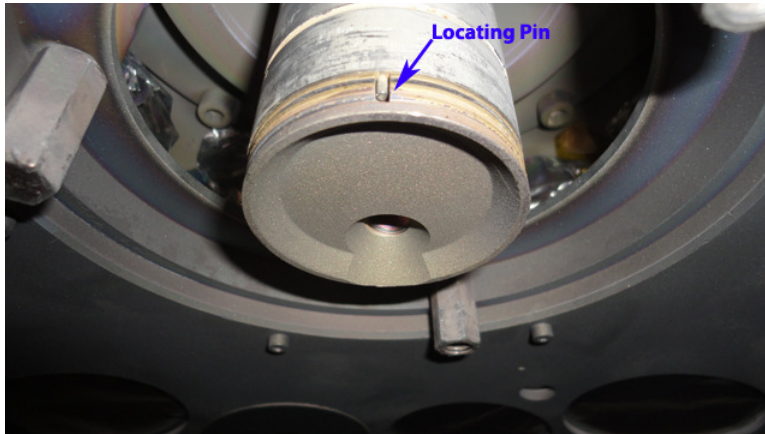
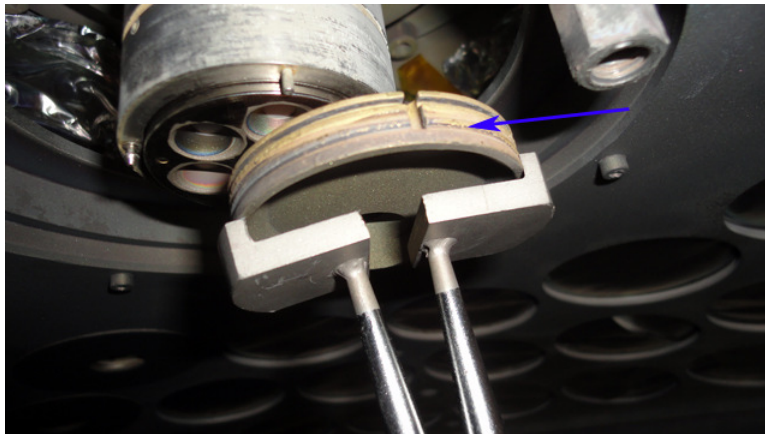


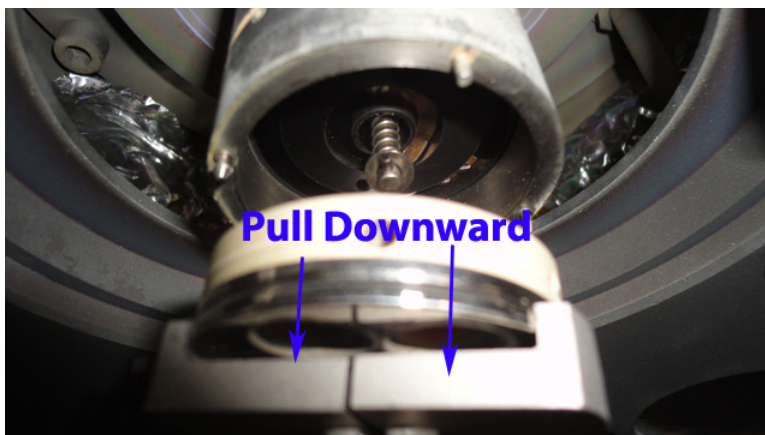
## Replacing Crystals QSK 610a



1) QSK610a in the center of the substrate carrier. Note the location of the pin that aligns the cover onto the body. This will be opposite the sensor hole.



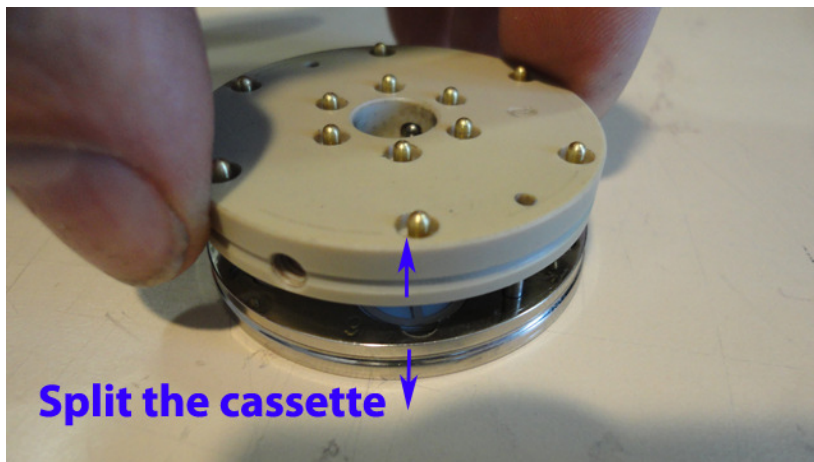
2) Using the crystal cassette grabber (or light finger pressure) pull down on the cassette cover to remove and expose the crystal carrying cassette.



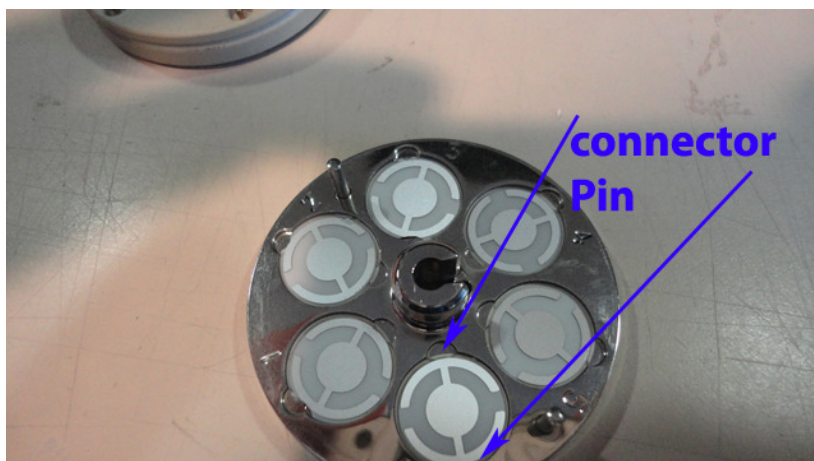
3) Pull the crystal cassette downward out of the crystal monitor body . Note the position of the spring and keyway as you will need to slot this back onto the shaft.



4) The crystal cassette is made from two halves. The crystals are trapped between the two halves.



5) The crystal cassette is held together by spring pressure. Place the face downward and gently ease the back away. Please note the letter 'O' for outside on the bottom cover. It must go back this way up.



6) The crystals are loose in the metal top cover. Tip them out and replace with new 6mhz crystals (gold or alloy).

It is important that the connector pin cut out is not aligned with the gap in the crystal. All of the crystal in this photo are aligned ok..

The bottom cover only goes back one way. 'O' to the outside and aligned on the 2 pins.

Be gentle as the crystals can break if the cover is snapped into position. You need to 'feel' it closed

When you have the cassette fitted back into the holder and the outer cover back on. Press the new crystals button on the touchscreen overview page (lower right). The system will check all of the crystals in turn. They should all have a frequency of just less than 6mhz. A broken crystal will fail the test with a zero frequency.

The frequency of the crystal becomes lower as its used. It is normal to change the crystals when the frequency is below 5.650mhz.