

BOEING
COMMERCIAL JET
OVERHAUL MANUAL

TO: ALL HOLDERS OF VIP COMMUNICATIONS MODULE ASSEMBLY M771, P5-45, P5-81
OVERHAUL MANUAL, 23-02-03

REVISION NO. 6, DATED NOV 20/87

HIGHLIGHTS

DESCRIPTION OF CHANGE	TOPICS AFFECTED												
	D & O	D / Assy	Cleaning	Inspect / Check	Repair	Assy	F / C	Test	T / Shooting	S / Tools	Storage	IPL	L / Overhaul
Added 69-68561-14 per basic release.	X							X				X	
Eliminated "simplified circuit" diagrams, which did not add any clarity	X												
Clarified functional test callouts, Page 6								X					
Added input wiring tests for 69-37377-1, -11								X					
Removed 69-68561-11 from Fig. 3A functional test. Added 69-68561-11 to test Fig. 3E								X					
Changed M786B test for 69-37377-24 from pin 14 to pin 15								X					
Removed 69-68561-11 from Fig. 4A Schematic diagram. Added 69-68561-11 to Schematic Diagram 4E								X					
Revised wiring on 69-37377-11 schematics to agree with delivered configurations								X					
Removed unnecessary detail from Fig. 5, 8											X		

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DESCRIPTION OF CHANGE	TOPICS AFFECTED												
	D & O	D / A s s y	C l e a n i n g	I n s p / C h k	R e p a i r	A s s y	F / C	T e s t	T / S h o o t t i n g	S / T o o l s	S t o r a g e	I P L	L / O v e r h a u l
Revised 69-37377 parts list to show SCN001 power connector is exclusively used											X		
Revised vendors											X		
The following pages have been obsoleted by this revision and must be removed and destroyed: 3, 4, 4A thru 4D, 6A and 6B													

VIP COMMUNICATIONS MODULE ASSEMBLY M771, P5-45, P5-81

23-02-03

BOEING P/N 69-37377-1, -7, -11, -14, -24, -27
69-68561-11, -14

AIRLINE P/N

THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT:

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT
		PRR 32519-15 PRR 32519-25 MC 3031-75K	Dec 25/75 Jul 5/76 Jan 5/78

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LIST OF EFFECTIVE PAGES

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

PAGE	DATE	PAGE	DATE	PAGE	DATE
23-02-03		* 12M	Nov 20/87		
* T-1	Nov 20/87	* 12N	BLANK		
T-2	BLANK	* 13	Nov 20/87		
* LEP-1	Nov 20/87	* 14	Nov 20/87		
LEP-2	BLANK	* 15	Nov 20/87		
* T/C-1	Nov 20/87	16	May 10/82		
T-C-2	BLANK	17	May 10/82		
* 1	Nov 20/87	18	May 10/82		
* 2	Nov 20/87	19	May 10/82		
* 3	DELETED	* 20	Nov 20/87		
*F 4	DELETED	* 21	May 20/87		
* 4A	DELETED	* 22	BLANK		
* 4B	DELETED	* 23	BLANK		
* 4C	DELETED	24	May 10/83		
*F 4D	DELETED	25	May 10/83		
* 5	Nov 20/87	26	May 10/83		
* 6	BLANK	27	May 10/83		
* 6A	DELETED	28	BLANK		
* 6B	DELETED	29	May 10/83		
7	Jul 5/76	30	May 10/83		
* 8	Nov 20/87	31	May 10/83		
* 8A	Nov 20/87	* 32	Nov 20/87		
8B	Jan 5/77				
* 8C	Nov 20/87				
8D	May 10/83				
* 8E	Nov 20/87				
8F	May 10/83				
* 8G	Nov 20/87				
* 8H	BLANK				
9	BLANK				
F 10	Jul 5/76				
F 11	Jul 5/76				
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* 12A	Nov 20/87				
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12C	BLANK				
*F 12D	Nov 20/87				
*F 12E	Nov 20/87				
12F	BLANK				
F 12G	May 10/83				
12H	BLANK				
12I	May 10/83				
12J	BLANK				
* 12K	Nov 20/87				
* 12L	BLANK				

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

*[2] Special instructions not required.

VIP COMMUNICATIONS MODULE ASSEMBLY M771, P5-45, P5-81

1. DESCRIPTION AND OPERATION

A. The VIP communications module assemblies consists of switches and indicators mounted on a baseplate assembly, terminal board assemblies containing diodes, a wire bundle, and a connector. Quick-disconnect studs are provided for panel mounting.

B. Assemblies 69-37377-1, -11, -24, -27:

(1) S1 *[1] selects lamp bright with direct 28 volts dc, or three stages of dimming through 1, 2, or 3 zener diodes which drop 5.1 volts each. Pin J1-9 *[2] receives lamp power, and J1-18 *[3] is grounded. Depressing S2 *[4] grounds all indicators for lamp test.

(2) Pin J1-9 is connected to 28 volts dc and J1-18 is grounded. Each lamp has a possible circuit to ground through a relay to either pin J1-12, J1-14, or J1-16. When a relay is energized, its lamp circuit cannot be completed. When a ground is connected to one of pins 12, 14, or 16, one lamp circuit is completed through one relay, the other two relays are energized, and the other two lamp circuits are disabled.

C. Assemblies 69-37377-7, -14 and 69-68561-11, -14:

(1) Operation can be determined from the schematic diagrams.

*[1] S1 on 69-37377-1, -11, -27
S783 on 69-37377-24

*[2] Pin J1-9 on 69-37377-1, -11, -27
Pin D1461-19 on 69-37377-24

*[3] Pin J1-18 on 69-37377-1, -11, -27
Pin D1461-15 on 69-37377-24

*[4] S2 on 69-37377-1, -11, -27
S712 on 69-37377-24

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DASH NUMBERS LIMITED

2. TESTING

A. Test Equipment

- (1) Power Supply: 28 volts dc, 1 ampere
- (2) Multimeter: Simpson 260P, or equivalent
- (3) Connector (with pigtail leads):
 - (a) 69-37377-1 and -11 - BACC45FT22-55S
 - (b) 69-37377-7, -14, -24 and 69-68561-11, -14 - BACC45FT18-31S
 - (c) 69-37377-27 - BACC45FT16-24S

B. Functional Test (See Fig. 2 for component locations)

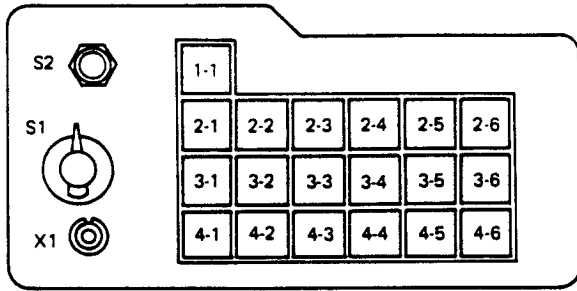
- (1) Perform test steps listed in indicated figures:

<u>Assembly</u>	<u>Figure</u>
69-37377-1	3
69-37377-7, -14	3A
69-37377-11	3B
69-37377-24	3C
69-37377-27	3D
69-68561-11, -14	3E

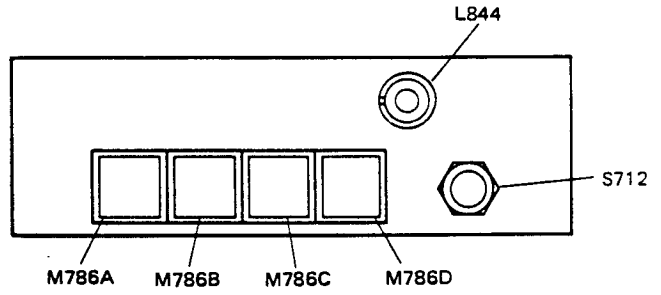
Note the following:

- (a) Con indicates continuity (less than 1 ohm) required. No Con or Open indicates more than 100 kilohms required.
- (b) When specified, depress the indicator listed in the Component Tested column.
- (c) Two bulbs should illuminate in each indicator. Check for uneven illumination over indicator caps which would indicate single bulb failure.

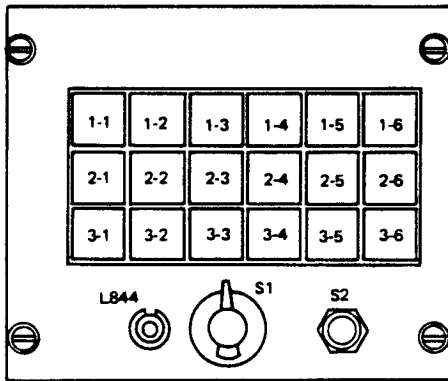
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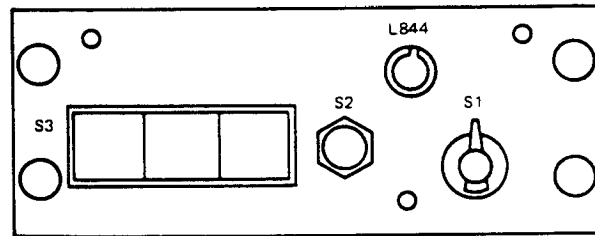
69-37377-1



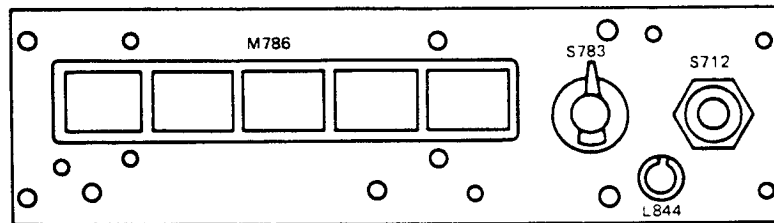
69-37377-7,-14



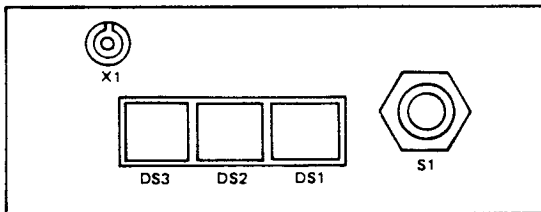
69-37377-11



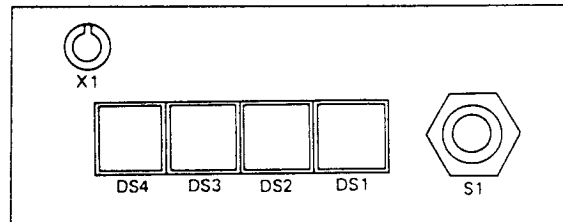
69-37377-27



69-37377-24



69-68561-11



69-68561-14

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Component Tested	Procedure	Required Results	
S2	Connect pin 18 to ground	All indicators extinguished	
S2	Connect pin 9 to 28 volts dc	All indicators illuminated bright while S2 depressed	
Indicators	Set S1 to BRIGHT (clockwise)	Verify three separate stages of lamp dimming as S1 is set to counterclockwise steps	
	Depress S2, release	Indicators extinguished	
S1, CR1-CR3 on A1	Depress S2, rotate S1 counter-clockwise		
	Release S2		
	Disconnect pins 9 and 18		
	Set S1 to BRIGHT (clockwise)		
	Connect pin 18 to 28 volts dc		
Diodes on A4	Connect pin 9 to ground	All indicators extinguished	
ALCR4	Depress S2 momentarily	2-2 extinguished	
ALCR5	Depress 2-2 momentarily	3-2 extinguished	
A3CR5	Depress 3-2 momentarily	4-2 extinguished	
	Depress 4-2 momentarily		
	Disconnect pins 9 and 18		
X1	Measure pin 10 to X1 center	Continuity	
	Measure pin 11 to X1 rim	Continuity	
	Measure pin 10 to pin 11	No Continuity	
<u>Indicator</u>	<u>Measure Between Pins:</u>	<u>Indicator Depressed</u>	<u>Indicator Released</u>
2-1	1 to 3	Con	No Con
3-1	1 to 5	Con	No Con
4-1	1 to 7	Con	No Con
2-2 & K2	18 to 12	Con	No Con
3-2 & K1	18 to 16	Con	No Con
4-2 & K3	18 to 14	Con	No Con
2-3	21 to 25	Con	No Con
2-4	21 to 23	Con	No Con
2-5	21 to 29	Con	No Con
2-6	21 to 27	Con	No Con
3-3	32 to 36	Con	No Con
3-4	32 to 34	Con	No Con
3-5	32 to 40	Con	No Con
3-6	32 to 38	Con	No Con
4-3	43 to 47	Con	No Con
4-4	43 to 45	Con	No Con
4-5	43 to 51	Con	No Con
4-6	43 to 49	Con	No Con

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DASH NUMBERS LIMITED

Component Tested	Procedure	Required Results
	Measure with ohmmeter between listed pins:	
Wiring	43 to 44	Con
Wiring	32 to 33	Con
Wiring	21 to 22	Con
A3CR4	12(+) to 16	100k min
A2CR4	12(+) to 14	100k min
A2CR3	16(+) to 12	100k min
A1CR3	16(+) to 14	100k min
A2CR5	14 (+) to 12	100k min
A3CR2	14(+) to 16	100k min
	Connect pin 9 to 28 vdc	
	Connect pin 18 to ground	
K2	Connect pin 12 to ground	2-2 illuminated
K2, A1CR3	Connect pin 16 to ground	2-2 extinguished
K1, A2CR4		3-2 must not illuminate
K1	Disconnect pin 12	3-2 illuminated
A2CR5	Connect pin 14 to ground	3-2 extinguished
K3, A2CR3		4-2 must not illuminate
K3	Disconnect pin 16	4-2 illuminated
A3CR4	Connect pin 12 to ground	4-2 extinguished
A3CR2		2-2 must not illuminate
	Remove all connections	
	<u>Measure Between Pins</u> (S2 Depressed)	
Wiring	2(+) to 18(-)	Con
Wiring	4(+) to 18(-)	Con
Wiring	6(+) to 18(-)	Con
Wiring	8(+) to 18(-)	Con
Wiring	24(+) to 18(-)	Con
Wiring	26(+) to 18(-)	Con
Wiring	28(+) to 18(-)	Con
Wiring	30(+) to 18(-)	Con
Wiring	35(+) to 18(-)	Con
Wiring	37(+) to 18(-)	Con
Wiring	39(+) to 18(-)	Con
Wiring	41(+) to 18(-)	Con
Wiring	46(+) to 18(-)	Con
Wiring	48(+) to 18(-)	Con
Wiring	50(+) to 18(-)	Con
Wiring	52(+) to 18(-)	Con
	Remove all connections	

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Component Tested	Procedure	Required Results	
S712 Indicators, Diodes	Connect pin 18 to ground Connect pin 9 to 28 vdc Depress S712, release	Indicators extinguished All indicators illuminated while S712 depressed	
Diodes	Remove all connections Connect pin 18 to 28 vdc Connect pin 9 to ground Depress S712 momentarily Remove all connections	All indicators extinguished	
M786A M786B M786C M786D	Connect pin 9 to 28 vdc Connect pin 5 to ground Connect pin 30 to ground Connect pin 28 to ground Connect pin 26 to ground	M786A illuminated M786B illuminated M786C illuminated M786D illuminated	
	<u>Measure Between Pins</u>	<u>Indicator Depressed</u>	<u>Indicator Released</u>
M786A	4 to 3	Con	No Con
M786B	21 to 29	Con	No Con
M786C	21 to 27	Con	No Con
M786D	21 to 25	Con	No Con
Wiring	21 to 22	Con	Con
L844	Measure L844 center to pin 2	Con	
	Measure L844 rim to pin 1	Con	
	Measure pin 1 to pin 2	No Con	
	Measure pin 1 to pin 18	Con	

Functional Test, 69-37377-7, -14
 Figure 3A

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Component Tested	Procedure	Required Results	
S2	Connect pin 18 to ground	All indicators extinguished	
S2	Connect pin 9 to 28 volts dc	All indicators extinguished	
Indicators	Set S1 to BRIGHT (clockwise)	All indicators illuminated	
	Depress S2, release	bright while S2 depressed	
S1, CR1-CR3 on A1	Depress S2, rotate S1 counter-clockwise	Verify three separate stages of lamp dimming as S1 is set to counterclockwise steps	
	Release S2	Indicators extinguished	
Diodes on A4 ALCR4 A4CR4 A3CR5	Disconnect pins 9 and 18	All indicators extinguished	
	Set S1 to BRIGHT (clockwise)	2-2 extinguished	
	Connect pin 18 to 28 volts dc	3-2 extinguished	
	Connect pin 9 to ground	4-2 extinguished	
	Depress S2 momentarily		
	Depress 1-2 momentarily		
L844	Depress 2-2 momentarily		
	Depress 3-2 momentarily		
	Disconnect pins 9 and 18		
L844	Measure pin 10 to L844 center	Continuity	
	Measure pin 11 to L844 rim	Continuity	
	Measure pin 10 to pin 11	No Continuity	
<u>Indicator</u>	<u>Measure Between Pins:</u>	<u>Indicator Depressed</u>	<u>Indicator Released</u>
1-1	1 to 3	Con	No Con
2-1	1 to 5	Con	No Con
3-1	1 to 7	Con	No Con
1-2 & K2	18 to 12	Con	No Con
2-2 & K1	18 to 16	Con	No Con
3-2 & K3	18 to 14	Con	No Con
1-3	21 to 25	Con	No Con
1-4	21 to 23	Con	No Con
1-5	21 to 29	Con	No Con
1-6	21 to 27	Con	No Con
2-3	32 to 36	Con	No Con
2-4	32 to 34	Con	No Con
2-5	32 to 40	Con	No Con
2-6	32 to 38	Con	No Con
3-3	43 to 47	Con	No Con
3-4	43 to 45	Con	No Con
3-5	43 to 51	Con	No Con
3-6	45 to 49	Con	No Con

Component Tested	Procedure	Required Results
	Measure with ohmmeter between listed pins:	
Wiring	43 to 44	Con
Wiring	32 to 33	Con
Wiring	21 to 22	Con
A3CR4	12(+) to 16	100k min
A2CR4	12(+) to 14	100k min
A2CR3	16(+) to 12	100k min
A1CR3	16(+) to 14	100k min
A2CR5	14(+) to 12	100k min
A3CR2	14(+) to 16	100k min
	Connect pin 9 to 28 vdc	
	Connect pin 18 to ground	
K2	Connect pin 12 to ground	1-2 illuminated
K2, A1CR3	Connect pin 16 to ground	1-2 extinguished
K1, A2CR4		2-2 must not illuminate
K1	Disconnect pin 12	2-2 illuminated
A2CR5	Connect pin 14 to ground	2-2 extinguished
K3, A2CR3		3-2 must not illuminate
K3	Disconnect pin 16	3-2 illuminated
A3CR4	Connect pin 12 to ground	3-2 extinguished
A3CR2		1-2 must not illuminate
	Remove all connections	
	<u>Measure Between Pins</u> (S2 Depressed)	<u>S2 Depressed</u>
Wiring	2(+) to 18(-)	Con
Wiring	4(+) to 18(-)	Con
Wiring	6(+) to 18(-)	Con
Wiring	24(+) to 18(-)	Con
Wiring	26(+) to 18(-)	Con
Wiring	28(+) to 18(-)	Con
Wiring	30(+) to 18(-)	Con
Wiring	35(+) to 18(-)	Con
Wiring	37(+) to 18(-)	Con
Wiring	39(+) to 18(-)	Con
Wiring	41(+) to 18(-)	Con
Wiring	46(+) to 18(-)	Con
Wiring	48(+) to 18(-)	Con
Wiring	50(+) to 18(-)	Con
Wiring	52(+) to 18(-)	Con
	Remove all connections	

Functional Test, 69-37377-11
Figure 3B (Sheet 2)

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Component Tested	Procedure	Required Results
<p>S712</p> <p>M786A-M786F, CR1-CR7 on M787,S712</p> <p>S712,S783, CR9-CR11 on M787</p>	<p>Connect pin 15 to GND Connect pin 19 to 28 vdc Set S783 to BRIGHT (counterclockwise) Depress S712, release</p> <p>Depress and hold S712 Rotate S783 clockwise</p> <p>Release S712</p> <p>Remove all connections</p>	<p>M786A thru M786F off</p> <p>M786A thru M786F illuminated bright while S712 depressed</p> <p>Verify three separate stages of lamp dimming as S783 is set to clockwise steps M786A thru M786F off</p>
<p>CR1-CR7 on M787</p>	<p>Set S783 to BRIGHT (counterclockwise) Connect pin 19 to GND Connect pin 15 to 28 vdc Momentarily depress S712</p> <p>Remove all connections</p>	<p>M786A thru M786F off</p>
<p>M786A</p> <p>M786B,CR8 on M787</p> <p>M786C M786D M786E M786F</p>	<p>Set S783 to BRIGHT (counterclockwise) Connect pin 19 to 28 vdc Connect pin 5 to GND Disconnect pin 5 to GND Connect pin 20 to GND Connect pin 4 to GND</p> <p>Connect pin 9 to GND Connect pin 11 to GND Connect pin 17 to GND Connect pin 12 to GND</p> <p>Remove all connections</p>	<p>M786A on M786A off M786A on M786B on</p> <p>M786C on M786D on M786E on M786F on</p>
<p>CR8 on M787</p>	<p>Set S783 to BRIGHT (counterclockwise) Connect pin 19 to GND Momentarily connect pin 4 to 28 vdc</p> <p>Remove all connections</p>	<p>M876B off</p>

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Component Tested	Procedure	Required Results	
		Indicator Depressed	Indicator Released
	<u>Measure Between Pins</u>		
M786A	3 to 6	Con	No Con
M786A	15 to 16	Con	No Con
M786B	15 to 4	Con	No Con
M786C	7 to 8	Con	No Con
M786D	7 to 10	Con	No Con
M786E	7 to 18	Con	No Con
M786F	7 to 13	Con	No Con
Wiring	7 to 14	Con	Con
L844	Measure resistance from pin 2 to L844 centerpost	Con	
	Measure resistance from pin 1 to L844 rim	Con	
	Measure resistance from pin 1 to pin 2	No Con	

Functional Tests, 69-37377-24
 Figure 3C (Sheet 2)

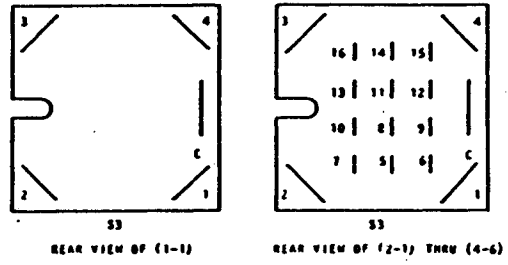
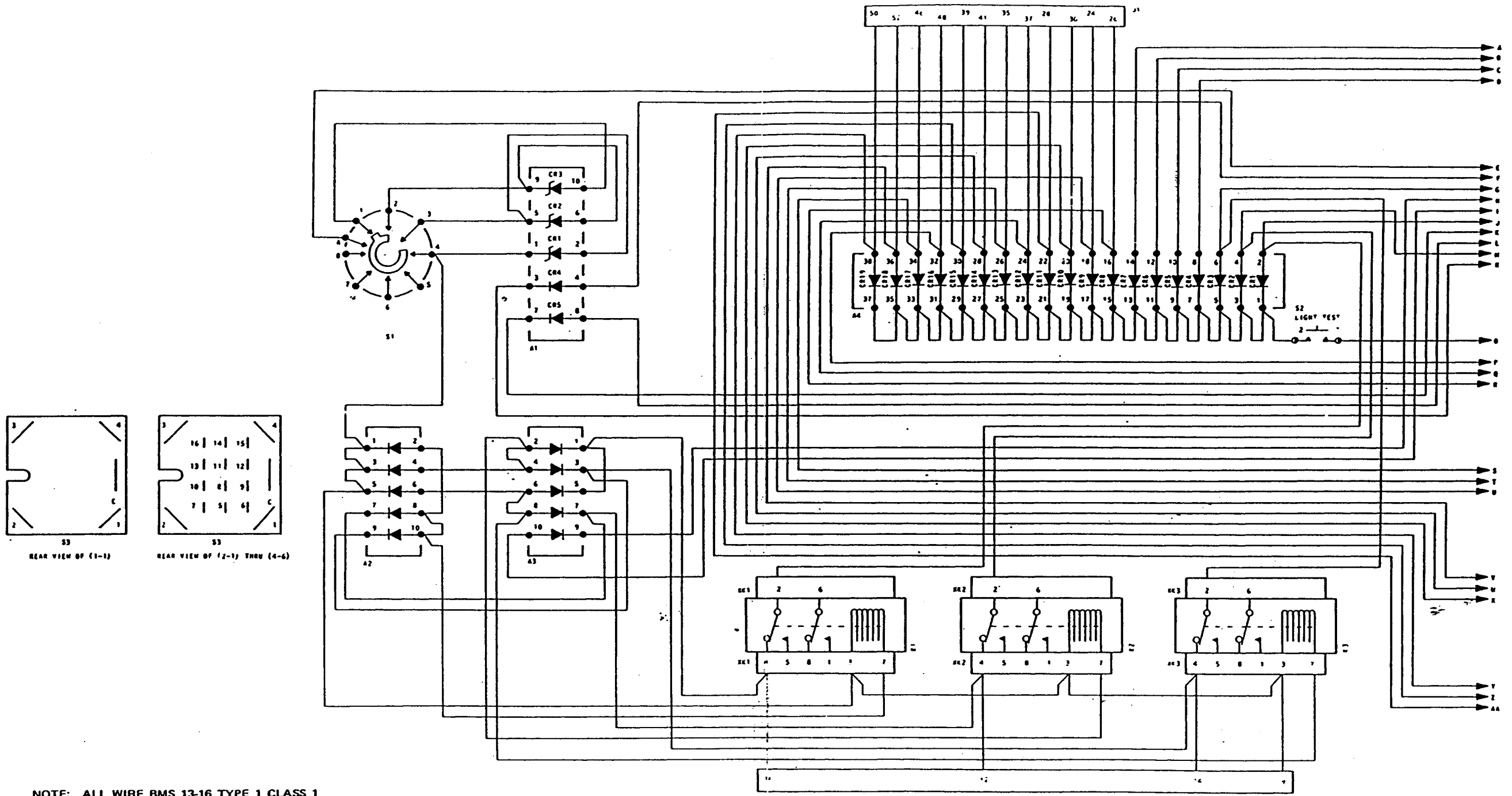
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Component Tested	Procedure	Required Results
S2	Connect pin 18 to GND Connect pin 9 to 28 vdc Set S1 to BRIGHT (clockwise) Depress S2, release	S3A thru S3C off S3A thru S3C illuminate bright while S2 depressed
CRI-CR3 on A2, S2	Depress and hold S2 Rotate S1 counterclockwise	Verify three separate stages of lamp dimming as S1 is set to counterclockwise steps
CRI-CR3 on A1, S1, S2	Release S2 Remove all connections Set S1 to BRIGHT (clockwise) Connect pin 9 to GND Connect pin 18 to 28 vdc Momentarily depress S2	S3A thru S3C off
CRI-CR3 on A2	Remove all connections Set S1 to BRIGHT (clockwise) Connect pin 9 to 28 vdc Connect pin 18 to 28 vdc Momentarily depress S2	S3A thru S3C off
S3A	Remove all connections Set S1 to BRIGHT (clockwise) Connect pin 9 to 28 vdc Connect pin 4 to GND	S3A on
S3B	Connect pin 6 to GND	S3B on
S3C	Connect pin 2 to GND Remove all connections	S3C on
	<u>Measure Between Pins</u>	<u>Indicator Depressed</u> <u>Indicator Released</u>
S3A	1 to 5	Con No Con
S3B	1 to 7	Con No Con
S3C	1 to 3	Con No Con
L844	Measure resistance from pin 10 to L844 centerpost Measure resistance from pin 11 to L844 rim Measure resistance from pin 10 to pin 11	Con Con No Con

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Component Tested	Procedure	Required Results	
<u>NOTES:</u>	Use designators in parenthesis for 69-68561-14		
	Open = 10 ohms max		
	Continuity = 100k min		
	Ground pin 18		
S1	Connect 28 vdc to pin 9	Indicators extinguished	
Indicators, TB1	Depress S1, release Remove all connections Ground pin 9 Connect 28 vdc to pin 18	All indicators illuminated while depressed	
TB1	Depress S1 momentarily Remove all connections Connect 28 vdc to pin 9	All indicators extinguished	
DS1	Ground pin 28 Remove ground from pin 28	DS1 illuminated while grounded	
DS2(DS3)	Ground pin 26 Remove ground from pin 26	DS2(DS3) illuminated while grounded	
DS3(DS4)	Ground pins Remove ground from pin 5	DS3(DS4) illuminated while grounded	
DS2*[1]	Ground pin 22 Remove all connections	DS2 illuminated while grounded	
	<u>Measure between pins</u>	<u>Indicator Depressed</u>	<u>Indicator Released</u>
DS1	21 to 27	Con	Open
DS1	21 to 7	Open	Con
DS2(DS3)	21 to 25	Con	Open
DS2(DS3)	21 to 6	Open	Con
DS2*[1]	21 to 24	Con	Open
DS2*[1]	21 to 23	Open	Con
DS3(DS4)	4 to 3	Open	Con
X1	Measure X1 center to pin 2	Con	
X1	Measure X1 rim to pin 1	Con	
X1	Measure pin 1 to pin 2	Open	
X1	Measure pin 1 to pin 18	Con	

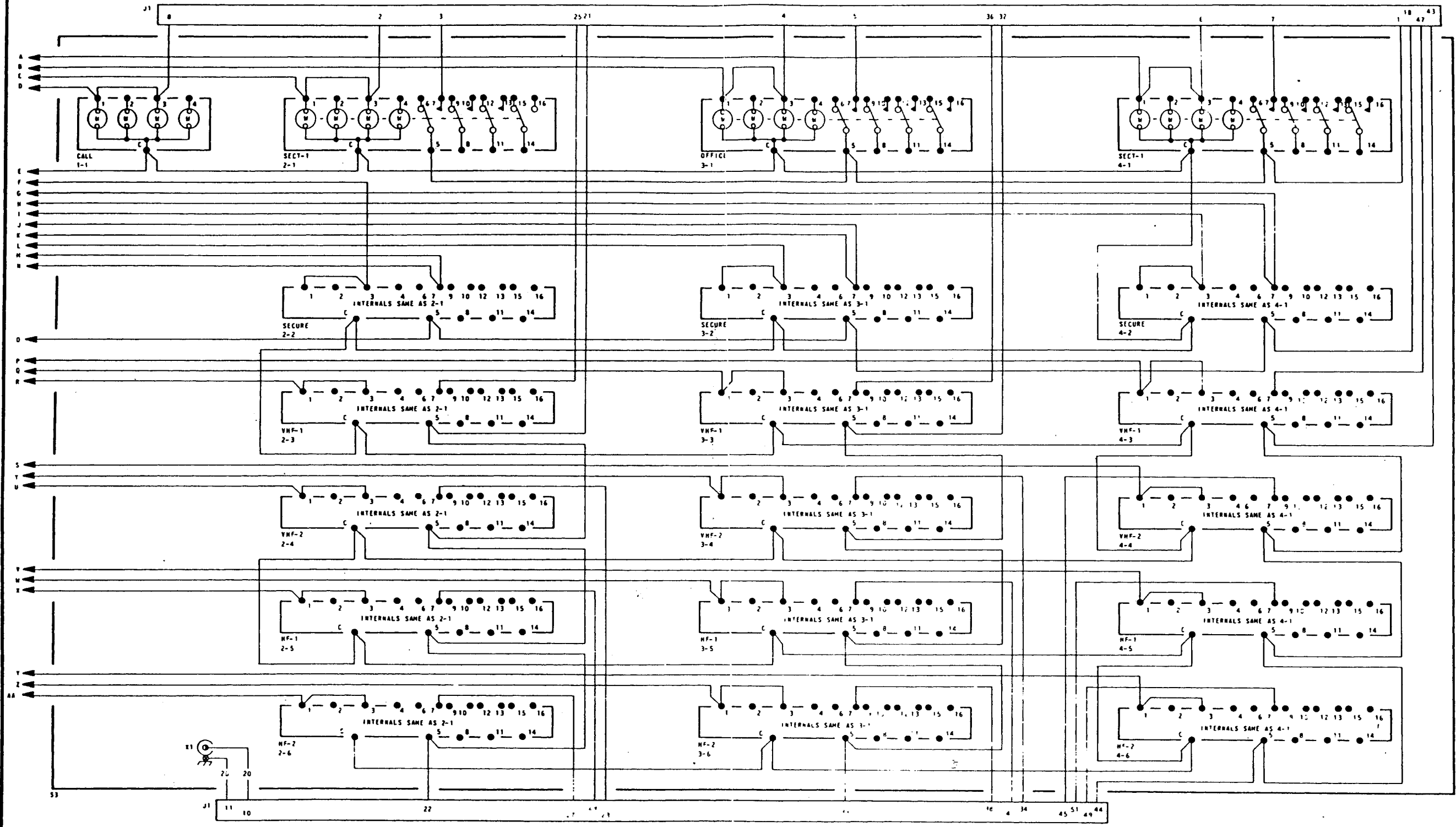
*[1] 69-68561-14



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

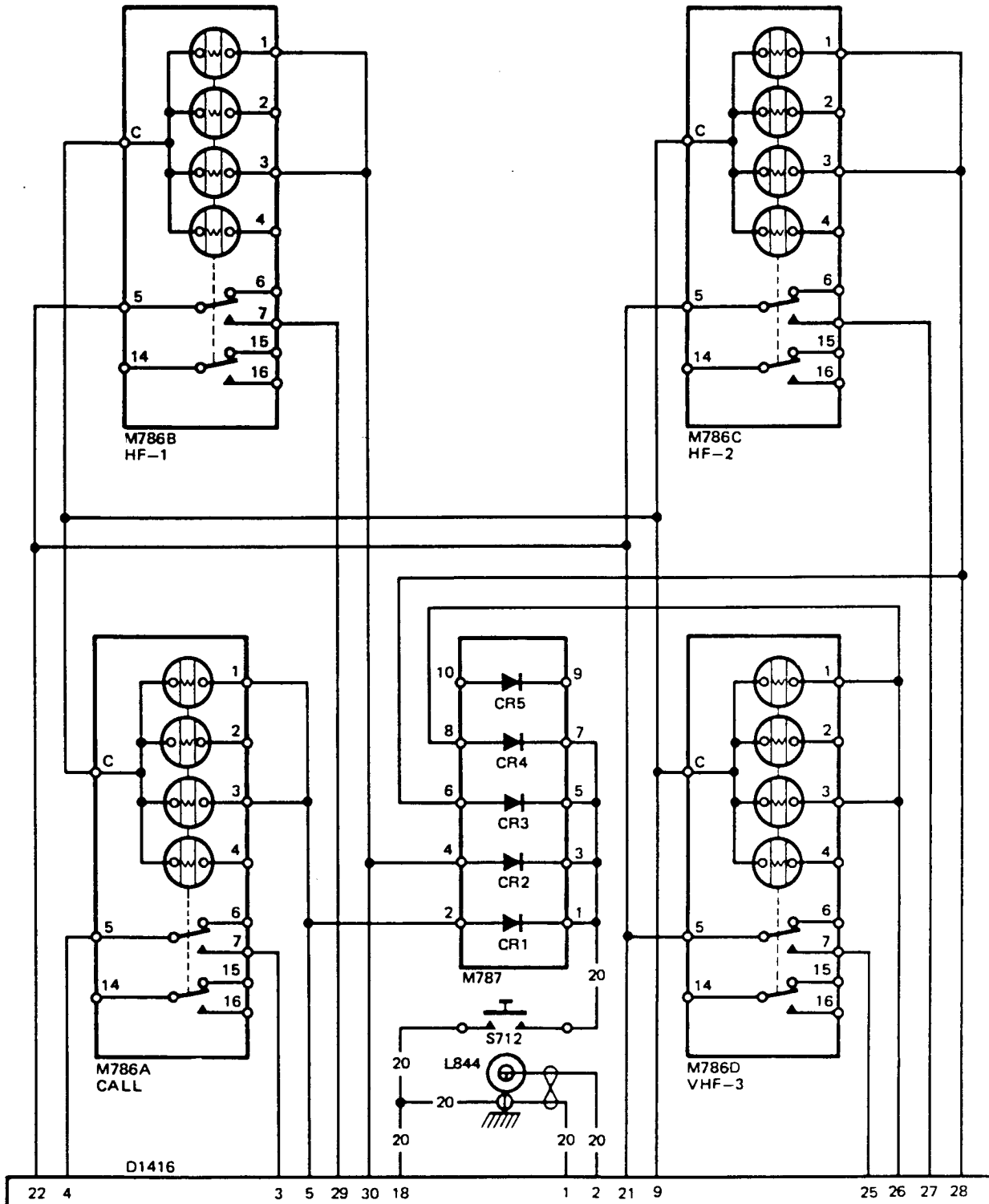
69-37377-1

Schematic Diagram
Figure 4 (Sheet 1)



69-37377-1

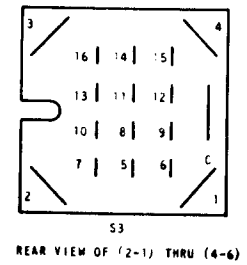
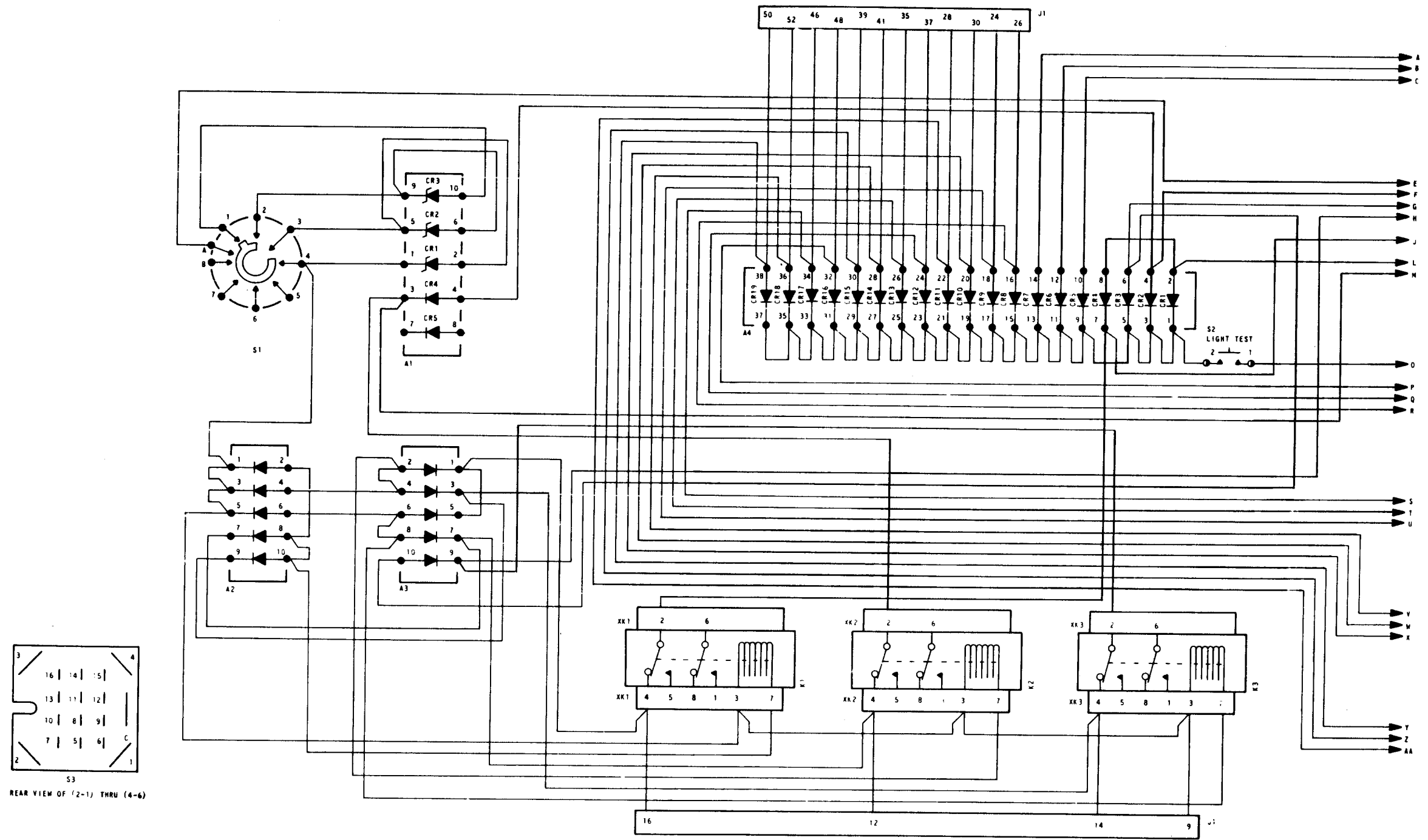
Schematic Diagram
Figure 4 (Sheet 2)



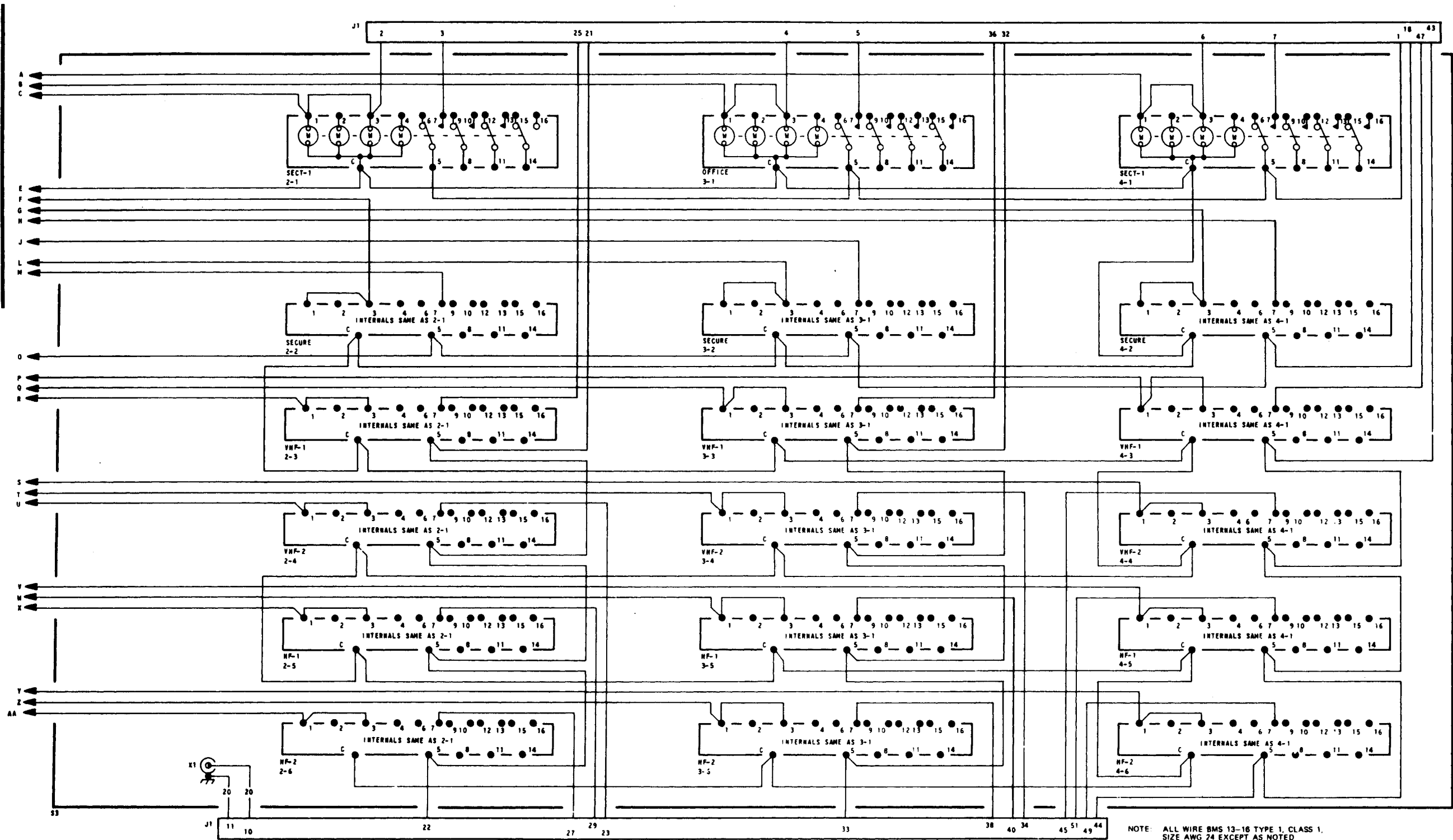
NOTE: ALL WIRE BMS 13-16,
 SIZE AWG 24 EXCEPT AS NOTED

69-37377-7, -14

Schematic Diagram
 Figure 4A



69-37377-11



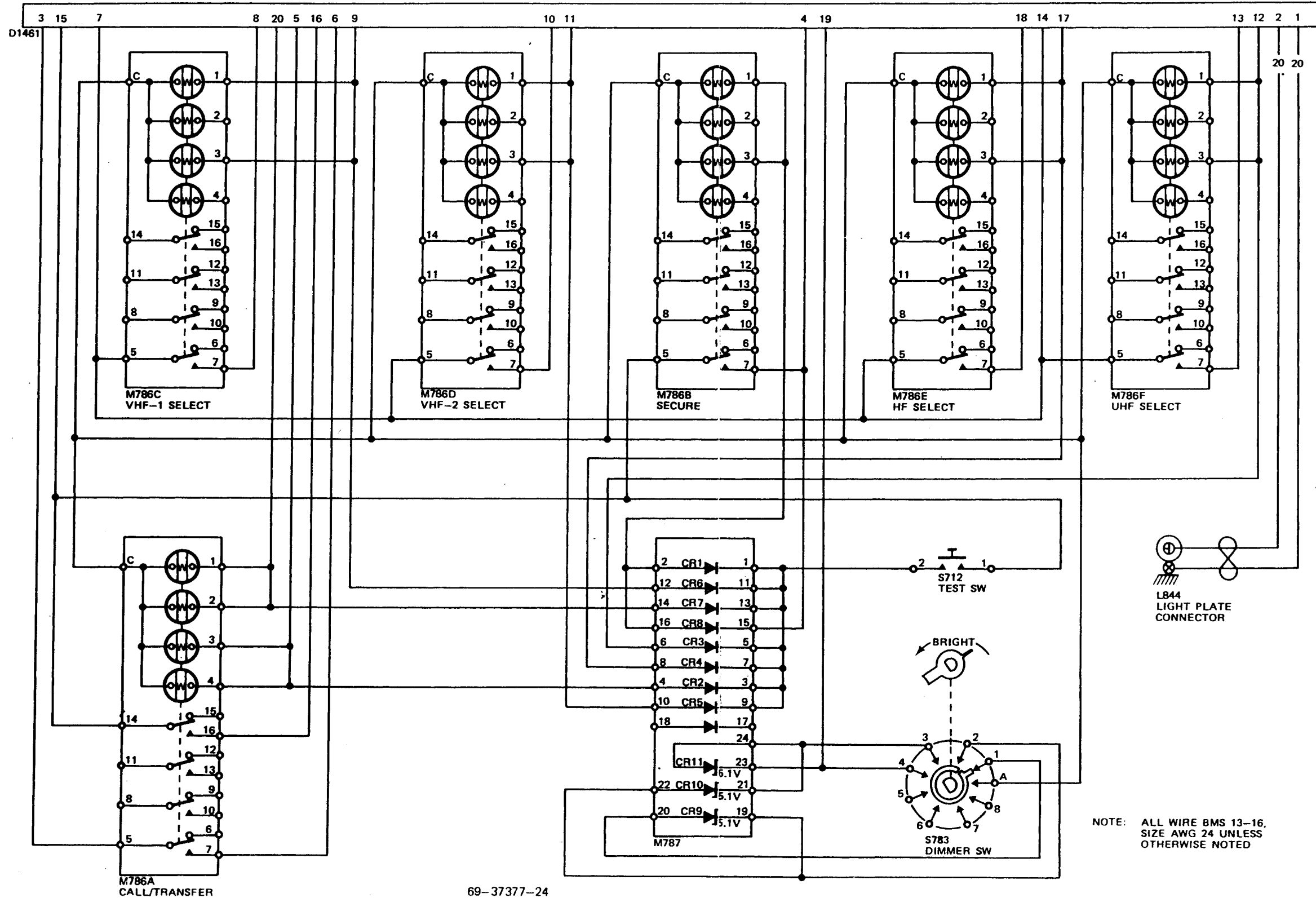
69-37377-11

Schematic Diagram
Figure 4B (Sheet 2)

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23-02-03
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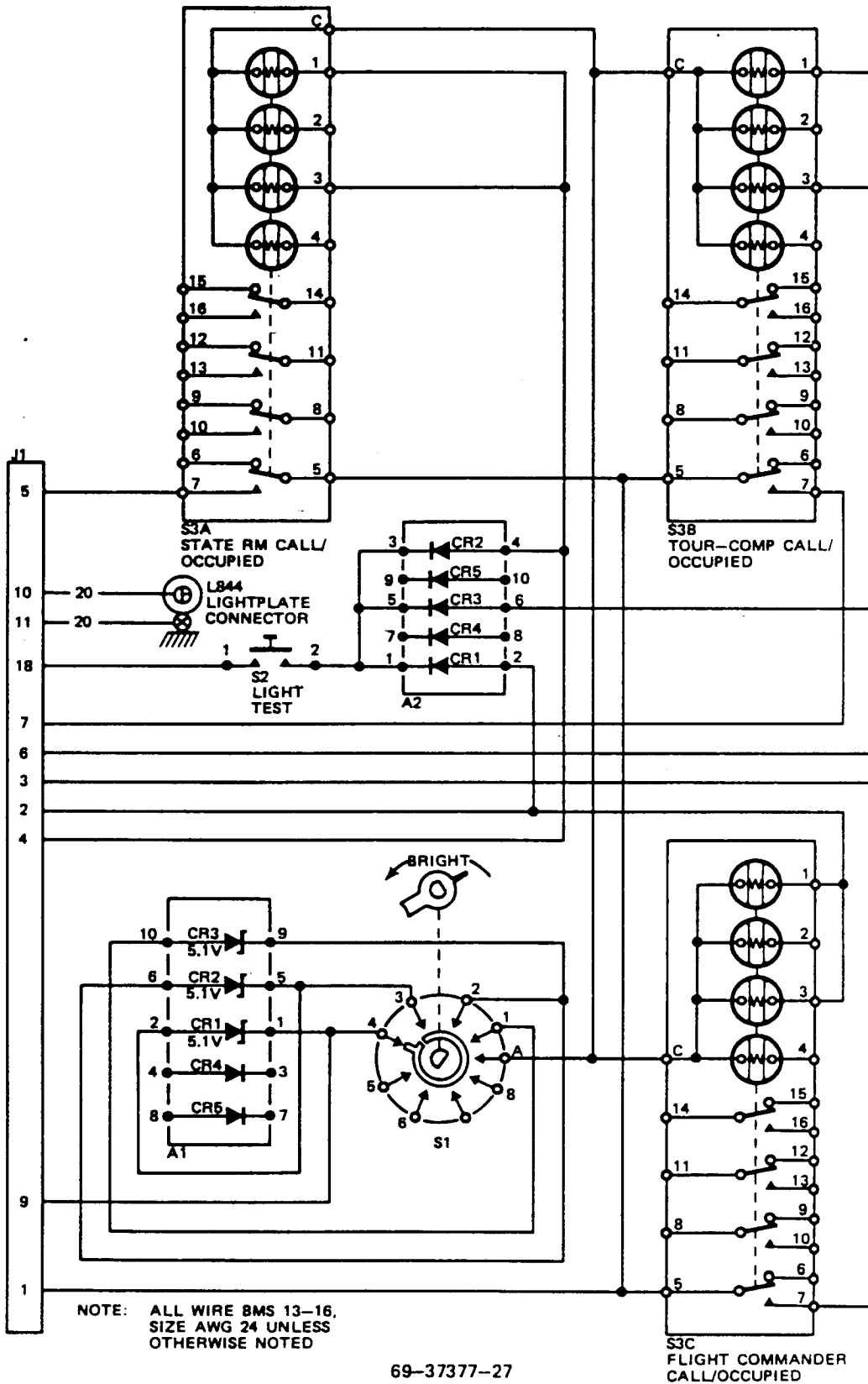
BOEING
COMMERCIAL JET
OVERHAUL MANUAL



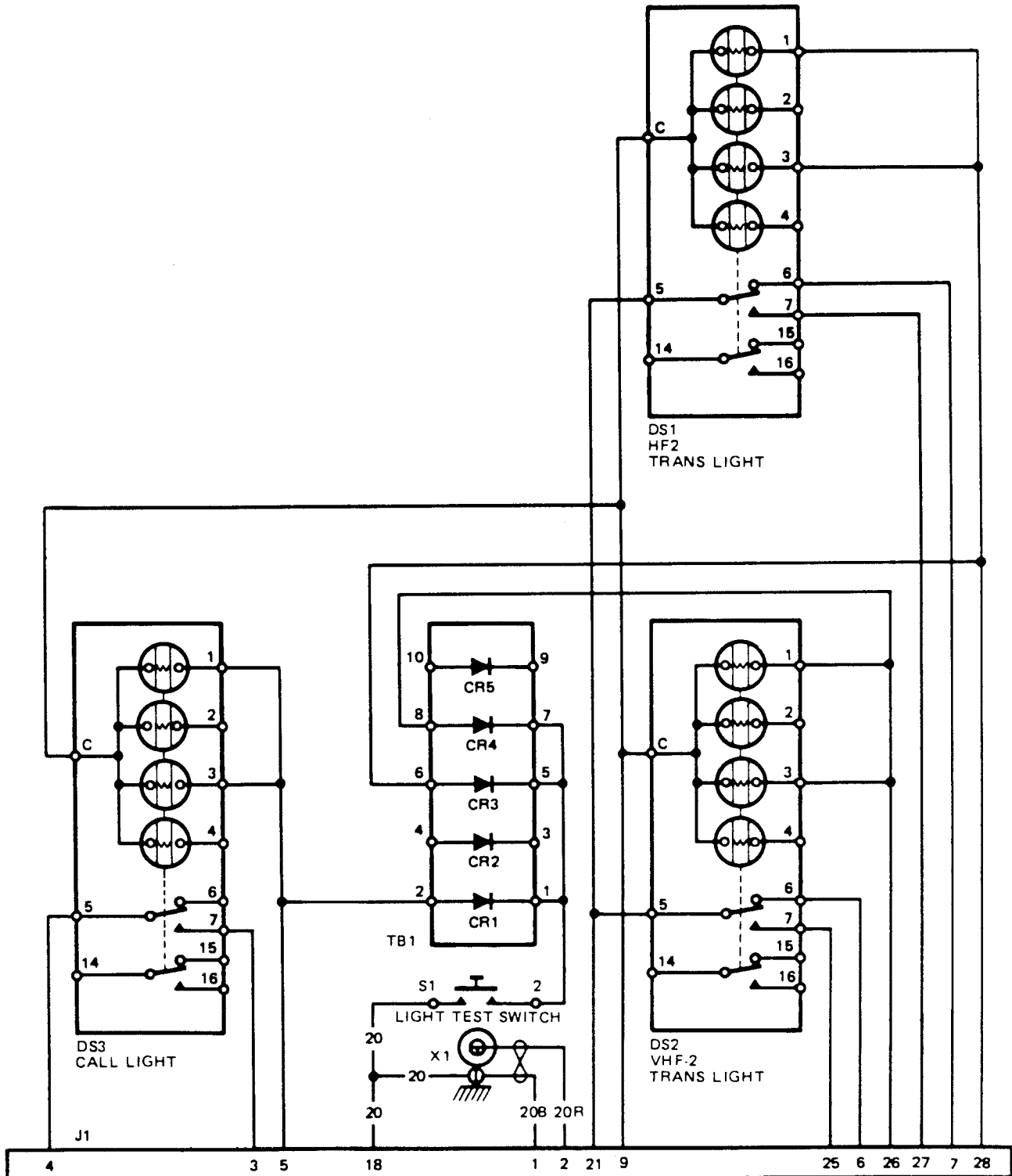
69-37377-24

Schematic Diagram
Figure 4C

OVERHAUL MANUAL



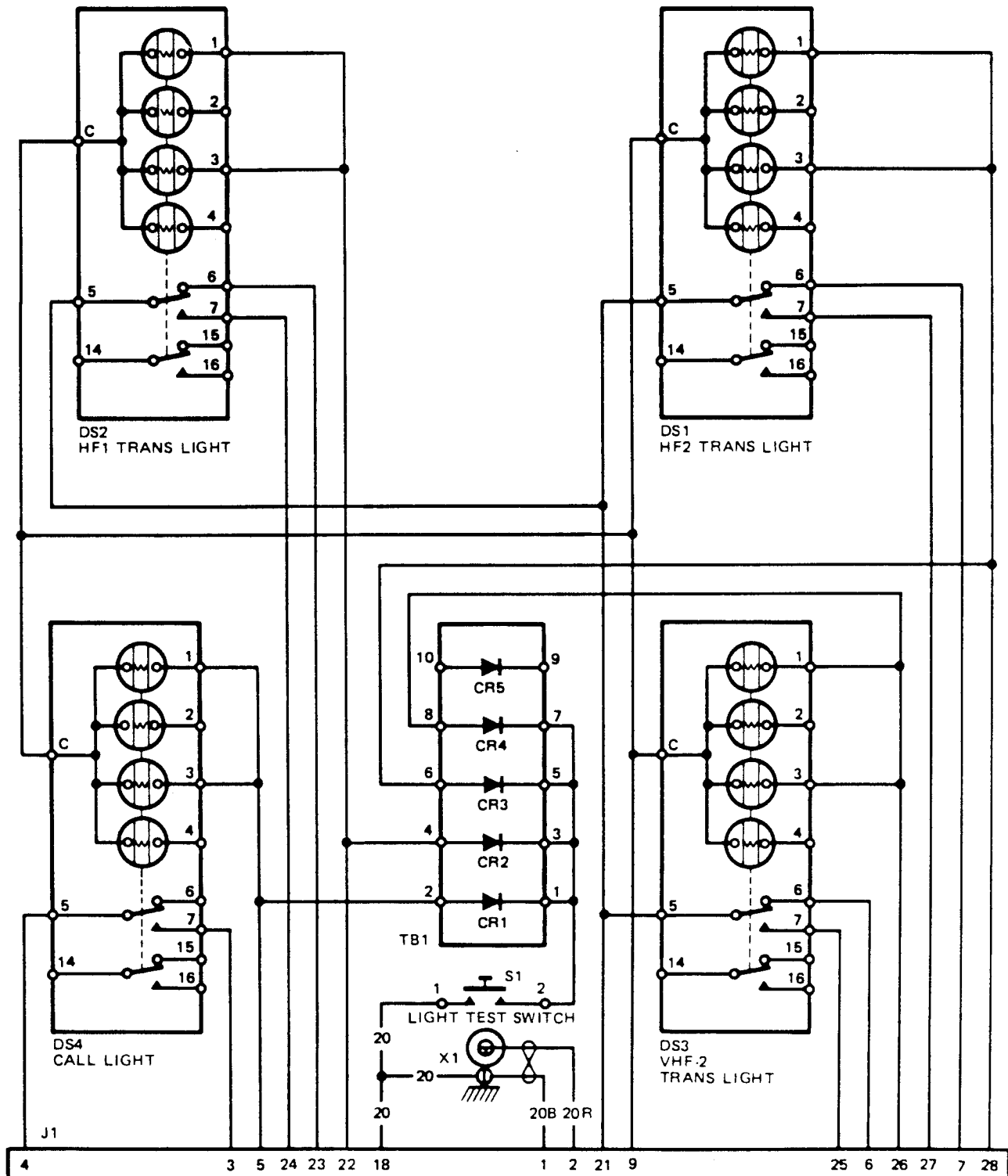
Schematic Diagram
 Figure 4D



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

69-68561-11

Schematic Diagram
 Figure 4E

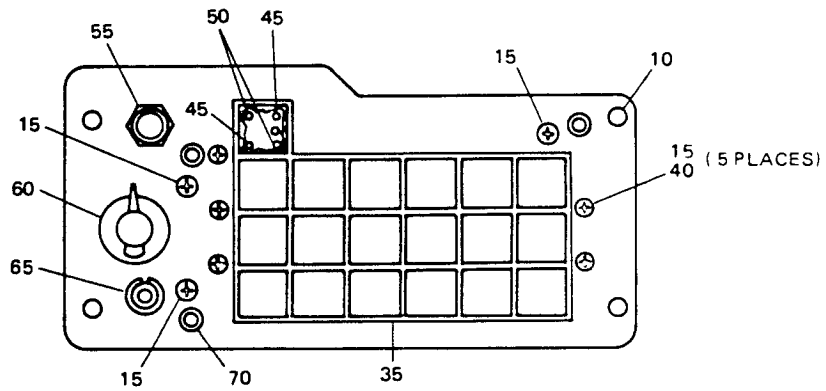
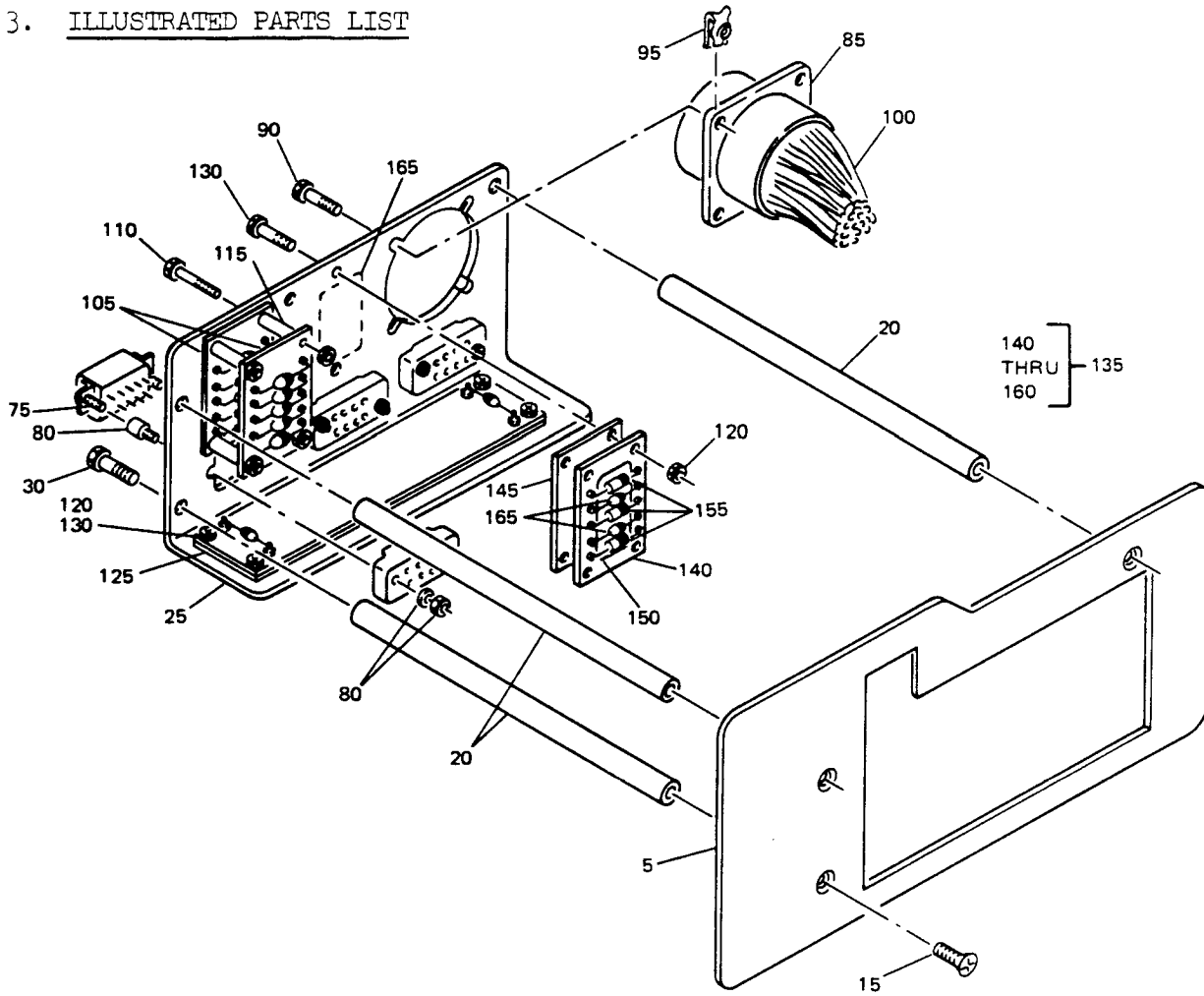


NOTE: ALL WIRE BMS 13-16,
 SIZE AWG 24 EXCEPT AS NOTED

69-68561-14

Schematic Diagram
 Figure 4F

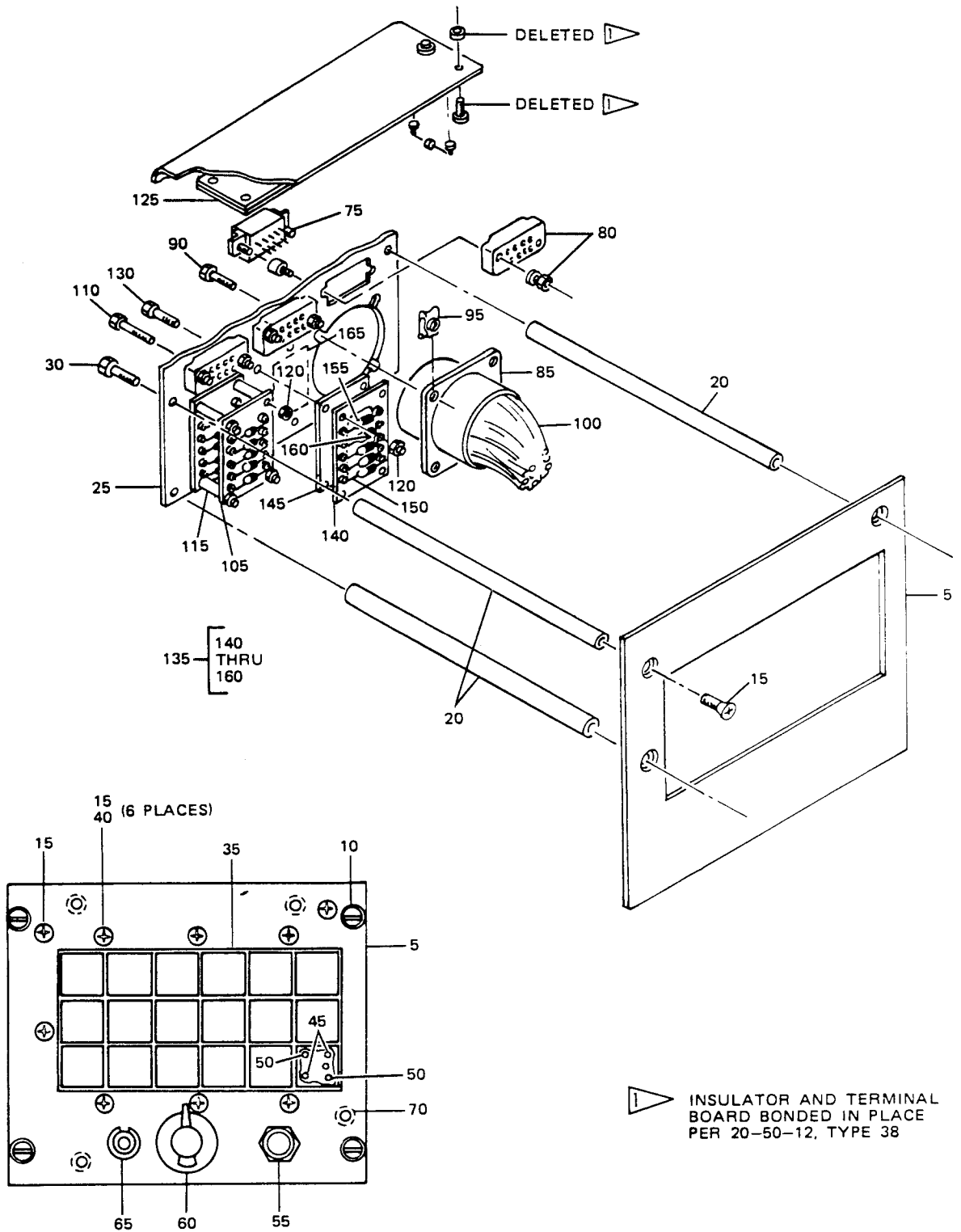
3. ILLUSTRATED PARTS LIST



69-37377-1

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 DASH NUMBERS LIMITED



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VIP Communications Module Assembly P5-45
 Figure 5 (Sheet 2)

BOEING 
COMMERCIAL JET
OVERHAUL MANUAL

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	N O M E N C L A T U R E							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
5-											
1	69-37377-1									A	
1	69-37377-11									B	
5	69-37377-4									A	1
5	69-37377-12									B	1
10	BACS21DD1G										4
5	NAS514P632-5									A	8
15	NAS514P632-5									B	9
20	66-13524-7										3
25	69-37377-3									A	1
25	69-37377-15									B	1
30	BACS12CB06-5										3
35	1M1307									A	1
35	1M1305									B	1
40	BACN10JC06									A	5
40	BACN10JC06									B	6
45	MS25237-387									A	38
45	MS25237-387									B	36
50	15001									A	38
50	15001									B	36
55	D20011-01										1
60	BACS30AZ3-1N4										1
65	SCN001									A	1
65	138-102									B	1
65	SCN001									B	1
70	BACN10PA06-6										4
75	BACR13CD2										3
80	HRTS17KM										3
85	BACC45FN22-55P										1
90	BACS12CB04-5										4
95	BACN10NW1										4
100	69-37377-2									A	1
100	69-37377-13									B	1
105	69-63592-5										2
110	BACS12CB04-14										4
115	NAS43DD0-32										4
120	BACN10DN40										4
125	69-63592-6										1
130	BACS12CB04-5									A	8
130	BACS12CB04-5									B	4
131	NAS514P440-5									B	4
											4
											DELETED (INSULATOR AND TERMINAL BOARD BONDED IN PLACE PER 20-50-12, TYPE 38)

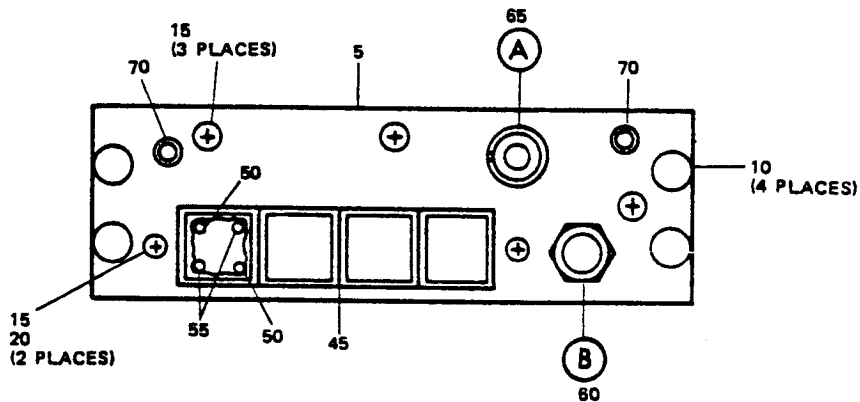
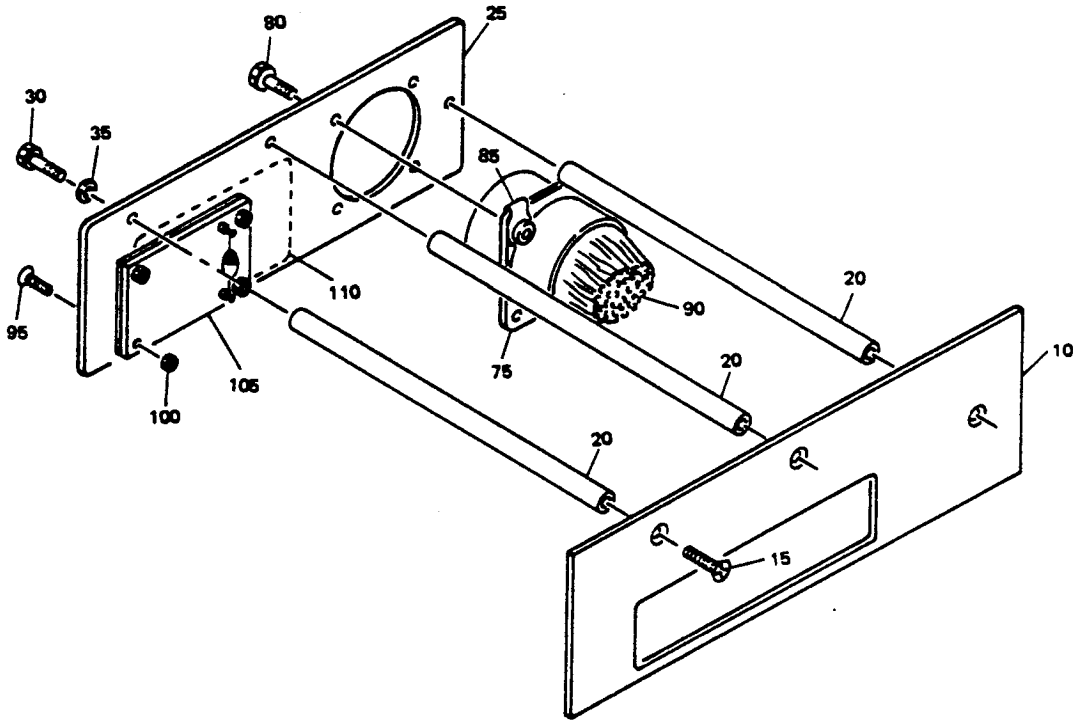
BOEING 
COMMERCIAL JET
OVERHAUL MANUAL

69-37377
69-68561
DASH NUMBERS LIMITED

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	N O M E N C L A T U R E							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
5-135	69-37377-6		.	.	.	.	.	.	.	.	1
140	MOD15511SP1		.	.	.	.	.	.	.	.	1
145	MOD15511SP2		.	.	.	.	.	.	.	.	1
150	BAC27DEX3352		.	.	.	.	.	.	.	.	1
155	1N5338B		.	.	.	.	.	.	.	.	3
160	1N5061		.	.	.	.	.	.	.	.	2
165	BAC27DEX3331		.	.	.	.	.	.	.	.	1

FIG. 5 REFERENCE DESIGNATION INDEX (SEE SCHEMATIC DIAGRAM)		
REFERENCE DESIGNATION	PART NUMBER	ITEM NO.
A1	69-37377-6	135
A1CR1-A1CR3	1N5338B	155
A1CR4, A1CR5	1N5061	160
A2, A3	69-63592-5	105
A4	69-63592-6	125
J1	BACC45FN22-55P	85
K1-K3	BACR13CD2	75
L844	138-102	65
L844	SCN001	65
S1	BACS30AZ3-1N4	60
S2	D20011-01	55
S3	1M1307	35
S3	1M1305	35
X1	SCN001	65
X1	138-002	65
XK1-XK3	HRTS17KM	80

Figure 6. Deleted

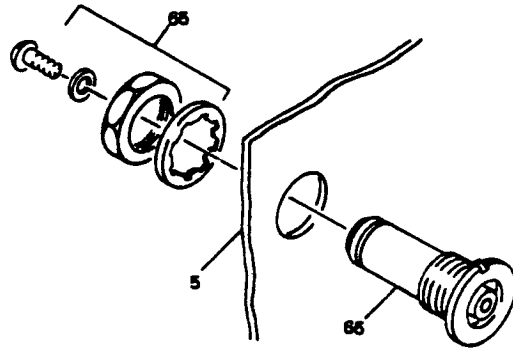


69-37377-7,-14

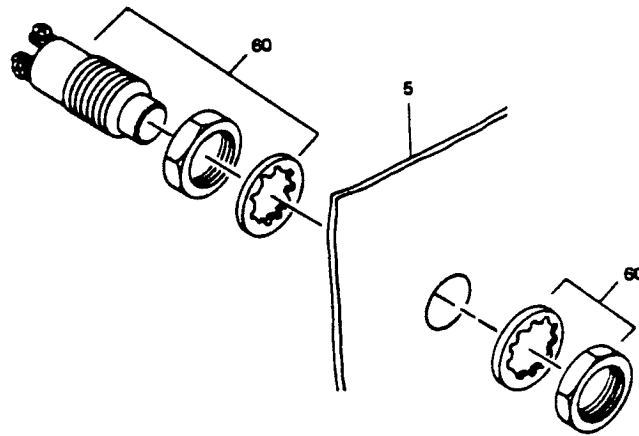
VIP Communications Module Assembly P5-45
 Figure 7 (Sheet 1)

BOEING 
COMMERCIAL JET
OVERHAUL MANUAL

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DASH NUMBERS LIMITED



(A)



(B)

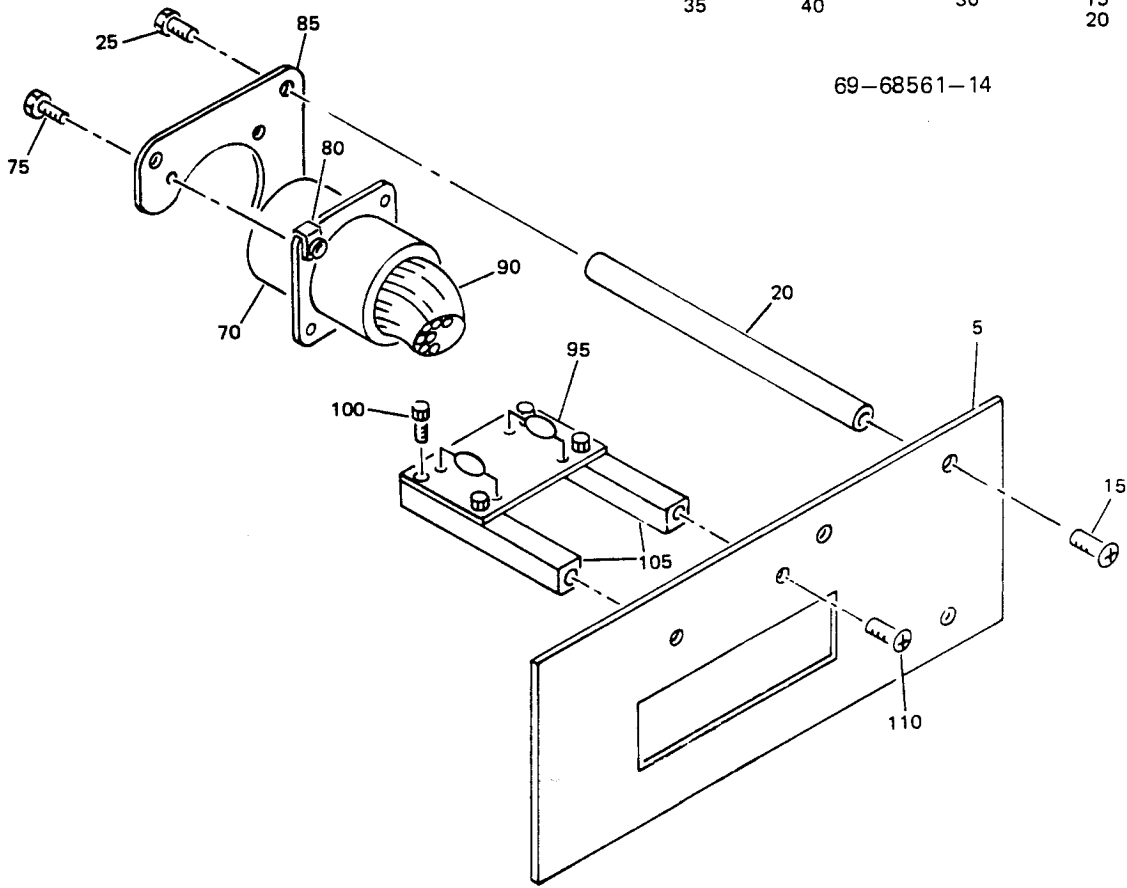
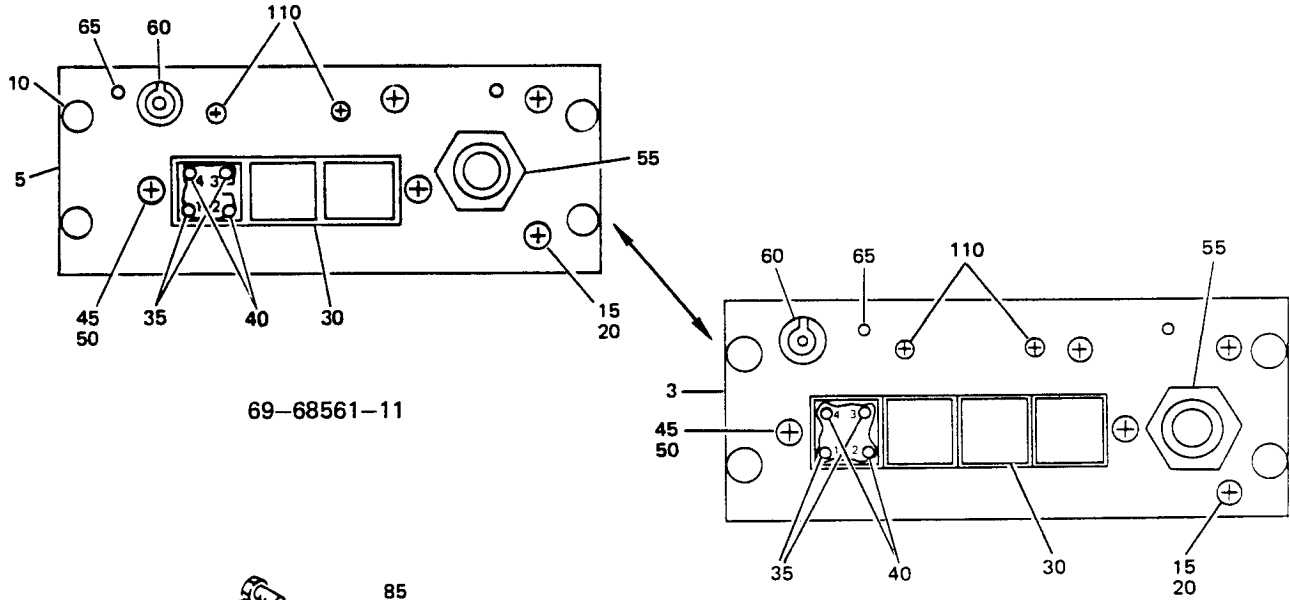
VIP Communications Module Assembly P5-45
Figure 7 (Sheet 2)

BOEING 
COMMERCIAL JET
OVERHAUL MANUAL

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	N O M E N C L A T U R E							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
7-1	69-37377-7		VIP COMMUNICATIONS MODULE ASSY P5-45							A	
1	69-37377-14		VIP COMMUNICATIONS MODULE ASSY P5-45							B	
5	69-37377-10		. BASEPLATE								1
10	BACS21DD1G		. STUD								4
15	NAS514P632-5		. SCREW								5
20	66-13524-5		. SPACER								3
25	69-37377-9		. PLATE, REAR								1
30	BACS12CB06-5		. SCREW								3
35	MS35338-41		. WASHER								3
40	BACN10JC06		. NUT								2
45	1M1738		. SWITCH, V12522							A	1
45	1M1306		. SWITCH V12522							B	1
50	MS25237-387		. LAMP, 40 MA								8
55	15001		. LAMP, DUMMY, V12522								8
60	D20011-01		. SWITCH, PUSHBUTTON, V81640								1
65	133		. POWER CONNECTOR, V04211								1
70	BACN10PA06-6		. PRESS NUT								2
75	BACC45FN18-31P		. CONNECTOR								1
80	BACS12CB04-5		. SCREW								4
85	BACN10NW1		. CLIP NUT								4
90	69-37377-8		. WIRE BUNDLE								1
95	NAS514P440-5		. SCREW								4
100	BACN10DN40		. NUT								4
105	69-63592-5		. TERMINAL BOARD ASSY (REF 34-21-17)								1
110	BAC27DEX3331		. MARKER								1

FIG. 7 REFERENCE DESIGNATION INDEX (SEE SCHEMATIC DIAGRAM)

REFERENCE DESIGNATION	PART NUMBER	ITEM NO.
D1461	BACC45FN18-31P	75
L844	133	65
M786	1M1738	45
M786	1M1306	45
M787	69-63592-5	105
S712	D20011-01	60



69-68561-11, -14

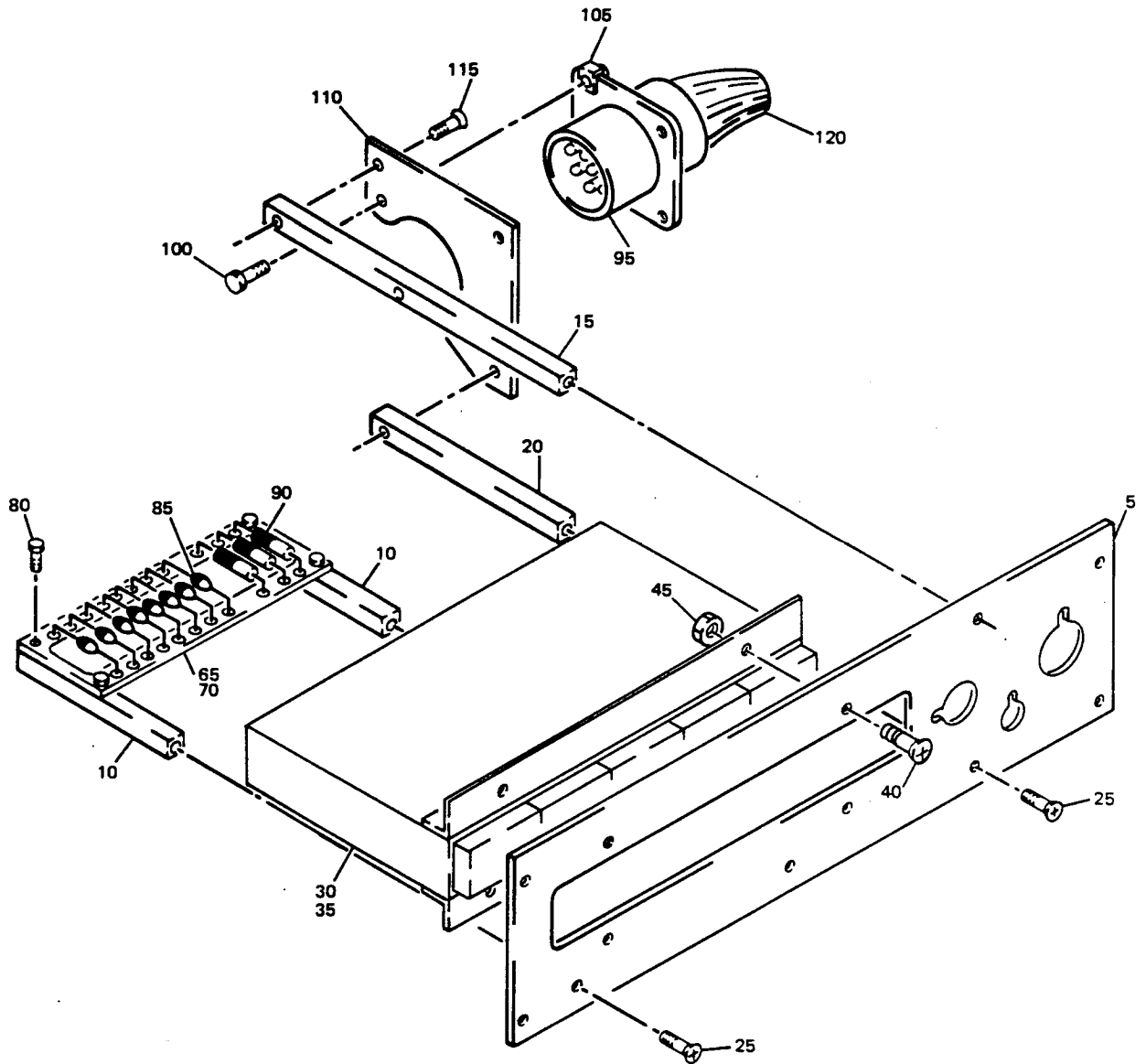
69-37377
 69-68561
 DASH NUMBERS LIMITED

BOEING 
COMMERCIAL JET
 OVERHAUL MANUAL

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	N O M E N C L A T U R E							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
8-1	69-68561-11		VIP COMMUNICATIONS MODULE ASSY P5-81							A	RF
1	69-68561-14		VIP COMMUNICATIONS MODULE ASSY P5-81							B	RF
3	69-63561-15		. BASEPLATE ASSY							B	1
5	69-68561-12		. BASEPLATE							A	1
10	BACS21DD1G		. STUD							A	4
15	NAS514P632-5		. SCREW								3
20	66-13524-3		. SPACER							A	3
20	66-13524-5		. SPACER							B	3
25	BACS12CB06-5		. SCREW								3
30	1M3824		. SWITCH LIGHT ASSY, V12522							A	1
30	1M3880		. SWITCH LIGHT ASSY, V12522							B	1
35	MS25237-387		. BULB							A	6
35	MS25237-387		. BULB							B	8
40	15001		. LAMP, DUMMY, V12522							A	6
40	15001		. LAMP, DUMMY, V12522							B	8
45	NAS514P632-5		. SCREW								2
50	BACN10JC06		. NUT								2
55	D20011-01		. SWITCH, PUSHBUTTON, V81640								1
60	800000121-1		. POWER CONNECTOR, V05617								1
65	BACN10PA06-6		. PRESS NUT								2
70	BACC45FN18-31P		. CONNECTOR								1
75	BACS12CB04-5		. SCREW								3
80	BACN10NW1		. CLIP NUT								3
85	69-43873-4		. PLATE, CONNECTOR								1
90	69-68561-13		. WIRE BUNDLE							A	1
90	69-68561-16		. WIRE BUNDLE							B	1
95	69-63592-5		. TERMINAL BOARD ASSY (REF 34-21-17)								1
100	BACS12CB04-4		. SCREW								4
105	69-37377-20		. STANDOFF								2
110	NAS514P632-5		. SCREW								2

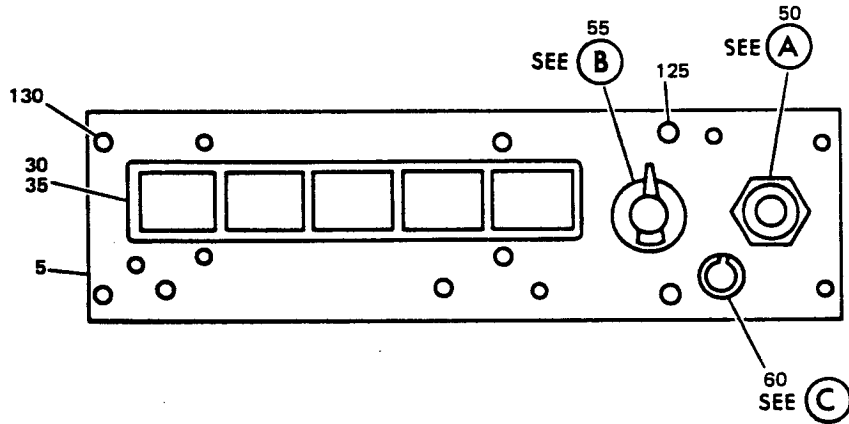
REFERENCE DESIGNATION INDEX (SEE SCHEMATIC DIAGRAM)		
REFERENCE DESIGNATION	PART NUMBER	ITEM NO.
DS1, DS2, DS3	1M3824	30
J1	BACC45FN18-31P	70
S1	D20011-01	55
TB1	69-63592-5	95
X1	800000121-1	60

OVERHAUL MANUAL

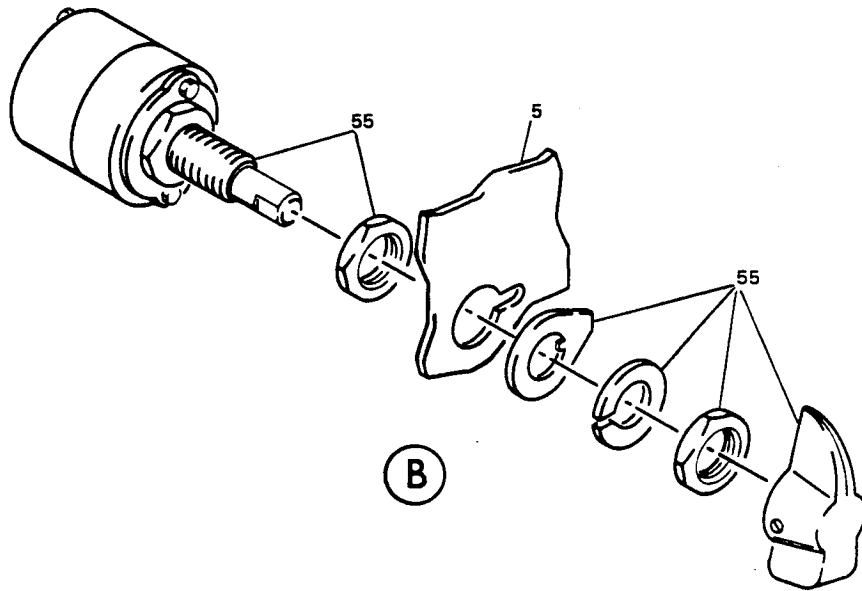


VIP Communications Module Assembly P5-45
Figure 9 (Sheet 1)

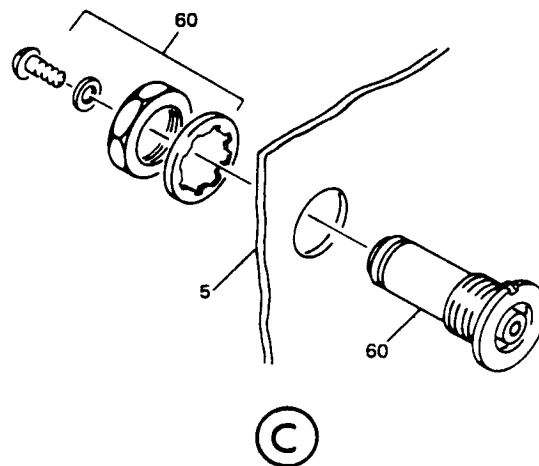
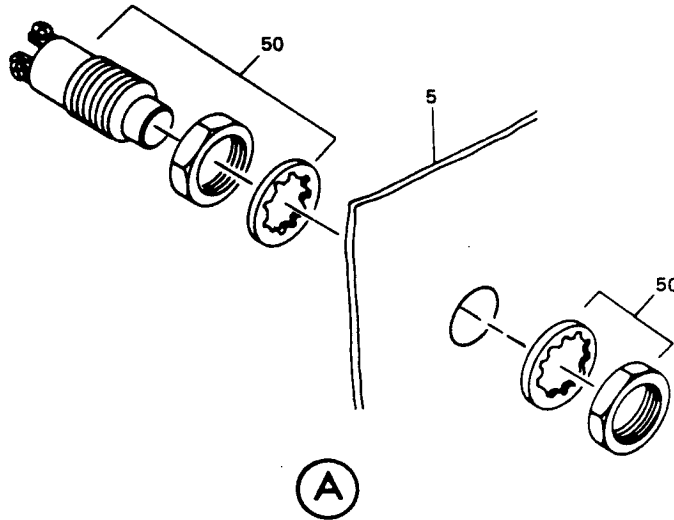
OVERHAUL MANUAL



69-37377-24



OVERHAUL MANUAL

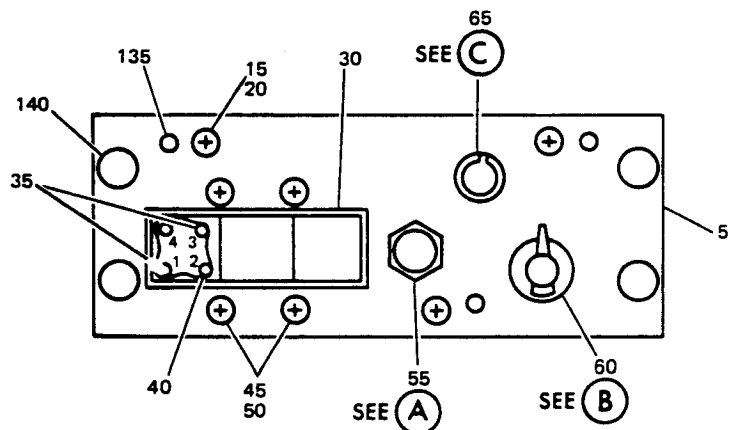
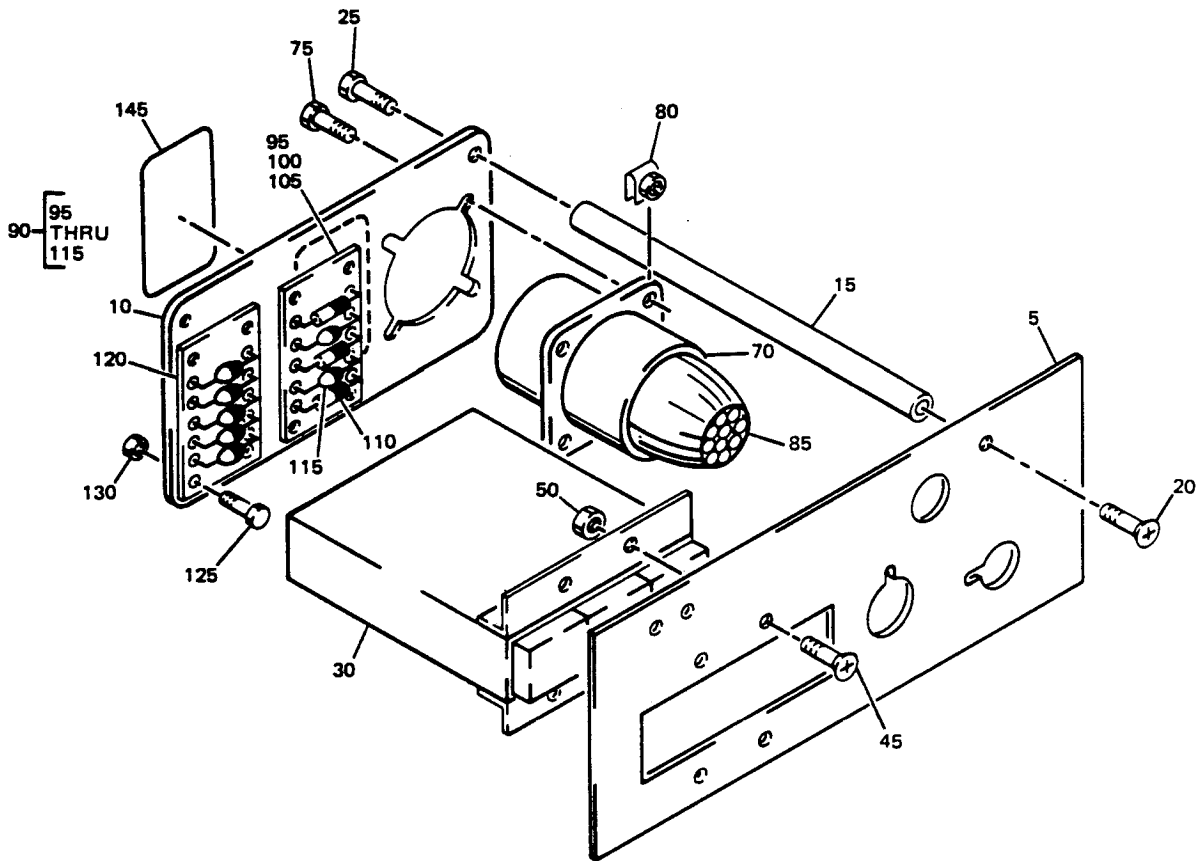


OVERHAUL MANUAL

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	N O M E N C L A T U R E							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
9-			VIP COMMUNICATION MODULE ASSY P5-45								
1	69-37377-24		. BASEPLATE								1
5	69-37377-23		. STANDOFF								2
10	69-37377-20		. STANDOFF								1
15	69-37377-21		. STANDOFF								1
20	69-37377-26		. STANDOFF								1
25	NAS514P632-5		. SCREW								4
30	1M1896		. SWITCH LIGHT, V12522								1
35	MS25237-387		. BULB								24
40	NAS514P632-5		. SCREW								4
45	22NM107-62		. NUT, V72962								4
50	D20011-01		. SWITCH, PUSHBUTTON, V81640								1
55	BACS30AZ3-1N4		. SWITCH, ROTARY								1
60	800000121-1		. POWER CONNECTOR, V05617								1
65	MOD15512SP1		. TERMINAL BOARD, V91833								1
70	MOD15512SP2		. INSULATOR, V91833								1
75	BAC27DEX925		. MARKER								1
80	BACS12CB04-4		. SCREW								4
85	1N5061		. DIODE								8
90	1N5338A		. DIODE, ZENER, 5.1V, 10PCT, 5 W								3
95	BACC45FN18-31P		. CONNECTOR								1
100	BACS12CB04-5		. SCREW								3
105	BACN10NW1		. NUT, CLIP								3
110	69-37377-19		. PLATE, CONNECTOR								1
115	BACS12CB04-4		. SCREW								3
120	69-37377-25		. WIRE BUNDLE								1
125	BACN10PA06-6		. PRESS NUT								3
130	BACS21DD1G		. STUD								4

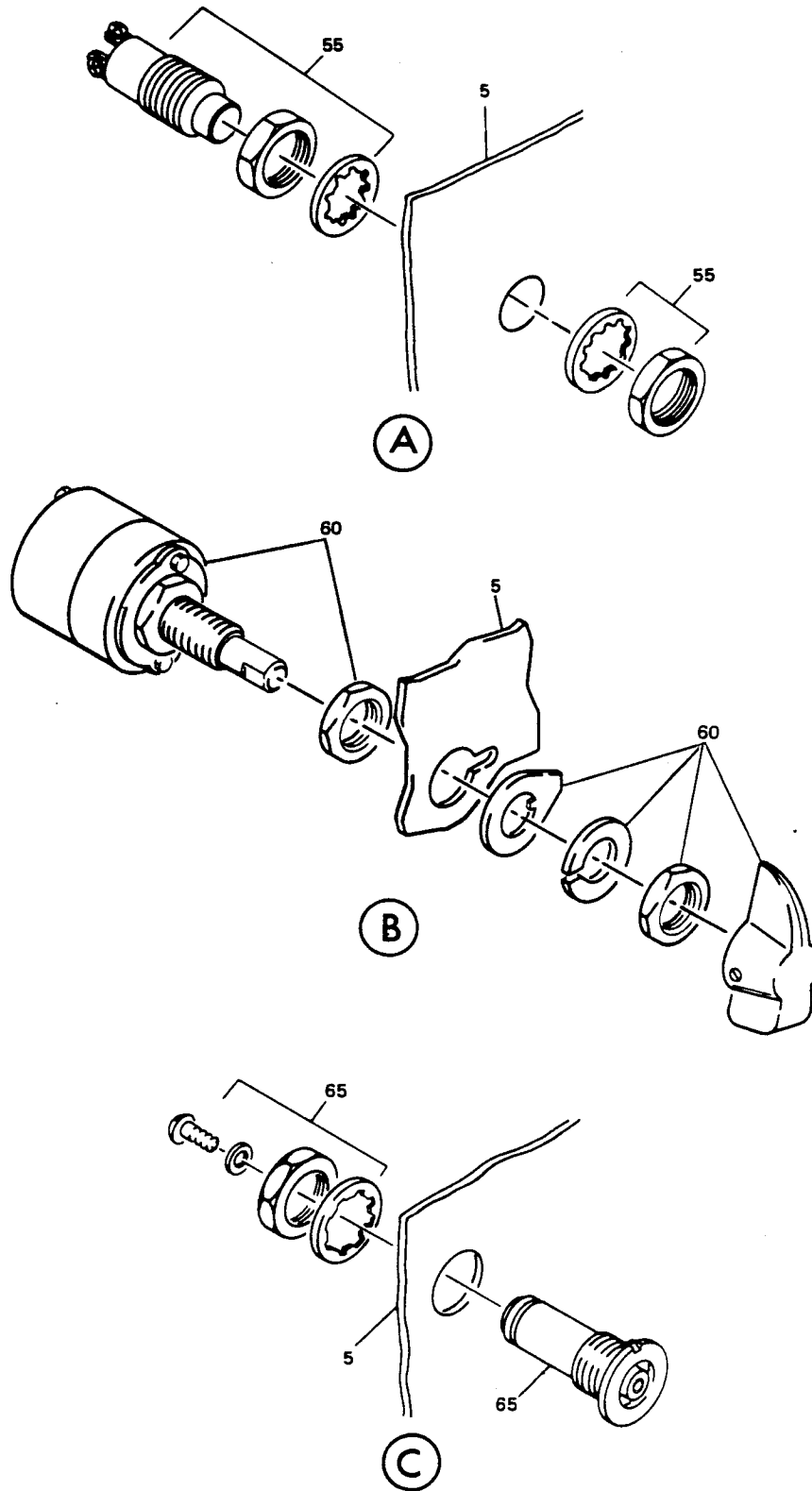
FIG. 9 REFERENCE DESIGNATION INDEX (SEE SCHEMATIC DIAGRAM)

REFERENCE DESIGNATION	PART NUMBER	ITEM NO.
CR1-CR8	1N5061	85
CR9-CR11	1N5338A	90
D1461	BACN45FN18-31P	95
L344	800000121-1	60
M786A-M786F	1M1896	30
M787	MOD15512SP1	65
S712	D20011-01	50
S783	BACS30AZ3-1N4	55



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OVERHAUL MANUAL



VIP Communications Module Assembly P5-45
Figure 10 (Sheet 2)

OVERHAUL MANUAL

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	N O M E N C L A T U R E							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
10-1	69-37377-27		VIP COMMUNICATION MODULE ASSY P5-45								
5	69-37377-28		. BASEPLATE								1
10	69-37377-29		. PLATE, REAR								1
15	66-13524-5		. SPACER								3
20	NAS514P632-5		. SCREW								3
25	BACS12CB06-5		. SCREW								3
30	1M3962		. SWITCH LIGHT, V12522								1
35	MS25237-387		. BULB								6
40	15001		. LAMP, DUMMY, V12522								6
45	NAS514P632-5		. SCREW								4
50	BACN10JC06		. NUT								4
55	D20011-01		. SWITCH, PUSHBUTTON, V81640								1
60	BACS30AZ3-1N4		. SWITCH, ROTARY								1
65	800000121-1		. POWER CONNECTOR, V05617								1
70	BACC45FN16-24P		. CONNECTOR								1
75	BACS12CB04-5		. SCREW								4
80	BACN10NW1		. NUT, CLIP								4
85	69-37377-30		. WIRE BUNDLE								1
90	69-37377-6		. TERMINAL BOARD ASSY								1
95	MOD15511SP1		. . TERMINAL BOARD, V91833								1
100	MOD15511SP2		. . INSULATOR, V91833								1
105	BAC27DEX3352		. . MARKER, VINYL								1
110	1N5338B		. . DIODE, ZENER, 5.1 VOLTS, 10 PCT, 5W								3
115	1N5061		. . DIODE								2
120	69-63592-5		. TERMINAL BOARD ASSY (REF 34-21-17)								1
125	BACS12CB04-5		. SCREW								8
130	BACN10DN40		. NUT								8
135	BACN10PA06-6		. PRESS NUT								3
140	BACS21DD1G		. STUD								4
145	BAC27DEX3331		. MARKER								1

OVERHAUL MANUAL

FIG. 10 REFERENCE DESIGNATION INDEX (SEE SCHEMATIC DIAGRAM)		
REFERENCE DESIGNATION	PART NUMBER	ITEM NO.
A1	MOD15511SP1	95
CR1, CR2, CR3	1N5338B	110
CR4, CR5	1N5061	115
A2	69-63592-5	120
J1	BACC45FN16-24P	70
L844	800000121-1	65
S1	BACS30AZ3-1N4	60
S2	D20011-01	55

VENDORS

- V04211 See V17824
- V05617 BELL INDUSTRIES, FARWEST MFG DIV., 18225 N.E. 76TH ST., REDMOND,
 WASHINGTON 98052
- V12522 STACOSWITCH INC., 1139 BAKER ST., COSTA MESA, CALIFORNIA 92626
- V17824 COASTAL DYNAMICS CORP., VENICE, CALIFORNIA 90291
- V22599 AMERACE CORP., ESNA DIV., 15201 BURBANK BLVD., SUITE C, VAN NUYS,
 CALIFORNIA 91411
- V26742 METHODE ELECTRONICS INC, 7447 WEST WILSON AVE., CHICAGO, ILLINOIS
 60656
- V54753 GENERAL INSTRUMENT CORP., SICKLES FW DIV., 1401 LOMALAND DRIVE, EL
 PASO, TEXAS 79935
- V72962 SEE V22599
- V81640 EATON CORP., AEROSPACE CONTROL SYSTEMS DIV., 2250 WHITFIELD AVE.
 E., SARASOTA, FLORIDA 34243-9703
- V91663 ARMEL ELECTRONICS INC., 1601 - 75TH ST., NORTH BERGEN, NEW JERSEY
 07047
- V91833 KEYSTONE ELECTRONICS INC., 49 BLEECKER ST., NEW YORK, NEW YORK
 10012
- V97564 SEE V54753