## Workshop Tyre Bead Breaker Assembly Instructions.

Contents:

- 16 x M6/20mm Bolts
- 16 x M6 Nuts
- 3 x M10/20mm Allen Bolts
- 2 x M8/60mm Bolts
- 2 x M8 washers
- 2 x M8 Lock Nuts
- 1 x Threaded Bar with Wing Nut + 2 normal Nuts.
- 4 x Support Struts.
- 1 x Lower Ring (larger)
- 1 x Upper Ring (smaller)
- 1 x L shaped Support Beam
- 1 x Main Lever Bar
- 1 x Slider with Thumbscrew
- 1 x Bead Breaking Flange
- 1 x Large Shaft with Retaining pin



Step One:

Using the M6 Bolts and Nuts attach the 4 Metal Support Struts to the Upper Ring (smaller ring with the 4 white plastic protectors on).

Pass the M6 Bolts through the Support Struts then through the Lugs in the Ring. You will use 2 Bolts and Nuts per Strut at this stage.

Only hand tighten these Nuts and Bolts at this stage.

Repeat until All 4 Struts are attached.



Step Two:

Now you can attach the Upper Ring assembly from Step One to the Lower Ring. As above offer the 4 Struts up so they are positioned over the Lugs on the Lower Ring.

Once in position and lined up you can pass the remaining M6 Bolts though and screw on the Nuts on the back.

Only hand-tighten until you have All the Bolts and Nuts fitted.

Once All the Bolts and Nuts are in you can fully tighten All 16 of them including the Upper rings one fitted in Step One.



Step Three:

Next you can attach the L shaped Support Beam. To do this you need the 3 x M10 Allen Bolts. On the Support Beam you will notice 3 threaded pressed in M10 fixings inserted into its base. You will also notice 3 matching support Lugs on the Lower Ring.

Lay the Support Beam on the Lugs so all 3 holes line up with the pressed in fixings. It can only go on one way.

Now you can screw in all 3 Allen Bolts, but only fully tighten once all 3 are fitted.



Step Four:

With the main Framework now finished you can start adding the attachments.

Firstly, add the Large Shaft with Retaining Pin. To do this flip the main assembly over to be the correct way up (Larger Ring on the bottom). Then on the L Shaped Beam you will see a larger hole on the upright section.

Pass the Large Shaft right through this hole, then pop the Retaining Pin on through the small hole on the end of the Shaft.

This Shaft will be used to restrain your first tyre lever, like a third hand.



Step Five:

Next add the Large Threaded Bar with Wing Nut. You will notice at one end there are two large Nuts wound onto the Threaded Bar.

Loosen and remove the first one. Wind further on the second nut so there is sufficient Threaded Bar to pass through the L Shaped Support Beam on its Lower Length.

Pass the Threaded bar through the L Beam and screw back on the Large Nut you just removed. With this done you can now Fully Tighten those 2 Nuts.

This shaft will replicate the Wheels Axle and keep the Wheel central whilst working on the Tyre.

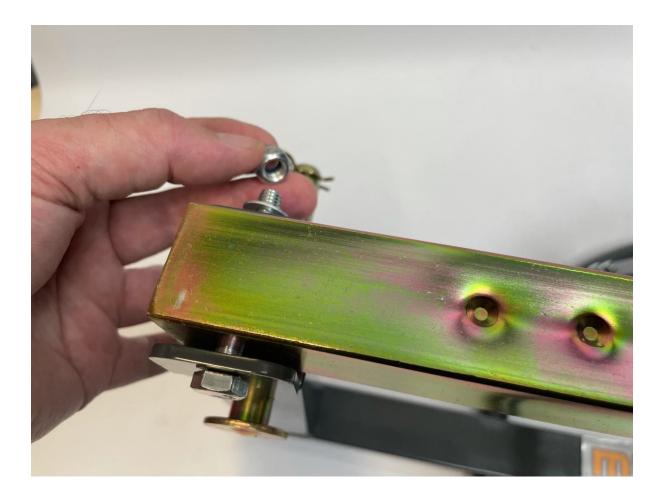


Step Six:

Now you can attach the Main Lever Bar. To do this you will use 1 of the M8x60 Bolts with Washer and Lock Nut.

Offer the Lever Bar up to the L Shaped Beams top mounting holes. You will notice the hole passing through the Lever Bar is NOT central. The hole in the Lever Bar needs to be in lowest possible orientation. This will allow the Lever Bar to fully Pivot.

So, with the above understood pass the Bolt through the L Beam, then through the Lever Bar and out the other side. You can then place the Washer on and wind the Lock Nut on. You can Fully Tighten the Nut at this point. Consider Fully tightened to be when the Washer cannot move independently.



Step Seven:

Now you can assemble the Box Shaped Slider with the Flanged Bead Breaker Edge. To do this use the remaining M8x60 Bolt with Washer and Lock Nut.

Place the Tubular section of the Bead Breaker Edge into the lower Lugs of the Box Shaped Slider. Line up the holes with the tube.

Now you can pass the M8x60 Bolt through the assembly. Next add the Washer and Lock Nut. Again, Fully Tighten until the Washer is no longer able to move freely.



Step Eight:

The final step. Loosen the Thumb Screw on the Box Shaped Slider. Then slide the Slider over the Main Lever Bar. NOTE: The Breaker Edge is curved to match the curve of the Tyre, ensure you slide it on in the correct orientation.

Position it all the way down until it is on the Box shaped area of the Lever Arm.

You will notice the Lever Arm has several indentations along its length. These are for the Thumbscrew to screw in to and locate firmly in position.

You use these indentations to align the Breaker edge with your Tyre.



The Assembly is now complete and will resemble the picture below.

