

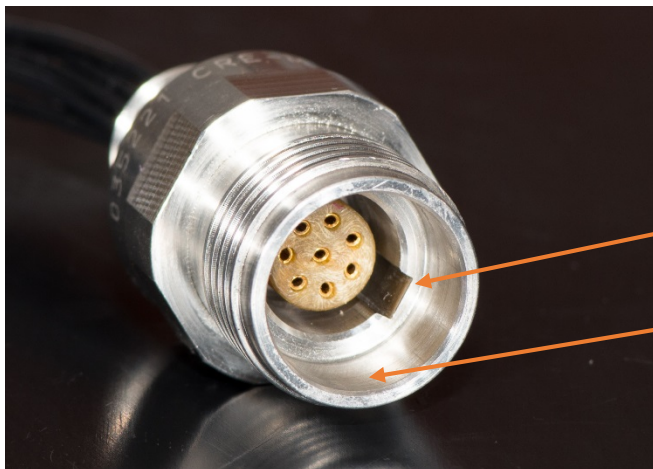
Bulkhead & connector maintenance

Bulkhead



Bulkhead seal

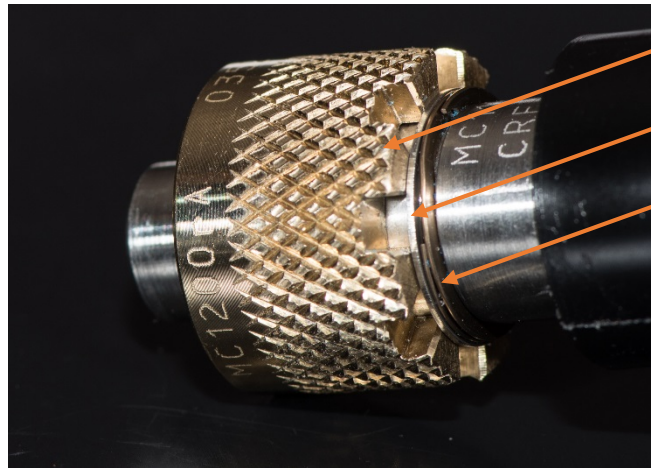
- Bulkheads come as two basic types
 - BCR – threaded interface, this may screw into or be retained by lock nuts against the rear of the interface
 - FCR – flanged interface, 4 cap head screws retain the bulkhead against the interface
- At the rear of the bulkhead there is a sealing arrangement
 - Rod seal(s)
 - Face seal(s)
 - Or a combination of rod & face



Orientation
keyway

O-ring seal face

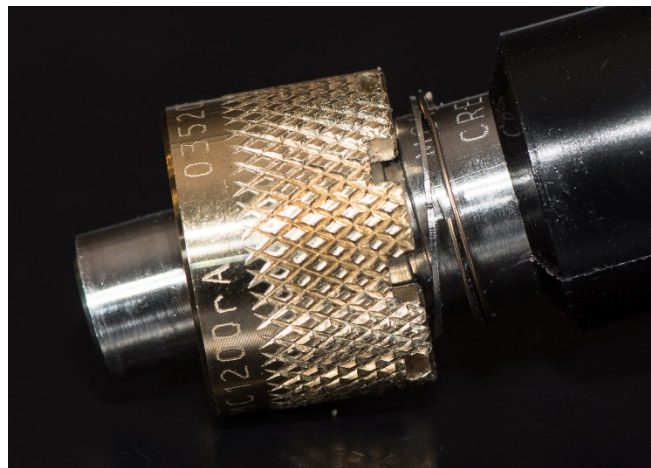
Connector maintenance



Locking collar

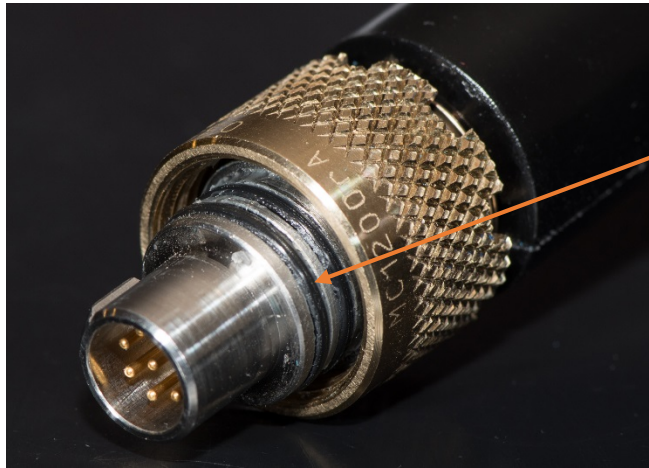
Backing washer

Spirolox
retaining ring



- The sealing o-rings are fitted on o-ring grooves below the locking collar
- To inspect or replace these o-rings, the Spirolox retaining ring needs to be removed from its groove using a standard small electrical screwdriver. It is then worked along the connector body until it reaches the PU overmoulding or the oil filled backshell on an oil filled assembly
- The locking collar and backing washer can then slide along the connector body exposing the o-rings

Connector maintenance



Dual o-ring
seals



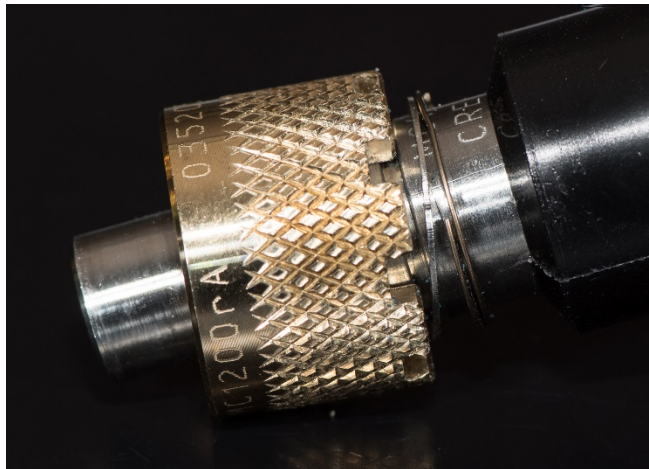
- The seals can be removed using a suitable o-ring removal tool manufactured from non scratch brass. <http://www.exactrubber.co.uk/O-ring-installation-and-removal/brass-o-ring-installation-removal-kit>
- The grooves should then be cleaned with a soft cloth and inspected for damage/scratches

Connector maintenance



- The grooves should then be lubricated with a suitable silicon grease such as Dow Corning Molykote 111
- Re-fit the correct seals for the connector, this can be found @

<http://www.cre-marine.com/connectors.html>



- The locking collar is then pulled back over the o-ring grooves and the Spirolox retaining ring can be worked back along the connector body until it locates in its groove
- The connector is now ready to be used

Correct make-up



- Before making the connector up to the bulkhead,
 - Inspect the seal bore of the bulkhead to ensure that it is clean and free of damage
 - Visually inspect the pins for any sign of damage or misalignment in the connector / bulkhead
 - Visually inspect the location key and keyway for any sign of damage
 - Lightly grease the seal bore of the bulkhead with the Dow Corning Molykote 111



- Check the alignment of the key and the keyway and make up the connector to the bulkhead
- The connector should make up with bulkhead by hand without the use of significant force
- It may be necessary to gently move the connector up/down relative to the bulkhead to assist make up
- Once the locking collar is fully made up, the thread should not be visible
- If a connector has been made up for some time it may be necessary to use a suitable sized C spanner in the locking collar castellations to start loosening the collar.
- DO NOT use mole grips, pipe wrenches etc. during make up or break out of the locking collar!