

Introduction to Bookler® Table Mounted Retractor (TMR) Systems

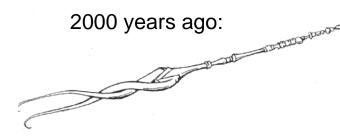
The world's first retractor



The world's first surgical procedure using the first retractor



How have Retractors Changed?



This is the oldest archaeological record we have of a surgical retractor. It is a skin hook found in the ashes of Pompeii. 2 most common types of surgery then were C-Sections and arrow-head removal...both using the skin hooks. 200 years ago:

1800 years later, retractors have hardly changed. By the time of the American Revolution, skin hooks and amputation saws were still the most common surgical instruments.

But, until the late 1800's surgery was rare.

Estimates are that over **90%** of surgical patients died of either shock or infection.

How have Retractors Changed?

... Two significant advances made in the late 1800's:

- Anesthesia dramatically reduced death by shock
- Aseptic surgical techniques dramatically reduced death by infection

This led to:

- 1) Dramatic increases in the number and types of surgical procedures
- 2) A need for new instruments
- 3) A significant need for retractors, especially for deep, abdominal procedures...

What developed was...

Hand-Held Retractors (late 1800's)



Advantages

- Many patterns and sizes match anatomy and patient
- Easily switched if different pattern or size needed
- Could create excellent exposure

Disadvantages

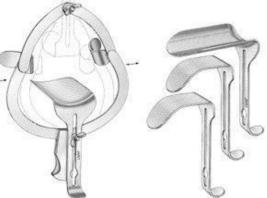
- Quality of exposure dependent on person holding retractor
- Fatigue and tremor became a significant issue

How have Retractors Changed?

The disadvantages of hand-held retraction led to the development of **Self-Retaining Retractors** in the mid 1900's







Advantages:

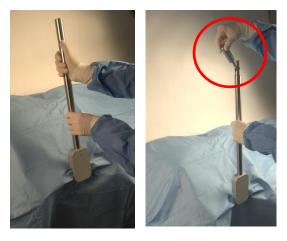
- Using ratchets, wing-nuts or some other method, blades could be spread and kept in position indefinitely without being held
- Many sizes, shapes and styles available

Disadvantages:

- Blade style, size and position were usually fixed, so if different size, shape or position needed, the entire system had to be removed and replaced
- Not always the optimal exposure...they only retract in one direction

Bookler[®] TMR Systems SYSTEM SET-UP

1. Attach Field Post to OR table rail



2. Insert the Horizontal Bar into the Post Coupler (closest to tightening knob)

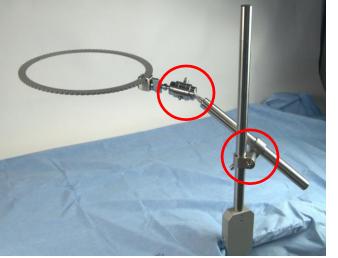


3. Attach the Post Coupler to the Field Post (Ring jaws upward)



4. Open the jaws of the Horizontal Bar and attach the appropriate Ring. Tighten the jaws until the Ring is rigid

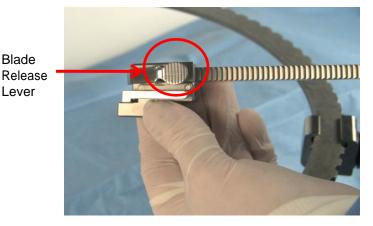




5. Loosen Post and/or Horizontal Bar coupler to position Ring over the operative site, retightened when in appropriate position

Bookler® TMR Systems SYSTEM SET-UP – BLADE POSITIONING

1. Insert Retractor Blade handle into Ratchet (blade teeth must engage in ratchet mechanism)



3. Adjust the retraction distance by advancing the Retractor Blade into the Ratchet.

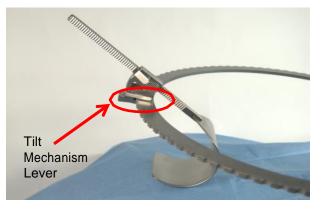




4. Adjust tilt manually to retract tissue upwards.



Tension of the retracted tissue will hold the ratchet on the Ring



Surgeon Pioneers

1965 Dick Thompson, MD an Anesthesiologist, developed the first table mounted retractor

- Mouth Gag retractor for tonsillectomy
- Many pieces, complicated to set-up
- Dr. Thompson founded Thompson Surgical
- Their retractor sets look/are still complicated

1974 John Bookwalter, MD a General Surgeon develops Bookwalter TMR System

Mediflex is approached by Codman to work with Dr. Bookwalter

"Good exposure is the key to good surgery" - John Bookwalter, MD, FACS

Bookler[®] TMR Systems MOUNTING HARDWARE

Field Posts (aka Table Posts)



12" (30cm) (Standard Length) # 72011 18" (45cm) (Bariatrics, GYN) # 72009 24" (60cm) (Bariatrics) # 72010

Coupler

72013 Stainless Steel Coupler



Horizontal Bars

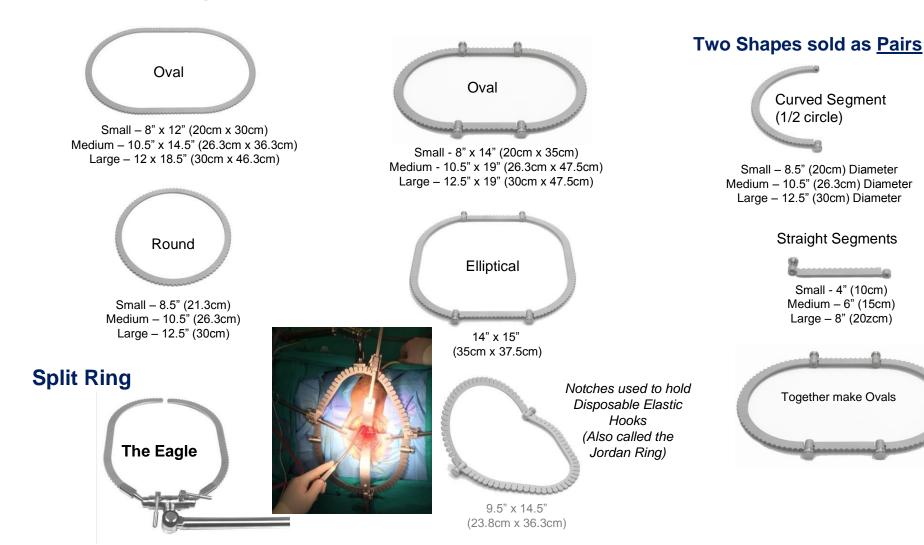




(Horizontal Flex Bar can gain 8-10" in height vs. Std. Horizontal Bar)

Bookler® TMR Systems RINGS & COMPONENTS

Solid Rings



Segmented Rings & Components

Bookler® TMR Systems MOUNTING HARDWARE

Vertical Extension Bar



Ratchets

Allows Blade movement in and out and ease of movement to adjacent notch

72025 Standard Ratchet





72026 Tilt Ratchet Allows angling of blade to retract tissue upward

72113 Twist Ratchet Adapter Allows microadjustment of blade/tissue retraction



Bookler® TMR Systems RETRACTOR BLADES

- The only parts of the system that touch the patient
- All major blade categories available: Balfour, Deaver, Harrington, Kelly, Richardson, Hooks/Rakes, Malleable
- All Mediflex Malleable Blades have a protective edge
- Mediflex offers additional blade sizes
 - Standard blade categories
 - 4-5 week lead time
 - Reasonably priced
 - Stainless Steel and Aluminum

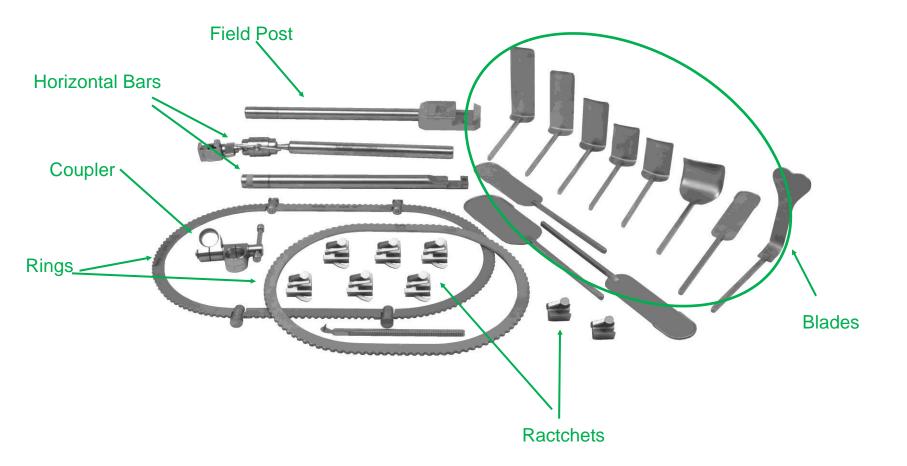




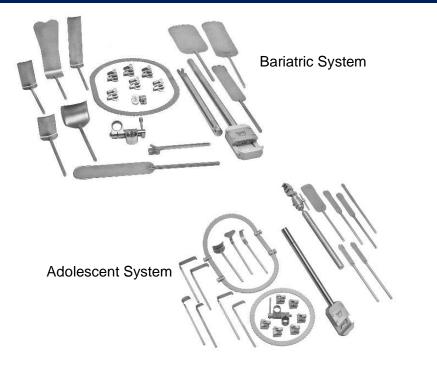


Bookler® TMR Systems PROCEDURAL SYSTEMS

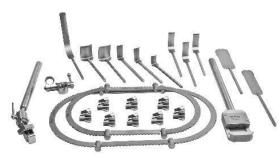
General Surgery System



Bookler[®] TMR Systems PROCEDURE / STARTER SYSTEMS







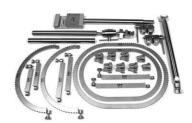
Urology System

Pre-Configured Starter Systems

Basic Starter System (no blades)



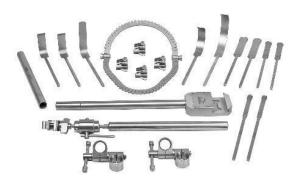
Deluxe Starter System



Bariatric Accessory System

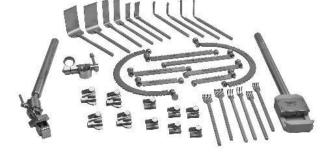


Bookler® TMR Systems PROCEDURE / STARTER SYSTEMS



Deluxe Vaginal System



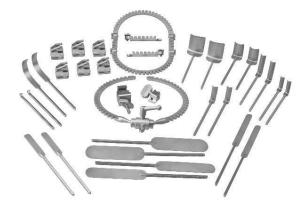


Laparoscopic Holding System

Spinal System



IMA System



Small Incision System

Bookler® TMR Systems ACCESSORIES

Flex-Light[™] Malleable Fiber Optic Light Pipe

- Attaches to Bookler Ring
- Accommodates any light cable
- Includes 3 adapters:
 - Storz/Olympus
 - Wolf
 - ACMI

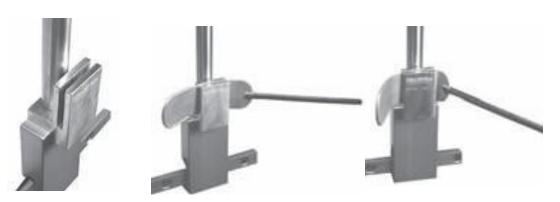


Mediflex

Flex-Light Frame Clip

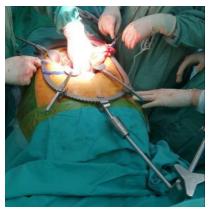


Malleable Blade Bending and Shaping Tool





Bookler® TMR Systems HOLDERS & POSITIONERS





StrongArm[™] PLUS

- Designed to resist deflection forces 3 5 times that of standard StrongArm Device.
- Due to its strength and height adjustability, a compliment for use with Bookler (and Bookwalter) TMR Systems





Bookler® TMR Systems HOLDERS & POSITIONERS



StrongArm[™] PLUS

- Can reach as high as a 24" Bookler Field Post
 - But go lower than the shortest Bookler Field Post; and with no vertical obstruction!



Available tip configurations

Quick-Connect Tip



Permanently attached Bookler Ring Clasper

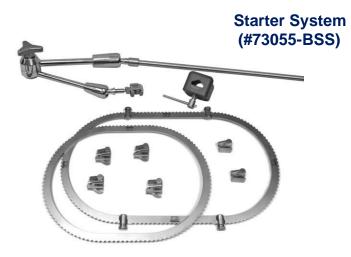


This is what will be in all StrongArm **PLUS** Bookler Systems

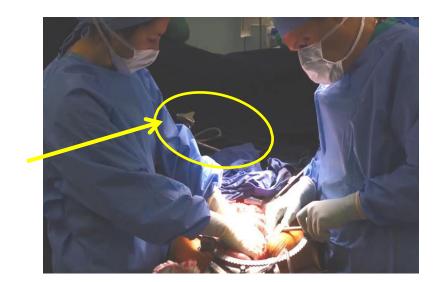
Bookler[®] TMR Systems HOLDERS & POSITIONERS

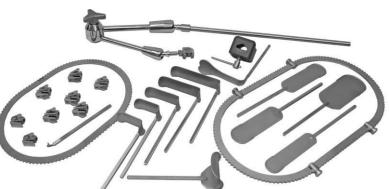
StrongArm[™] PLUS

Providing maximum stabilization without interference



Top Mount StrongArm Plus with Bookler Ring Clasper and Heavy Duty Rail Clamp (#73055-BC)



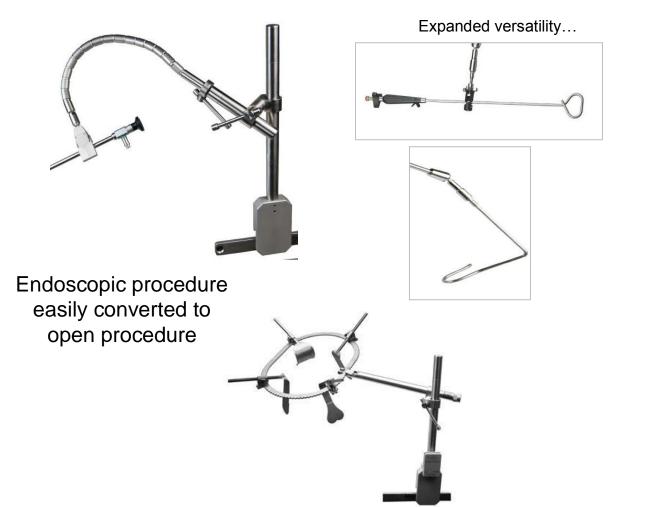


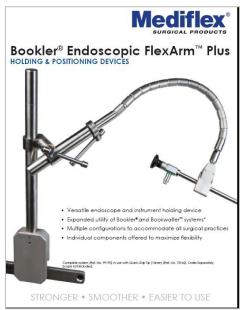
General Surgery System (#72000-SA)



Bookler[®] TMR Systems PRODUCT OVERVIEW

Bookler Endoscopic FlexArm[™] Plus





				e or laparoscopic instrument. Ind okier RexArm Plus System.	
	COMPL	.ETE BOOKLER®	ENDOSCC	PIC SYSTEMS	
REF. NO	DESCRIPTION			FlexAm Devices are available with a Guick-Connect (A) Hexagonal Fitting us	
99190	Bookler RexArm Plus with Quick-Connect Tip-12" (30cm) Post			with our interchangeable tips or can be	
99105		h fixed Stainless Steel Tip-		ordered with permanently attached Stainless Steel Tip (8) or Deirin Tip (C).	
99106		h fixed Delrin Tip-12"(30cr			
99191	Bookler RexArm Plus with Quick-Connect Tip-18" (45cm) Post				
99095	Bookler RexArm Plus will	h fixed Stainless Steel Tip-	18"(45cm) Post A	Quick-Connect 8 - Permanently at	
99096	Bookler RexArm Plus with	h fixed Delrin Tip-18" (45cr	m) Post	Hexagonal Phing Stainless Sheel Tp	
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. 61152	mi	4 99103	Bookler FlexArm	Plus with Quick-Connect Hex Filling	
_	The second s	99051		Plus with fixed Stainless Steel Tip (B)	
	11.1*(48.50)	99029		Plus with fixed Delrin Tip (C)	
	FIELD POSTS		COUPLING	VERTICAL EXTENSION K	
		9			
Standar REF. N	D. 72011 d 12" (30cm) D. 72009 "(45cm)	REF. NO. 72013 Post Coupler 1" x 1" (2.5 x 2.5cm)	REF. NO. 72013-C Quick Lock Post Coupler 1" x 1" (2.5 x 2.5c You for sole in the U.5	m) REF. NO. 72193 12" Vertical Extension Bar with Post Coupler (72013)	
		HOLDI	ING TIPS		
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e e	49704	REE NO 49707	-	REF NO 48704-1	
Stainless	0. 69706 Steel Tip	REF. NO. 69707 Dekin Tip	-	REF. NO. 69706-L XL Stainless Steel Tip	
Stainless	0. 69706 Steel Tip Capacity: 3.5mm - 15mm	REF. N.O. 69707 Delrin Tip Holding Capacity:	: 3.0mm - 15mm	REF. NO. 69706-L XL Stainless Steel Tip Holding Capacity: Smm - 31.75mr	
Stainles: Holding	Steel Tip Capacity: 3.5mm - 15mm	Dekin Tip Holding Capacity: AUTOMATIC	HOLDING TIPS	XL Stainless Steel Tip Holding Capacity: Smm - 31.75mm	
Stainles: Holding	Steel Tip Capacity: 3.5mm - 15mm	Dekin Tip Holding Capacity: AUTOMATIC	HOLDING TIPS	XL Stainless Steel Tip	

Bookler® TMR Systems STERILIZATION CONTAINERS



Large Container 2 inner baskets



Holds Field Post (12 or 18"), Horizontal Bar, Horizontal Flexbar in the larger, lower basket... And the Rings in the smaller, upper basket.





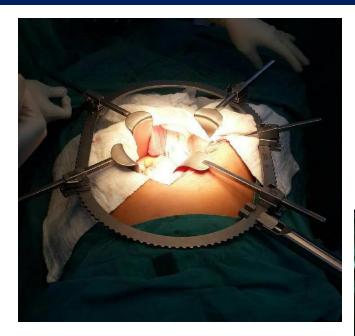
Small Container 1 inner basket



Holds all of the blades, ratchets and couplers in one deep basket.



Bookler[®] TMR Systems CLINICAL APPLICATIONS / SET-UPS





StrongArm Plus used in kidney surgery



Segmented Ring conforms to patient/anatomy geometry

Perineal Ring used in trans-vaginal surgery

