

IRSF: SIRPOL ON

(i.e. changing from Sirius-mode to Polarimeter-mode)

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Preparation

Locate the cardboard box marked SIRPOL (currently kept next to the compressor in the IRSF link passage).



This box includes a manual which is in Japanese but it contains pictures that could be of use. Retrieve the three items shown in the pictures below from the box: (1) is the polarizer wheel, (2) the stationary polarizer plate and (3) a package containing two special tools and the pin that secures the polarizer wheel.

(1)



(2)

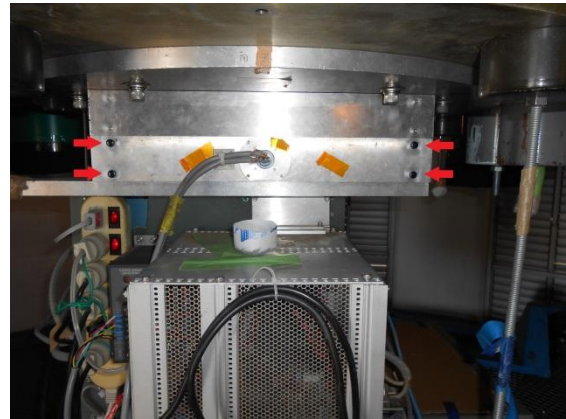


(3)



Procedure for installing the polarizer's (i.e. changing from Sirius-mode to Polarimeter-mode)

The picture on the right shows the location of the polarimeter module which is situated below the instrument flange, between the telescope and the instrument.



This is the view as seen from the south. The arrows point towards the four thumbscrews which must be removed.

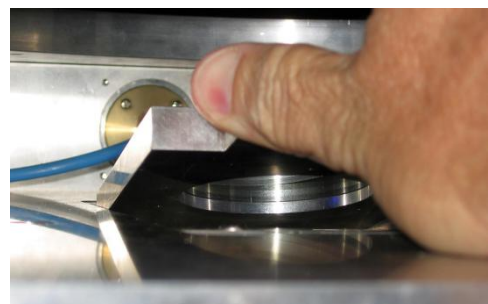
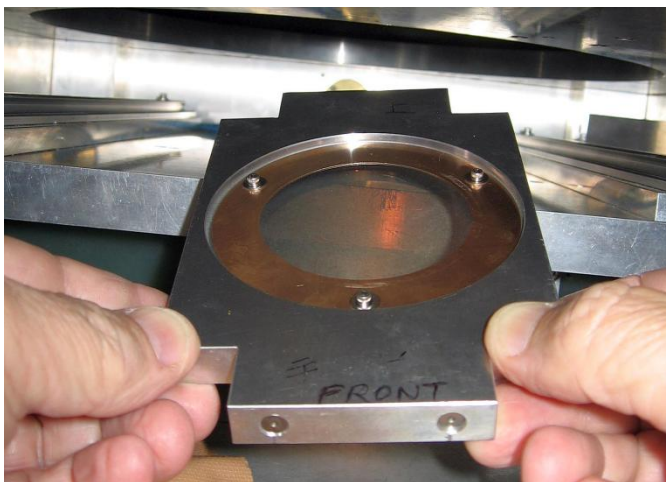
Firstly, remove the four thumbscrews while supporting the cover plate with your other hand.

Open package (2) to reveal a plastic container with the stationary polarizer plate inside.

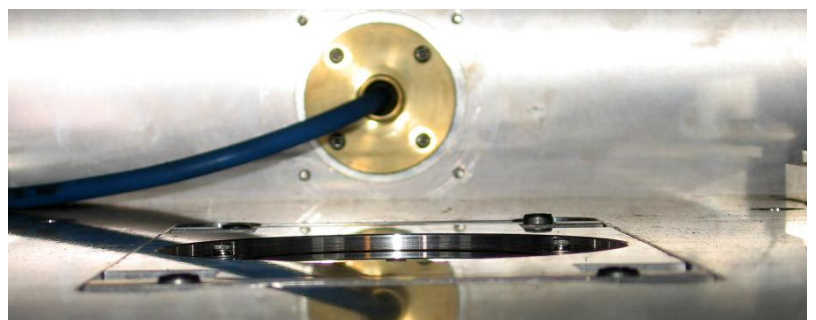


Taking care not to touch the optical surfaces, remove the covers from the stationary polarizer plate and store them back in the plastic box.

The stationary polarizer plate gets inserted into its machined space at the bottom of the polarimeter module. Ensure that you place the stationary polarizer plate the correct way round (marked FRONT) as shown in the picture below.

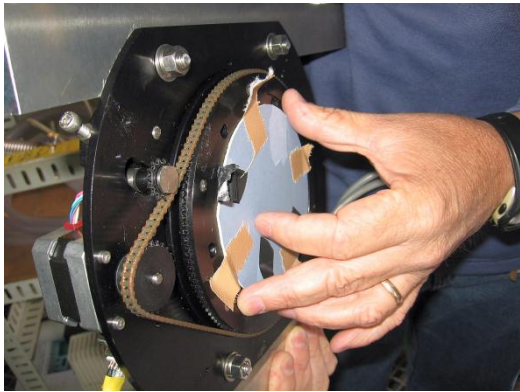


Carefully slip the polarizer plate into position, as shown in the pictures (right). It is held down by gravity only (no fasteners involved).



Remove the bubble wrap from package (1) to reveal the polarizer wheel.

Very carefully remove the improvised optic covers as shown in the pictures below.



VERY CAREFULLY slide the polarizer wheel into the instrument, **taking care not to touch or scratch the optical surfaces**. Ensure that the wheel does not slide back out by holding it with your one hand (or get someone to hold it) until it is secured with the taper pin.



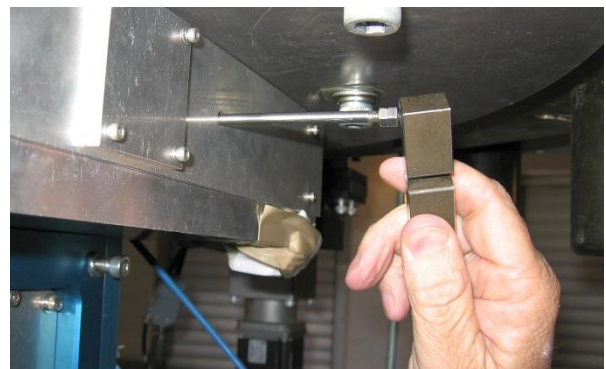
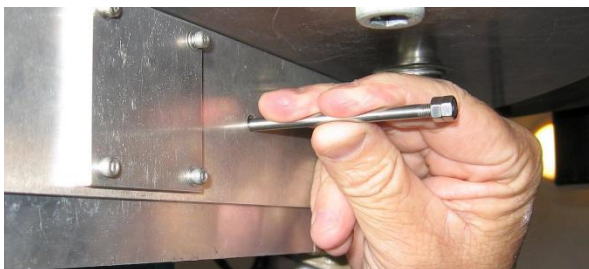
Inserting the taper pin

Get the two special tools and the taper pin from package (3). Screw the threaded bar into the back of the taper pin. Locate the small hole on the eastern side of the instrument and insert the pin and bar into this hole (pictures).



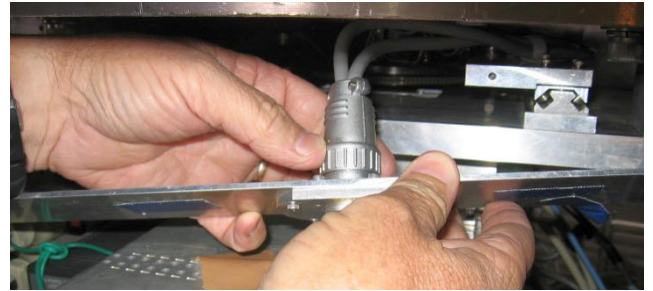
Using the block with the groove as a "hammer", tap the taper pin into the instrument (picture).

NOTE: When tapping it in, keep feeling the polarizer wheel. Hammer in the taper pin **only until** the polarizer wheel becomes immobile. Remove the rod by unscrewing it - this may require the use of a spanner.



Plug the polarizer wheel cable into the connector on the back of the cover plate.

Close up the cover plate using the four thumbscrews.



Finishing up

Put the special tools back in package (3) which is stored in the SIRPOL box (picture).

Store all the packaging and documentation back in the SIRPOL box.

Place the SIRPOL box next to the compressor in the link package.

