



How To Build the

CAMMATE SYSTEM - TRAVEL SERIES

BOOK OF PARTS

VOLUME #1

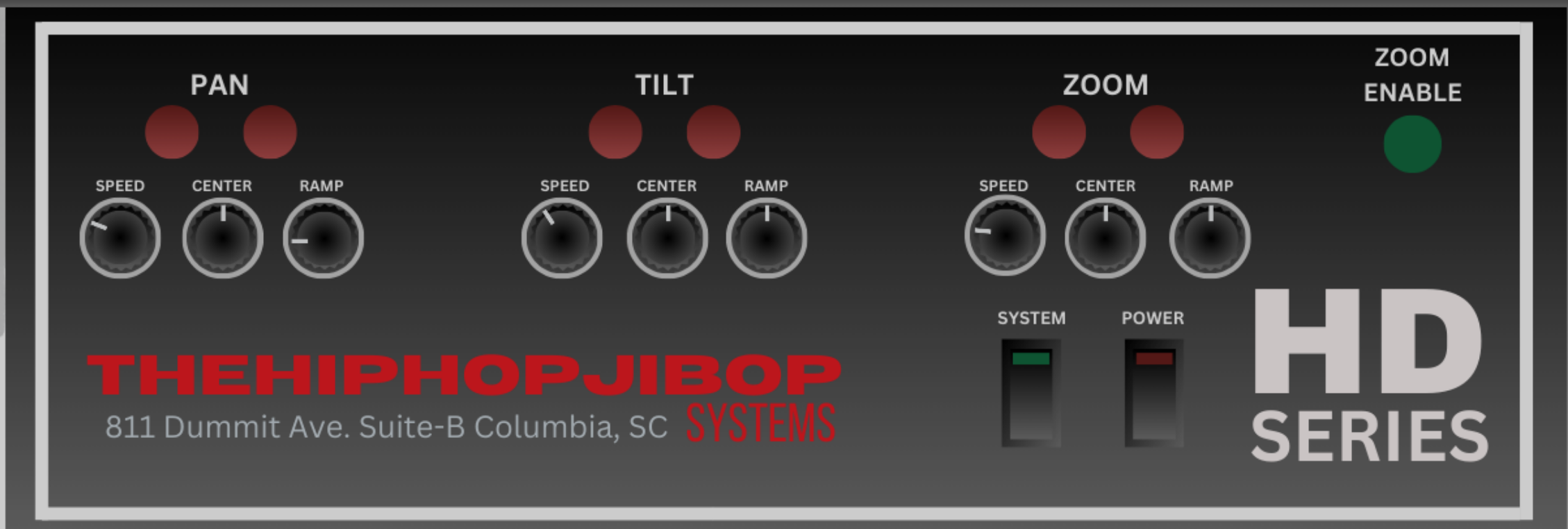
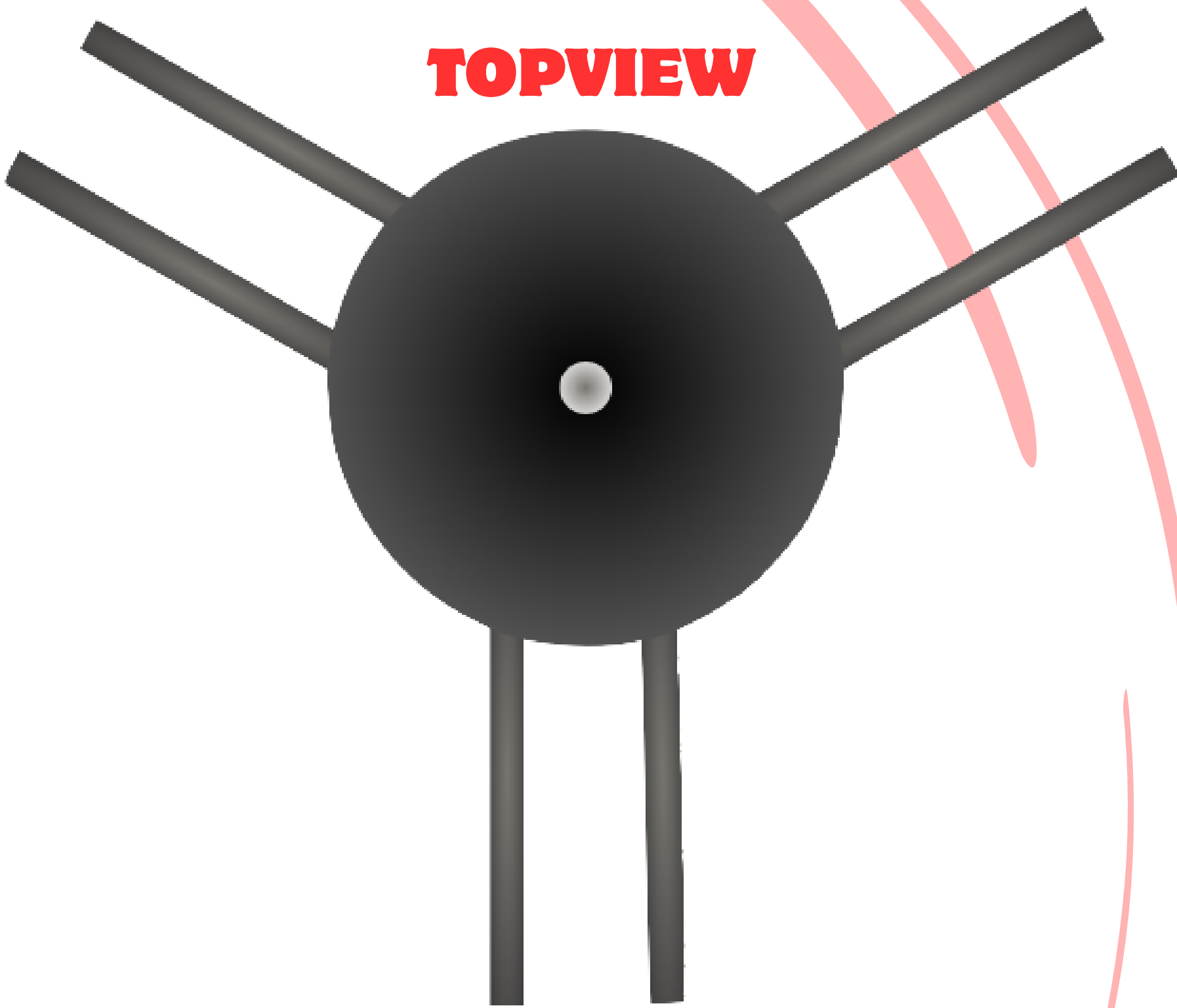


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TOPVIEW



SIDEVIEW



CENTERPIECE

Plate

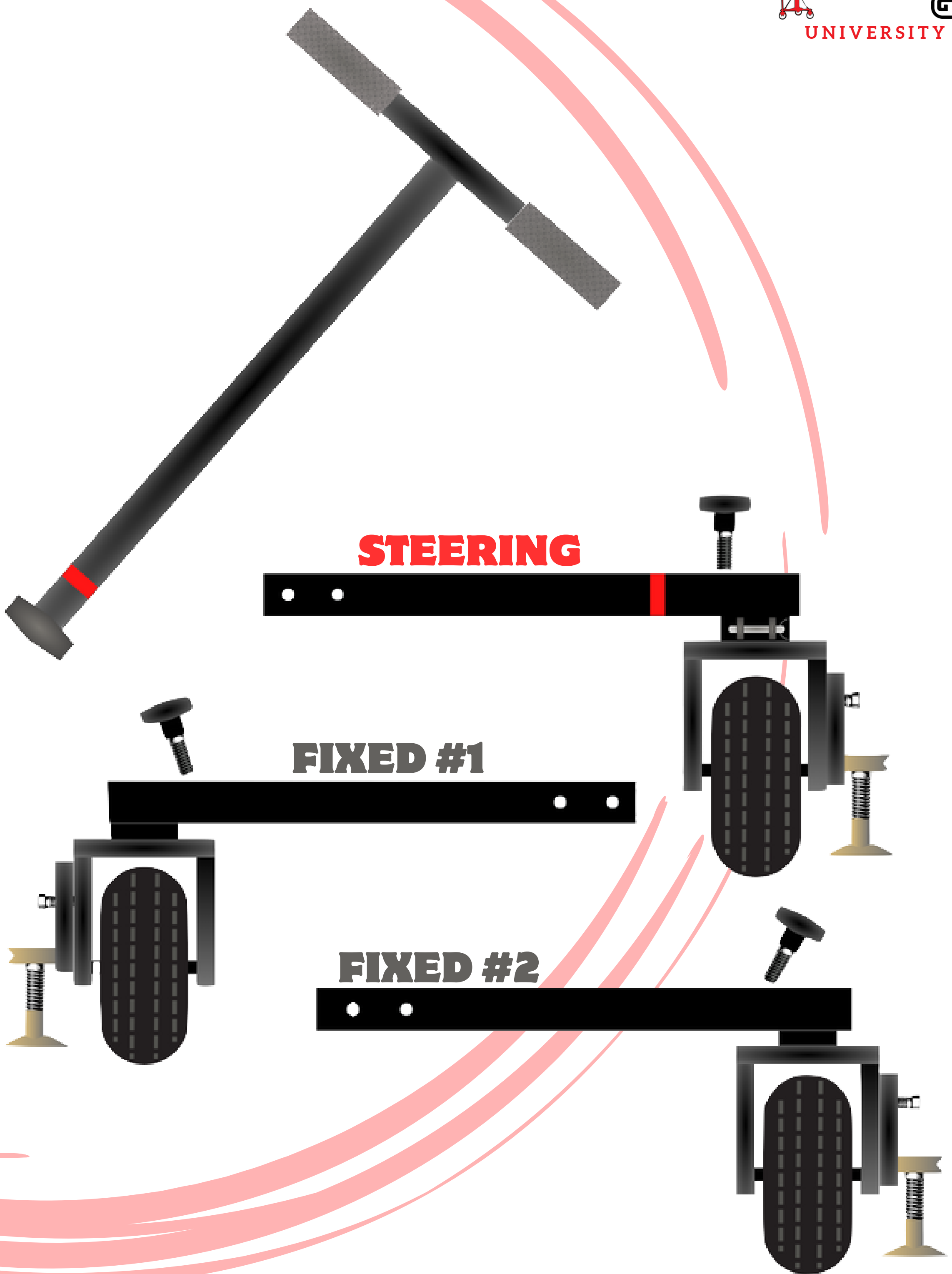
Key Takeaways:

The **“Centerpiece”** of your jib is just that, the centerpiece to your foundation. This part is the most important to me because it holds the tripod and all other parts of the entire jib arm together. So always double check and make sure that:

- The centerpiece is put in it's correct position which is to have the flat side facing downward before attaching any legs.
- The fixed wheels should be attached to the plate first to eliminate placing the wrong leg in the wrong place.
- The quick release pin goes in (Hole#1) and mounting knobs go into (Hole#2). Make sure they are placed in their proper holes when attaching them to the centerpiece plate.

NOTE:

THIS PART OF THE BUILD PROCESS HAS TO BE DONE CORRECTLY FROM THE BEGINNING!



WHEELBASE & Handle

Key Takeaways:

The **“Wheelbase”** is what you put together first but most important is a major component for building a safe and operational machine. So I always double check and make sure that:

- The parts of the wheelbase are in working condition.
- The direction in which you are building your jib is clear and free of traffic and obstacles.
- The steering handle is attached and ready to move the jib when needed.

Details:

Assembled height - 53 3/4" with 6" Riser

59 3/4" with 12" Riser

Weight: 80 Lbs. with 6" Rise

83 Lbs. with 12" Riser

Footprint: 40.5" X 48.5"

When repositioning the dolly, always push from the bottom of the dolly with someone at both ends. This will ensure that the dolly does not become unstable.

Table of Specifications - Tripod with Wheels

Travel 25', 2024 and smaller cranes ONLY



CLOSED



OPEN

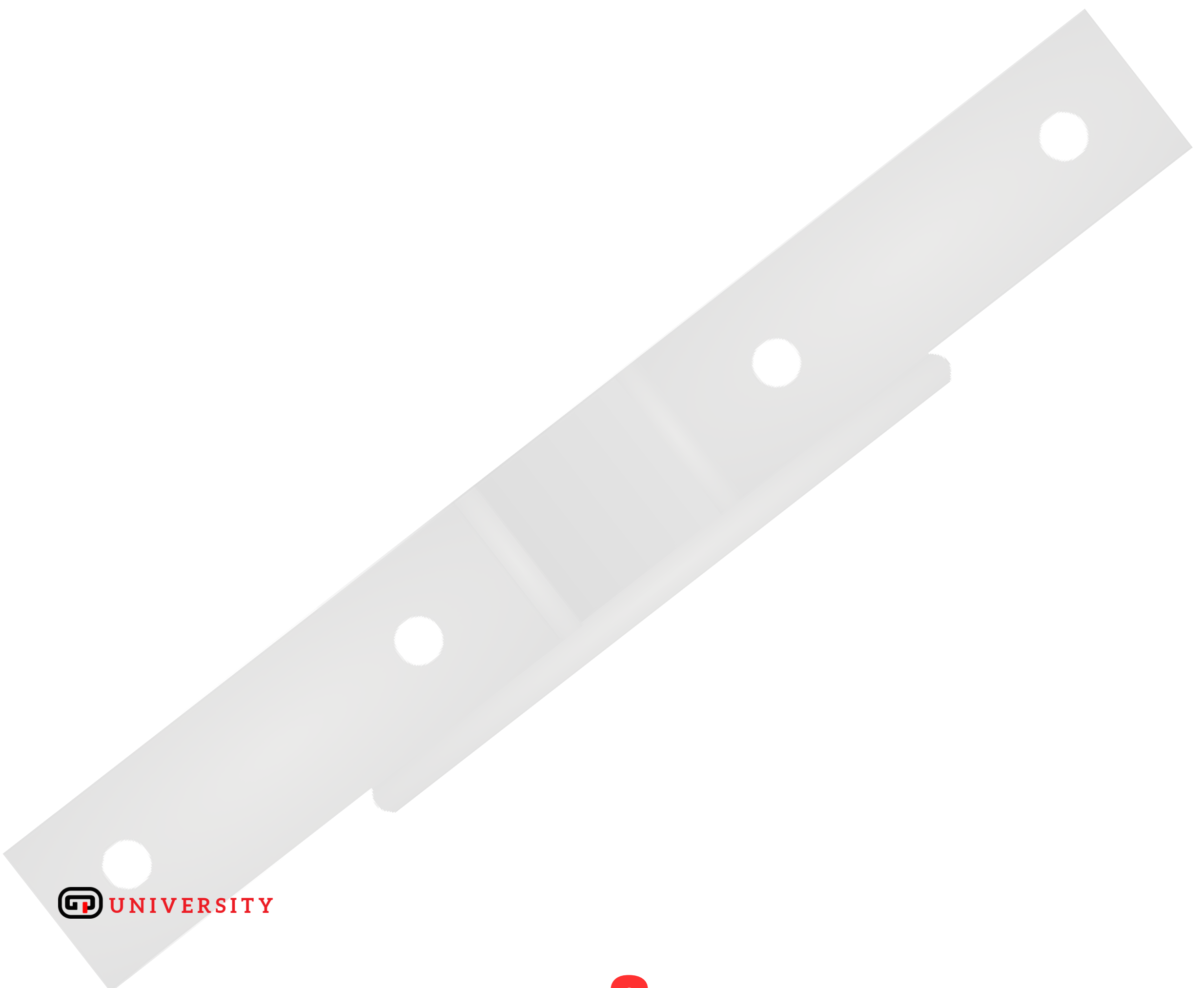
TRIPOD

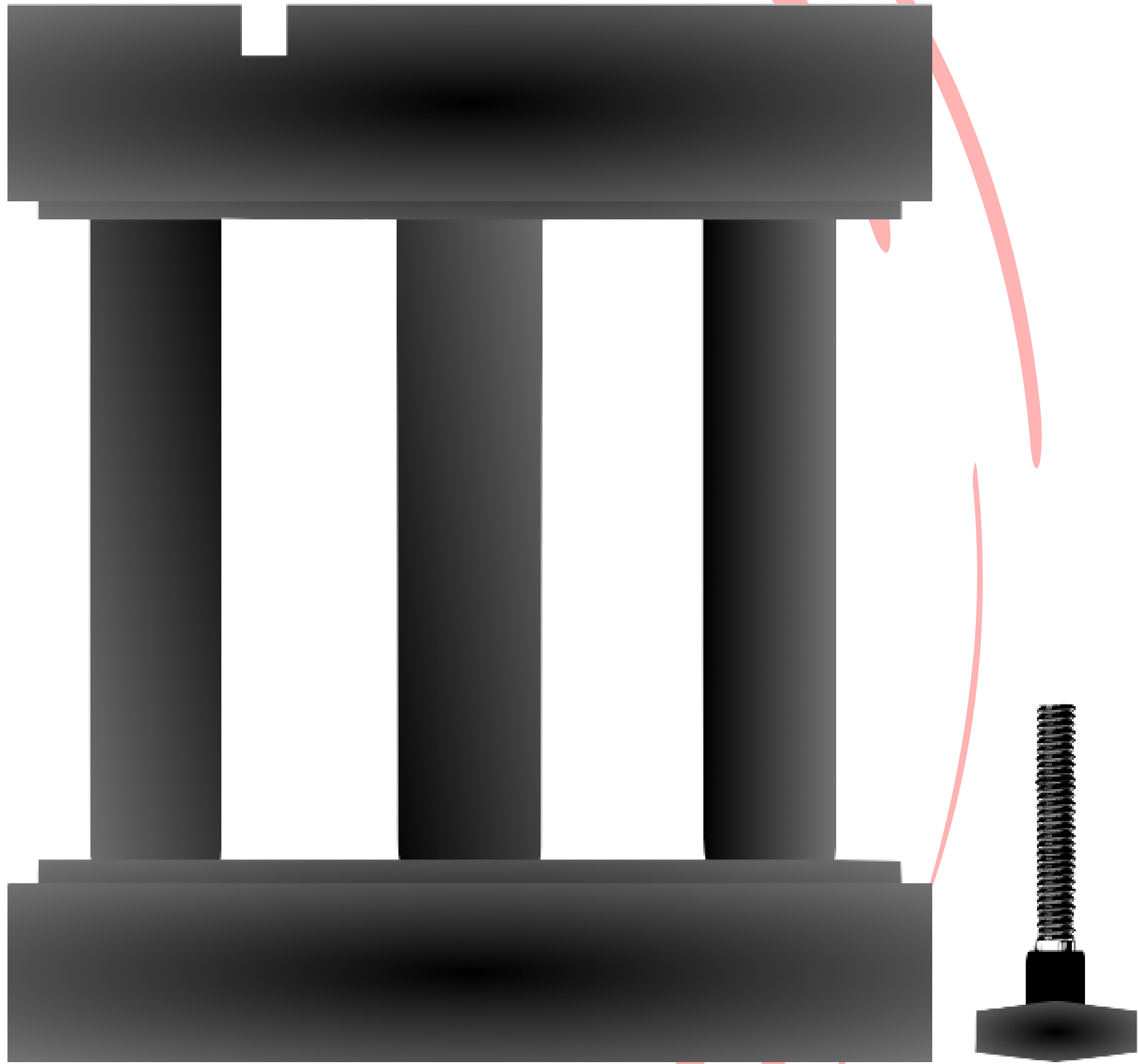
Legs

Key Takeaways:

The **“Tripod Legs”** are another one of those essential parts to building the foundation to your jib. It must be in great condition, and most important leveled before adding any arm extensions. So I always double check and make sure that:

- The tripod legs are locked before flipping over the tripod.
- The area in which you build your jib is not harmful to yourself and or others.
- The base with the tripod attached is leveled properly before adding any arm extensions.





RISER *and Knob*

Key Takeaways:

The **“6” Riser”** is where the fulcrum or pivot point is attached. The riser is what allows for the jib to get a certain height over a crowd or obstacle as needed. So I always double check and make sure that the:

- Riser is attached tightly and secured.
- Riser show no signs of wear and tear.



FULCRUM

& Knob

Key Takeaways:

The **“Fulcrum”** is the pivot point on contact between the main arm section and the base it is attached to. It is responsible for:

- The see saw effect you see when a jib arm boom up or down.
- Allowing the arm to spin 360 degrees.
- Attaching to the dolly tube once attached.
- Panning and Tilting of the arm sections.
- The fulcrum is not bent or showing signs of grinding metal together such as metal flakes.

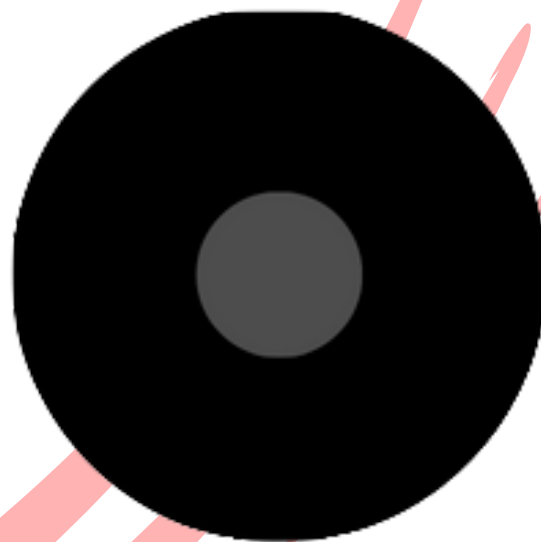
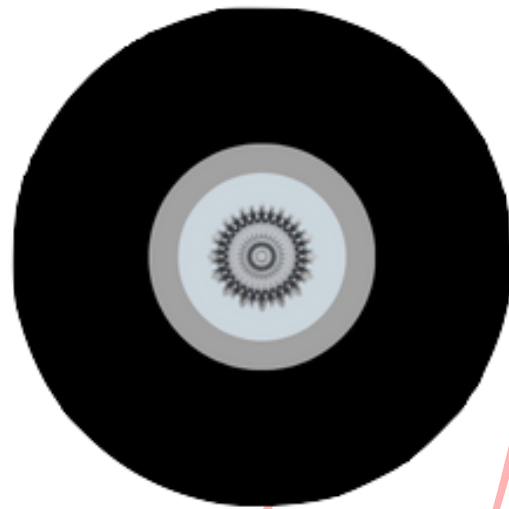
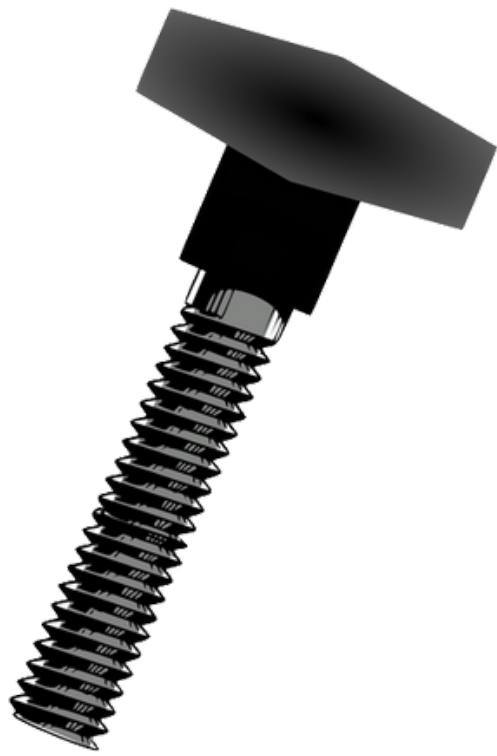


MAIN ARM & Control Rod

Key Takeaways:

The **“Main Arm Section”** is the first arm extension that will go on the wheelbase of your jib. So I always double check and make sure that the:

- Retainer pin is in place and not damaged.
- C-Stand or stand you are using is set up and in place.
- Control rods are connected and balanced.
- The arm is not bent or signs of grinding metal together such as metal flakes.



TILT BRAKE

and Washer Nut

Key Takeaways:

The ***“Tilt Brake & Washer Nut”*** is what allows an operator to lock the arm when jib is unattended. So I always double check and make sure that:

- Tilt brake is not bent and or damaged.
- The washer nut and Brake pad are available to be attached to the fulcrum.
- The brake pad is in between the fulcrum and the tilt brake.



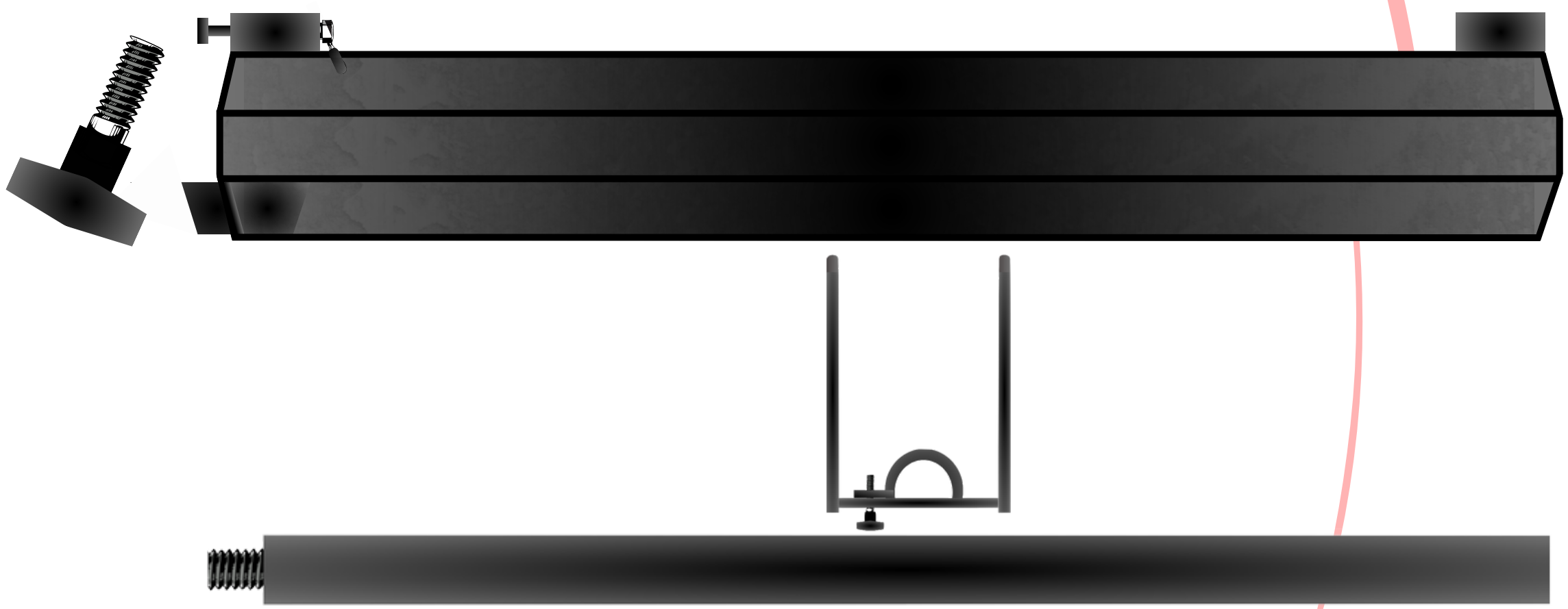
CONTROL

ROD

Key Takeaways:

The **“Control Rod”** helps the remote head maintain a balanced and leveled shot when just booming the arm up or down. Without the control rods your remote head will not sit nor operate correctly. So I always double check and make sure that:

- The control rod bracket is secure and has all its knobs and free of debris.
- Each control rod is attached to each arm and each control rod bracket arm is center of gravity.
- Each control rod is attach along with the arm extensions to eliminate time.



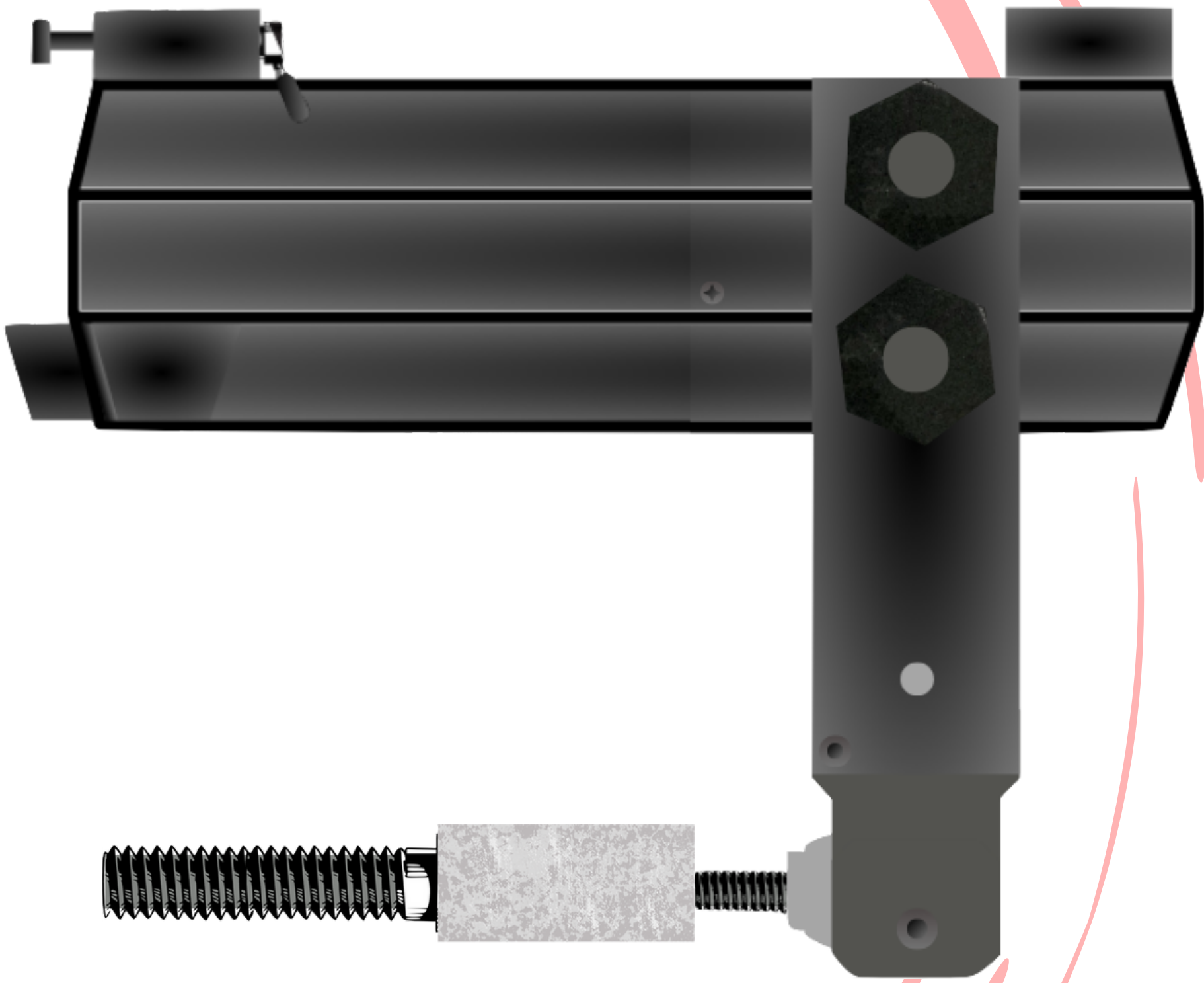
ARM EXTENSIONS

& Control Rod

Key Takeaways:

The **“Arm Extensions”** will be the next arm section to add to the main arm section. The arm extensions are responsible for the reach and height that jib can operate within. So I always double check and make sure that:

- The control rod bracket is not damaged and worn out.
- Mounting knobs are available and ready for use.
- The connecting tongue is not damaged, loosened, or missing.
- Control rods are connected and balanced.
- The arm is not bent or signs of grinding metal together such as metal flakes.

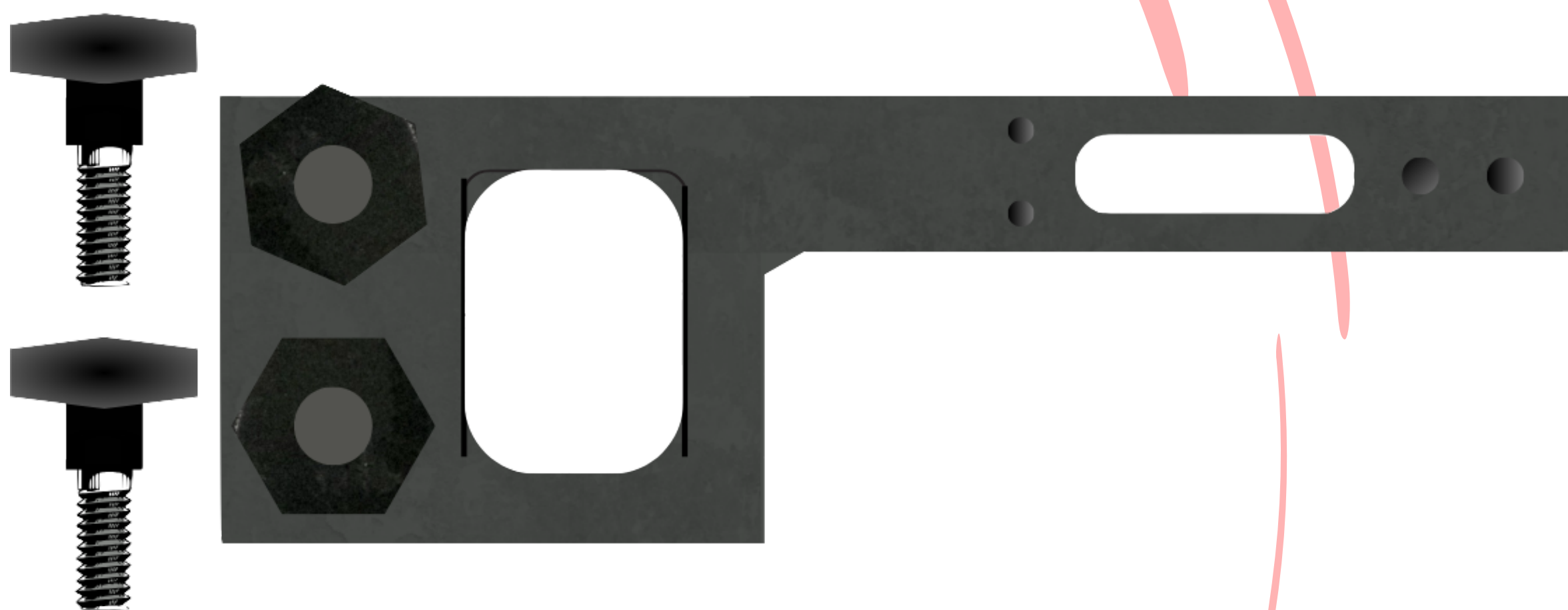


NOSEPIECE & Screw

Key Takeaways:

The **“Nosepiece”** is what the magical remote head attaches to. It helps to keep your jib head balanced and leveled at all times. So I always double check and make sure that:

- The control rod from the last arm attached is connected and ready.
- The adjusting screw is not bent and working properly.
- The remote head is attached and adjusted to accommodate what type of camera being used.
- The jam nuts are locked to secure the remote head from damage.

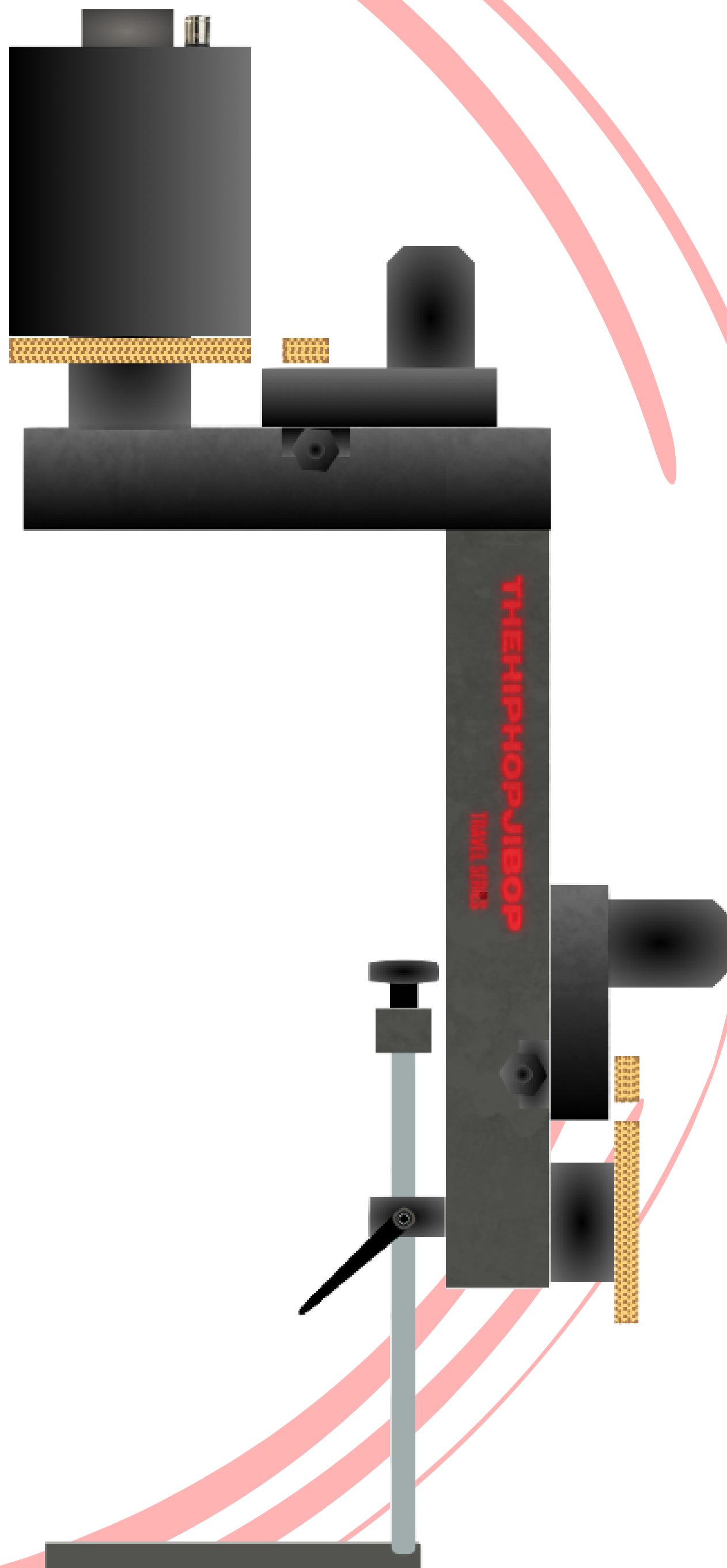


HEAD BRACKETS & Knobs

Key Takeaways:

The **“Head Bracket or Forks”** are the connection between the remote head and the arm extensions. The remote head itself is what attaches to the forks to later be balanced and leveled once the camera is attached. So I always double check and make sure that:

- The head bracket has all 4 mounting knobs to secure it.
- The forks are not bent or damaged in no such way.
- The other 4 mounting knobs that attaches the forks to the remote head column.



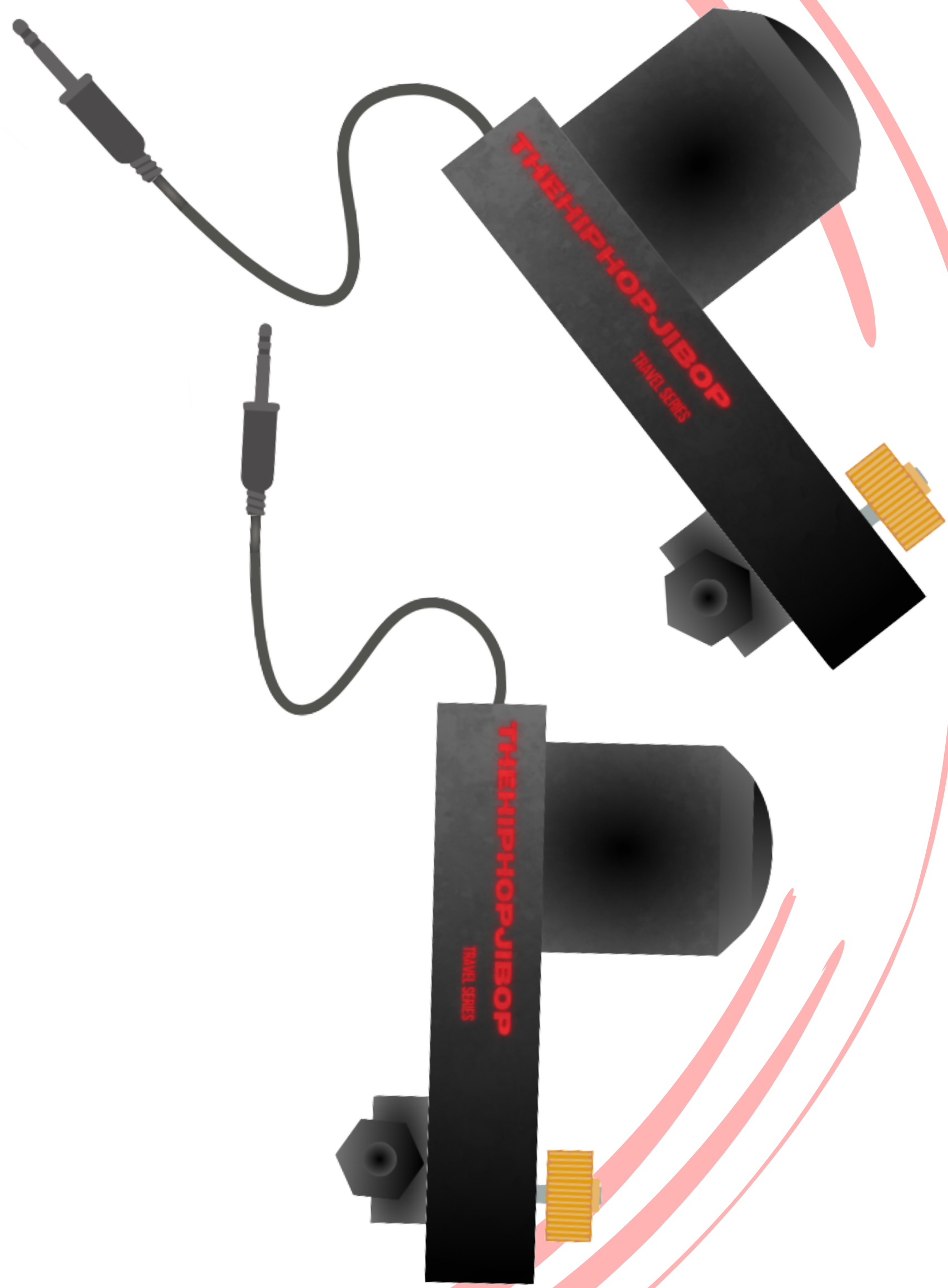
REMOTE HEAD

2-Axis

Key Takeaways:

The **“Remote Head”** is the where the magic behind the jib is embedded. Without the remote head being attached properly and balanced correctly is a recipe for diaster. So I always double check and make sure that the:

- Nosepiece is attached correctly to control rod and last arm extension.
- Remote head is attached with the 4 mounting knobs.
- Camera cradle is lowered to before mounting the camera.
- Jam nuts are locked to secure the remote head from damage.
- The camera cradle is in the down position and the cradle lock is unlocked.
- All accessories, tapes, safety cables, etc are attached to the camera before balancing. DO NOT FORGET TO MAKE SURE!!
- While the camera is attached to find out if it is front or rear heavy is to loosen it and see if the lens points to the floor or the sky. And adjust accordingly.
- Once the front and rear balancing is set to then raise the camera table using the table height adjustment knob to achieve center of gravity.



TILT/PAN

Motors

Key Takeaways:

The ***“Pan and Tilt Motors”*** are responsible for the up down right and left movement of the remote head. These two motors are what make up the 2-axis that the remote head operates on. So I always double check and make sure that the:

- Motors are not engaged before attaching the camera.
- Power cables are not frayed or damaged.
- The gears show no sign of damage.

TAIL SECTION



TAIL EXTENSION



TAIL
Section

Key Takeaways:

The **“Tail Section”** is where the control box and monitor is attached. It has two sections: the Tail extension and the tail section. The cable support can not be attached without the tail section being connected. So I always double check and make sure that the:

- The pan brake is attached and in place.
- The control box is attached.
- Connecting tongue is not bent or damaged.
- The arm is not bent or signs of grinding metal together such as metal flakes.

FRONT



BACK



CONTROL Box

Key Takeaways:

The **“Control Box”** is what controls the electronics of the jib simple machine. It is responsible for:

- Controlling the 2 or 3-axis remote head
- 4-Pin DC power In/Out
- Attaching the 37-pin CPC Connector that powers the remote head.
- Attaching the 16-pin CPC input Connector joystick and pistol controllers.

Details:

REAR

1. 16-Pin CPC input connector from Joystick.
2. 37-Pin CPC connector, Main Cable to Head.
3. DC System Fuse (10 amp 125v Fast-Blow)
4. AC Line Fuse (3 Amp/125v Slow-Blow)
5. AC Line input connector.
6. External DC supply input connector (12-15v)
7. External DC supply output connectors (15.25v)
8. 8-Pin Multi pass thru connector.
9. HD-SDI input
10. HD-SDI output
11. SD-SDI output
12. Gen Lock output
13. Time Code output
14. Trico output

1. Pan direction LED's.
2. Tilt direction LED's.
3. Zoom direction LED's.
4. Zoom Enable indicator LED.

Pan Controls:

1. Speed: This varies the Pan Motor's top speed over a 5:1 range.
2. Center: This controls the centering of the Pan Motor.
3. Damp: This control will vary the amount of dampening applied to the Pan Motor.

Tilt Controls:

1. Speed: This varies the Tilt Motor's top speed over a 5:1 range.
2. Center: This controls the centering of the Tilt Motor.
3. Damp: This control will vary the amount of dampening applied to the tilt motor.

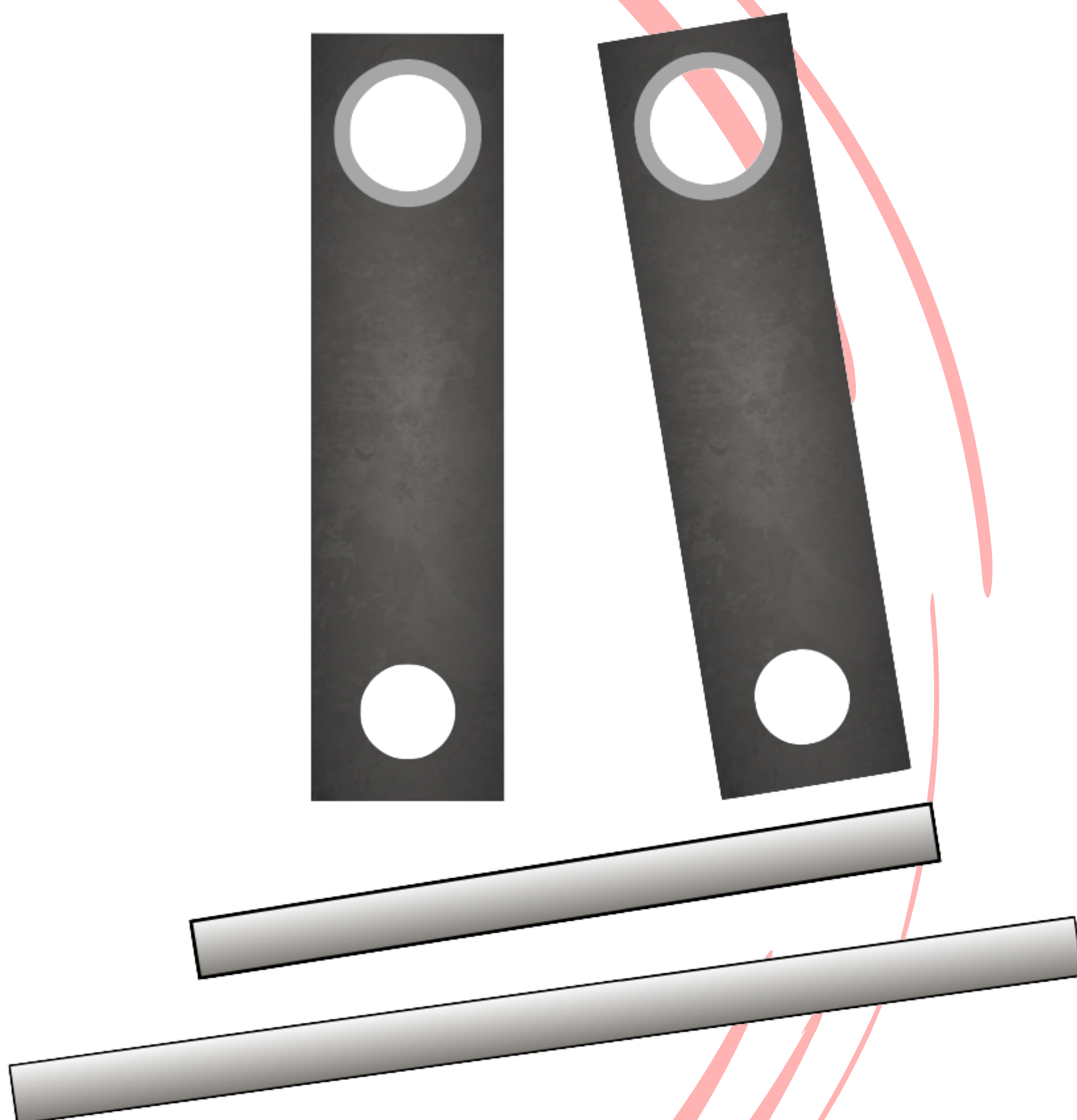
Zoom Controls:

1. Speed: This varies the Zoom speed range.
2. Center: This controls the centering of the Zoom.
3. Damp: This control will vary the amount of dampening applied to Zoom Lens.

System Power Switch: Turns On/Off the electronics DC power.

AC Power Switch: Turns On/Off the AC power supply.

Note: Turn this on before the System Power



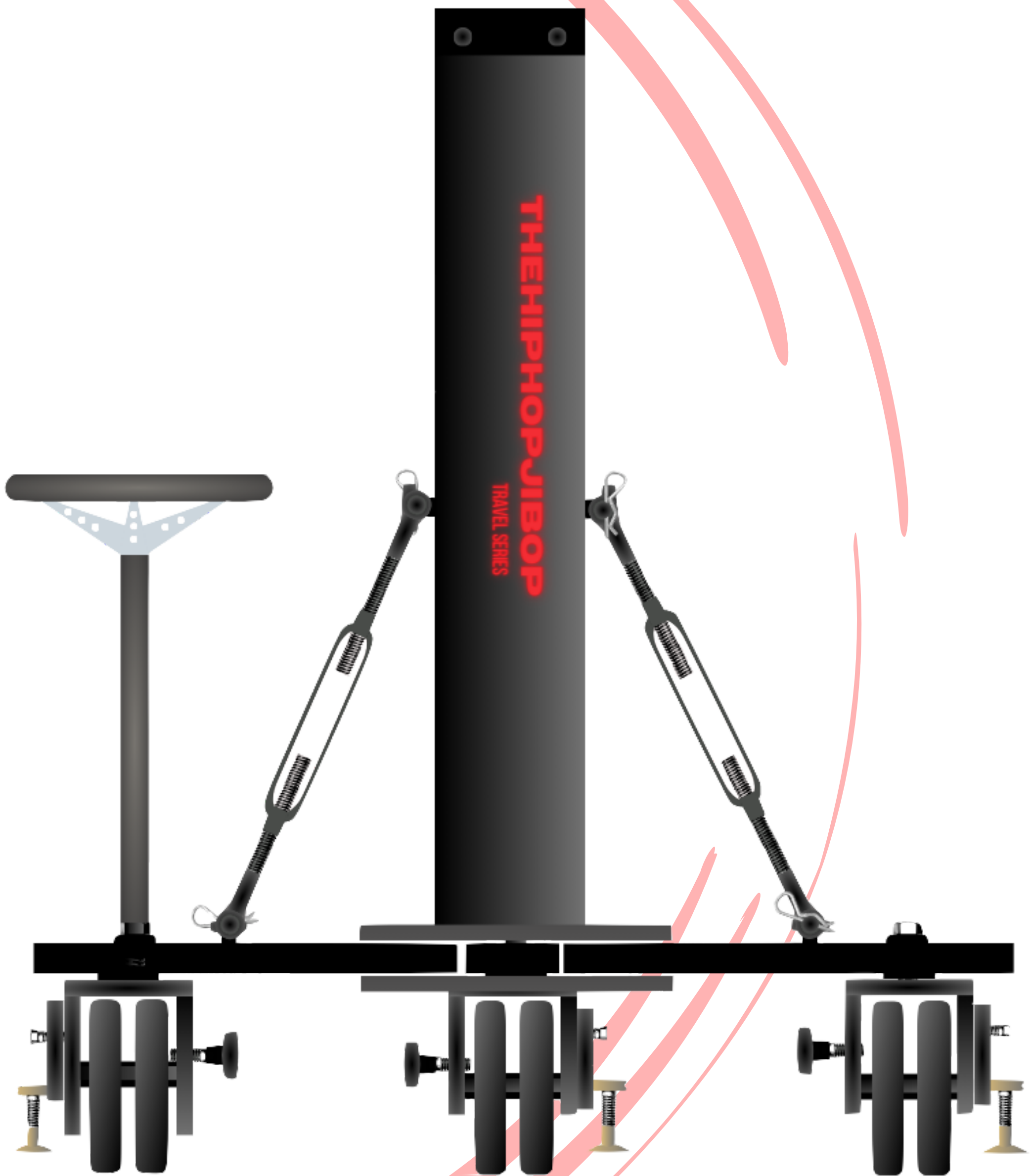
WEIGHT

Bars

Key Takeaways:

The “**Weight Bars**” are holding all the weights that are applied to the tail section of the jib. So I always double check and make sure that:

- You don't overload the weight bars with excessive weight.
- Have enough weight according to the length of arm you are building.
- You use the heavier weights first before lighter weights.



CRAB

Dolly

Key Takeaways:

The **“Crab Dolly”** is a wheelbase that is a little bit more heavy duty than the tripod wheelbase we started out learning in this course. However it can carry a heavier and longer arm than the tripod wheelbase. It is capable of:

- Holding a 29' - 32' reach arm and weight.
- Steering with a removable steering column.
- Being two different heights because of the choice between the different main tubes.
- Securing the dolly tube with 3 turnbuckles.
- Being used on a studio floor.

Details:

Travel 25' and all shorter cranes

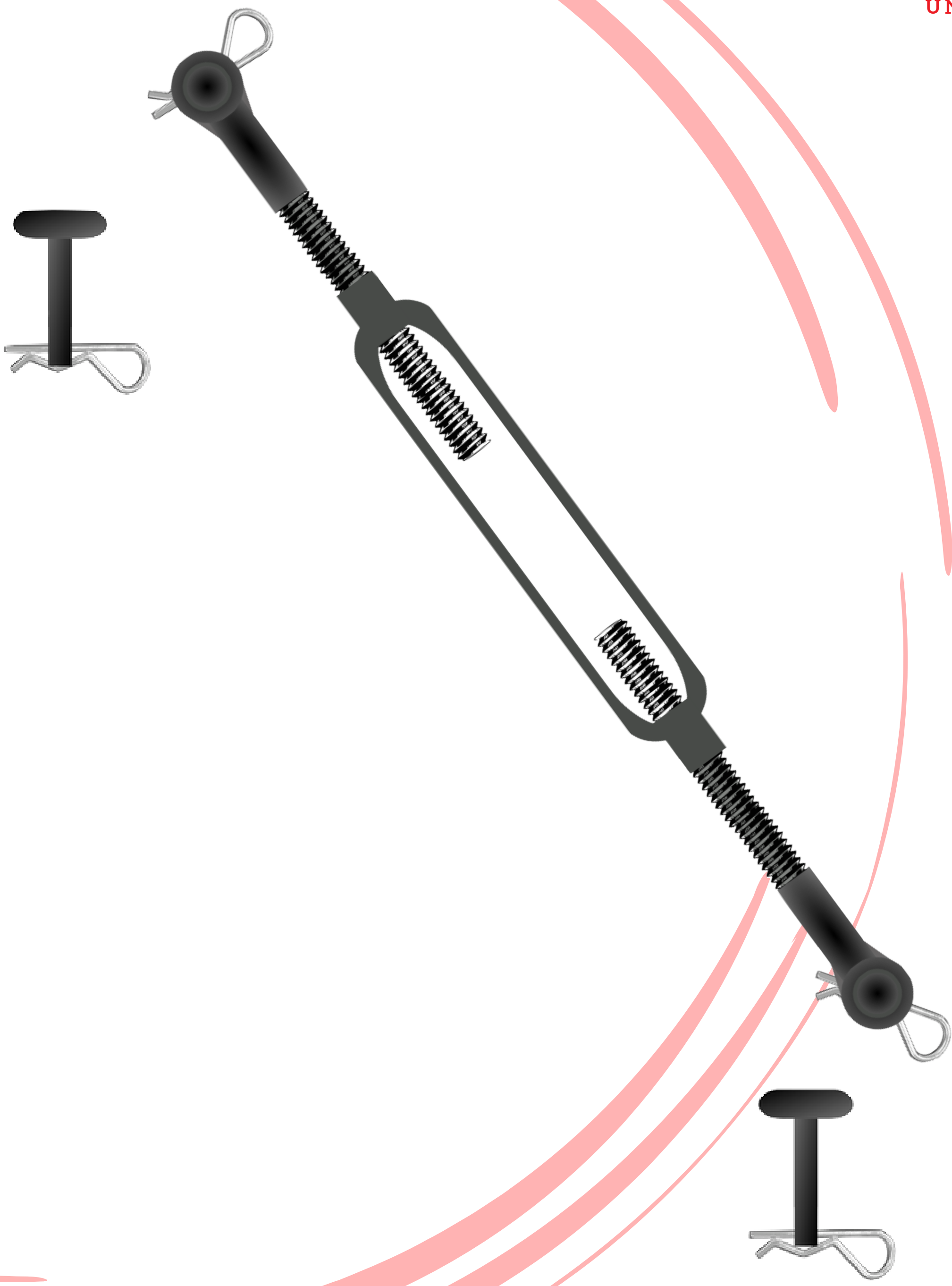
Assembled height..... 48 5/8" with 36" Tube
60 5/8" with 48" Tube

Weight.....103 Lbs. with 36" Tube
108 Lbs. with 48" Tube

Diameter: 41"

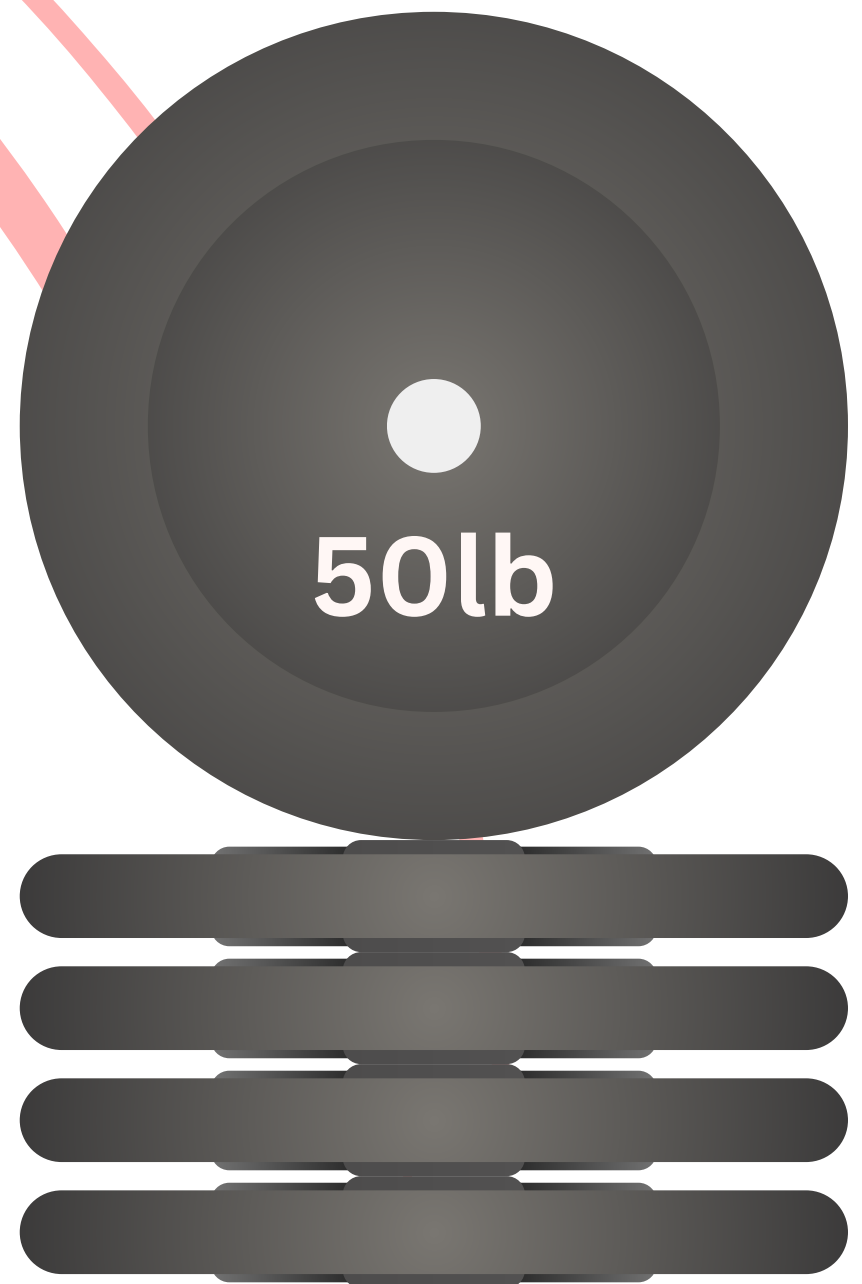
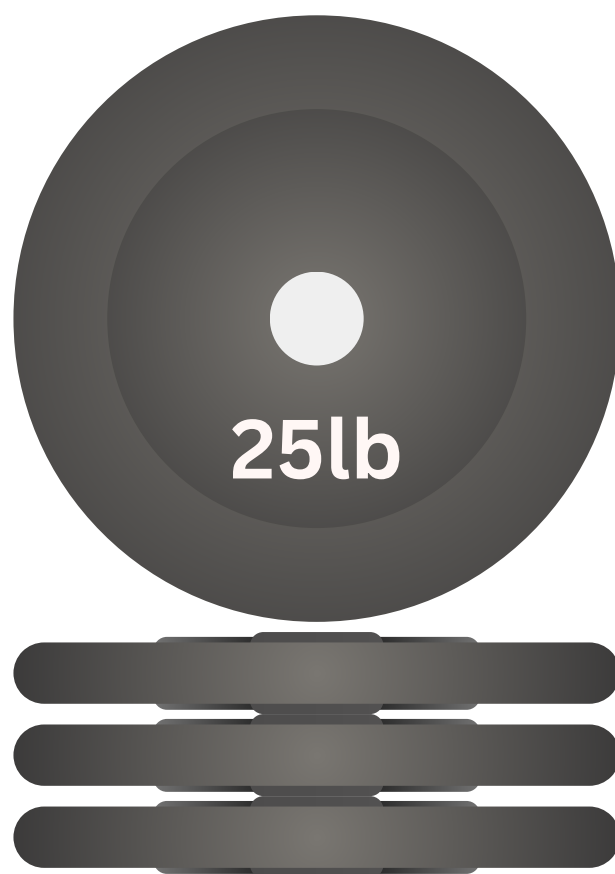
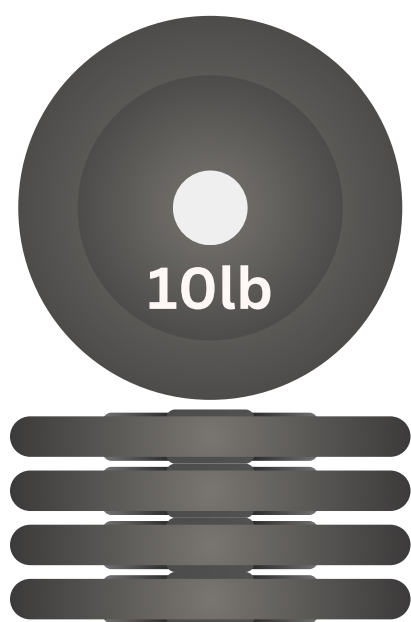
NOTE:

Adding the outriggers Support pack adds an additional 50lbs to the crab dolly final weight.



TURNBUCKLE

and Pins



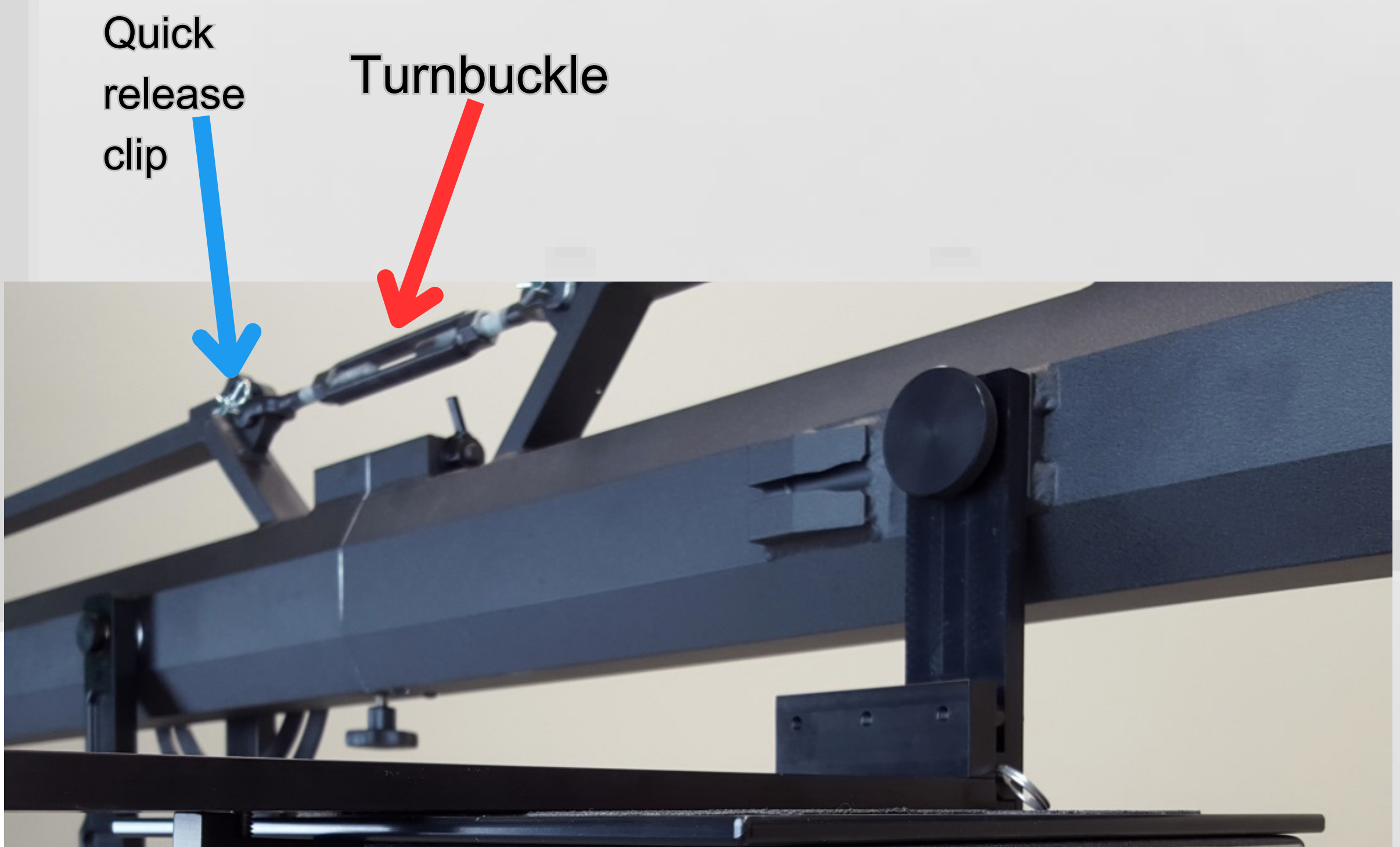
Always start with putting on your heaviest weights on first! This way you can find the optimal balance point using lesser number of weights.

10LB-50LB *Weights*

Key Takeaways:

The **“Turnbuckle”** is how the arm sections are held together for extra added support on the 2000 Series of the CamMate System models. So always double check and make sure that:

- The turnbuckles are attached in a uniform way that they all turn in the same direction.
- The **“quick release clip”** and turnbuckle pin are placed properly in the eyelets.
- You only hand tighten the turnbuckles for best results.



THHJO Resources

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