

\*NOTE: SECONDARY LIMIT SWITCHES ARE USED WITH THE ROLLER NORMALLY DEPRESSED. THIS DIAGRAM REFLECTS THE CONNECTIONS TO THE SWITCH - NC, NO, AND COM. IN USE, THE CURRENT PATHS ARE 'MADE'

SECOND CONNECTOR ADDED TO ALLOW PART OF STAGE TO DISCONNECT WITH DEWAR FOR EASE OF MAINTENANCE. MOTOR AND SECONDARY LIMIT STAY WITH DEWAR.

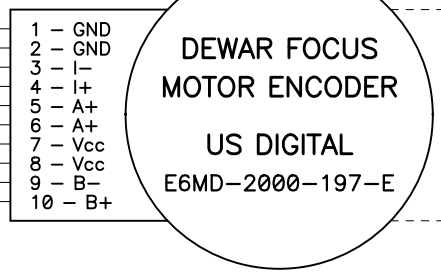
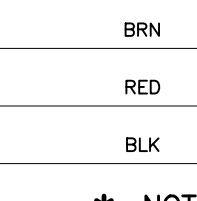
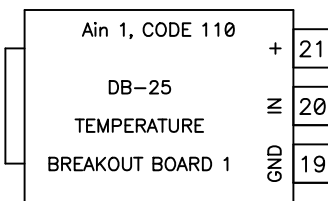
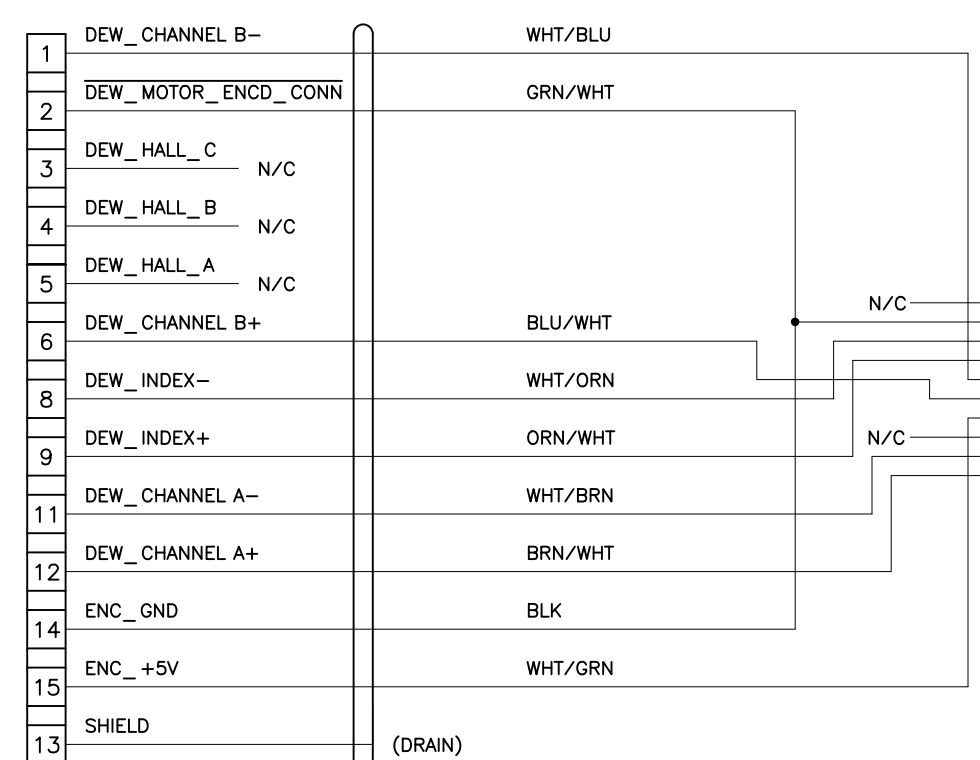
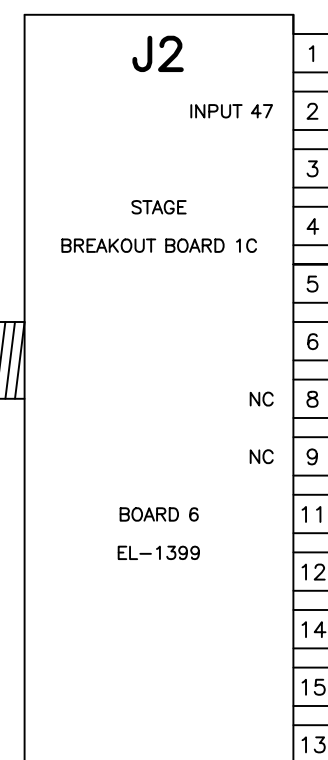
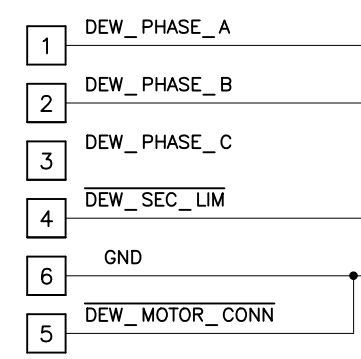
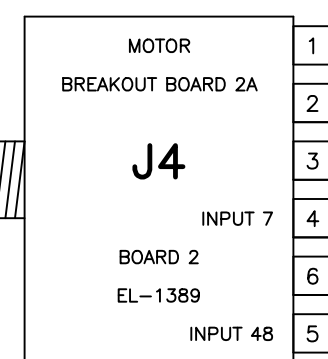
DEWAR FOCUS SECONDARY LIMIT

KD=67  
KP=20  
KI=20  
IL=-0.25

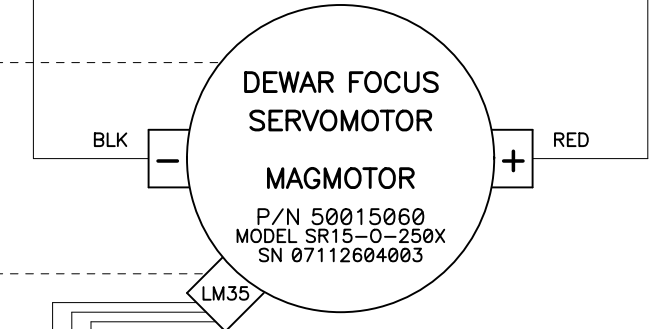
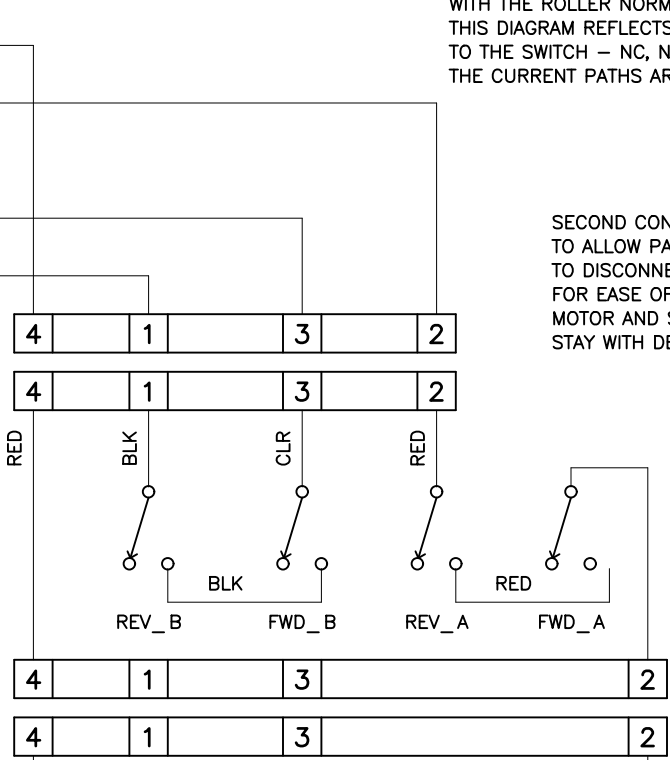
# G-AXIS

TO ELEC. RACK

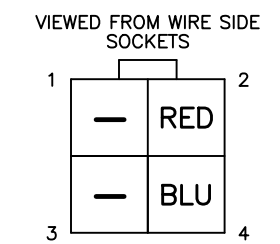
TO ELEC. RACK



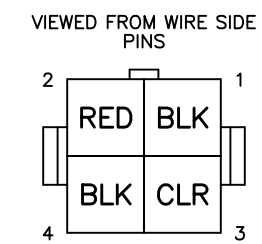
NOTE: US DIGITAL ENCODER A AND B CHANNELS ARE SWAPPED FOR ALL APF STAGES. THIS ALLOWS MOTOR WIRING TO BE CONSISTENT WITH OUR EXISTING SCHEME WHERE POSITIVE MOVES THE STAGE AWAY FROM ITS MOTOR.



CONXALL: 8282-5PG-3DC 6282-5SG-2DC



WIRING AT AMP  
CONN: AMP 172167-1  
SOCKETS: 171639-1



WIRING AT MOTOR  
CONN: AMP 172159-1  
PINS: 171638-1

\* NOTE: MOTOR SIGNAL SHIELDS ARE TIED TO THE BREADBOARD ENTRY PANEL FLOATS.

UNIVERSITY OF CALIFORNIA LICK OBSERVATORY		DEWAR FOCUS STAGE APF SPECTROMETER	
DES'N BY: B. Alcott	ORIGIN DATE: 02-09-04	DWG. NO. EL-3517	NUM. 2 OF 4
Last SN	MODIFY DATE: 11-28-11	REV. A	
PRINT TIME: 09:29:32	PRINT DATE: Wed Nov 14, 2012	PATH: APF\ APF_dewar_focus.sch	

REVISIONS [http://loel.ucolick.org/manual/Apf/schematics/APF\\_dewar\\_focus\\_sh\\_2.pdf](http://loel.ucolick.org/manual/Apf/schematics/APF_dewar_focus_sh_2.pdf)

03-15-07	CHANGED SENSE OF 2ND LIMIT AND ADDED NOTE
01-31-08	ADDED SHIELDS TO MOTOR SIGNALS AND ADDED CONNECTOR PART NUMBERS FOR MOTOR CONNECTOR
02-13-08	ADDED SECOND MOTOR CONNECTOR AND ADDED TEMPERATURE SENSOR CONNECTOR
10-24-08	REMOVED UNUSED CONNECTOR BETWEEN STAGE BREAKOUT BOARD (EL1399) & THE U.S. DIGITAL ENCODER.
10-24-08	REMOVED UNUSED CONNECTOR BETWEEN STAGE BREAKOUT BOARD (EL1399) & THE U.S. DIGITAL ENCODER.
01-06-10	UPDATED MOTOR TUNING NUMBERS
05-11-11	ADDED SECOND SECONDARY LIMIT - INSTALLED (LAST YEAR) BECAUSE A SINGLE SWITCH HAS TOO MUCH HYSTERESIS.
05-27-11	CORRECTED TEMPERATURE SENSOR WIRING AND ADDED COLORS
11-28-11	ADDED INPUT BIT INFO