SPOL Install at Kuiper 61"

Pre-SPOL Install Support

- Paul will bring most of the instrumentation himself, but he doesn't have room for the instrument's cart, or the “reactor”, so someone in Mtn Ops will need to make sure these are brought to the mountain with them that day, or have made it there previous to install.
- Paul will need help unloading his car when he arrives, and will need loading dock access.
- Paul will help you load everything onto the jib crane, which is how you get most of the instrument to the second floor.

Getting SPOL on the Vacuum Pump

- As soon as you can, you want to get SPOL on the vacuum pump.
- When you're attaching the vacuum hose to the port, you want to avoid having the o-ring clamp down right where the weld in the port is, otherwise you'll see pretty quickly, you won't get a good vacuum
- You can open the CCD vacuum valve, but Paul likes to close it.
- Unlike the M4K, there is no rush to fill SPOL with LN2 after removing it from the vacuum pump.
- Never fill SPOL with LN2 yourself.

Mounting SPOL

- The rotator on the bottom of the scope needs to be moved so the readout is “895”, and the bolt fits into the SPOL detent.
- SPOL mounts to the small guider box, so that needs to be installed. The two pieces of aluminum that the guider mounts to that hang down face east when mounted.
    - It's easiest if you line up the guider box under the scope and tighten two of the eight bolts, lower the cart out of the way, and then put in the rest of the bolts.
- Paul needs help getting the instrument out of its box.
    - Before getting it all the way out of the box it will be tipped so that the top of the instrument is hanging out, and a plate will be installed.
    - From there, the instrument can come out of the box, and be moved to its cart, where it will hang on the plate you just installed.
- Before mounting SPOL to the telescope, a silver adapter plate is mounted on the bottom of the guider box.
- Once the cart and instrument are on the platform, align it so that the side where the dewar mounts to faces north.
- Paul will usually run the elevator up. Once in place, SPOL mounts to the silver plate.

Mounting the CCD Power Supply

- The gold CCD power supply bolts first to a silver plate, and then on the west side of the bottom of the guider box.

Mounting the Guider Computer

- The guider computer is mounted on the two strips of aluminum on the east side of the guider box with four bolts.

Mounting the Guider Chiller

- The guider chiller is mounted to the north side of the guider box.

Mounting the Dewar

- The dewar mounts on the north side of the instrument. Once mounted, Paul will begin to fill with LN2.

Cabling

- All the cabling is done by Paul.

Before Observations

- Balance
    - Before balancing check in with Paul to see if he has connected any of the BNC cables from upstairs to the computer in the control room. If they are connected, you will only be able to raise the platform 5 steps up the staircase next to the elevator.
- Ethernet connection-make sure Paul's PC and Gerard can talk to one another.
- Testing- Make sure Paul's diagnostic tests come back ok.
- Telcom- Make sure Telcom is on


8 9 5


DOWN
UP
SEE
0000


SPOC
(Detent)

SPOL Install at Bok 90"

Pre-SPOL Install Support

- Paul will bring most of the instrumentation himself, but he doesn't have room for the instrument's cart, or the “reactor”, so someone in Mtn Ops will need to make sure these are brought to the mountain with them that day, or have made it there previous to install.
- Paul will need help unloading his car when he arrives, and will need garage bay access.
- Paul will help you load everything onto several wheeled carts which go in the elevator, which is how you get the instrument to the observing floor.

Getting SPOL on the Vacuum Pump

- As soon as you can, you want to get SPOL on the vacuum pump.
- When you're attaching the vacuum hose to the port, you want to avoid having the o-ring clamp down right where the weld in the port is, otherwise you'll see pretty quickly, you won't get a good vacuum
- You can open the CCD vacuum valve, but Paul likes to close it.
- Unlike the other cameras, there is no rush to fill SPOL with LN2 after removing it from the vacuum pump.
- Never fill SPOL with LN2 yourself.

Mounting SPOL

- The IIS needs to be set at 90 degrees to install SPOL.
- Paul needs help getting the instrument out of its box.

    - Before getting it all the way out of the box it will be tipped so that the top of the instrument is hanging out, and a plate will be installed.
    - From there, the instrument can come out of the box, and be moved to its cart, where it will hang on the plate you just installed.
- Two people are then required to pick up the instrument and the cart and place it on the platform under the telescope.
- Paul will use the platform paddle to bump it up until the guider box's guide pins go through the plate. The instrument bolts directly on the guider box.

Mounting the CCD Power Supply

- The gold power supply mounts directly to the IIS in the north.

Mounting the Guider Computer

- The guider computer is mounted onto the south fire plug on the IIS.

Mounting the Guider Chiller

- The guider chiller is mounted to the southwest fire plug on the IIS.

Mounting the Dewar

- The dewar is mounted on the South side of the instrument. Once mounted, Paul will begin filling the dewar with LN2.

Cabling

- All cabling is done by Paul.

Before Observations

- Balance
- Ethernet- Make sure Paul's computer is on the network.
- Testing- Make sure Paul's diagnostic tests come back ok
- Make sure weather page is updating