
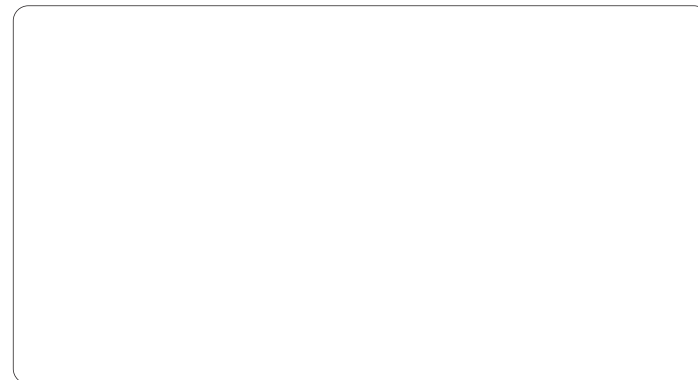


**SMART FIX**  
HEAD FRAME & HOLDER



CE

 Caution	<ul style="list-style-type: none"> <li>• Prior to product use, carefully read and comprehend the contents of the user manual and product packaging information.</li> <li>• Inspect the product routinely and thoroughly, in addition to pre- and postoperative examinations.</li> <li>• For after-sale support, contact your local sales representative.</li> </ul>
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Note: Published specifications are subject to change without prior notice.  
 Details and colors of the images might be different from ones of real products.

**SMART FIX**  
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CE

# SMART FIX

## HEAD FRAME & HOLDER

### Ratchet Slider

Adoption of a ratchet slider on all 6 pin holes. There is no need to rotate the pin countless times, simply push the pin in with a quick sliding motion. Positioned at the back of each pin is a locking mechanism, this allows the final pin fixation to be done safely by rotating pins with one's finger.



### Stopper Sleeve

After penetrating the cranium with the pins, fixate in order to prevent slippage/movement.



### Box Joint

Change in the shape of the fixation screw on the center of the box joint. This increases the fixing force of the head frame. Additionally, added new rollers to allow the smooth sliding motion of the overall frame.

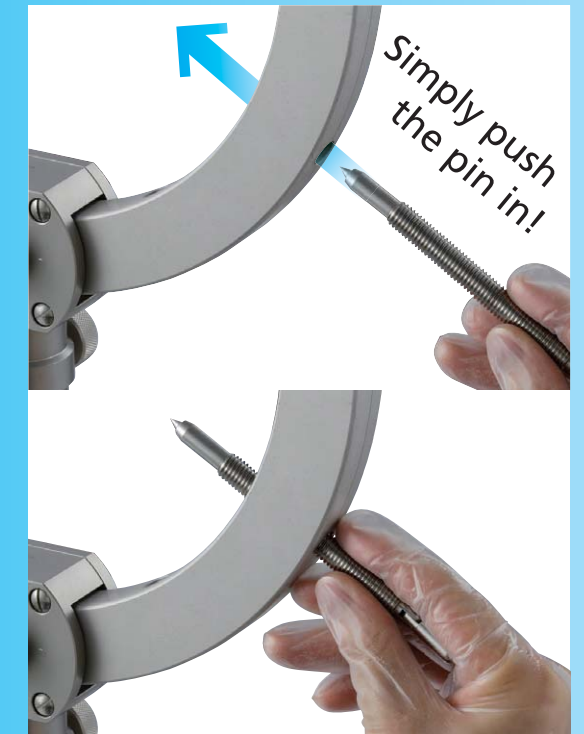


### Table attachment and Basal Frame

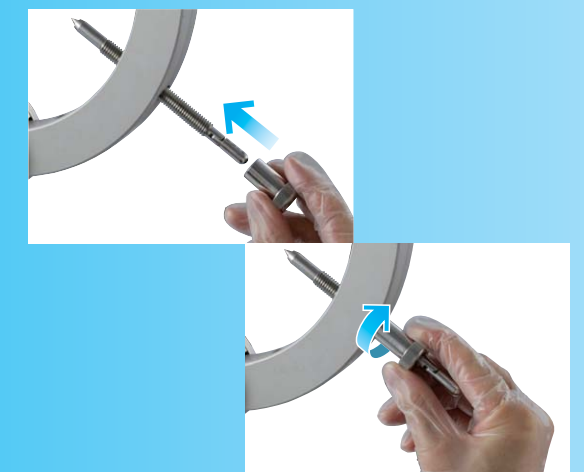
The table attachment and basal frame from the original version of the Sugita Multi-Purpose Head Frame System are interchangeable and can be used in conjunction with the upgraded Smart Fix Head Holder System.



### Method / Technical of mounting the pin



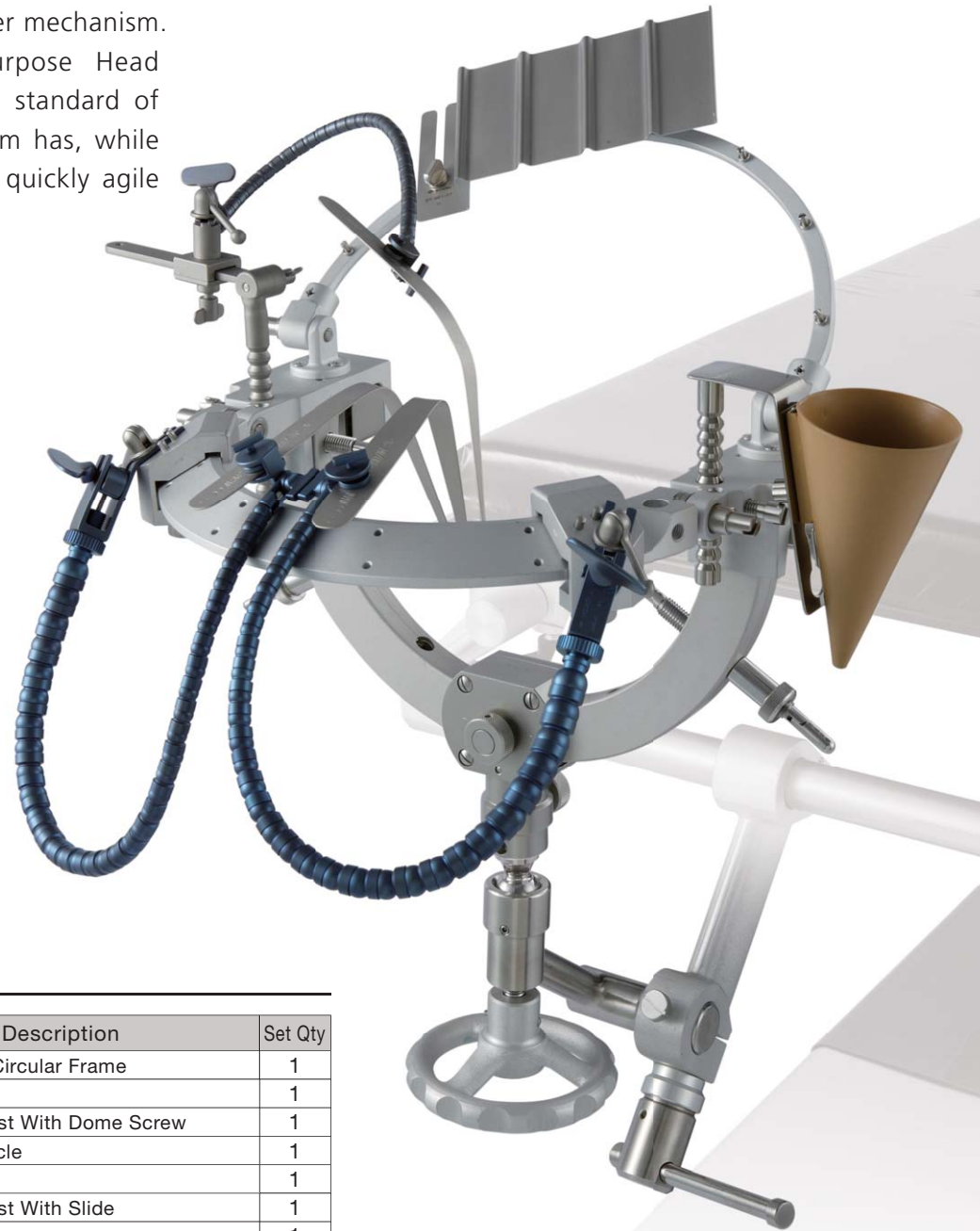
Insert the pin through the smart fix ratchet holes. Due to the mechanism of the ratchet slider, simply press the pin forward to smoothly position the pin in place. Upon the pin reaching the patient's skull, manually rotate the pin for final fixation. Always rotate two pins at the same time for fixation. By rotating two opposed pins at a time, minute adjustments can be implemented.



After the skull has been fixated, please fix the stopper sleeve so there is no risk that the pin will slip or move.

# New Smart Fix Head Holder Set

The adoption of a new Ratchet Slider mechanism. This allows the Sugita Multi-Purpose Head Holder to retain the reliability and standard of performance that the current system has, while making it possible to implement a quickly agile skull fixation.



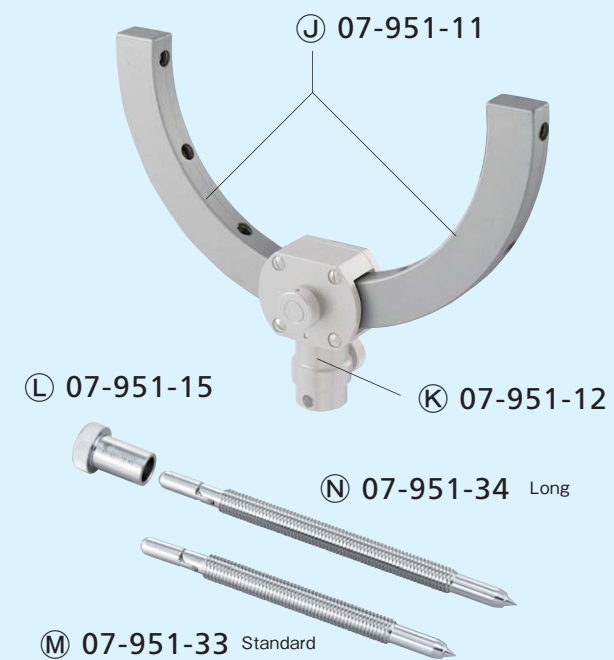
## Smart Fix Head Frame Set

P. No.	Product Description	Set Qty
07-981-02	Ⓐ Basal Frame/Semi-Circular Frame	1
07-981-03	Ⓑ Hand Rest	1
07-981-04	Ⓒ Adjustable Hand Rest With Dome Screw	1
07-981-06	Ⓔ Instrument Receptacle	1
07-981-07	Ⓕ Cotton Plate	1
07-981-09	Ⓓ Adjustable Hand Rest With Slide	1
07-981-10	Ⓖ Quarter Frame	1
07-954-00MM	Ⓗ Spring Hook Retractors, SUS	6
07-955-01	Ⓘ Slide Adjustor For Retractor	2
07-951-11	Ⓙ Smart Fix C Holder	1
07-951-12	Ⓚ Smart Fix Joint Box (Including 2 Fixing Screws)	1
07-951-15	Ⓛ Smart Fix Stopper Sleeve	4
07-951-33	Ⓜ Smart Fix Head Pin Standard	4
07-951-34	Ⓝ Smart Fix Head Pin Long	4
07-952-00	Ⓞ Table Attachment	1

## Table attachment Option

P. No.	Product Description
07-952-05	Table Attachment For 2080
07-952-06	Table Attachment For 3080
08-075-10	Mayfield Adaptor
08-075-11	Attachment For Mayfield Head Support

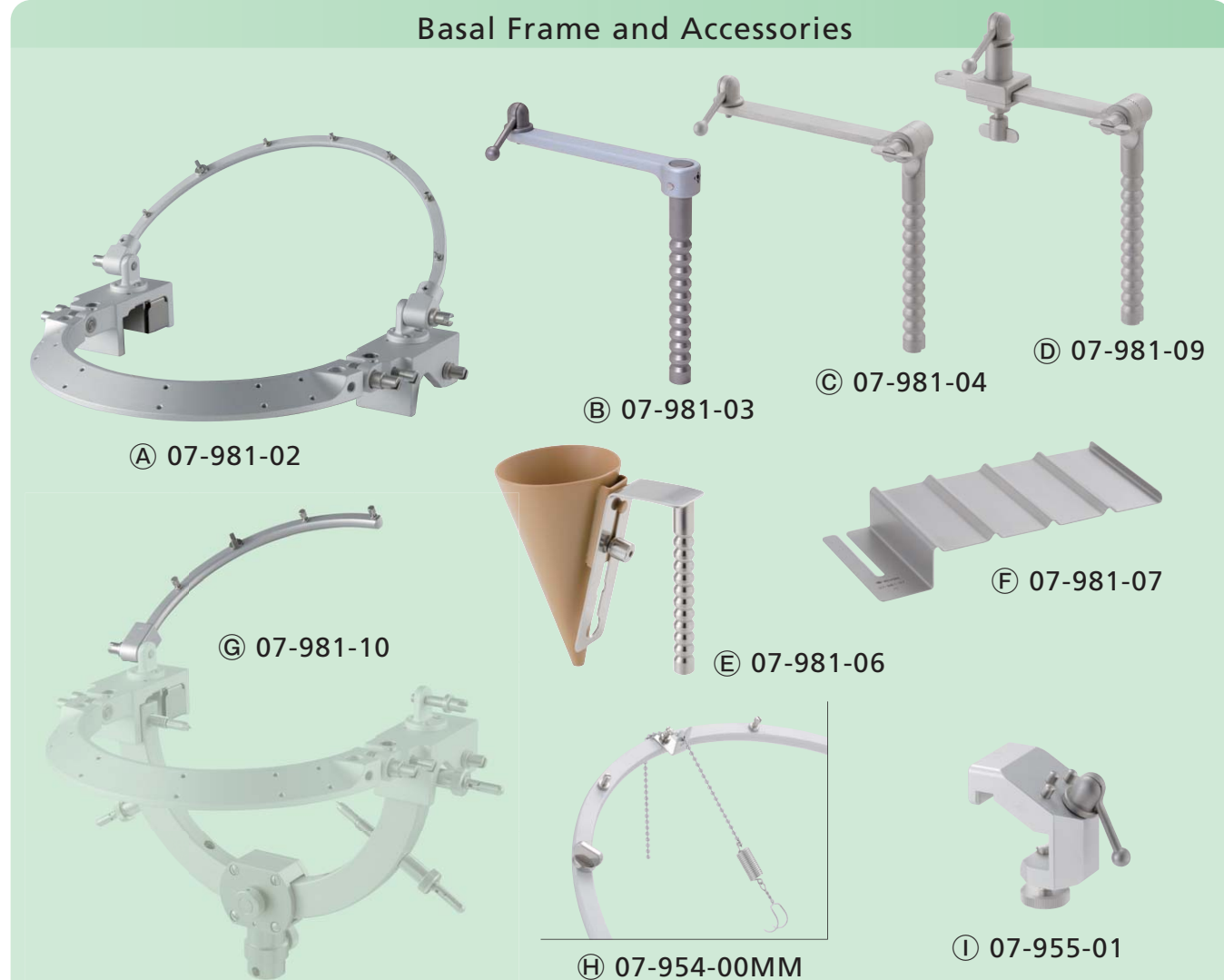
## Smart Fix Head Frame Set



## Table Attachment

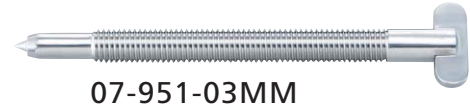
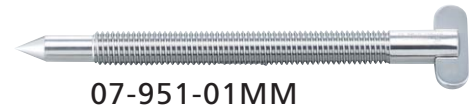


## Basal Frame and Accessories



## Head Holder (Original model)

Simple and Cost effective 4 pins fixation model.



P. No.	Product Description
07-951-00MM	Head Holder
07-951-01MM	Head Pin, Standard, Sus
07-951-02MM	Head Pin, Short Tip, For Adult, SUS
07-951-03MM	Head Pin, Short Tip, For Pediatric, SUS

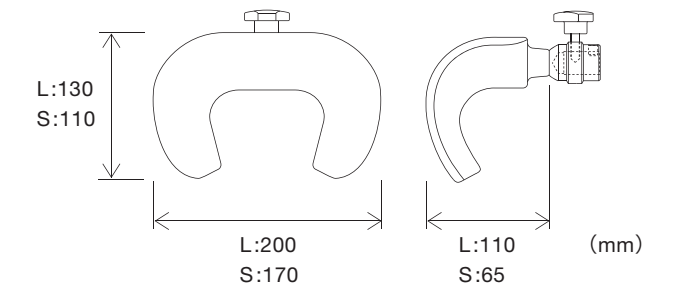


P. No.	Product Description
07-175-00	Self-Retaining Retractor Attachment F-1
07-157-01	Tapered Self-Retaining Retractor 42cm
07-952-00	Table Attachment

## Horseshoe Head Rest

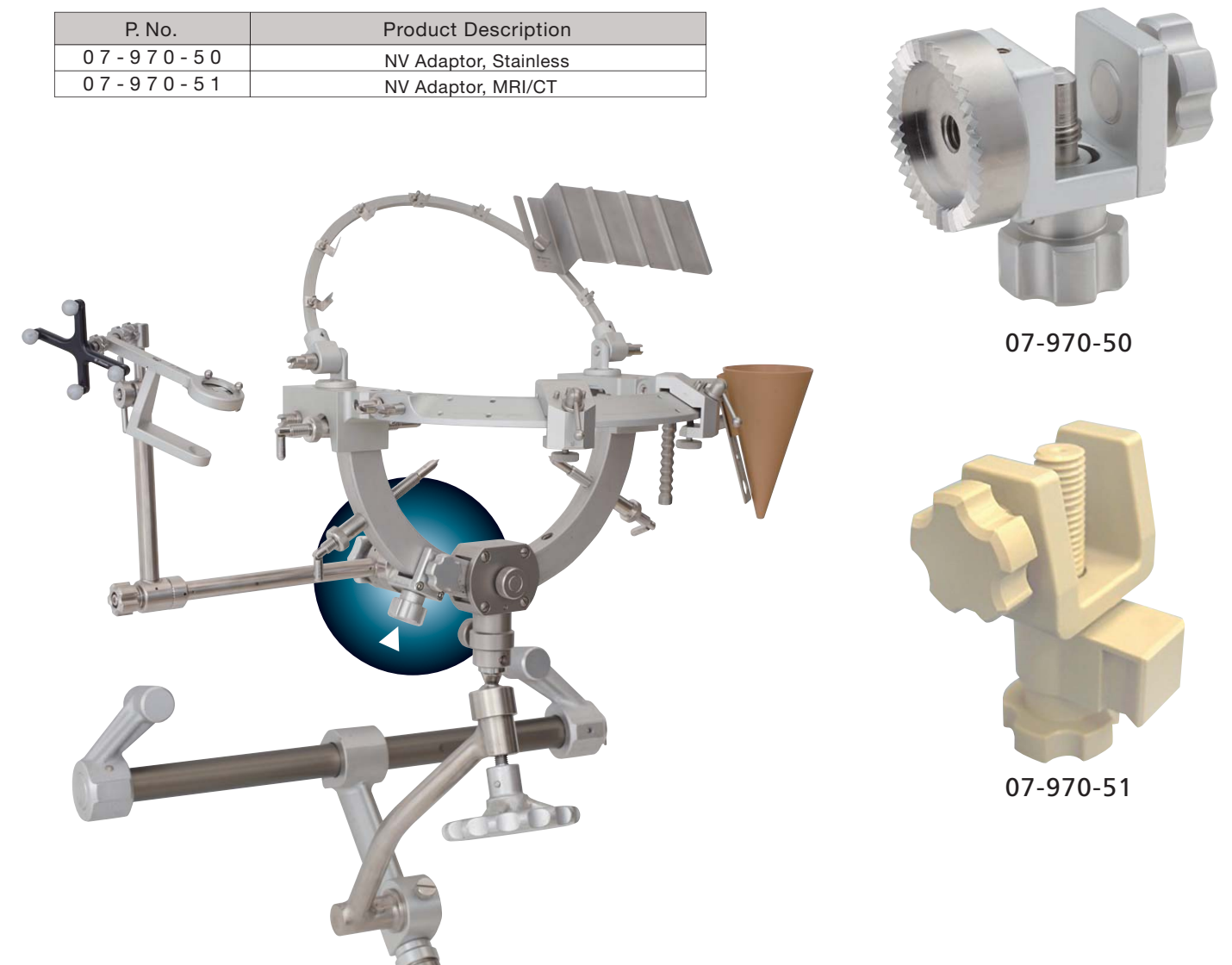


P. No.	Product Description
08-073-03	U-Shaped Head Rest L
08-073-04	U-Shaped Head Rest S



## Navigation Adaptor

P. No.	Product Description
07-970-50	NV Adaptor, Stainless
07-970-51	NV Adaptor, MRI/CT



# Basal Frame

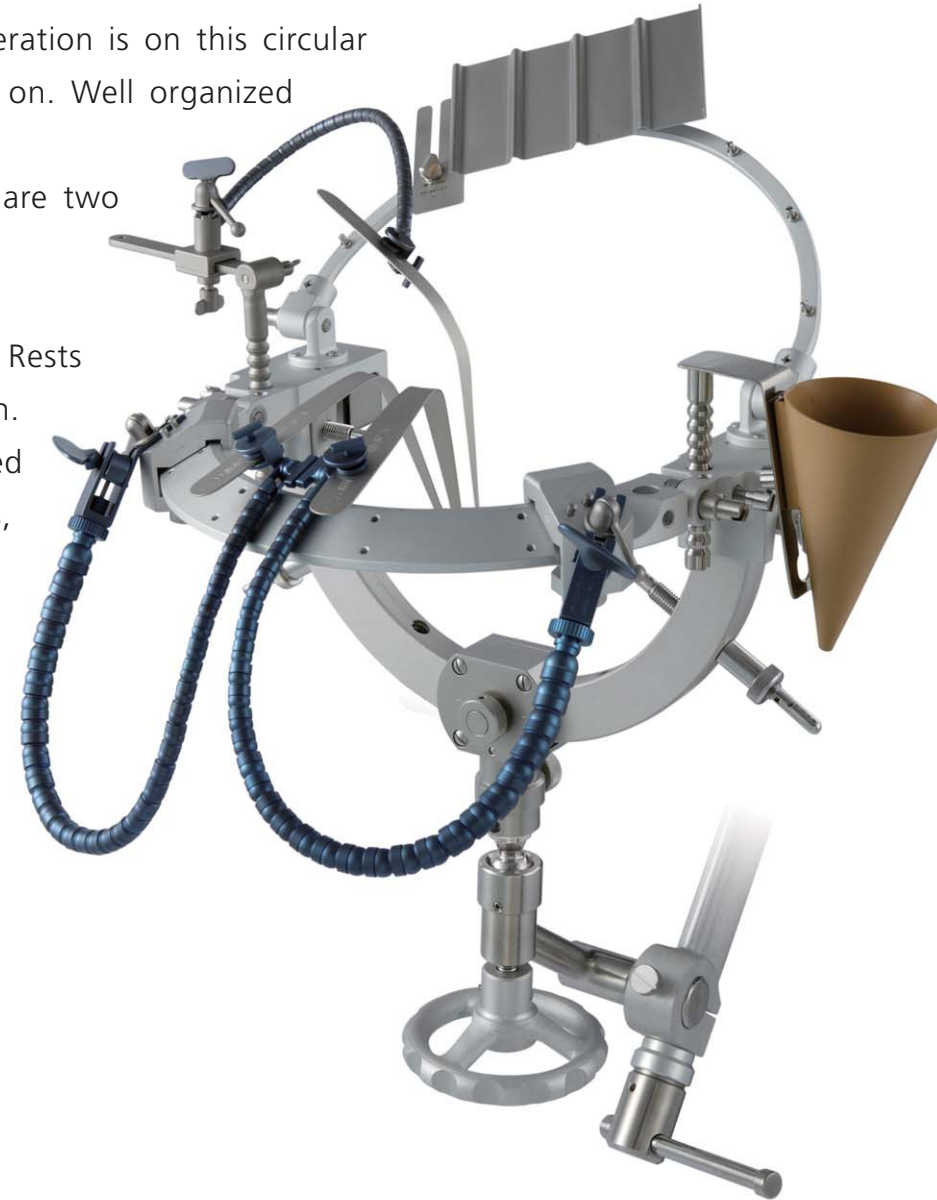
Everything surgeon needs for operation is on this circular frame. All accessories can attach on. Well organized frame to support operation.

At each end of the Basal Frame are two holes to support the Hand Rest and Instrument Receptacle.

The angle and height of the Hand Rests are adjustable to suit each surgeon.

Instrument Receptacle is insulated and used to retain Bipolar Forceps, Suction Tubes, and other microsurgery instruments.

The sub frame and semi-circular is used to attach Scalp Hooks, Cotton plate and self-retaining retractor.



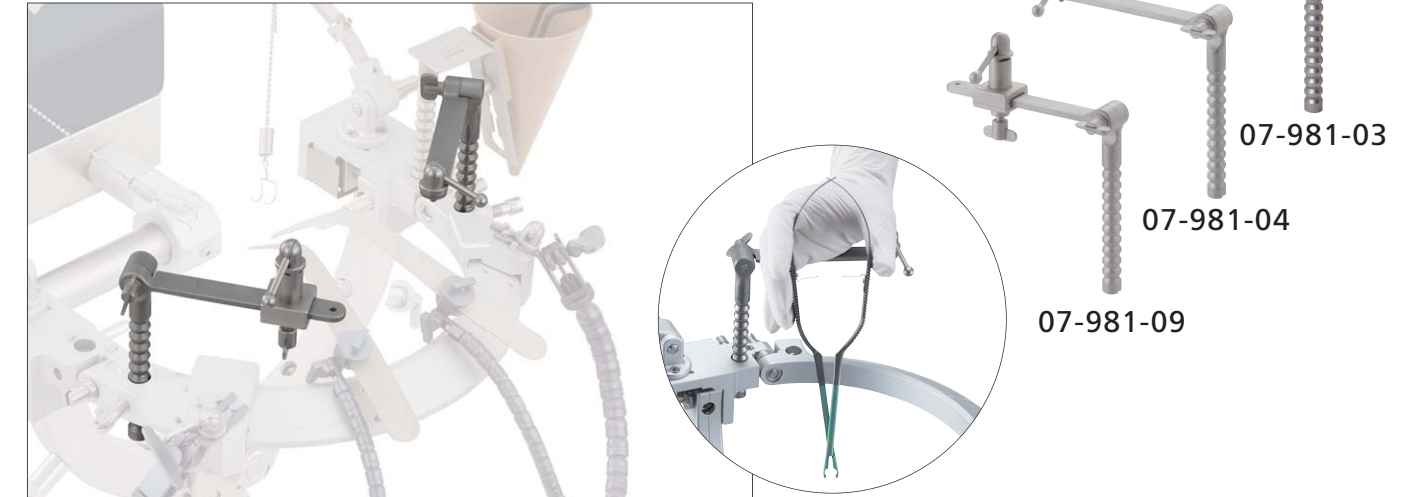
All accessories can attach on.

P. No.	Product Description
07-981-02	Basal Frame/Semi-Circular Frame
07-981-03	Hand Rest
07-981-04	Adjustable Hand Rest With Dome Screw
07-981-06	Instrument Receptacle
07-981-07	Cotton Plate
07-981-09	Adjustable Hand Rest With Slide
07-981-10	Quarter Frame
07-954-00MM	Spring Hook Retractors, SUS
07-955-01	Slide Adjustor For Retractor

## Arm Rest Example Usage

A key accessory for microscopic operation.

Arm rest secures free space to operate by setting it up above spatula and self-retaining retractors.

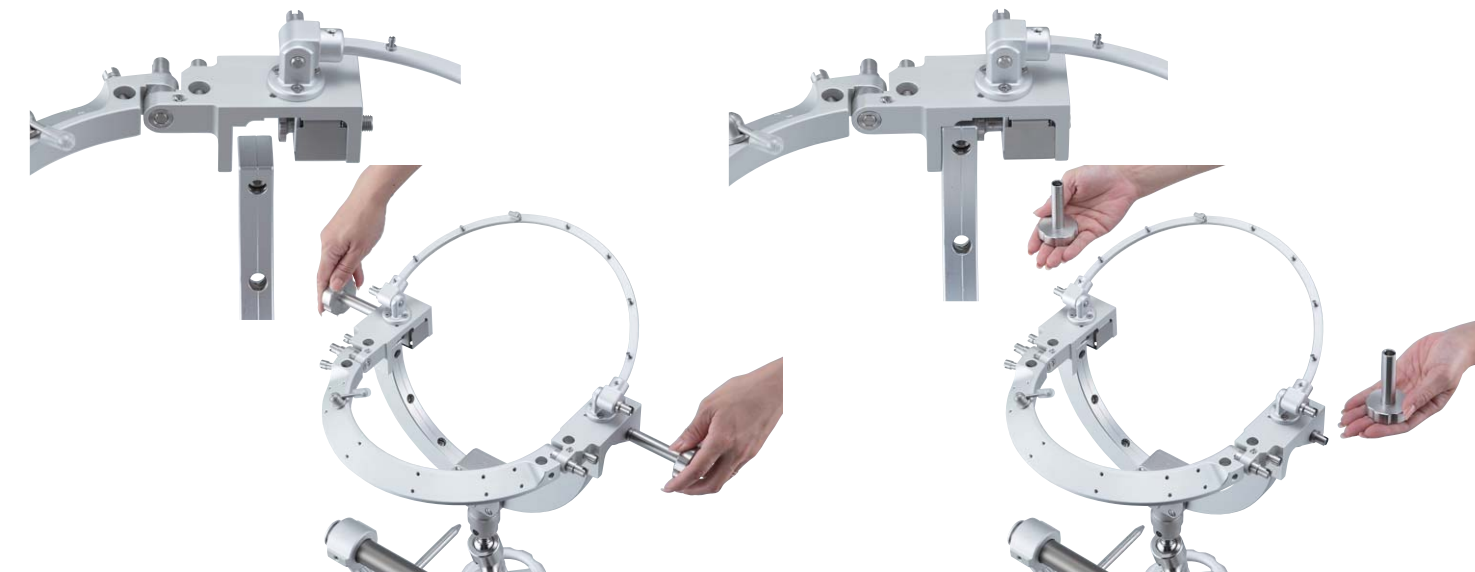


## Instrument Receptacle Example usage



## Very easy to assemble

Assembly work complete just to put basal frame on head holder and tighten screws by two handles (P07-980-04).



# Tapered and Non Tapered Self-Retaining RETRACTORS for Microsurgery

## Safety, security, stability

Mizuho's self-retaining snake retractors provide exceptional stability and control throughout the entire neurosurgical procedure. Once adjusted and locked down, the arm maximizes balance and holding power, effectively preventing "drift and drop" that cause spatulas to shift and threaten vulnerable neural and vascular structures



## Two convenient, compatible designs

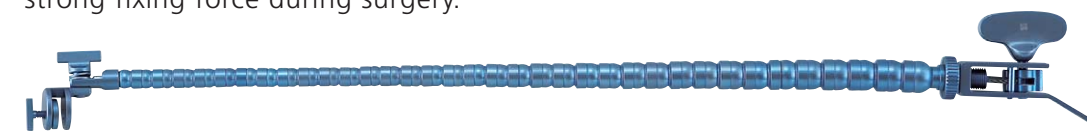
Retractors are available in both tapered and non-tapered designs. Both are fully compatible with Mizuho's F-1 (C-clamp) attachment, which affixes directly to any standard headframe in just a few seconds. This timesaving feature is especially beneficial during urgent trauma cases. Retractors can also be quickly attached right to the Sugita Basal Frame using the convenient slide adjusters. Currently, Mizuho offers nine models to choose from in lightweight, corrosion-resistant titanium and traditional stainless steel.

## Self-retaining retractor advantages

- No-drift design holds spatulas securely in place
- Choice of tapered or non-tapered to match your preference
- Faster setup and breakdown than traditional slide-rail systems

## Tapered Titanium Retractor

Tapered shape body provides maintaining strong fixing force during surgery.

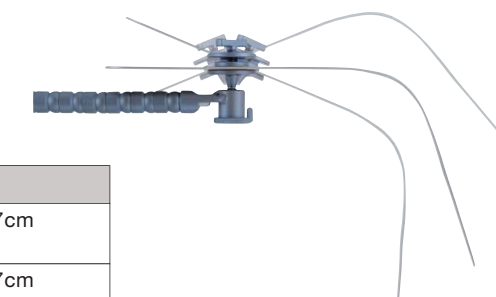


P. No.	Product Description
07 - 174 - 24	Retaining Retractor 42cm Without Clamp
07 - 174 - 25	Retaining Retractor 37cm Without Clamp
07 - 157 - 01	Tapered Self-Retaining Retractor 42cm
07 - 157 - 02	Tapered Self-Retaining Retractor 37cm

## Hadeishi Titanium Retractor

New Ball Joint top retractor. Easy to remove and reposition spatula by one hand.

Helping to retract tumor from back and forth.



P. No.	Product Description
07 - 157 - 11	Tapered Self-Retaining Retractor 5mm 37cm (Hadeishi Version)
07 - 157 - 12	Tapered Self-Retaining Retractor 6mm 37cm (Hadeishi Version)

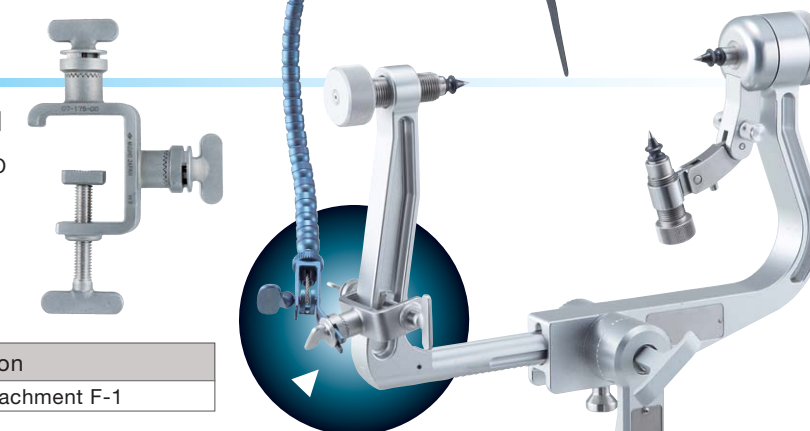
## Stainless Retractor



P. No.	Product Description
07 - 173 - 00	Self-Retaining Retractor Single
07 - 174 - 21	Self-Retaining Retractor Stainless Steel 37cm
07 - 174 - 22	Self-Retaining Retractor Stainless Steel 42cm
07 - 174 - 23	Self-Retaining Retractor Stainless Steel 24cm
07 - 174 - 26	Self-Retaining Retractor Stainless Steel 48cm

## F-1 Attachment

Retractors are fully compatible with F-1 (C-clamp) attachment, which affixes directly to any standard head frame in just a few second.



P. No.	Product Description
07 - 175 - 00	Self-Retaining Retractor Attachment F-1