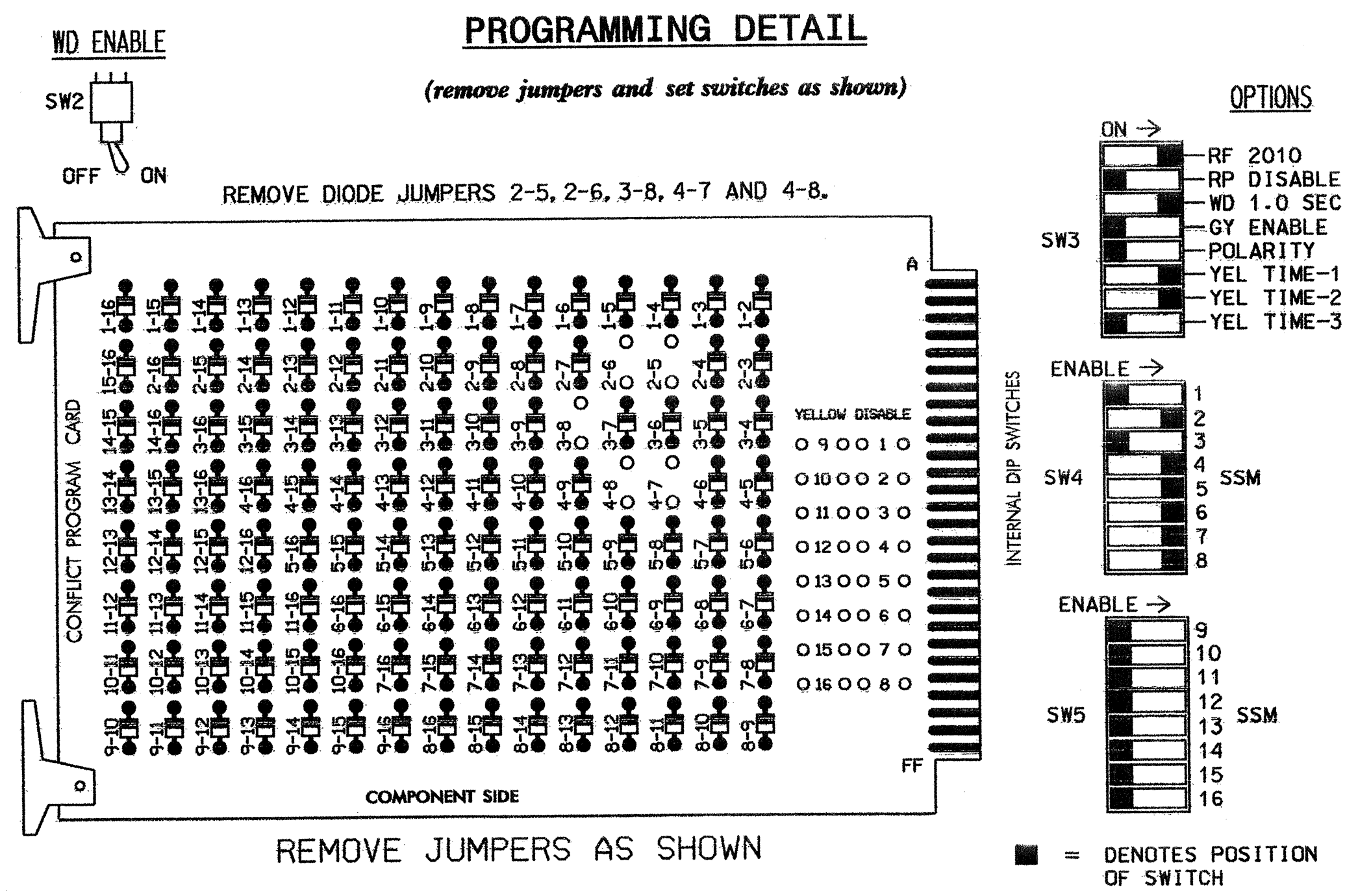


**EDI MODEL 2010ECL CONFLICT MONITOR**



- 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 1,3,9, 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 4 AND 8, ON CONTROLLER UNIT, FOR DUAL ENTRY.

**EQUIPMENT INFORMATION**

CONTROLLER.....CONTRACTOR SUPPLIED 2070L  
 CABINET .....CONTRACTOR SUPPLIED 332  
 SOFTWARE .....ECONOLITE OASIS 3.00.81  
 CABINET MOUNT.....BASE  
 OUTPUT FILE POSITIONS...12  
 LOAD SWITCHES USED.....S2,S3,S4,S5,S6,S7,S8  
 PHASES USED.....2,3\*,4,5,6,7,8  
 OVERLAPS.....NONE

\* USED DURING PREEMPT ONLY

**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.	NU	21,22	NU	81	41,42	NU	21	61,62	NU	41	81,82	NU
GREEN		130			103			136			109	
YELLOW		129		*	102			135			108	
RED		128			101		*	134		*	107	
RED ARROW												
YELLOW ARROW							132			123		
GREEN ARROW				118			133			124		

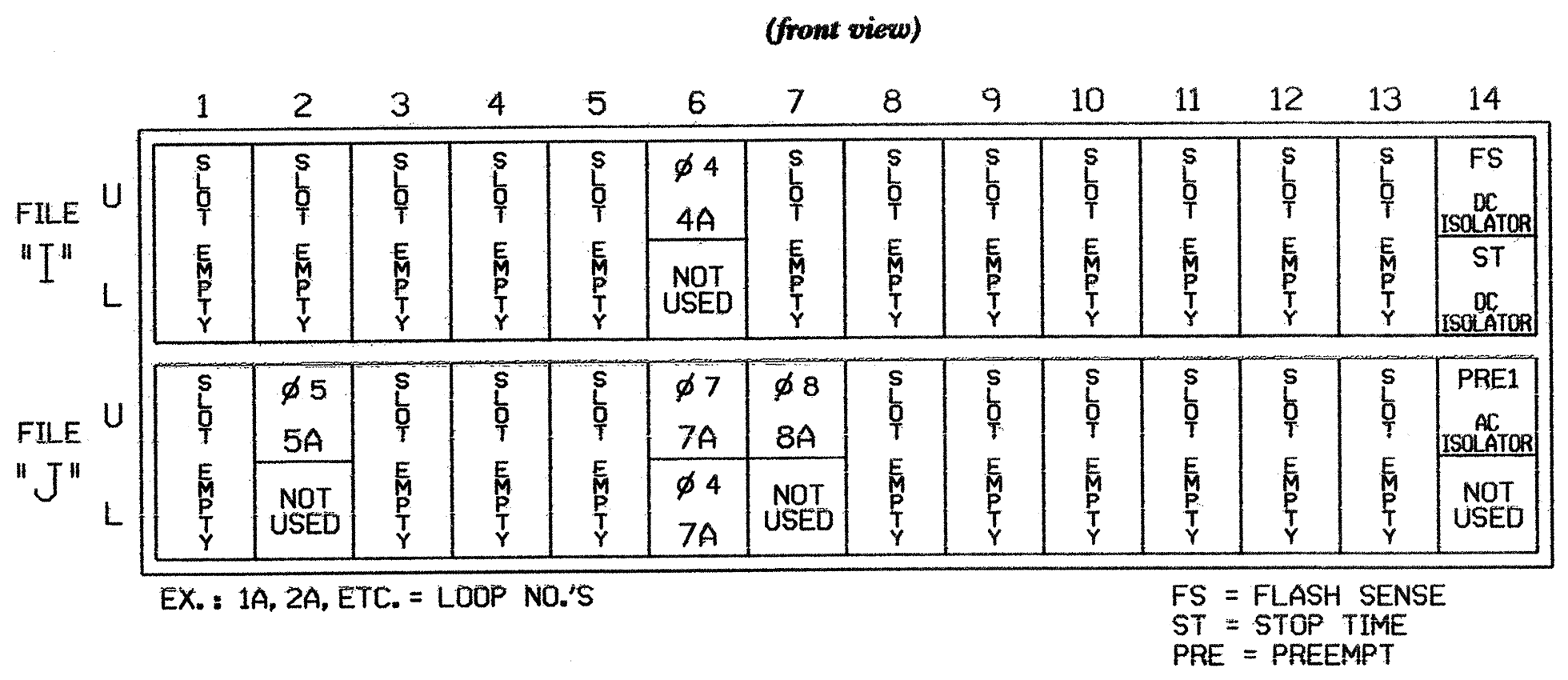
NU = NOT USED  
 \* DENOTES INSTALL LOAD RESISTOR. SEE LOAD RESISTOR INSTALLATION DETAIL THIS PAGE.

**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, 6, 7 AND 8 FOR 'STARTUP CALLS'. THIS IS TO PREVENT PHASE 3 FROM BEING SERVED WHEN NOT IN PREEMPT.

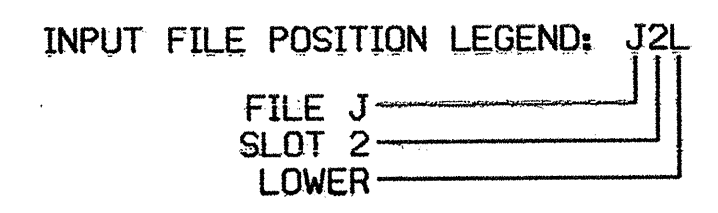
**INPUT FILE POSITION LAYOUT**



**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
4A	TB4-9,10	I6U	41	3	4	4	Y	Y			10
5A	TB3-5,6	J2U	40	2	6	5	Y	Y			15
7A	TB5-9,10	J6U	42	4	8	7	Y	Y			15
	TB5-11,12	J6L	46	8	18	4	Y	Y			3
8A	TB7-1,2	J7U	66	28	38	8	Y	Y			10

1 ADD JUMPERS FROM TB5-9 TO TB5-11, AND FROM TB5-10 TO TB5-12.



**BACK-UP PROTECTION PROGRAMMING DETAIL**

- (program controller as shown below)
- FROM MAIN MENU PRESS '2' (PHASE CONTROL), THEN '1' (PHASE CONTROL FUNCTIONS). SCROLL TO THE BOTTOM OF THE MENU AND ENABLE DYNAMIC/BACKUP CONTROL FUNCTIONS 1 AND 2.
  - FROM PHASE CONTROL FUNCTIONS MENU PRESS '2' (DYNAMIC/BACKUP CONTROL FUNCTIONS).

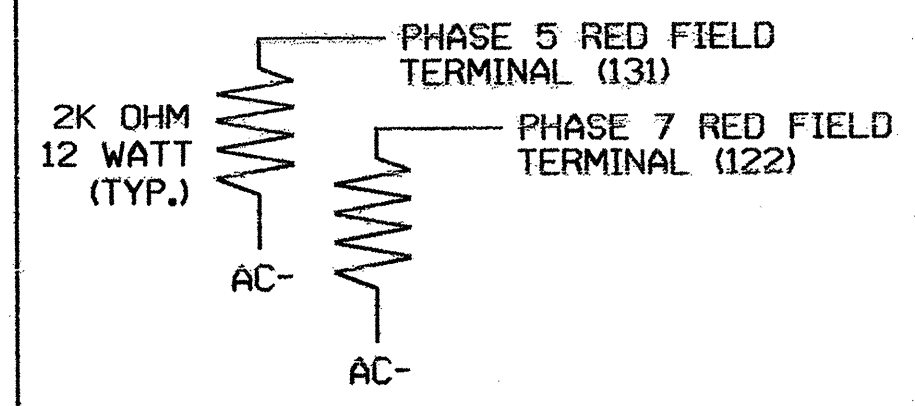
DYNAMIC/BACKUP CONTROL FUNCTION #01  
 OVERLAPS: ABCDEFGHIJKLMNPO  
 IF OVERLAPS ARE ACTIVE: |  
 OR PHASES: |12345678910111213141516  
 IF PHASES ARE ON: | X  
 OMIT PHASES: | X  
 CALL PHASES: | X

PRESS 'NEXT'

DYNAMIC/BACKUP CONTROL FUNCTION #02  
 OVERLAPS: ABCDEFGHIJKLMNPO  
 IF OVERLAPS ARE ACTIVE: |  
 OR PHASES: |12345678910111213141516  
 IF PHASES ARE ON: | X  
 OMIT PHASES: | X  
 CALL PHASES: | X

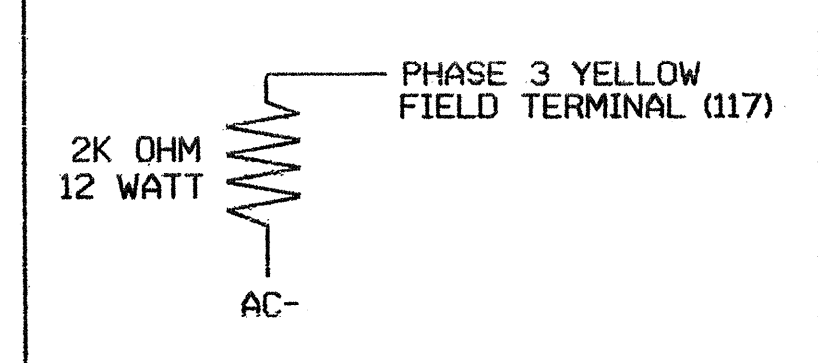
BACKUP PROTECTION PROGRAMMING COMPLETE

**LOAD RESISTOR INSTALLATION DETAIL**



NOTE: THE PURPOSE OF THESE RESISTORS IS TO LOAD THE CHANNEL RED MONITOR INPUTS 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.

**LOAD RESISTOR INSTALLATION DETAIL**



NOTE: THE PURPOSE OF THIS RESISTOR IS TO LOAD THE CHANNEL YELLOW MONITOR INPUT IN ORDER TO PREVENT THE SIGNAL SEQUENCE MONITOR FROM DETECTING ANY POSSIBLE 'PHANTOM' (OR FALSE) CONFLICT, AS THIS CHANNEL HAS NO YELLOW FIELD DISPLAY.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 12-00121, T2  
 DESIGNED: 10/30/03  
 SEALED: 08/09/04  
 REVISED:

SIGNAL UPGRADE - TEMPORARY DESIGN 1,2 - SHEET 1 OF 2

ELECTRICAL AND PROGRAMMING DETAILS FOR: NC 274 (BESSEMER CITY ROAD) AT NC 275 (DALLAS-BESSEMER CITY ROAD) AND SR 1312 (OATES ROAD)

PREPARED BY: WILLIAM HAIRSTON REVIEWED BY: T. J. J.

DATE: JULY 2004

122 N. McDowell St., Raleigh, NC 27603

Seal: GEORGE C. BROWN, ENGINEER, 022013

DATE: 8/16/04

SIG. INVENTORY NO. 12-00121, T2