Adjustment. Switch S1 and S2.

1.) Remove tube assembly from goniometer
   a. Two bolts on the side of stand
   b. Place on table top with monochromator facing up
2.) Remove monochromator
3.) Remove shutter cover assembly
   a. Watch the spring and piston on shutter does not fly off
4.) Remove shutter
5.) Disassemble shutter
6.) Reassemble shutter without spring or pin
7.) Replace shutter assembly
8.) While holding shutter in closed position remove the shutter cover assembly
9.) Mark the position of the closed shutter
   a. Keep shutter in closed position at the position that you have marked
   b. Mark the current position of S1 and S2.
10.) Start D8 tools and goto offsets and find left door S658 0=closed 1=not
11.) Open left door
12.) Adjust the top switch S1 out until the offset reads 0=closed
13.) Now Adjust the top switch in until the offset reads 1=not closed
14.) Find the offset in D8 tools for the S1 and S2 switches (OK or not OK)
15.) Move the bottom switch (S2) out until you see not OK
16.) Now move the switch in until you see OK
   a. The trick is not to over adjust S1 and S2 which will cause the shutter to stick
   b. It may take a few adjustments before S1 and S2 are in the correct positions.
17.) Remove the shutter and reassemble the shutter assembly and place it back in the tubing
18.) Replace monochromator and place the tube housing back on the goniometer.
19.) Exercise shutter