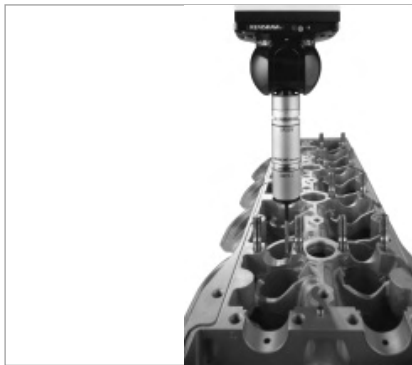


Repair services

Price List Issue 16 Section 6



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 \$75 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 10% re-stocking fee is applied.

Coordinate Measuring Machine products

Manual probe heads

Description	Check and test	Repair	Repair by exchange	RBE part number
MH20	\$90	N/A	\$990	A-4043-0024-RBE
MH20i	\$90	N/A	\$1,260	A-4099-0022-RBE
MH8	\$90	N/A	\$685	A-1332-0002-RBE
MIH	\$200	\$855	\$1,785	A-1070-0003-RBE
PH1	\$90	N/A	\$495	A-1049-1795-RBE
PH5	\$90	N/A	N/A	Replace at new list price
PH6	\$90	N/A	N/A	Replace at new list price

Motorized and servo positioning heads

Description	Recertification	Calibration	Minor repair	Major repair	Repair by exchange	RBE part number
PH9	\$430			\$2,395		
PH10M	\$430	\$535	\$990	\$2,120	\$4,630	A-1025-0050-RBE
PH10MQ	\$430	\$535	\$990	\$2,120	\$4,630	A-1036-0001-RBE
PH10MQH	\$430	\$535	\$990	\$2,120	\$4,630	A-1036-0100-RBE
PH10T	\$430	\$535	\$990	\$2,120	\$4,630	A-1025-1520-RBE

Description	Check and test	Level 1 repair	Level 2 repair	Repair by exchange	RBE part number
PHS	\$555	\$3,515	\$7,135	\$13,385	A-2150-0815-RBE

Controllers

Description	Calibration	Repair	Repair by exchange	RBE part number
ACC2 (upgrade to ACC2-2)	N/A	N/A	\$1,005 (RS232 only)	A-1520-0101-RBE
ACC2-2	\$250	\$720	\$1,005 (RS232 only)	A-1520-0101-RBE
PHC10/RS232 (upgrade to PHC10-2)	N/A	N/A	\$1,005	A-1368-0100-RBE
PHC10-2/RS232	\$250	\$720	\$1,005	A-1368-0100-RBE
PHC10/IEEE (upgrade to PHC10-2)	N/A	N/A	\$1,005	A-1368-0101-RBE
PHC10-2/IEEE	\$250	\$720	\$1,005	A-1368-0101-RBE
PHS PC card	N/A	N/A	\$1,320	A-2150-0824-RBE
PHS PC card (B&S)	N/A	N/A	\$1,320	A-2150-1360-RBE

Probes

Description	Price
Probe recertification (check and test)	\$90

Description	Repair	Repair by exchange	RBE part number
SP25M probe body	N/A	\$1,520	A-2237-1000-RBE
SM25-1 module	N/A	\$1,080	A-2237-1111-RBE
SM25-2 module	N/A	\$1,080	A-2237-1112-RBE
SM25-3 module	N/A	\$1,080	A-2237-1113-RBE
SM25-4 module	N/A	\$1,185	A-2237-1114-RBE
TM25-20 module	N/A	\$620	A-2237-1200-RBE
SP600	N/A	\$3,730	A-2098-0104-RBE
TP1S	N/A	\$835	A-1041-7540-RBE
TP1SM	N/A	\$835	A-1041-7541-RBE
TP2-5W*	N/A	\$840	A-1042-1890-RBE

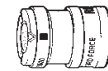
* You can order TP20 upgrades for the same price as a TP2 RBE:

TP20 with 1 module	\$840
TP20 with 2 modules	\$1,281
TP20 with 3 modules	\$1,876

Call for details.

Probes continued

Description	Repair	Repair by exchange	RBE part number
TP6	N/A	\$835	A-1039-0001-RBE
TP6A	N/A	\$835	A-1039-0028-RBE
TP7M	N/A	\$1,165	A-1073-0121-RBE
TPES	N/A	\$660	A-1311-0033-RBE
TP20 low force probe module only	N/A	\$810	A-1371-0392-RBE
TP20 standard force probe module only	N/A	\$810	A-1371-0270-RBE
TP20 medium force probe module only	N/A	\$810	A-1371-0271-RBE
TP20 extended force probe module only	N/A	\$810	A-1371-0272-RBE
TP20 6-way probe module only	N/A	\$900	A-1371-0419-RBE
EM1 TP20 extension module	N/A	\$900	A-1371-0430-RBE
EM2 TP20 extension module	N/A	\$900	A-1371-0431-RBE
TP20 body only	N/A	\$535	A-1371-0275-RBE
TP200 stylus module	N/A	N/A	Replace at new list price
TP200 probe sensor	N/A	\$995	A-1207-0020-RBE
TP200B probe sensor	N/A	\$995	A-1207-0046-RBE



Description	Check and test	Minor repair	Major repair	Repair by exchange	RBE part number
SP80	\$130	\$1,695	\$2,750	\$4,580	A-2238-0101-RBE
SP80H	\$130	\$1,695	\$2,750	\$4,580	A-2238-0414-RBE

Interfaces

Description	Repair	Repair by exchange	RBE part number
PI4	N/A	N/A	Replace at new list price
PI4-2	N/A	N/A	Replace at new list price
PI7-2	\$695	N/A	N/A
PI200	N/A	N/A	Replace at new list price

Machine checking gage


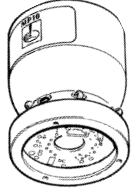

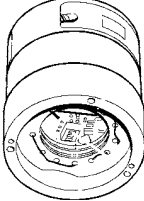
Description	Calibration
Small checking gage set (includes arms, pivot and stylus. Excludes needed replacement items)	\$400
Large checking gage set (includes arms, pivot and stylus. Excludes needed replacement items)	\$450

Changing systems

Description	Calibration	Minor repair	Major repair	Repair by exchange	RBE part number
ACR1	\$405	\$825	\$1,755	\$4,570	A-1051-1300-RBE
ACR3	N/A	\$365 (port replacement only)	\$1,095	\$2,650	A-5036-0005-RBE
FCR25	N/A	\$325 (port replacement only)	N/A	\$625	A-2237-1401-RBE
(for use with MRS)					
FCR25-L3	N/A	\$325 (port replacement only)	N/A	\$940	A-2237-1403-RBE
MCR20	N/A	\$395 (port replacement only)	N/A	\$990	A-1371-0163-RBE
SCR600	N/A	\$715 (port replacement only)	N/A	\$1,865	A-2098-0724-RBE
SCR200	N/A	\$1,045	N/A	\$1,865	A-1085-0370-RBE

Machine Tool products

Inspection probes for machining centers

Description	Price			
Recertification (check and test)	\$90			
Description	Repair	Repair by exchange	RBE part number	
CP1 probe	N/A	\$590	A-2012-0007-RBE	
MP1/R probe	N/A	\$705	A-2051-4577-RBE	
MP1/S probe	N/A	\$705	A-2051-4576-RBE	
MP3 probe	N/A	\$705	A-2053-5358-RBE	
MP3 wide angle OMP short arm	N/A	\$955	A-2033-1165-RBE	
MP3 wide angle OMP long arm	N/A	\$955	A-2033-1166-RBE	
MP3 360° OMP	N/A	\$810	A-2103-0008-RBE	
MP7/MP8/MP9/MP10 probe module	N/A	\$705	A-2033-0704-RBE	
MP7 OMP 35°	N/A	\$590	A-2033-0946-RBE	
MP7 OMP 70°	N/A	\$590	A-2033-0947-RBE	
MP8 OMP 35°	N/A	\$590	A-2033-0861-RBE	
MP8 OMP 70°	N/A	\$590	A-2033-0862-RBE	
MP9 OMP 35°	N/A	\$590	A-2034-0037-RBE	
MP9 OMP 70°	N/A	\$590	A-2034-0038-RBE	
MP10 OMP 35°	N/A	\$590	A-2085-0075-RBE	
MP10 OMP 70°	N/A	\$590	A-2085-0076-RBE	
MP11 probe	N/A	\$705	A-2045-0003-RBE	
MP12 probe	N/A	\$995	A-2075-0009-RBE	
MP16 (RMP2)	\$910	N/A	N/A	
MP15	N/A	\$795	A-2116-0621-RBE	
MP15F	N/A	\$795	A-2116-0685-RBE	
MP700 probe module	N/A	\$910	A-2108-0001-RBE	
MP700 OMP 35°	N/A	\$685	A-2107-0036-RBE	
MP700 OMP 70°	N/A	\$685	A-2107-0071-RBE	
OMP40	N/A	\$985	A-4071-0001-RBE	
OMP400	N/A	\$1,395	A-5069-0001-RBE	
OMP60	N/A	\$1,090	A-4038-0001-RBE	
RMP60	N/A	\$1,455	A-4113-0001-RBE	
RMP600	N/A	\$1,750	A-5312-0001-RBE	
OMP60M/RMP60M probe module	N/A	\$820	A-4038-1002-RBE	
OMP60M transmission module	N/A	\$680	A-4038-1003-RBE	
RMP60M transmission module	N/A	\$870	A-4113-1003-RBE	

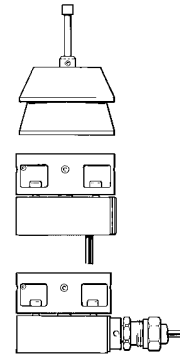
Tool setting probes for machining centers

MP4

Description	Repair	Repair by exchange	RBE part number
Probe only	N/A	\$705	A-2054-6473-RBE
Rear exit base and adjustment module	N/A	\$545	A-2054-6474-RBE
Side exit base and adjustment module	N/A	\$545	A-2054-6476-RBE

MP6

Description	Repair	Repair by exchange	RBE part number
Probe only	N/A	\$705	A-2053-5358-RBE
MP6 base only	N/A	N/A	Replace at new list price



TS27R

Description	Rewire	Repair by exchange	RBE part number
TS27R	\$180	\$805	A-2008-0368-RBE

NC1

Description	Repair	Repair by exchange	RBE part number
F150/40	N/A	\$1,910	A-2253-8524-RBE
F200/90	N/A	\$1,910	A-2253-8525-RBE
F300/190	N/A	\$1,910	A-2253-8526-RBE
S700 (500-700 mm)	N/A	\$1,910	A-2253-8541-RBE
S1000 (700-1000 mm)	N/A	\$1,910	A-2253-8542-RBE
S1400 (1000-1400 mm)	N/A	\$1,910	A-2253-8543-RBE
S2000 (1400-2000 mm)	N/A	\$1,910	A-2253-8544-RBE

NC2

Description	Repair	Repair by exchange	RBE part number
NC2	N/A	\$995	A-5132-1500-RBE

NC3

Description	Repair	Repair by exchange	RBE part number
NC3	N/A	\$1,450	A-4179-1500-RBE

NC4

Description	Repair	Repair by exchange	RBE part number
NC4 generic TX (separate)	N/A	\$950	A-4114-5200-RBE
NC4 generic RX (separate)	N/A	\$950	A-4114-5300-RBE
NC4F95 compact	N/A	\$1,900	A-5299-5210-RBE
NC4F115 compact	N/A	\$1,900	A-5299-5010-RBE
NC4F145 compact	N/A	\$1,900	A-5299-5310-RBE
NC4F230 compact	N/A	\$1,900	A-5299-5110-RBE
NC4F300 compact	N/A	\$1,900	A-5299-5710-RBE
NC4F300 modular	N/A	\$1,900	A-4114-5100-RBE

NCPCB

Description	Repair	Repair by exchange	RBE part number
NCPCB	N/A	N/A	Replace at new list price

OTS

Description	Repair	Repair by exchange	RBE part number
OTS	N/A	\$900	A-5401-2001-RBE
OTS (AA)	N/A	\$975	A-5514-2001-RBE

TRS2

Description	Repair	Repair by exchange	RBE part number
TRS2	N/A	\$610	A-5450-0400-RBE(TRS2)

Inspection probes for turning centers

Description	Repair	Repair by exchange	RBE part number
LP2 probe	N/A	\$715	A-2063-6098-RBE
LP2DD probe	N/A	\$715	A-2063-8020-RBE
LP2H probe	N/A	\$715	A-2064-0002-RBE
LTO2	N/A	\$715	A-2030-0121-RBE
LTO2S	N/A	\$715	A-2030-0183-RBE
LTO2T (25 mm shank)	N/A	\$715	A-2030-0218-RBE
LTO2T (1 in shank)	N/A	\$715	A-2030-0274-RBE
LTO3T (25 mm shank)	N/A	\$715	A-2030-0330-RBE
LTO3T (1 in shank)	N/A	\$715	A-2030-0334-RBE

Tool setting arms

HPRA

Description	Repair	Repair by exchange	RBE part number
HPRA 6 in with RP3	N/A	\$1,390	A-2176-0691-RBE
HPRA 8 in with RP3	N/A	\$1,390	A-2176-0692-RBE
HPRA 10 in with RP3	N/A	\$1,390	A-2176-0693-RBE
HPRA 12 in with RP3	N/A	\$1,390	A-2176-0694-RBE
HPRA 15 in with RP3	N/A	\$1,390	A-2176-0695-RBE
HPRA 18 in with RP3	N/A	\$1,390	A-2176-0697-RBE
HPRA 24 in with RP3	N/A	\$1,390	A-2176-0698-RBE

HPPA

Description	Repair	Repair by exchange	RBE part number
HPPA 6 in rear exit with RP3	N/A	\$1,645	A-2275-0181-RBE
HPPA 8 in rear exit with RP3	N/A	\$1,645	A-2275-0182-RBE
HPPA 10 in rear exit with RP3	N/A	\$1,645	A-2275-0183-RBE
HPPA 12 in rear exit with RP3	N/A	\$1,645	A-2275-0184-RBE
HPPA 15 in rear exit with RP3	N/A	\$1,645	A-2275-0185-RBE
HPPA 18 in rear exit with RP3	N/A	\$1,645	A-2275-0186-RBE

HPMA

Description	Repair	Repair by exchange	RBE part number
HPMA 6 in rear exit with RP3	N/A	\$1,850	A-2181-0645-RBE
HPMA 8 in rear exit with RP3	N/A	\$1,850	A-2181-0646-RBE
HPMA 10 in rear exit with RP3	N/A	\$1,850	A-2181-0647-RBE
HPMA 12 in rear exit with RP3	N/A	\$1,850	A-2181-0648-RBE
HPMA 15 in rear exit with RP3	N/A	\$1,850	A-2181-0649-RBE
HPMA 18 in rear exit with RP3	N/A	\$1,850	A-2181-0650-RBE
HPMA 24 in rear exit with RP3	N/A	\$1,850	A-2181-0651-RBE

TSA

Description	Repair	Repair by exchange	RBE part number
TSA (hub only)	N/A	\$1,710	A-2116-0200-RBE(REAR EXIT)
TSA (hub only)	N/A	\$1,710	A-2116-0201-RBE(SIDE EXIT)

Tool setting probes for turning centers

Description	Repair	Repair by exchange	RBE part number
RP1 probe	N/A	\$685	A-2154-0007-RBE
RP2 probe	N/A	\$685	A-2116-0149-RBE
RP3 probe	N/A	\$685	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
MI5	N/A	N/A	Replace at new list price
MI8	N/A	N/A	Replace at new list price
MI12	N/A	\$695	A-2075-0142-RBE
NCi interface	N/A	N/A	Replace at new list price
SSR converter board	N/A	N/A	Replace at new list price
TSi interface	N/A	N/A	Replace at new list price
OMI	N/A	\$865	A-2115-0001-RBE
OMI-2	N/A	\$760	A-5191-0050-RBE
OM1-2T	N/A	\$760	A-5439-0050-RBE
OMM	N/A	\$605	A-2033-0576-RBE
IMM (inductive module machine)	N/A	N/A	Replace at new list price
IMP (inductive module probe) assembly	N/A	N/A	Replace at new list price
RMI	N/A	\$895	A-4113-0050-RBE

Calibration systems

Renishaw recommends the following calibration frequencies:	ML10/ML10X	Every 2-3 years
	EC10	Every 12 months
	Ballbar	Every 12 months

Repair prices

Description	Repair	Repair by exchange	RBE part number
ML10 (less than seven years old)	\$1,870	N/A	N/A
ML10 (more than seven years old)	\$2,560	N/A	N/A
ML10 (more than ten years old)	\$3,240	N/A	N/A
XC80	\$1,870	N/A	N/A
XL80	\$1,870	N/A	N/A
EC10	\$1,870	N/A	N/A
Ballbar (mechanical assembly only)	N/A	\$2,205	A-8014-0286-RBE
RX10 (less than seven years old)	\$2,160	N/A	N/A
RX10 (more than seven years old)	\$3,240	N/A	N/A
RX10 (more than ten years old)	\$5,220	N/A	N/A

Calibration prices

	Standard calibration	Express calibration
ML10/ML10X	\$850	\$1,015
EC10	\$850	\$1,015
Ballbar	\$650	\$760
XC80	\$850	\$1,015
XL80	\$850	\$1,015
Zerodur 50 mm	\$440	\$505
RX10	\$1,395	N/A

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 806.

Ballbar calibration includes ballbar and zerodur 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.

Replacement parts

Description	Part number	Price
ACR1 short port replacement kit	A-5036-0049	\$255
ACR1 long port replacement kit	A-1051-7077	\$245
ACR1 mixed port replacement kit	A-1051-7076	\$245
MP8 shank switch assembly	A-2033-0755	\$115
MP1/MP4/MP7/MP8/MP9/MP10 probe outer diaphragm replacement kit	A-2051-7105	\$95
MP3/MP6 probe outer diaphragm kit	A-2053-8156	\$95
LP2 service kit	A-2063-7542	\$70
LP2DD service kit	A-2063-8023	\$160
Ballbar center cup assembly	A-8014-0522	\$140
Ballbar center ball assembly	A-8014-0141	\$140
Ballbar magnetic tool cup	A-8014-0521	\$125
Ballbar ball and mount assembly	A-8014-0182	\$140
Ballbar cleaning kit	A-8014-0423	\$12
PH1 threaded rod end	M-1049-1328	\$15
MP1/S probe rear seal	M-2051-4522	\$10
MP1/R probe rear seal	M-2051-6148	\$10
MP7/MP8/MP9/MP10/MP700 battery cap seal	M-2107-0115	\$20
MP7/MP8/MP9/MP10/MP700 battery cap screw	P-SC08-0335	\$1
OMP40 pull-up cone assembly	A-4071-0094	\$35
OMP40 round battery cap seal	M-4071-0119	\$9
OMP40 round battery cap	A-4071-0096	\$93
OMP40 rectangular battery cassette	A-4071-1166	\$120
OMP40/OMP60/RMP60 battery cassette seal	A-4038-0301	\$73
OMP60/RMP60 battery cassette	A-4038-0300	\$175
OMP60/RMP60 outer diaphragm kit	A-4038-0302	\$68
OMP60/RMP60 shank switch bobbin	A-4038-0303	\$165