

BRUKER - S4 PIONEER XRF Spectrometer OEG Tube Adaption



Work Instruction

The Varian OEG-92J-Rh can be used in many Bruker XRF instruments. These offer the possibility of significantly improved results.

INSTALLATION PROCEDURE

- 1. Remove existing tube.
- 2. Remove tube guide and lower support with the toggle levers.

THE OLD NOZZLE MUST BE RETURNED TO AXT

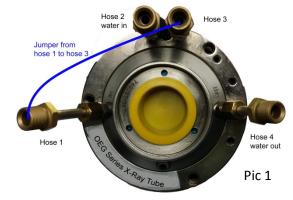
- The tube guide safety stop on the lower support frame is too high for the OEG tube. Bend this flush.
- 2. Remove the clamps and install clamp spacer blocks (Part number BRUK-AK-846884) with screws (Part number BRUK-AK-1940) and washers (Part number BRUK-AK-M5 flat washer).

PREPARE THE TUBE AS FOLLOWS:

- 1. Fit O-ring (Part number BRUK-AK-N67x5.7) into brass vacuum ring (Part number BRUK-AK-1996...)
- 2. Slide on the brass vacuum ring (Part number BRUK-AK-1996-15.6) for an OEG-92 or (Part number BRUK-AK-1996-14.2) for an OEG-96.
- Fit the water adaptor fittings (Part number BRUK-AK-1937) referring to the supplied photo showing the layout where the longer adaptor goes (refer to Pic 1).
- 4. Fit the tube hose loop (hose 1 to hose 3) as per Pic 1.
- 5. Shorten the filament cable as required (approximately 600mm long).
- 6. The tube can now be installed and clamped.
- 7. Rotate the tube anti-clockwise for water fitting clearance.
- 8. Adjust clamps for firm support.
- 9. Observe the correct water flow sequence and connect hoses.
- Viewing the installed tube, the supply attaches 2nd from the left (hose 2), the loop goes from hose 1 to hose 3, and the return hose attaches to the far right fitting (hose 4).
- 11. Attach the earth cable with screw (Part number BRUK-AK-1938) and washer (Part Number BRUK-AK-M4 spring washer).

THE HT CABLE

- 1. Remove the screw ring and spacer ring.
- 2. Remove the clamp halves, these can be re-installed when the new screw ring (Part number BRUK-AK-4183) and wavy washer that comes with (Part number BRUK-AK-4183) is in place.
- 3. The HV connector O-ring can be removed to permit enough thread purchase on the screw ring (Part number BRUK-AK-4183).





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OEG X-RAY TUBE ADAPTATION KIT CHECK LIST

Item	Part Number	Description	Nr. per Kit	Check List
Vacuum seal ring (brass)	BRUK-AK-1996-15.6	For OEG-92 installation brass ring	1	
Vacuum seal ring (brass)	BRUK-AK-1996-14.2	For OEG-96 installation brass ring	1	
O-ring	BRUK-AK-N67 x 5.7	Seal ring	1	
Nose cone O-ring	BRUK-AK-N7-233	Sealing O-ring	1	
Aluminum blocks	BRUK-AK-846884	Spacer blocks for toggle clamps	2	
Screws M5 x 45 stainless steel philips head	BRUK-AK-1940	For aluminum blocks (stainless steel)	8	
Washer flat M5 stainless steel	BRUK-AK-M5flat washer	Goes under - screws M5 x 45	8	
Screw 10# 32 TPI x 3/8" s.steel allan head	BRUK-AK-1938	For earth strap	1	
Washer spring M4 stainless steel	BRUK-AK-M4 spring	Goes under - screw 10# 32TPI x 3/8"	1	
Cable retainer ring	BRUK-AK-4183	Aluminum threaded ring for HT cable	1	
Wavy washer (spring steel)	BRUK-AK- wavy washer	Wavy washer for cable retainer ring	1	
HV Silicone paste P4	BRUK-AK-P4	Silicone grease for high voltage cable plug	1	
Water adaptors (kit) (4 items)	BRUK-AK-1937	Imperial to metric conversions for water pipes. (The kit has Nut 2901505, Olive 2900409, Fitting ¼" NPT to M14x1, ¼" stainless steel tube)	1	