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Mauna Loa Solar Observatory Observer's Log  
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Fri Jul 28 16:28:15 GMT 2006

Year: 06 Doy: 209

Observer: yasukawa

WEATHER COMMENT: Fri Jul 28 16:28:37 GMT 2006

Clear overhead but sun behind high cloudbank to east. S wind 19 mph,  
temp 43 F.

\_\_\_\_end\_\_\_\_

\*\*MKIV PROBLEM\*\*: Fri Jul 28 16:29:30 GMT 2006

Waited for KCC monitor to come up before doing "Run".

KCC monitor did not come up, I can see CW pulses at J6-C16 on the transformation  
board indicating KCC is sending barrel pulses to the tranformation  
board.

Barrel is not turning.

\_\_\_\_end\_\_\_\_

\*\*MKIV PROBLEM\*\*: Fri Jul 28 16:44:57 GMT 2006

One possible clue.... Barrel status indicating CW limit, drive is enabled  
in CW direction. Barrel is actually at 359, the stow position which is  
not a limit.

\_\_\_\_end\_\_\_\_

Fri Jul 28 16:46:57 GMT 2006 CHIP Start Patrol

SBM COMMENT: Fri Jul 28 16:47:08 GMT 2006

Observing.

\_\_\_\_end\_\_\_\_

PSPT COMMENT: Fri Jul 28 16:48:28 GMT 2006

Starting up.

\_\_\_\_end\_\_\_\_

Fri Jul 28 16:49:30 GMT 2006 PICS Start Patrol

WEATHER COMMENT: Fri Jul 28 16:59:29 GMT 2006

Cloud deck following sun as it tries to climb out. Paused SBM.

\_\_\_\_end\_\_\_\_

\*\*MKIV PROBLEM\*\*: Fri Jul 28 17:18:12 GMT 2006

CW pulses also at J25-2, the output of the signal transformation board  
going up to the dome.

\_\_\_\_end\_\_\_\_

COMMENT: Fri Jul 28 17:46:37 GMT 2006

jostling spar around troubleshooting mk4.

\_\_\_\_end\_\_\_\_

Fri Jul 28 18:02:18 GMT 2006 PICS Flat

Fri Jul 28 18:03:09 GMT 2006 CHIP LSD

Fri Jul 28 18:04:36 GMT 2006 PICS End Flat

Fri Jul 28 18:04:42 GMT 2006 PICS ReStart Patrol

Fri Jul 28 18:04:51 GMT 2006 CHIP End LSD

Fri Jul 28 18:04:58 GMT 2006 CHIP BiasLSD

Fri Jul 28 18:05:37 GMT 2006 CHIP End BiasLSD

Fri Jul 28 18:05:42 GMT 2006 MKIV Start Patrol

Fri Jul 28 18:05:44 GMT 2006 CHIP Bias  
Fri Jul 28 18:06:24 GMT 2006 CHIP End Bias  
Fri Jul 28 18:06:29 GMT 2006 CHIP ReStart Patrol

**\*\*MKIV PROBLEM\*\***: Fri Jul 28 18:06:16 GMT 2006

Installed probes on output to 75115 line receiver on the spar after turning off spar power. Connected scope to probes and turned spar power back on. Cycled KCC power and watched as KCC rebooted. Barrel CW pulses appeared there between the line receiver and the STM101 board.

There is the possibility that enough time has passed that the intermittent went away or that pulling the transceiver board to attach the probes and inserting the board again may have fixed a poor connection at the board edge connector.

As a possible fix, I will replace the 75115, IC-A on the board. Turning off spar power and working on board. This may again hose the pointing.

\_\_\_\_end\_\_\_\_

**\*\*MKIV PROBLEM\*\***: Fri Jul 28 18:31:52 GMT 2006

Tesong barrel in overcast. Patrol is working.

\_\_\_\_end\_\_\_\_

WEATHER COMMENT: Fri Jul 28 18:37:39 GMT 2006

Anvil top of cloud bank to east keeps expanding westward faster than the sun is moving.

\_\_\_\_end\_\_\_\_

**\*\*MKIV PROBLEM\*\***: Fri Jul 28 18:45:18 GMT 2006

Did an End Day and then turned off KCC. Powered back up to see if barrel will move from 359 to 176 as it should during normal start-up.

\_\_\_\_end\_\_\_\_

**\*\*MKIV PROBLEM\*\***: Fri Jul 28 18:48:36 GMT 2006

OK, Startup performed normally. Patrol is running normally in overcast. Either replacement 75115 or board reseal fixed the problem or the real culprit has had its morning coffee and has decided to start working as Allen proposed.

\_\_\_\_end\_\_\_\_

COMMENT: Fri Jul 28 18:51:50 GMT 2006

Time for my morning coffee!

\_\_\_\_end\_\_\_\_

Fri Jul 28 19:19:18 GMT 2006 MKIV End Patrol

Fri Jul 28 19:21:51 GMT 2006 CHIP End Patrol

Fri Jul 28 19:22:01 GMT 2006 PICS End Patrol

**\*\*MKIV PROBLEM\*\***: Fri Jul 28 20:08:49 GMT 2006

Checked CW and CCW limit switches and they are currently working OK. CW limit LED was on this morning even though the barrel was at 359 degrees. If the CW limit switch was actually enabled/stuck upstairs, then CW pulses coming out of the KCC would not get through the 75115 upstairs which would be disabled by the limit switch. NO enables line receiver, NC -- barrel at limit, line receiver disabled. If CW limit switch is closed, CW pulses are blocked to STM101 stepper motor driver board. << places to check

if barrel doesn't rotate tomorrow morning.

\_\_\_\_end\_\_\_\_

WEATHER COMMENT: Fri Jul 28 20:29:26 GMT 2006

light mist moved in, closed domes.

\_\_\_\_end\_\_\_\_

WEATHER COMMENT: Fri Jul 28 21:27:13 GMT 2006

In fringes of former tropical depression Daniel. In light blowing mist,  
thick cloud bank, 22 mph wind gusting to 34 mph.

\_\_\_\_end\_\_\_\_

GONG COMMENT: Fri Jul 28 21:28:46 GMT 2006

Stowing turret as a precaution.

\_\_\_\_end\_\_\_\_

Fri Jul 28 21:29:30 GMT 2006

MkIV

18\_05.rawmk4 18\_08.rawmk4