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## Mauna Loa Solar Observatory Observer's Log

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Wed Mar 15 17:09:02 GMT 2000

Year: 00 Doy: 075 Observer: koon

WEATHER COMMENT: Wed Mar 15 17:09:25 GMT 2000 Clear sky, wind=10 mph from the SE, temp=42 F.

Wed Mar 15 17:10:08 GMT 2000 CHIP Startup--Initializing new tape

Wed Mar 15 17:14:01 GMT 2000 MKIV Start Patrol

Wed Mar 15 17:14:07 GMT 2000 CHIP CHIP Start 7 Passband Patrol Wed Mar 15 17:14:07 GMT 2000 CHIP CHIP Start 7 Passband Patrol

Wed Mar 15 18:00:31 GMT 2000 PICS Flat
Wed Mar 15 18:03:10 GMT 2000 PICS End Flat
\*\*PSPT PROBLEM\*\*: Wed Mar 15 18:39:54 GMT 2000

Judging from the recent focus problems it looks like the stepper motor for the focus stage may be missing steps, the limit switches are being activated at perceived positions of 52 rather than 10 where it should happen, and sticky positions have been observed. I'm trying to figure out how to get access to the focus stage so that I can check the operation. That assembly is hidden behind a combination of unmovable structure and a tangle of plates. The drawings help but don't detail everything involved.

\*\*PSPT PROBLEM\*\*: Wed Mar 15 18:49:26 GMT 2000

The focus stage drawing shows a cantilevered lens mount that relies on a teflon "glide ring" concentric to the lens for smooth operation. I don't understand why there should be any contact there near the lens, especially since the mount is cantilevered. There is a second ring at the front of the assembly too. It is designed to prevent light leaks but there may be a better way of doing it.

Wed Mar 15 20:02:15 GMT 2000 CHIP Gain7
Wed Mar 15 20:10:40 GMT 2000 CHIP End Gain
Wed Mar 15 20:10:58 GMT 2000 CHIP Bias
Wed Mar 15 20:12:08 GMT 2000 CHIP End Bias
\*\*PSPT PROBLEM\*\*: Wed Mar 15 21:18:44 GMT 2000

After thoroughly checking the drawings and instrument I can't find a way to gain access to the focus stage assembly in order to test it for how well it functions and to improve the function without removing most or all of the secondary optics package. Do you know of a faster and safer way Haosheng? For now I will run the telescope as is and see if Haosheng's code change eliminates the problem, he was going to eliminate the focus sequence from the routine to lessen the usage of the focus stage. COMMENT: Wed Mar 15 21:44:11 GMT 2000

Extended the dome slot.

\*\*LOW-L PROBLEM\*\*: Wed Mar 15 21:48:37 GMT 2000

L00677 popped out of drive #0 early, replaced it with L00679.

Wed Mar 15 22:10:02 GMT 2000 CHIP CHIP End Patrol

Wed Mar 15 22:10:24 GMT 2000 PICS End Patrol

Wed Mar 15 22:11:36 GMT 2000 CHIP ending tape

COMMENT: Wed Mar 15 22:17:31 GMT 2000

TAPES: \*\*\*\*\*

MKIV: 00-075 CHIP: C01074 PICS: P01694

LOWL: L00677 in drive #0 and L00678 in drive #1

Wed Mar 15 22:19:07 GMT 2000 MkIV

17_14.rawmk4 17_17.rawmk4 17_20.rawmk4 17_23.rawmk4 17_25.rawmk4 17_28.rawmk4 17_31.rawmk4 17_34.rawmk4 17_37.rawmk4	18_22.rawmk4 18_26.rawmk4 18_29.rawmk4 18_32.rawmk4 18_34.rawmk4 18_37.rawmk4 18_40.rawmk4 18_43.rawmk4 18_46.rawmk4 18_49.rawmk4	19_22.rawmk4 19_25.rawmk4 19_28.rawmk4 19_31.rawmk4 19_34.rawmk4 19_40.rawmk4 19_43.rawmk4 19_46.rawmk4 19_46.rawmk4	20_21.rawmk4 20_24.rawmk4 20_27.rawmk4 20_30.rawmk4 20_33.rawmk4 20_36.rawmk4 20_39.rawmk4 20_42.rawmk4 20_45.rawmk4	21_20.rawmk4 21_23.rawmk4 21_26.rawmk4 21_29.rawmk4 21_32.rawmk4 21_35.rawmk4 21_38.rawmk4 21_41.rawmk4 21_44.rawmk4 21_47.rawmk4
17_40.rawmk4	18_52.rawmk4	19_49.rawmk4 19_51.rawmk4	20_48.rawmk4 20_51.rawmk4	21_47.rawmk4 21_50.rawmk4
17_46.rawmk4		19_54.rawmk4		21_53.rawmk4
17_49.rawmk4	18_58.rawmk4	19_57.rawmk4	20_57.rawmk4	21_56.rawmk4
17_52.rawmk4	19_01.rawmk4	20_00.rawmk4	21_00.rawmk4	21_59.rawmk4
17_55.rawmk4	19_04.rawmk4	20_03.rawmk4	21_03.rawmk4	22_02.rawmk4
17_58.rawmk4	19_07.rawmk4	20_06.rawmk4	21_06.rawmk4	22_05.rawmk4
18_01.rawmk4	19_10.rawmk4	20_09.rawmk4	21_09.rawmk4	22_08.rawmk4
18_04.rawmk4	19_13.rawmk4	20_12.rawmk4	21_11.rawmk4	c18_07.rawmk4
18_10.rawmk4	19_16.rawmk4	20_15.rawmk4	21_14.rawmk4	c18_13.rawmk4
18_16.rawmk4	19_19.rawmk4	20_18.rawmk4	21_17.rawmk4	c18_19.rawmk4