

DCA-08-MR-009  
Metrolink – UP Collision  
Chatsworth, CA  
September 12, 2008

## ATTACHMENT 15

Post Accident Signal and Switch Inspection  
Records

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY  
 Communications and Signals Department  
**PART 236 INSPECTIONS and TESTS**



Test must be made when placed in service, modified or disarranged, and at least once every designated time frame thereafter.

**RECORDING MARK:**

C = Test complete. Equipment in satisfactory condition

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 Equipment in satisfactory condition.

\* R = Repairs or replacement needed.

\* S = Repairs or replacement made.  
 Equipment in satisfactory condition.

\* = Explain on back of form.

NAME: Johny McEntyre  
 SIGNATURE: [Signature] DATE: 9-13-08  
 SUBDIVISION: VENTURA  
 REVIEWED BY: [Signature] DATE: 9-17-08

M.P.	LOCATION	DATE OF TEST	MONTHLY				6 MONTHS				1 YEAR				2 YEAR				LINE NO.			
			SW. CRT. CONT. 236.103	SHUNT FOULING 236.104	GROUNDS 236.107	GAGE ATS INDUCTOR 236.576	SWITCH OBSTRUCTION 236.382	TEST ATS INDUCTOR 236.576	SL SIGNAL MECH. 236.102 (a)	TIMER NAME	PREDETERMINED TIME	ACTUAL TIME	TEST RESULTS	APPROACH LOCKING 236.377	TIME LOCKING 236.378	ROUTE LOCKING 236.379	INDICATION LOCKING 236.380	TRAFFIC LOCKING 236.381				
			TIME RELEASE/TIME RELAY				236.109															
44680	C.P. Beauson	9-13-08			C															1		
																					2	
																						3
																						4
																						5
																						6
																						7
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																						9
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																						22
																						23
																						24











SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY  
 Communications and Signals Department  
**PART 236 INSPECTIONS and TESTS**



NAME: S.T. MORRIS  
 SIGNATURE: *[Signature]*  
 SUBDIVISION: VENTURA  
 REVIEWED BY: *[Signature]*

DATE: 9/14/08

DATE: 9-17-08

Test must be made when placed in service, modified or disarranged, and at least once every designated time frame thereafter.

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LINE NO.	MONTHLY					6 MONTHS		1 YEAR			2 YEAR					
	SW. CKT. CONT. 236.103	SHUNT FOULING 236.104	GROUNDS 236.107	GAGE ATS INDUCTOR 236.576	SWITCH OBSTRUCTION 236.382	TEST ATS INDUCTOR 236.576	SL SIGNAL MECH. 236.102 (a)	TIMER NAME	PREDETERMINED TIME	ACTUAL TIME	TEST RESULTS	APPROACH LOCKING 236.377	TIME LOCKING 236.378	ROUTE LOCKING 236.379	INDICATION LOCKING 236.380	TRAFFIC LOCKING 236.381
1			✓													
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
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13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

DATE OF TEST  
 9/14/08

LOCATION

C.P. TOPANGA





**SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY**  
**Communications and Signals Department**  
**PARTS 234 and 236 RELAY INSPECTIONS and TESTS**

SHEET 1 OF 6 SHEETS

SEARCHLIGHT SIGNAL Rule 236.102(b)  
 ELECTRIC SWITCH LOCK Rule 236.105  
 D.C. POLAR RELAY Rule 236.106 and 234.263  
 D.C. NON-POLAR RELAY Rule 236.106 and 234.263



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SUBDIVISION VENTURA LOCATION C.P. TOPANGA  
 RELAY NAME ESTOP RELAY TYPE B  
 MANUFACTURER ALSTOM PIECE NO. A62-125  
 SERIAL NO. 71219T089 COIL RESISTANCE 500 OHM

RATED							
MINIMUM RELEASE		MAX. DIRECT PICK-UP		WORKING		MAX. CHANGE OVER	
NORMAL	REVERSE	NORMAL	REVERSE	NORMAL	REVERSE	NORMAL	REVERSE
0.0039		0.0127					

YEAR	2008	INITIAL CHARGE	12V	POLAR CONTACTS		RESULT OF TEST:
		NEUTRAL CONTACTS	6X6	NORMAL	REVERSE	C
		MINIMUM RELEASE		NORMAL	REVERSE	
		MAXIMUM DIRECT PICK-UP		NORMAL	REVERSE	
		WORKING		NORMAL	REVERSE	
		Comments: <u>10063</u> <u>041</u>				
		NAME (print) <u>S.T. MORRIS</u> DATE <u>9/15/2008</u>				
		SIGNATURE <u>[Signature]</u>				
		REVIEWED BY (print) <u>J. Mc Intyre</u> DATE <u>9-17-08</u>				
		SIGNATURE <u>[Signature]</u>				

YEAR		INITIAL CHARGE		POLAR CONTACTS		RESULT OF TEST:
		NEUTRAL CONTACTS		NORMAL	REVERSE	
		MINIMUM RELEASE		NORMAL	REVERSE	
		MAXIMUM DIRECT PICK-UP		NORMAL	REVERSE	
		WORKING		NORMAL	REVERSE	
		Comments:				
		NAME (print)				
		SIGNATURE				
		REVIEWED BY (print)				
		SIGNATURE				

YEAR		INITIAL CHARGE		POLAR CONTACTS		RESULT OF TEST:
		NEUTRAL CONTACTS		NORMAL	REVERSE	
		MINIMUM RELEASE		NORMAL	REVERSE	
		MAXIMUM DIRECT PICK-UP		NORMAL	REVERSE	
		WORKING		NORMAL	REVERSE	
		Comments:				
		NAME (print)				
		SIGNATURE				
		REVIEWED BY (print)				
		SIGNATURE				



SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY  
 Communications and Signals Department  
 PARTS 234 and 236 RELAY INSPECTIONS and TESTS



SEARCHLIGHT SIGNAL Rule 236.102(b)  
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SUBDIVISION VENTURA LOCATION C.P. TOPANGA  
 RELAY NAME WSTOP RELAY TYPE B  
 MANUFACTURER ALSTOM PIECE NO. A62-125  
 SERIAL NO. 71219T080 COIL RESISTANCE 500 OHM

RATED							
MINIMUM RELEASE		MAX. DIRECT PICK-UP		WORKING		MAX. CHANGE OVER	
NORMAL	REVERSE	NORMAL	REVERSE	NORMAL	REVERSE	NORMAL	REVERSE
0.0039		0.0127					

YEAR	2008	INITIAL CHARGE	12V	POLAR CONTACTS				RESULT OF TEST:	C
		NEUTRAL CONTACTS		6X6					
		MINIMUM RELEASE		NORMAL	REVERSE	NORMAL	REVERSE		
		MAXIMUM DIRECT PICK-UP		NORMAL	REVERSE	Comments:			
		WORKING		NORMAL	REVERSE	S.T. MORRIS SIGNATURE <i>[Signature]</i> DATE 9/15/2008 REVIEWED BY (print) J. Mc Intyre SIGNATURE <i>[Signature]</i> DATE 9-17-08			

YEAR		INITIAL CHARGE		POLAR CONTACTS				RESULT OF TEST:	
		NEUTRAL CONTACTS							
		MINIMUM RELEASE		NORMAL	REVERSE	NORMAL	REVERSE		
		MAXIMUM DIRECT PICK-UP		NORMAL	REVERSE	Comments:			
		WORKING		NORMAL	REVERSE	NAME (print) SIGNATURE REVIEWED BY (print) SIGNATURE			

YEAR		INITIAL CHARGE		POLAR CONTACTS				RESULT OF TEST:	
		NEUTRAL CONTACTS							
		MINIMUM RELEASE		NORMAL	REVERSE	NORMAL	REVERSE		
		MAXIMUM DIRECT PICK-UP		NORMAL	REVERSE	Comments:			
		WORKING		NORMAL	REVERSE	NAME (print) SIGNATURE REVIEWED BY (print) SIGNATURE			

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY  
 Communications and Signals Department  
 PARTS 234 and 236 RELAY INSPECTIONS and TESTS



SEARCHLIGHT SIGNAL Rule 236.102(b)  
 ELECTRIC SWITCH LOCK Rule 236.105  
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SUBDIVISION VENTURA LOCATION C.P. TOPANGA  
 RELAY NAME NWR RELAY TYPE ST  
 MANUFACTURER SAFETRAN PIECE NO. 400520  
 SERIAL NO. 805097 COIL RESISTANCE 500 OHM

RATED					
MINIMUM RELEASE		MAX. DIRECT PICK-UP		WORKING	
NORMAL	REVERSE	NORMAL	REVERSE	NORMAL	REVERSE
3.23v.		10.45v.			

YEAR	2008	INITIAL CHARGE	12V.	RESULT OF TEST:
		NEUTRAL CONTACTS	2X2	C
		MINIMUM RELEASE	NORMAL REVERSE	
			4.24	
		MAXIMUM DIRECT PICK-UP	NORMAL REVERSE	
			9.34	
		WORKING	NORMAL REVERSE	
		POLAR CONTACTS		
		CHANGE-OVER		
		Comments:		
		NAME (print)	S.T. MORRIS	DATE 9/15/2008
		SIGNATURE	<i>[Signature]</i>	DATE 9-17-08
		REVIEWED BY (print)	J. MCINTYRE	
		SIGNATURE	<i>[Signature]</i>	

YEAR	INITIAL CHARGE	RESULT OF TEST:
	NEUTRAL CONTACTS	
	MINIMUM RELEASE	
	MAXIMUM DIRECT PICK-UP	
	WORKING	
	POLAR CONTACTS	
	CHANGE-OVER	
	Comments:	
	NAME (print)	
	SIGNATURE	
	REVIEWED BY (print)	
	SIGNATURE	

YEAR	INITIAL CHARGE	RESULT OF TEST:
	NEUTRAL CONTACTS	
	MINIMUM RELEASE	
	MAXIMUM DIRECT PICK-UP	
	WORKING	
	POLAR CONTACTS	
	CHANGE-OVER	
	Comments:	
	NAME (print)	
	SIGNATURE	
	REVIEWED BY (print)	
	SIGNATURE	



SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY  
 Communications and Signals Department  
**PARTS 234 and 236 RELAY INSPECTIONS and TESTS**



SEARCHLIGHT SIGNAL 2 YEAR TEST Rule 236.102(b)  
 ELECTRIC SWITCH LOCK 2 YEAR TEST Rule 236.105  
 D.C. POLAR RELAY 2 YEAR TEST Rule 236.106 and 234.263  
 D.C. NON-POLAR RELAY 4 YEAR TEST Rule 236.106 and 234.263

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SUBDIVISION VENTURA LOCATION C.P. TOPANGA  
 RELAY NAME RWR RELAY TYPE ST  
 MANUFACTURER SAFETRAN PIECE NO. 400520  
 SERIAL NO. 112595 COIL RESISTANCE 500 OHM

RATED							
MINIMUM RELEASE		MAX. DIRECT PICK-UP		WORKING		MAX. CHANGE OVER	
NORMAL	REVERSE	NORMAL	REVERSE	NORMAL	REVERSE	NORMAL	REVERSE
3.23v.		10.45v.					

YEAR	2008	INITIAL CHARGE	12V.	POLAR CONTACTS				RESULT OF TEST:	C
		NEUTRAL CONTACTS		2X2					
		MINIMUM RELEASE		NORMAL	REVERSE	NORMAL	REVERSE		
				3.94					
		MAXIMUM DIRECT PICK-UP		NORMAL	REVERSE	Comments:			
				9.48					
		WORKING		NORMAL	REVERSE	NAME (print) S.T. MORRIS			
						SIGNATURE <i>[Signature]</i>			
						REVIEWED BY (print) J. MCINTYRE			
						SIGNATURE <i>[Signature]</i>			
						DATE 9/15/2008			
						DATE 9-17-08			

YEAR		INITIAL CHARGE		POLAR CONTACTS				RESULT OF TEST:	
		NEUTRAL CONTACTS							
		MINIMUM RELEASE		NORMAL	REVERSE	NORMAL	REVERSE		
		MAXIMUM DIRECT PICK-UP		NORMAL	REVERSE	Comments:			
		WORKING		NORMAL	REVERSE	NAME (print)			
						SIGNATURE			
						REVIEWED BY (print)			
						SIGNATURE			
						DATE			
						DATE			

YEAR		INITIAL CHARGE		POLAR CONTACTS				RESULT OF TEST:	
		NEUTRAL CONTACTS							
		MINIMUM RELEASE		NORMAL	REVERSE	NORMAL	REVERSE		
		MAXIMUM DIRECT PICK-UP		NORMAL	REVERSE	Comments:			
		WORKING		NORMAL	REVERSE	NAME (print)			
						SIGNATURE			
						REVIEWED BY (print)			
						SIGNATURE			
						DATE			
						DATE			



**SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY**  
**Communications and Signals Department**  
**PARTS 234 and 236 RELAY INSPECTIONS and TESTS**

SEARCHLIGHT SIGNAL Rule 236.102(b)  
 ELECTRIC SWITCH LOCK Rule 236.105  
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SUBDIVISION VENTURA LOCATION C.P. TOPANGA  
 RELAY NAME TR RELAY TYPE B  
 MANUFACTURER GRS PIECE NO. A62-682  
 SERIAL NO. 58297S013 COIL RESISTANCE 4 OHM

RATED			
MINIMUM RELEASE	MAX. DIRECT PICK-UP	WORKING	MAX. CHANGE OVER
NORMAL	REVERSE	NORMAL	REVERSE
0.044	0.114		

YEAR	2008	INITIAL CHARGE	12V	RESULT OF TEST:
		NEUTRAL CONTACTS	6X6	C
		MINIMUM RELEASE	NORMAL	
			REVERSE	
		MAXIMUM	NORMAL	
		DIRECT PICK-UP	REVERSE	
		WORKING	NORMAL	
			REVERSE	
			POLAR CONTACTS	
			CHANGE-OVER	
			NORMAL	
			REVERSE	
			Comments:	
			NAME (print)	S.T. MORRIS
			SIGNATURE	<i>[Signature]</i>
			REVIEWED BY (print)	J. MCINTYRE
			SIGNATURE	<i>[Signature]</i>
			DATE	9-17-07

YEAR		INITIAL CHARGE		RESULT OF TEST:
		NEUTRAL CONTACTS		
		MINIMUM RELEASE	NORMAL	
			REVERSE	
		MAXIMUM	NORMAL	
		DIRECT PICK-UP	REVERSE	
		WORKING	NORMAL	
			REVERSE	
			POLAR CONTACTS	
			CHANGE-OVER	
			NORMAL	
			REVERSE	
			Comments:	
			NAME (print)	
			SIGNATURE	
			REVIEWED BY (print)	
			SIGNATURE	
			DATE	

YEAR		INITIAL CHARGE		RESULT OF TEST:
		NEUTRAL CONTACTS		
		MINIMUM RELEASE	NORMAL	
			REVERSE	
		MAXIMUM	NORMAL	
		DIRECT PICK-UP	REVERSE	
		WORKING	NORMAL	
			REVERSE	
			POLAR CONTACTS	
			CHANGE-OVER	
			NORMAL	
			REVERSE	
			Comments:	
			NAME (print)	
			SIGNATURE	
			REVIEWED BY (print)	
			SIGNATURE	
			DATE	

**SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY**  
**Communications and Signals Department**  
**PARTS 234 and 236 RELAY INSPECTIONS and TESTS**

SEARCHLIGHT SIGNAL Rule 236.102(b)  
 ELECTRIC SWITCH LOCK Rule 236.105  
 D.C. POLAR RELAY Rule 236.106 and 234.263  
 D.C. NON-POLAR RELAY Rule 236.106 and 234.263



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SUBDIVISION VENTURA LOCATION C.P. TOPANGA  
 RELAY NAME XTR RELAY TYPE B  
 MANUFACTURER GRS PIECE NO. A62-682  
 SERIAL NO. 58297S004 COIL RESISTANCE 4 OHM

RATED							
MINIMUM RELEASE		MAX. DIRECT PICK-UP		WORKING		MAX. CHANGE OVER	
NORMAL	REVERSE	NORMAL	REVERSE	NORMAL	REVERSE	NORMAL	REVERSE
0.044		0.114					

YEAR	2008	INITIAL CHARGE	12V	POLAR CONTACTS				RESULT OF TEST:
		NEUTRAL CONTACTS	6X6	NORMAL	REVERSE	NORMAL	REVERSE	C
		MINIMUM RELEASE		0.0554				
		MAXIMUM						
		DIRECT PICK-UP		1.022				
		WORKING						
		NAME (print)		S.T. MORRIS				DATE
		SIGNATURE		<i>[Signature]</i>				9/17/08
		REVIEWED BY (print)		J. MCINTYRE				DATE
		SIGNATURE		<i>[Signature]</i>				9-17-08

YEAR		INITIAL CHARGE		POLAR CONTACTS				RESULT OF TEST:
		NEUTRAL CONTACTS		NORMAL	REVERSE	NORMAL	REVERSE	
		MINIMUM RELEASE						
		MAXIMUM						
		DIRECT PICK-UP						
		WORKING						
		NAME (print)						DATE
		SIGNATURE						
		REVIEWED BY (print)						DATE
		SIGNATURE						

YEAR		INITIAL CHARGE		POLAR CONTACTS				RESULT OF TEST:
		NEUTRAL CONTACTS		NORMAL	REVERSE	NORMAL	REVERSE	
		MINIMUM RELEASE						
		MAXIMUM						
		DIRECT PICK-UP						
		WORKING						
		NAME (print)						DATE
		SIGNATURE						
		REVIEWED BY (print)						DATE
		SIGNATURE						











**TEN YEAR INSULATION RESISTANCE TEST FOR WIRES IN TRUNKING AND CABLES**  
RULES 234.267 and 236.108



LOCATION: C.P. TOPANGA  
SUBDIVISION: VENTURA

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MONTH: SEPT.  
YEAR: 2008

TESTED BY:  
NAME (Print): S.J. MORRIS  
SIGNATURE: *[Signature]*

DATE OF TEST	CABLE	WIRE I.D.	TEST RESULTS	RESISTANCE	CIRCUITS NOT MEETING SPECIFICATIONS	REMARKS	CONDITION
9/12/08	7c #6	WADGE	C	26			
		WAHGE		200M			
		WARGE		16			
		WADGEN		16			
		WAHGEN		16			
		WARGEN		500M			
		WARGEN		16			
	7c #6	WBDGE		500M			
		WBHGE		16			
		WBRGE		200M			
		WBDGEN		16			
		WBHGEN		16			
		WBRGEN		500M			
		WBRGEN		500M			



TEN YEAR INSULATION RESISTANCE TEST FOR WIRES IN TRUNKING AND CABLES  
 RULES 234.267 and 236.108



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LOCATION: C.P. TOPANGA  
 SUBDIVISION: VENTURA

TESTED BY: SAT MORRIS  
 NAME (Print): SAT MORRIS  
 SIGNATURE: *[Signature]*

MONTH: SEPT.  
 YEAR: 2008

DATE OF TEST	CABLE	WIRE I.D.	TEST RESULTS	RESISTANCE	CIRCUITS NOT MEETING SPECIFICATIONS	REMARKS	CONDITION
9/12/08	7c #6	EADGE	C	1M F			
		EAHGE		500M		REPLACED ARRESTOR - LEFT 16	
		EARGE		26			
		EADGEN		26			
		EAHGEN		500M			
		EARGEN		500M			
		EARGEN		16			
		EBDGE		26			
	7c #6	EBHGE		500M			
		EBRGE		16			
		EBDGEN		500M			
		EBHGEN		26			
		EBRGEN		500M			
		EBRGEN		16			

**TEN YEAR INSULATION RESISTANCE TEST FOR WIRES IN TRUNKING AND CABLES**  
 RULES 234.267 and 236.108



LOCATION: C.P. TOPANGA  
 SUBDIVISION: VENTURA

TESTED BY:  
 NAME (Print): S.T. MORRIS  
 SIGNATURE: *[Signature]*

MONTH: SEPT.  
 YEAR: 2008

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DATE OF TEST	CABLE	WIRE I.D.	TEST RESULTS	RESISTANCE	CIRCUITS NOT MEETING SPECIFICATIONS	REMARKS	CONDITION
9/17/08	12c #14	WNP1	C	INF			
		WNP1		16			
		WRP1		26			
		WRPN		26			
		WP		26			
		B 12		26			
		N 12		16			
		SP8-12		INF			
	7c #6	5	C	INF			
		10		26			
		B		26			
		C		26			
		NL		26			
		SP		INF			
		SP		INF			