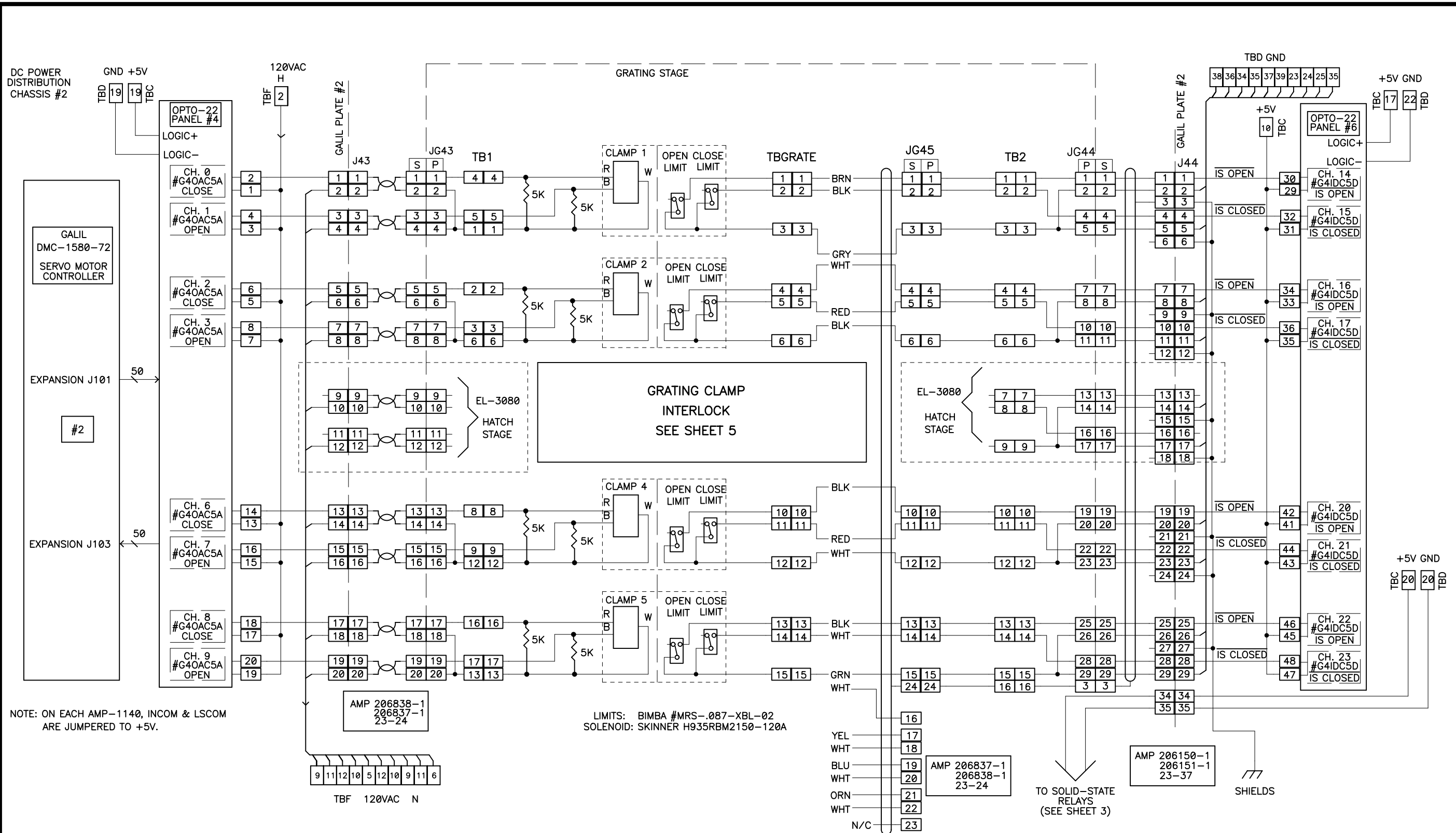


REVISION	
07-06-01	CORRECTED PIN NUMBERS ON JG44 ON SHEET 3
07-11-01	UPDATED TITLE SHEET TO CORRECT SHEET NUMBERING AT UPPER RIGHT CORNER OF DRAWING
07-30-01	CHANGE J43 REF TO J44, ADDED JG44 AND DB-9 LABELS (SHEET 4)
08-01-01	CORRECTED WIRING AND TERMINAL DESIGNATIONS AND ADDED WIRE COLORS ON SHEET 4
02-25-02	ADDED GRATING PIN CLAMP CIRCUIT (SHEET 4)
05-21-02	MADE CORRECTIONS ON SHEET 4 AND ADDED CABLE DRAWING NUMBER TO SHEETS 2 AND 4
10-28-03	ADDED BLOCK FOR GRATING PIN FUNCTION

UNIVERSITY OF CALIFORNIA LICK OBSERVATORY		GRATING CLAMP STAGE WIRING DEIMOS SPECTROGRAPH	
DES'N BY: B. Alcott	ORIGIN DATE: 05-16-95	DWG. NO.	NUM. 1 OF 5
Last SN	MODIFY DATE: 10-28-03	EL-3082	
PATH: DEIMOS\GRATCLMP			



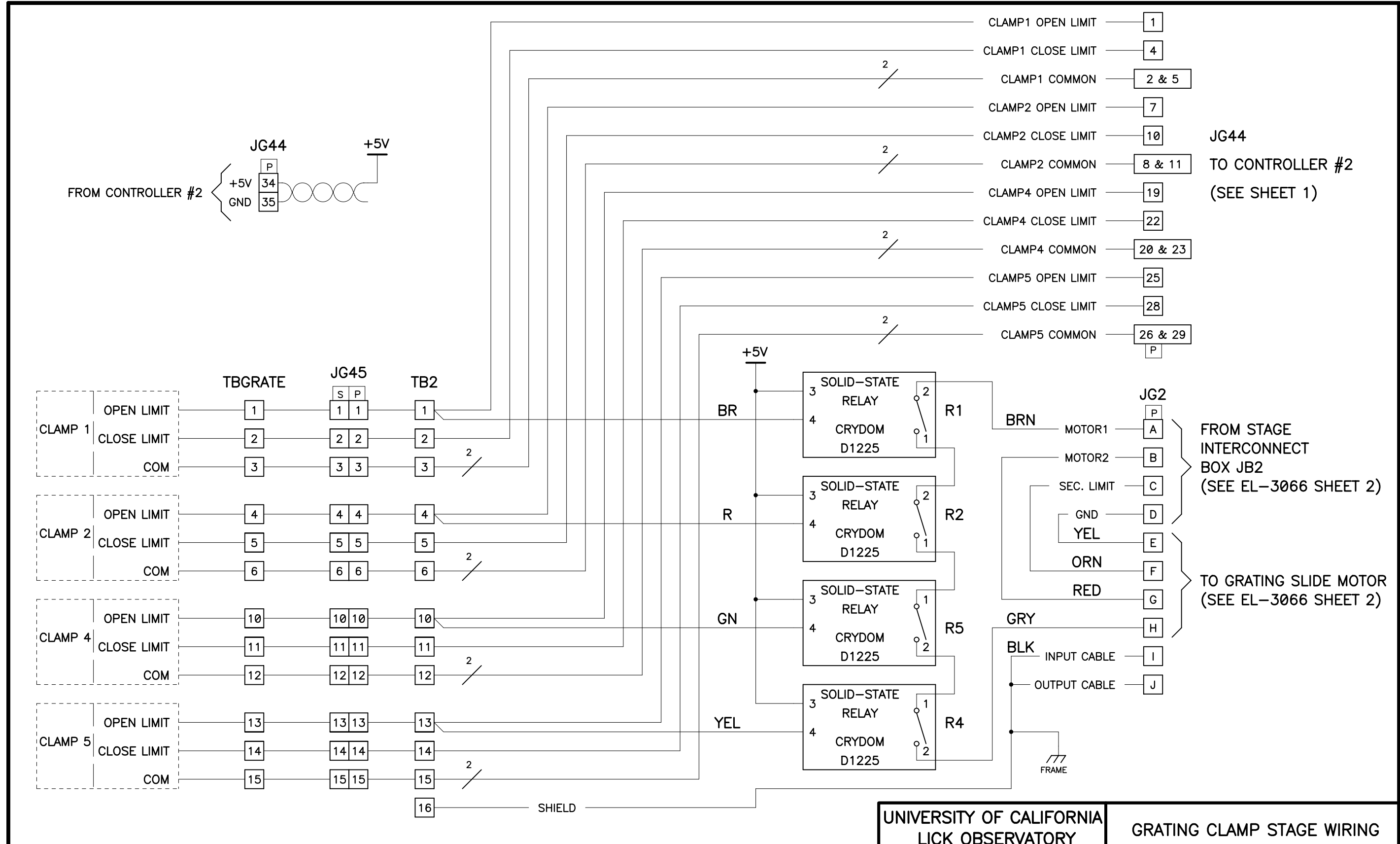
NOTE: ON EACH AMP-1140, INCOM & LSCOM ARE JUMPED TO +5V.

LIMITS: BIMBA #MRS-.087-XBL-02
SOLENOID: SKINNER H935RBM2150-120A

ALSO SEE EL-3098 FOR CABLE INFO

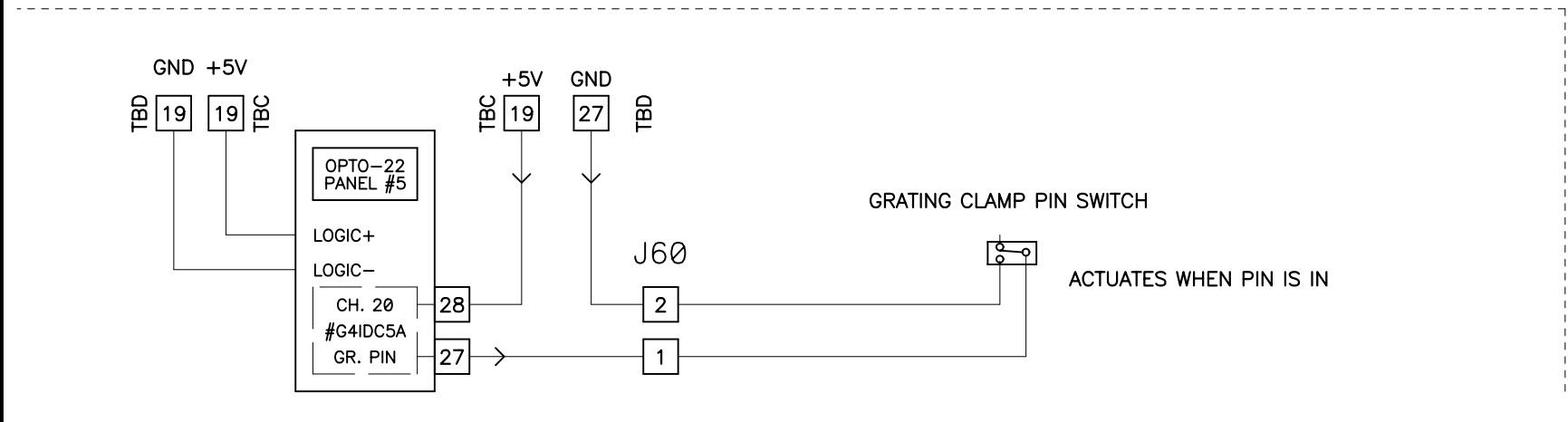
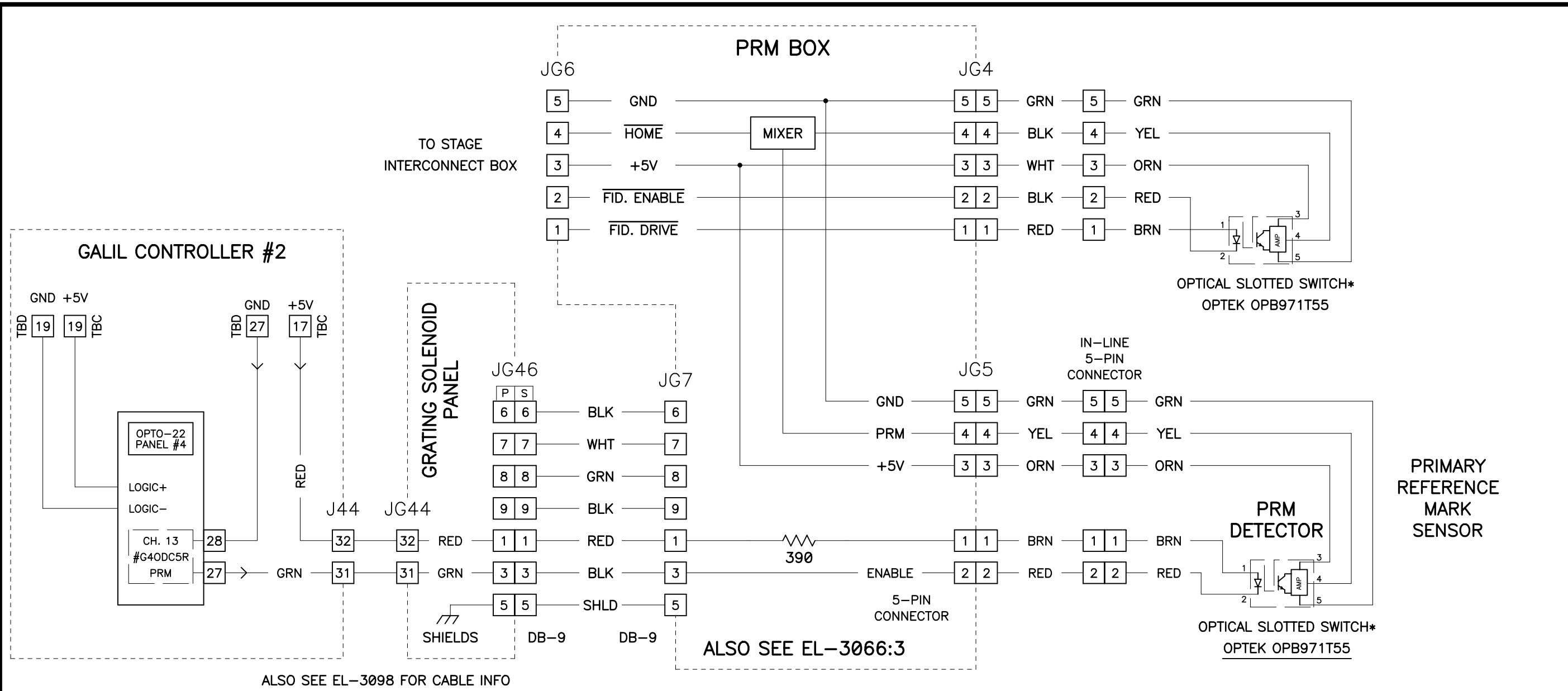
UNIVERSITY OF CALIFORNIA LICK OBSERVATORY		GRATING CLAMP STAGE WIRING DEIMOS SPECTROGRAPH	
DES'N BY: B. Alcott	ORIGIN DATE: 05-16-95	DWG. NO.	NUM. 2 OF 5
Last SN	MODIFY DATE: 06-08-01	EL-3082	
PATH: DEIMOS\GRATCLMP			

REVISION	
03-09-98	CORRECTED EXPANSION J NUMBERS.
03-19-98	CHANGED TO B-SIZE. ADDED 5K RESISTORS AND CORRECTED CONNECTOR NUMBERS.
03-24-98	CORRECTED PIN NUMBERS 13, 16, & 17 OF TB1 AND RESISTOR CONNECTIONS
10-17-00	CHANGED TO NATIONAL WIRE CABLE
04-30-01	SWAPPED OPEN AND CLOSE SIGNAL LABELS ON OPTO-22 PANEL #4
06-08-01	ADDED SOLID-STATE RELAYS AND CHANGED CLAMP3 TO HATCH



REVISION
06-08-01 ADDED PIN NUMBERS, COLORS AND JG45 'P' HALF
06-19-01 ADDED FRAME GROUND TO GRATING CLAMP INTERLOCK, JG2, PIN J. ADDED TWISTS TO JG44 AND REMOVED GROUND SYMBOL.
07-05-01 MOVED S/S RELAY INPUTS FROM CLAMP CLOSE LIMIT TO CLAMP OPEN LIMIT SO THAT THE MOTOR CAN ONLY MOVE WHEN ALL CLAMPS ARE OPEN
07-06-01 CORRECTED PIN NUMBERS ON JG44

UNIVERSITY OF CALIFORNIA LICK OBSERVATORY		GRATING CLAMP STAGE WIRING DEIMOS SPECTROGRAPH	
DES'N BY: B. Alcott	ORIGIN DATE: 05-16-95	DWG. NO.	NUM. 3 OF 5
Last SN	MODIFY DATE: 07-06-01	EL-3082	
PATH: DEIMOS\GRATCLMP	REV.A		



REVISION
05-07-01 ADDED THIS SECOND SHEET AND MOVED NOTES TO THIRD SHEET
07-26-01 ADDED WIRE COLORS AND CONNECTOR NUMBERS TO SCHEMATIC
07-30-01 CHANGE J43 REF TO J44, ADDED JG44 AND DB-9 LABELS
08-01-01 CORRECTED WIRING AND TERMINAL DESIGNATIONS AND ADDED WIRE COLORS
02-25-02 ADDED GRATING PIN CLAMP CIRCUIT
05-21-02 CORRECTED OPTO-22 RELAY LABELS AND ADDED BLOCKS TO SHOW LOCATIONS OF CONNECTORS

UNIVERSITY OF CALIFORNIA LICK OBSERVATORY		GRATING CLAMP STAGE WIRING DEIMOS SPECTROGRAPH	
DES'N BY: B. Alcott	ORIGIN DATE: 05-16-95	DWG. NO.	NUM. 4 OF 5
Last SN	MODIFY DATE: 05-21-02	EL-3082	
PATH: DEIMOS\GRATCLMP			

NOTE: THESE SENSORS ARE DIFFERENT FROM THOSE USED ON ALL OTHER STAGES. THEY ARE OPEN-COLLECTOR OUTPUT DEVICES USED SO THAT WE CAN 'WIRE OR' THE TWO SENSORS. THIS ALLOWS THE PRM'S TO BE LOCATED FASTER. ALSO SEE EL-3066

WIRING DETAILS:

1. THE CONNECTIONS BETWEEN THE GALIL CONTROLLER AND THE OPTO-22 MODULES ARE MADE WITH THREE 50-PIN RIBBON CABLES.
2. THE AC HOT SIDE WIRING ON THE OPTO-22 PANEL #4 IS DONE USING THE OPTO-22 BUS BAR.
3. THE AC NEUTRAL WIRING COMES FROM THE AC DISTRIBUTION TERMINAL STRIP.
4. THE WIRING BETWEEN THE GALIL PLATE AND THE SOLENOID PLATE USES NATIONAL WIRE #2464, 12-PAIR, 20 AWG WITH AN OVERALL BRAID SHIELD
5. ALL WIRING ON THE SOLENOID PLATE AND LIMIT SWITCHES ON GRATING STAGE IS 18 AWG.
6. THE WIRING BETWEEN THE GRATING STAGE CLAMP LIMIT SWITCHES AND THE GALIL PLATE IS THE SAME AS ITEM #4.

CONNECTORS:

1. THE CONNECTOR FOR THE SOLENOIDS IS A CPC 23-37 #206151-1 CONNECTOR AND MATING #206150-1 CABLE END.
2. THE CONNECTOR FOR THE LIMITS IS A REVERSE SEX CPC 23-37 #206306-1 AND #206305-1.
2. THE CONNECTOR FOR THE CABLE FROM TBGRATE TO TB2 IS CPC 23-24 #206837-1 AND #206838-1

CONNECTIONS:

1. THE SOLENOID PLATE IS WIRED WITH 18 AWG WIRE BETWEEN THE CPC CONNECTOR AND THE TERMINAL STRIP.
2. THE LIMIT SWITCHES ARE WIRED WITH 22 AWG WIRE BETWEEN THE CPC CONNECTOR AND THE TERMINAL STRIP.

UNIVERSITY OF CALIFORNIA LICK OBSERVATORY		GRATING CLAMP STAGE WIRING DEIMOS SPECTROGRAPH	
DES'N BY: B. Alcott	ORIGIN DATE: 05-16-95	DWG. NO.	NUM. 5 OF 5
Last SN	MODIFY DATE: 04-30-01	EL-3082	
PATH: DEIMOS\GRATCLMP			
REVISION			
04-30-01 CORRECTED WIRE TYPE - ITEM #4			