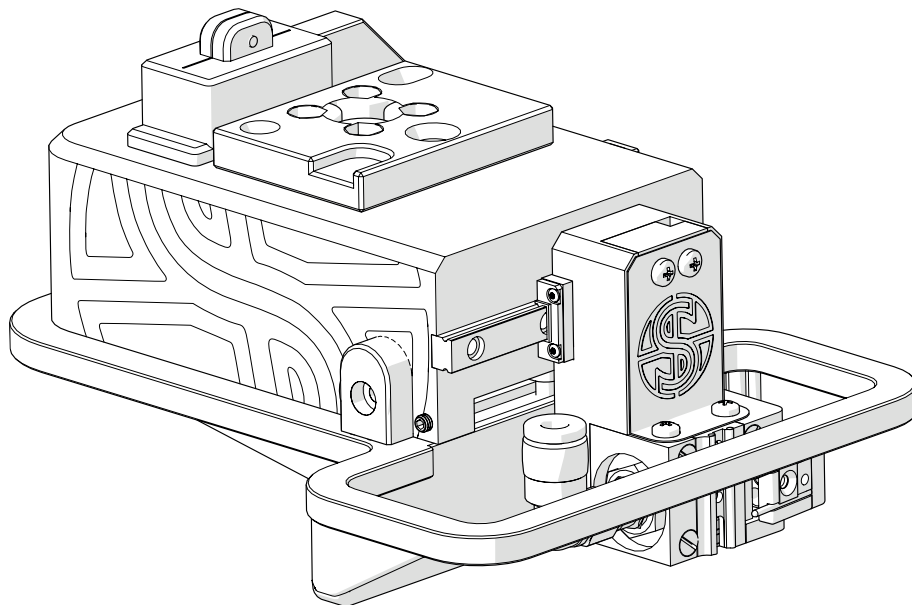
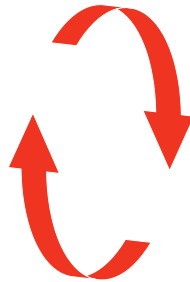
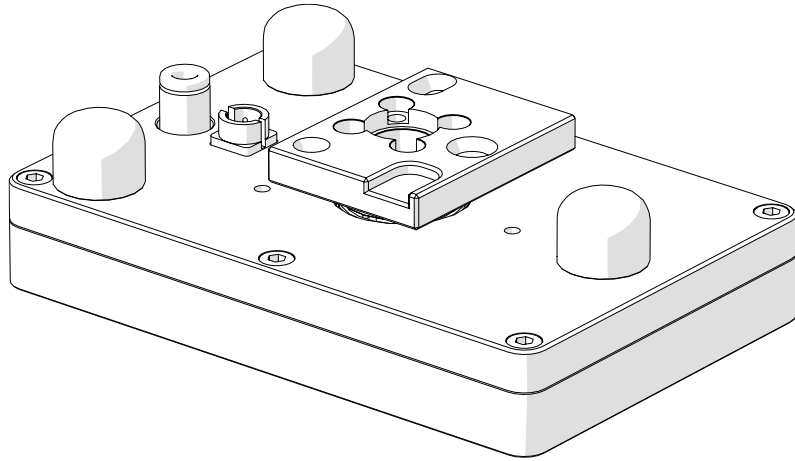


THE STINGER™





BEFORE YOU START!

- Always check that wires and tubes are clear before fitting The Stinger or Pad Head. Failure to do so could cause machine damage.
- The Stinger and Pad Head should be stored in their foam case. To prevent loss or damage always store The Stinger and Pad Head in their case as soon as they are removed.
- Do NOT twist or rotate any connectors. This will cause damage to both the ROTOR and The Stinger.
- Take care when removing The Stinger or Pad Head. The magnets are very strong — do not let The Stinger or Pad Head collide with the ROTOR HDA.
- Pull all connectors by their plugs only. NEVER pull connectors by the cables or damage will occur.
- Always pinch down the white ring on the pneumatic connectors when removing. The white ring locks the connector in place, trying to remove without unlocking will cause connection damage.
- Ensure black connectors are orientated correctly. The black connectors have locators that need to be align before inserted. Misalignment will cause damage.
- During head removal, always ensure the push cylinder is cleared before moving away from the carriage. The push cylinder runs from the carriage arm into The Stinger/Pad Head. If either are not pulled down far enough during removal, the cylinder will catch and damage the ROTOR HDA.
- Ensure the unused connector is securely in the holder before operating the ROTOR HDA. A loose cable may cause machine damage.
- Always ensure the power is OFF before changing heads. Leaving the power on can cause a hardware crash.
- Ensure The Stinger's pin cartridge is pushed to back left corner of ROTOR pad rim. This is to avoid damage to the pad rim's locator pins.

3. Introduction
4. Preparing the ROTOR HDA for The Stinger
 - Removing the Pad Head
 - Attaching The Stinger
7. Preparing the ROTOR HDA for the Pad Head
 - Removing The Stinger
 - Attaching the Pad Head
10. Notes

THE STINGER™

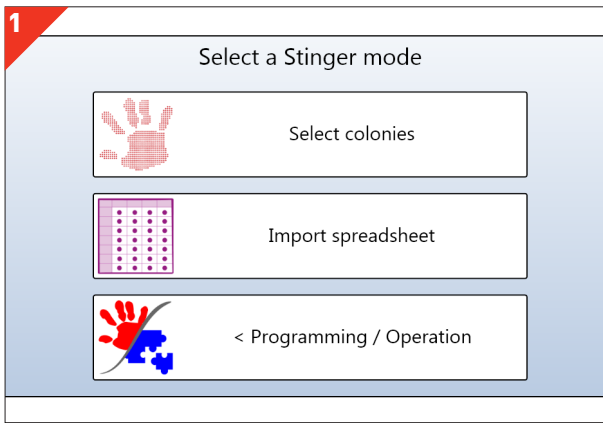
ASSEMBLY GUIDE – INTRODUCTION

Please follow the instructions to get The Stinger[®] set-up and ready for ultra-fast colony picking. Once The Stinger[®] is attached and ready to go, refer to the *User Guide* to learn useful operation guidance to get the most out of your product.

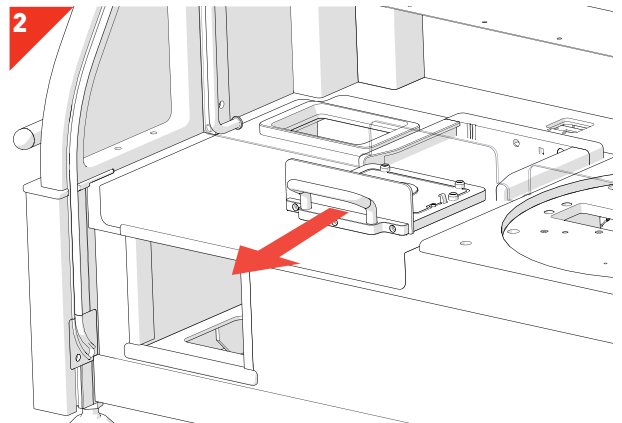
DISCLAIMER

At Singer Instruments, we are constantly seeking to improve our products and adapt them to the requirements of modern research techniques and testing methods. This involves modification to the mechanical structure and optical design of our instruments. Therefore, all descriptions and illustrations in this user guide, including all specifications are subject to change without notice.

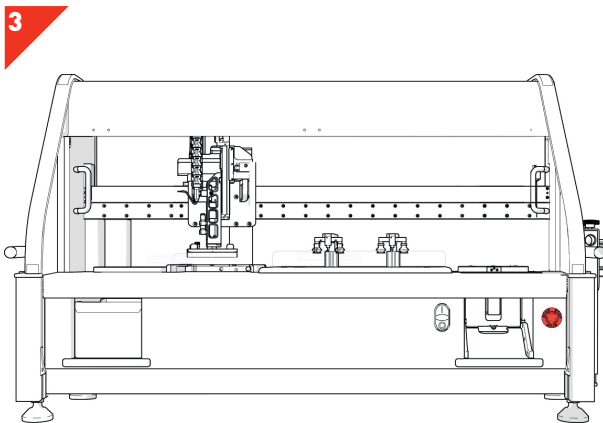
INSTALLING THE STINGER



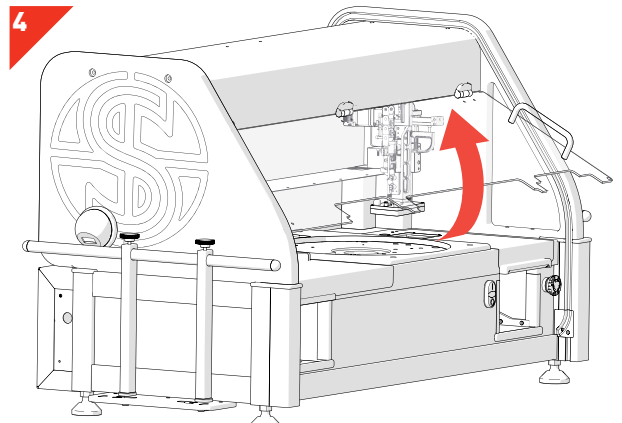
- Select your chosen mode on the *Stinger Menu*.
- On-screen instructions will guide you through the following steps.



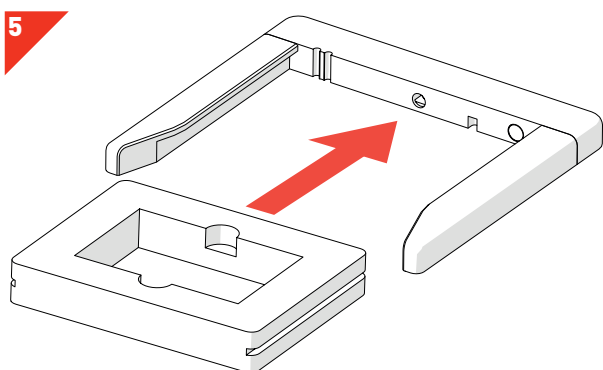
- Remove the *Black Bay* from the ROTOR HDA.



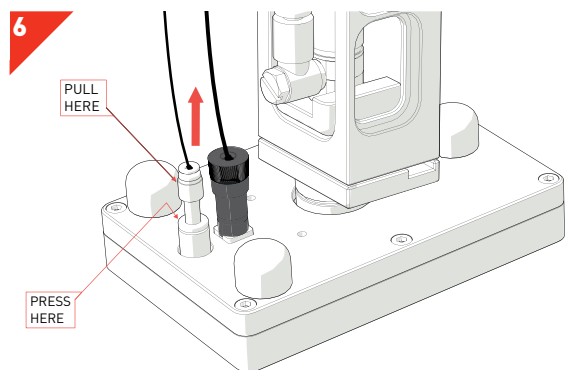
- Once the carriage arm has moved into position, turn power off ROTOR HDA by pressing the *Red Stop Button*.



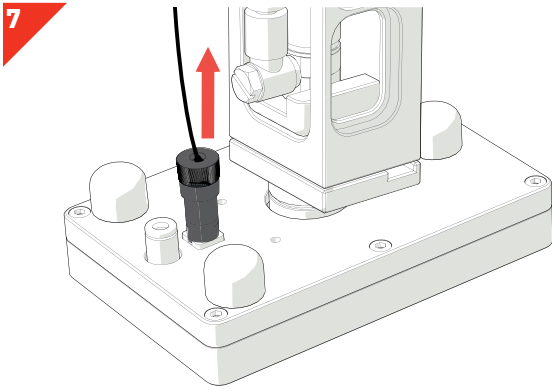
- Lift up the *Safety Screen*.



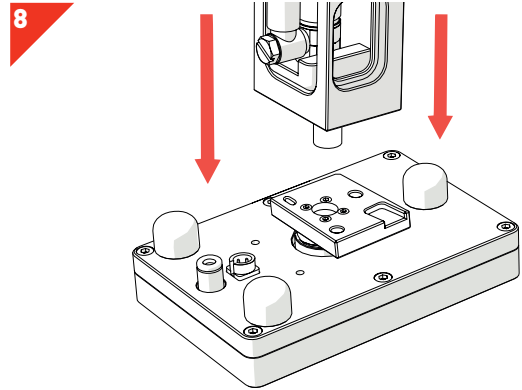
- Insert the *Pad Head Foam Case* into the *Black Bay Zone*.



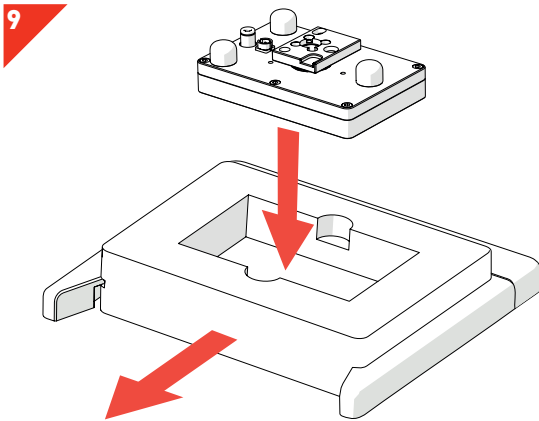
- While holding the *Pad Head* with one hand, press in the *Connection Locking Ring* with your thumb and first finger while gently pulling the *Pneumatic Connector* by the plastic shaft with your other hand.



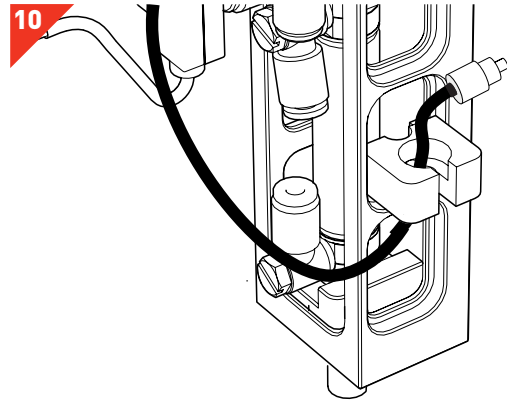
- While still holding the *Pad Head*, without twisting, gently pull the *Gripper Contact Cable* with your free hand by the plug, until it disconnects.



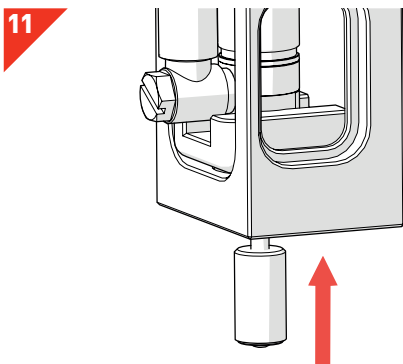
- Pull down gently on the *Pad Head* with both hands until it comes free from the *Carriage Arm*. Remember to grip the pad head firmly.



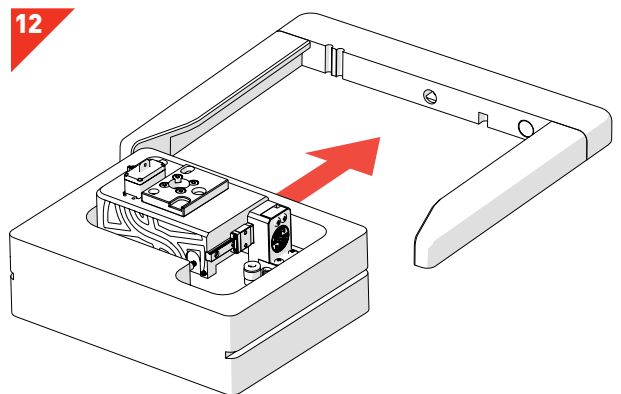
- Place the *Pad Head* into the *Foam Case*, remove from the *Black Bay Zone* and store away safely.



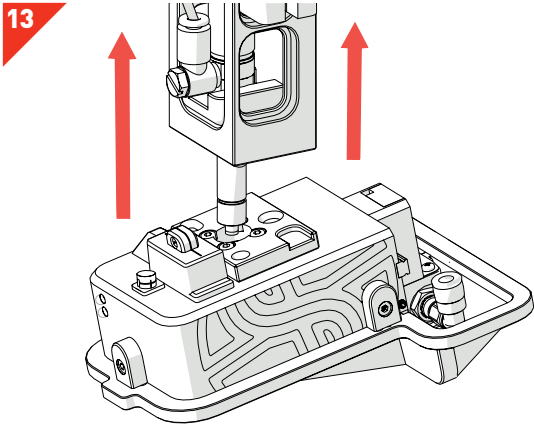
- Remove *The Stinger Data Contact Cable* from the holder on the carriage arm and replace it with the *Pad Head Gripper Contact Cable*.



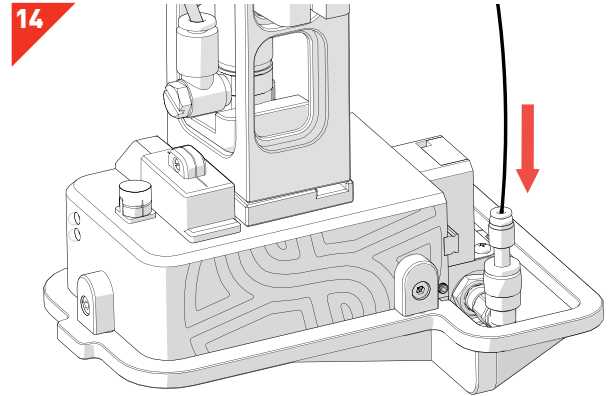
- Please ensure the *Cylinder Head* is pushed inside the *Carriage Arm Cylinder* to ensure that it is not obstructing *The Stinger* from being correctly attached.



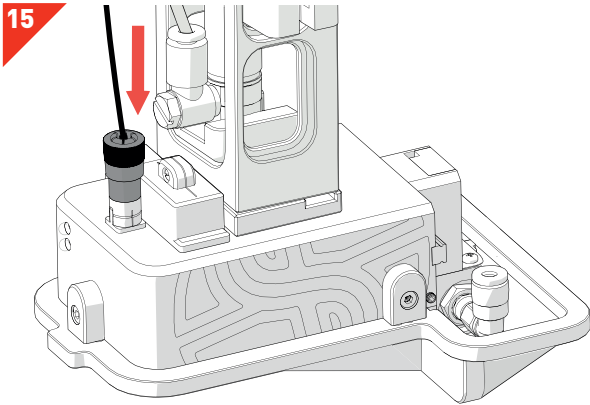
- Insert *The Stinger* with its protective foam case into the *Black Bay Zone*.



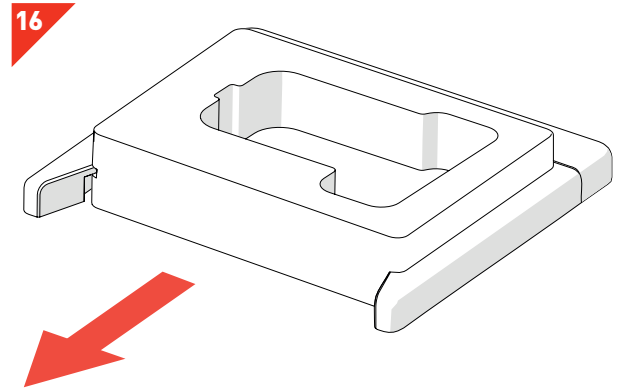
· Connect *The Stinger* to the *Carriage Arm* by lifting it up until it snaps into place. The cylinder arm should be on the right hand side when facing the ROTOR HDA (as shown).



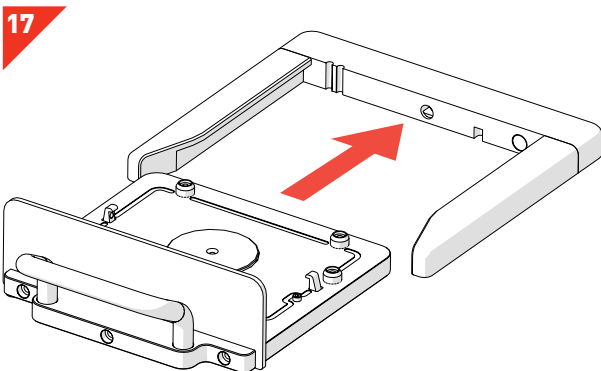
· Connect the *Pneumatic Line* to *The Stinger Head* by gently inserting it into the *Pneumatic Socket*



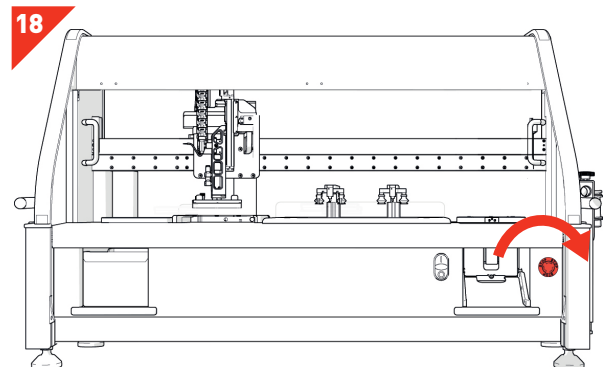
· Insert *The Stinger Data Cable* into *Data Socket*.



· Remove the *Stinger Foam Case* from the *Black Bay Zone*.

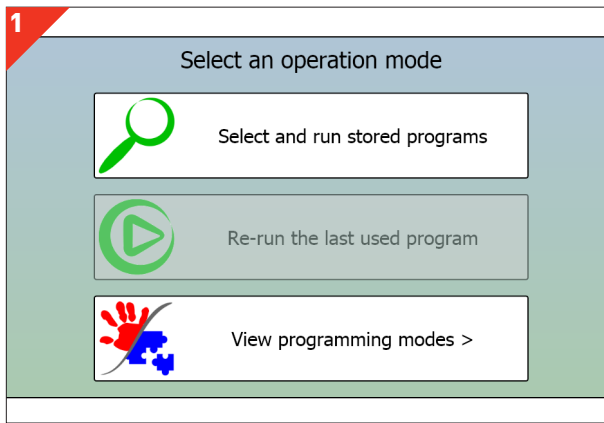


· Re-insert the *Black Bay*.

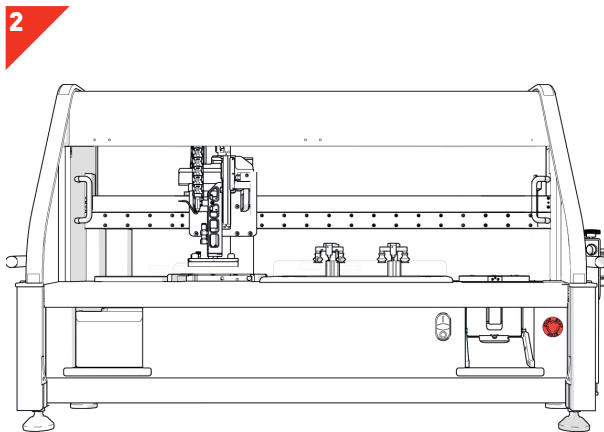


· Turn the *Red Stop Button* clockwise until it pops out.
· Initialise the ROTOR HDA

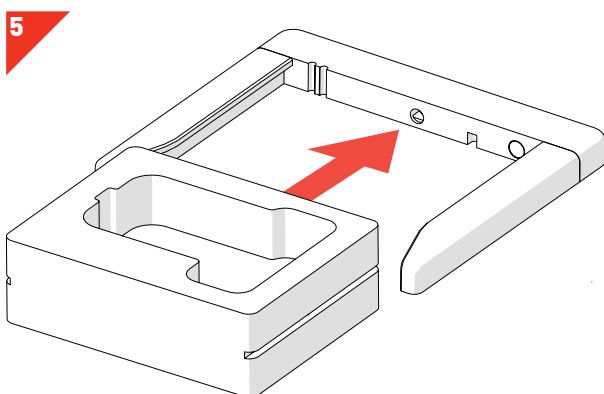
INSTALLING PAD HEAD



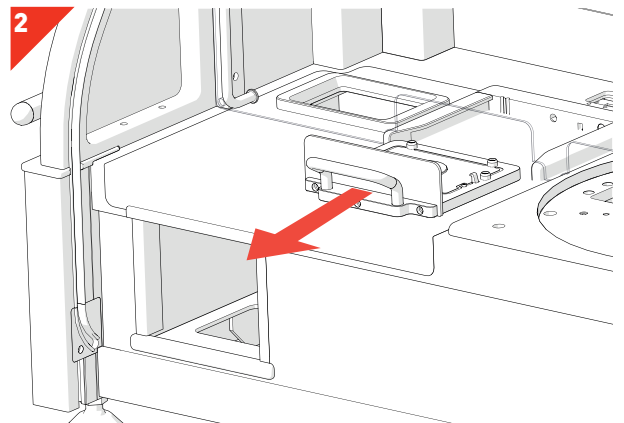
- Select a normal operation mode on the *ROTOR HDA Menu*.
- On-screen instructions will guide you through the following steps.



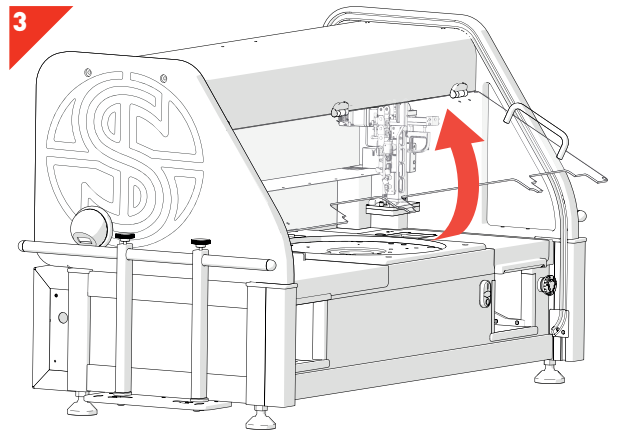
- Once the carriage arm has moved into position, turn power off ROTOR HDA by pressing *Red Stop Button*.



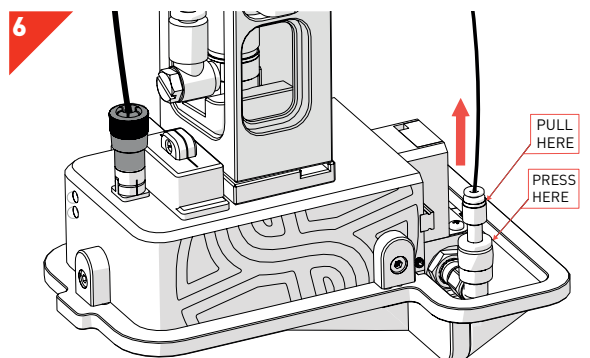
- Insert the *Stinger Foam Case* into the *Black Bay Zone*.



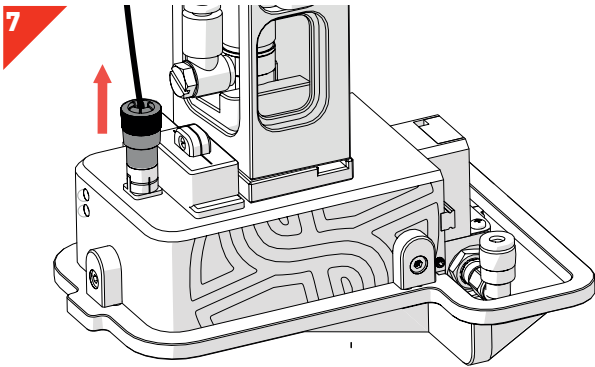
- Remove the *Black Bay* from the ROTOR HDA.



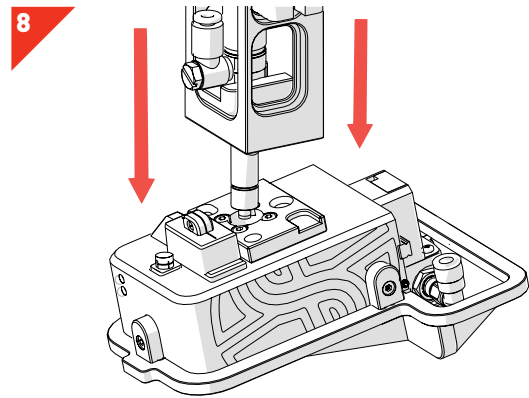
- Lift up the *Safety Screen*.



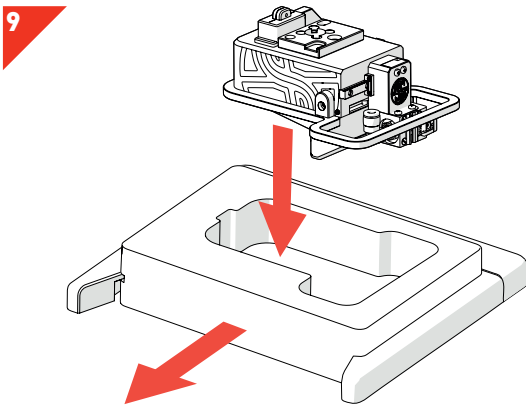
- While holding the *The Stinger* with one hand, press in the *Connection Locking Ring* with your thumb and first finger while gently pulling the *Pneumatic Connector* by the plastic shaft with your other hand.



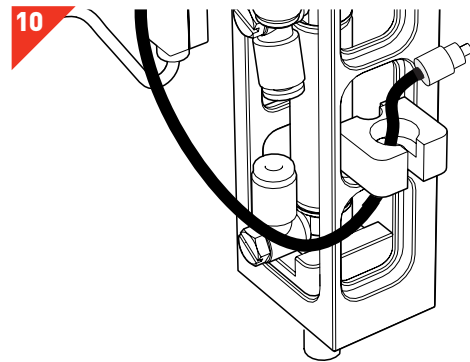
- While still holding *The Stinger*, without twisting, gently pull the *Data Cable* with your free hand by the plug, until it disconnects.



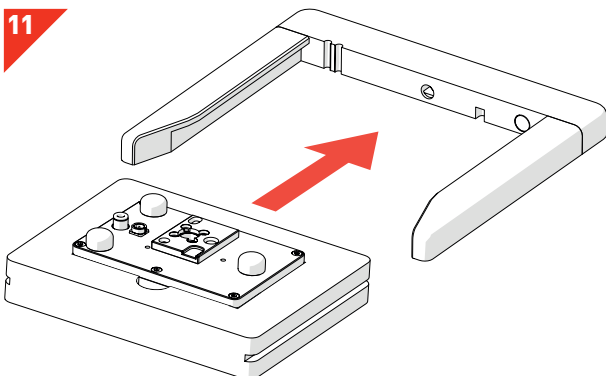
- Pull down gently on *The Stinger* with both hands until it comes free from the *Carriage Arm*. Remember to grip *The Stinger* firmly.



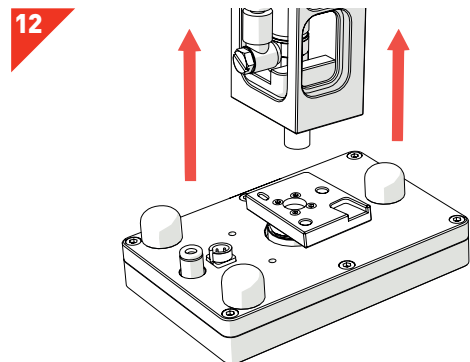
- Place *The Stinger* into the *Foam Case*, remove from the *Black Bay Zone* and store away safely.



- Remove the *Pad Head Gripper Contact Cable* from the holder on the carriage arm and replace it with *The Stinger Data Cable*.

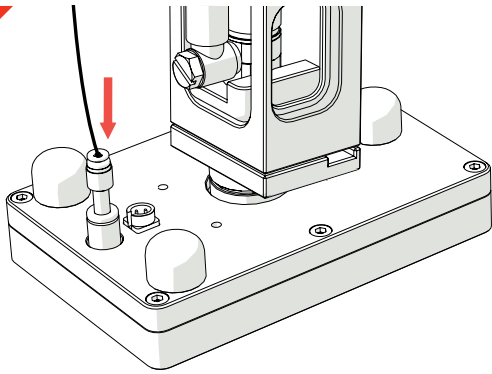


- Insert the *Pad Head* with its protective foam case into the *Black Bay Zone*.



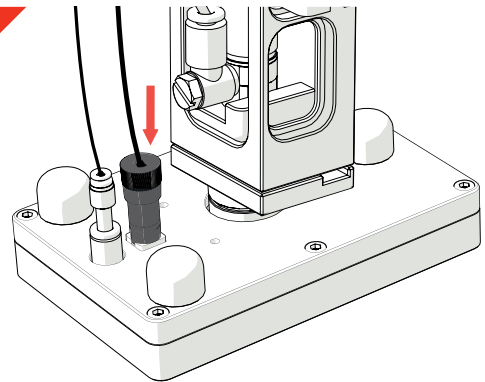
- Connect the *Pad Head* to the *Carriage Arm* by lifting it up until it snaps into place. The pneumatic connector should be on the left hand side when facing the ROTOR HDA.

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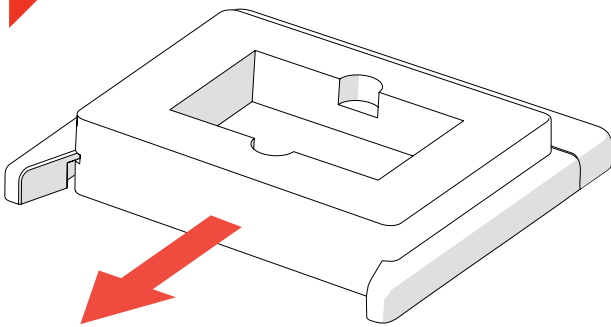
- Connect the *Pneumatic Line* to the *Pad Head* by gently inserting it into the *Pneumatic Socket*.

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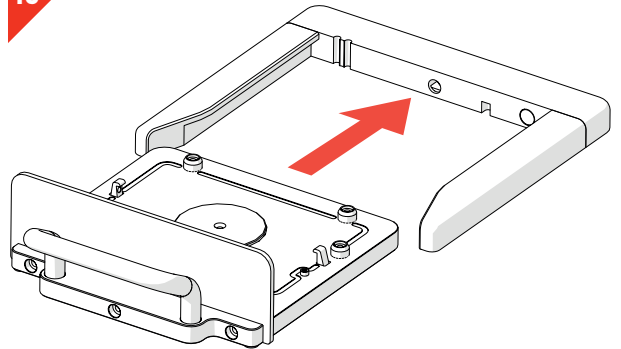
- Insert the *Pad Head Gripper Contact Cable* into the *Contact Cable Socket*.

15



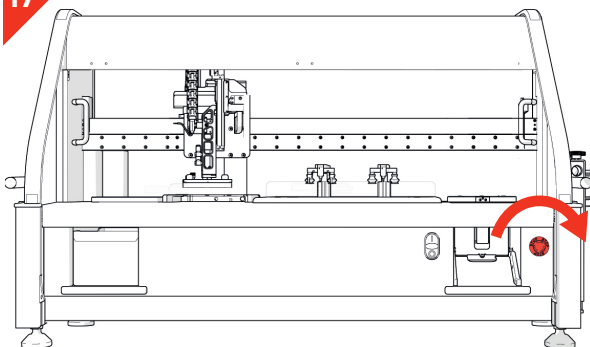
- Remove the *Pad Head Foam Case* from the *Black Bay Zone*.

16



- Re-insert the *Black Bay*.

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- Turn the *Red Stop Button* clockwise until it pops out.
- Initialise the ROTOR HDA



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