# **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

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# ELTD REVISION SUMMARY

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Date: 04 March 2016

# **Table of Contents**

1.0 Reference Documents	1
1.1 Virtual Instrument Portable Equipment Repair/Test (VIPER/T)	1
1.2 Third Echelon Test System (TETS-B)	1
1.3 Unit Under Test	1
1.4 Reference Drawings	2
2.0 English Language Test Description Steps	2
2.1 Common Procedures	2
2.1.1 UUT Power	2
2.2 Interface ID	2
2.3 UUT ID	3
2.4 Safe To Turn On	5
2.5 Module 1: Relays And Discrete Outputs	10
3.0 Functional Flow Chart (FFC)	27

### 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 Third Echelon Test System

(TETS)

Doc # 93006A0018 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	В	31 Jan 1996
LRU QA Specification	ES13456	None	
Circuit Card Assy, Grenade Relay CCA	7579575-011	В	31 Jan 1996
Schematic Diagram, Grenade Relay CCA	7579578-001	-	10 Apr 1995

Date: 04 March 2016

### 1.4 Reference Drawings

Refer to the following schematics when diagnosing connection paths.

ID Schematic



W3 Schematic



# 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
ROM 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.

Date: 04 March 2016

FROM ID BUS 5 FROM ID A1P8.4' FROM ID P10-7 FROM ID A1J7.2 FROM ID A1P4.1' FROM ID R111.2 FROM ID A1J4.9	7 (S301-47) S	TO ID TO ID TO ID TO ID	A1P7.23 A1J4.15 R111.1 A1P4.9	S301-48)
FROM ID BUS 6 FROM ID A1P8.4	8 (S301-49) 54 6 55	TO ID TO ID TO ID TO ID	A1J8.48 P10-171 A1P7.24 A1J4.16 R109.1 A1P4.9	(S301-50)
FROM ID A1J15.	8 5 7 (S503-7) 5	TO ID TO ID	A1J8.28 P10-203	(S503-1)
FROM ID A1J15.	6 [3503-8]	TO ID TO ID	A1J8.26 P10-139	

# **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.

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	WЗ	P2-10 (UUT J1-10)	TO	WЗ	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

Date: 04 March 2016

FROM ID A	1J9.19	ТО	ID	BUS 1
FROM ID P2	20-3 (DMM-LO)	то	ID	A1P15.50
FROM ID A	1J15.50	TO	ID	A1J8.26
FROM ID A	1P8.26	TO	ID	P10-139 (S503-2)
FROM ID P	10-12 (S503-4)	TO	ID	A1P6.23
FROM ID A	1J6.23	ТО	ID	BUS 2
FROM W3 P2	2-16 (UUT J1-16)	TO	W3	P1A-5F
FROM ID J	1A-5F	ТО	ID	A1J14.18
FROM ID A	1P14.18	TO	ID	P13-89 (S202-18)
FROM ID PI	13-29 (S202-4)	TO	ID	A1P14.50
FROM ID A	1J14.50	TO	ID	A1J10.50
FROM ID A	1P10.50	TO	ID	P11-244 (S510-2)
FROM ID PI	11-147 (S510-4)	TO	ID	A1P9.31
FROM ID A	1Ј9.31	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.

FROM I	ID P20-2 (DMM-HI)	TO ID	A1P15.49
	ID A1J15.49		A1J8.28
FROM I	ID A1P8.28	TO ID	P10-203 (S503-1)
FROM I	ID P10-77 (S503-3)	TO ID	A1P6.13
FROM I	ID A1J6.13	TO ID	BUS 1
FROM W	73 P2-6 (UUT J1-6)	TO W3	P1B-7A
FROM I	ID J1B-7A	TO ID	A1J12.7
FROM I	ID A1P12.7	TO ID	P12-82 (S201-29)
FROM I	ID P12-16 (S201-1)	TO ID	A1P12.42
FROM I	ID A1J12.42	TO ID	A1J10.6
	ID A1P10.6		P11-203 (S508-1)
FROM I	ID P11-77 (S508-3)	TO ID	A1P9.15
FROM I	ID A1J9.15	TO ID	BUS 1
	ID P20-3 (DMM-LO)		A1P15.50
FROM I	ID A1J15.50	TO ID	A1J8.26
	ID A1P8.26		P10-139 (S503-2)
FROM I	ID P10-12 (S503-4)	TO ID	A1P6.23
FROM I	ID A1J6.23	TO ID	BUS 2
FROM W	V3 P2-11 (UUT J1-11)	TO W3	P1B-5C
FROM I	ID J1B-5C	_	A1J12.15
FROM I	ID A1P12.15	TO ID	P12-31 (S202-45)
FROM I	ID P13-93 (S202-3)	TO ID	A1P14.49

Date: 04 March 2016

FROM ID AlJ14.49 TO ID AlJ10.48
FROM ID AlP10.48 TO ID P11-52 (S510-1)
FROM ID P11-147 (S510-4) TO ID AlP9.31
FROM ID AlJ9.31 TO ID BUS 2

### 2.3 SAFE TO TURN ON

Refer to <u>1.4 Reference Drawings</u> 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 FROM ID A1P8.28 FROM ID P10-77 (S503-3) FROM ID A1J6.13	TO ID A1J8.28 TO ID P10-203 (S503-1) TO ID A1P6.13 TO ID BUS 1
FROM W3 P2-8 (UUT J1-8) FROM ID J1B-14B FROM ID A1P13.3	TO W3 P1B-14B TO ID A1J13.3 TO ID P12-46 (S201-7)
FROM ID P12-16 (S201-1) FROM ID A1J12.42 FROM ID A1P10.6 FROM ID P11-77 (S508-3) FROM ID A1J9.15	TO ID A1J10.6 TO ID P11-203 (S508-1)
FROM ID P20-3 (DMM-LO) FROM ID A1J15.50 FROM ID A1P8.26 FROM ID P10-12 (S503-4) FROM ID A1J6.23	TO ID A1J8.26 TO ID P10-139 (S503-2)
FROM W3 P2-7 (UUT J1-7) FROM ID J1B-13B FROM ID A1P13.4	TO W3 P1B-13B TO ID A1J13.4 TO ID P12-13 (S201-8)
FROM ID P12-80 (S201-4) FROM ID A1J12.44 FROM ID A1P10.4 FROM ID P11-72 (S507-4) FROM ID A1J9.27	TO ID A1J10.4 TO ID P11-71 (S507-2)

### 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 .	A1P8.28 P10-77 (S503-3)	TO 1 TO 1	ID ID ID	A1P15.49 A1J8.28 P10-203 (S503-1) A1P6.13 BUS 1
FROM ID	P2-32 (UUT J1-32) J1B-8B A1P12.5	TO I	ID	P1B-8B A1J12.5 P12-17 (S201-23)
FROM ID .	A1P10.6 P11-77 (S508-3)	TO 1 TO 1	ID ID ID	A1J10.6 P11-203 (S508-1)
FROM ID .	A1P8.26 P10-12 (S503-4)	TO I	ID ID ID	A1J8.26 P10-139 (S503-2)
FROM W3 FROM ID FROM ID		TO I	ID	P1B-8A A1J12.4 P12-18 (S201-22)
FROM ID .	A1P10.4 P11-72 (S507-4)	TO 1 TO 1	ID ID ID	A1J10.4 P11-71 (S507-2)

### 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.

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 A1P8.28 TO ID P10-203 (S503-1 FROM ID P10-77 (S503-3) TO ID A1P6.13
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

Date: 04 March 2016

	J1B-14C A1P13.5	_	D A1J13.5 D P12-14 (S201-13)
FROM ID FROM ID FROM ID	P12-16 (S201-1) A1J12.42 A1P10.6 P11-77 (S508-3) A1J9.15	TO I TO I	D A1J10.6 D P11-203 (S508-1)
FROM ID FROM ID FROM ID	P20-3 (DMM-LO) A1J15.50 A1P8.26 P10-12 (S503-4) A1J6.23	TO I TO I	D A1P15.50 D A1J8.26 D P10-139 (S503-2) D A1P6.23 D BUS 2
FROM ID	P2-2 (UUT J1-2) J1B-13C A1P13.6	TO I	73 P1B-13C CD A1J13.6 CD P12-78 (S201-14)
FROM ID FROM ID FROM ID	P12-52 (S201-4) A1J12.44 A1P10.4 P11-72 (S507-4) A1J9.27	TO I TO I	D A1P12.44 D A1J10.4 D P11-71 (S507-2) D A1P9.27 D 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.

FROM ID	P20-2 (DMM-HI)	TO II	D A1P15.49
FROM ID	A1J15.49	TO II	A1J8.28
FROM ID	A1P8.28	TO II	P10-203 (S503-1)
FROM ID	P10-77 (S503-3)	TO II	D A1P6.13
FROM ID	A1J6.13	TO II	D BUS 1
FROM W3	P2-16 (UUT J1-16)	TO W	3 P1A-5F
FROM ID	J1A-5F	TO II	D A1J14.18
FROM ID	A1P14.18	TO II	P13-89 (S202-18)
FROM ID	P12-90 (S202-2)	TO II	D A1P12.36
FROM ID	A1J12.36	TO II	D A1J10.12
_	A1J12.36 A1P10.12	-	D A1J10.12 D P11-242 (S509-2)
FROM ID		TO II	
FROM ID	A1P10.12	TO II	P11-242 (S509-2)
FROM ID	A1P10.12 P11-18 (S509-3)	TO II	D P11-242 (S509-2) D A1P9.19
FROM ID FROM ID FROM ID	A1P10.12 P11-18 (S509-3)	TO II TO II	D P11-242 (S509-2) D A1P9.19
FROM ID FROM ID FROM ID	A1P10.12 P11-18 (S509-3) A1J9.19	TO II TO II TO II	D P11-242 (S509-2) D A1P9.19 D BUS 1
FROM ID FROM ID FROM ID FROM ID FROM ID	A1P10.12 P11-18 (S509-3) A1J9.19 P20-3 (DMM-LO)	TO II TO II TO II TO II TO II	P11-242 (S509-2) A1P9.19 BUS 1 A1P15.50

Date: 04 March 2016

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.

FROM ID P20-2 (DMM-HI) FROM ID A1J15.49 FROM ID A1P8.28 FROM ID P10-77 (S503-3) FROM ID A1J6.13	TO ID A1J8.28 TO ID P10-203 (S503-1)
FROM W3 P2-3 (UUT J1-3) FROM ID J1B-14A	TO W3 P1B-14A TO ID A1J13.1
FROM ID A1P13.1	TO ID P12-79 (S201-5)
FROM ID P12-16 (S201-1) FROM ID A1J12.42	TO ID A1J10.6
FROM ID A1P10.6 FROM ID P11-77 (S508-3) FROM ID A1J9.15	TO ID P11-203 (S508-1) TO ID A1P9.15 TO ID BUS 1
FROM ID P20-3 (DMM-LO) FROM ID A1J15.50 FROM ID A1P8.26 FROM ID P10-12 (S503-4) FROM ID A1J6.23	TO ID A1J8.26 TO ID P10-139 (S503-2)
FROM W3 P2-9 (UUT J1-9) FROM ID J1B-13A FROM ID A1P13.2	TO W3 P1B-13A TO ID A1J13.2 TO ID P12-47 (S201-6)
FROM ID P12-80 (S201-2) FROM ID A1J12.40 FROM ID A1P10.8 FROM ID P11-12 (S508-4) FROM ID A1J9.25	TO ID A1J10.8 TO ID P11-139 (S508-2)

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) FROM ID A1J15.49 FROM ID A1P8.28 FROM ID P10-77 (S503-3) FROM ID A1J6.13	TO ID A1J8.28 TO ID P10-203 (S503-1)
FROM W3 P2-6 (UUT J1-6) FROM ID J1B-7A FROM ID A1P12.7	TO W3 P1B-7A TO ID A1J12.7 TO ID P12-82 (S201-29)
FROM ID P12-16 (S201-1) FROM ID A1J12.42 FROM ID A1P10.6 FROM ID P11-77 (S508-3) FROM ID A1J9.15	TO ID A1J10.6 TO ID P11-203 (S508-1)
	TO ID A1J8.26 TO ID P10-139 (S503-2)
FROM W3 P2-14 (UUT J1-14) FROM ID J1B-7B FROM ID A1P12.8	TO W3 P1B-7B TO ID A1J12.8 TO ID P12-50 (S201-30)
FROM ID P12-52 (S201-4) FROM ID A1J12.44 FROM ID A1P10.4 FROM ID P11-72 (S507-4) FROM ID A1J9.27	TO ID A1J10.4 TO ID P11-71 (S507-2)

#### 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.

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

Date: 04 March 2016

FROM ID A1	1J6.13	ТО	ID	BUS 1
FROM W3 P2	2-6 (UUT J1-6)	то	W3	P1B-7A
FROM ID J1	1B-7A	TO	ID	A1J12.7
FROM ID A1		TO	ID	P12-82 (S201-29)
				, , ,
FROM ID P1	12-16 (S201-1)	ТО	ID	A1P12.42
FROM ID A1	lJ12.42	ТО	ID	A1J10.6
FROM ID A1		ТО	ID	P11-203 (S508-1)
FROM ID P1	11-77 (S508-3)	ТО	ID	A1P9.15
FROM ID A1	lJ9.15	ТО	ID	BUS 1
FROM ID P2	20-3 (DMM-LO)	ТО	ID	A1P15.50
FROM ID A1				A1J8.26
FROM ID A1		TO	ID	P10-139 (S503-2)
FROM ID P1	10-12 (S503-4)	TO	ID	A1P6.23
FROM ID A1	1Ј6.23	ТО	ID	BUS 2
FROM W3 P2	2-30 (UUT J1-30)	ТО	WЗ	P1B-6A
FROM ID J1	1B-6A	ТО	ID	A1J12.10
FROM ID A1	1P12.10	TO	ID	P12-83 (S201-32)
FROM ID P1	12-52 (S201-4)	ТО	ID	A1P12.44
FROM ID A1	1J12.44	TO	ID	A1J10.4
FROM ID A1	1P10.4	TO	ID	P11-71 (S507-2)
FROM ID P1	11-72 (S507-4)	TO	ID	A1P9.27
FROM ID A1	1J9.27	TO	ID	BUS 2

# 2.4 Module 1: Relays And Discrete Outputs

The following module tests the Relays and Discrete Outputs.

Refer to <u>1.4 Reference Drawings</u> 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
```

Date: 04 March 2016

FROM ID	A1J6.23	то	ID	BUS 2
FROM ID	P2-31 (UUT J1-31) J1B-9C A1P12.3	TO	ID	P1B-9C A1J12.3 P12-51 (S201-21)
FROM ID FROM ID FROM ID	P12-20 (S201-3) A1J12.46 A1P10.2 P11-168 (S507-3) A1J9.17	TO TO	ID ID ID	A1J10.2
FROM ID	P2-38 (UUT J1-38) J1B-8A A1P12.4	TO	ID	P1B-8A A1J12.4 P12-18 (S201-22)
FROM ID FROM ID FROM ID	P12-52 (S201-4) A1J12.44 A1P10.4 P11-72 (S507-4) A1J9.27	TO TO	ID ID	A1P12.44 A1J10.4 P11-71 (S507-2) A1P9.27 BUS 2
FROM ID	P2-8 (UUT J1-8) J1B-14B A1P13.3	TO	ID	P1B-14B A1J13.3 P12-46 (S201-7)
FROM ID FROM ID FROM ID	P12-16 (S201-1) A1J12.42 A1P10.6 P11-173 (S508-9) A1J9.12	TO TO	ID ID	A1J10.6 P11-203 (9508-1)
PROM ID	P2-7 (UUT J1-7) J1B-13B A1P13.4	10	$\perp \nu$	P1B-13B A1J13.4 P12-13 (S201-8)
FROM ID FROM ID	P12-80 (S201-2) A1J12.40 A1P10.8 P11-205 (S508-10) A1J9.2	TO TO	ID ID	A1J10.8 P11-139 (S508-2)

### 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.

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

Date: 04 March 2016

FROM	ID A1J7.47	TO ID BUS 6
FROM FROM FROM FROM FROM	ID P19-19 (CT-IN2) ID A1J22.1 ID A1P6.10 ID P10-5 (S502-8) ID A1J6.36	TO ID A1P22.1 TO ID A1J6.10 TO ID P10-71 (S502-2) TO ID A1P6.36 TO ID BUS 6
FROM FROM	ID P10-102 (S301-25)	TO ID A1J6.11 TO ID P10-166 (S301-26) TO ID A1P7.34 TO GROUND
FROM	W3 P2-38 (UUT J1-38) ID J1B-8A ID A1P12.4	TO W3 P1B-8A TO ID A1J12.4 TO ID P12-18 (S201-22)
FROM FROM FROM	ID P11-205 (S508-10)	TO ID A1J10.8 TO ID P11-139 (S508-2)
FROM	W3 P2-32 (UUT J1-32) ID J1B-8B ID A1P12.5	TO W3 P1B-8B TO ID A1J12.5 TO ID P12-17 (S201-23)
FROM FROM	ID P11-5 (S507-8)	TO ID P11-39 (S507-1)
FROM FROM FROM	+15V TO ID R6.2 ID R6.1 ID A1P8.17 ID P10-175 (S301-81) ID A1J8.40	TO ID A1J8.17 TO ID P10-48 (S301-82) TO ID A1P8.40 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.

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

Date: 04 March 2016

	TO ID A1J6.10 TO ID P10-71 (S502-2)
FROM CT-RTN FROM ID A1P6.11 FROM ID P10-102 (S301-25) FROM ID A1J7.34	TO ID A1J6.11 TO ID P10-166 (S301-26) TO ID A1P7.34 TO GROUND
FROM W3 P2-38 (UUT J1-38) FROM ID J1B-8A FROM ID A1P12.4	TO W3 P1B-8A TO ID A1J12.4 TO ID P12-18 (S201-22)
FROM ID P12-80 (S201-2) FROM ID A1J12.40 FROM ID A1P10.8 FROM ID P11-205 (S508-10) FROM ID A1J9.2	TO ID A1J10.8 TO ID P11-139 (S508-2)
FROM W3 P2-32 (UUT J1-32) FROM ID J1B-8B FROM ID A1P12.5	TO W3 P1B-8B TO ID A1J12.5 TO ID P12-17 (S201-23)
FROM ID P12-20 (S201-3) FROM ID A1J12.46 FROM ID A1P10.2 FROM ID P11-5 (S507-8) FROM ID A1J9.24	TO ID A1J10.2 TO ID P11-39 (S507-1)
FROM +15V TO ID R6.2 FROM ID R6.1 FROM ID A1P8.17 FROM ID P10-175 (S301-81) FROM ID A1J8.40	TO ID A1J8.17 TO ID P10-48 (S301-82) TO ID A1P8.40 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.

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)

Date: 04 March 2016

	P10-12 (S503-4) A1J6.23		
FROM ID	P2-1 (UUT J1-1) J1B-14C A1P13.5	TO ID	
FROM ID FROM ID	P12-16 (S201-1) A1J12.42 A1P10.6 P11-77 (S508-3) A1J9.15	TO ID TO ID	A1J10.6 P11-203 (S508-1) A1P9.15
FROM ID	P2-2 (UUT J1-2) J1B-13C A1P13.6	TO ID	P1B-13C A1J13.6 P12-78 (S201-14)
FROM ID FROM ID FROM ID	P12-80 (S201-2) A1J12.40 A1P10.8 P11-12 (S508-4) A1J9.25	TO ID TO ID	A1J10.8 P11-139 (S508-2) A1P9.25

### STEP 105

### DESCRIPTION:

THIS STEP VERIFIES CONTINUITY BETWEEN J1.3 AND J1.2. THE DMM IS USED TO MEASURE THE RESISTANCE, WITH LIMITS LT  $10~\mathrm{OHM}$ .

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)	
FROM W3 P2-3 (UUT J1-3) FROM ID J1B-14A	
FROM ID J1B-14A FROM ID A1P13.1	TO ID A1J13.1 TO ID P12-79 (S201-5)
FROM ID J1B-14A	TO ID A1J13.1 TO ID P12-79 (S201-5)
FROM ID J1B-14A FROM ID A1P13.1	TO ID A1J13.1 TO ID P12-79 (S201-5)  TO ID A1P12.42 TO ID A1J10.6
FROM ID J1B-14A FROM ID A1P13.1 FROM ID P12-16 (S201-1) FROM ID A1J12.42 FROM ID A1P10.6	TO ID A1J13.1 TO ID P12-79 (S201-5)  TO ID A1P12.42 TO ID A1J10.6 TO ID P11-203 (S508-1)
FROM ID J1B-14A FROM ID A1P13.1 FROM ID P12-16 (S201-1) FROM ID A1J12.42	TO ID A1J13.1 TO ID P12-79 (S201-5)  TO ID A1P12.42 TO ID A1J10.6 TO ID P11-203 (S508-1)
FROM ID J1B-14A FROM ID A1P13.1 FROM ID P12-16 (S201-1) FROM ID A1J12.42 FROM ID A1P10.6	TO ID A1J13.1 TO ID P12-79 (S201-5)  TO ID A1P12.42 TO ID A1J10.6 TO ID P11-203 (S508-1)
FROM ID J1B-14A FROM ID A1P13.1 FROM ID P12-16 (S201-1) FROM ID A1J12.42 FROM ID A1P10.6 FROM ID P11-77 (S508-3) FROM ID A1J9.15	TO ID A1J13.1 TO ID P12-79 (S201-5)  TO ID A1P12.42 TO ID A1J10.6 TO ID P11-203 (S508-1) TO ID A1P9.15 TO ID BUS 1
FROM ID J1B-14A FROM ID A1P13.1 FROM ID P12-16 (S201-1) FROM ID A1J12.42 FROM ID A1P10.6 FROM ID P11-77 (S508-3)	TO ID A1J13.1 TO ID P12-79 (S201-5)  TO ID A1P12.42 TO ID A1J10.6 TO ID P11-203 (S508-1) TO ID A1P9.15 TO ID BUS 1

Date: 04 March 2016

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.

FROM ID P20-2 (DMM-HI) FROM ID A1J15.49 FROM ID A1P8.28 FROM ID P10-77 (S503-3) FROM ID A1J6.13	TO ID A1P15.49 TO ID A1J8.28 TO ID P10-203 (S503-1) TO ID A1P6.13 TO ID BUS 1
FROM ID P20-3 (DMM-LO) FROM ID A1J15.50 FROM ID A1P8.26 FROM ID P10-205 (S503-10) FROM ID A1J6.16	TO ID A1P15.50 TO ID A1J8.26 TO ID P10-139 (S503-2) TO ID A1P6.16 TO ID BUS 8
FROM W3 P2-1 (UUT J1-1) FROM ID J1B-14C FROM ID A1P13.5	TO W3 P1B-14C TO ID A1J13.5 TO ID P12-14 (S201-13)
FROM ID P12-16 (S201-1) FROM ID A1J12.42 FROM ID A1P10.6 FROM ID P11-77 (S508-3) FROM ID A1J9.15	TO ID P11-203 (S508-1)
FROM W3 P2-3 (UUT J1-3) FROM ID J1B-14A FROM ID A1P13.1	TO W3 P1B-14A TO ID A1J13.1 TO ID P12-79 (S201-5)
	TO ID A1J10.2 TO ID P11-39 (S507-1)
	TO ID A1J13.2 TO ID P12-47 (S201-6)

Date: 04 March 2016

FROM ID A1P10.4

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

**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)	ТО	ID	A1P15.49
FROM ID	A1J15.49	TO	ID	A1J8.28

FROM ID A1J15.49
FROM ID A1P8.28

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 (S

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 P10-77 (S503-3)	ТО	ID	P10-203 (S503-1)
FROM ID	P10-77 (S503-3)	TO	ID	AlP6.13
FROM ID	A1J6.13	1.0	TD	BUS 1
FROM ID	P20-3 (DMM-LO)	ТО	ID	A1P15.50
	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	ТО	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	ТО	ID	P12-82 (S201-29)
FROM ID	P12-20 (S201-3) A1J12.46 A1P10.2 P11-232 (S507-9) A1J9.14	ТО	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	ТО	ID	BUS 7
FROM W3	P2-14 (UUT J1-14)	ТО	w3	P1B-7B
FROM ID	J1B-7B			A1J12.8
FROM ID	A1P12.8	TO	ID	P12-50 (S201-30)
FROM ID	P12-52 (S201-4)	ТО	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
	A1J9.4			BUS 8
FROM W3	P2-5 (UUT J1-5)	TO	W3	P1B-4A
FROM ID	J1B-4A	TO	ID	A1J12.16
FROM ID	P2-5 (UUT J1-5) J1B-4A A1P12.16	TO	ID	P12-63 (S202-46)
FROM ID	P12-90 (S202-2)	ТО	ID	A1P12.36
	A1J12.36	TO	ID	A1J10.12 P11-242 (S509-2)
		TO	ID	P11-242 (S509-2)
FROM ID	P11-18 (S509-3)	TO	ID	A1P9.19
FROM ID	A1J9.19	ТО	ID	BUS 1
FROM W3	P2-16 (UUT J1-16)			P1A-5F
FROM ID				A1J14.18
FROM ID	A1P14.18	ТО	ID	P13-89 (S202-18)
				A1P14.50
	A1J14.50			A1J10.50
	A1P10.50			P11-244 (S510-2)
	P11-147 (S510-4)			A1P9.31
FROM ID	A1J9.31	ТО	ID	BUS 2

STEP 109

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 FROM ID	P20-2 (DMM-HI) A1J15.49 A1P8.28 P10-77 (S503-3) A1J6.13	TO ID	P10-203 (S503-1) A1P6.13
FROM ID FROM ID FROM ID	A1P8.26 P10-205 (S503-10)	TO ID	A1J8.26 P10-139 (S503-2) A1P6.16
FROM ID	P2-6 (UUT J1-6) J1B-7A A1P12.7	TO ID	P1B-7A A1J12.7 P12-82 (S201-29)
FROM ID FROM ID FROM ID	P12-20 (S201-3) A1J12.46 A1P10.2 P11-232 (S507-9) A1J9.14	TO ID TO ID TO ID	A1J10.2
FROM ID	P2-14 (UUT J1-14) J1B-7B A1P12.8	TO ID	P1B-7B A1J12.8 P12-50 (S201-30)
FROM ID	A1P10.4 P11-105 (S507-10)	TO ID TO ID	A1J10.4
FROM ID	P2-10 (UUT J1-10) J1A-6E A1P14.19	TO ID	P1A-6E A1J14.19 P13-88 (S202-19)
FROM ID FROM ID FROM ID	P12-59 (S202-1) A1J12.38 A1P10.10 P11-18 (S509-3) A1J9.19	TO ID TO ID TO ID	A1P12.38 A1J10.10 P11-177 (S509-1) A1P9.19 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.

TD01/ TD D00 0 (D10/ 117)	EO TO 31015 40
FROM ID P20-2 (DMM-HI) FROM ID A1J15.49	TO ID AIP15.49 TO ID A1J8.28
EDOM ED 31DO OO	mo TD D10 000 /0000 1\
FROM ID A178.28  FROM ID P10-77 (S503-3)	TO ID P10-203 (S503-1)
FROM ID PIU-// (S503-3)	TO ID AIP6.13
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)
THOM ID THE 12.7	10 12 112 02 (5201 25)
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 AlP14.18	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 A1014.50	TO ID P11-244 (S510-2)
FROM ID P11-147 (S510-4)	TO ID A1P9.31
FROM ID A1J9.31	TO ID BUS 2
11.011 10 1110 ). 01	10 10 000 2

### STEP 111

### DESCRIPTION:

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

### CONNECTION PATH IS AS FOLLOWS:

FROM ID P20-2 (DMM-HI) FROM ID A1J15.49 FROM ID A1P8.28 FROM ID P10-77 (S503-3) FROM ID A1J6.13	TO ID A1J8.28 TO ID P10-203 (S503-1)
FROM ID P20-3 (DMM-LO) FROM ID A1J15.50 FROM ID A1P8.26 FROM ID P10-205 (S503-10) FROM ID A1J6.16	TO ID A1J8.26
FROM W3 P2-6 (UUT J1-6) FROM ID J1B-7A FROM ID A1P12.7	TO W3 P1B-7A TO ID A1J12.7 TO ID P12-82 (S201-29)
FROM ID P12-20 (S201-3) FROM ID A1J12.46 FROM ID A1P10.2 FROM ID P11-232 (S507-9) FROM ID A1J9.14	TO ID A1P12.46 TO ID A1J10.2 TO ID P11-39 (S507-1) TO ID A1P9.14 TO ID BUS 7
FROM W3 P2-30 (UUT J1-30) FROM ID J1B-6A FROM ID A1P12.10	TO W3 P1B-6A TO ID A1J12.10 TO ID P12-83 (S201-32)
FROM ID P12-80 (S201-2) FROM ID A1J12.40 FROM ID A1P10.8 FROM ID P11-205 (S508-10) FROM ID A1J9.2	TO ID A1P12.40 TO ID A1J10.8 TO ID P11-139 (S508-2) TO ID A1P9.2 TO ID BUS 8
FROM W3 P2-17 (UUT J1-17) FROM ID J1A-6F FROM ID A1P14.20	TO W3 P1A-6F TO ID A1J14.20 TO ID P13-24 (S202-20)
FROM ID P12-90 (S202-2) FROM ID A1J12.36 FROM ID A1P10.12 FROM ID P11-18 (S509-3) FROM ID A1J9.19	TO ID A1J10.12 TO ID P11-242 (S509-2)

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  $4.4~\rm V$ , LL  $4.2~\rm V$ .

### CONNECTION PATH IS AS FOLLOWS:

FROM ID	P10-138 (S301-54)	TO ID A1J4.10 TO ID R108.2 TO ID A1P4.18 TO ID A1J7.26 TO ID P10-9 (S301-53) TO ID A1P8.50 TO ID BUS 6
FROM ID	P20-2 (DMM-HI) A1J15.49 A1P8.28 P10-170 (S503-8) A1J6.38	TO ID A1P15.49 TO ID A1J8.28 TO ID P10-203 (S503-1) TO ID A1P6.38 TO ID BUS 6
LDUM ID	P20-3 (DMM-LO) A1J15.50 A1P8.26 P10-205 (S503-10) A1J6.16	TC $TD$ $X1.TQ$ $C$
FROM ID FROM ID		TO ID A1J12.8 TO ID P12-50 (S201-30)
FROM ID	P12-80 (S201-2) A1J12.40 A1P10.8 P11-173 (S508-9) A1J9.12	TO ID A1P9.12
FROM W3 FROM ID FROM ID	P2-6 (UUT J1-6) J1B-7A A1P12.7	TO W3 P1B-7A TO ID A1J12.7 TO ID P12-82 (S201-29)
FROM ID FROM ID FROM ID	P11-170 (S508-8)	A1J10.6 TO ID P11-203 (S508-1)

### 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

Date: 04 March 2016

FROM ID P10-138 (S301-54)	TO ID R108.2 TO ID A1P4.18 TO ID A1J7.26 TO ID P10-9 (S301-53) TO ID A1P8.50 TO ID BUS 6
FROM ID A1P8.28 FROM ID P10-170 (S503-8) FROM ID A1J6.38	TO ID A1J8.28 TO ID P10-203 (S503-1) TO ID A1P6.38 TO ID BUS 6
FROM ID P20-3 (DMM-LO) FROM ID A1J15.50 FROM ID A1P8.26 FROM ID P10-205 (S503-10) FROM ID A1J6.16	TO ID A1P15.50 TO ID A1J8.26 TO ID P10-139 (S503-2) TO ID A1P6.16 TO ID BUS 8
FROM W3 P2-30 (UUT J1-30) FROM ID J1B-6A FROM ID A1P12.10	TO W3 P1B-6A TO ID A1J12.10 TO ID P12-83 (S201-32)
FROM ID P12-52 (S201-4) FROM ID A1J12.44 FROM ID A1P10.4 FROM ID P11-232 (S507-9) FROM ID A1J9.14	TO TD \$1.T10 4
FROM W3 P2-6 (UUT J1-6) FROM ID J1B-7A FROM ID A1P12.7	TO W3 P1B-7A TO ID A1J12.7 TO ID P12-82 (S201-29)
FROM ID P12-16 (S201-1) FROM ID A1J12.42 FROM ID A1P10.6 FROM ID P11-170 (S508-8) FROM ID A1J9.22	TO ID P11-203 (S508-1)

### 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.

FROM	GRO	OUND		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

Date: 04 March 2016

FROM ID FROM ID FROM ID	P10-170 (S503-8)	TO TO	ID ID ID	A1J8.28 P10-203 (S503-1)
	P20-3 (DMM-LO)			
_	A1J15.50	ТО	ID	A1J8.26 P10-139 (S503-2)
_				
	P10-205 (S503-10)			
FROM ID	A1J6.16	ТО	ID	BUS 8
	DO 14 (TTTT T1 14)			D1D [ID
	P2-14 (UUT J1-14)			
FROM ID	J1B-7B A1P12.8	10	TD	AIJI2.8
FROM ID	AIPI2.8	10	TD	P12-50 (S201-30)
FROM ID	P12-80 (S201-2)	ΤО	TD	Δ1D12 40
FROM ID	A1J12.40	ΤO	TD	A1.T10 8
FROM ID	A1P10.8	ΤO	TD	P11-139 (S508-2)
	P11-173 (S508-9)			
	A1J9.12			BUS 7
111011 12	11107111			202 ,
FROM W3	P2-34 (UUT J1-34)	то	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	AlJ12.44 AlP10.4	TO	ID	A1J10.4
FROM ID	A1P10.4	TO	ID	P11-71 (S507-2)
FROM ID	P11-5 (S507-8) A1J9.24	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.

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

Date: 04 March 2016

FROM	ID	P20-3 (DMM-LO)	ТО	ID	A1P15.50
FROM	ID	A1J15.50	ТО	ID	A1J8.26
FROM	ID	A1J15.50 A1P8.26	ТО	ID	P10-139 (S503-2)
FROM	ID	P10-205 (S503-10)	ТО	ID	A1P6.16
		A1J6.16			
		P2-30 (UUT J1-30)			
FROM	ID	J1B-6A	TO	ID	A1J12.10
FROM	ID	A1P12.10	TO	ID	P12-83 (S201-32)
		P12-80 (S201-2)			
		A1J12.40			
		A1P10.8	TO	ID	P11-139 (S508-2)
		P11-173 (S508-9)			
FROM	ID	A1J9.12	ТО	ID	BUS 7
					_1
		P2-34 (UUT J1-34)			
_		J1A-3E	ТО	ID	A1J14.13 P13-19 (S201-34)
FROM	ID	A1P14.13	TO	ID	P13-19 (S201-34)
		-10 50 (2001 4)			-1-10 44
FROM	TD	P12-52 (S201-4)	TO	TD	A1P12.44
FROM	TD	A1J12.44 A1P10.4	TO	TD	ALUIU.4
FROM	TD	AIPIU.4	TO	TD	PII-/I (S507-2)
FROM	TD	P11-5 (S507-8) A1J9.24	1.0	TD	AIPY. 24
FROM	ΤD	A1J9.24	.T.O	ΤD	B02 0

### 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  $4.4~\rm V$ , LL  $4.2\rm V$ .

FROM	GRO	DUND	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

Date: 04 March 2016

FROM	WЗ	P2-23 (UUT J1-23)	TO	WЗ	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
		P2-4 (UUT J1-4) J1A-2E			P1A-2E A1J14.10
FROM	ID		ТО	ID	
FROM	ID	J1A-2E	ТО	ID	A1J14.10
FROM FROM	ID ID	J1A-2E A1P14.10 P12-16 (S201-1)	TO TO	ID ID	A1J14.10 P13-83 (S201-27)
FROM FROM	ID ID	J1A-2E A1P14.10 P12-16 (S201-1) A1J12.42	TO TO TO	ID ID ID	A1J14.10 P13-83 (S201-27) A1P12.42 A1J10.6
FROM FROM FROM FROM	ID ID ID ID ID	J1A-2E A1P14.10 P12-16 (S201-1) A1J12.42 A1P10.6	TO TO TO TO	ID ID ID ID ID	A1J14.10 P13-83 (S201-27) A1P12.42 A1J10.6 P11-203 (S508-1)
FROM FROM FROM FROM	ID ID ID ID ID	J1A-2E A1P14.10 P12-16 (S201-1) A1J12.42	TO TO TO TO	ID ID ID ID ID	A1J14.10 P13-83 (S201-27) A1P12.42 A1J10.6 P11-203 (S508-1)
FROM FROM FROM FROM FROM FROM	ID ID ID ID ID ID	J1A-2E A1P14.10 P12-16 (S201-1) A1J12.42 A1P10.6	TO TO TO TO TO	ID ID ID ID ID ID	A1J14.10 P13-83 (S201-27) A1P12.42 A1J10.6 P11-203 (S508-1)

### 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  $4.4~\rm{V}$ , LL  $4.2~\rm{V}$ .

FROM GROUND FROM ID A1P4.10 FROM ID R108.1 FROM ID A1J4.18 FROM ID A1P7.26 FROM ID P10-138 (S301-54) FROM ID A1J8.50	TO ID A1P4.18 TO ID A1J7.26 TO ID P10-9 (S301-53) TO ID A1P8.50
FROM ID P20-2 (DMM-HI) FROM ID A1J15.49 FROM ID A1P8.28 FROM ID P10-170 (S503-8) FROM ID A1J6.38	TO ID A1J8.28 TO ID P10-203 (S503-1)
FROM ID P20-3 (DMM-LO) FROM ID A1J15.50 FROM ID A1P8.26 FROM ID P10-205 (S503-10) FROM ID A1J6.16	TO ID A1J8.26 TO ID P10-139 (S503-2)
FROM W3 P2-15 (UUT J1-15) FROM ID J1A-2A FROM ID A1P14.2 FROM ID P12-52 (S201-4) FROM ID A1J12.44	TO ID A1J14.2 TO ID P13-14 (S201-10)

Date: 04 March 2016

FROM ID A1P10.4
FROM ID P11-232 (S507-9)
FROM ID A1J9.14
FROM ID A1J9.14
FROM ID A1J9.14
FROM ID J1A-1B
FROM ID A1P14.3
FROM ID A1P14.3
FROM ID A1P14.3
FROM ID P12-16 (S201-1)
FROM ID A1J12.42
FROM ID A1J12.42
FROM ID A1J10.6
FROM ID A1P10.6
FROM ID P11-170 (S508-8)
FROM ID A1J9.22
FROM 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  $4.4~\rm{V}$ , LL  $4.2~\rm{V}$ .

FROM GROUND FROM ID A1P4.10 FROM ID R108.1 FROM ID A1J4.18 FROM ID A1P7.26 FROM ID P10-138 (S301-54) FROM ID A1J8.50	TO ID A1J4.10 TO ID R108.2 TO ID A1P4.18 TO ID A1J7.26 TO ID P10-9 (S301-53) TO ID A1P8.50 TO ID BUS 6
FROM ID P20-2 (DMM-HI) FROM ID A1J15.49 FROM ID A1P8.28 FROM ID P10-170 (S503-8) FROM ID A1J6.38	TO ID A1J8.28
FROM ID P10-205 (S503-10)	10 12 110 107 (8000 17
FROM W3 P2-15 (UUT J1-15) FROM ID J1A-2A FROM ID A1P14.2	TO W3 P1A-2A TO ID A1J14.2 TO ID P13-14 (S201-10)
FROM ID P12-52 (S201-4) FROM ID A1J12.44 FROM ID A1P10.4 FROM ID P11-232 (S507-9) FROM ID A1J9.14	TO ID A1J10.4 TO ID P11-71 (S507-2)
FROM W3 P2-36 (UUT J1-36) FROM ID J1A-2B	TO W3 P1A-2B TO ID A1J14.4

Date: 04 March 2016

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

# 3.0 Functional Flow Chart (FFC)

