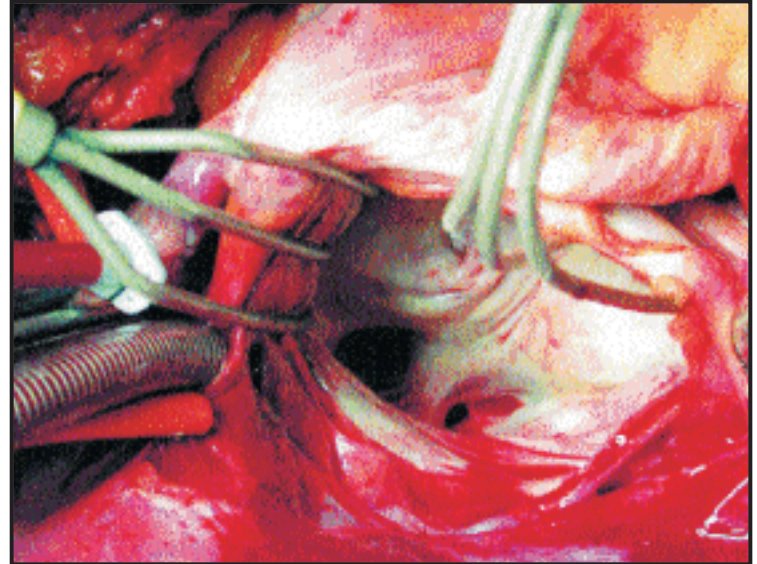
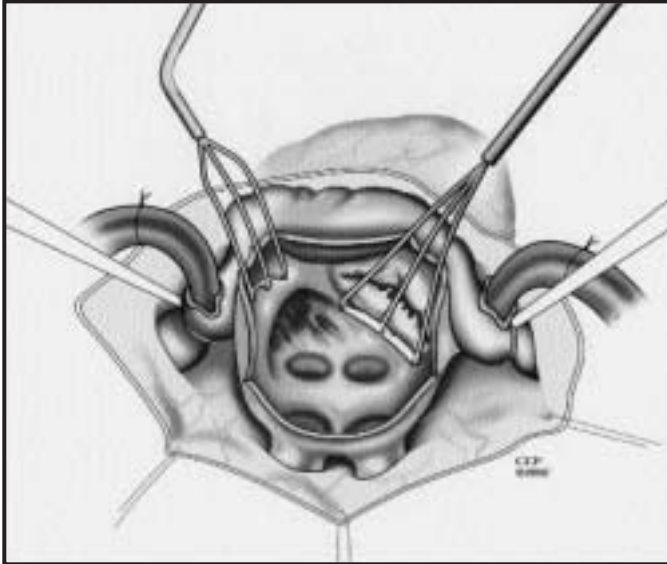


Self-Retaining "Maze" Retractor

Patent Pending



A. Marc Gillinov, M.D., The Cleveland Clinic Foundation, Dept. of Thoracic and Cardiovascular Surgery

Indication: This retractor/attachment is designed to provide exposure of the pulmonary veins and atrial appendage during the Maze procedure or other operations for atrial fibrillation that include pulmonary vein ablation. Visualization of these structures is challenging using standard retractors.

After the left atriotomy is constructed, the self-retaining Maze retractor is placed. A blade is positioned over the mitral annulus. This configuration distracts the mitral valve toward the patient's left, thereby exposing the left pulmonary veins. A second blade is placed cephalad, exposing the orifice of the left atrial appendage (see above). The Maze procedure or pulmonary vein isolation is then completed with excellent exposure, with the assistant's hands free for other tasks.

Application: The Gillinov - Maze Retractor is the preferred attachment used with a self-retaining mitral retractor such as the Cosgrove Mitral Heart Retractor. See drawing (Figures 1 and 2) below. The system includes 2 adjustable blades (Figure 3) and, if preferred, a hand-held retractor (Figure 4, below). Each of the adjustable blades is available in 2 configurations. With both blades in place, the pulmonary veins and left atrial appendage are exposed (see above).

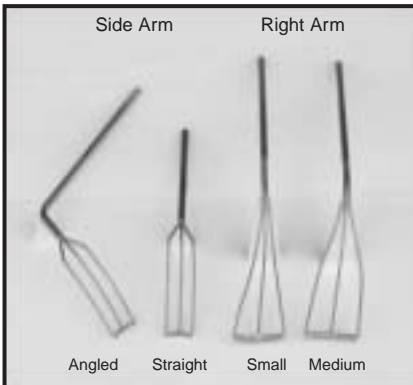
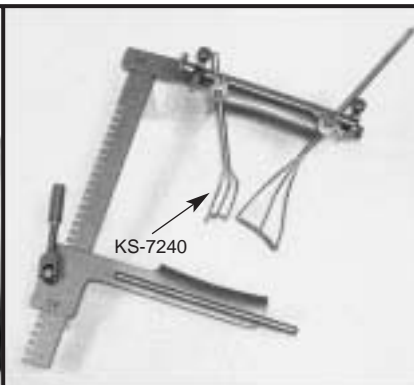
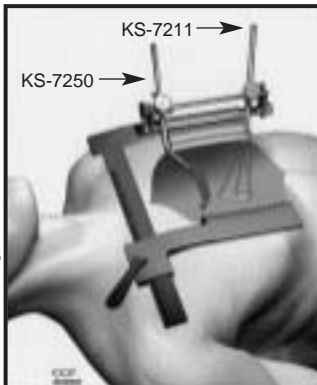
Figure 1

Figure 2

Figure 3

Patent Pending

Figure 4



Patent Pending

Self-Retaining Gillinov™ - Maze Retractor with Side Arm Attachment

Upper Arm	Small	KS-7210	Side Arm	Straight	KS-7240
	Medium	KS-7211		Angled	KS-7250

Self Retaining Blades

Side Arm	Straight	KS-7240
(Cephalad)	Angled	KS-7250
Right Arm	Small	KS-7210
(Distal)	Medium	KS-7211
Entire Set		KS-7200

Hand Held Gillinov™ Maze Retractor

Small	KS-7205	} Right Side Mitral Retractor
Medium	KS-7202	
Angled	KS-7204	} Left Vein Retractor
Entire Set	KS-7201	



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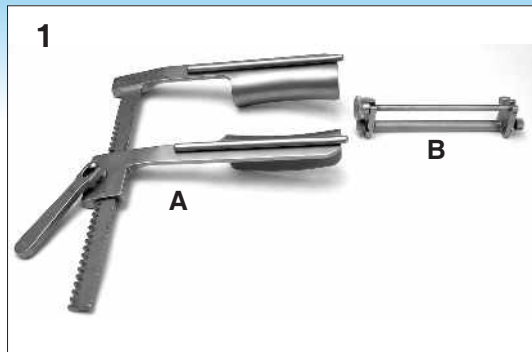
4919 Warrensville Center Rd., Cleveland, OH 44128
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email: Info@kappsurgical.com

web site: www.kappsurgical.com



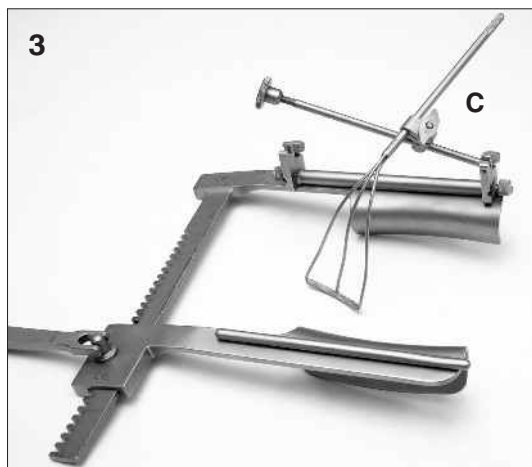
Gillinov Self-Retaining Retractor for the “Maze” Procedure Instructions



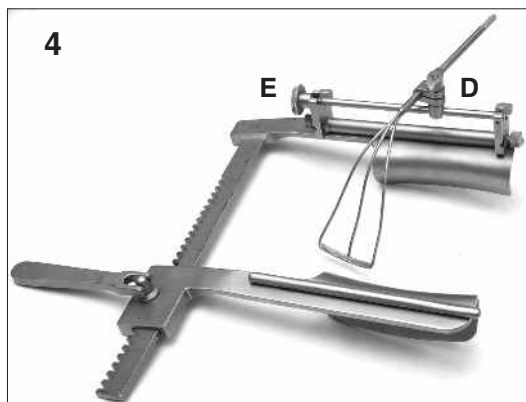
Picture #1
Position your modified chest spreader (A). Slide the Main Bracket (B) onto the chest spreader moving from right to left. (See photograph #2)



Picture #2
Main Bracket on the chest spreader.



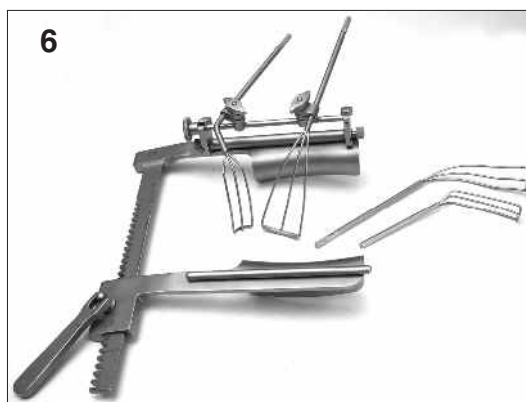
Picture #3
Slide the retractor blade through the Universal Clamp (C).



Picture #4
Slide the Universal Clamp with attached blade (D) onto the 1/4" support bar. Tighten the lock nut (E) on the support bar until the bar is horizontal.



Picture #5
Angled blade shown attached to support bar.



Picture #6
Complete system showing straight, angled, small and medium Gillinov retractor blades.



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