

**RACAL INSTRUMENTS™**  
**1260-13**  
**SWITCHING/RELAY**  
**MODULE**

Publication No. 980673-002 Rev. A

**Astronics Test Systems Inc.**

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**THANK YOU FOR PURCHASING THIS  
ASTRONICS TEST SYSTEMS PRODUCT**

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For this product, or any other Astronics Test Systems product that incorporates software drivers, you may access our web site to verify and/or download the latest driver versions. The web address for driver downloads is:

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**WARRANTY STATEMENT**

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All Astronics Test Systems products are designed to exacting standards and manufactured in full compliance to our AS9100 Quality Management System processes.

This warranty does not apply to defects resulting from any modification(s) of any product or part without Astronics Test Systems express written consent, or misuse of any product or part. The warranty also does not apply to fuses, software, non-rechargeable batteries, damage from battery leakage, or problems arising from normal wear, such as mechanical relay life, or failure to follow instructions.

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For the specific terms of your standard warranty, contact Customer Support. Please have the following information available to facilitate service.

1. Product serial number
2. Product model number
3. Your company and contact information

You may contact Customer Support by:

E-Mail:	<a href="mailto:atshelpdesk@astronics.com">atshelpdesk@astronics.com</a>	
Telephone:	+1 800 722 3262	(USA)
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## RETURN OF PRODUCT

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Authorization is required from Astronics Test Systems before you send us your product or sub-assembly for service or calibration. Call or contact Customer Support at 1-800-722-3262 or 1-949-859-8999 or via fax at 1-949-859-7139. We can also be reached at: [atshelpdesk@astronics.com](mailto:atshelpdesk@astronics.com).

If the original packing material is unavailable, ship the product or sub-assembly in an ESD shielding bag and use appropriate packing materials to surround and protect the product.

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## PROPRIETARY NOTICE

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# FOR YOUR SAFETY

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Before undertaking any troubleshooting, maintenance or exploratory procedure, read carefully the **WARNINGS** and **CAUTION** notices.



This equipment contains voltage hazardous to human life and safety, and is capable of inflicting personal injury.



If this instrument is to be powered from the AC line (mains) through an autotransformer, ensure the common connector is connected to the neutral (earth pole) of the power supply.



Before operating the unit, ensure the conductor (green wire) is connected to the ground (earth) conductor of the power outlet. Do not use a two-conductor extension cord or a three-prong/two-prong adapter. This will defeat the protective feature of the third conductor in the power cord.



Maintenance and calibration procedures sometimes call for operation of the unit with power applied and protective covers removed. Read the procedures and heed warnings to avoid “live” circuit points.

Before operating this instrument:

1. Ensure the proper fuse is in place for the power source to operate.
2. Ensure all other devices connected to or in proximity to this instrument are properly grounded or connected to the protective third-wire earth ground.

If the instrument:

- fails to operate satisfactorily
- shows visible damage
- has been stored under unfavorable conditions
- has sustained stress

Do not operate until performance is checked by qualified personnel.

## EC Declaration of Conformity

We

Astronics Test Systems  
4 Goodyear  
Irvine, CA 92618

declare under sole responsibility that the

**1260-13 Signal Switching Relay Module  
P/N 404941**

conforms to the following Product Specifications:

**Safety:** EN 61010-1

**EMC:** CISPR 11:1990/EN 55011 (1991): Group 1 Class A  
IEC 801-2:1991/EN 50082-1 (1992): 4 kV CD, 8 kV AD  
IEC 801-3:1984/EN 50082-1 (1992): 3 V/m, 27-500 MHz  
IEC 801-4:1988/EN 50082-1 (1992): 1 kV

**Supplementary Information:**

The above specifications are met when the product is installed in an Astronics Test Systems certified mainframe with faceplates installed over all unused slots, as applicable.

The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC.

Irvine, CA, January 24, 1996

  
Quality Manager

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## **NOTE FOR SYSTEMS WITH 1260-OPT 01T**

The “Module-Specific Syntax” section of this manual shows the command syntax for the 1260-01S Smart Card. If you are using the newer 1260-01T Smart Card, the commands will NOT work as shown.

Consult the 1260-01T Manual for a description of the commands which may be used with the 1260-01T Smart Card.

The channel numbers described in this manual are valid for the 1260-01T. The channel numbers continue to be used for the 1260-01T.

The syntax of the commands which use channel numbers has changed for those cards controlled by the 1260-01T.

The new syntax used to close a channel is:

```
CLOSE (@ <module address> ( <channel> ) )
```

For example, with for a relay module whose <module address> is set to 7, closing <channel> 0 is performed with the command:

```
CLOSE (@ 7 (0))
```

Using the older 1260-01S, the command would be (as shown in this manual):

```
CLOSE 7.0
```

Many other command syntax differences exist. Please consult chapter 2 of the 1260-01T manual for a description of the commands which are available for the 1260-01T.

### Control Information for the 1260-13

The following information describes the control-register-to-relay-channel mapping for a 1260-13 Relay Module. This information may be used to control a 1260-13 when using a 1260-01T in the register-based mode of operation.

Each relay on this module is controlled by setting or clearing a single bit within a Control Register. Control Registers on the module operate 8 channels simultaneously. There are eight control bits per Control Register. Setting the bit to a 1 closes the relay; setting the bit to a 0 opens the relay.

The table below shows the mapping from logical channels to control bits. The logical channels are used when operating the relay module in message-based mode. The control bits within the Control Registers are used to operate the module in register-based mode.

Each Control Register is located 2 addresses from the previous Control Register. That is, each Control Register is located at an odd address. This is shown in Table 2-2 of the 1260-01T manual. Control Register 0 is located at the "Base A24 Address" for the module. Consult the "Register-Based Operation" Section of Chapter 2 of the 1260-01T manual for a description of calculating control register addresses.

Channel	Control Register	Control Bit
0	0	0
1	0	1
2	0	2
3	0	3
4	0	4
5	0	5
6	0	6
7	0	7
8	1	0
9	1	1
10	1	2
11	1	3
12	1	4
13	1	5
14	1	6
15	1	7
16	2	0
17	2	1
18	2	2
19	2	3
20	2	4
21	2	5
22	2	6
23	2	7
24	3	0
25	3	1
26	3	2
27	3	3
28	3	4
29	3	5
30	3	6
31	3	7
32	4	0
33	4	1
34	4	2
35	4	3
36	4	4
37	4	5
38	4	6
39	4	7



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## DOCUMENT CHANGE HISTORY

Revision	Date	Description of Change
A	01/22/10	Revised per EO 30018 Revised format to current standards. Company name revised throughout manual. Manual now revision letter controlled. Added Document Change History Page iii. Back of cover sheet. Revised Warranty Statement, Return of Product, Proprietary Notice and Disclaimer to current standards. (Chap2-1) Unpacking and inspection. Revise to current standards. Removed Reshipment Instructions in (Chap. 2-1) and removed (Chap 5). Information. Now appears in first 2 sheets behind cover sheet. Updated table of contents to reflect changes made. . Added company name to footer in lower corner opposite of Page no's i thru iv.

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# Chapter 1

## MODULE SPECIFICATION

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### General

The 1260-13 Signal Switching/Relay Actuator module provides 40 independent channels of DPST switching. All pins of each channel are accessible through the front panel allowing each channel to function independently. Each channel features mounting holes to allow the addition of a series and shunt element such as arc suppressor for contact protection, filter, etc. It also provides mounting holes for jumpers to allow the configuration of custom relay switching networks. The module permits switching up to 2 amps and 220 volts DC or 250 volts rms per channel.

### Specifications (Per Independent Channel)

Switch Configuration	40 DPST Relays
User Connector	Positronics SMPL 4 FOTO LB
Maximum Switchable Voltage	220 VDC, 250 VAC RMS
Maximum Switchable Current	
Per Channel	2 ADC or AC RMS
Maximum Switchable Power	60 W or 62.5 VA
Path Resistance	< 300 M $\Omega$
Capacitance (Per Independent Channel)	
Open Channel	< 50 pF
Hi-Lo	< 80 pF
Bandwidth, (50 $\Omega$ Termination)	50 MHz
Isolation, (50 $\Omega$ Termination)	0.2 dB to 100 kHz 0.3 dB to 1 MHz 0.5 dB to 10 MHz

Crosstalk, (50 $\Omega$ Termination)	< -70 dB to 100 kHz
	< -50 dB to 1 MHz
	< -25 dB to 10 MHz

#### Cooling Requirements

Airflow	1.0 liter/sec
Backpressure	0.05 mm H <sub>2</sub> O

#### Cooling Requirements (With Option 01S/T)

Airflow	2.0 liters/sec
Backpressure	0.2 mm H <sub>2</sub> O

#### Power Requirements (I<sub>pm</sub>)

+5 V	0.4 A (2.8A with Option 01)
+24 V	10 mA per energized relay

Weight	2.77 lbs (1.25 Kg) w/o Option 01
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	3.05 lbs (1.37 Kg) with Option 01
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#### Minimum Option 01 Firmware

Revision	17.1
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## Chapter 2

# INSTALLATION INSTRUCTIONS

### Unpacking and Inspection

1. Remove the 1260-13 module and inspect it for damage. If any damage is apparent, inform the carrier immediately. Retain shipping carton and packing material for the carrier's inspection.
2. Verify that the pieces in the package you received contain the correct 1260-13 module option and the 1260-13 Users Manual. Notify Customer Support if the module appears damaged in any way. Do not attempt to install a damaged module into a VXI chassis.
3. The 1260-13 module is shipped in an anti-static bag to prevent electrostatic damage to the module. Do not remove the module from the anti-static bag unless it is in a static-controlled area.

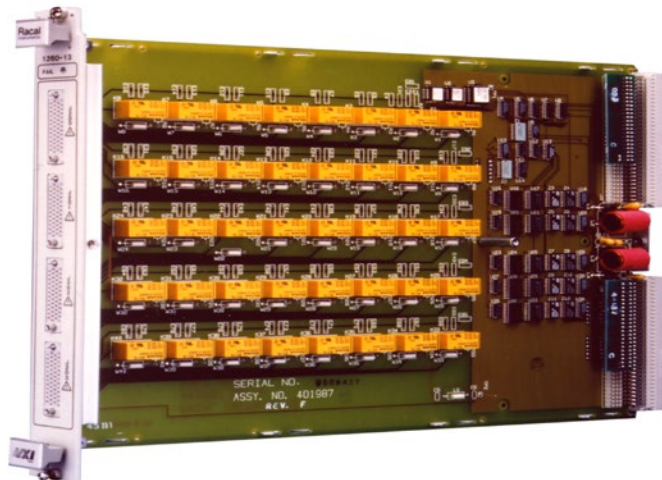


Figure 2-1, 1260-13

## **Option 01 Installation**

Installation of the Option 01 into the 1260-13 is described in the Installation section of the 1260 Series VXI Switching Cards Manual.

## **Module Installation**

Installation of the 1260-13 Switching Module into a VXI mainframe, including the setting of DIP switches, is described in the Installation section of the 1260 Series VXI Switching Cards Manual. The ID byte DIP switches, SW1-5 and SW1-6, should be set OFF.



## Chapter 3

# MODULE SPECIFIC SYNTAX

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The module specific syntax for the 1260-13 is required in the use of the OPEN and CLOSE commands. It will also appear in the data output by the Master in response to the PDATAOUT and PSETUP commands.

### Syntax

The Module Specific Syntax for the 1260-13 module is as follows:

<module address>.<channel>

where <module address> is the switch card address.

<channel> is the channel number to be switched; the valid values for

<channel> range from 0 to 39

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**NOTE:**

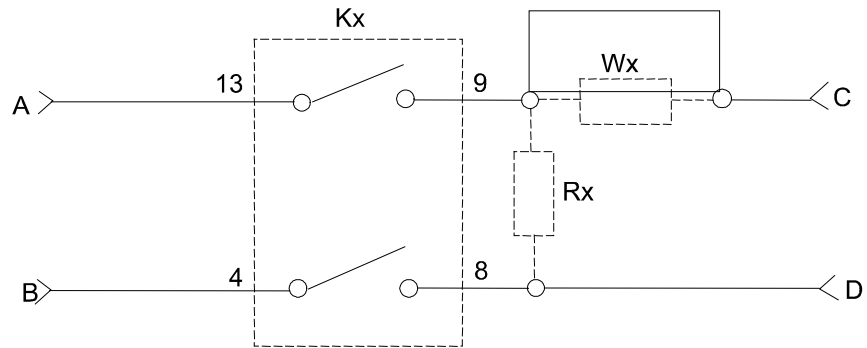
**The <module address> used here is not the VXIbus defined logical address of the 1260 Master. It is peculiar to the 1260 Series, and describes the switching module in relation to the Master. This address corresponds to the binary value of the switch setting of SW1 on the module PCB.**

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### Configuration Setting

The 1260-13 Signal Switching/Relay Actuator module provides 40 independent channels of DPST switching. All four pins of each DPST relay are accessible through the front panel allowing each channel to function independently. Each channel features mounting holes to allow the addition of a series and shunt element such as arc suppressor for contact protection, filter, etc. It also provides mounting holes for jumpers to allow the configuration of custom relay switching networks. The module permits switching up to 2 amps and 220 volts, DC or 250 volts rms per channel.

A total of 200 pins are accessible through the front panel connectors, 22 of which are not used. Each channel is assigned 4 pins, A,B,C and D, as shown in **Figure 3-1**.



**Figure 3-1, 1260-13 Relay Diagram**

The corresponding pin assignments of the 4 pins for each channel is tabulated on **Table 3-1**.

## Connector Pin Configuration

Refer to **Figure 3-2** below for the pin configurations of the front panel connectors J200 to J203. J200 to J203 is Part Number 601856-050. The mating connectors are Part Number 601855-050, and mating pins are Part Number 601857.

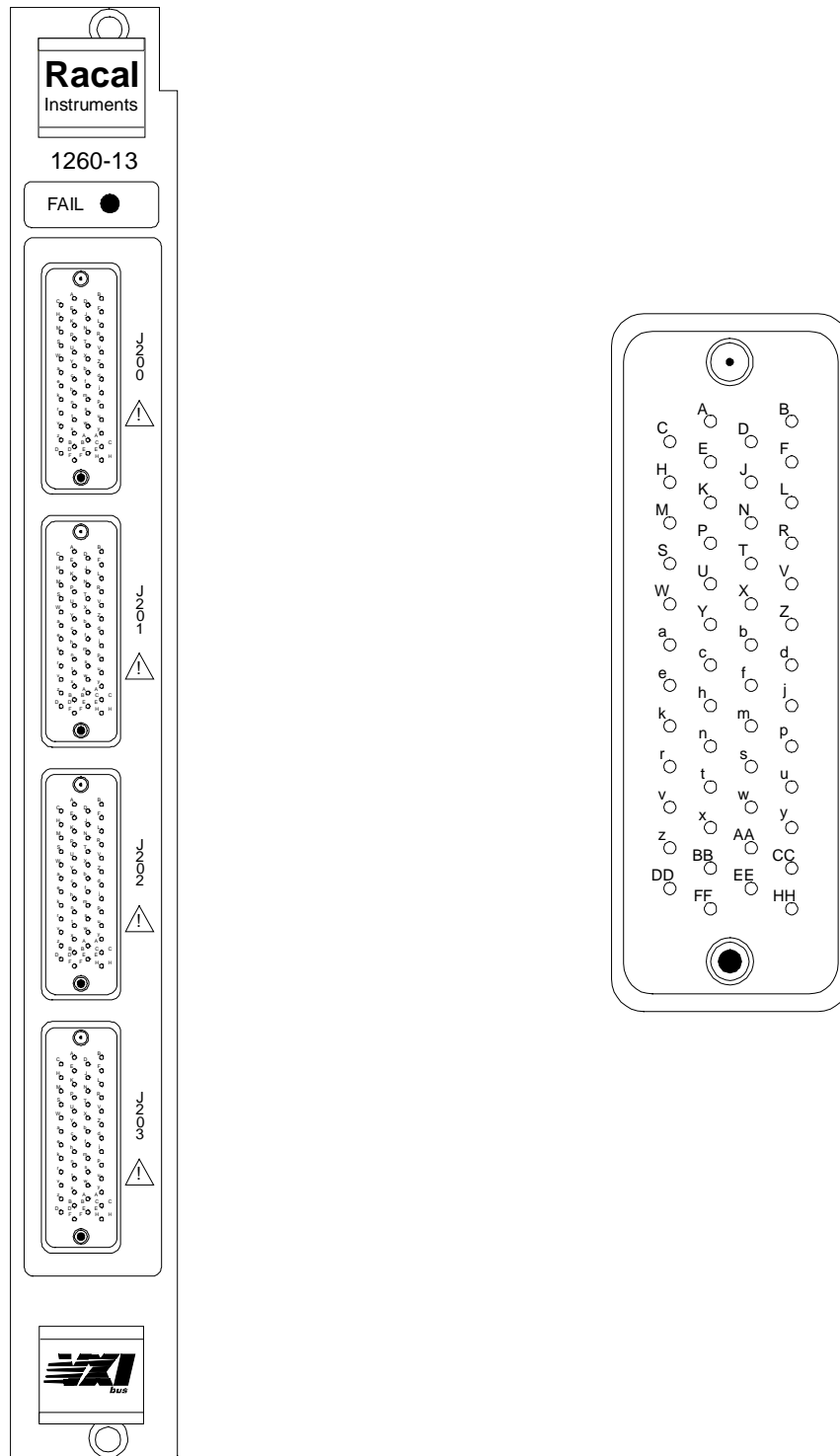


Figure 3-2, 1260-13 J200-J203 Pin Configurations

Table 3-1, 1260-13 "A,B,C and D" Assignments

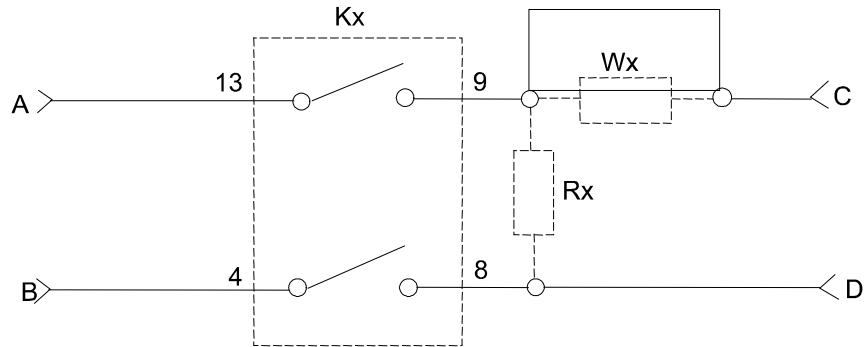
CHANNEL NO.	Pin A	Pin C	Pin B	Pin D
00	J200-s	J200-p	J200-r	J200-n
01	J200-m	J200-j	J200-k	J200-h
02	J200-f	J200-d	J200-e	J200-c
03	J200-b	J200-Z	J200-a	J200-Y
04	J200-X	J200-V	J200-W	J200-U
05	J200-T	J200-R	J200-S	J200-P
06	J200-N	J200-L	J200-M	J200-K
07	J200-J	J200-F	J200-H	J200-E
08	J201-f	J201-d	J201-e	J201-c
09	J201-b	J201-Z	J201-a	J201-Y
10	J201-X	J201-V	J201-W	J201-U
11	J201-T	J201-R	J201-S	J201-P
12	J201-N	J201-L	J201-M	J201-K
13	J201-J	J201-F	J201-H	J201-E
14	J200-EE	J200-CC	J200-DD	J200-BB
15	J200-AA	J200-y	J200-z	J200-x
16	J202-X	J202-V	J202-W	J202-U
17	J202-T	J202-R	J202-S	J202-P
18	J202-N	J202-L	J202-M	J202-K
19	J202-J	J202-F	J202-H	J202-E
20	J201-EE	J201-CC	J201-DD	J201-BB
21	J201-AA	J201-y	J201-z	J201-x
22	J201-w	J201-u	J201-v	J201-t
23	J201-s	J201-p	J201-r	J201-n
24	J203-N	J203-L	J203-M	J203-K
25	J203-J	J203-F	J203-H	J203-E
26	J202-EE	J202-CC	J202-DD	J202-BB
27	J202-AA	J202-y	J202-z	J202-x
28	J202-w	J202-u	J202-v	J202-t
29	J202-s	J202-p	J202-r	J202-n
30	J202-m	J202-j	J202-k	J202-h
31	J202-f	J202-d	J202-e	J202-c
32	J203-EE	J203-CC	J203-DD	J203-BB
33	J203-AA	J203-y	J203-z	J203-x
34	J203-w	J203-u	J203-v	J203-t
35	J203-s	J203-p	J203-r	J203-n
36	J203-m	J203-j	J203-k	J203-h
37	J203-f	J203-d	J203-e	J203-c
38	J203-b	J203-Z	J203-a	J203-Y
39	J203-X	J203-V	J203-W	J203-U

Table 3-1, 1260-13 "A,B,C and D" Assignments (continued)

<b>COM</b>	<b>A</b>	<b>B</b>
0	J200-D	J200-C
1	J200-w	J200-v
2	J201-m	J201-k
3	J202-b	J202-a
4	J203-T	J203-S

<b>Chassis</b>	<b>Ground</b>
J200-A	J200-FF
J201-A	J201-FF
J202-A	J202-FF
J203-A	J203-FF

**Figure 3-3** shows a 1260-13 channel with a series and shunt element associated with each channel. The series elements are designated W1 to W40 while the shunt elements are designated R1 to R40. To allow immediate use of the module, a zero-ohm jumper is installed on all positions for W1 to W40. No component is installed on R1 to R40.

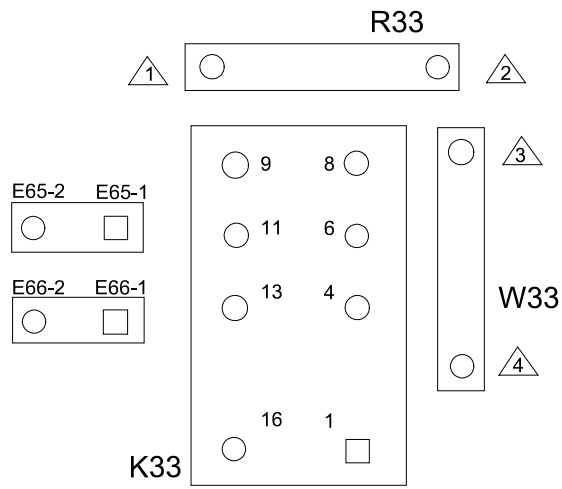


**Figure 3-3, 1260-13 Channel**

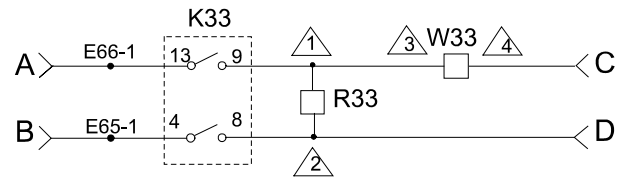
To install a shunt element at a particular channel, locate the "R" position which has a numerical assignment that is one higher than the channel number. For example, the shunt element associated with CH 19 will have the designation R20. The same procedure applies to the installation of a series element except, instead of an "R" designation, a series element will be installed on a "W" position. Since the module is shipped with jumpers installed on W1 to W40, installation of a series element will first require the removal of the jumper on the location of interest. **Figure 3-4** summarizes the components associated with each channel. It also shows how the series and shunt elements are connected to the relay, which is useful when the elements being installed have associated polarities.

Custom relay switching networks can be implemented by using jumpers and mounting holes on the module. Referring to **Figure 3-4**, mounting holes are provided on the "A" and "B" side of each relay. In addition, a pair of "common" lines with mounting holes run alongside each column of 8 relays. These lines can be used to implement a multiplexer using the 8 adjacent relays. For example, to implement an 8 x 1 multiplexer using K1 to K8, use jumpers to connect E1-1 to E1-2, E2-1 to E2-2, ..., E16-1 to E16-2 (See **Figure 3-5**). K1 to K8 now composes a 2-wire, 8 x 1 multiplexer with COM0A and COM0B as the common pair. The other four columns of eight relays can be configured in the same manner to provide a total of five 8 x 1 multiplexers. The pin assignment of the common pairs is shown on **Table 3-1**.

EXAMPLE: CH 32



COMPONENT LAYOUT  
(TOP VIEW)



SCHEMATIC

NOTE: PINS 6 AND 11 OF THE RELAY ARE NOT USED

Figure 3-4, 1260-13 Components Per Channel

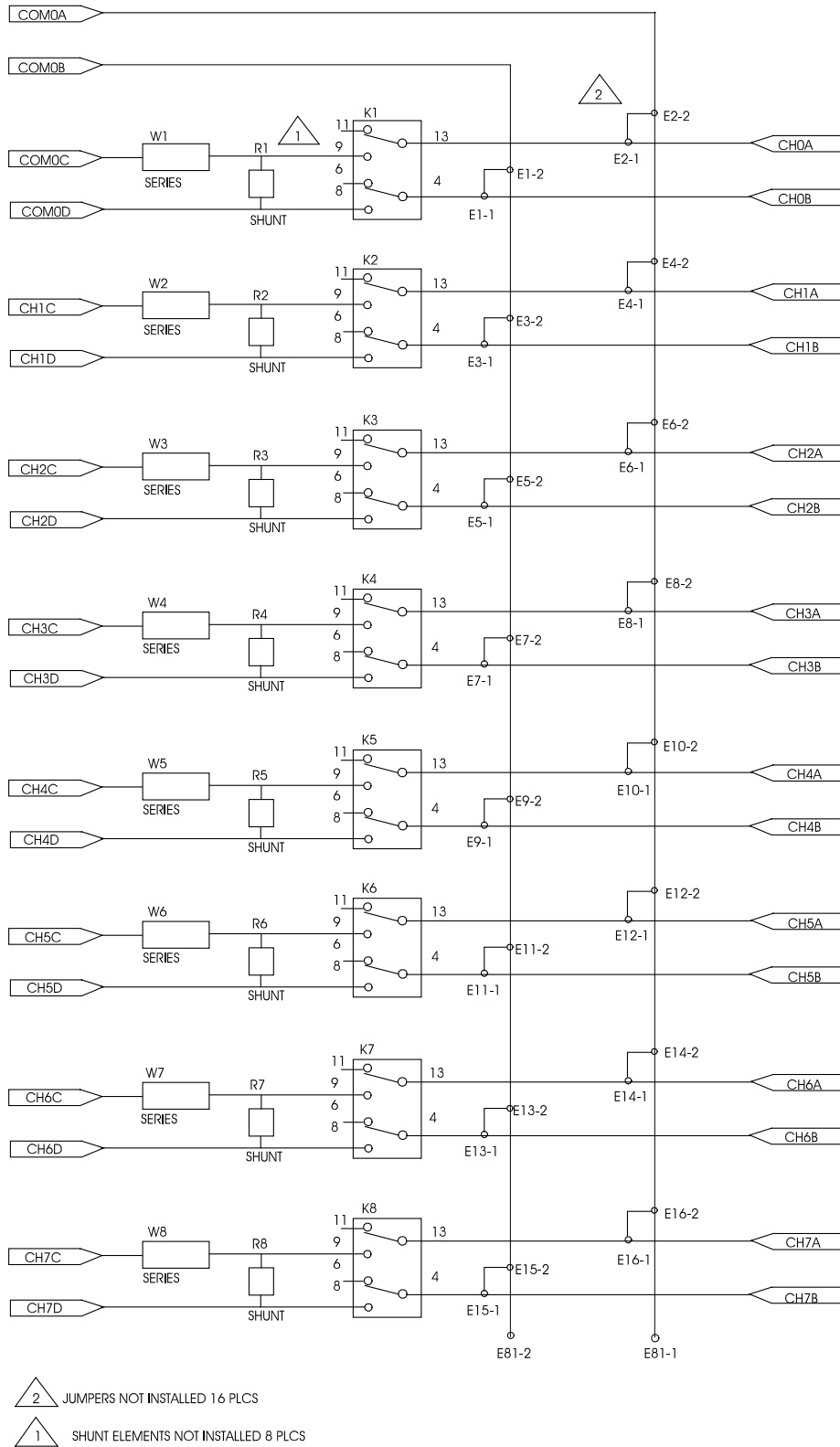


Figure 3-5, 1260-13 Jumper Locations



## Chapter 4

# OPTIONAL HARNESS ASSEMBLIES

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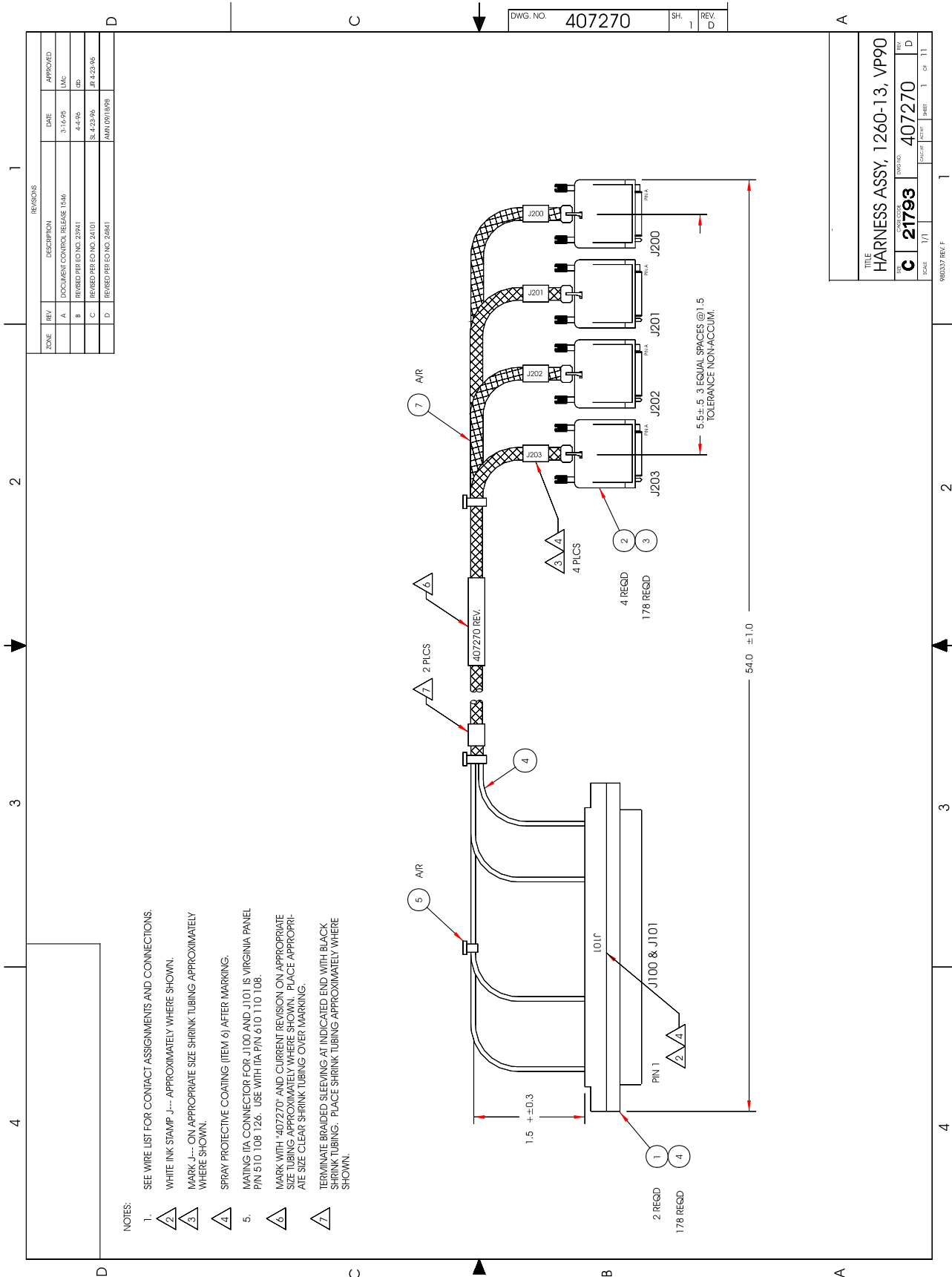
The following harness assemblies are used to connect 1260-13 to Freedom Series Test Receiver Interfaces.

Each harness documentation consists of an assembly drawing, parts list, system wire list and wire list.

407270 Virginia Panel, Inc. Series VP90 Interface  
Harness

407271 TTI Testron, Inc. Interface Harness  
(TTI Receiver must be above chassis)

For more information on the complete line of Test Receiver Interface solutions, contact Astronics Test Systems Customer Support Department.



## ENGINEERING PARTS LIST

ITEM	BIN	PART NO.	DESCRIPTION	QTY	REFERENCE
1		602201-003	CONN-RCV-PLG096C.---T-VP90	2	J100-J101
2		601855-050	CONN-CAB-PLG50CP	4	J200-J203
3		602092-001	CONT-SGM MALE CRIMP	178	W/J200-J203
4		602201-806	PATCHCORD,SIGNAL,24AWG,60IN	178	W/J101-J101
5		610777	TIE-CA-LKG-.062-.075	A/R	
6		910541	POLYURETHANE CONF. COAT	A/R	
7		GRP-110-1/2	TBGWOV-POY.250ID-BLACK	A/R	

DOCUMENT TITLE	SIZE	CODE NO.	DOCUMENT NO.	REV
HARNESS ASSEMBLY, 1260-13, VP-90	A	21793	407270	D
	DRN		SHEET 2 of 11	

## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART#	WIRE LEN	REFERENCE
	BLK AA (J100)	Uxx-SLOT yy (J200-J202)	CABLE	407270		SYSTEM WIRE LIST
	BLK AA (J101)	Uxx-SLOT yy (J201-J203)	CABLE	407270		

This system wirelist serves as a template for incorporating this harness assembly into the overall system wirelist. It does not in any way affect the fabrication of this harness assembly.

DOCUMENT TITLE	SIZE	CODE NO.	DOCUMENT NO.	REV
HARNESS ASSEMBLY, 1260-13, VP-90	A	21793	407270	D
	DRN		SHEET 3 of 11	

## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART#	WIRE LEN	REFERENCE
1	J100-1 (602201-003)	J200-s 602092-001	24 AWG WHT	602201-806	54"	CHANNEL 00 HI IN
2	J100-2 (602201-003)	J200-r 602092-001	24 AWG WHT	602201-806	54"	CHANNEL 00 LO IN
3	J100-33 (602201-003)	J200-p 602092-001	24 AWG WHT	602201-806	54"	CHANNEL 00 HI OUT
4	J100-34 (602201-003)	J200-n 602092-001	24 AWG WHT	602201-806	54"	CHANNEL 00 LO OUT
5	J100-3 (602201-003)	J200-m 602092-001	24 AWG WHT	602201-806	54"	CHANNEL 01 HI IN
6	J100-4 (602201-003)	J200-k 602092-001	24 AWG WHT	602201-806	54"	CHANNEL 01 LO IN
7	J100-35 (602201-003)	J200-j 602092-001	24 AWG WHT	602201-806	54"	CHANNEL 01 HI OUT
8	J100-36 (602201-003)	J200-h 602092-001	24 AWG WHT	602201-806	54"	CHANNEL 01 LO OUT
9	J100-65 (602201-003)	J200-f 602092-001	24 AWG WHT	602201-806	54"	CHANNEL 02 HI IN
10	J100-66 (602201-003)	J200-e 602092-001	24 AWG WHT	602201-806	54"	CHANNEL 02L OI N
11	J100-67 (602201-003)	J200-d 602092-001	24 AWG WHT	602201-806	54"	CHANNEL 02 HI OUT
12	J100-68 (602201-003)	J200-c 602092-001	24 AWG WHT	602201-806	54"	CHANNEL 02 LO OUT
13	J100-5 (602201-003)	J200-b 602092-001	24 AWG WHT	602201-806	54"	CHANNEL 03 HI IN
14	J100-6 (602201-003)	J200-a 602092-001	24 AWG WHT	602201-806	54"	CHANNEL 03 LO IN
15	J100-37 (602201-003)	J200-Z 602092-001	24 AWG WHT	602201-806	54"	CHANNEL 03 HI OUT
16	J100-38 (602201-003)	J200-Y 602092-001	24 AWG WHT	602201-806	54"	CHANNEL 03 LO OUT
17	J100-7 (602201-003)	J200-X 602092-001	24 AWG WHT	602201-806	54"	CHANNEL 04 HI IN
18	J100-8 (602201-003)	J200-W 602092-001	24 AWG WHT	602201-806	54"	CHANNEL 04 LO IN
19	J100-39 (602201-003)	J200-V 602092-001	24 AWG WHT	602201-806	54"	CHANNEL 04 HI OUT
20	J106-40 (602201-003)	J200-U 602092-001	24 AWG WHT	602201-806	54"	CHANNEL 04 LO OUT
21	J100-69 (602201-003)	J200-T 602092-001	24 AWG WHT	602201-806	54"	CHANNEL 05 HI IN
22	J100-70 (602201-003)	J200-S 602092-001	24 AWG WHT	602201-806	54"	CHANNEL 05 LO IN
23	J100-71 (602201-003)	J200-R 602092-001	24 AWG WHT	602201-806	54"	CHANNEL 05 HI OUT
24	J100-72 (602201-003)	J200-P 602092-001	24 AWG WHT	602201-806	54"	CHANNEL 05 LO OUT
25	J100-9 (602201-003)	J200-N 602092-001	24 AWG WHT	602201-806	54"	CHANNEL 06 HI IN

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## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART#	WIRE LEN	REFERENCE
26	J100-10	J200-M	24 AWG	602201-	54"	CHANNEL 06 LO IN
	(602201-003)	602092-001	WHT	806		
27	J100-41	J200-L	24 AWG	602201-	54"	CHANNEL 06 HI OUT
	(602201-003)	602092-001	WHT	806		
28	J100-42	J200-K	24 AWG	602201-	54"	CHANNEL 06 LO OUT
	(602201-003)	602092-001	WHT	806		
29	J100-11	J200-J	24 AWG	602201-	54"	CHANNEL 07 HI IN
	(602201-003)	602092-001	WHT	806		
30	J100-12	J200-H	24 AWG	602201-	54"	CHANNEL 07 LO IN
	(602201-003)	602092-001	WHT	806		
31	J100-43	J200-F	24 AWG	602201-	54"	CHANNEL 07 HI OUT
	(602201-003)	602092-001	WHT	806		
32	J100-44	J200-E	24 AWG	602201-	54"	CHANNEL 07 LO OUT
	(602201-003)	602092-001	WHT	806		
33	J100-73	J201-f	24 AWG	602201-	54"	CHANNEL 08 HI IN
	(602201-003)	602092-001	WHT	806		
34	J100-74	J201-e	24 AWG	602201-	54"	CHANNEL 08 LO IN
	(602201-003)	602092-001	WHT	806		
35	J100-75	J201-d	24 AWG	602201-	54"	CHANNEL 08 HI OUT
	(602201-003)	602092-001	WHT	806		
36	J100-76	J201-c	24 AWG	602201-	54"	CHANNEL 08 LO OUT
	(602201-003)	602092-001	WHT	806		
37	J100-13	J201-b	24 AWG	602201-	54"	CHANNEL 09 HI IN
	(602201-003)	602092-001	WIIT	806		
38	J100-14	J201-a	24 AWG	602201-	54"	CHANNEL 09 LO IN
	(602201-003)	602092-001	WHT	806		
39	J100-45	J201-Z	24 AWG	602201-	54"	CHANNEL 09 HI OUT
	(602201-003)	602092-001	WHT	806		
40	J100-46	J201-Y	24 AWG	602201-	54"	CHANNEL 09 LO OUT
	(602201-003)	602092-001	WHT	806		
41	J100-15	J201-X	24 AWG	602201-	54"	CHANNEL 10 HI IN
	(602201-003)	602092-001	WHT	806		
42	J100-16	J201-W	24 AWG	602201-	54"	CHANNEL 10 LO IN
	(602201-003)	602092-001	WHT	806		
43	J100-47	J201-V	24 AWG	602201-	54"	CHANNEL 10 HI OUT
	(602201-003)	602092-001	WHT	806		
44	J100-48	J201-U	24 AWG	602201-	54"	CHANNEL 10 LO OUT
	(602201-003)	602092-001	WHT	806		
45	J100-77	J201 -T	24 AWG	602201-	54"	CHANNEL 11 HI IN
	(602201-003)	602092-001	WHT	806		
46	J100-78	J201-S	24 AWG	602201-	54"	CHANNEL 11 LO IN
	(602201-003)	602092-001	WHT	806		
47	J100-79	J201-R	24 AWG	602201-	54"	CHANNEL 11 HI OUT
	(602201-003)	602092-001	WHT	806		
48	J100-80	J201-P	24 AWG	602201-	54"	CHANNEL 11 LO OUT
	(602201-003)	602092-001	WHT	806		
49	J100-17	J201-N	24 AWG	602201-	54"	CHANNEL 12 HI IN
	(602201-003)	602092-001	WHT	806		
50	J100-18	J201-M	24 AWG	602201-	54"	CHANNEL 12 LO IN
	(602201-003)	602092-001	WHT	806		

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## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART#	WIRE LEN	REFERENCE
51	J100-49	J201-L	24 AWG	602201-	54"	CHANNEL 12 HI OUT
	(602201-003)	602092-001	WHT	806		
52	J100-50	J201-K	24 AWG	602201-	54"	CHANNEL 12 LO OUT
	(602201-003)	602092-001	WHT	806		
53	J100-19	J201-J	24 AWG	602201-	54"	CHANNEL 13 HI IN
	(602201-003)	602092-001	WHT	806		
54	J100-20	J201-H	24 AWG	602201-	54"	CHANNEL 13 LO IN
	(602201-003)	602092-001	WHT	806		
55	J100-51	J201-F	24 AWG	602201-	54"	CHANNEL 13 HI OUT
	(602201-003)	602092-001	WHT	806		
56	J100-52	J201-E	24 AWG	602201-	54"	CHANNEL 13 LO OUT
	(602201-003)	602092-001	WHT	806		
57	J100-81	J200-EE	24 AWG	602201-	54"	CHANNEL 14 HI IN
	(602201-003)	602092-001	WHT	806		
58	J100-82	J200-DD	24 AWG	602201-	54"	CHANNEL 14 LO IN
	(602201-003)	602092-001	WHT	806		
59	J100-83	J200-CC	24 AWG	602201-	54"	CHANNEL 14 HI OUT
	(602201-003)	602092-001	WHT	806		
60	J100-84	J200-BB	24 AWG	602201-	54"	CHANNEL 14 LO OUT
	(602201-003)	602092-001	WHT	806		
61	J100-21	J200-AA	24 AWG	602201-	54"	CHANNEL 15 HI IN
	(602201-003)	602092-001	WHT	806		
62	J100-22	J200-z	24 AWG	602201-	54"	CHANNEL 15 LO IN
	(602201-003)	602092-001	WHT	806		
63	J100-53	J200-y	24 AWG	602201-	54"	CHANNEL 15 HI OUT
	(602201-003)	602092-001	WHT	806		
64	J100-54	J200-x	24 AWG	602201-	54"	CHANNEL 15 LO OUT
	(602201-003)	602092-001	WHT	806		
65	J100-23	J202-X	24 AWG	602201-	54"	CHANNEL 16 HI IN
	(602201-003)	602092-001	WHT	806		
66	J100-24	J202-W	24 AWG	602201-	54"	CHANNEL 16 LO IN
	(602201-003)	602092-001	WHT	806		
67	J100-55	J202-V	24 AWG	602201-	54"	CHANNEL 16 HI OUT
	(602201-003)	602092-001	WHT	806		
68	J100-56	J202-U	24 AWG	602201-	54"	CHANNEL 16 LO OUT
	(602201-003)	602092-001	WHT	806		
69	J100-85	J202-T	24 AWG	602201-	54"	CHANNEL 17 HI IN
	(602201-003)	602092-001	WHT	806		
70	J100-86	J202-S	24 AWG	602201-	54"	CHANNEL 17 LO IN
	(602201-003)	602092-001	WHT	806		
71	J100-87	J202-R	24 AWG	602201-	54"	CHANNEL 17 HI OUT
	(602201-003)	602092-001	WHT	806		
72	J100-88	J202-P	24 AWG	602201-	54"	CHANNEL 17 LO OUT
	(602201-003)	602092-001	WHT	806		
73	J100-25	J202-N	24 AWG	602201-	54"	CHANNEL 18 HI IN
	(602201-003)	602092-001	WHT	806		
74	J100-26	J202-M	24 AWG	602201-	54"	CHANNEL 18 LO IN
	(602201-003)	602092-001	WHT	806		
75	J100-57	J202-L	24 AWG	602201-	54"	CHANNEL 18 HI OUT
	(602201-003)	602092-001	WHT	806		

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## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART#	WIRE LEN	REFERENCE
76	J100-58	J202-K	24 AWG	602201-	54"	CHANNEL 18 LO OUT
	(602201-003)	602092-001	WHT	806		
77	J100-27	J202-J	24 AWG	602201-	54"	CHANNEL 19 HI IN
	(602201-003)	602092-001	WHT	806		
78	J100-28	J202-H	24 AWG	602201-	54"	CHANNEL 19 LO IN
	(602201-003)	602092-001	WHT	806		
79	J100-59	J202-F	24 AWG	602201-	54"	CHANNEL 19 HI OUT
	(602201-003)	602092-001	WHT	806		
80	J100-60	J202-E	24 AWG	602201-	54"	CHANNEL 19 LO OUT
	(602201-003)	602092-001	WHT	806		
81	J100-99					
	NO CONNECT					
82	J100-90					
	NO CONNECT					
83	J100-91					
	NO CONNECT					
84	J100-92					
	NO CONNECT					
85	J100-29	J200-D	24 AWG	602201-	54"	COMMON 00 HI
	(602201-003)	602092-001	WHT	806		
86	J100-30	J200-C	24 AWG	602201-	54"	COMMON 00 LO
	(602201-003)	602092-001	WHT	806		
87	J100-61	J200-w	24 AWG	602201-	54"	COMMON 01 HI
	(602201-003)	602092-001	WHT	806		
88	J100-62	J200-v	24 AWG	602201-	54"	COMMON 01 LO
	(602201-003)	602092-001	WHT	806		
89	J100-31	J200-A	24 AWG	602201-	54"	GROUND
	(602201-003)	602092-001	WHT	806		
90	J10032	J200-FF	24 AWG	602201-	54"	GROUND
	(602201-003)	602092-001	WHT	806		
91	J100-63	J201-A	24 AWG	602201-	54"	GROUND
	(602201-003)	602092-001	WHT	806		
92	J100-64	J201-FF	24 AWG	602201-	54"	GROUND
	(602201-003)	602092-001	WHT	806		
93	J100-93	J201-m	24 AWG	602201-	54"	COMMON 02 HI
	(602201-003)	602092-001	WHT	806		
94	J100-94	J201-k	24 AWG	602201-	54"	COMMON 02 LO
	(602101-003)	602092-001	WHT	806		
95	J100-95					
	NO CONNECT					
96	J100-96					
	NO CONNECT					
97	J101-1	J201-EE	24 AWG	602201-	54"	CHANNEL 20 HI IN
	(602201-003)	602092-001	WHT	806		
98	J101-2	J201-DD	24 AWG	602201-	54"	CHANNEL 20 LO IN
	(602201-003)	602092-001	WHT	806		
99	J101-33	J201-CC	24 AWG	602201-		CHANNEL 20 HI OUT
	(602201-003)	602092-001	WHT	806		
100	J101-34	J201-BB	24 AWG	602201-	54"	CHANNEL 20 LO OUT
	(602201-003)	602092-001	WHT	806		

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## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART#	WIRE LEN	REFERENCE
101	J101-3	J201-AA	24 AWG	602201-	54"	CHANNEL 21 HI IN
	(602201-003)	602092-001	WHT	806		
102	J101-4	J201-z	24 AWG	602201-	54"	CHANNEL 21 LO IN
	(602201-003)	602092-001	WHT	806		
103	J101-35	J201-y	24 AWG	602201-	54"	CHANNEL 21 HI OUT
	(602201-003)	602092-001	WHT	806		
104	J101-36	J201-x	24 AWG	602201-	54"	CHANNEL 21 LO OUT
	(602201-003)	602092-001	WHT	806		
105	J101-65	J201-w	24 AWG	602201-	54"	CHANNEL 22 HI IN
	(602201-003)	602092-001	WHT	806		
106	J101-66	J201-v	24 AWG	602201-	54"	CHANNEL 22 LO IN
	(602201-003)	602092-001	WHT	806		
107	J101-67	J201-u	24 AWG	602201-	54"	CHANNEL 22 HI OUT
	(602201-003)	602092-001	WHT	806		
108	J101-68	J201-t	24 AWG	602201-	54"	CHANNEL 22 LO OUT
	(602201-003)	602092-001	WHT	806		
109	J101-5	J201-s	24 AWG	602201-	54"	CHANNEL 23 HI IN
	(602201-003)	602092-001	WHT	806		
110	J101-6	J201-r	24 AWG	602201-	54"	CHANNEL 23 LO IN
	(602201-003)	602092-001	WHT	806		
111	J101-37	J201-p	24 AWG	602201-	54"	CHANNEL 23 HI OUT
	(602201-003)	602092-001	WHT	806		
112	J101-38	J201-n	24 AWG	602201-	54"	CHANNEL 23 LO OUT
	(602201-003)	602092-001	WHT	806		
113	J101-7	J203-N	24 AWG	602201-	54"	CHANNEL 24 HI IN
	(602201-003)	602092-001	WHT	806		
114	J101-8	J203-M	24 AWG	602201-	54"	CHANNEL 24 LO IN
	(602201-003)	602092-001	WHT	806		
115	J101-39	J203-L	24 AWG	602201-	54"	CHANNEL 24 HI OUT
	(602201-003)	602092-001	WHT	806		
116	J10140	J203-K	24 AWG	662201-	54"	CHANNEL 24 LO OUT
	(602201-003)	602092-001	WHT	806		
117	J101-69	J203-J	24 AWG	602201-	54"	CHANNEL 25 HI IN
	(602201-003)	602092-001	WHT	806		
118	J101-70	J203-H	24 AWG	602201-	54"	CHANNEL 25 LO IN
	(602201-003)	602092-001	WHT	806		
119	J101-71	J203-F	24 AWG	602201-	54"	CHANNEL 25 HI OUT
	(602201-003)	602092-001	WHT	806		
120	J101-72	J203-E	24 AWG	602201-	54"	CHANNEL 25 LO OUT
	(602201-003)	602092-001	WHT	806		
121	J101-9	J202-EE	24 AWG	602201-	54"	CHANNEL 26 HI IN
	(602201-003)	602092-001	WHT	806		
122	J101-10	J202-DD	24 AWG	602201-	54"	CHANNEL 26 LO IN
	(602201-003)	602092-001	WHT	806		
123	J101-41	J202-CC	24 AWG	602201-	54"	CHANNEL 26 HI OUT
	(602201-003)	602092-001	WHT	806		
124	J101-42	J202-BB	24 AWG	602201-	54"	CHANNEL 26 LO OUT
	(602201-003)	602092-001	WHT	806		
125	J101-11	J202-AA	24 AWG	602201-	54"	CHANNEL 27 HI IN
	(602201-003)	602092-001	WHT	806		

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WIRE	FROM	TO	TYPE	PART#	WIRE LEN	REFERENCE
126	J101-12	J202-z	24 AWG	602201-	54"	CHANNEL 27 LO IN
	(602201-003)	602092-001	WHT	806		
127	J101-43	J202-y	24 AWG	602201-	54"	CHANNEL 27 HI OUT
	(602201-003)	602092-001	WHT	806		
128	J101-44	J202-x	24 AWG	602201-	54"	CHANNEL 27 LO OUT
	(602201-003)	602092-001	WHT	806		
129	J101-73	J202-w	24 AWG	602201-	54"	CHANNEL 28 HI IN
	(602201-003)	602092-001	WHT	806		
130	J101-74	J202-v	24 AWG	602201-	54"	CHANNEL 28 LO IN
	(602201-003)	602092-001	WHT	806		
131	J101-75	J202-u	24 AWG	602201-	54"	CHANNEL 28 HI OUT
	(602201-003)	602092-001	WHT	806		
132	J101-76	J202-t	24 AWG	602201-	54"	CHANNEL 28 LO OUT
	(602201-003)	602092-001	WHT	806		
133	J101-13	J202-s	24 AWG	602201-	54"	CHANNEL 29 HI IN
	(602201-003)	602092-001	WHT	806		
134	J101-14	J202-r	24 AWG	602201-	54"	CHANNEL 29 LO IN
	(602201-003)	602092-001	WHT	806		
135	J101-45	J202-p	24 AWG	602201-	54"	CHANNEL 29 HI OUT
	(602201-003)	602092-001	WHT	806		
136	J101-46	J202-n	24 AWG	602201-	54"	CHANNEL 29 LO OUT
	(602201-003)	602092-001	WHT	806		
137	J101-15	J202-m	24 AWG	602201-	54"	CHANNEL 30 HI IN
	(602201-003)	602092-001	WHT	806		
138	J101-16	J202-k	24 AWG	602201-	54"	CHANNEL 30 LO IN
	(602201-003)	602092-001	WHT	806		
139	J101-47	J202-j	24 AWG	602201-	54"	CHANNEL 30 HI OUT
	(602201-003)	602092-001	WHT	806		
140	J101-48	J202-h	24 AWG	602201-	54"	CHANNEL 30 LO OUT
	(602201-003)	602092-001	WHT	806		
141	J101-77	J202-f	24 AWG	602201-	54"	CHANNEL 31 HI IN
	(602201-003)	602092-001	WHT	806		
142	J101-78	J202-e	24 AWG	602201-	54"	CHANNEL 31 LO IN
	(602201-003)	602092-001	WHT	806		
143	J101-79	J202-d	24 AWG	602201-	54"	CHANNEL 31 HI OUT
	(602201-003)	602092-001	WHT	806		
144	J101-80	J202-c	24 AWG	602201-	54"	CHANNEL 31 LO OUT
	(602201-003)	602092-001	WHT	806		
145	J101-17	J203-EE	24 AWG	602201-	54"	CHANNEL 32 HI IN
	(602201-003)	602092-001	WHT	806		
146	J101-18	J203-DD	24 AWG	602201-	54"	CHANNEL 32 LO IN
	(602201-003)	602092-001	WHT	806		
147	J101-49	J203-CC	24 AWG	602201-	54"	CHANNEL 32 HI OUT
	(602201-003)	602092-001	WHT	806		
148	J101-50	J203-BB	24 AWG	602201-	54"	CHANNEL 32 LO OUT
	(602201-003)	602092-001	WHT	806		
149	J101-19	J203-AA	24 AWG	602201-	54"	CHANNEL 33 HI IN
	(602201-003)	602092-001	WHT	806		
150	J101-20	J203-z	24 AWG	602201-	54"	CHANNEL 33 LO IN
	(602201-003)	602092-001	WHT	806		

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## ENGINEERING WIRE LIST

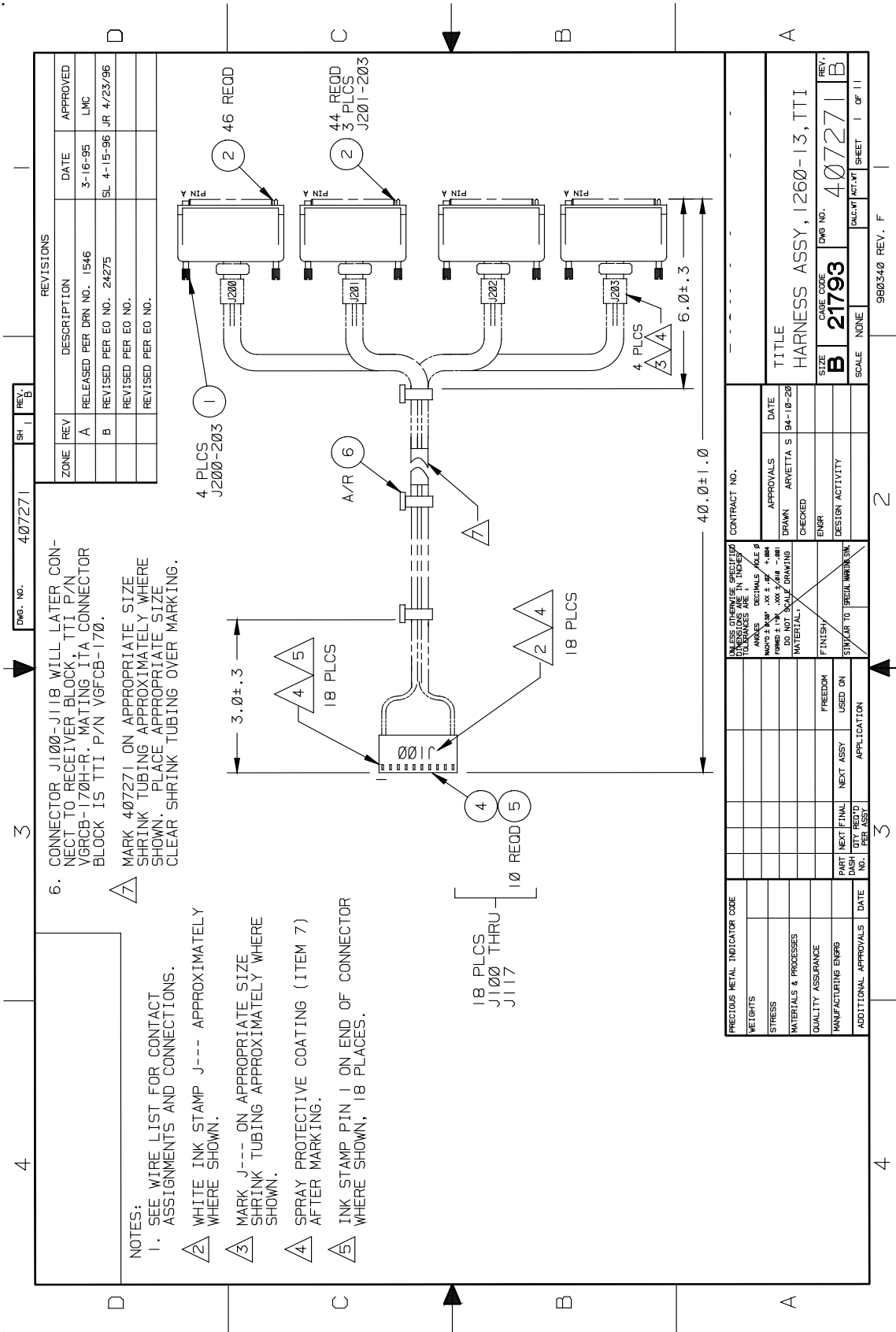
WIRE	FROM	TO	TYPE	PART#	WIRE LEN	REFERENCE
151	J101-51	J203-y	24 AWG	602201-	54"	CHANNEL 33 HI OUT
	(602201-003)	602092-001	WHT	806		
152	J101-52	J203-x	24 AWG	602201-	54"	CHANNEL 33 LO OUT
	(602201-003)	602092-001	WHT	806		
153	J101-81	J203-w	24 AWG	602201-	54"	CHANNEL 34 HI IN
	(602201-003)	602092-001	WHT	806		
154	J101-82	J203-v	24 AWG	602201-	54"	CHANNEL 34 LO IN
	(602201-003)	602092-001	WHT	806		
155	J101-83	J203-u	24 AWG	602201-	54"	CHANNEL 34 HI OUT
	(602201-003)	602092-001	WHT	806		
156	J101-84	J203-t	24 AWG	602201-	54"	CHANNEL 34 LO OUT
	(602201-003)	602092-001	WHT	806		
157	J101-21	J203-s	24 AWG	602201-	54"	CHANNEL 35 HI IN
	(602201-003)	602092-001	WHT	806		
158	J101-22	J203-r	24 AWG	602201-	54"	CHANNEL 35 LO IN
	(602201-003)	602092-001	WHT	806		
159	J101-53	J203-p	24 AWG	602201-	54"	CHANNEL 35 HI OUT
	(602201-003)	602092-001	WHT	806		
160	J101-54	J203-n	24 AWG	602201-	54"	CHANNEL 35 LO OUT
	(602201-003)	602092-001	WHT	806		
161	J101-23	J203-m	24 AWG	602201-	54"	CHANNEL 36 HI IN
	(602201-003)	602092-001	WHT	806		
162	J101-24	J203-k	24 AWG	602201-	54"	CHANNEL 36 LO IN
	(602201-003)	602092-001	WHT	806		
163	J101-55	J203-j	24 AWG	602201-	54"	CHANNEL 36 HI OUT
	(602201-003)	602092-001	WHT	806		
164	J101-56	J203-h	24 AWG	602201-	54"	CHANNEL 36 LO OUT
	(602201-003)	602092-001	WHT	806		
165	J101-85	J203-f	24 AWG	602201-	54"	CHANNEL 37 HI IN
	(602201-003)	602092-001	WHT	806		
166	J101-86	J203-e	24 AWG	602201-	54"	CHANNEL 37 LO IN
	(602201-003)	602092-001	WHT	806		
167	J101-87	J203-d	24 AWG	602201-	54"	CHANNEL 37 HI OUT
	(602201-003)	602092-001	WHT	806		
168	J101-88	J203-c	24 AWG	602201-	54"	CHANNEL 37 LO OUT
	(602201-003)	602092-001	WHT	806		
169	J101-25	J203-b	24 AWG	602201-	54"	CHANNEL 38 HI IN
	(602201-003)	602092-001	WHT	806		
170	J101-26	J203-a	24 AWG	602201-	54"	CHANNEL 38 LO IN
	(602201-003)	602092-001	WHT	806		
171	J101-57	J203-Z	24 AWG	602201-	54"	CHANNEL 38 HI OUT
	(602201-003)	602092-001	WHT	806		
172	J101-58	J203-Y	24 AWG	602201-	54"	CHANNEL 38 LO OUT
	(602201-003)	602092-001	WHT	806		
173	J101-27	J203-X	24 AWG	602201-	54"	CHANNEL 39 HI IN
	(602201-003)	602092-001	WHT	806		
174	J101-28	J203-W	24 AWG	602201-	54"	CHANNEL 39 LO IN
	(602201-003)	602092-001	WHT	806		
175	J101-59	J203-V	24 AWG	602201-	54"	CHANNEL 39 HI OUT
	(602201-003)	602092-001	WHT	806		

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## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART#	WIRE LEN	REFERENCE
176	J101-60	J203-U	24 AWG	602201-	54"	CHANNEL 39 LO OUT
	(602201-003)	602092-001	WHT	806		
177	J101-89					
	NO CONNECT					
178	J101-90					
	NO CONNECT					
179	J101-91					
	NO CONNECT					
180	J101-92					
	NO CONNECT					
181	J101-29	J202-b	24 AWG	602201-	54"	COMMON 03 HI
	(602201-003)	602092-001	WHT	806		
182	J101-30	J202-a	24 AWG	602201-	54"	COMMON 03 LO
	(602201-003)	602092-001	WHT	806		
183	J101-61	J203-T	24 AWG	602201-	54"	COMMON 04 HI
	(602201-003)	602092-001	WHT	806		
184	J101-62	J203-S	24 AWG	602201-	54"	COMMON 04 LO
	(602201-003)	602092-001	WHT	806		
185	J101-31	J202-A	24 AWG	602201-	54"	GROUND
	(602201-003)	602092-001	WHT	806		
186	J101-32	J202-FF	24 AWG	602201-	54"	GROUND
	(602201-003)	602092-001	WHT	806		
187	J101-63	J203-A	24 AWG	602201-	54"	GROUND
	(602201-003)	602092-001	WHT	806		
188	J101-64	J203-FF	24 AWG	602201-	54"	GROUND
	(602201-003)	602092-001	WHT	806		
189	J101-93					
	NO CONNECT					
190	J101-94					
	NO CONNECT					
191	J101-95					
	NO CONNECT					
192	J101-96					
	NO CONNECT					

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ZONE	REV	DESCRIPTION	DATE	APPROVED
A		RELEASED PER DRN NO. 1546	3-16-95	LMC
B		REVISED PER EO NO. 24275	SL 4-15-96	JR 4/23/96
		REVISED PER EO NO.		
		REVISED PER EO NO.		

6. CONNECTOR J100-J118 WILL LATER CONNECT TO RECEIVER BLOCK, TTI P/N VGRCB-170H-R. MATING ITA CONNECTOR BLOCK IS TTI P/N VGFCB-170.

MARK 407271 ON APPROPRIATE SIZE SHRINK TUBING APPROXIMATELY WHERE SHOWN. PLACE APPROPRIATE SIZE CLEAR SHRINK TUBING OVER MARKING.

- NOTES:
- 1. SEE WIRE LIST FOR CONTACT ASSIGNMENTS AND CONNECTIONS.
- 2. WHITE INK STAMP J--- APPROXIMATELY WHERE SHOWN.
- 3. MARK J--- ON APPROPRIATE SIZE SHRINK TUBING APPROXIMATELY WHERE SHOWN.
- 4. SPRAY PROTECTIVE COATING (ITEM 7) AFTER MARKING.
- 5. INK STAMP PIN 1 ON END OF CONNECTOR WHERE SHOWN, 18 PLACES.

PRECIOUS METAL INDICATOR CODE		UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES	
WEIGHTS		ANGLES	DECIMALS / 1000
STRESS		WELD SIZES	XX ± .01
MATERIALS & PROCESSES		FINISH	STANDARD TO PREL. MARKING
QUALITY ASSURANCE		FINISH	STANDARD TO PREL. MARKING
MANUFACTURING ENGRG		FINISH	STANDARD TO PREL. MARKING
ADDITIONAL APPROVALS		DATE	
		PART NO.	
		QTY.	
		PER ASSY	
		APPLICATION	
		USED ON	
		FREEDOM	
		USED ON	
		DESIGN ACTIVITY	
		ENGR	
		CHECKED	
		APPROVALS	
		DATE	
		CONTRACT NO.	
		DRAWN	
		ARVETTA S	
		94-10-220	
		SCALE	
		NONE	
		SIZE	
		B	
		CAGE CODE	
		21793	
		DWG NO.	
		407271	
		REV.	
		B	
		TITLE	
		HARNES ASSY, 1260-13, TTI	

## ENGINEERING PARTS LIST

ITEM	BIN	PART NO.	DESCRIPTION	QTY	REFERENCE	
1		601855-050	CON-CAB-PLG50CP.	4	J200-J203	
2		602092-001	CONT,SGMC,MALE CRIMP	178	W/J200-J203	
3		524999	WRTEF-STR24G-9-9-9	A/R		
4		602193-010	CON-CAB-RCP010C.100S	18	J100-J117	
5		602199-001	CONTACT,CRIMP,RECPT,28-22GA	180	W/J100-J117	
6		610777	TIE-CA-LKG-.062-.075	A/R		
7		910541	POLYURETHANE CONF. COAT	A/R		
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## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART#	WIRE LEN	REFERENCE
	BLK AAx RW 01 (J100)	Uxx-SLOT yy (J200)	CABLE	407271		SYSTEM WIRE LIST
	BLK AAx RW 02 (J101)	Uxx-SLOT yy (J200)	CABLE	407271		
	BLK AAx RW 03 (J102)	Uxx-SLOT yy (J200)	CABLE	407271		
	BLK AAx RW 04 (J103)	Uxx-SLOT yy (J200-J201)	CABLE	407271		
	BLK AAx RW 05 (J104)	Uxx-SLOT yy (J201)	CABLE	407271		
	BLK AAx RW 06 (J105)	Uxx-SLOT yy (J200-J201)	CABLE	407271		
	BLK AAx RW 07 (J106)	Uxx-SLOT yy 202	CABLE	407271		
	BLK AAx RW 08 (J107)	Uxx-SLOT yy (J202)	CABLE	407271		
	BLK AAx RW 09 (J108)	Uxx-SLOT yy (J200-J201)	CABLE	407271		
	BLK AAx RW 10 (J109)	Uxx-SLOT yy (J201)	CABLE	407271		
	BLK AAx RW 11 (J110)	Uxx-SLOT yy (J201,J203)	CABLE	407271		
	BLK AAx RW 12 (J111)	Uxx-SLOT yy (J202,J203)	CABLE	407271		
	BLK AAx RW 13 (J112)	Uxx-SLOT yy (J202)	CABLE	407271		
	BLK AAx RW 14 (J113)	Uxx-SLOT yy (J202-J203)	CABLE	407271		
	BLK AAx RW 15 (J114)	Uxx-SLOT yy (J203)	CABLE	407271		
	BLK AAx RW 16 (J115)	Uxx-SLOT yy (J203)	CABLE	407271		
	BLK AAx RW 17 (J116)	Uxx-SLOT yy (J203)	CABLE	407271		
	BLK AAx RW 01 (J117)	Uxx-SLOT yy (J202-J203)	CABLE	407271		

This system wirelist serves as a template for incorporating this harness assembly into the overall system wirelist. It does not in any way affect the fabrication of this harness assembly.

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## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART#	WIRE LEN	REFERENCE
1	J100-1	J200-s	24 AWG	524999	40"	CHANNEL 00 HI IN
	602199-001	602092-001	WHT			
2	J100-2	J200-r	24 AWG	524999	40"	CHANNEL-00-LO-IN
	602199-001	602092-001	WHT			
3	J100-3	J200-p	24 AWG	524999	40"	CHANNEL-00-HI-OUT
	602199-001	602092-001	WHT			
4	J100-4	J200-n	24 AWG	524999	40"	CHANNEL 00 LO OUT
	602199-001	602092-001	WHT			
5	J100-5	J200-m	24 AWG	524999	40"	CHANNEL 01 HI IN
	602199-001	602092-001	WHT			
6	J100-6	J200-k	24 AWG	524999	40"	CHANNEL 01 LO IN
	602199-001	602092-001	WHT			
7	J100-7	J200-j	24 AWG	524999	40"	CHANNEL 01 HI OUT
	602199-001	602092-001	WHT			
8	J100-8	J200-h	24 AWG	524999	40"	CHANNEL 01 LO OUT
	602199-001	602092-001	WHT			
9	J100-9	J200-f	24 AWG	524999	40"	CHANNEL 02 HI IN
	602199-001	602092-001	WHT			
10	J100-10	J200-e	24 AWG	524999	40"	CHANNEL 02 LO IN
	602199-001	602092-001	WHT			
11	J101-10	J200-d	24 AWG	524999	40"	CHANNEL 02 HI OUT
	602199-001	602092-001	WHT			
12	J101-9	J200-c	24 AWG	524999	40"	CHANNEL 02 LO OUT
	602199-001	602092-001	WHT			
13	J101-8	J200-b	24 AWG	524999	40"	CHANNEL 03 HI IN
	602199-001	602092-001	WHT			
14	J101-7	J200-a	24 AWG	524999	40"	CHANNEL 03 LO IN
	602199-001	602092-001	WHT			
15	J101-6	J200-Z	24 AWG	524999	40"	CHANNEL 03 HI OUT
	602199-001	602092-001	WHT			
16	J101-5	J200-Y	24 AWG	524999	40"	CHANNEL 03 LO OUT
	602199-001	602092-001	WHT			
17	J101-4	J200-X	24 AWG	524999	40"	CHANNEL 04 HI IN
	602199-001	602092-001	WHT			
18	J101-3	J200-W	24 AWG	524999	40"	CHANNEL 04 LO IN
	602199-001	602092-001	WHT			
19	J101-2	J200-V	24 AWG	524999	40"	CHANNEL 04 HI OUT
	602199-001	602092-001	WHT			
20	J101-1	J200-U	24 AWG	524999	40"	CHANNEL 04 LO OUT
	602199-001	602092-001	WHT			
21	J102-1	J200-T	24 AWG	524999	40"	CHANNEL 05 HI IN
	602199-001	602092-001	WHT			
22	J102-2	J200-S	24 AWG	524999	40"	CHANNEL 05 LO IN
	602199-001	602092-001	WHT			
23	J102-3	J200-R	24 AWG	524999	40"	CHANNEL 05 HI OUT
	602199-001	602092-001	WHT			
24	J102-4	J200-P	24 AWG	524999	40"	CHANNEL 05 LO OUT
	602199-001	602092-001	WHT			
25	J102-5	J200-N	24 AWG	524999	40"	CHANNEL 06 HI IN
	602199-001	602092-001	WHT			

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## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART#	WIRE LEN	REFERENCE
26	J102-6	J200-M	24 AWG	524999	40"	CHANNEL 06 LO IN
	602199-001	602092-001	WHT			
27	J102-7	J200-L	24 AWG	524999	40"	CHANNEL 06 HI OUT
	602199-001	602092-001	WHT			
28	J102-8	J200-K	24 AWG	524999	40"	CHANNEL 06 LO OUT
	602199-001	602092-001	WHT			
29	J102-9	J200-J	24 AWG	524999	40"	CHANNEL 07 HI IN
	602199-001	602092-001	WHT			
30	J102-10	J200-H	24 AWG	524999	40"	CHANNEL 07 LO IN
	602199-001	602092-001	WHT			
31	J103-10	J200-F	24 AWG	524999	40"	CHANNEL 07 HI OUT
	602199-001	602092-001	WHT			
32	J103-9	J200-E	24 AWG	524999	40"	CHANNEL 07 LO OUT
	602199-001	602092-001	WHT			
33	J103-8	J201-f	24 AWG	524999	40"	CHANNEL 08 HI IN
	602199-001	602092-001	VVHT			
34	J103-7	J201-e	24 AWG	524999	40"	CHANNEL 08 LO IN
	602199-001	602092-001	WHT			
35	J103-6	J201-d	24 AWG	524999	40"	CHANNEL 08 HI OUT
	602199-001	602092-001	WHT			
36	J103-5	J201-c	24 AWG	524999	40"	CHANNEL 08 LO OUT
	602199-001	602092-001	WHT			
37	J103-4	J201-b	24 AWG	524999	40"	CHANNEL 09 HI IN
	602199-001	602092-001	WHT			
38	J103-3	J201-a	24 AWG	524999	40"	CHANNEL 09 LO IN
	602199-001	602092-001	WHT			
39	J103-2	J201-Z	24 AWG	524999	40"	CHANNEL 09 HI OUT
	602199-001	602092-001	WHT			
40	J103-1	J201-Y	24 AWG	524999	40"	CHANNEL 09 LO OUT
	602199-001	602092-001	WHT			
41	J104-1	J201-X	24 AWG	524999	40"	CHANNEL 10 HI IN
	602199-001	602092-001	WHT			
42	J104-2	J201-W	24 AWG	524999	40"	CHANNEL 10 LO IN
	602199-001	602092-001	WHT			
43	J104-3	J201-V	24 AWG	524999	40"	CHANNEL 10 HI OUT
	602199-001	602092-001	WHT			
44	J104-4	J201-U	24 AWG	524999	40"	CHANNEL 10 LO OUT
	602199-001	602092-001	WHT			
45	J104-5	J201-T	24 AWG	524999	40"	CHANNEL 11 HI IN
	602199-001	602092-001	WHT			
46	J104-6	J201-S	24 AWG	524999	40"	CHANNEL 11 LO IN
	602199-001	602092-001	WHT			
47	J104-7	J201-R	24 AWG	524999	40"	CHANNEL 11 HI OUT
	602199-001	602092-001	WHT			
48	J104-8	J201-P	24 AWG	524999	40"	CHANNEL 11 LO OUT
	602199-001	602092-001	WHT			
49	J104-9	J201-N	24 AWG	524999	40"	CHANNEL 12 HI IN
	602199-001	602092-001	WHT			

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## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART#	WIRE LEN	REFERENCE
50	J104-10	J201-M	24 AWG	524999	40"	CHANNEL 12 LO IN
	602199-001	602092-001	WHT			
51	J105-10	J201-L	24 AWG	524999	40"	CHANNEL 12 HI OUT
	602199-001	602092-001	WHT			
52	J105-9	J201-K	24 AWG	524999	40"	CHANNEL 12 LO OUT
	602199-001	602092-001	WHT			
53	J105-8	J201-J	24 AWG	524999	40"	CHANNEL 13 HI IN
	602199-001	602092-001	WHT			
54	J105-7	J201-H	24 AWG	524999	40"	CHANNEL 13 LO IN
	602199-001	602092-001	WHT			
55	J105-6	J201-F	24 AWG	524999	40"	CHANNEL 13 HI OUT
	602199-001	602092-001	WHT			
56	J105-5	J201-E	24 AWG	524999	40"	CHANNEL 13 LO OUT
	602199-001	602092-001	WHT			
57	J105-4	J200-EE	24 AWG	524999	40"	CHANNEL 14 HI IN
	602199-001	602092-001	WHT			
58	J105-3	J200-DD	24 AWG	524999	40"	CHANNEL 14 LO IN
	602199-001	602092-001	WHT			
59	J105-2	J200-CC	24 AWG	524999	40"	CHANNEL 14 HI OUT
	602199-001	602092-001	WHT			
60	J105-1	J200-BB	24 AWG	524999	40"	CHANNEL 14 LO OUT
	602199-001	602092-001	WHT			
61	J106-1	J200-AA	24 AWG	524999	40"	CHANNEL 15 HI IN
	602199-001	602092-001	WHT			
62	J106-2	J200-z	24 AWG	524999	40"	CHANNEL 15 LO IN
	602199-001	602092-001	WHT			
63	J106-3	J200-y	24 AWG	524999	40"	CHANNEL 15 HI OUT
	602199-001	602092-001	WHT			
64	J106-4	J200-x	24 AWG	524999	40"	CHANNEL 15 LO OUT
	602199-001	602092-001	WHT			
65	J106-5	J202-X	24 AWG	524999	40"	CHANNEL 16 HI IN
	602199-001	602092-001	WHT			
66	J106-6	J202-W	24 AWG	524999	40"	CHANNEL 16 LO IN
	602199-001	602092-001	WHT			
67	J106-7	J202-V	24 AWG	524999	40"	CHANNEL 16 HI OUT
	602199-001	602092-001	WHT			
68	J106-8	J202-U	24 AWG	524999	40"	CHANNEL 16 LO OUT
	602199-001	602092-001	WHT			
69	J106-9	J202-T	24 AWG	524999	40"	CHANNEL 17 HI IN
	602199-001	602092-001	WHT			
70	J106-10	J202-S	24 AWG	524999	40"	CHANNEL 17 LO IN
	602199-001	602092-001	WHT			
71	J107-10	J202-R	24 AWG	524999	40"	CHANNEL 17 HI OUT
	602199-001	602092-001	WHT			
72	J107-9	J202-P	24 AWG	524999	40"	CHANNEL 17 LO OUT
	602199-001	602092-001	WHT			

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## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART#	WIRE LEN	REFERENCE
73	J107-8	J202-N	24 AWG	524999	40"	CHANNEL 18 HI IN
	602199-001	602092-001	WHT			
74	J107-7	J202-M	24 AWG	524999	40"	CHANNEL 18 LO IN
	602199-001	602092-001	WHT			
75	J107-6	J202-L	24 AWG	524999	40"	CHANNEL 18 HI OUT
	602199-001	602092-001	WHT			
76	J107-5	J202-K	24 AWG	524999	40"	CHANNEL 18 LO OUT
	602199-001	602092-001	WHT			
77	J107-4	J202-J	24 AWG	524999	40"	CHANNEL 19 HI IN
	602199-001	602092-001	WHT			
78	J107-3	J202-H	24 AWG	524999	40"	CHANNEL 19 LO IN
	602199-001	602092-001	WHT			
79	J107-2	J202-F	24 AWG	524999	40"	CHANNEL 19 HI OUT
	602199-001	602092-001	WHT			
80	J107-1	J202-E	24 AWG	524999	40"	CHANNEL 19 LO OUT
	602199-001	602092-001	WHT			
81	J108-1	J200-D	24 AWG	524999	40"	COMMON 00 HI
	602199-001	602092-001	WHT			
82	J108-2	J200-C	24 AWG	524999	40"	COMMON 00 LO
	602199-001	602092-001	WHT			
83	J108-3	J200-w	24 AWG	524999	40"	COMMON 01 HI
	602199-001	602092-001	WHT			
84	J108-4	J200-v	24 AWG	524999	40"	COMMON 01 LO
	602199-001	602092-001	WHT			
85	J109-5	J200-A	24 AWG	524999	40"	GROUND
	602199-001	602092-001	WHT			
86	J108-6	J200-FF	24 AWG	524999	40"	GROUND
	602199-001	602092-001	WHT			
87	J109-7	J201-A	24 AWG	524999	40"	GROUND
	602199-001	602092-001	WHT			
88	J108-8	J201-FF	24 AWG	524999	40"	GROUND
	602199-001	602092-001	WHT			
89	J108-9	J201-m	24 AWG	524999	40"	COMMON 02 HI
	602199-001	602092-001	WHT			
90	J108-10	J201-k	24 AWG	524999	40"	COMMON 02 LO
	602199-001	602092-001	WHT			
91	J109-10	J201-EE	24 AWG	524999	40"	CHANNEL 20 HI IN
	602199-001	602092-001	WHT			
92	J109-9	J201-DD	24 AWG	524999	40"	CHANNEL 20 LO IN
	602199-001	602092-001	WHT			
93	J109-8	J201-CC	24 AWG	524999	40"	CHANNEL 20 HI OUT
	602199-001	602092-001	WHT			
94	J109-7	J201-BB	24 AWG	524999	40"	CHANNEL 20 LO OUT
	602199-001	602092-001	WHT			
95	J109-6	J201-AA	24 AWG	524999	40"	CHANNEL 21 HI IN
	602199-001	602092-001	WHT			

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## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART#	WIRE LEN	REFERENCE
96	J109-5	J201-z	24 AWG	524999	40"	CHANNEL 21 LO IN
	602199-001	602092-001	WHT			
97	J109-4	J201-y	24 AWG	524999	40"	CHANNEL 21 HI OUT
	602199-001	602092-001	WHT			
98	J109-3	J201-x	24 AWG	524999	40"	CHANNEL 21 LO OUT
	602199-001	602092-001	WHT			
99	J109-2	J201-w	24 AWG	524999	40"	CHANNEL 22 HI IN
	602199-001	602092-001	WHT			
100	J109-1	J201-v	24 AWG	524999	40"	CHANNEL 22 LO IN
	602199-001	602092-001	WHT			
101	J110-1	J201-u	24 AWG	524999	40"	CHANNEL 22 HI OUT
	602199-001	602092-001	WHT			
102	J110-2	J201-t	24 AWG	524999	40"	CHANNEL 22 LO OUT
	602199-001	602092-001	WHT			
103	J110-3	J201-s	24 AWG	524999	40"	CHANNEL 23 HI IN
	602199-001	602092-001	WHT			
104	J110-4	J201-r	24 AWG	524999	40"	CHANNEL 23 LO IN
	602199-001	602092-001	WHT			
105	J110-5	J201-p	24 AWG	524999	40"	CHANNEL 23 HI OUT
	602199-001	602092-001	WHT			
106	J110-6	J201-n	24 AWG	524999	40"	CHANNEL 23 LO OUT
	602199-001	602092-001	WHT			
107	J110-7	J203-N	24 AWG	524999	40"	CHANNEL 24 HI IN
	602199-001	602092-001	WHT			
108	J110-8	J203-M	24 AWG	524999	40"	CHANNEL 24 LO IN
	602199-001	602092-001	WHT			
109	J110-9	J203-L	24 AWG	524999	40"	CHANNEL 24 HI OUT
	602199-001	602092-001	WHT			
110	J110-10	J203-K	24 AWG	524999	40"	CHANNEL 24 LO OUT
	602199-001	602092-001	WHT			
111	J111-10	J203-J	24 AWG	524999	40"	CHANNEL 25 HI IN
	602199-001	602092-001	WHT			
112	J111-9	J203-H	24 AWG	524999	40"	CHANNEL 25 LO IN
	602199-001	602092-001	WHT			
113	J111-8	J203-F	24 AWG	524999	40"	CHANNEL 25 HI OUT
	602199-001	602092-001	WHT			
114	J111-7	J203-E	24 AWG	524999	40"	CHANNEL 25 LO OUT
	602199-001	602092-001	WHT			
115	J111-6	J202-EE	24 AWG	524999	40"	CHANNEL 26 HI IN
	602199-001	602092-001	WHT			
116	J111-5	J202-DD	24 AWG	524999	40"	CHANNEL 26 LO IN
	602199-001	602092-001	WHT			
117	J111-4	J202-CC	24 AWG	524999	40"	CHANNEL 26 HI OUT
	602199-001	602092-001	WHT			
118	J111-3	J202-BB	24 AWG	524999	40"	CHANNEL 26 LO OUT
	602199-001	602092-001	WHT			

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## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART#	WIRE LEN	REFERENCE
119	J111-2	J202-AA	24 AWG	524999	40"	CHANNEL 27 HI IN
	602199-001	602092-001	WHT			
120	J111-1	J202-z	24 AWG	524999	40"	CHANNEL 27 LO IN
	602199-001	602092-001	WHT			
121	J112-1	J202-y	24 AWG	524999	40"	CHANNEL 27 HI OUT
	602199-001	602092-001	WHT			
122	J112-2	J202-x	24 AWG	524999	40"	CHANNEL 27 LO OUT
	602199-001	602092-001	WHT			
123	J112-3	J202-w	24 AWG	524999	40"	CHANNEL 28 HI IN
	602199-001	602092-001	WHT			
124	J112-4	J202-v	24 AWG	524999	40"	CHANNEL 28 LO IN
	602199-001	602092-001	WHT			
125	J112-5	J202-u	24 AWG	524999	40"	CHANNEL 28 HI OUT
	602199-001	602092-001	WHT			
126	J112-6	J202-t	24 AWG	524999	40"	CHANNEL 28 LO OUT
	602199-001	602092-001	WHT			
127	J112-7	J202-s	24 AWG	524999	40"	CHANNEL 29 HI IN
	602199-001	602092-001	WHT			
128	J112-8	J202-r	24 AWG	524999	40"	CHANNEL 29 LO IN
	602199-001	602092-001	WHT			
129	J112-9	J202-p	24 AWG	524999	40"	CHANNEL 29 HI OUT
	602199-001	602092-001	WHT			
130	J112-10	J202-n	24 AWG	524999	40"	CHANNEL 29 LO OUT
	602199-001	602092-001	WHT			
131	J113-10	J202-m	24 AWG	524999	40"	CHANNEL 30 HI IN
	602199-001	602092-001	WHT			
132	J113-9	J202-k	24 AWG	524999	40"	CHANNEL 30 LO IN
	602199-001	602092-001	WHT			
133	J113-8	J202-j	24 AWG	524999	40"	CHANNEL 30 HI OUT
	602199-001	602092-001	WHT			
134	J113-7	J202-h	24 AWG	524999	40"	CHANNEL 30 LO OUT
	602199-001	602092-001	WHT			
135	J113-6	J202-f	24 AWG	524999	40"	CHANNEL 31 HI IN
	602199-001	602092-001	WHT			
136	J113-5	J202-e	24 AWG	524999	40"	CHANNEL 31 LO IN
	602199-001	602092-001	WHT			
137	J113-4	J202-d	24 AWG	524999	40"	CHANNEL 31 HI OUT
	602199-001	602092-001	WHT			
138	J113-3	J202-c	24 AWG	524999	40"	CHANNEL 31 LO OUT
	602199-001	602092-001	WHT			
139	J113-2	J203-EE	24 AWG	524999	40"	CHANNEL 32 HI IN
	602199-001	602092-001	WHT			
140	J113-1	J203-DD	24 AWG	524999	40"	CHANNEL 32 LO IN
	602199-001	602092-001	WHT			
141	J114-1	J203-CC	24 AWG	524999	40"	CHANNEL 32 HI OUT
	602199-001	602092-001	WHT			
142	J114-2	J203-BB	24 AWG	524999	40"	CHANNEL 32 LO OUT
	602199-001	602092-001	WHT			

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## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART#	WIRE LEN	REFERENCE
143	J114-3	J203-AA	24 AWG	524999	40"	CHANNEL 33 HI IN
	602199-001	602092-001	WHT			
144	J114-4	J203-z	24 AWG	524999	40"	CHANNEL 33 LO IN
	602199-001	602092-001	WHT			
145	J114-5	J203-y	24 AWG	524999	40"	CHANNEL 33 HI OUT
	602199-001	602092-001	WHT			
146	J114-6	J203-x	24 AWG	524999	40"	CHANNEL 33 LO OUT
	602199-001	602092-001	WHT			
147	J114-7	J203-w	24 AWG	524999	40"	CHANNEL 34 HI IN
	602199-001	602092-001	WHT			
148	J114-8	J203-v	24 AWG	524999	40"	CHANNEL 34 LO IN
	602199-001	602092-001	WHT			
149	J114-9	J203-u	24 AWG	524999	40"	CHANNEL 34 HI OUT
	602199-001	602092-001	WHT			
150	J114-10	J203-t	24 AWG	524999	40"	CHANNEL 34 LO OUT
	602199-001	602092-001	WHT			
151	J115-10	J203-s	24 AWG	524999	40"	CHANNEL 35 HI IN
	602199-001	602092-001	WHT			
152	J115-9	J203-r	24 AWG	524999	40"	CHANNEL 35 LO IN
	602199-001	602092-001	WHT			
153	J115-8	J203-p	24 AWG	524999	40"	CHANNEL 35 HI OUT
	602199-001	602092-001	WHT			
154	J115-7	J203-n	24 AWG	524999	40"	CHANNEL 35 LO OUT
	602199-001	602092-001	WHT			
155	J115-6	J203-m	24 AWG	524999	40"	CHANNEL 36 HI IN
	602199-001	602092-001	WHT			
156	J115-5	J203-k	24 AWG	524999	40"	CHANNEL 36 LO IN
	602199-001	602092-001	WHT			
157	J115-4	J203-j	24 AWG	524999	40"	CHANNEL 36 HI OUT
	602199-001	602092-001	WHT			
158	J115-3	J203-h	24 AWG	524999	40"	CHANNEL 36 LO OUT
	602199-001	602092-001	WHT			
159	J115-2	J203-f	24 AWG	524999	40"	CHANNEL 37 HI IN
	602199-001	602092-001	WHT			
160	J115-1	J203-e	24 AWG	524999	40"	CHANNEL 37 LO IN
	602199-001	602092-001	WHT			
161	J116-1	J203-d	24 AWG	524999	40"	CHANNEL 37 HI OUT
	602199-001	602092-001	WHT			
162	J116-2	J203-c	24 AWG	524999	40"	CHANNEL 37 LO OUT
	602199-001	602092-001	WHT			
163	J116-3	J203-b	24 AWG	524999	40"	CHANNEL 38 HI IN
	602199-001	602092-001	WHT			
164	J116-4	J203-a	24 AWG	524999	40"	CHANNEL 38 LO IN
	602199-001	602092-001	WHT			
165	J116-5	J203-Z	24 AWG	524999	40"	CHANNEL 38 HI OUT
	602199-001	602092-001	WHT			
166	J116-6	J203-Y	24 AWG	524999	40"	CHANNEL 38 LO OUT
	602199-001	602092-001	WHT			
167	J116-7	J203-X	24 AWG	524999	40"	CHANNEL 39 HI IN
	602199-001	602092-001	WHT			

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## ENGINEERING WIRE LIST

WIRE	FROM	TO	TYPE	PART#	WIRE LEN	REFERENCE
168	J116-8	J203-W	24 AWG	524999	40"	CHANNEL 39 LO IN
	602199-001	602092-001	WHT			
169	J116-9	J203-V	24 AWG	524999	40"	CHANNEL 39 HI OUT
	602199-001	602092-001	WHT			
170	J116-10	J203-U	24 AWG	524999	40"	CHANNEL 39 LO OUT
	602199-001	602092-001	WHT			
171	J117-10	J202-b	24 AWG	524999	40"	COMMON 03 HI
	602199-001	602092-001	WHT			
172	J117-9	J202-a	24 AWG	524999	40"	COMMON 03 LO
	602199-001	602092-001	WHT			
173	J117-8	J203-T	24 AWG	524999	40"	COMMON 04 HI
	602199-001	602092-001	WHT			
174	J117-7	J203-S	24 AWG	524999	40"	COMMON 04 LO
	602199-001	602092-001	WHT			
175	J117-6	J202-A	24 AWG	524999	40"	GROUND
	602199-001	602092-001	WHT			
176	J117-5	J202-FF	24 AWG	524999	40"	GROUND
	602199-001	602092-001	WHT			
177	J117-4	J203-A	24 AWG	524999	40"	GROUND
	602199-001	602092-001	WHT			
178	J117-3	J203-FF	24 AWG	524999	40"	GROUND
	602199-001	602092-001	WHT			
179	J117-2	NO CONNECT				
	602199-001					
180	J117-1	NO CONNECT				
	602199-001					

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