

SINGLE CRYSTAL SPARE PARTS LIST

Rotating Anode Generator:

RAG-4892V1	0.5 X 1.0 mm, set of 3 normal focus filaments (RU200/RUH2R) (12kw)	\$900.00
RAG-4892V2	0.1, 0.2, 0.3 X 1, 2, 3 mm, set of 3 fine focus filaments (12kw & 18kw (RU200/300; RUH2/3R)	\$900.00
RAG-4893D1	0.5 X 1mm, set of 3 normal focus filaments (18kw) (RU300)	\$900.00
RAG-4478B5	Cathode assembly, 0.5 X 10mm pt. focus (RU200/300)	\$2,600.00
RAG-4478B3	Cathode assembly, 0.3 X 3 mm pt. focus (RU200/300)	\$2,600.00
RAG-4478B2	Cathode assembly, 0.2 X 2 mm pt. focus (RU200/300)	\$2,600.00
RAG-4478B1	Cathode assembly, 0.1 X 1 mm pt. focus (RU200/300)	\$2,600.00
RAG-4478M6	Cathode assembly, 0.5 X 10 mm pt. focus (RU-H3R)	\$2,600.00
RAG-4478M3	Cathode assembly, 0.3 X 3 mm pt. focus (RUH 2/3R)	\$2,600.00
RAG-4478M2	Cathode assembly, 0.2 X 2 mm pt. focus (RUH 2/3R)	\$2,600.00
RAG-4478M1	Cathode assembly, 0.1 X 1 mm pt. focus (RUH 2/3R)	\$2,600.00
RAG-4892V-4940	Filament lead wires (RU200/300) (set of 2)	\$350.00
RAG-A006-1007	Filament lead wires (RUH2/3R) (set of 2)	\$315.00
RAG-4940-1008	Filament lead wire screws (set of 2)	\$30.00
RAG-F3X8COV	Filament cover screws (set of 10)	\$3.00
RAG-SCR-3202	Filament base screws (set of 2)	\$5.00
RAG-4548-004-03	Cathode cover screw 4 X 6 mm (set of 5)	\$65.00
RAG-M4X12-SCRWST	Cathode vacuum lid cover plate screw (set of 4)	\$30.00
RAG-447-S110	Generator, o-ring front lid of cathode	\$10.00
GEN-RU2HR-S105	Generator, o-ring cover o-ring	\$8.00

Belt Drive Rotating Anodes:

AN-4363F3	Rotating anode assembly - CU target 50Hz	\$7,875.00
AN-4363F4	Rotating anode assembly - CU target 60Hz	\$7,875.00
AN-4363Z3	Rotating anode assembly - MO target 50Hz	\$18,000.00
AN-4363Z4	Rotating anode assembly - MO target 60Hz	\$18,000.00

Rotating Anode Rebuild Parts For Use With RU200/300 or RUH2/3 Generators:

AN-4980-3-2D	Magnetic cassette seal	\$1,350.00
AN-D2R66K	Bearing assembly	\$470.00
AN-D2R41J-RINT	Oil/water seal (KE16284)	\$40.00
AN-D2R72U	Water seal shaft	\$44.00
AN-01AS007	S7 o-ring *2 required	\$3.00
AN-01AS015	S15 o-ring	\$3.00
AN-01AS028	S28 o-ring	\$3.00
AN-01AS042	S42 o-ring	\$4.00
AN-D2R43M	KS8 o-ring	\$3.00
AN-04DS100	S100 o-ring, viton	\$10.00
AN-R5M630	Polymax target belt (USA-60Hz) (AN-R5M670-50Hz)	\$15.00
AN-AD-4362RK(50/60)	Complete anode rebuild kit for 50Hz/60Hz (Contains all the above Rotating Anode Rebuild Parts)	\$1,850.00

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Rotating Anode Miscellaneous Parts:

AN-4555-303	Locking ring	\$14.00
AN-4555-304	Clamp screw for anode	\$30.00
AN-4555-609	Pin for anode	\$6.00
AN-4555-330	Cap nut (*special order item)	\$20.00
AN-3020-607	Water mouth piece (*special order item)	\$50.00
AN-P3X8	Magnetic cassette seal housing screws (set of 4)	\$4.00
AN-P4X35	Anode end cap screws (set of 10)	\$4.00
RAG-M4X14-SCRWST	Anode to tube housing screws (SUS) (set of 4)	\$15.00
AN-F3X6	Water seal shaft screws (set of 4)	\$3.00
AN-4555-1802	Joint screw connection	\$26.00
AN-P7	Tube hose o-ring/leak valve	\$3.00
AN-436TGTJIG	Jig, target disassembly	\$12.00
GEN-RU200COVER	Safety cover, RU200, acrylic	\$60.00
GEN-RUH3RCOVER	Safety cover, RUH3R, acrylic	\$60.00

Direct Drive Anode:

ANDD-4364F2	Direct drive anode assembly - Cu anode	\$9,750.00
ANDD-4364G2	Direct drive anode assembly - Mo (diffused) anode	\$19,000.00

Direct Drive Anode Rebuild Parts:

AN-4980-3-2D	Magnetic cassette seal	\$1,350.00
ANDD-BRNG-7777	DD anode bearing 6004ZZPS	\$16.00
AN-D2R41J-RINT	DD anode water seal (JIS G)	\$40.00
ANDD-305	DD water seal shaft A123-30	\$90.00
ANDD-01AS008	S8 o-ring for DD only	\$3.00
AN-01AS015	S15 o-ring	\$3.00
AN-01AS028	S28 o-ring	\$4.00
AN-01AS042	S42 o-ring	\$3.00
AN-D2R43M	KS-8 o-ring, nitril	\$3.00
AN-04DS100	S100 o-ring, viton	\$20.00
ANDD-5848-0016	5848-0016 carbon brush kit (for DD only) (specify long or short brush)	\$340.00
ANDD-4362RK	Complete DD anode rebuild kit for 50Hz/60Hz (Contains all above Direct Drive Anode Rebuild Parts)	\$1,850.00

Oils:

RP OIL	Roughing pump oil (2 Bottles)	\$60.00
TMP OIL	TMP oil (8 oz.)	\$60.00
RAX-5811-OIL	Linear vacutra motor oil for R-Axis	\$15.00
GEN-GS5-HVOIL	Generator HV transformer oil	\$60.00

Lamps:

LMP-OL-387	Shutter lamp (for rotary shutter RU200/300, x-ray on lamp front panel of RU200/300 and RUH2/3R) (set of 10)	\$16.00
LMP-OL-384	X-ray on panel indicator lamp (RUH3R & Rapid), shutter lamp (rotary shutter RU200/300 & RUH 2/3R) (set of 5)	\$30.00
LMP-H0943	Camera shutter lamp/fuse (RU200/300) (set of 5)	\$20.00
LMP-OL-718	Camera shutter controller lamp (RU200/300) (set of 5)	\$16.00
LMP-H-BP27E	Camera shutter lamp/fuse (RUH2/3R) (set of 5)	\$26.00
LMP-CN1819	Large x-ray on lamp (RU200/300) (set of 10)	\$15.00
LMP-L01001	Rigaku radiation shield lamp	\$8.00
LMP-28V/7K	X-ray lamp red light- (on with x-rays, RUH2/3R in warning lamp) (set of 10)	\$25.00
LMP-12V-.11A	Ready lamp (RUH2/3R ready and shutter lamp in warning lamp) (set of 5)	\$25.00
LMP-AFC7-1847	Shutter lamp for rotary shutter x-ray on (RUH2/3R)	\$25.00

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Various Consumable Parts:

RAG-BE-D2R72L	Be window 4550-408-02	\$850.00
RAG-BE-04DS020	Be window S20 o-ring	\$6.00
I'MP-D2R66H	Ion gauge tube, IV-2000	\$165.00
I'MP-D2R66-5510	Ion gauge seal 4940-703	\$10.00
GH-1383G4	Rigaku eucentric goniometer head (ACA std)	\$1,900.00
GH-1384G2	Rigaku arcless goniometer head (ACA std)	\$1,095.00
GH-XYZ	Huber XYZ goniometer head	\$910.00
GH-D4340HE	Huber eucentric goniometer head	\$1,250.00
GH-1384J1	Driver for 138G3 eucentric eoniometer head	\$160.00
GH-D4300HP	Huber goniometer pin	\$8.00
GH-STSCR	Goniometer head set screws (set of 3)	\$2.00
GH-THUMBSCREW	Key adjustment for XYZ goniometer head, monochromator & phi axis	\$50.00
GEN-IONEXCGR-KIT	Generator ion exchange kit (includes cartridge and hose clamps)	\$95.00
RAD-GLOVES	Radiation gloves in sizes 7, 8, 8½ and 9 (specify size on order)	\$84.00

Tested Alignment Crystals:

AMBITART-3	Testing of Mercury CCD system (detector & alignment) Data Collection & Structure Solution Report included	\$50.00
AMBITART-4	Testing of RAPID Diffractometer System	\$500.00

Consumables for Sealed Tube Generators:

STG-TB9407G8	X-ray tube, Mo 2.4kw, normal focus	\$4,750.00
FUSE-3AMP-250V	Fuse, location F1, fast (set of 5)	\$5.00
FUSE-1AMP-250V	Fuse, location F401, fast (set of 5)	\$5.00
FUSE-2AMP-250V	Fuse, location F402, fast (set of 5)	\$5.00

Consumables for R-AXIS:

RAX-5811-35-HAM	R-AXIS II photomultiplier tube	\$800.00
RX4-R1924-HAM	R-AXIS IV photomultiplier tube	\$800.00
RAX-5811-3-2	R-AXIS II erase lamps (4 pcs/set)	\$120.00
RX4-FPL36ER-PLMP	R-AXIS IV erase lamps (6 pcs/set)	\$250.00
RAX-5811-4-3BLT	R-AXIS II linear motor belt	\$280.00
RAX-5811-SHEET	1 (13" X 11") square of R-AXIS II black paper	\$35.00
RX4-5811-SHEET	1 (16" X 16") square of R-AXIS IV black paper	\$55.00
RAX-5811-19-11	R-AXIS oiler hose (12" length)	\$21.00
RAX-LM-PLY-BRNG	Linear motor bearings for inverter pulley & encoder pulley (2 per set). *May be changed one side at a time, the bearings are the same on each side.	\$30.00
RAX-5811-15-1	Linear Motor Bearings (set of 3)	\$50.00
RAX-5811-15-2	Linear motor bearings (set of 3)	\$50.00

Note: R-AXIS II requires both sets of Linear Motor Bearings for a change.

R-AXIS IV Laser Assemblies:

RX4-LSU68C-ASY	RX4 laser assembly (RX4's shipped prior to August 1997)	\$9,525.00
RX4-LSU68B-ASY	RX4 laser assembly (RX4's shipped after August 1997)	\$7,425.00

Turbo Molecular Pumps:

I'MP-9023A4	Turbo molecular pump, 50MT (RTP300) 8 pin	\$10,500.00
I'MP-50MT-8R	Turbo molecular pump, 50MT (RTP300) 8 pin (REFURBISHED)	\$7,500.00

Trade in Policy: Upon evaluation of customer's turbo pump, if repairable, the customer will receive a \$1,500.00 credit.

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Consumables for X-stream:

XS-FILTERKIT2000	Complete set of filters required for 2,000 hour maintenance	\$325.00
XSFB-ELE-PB1	Piggyback filter for filterbank (2,000 hours)	\$15.00
XSFB-ELE-C1	Coalescing filter element for filterbank (2,000 hours)	\$38.00
XSFB-CHAR-CART	Charcoal replacement filter for filterbank (2,000 hours)	\$100.00
XS-JUNAIR-FILTER	Jun-air replacement filter for filterbank(2,000 hours), (2 required, sold as each)	\$75.00
XS-CRYHECHARFIL	Helium charcoal filter (10,000 hours), includes \$50 core charge	\$1,350.00
XS-SPAREPARTS	Spare parts kit for Cryomech (10,000 hours)	\$160.00
*XS-CRYVALVE-CH	Rotary valve for cold head (20,000 hours)	\$600.00
*XS-CRYOVALVE-PLT	Rotary valve plate for cold head (20,000 hours)	\$600.00
XSFBMEM	Membrane filter each (35,000 hours, some units require 2)	\$1,500.00
XS-RECHG-KIT	Recharge kit <i>Note: Helium required</i>	\$2,000.00
HPH	Helium lecture bottle (additional charges: crating \$75.00 & HAZMAT shipping approx. \$200.00-\$225.00)	\$300.00
XSFUSE-CRYOCOMP	Fuse for the He compressor (fnt 4/10 amp fuse)	\$15.00
V08OPER3/4ASY	V08 operator assembly (X-stream/LT)	\$900.00
XS-PR15MAINT.KIT	Air Dryer maintenance replacement kit of element, drain, mechanism, o-rings, drain catcher and instructions (please specify whether you have PR15 or PR5)	\$100.00
XS-PR5 MAINT.KIT	Air Dryer maintenance replacement kit of element, drain, mechanism, o-rings, drain catcher and instructions (please specify whether you have PR15 or PR5)	\$85.00

*Recommended to replace Rotary Valve Plate and Rotary Valve concurrently

Consumables for X-stream2000:

XS-CRYHECHARFIL	Helium charcoal filter (10,000 hours), includes \$50 core charge	\$1,350.00
XS-SPAREPARTS	Spare parts kit for Cryomech (10,000 hours)	\$160.00
*XS-CRYVALVE-CH	Rotary valve for cold head (20,000 hours)	\$600.00
*XS-CRYOVALVE-PLT	Rotary valve plate for cold head (20,000 hours)	\$600.00
XS-RECHG-KIT	Recharge kit <i>Note: Helium required</i>	\$2,000.00
HPH	Helium lecture bottle (additional charges: crating \$75.00 & HAZMAT shipping approx. \$200.00-\$225.00)	\$300.00
XS-FILKITNG20LA	N2 generator filter kit (5,000 hours) (includes 2 each of compressor inlet filter & coalescing filter elements)	\$500.00
XS-NG20LEXSILASY	Exhaust silence element for N2 generator (set of 2)	\$340.00
XS-NG230VSERKITA	Compressor service kit 230V assembly	\$900.00
XS-NG110VSERKITA	Compressor service kit 110V assembly	\$900.00

*Recommended to replace Rotary Valve Plate and Rotary Valve concurrently

Consumables for Kaiser Unit:

XS-KAESFILCAR	Oil filter cartridge (2,000 hrs.)	\$20.00
XS-K-COMP-OIL	Compressor oil (1 gallon) (2,000 hrs.)	\$75.00
XS-AIRINFILCART	Air inlet filter cartridge (1,500 hrs.)	\$35.00
XS-KAESSEPCARST	Oil separating cartridge complete set (5,000 hrs.)	\$290.00
XS-KAESFILMAT	Filter mat (100 to 300 hrs.)	\$5.00
XS-KAESABSELEMT	Absorption oil filter element (4,500 to 6,500 hrs.)	\$28.00
XS-KAESCOAELEMT	Coalescing oil filter element (4,500 to 6,500 hrs.)	\$26.00
XS-KAESPALELENT	Particulate filter element (4,500 to 6,500 hrs.)	\$26.00
XS-KAESV-BELT	V-belt (8,500 to 13,500 hrs.)	\$20.00

Consumables for Mirrors Parts:

MIR80MM	Mirror 80mm	\$2,500.00
MIRTA80BB4	Mirror bending bars for 80mm mirror	\$150.00
MIR160MM	Mirror 160mm	\$2,500.00
MIRTA160BB5	Mirror bending bars for 160mm mirror	\$150.00

Consumables for Cryo-Xe-Siter:

CRYOXE-YALE KIT	Yale stem kit. (Includes stem designed for Yale pins and 4 cryovials with crystal mounting pins.)	\$1,400.00
CRYOXE-HPK-.2-.3	Hampton stem kit. (Includes stem designed for Hampton pins & 4 cryovials with crystal mounting pins.)	\$1,400.00
CRYOXE-WIRERACK	Vial storage rack with eight positions	\$75.00
CRYOXE-STA	Small cryovial forceps	\$100.00
CRYOXE-LTA	Large cryotongs	\$175.00

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CRYOXE-REGASY	Gas regulator - brass	\$350.00
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