

PhacoMaster™

Identifying the Parts:

1. **Multi-Base** -- reusable, modular base that accepts Capsule 5.5 or Capsule 8.0
2. **Capsule 5.5** -- reusable capsular bag with pre-made 5.5mm rhexis
3. **Capsule 8.0** -- reusable capsular bag with 8mm opening for use with Rhexis Films to Make-A-Rhexis
4. **Eye Front PhacoMaster 7.5** -- multi-use cornea-scleral shell with pre-placed main incision and 7.5mm pupil

Pre-Made Rhexis vs Make-A-Rhexis

Capsule 5.5 = “Pre-Made Rhexis”

A pre-made capsulorhexis maximizes training time while at a phaco lab station and allows for a more routine and successful case. The goal is quick throughput with the focus on the use of the machine.

Capsule 8.0 = “Make-A-Rhexis”

A larger 8mm opening allows the use of replaceable anterior capsule Rhexis Films to create a capsulorhexis. The goal is a more complete experience which adds the crucial step of making a CCC when time allows.

Assembly Overview:

- PhacoMaster Eye (standalone) comes pre-assembled with the **Eye Front** attached to the **Multi-Base Capsule 5.5**.
- PhacoMaster KIT includes both Capsule 5.5 and Capsule 8.0
- The components in the KIT are all unassembled
- **Preparation Before Use:**
 - Remove Eye Front
 - Attach appropriate Capsule (5.5 or 8.0)
 - Insert Lens (Soft vs Medium vs Hard) into capsule with correct orientation – flatter side up
 - Fill **Back of Eye** with water – **only for initial set-up ******
 - Attach Rhexis Film if using Capsule 8.0
 - Attach Eye Front & Red Clip
 - Use **Dispersive** Viscoelastic Substitute to fill AC and coat the cornea

Reusability:

- **Multi-Base** is modular and can be reused with either Capsule 5.5 or Capsule 8.0
- **Capsules** are reusable many times
- **Eye Fronts** are reusable many times
- Additional **Eye Fronts** are available separately
- **Remove Capsule** for use with certain Eye Fronts such as Yamane technique
- **Lenses and Rhexis Films are single use**

Storage:

- Keep the original containers for storage and protection
 - See below for additional details
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FILLING BACK OF EYE WITH WATER

- Back of Eye **MUST BE FILLED** with water for the **INITIAL SET-UP**
- **Critical for Red Reflex and proper support of the lens**
- **Refill back of eye** if **bubbles** are present behind capsule or there is a poor red reflex
- **Refill back of eye** if **Capsule becomes dislodged**
- **Refill back of eye** if **lens has no support** and acts like a post-vitrectomy eye
- **Insert Capsule in Multi-Base BEFORE filling back of eye with water**

ATTENTION

- **Capsule may invert** when installing the **Suction Cup** if the Lens is not in the capsule
 - **BEFORE filling with water and attaching Suction Cup**, ensure lens is in capsule
 - **If not using lens for phaco**, fill Capsule and AC with visco and ensure Eye Front is securely attached
 - **If not using lens in capsule and Eye Front is not attached**: Hold your finger over the capsule while installing the Suction Cup to prevent inversion.
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Step-by-Step Instructions:

Inserting Capsules into Multi-Base

1. **Remove Eye Front** if attached
 2. **Remove Suction Cup**
 3. **Place Capsule (5.5 or 8.0) FACE DOWN** on a flat surface
 4. **Hold Multi-Base** in dominant hand
 5. **Look through hole in Multi-Base to ALIGN** bottom part of capsule within hole of Multi-Base
 6. **When capsule is aligned in the hole, simply press down to install capsule**
 7. **Confirm Capsule is straight** and securely in place
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Pre-Made Rhexis using Capsule 5.5

Note: Standalone PhacoMaster Eye comes with the Capsule 5.5 already installed in the Multi-Base. Remove Eye Front to expose the capsule with the pre-made rhexis.

1. **Remove Eye Front** if attached
2. **Remove Suction Cup**
3. **Insert Capsule 5.5** into Multi-Base – see instructions above
4. **Select Lens** (Soft, Medium or Hard)
5. **Lens orientation** -- flatter side of lens is the anterior surface
6. **Hold lens in dominant hand**
7. **Insert edge** of lens into capsule opening
8. **Rotate lens** into position so anterior (flatter) side of lens is facing up
9. **Fill the Back of the Multi-Base** with water
10. **Reinstall Suction Cup**
11. **Keep Multi-Base inverted and vertical while installing Suction Cup *****
12. **Attach Eye Front and Red Clip** to the Multi-Base with Capsule and Lens
13. **Locate pre-placed Main Incision Hole**
14. **Mark Incision Locations** if desired
15. **Make Sideport incision**
16. **Fill AC with SimulEYE Dispersive** Viscoelastic Substitute
17. **Place additional SimulEYE Dispersive** Viscoelastic **over the entire cornea** to improve visibility
18. **Perform Phaco**
19. **Inject IOLs, CTRs**, or other devices, and practice removing and cutting IOLs
20. **Remove Eye Front** for direct access to the capsular bag
21. **Remove any residual lens material** – see below
22. **Remove IOLs and Devices** from the capsule through the pre-made rhexis

TO CONTINUE WITH NEXT CASE

1. **Insert new Lens with correct orientation**
 2. **Reattach Eye Front**
 3. **Fill AC with Dispersive visco**
 4. **Place additional Dispersive visco across the cornea** as needed for the best view
 5. **Perform next Phaco**
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Make-A-Rhexis using Capsule 8.0

Note: Standalone PhacoMaster Eye only comes with Capsule 5.5 with a Pre-Made Rhexis and not the Capsule 8.0 to Make-A-Rhexis. Please use the PhacoMaster Kit or order additional parts to practice CCC.

1. **Remove Eye Front** if attached
2. **Remove Suction Cup**
3. **Insert Capsule 8.0** into Multi-Base – see instructions above
4. **Fill the Capsular Bag** with SimulEYE **Dispersive** Viscoelastic Substitute
5. **Ensure No Bubbles** are present in the capsule
6. **Select Lens** (Soft, Medium or Hard)
7. **Lens orientation** -- flatter side of lens is the anterior surface
8. **Hold lens in dominant hand**
9. **Insert Lens into Capsule** – flatter side upward
10. Visco will be displaced from capsule
11. **Fill the Back of the Multi-Base** with water
12. **Reinstall Suction Cup**
13. **Keep Multi-Base inverted and vertical while installing Suction Cup *****
14. **Place additional Dispersive visco on top of lens** – ensure no bubbles
15. Place **Rhexis Film** on top of lens with **WHITE RIM facing upward**
16. **Ensure Rhexis Film is still centered on top of lens**
17. **Attach the Eye Front and Red Clip** to the Multi-Base with Capsule, Lens and Rhexis Film
18. **Locate pre-placed Main Incision Hole**
19. **Mark Incision Locations** if desired
20. **Make Sideport incision**
21. **Fill AC with SimulEYE Dispersive** Viscoelastic Substitute
22. **Place additional SimulEYE Dispersive Viscoelastic over the entire cornea** to improve visibility
23. **Perform CCC and Phaco**
24. **Inject IOLs, CTRs, or other devices, and practice removing and cutting IOLs**
25. **Remove Eye Front** for direct access to the capsular bag
26. **Remove used Rhexis Film – it will usually be up inside the Eye Front ******
27. **Remove any residual lens material** – see below
28. **Remove IOLs and Devices** from the capsule

TO CONTINUE WITH NEXT CASE

1. **Fill Capsule** with SimuleYE **Dispersive** Viscoelastic Substitute
2. **Insert new Lens with correct orientation**
3. **Place additional Dispersive visco on top of lens**
4. **Place Rhexis Film on top of lens – WHITE RIM facing upward**
5. **Ensure Rhexis Film is well centered**
6. **Reattach Eye Front & Red Clip**
7. **Fill AC** with **Dispersive visco**
8. **Place additional Dispersive visco across the cornea** as needed for the best view
9. **Perform next Phaco with CCC**

TIPS

- **Mark Incision Sites** with a Sharpie Pen and **Make Incisions BEFORE** placing Dispersive on the Eye
- **SimuleYE Dispersive Viscoelastic** over the cornea provides the best view into the eye and helps to prevent air from coming into the AC
- The Main Incision is a pre-placed hole and is designed to seal around the Phaco Tip and Sleeve
- **Sideport Incision should be 1mm or less** to minimize fluid leak
- **Use Second Instrument to open Main Incision when entering with Phaco Tip**
- **Place Capsule Lubricant on Phaco Sleeve so it enters more easily**
- **Hydro-dissection** step can be performed but a fluid wave will not be seen

Lens is large and fills the capsular bag

- Large lens provides lots of practice per lens
- Smaller pieces will emulsify better as they have room to tumble
- Chop or crack into **smaller pieces** – 1/6 size lens fragments if possible
- Use second instrument to move lens material in front of phaco tip to emulsify

Cleaning and Storage

1. Remove Eye Front
2. Remove residual Lens Material and any IOLs, CTRs or other devices from the capsule
3. Place Capsule and Eye Front under running water to help remove residual viscoelastic
4. Use Blue Spear with Fuzzy Tip to gently clean out capsule and AC
5. Remove Capsule or Unscrew Suction Cup to remove water from back of Eye
6. Shake parts dry
7. Reassemble parts and place into original storage containers
8. 1 extra Capsule can be stored at the bottom of the Eye Container

When ready to use again, follow the instructions from the beginning.

Removing Lens material from Capsule

- Some Lens material may remain in the capsule after each case
 - Squeeze sides of capsule to displace and remove larger pieces of lens material
 - Use the Blue Spear Fuzzy Tip from the Kit to remove smaller pieces of lens material
 - Be careful not to damage the capsule
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TIPS for using CTR's

- CTR's may hang up due to friction between the capsule and the ring
 - **Capsule Lubricant** can be applied to the inside of the capsule for improved performance
 - Make sure capsule is clean and dry
 - Place a small drop of **Capsule Lubricant** inside the bag
 - Wipe with Q-Tip or Blue Spear Fuzzy Tip to spread lubricant around and remove excess
 - Reapply as needed after multiple uses
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RED CLIPS

- Included on standalone Eye and 2 per Kit
 - Place below Main Incision to secure Eye Front to Multi-Base
 - Groove on inside goes towards the top
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EYE & HAND PLACEMENT

The SimulEYE Base Tray is used to catch fluid. It must be positioned so that the logo and writing are oriented correctly in front of the surgeon otherwise it will not be stable. The Base Tray should sit directly on the table. Do NOT place a chuck or another tray underneath it which can slide.

Attach the Eye to the Elevated Base which is then placed in the Base Tray. The surgeon's hands can rest on the edge of the Base Tray for support.

PhacoMaster™ – Tips for Success!

PhacoMaster Eye Fronts have a pre-placed hole for the main incision.

- Hole is sized for a 2.4 mm tip / sleeve set-up.
- Provides the best seal around the phaco tip sleeve.
- Allows reduced use of fluid and improved fluidics inside the eye.
- Do NOT use blades to create a main incision.
- Only make sideport incisions as needed. Use 1mm or less and do not enlarge.

Aphakia 2.0 Eye Fronts can be used with PhacoMaster

- These have NO pre-placed hole.
- Must make your own incision.
- Size incision to your phaco tip / sleeve and do not oversize.
- These incisions will leak more compared to the pre-placed holes.

Get the Best View

- Use SimulEYE **Dispersive** Viscoelastic Substitute inside the eye and especially across the cornea to provide the best view into the eye.
- Wait 5 seconds and the view should be great.
- Do not drop water on the cornea as it is hydrophobic.

PhacoMaster Lenses will perform very realistically in many ways but are not human lenses.

- Be deliberate with your movements and foot pedal when sculpting and cracking.
- Keep a defined channel when sculpting.
- Sculpt long and deep (80%) to have success with cracking.
- Red Reflex can help to gauge depth of channel.
- If using **Alcon Centurion**, **TURN OFF TORSIONAL** for Sculpt and Chop settings ***

Entering with phaco tip through pre-placed incision hole:

- Use Second Instrument to open the incision hole when entering with the phaco tip.
- Use Capsule Lubricant on the phaco sleeve if needed to allow easier movement of the sleeve within the pre-placed hole.

Reduce Bottle Height

- Target IOP of 40 to 50 mmHg should provide adequate infusion.
- If air bubbles are coming in through the sideport, raise the bottle height slightly until they disappear.

Crack the lens all the way through or the pieces will not come up

- There is no nucleus / epinucleus / cortex so the lens material fills the entire bag and is rather large.
- It is critical to get the lens cracked or chopped all the way through to the bottom or the pieces will remain tethered and will not come up where they can be emulsified.
- Use the RED REFLEX to gauge depth of the groove. Sculpt to at least **80% depth**.
- Get instruments down toward the bottom of the groove when cracking.

Second Instruments

- Drysdale Spatula with its large surface area is a great choice for Divide and Conquer.
- Seibel Nucleus Chopper, Conner Wand, Nagahara Chopper and Chang Microfinger are great options for horizontal chopping.
- Vertical Chopping requires an instrument with adequate surface area such as the Seibel Vertical Safety Chopper.
- Do not use a Sinskey Hook for chopping as the lens is not hard enough to support that instrument / technique.

Trouble Shooting:

Main Incision is Leaking

- Did you use the pre-placed hole with an appropriately sized tip / sleeve combo?
- Did you make a blade incision elsewhere in the cornea instead of using the pre-placed hole?
- Remember to float and pivot within the incision and not stretch or distort it which will cause leakage.
- Lower the bottle height just to where there are no bubbles entering the eye.
- Is the wound melted or distorted from too much phaco energy and / or too much pressure at the incision? If so, it is time to use a new Eye Front.

Hard To See

- Coat the surface with SimulEYE Dispersive Viscoelastic Substitute
- Wait 5 seconds and the view should be great.
- Do not drop water on the cornea as it is hydrophobic.

Lens is too soft or pieces won't come out – lens gets bowled out

- Yes, the lens does not have the structural integrity of the human lens. But it still performs very realistically in many ways.
- Be deliberate with the phaco tip and the pedal.
- Groove long and deep to get a good crack.
- Lens **MUST** be cracked all the way through for the pieces to come up.
- Use our **Pre-Sculpt Lens** for your first cases to get a feel for the material and to have great success in cracking the lens and emulsifying the fragments.