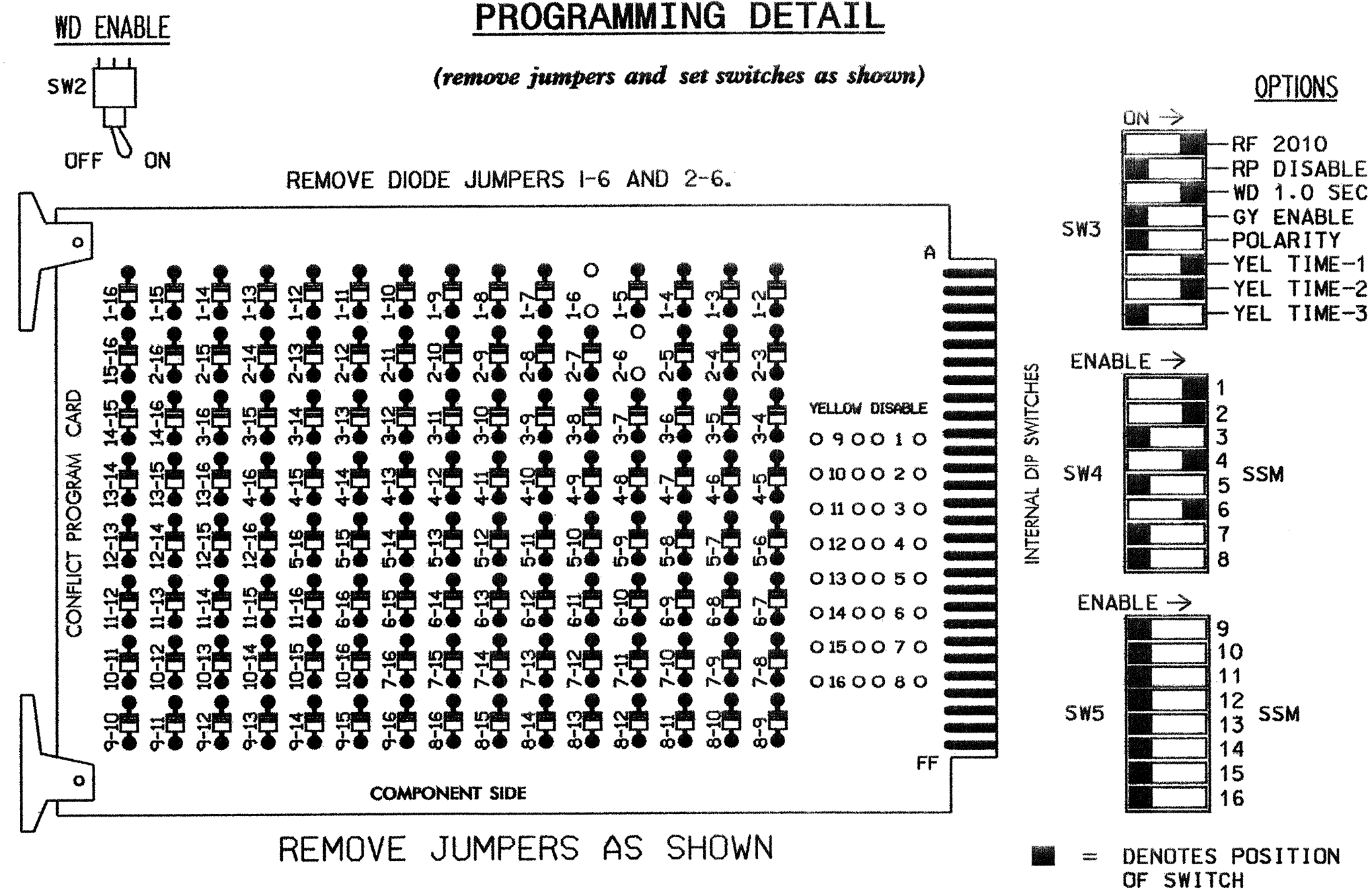


EDI MODEL 2010ECL CONFLICT MONITOR

PROGRAMMING DETAIL



NOTES:

- CARD IS PROVIDED WITH ALL DIODE JUMPERS IN PLACE. REMOVAL OF ANY JUMPER ALLOWS ITS CHANNELS TO RUN CONCURRENTLY.
- MAKE SURE JUMPERS SEL1-SEL5 ARE PRESENT ON THE MONITOR BOARD.

NOTES

- TO PREVENT "FLASH-CONFLICT" PROBLEMS, INSERT RED FLASH PROGRAM BLOCKS FOR ALL UNUSED VEHICLE LOAD SWITCHES IN THE OUTPUT FILE. THE INSTALLER SHALL VERIFY THAT SIGNAL HEADS FLASH IN ACCORDANCE WITH THE SIGNAL PLANS.
 - ENSURE THAT RED ENABLE IS ACTIVE AT ALL TIMES DURING NORMAL OPERATION. TO PREVENT RED FAILURES ON UNUSED MONITOR CHANNELS, TIE UNUSED RED MONITOR INPUTS 3,5,7, 8,9,10,11,12,13,14,15 & 16 TO LOAD SWITCH AC+ PER THE CABINET MANUFACTURER'S INSTRUCTIONS.
 - PROGRAM CONTROLLER TO START UP IN PHASES 2 AND 6 GREEN.
 - ENABLE SIMULTANEOUS GAP-OUT FEATURE, ON CONTROLLER UNIT, FOR ALL PHASES.
 - PROGRAM PHASES 2 AND 6, ON CONTROLLER UNIT, FOR VARIABLE INITIAL AND GAP REDUCTION.
 - THE CABINET AND CONTROLLER ARE PART OF THE GASTONIA CITY SIGNAL SYSTEM.
9. IF AN APPROVED EQUIVALENT OF TC-26B MICROWAVE DETECTOR IS USED, DISREGARD MICROWAVE DETECTOR WIRING DETAIL SHOWN BELOW. INSTALL ACCORDING TO MANUFACTURER'S INSTRUCTIONS. SENSOR SHALL BE WIRED SUCH THAT INPUT INTERFACE TO THE CONTROLLER IS ACHIEVED THROUGH ISOLATION CIRCUITRY.

EQUIPMENT INFORMATION

CONTROLLER.....CONTRACTOR SUPPLIED 2070L
 CABINETCONTRACTOR SUPPLIED 332
 SOFTWAREECONOLITE OASIS
 CABINET MOUNT.....BASE
 OUTPUT FILE POSITIONS...12
 LOAD SWITCHES USED.....S1,S2,S4,S6
 PHASES USED.....1,2,4,6
 OVERLAPS.....NONE

FIELD CONNECTION HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S2P	S3	S4	S4P	S5	S6	S6P	S7	S8	S8P
PHASE	1	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	8 PED
SIGNAL HEAD NO.	61	21,22	NU	NU	41,42	NU	NU	61,62	NU	NU	NU	NU
GREEN		130			103			136				
YELLOW		129			102			135				
RED	*	128			101			134				
RED ARROW												
YELLOW ARROW	126											
GREEN ARROW	127											

NU = NOT USED
 * DENOTES INSTALL LOAD RESISTOR. SEE LOAD RESISTOR INSTALLATION DETAIL THIS PAGE.

INPUT FILE POSITION LAYOUT

(front view)

FILE	1	2	3	4	5	6	7	8	9	10	11	12	13	14
U	1A	2A	3A	4A	5A	6A	7A	8A	9A	10A	11A	12A	13A	FS
I	ISOLATOR	ISOLATOR	ISOLATOR	ISOLATOR	ISOLATOR	ISOLATOR	ISOLATOR	ISOLATOR	ISOLATOR	ISOLATOR	ISOLATOR	ISOLATOR	ISOLATOR	DC ISOLATOR
L	1A	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	ST
U	6A,6B	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	DC ISOLATOR
L	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED

EX. : 1A, 2A, ETC. = LOOP NO.'S

FS = FLASH SENSE
 ST = STOP TIME

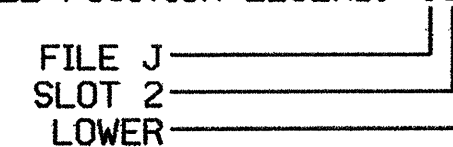
INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT ASSIGNMENT NO.	DETECTOR NO.	NEMA PHASE	CALL	EXTEND	FULL TIME DELAY	STRETCH TIME	DELAY TIME
1A ¹	TB2-5,6	I2U	39	1	2	1	Y	Y			15
	TB2-7,8	I2L	43	5	12	6	Y	Y	Y		3
* 2A	-	I3U	63	25	32	2	Y	Y			
4A	TB4-9,10	I6U	41	3	4	4	Y	Y			10
6A,6B	TB3-5,6	J2U	40	2	6	6	Y	Y			

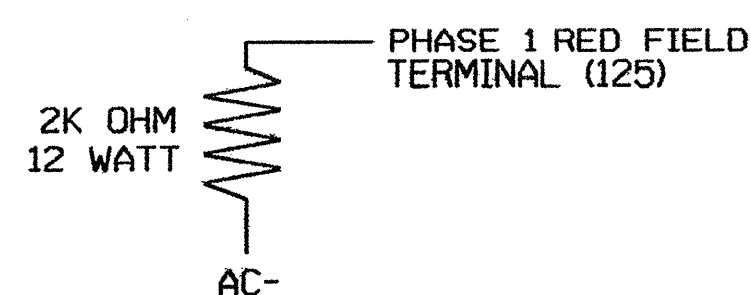
¹ ADD JUMPERS FROM TB2-5 TO TB2-7, AND FROM TB2-6 TO TB2-8.

* MICROWAVE DETECTOR. SEE WIRING DETAIL THIS PAGE.

INPUT FILE POSITION LEGEND: J2L



LOAD RESISTOR INSTALLATION DETAIL

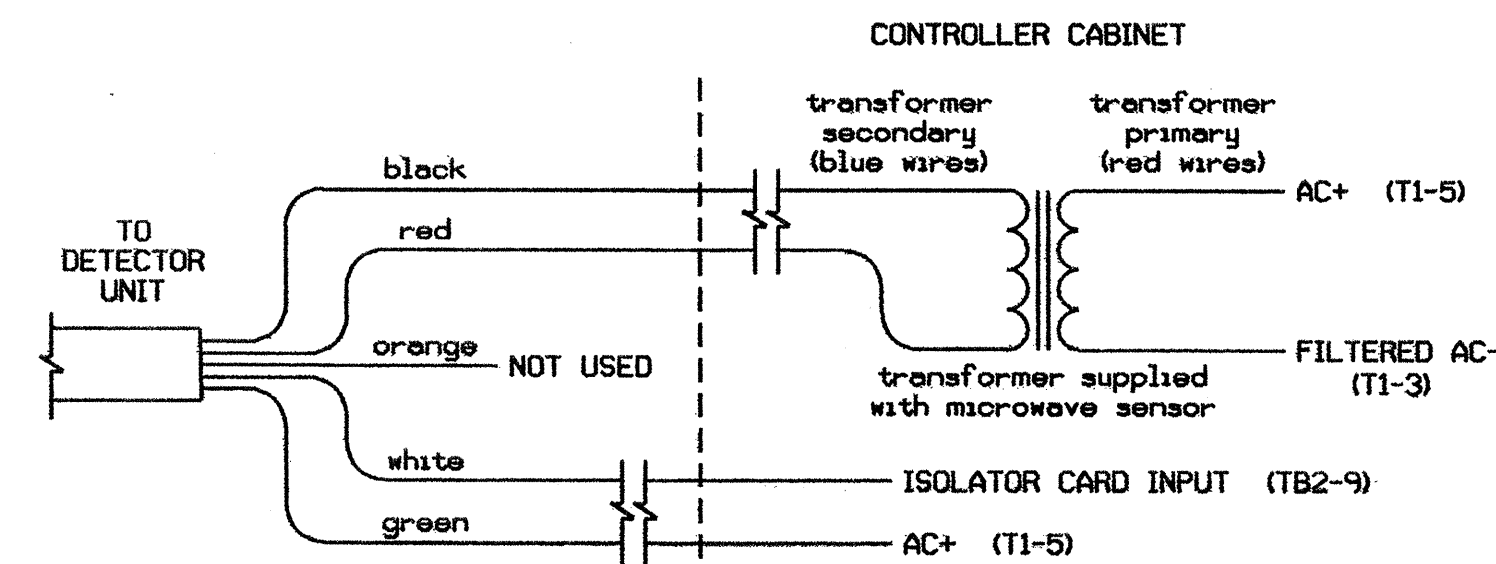


NOTE: THE PURPOSE OF THIS RESISTOR IS TO LOAD THE CHANNEL RED MONITOR INPUT IN ORDER FOR THE SIGNAL SEQUENCE MONITOR TO USE THE FULL SIGNAL SEQUENCE MONITORING CAPABILITY ON CHANNELS THAT DO NOT USE THE RED DISPLAY IN THE FIELD.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 12-0928
 DESIGNED: 10/30/03
 SEALED: 08/09/04
 REVISED:

MICROWAVE DETECTOR WIRING DETAIL

(wire as shown)



TC26B WIRE LIST

COLOR	FUNCTION
black	12V to 24V AC/DC (no polarity)
red	12V to 24V AC/DC (no polarity)
orange	Output Relay Normally Open
white	Output Relay Normally Closed
green	Output Relay Normally Common

NOTES:

- SENSOR IS A MICROWAVE SENSORS, INC. MODEL TC-26B MICROWAVE MOTION DETECTOR MOUNTED ON POLES AS INDICATED ON SIGNAL DESIGN PLANS.
- CONFIGURE AC ISOLATOR CARD TO PLACE CALL UPON REMOVAL OF AC+ FROM THE INPUT.
- IMPORTANT: FOR PROPER OPERATION OF THE MICROWAVE DETECTOR, REMOVE SURGE PROTECTION FROM TB2-9 AND TB2-10. TIE TB2-10 TO AC NEUTRAL.

SIGNAL UPGRADE - FINAL DESIGN

ELECTRICAL AND PROGRAMMING DETAILS FOR: **NC 274 (BESSEMER CITY ROAD) AT I-85 NORTHBOUND RAMP & LOOP**

Prepared in the Office of: **North Carolina Department of Transportation**

122 N. McDowell St., Raleigh, NC 27603

DIVISION 12 GASTON COUNTY GASTONIA
 PLAN DATE: JULY 2004 REVIEWED BY: *TJ*
 PREPARED BY: WILLIAM HAIRSTON REVIEWED BY: *TJ*

REVISIONS: _____ INIT. DATE _____

SEAL: **GEORGE C. BROWN** ENGINEER
 SIGNATURE: *George C. Brown* DATE: _____

SIG. INVENTORY NO. 12-0928