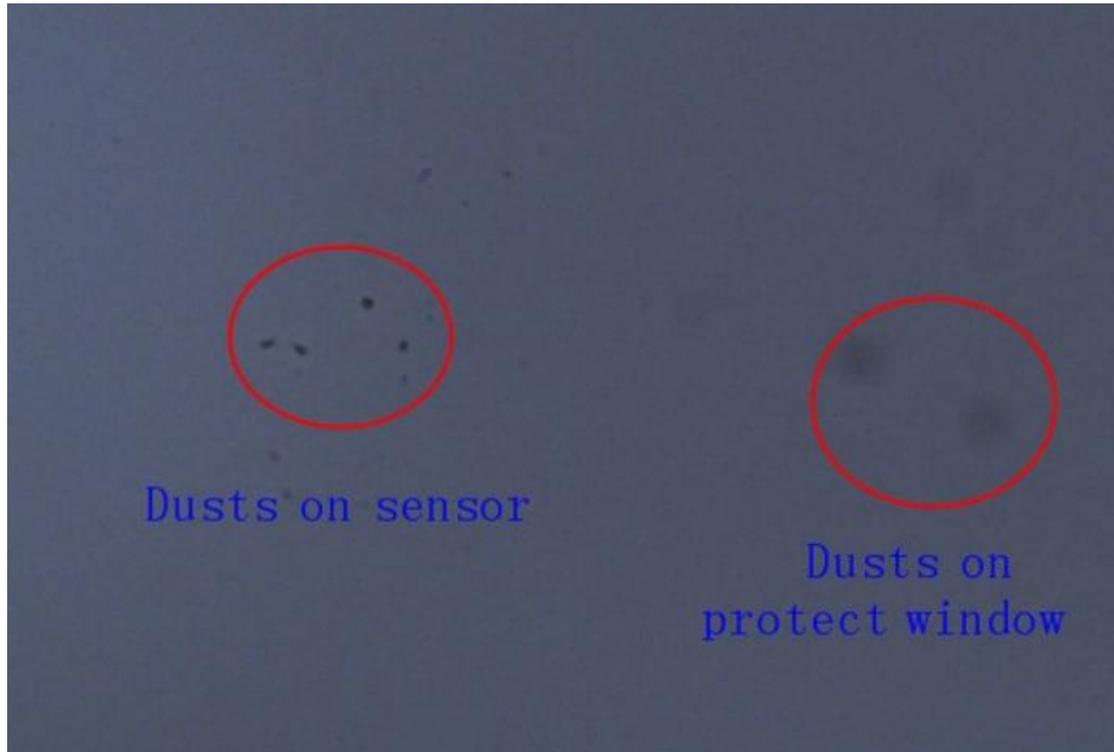


## How to clean ASI cameras and redry the desiccant

The camera comes with an protective window, which can protect the sensor from dust and humidity. Should you need to clean the sensor, it's better to do so during the daytime. To see the dust, you just need to setup your telescope and point it to a bright place. A Barlow is required to see these dusts clear. Then attach the camera and adjust the exposure to make sure not over exposed. You can see an image like below if it's dirty.



The big dim spot on the image (at right ) are the shadows of dust on the protect window.

The very small but very dark spot in the image (at left) are the shadows of the dusts on the sensor.

The suggested way to clean them is try to blow them away with a manual air pump. To clean the dust and spots on the sensor, you will need to open the camera chamber.

Please read the following steps carefully, and follow our instructions to clean a cooled camera.

## Step1: Necessary Equipment

Prepare ethanol, cotton buds and air blow for cleaning.



## Step2: open the chamber of cooled camera

1. Old versions of cooled camera, we need to anticlockwise screw the front piece hardly, and hold camera body by another hand.



2. Uncooled camera is similar, anticlockwise screw the front piece hardly, and hold camera body by another hand.

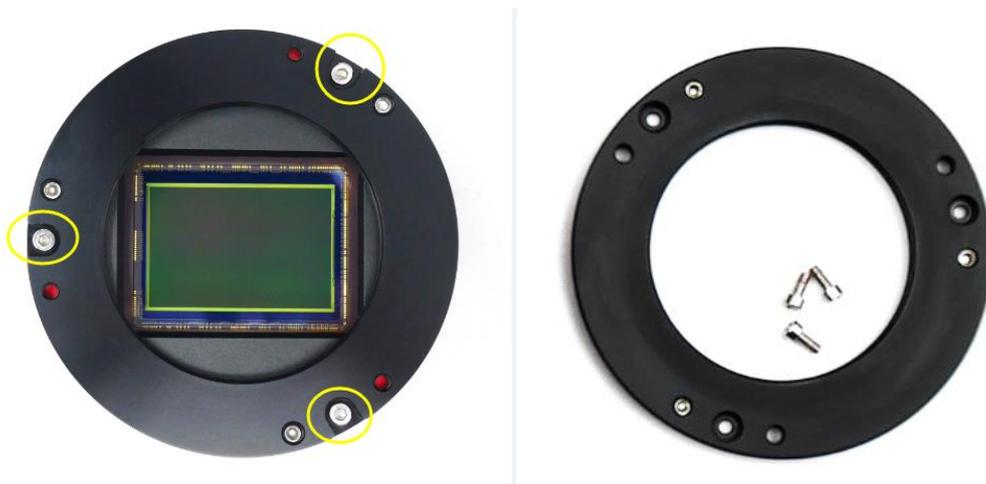


3. New versions of cooled camera , we need to unscrew 4 seal screws on the front piece.

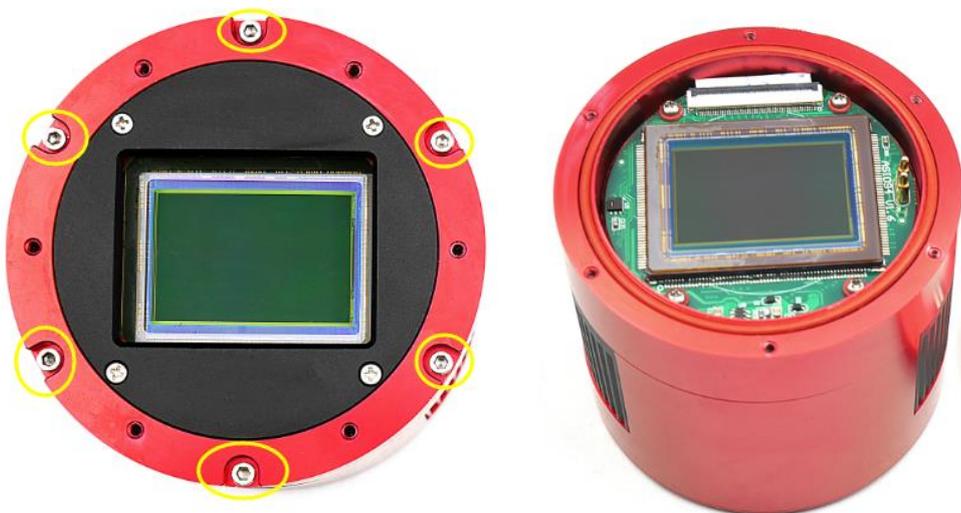


4. ASI094Pro, ASI128Pro, ASI071Pro, need two steps to open the chamber.

◆ loose the 3 screws which fix the tilter



◆ loose the 6 screws which fix the cover, please loose the screws on average



### Step3: Remove the front piece

When the chamber is unlocked, you can remove front piece carefully.

Use ASI1600 cooled camera for example:



Use ASI094MC Pro for example:



#### Step4: Clean the dust on sensor

Use air blow to blow away the big dust on sensor.



#### Step5: Clean the spots on sensor

Put some ethanol on cotton bud and clean the sensor slightly.



### **Step6: Clean the dust on the inner surface of protective window**

Use air blow the blow away the big dust on sensor.



### **Step7: Clean the spots on the inner surface of protective window**

Put some ethanol on cotton bud and clean the sensor slightly.



### Step8: redry the desiccant (prevent the camera from dew problem)

Usually, when you open the chamber, the air will come into it and cause dew problem. You need to redry the desiccant or replace the desiccant to make the chamber keep dry after you seal it again.

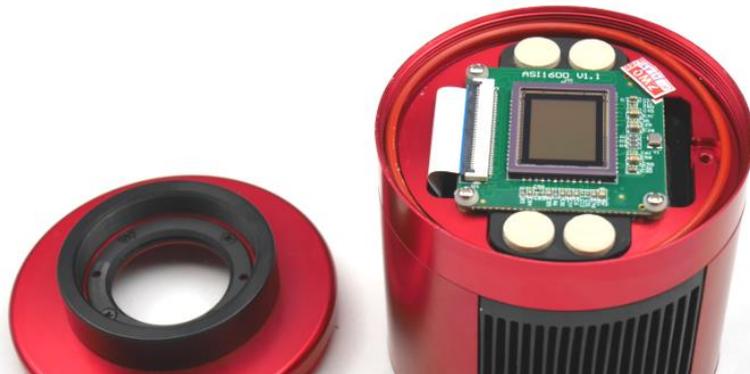
1. Take out the desiccant from camera



2. Put them into microwave oven, medium power, heat for 2 minutes.



3. Put them back to Chamber when it is still warm.



## Step9:reseal the chamber immediately

When you put back the desiccant, you need to reseal the chamber as soon as possible. Because the desiccant will lose capability when it is expose under fresh air for long time.

**NOTICE: if you changed the dessicant, please MAKE SURE the dessicant have same thickness with old ones. If the dessicant is too thick, the chamber will can't be sealed, force to screw the screws will damage the sensor board and dessicant.**

1.Old versions of cooled camera, we need to anticlockwise screw the front piece hardly, and hold camera body by another hand.

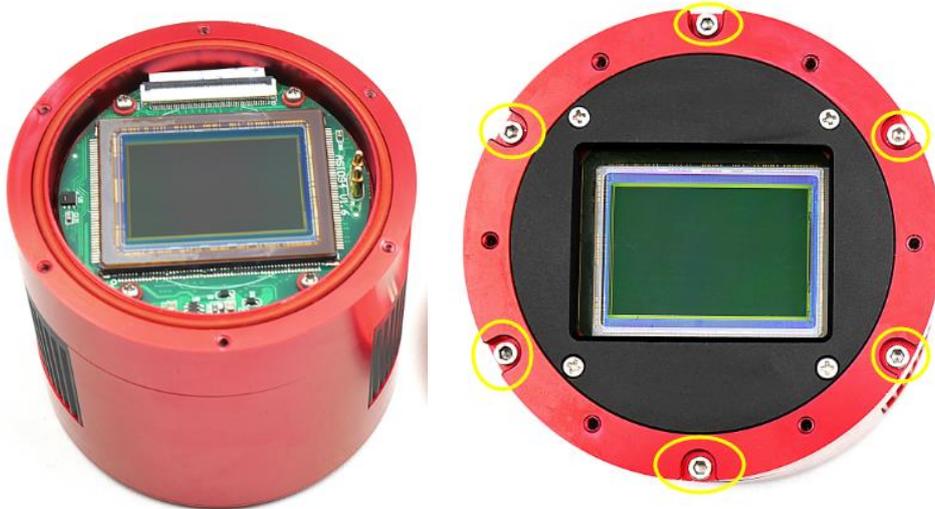


2.New versions of cooled camera , we need to screw up 4 seal screws on the front piece.

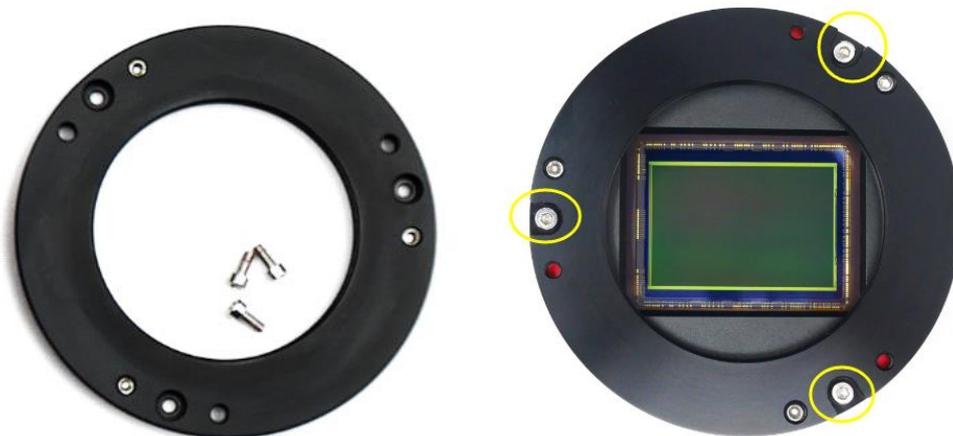


3.ASI094Pro,ASI128Pro,ASI071Pro, need two steps.

- ◆ Screw up 6 screws which fix the cover, please screw up the screws on average



- ◆ Screw up 3 screws to assemble the filter



**Congratulations!**

**You finished clean and redry job!**

**Your camera is ressurected with full HP!**