320A	69-37313-131		. .							WIRE BUNDLE ASSY	X, AC	1
325	BAC27EEX510		. .							DECAL	W-Y, AB- AD	1
330	BAC27DCC351		. .							MARKER-INOP	AB-AD	1

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