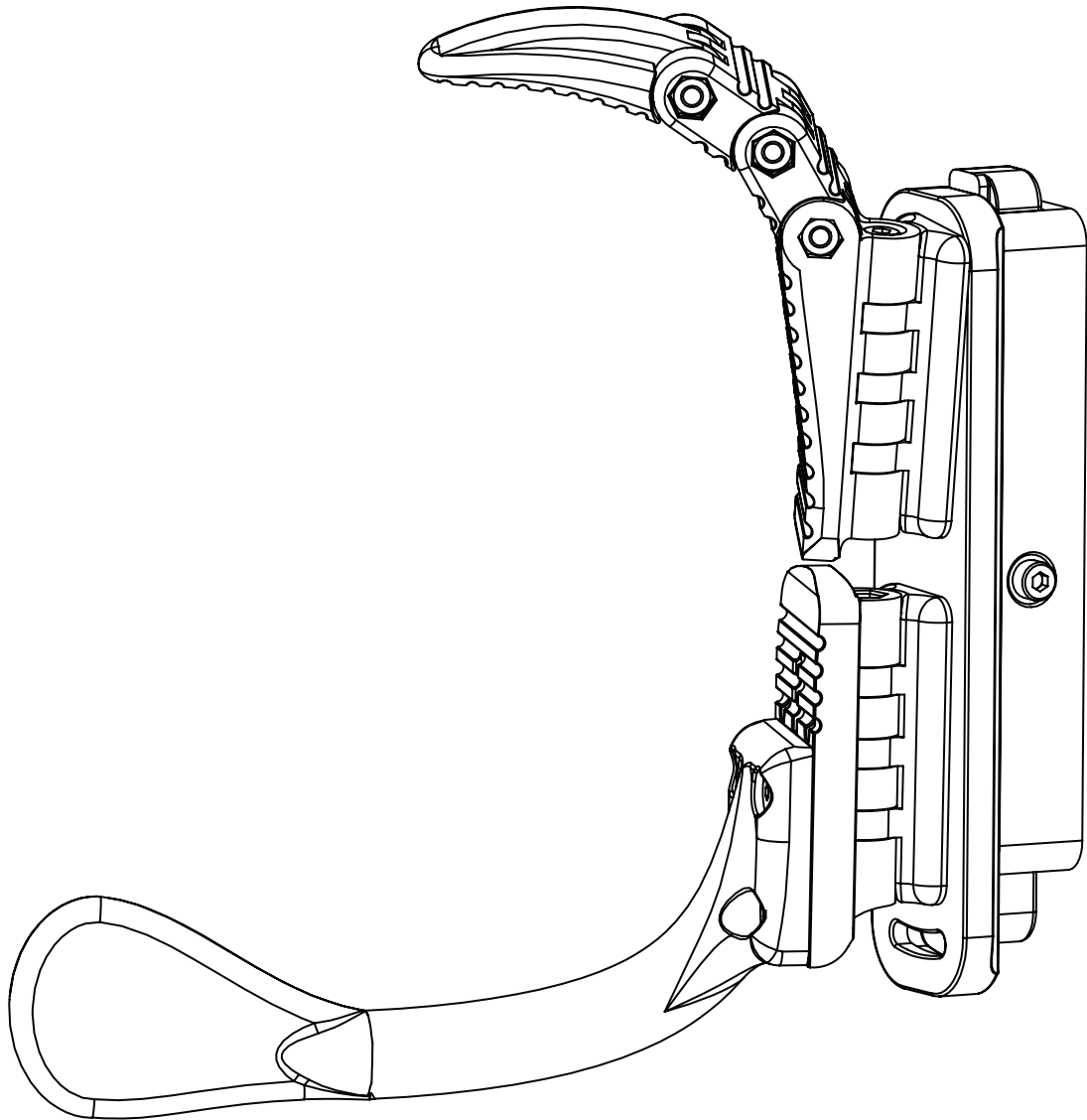


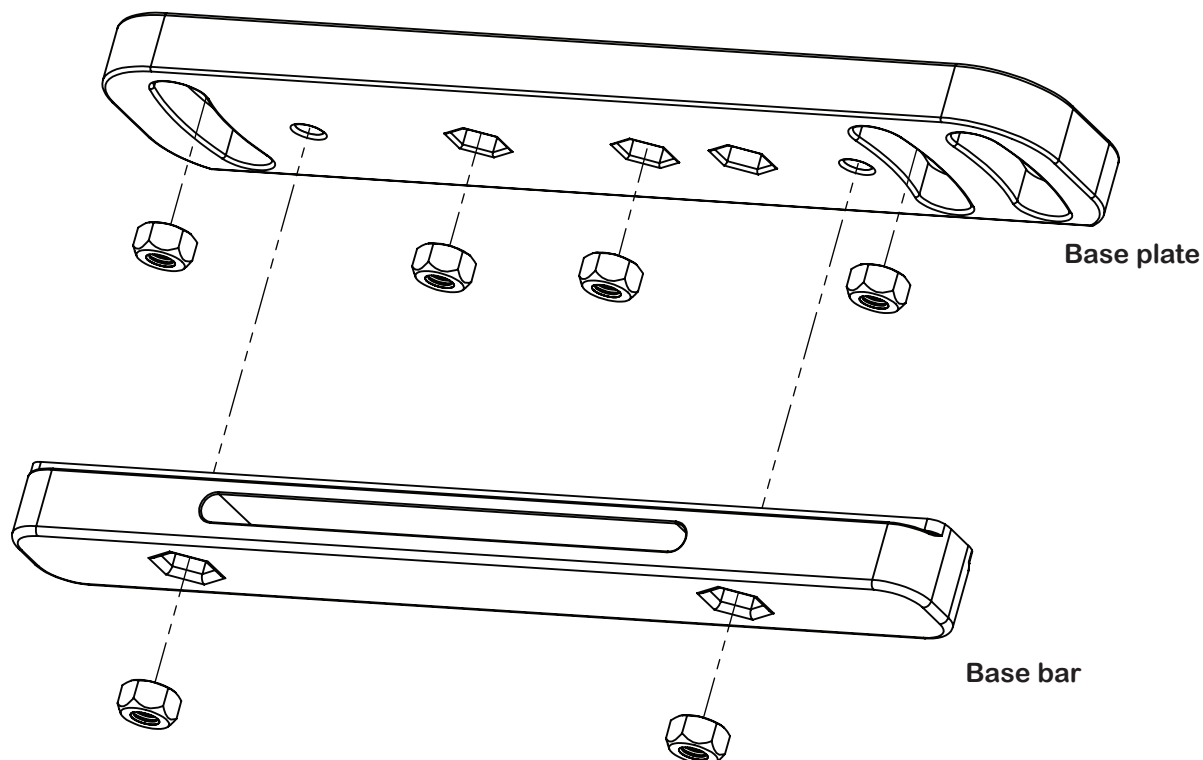
# Competition shooter

## Field Target Butt Hook



# Assembly Instructions

# Step 1



## Required components :

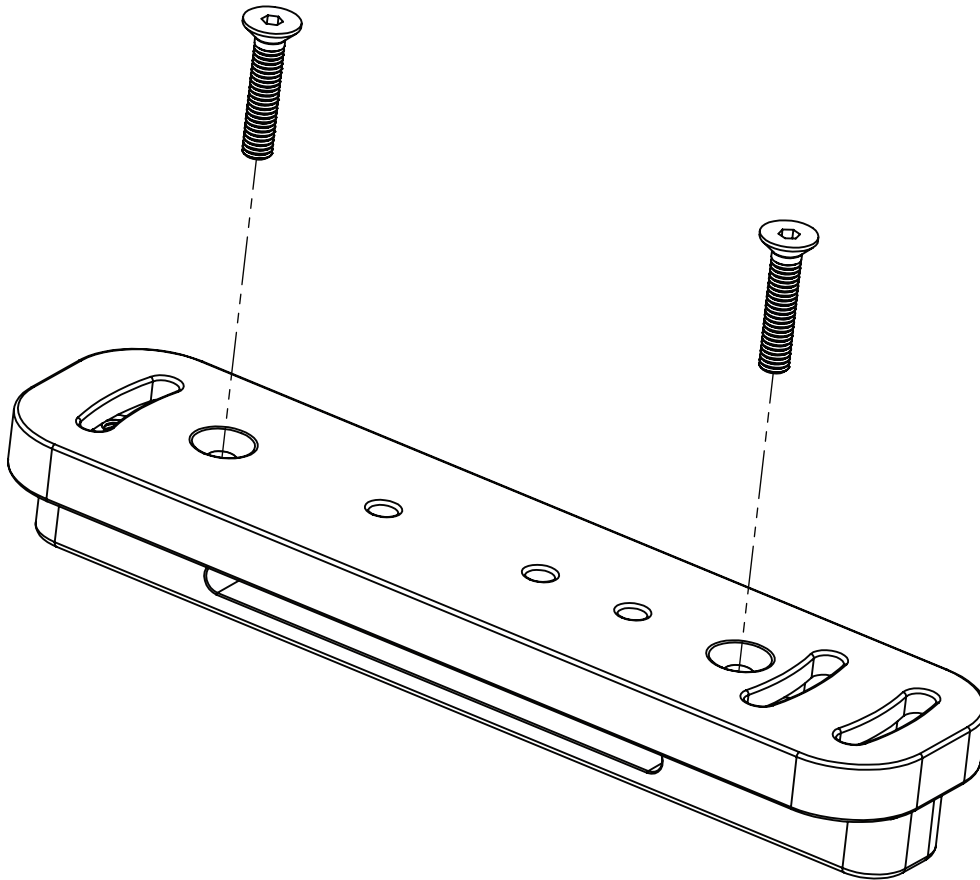
- 6 x M4 Aerotight nuts
- 1 x Base bar
- 1 x Base plate

## Instructions

Gently insert the 6 aerotight nuts into the recesses in the base bar and base plate. The bottom of the base plate contains an optional adjustment slot to allow you to increase the distance between the two sections of the shoulder pad. For most people the holes and slots illustrated above will be sufficient.

When locating the aerotight nuts in the two adjustment slots, it will aid assembly if you secure the nuts in place by temporarily fitting an M4 screw to keep them in place.

## Step 2



### Required components :

- 2 x M4 countersunk 20mm socket screws
- 1 x Base bar (with aerotight nuts fitted in previous step)
- 1 x Base plate (with aerotight nuts fitted in previous step)

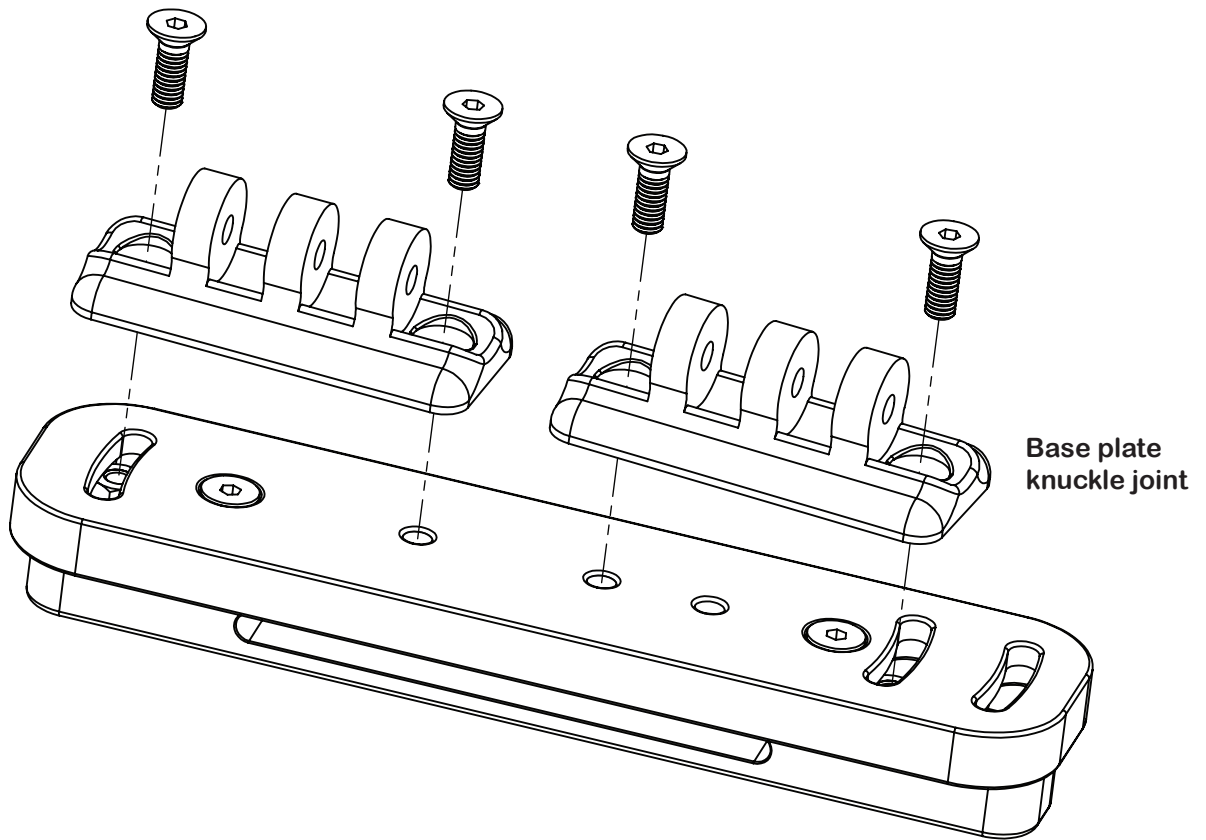
### Instructions

Align the countersunk holes in the top surface of the base plate with the corresponding holes in the base bar.

Note: the base bar has a top and bottom, the base bar when fitted correctly should not protrude beyond the base plate and should cover both adjustment slots at the bottom of the base plate.

If you require more upward adjustment of the hook than downward adjustment, the base bar can be flipped around and reassembled.

## Step 3



### Required components :

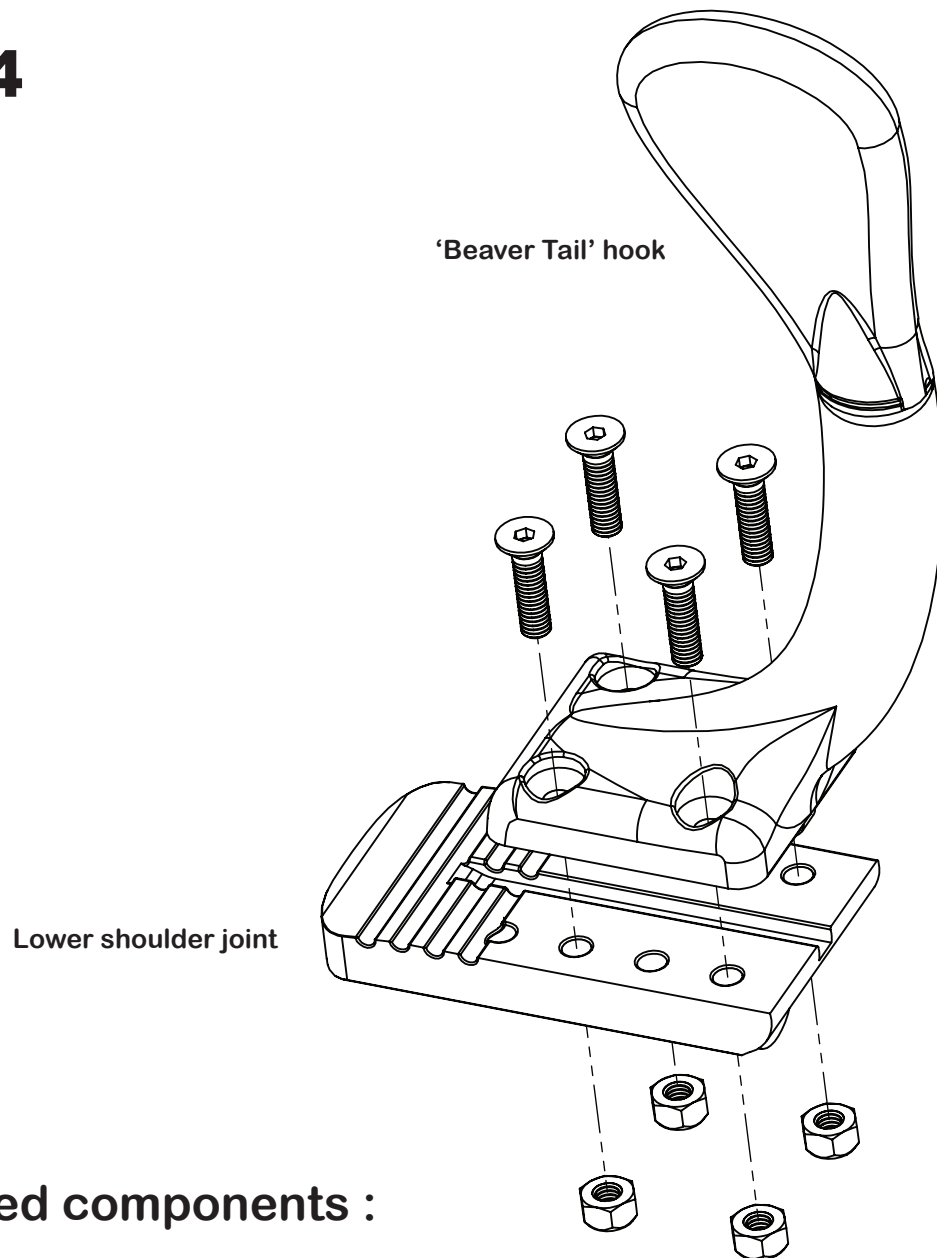
- 4 x M4 countersunk 12mm socket screws
- 2 x Base plate knuckle joints
- 1 x Base bar / Base plate assembly (from step 2)

### Instructions

Align the countersunk holes in the knuckle joints with the aerotight nuts in the base plate (from step 1).

The knuckle joints can be adjusted to an angle that suits your shoulder, but to do this you will need to disassemble the butt hook back to this step.

# Step 4



## Required components :

- 4 x M4 countersunk 16mm socket screws
- 4 x M4 Aerotight nuts
- 1 x 'Beaver Tail' Hook
- 1 x Lower shoulder joint

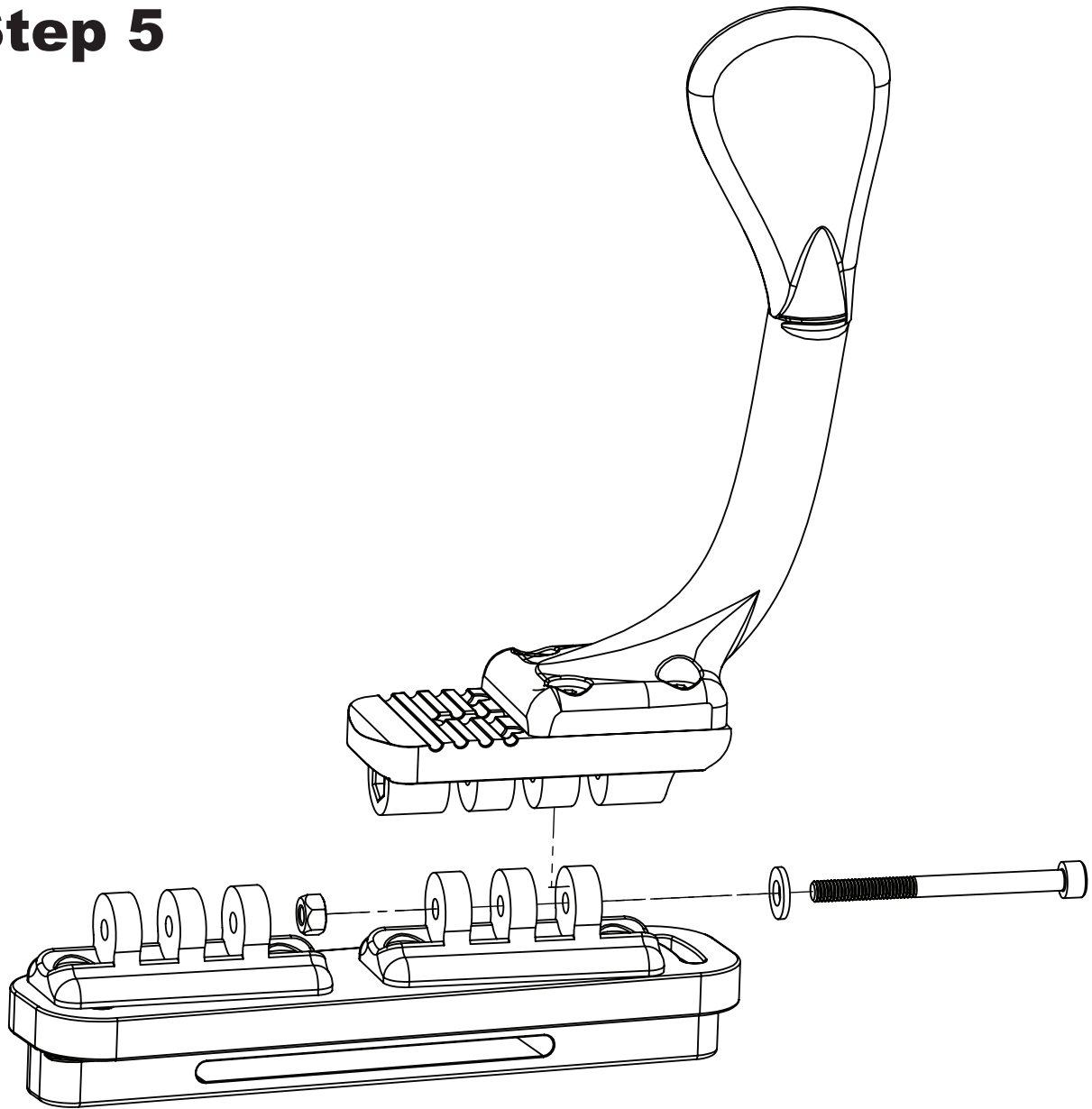
## Instructions

The hook can be fitted in either of two positions to improve the fit of the butt pad.

Align the screw holes and centre locating spline at the base of the hook base plate.

Gently fit the aerotight nuts in the underside of the lower shoulder joint and tighten the screws.

## Step 5



### Required components :

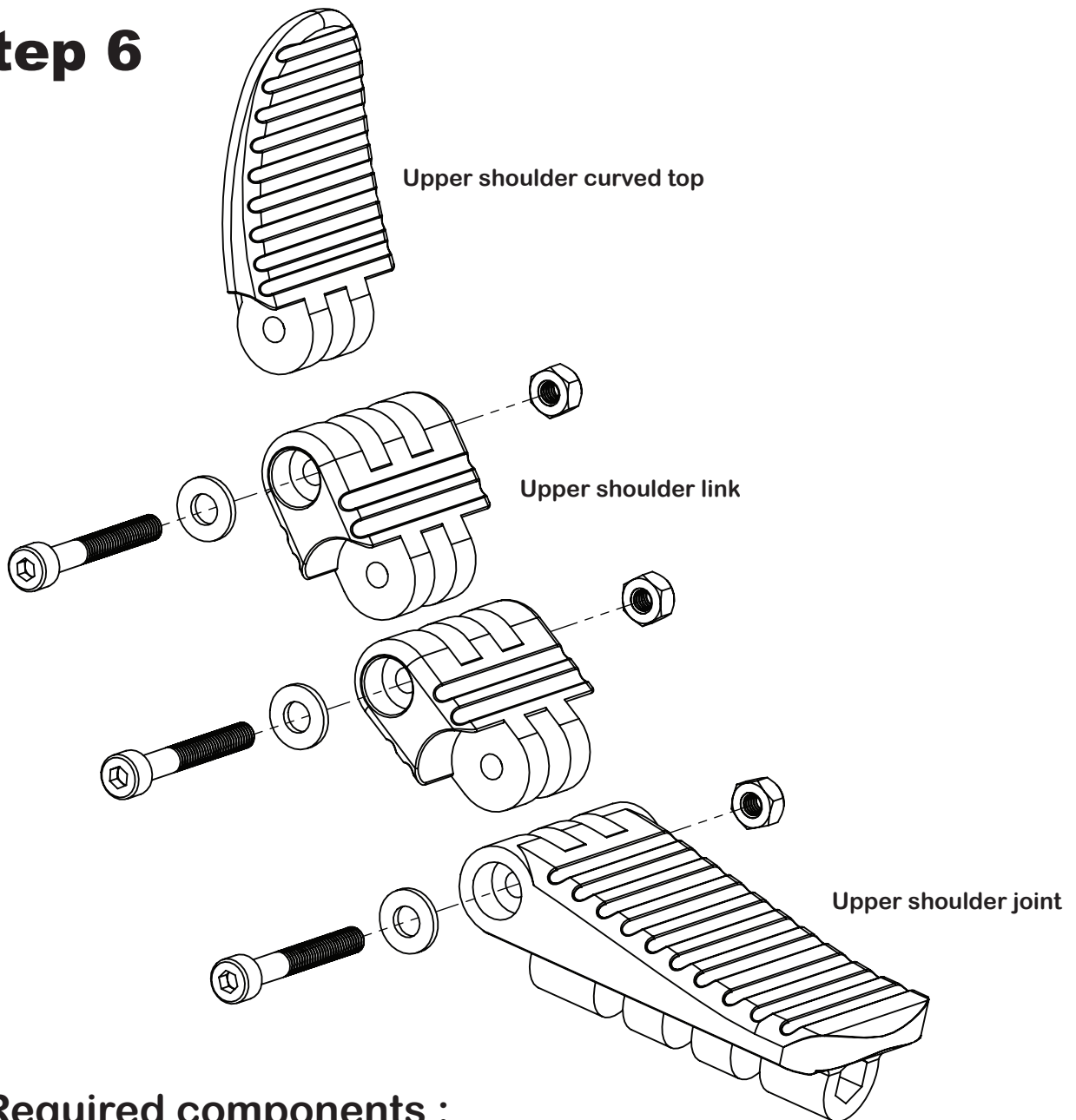
- 1 x M4 50mm socket screw & washer
- 1 x M4 Aerotight nut
- 1 x 'Beaver Tail' Hook / Lower shoulder joint assembly (from step 5)
- 1 x Base plate and knuckle joint assembly (from step 4)

### Instructions

Locate the lower shoulder joint / hook assembly into the lower base plate knuckle joint.

Using a washer, 50mm bolt and aerotight nut, set the desired angle for the lower shoulder assembly and tighten the bolt to lock it in position.

## Step 6



### Required components :

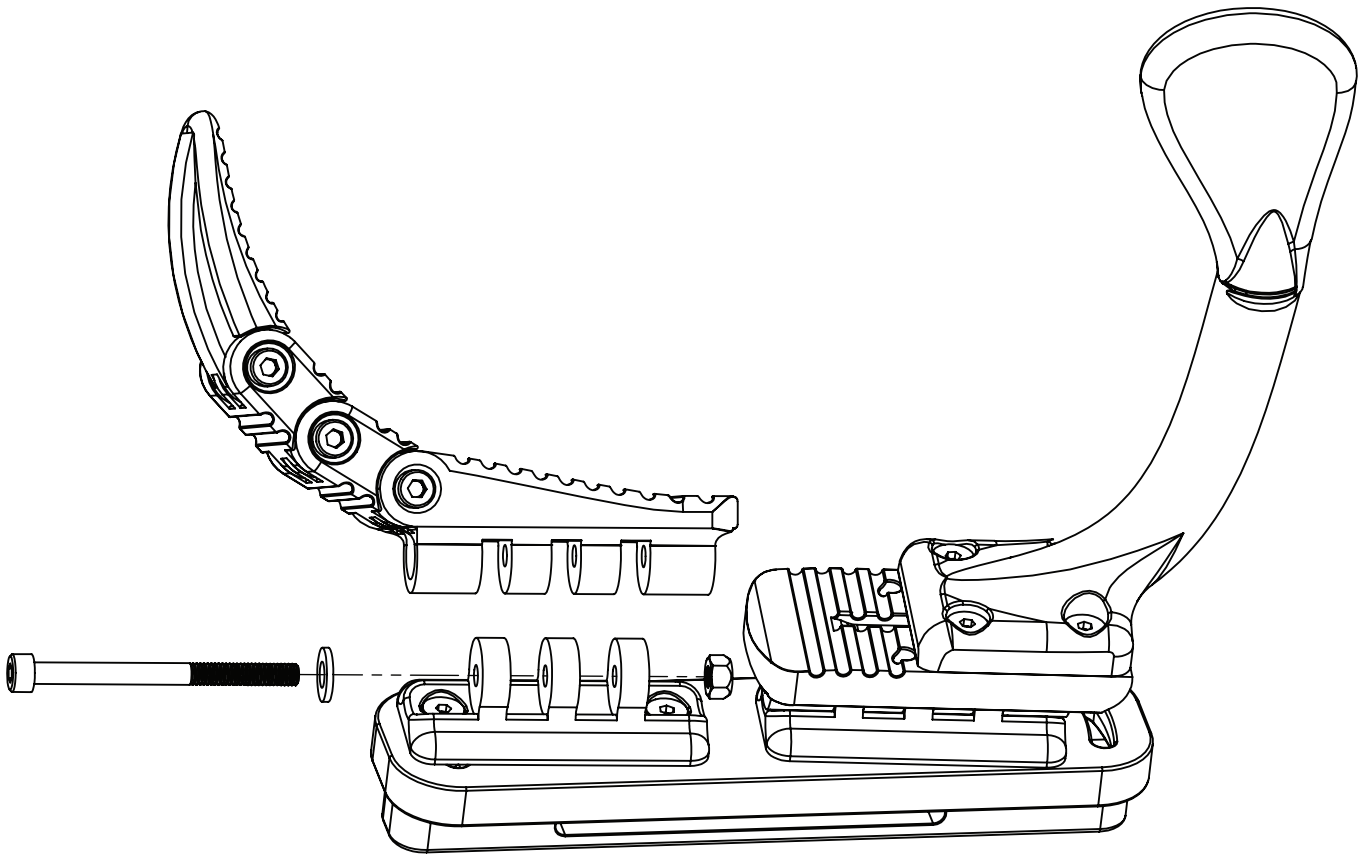
- 3 x M4 30mm socket screws & washers
- 3 x M4 Aerotight nuts
- 1 x Upper shoulder joint
- 2 x Upper shoulder links
- 1 x Upper shoulder curved top

### Instructions

Assemble the parts as illustrated and adjust the angle of the links and curved top part to follow the contours of your shoulder.

The angle of the links can be adjusted to provide a perfect fit for a large or small shoulder. Additional links can also be purchased separately to extend the hook if required.

# Step 7



## Required components :

- 1 x M4 50mm socket screw & washer
- 1 x M4 Aerotight nut
- All the parts from the previous steps

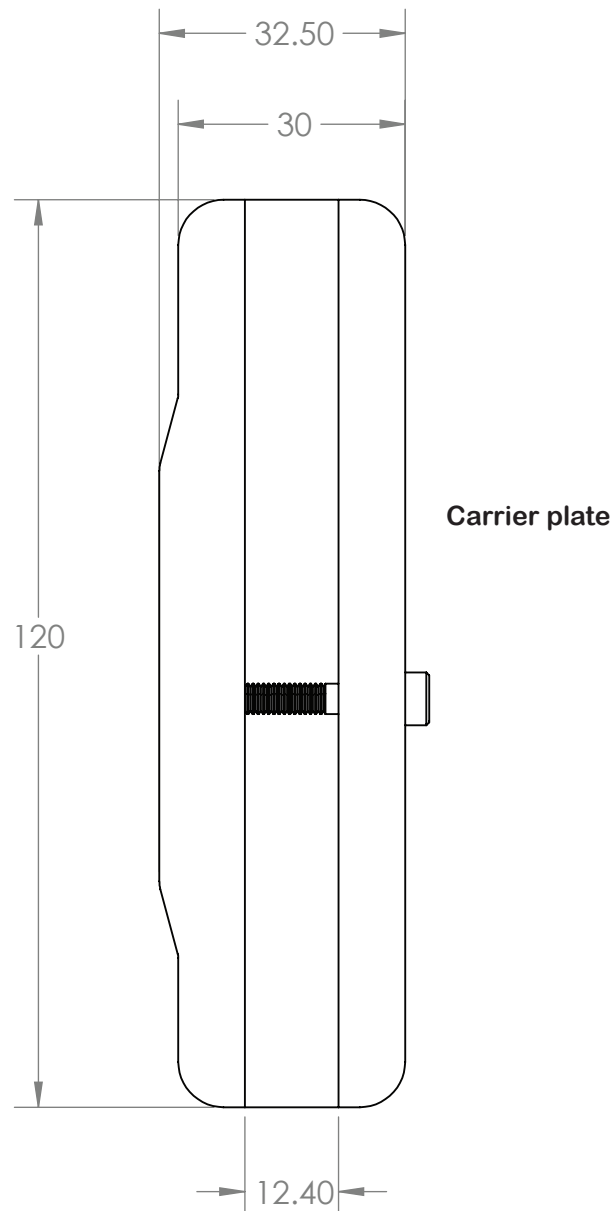
## Instructions

Locate the upper shoulder joint into the upper base plate knuckle joint.

Using a washer, 50mm bolt and aerotight nut, set the desired angle for the upper shoulder assembly and tighten the bolt to lock it in position.



## Step 8



### Attaching the carrier plate to your rifle

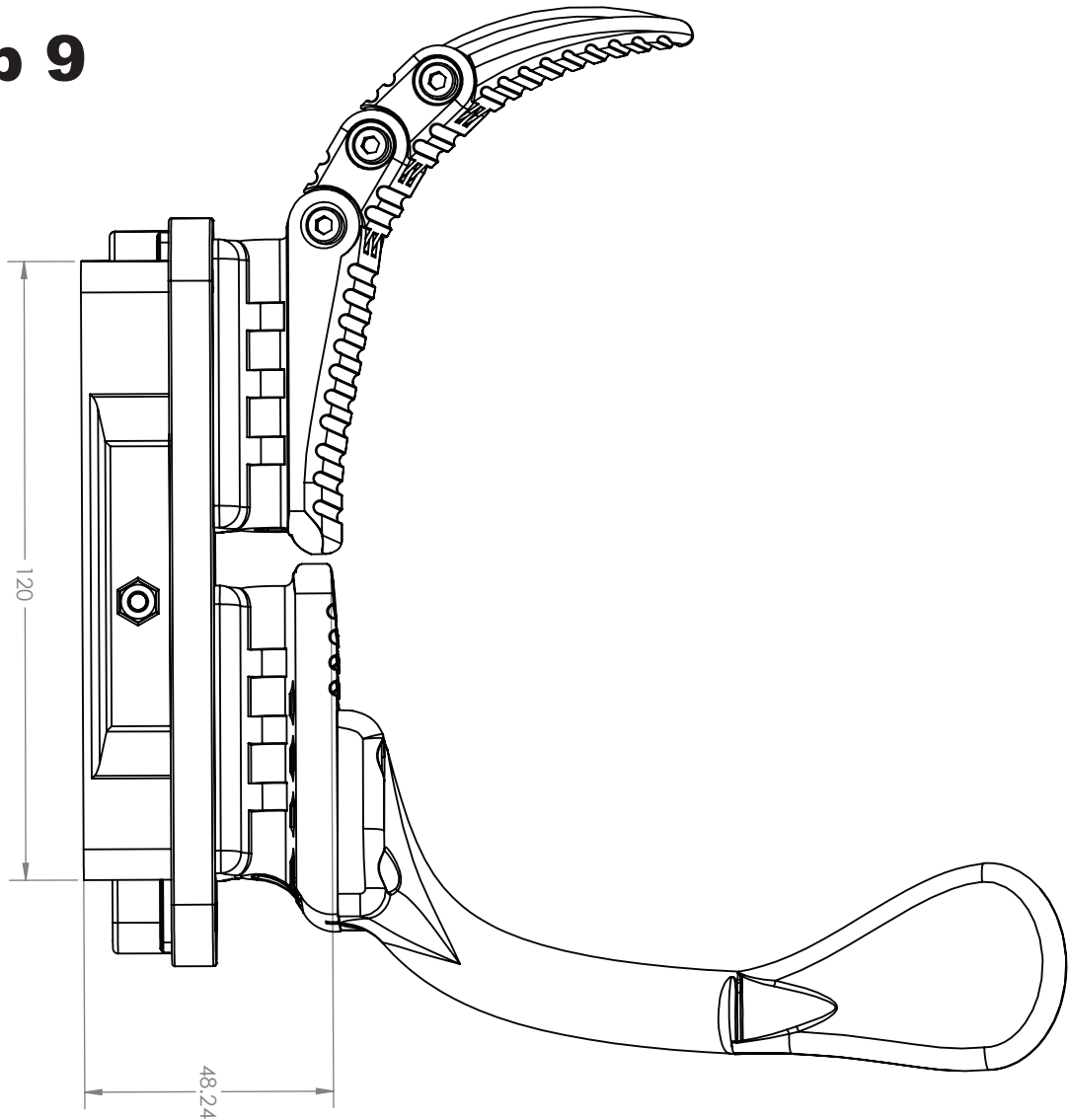
Take note of the correct orientation of the carrier plate, the height adjustment screw should be located on the right hand side of the stock (for a right handed shooter) and the thickened part of the carrier plate should be on the left hand side.

You will need to drill and counter sink holes in the carrier plate to align with the desired location for the screw holes in your stock.

3 screws are recommended to attach the carrier plate to your stock.

**Note:** The screw holes must be countersunk so that the screws do not foul the base bar and allow it to slide up and down freely.

## Step 9



### Fitting the hook and final adjustments

Slide the base bar into the channel in the carrier plate and use a 30mm M4 socket head screw, washer and aerotight nut to set the height adjustment of the hook in your shoulder.

Adjust the links and knuckle joint angles to fit the contours of your shoulder - this may take some experimentation before you get it exactly right.

A knurled thumb screw adjuster is available to purchase as an option to allow you to adjust the height of the butt hook to suit different shooting positions without the need to carry a hex key during a competition.

The butt hook is made from 3D printed Laser Sintered Nylon and should withstand some fairly rough treatment.

Nylon is a tough material, with some natural flex.

All the component parts are available to purchase individually in the unlikely event that any parts break.