

English Language Test Description

MIPR # M9545012MP24797

CDRL F001

for

Unit Under Test

Grenade Relay CCA

P/N 7579575-011

From

Light Armored Vehicle - 25A2

(LAV-25A2)

ATE SYSTEM

AN/USM-657B – Third Echelon Test System (TETS-B)

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
Al Ocampo		6 May 2015	

Approved By	Signature	Date Received	Date Approved
Thomas Bradford			
Richard Foyt			

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ELTD REVISION SUMMARY

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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: 7579575-011
 UUT Nomenclature: Grenade Relay CCA
 UUT Type: Shop Replaceable Unit (SRU)

<u>DESCRIPTION</u>	<u>NUMBER</u>	<u>REVISION</u>	<u>DATE</u>
Parts List	7579575-011	B	31 Jan 1996
LRU QA Specification	ES13456	None	
Circuit Card Assy, Grenade Relay CCA	7579575-011	B	31 Jan 1996
Schematic Diagram, Grenade Relay CCA	7579578-001	-	10 Apr 1995

1.4 Reference Drawings

Refer to the following schematics when diagnosing connection paths.

ID Schematic



13020A0001
(SYSTEM INTERCON)

W3 Schematic



13020A7301 (CABLE,
W3, SCHEMATIC).pdf

2.0 English Language Test Description Steps

2.1 Common Procedures

The following connections are common throughout the entire test

2.1.1 UUT POWER

DESCRIPTION:

28V Power is applied to ID BUS7 (HI) and ID BUS8 (LO) using DC9.

CONNECTION PATH IS AS FOLLOWS:

FROM IDP1-25 (DC9-HI)	TO ID A1P1.13
FROM ID A1J1.13	TO ID A1J7.14
FROM ID A1P7.14	TO ID P10-197 (S301-29)
FROM ID P10-198 (S301-30)	TO ID A1P6.24
FROM ID A1J6.24	TO ID BUS 7

FROM ID P1-26 (DC9-LO)	TO ID A1P1.5
FROM ID A1J1.5	TO ID A1J7.18
FROM ID A1P7.18	TO ID P10-133 (S301-27)
FROM ID P10-70 (S301-28)	TO ID A1P6.12
FROM ID A1J6.12	TO ID BUS

2.2 INTERFACE ID

Refer to [1.4 Reference Drawings](#) when diagnosing connection paths.

STEP 1

DESCRIPTION:

THIS STEP VERIFIES THE CORRECT ID IS INSTALLED. THE DMM IS USED TO MEASURE THE RESISTANCE ACROSS ID RESISTORS R111 (324 OHMS) AND R109 (698 OHMS). THE DMM SHOULD MEASURE BETWEEN 971 AND 1073 OHMS.

CONNECTION PATH IS AS FOLLOWS:

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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 ID R111.1
FROM ID R111.2	TO ID A1P4.9
FROM ID A1J4.9	TO +28V
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 ID R109.1
FROM ID R109.2	TO ID A1P4.9
FROM ID A1J4.9	TO +28V
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 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 UUT ID

STEP 2

DESCRIPTION:

THIS VERIFIES THE CORRECT UUT IS INSTALLED ONTO THE ITA. THE DMM IS USED TO MEASURE THE RESISTANCE FROM UUT J1.10 TO UUT J1.16. THE DMM SHOULD MEASURE LESS THAN 10 OHMS.

CONNECTION PATH IS AS FOLLOWS:

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 W3 P2-10 (UUT J1-10)	TO W3 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 A1P12.38
FROM ID A1J12.38	TO ID A1J10.10
FROM ID A1P10.10	TO ID P11-177 (S509-1)
FROM ID P11-18 (S509-3)	TO ID A1P9.19

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FROM ID A1J9.19	TO ID BUS 1
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 W3 P2-16 (UUT J1-16)	TO W3 P1A-5F
FROM ID J1A-5F	TO ID A1J14.18
FROM ID A1P14.18	TO ID P13-89 (S202-18)
FROM ID P13-29 (S202-4)	TO ID A1P14.50
FROM ID A1J14.50	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

STEP 3

DESCRIPTION:

THIS VERIFIES THE CONTINUITY OR ISOLATION OF TWO UUT PINS. THE DMM IS USED TO MEASURE THE RESISTANCE FROM UUT J1.6 TO UUT J1.11. THE DMM SHOULD MEASURE BETWEEN 5 AND 20 OHMS.

CONNECTION PATH IS AS FOLLOWS:

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 W3 P2-6 (UUT J1-6)	TO W3 P1B-7A
FROM ID J1B-7A	TO ID A1J12.7
FROM ID A1P12.7	TO ID P12-82 (S201-29)
FROM ID P12-16 (S201-1)	TO ID A1P12.42
FROM ID A1J12.42	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 P20-3 (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 W3 P2-11 (UUT J1-11)	TO W3 P1B-5C
FROM ID J1B-5C	TO ID A1J12.15
FROM ID A1P12.15	TO ID P12-31 (S202-45)
FROM ID P13-93 (S202-3)	TO ID A1P14.49

FROM ID A1J14.49	TO ID A1J10.48
FROM ID A1P10.48	TO ID P11-52 (S510-1)
FROM ID P11-147 (S510-4)	TO ID A1P9.31
FROM ID A1J9.31	TO ID BUS 2

2.3 SAFE TO TURN ON

Refer to [1.4 Reference Drawings](#) when diagnosing connection paths.

STEP 4

DESCRIPTION:

THIS VERIFIES THE CONTINUITY OR ISOLATION OF TWO UUT PINS. THE DMM IS USED TO MEASURE THE RESISTANCE FROM UUT J1.8 TO UUT J1.7. THE DMM SHOULD MEASURE BETWEEN 280 AND 380 OHMS.

CONNECTION PATH IS AS FOLLOWS:

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 W3 P2-8 (UUT J1-8)	TO W3 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 A1P12.42
FROM ID A1J12.42	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 P20-3 (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 W3 P2-7 (UUT J1-7)	TO W3 P1B-13B
FROM ID J1B-13B	TO ID A1J13.4
FROM ID A1P13.4	TO ID P12-13 (S201-8)
FROM ID P12-80 (S201-4)	TO ID A1P12.44
FROM ID A1J12.44	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

STEP 5

DESCRIPTION:

Date: 04 March 2016

THIS VERIFIES THE CONTINUITY OR ISOLATION OF TWO UUT PINS. THE DMM IS USED TO MEASURE THE RESISTANCE FROM UUT J1.32 TO UUT J1.38. THE DMM SHOULD MEASURE GREATER THAN 10 KOHMS.

CONNECTION PATH IS AS FOLLOWS:

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 W3 P2-32 (UUT J1-32)	TO W3 P1B-8B
FROM ID J1B-8B	TO ID A1J12.5
FROM ID A1P12.5	TO ID P12-17 (S201-23)
FROM ID P12-16 (S201-1)	TO ID A1P12.42
FROM ID A1J12.42	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 P20-3 (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 W3 P2-38 (UUT J1-38)	TO W3 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 A1P12.44
FROM ID A1J12.44	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

STEP 6

DESCRIPTION:

THIS VERIFIES THE CONTINUITY OR ISOLATION OF TWO UUT PINS. THE DMM IS USED TO MEASURE THE RESISTANCE FROM UUT J1.1 TO UUT J1.3. THE DMM SHOULD MEASURE GREATER THAN 10 KOHMS.

CONNECTION PATH IS AS FOLLOWS:

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 W3 P2-1 (UUT J1-1)	TO W3 P1B-14C

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FROM ID J1B-14C	TO ID A1J13.5
FROM ID A1P13.5	TO ID P12-14 (S201-13)
FROM ID P12-16 (S201-1)	TO ID A1P12.42
FROM ID A1J12.42	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 P20-3 (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 W3 P2-2 (UUT J1-2)	TO W3 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 A1P12.44
FROM ID A1J12.44	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

STEP 7

DESCRIPTION:

THIS VERIFIES THE CONTINUITY OR ISOLATION OF TWO UUT PINS. THE DMM IS USED TO MEASURE THE RESISTANCE FROM UUT J1.16 TO UUT J1.24. THE DMM SHOULD MEASURE GREATER THAN 10 KOHM.

CONNECTION PATH IS AS FOLLOWS:

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 W3 P2-16 (UUT J1-16)	TO W3 P1A-5F
FROM ID J1A-5F	TO ID A1J14.18
FROM ID A1P14.18	TO ID P13-89 (S202-18)
FROM ID P12-90 (S202-2)	TO ID A1P12.36
FROM ID A1J12.36	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 P20-3 (DMM-LO)	TO ID A1P15.50
FROM ID A1J15.50	TO ID A1J8.26
FROM ID A1P8.26	TO ID P10-139 (S503-2)

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FROM ID P10-12 (S503-4)	TO ID A1P6.23
FROM ID A1J6.23	TO ID BUS 2
FROM W3 P2-24 (UUT J1-24)	TO W3 P1B-14D
FROM ID J1B-14D	TO ID A1J13.7
FROM ID A1P13.7	TO ID P12-4 (S701-3)
FROM ID P12-76 (S701-1)	TO ID A1P12.50
FROM ID A1J12.50	TO ID A1J10.3
FROM ID A1P10.3	TO ID P11-194 (S506-1)
FROM ID P11-195 (S506-4)	TO ID A1P9.33
FROM ID A1J9.33	TO ID BUS 2

STEP 8

DESCRIPTION:

THIS VERIFIES THE CONTINUITY OR ISOLATION OF TWO UUT PINS. THE DMM IS USED TO MEASURE THE RESISTANCE FROM UUT J1.3 TO UUT J1.9. THE DMM SHOULD MEASURE BETWEEN 280 AND 380 OHMS.

CONNECTION PATH IS AS FOLLOWS:

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 W3 P2-3 (UUT J1-3)	TO W3 P1B-14A
FROM ID J1B-14A	TO ID A1J13.1
FROM ID A1P13.1	TO ID P12-79 (S201-5)
FROM ID P12-16 (S201-1)	TO ID A1P12.42
FROM ID A1J12.42	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 P20-3 (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 W3 P2-9 (UUT J1-9)	TO W3 P1B-13A
FROM ID J1B-13A	TO ID A1J13.2
FROM ID A1P13.2	TO ID P12-47 (S201-6)
FROM ID P12-80 (S201-2)	TO ID A1P12.40
FROM ID A1J12.40	TO ID A1J10.8
FROM ID A1P10.8	TO ID P11-139 (S508-2)
FROM ID P11-12 (S508-4)	TO ID A1P9.25
FROM ID A1J9.25	TO ID BUS 2

Date: 04 March 2016

STEP 9

DESCRIPTION:

THIS VERIFIES THE CONTINUITY OR ISOLATION OF TWO UUT PINS. THE DMM IS USED TO MEASURE THE RESISTANCE FROM UUT J1.6 TO UUT J1.14. THE DMM SHOULD MEASURE BETWEEN 270 AND 330 OHMS.

CONNECTION PATH IS AS FOLLOWS:

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 W3 P2-6 (UUT J1-6)	TO W3 P1B-7A
FROM ID J1B-7A	TO ID A1J12.7
FROM ID A1P12.7	TO ID P12-82 (S201-29)
FROM ID P12-16 (S201-1)	TO ID A1P12.42
FROM ID A1J12.42	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 P20-3 (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 W3 P2-14 (UUT J1-14)	TO W3 P1B-7B
FROM ID J1B-7B	TO ID A1J12.8
FROM ID A1P12.8	TO ID P12-50 (S201-30)
FROM ID P12-52 (S201-4)	TO ID A1P12.44
FROM ID A1J12.44	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

STEP 10

DESCRIPTION:

THIS VERIFIES THE CONTINUITY OR ISOLATION OF TWO UUT PINS. THE DMM IS USED TO MEASURE THE RESISTANCE FROM UUT J1.6 TO UUT J1.30. THE DMM SHOULD MEASURE BETWEEN 270 AND 330 OHMS.

CONNECTION PATH IS AS FOLLOWS:

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 W3 P2-6 (UUT J1-6)	TO W3 P1B-7A
FROM ID J1B-7A	TO ID A1J12.7
FROM ID A1P12.7	TO ID P12-82 (S201-29)
FROM ID P12-16 (S201-1)	TO ID A1P12.42
FROM ID A1J12.42	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 P20-3 (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 W3 P2-30 (UUT J1-30)	TO W3 P1B-6A
FROM ID J1B-6A	TO ID A1J12.10
FROM ID A1P12.10	TO ID P12-83 (S201-32)
FROM ID P12-52 (S201-4)	TO ID A1P12.44
FROM ID A1J12.44	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

2.4 Module 1: Relays And Discrete Outputs

The following module tests the Relays and Discrete Outputs.

Refer to [1.4 Reference Drawings](#) when diagnosing connection paths.

STEP 101

DESCRIPTION:

THIS STEP VERIFIES CONTINUITY BETWEEN J1.31 AND J1.38. THE DMM IS USED TO MEASURE THE RESISTANCE, WITH LIMITS LT 10 OHM.

CONNECTION PATH IS AS FOLLOWS:

SEE "UUT POWER"

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 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

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FROM ID A1J6.23	TO ID BUS 2
FROM W3 P2-31 (UUT J1-31)	TO W3 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 A1P12.46
FROM ID A1J12.46	TO ID A1J10.2
FROM ID A1P10.2	TO ID P11-39 (S507-1)
FROM ID P11-168 (S507-3)	TO ID A1P9.17
FROM ID A1J9.17	TO ID BUS 1
FROM W3 P2-38 (UUT J1-38)	TO W3 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 A1P12.44
FROM ID A1J12.44	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 W3 P2-8 (UUT J1-8)	TO W3 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 A1P12.42
FROM ID A1J12.42	TO ID A1J10.6
FROM ID A1P10.6	TO ID P11-203 (S508-1)
FROM ID P11-173 (S508-9)	TO ID A1P9.12
FROM ID A1J9.12	TO ID BUS 7
FROM W3 P2-7 (UUT J1-7)	TO W3 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 A1P12.40
FROM ID A1J12.40	TO ID A1J10.8
FROM ID A1P10.8	TO ID P11-139 (S508-2)
FROM ID P11-205 (S508-10)	TO ID A1P9.2
FROM ID A1J9.2	TO ID BUS 8

STEP 102

DESCRIPTION:

THIS STEP VERIFIES RISE TIME BETWEEN J1.32 AND J1.38. THE CT IS USED TO MEASURE THE TIME INTERVAL, WITH LIMITS LL 10 MS UL 50 MS.

CONNECTION PATH IS AS FOLLOWS:

FROM ID P19-18 (CT-IN1)	TO ID A1P21.1
FROM ID A1J21.1	TO ID A1J6.8
FROM ID A1P6.8	TO ID P10-162 (S501-2)
FROM ID P10-129 (S501-8)	TO ID A1P7.47

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FROM ID A1J7.47	TO ID BUS 6
FROM ID P19-19 (CT-IN2)	TO ID A1P22.1
FROM ID A1J22.1	TO ID A1J6.10
FROM ID A1P6.10	TO ID P10-71 (S502-2)
FROM ID P10-5 (S502-8)	TO ID A1P6.36
FROM ID A1J6.36	TO ID BUS 6
FROM CT-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
FROM W3 P2-38 (UUT J1-38)	TO W3 P1B-8A
FROM ID J1B-8A	TO ID A1J12.4
FROM ID A1P12.4	TO ID P12-18 (S201-22)
FROM ID P12-80 (S201-2)	TO ID A1P12.40
FROM ID A1J12.40	TO ID A1J10.8
FROM ID A1P10.8	TO ID P11-139 (S508-2)
FROM ID P11-205 (S508-10)	TO ID A1P9.2
FROM ID A1J9.2	TO ID BUS 8
FROM W3 P2-32 (UUT J1-32)	TO W3 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 A1P12.46
FROM ID A1J12.46	TO ID A1J10.2
FROM ID A1P10.2	TO ID P11-39 (S507-1)
FROM ID P11-5 (S507-8)	TO ID A1P9.24
FROM ID A1J9.24	TO ID BUS 6
FROM +15V TO ID R6.2	
FROM ID R6.1	TO ID A1J8.17
FROM ID A1P8.17	TO ID P10-48 (S301-82)
FROM ID P10-175 (S301-81)	TO ID A1P8.40
FROM ID A1J8.40	TO ID BUS 6

STEP 103

DESCRIPTION:

THIS STEP VERIFIES FALL TIME BETWEEN J1.32 AND J1.38. THE CT IS USED TO MEASURE THE TIME INTERVAL, WITH LIMITS LL 75 MS UL 150 MS.

CONNECTION PATH IS AS FOLLOWS:

FROM ID P19-18 (CT-IN1)	TO ID A1P21.1
FROM ID A1J21.1	TO ID A1J6.8
FROM ID A1P6.8	TO ID P10-162 (S501-2)
FROM ID P10-129 (S501-8)	TO ID A1P7.47
FROM ID A1J7.47	TO ID BUS 6

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FROM ID P19-19 (CT-IN2)	TO ID A1P22.1
FROM ID A1J22.1	TO ID A1J6.10
FROM ID A1P6.10	TO ID P10-71 (S502-2)
FROM ID P10-5 (S502-8)	TO ID A1P6.36
FROM ID A1J6.36	TO ID BUS 6
FROM CT-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
FROM W3 P2-38 (UUT J1-38)	TO W3 P1B-8A
FROM ID J1B-8A	TO ID A1J12.4
FROM ID A1P12.4	TO ID P12-18 (S201-22)
FROM ID P12-80 (S201-2)	TO ID A1P12.40
FROM ID A1J12.40	TO ID A1J10.8
FROM ID A1P10.8	TO ID P11-139 (S508-2)
FROM ID P11-205 (S508-10)	TO ID A1P9.2
FROM ID A1J9.2	TO ID BUS 8
FROM W3 P2-32 (UUT J1-32)	TO W3 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 A1P12.46
FROM ID A1J12.46	TO ID A1J10.2
FROM ID A1P10.2	TO ID P11-39 (S507-1)
FROM ID P11-5 (S507-8)	TO ID A1P9.24
FROM ID A1J9.24	TO ID BUS 6
FROM +15V TO ID R6.2	
FROM ID R6.1	TO ID A1J8.17
FROM ID A1P8.17	TO ID P10-48 (S301-82)
FROM ID P10-175 (S301-81)	TO ID A1P8.40
FROM ID A1J8.40	TO ID BUS 6

STEP 104

DESCRIPTION:

THIS STEP VERIFIES ISOLATION BETWEEN J1.1 AND J1.2. THE DMM IS USED TO MEASURE THE RESISTANCE, WITH LIMITS GT 10 KOHM.

CONNECTION PATH IS AS FOLLOWS:

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 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)

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FROM ID P10-12 (S503-4)	TO ID A1P6.23
FROM ID A1J6.23	TO ID BUS 2
FROM W3 P2-1 (UUT J1-1)	TO W3 P1B-14C
FROM ID J1B-14C	TO ID A1J13.5
FROM ID A1P13.5	TO ID P12-14 (S201-13)
FROM ID P12-16 (S201-1)	TO ID A1P12.42
FROM ID A1J12.42	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 W3 P2-2 (UUT J1-2)	TO W3 P1B-13C
FROM ID J1B-13C	TO ID A1J13.6
FROM ID A1P13.6	TO ID P12-78 (S201-14)
FROM ID P12-80 (S201-2)	TO ID A1P12.40
FROM ID A1J12.40	TO ID A1J10.8
FROM ID A1P10.8	TO ID P11-139 (S508-2)
FROM ID P11-12 (S508-4)	TO ID A1P9.25
FROM ID A1J9.25	TO ID BUS 2

STEP 105

DESCRIPTION:

THIS STEP VERIFIES CONTINUITY BETWEEN J1.3 AND J1.2. THE DMM IS USED TO MEASURE THE RESISTANCE, WITH LIMITS LT 10 OHM.

CONNECTION PATH IS AS FOLLOWS:

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 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 W3 P2-3 (UUT J1-3)	TO W3 P1B-14A
FROM ID J1B-14A	TO ID A1J13.1
FROM ID A1P13.1	TO ID P12-79 (S201-5)
FROM ID P12-16 (S201-1)	TO ID A1P12.42
FROM ID A1J12.42	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 W3 P2-2 (UUT J1-2)	TO W3 P1B-13C

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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 A1P12.44
FROM ID A1J12.44	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

STEP 106

DESCRIPTION:

THIS STEP VERIFIES ISOLATION BETWEEN J1.1 AND J1.2. DMM IS USED TO MEASURE THE RESISTANCE, WITH LIMITS GT 10 KOHM.

CONNECTION PATH IS AS FOLLOWS:

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 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 P10-205 (S503-10)	TO ID A1P6.16
FROM ID A1J6.16	TO ID BUS 8
FROM W3 P2-1 (UUT J1-1)	TO W3 P1B-14C
FROM ID J1B-14C	TO ID A1J13.5
FROM ID A1P13.5	TO ID P12-14 (S201-13)
FROM ID P12-16 (S201-1)	TO ID A1P12.42
FROM ID A1J12.42	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 W3 P2-3 (UUT J1-3)	TO W3 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 A1P12.46
FROM ID A1J12.46	TO ID A1J10.2
FROM ID A1P10.2	TO ID P11-39 (S507-1)
FROM ID P11-232 (S507-9)	TO ID A1P9.14
FROM ID A1J9.14	TO ID BUS 7
FROM W3 P2-9 (UUT J1-9)	TO W3 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 A1P12.44
FROM ID A1J12.44	TO ID A1J10.4

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FROM ID A1P10.4	TO ID P11-71 (S507-2)
FROM ID P11-105 (S507-10)	TO ID A1P9.4
FROM ID A1J9.4	TO ID BUS 8

STEP 107

DESCRIPTION:

THIS STEP VERIFIES CONTINUITY BETWEEN J1.16 AND J1.17 WITH K4 OFF. THE DMM IS USED TO MEASURE THE RESISTANCE WITH LIMITS LT 10 OHM.

CONNECTION PATH IS AS FOLLOWS:

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 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 W3 P2-16 (UUT J1-16)	TO W3 P1A-5F
FROM ID J1A-5F	TO ID A1J14.18
FROM ID A1P14.18	TO ID P13-89 (S202-18)

FROM ID P12-90 (S202-2)	TO ID A1P12.36
FROM ID A1J12.36	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 W3 P2-17 (UUT J1-17)	TO W3 P1A-6F
FROM ID J1A-6F	TO ID A1J14.20
FROM ID A1P14.20	TO ID P13-24 (S202-20)

FROM ID P13-29 (S202-4)	TO ID A1P14.50
FROM ID A1J14.50	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

STEP 108

DESCRIPTION:

THIS STEP VERIFIES CONTINUITY BETWEEN J1.5 AND J1.16 WITH K3 ON. THE DMM IS USED TO MEASURE THE RESISTANCE WITH LIMITS LT 10 OHM.

CONNECTION PATH IS AS FOLLOWS:

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 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 W3 P2-6 (UUT J1-6)	TO W3 P1B-7A
FROM ID J1B-7A	TO ID A1J12.7
FROM ID A1P12.7	TO ID P12-82 (S201-29)
FROM ID P12-20 (S201-3)	TO ID A1P12.46
FROM ID A1J12.46	TO ID A1J10.2
FROM ID A1P10.2	TO ID P11-39 (S507-1)
FROM ID P11-232 (S507-9)	TO ID A1P9.14
FROM ID A1J9.14	TO ID BUS 7
FROM W3 P2-14 (UUT J1-14)	TO W3 P1B-7B
FROM ID J1B-7B	TO ID A1J12.8
FROM ID A1P12.8	TO ID P12-50 (S201-30)
FROM ID P12-52 (S201-4)	TO ID A1P12.44
FROM ID A1J12.44	TO ID A1J10.4
FROM ID A1P10.4	TO ID P11-71 (S507-2)
FROM ID P11-105 (S507-10)	TO ID A1P9.4
FROM ID A1J9.4	TO ID BUS 8
FROM W3 P2-5 (UUT J1-5)	TO W3 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 A1P12.36
FROM ID A1J12.36	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 W3 P2-16 (UUT J1-16)	TO W3 P1A-5F
FROM ID J1A-5F	TO ID A1J14.18
FROM ID A1P14.18	TO ID P13-89 (S202-18)
FROM ID P13-29 (S202-4)	TO ID A1P14.50
FROM ID A1J14.50	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

Date: 04 March 2016

DESCRIPTION:

THIS STEP VERIFIES VOLTAGE ON J1.10 WITH K3 ON. THE DMM IS USED TO MEASURE THE VOLTAGE WITH LIMITS GT 26 VDC.

CONNECTION PATH IS AS FOLLOWS:

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 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 P10-205 (S503-10)	TO ID A1P6.16
FROM ID A1J6.16	TO ID BUS 8
FROM W3 P2-6 (UUT J1-6)	TO W3 P1B-7A
FROM ID J1B-7A	TO ID A1J12.7
FROM ID A1P12.7	TO ID P12-82 (S201-29)
FROM ID P12-20 (S201-3)	TO ID A1P12.46
FROM ID A1J12.46	TO ID A1J10.2
FROM ID A1P10.2	TO ID P11-39 (S507-1)
FROM ID P11-232 (S507-9)	TO ID A1P9.14
FROM ID A1J9.14	TO ID BUS 7
FROM W3 P2-14 (UUT J1-14)	TO W3 P1B-7B
FROM ID J1B-7B	TO ID A1J12.8
FROM ID A1P12.8	TO ID P12-50 (S201-30)
FROM ID P12-52 (S201-4)	TO ID A1P12.44
FROM ID A1J12.44	TO ID A1J10.4
FROM ID A1P10.4	TO ID P11-71 (S507-2)
FROM ID P11-105 (S507-10)	TO ID A1P9.4
FROM ID A1J9.4	TO ID BUS 8
FROM W3 P2-10 (UUT J1-10)	TO W3 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 A1P12.38
FROM ID A1J12.38	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

STEP 110

DESCRIPTION:

THIS STEP VERIFIES CONTINUITY BETWEEN J1.5 AND J1.16 WITH K4 ON. THE DMM IS USED TO MEASURE THE RESISTANCE WITH LIMITS LT 10 OHM.

CONNECTION PATH IS AS FOLLOWS:

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 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 W3 P2-6 (UUT J1-6)	TO W3 P1B-7A
FROM ID J1B-7A	TO ID A1J12.7
FROM ID A1P12.7	TO ID P12-82 (S201-29)
FROM ID P12-20 (S201-3)	TO ID A1P12.46
FROM ID A1J12.46	TO ID A1J10.2
FROM ID A1P10.2	TO ID P11-39 (S507-1)
FROM ID P11-232 (S507-9)	TO ID A1P9.14
FROM ID A1J9.14	TO ID BUS 7
FROM W3 P2-30 (UUT J1-30)	TO W3 P1B-6A
FROM ID J1B-6A	TO ID A1J12.10
FROM ID A1P12.10	TO ID P12-83 (S201-32)
FROM ID P12-80 (S201-2)	TO ID A1P12.40
FROM ID A1J12.40	TO ID A1J10.8
FROM ID A1P10.8	TO ID P11-139 (S508-2)
FROM ID P11-205 (S508-10)	TO ID A1P9.2
FROM ID A1J9.2	TO ID BUS 8
FROM W3 P2-5 (UUT J1-5)	TO W3 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 A1P12.36
FROM ID A1J12.36	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 W3 P2-16 (UUT J1-16)	TO W3 P1A-5F
FROM ID J1A-5F	TO ID A1J14.18
FROM ID A1P14.18	TO ID P13-89 (S202-18)
FROM ID P13-29 (S202-4)	TO ID A1P14.50
FROM ID A1J14.50	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

Date: 04 March 2016

STEP 111

DESCRIPTION:

THIS STEP VERIFIES VOLTAGE ON J1.17 WITH K4 ON. THE DMM IS USED TO MEASURE THE VOLTAGE WITH LIMITS GT 26 VDC.

CONNECTION PATH IS AS FOLLOWS:

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 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 P10-205 (S503-10)	TO ID A1P6.16
FROM ID A1J6.16	TO ID BUS 8
FROM W3 P2-6 (UUT J1-6)	TO W3 P1B-7A
FROM ID J1B-7A	TO ID A1J12.7
FROM ID A1P12.7	TO ID P12-82 (S201-29)
FROM ID P12-20 (S201-3)	TO ID A1P12.46
FROM ID A1J12.46	TO ID A1J10.2
FROM ID A1P10.2	TO ID P11-39 (S507-1)
FROM ID P11-232 (S507-9)	TO ID A1P9.14
FROM ID A1J9.14	TO ID BUS 7
FROM W3 P2-30 (UUT J1-30)	TO W3 P1B-6A
FROM ID J1B-6A	TO ID A1J12.10
FROM ID A1P12.10	TO ID P12-83 (S201-32)
FROM ID P12-80 (S201-2)	TO ID A1P12.40
FROM ID A1J12.40	TO ID A1J10.8
FROM ID A1P10.8	TO ID P11-139 (S508-2)
FROM ID P11-205 (S508-10)	TO ID A1P9.2
FROM ID A1J9.2	TO ID BUS 8
FROM W3 P2-17 (UUT J1-17)	TO W3 P1A-6F
FROM ID J1A-6F	TO ID A1J14.20
FROM ID A1P14.20	TO ID P13-24 (S202-20)
FROM ID P12-90 (S202-2)	TO ID A1P12.36
FROM ID A1J12.36	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

STEP 112

Date: 04 March 2016

DESCRIPTION:

THIS STEP VERIFIES DIODE VOLTAGE DROP BETWEEN J1.14 AND J1.6. THE DMM IS USED TO MEASURE THE VOLTAGE WITH LIMITS UL 4.4 V, LL 4.2 V.

CONNECTION PATH IS AS FOLLOWS:

FROM GROUND	TO ID A1J4.10
FROM ID A1P4.10	TO ID R108.2
FROM ID R108.1	TO ID A1P4.18
FROM ID A1J4.18	TO ID A1J7.26
FROM ID A1P7.26	TO ID P10-9 (S301-53)
FROM ID P10-138 (S301-54)	TO ID A1P8.50
FROM ID A1J8.50	TO ID BUS 6
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 P10-170 (S503-8)	TO ID A1P6.38
FROM ID A1J6.38	TO ID BUS 6
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 P10-205 (S503-10)	TO ID A1P6.16
FROM ID A1J6.16	TO ID BUS 8
FROM W3 P2-14 (UUT J1-14)	TO W3 P1B-7B
FROM ID J1B-7B	TO ID A1J12.8
FROM ID A1P12.8	TO ID P12-50 (S201-30)
FROM ID P12-80 (S201-2)	TO ID A1P12.40
FROM ID A1J12.40	TO ID A1J10.8
FROM ID A1P10.8	TO ID P11-139 (S508-2)
FROM ID P11-173 (S508-9)	TO ID A1P9.12
FROM ID A1J9.12	TO ID BUS 7
FROM W3 P2-6 (UUT J1-6)	TO W3 P1B-7A
FROM ID J1B-7A	TO ID A1J12.7
FROM ID A1P12.7	TO ID P12-82 (S201-29)
FROM ID P12-16 (S201-1)	TO ID A1P12.42
FROM ID A1J12.42	TO ID A1J10.6
FROM ID A1P10.6	TO ID P11-203 (S508-1)
FROM ID P11-170 (S508-8)	TO ID A1P9.22
FROM ID A1J9.22	TO ID BUS 6

STEP 113

DESCRIPTION:

THIS STEP VERIFIES DIODE VOLTAGE DROP BETWEEN J1.30 AND J1.6. THE DMM IS USED TO MEASURE THE VOLTAGE WITH LIMITS UL 4.4 V, LL 4.2V.

CONNECTION PATH IS AS FOLLOWS:

FROM GROUND	TO ID A1J4.10
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FROM ID A1P4.10	TO ID R108.2
FROM ID R108.1	TO ID A1P4.18
FROM ID A1J4.18	TO ID A1J7.26
FROM ID A1P7.26	TO ID P10-9 (S301-53)
FROM ID P10-138 (S301-54)	TO ID A1P8.50
FROM ID A1J8.50	TO ID BUS 6
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 P10-170 (S503-8)	TO ID A1P6.38
FROM ID A1J6.38	TO ID BUS 6
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 P10-205 (S503-10)	TO ID A1P6.16
FROM ID A1J6.16	TO ID BUS 8
FROM W3 P2-30 (UUT J1-30)	TO W3 P1B-6A
FROM ID J1B-6A	TO ID A1J12.10
FROM ID A1P12.10	TO ID P12-83 (S201-32)
FROM ID P12-52 (S201-4)	TO ID A1P12.44
FROM ID A1J12.44	TO ID A1J10.4
FROM ID A1P10.4	TO ID P11-71 (S507-2)
FROM ID P11-232 (S507-9)	TO ID A1P9.14
FROM ID A1J9.14	TO ID BUS 7
FROM W3 P2-6 (UUT J1-6)	TO W3 P1B-7A
FROM ID J1B-7A	TO ID A1J12.7
FROM ID A1P12.7	TO ID P12-82 (S201-29)
FROM ID P12-16 (S201-1)	TO ID A1P12.42
FROM ID A1J12.42	TO ID A1J10.6
FROM ID A1P10.6	TO ID P11-203 (S508-1)
FROM ID P11-170 (S508-8)	TO ID A1P9.22
FROM ID A1J9.22	TO ID BUS 6

STEP 114

DESCRIPTION:

THIS STEP VERIFIES DIODE VOLTAGE DROP BETWEEN J1.14 AND J1.34. THE DMM IS USED TO MEASURE THE VOLTAGE WITH LIMITS UL 3.8 V, LL 3.4 V.

CONNECTION PATH IS AS FOLLOWS:

FROM GROUND	TO ID A1J4.10
FROM ID A1P4.10	TO ID R108.2
FROM ID R108.1	TO ID A1P4.18
FROM ID A1J4.18	TO ID A1J7.26
FROM ID A1P7.26	TO ID P10-9 (S301-53)
FROM ID P10-138 (S301-54)	TO ID A1P8.50
FROM ID A1J8.50	TO ID BUS 6

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 P10-170 (S503-8)	TO ID A1P6.38
FROM ID A1J6.38	TO ID BUS 6
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 P10-205 (S503-10)	TO ID A1P6.16
FROM ID A1J6.16	TO ID BUS 8
FROM W3 P2-14 (UUT J1-14)	TO W3 P1B-7B
FROM ID J1B-7B	TO ID A1J12.8
FROM ID A1P12.8	TO ID P12-50 (S201-30)
FROM ID P12-80 (S201-2)	TO ID A1P12.40
FROM ID A1J12.40	TO ID A1J10.8
FROM ID A1P10.8	TO ID P11-139 (S508-2)
FROM ID P11-173 (S508-9)	TO ID A1P9.12
FROM ID A1J9.12	TO ID BUS 7
FROM W3 P2-34 (UUT J1-34)	TO W3 P1A-3E
FROM ID J1A-3E	TO ID A1J14.13
FROM ID A1P14.13	TO ID P13-19 (S201-34)
FROM ID P12-52 (S201-4)	TO ID A1P12.44
FROM ID A1J12.44	TO ID A1J10.4
FROM ID A1P10.4	TO ID P11-71 (S507-2)
FROM ID P11-5 (S507-8)	TO ID A1P9.24
FROM ID A1J9.24	TO ID BUS 6

STEP 115

DESCRIPTION:

THIS STEP VERIFIES DIODE VOLTAGE DROP BETWEEN J1.30 AND J1.34. THE DMM IS USED TO MEASURE THE VOLTAGE WITH LIMITS UL 3.8 V, LL 3.4 V.

CONNECTION PATH IS AS FOLLOWS:

FROM GROUND	TO ID A1J4.10
FROM ID A1P4.10	TO ID R108.2
FROM ID R108.1	TO ID A1P4.18
FROM ID A1J4.18	TO ID A1J7.26
FROM ID A1P7.26	TO ID P10-9 (S301-53)
FROM ID P10-138 (S301-54)	TO ID A1P8.50
FROM ID A1J8.50	TO ID BUS 6
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 P10-170 (S503-8)	TO ID A1P6.38
FROM ID A1J6.38	TO ID BUS 6

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 P10-205 (S503-10)	TO ID A1P6.16
FROM ID A1J6.16	TO ID BUS 8
FROM W3 P2-30 (UUT J1-30)	TO W3 P1B-6A
FROM ID J1B-6A	TO ID A1J12.10
FROM ID A1P12.10	TO ID P12-83 (S201-32)
FROM ID P12-80 (S201-2)	TO ID A1P12.40
FROM ID A1J12.40	TO ID A1J10.8
FROM ID A1P10.8	TO ID P11-139 (S508-2)
FROM ID P11-173 (S508-9)	TO ID A1P9.12
FROM ID A1J9.12	TO ID BUS 7
FROM W3 P2-34 (UUT J1-34)	TO W3 P1A-3E
FROM ID J1A-3E	TO ID A1J14.13
FROM ID A1P14.13	TO ID P13-19 (S201-34)
FROM ID P12-52 (S201-4)	TO ID A1P12.44
FROM ID A1J12.44	TO ID A1J10.4
FROM ID A1P10.4	TO ID P11-71 (S507-2)
FROM ID P11-5 (S507-8)	TO ID A1P9.24
FROM ID A1J9.24	TO ID BUS 6

STEP 116

DESCRIPTION:

THIS STEP VERIFIES DIODE VOLTAGE DROP BETWEEN J1.23 AND J1.4. THE DMM IS USED TO MEASURE THE VOLTAGE WITH LIMITS UL 4.4 V, LL 4.2V.

CONNECTION PATH IS AS FOLLOWS:

FROM GROUND	TO ID A1J4.10
FROM ID A1P4.10	TO ID R108.2
FROM ID R108.1	TO ID A1P4.18
FROM ID A1J4.18	TO ID A1J7.26
FROM ID A1P7.26	TO ID P10-9 (S301-53)
FROM ID P10-138 (S301-54)	TO ID A1P8.50
FROM ID A1J8.50	TO ID BUS 6
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 P10-170 (S503-8)	TO ID A1P6.38
FROM ID A1J6.38	TO ID BUS 6
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 P10-205 (S503-10)	TO ID A1P6.16
FROM ID A1J6.16	TO ID BUS 8

FROM W3 P2-23 (UUT J1-23)	TO W3 P1A-1F
FROM ID J1A-1F	TO ID A1J14.11
FROM ID A1P14.11	TO ID P13-51 (S201-28)
FROM ID P12-80 (S201-2)	TO ID A1P12.40
FROM ID A1J12.40	TO ID A1J10.8
FROM ID A1P10.8	TO ID P11-139 (S508-2)
FROM ID P11-173 (S508-9)	TO ID A1P9.12
FROM ID A1J9.12	TO ID BUS 7
FROM W3 P2-4 (UUT J1-4)	TO W3 P1A-2E
FROM ID J1A-2E	TO ID A1J14.10
FROM ID A1P14.10	TO ID P13-83 (S201-27)
FROM ID P12-16 (S201-1)	TO ID A1P12.42
FROM ID A1J12.42	TO ID A1J10.6
FROM ID A1P10.6	TO ID P11-203 (S508-1)
FROM ID P11-170 (S508-8)	TO ID A1P9.22
FROM ID A1J9.22	TO ID BUS 6

STEP 117

DESCRIPTION:

THIS STEP VERIFIES DIODE VOLTAGE DROP BETWEEN J1.15 AND J1.35. THE DMM IS USED TO MEASURE THE VOLTAGE WITH LIMITS UL 4.4 V, LL 4.2 V.

CONNECTION PATH IS AS FOLLOWS:

FROM GROUND	TO ID A1J4.10
FROM ID A1P4.10	TO ID R108.2
FROM ID R108.1	TO ID A1P4.18
FROM ID A1J4.18	TO ID A1J7.26
FROM ID A1P7.26	TO ID P10-9 (S301-53)
FROM ID P10-138 (S301-54)	TO ID A1P8.50
FROM ID A1J8.50	TO ID BUS 6
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 P10-170 (S503-8)	TO ID A1P6.38
FROM ID A1J6.38	TO ID BUS 6
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 P10-205 (S503-10)	TO ID A1P6.16
FROM ID A1J6.16	TO ID BUS 8
FROM W3 P2-15 (UUT J1-15)	TO W3 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 A1P12.44
FROM ID A1J12.44	TO ID A1J10.4

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FROM ID A1P10.4	TO ID P11-71 (S507-2)
FROM ID P11-232 (S507-9)	TO ID A1P9.14
FROM ID A1J9.14	TO ID BUS 7
FROM W3 P2-35 (UUT J1-35)	TO W3 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 A1P12.42
FROM ID A1J12.42	TO ID A1J10.6
FROM ID A1P10.6	TO ID P11-203 (S508-1)
FROM ID P11-170 (S508-8)	TO ID A1P9.22
FROM ID A1J9.22	TO ID BUS 6

STEP 118

DESCRIPTION:

THIS STEP VERIFIES DIODE VOLTAGE DROP BETWEEN J1.15 AND J1.36. THE DMM IS USED TO MEASURE THE VOLTAGE WITH LIMITS UL 4.4 V, LL 4.2 V.

CONNECTION PATH IS AS FOLLOWS:

FROM GROUND	TO ID A1J4.10
FROM ID A1P4.10	TO ID R108.2
FROM ID R108.1	TO ID A1P4.18
FROM ID A1J4.18	TO ID A1J7.26
FROM ID A1P7.26	TO ID P10-9 (S301-53)
FROM ID P10-138 (S301-54)	TO ID A1P8.50
FROM ID A1J8.50	TO ID BUS 6
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 P10-170 (S503-8)	TO ID A1P6.38
FROM ID A1J6.38	TO ID BUS 6
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 P10-205 (S503-10)	TO ID A1P6.16
FROM ID A1J6.16	TO ID BUS 8
FROM W3 P2-15 (UUT J1-15)	TO W3 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 A1P12.44
FROM ID A1J12.44	TO ID A1J10.4
FROM ID A1P10.4	TO ID P11-71 (S507-2)
FROM ID P11-232 (S507-9)	TO ID A1P9.14
FROM ID A1J9.14	TO ID BUS 7
FROM W3 P2-36 (UUT J1-36)	TO W3 P1A-2B
FROM ID J1A-2B	TO ID A1J14.4

FROM ID A1P14.4	TO ID P13-48 (S201-12)
FROM ID P12-80 (S201-2)	TO ID A1P12.40
FROM ID A1J12.40	TO ID A1J10.8
FROM ID A1P10.8	TO ID P11-139 (S508-2)
FROM ID P11-170 (S508-8)	TO ID A1P9.22
FROM ID A1J9.22	TO ID BUS 6

3.0 Functional Flow Chart (FFC)

