



Neurosurgery



**Crutchfield
Traction Tongs
MB11-001 13 cm
small**



**Crutchfield drill bit
MB11-002 3.5 mm**



**Crutchfield drill bit
MB11-003 5.0 mm**
Set of 2 Pieces for
MB11-001 and MB11-004



**Crutchfield
Traction Tongs
MB11-004 18.5 cm**



**Crutchfield Skull
Tongs MB11-005**
large type, cervical traction
tongs-pins adjustable no drilling
to be done 11 cm



MB11-006
Wrench double
ended for MB11-005



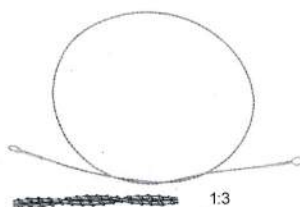
**De Martel
Saw Conductor
MB11-007
100 cm 39"**



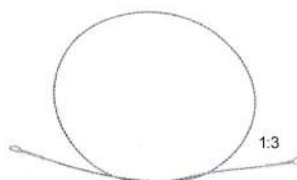
**Adson
Drill guide
MB11-008
15 cm 6"**



**De Vilbiss
Skull Forceps
MB11-009
20 cm 8 1/4"**



**Olivecrona
Wire Saw**
MB11-010 30 cm 12"
MB11-011 40 cm 16"
MB11-012 50 cm 20"
MB11-013 60 cm 23 1/2"
MB11-014 70 cm 27 1/2"



Gigle, Wire Saw
MB11-015 30 cm 12"
MB11-016 40 cm 16"
MB11-017 50 cm 20"
6 wires twisted



**Gigle-Strully
Handle for
wire saw
MB11-018**



Supra Cut Distraction Screw

MB11-019	12 mm Non Sterile
MB11-020	14 mm Non Sterile
MB11-021	16 mm Non Sterile
MB11-022	18 mm Non Sterile
MB11-023	12 mm Sterile
MB11-024	14 mm Sterile
MB11-025	16 mm Sterile
MB11-026	18 mm Sterile



**Supra Cut
Distraction
Screw Driver
MB11-027**



Cushing, brain spatula
MB11-028 7 mm x 9 mm
MB11-029 11 mm x 13 mm
MB11-030 15 mm x 18 mm
MB11-031 18 mm x 22 mm
18 cm 7"



**Olivecrona
MB11-032**
brain spatula
18 cm 7"



Brain Spatula
MB11-033 7 mm x 9 mm
MB11-034 11 mm x 13 mm
MB11-035 15 mm x 18 mm
MB11-036 18 mm x 22 mm
18 cm 7", Convex



Brain Spatula
MB11-037 7 mm x 9 mm
MB11-038 11 mm x 13 mm
MB11-039 15 mm x 18 mm
MB11-040 18 mm x 22 mm
18 cm 7", Concave



Heifetz, brain spatula
MB11-041 8 mm
MB11-042 11 mm
MB11-043 14 mm
MB11-044 17 mm
MB11-045 20 mm
20 cm 8", Malleable



MB11-046
15 cm 6"
MB11-047
19 cm 7 1/2"
Straight



MB11-048
15 cm 6"
MB11-049
19 cm 7 1/2"
Curved



McKenzie
MB11-050 148 mm x 40 mm x 6 mm
5 3/4" x 1 1/2" x 1/2", Brain clip rack for 20 clips



McKenzie Clip
Applying Forceps
MB11-051
Straight Handle,
Curved Jaws, 6"



McKenzie Clip
Applying Forceps
MB11-052
Curved Handle,
Curved Jaws, 6"



Smithwick Clip
Applying Forceps
MB11-053
9", Curved Jaws
Straight Handle



Smithwick Clip
Applying Forceps
MB11-054
10 1/2", Curved Jaws
Straight Handle



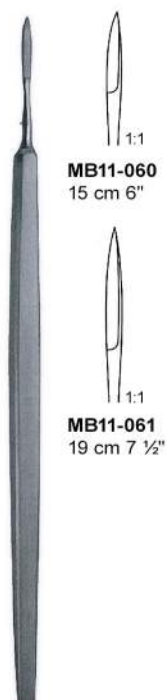
Smithwick Clip
Applying Forceps
MB11-055
10 1/2", Straight Jaws
Straight Handle



Schwartz Clip Applying Forceps
MB11-056 20.3 cm 8"



Schwartz Vessel Clip
MB11-057 1" (2.5 cm), Straight Jaws 1.7 x 8 mm
MB11-058 1" (2.5 cm), Slightly Angled Jaws 1.7 x 8 mm
MB11-059 1" (2.5 cm), Strong Angled Jaws 1.7 x 8 mm



Toennis Nerve
Dura Hook



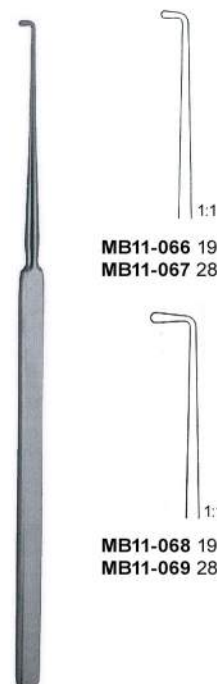
Halle Nerve
Dura Hook
MB11-062
20cm 8"



Smithwick Nerve
Dura Hook
MB11-063 17 cm 6 3/4"
MB11-064 21 cm 8 1/4"

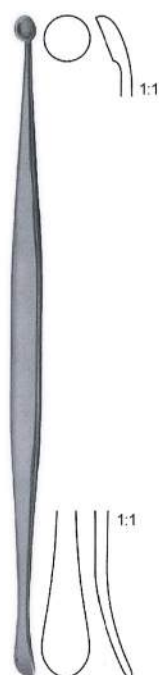


Hoen Nerve
Dura Hook
MB11-065
22 cm 8 3/4"



Cushing Nerve
Dura Hook

DURA DISSECTORS



Penfield Dura
Dissector
MB11-070
17.5 cm 7"



Penfield Dura
Dissector
MB11-071
19.5 cm 7 3/4"



Penfield Dura
Dissector
MB11-072
19.5 cm 7 3/4"



Penfield Dura
Dissector
MB11-073
19.5 cm 7 3/4"



Penfield Dura
Dissector
MB11-074
19.5 cm 7 3/4"



**Love Nerve Dura
Hook Retractor**
MB11-075 19 cm 7 ½"
Straight



**Love Nerve Dura
Hook Retractor**
MB11-076 19 cm 7 ½"
45° Angled



**Love Nerve Dura
Hook Retractor**
MB11-077 19 cm 7 ½"
90° Angled



**Cushing Nerve Dura
Hook Retractor**
MB11-078 14 cm 5½"



Frazier Nerve Dura



MB11-079
13 cm 5"
MB11-080
18 cm 7"
Sharp



MB11-081
13 cm 5"
MB11-082
18 cm 7"
Blunt



**Lahey Nerve Dura
Hook Retractor**
MB11-083 13 cm 5"



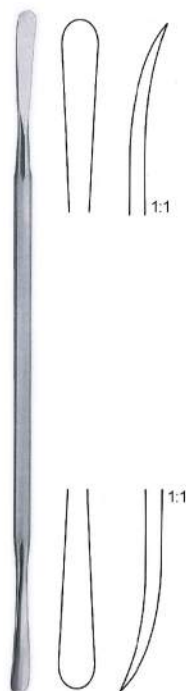
**Yasargil Nerve Dura
Hook Retractor**
MB11-084 21 cm 12 ¼"
MB11-085 41 cm 16 ¼"
Galea retractor



**Toennis Dura
Dissector
MB11-086**
25 cm 9 3/4"



**Davis Dura
Dissector
MB11-087**
24.5 cm 9 3/4"



**Dura Dissector
MB11-088**
22 cm 8 3/4"



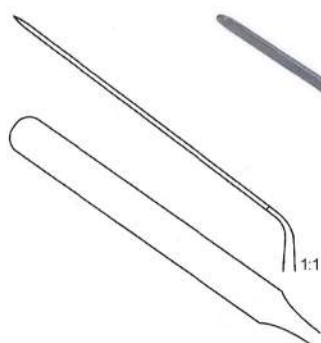
**Sachs Dura
Dissector
MB11-089**
21 cm 8 1/4"



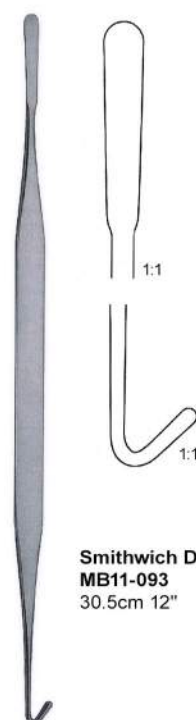
**Sachs Dura
Dissector
MB11-090**
21 cm 8 1/4"



**Sachs Dura
Dissector
MB11-091**
21 cm 8 1/4"



**Horsley Dura
Dissector
MB11-092**
20 cm 8"



**Smithwich Dura Dissector
MB11-093**
30.5cm 12"



Cushing Intervertebral Disc Rongeurs

2 × 10 mm, 6"	2 × 10 mm, 9"
MB11-094 straight	MB11-106 straight
MB11-095 UP	MB11-107 UP
MB11-096 Down	MB11-108 Down
1.5 × 10 mm, 7"	2 × 10 mm, 10"
MB11-097 straight	MB11-109 straight
MB11-098 Up	MB11-110 UP
MB11-099 Down	MB11-111 Down
2 × 10 mm, 7"	2 × 10 mm, 11"
MB11-100 straight	MB11-112 straight
MB11-101 UP	MB11-113 UP
MB11-102 Down	MB11-114 Down
1.5 × 10 mm, 9"	2 × 10 mm, 12"
MB11-103 straight	MB11-115 straight
MB11-104 Up	MB11-116 UP
MB11-105 Down	MB11-117 Down



Love-Gruenwald Intervertebral Disc Rongeurs

3 × 10 mm, 6"	3 × 10 mm, 10"
MB11-118 straight	MB11-127 straight
MB11-119 Up	MB11-128 Up
MB11-120 Down	MB11-129 Down
3 × 10 mm, 7"	3 × 10 mm, 11"
MB11-121 straight	MB11-130 straight
MB11-122 Up	MB11-131 Up
MB11-123 Down	MB11-132 Down
3 × 10 mm, 9"	3 × 10 mm, 12"
MB11-124 straight	MB11-133 straight
MB11-125 Up	MB11-134 Up
MB11-126 Down	MB11-135 Down



Spurring Intervertebral Disc Rongeurs

4 × 10 mm, 6"	4 × 10 mm, 10"
MB11-136 straight	MB11-145 straight
MB11-137 Up	MB11-146 Up
MB11-138 Down	MB11-147 Down
4 × 10 mm, 7"	4 × 10 mm, 11"
MB11-139 straight	MB11-148 straight
MB11-140 Up	MB11-149 Up
MB11-141 Down	MB11-150 Down
4 × 10 mm, 9"	4 × 10 mm, 12"
MB11-142 straight	MB11-151 straight
MB11-143 Up	MB11-152 Up
MB11-144 Down	MB11-153 Down



Micro Cup Forceps

5.5", 0.5 mm
MB11-154 Straight
MB11-155 Right
MB11-156 Left



Micro Cup Forceps

5.5", 1 mm
MB11-157 Straight
MB11-158 Right
MB11-159 Left
5.5", 2 mm
MB11-160 Straight



Micro Cup Forceps

8", 200 mm, 2 mm
MB11-161 Straight
MB11-162 Up
MB11-163 Down



Wilde Intervertebral Disc Rongeurs

- 7" Straight
MB11-164 2.5mm
MB11-165 3mm
MB11-166 4mm
MB11-167 5mm
- 7" Angled Up
MB11-168 2.5mm
MB11-169 3mm
MB11-170 4mm
MB11-171 5mm
- 9" Straight
MB11-172 3mm
MB11-173 4mm
MB11-174 5mm



Caspar Type Intervertebral Disc Rongeurs

- 6.25" Straight
MB11-175 2 × 12mm
MB11-176 3 × 12mm
MB11-177 4 × 14mm
MB11-178 5 × 14mm
MB11-179 6 × 16mm
- 6.25" Up
MB11-180 3 × 12mm
MB11-181 4 × 14mm
MB11-182 5 × 14mm
- 6.25" Down
MB11-183 3 × 12mm
MB11-184 4 × 14mm



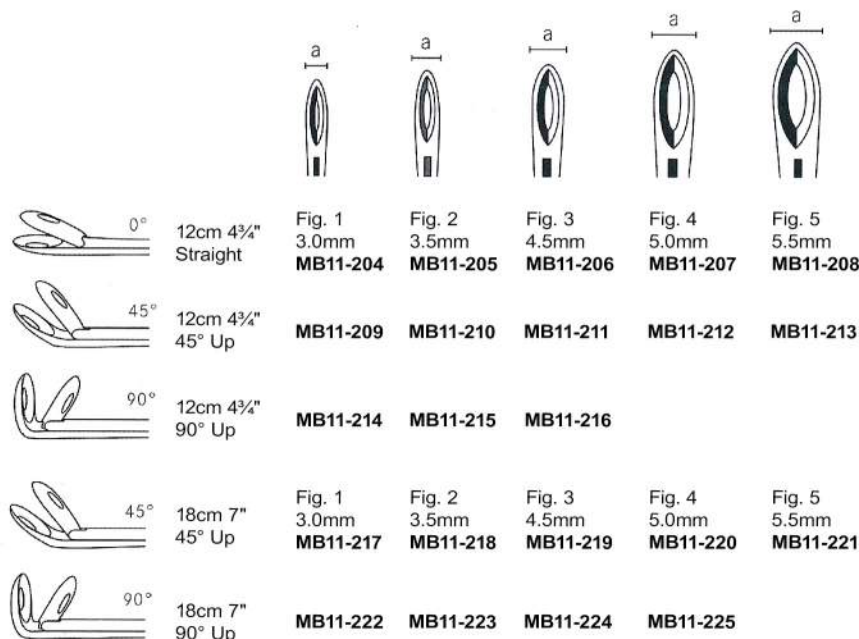
Caspar Type Intervertebral Disc Rongeurs

- 7.25" Straight
MB11-185 2 × 12mm
MB11-186 3 × 12mm
MB11-187 4 × 14mm
MB11-188 5 × 14mm
MB11-189 6 × 16mm
- 7.25" Up
MB11-190 2 × 12mm
MB11-191 3 × 12mm
MB11-192 4 × 14mm
MB11-193 5 × 14mm
- 7.25" Down
MB11-194 2 × 12mm
MB11-195 3 × 12mm
MB11-196 4 × 14mm



Cushing Intervertebral Disc Rongeurs

- w/teeth 2 × 10mm, 7"
MB11-197 Straight
MB11-198 Up
MB11-199 Down
L-G Intervertebral Disc Rongeurs
w/teeth 3 × 10mm, 7"
MB11-200 Straight
MB11-201 Up
MB11-202 Down
3 × 10mm, 10"
MB11-203 Straight



Well Blakesley Laminectomy Rongeurs

**Spurling Intervertebral
Disc Rongeurs**
w/teeth 4 × 10mm, 7"

MB11-226 Straight
MB11-227 Up
MB11-228 Down

4 × 10mm, 10"
MB11-229 Straight

5 × 10mm, 10"
MB11-230 Straight



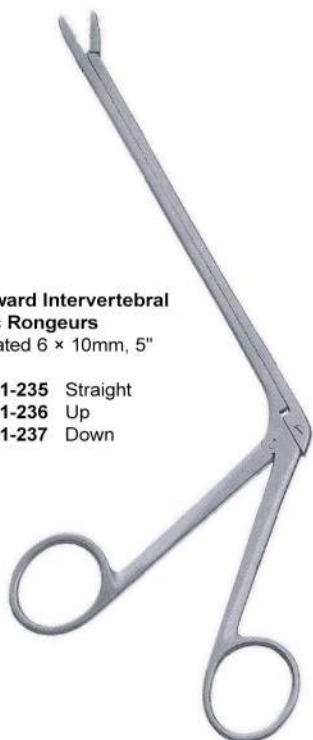
**Schlesinger Intervertebral
Disc Rongeurs**

MB11-231 2 × 10mm, 5" Straight
MB11-232 3 × 10mm, 5" Straight
MB11-233 4 × 10mm, 5" Straight
MB11-234 3 × 10mm, 5" Angled Up



**Cloward Intervertebral
Disc Rongeurs**
serrated 6 × 10mm, 5"

MB11-235 Straight
MB11-236 Up
MB11-237 Down



**Oldberg Intervertebral
Disc Rongeurs**

MB11-238 6mm Diameter
7-1/8"



**Selverstone Intervertebral
Disc Rongeurs**

MB11-239 2 × 3mm, 6"
MB11-240 2 × 5mm, 6"





**Cushing Intervertebral
Disc Rongeurs**
2 x 10mm, 5"

MB11-241 Straight
MB11-242 Up
MB11-243 Down



**Spurling Intervertebral
Disc Rongeurs**
4 x 10mm, 5"

MB11-247 Straight
MB11-248 Up
MB11-249 Down



**Peapod Intervertebral
Disc Rongeurs, 5-1/2"**

MB11-250 Angle Up 1.5mm, X-Small
MB11-251 Angle Up 2mm, Small
MB11-252 Angle Up 2.5mm, Medium
MB11-253 Angle Up 3mm, Large

**Peapod Intervertebral
Disc Rongeurs**

MB11-254 Angle Up 2.5mm, 7"
MB11-255 Angle Up 3mm, 7"
MB11-256 Angle Up 4mm, 7"
MB11-257 Straight 2mm, 5-1/2"
MB11-258 Straight 2.5mm, 5-1/2"
MB11-259 Straight 3mm, 5-1/2"



**Decker Intervertebral
Disc Rongeurs**
2 x 5mm, 6"

MB11-260 Right
MB11-261 Left
MB11-262 Down
MB11-263 Up
MB11-264 Straight



**Jackson Intervertebral
Disc Rongeurs**
70° Up, 7"

MB11-265 2 x 8mm
MB11-266 3 x 8mm
MB11-267 4 x 8mm



**Williams Style Micro Disc
Intervertebral Disc Rongeurs**
1 x 2 Teeth, Straight

MB11-268 5.5"
MB11-269 7"
MB11-270 10"

Ferris Smith Micro Kerrison Laminectomy Rongeurs

90° Up, 9mm Bite Opening, 7"

MB11-271	1mm
MB11-272	2mm
MB11-273	3mm
MB11-274	4mm
MB11-275	5mm
MB11-276	6mm

90° Up, 9mm Bite Opening, 8"

MB11-277	1mm
MB11-278	2mm
MB11-279	3mm
MB11-280	4mm
MB11-281	5mm
MB11-282	6mm



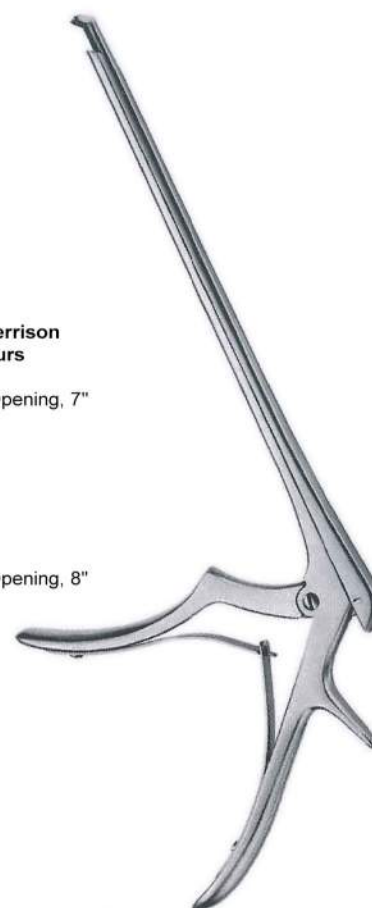
Ferris Smith Micro Kerrison Laminectomy Rongeurs

90° Down, 9mm Bite Opening, 7"

MB11-283	1mm
MB11-284	2mm
MB11-285	3mm
MB11-286	4mm
MB11-287	5mm
MB11-288	6mm

90° Down, 9mm Bite Opening, 8"

MB11-289	1mm
MB11-290	2mm
MB11-291	3mm
MB11-292	4mm
MB11-293	5mm
MB11-294	6mm



Micro Ejector Kerrison Laminectomy Rongeurs

40° Up, 8"

MB11-295	2mm
MB11-296	3mm
MB11-297	4mm
MB11-298	5mm
MB11-299	6mm



Wide Mouth Ejector Kerrison Laminectomy Rongeurs

40° Up, 7"

MB11-300	2mm
MB11-301	3mm
MB11-302	4mm
MB11-303	5mm
MB11-304	6mm

40° Up, 8"

MB11-305	2mm
MB11-306	3mm
MB11-307	4mm
MB11-308	5mm
MB11-309	6mm



Ferris-Smith Intervertebral Disc Rongeurs

7" Straight

MB11-310 2 × 10mm
MB11-311 3 × 10mm
MB11-312 4 × 8mm
MB11-313 4 × 10mm
MB11-314 6 × 10mm
MB11-315 6 × 12mm



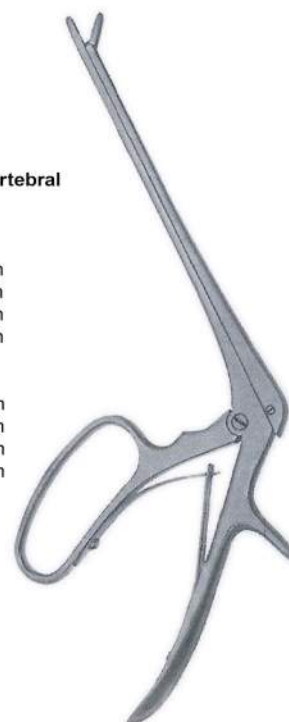
Ferris-Smith Intervertebral Disc Rongeurs

7" Up

MB11-316 2 × 10mm
MB11-317 3 × 10mm
MB11-318 4 × 10mm
MB11-319 6 × 10mm

7" Down

MB11-320 2 × 10mm
MB11-321 3 × 10mm
MB11-322 4 × 10mm
MB11-323 6 × 10mm



Ferris Smith Micro Kerrison Laminectomy Rongeurs

130° Down Bite, 11"	130° Down Bite, 12"
MB11-324 4mm	MB11-327 1mm
MB11-325 5mm	MB11-328 2mm
MB11-326 6mm	MB11-329 3mm
	MB11-330 4mm
	MB11-331 5mm
	MB11-332 6mm



Kerrison Cervical Rongeur MB11-333

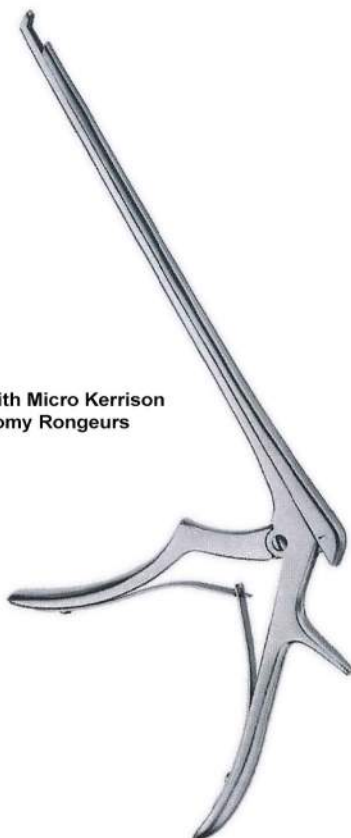
17.8cm 7" Shaft, 3mm
40° Forward Angle



Schlesinger Cervical Rongeur MB11-334

Thin Tips, 6" (15.2cm) Shaft,
Up-Bite, 3mm

Ferris Smith Micro Kerrison
Laminectomy Rongeurs
Upward



Ferris Smith Micro Kerrison
Laminectomy Rongeurs
Downward



40° UP
9mm Bite Opening, 7"
MB11-335
MB11-336 1mm
MB11-337 2mm
MB11-338 3mm
MB11-339 4mm
MB11-340 5mm
MB11-341 6mm

40° Down
9mm Bite Opening, 7"
MB11-342 2mm
MB11-343 3mm
MB11-344 4mm
MB11-345 5mm
MB11-346 6mm

40° UP
9mm Bite Opening, 8"
MB11-347 1mm
MB11-349 2mm
MB11-350 3mm
MB11-351 4mm
MB11-352 5mm
MB11-353 6mm

40° Down
9mm Bite Opening, 8"
MB11-354 1mm
MB11-355 2mm
MB11-356 3mm
MB11-357 4mm
MB11-358 5mm
MB11-359 6mm

40° UP
9mm Bite Opening, 9"
MB11-360 1mm
MB11-361 2mm
MB11-362 3mm
MB11-363 4mm
MB11-364 5mm
MB11-365 6mm

40° UP
9mm Bite Opening, 10"
MB11-366 2mm
MB11-367 3mm
MB11-368 4mm
MB11-369 5mm
MB11-370 6mm

40° UP
9mm Bite Opening, 11"
MB11-371 2mm
MB11-372 3mm
MB11-373 4mm
MB11-374 5mm
MB11-375 6mm

40° UP
9mm Bite Opening, 12"
MB11-376 2mm
MB11-377 3mm
MB11-378 4mm
MB11-379 5mm
MB11-380 6mm

130° Down
9mm Bite Opening, 7"
MB11-381 1mm
MB11-382 2mm
MB11-383 3mm
MB11-384 4mm
MB11-385 5mm
MB11-386 6mm

130° Down
9mm Bite Opening, 8"
MB11-387 1mm
MB11-388 2mm
MB11-389 3mm
MB11-390 4mm
MB11-391 5mm
MB11-392 6mm

130° Down
9mm Bite Opening, 9"
MB11-393 1mm
MB11-394 2mm
MB11-395 3mm
MB11-396 4mm
MB11-397 5mm
MB11-398 6mm

130° Down
9mm Bite Opening, 10"
MB11-399 1mm
MB11-400 2mm
MB11-401 3mm
MB11-402 4mm
MB11-403 5mm
MB11-404 6mm

130° Down
9mm Bite Opening, 11"
MB11-405 1mm
MB11-406 2mm
MB11-407 3mm
MB11-408 4mm
MB11-409 5mm
MB11-410 6mm

130° Down
9mm Bite Opening, 12"
MB11-411 1mm
MB11-412 2mm
MB11-413 3mm
MB11-414 4mm
MB11-415 5mm
MB11-416 6mm

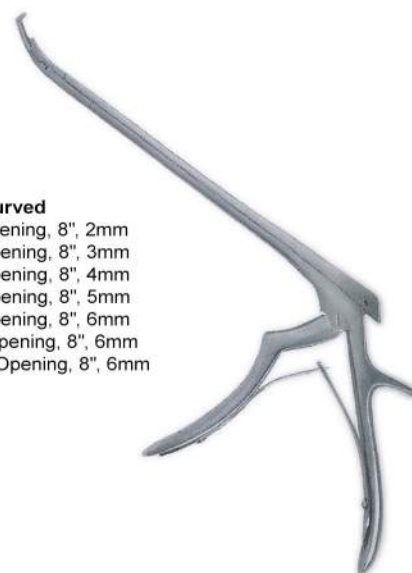
Bayonet Micro Kerrison Laminectomy Rongeurs

40° Up, 150mm Working Length 8"	90° Up, 150mm Working Length 8"
MB11-417 1mm	MB11-423 1mm
MB11-418 2mm	MB11-424 2mm
MB11-419 3mm	MB11-425 3mm
MB11-420 4mm	MB11-426 4mm
MB11-421 5mm	MB11-427 5mm
MB11-422 6mm	MB11-428 6mm



Foramenotomy Kerrison Laminectomy Rongeurs, Curved

MB11-441 Up, 9mm Bite Opening, 8", 2mm
MB11-442 Up, 9mm Bite Opening, 8", 3mm
MB11-443 Up, 9mm Bite Opening, 8", 4mm
MB11-444 Up, 9mm Bite Opening, 8", 5mm
MB11-445 Up, 9mm Bite Opening, 8", 6mm
MB11-446 Left, 9mm Bite Opening, 8", 6mm
MB11-447 Right, 9mm Bite Opening, 8", 6mm



Bayonet Spurling Kerrison Laminectomy Rongeurs

40° Up, 150mm Working Length 8"	90° Up, 150mm Working Length 8"
MB11-429 1mm	MB11-435 1mm
MB11-430 2mm	MB11-436 2mm
MB11-431 3mm	MB11-437 3mm
MB11-432 4mm	MB11-438 4mm
MB11-433 5mm	MB11-439 5mm
MB11-434 6mm	MB11-440 6mm



40° Up, 15mm Bite Opening, 7"
MB11-448 2mm
MB11-449 3mm
MB11-450 4mm
MB11-451 5mm
MB11-452 6mm

40° Up, 15mm Bite Opening, 8"
MB11-453 2mm
MB11-454 3mm
MB11-455 4mm
MB11-456 5mm
MB11-457 6mm

40° Up, 15mm Bite Opening, 9"
MB11-458 2mm
MB11-459 3mm
MB11-460 4mm
MB11-461 5mm
MB11-462 6mm

40° Up, 15mm Bite Opening, 10"
MB11-463 2mm
MB11-464 3mm
MB11-465 4mm
MB11-466 5mm
MB11-467 6mm

40° Up, 15mm Bite Opening, 11"
MB11-468 2mm
MB11-469 3mm
MB11-470 4mm
MB11-471 5mm
MB11-472 6mm

90° Up, 15mm Bite Opening, 7"
MB11-473 2mm
MB11-474 3mm
MB11-475 4mm
MB11-476 5mm
MB11-477 6mm

90° Up, 15mm Bite Opening, 8"
MB11-478 2mm
MB11-479 3mm
MB11-480 4mm
MB11-481 5mm
MB11-482 6mm

90° Down, 15mm Bite Opening, 7"
MB11-483 2mm
MB11-484 3mm
MB11-485 4mm
MB11-486 5mm
MB11-487 6mm

90° Down, 15mm Bite Opening, 8"
MB11-488 2mm
MB11-489 3mm
MB11-490 4mm
MB11-491 5mm
MB11-492 6mm

40° Up, 15mm Bite Opening, 7"
MB11-493 2mm
MB11-494 3mm
MB11-495 4mm
MB11-496 5mm
MB11-497 6mm

40° Up, 15mm Bite Opening, 8"
MB11-498 2mm
MB11-499 3mm
MB11-500 4mm
MB11-501 5mm
MB11-502 6mm

40° UP, 15mm Bite Opening, 9"
MB11-503 2mm
MB11-504 3mm
MB11-505 4mm
MB11-506 5mm
MB11-507 6mm

40° UP, 15mm Bite Opening, 10"
MB11-508 2mm
MB11-509 3mm
MB11-510 4mm
MB11-511 5mm

MB11-512 6mm 40° Up, 15mm Bite Opening, 11"
MB11-513 2mm
MB11-514 3mm
MB11-515 4mm
MB11-516 5mm
MB11-517 6mm

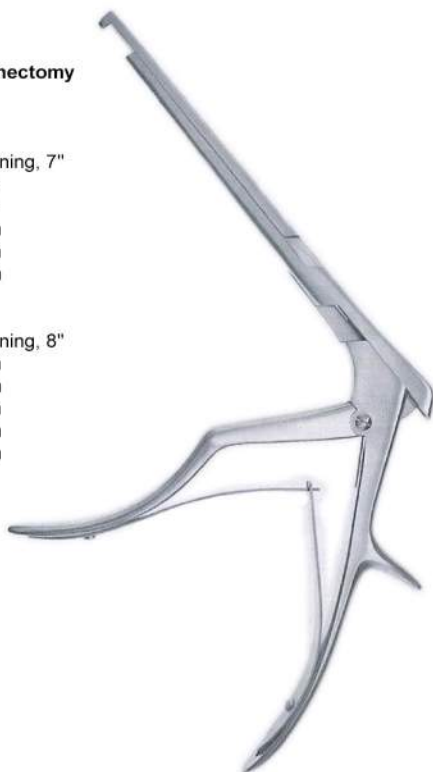
Spurling Laminectomy Rongeurs

90° Down,
15mm Bite Opening, 7"

MB11-518 2mm
MB11-519 3mm
MB11-520 4mm
MB11-521 5mm
MB11-522 6mm

90° Down,
15mm Bite Opening, 8"

MB11-523 2mm
MB11-524 3mm
MB11-525 4mm
MB11-526 5mm
MB11-527 6mm



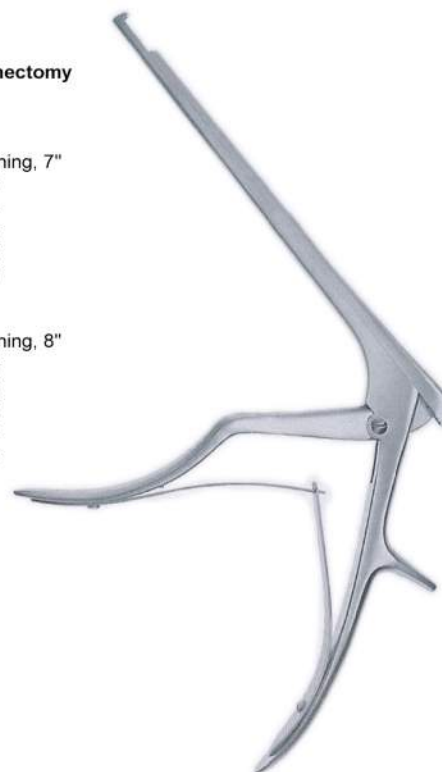
Spurling Laminectomy Rongeurs

90° UP,
15mm Bite Opening, 7"

MB11-528 2mm
MB11-529 3mm
MB11-530 4mm
MB11-531 5mm
MB11-532 6mm

90° UP,
15mm Bite Opening, 8"

MB11-533 2mm
MB11-534 3mm
MB11-535 4mm
MB11-536 5mm
MB11-537 6mm



Micro Ejector Kerrison Laminectomy Rongeurs

40° Up 8"

MB11-538 2mm
MB11-539 3mm
MB11-540 4mm
MB11-541 5mm
MB11-542 6mm



Wide Mouth Ejector Kerrison Laminectomy Rongeurs

40° Up 7"

MB11-543 2mm
MB11-544 3mm
MB11-545 4mm
MB11-546 5mm
MB11-547 6mm

40° Up 8"

MB11-548 2mm
MB11-549 3mm
MB11-550 4mm
MB11-551 5mm
MB11-552 6mm





**Cloward Retractor
MB11-553**
15.5 cm, 6"



**Cloward Retractor
MB11-554**
13.5 cm, 5 1/4"



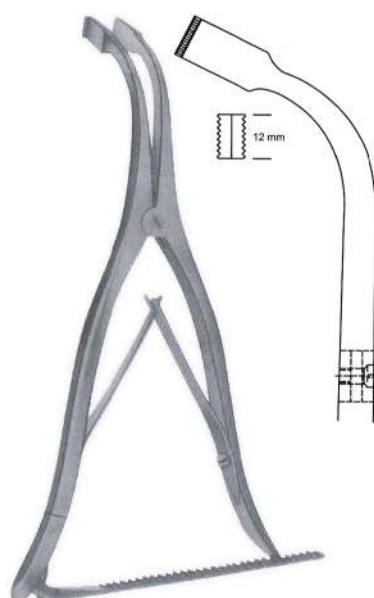
**Cloward Vertibral
Cervical Spreader
MB11-555**



**Spinal Distractor
MB11-556** 24cm 9 1/2"
45° angle / small style
1/4" rods



**Inge Retractor
MB11-557**
17.0 cm, 6 3/4"



**Inge Retractor
MB11-558**
27.5 cm, 10 3/4"



**Spinal Distractor
MB11-559**
25.5cm 10"
small style



**Inge Retractor
MB11-560** 20cm 8"
toothed w/spindle