

The O-rings in the mounting adapter are defective. How do I change them?

If the shaft of the probe / nozzle is kept clean and is smoothly treated with vaseline or silicone grease, the rings hold almost unlimited (current long-term experience > 15 years). If the O-rings are not maintained the O-rings and here in particular the O-ring 1 can be easily destroyed by abrasion, which leads to leakage in the system and thus to useless readings. The exchange of the O-ring (s) is then mandatory.

The mounting adapters UN, SUN and UNG each have three internal O-rings for sealing the pressures applied via a multi probe. For the O-rings 1 and 2 we show here the possibility of the exchange while the mounting adapter is built in. The exchange of the 3rd O-ring in the built-in state is also possible, but is not officially supported by us since a higher degree of craftsmanship is required for this exchange. Good to know: Compared to the first O-ring, the third O-ring is roughly 10x less affected by friction and is therefore very rarely defective.

Change of O-Ring 1 in Mounting Adapter type UN only!

How to do it

Caution: If O-ring 2 has to be replaced, it must be installed before O-ring 1. (See "Replacement O-ring 2")

With a pointed needle (2mm steel wire pointed and slightly curved) you lift the old ring out of the bed and pull it with a hook bent wire out of the mounting adapter.

Lube the new ring 8x1,5 NBR 70 with vaseline or silicone grease and pushed it into the adapter.

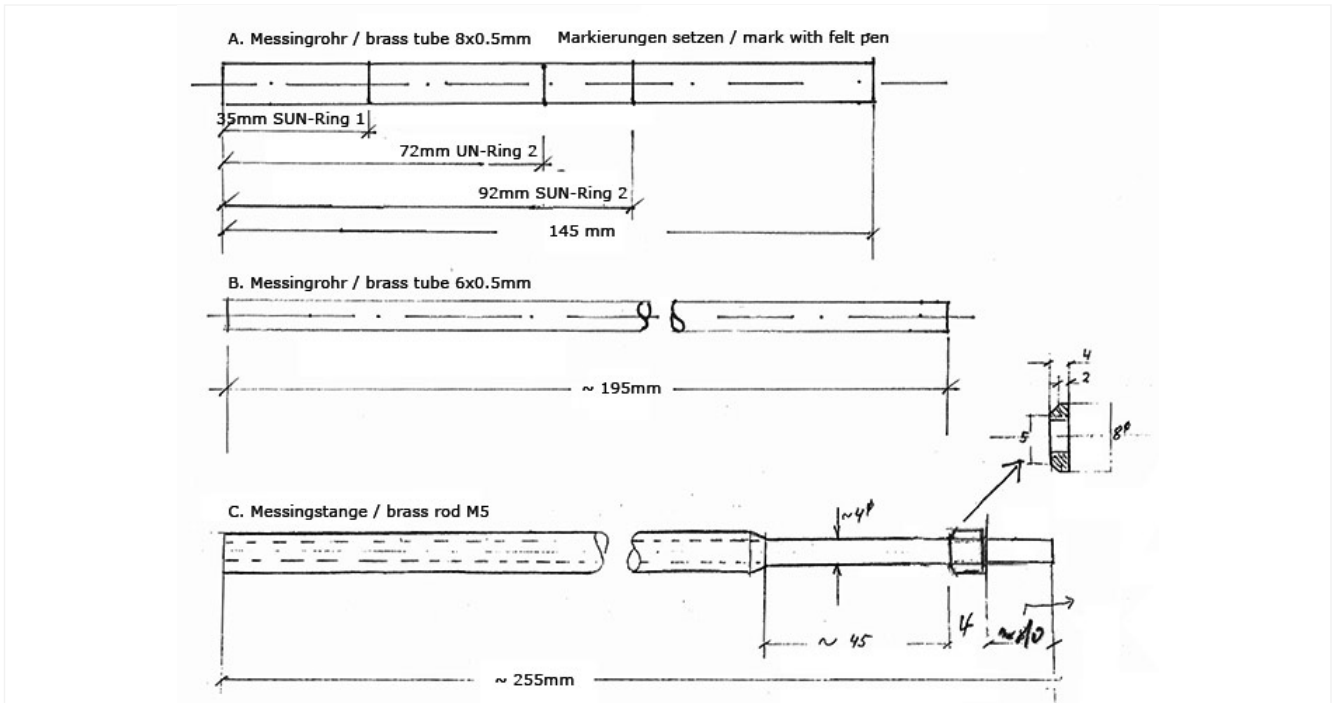
The 1st O-ring groove is easily visible in the mounting adapter type UN. Using a dull round material (4-5 mm) carefully insert the ring into the adapter until it slides into the bed at the appropriate location. Then push the remaining ring part into the bed.

Step by Step Change of O-Ring 1 Adapter SUN | UNG and O-Ring 2 Adapter UN | SUN | UNG

How to do it

Caution: For the exchange, we are happy to provide an auxiliary tool on request, alternatively, this can be self build corresponding the following sketches.

03 Sketch for tool for changing O-Ring 1 and 2



04 Picture of tool for changing O-Ring 1 and 2



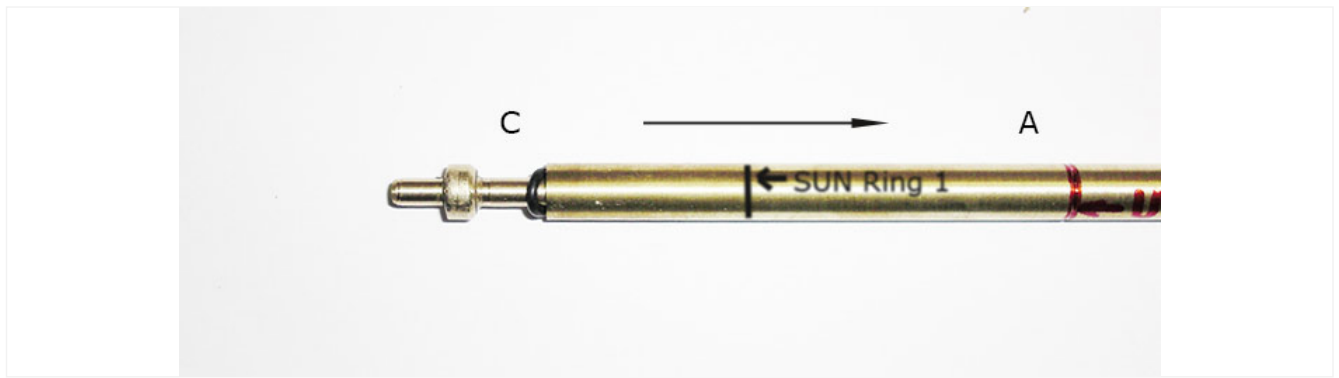
The O-rings 1 and 2 are lifted out of their beds with a pointed needle (2mm steel wire pointed and slightly curved) and pull them out of the adapter one after the other with the bent hook

The new O-ring, slightly greased as shown in the following pictures, is placed over tool C and then inserted into tool A. The O-ring is pulled into tool A.

05 Insert new O-Ring



06 Close tool

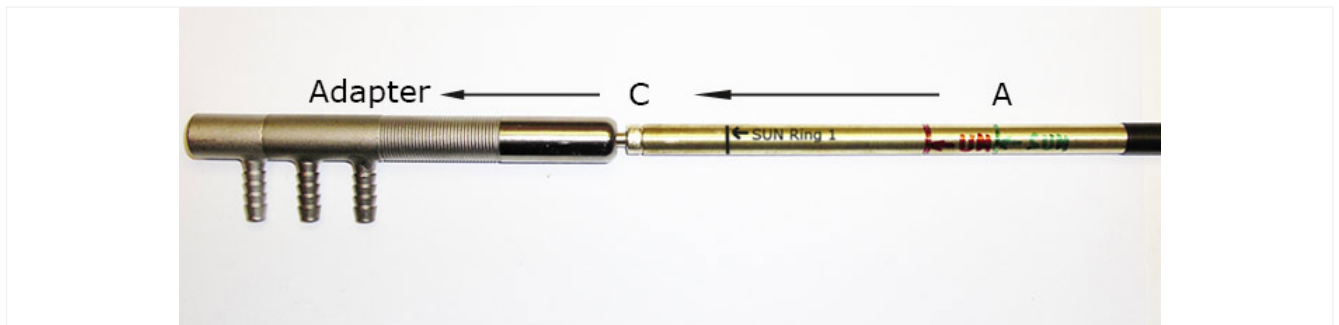


07 Ready to use



Insert the closed tool into the (installed) UN or SUN adapter as far as it will go.

08 Insert the tool



Now, slowly pull tool A (sleeve) up to the mark (BLACK for adapter SUN-ring-1, RED for adapter UN-ring 2, GREEN for adapter SUN-ring-2).

09 Slowly pull the sleeve



Push tool B onto tool C (rod) and thus press the O-ring from tool A (sleeve). Tool A (sleeve) must still be aligned with the appropriate marking. Then remove tool B.

10 Pull on extraction tool



Using tool C (rod), pull the O-ring slowly and sensitively against tool A (sleeve) until the O-ring engages in the bed. If necessary, move tool A 2-3 mm back and forth. Tool C can be easily removed if the O-ring has been installed correctly.

11 Draw O-Ring in correct position



Change of O-Ring 3 in the Mounting Adapters UN | SUN | UNG

How to do it

Officially the adapter has to be removed for the replacement of the 3rd O-ring. After removal, the gluing of the end piece must be achieved by heating to approx. 90 ° (hot-air gun). By removing the end piece, it is possible to replace the O-ring 3,68x1,78 NBR 70. After the ring has been inserted, the end piece has to be glued again with thickened epoxy (for example, UHU-plus 300) and tempered at about 70 ° for 1 hour.

Some pilots did report that they have successfully changed the 3rd O-ring while the adapter was built-in. However, there are reports of misses in the majority. Therefore, the procedure shown in the video is only recommended for experienced practitioners who are able to produce the right tool for themselves. The basic principle corresponds to the change of ring 1 and 2, but the cladding of the tool is no longer AD 8 mm but only AD 4 mm.