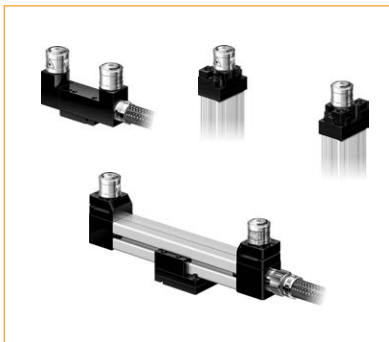


# Repair services



## Repair services

# Renishaw repair services

## Services offered

### Repair

Your product is repaired to factory performance specifications, and carries a 3-month warranty.

### Repair By Exchange (RBE)

Your product is replaced by a refurbished or as new product, shipped to you once we have received your failed product.

RBEs carry a 6-month warranty.

### Advance RBE

Your product is replaced by a refurbished or as new product, shipped to you on the same day that you report a fault. Advance RBEs carry a 6-month warranty.

### Replace new

Your product is replaced by a new product, carrying a new factory warranty.

### Please note:

The services offered on each product vary – please consult the detailed list that follows.

On Advance RBE, in order to get you a replacement product as soon as possible, it is necessary to charge a small additional premium on top of the price of the product to cover additional administration.

Available repair services for Specials are quoted per job.

All the following prices are for guidance only. When units are received with excessive wear and tear, or obsolete product is returned for repair, Renishaw reserves the right to quote a different service/replacement charge.

## Advance replacements

Advance replacement is a Renishaw premium service aimed at minimizing your downtime. This service is only available on products where a Repair By Exchange (RBE) service is offered. Through this service we ship an RBE in advance of receipt of your inoperative product.

Please note:

- 1) A \$95 charge applies to each advance replacement.
- 2) Your inoperative product must be returned to Renishaw within 14 working days of receipt of the advance replacement.
- 3) Failure to do so will result in an issuance of a non-return invoice in the amount of the difference between the RBE price and the new list price.
- 4) Return of your inoperative product after the issuance of the non-return invoice will not result in a credit of the non-return invoice, and your inoperative product will be returned to you.
- 5) Advance replacements sent out under a warranty claim will not be credited if the returned product is damaged, or no fault is found with the returned product.
- 6) Returns of advance replacements will be accepted if:
  - a) they are returned unused, and in the original packaging, within ten working days of invoice date, and
  - b) the return has been pre-approved by Renishaw through the issuance of a Return Goods Authorization (RGA) number, and
  - c) the return passes Renishaw inspection, and
  - d) a re-stocking fee of \$95 or 20% is applied, whichever is the greater.

## Coordinate Measuring Machine products

### Manual probe heads

Description	Check and test	Repair	Repair by exchange	RBE part number
MH20	\$100	N/A	\$1,095	A-4043-0024-RBE
MH20i	\$100	N/A	\$1,395	A-4099-0022-RBE
MH8	\$100	N/A	\$760	A-1332-0002-RBE
MIH	\$225	\$980	\$1,975	A-1070-0003-RBE
PH1	\$100	N/A	\$550	A-1049-1795-RBE
PH5	\$100	N/A	N/A	Replace at new list price
PH6	\$100	N/A	N/A	Replace at new list price

### Motorized and servo positioning heads

Description	Check and test	Calibration	Minor repair	Major repair	Repair by exchange	RBE part number
REVO®	\$480				\$9,320	A-3060-0040-RBE
REVO2	\$480				\$10,350	A-5759-1000-RBE
PH20	\$480				\$4,125	A-5669-0001-RBE
PH9/PH9A	Obsolete				Call for upgrade options to PH10 system	
PH10M	\$480	\$595	\$1,095	\$2,340	\$5,120	A-1025-6050-RBE
PH10MQ	\$480	\$595	\$1,095	\$2,340	\$5,120	A-1036-6001-RBE
PH10MQH	\$480	\$595	\$1,095	\$2,340	\$5,120	A-1036-0100-RBE
PH10T	\$480	\$595	\$1,095	\$2,340	\$5,120	A-1025-7526-RBE
PH10M Plus	\$480	\$595	\$1,095	\$2,340	\$5,120	A-5863-1000-RBE
PH10T Plus	\$480	\$595	\$1,095	\$2,340	\$5,120	A-5863-2000-RBE
PH10MQ Plus	\$480	\$595	\$1,095	\$2,340	\$5,120	A-5863-3000-RBE
Description	Upgrade	Upgrade part number	Repair by exchange	RBE part number		
PHS-2 RBE			\$12,613	A-5795-0001-RBE		
PHS (upgrade to PHS-2)	\$19,609	A-5795-0001-UPG				

### Controllers

Description	Calibration	Repair	Repair by exchange	RBE part number
ACC2 (upgrade to ACC2-3)	N/A	N/A	\$1,110	A-6299-0100-RBE
ACC2-2 (upgrade to ACC2-3)	N/A	N/A	\$1,110	A-6299-0100-RBE
ACC2-3	N/A	M/A	\$1,100	A-6299-0100-RBE
PHC9/RS232	Obsolete		Call for upgrade options to PH10 system	
PHC9/IEEE	Obsolete		Call for upgrade options to PH10 system	
PHC10/RS232 (upgrade to PHC10-3 Plus)	N/A	N/A	\$1,110	A-5863-0100-RBE
PHC10-2/RS232 (upgrade to PHC10-3 Plus)	N/A	N/A	\$1,110	A-5863-0100-RBE
PHC10-3 Plus	\$280	N/A	\$1,110	A-5863-0100-RBE
PHS PC card	N/A	N/A	\$1,460	A-2150-0824-RBE
PHS PC card (B&S)	N/A	N/A	\$1,460	A-2150-1360-RBE

### Probes

Description	Price			
Probe recertification (check and test)	\$100			
Description	Repair	Repair by exchange	RBE part number	
SP25M probe body	N/A	\$1,745	A-2237-1000-RBE	
SM25-1 module	N/A	\$1,245	A-2237-1111-RBE	
SM25-2 module	N/A	\$1,245	A-2237-1112-RBE	
SM25-3 module	N/A	\$1,245	A-2237-1113-RBE	
SM25-4 module	N/A	\$1,420	A-2237-1114-RBE	
SM25-5 module	N/A	\$1,860	A-2237-1115-RBE	
TM25-20 module	N/A	\$690	A-2237-1200-RBE	
SP600M	N/A	\$4,120	A-2098-0104-RBE	
TP1S	N/A	\$925	A-1041-7540-RBE	
TP1SM	N/A	\$925	A-1041-7541-RBE	

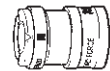
## Repair services

### Probes continued

Description	Repair	Repair by exchange	RBE part number
TP2-5W	N/A	\$930	A-1042-1890-RBE
TP6	N/A	\$925	A-1039-0001-RBE
TP6A	N/A	\$925	A-1039-0028-RBE
TP7M	N/A	\$1,290	A-1073-0121-RBE
TPES	N/A	\$730	A-1311-0033-RBE
TP20 low force probe module only	N/A	\$900	A-1371-0392-RBE
TP20 standard force probe module only	N/A	\$900	A-1371-0270-RBE
TP20 medium force probe module only	N/A	\$900	A-1371-0271-RBE
TP20 extended force probe module only	N/A	\$900	A-1371-0272-RBE
TP20 6-way probe module only	N/A	\$1,000	A-1371-0419-RBE
EM1 TP20 extension module	N/A	\$1,000	A-1371-0430-RBE
EM2 TP20 extension module	N/A	\$1,000	A-1371-0431-RBE
TP20 body only	N/A	\$690	A-1371-0275-RBE
TP20 body (non-inhibit)	N/A	\$690	A-1371-0636-RBE



TP200 stylus module	N/A	N/A	Replace at new list price
TP200 probe sensor	N/A	\$1,100	A-1207-0020-RBE
TP200B probe sensor	N/A	\$1,100	A-1207-0046-RBE



Description	Check and test	Minor repair	Major repair	Repair by exchange	RBE part number
SP80	\$145	\$1,875	\$3,040	\$5,060	A-2238-0101-RBE
SP80H	\$145	\$1,875	\$3,040	\$5,060	A-2238-0414-RBE

### Interfaces

Description	Repair	Repair by exchange	RBE part number
PI7-3	N/A	N/A	Replace at new list price
PI200-3	N/A	N/A	Replace at new list price

### Machine checking gage

Description	Calibration
Small checking gage set (includes arms, pivot and stylus; excludes needed replacement items)	\$438
Large checking gage set (includes arms, pivot and stylus; excludes needed replacement items)	\$479
(The machine checking gage is sent to the UK for calibration.)	

### Changing systems

Description	Calibration	Minor repair	Major repair	Repair by exchange	RBE part number
ACR1	\$450	\$910	\$1,940	\$5,050	A-1051-1300-RBE
ACR2	N/A	N/A	N/A	\$1,990	A-1383-0003-RBE
ACR3	N/A	\$405 (port replacement only)	N/A	\$2,925	A-5036-0005-RBE
FCR25	N/A	\$360 (port replacement only)	N/A	\$695	A-2237-1401-RBE
(for use with MRS)					
FCR25-L3	N/A	\$360 (port replacement only)	N/A	\$1,040	A-2237-1403-RBE
MCR20	N/A	\$440 (port replacement only)	N/A	\$1,095	A-1371-0163-RBE
SCR600	N/A	N/A	N/A	\$2,065	A-2098-0724-RBE
SCR200	N/A	\$1,160	N/A	\$2,065	A-1085-0370-RBE

## Machine Tool products

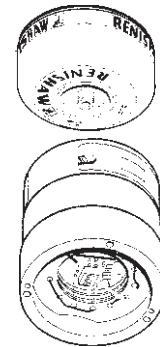
### Inspection probes for machining centers

Description	Price		
Recertification (check and test)	\$100		
Description	Repair	Repair by exchange	RBE part number
CP1 probe	Obsolete	Call for upgrade options	
MP1/R probe	Obsolete	Call for upgrade options	
MP1/S probe	Obsolete	Call for upgrade options	
MP3 probe	N/A	\$785	A-2053-5358-RBE
MP3 wide angle OMP short arm	Obsolete	Call for upgrade options to RMP60	
MP3 wide angle OMP long arm	Obsolete	Call for upgrade options to RMP60	
MP3 360° OMP	Obsolete	Call for upgrade options to RMP60	
MP12 probe	Obsolete	Call for upgrade options	
MP16 (RMP2)	N/A	Call for upgrade options to RMP60	
MP15	N/A	\$880	A-2116-0621-RBE
MP15F	N/A	\$880	A-2116-0685-RBE

MP700 probe module      Obsolete      Call for upgrade options

MP700 OMP 35°      Obsolete      Call for upgrade options

MP700 OMP 70°      Obsolete      Call for upgrade options



OMP40	N/A	\$1,210	Legacy: A-4071-0001-RBE Modulated: A-4071-2001-RBE
OMP400	N/A	\$1,720	Legacy: A-5069-0001-RBE Modulated: A-5069-2001-RBE
OMP60	N/A	\$1,210	Legacy: A-4038-0001-RBE Modulated: A-4038-2001-RBE
OMP600	N/A	\$1,650	A-5180-2001-RBE
RMP40	N/A	\$1,545	A-5480-0001-RBE
RMP60	N/A	\$1,610	A-4113-0001-RBE
RMP60Q	N/A	\$1,610	A-5742-0001-RBE
RMP60MQ	N/A	\$965	A-5742-1003-RBE
RMP600	N/A	\$1,930	A-5312-0001-RBE
OMP60M/RMP60M probe module	N/A	\$910	A-4038-1002-RBE
OMP60M transmission module	N/A	\$750	A-4038-1003-RBE

Description	Check test	Minor repair	Medium repair	Major repair	Repair by exchange	RBE part number
MSP80 rear exit	\$430	\$1,120	\$4,475	\$6,950	\$12,500	A-2238-1255-RBE
MSP80 side exit	\$430	\$1,120	\$4,475	\$6,950	\$12,500	A-2238-1270-RBE

## Repair services

### Tool setting probes for machining centers

Description	Repair	Upgrade	Upgrade part number
MP4 side exit (obsolete, upgrade to TS34 side exit)	N/A	\$2,291	RI-2197-3000
MP4 rear exit (obsolete, upgrade to TS34 rear exit)	N/A	\$2,291	RI-2197-2100
MP6 base only	N/A	N/A	Replace at new list price

Description	Rewire	Repair by exchange	RBE part number
TS27R	\$210	\$890	A-2008-0368-RBE
TS34 rear exit	N/A	\$1,015	A-2197-2100-RBE
TS34 side exit	N/A	\$1,015	A-2197-3000-RBE

Description	Repair	Repair by exchange	RBE part number
NC4 generic TX (separate)	N/A	\$1,055	A-4114-5200-RBE
NC4 generic RX (separate)	N/A	\$1,055	A-4114-5300-RBE
NC4 TX separate with connector	N/A	\$1,055	A-4114-2345-RBE
NC4 RX separate with connector	N/A	\$1,055	A-4114-2346-RBE
NC4F95 compact	N/A	\$2,100	A-5299-5210-RBE
NC4F115 compact	N/A	\$2,100	A-5299-5010-RBE
NC4F145 compact	N/A	\$2,100	A-5299-5310-RBE
NC4F230 compact	N/A	\$2,100	A-5299-5110-RBE
NC4F300 compact	N/A	\$2,100	A-5299-5710-RBE
NC4F300 modular	N/A	\$2,100	A-4114-5100-RBE
NCPCB	N/A	N/A	Replace at new list price
OTS	N/A	\$1,000	A-5401-2001-RBE
OTS (AA)	N/A	\$1,080	A-5514-2001-RBE
TRS2	N/A	\$675	A-5450-0400-RBE(TRS2)
RTS	N/A	\$1,640	A-5646-0001-RBE

## Inspection probes for turning centers

Description	Repair	Repair by exchange	RBE part number
LP2 probe	N/A	\$795	A-2063-6098-RBE
LP2DD probe	N/A	\$795	A-2063-8020-RBE
LP2H probe	N/A	\$795	A-2064-0002-RBE
LTO2	Obsolete	Call for upgrade options	
LTO2S	Obsolete	Call for upgrade options	
LTO2T (25 mm shank)	Obsolete	Call for upgrade options	
LTO2T (1 in shank)	Obsolete	Call for upgrade options	
LTO3T (25 mm shank)	Obsolete	Call for upgrade options	
LTO3T (1 in shank)	Obsolete	Call for upgrade options	
MP250	N/A	\$1,080	A-5500-1600-RBE
OLP40	N/A	\$1,205	A-5625-2001-RBE
OMP40M	N/A	\$770	A-5626-2001-RBE
RLP40	N/A	\$1,650	A-5627-0001-RBE
RMP40M	N/A	\$965	A-5628-0001-RBE

## Tool setting arms

Description	Repair	Repair by exchange	RBE part number
HPRA 6 in with RP3	N/A	\$1,540	A-2176-0691-RBE
HPRA 8 in with RP3	N/A	\$1,540	A-2176-0692-RBE
HPRA 10 in with RP3	N/A	\$1,540	A-2176-0693-RBE
HPRA 12 in with RP3	N/A	\$1,540	A-2176-0694-RBE
HPRA 15 in with RP3	N/A	\$1,540	A-2176-0695-RBE
HPRA 18 in with RP3	N/A	\$1,540	A-2176-0697-RBE
HPRA 24 in with RP3	N/A	\$1,540	A-2176-0698-RBE
HPPA 6 in rear exit with RP3	N/A	\$1,820	A-2275-0181-RBE
HPPA 8 in rear exit with RP3	N/A	\$1,820	A-2275-0182-RBE
HPPA 10 in rear exit with RP3	N/A	\$1,820	A-2275-0183-RBE
HPPA 12 in rear exit with RP3	N/A	\$1,820	A-2275-0184-RBE
HPPA 15 in rear exit with RP3	N/A	\$1,820	A-2275-0185-RBE
HPPA 18 in rear exit with RP3	N/A	\$1,820	A-2275-0186-RBE
HPMA 6 in rear exit with RP3	N/A	\$2,050	A-2181-0645-RBE
HPMA 8 in rear exit with RP3	N/A	\$2,050	A-2181-0646-RBE
HPMA 10 in rear exit with RP3	N/A	\$2,050	A-2181-0647-RBE
HPMA 12 in rear exit with RP3	N/A	\$2,050	A-2181-0648-RBE
HPMA 15 in rear exit with RP3	N/A	\$2,050	A-2181-0649-RBE
HPMA 18 in rear exit with RP3	N/A	\$2,050	A-2181-0650-RBE
HPMA 24 in rear exit with RP3	N/A	\$2,050	A-2181-0651-RBE
HPGA (side exit)	N/A	\$1,985	A-5616-0352-RBE

## Repair services

### Tool setting probes for turning centers

Description	Repair	Repair by exchange	RBE part number
RP1 probe	N/A	\$765	A-2154-0007-RBE
RP2 probe	N/A	\$765	A-2116-0149-RBE
RP3 probe	N/A	\$765	A-2197-0049-RBE
TS20 probe	N/A	N/A	Replace at new list price

### Interfaces, receivers and inductive systems

Description	Repair	Repair by exchange	RBE part number
HSI	N/A	N/A	Replace at new list price
IMM (inductive module machine)	N/A	N/A	Call for availability
IMP (inductive module probe) assembly	N/A	N/A	Call for availability
MI5	Obsolete	N/A	Call for details
MI8	N/A	N/A	Replace with HSI interface at list price
MI12	Obsolete	N/A	Call for upgrade options
NCi interface	N/A	N/A	Replace at new list price
OMI	Obsolete		Call for upgrade options
OMI-2	N/A	\$845	A-5191-0050-RBE
OMI-2T	N/A	\$845	A-5439-0050-RBE
OMM	Obsolete		Call for upgrade options
OMM-2	N/A	\$675	A-5492-0051-RBE
RMI	Obsolete	\$1,000	Replace with A-5687-0050-RBE
RMI-Q	N/A	\$1,000	A-5687-0050-RBE
SSR converter board	Obsolete	N/A	Replace with HSI interface at list price
TSi interface	N/A	N/A	Replace at new list price

## Gaging systems

Description	Minor repair	Medium repair	Major repair	Repair by exchange	RBE part number
Equator™ 300 machine	\$824	\$3,193	\$4,738	\$9,975	A-5504-0040-RBE
Equator™ 300 extended height machine	\$824	\$3,193	\$4,738	\$10,500	A-5504-0050-RBE
Equator™ controller	N/A	N/A	N/A	\$3,000	A-5696-0101-RBE
SP25M body	N/A	N/A	N/A	\$1,745	A-2237-1000-RBE
SM25-2 module	N/A	N/A	N/A	\$1,245	A-2237-1112-RBE
Equator™ 500 machine	Call for repair options and pricing				



## Calibration systems

Renishaw recommends the following calibration frequencies:	XM-60	Every 1-2 years
	ML10/ML10X/XL-80	Every 2-3 years
	EC10/XC-80	Every 12 months
	Ballbar	Every 12 months
	RX10	Every 2-3 years
	XR20-W	Every 1-3 years

Check and test \$315

## Repair prices

Description	Repair	Repair by exchange	RBE part number
XC-80	\$2,168	N/A	N/A
XL-80	\$2,168	N/A	N/A
QC10 ballbar (mechanical assembly only)	N/A	N/A	Call for upgrade options
RX10	\$6,534	N/A	N/A
QC20-W (mechanical assembly only)	N/A	\$3,210	A-8014-1520-RBE
XL-80 tripod	\$377	N/A	N/A
XR20-W**	\$3,911	N/A	N/A
XM-60	Call for pricing	N/A	N/A

## Calibration prices

	Standard calibration	Express calibration
ML10/ML10X	\$1,037	\$1,178
EC10 *	\$1,037	\$1,178
QC10 (includes calibrator)	\$817	\$927
XC-80 *	\$1,037	\$1,178
XL-80	\$1,037	\$1,178
Calibrator 50 mm (glass only)	\$278	\$388
Calibrator 300 mm (glass only)	\$315	\$425
Calibrator 50 mm (for QC10) with replacement of center ball, tool cup (2) and center cups	\$655	\$765
Calibrator 50 mm (for QC20) with replacement of center ball	\$404	\$514
RX10	\$1,618	N/A
XR20-W**	\$1,435	N/A
QC20 (includes calibrator)	\$817	\$927
Copy of calibration certificate	\$137	
XM-60/XM-600	\$4,131	N/A

\* Price includes one air sensor and up to three material sensors. Each additional sensor \$273. Please send in your sensors with your EC10 and XC-80.

\*\* XR20-W must be shipped in proper packaging. Failure to do so could damage unit and delay return after service. Alternative packaging solutions other than the XR20-W case are available for purchase which provide protection for your unit and save transport costs. XR20W-CAL-BOX is an economic and safe alternative to shipping XR20-W in its case. The packaging is reusable and can be purchased for \$70.

A "standard" calibration will take a maximum of five working days and an "express" calibration will take a maximum of two working days. Express calibrations must be scheduled by calling the Renishaw Service Center at: 847/286-9953 extension 62123.

Ballbar calibration includes ballbar and calibrator calibration, and replacement of ball and mount assembly, center cup assembly, center ball assembly, and tool cup assembly. A new cleaning kit will also be supplied.

Traceable calibration certificates will be issued at the time of calibration and enclosed with the returned units.

## Repair services

### Replacement parts

Description	Part number	Price
ACR1 short port replacement kit	A-5036-0049	\$285
ACR1 long port replacement kit	A-1051-7077	\$275
ACR1 mixed port replacement kit	A-1051-7076	\$275
MP8 shank switch assembly	Obsolete	Call for upgrade options
MP3/MP6 probe outer diaphragm kit	A-2053-8156	\$105
LP2 service kit	A-2063-7542	\$80
Ballbar center cup assembly	A-8014-0522	\$184
Ballbar center ball assembly	A-8014-0141	\$163
Ballbar magnetic tool cup	A-8014-0521	\$147
Transducer ball	A-8014-0182	\$163
Ballbar cleaning kit	A-8014-0423	\$21
Ballbar service kit	A-8014-0786	\$529
MP7/MP8/MP9/MP10 battery cap seal	M-2107-0115	\$30
MP7/MP8/MP9/MP10 battery cap screw	P-SC08-0335	\$5
OMP40 pull-up cone assembly	A-4071-0094	\$45
OMP40 round battery cap seal	A-4071-1157	\$25
OMP40 round battery cap	A-4071-0096	\$105
OMP40 rectangular battery cassette	A-4071-1166	\$135
OMP40/OMP60/RMP60 battery cassette seal	A-4038-0301	\$30
OMP60/RMP60 battery cassette	A-4038-0300	\$204
OMP60/RMP60 outer diaphragm kit	A-4038-0302	\$79
OMP60/RMP60 shank switch bobbin	A-4038-0303	\$185
OMP60/RMP60 new type shank switch	A-4038-0177	\$190
OLP40/RLP40 eyelid service kit	A-5625-0005	\$30
OLP40/RLP40 metal battery cassette	A-5625-1166	\$160
OTS/RTS battery cap	A-5401-0301	\$180
TS27R front cover	A-2008-1015	\$95
OTS/RTS front cover kit	A-5401-8512	\$135
TS34 chip shield	A-2008-6007	\$135