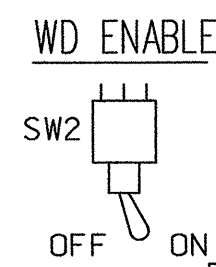


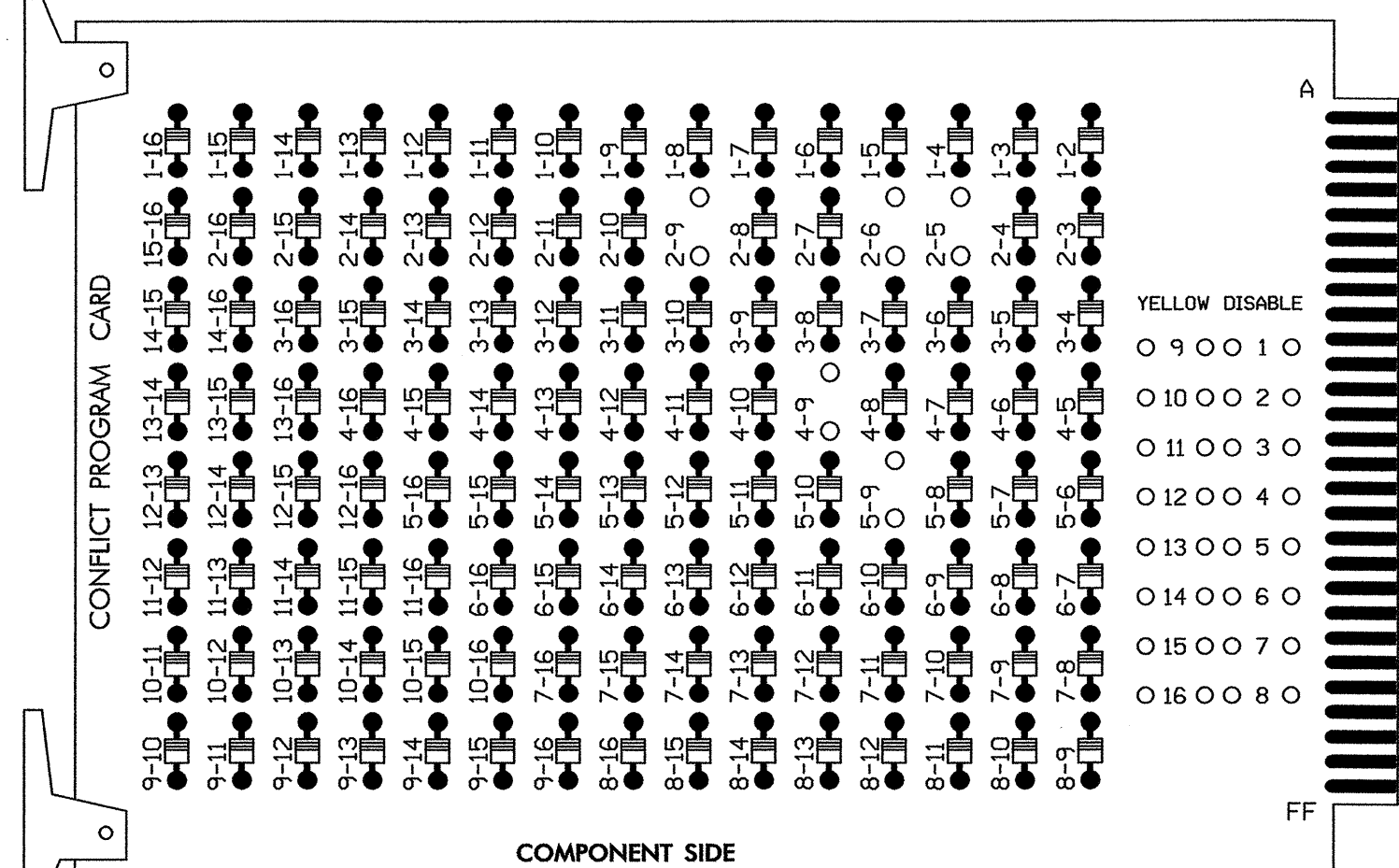
EDI MODEL 2010ECL CONFLICT MONITOR

PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

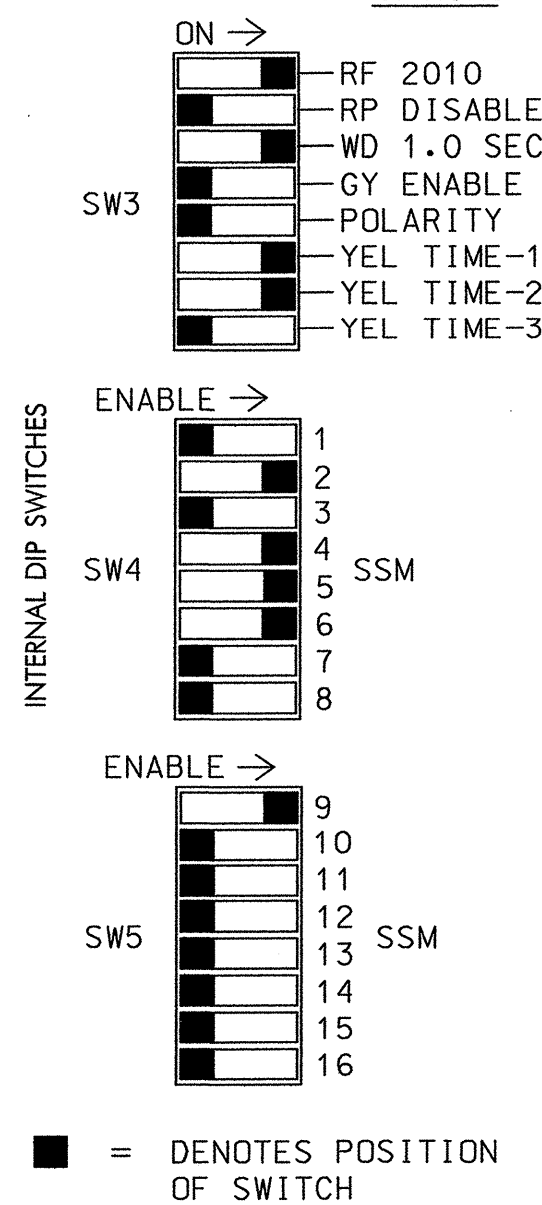


REMOVE DIODE JUMPERS 2-5, 2-6, 2-9, 4-9 AND 5-9.



REMOVE JUMPERS AS SHOWN

OPTIONS



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 1,7,8,10,11,12,13,14,15 & 16 TO LOAD SWITCH AC+ PER 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 CONTROLLER AND CABINET ARE TO BE PROGRAMMED AND WIRED TO BE PART OF A CLOSED LOOP SIGNAL SYSTEM. CONTROLLER ASSET: 0884

OVERLAP PROGRAMMING DETAIL

(program controller as shown below)

FROM MAIN MENU PRESS '8' (OVERLAPS), THEN '1' (VEHICLE OVERLAP SETTINGS).

PAGE 1: VEHICLE OVERLAP 'A' SETTINGS
 PHASE: 12345678910111213141516
 VEH OVL PARENTS: XX
 VEH OVL NOT VEH:
 VEH OVL NOT PED:
 VEH OVL GRN EXT:
 STARTUP COLOR: - RED - YELLOW - GREEN
 FLASH COLORS: - RED - YELLOW - GREEN
 SELECT VEHICLE OVERLAP OPTIONS: (Y/N)
 FLASH YELLOW IN CONTROLLER FLASH?...N
 GREEN EXTENSION (0-255 SEC)...0
 YELLOW CLEAR (0=PARENT,3-25.5 SEC)...0
 RED CLEAR (0=PARENT,0.1-25.5 SEC)...0
 OUTPUT AS PHASE # (0=NONE, 1-16)...0

OVERLAP PROGRAMMING COMPLETE

INPUT FILE POSITION LAYOUT

(front view)

FILE "I"	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	FS	2A/S23	FS	FS	FS	4A	FS	FS	FS	FS	FS	FS	FS	FS
	2B/S24	FS	FS	FS	FS	NOT USED	FS	FS	FS	FS	FS	FS	FS	DC ISOLATOR
FILE "J"	FS	5A	5C	FS	FS	6A/S25	FS	FS	SYS	FS	FS	FS	FS	NOT USED
	5B	5D	FS	FS	FS	6B/S26	FS	FS	SYS	FS	FS	FS	FS	PRE2

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

FS = FLASH SENSE
 ST = STOP TIME
 PRE2 = PREEMPTOR 2 (EV)

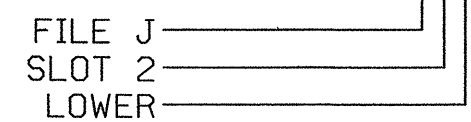
INPUT FILE CONNECTION & PROGRAMMING CHART

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
* 2A/S23	TB2-5,6	I2U	39	1	2	2/SYS	Y	Y	-	---	---
* 2B/S24	TB2-7,8	I2L	43	5	12	2/SYS	Y	Y	-	---	---
4A	TB4-9,10	I6U	41	3	4	4	Y	Y	-	---	---
5A	TB3-5,6	J2U	40	2	6	5	Y	Y	-	---	---
5B	TB3-7,8	J2L	44	6	16	5	Y	Y	-	---	---
5C	TB3-9,10	J3U	64	26	36	5	Y	Y	-	---	15
5D	TB3-11,12	J3L	77	39	46	5	Y	Y	-	---	15
* 6A/S25	TB5-9,10	J6U	42	4	8	6/SYS	Y	Y	-	---	---
* 6B/S26	TB5-11,12	J6L	46	8	18	6/SYS	Y	Y	-	---	---
* S27	TB7-9,10	J9U	59	21	15	SYS	-	-	-	---	---
* S28	TB7-11,12	J9L	61	23	17	SYS	-	-	-	---	---

* SYSTEM DETECTOR

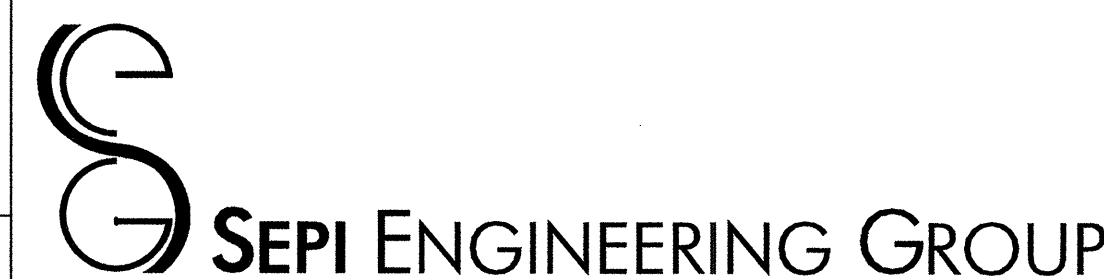
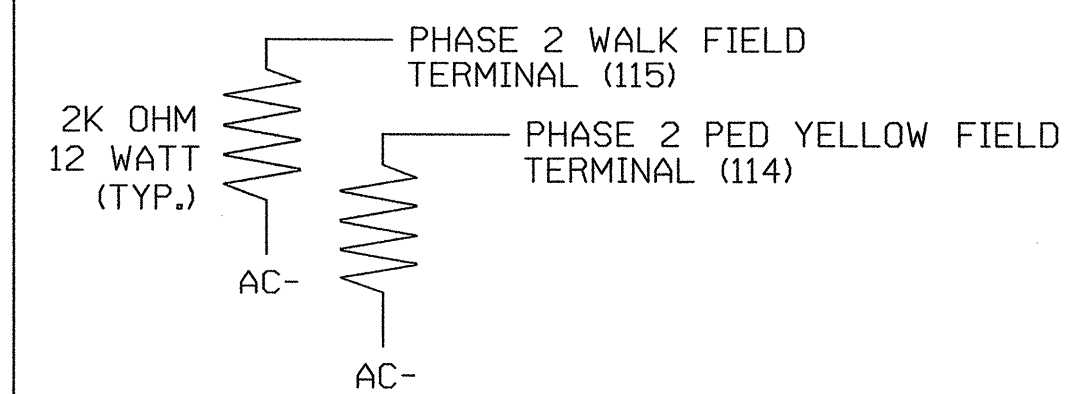
** SYSTEM DETECTOR ONLY. REMOVE THE VEHICLE PHASE ASSIGNED TO THIS DETECTOR IN THE DEFAULT PROGRAMMING.

INPUT FILE POSITION LEGEND: J2L



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 03-0884
 DESIGNED: SEPTEMBER 2003
 SEALED: 1/7/2004
 REVISED: TBD

LOAD RESISTOR INSTALLATION DETAIL



2300 Rexwoods Drive
 Suite 370
 Raleigh, NC 27607
 Tel:919-789-9977 Fax:789-9591

FIELD CONNECTION HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S2P	S3	S4	S4P	S5	S6	S6P	S7	S8	S8P	S9	S10	S11	S12	S13	S14
PHASE	1	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	8 PED	OLA	OLB	SPARE	OLC	OLD	SPARE
SIGNAL HEAD NO.	NU	21,22	NU	31	32	41	42	NU	51,52	61,62,63	NU	NU	NU	NU	43,44	NU	NU	NU
GREEN		130		118	118	103	103			136								
YELLOW		129		117	117	102	102			135								
RED		128		116	116	101	101			134								
RED ARROW									131						A121			
YELLOW ARROW									132						A122			
GREEN ARROW				118		103			133						A123			

NU = NOT USED

EQUIPMENT INFORMATION

CONTROLLER.....CONTRACTOR SUPPLIED 2070L
 CABINETCONTRACTOR SUPPLIED 332
 SOFTWAREECONOLITE OASIS
 CABINET MOUNT.....BASE
 OUTPUT FILE POSITIONS...18 (12-STD, 6-AUX)
 LOAD SWITCHES USED.....S2,S3,S4,S5,S6,S9
 PHASES USED.....2,3*,4,5,6
 OVERLAPS.....OLA=4+5

* PHASE 3 USED IN PREEMPT ONLY

BACK-UP PROTECTION PROGRAMMING NOTES

(program controller as shown below)

PROGRAM THE CONTROLLER AS FOLLOWS TO ENABLE PHASE 2+6 TO CLEAR TO PHASE 2+5 BY PROGRESSING THROUGH AN ALL RED DISPLAY.

- FROM MAIN MENU PRESS '2' (PHASE CONTROL), THEN '1' (PHASE CONTROL FUNCTIONS). SCROLL DOWN THE MENU TO "BACKUP PROTECT" FEATURE AND SELECT PHASE 2.
- ENSURE THAT RED REVERT TIMES AS SHOWN ON THE SIGNAL DESIGN PLANS ARE PROGRAMMED IN THE 'PHASE TIMING' MENU.

PREEMPT ONLY PHASE OMIT NOTE

(program controller as shown below)

FROM MAIN MENU PRESS '2' (PHASE CONTROL), THEN '1' (PHASE CONTROL FUNCTIONS). PROGRAM PHASE 3 FOR 'OMIT PHASE' AND PHASES 2, 4, 5 AND 6 FOR 'STARTUP CALLS'. THIS IS TO PREVENT PHASE 3 FROM BEING SERVED WHEN NOT IN PREEMPT.

SIGNAL UPGRADE FINAL DESIGN PAGE 1 OF 2

ELECTRICAL AND PROGRAMMING DETAILS FOR: SR 1409 (MILITARY CUTOFF ROAD) AT SR 2048 (GORDON ROAD) AND (OGDEN RESCUE SQUAD)

Prepared for the Offices of: NORTH CAROLINA PROFESSIONAL SEAL 07438 ENGINEER JAMES O. DEATON

PLAN DATE: NOVEMBER 2003 REVIEWED BY: J O DEATON
 PREPARED BY: M W YALCH REVIEWED BY: [Signature]

REVISIONS: [Table] INIT. DATE: [Table]

122 N. McDowell St., Raleigh, NC 27603

SIG. INVENTORY NO. 03-0884