ELTD 7566131-121 Rev. -
Date: 04 Mar 2016

English Language Test Description

MIPR # M95450MP24797
CDRL F001

for

Unit Under Test

UUT Nomenclature: GTD Power Supply CCA
UUT Part Number: 7566131-121

from

Light Armored Vehicle - 25A2
(LAV-25A2)

ATE SYSTEM

AN/USM-657B Third Echelon Test System (TETS)
AN/USM-717 Virtual Instrument Portable Equipment Repair/Test (VIPER/T)

Developed by

U.S. Army RDECOM
Armament Research, Development and Engineering Center
Automated Test Systems Division
AMSRD-AAR-WSF-A, Building 91
Picatinny, NJ 07806

Prepared By	Signature	Date Prepared	Date Submitted
R. Cannizzo		26 January 2016	

Approved By	Signature	Date Received	Date Approved
Thomas Bradford			
Rick Foyt			

ELTD REVISION SUMMARY

Revision Number	Date	Reason	Approved By - Date Approved
-	04 Mar 2016	ORIGINAL ISSUE	B. Nimmick 3/4/2016

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1.0 Reference Documents

1.1 Virtual Instrument Portable Equipment Repair/Test (VIPER/T)

IEEE Std 716-1989	IEEE Standard Common Abbreviated Test Language for All Systems
TM TBD-CD	VIPER/T IETM (Interactive Electronic Technical Manual)
System Design Document Doc # 7992008	VIPER/T AN/USM-717
VIPER/T P/N 7992021	VIPER/T CPM (Computer Programming Manual)

1.2 Third Echelon Test System (TETS-B)

TM 10530A-CD	TETS IETM (Interactive Electronic Technical Manual)
System Design Description Doc # 93006A0018	Third Echelon Test System (TETS) AN/USM-657
TETS P/N 93006A0026	TETS CPM (Computer Programming Manual)

1.3 Unit Under Test

UUT P/N: 7566131-121
UUT Nomenclature: Power Supply CCA
UUT Type: SRU

DESCRIPTION	NUMBER	REVISION	DATE
Parts List	7566131	AR	11 Aug 1999
LRU QA Spec	ES13457	None	08 Aug 2006
Circuit Card Assy, Power Supply	7566131	AR	11 Aug 1999
Schematic Diagram, Power Supply CCA	7566131	AR	11 Aug 1999

1.4 Reference Drawings

Refer to the following schematics when diagnosing connection paths.

ID Schematic

13020A0001
(SYSTEM INTERCONN

W6 Schematic

13020A7601 (CABLE, W6, SCHEMATIC)

2.0 English Language Test Description Steps

2.1 Common Procedures

The following connections are common throughout the entire test

POWER UP UUT 28VDC

This procedure applies power to the UUT 15VDC and 800Hz circuitry to produce +/-15VDC and 26VAC. DCPS10 is used to supply +28VDC to UUT J1_5 and J1_4.

From W6 P2-4 (UUT J1-4)	to W6 P1B-3D
From ID J1B-3D	to ID A1J2.16
From ID A1P2.16	to ID P10-154 (S101-19)
From ID P10-218 (S101-20)	to ID A1P2.32
From ID A1J2.32	to ID A1J2.29
From ID A1P2.29	to ID P10-153 (S101-15)
From W6 P2-5 (UUT J1-5)	to W6 P1B-3B
From ID J1B-3B	to ID A1J2.29
From ID A1P2.29	to ID P10-153 (S101-15)
From ID P10-217 (S101-16)	to ID A1P2.11
From ID A1J2.11	to ID A1J1.6
From ID A1P1.6	to ID P1-28 (DC10-HI)
From W6 P2-7 (UUT J1-7)	to W6 P1B-1E
From ID J1B-1E	to GROUND

POWER UP UUT 15VDC

This procedure applies power to the UUT 15VDC and 800Hz circuitry to produce +/-15VDC and 26VAC. DCPS10 is used to supply +28VDC to UUT J1_5 and J1_4.

From W6 P2-4 (UUT J1-4)	to W6 P1B-3D
From ID J1B-3D	to ID A1J2.16
From ID A1P2.16	to ID P10-154 (S101-19)
From ID P10-218 (S101-20)	to ID A1P2.32

```
From ID A1J2.32           to ID A1J2.29
From ID A1P2.29           to ID P10-153 (S101-15)

From W6 P2-5 (UUT J1-5)   to W6 P1B-3B
From ID J1B-3B            to ID A1J2.29
From ID A1P2.29           to ID P10-153 (S101-15)
From ID P10-217 (S101-16) to ID A1P2.11
From ID A1J2.11           to ID A1J1.6
From ID A1P1.6            to ID P1-28 (DC10-HI)

From W6 P2-7 (UUT J1-7)   to W6 P1B-1E
From ID J1B-1E            to GROUND
```

POWER UP UUT 30VDC

This procedure applies power to the UUT 15VDC and circuitry to produce +/-15VDC and 26VAC. DCPS10 is used to supply +30VDC to UUT J1_5 and J1_4

```
From W6 P2-4 (UUT J1-4)   to W6 P1B-3D
From ID J1B-3D            to ID A1J2.16
From ID A1P2.16           to ID P10-154 (S101-19)
From ID P10-218 (S101-20) to ID A1P2.32
From ID A1J2.32           to ID A1J2.29
From ID A1P2.29           to ID P10-153 (S101-15)

From W6 P2-5 (UUT J1-5)   to W6 P1B-3B
From ID J1B-3B            to ID A1J2.29
From ID A1P2.29           to ID P10-153 (S101-15)
From ID P10-217 (S101-16) to ID A1P2.11
From ID A1J2.11           to ID A1J1.6
From ID A1P1.6            to ID P1-28 (DC10-HI)

From W6 P2-7 (UUT J1-7)   to W6 P1B-1E
From ID J1B-1E            to GROUND
```

POWER UP DCPS 28VDC

This procedure applies power to the UUT 15VDC circuitry only to produce +/-15VDC (i.e. 800Hz circuitry is not powered up). DCPS10 is used to supply +28VDC to UUT J1_5.

```
From W6 P2-5 (UUT J1-5)   to W6 P1B-3B
From ID J1B-3B            to ID A1J2.29
From ID A1P2.29           to ID P10-153 (S101-15)
From ID P10-217 (S101-16) to ID A1P2.11
From ID A1J2.11           to ID A1J1.6
From ID A1P1.6            to ID P1-28 (DC10-HI)

From W6 P2-7 (UUT J1-7)   to W6 P1B-1E
From ID J1B-1E            to GROUND
```

POWER UP DCPS 15VDC

This procedure applies power to the UUT 15VDC circuitry only to produce +/-15VDC (i.e. 800Hz circuitry is not powered up). DCPS10 is used to supply +15VDC to UUT J1_5.

From W6 P2-5 (UUT J1-5)	to W6 P1B-3B
From ID J1B-3B	to ID A1J2.29
From ID A1P2.29	to ID P10-153 (S101-15)
From ID P10-217 (S101-16)	to ID A1P2.11
From ID A1J2.11	to ID A1J1.6
From ID A1P1.6	to ID P1-28 (DC10-HI)
From W6 P2-7 (UUT J1-7)	to W6 P1B-1E
From ID J1B-1E	to GROUND

POWER UP DCPS 30VDC

This procedure applies power to the UUT 15VDC circuitry only to produce +/-15VDC (i.e. 800Hz circuitry is not powered up). DCPS10 is used to supply +30VDC to UUT J1_5.

From W6 P2-5 (UUT J1-5)	to W6 P1B-3B
From ID J1B-3B	to ID A1J2.29
From ID A1P2.29	to ID P10-153 (S101-15)
From ID P10-217 (S101-16)	to ID A1P2.11
From ID A1J2.11	to ID A1J1.6
From ID A1P1.6	to ID P1-28 (DC10-HI)
From W6 P2-7 (UUT J1-7)	to W6 P1B-1E
From ID J1B-1E	to GROUND

POWER UP DCPS 35VDC

This procedure applies power to the UUT 15VDC circuitry only to produce +/-15VDC (i.e. 800Hz circuitry is not powered up). DCPS10 is used to supply +35VDC to UUT J1_5.

From W6 P2-5 (UUT J1-5)	to W6 P1B-3B
From ID J1B-3B	to ID A1J2.29
From ID A1P2.29	to ID P10-153 (S101-15)
From ID P10-217 (S101-16)	to ID A1P2.11
From ID A1J2.11	to ID A1J1.6
From ID A1P1.6	to ID P1-28 (DC10-HI)
From W6 P2-7 (UUT J1-7)	to W6 P1B-1E
From ID J1B-1E	to GROUND

APPLY DCPS PEAK LOAD

This procedure applies the PEAK load to the DCPS output (+15VDC & -15VDC).

From W6 P2-6 (UUT J1-6)	to W6 P1B-2D
From ID J1B-2D	to ID A1J2.19
From ID A1P2.19	to ID P11.23 (S101-25)

```
From ID P11.87 (S101-26)   to ID A1P2.9
From ID A1J2.9             to ID A1J4.3
From ID A1P4.3             to ID R105.1
From ID R105.2             to ID A1P4.10
From ID A1J4.10            to GROUND

From W6 P-3 (UUT J1-3)     to W6 P1B-2E
From ID J1B-2E             to ID A1J11.3
From ID A1P11.3            to ID P11.46 (S301-160)
From ID P11.45 (S301-159)  to ID A1P11.31
From ID A1J11.31           to ID A1J4.6
From ID A1P4.6             to ID R107.1
From ID R107.2             to ID A1P4.10
From ID A1J4.10            to GROUND
```

APPLY DCPS MAX LOAD

This procedure applies the MAX load to the DCPS output (+15VDC & -15VDC).

```
From W6 P2-19 (UUT J1-19)     to W6 P1B-2C
From ID J1B-2C                to ID A1J11.2
From ID A1P11.2               to ID AP11.13 (S301-158)
From ID A1P11.172 (S301-157)  to ID A1P11.33
From ID A1J11.33              to ID A1J4.7
From ID A1P4.7                to ID R112.1
From ID R112.2                to ID A1P4.21
From ID R112.2                to ID A1P4.22
From ID A1J4.21               to GROUND
From ID A1J4.22               to GROUND

From W6 P2-15 (UUT J1-15)  to W6 P1B-2B
From ID J1B-2B             to ID A1J11.1
From ID A1P11.1            to ID P11.11 (S301-156)
From ID P11.169 (S301-155) to ID A1P11.32
From ID A1J11.32           to ID A1J4.8
From ID A1P4.8             to ID R113.1
From ID R113.2             to ID A1P4.10
From ID A1J4.10            to GROUND
```

APPLY 800HZ PEAK LOAD

This procedure applies the PEAK load to 800HZ outputs.

```
From W6 P2-11 (UUT J1-11)  to W6 P1B-2F
From ID J1B-2F             to ID A1J2.17
From ID A1P2.17            to ID P11.22 (S101-21)
From ID P11.86 (S101-22)   to ID A1P2.10
From ID A1J2.10            to ID A1J4.2
From ID A1P4.2             to ID L1.1
From ID L1.2               to ID R106.1
From ID R106.2             to ID A1P4.21
From ID R106.2             to ID A1P4.22
From ID A1J4.21            to GROUND
```

From ID A1J4.22	to GROUND

APPLY 800HZ MAX LOAD

This procedure applies the MAX load to 800HZ outputs.

From W6 P2-12 (UUT J1-12)	to W6 P1B-1C
From ID J1B-1C	to ID A1J2.13
From ID A1P2.13	to ID P11.25 (S101-33)
From ID P11.89 (S101-34)	to ID A1P2.7
From ID A1J2.7	to ID A1J4.5
From ID A1P4.5	to ID L2.1
From ID L2.2	to ID R114.1
From ID R114.2	to ID A1P4.21
From ID R114.2	to ID A1P4.22
From ID A1J4.21	to GROUND
From ID A1J4.22	to GROUND

2.2 Interface ID

The following procedure is used to properly identify the Interface Device Hardware.

Refer to Reference Drawings when diagnosing connection paths.

Step 1:

The DMM is used to measure and record the resistance of ID R111 in series with R109. The measured resistance should be 1022 ±5% ohms.

From ID P20-2 (DMM-HI)	to ID A1P15.49
From ID A1J15.49	to ID A1J8.28
From ID A1P8.28	to ID P10-203 (S503-1)
From ID P10-137 (S503-7)	to ID A1P6.47
From ID A1J6.47	to ID BUS 5
From ID BUS 5	to ID A1J8.47
From ID A1P8.47	to ID P10-73 (S301-48)
From ID P10-7 (S301-47)	to ID A1P7.23
From ID A1J7.23	to ID A1J4.15
From ID A1P4.15	to R111
From ID BUS 6	to ID A1J8.48
From ID A1P8.48	to ID P10-171 (S301-50)
From ID P10-42 (S301-49)	to ID A1P7.24
From ID A1J7.24	to ID A1J4.16
From ID A1P4.16	to R109
From ID P20-3 (DMM-LO)	to ID A1P15.50

```
From ID A1J15.50          to ID A1J8.26
From ID A1P8.26           to ID P10-139 (S503-2)
From ID P10-170 (S503-8)  to ID A1P6.38
From ID A1J6.38           to ID BUS 6
```

2.3 Unit Under Test ID

The following procedure is used to properly identify the Unit Under Test (UUT) ID.

Refer to Reference Drawings when diagnosing connection paths.

Step 2:

The DMM is used to measure and record the resistance of UUT R66 pins J2-8 to J1-7. The measured resistance should be 1k ±2% ohms.

```
From ID P20-2 (DMM-HI)    to ID A1P15.49
From ID A1J15.49          to ID A1J8.28
From ID A1P8.28           to ID P10-203 (S503-1)
From ID P10-77 (S503-3)   to ID A1P6.13
From ID A1J6.13           to ID BUS 1

From ID P12-90 (S202-2)   to ID A1P11.36
From ID A1J11.36          to ID A1J10.12
From ID A1P10.12          to ID P11-242 (S509-2)
From ID P11-18 (S509-3)   to ID A1P9.19
From ID A1J9.19           to ID BUS 1

From W6 P3-B4 (UUT J2-8)  to W6 P1B-4C
From ID J1B-4C            to ID A1J12.18
From ID A1P12.18          to ID P12-32 (S202-48)

From W6 P2-7 (UUT J1-7)   to W6 P1B-1E
From ID J1B-1E            to GROUND

From ID P20-3 (DMM-LO)    to ID A1J7.38
From ID A1P7.38           to ID P10-130 (S301-23)
From ID P10-229 (S301-24) to ID A1P7.36
From ID A1J7.36           to GROUND
```

2.4 Safe to Turn On

The following procedure is used to verify the UUT is safe to turn on (STTO).

Refer to Reference Drawings when diagnosing connection paths.

Step 3:

The DMM is used to measure and record the resistance of UUT pins J2-9 to J1-7. The measured resistance should be greater than 11k ohms.

From ID P20-2 (DMM-HI)	to ID A1P15.49
From ID A1J15.49	to ID A1J8.28
From ID A1P8.28	to ID P10-203 (S503-1)
From ID P10-77 (S503-3)	to ID A1P6.13
From ID A1J6.13	to ID BUS 1
From ID P12-90 (S202-2)	to ID A1P11.36
From ID A1J11.36	to ID A1J10.12
From ID A1P10.12	to ID P11-242 (S509-2)
From ID P11-18 (S509-3)	to ID A1P9.19
From ID A1J9.19	to ID BUS 1
From W6 P3-A5 (UUT J2-9)	to W6 P1B-5B
From ID J1B-5B	to ID A1J12.14
From ID A1P12.14	to ID P12-27 (S202-24)
From W6 P2-7 (UUT J1-7)	to W6 P1B-1E
From ID J1B-1E	to GROUND
From ID P20-3 (DMM-LO)	to ID A1J7.38
From ID A1P7.38	to ID P10-130 (S301-23)
From ID P10-229 (S301-24)	to ID A1P7.36
From ID A1J7.36	to GROUND

Step 4:

The DMM is used to measure and record the resistance of UUT pins J1-5 to J1-7. The measured resistance should be greater than 10 ohms.

From ID P20-2 (DMM-HI)	to ID A1P15.49
From ID A1J15.49	to ID A1J8.30
From ID A1P8.30	to ID P10-41 (S301-42)
From ID P10-199 (S301-41)	to ID A1P7.2
From ID A1J7.2	to ID J1B-3B
From W6 P1B-3B	to W6 P2-5 (UUT J1-5)
From W6 P2-7 (UUT J1-7)	to W6 P1B-1E
From ID J1B-1E	to GROUND
From ID P20-3 (DMM-LO)	to ID A1J7.38
From ID A1P7.38	to ID P10-130 (S301-23)
From ID P10-229 (S301-24)	to ID A1P7.36
From ID A1J7.36	to GROUND

Step 5:

The DMM is used to measure and record the resistance of UUT pins J1-6 to J1-1. The measured resistance should be greater than 100 ohms.

From ID P20-2 (DMM-HI)	to ID A1P15.49
From ID A1J15.49	to ID A1J8.28
From ID A1P8.28	to ID P10-203 (S503-1)
From ID P10-77 (S503-3)	to ID A1P6.13
From ID A1J6.13	to ID BUS 1
From ID P12-80 (S201-2)	to ID A1P11.40
From ID A1J11.40	to ID A1J10.8
From ID A1P10.8	to ID P11-139 (S508-2)
From ID P11-77 (S508-3)	to ID A1P9.15
From ID A1J9.15	to ID BUS 1
From W6 P2-6 (UUT J1-6)	to W6 P1B-13B
From ID J1B-13B	to ID A1J13.4
From ID A1P13.4	to ID P12-13 (S201-8)
From W6 P2-1 (UUT J1-1)	to W6 P1B-14A
From ID J1B-14A	to ID A1J13.1
From ID A1P13.1	to ID P12-79 (S201-5)
From ID P12-20 (S201-3)	to ID A1P11.46
From ID A1J11.46	to ID A1J10.2
From ID A1P10.2	to ID P11-39 (S507-1)
From ID P11-72 (S507-4)	to ID A1P9.27
From ID A1J9.27	to ID BUS 2
From ID P20-3 (DMM-LO)	to ID A1P15.50
From ID A1J15.50	to ID A1J8.26
From ID A1P8.26	to ID P10-139 (S503-2)
From ID P10-12 (S503-4)	to ID A1P6.23
From ID A1J6.23	to ID BUS 2

Step 6:

The DMM is used to measure and record the resistance of UUT pins J1-3 to J1-1. The measured resistance should be greater than 100 ohms.

From ID P20-2 (DMM-HI)	to ID A1P15.49
From ID A1J15.49	to ID A1J8.28
From ID A1P8.28	to ID P10-203 (S503-1)
From ID P10-77 (S503-3)	to ID A1P6.13
From ID A1J6.13	to ID BUS 1
From ID P12-16 (S201-1)	to ID A1P11.42

```
From ID A1J11.42          to ID A1J10.6
From ID A1P10.6           to ID P11-203 (S508-1)
From ID P11-77 (S508-3)   to ID A1P9.15
From ID A1J9.15           to ID BUS 1

From W6 P2-3 (UUT J1-3)   to W6 P1B-14B
From ID J1B-14B           to ID A1J13.3
From ID A1P13.3           to ID P12-46 (S201-7)

From W6 P2-1 (UUT J1-1)   to W6 P1B-14A
From ID J1B-14A           to ID A1J13.1
From ID A1P13.1           to ID P12-79 (S201-5)

From ID P12-20 (S201-3)   to ID A1P11.46
From ID A1J11.46          to ID A1J10.2
From ID A1P10.2           to ID P11-39 (S507-1)
From ID P11-72 (S507-4)   to ID A1P9.27
From ID A1J9.27           to ID BUS 2

From ID P20-3 (DMM-LO)    to ID A1P15.50
From ID A1J15.50          to ID A1J8.26
From ID A1P8.26           to ID P10-139 (S503-2)
From ID P10-12 (S503-4)   to ID A1P6.23
From ID A1J6.23           to ID BUS 2
```

Step 7:

The DMM is used to measure and record the resistance of UUT pins J1-6 to J1-3. The measured resistance should be greater than 100 ohms.

```
From ID P20-2 (DMM-HI)    to ID A1P15.49
From ID A1J15.49          to ID A1J8.28
From ID A1P8.28           to ID P10-203 (S503-1)
From ID P10-77 (S503-3)   to ID A1P6.13
From ID A1J6.13           to ID BUS 1

From ID P12-80 (S201-2)   to ID A1P11.40
From ID A1J11.40          to ID A1J10.8
From ID A1P10.8           to ID P11-139 (S508-2)
From ID P11-77 (S508-3)   to ID A1P9.15
From ID A1J9.15           to ID BUS 1

From W6 P2-6 (UUT J1-6)   to W6 P1B-13B
From ID J1B-13B           to ID A1J13.4
From ID A1P13.4           to ID P12-13 (S201-8)

From W6 P2-3 (UUT J1-3)   to W6 P1B-14B
From ID J1B-14B           to ID A1J13.3
From ID A1P13.3           to ID P12-46 (S201-7)
```

```
From ID P12-20 (S201-3)    to ID A1P11.46
From ID A1J11.46           to ID A1J10.2
From ID A1P10.2            to ID P11-39 (S507-1)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2

From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2
```

Step 8:

The DMM is used to measure and record the resistance of UUT pins J2-11 to J1-7. The measured resistance should be greater than 11k ohms.

```
From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1

From ID P12-90 (S202-2)    to ID A1P11.36
From ID A1J11.36           to ID A1J10.12
From ID A1P10.12           to ID P11-242 (S509-2)
From ID P11-18 (S509-3)    to ID A1P9.19
From ID A1J9.19            to ID BUS 1

From W6 P3-A6 (UUT J2-11)  to W6 P1A-7E
From ID J1A-7E             to ID A1J14.21
From ID A1P14.21           to ID P13-90 (S202-26)

From W6 P2-7 (UUT J1-7)    to W6 P1B-1E
From ID J1B-1E             to GROUND

From ID P20-3 (DMM-LO)     to ID A1J7.38
From ID A1P7.38            to ID P10-130 (S301-23)
From ID P10-229 (S301-24)  to ID A1P7.36
From ID A1J7.36            to GROUND
```

Step 9:

The DMM is used to measure and record the resistance of UUT pins J1-4 to J1-7. The measured resistance should be greater than 10 ohms.

```
From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.30
From ID A1P8.30            to ID P10-41 (S301-42)
```

```
From ID P10-199 (S301-41)  to ID A1P7.2
From ID A1J7.2             to ID A1J2.32
From ID A1P2.32            to ID P10-218 (S101-20)

From ID P10-154 (S101-19)  to ID A1P2.16
From ID A1J2.16            to ID J1B-3D
From W6 P1B-3D             to W6 P2-4 (UUT J1-4)

From W6 P2-7 (UUT J1-7)    to W6 P1B-1E
From ID J1B-1E             to GROUND

From ID P20-3 (DMM-LO)     to ID A1J7.38
From ID A1P7.38            to ID P10-130 (S301-23)
From ID P10-229 (S301-24)  to ID A1P7.36
From ID A1J7.36            to GROUND
```

Step 10:

The DMM is used to measure and record the resistance of UUT pins J2-5 to J1-7. The measured resistance should be greater than 11k ohms.

```
From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1

From ID P12-59 (S202-1)    to ID A1P11.38
From ID A1J11.38           to ID A1J10.10
From ID A1P10.10           to ID P11-177 (S509-1)
From ID P11-18 (S509-3)    to ID A1P9.19
From ID A1J9.19            to ID BUS 1

From W6 P3-A3 (UUT J2-5)   to W6 P1B-5C
From ID J1B-5C             to ID A1J12.15
From ID A1P12.15           to ID P12-31 (S202-45)

From W6 P2-7 (UUT J1-7)    to W6 P1B-1E
From ID J1B-1E             to GROUND

From ID P20-3 (DMM-LO)     to ID A1J7.38
From ID A1P7.38            to ID P10-130 (S301-23)
From ID P10-229 (S301-24)  to ID A1P7.36
From ID A1J7.36            to GROUND
```

2.5 MODULE 1 - STATIC MEASUREMENTS

Refer to Reference Drawings when diagnosing connection paths.

Step 101:

The DMM is used to measure the resistance of the UUT pins J1-1 to J1-2. The measured resistance should be less than 10 ohms.

From ID P20-2 (DMM-HI)	to ID A1P15.49
From ID A1J15.49	to ID A1J8.28
From ID A1P8.28	to ID P10-203 (S503-1)
From ID P10-77 (S503-3)	to ID A1P6.13
From ID A1J6.13	to ID BUS 1
From ID P12-16 (S201-1)	to ID A1P11.42
From ID A1J11.42	to ID A1J10.6
From ID A1P10.6	to ID P11-203 (S508-1)
From ID P11-77 (S508-3)	to ID A1P9.15
From ID A1J9.15	to ID BUS 1
From W6 P2-1 (UUT J1-1)	to W6 P1B-14A
From ID J1B-14A	to ID A1J13.1
From ID A1P13.1	to ID P12-79 (S201-5)
From W6 P2-2 (UUT J1-2)	to W6 P1B-13A
From ID J1B-13A	to ID A1J13.2
From ID A1P13.2	to ID P12-47 (S201-6)
From ID P12-52 (S201-4)	to ID A1P11.44
From ID A1J11.44	to ID A1J10.4
From ID A1P10.4	to ID P11-71 (S507-2)
From ID P11-72 (S507-4)	to ID A1P9.27
From ID A1J9.27	to ID BUS 2
From ID P20-3 (DMM-LO)	to ID A1P15.50
From ID A1J15.50	to ID A1J8.26
From ID A1P8.26	to ID P10-139 (S503-2)
From ID P10-12 (S503-4)	to ID A1P6.23
From ID A1J6.23	to ID BUS 2

Step 102:

The DMM is used to measure the resistance of the UUT pins J1-1 to J1-7. The measured resistance should be less than 10 ohms.

From ID P20-2 (DMM-HI)	to ID A1P15.49
From ID A1J15.49	to ID A1J8.28
From ID A1P8.28	to ID P10-203 (S503-1)
From ID P10-77 (S503-3)	to ID A1P6.13
From ID A1J6.13	to ID BUS 1
From ID P12-16 (S201-1)	to ID A1P11.42

```
From ID A1J11.42          to ID A1J10.6
From ID A1P10.6           to ID P11-203 (S508-1)
From ID P11-77 (S508-3)   to ID A1P9.15
From ID A1J9.15           to ID BUS 1

From W6 P2-1 (UUT J1-1)   to W6 P1B-14A
From ID J1B-14A           to ID A1J13.1
From ID A1P13.1           to ID P12-79 (S201-5)

From W6 P2-7 (UUT J1-7)   to W6 P1B-1E
From ID J1B-1E            to GROUND

From ID P20-3 (DMM-LO)    to ID A1J7.38
From ID A1P7.38           to ID P10-130 (S301-23)
From ID P10-229 (S301-24) to ID A1P7.36
From ID A1J7.36           to GROUND
```

Step 103:

The DMM is used to measure the resistance of the UUT pins J1-1 to J1-8. The measured resistance should be less than 10 ohms.

```
From ID P20-2 (DMM-HI)    to ID A1P15.49
From ID A1J15.49          to ID A1J8.28
From ID A1P8.28           to ID P10-203 (S503-1)
From ID P10-77 (S503-3)   to ID A1P6.13
From ID A1J6.13           to ID BUS 1

From ID P12-16 (S201-1)   to ID A1P11.42
From ID A1J11.42          to ID A1J10.6
From ID A1P10.6           to ID P11-203 (S508-1)
From ID P11-77 (S508-3)   to ID A1P9.15
From ID A1J9.15           to ID BUS 1

From W6 P2-1 (UUT J1-1)   to W6 P1B-14A
From ID J1B-14A           to ID A1J13.1
From ID A1P13.1           to ID P12-79 (S201-5)

From W6 P2-8 (UUT J1-8)   to W6 P1A-1E
From ID J1A-1E            to ID A1J14.9
From ID A1P14.9           to ID P13-17 (S201-26)

From ID P12-52 (S201-4)   to ID A1P11.44
From ID A1J11.44          to ID A1J10.4
From ID A1P10.4           to ID P11-71 (S507-2)
From ID P11-72 (S507-4)   to ID A1P9.27
From ID A1J9.27           to ID BUS 2

From ID P20-3 (DMM-LO)    to ID A1P15.50
From ID A1J15.50          to ID A1J8.26
```

```
From ID A1P8.26           to ID P10-139 (S503-2)
From ID P10-12 (S503-4)   to ID A1P6.23
From ID A1J6.23           to ID BUS 2
```

Step 104:

The DMM is used to measure the resistance of the UUT pins J1-1 to J1-9. The measured resistance should be less than 10 ohms.

```
From ID P20-2 (DMM-HI)    to ID A1P15.49
From ID A1J15.49          to ID A1J8.28
From ID A1P8.28           to ID P10-203 (S503-1)
From ID P10-77 (S503-3)   to ID A1P6.13
From ID A1J6.13           to ID BUS 1

From ID P12-16 (S201-1)   to ID A1P11.42
From ID A1J11.42          to ID A1J10.6
From ID A1P10.6           to ID P11-203 (S508-1)
From ID P11-77 (S508-3)   to ID A1P9.15
From ID A1J9.15           to ID BUS 1

From W6 P2-1 (UUT J1-1)   to W6 P1B-14A
From ID J1B-14A           to ID A1J13.1
From ID A1P13.1           to ID P12-79 (S201-5)

From W6 P2-9 (UUT J1-9)   to W6 P1A-1A
From ID J1A-1A            to ID A1J14.1
From ID A1P14.1           to ID P13-47 (S201-9)

From ID P12-20 (S201-3)   to ID A1P11.46
From ID A1J11.46          to ID A1J10.2
From ID A1P10.2           to ID P11-39 (S507-1)
From ID P11-72 (S507-4)   to ID A1P9.27
From ID A1J9.27           to ID BUS 2

From ID P20-3 (DMM-LO)    to ID A1P15.50
From ID A1J15.50          to ID A1J8.26
From ID A1P8.26           to ID P10-139 (S503-2)
From ID P10-12 (S503-4)   to ID A1P6.23
From ID A1J6.23           to ID BUS 2
```

Step 105:

The DMM is used to measure the resistance of the UUT pins J1-1 to J1-10. The measured resistance should be less than 10 ohms.

```
From ID P20-2 (DMM-HI)    to ID A1P15.49
From ID A1J15.49          to ID A1J8.28
From ID A1P8.28           to ID P10-203 (S503-1)
```

```
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1

From ID P12-16 (S201-1)    to ID A1P11.42
From ID A1J11.42           to ID A1J10.6
From ID A1P10.6            to ID P11-203 (S508-1)
From ID P11-77 (S508-3)    to ID A1P9.15
From ID A1J9.15            to ID BUS 1

From W6 P2-1 (UUT J1-1)    to W6 P1B-14A
From ID J1B-14A            to ID A1J13.1
From ID A1P13.1            to ID P12-79 (S201-5)

From W6 P2-10 (UUT J1-10)  to W6 P1A-2A
From ID J1A-2A             to ID A1J14.2
From ID A1P14.2            to ID P13-14 (S201-10)

From ID P12-52 (S201-4)    to ID A1P11.44
From ID A1J11.44           to ID A1J10.4
From ID A1P10.4            to ID P11-71 (S507-2)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2

From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2
```

Step 106:

The DMM is used to measure the resistance of the UUT pins J1-1 to J1-14. The measured resistance should be less than 10 ohms.

```
From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1

From ID P12-16 (S201-1)    to ID A1P11.42
From ID A1J11.42           to ID A1J10.6
From ID A1P10.6            to ID P11-203 (S508-1)
From ID P11-77 (S508-3)    to ID A1P9.15
From ID A1J9.15            to ID BUS 1

From W6 P2-1 (UUT J1-1)    to W6 P1B-14A
From ID J1B-14A            to ID A1J13.1
From ID A1P13.1            to ID P12-79 (S201-5)
```

```
From W6 P2-14 (UUT J1-14)  to W6 P1B-13C
From ID J1B-13C            to ID A1J13.6
From ID A1P13.6            to ID P12-78 (S201-14)

From ID P12-52 (S201-4)    to ID A1P11.44
From ID A1J11.44           to ID A1J10.4
From ID A1P10.4            to ID P11-71 (S507-2)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2

From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2
```

Step 107:

The DMM is used to measure the resistance of the UUT pins J1-1 to J1-20. The measured resistance should be less than 10 ohms.

```
From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1

From ID P12-16 (S201-1)    to ID A1P11.42
From ID A1J11.42           to ID A1J10.6
From ID A1P10.6            to ID P11-203 (S508-1)
From ID P11-77 (S508-3)    to ID A1P9.15
From ID A1J9.15            to ID BUS 1

From W6 P2-1 (UUT J1-1)    to W6 P1B-14A
From ID J1B-14A            to ID A1J13.1
From ID A1P13.1            to ID P12-79 (S201-5)

From W6 P2-20 (UUT J1-20)  to W6 P1A-2C
From ID J1A-2C             to ID A1J14.6
From ID A1P14.6            to ID P13-15 (S201-19)

From ID P12-20 (S201-3)    to ID A1P11.46
From ID A1J11.46           to ID A1J10.2
From ID A1P10.2            to ID P11-39 (S507-1)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2

From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
```

```
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2
```

Step 108:

The DMM is used to measure the resistance of the UUT pins J1-1 to J1-21. The measured resistance should be less than 10 ohms.

```
From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1

From ID P12-16 (S201-1)    to ID A1P11.42
From ID A1J11.42           to ID A1J10.6
From ID A1P10.6            to ID P11-203 (S508-1)
From ID P11-77 (S508-3)    to ID A1P9.15
From ID A1J9.15            to ID BUS 1

From W6 P2-1 (UUT J1-1)    to W6 P1B-14A
From ID J1B-14A            to ID A1J13.1
From ID A1P13.1            to ID P12-79 (S201-5)

From W6 P2-21 (UUT J1-21)  to W6 P1A-1D
From ID J1A-1D             to ID A1J14.7
From ID A1P14.7            to ID P13-79 (S201-20)

From ID P12-52 (S201-4)    to ID A1P11.44
From ID A1J11.44           to ID A1J10.4
From ID A1P10.4            to ID P11-71 (S507-2)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2

From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2
```

Step 109:

The DMM is used to measure the resistance of the UUT pins J1-1 to J1-22. The measured resistance should be less than 10 ohms.

```
From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
```

```
From ID A1J6.13           to ID BUS 1

From ID P12-16 (S201-1)   to ID A1P11.42
From ID A1J11.42          to ID A1J10.6
From ID A1P10.6           to ID P11-203 (S508-1)
From ID P11-77 (S508-3)   to ID A1P9.15
From ID A1J9.15           to ID BUS 1

From W6 P2-1 (UUT J1-1)   to W6 P1B-14A
From ID J1B-14A           to ID A1J13.1
From ID A1P13.1           to ID P12-79 (S201-5)

From W6 P2-22 (UUT J1-22) to W6 P1B-9C
From ID J1B-9C            to ID A1J12.3
From ID A1P12.3           to ID P12-51 (S201-21)

From ID P12-20 (S201-3)   to ID A1P11.46
From ID A1J11.46          to ID A1J10.2
From ID A1P10.2           to ID P11-39 (S507-1)
From ID P11-72 (S507-4)   to ID A1P9.27
From ID A1J9.27           to ID BUS 2

From ID P20-3 (DMM-LO)    to ID A1P15.50
From ID A1J15.50          to ID A1J8.26
From ID A1P8.26           to ID P10-139 (S503-2)
From ID P10-12 (S503-4)   to ID A1P6.23
From ID A1J6.23           to ID BUS 2
```

Step 110:

The DMM is used to measure the resistance of the UUT pins J1-1 to J1-23. The measured resistance should be less than 10 ohms.

```
From ID P20-2 (DMM-HI)    to ID A1P15.49
From ID A1J15.49          to ID A1J8.28
From ID A1P8.28           to ID P10-203 (S503-1)
From ID P10-77 (S503-3)   to ID A1P6.13
From ID A1J6.13           to ID BUS 1

From ID P12-16 (S201-1)   to ID A1P11.42
From ID A1J11.42          to ID A1J10.6
From ID A1P10.6           to ID P11-203 (S508-1)
From ID P11-77 (S508-3)   to ID A1P9.15
From ID A1J9.15           to ID BUS 1

From W6 P2-1 (UUT J1-1)   to W6 P1B-14A
From ID J1B-14A           to ID A1J13.1
From ID A1P13.1           to ID P12-79 (S201-5)

From W6 P2-23 (UUT J1-23) to W6 P1B-8A
```

```
From ID J1B-8A            to ID A1J12.4
From ID A1P12.4           to ID P12-18 (S201-22)

From ID P12-52 (S201-4)   to ID A1P11.44
From ID A1J11.44          to ID A1J10.4
From ID A1P10.4           to ID P11-71 (S507-2)
From ID P11-72 (S507-4)   to ID A1P9.27
From ID A1J9.27           to ID BUS 2

From ID P20-3 (DMM-LO)    to ID A1P15.50
From ID A1J15.50          to ID A1J8.26
From ID A1P8.26           to ID P10-139 (S503-2)
From ID P10-12 (S503-4)   to ID A1P6.23
From ID A1J6.23           to ID BUS 2
```

Step 111:

The DMM is used to measure the resistance of the UUT pins J1-3 to J1-15. The measured resistance should be less than 10 ohms.

```
From ID P20-2 (DMM-HI)    to ID A1P15.49
From ID A1J15.49          to ID A1J8.28
From ID A1P8.28           to ID P10-203 (S503-1)
From ID P10-77 (S503-3)   to ID A1P6.13
From ID A1J6.13           to ID BUS 1

From ID P12-16 (S201-1)   to ID A1P11.42
From ID A1J11.42          to ID A1J10.6
From ID A1P10.6           to ID P11-203 (S508-1)
From ID P11-77 (S508-3)   to ID A1P9.15
From ID A1J9.15           to ID BUS 1

From W6 P2-3 (UUT J1-3)   to W6 P1B-14B
From ID J1B-14B           to ID A1J13.3
From ID A1P13.3           to ID P12-46 (S201-7)

From W6 P2-15 (UUT J1-15) to W6 P1B-9A
From ID J1B-9A            to ID A1J12.1
From ID A1P12.1           to ID P12-48 (S201-15)

From ID P12-20 (S201-3)   to ID A1P11.46
From ID A1J11.46          to ID A1J10.2
From ID A1P10.2           to ID P11-39 (S507-1)
From ID P11-72 (S507-4)   to ID A1P9.27
From ID A1J9.27           to ID BUS 2

From ID P20-3 (DMM-LO)    to ID A1P15.50
From ID A1J15.50          to ID A1J8.26
From ID A1P8.26           to ID P10-139 (S503-2)
From ID P10-12 (S503-4)   to ID A1P6.23
```

```
From ID A1J6.23           to ID BUS 2
```

Step 112:

The DMM is used to measure the resistance of the UUT pins J1-3 to J1-16. The measured resistance should be less than 10 ohms.

```
From ID P20-2 (DMM-HI)    to ID A1P15.49
From ID A1J15.49          to ID A1J8.28
From ID A1P8.28           to ID P10-203 (S503-1)
From ID P10-77 (S503-3)   to ID A1P6.13
From ID A1J6.13           to ID BUS 1

From ID P12-16 (S201-1)   to ID A1P11.42
From ID A1J11.42          to ID A1J10.6
From ID A1P10.6           to ID P11-203 (S508-1)
From ID P11-77 (S508-3)   to ID A1P9.15
From ID A1J9.15           to ID BUS 1

From W6 P2-3 (UUT J1-3)   to W6 P1B-14B
From ID J1B-14B           to ID A1J13.3
From ID A1P13.3           to ID P12-46 (S201-7)

From W6 P2-16 (UUT J1-16) to W6 P1B-9B
From ID J1B-9B            to ID A1J12.2
From ID A1P12.2           to ID P12-15 (S201-16)

From ID P12-52 (S201-4)   to ID A1P11.44
From ID A1J11.44          to ID A1J10.4
From ID A1P10.4           to ID P11-71 (S507-2)
From ID P11-72 (S507-4)   to ID A1P9.27
From ID A1J9.27           to ID BUS 2

From ID P20-3 (DMM-LO)    to ID A1P15.50
From ID A1J15.50          to ID A1J8.26
From ID A1P8.26           to ID P10-139 (S503-2)
From ID P10-12 (S503-4)   to ID A1P6.23
From ID A1J6.23           to ID BUS 2
```

Step 113:

The DMM is used to measure the resistance of the UUT pins J1-6 to J1-18. The measured resistance should be less than 10 ohms.

```
From ID P20-2 (DMM-HI)    to ID A1P15.49
From ID A1J15.49          to ID A1J8.28
From ID A1P8.28           to ID P10-203 (S503-1)
From ID P10-77 (S503-3)   to ID A1P6.13
From ID A1J6.13           to ID BUS 1
```

```
From ID P12-80 (S201-2)    to ID A1P11.40
From ID A1J11.40           to ID A1J10.8
From ID A1P10.8            to ID P11-139 (S508-2)
From ID P11-77 (S508-3)    to ID A1P9.15
From ID A1J9.15            to ID BUS 1

From W6 P2-6 (UUT J1-6)    to W6 P1B-13B
From ID J1B-13B            to ID A1J13.4
From ID A1P13.4            to ID P12-13 (S201-8)

From W6 P2-18 (UUT J1-18)  to W6 P1A-1C
From ID J1A-1C             to ID A1J14.5
From ID A1P14.5            to ID P13-49 (S201-17)

From ID P12-20 (S201-3)    to ID A1P11.46
From ID A1J11.46           to ID A1J10.2
From ID A1P10.2            to ID P11-39 (S507-1)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2

From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2
```

Step 114:

The DMM is used to measure the resistance of the UUT pins J1-6 to J1-19. The measured resistance should be less than 10 ohms.

```
From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1

From ID P12-80 (S201-2)    to ID A1P11.40
From ID A1J11.40           to ID A1J10.8
From ID A1P10.8            to ID P11-139 (S508-2)
From ID P11-77 (S508-3)    to ID A1P9.15
From ID A1J9.15            to ID BUS 1

From W6 P2-6 (UUT J1-6)    to W6 P1B-13B
From ID J1B-13B            to ID A1J13.4
From ID A1P13.4            to ID P12-13 (S201-8)

From W6 P2-19 (UUT J1-19)  to W6 P1A-10F
From ID J1A-10F            to ID A1J14.28
From ID A1P14.28           to ID P13-16 (S201-18)
```

```
From ID P12-52 (S201-4)    to ID A1P11.44
From ID A1J11.44           to ID A1J10.4
From ID A1P10.4            to ID P11-71 (S507-2)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2

From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2
```

Step 115:

The DMM is used to measure the resistance of the UUT pins J1-11 to J1-12. The measured resistance should be less than 10 ohms.

```
From ID P12-16 (S201-1)    to ID A1P11.42
From ID A1J11.42           to ID A1J10.6
From ID A1P10.6            to ID P11-203 (S508-1)
From ID P11-77 (S508-3)    to ID A1P9.15
From ID A1J9.15            to ID BUS 1

From W6 P2-11 (UUT J1-11)  to W6 P1A-1B
From ID J1A-1B             to ID A1J14.3
From ID A1P14.3            to ID P13-80 (S201-11)

From W6 P2-12 (UUT J1-12)  to W6 P1A-2B
From ID J1A-2B             to ID A1J14.4
From ID A1P14.4            to ID P13-48 (S201-12)

From ID P12-52 (S201-4)    to ID A1P11.44
From ID A1J11.44           to ID A1J10.4
From ID A1P10.4            to ID P11-71 (S507-2)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2

From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2
```

Step 116:

The DMM is used to measure the resistance of the UUT pins J1-11 to J1-13. The measured resistance should be less than 10 ohms.

```
From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1

From ID P12-16 (S201-1)    to ID A1P11.42
From ID A1J11.42           to ID A1J10.6
From ID A1P10.6            to ID P11-203 (S508-1)
From ID P11-77 (S508-3)    to ID A1P9.15
From ID A1J9.15            to ID BUS 1

From W6 P2-11 (UUT J1-11)  to W6 P1A-1B
From ID J1A-1B             to ID A1J14.3
From ID A1P14.3            to ID P13-80 (S201-11)

From W6 P2-13 (UUT J1-13)  to W6 P1B-14C
From ID J1B-14C            to ID A1J13.5
From ID A1P13.5            to ID P12-14 (S201-13)

From ID P12-20 (S201-3)    to ID A1P11.46
From ID A1J11.46           to ID A1J10.2
From ID A1P10.2            to ID P11-39 (S507-1)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2

From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2
```

Step 117:

The DMM is used to measure the resistance of the UUT pins J1-11 to J1-24. The measured resistance should be less than 10 ohms.

```
From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1

From ID P12-16 (S201-1)    to ID A1P11.42
From ID A1J11.42           to ID A1J10.6
From ID A1P10.6            to ID P11-203 (S508-1)
From ID P11-77 (S508-3)    to ID A1P9.15
From ID A1J9.15            to ID BUS 1

From W6 P2-11 (UUT J1-11)  to W6 P1A-1B
```

```
From ID J1A-1B             to ID A1J14.3
From ID A1P14.3            to ID P13-80 (S201-11)

From W6 P2-24 9UUT J1-24)  to W6 P1B-8B
From ID J1B-8B             to ID A1J12.5
From ID A1P12.5            to ID P12-17 (S201-23)

From ID P12-20 (S201-3)    to ID A1P11.46
From ID A1J11.46           to ID A1J10.2
From ID A1P10.2            to ID P11-39 (S507-1)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2

From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2
```

Step 118:

The DMM is used to measure the resistance of the UUT pins J1-11 to J1-25. The measured resistance should be less than 10 ohms.

```
From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1

From ID P12-16 (S201-1)    to ID A1P11.42
From ID A1J11.42           to ID A1J10.6
From ID A1P10.6            to ID P11-203 (S508-1)
From ID P11-77 (S508-3)    to ID A1P9.15
From ID A1J9.15            to ID BUS 1

From W6 P2-11 (UUT J1-11)  to W6 P1A-1B
From ID J1A-1B             to ID A1J14.3
From ID A1P14.3            to ID P13-80 (S201-11)

From W6 P2-25 (UUT J1-25)  to W6 P1B-8C
From ID J1B-8C             to ID A1J12.6
From ID A1P12.6            to ID P12-81 (S201-24)

From ID P12-52 (S201-4)    to ID A1P11.44
From ID A1J11.44           to ID A1J10.4
From ID A1P10.4            to ID P11-71 (S507-2)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2
```

```
From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2
```

Step 119:

The DMM is used to measure the resistance of the UUT pins J1-11 to J1-26. The measured resistance should be less than 10 ohms.

```
From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1

From ID P12-16 (S201-1)    to ID A1P11.42
From ID A1J11.42           to ID A1J10.6
From ID A1P10.6            to ID P11-203 (S508-1)
From ID P11-77 (S508-3)    to ID A1P9.15
From ID A1J9.15            to ID BUS 1

From W6 P2-11 (UUT J1-11)  to W6 P1A-1B
From ID J1A-1B             to ID A1J14.3
From ID A1P14.3            to ID P13-80 (S201-11)

From W6 P2-26 (UUT J1-26)  to W6 P1A-2D
From ID J1A-2D             to ID A1J14.8
From ID A1P14.9            to ID P13-50 (S201-25)

From ID P12-20 (S201-3)    to ID A1P11.46
From ID A1J11.46           to ID A1J10.2
From ID A1P10.2            to ID P11-39 (S507-1)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2

From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2
```

Step 120:

The DMM is used to measure the resistance of the UUT pins J1-14 to J2-8. The measured resistance should be equal to 1k ohms +/- 2%.

```
From ID P20-2 (DMM-HI)     to ID A1P15.49
```

```
From ID A1J15.49          to ID A1J8.28
From ID A1P8.28           to ID P10-203 (S503-1)
From ID P10-77 (S503-3)   to ID A1P6.13
From ID A1J6.13           to ID BUS 1

From ID P12-80 (S201-2)   to ID A1P11.40
From ID A1J11.40          to ID A1J10.8
From ID A1P10.8           to ID P11-139 (S508-2)
From ID P11-77 (S508-3)   to ID A1P9.15
From ID A1J9.15           to ID BUS 1

From W6 P2-14 (UUT J1-14) to W6 P1B-13C
From ID J1B-13C           to ID A1J13.6
From ID A1P13.6           to ID P12-78 (S201-14)

From W6 P3-B4 (UUT J2-8)  to W6 P1B-4C
From ID J1B-4C            to ID A1J12.18
From ID A1P12.18          to ID P12-32 (S202-48)

From ID P13-29 (S202-4)   to ID A1P13.50
From ID A1J13.50          to ID A1J10.50
From ID A1P10.50          to ID P11-244 (S510-2)
From ID P11-147 (S510-4)  to ID A1P9.31
From ID A1J9.31           to ID BUS 2

From ID P20-3 (DMM-LO)    to ID A1P15.50
From ID A1J15.50          to ID A1J8.26
From ID A1P8.26           to ID P10-139 (S503-2)
From ID P10-12 (S503-4)   to ID A1P6.23
From ID A1J6.23           to ID BUS 2
```

Step 121:

The DMM is used to measure the resistance of the UUT pins J2-2 to J1-7. The measured resistance should be equal to 10k ohms +/- 10%.

```
From ID P20-2 (DMM-HI)    to ID A1P15.49
From ID A1J15.49          to ID A1J8.28
From ID A1P8.28           to ID P10-203 (S503-1)
From ID P10-77 (S503-3)   to ID A1P6.13
From ID A1J6.13           to ID BUS 1

From ID P12-90 (S202-2)   to ID A1P11.36
From ID A1J11.36          to ID A1J10.12
From ID A1P10.12          to ID P11-242 (S509-2)
From ID P11-18 (S509-3)   to ID A1P9.19
From ID A1J9.19           to ID BUS 1

From W6 P3-B1 (UUT J2-2)  to W6 P1A-6F
From ID J1A-6F            to ID A1J14.20
```

```
From ID A1P14.20          to ID P13-24 (S202-20)

From W6 P2-7 (UUT J1-7)   to W6 P1B-1E
From ID J1B-1E            to GROUND

From ID P20-3 (DMM-LO)    to ID A1J7.38
From ID A1P7.38           to ID P10-130 (S301-23)
From ID P10-229 (S301-24) to ID A1P7.36
From ID A1J7.36           to GROUND
```

Step 122:

The DMM is used to measure the resistance of the UUT pins J2-1 to J1-7. The measured resistance should be equal to 10k ohms +/- 10%.

```
From ID P20-2 (DMM-HI)    to ID A1P15.49
From ID A1J15.49          to ID A1J8.28
From ID A1P8.28           to ID P10-203 (S503-1)
From ID P10-77 (S503-3)   to ID A1P6.13
From ID A1J6.13           to ID BUS 1

From ID P12-59 (S202-1)   to ID A1P11.38
From ID A1J11.38          to ID A1J10.10
From ID A1P10.10          to ID P11-177 (S509-1)
From ID P11-18 (S509-3)   to ID A1P9.19
From ID A1J9.19           to ID BUS 1

From W6 P3-A1 (UUT J2-1)  to W6 P1A-6E
From ID J1A-6E            to ID A1J14.19
From ID A1P14.19          to ID P13-88 (S202-19)

From W6 P2-7 (UUT J1-7)   to W6 P1B-1E
From ID J1B-1E            to GROUND

From ID P20-3 (DMM-LO)    to ID A1J7.38
From ID A1P7.38           to ID P10-130 (S301-23)
From ID P10-229 (S301-24) to ID A1P7.36
From ID A1J7.36           to GROUND
```

Step 123:

The DMM is used to measure the resistance of the UUT pins J2-3 to J1-7. The measured resistance should be greater than 112.8 and less than 117 ohms.

```
From ID P20-2 (DMM-HI)    to ID A1P15.49
From ID A1J15.49          to ID A1J8.28
From ID A1P8.28           to ID P10-203 (S503-1)
From ID P10-77 (S503-3)   to ID A1P6.13
From ID A1J6.13           to ID BUS 1
```

```
From ID P12-90 (S202-2)    to ID A1P11.36
From ID A1J11.36           to ID A1J10.12
From ID A1P10.12           to ID P11-242 (S509-2)
From ID P11-18 (S509-3)    to ID A1P9.19
From ID A1J9.19            to ID BUS 1

From W6 P3-A2 (UUT J2-3)   to W6 P1A-7F
From ID J1A-7F             to ID A1J14.22
From ID A1P14.22           to ID P13-92 (S202-34)

From W6 P2-7 (UUT J1-7)    to W6 P1B-1E
From ID J1B-1E             to GROUND

From ID P20-3 (DMM-LO)     to ID A1J7.38
From ID A1P7.38            to ID P10-130 (S301-23)
From ID P10-229 (S301-24)  to ID A1P7.36
From ID A1J7.36            to GROUND
```

Step 124:

The DMM is used to measure the resistance of the UUT pins J2-7 to J1-7. The measured resistance should be equal to 10k ohms +/- 10%.

```
From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1

From ID P12-59 (S202-1)    to ID A1P11.38
From ID A1J11.38           to ID A1J10.10
From ID A1P10.10           to ID P11-177 (S509-1)
From ID P11-18 (S509-3)    to ID A1P9.19
From ID A1J9.19            to ID BUS 1

From W6 P3-A4 (UUT J2-7)   to W6 P1B-4B
From ID J1B-4B             to ID A1J12.17
From ID A1P12.17           to ID P12-96 (S202-47)

From W6 P2-7 (UUT J1-7)    to W6 P1B-1E
From ID J1B-1E             to GROUND

From ID P20-3 (DMM-LO)     to ID A1J7.38
From ID A1P7.38            to ID P10-130 (S301-23)
From ID P10-229 (S301-24)  to ID A1P7.36
From ID A1J7.36            to GROUND
```

Step 125:

The DMM is used to measure the resistance of the UUT pins

J2-5 to J2-9. The measured resistance should be greater than 25k ohms.

From ID P20-2 (DMM-HI)	to ID A1P15.49
From ID A1J15.49	to ID A1J8.28
From ID A1P8.28	to ID P10-203 (S503-1)
From ID P10-77 (S503-3)	to ID A1P6.13
From ID A1J6.13	to ID BUS 1
From ID P12-59 (S202-1)	to ID A1P11.38
From ID A1J11.38	to ID A1J10.10
From ID A1P10.10	to ID P11-177 (S509-1)
From ID P11-18 (S509-3)	to ID A1P9.19
From ID A1J9.19	to ID BUS 1
From W6 P3-A3 (UUT J2-5)	to W6 P1B-5C
From ID J1B-5C	to ID A1J12.15
From ID A1P12.15	to ID P12-31 (S202-45)
From ID P20-3 (DMM-LO)	to ID A1P15.50
From ID A1J15.50	to ID A1J8.26
From ID A1P8.26	to ID P10-139 (S503-2)
From ID P10-12 (S503-4)	to ID A1P6.23
From ID A1J6.23	to ID BUS 2
From ID P13-29 (S202-4)	to ID A1P13.50
From ID A1J13.50	to ID A1J10.50
From ID A1P10.50	to ID P11-244 (S510-2)
From ID P11-147 (S510-4)	to ID A1P9.31
From ID A1J9.31	to ID BUS 2
From W6 P3-A5 (UUT J2-9)	to W6 P1B-5B
From ID J1B-5B	to ID A1J12.14
From ID A1P12.14	to ID P12-27 (S202-24)

Step 126:

The DMM is used to measure the resistance of the UUT pins J1-6 to J1-7. The measured resistance should be less than 250 ohms.

From ID P20-2 (DMM-HI)	to ID A1P15.49
From ID A1J15.49	to ID A1J8.28
From ID A1P8.28	to ID P10-203 (S503-1)
From ID P10-77 (S503-3)	to ID A1P6.13
From ID A1J6.13	to ID BUS 1
From ID P12-80 (S201-2)	to ID A1P11.40
From ID A1J11.40	to ID A1J10.8
From ID A1P10.8	to ID P11-139 (S508-2)
From ID P11-77 (S508-3)	to ID A1P9.15

```
From ID A1J9.15            to ID BUS 1

From W6 P2-6 (UUT J1-6)    to W6 P1B-13B
From ID J1B-13B            to ID A1J13.4
From ID A1P13.4            to ID P12-13 (S201-8)

From W6 P2-1 (UUT J1-1)    to W6 P1B-14A
From ID J1B-14A            to ID A1J13.1
From ID A1P13.1            to ID P12-79 (S201-5)

From ID P12-20 (S201-3)    to ID A1P11.46
From ID A1J11.46           to ID A1J10.2
From ID A1P10.2            to ID P11-39 (S507-1)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2

From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2
```

2.6 MODULE 2 - DCPS WITH PEAK AND MAX LOAD

Refer to Reference Drawings when diagnosing connection paths.
Refer to Table 1 on page 69.

Step 201 DCPS Voltage Test Point:
DCPS test point shall be measured. With 28.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with PEAK loads applied as shown in Table 1, the DMM shall be used to measure the Test Point Voltage of the DCPS at UUT pins J2-9 (HI) to J1-1 (LO). The measured output voltage shall be > 20 Vdc.

```
From W6 P3-A5 (UUT J2-9)    to W6 P1B-5B
From ID J1B-5B              to ID A1J12.14
From ID A1P12.14            to ID P12-27 (S202-24)

From ID P12-90 (S202-2)     to ID A1P11.36
From ID A1J11.36            to ID A1J10.12
From ID A1P10.12            to ID P11-242 (S509-2)
From ID P11-18 (S509-3)     to ID A1P9.19
From ID A1J9.19             to ID BUS 1

From ID P20-2 (DMM-HI)      to ID A1P15.49
From ID A1J15.49            to ID A1J8.28
From ID A1P8.28             to ID P10-203 (S503-1)
From ID P10-77 (S503-3)     to ID A1P6.13
From ID A1J6.13             to ID BUS 1
```

```
From W6 P2-1 (UUT J1-1)    to W6 P1B-14A
From ID J1B-14A            to ID A1J13.1
From ID A1P13.1            to ID P12-79 (S201-5)

From ID P12-20 (S201-3)    to ID A1P11.46
From ID A1J11.46           to ID A1J10.2
From ID A1P10.2            to ID P11-39 (S507-1)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2

From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2

See "APPLY DCPS PEAK LOAD"

See "POWER UP DCPS 28VDC"
```

Step 202 DCPS Voltage Test Point:

DCPS test point shall be measured. With 28.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with PEAK loads applied as shown in Table 1, the DMM shall be used to measure the Test Point Voltage of the DCPS at UUT pins J2-5 (HI) to J1-1 (LO). The measured output voltage shall be > 15 Vdc.

```
From W6 P3-A3 (UUT J2-5)   to W6 P1B-5C
From ID J1B-5C             to ID A1J12.15
From ID A1P12.15           to ID P12-31 (S202-45)

From ID P12-59 (S202-1)    to ID A1P11.38
From ID A1J11.38           to ID A1J10.10
From ID A1P10.10           to ID P11-177 (S509-1)
From ID P11-18 (S509-3)    to ID A1P9.19
From ID A1J9.19            to ID BUS 1

From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1

From W6 P2-1 (UUT J1-1)    to W6 P1B-14A
From ID J1B-14A            to ID A1J13.1
From ID A1P13.1            to ID P12-79 (S201-5)

From ID P12-20 (S201-3)    to ID A1P11.46
```

```
From ID A1J11.46          to ID A1J10.2
From ID A1P10.2           to ID P11-39 (S507-1)
From ID P11-72 (S507-4)   to ID A1P9.27
From ID A1J9.27           to ID BUS 2

From ID P20-3 (DMM-LO)    to ID A1P15.50
From ID A1J15.50          to ID A1J8.26
From ID A1P8.26           to ID P10-139 (S503-2)
From ID P10-12 (S503-4)   to ID A1P6.23
From ID A1J6.23           to ID BUS 2
```

See "APPLY DCPS PEAK LOAD"

See "POWER UP DCPS 28VDC"

Step 203 DCPS Input Current with PEAK load:

DCPS Input current shall be measured. With 28.0 ± 0.2 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with PEAK loads applied as shown in Table 1, the DMM shall be used to measure the input current. The measured input current to J1-5 shall be < 1.5 amperes.

See "POWER UP DCPS 28VDC"

Step 204 DCPS Output Voltage (+15v):

DCPS output voltage shall be measured. With 28.0 ± 0.2 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with PEAK loads applied as shown in Table 1, the DMM shall be used to measure the Output Voltage of the DCPS at UUT pins J1-6 (HI) to J1-1 (LO). The measured output voltage shall be 15 +/- 0.6Vdc.

```
From W6 P2-6 (UUT J1-6)  to W6 P1B-13B
From ID J1B-13B            to ID A1J13.4
From ID A1P13.4            to ID P12-13 (S201-8)

From ID P12-80 (S201-2)    to ID A1P11.40
From ID A1J11.40           to ID A1J10.8
From ID A1P10.8            to ID P11-139 (S508-2)
From ID P11-77 (S508-3)    to ID A1P9.15
From ID A1J9.15            to ID BUS 1

From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1
```

```
From W6 P2-1 (UUT J1-1)    to W6 P1B-14A
From ID J1B-14A            to ID A1J13.1
From ID A1P13.1            to ID P12-79 (S201-5)

From ID P12-20 (S201-3)    to ID A1P11.46
From ID A1J11.46           to ID A1J10.2
From ID A1P10.2            to ID P11-39 (S507-1)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2

From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2

See "APPLY DCPS PEAK LOAD"

See "POWER UP DCPS 28VDC"
```

Step 205 DCPS Output Voltage (-15v):

DCPS output voltage shall be measured. With 28.0 ± 0.2 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with PEAK loads applied as shown in Table 1, the DMM shall be used to measure the Output Voltage of the DCPS at UUT pins J1-3 (HI) to J1-1 (LO). The measured output voltage shall be -15 +/- 0.6Vdc.

```
From W6 P2-3 (UUT J1-3)  to W6 P1B-14B
From ID J1B-14B            to ID A1J13.3
From ID A1P13.3            to ID P12-46 (S201-7)

From ID P12-16 (S201-1)    to ID A1P11.42
From ID A1J11.42           to ID A1J10.6
From ID A1P10.6            to ID P11-203 (S508-1)
From ID P11-77 (S508-3)    to ID A1P9.15
From ID A1J9.15            to ID BUS 1

From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1

From W6 P2-1 (UUT J1-1)    to W6 P1B-14A
From ID J1B-14A            to ID A1J13.1
From ID A1P13.1            to ID P12-79 (S201-5)

From ID P12-20 (S201-3)    to ID A1P11.46
From ID A1J11.46           to ID A1J10.2
```

```
From ID A1P10.2           to ID P11-39 (S507-1)
From ID P11-72 (S507-4)   to ID A1P9.27
From ID A1J9.27           to ID BUS 2

From ID P20-3 (DMM-LO)    to ID A1P15.50
From ID A1J15.50          to ID A1J8.26
From ID A1P8.26           to ID P10-139 (S503-2)
From ID P10-12 (S503-4)   to ID A1P6.23
From ID A1J6.23           to ID BUS 2

See "APPLY DCPS PEAK LOAD"

See "POWER UP DCPS 28VDC"
```

Step 206 DCPS Output Voltage (+15v) with no load:

DCPS output voltage shall be measured. With 28.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with NO load applied as shown in Table 1, the DMM shall be used to measure the Output Voltage of the DCPS at UUT pins J1-6 (HI) to J1-1 (LO). The measured output voltage shall be 15 +/- 1.0Vdc.

```
From W6 P2-6 (UUT J1-6)   to W6 P1B-13B
From ID J1B-13B           to ID A1J13.4
From ID A1P13.4           to ID P12-13 (S201-8)

From ID P12-80 (S201-2)   to ID A1P11.40
From ID A1J11.40          to ID A1J10.8
From ID A1P10.8           to ID P11-139 (S508-2)
From ID P11-77 (S508-3)   to ID A1P9.15
From ID A1J9.15           to ID BUS 1

From ID P20-2 (DMM-HI)    to ID A1P15.49
From ID A1J15.49          to ID A1J8.28
From ID A1P8.28           to ID P10-203 (S503-1)
From ID P10-77 (S503-3)   to ID A1P6.13
From ID A1J6.13           to ID BUS 1

From W6 P2-1 (UUT J1-1)   to W6 P1B-14A
From ID J1B-14A           to ID A1J13.1
From ID A1P13.1           to ID P12-79 (S201-5)

From ID P12-20 (S201-3)   to ID A1P11.46
From ID A1J11.46          to ID A1J10.2
From ID A1P10.2           to ID P11-39 (S507-1)
From ID P11-72 (S507-4)   to ID A1P9.27
From ID A1J9.27           to ID BUS 2

From ID P20-3 (DMM-LO)    to ID A1P15.50
From ID A1J15.50          to ID A1J8.26
```

```
From ID A1P8.26           to ID P10-139 (S503-2)
From ID P10-12 (S503-4)   to ID A1P6.23
From ID A1J6.23           to ID BUS 2

See "POWER UP DCPS 28VDC"
```

Step 207 DCPS Output Voltage (-15v) with no load:

DCPS output voltage shall be measured. With 28.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with NO load applied as shown in Table 1, the DMM shall be used to measure the Output Voltage of the DCPS at UUT pins J1-3 (HI) to J1-1 (LO). The measured output voltage shall be -14 to -16.4 Vdc.

```
From W6 P2-3 (UUT J1-3)   to W6 P1B-14B
From ID J1B-14B           to ID A1J13.3
From ID A1P13.3           to ID P12-46 (S201-7)

From ID P12-16 (S201-1)   to ID A1P11.42
From ID A1J11.42          to ID A1J10.6
From ID A1P10.6           to ID P11-203 (S508-1)
From ID P11-77 (S508-3)   to ID A1P9.15
From ID A1J9.15           to ID BUS 1

From ID P20-2 (DMM-HI)    to ID A1P15.49
From ID A1J15.49          to ID A1J8.28
From ID A1P8.28           to ID P10-203 (S503-1)
From ID P10-77 (S503-3)   to ID A1P6.13
From ID A1J6.13           to ID BUS 1

From W6 P2-1 (UUT J1-1)   to W6 P1B-14A
From ID J1B-14A           to ID A1J13.1
From ID A1P13.1           to ID P12-79 (S201-5)

From ID P12-20 (S201-3)   to ID A1P11.46
From ID A1J11.46          to ID A1J10.2
From ID A1P10.2           to ID P11-39 (S507-1)
From ID P11-72 (S507-4)   to ID A1P9.27
From ID A1J9.27           to ID BUS 2

From ID P20-3 (DMM-LO)    to ID A1P15.50
From ID A1J15.50          to ID A1J8.26
From ID A1P8.26           to ID P10-139 (S503-2)
From ID P10-12 (S503-4)   to ID A1P6.23
From ID A1J6.23           to ID BUS 2

See "POWER UP DCPS 28VDC"
```

Step 208 DCPS Input Current with MAX load:

DCPS Input current shall be measured. With 28.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with MAX loads applied as shown in Table 1, the DMM shall be used to measure the input current. The measured input current to J1-5 shall be < 0.8 amperes.

See "POWER UP DCPS 28VDC"

Step 209 DCPS Output Voltage ripple on (+15v):

DCPS output voltage ripple shall be measured. With 28.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with MAX loads applied as shown in Table 1, the DMM shall be used to measure the Output Voltage ripple of the DCPS at UUT pins J1-6 (HI) to J1-1 (LO). The measured output voltage ripple shall be < 250mV pp.

From W6 P2-6 (UUT J1-6)	to W6 P1B-13B
From ID J1B-13B	to ID A1J13.4
From ID A1P13.4	to ID P12-13 (S201-8)
From ID P12-80 (S201-2)	to ID A1P11.40
From ID A1J11.40	to ID A1J10.8
From ID A1P10.8	to ID P11-139 (S508-2)
From ID P11-77 (S508-3)	to ID A1P9.15
From ID A1J9.15	to ID BUS 1
From ID P19-2 (DSO-IN2)	to ID A1P18.1
From ID A1J18.1	to ID A1J6.2
From ID A1P6.2	to ID P10-39 (S502-1)
From ID P10-168 (S502-3)	to ID A1P7.31
From ID A1J7.31	to ID BUS 1
From DSO-RTN	to ID A1J6.11
From ID A1P6.11	to ID P10-166 (S301-26)
From ID P10-102 (S301-25)	to ID A1P7.34
From ID A1J7.34	to GROUND

See "APPLY DCPS MAX LOAD"

See "POWER UP DCPS 28VDC"

Step 210 DCPS Output Voltage ripple on (-15v):

DCPS output voltage ripple shall be measured. With 28.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with MAX loads applied as shown in Table 1, the DMM shall be used to measure the Output Voltage ripple of the DCPS at UUT pins J1-3 (HI) to J1-1 (LO). The measured output voltage ripple shall be < 250mV pp.

```
From W6 P2-3 (UUT J1-3)    to W6 P1B-14B
From ID J1B-14B            to ID A1J13.3
From ID A1P13.3            to ID P12-46 (S201-7)

From ID P12-16 (S201-1)    to ID A1P11.42
From ID A1J11.42           to ID A1J10.6
From ID A1P10.6            to ID P11-203 (S508-1)
From ID P11-77 (S508-3)    to ID A1P9.15
From ID A1J9.15            to ID BUS 1

From ID P19-2 (DSO-IN2)    to ID A1P18.1
From ID A1J18.1            to ID A1J6.2
From ID A1P6.2             to ID P10-39 (S502-1)
From ID P10-168 (S502-3)   to ID A1P7.31
From ID A1J7.31            to ID BUS 1

From DSO-RTN               to ID A1J6.11
From ID A1P6.11            to ID P10-166 (S301-26)
From ID P10-102 (S301-25)  to ID A1P7.34
From ID A1J7.34            to GROUND

See "APPLY DCPS MAX LOAD"

See "POWER UP DCPS 28VDC"
```

Step 211 DCPS Blocking Diode Test:

DCPS Blocking Diode presence shall be verified. With 28.0 ± 0.2 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with PEAK loads applied as shown in Table 1, the DMM shall be used to measure the Voltage present at UUT pins J1-5 (HI) to J2-9 (LO). The measured output voltage shall be 0.6 to 1.2 Vdc.

```
From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.30
From ID A1P8.30            to ID P10-41 (S301-42)
From ID P10-199 (S301-41)  to ID A1P7.2
From ID A1J7.2             to ID J1B-3B
From W6 P1B-3B             to W6 P2-5 (UUT J1-5)

From W6 P3-A5 (UUT J2-9)   to W6 P1B-5B
From ID J1B-5B             to ID A1J12.14
From ID A1P12.14           to ID P12-27 (S202-24)

From ID P13-29 (S202-4)    to ID A1P13.50
From ID A1J13.50           to ID A1J10.50
From ID A1P10.50           to ID P11-244 (S510-2)
From ID P11-147 (S510-4)   to ID A1P9.31
From ID A1J9.31            to ID BUS 2
```

```
From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2
```

See "APPLY DCPS PEAK LOAD"

See "POWER UP DCPS 28VDC"

2.7 MODULE 3 - 800HZ AC W/ PEAK AND MAX LOAD

Refer to Reference Drawings when diagnosing connection paths.
Refer to Table 1 on page 69.

Step 301 800Hz Bias Test:

With 28.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO). The DMM shall be used to measure the Bias Voltage of the 800Hz pins J2-4 (HI) to J1-1 (LO).

The measured output voltage shall be < 0.5 Vdc.

```
From W6 P3-B2 (UUT J2-4)   to W6 P1A-8E
From ID J1A-8E             to ID A1J14.23
From ID A1P14.23           to ID P13-91 (S202-35)

From ID P12-59 (S202-1)    to ID A1P11.38
From ID A1J11.38           to ID A1J10.10
From ID A1P10.10           to ID P11-177 (S509-1)
From ID P11-18 (S509-3)    to ID A1P9.19
From ID A1J9.19            to ID BUS 1

From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1

From W6 P2-1 (UUT J1-1)    to W6 P1B-14A
From ID J1B-14A            to ID A1J13.1
From ID A1P13.1            to ID P12-79 (S201-5)

From ID P12-20 (S201-3)    to ID A1P11.46
From ID A1J11.46           to ID A1J10.2
From ID A1P10.2            to ID P11-39 (S507-1)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2

From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
```

From ID A1P8.26 to ID P10-139 (S503-2)
From ID P10-12 (S503-4) to ID A1P6.23
From ID A1J6.23 to ID BUS 2

See "POWER UP DCPS 28VDC"

Step 302 800Hz Bias Test:

With 28.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO). The DMM shall be used to measure the Bias Voltage of the 800Hz pins J2-6 (HI) to J1-1 (LO). The measured output voltage shall be -17Vdc < x < -12 Vdc.

From W6 P3-B3 (UUT J2-6) to W6 P1B-4A
From ID J1B-4A to ID A1J12.16
From ID A1P12.16 to ID P12-63 (S202-46)

From ID P12-90 (S202-2) to ID A1P11.36
From ID A1J11.36 to ID A1J10.12
From ID A1P10.12 to ID P11-242 (S509-2)
From ID P11-18 (S509-3) to ID A1P9.19
From ID A1J9.19 to ID BUS 1

From ID P20-2 (DMM-HI) to ID A1P15.49
From ID A1J15.49 to ID A1J8.28
From ID A1P8.28 to ID P10-203 (S503-1)
From ID P10-77 (S503-3) to ID A1P6.13
From ID A1J6.13 to ID BUS 1

From W6 P2-1 (UUT J1-1) to W6 P1B-14A
From ID J1B-14A to ID A1J13.1
From ID A1P13.1 to ID P12-79 (S201-5)

From ID P12-20 (S201-3) to ID A1P11.46
From ID A1J11.46 to ID A1J10.2
From ID A1P10.2 to ID P11-39 (S507-1)
From ID P11-72 (S507-4) to ID A1P9.27
From ID A1J9.27 to ID BUS 2

From ID P20-3 (DMM-LO) to ID A1P15.50
From ID A1J15.50 to ID A1J8.26
From ID A1P8.26 to ID P10-139 (S503-2)
From ID P10-12 (S503-4) to ID A1P6.23
From ID A1J6.23 to ID BUS 2

See "POWER UP DCPS 28VDC"

Step 303 800Hz Bias Test:

With 28.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO). The DMM shall be used to measure the Bias

Voltage and frequency of the 800Hz pins J2-3 (HI) to J1-1 (LO). The measured output voltage shall be > 10 Vrms. The measured output frequency shall be 776 – 824 Hz.

```
From W6 P3-A2 (UUT J2-3)   to W6 P1A-7F
From ID J1A-7F             to ID A1J14.22
From ID A1P14.22           to ID P13-92 (S202-34)

From ID P12-90 (S202-2)    to ID A1P11.36
From ID A1J11.36           to ID A1J10.12
From ID A1P10.12           to ID P11-242 (S509-2)
From ID P11-18 (S509-3)    to ID A1P9.19
From ID A1J9.19            to ID BUS 1

From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1

From W6 P2-1 (UUT J1-1)    to W6 P1B-14A
From ID J1B-14A            to ID A1J13.1
From ID A1P13.1            to ID P12-79 (S201-5)

From ID P12-20 (S201-3)    to ID A1P11.46
From ID A1J11.46           to ID A1J10.2
From ID A1P10.2            to ID P11-39 (S507-1)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2

From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2
```

See "POWER UP DCPS 28VDC"

Step 304 800Hz Bias Test:

With 28.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO). The DMM shall be used to measure the Bias Voltage and frequency of the 800Hz pins J2-1 (HI) to J1-1 (LO). The measured output voltage shall be > 8.5 Vrms. The measured output frequency shall be 776 – 824 Hz.

```
From W6 P3-A1 (UUT J2-1)   to W6 P1A-6E
From ID J1A-6E             to ID A1J14.19
From ID A1P14.19           to ID P13-88 (S202-19)
```

```
From ID P12-59 (S202-1)    to ID A1P11.38
From ID A1J11.38           to ID A1J10.10
From ID A1P10.10           to ID P11-177 (S509-1)
From ID P11-18 (S509-3)    to ID A1P9.19
From ID A1J9.19            to ID BUS 1

From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1

From W6 P2-1 (UUT J1-1)    to W6 P1B-14A
From ID J1B-14A            to ID A1J13.1
From ID A1P13.1            to ID P12-79 (S201-5)

From ID P12-20 (S201-3)    to ID A1P11.46
From ID A1J11.46           to ID A1J10.2
From ID A1P10.2            to ID P11-39 (S507-1)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2

From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2

See "POWER UP DCPS 28VDC"
```

Step 305 800Hz Voltage Test Point:

800Hz test point shall be measured. With 28.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with 28.0 ± 0.3 Vdc applied from J1-4 (HI) to J1-7(LO). PEAK loads applied as shown in Table 1, the DMM shall be used to measure the Test Point Voltage of the 800Hz pins J2-11 (HI) to J1-1 (LO). The measured output voltage shall be > 20 Vdc.

```
From W6 P3-A6 (UUT J2-11)  to W6 P1A-7E
From ID J1A-7E             to ID A1J14.21
From ID A1P14.21           to ID P13-90 (S202-26)

From ID P12-90 (S202-2)    to ID A1P11.36
From ID A1J11.36           to ID A1J10.12
From ID A1P10.12           to ID P11-242 (S509-2)
From ID P11-18 (S509-3)    to ID A1P9.19
From ID A1J9.19            to ID BUS 1

From ID P20-2 (DMM-HI)     to ID A1P15.49
```

```
From ID A1J15.49          to ID A1J8.28
From ID A1P8.28           to ID P10-203 (S503-1)
From ID P10-77 (S503-3)   to ID A1P6.13
From ID A1J6.13           to ID BUS 1

From W6 P2-1 (UUT J1-1)   to W6 P1B-14A
From ID J1B-14A           to ID A1J13.1
From ID A1P13.1           to ID P12-79 (S201-5)

From ID P12-20 (S201-3)   to ID A1P11.46
From ID A1J11.46          to ID A1J10.2
From ID A1P10.2           to ID P11-39 (S507-1)
From ID P11-72 (S507-4)   to ID A1P9.27
From ID A1J9.27           to ID BUS 2

From ID P20-3 (DMM-LO)    to ID A1P15.50
From ID A1J15.50          to ID A1J8.26
From ID A1P8.26           to ID P10-139 (S503-2)
From ID P10-12 (S503-4)   to ID A1P6.23
From ID A1J6.23           to ID BUS 2

See "APPLY 800HZ PEAK LOAD"

See "POWER UP UUT 28VDC"
```

Step 306 800Hz AC Supply Input Current with PEAK load:

800 Hz AC Supply Input current shall be measured. With 28.0 ± 0.2 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with 28.0 ± 0.2 Vdc applied from J1-4 (HI) to J1-7(LO). PEAK loads applied as shown in Table 1, the DMM shall be used to measure the input current. The measured input current to J1-4 shall be < 2 amperes.

```
See "POWER UP UUT 28VDC"
```

Step 307 800Hz AC Supply Output Voltage with PEAK load:

800 Hz AC Supply Output Voltage shall be measured. With 28.0 ± 0.2 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with 28.0 ± 0.2 Vdc applied from J1-4 (HI) to J1-7(LO). PEAK loads applied as shown in Table 1, the DMM shall be used to measure the Output Voltage of the AC Source at UUT pins J1-11 (HI) to J1-9 (LO). The measured output Voltage shall be 26 ± 0.8 Vrms.

```
From W6 P3-B2 (UUT J2-4)  to W6 P1A-8E
From ID J1A-8E            to ID A1J14.23
From ID A1P14.23          to ID P13-91 (S202-35)
From ID P12-59 (S202-1)   to ID A1P11.38
```

```
From ID A1J11.38          to ID A1J10.10
From ID A1P10.10          to ID P11-177 (S509-1)
From ID P11-18 (S509-3)   to ID A1P9.19
From ID A1J9.19           to ID BUS 1

From ID P19-1 (DSO-IN1)   to ID A1P17.1
From ID A1J17.1           to ID A1J6.1
From ID A1P6.1            to ID P10-177 (S504-1)
From ID P10-18 (S504-3)   to ID A1P6.15
From ID A1J6.15           to ID BUS 1

From W6 P2-1 (UUT J1-1)   to W6 P1B-14A
From ID J1B-14A           to ID A1J13.1
From ID A1P13.1           to ID P12-79 (S201-5)

From ID P12-20 (S201-3)   to ID A1P11.46
From ID A1J11.46          to ID A1J10.2
From ID A1P10.2           to ID P11-39 (S507-1)
From ID P11-72 (S507-4)   to ID A1P9.27
From ID A1J9.27           to ID BUS 2

From ID P20-3 (DMM-LO)    to ID A1P15.50
From ID A1J15.50          to ID A1J8.26
From ID A1P8.26           to ID P10-139 (S503-2)
From ID P10-12 (S503-4)   to ID A1P6.23
From ID A1J6.23           to ID BUS 2

See "APPLY 800HZ PEAK LOAD"

See "POWER UP UUT 28VDC"

From W6 P2-11 (UUT J1-11) to W6 P1A-1B
From ID J1A-1B            to ID A1J14.3
From ID A1P14.3           to ID P13-80 (S201-11)

From ID P12-16 (S201-1)   to ID A1P11.42
From ID A1J11.42          to ID A1J10.6
From ID A1P10.6           to ID P11-203 (S508-1)
From ID P11-77 (S508-3)   to ID A1P9.15
From ID A1J9.15           to ID BUS 1

From ID P20-2 (DMM-HI)    to ID A1P15.49
From ID A1J15.49          to ID A1J8.28
From ID A1P8.28           to ID P10-203 (S503-1)
From ID P10-77 (S503-3)   to ID A1P6.13
From ID A1J6.13           to ID BUS 1

From W6 P2-9 (UUT J1-9)   to W6 P1A-1A
From ID J1A-1A            to ID A1J14.1
From ID A1P14.1           to ID P13-47 (S201-9)

From ID P12-20 (S201-3)   to ID A1P11.46
```

```
From ID A1J11.46          to ID A1J10.2
From ID A1P10.2           to ID P11-39 (S507-1)
From ID P11-72 (S507-4)   to ID A1P9.27
From ID A1J9.27           to ID BUS 2

From ID P20-3 (DMM-LO)    to ID A1P15.50
From ID A1J15.50          to ID A1J8.26
From ID A1P8.26           to ID P10-139 (S503-2)
From ID P10-12 (S503-4)   to ID A1P6.23
From ID A1J6.23           to ID BUS 2
```

See "APPLY 800HZ PEAK LOAD"

See "POWER UP UUT 28VDC"

Step 308 800Hz AC Supply Output Voltage with NO load:

800 Hz AC Supply Output Voltage shall be measured. With 28.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with 28.0 ± 0.3 Vdc applied from J1-4 (HI) to J1-7(LO). NO load is applied. The DMM shall be used to measure the Output Voltage of the AC Source at UUT pins J1-11 (HI) to J1-9 (LO). The measured output Voltage shall be 26 ± 2 Vrms.

```
From W6 P2-11 (UUT J1-11) to W6 P1A-1B
From ID J1A-1B            to ID A1J14.3
From ID A1P14.3           to ID P13-80 (S201-11)

From ID P12-16 (S201-1)   to ID A1P11.42
From ID A1J11.42          to ID A1J10.6
From ID A1P10.6           to ID P11-203 (S508-1)
From ID P11-77 (S508-3)   to ID A1P9.15
From ID A1J9.15           to ID BUS 1

From ID P20-2 (DMM-HI)    to ID A1P15.49
From ID A1J15.49          to ID A1J8.28
From ID A1P8.28           to ID P10-203 (S503-1)
From ID P10-77 (S503-3)   to ID A1P6.13
From ID A1J6.13           to ID BUS 1

From W6 P2-9 (UUT J1-9)   to W6 P1A-1A
From ID J1A-1A            to ID A1J14.1
From ID A1P14.1           to ID P13-47 (S201-9)

From ID P12-20 (S201-3)   to ID A1P11.46
From ID A1J11.46          to ID A1J10.2
From ID A1P10.2           to ID P11-39 (S507-1)
From ID P11-72 (S507-4)   to ID A1P9.27
From ID A1J9.27           to ID BUS 2
```

```
From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2

See "POWER UP UUT 28VDC"
```

Step 309 800Hz AC Supply Output Frequency with PEAK load:

800 Hz AC Supply Output frequency shall be measured. With 28.0 ± 0.2 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with 28.0 ± 0.2 Vdc applied from J1-4 (HI) to J1-7(LO). PEAK loads applied as shown in Table 1, the frequency counter shall be used to measure the Output Frequency of the AC Source at UUT pins J1-11 (HI) to J1-9 (LO). The measured output frequency shall be between 776 Hz to 824 Hz.

```
From W6 P2-11 (UUT J1-11)  to W6 P1A-1B
From ID J1A-1B             to ID A1J14.3
From ID A1P14.3            to ID P13-80 (S201-11)

From ID P12-16 (S201-1)    to ID A1P11.42
From ID A1J11.42           to ID A1J10.6
From ID A1P10.6            to ID P11-203 (S508-1)
From ID P11-77 (S508-3)    to ID A1P9.15
From ID A1J9.15            to ID BUS 1

From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1

From W6 P2-9 (UUT J1-9)    to W6 P1A-1A
From ID J1A-1A             to ID A1J14.1
From ID A1P14.1            to ID P13-47 (S201-9)

From ID P12-20 (S201-3)    to ID A1P11.46
From ID A1J11.46           to ID A1J10.2
From ID A1P10.2            to ID P11-39 (S507-1)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2

From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2
```

See "APPLY 800HZ PEAK LOAD"

See "POWER UP UUT 28VDC"

Step 310 800Hz AC Supply Input Current with MAX load:

800 Hz AC Supply Input current shall be measured. With 28.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with 28.0 ± 0.3 Vdc applied from J1-4 (HI) to J1-7(LO). MAX loads applied as shown in Table 1, the DMM shall be used to measure the input current. The measured input current to J1-4 shall be < 2.0 amperes.

See "POWER UP UUT 28VDC"

Step 311 800Hz AC Supply Blocking Diode Test:

800Hz AC Supply Blocking Diode presence shall be verified. With 28.0 ± 0.2 Vdc input voltage applied from J1-4 (HI) to J1-7 (LO), the DMM shall be used to measure the Voltage present at UUT pins J1-4 (HI) to J2-11 (LO). The measured output voltage shall be 0.6 to 1.2 Vdc.

From W6 P2-4 (UUT J1-4)	to W6 P1B-3D
From ID J1B-3D	to ID A1J2.16
From ID A1P2.16	to ID P10-154 (S101-19)
From ID P10-218 (S101-20)	to ID A1P2.32
From ID A1J2.32	to ID A1J7.2
From ID A1P7.2	to ID P10-199 (S301-41)
From ID P10-41 (S301-42)	to ID A1P8.30
From ID A1J8.30	to ID A1J15.49
From ID A1P15.49	to ID P20-2 (DMM-HI)
From W6 P3-A6 (UUT J2-11)	to W6 P1A-7E
From ID J1A-7E	to ID A1J14.21
From ID A1P14.21	to ID P13-90 (S202-26)
From ID P13-29 (S202-4)	to ID A1P13.50
From ID A1J13.50	to ID A1J10.50
From ID A1P10.50	to ID P11-244 (S510-2)
From ID P11-147 (S510-4)	to ID A1P9.31
From ID A1J9.31	to ID BUS 2
From ID P20-3 (DMM-LO)	to ID A1P15.50
From ID A1J15.50	to ID A1J8.26
From ID A1P8.26	to ID P10-139 (S503-2)
From ID P10-12 (S503-4)	to ID A1P6.23
From ID A1J6.23	to ID BUS 2

See "APPLY 800HZ PEAK LOAD"

See "POWER UP UUT 28VDC"

2.8 MODULE 4 - DCPS VOLTAGE RANGE EXTREMES

Refer to Reference Drawings when diagnosing connection paths.
Refer to Table 1 on page 69.

Step 401 DCPS Input Current with High Input Voltage and PEAK load:

DCPS Input current shall be measured. With 30.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with PEAK loads applied as shown in Table 1, the DMM shall be used to measure the input current. The measured input current to J1-5 shall be < 1.0 amperes.

See "POWER UP DCPS 30VDC"

Step 402 DCPS Output Voltage (+15v) with High Input Voltage and PEAK load:

DCPS output voltage shall be measured. With 30.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with PEAK loads applied as shown in Table 1, the DMM shall be used to measure the Output Voltage of the DCPS at UUT pins J1-6 (HI) to J1-1 (LO). The measured output voltage shall be 15 +/- 0.6Vdc.

From W6 P2-6 (UUT J1-6)	to W6 P1B-13B
From ID J1B-13B	to ID A1J13.4
From ID A1P13.4	to ID P12-13 (S201-8)
From ID P12-80 (S201-2)	to ID A1P11.40
From ID A1J11.40	to ID A1J10.8
From ID A1P10.8	to ID P11-139 (S508-2)
From ID P11-77 (S508-3)	to ID A1P9.15
From ID A1J9.15	to ID BUS 1
From ID P20-2 (DMM-HI)	to ID A1P15.49
From ID A1J15.49	to ID A1J8.28
From ID A1P8.28	to ID P10-203 (S503-1)
From ID P10-77 (S503-3)	to ID A1P6.13
From ID A1J6.13	to ID BUS 1
From W6 P2-1 (UUT J1-1)	to W6 P1B-14A
From ID J1B-14A	to ID A1J13.1
From ID A1P13.1	to ID P12-79 (S201-5)
From ID P12-20 (S201-3)	to ID A1P11.46

```
From ID A1J11.46          to ID A1J10.2
From ID A1P10.2           to ID P11-39 (S507-1)
From ID P11-72 (S507-4)   to ID A1P9.27
From ID A1J9.27           to ID BUS 2

From ID P20-3 (DMM-LO)    to ID A1P15.50
From ID A1J15.50          to ID A1J8.26
From ID A1P8.26           to ID P10-139 (S503-2)
From ID P10-12 (S503-4)   to ID A1P6.23
From ID A1J6.23           to ID BUS 2

See "APPLY DCPS PEAK LOAD"

See "POWER UP DCPS 30VDC"
```

Step 403 DCPS Output Voltage (-15v) with High Input Voltage and PEAK load:

DCPS output voltage shall be measured. With 30.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with PEAK loads applied as shown in Table 1, the DMM shall be used to measure the Output Voltage of the DCPS at UUT pins J1-3 (HI) to J1-1 (LO). The measured output voltage shall be -15 +/- 0.6Vdc.

```
From W6 P2-3 (UUT J1-3)  to W6 P1B-14B
From ID J1B-14B            to ID A1J13.3
From ID A1P13.3            to ID P12-46 (S201-7)

From ID P12-16 (S201-1)    to ID A1P11.42
From ID A1J11.42           to ID A1J10.6
From ID A1P10.6            to ID P11-203 (S508-1)
From ID P11-77 (S508-3)    to ID A1P9.15
From ID A1J9.15            to ID BUS 1

From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1

From W6 P2-1 (UUT J1-1)    to W6 P1B-14A
From ID J1B-14A            to ID A1J13.1
From ID A1P13.1            to ID P12-79 (S201-5)

From ID P12-20 (S201-3)    to ID A1P11.46
From ID A1J11.46           to ID A1J10.2
From ID A1P10.2            to ID P11-39 (S507-1)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2
```

```
From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2
```

See "APPLY DCPS PEAK LOAD"

See "POWER UP DCPS 30VDC"

Step 404 DCPS (+15V) Output Voltage at High input Voltage and MAX load:

DCPS output voltage shall be measured. With 35.0 ± 0.4 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with MAX loads applied as shown in Table 1, the DMM shall be used to measure the Output Voltage of the DCPS at UUT pins J1-6 (HI) to J1-1 (LO). The measured output voltage shall be 15 +/- 0.6Vdc.

```
From W6 P2-6 (UUT J1-6)    to W6 P1B-13B
From ID J1B-13B            to ID A1J13.4
From ID A1P13.4            to ID P12-13 (S201-8)

From ID P12-80 (S201-2)    to ID A1P11.40
From ID A1J11.40           to ID A1J10.8
From ID A1P10.8            to ID P11-139 (S508-2)
From ID P11-77 (S508-3)    to ID A1P9.15
From ID A1J9.15            to ID BUS 1

From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1

From W6 P2-1 (UUT J1-1)    to W6 P1B-14A
From ID J1B-14A            to ID A1J13.1
From ID A1P13.1            to ID P12-79 (S201-5)

From ID P12-20 (S201-3)    to ID A1P11.46
From ID A1J11.46           to ID A1J10.2
From ID A1P10.2            to ID P11-39 (S507-1)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2

From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2
```

See "APPLY DCPS MAX LOAD"

See "POWER UP DCPS 35VDC"

Step 405 DCPS (-15V) Output Voltage at High input Voltage and MAX load:

DCPS output voltage shall be measured. With 35.0 ± 0.4 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with MAX loads applied as shown in Table 1, the DMM shall be used to measure the Output Voltage of the DCPS at UUT pins J1-3 (HI) to J1-1 (LO). The measured output voltage shall be -15 +/- 0.6Vdc.

From W6 P2-3 (UUT J1-3)	to W6 P1B-14B
From ID J1B-14B	to ID A1J13.3
From ID A1P13.3	to ID P12-46 (S201-7)
From ID P12-16 (S201-1)	to ID A1P11.42
From ID A1J11.42	to ID A1J10.6
From ID A1P10.6	to ID P11-203 (S508-1)
From ID P11-77 (S508-3)	to ID A1P9.15
From ID A1J9.15	to ID BUS 1
From ID P20-2 (DMM-HI)	to ID A1P15.49
From ID A1J15.49	to ID A1J8.28
From ID A1P8.28	to ID P10-203 (S503-1)
From ID P10-77 (S503-3)	to ID A1P6.13
From ID A1J6.13	to ID BUS 1
From W6 P2-1 (UUT J1-1)	to W6 P1B-14A
From ID J1B-14A	to ID A1J13.1
From ID A1P13.1	to ID P12-79 (S201-5)
From ID P12-20 (S201-3)	to ID A1P11.46
From ID A1J11.46	to ID A1J10.2
From ID A1P10.2	to ID P11-39 (S507-1)
From ID P11-72 (S507-4)	to ID A1P9.27
From ID A1J9.27	to ID BUS 2
From ID P20-3 (DMM-LO)	to ID A1P15.50
From ID A1J15.50	to ID A1J8.26
From ID A1P8.26	to ID P10-139 (S503-2)
From ID P10-12 (S503-4)	to ID A1P6.23
From ID A1J6.23	to ID BUS 2

See "APPLY DCPS MAX LOAD"

See "POWER UP DCPS 35VDC"

Step 406 DCPS (+15V) Output Voltage at Low input Voltage and MAX load:

DCPS output voltage shall be measured. With 15.0 ± 0.1 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with MAX loads applied as shown in Table 1, the DMM shall be used to measure the Output Voltage of the DCPS at UUT pins J1-6 (HI) to J1-1 (LO). The measured output voltage shall be 15 +/- 3Vdc.

From W6 P2-6 (UUT J1-6)	to W6 P1B-13B
From ID J1B-13B	to ID A1J13.4
From ID A1P13.4	to ID P12-13 (S201-8)
From ID P12-80 (S201-2)	to ID A1P11.40
From ID A1J11.40	to ID A1J10.8
From ID A1P10.8	to ID P11-139 (S508-2)
From ID P11-77 (S508-3)	to ID A1P9.15
From ID A1J9.15	to ID BUS 1
From ID P20-2 (DMM-HI)	to ID A1P15.49
From ID A1J15.49	to ID A1J8.28
From ID A1P8.28	to ID P10-203 (S503-1)
From ID P10-77 (S503-3)	to ID A1P6.13
From ID A1J6.13	to ID BUS 1
From W6 P2-1 (UUT J1-1)	to W6 P1B-14A
From ID J1B-14A	to ID A1J13.1
From ID A1P13.1	to ID P12-79 (S201-5)
From ID P12-20 (S201-3)	to ID A1P11.46
From ID A1J11.46	to ID A1J10.2
From ID A1P10.2	to ID P11-39 (S507-1)
From ID P11-72 (S507-4)	to ID A1P9.27
From ID A1J9.27	to ID BUS 2
From ID P20-3 (DMM-LO)	to ID A1P15.50
From ID A1J15.50	to ID A1J8.26
From ID A1P8.26	to ID P10-139 (S503-2)
From ID P10-12 (S503-4)	to ID A1P6.23
From ID A1J6.23	to ID BUS 2

See "APPLY DCPS MAX LOAD"

See "POWER UP DCPS 15VDC"

Step 407 DCPS (-15V) Output Voltage at Low input Voltage and MAX load:

DCPS output voltage shall be measured. With 15.0 ± 0.1 Vdc

input voltage applied from J1-5 (HI) to J1-7 (LO) and with MAX loads applied as shown in Table 1, the DMM shall be used to measure the Output Voltage of the DCPS at UUT pins J1-3 (HI) to J1-1 (LO). The measured output voltage shall be -15 +/- 3Vdc.

```
From W6 P2-3 (UUT J1-3)    to W6 P1B-14B
From ID J1B-14B            to ID A1J13.3
From ID A1P13.3            to ID P12-46 (S201-7)

From ID P12-16 (S201-1)    to ID A1P11.42
From ID A1J11.42           to ID A1J10.6
From ID A1P10.6            to ID P11-203 (S508-1)
From ID P11-77 (S508-3)    to ID A1P9.15
From ID A1J9.15            to ID BUS 1

From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1

From W6 P2-1 (UUT J1-1)    to W6 P1B-14A
From ID J1B-14A            to ID A1J13.1
From ID A1P13.1            to ID P12-79 (S201-5)

From ID P12-20 (S201-3)    to ID A1P11.46
From ID A1J11.46           to ID A1J10.2
From ID A1P10.2            to ID P11-39 (S507-1)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2

From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2

See "APPLY DCPS MAX LOAD"

See "POWER UP DCPS 15VDC"
```

2.9 MODULE 5 - 800HZ AC VOLTAGE RANGE EXTREME

Refer to Reference Drawings when diagnosing connection paths.
Refer to Table 1 on page 69.

Step 501 800Hz AC Supply Input Current with High Input Voltage and PEAK load:

800 Hz AC Supply Input current shall be measured. With 30.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with 30.0 ± 0.3 Vdc applied from J1-4 (HI) to J1-7(LO). PEAK loads applied as shown in Table 1, the DMM shall be used to measure the input current. The measured input current to J1-4 shall be < 2.4 amperes.

See "POWER UP UUT 30VDC"

Step 502 800Hz AC Supply Output Voltage with High Input Voltage and PEAK load:

800 Hz AC Supply Output Voltage shall be measured. With 30.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with 30.0 ± 0.3 Vdc applied from J1-4 (HI) to J1-7(LO). PEAK loads applied as shown in Table 1, the DMM shall be used to measure the Output Voltage of the AC Source at UUT pins J1-11 (HI) to J1-9 (LO). The measured output Voltage shall be 26 ± 0.8 Vrms.

From W6 P2-11 (UUT J1-11) to W6 P1A-1B
From ID J1A-1B to ID A1J14.3
From ID A1P14.3 to ID P13-80 (S201-11)

From ID P12-16 (S201-1) to ID A1P11.42
From ID A1J11.42 to ID A1J10.6
From ID A1P10.6 to ID P11-203 (S508-1)
From ID P11-77 (S508-3) to ID A1P9.15
From ID A1J9.15 to ID BUS 1

From ID P20-2 (DMM-HI) to ID A1P15.49
From ID A1J15.49 to ID A1J8.28
From ID A1P8.28 to ID P10-203 (S503-1)
From ID P10-77 (S503-3) to ID A1P6.13
From ID A1J6.13 to ID BUS 1

From W6 P2-9 (UUT J1-9) to W6 P1A-1A
From ID J1A-1A to ID A1J14.1
From ID A1P14.1 to ID P13-47 (S201-9)

From ID P12-20 (S201-3) to ID A1P11.46
From ID A1J11.46 to ID A1J10.2
From ID A1P10.2 to ID P11-39 (S507-1)
From ID P11-72 (S507-4) to ID A1P9.27
From ID A1J9.27 to ID BUS 2

From ID P20-3 (DMM-LO) to ID A1P15.50
From ID A1J15.50 to ID A1J8.26
From ID A1P8.26 to ID P10-139 (S503-2)
From ID P10-12 (S503-4) to ID A1P6.23

From ID A1J6.23 to ID BUS 2

See "APPLY 800HZ PEAK LOAD"

See "POWER UP UUT 30VDC"

Step 503 800Hz AC Supply Output Frequency with High Vin and PEAK load:

800 Hz AC Supply Output Voltage shall be measured. With 30.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with 30.0 ± 0.3 Vdc applied from J1-4 (HI) to J1-7(LO). PEAK loads applied as shown in Table 1, the frequency counter shall be used to measure the Output Frequency of the AC Source at UUT pins J1-11 (HI) to J1-9 (LO). The measured output frequency shall be between 776 Hz to 824 Hz.

From W6 P2-11 (UUT J1-11) to W6 P1A-1B
From ID J1A-1B to ID A1J14.3
From ID A1P14.3 to ID P13-80 (S201-11)

From ID P12-16 (S201-1) to ID A1P11.42
From ID A1J11.42 to ID A1J10.6
From ID A1P10.6 to ID P11-203 (S508-1)
From ID P11-77 (S508-3) to ID A1P9.15
From ID A1J9.15 to ID BUS 1

From ID P20-2 (DMM-HI) to ID A1P15.49
From ID A1J15.49 to ID A1J8.28
From ID A1P8.28 to ID P10-203 (S503-1)
From ID P10-77 (S503-3) to ID A1P6.13
From ID A1J6.13 to ID BUS 1

From W6 P2-9 (UUT J1-9) to W6 P1A-1A
From ID J1A-1A to ID A1J14.1
From ID A1P14.1 to ID P13-47 (S201-9)

From ID P12-20 (S201-3) to ID A1P11.46
From ID A1J11.46 to ID A1J10.2
From ID A1P10.2 to ID P11-39 (S507-1)
From ID P11-72 (S507-4) to ID A1P9.27
From ID A1J9.27 to ID BUS 2

From ID P20-3 (DMM-LO) to ID A1P15.50
From ID A1J15.50 to ID A1J8.26
From ID A1P8.26 to ID P10-139 (S503-2)
From ID P10-12 (S503-4) to ID A1P6.23
From ID A1J6.23 to ID BUS 2

See "APPLY 800HZ PEAK LOAD"

See "POWER UP UUT 30VDC"

Step 504 800Hz AC Supply Output Voltage Shutdown with High Input Voltage and MAX Load:

800 Hz AC Supply Output Voltage shall be measured. With 28.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with 28.0 ± 0.3 Vdc applied from J1-4 (HI) to J1-7(LO) and MAX loads applied as shown in Table 1, the DMM shall be used to measure the Output Voltage of the AC Source at UUT pins J1-11 (HI) to J1-9 (LO). The measured output Voltage shall be 26 ± 0.8 Vrms.

Next increase the DC input supply Voltage (SLOWLY!) and monitor it at UUT pins J1-5 (HI) and J1-7 (LO) while also monitoring using the DMM, AC Source at UUT pins J1-11 (HI) to J1-9 (LO). The measured input Voltage at which point the AC output shuts off is <= 41.4 Vdc.

NOTE!! DO NOT EXCEED 41.4 Vdc while verifying this result.

From W6 P2-11 (UUT J1-11)	to W6 P1A-1B
From ID J1A-1B	to ID A1J14.3
From ID A1P14.3	to ID P13-80 (S201-11)
From ID P12-16 (S201-1)	to ID A1P11.42
From ID A1J11.42	to ID A1J10.6
From ID A1P10.6	to ID P11-203 (S508-1)
From ID P11-77 (S508-3)	to ID A1P9.15
From ID A1J9.15	to ID BUS 1
From ID P20-2 (DMM-HI)	to ID A1P15.49
From ID A1J15.49	to ID A1J8.28
From ID A1P8.28	to ID P10-203 (S503-1)
From ID P10-77 (S503-3)	to ID A1P6.13
From ID A1J6.13	to ID BUS 1
From W6 P2-9 (UUT J1-9)	to W6 P1A-1A
From ID J1A-1A	to ID A1J14.1
From ID A1P14.1	to ID P13-47 (S201-9)
From ID P12-20 (S201-3)	to ID A1P11.46
From ID A1J11.46	to ID A1J10.2
From ID A1P10.2	to ID P11-39 (S507-1)
From ID P11-72 (S507-4)	to ID A1P9.27
From ID A1J9.27	to ID BUS 2
From ID P20-3 (DMM-LO)	to ID A1P15.50
From ID A1J15.50	to ID A1J8.26
From ID A1P8.26	to ID P10-139 (S503-2)

```
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2

See "APPLY 800HZ MAX LOAD"

See "POWER UP UUT 30VDC"
```

Step 505 800Hz AC Supply Output Voltage with Low Input Voltage and MAX load:

800 Hz AC Supply Output Voltage shall be measured. With 15.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with 15.0 ± 0.3 Vdc applied from J1-4 (HI) to J1-7(LO). PEAK loads applied as shown in Table 1, the DMM shall be used to measure the Output Voltage of the AC Source at UUT pins J1-11 (HI) to J1-9 (LO). The measured output Voltage shall be 15 Vrms to 26.8 Vrms.

```
From W6 P2-11 (UUT J1-11)  to W6 P1A-1B
From ID J1A-1B             to ID A1J14.3
From ID A1P14.3            to ID P13-80 (S201-11)

From ID P12-16 (S201-1)    to ID A1P11.42
From ID A1J11.42           to ID A1J10.6
From ID A1P10.6            to ID P11-203 (S508-1)
From ID P11-77 (S508-3)    to ID A1P9.15
From ID A1J9.15            to ID BUS 1

From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1

From W6 P2-9 (UUT J1-9)    to W6 P1A-1A
From ID J1A-1A             to ID A1J14.1
From ID A1P14.1            to ID P13-47 (S201-9)

From ID P12-20 (S201-3)    to ID A1P11.46
From ID A1J11.46           to ID A1J10.2
From ID A1P10.2            to ID P11-39 (S507-1)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2

From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2

See "APPLY 800HZ MAX LOAD"
```

See "POWER UP UUT 15VDC"

2.10 MODULE 6 - OUTPUT OVERLOAD TESTS

Refer to Reference Drawings when diagnosing connection paths.
Refer to Table 1 on page 69.

Step 601 DCPS Output Voltage Overload (+15v):

DCPS output voltage shall be measured. With 28.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with MAX loads applied as shown in Table 1, the DMM shall be used to measure the Output Voltage of the DCPS at UUT pins J1-6 (HI) to J1-1 (LO). The measured output voltage shall be 15 +/- 0.6Vdc.

Next apply 0 Ohm load to the Output of the DCPS at UUT pins J1-6 (HI) to J1-1 (LO) in parallel with the MAX load.

The power supply shall shut down.

Next remove the 0 Ohm Load in step above (leaving the MAX load). The measured output voltage shall be 15 +/- 0.6Vdc.

```
From W6 P2-6 (UUT J1-6)  to W6 P1B-13B
From ID J1B-13B            to ID A1J13.4
From ID A1P13.4            to ID P12-13 (S201-8)

From ID P12-80 (S201-2)    to ID A1P11.40
From ID A1J11.40           to ID A1J10.8
From ID A1P10.8            to ID P11-139 (S508-2)
From ID P11-77 (S508-3)    to ID A1P9.15
From ID A1J9.15            to ID BUS 1

From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1

From W6 P2-1 (UUT J1-1)    to W6 P1B-14A
From ID J1B-14A            to ID A1J13.1
From ID A1P13.1            to ID P12-79 (S201-5)

From ID P12-20 (S201-3)    to ID A1P11.46
From ID A1J11.46           to ID A1J10.2
From ID A1P10.2            to ID P11-39 (S507-1)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2
```

```
From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2

See "APPLY DCPS MAX LOAD"

See "POWER UP DCPS 28VDC"

From W6 P2-6 (UUT J1-6)    to W6 P1B-2D
From W6 P2-18 (UUT J1-18)  to W6 P1B-3C
From W6 P2-19 (UUT J1-19)  to W6 P1B-2C
From ID J1B-2D             to ID R34.1
From ID J1B-3C             to ID R31.1
From ID J1B-2C             to ID R28.1
From ID R34.2              to ID Q5.2
From ID R31.2              to ID Q4.2
From ID R28.2              to ID Q3.2
From ID P1-4 (DC2-HI)      to ID A1P1.2
From ID A1J1.2             to +15V
From +15V                  to ID A1J11.41
From ID A1P11.41           to ID P11.9 (S301-149)
From ID P11.138 (S301-150) to ID A1P11.43
From ID A1J11.43           to ID R27.1
From ID A1J11.43           to ID R30.1
From ID A1J11.43           to ID R33.1
From ID R27.2              to ID Q3.1
From ID R30.2              to ID Q4.1
From ID R33.2              to ID Q5.1
From ID Q3.1               to ID R26.1
From ID Q4.1               to ID R29.1
From ID Q5.1               to ID R32.1
From ID R26.2              to GROUND
From ID R29.2              to GROUND
From ID R32.2              to GROUND
From ID Q3.3               to GROUND
From ID Q4.3               to GROUND
From ID Q5.3               to GROUND
```

Step 602 DCPS Output Voltage Overload (-15v):

DCPS output voltage shall be measured. With 28.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with MAX loads applied as shown in Table 1, the DMM shall be used to measure the Output Voltage of the DCPS at UUT pins J1-3 (HI) to J1-1 (LO). The measured output voltage shall be -15 +/- 0.6Vdc.

Next apply 0 Ohm load to the Output of the DCPS at UUT pins J1-3 (HI) to J1-1 (LO) in parallel with the MAX load.

The power supply shall shut down

Next remove the 0 Ohm Load in step above (leaving the MAX load). The measured output voltage shall be -15 +/- 0.6Vdc.

From W6 P2-3 (UUT J1-3)	to W6 P1B-14B
From ID J1B-14B	to ID A1J13.3
From ID A1P13.3	to ID P12-46 (S201-7)
From ID P12-16 (S201-1)	to ID A1P11.42
From ID A1J11.42	to ID A1J10.6
From ID A1P10.6	to ID P11-203 (S508-1)
From ID P11-77 (S508-3)	to ID A1P9.15
From ID A1J9.15	to ID BUS 1
From ID P20-2 (DMM-HI)	to ID A1P15.49
From ID A1J15.49	to ID A1J8.28
From ID A1P8.28	to ID P10-203 (S503-1)
From ID P10-77 (S503-3)	to ID A1P6.13
From ID A1J6.13	to ID BUS 1
From W6 P2-1 (UUT J1-1)	to W6 P1B-14A
From ID J1B-14A	to ID A1J13.1
From ID A1P13.1	to ID P12-79 (S201-5)
From ID P12-20 (S201-3)	to ID A1P11.46
From ID A1J11.46	to ID A1J10.2
From ID A1P10.2	to ID P11-39 (S507-1)
From ID P11-72 (S507-4)	to ID A1P9.27
From ID A1J9.27	to ID BUS 2
From ID P20-3 (DMM-LO)	to ID A1P15.50
From ID A1J15.50	to ID A1J8.26
From ID A1P8.26	to ID P10-139 (S503-2)
From ID P10-12 (S503-4)	to ID A1P6.23
From ID A1J6.23	to ID BUS 2

See "APPLY DCPS MAX LOAD"

See "POWER UP DCPS 28VDC"

From W6 P2-3 (UUT J1-3)	to W6 P1B-2E
From W6 P2-15 (UUT J1-15)	to W6 P1B-2B
From W6 P2-16 (UUT J1-16)	to W6 P1B-4D
From ID J1B-2E	to ID Q7.3
From ID J1B-2B	to ID Q6.3
From ID J1B-4D	to ID Q8.3
From ID Q6.2	to ID R37.2
From ID Q7.2	to ID R40.2
From ID Q8.2	to ID R43.2
From ID R37.1	to GROUND

From ID R40.1	to GROUND
From ID R43.1	to GROUND
From ID P1-16 (DC6-HI)	to ID A1P1.15
From ID A1J1.15	to -15V
From -15V	to ID R35.1
From -15V	to ID R38.1
From -15V	to ID R41.1
From ID R35.2	to ID Q6.1
From ID R38.2	to ID Q7.1
From ID R41.2	to ID Q8.1
From ID P1-4 (DC2-HI)	to ID A1P1.2
From ID A1J1.2	to +15V
From +15V	to ID A1J11.42
From ID A1P11.42	to ID P11.106 (S301-151)
From ID P11.75 (S301-152)	to ID A1P11.44
From ID A1J11.44	to ID R36.1
From ID A1J11.44	to ID R39.1
From ID A1J11.44	to ID R42.1
From ID R36.2	to ID Q6.1
From ID R39.2	to ID Q7.1
From ID R42.2	to ID Q8.1

Step 603 800Hz AC Supply Output Overload Test:

800 Hz AC Supply Output Voltage shall be measured. With 28.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with 28.0 ± 0.3 Vdc applied from J1-4 (HI) to J1-7(LO). MAX load is applied as shown in Table 1. The DMM shall be used to measure the Output Voltage of the AC Source at UUT pins J1-11 (HI) to J1-9 (LO). The measured output Voltage shall be 26 ± 2 Vrms.

Next apply PEAK load to the Output of the 800 Hz output at UUT pins J1-1 (HI) to J1-9 (LO) in parallel with the MAX load.

The 800 Hz AC source shut down and shall be 0 ± 0.2 Vrms.

Next Remove the PEAK Load in step above (leaving the MAX load). The measured output Voltage shall be 26 ± 2 Vrms.

From W6 P2-11 (UUT J1-11)	to W6 P1A-1B
From ID J1A-1B	to ID A1J14.3
From ID A1P14.3	to ID P13-80 (S201-11)
From ID P12-16 (S201-1)	to ID A1P11.42
From ID A1J11.42	to ID A1J10.6
From ID A1P10.6	to ID P11-203 (S508-1)
From ID P11-77 (S508-3)	to ID A1P9.15
From ID A1J9.15	to ID BUS 1

```
From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1

From W6 P2-9 (UUT J1-9)    to W6 P1A-1A
From ID J1A-1A             to ID A1J14.1
From ID A1P14.1            to ID P13-47 (S201-9)

From ID P12-20 (S201-3)    to ID A1P11.46
From ID A1J11.46           to ID A1J10.2
From ID A1P10.2            to ID P11-39 (S507-1)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2

From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2

See "APPLY 800HZ MAX LOAD"

See "POWER UP UUT 28VDC"

See "APPLY 800HZ PEAK LOAD"
```

2.11 MODULE 7 - FINAL POST VERIFICATION CHECK

Refer to Reference Drawings when diagnosing connection paths.
Refer to Table 1 on page 69.

Step 701 DCPS Input Current with MAX load:

DCPS Input current shall be measured. With 28.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with MAX loads applied as shown in Table 1, the DMM shall be used to measure the input current. The measured input current to J1-5 shall be < 0.8 amperes.

```
See "POWER UP DCPS 28VDC"
```

Step 702 DCPS Output Voltage (+15v) with MAX load:

DCPS output voltage shall be measured. With 28.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with MAX loads applied as shown in Table 1, the DMM shall be used to measure the Output Voltage of the DCPS at UUT pins J1-6 (HI) to J1-1 (LO). The measured output voltage shall

be 15 +/- 0.6Vdc.

From W6 P2-6 (UUT J1-6)	to W6 P1B-13B
From ID J1B-13B	to ID A1J13.4
From ID A1P13.4	to ID P12-13 (S201-8)
From ID P12-80 (S201-2)	to ID A1P11.40
From ID A1J11.40	to ID A1J10.8
From ID A1P10.8	to ID P11-139 (S508-2)
From ID P11-77 (S508-3)	to ID A1P9.15
From ID A1J9.15	to ID BUS 1
From ID P20-2 (DMM-HI)	to ID A1P15.49
From ID A1J15.49	to ID A1J8.28
From ID A1P8.28	to ID P10-203 (S503-1)
From ID P10-77 (S503-3)	to ID A1P6.13
From ID A1J6.13	to ID BUS 1
From W6 P2-1 (UUT J1-1)	to W6 P1B-14A
From ID J1B-14A	to ID A1J13.1
From ID A1P13.1	to ID P12-79 (S201-5)
From ID P12-20 (S201-3)	to ID A1P11.46
From ID A1J11.46	to ID A1J10.2
From ID A1P10.2	to ID P11-39 (S507-1)
From ID P11-72 (S507-4)	to ID A1P9.27
From ID A1J9.27	to ID BUS 2
From ID P20-3 (DMM-LO)	to ID A1P15.50
From ID A1J15.50	to ID A1J8.26
From ID A1P8.26	to ID P10-139 (S503-2)
From ID P10-12 (S503-4)	to ID A1P6.23
From ID A1J6.23	to ID BUS 2

See "APPLY DCPS MAX LOAD"

See "POWER UP DCPS 28VDC"

Step 703 DCPS Output Voltage (-15v) with MAX load:

DCPS output voltage shall be measured. With 28.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with MAX loads applied as shown in Table 1, the DMM shall be used to measure the Output Voltage of the DCPS at UUT pins J1-3 (HI) to J1-1 (LO). The measured output voltage shall be -15 +/- 0.6Vdc.

From W6 P2-3 (UUT J1-3)	to W6 P1B-14B
From ID J1B-14B	to ID A1J13.3
From ID A1P13.3	to ID P12-46 (S201-7)

```
From ID P12-16 (S201-1)    to ID A1P11.42
From ID A1J11.42           to ID A1J10.6
From ID A1P10.6            to ID P11-203 (S508-1)
From ID P11-77 (S508-3)    to ID A1P9.15
From ID A1J9.15            to ID BUS 1

From ID P20-2 (DMM-HI)     to ID A1P15.49
From ID A1J15.49           to ID A1J8.28
From ID A1P8.28            to ID P10-203 (S503-1)
From ID P10-77 (S503-3)    to ID A1P6.13
From ID A1J6.13            to ID BUS 1

From W6 P2-1 (UUT J1-1)    to W6 P1B-14A
From ID J1B-14A            to ID A1J13.1
From ID A1P13.1            to ID P12-79 (S201-5)

From ID P12-20 (S201-3)    to ID A1P11.46
From ID A1J11.46           to ID A1J10.2
From ID A1P10.2            to ID P11-39 (S507-1)
From ID P11-72 (S507-4)    to ID A1P9.27
From ID A1J9.27            to ID BUS 2

From ID P20-3 (DMM-LO)     to ID A1P15.50
From ID A1J15.50           to ID A1J8.26
From ID A1P8.26            to ID P10-139 (S503-2)
From ID P10-12 (S503-4)    to ID A1P6.23
From ID A1J6.23            to ID BUS 2

See "APPLY DCPS MAX LOAD"

See "POWER UP DCPS 28VDC"
```

Step 704 800Hz AC Supply Input Current with MAX load:

800 Hz AC Supply Input current shall be measured. With 28.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with 28.0 ± 0.3 Vdc applied from J1-4 (HI) to J1-7(LO). MAX loads applied as shown in Table 1, the DMM shall be used to measure the input current. The measured input current to J1-4 shall be < 2.0 amperes.

```
See "POWER UP UUT 28VDC"
```

Step 705 800Hz AC Supply Output Voltage with MAX load:

800 Hz AC Supply Output Voltage shall be measured. With 28.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with 28.0 ± 0.3 Vdc applied from J1-4 (HI) to J1-7(LO). MAX loads applied as shown in Table 1, the DMM shall be used to measure the Output Voltage of the AC Source at

UUT pins J1-11 (HI) to J1-9 (LO). The measured output Voltage shall be 26 ± 0.8 Vrms.

From W6 P2-11 (UUT J1-11)	to W6 P1A-1B
From ID J1A-1B	to ID A1J14.3
From ID A1P14.3	to ID P13-80 (S201-11)
From ID P12-16 (S201-1)	to ID A1P11.42
From ID A1J11.42	to ID A1J10.6
From ID A1P10.6	to ID P11-203 (S508-1)
From ID P11-77 (S508-3)	to ID A1P9.15
From ID A1J9.15	to ID BUS 1
From ID P20-2 (DMM-HI)	to ID A1P15.49
From ID A1J15.49	to ID A1J8.28
From ID A1P8.28	to ID P10-203 (S503-1)
From ID P10-77 (S503-3)	to ID A1P6.13
From ID A1J6.13	to ID BUS 1
From W6 P2-9 (UUT J1-9)	to W6 P1A-1A
From ID J1A-1A	to ID A1J14.1
From ID A1P14.1	to ID P13-47 (S201-9)
From ID P12-20 (S201-3)	to ID A1P11.46
From ID A1J11.46	to ID A1J10.2
From ID A1P10.2	to ID P11-39 (S507-1)
From ID P11-72 (S507-4)	to ID A1P9.27
From ID A1J9.27	to ID BUS 2
From ID P20-3 (DMM-LO)	to ID A1P15.50
From ID A1J15.50	to ID A1J8.26
From ID A1P8.26	to ID P10-139 (S503-2)
From ID P10-12 (S503-4)	to ID A1P6.23
From ID A1J6.23	to ID BUS 2

See "APPLY 800HZ MAX LOAD"

See "POWER UP UUT 28VDC"

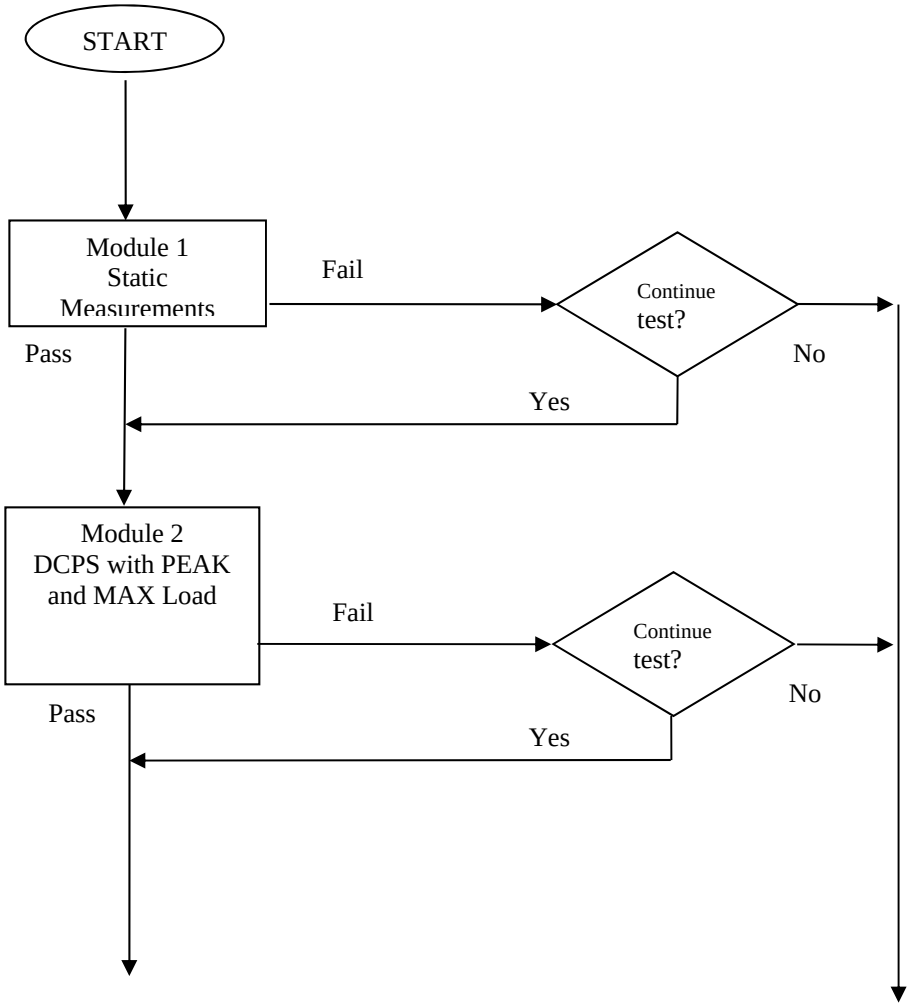
Step 706 800Hz AC Supply Output Frequency with MAX load:

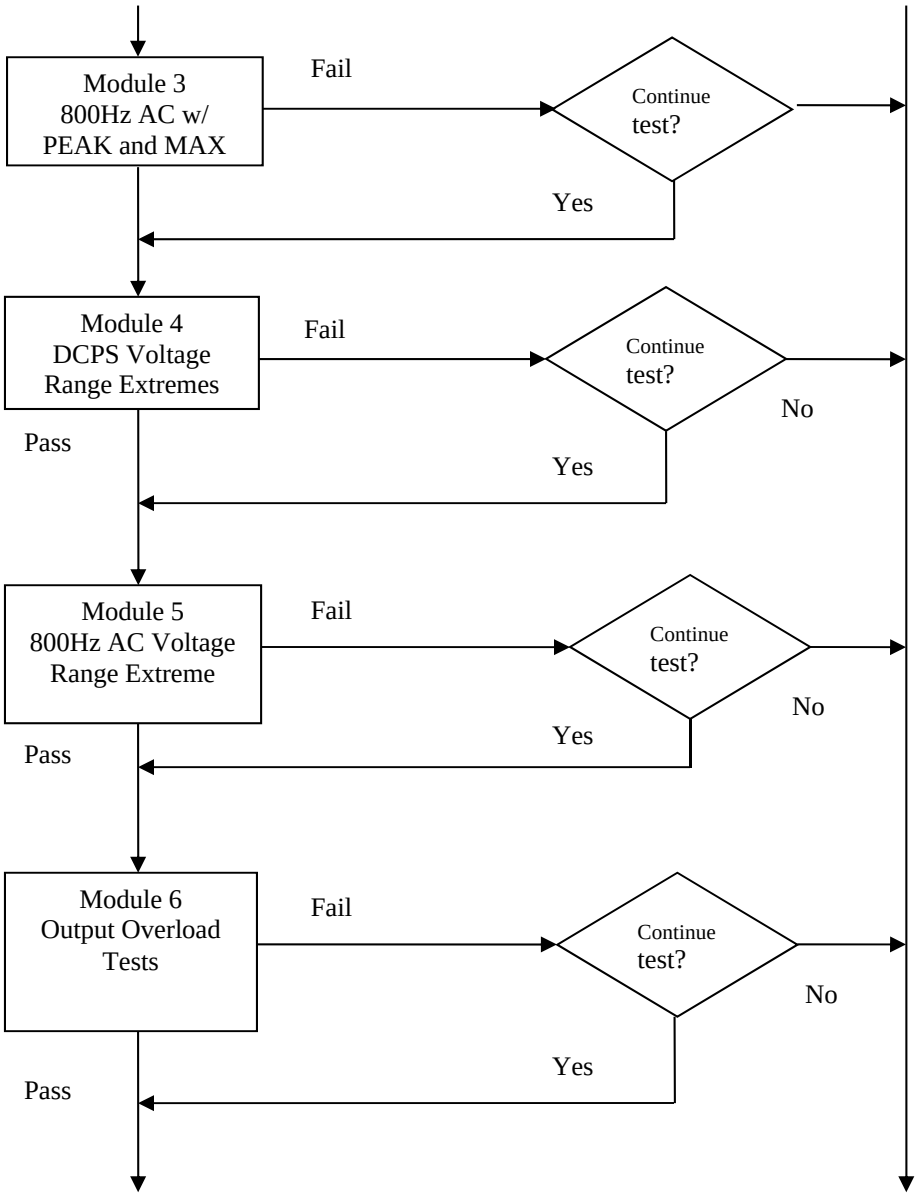
800 Hz AC Supply Output Voltage shall be measured. With 28.0 ± 0.3 Vdc input voltage applied from J1-5 (HI) to J1-7 (LO) and with 28.0 ± 0.3 Vdc applied from J1-4 (HI) to J1-7(LO). MAX loads applied as shown in Table 1, the frequency counter shall be used to measure the Output Frequency of the AC Source at UUT pins J1-11 (HI) to J1-9 (LO). The measured output frequency shall be between 776 Hz to 824 Hz.

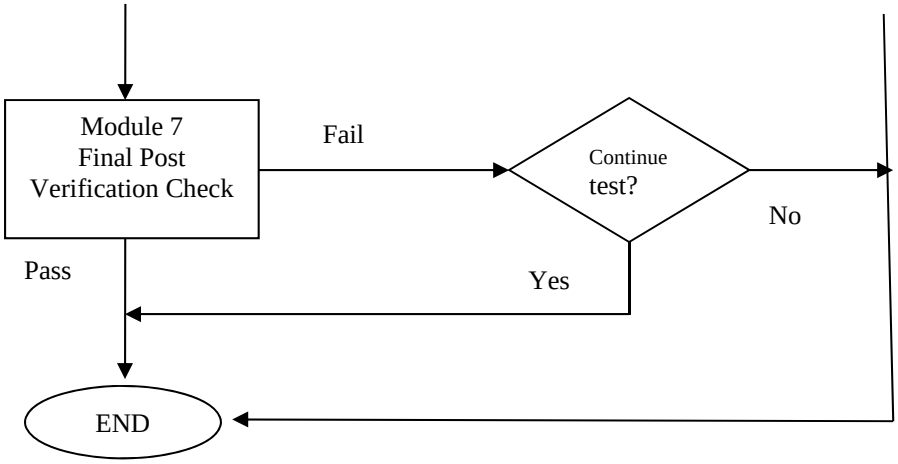
From W6 P2-11 (UUT J1-11)	to W6 P1A-1B

```
From ID J1A-1B            to ID A1J14.3
From ID A1P14.3           to ID P13-80 (S201-11)

From ID P12-16 (S201-1)   to ID A1P11.42
From ID A1J11.42          to ID A1J10.6
From ID A1P10.6           to ID P11-203 (S508-1)
From ID P11-77 (S508-3)   to ID A1P9.15
From ID A1J9.15           to ID BUS 1

From ID P20-2 (DMM-HI)    to ID A1P15.49
From ID A1J15.49          to ID A1J8.28
From ID A1P8.28           to ID P10-203 (S503-1)
From ID P10-77 (S503-3)   to ID A1P6.13
From ID A1J6.13           to ID BUS 1

From W6 P2-9 (UUT J1-9)   to W6 P1A-1A
From ID J1A-1A            to ID A1J14.1
From ID A1P14.1           to ID P13-47 (S201-9)

From ID P12-20 (S201-3)   to ID A1P11.46
From ID A1J11.46          to ID A1J10.2
From ID A1P10.2           to ID P11-39 (S507-1)
From ID P11-72 (S507-4)   to ID A1P9.27
From ID A1J9.27           to ID BUS 2

From ID P20-3 (DMM-LO)    to ID A1P15.50
From ID A1J15.50          to ID A1J8.26
From ID A1P8.26           to ID P10-139 (S503-2)
From ID P10-12 (S503-4)   to ID A1P6.23
From ID A1J6.23           to ID BUS 2

See "APPLY 800HZ MAX LOAD"

See "POWER UP UUT 28VDC"
```

3.0 Functional Flow Chart (FFC)




Module 3
800Hz AC w/
PEAK and MAX
Fail
Continue
test?
Yes
Module 4
DCPS Voltage
Range Extremes
Fail
Continue
test?
No
Pass
Yes
Module 5
800Hz AC Voltage
Range Extreme
Fail
Continue
test?
No
Pass
Yes
Module 6
Output Overload
Tests
Fail
Continue
test?
No
Pass
Yes



4.0 TABLE 1

Required Test Loads Modules 2-7:

Load Designation	**+ 15Vdc**	**-15Vdc**	**26 Vrms (R)**	**26 Vrms (L)**
Peak Load	27 Ohms (10W)	47 Ohms (5W)	21 Ohms	3.3mH
Maximum Load	41 Ohms (10W)	68 Ohms (5W)	25 Ohms	3.3mH