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Alfa Romeo 8C 2800 wire wheel upgrade set for Italeri 1/12th kit

Thanks for purchasing unobtainium's very first commercial product, hopefully the first of many.



To assemble these wire wheels, you will need:

- Good quality side cutters
- Good quality tweezers
- Razor saw
- Modelling knife
- Sanding board or sandpaper on flat surface
- Magnifier
- Ultra-thin CA

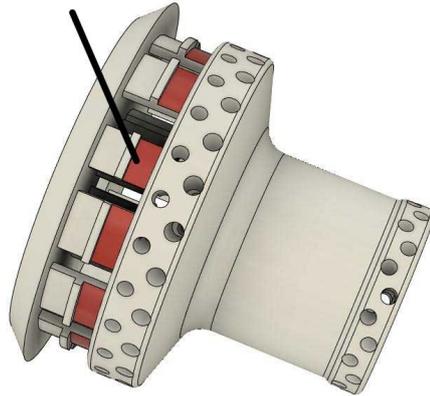
Familiarise yourself with the components, you should have 4 Rims and Jigs (combined as 1 part each)
4 hubs, 4 knock offs, 4 push tools and 8 rows of spoke nipple sets plus 2 sets of valves.

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IMPORTANT – DO NOT remove the RIM from its base yet, this is the jig to build the wheel and is only removed after adding all the spokes as a final step.

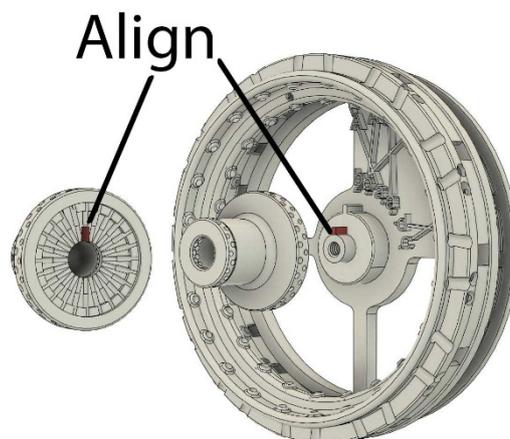
Start by cutting the hub free from its base along this line.

Cut here



Sand the rear face flat, removing all the rectangular print bearers shown in red.

You will see that there is a keyway on rear of the hub, so align this with the key in the centre of the rim jig. This should be a snug fit and remain in place **DO NOT GLUE THIS**



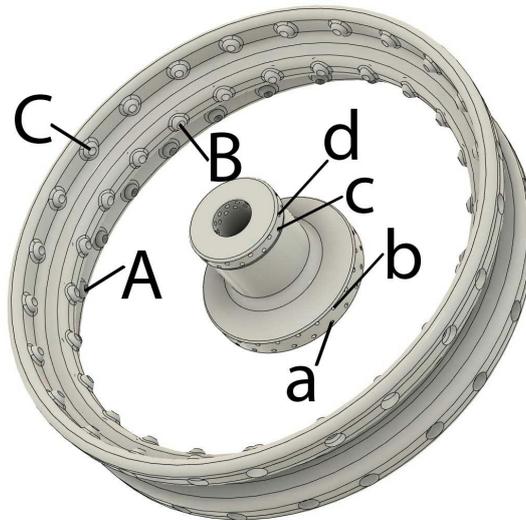
Next prepare the spokes, in bunches of 4 cut all the wire into roughly 20mm lengths.

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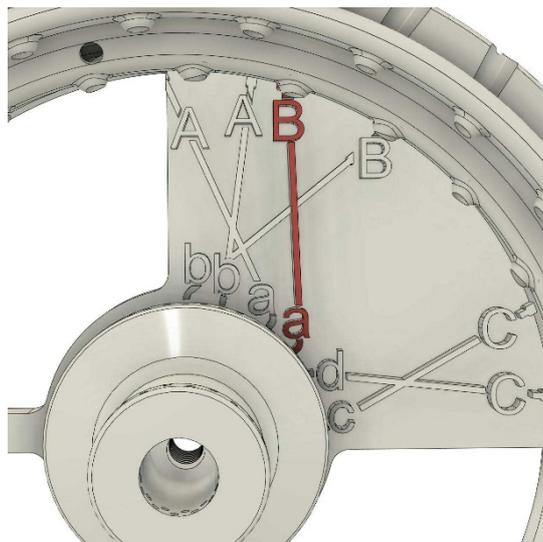
There are 6 different spoke shapes, and you will need 12 of each per wheel.

5 of the 6 sets require a bend of about 45° at 2-3mm from one end. This angle is not critical, and you will see the angle each spoke should be bent to as you insert them. It's better if this angle isn't perfect actually, as it provides a small amount of spring tension to hold the spoke in the hub without adhesive during construction if it's slightly out. Just adjust the bend so the spoke doesn't flex and runs straight after you insert it in the hub.

The hub and rim holes are organised as follows, the hub is lowercase **a** through **d** starting at the back and the rim is Uppercase **A** through **C** starting at the back.

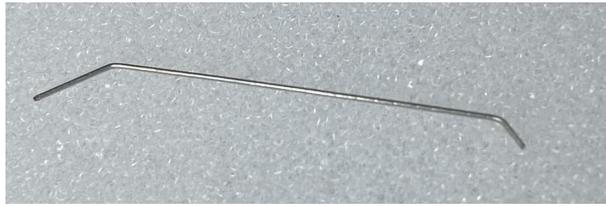


We are going to start with the **a-B** spokes, so locate this on the jig,

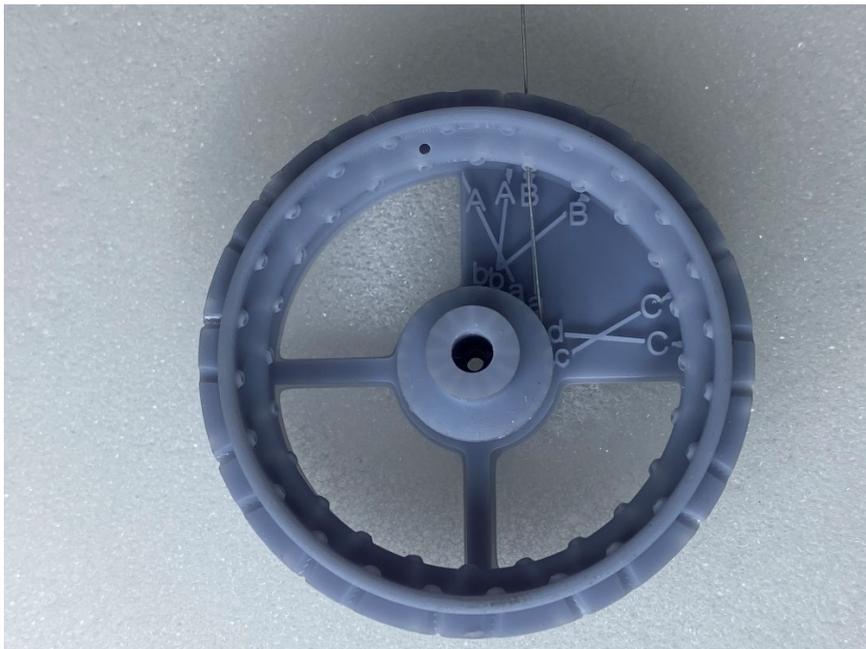


For the spokes going to the centre of the rim, they are easier to thread if you put a small bend in the other end, so they angle outward, toward you as you thread them.

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From inside the rim, and using the visual guide printed on the jig, thread into the first **B** hole, use the slight bend to aid threading, ensure it exits through the round hole in the rim. Then Thread the other end in the **a** row of the hub.



For the next spoke, skip a hole on BOTH the hub and the rim, so if you started at a1-B1, then it's a3-B3, a5-B5 etc.



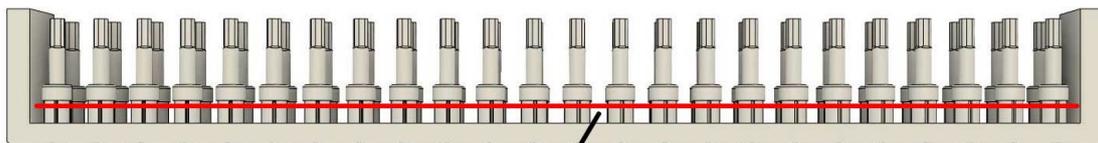
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Continue until you have laced 12 spokes. It should look like this at this point, with every other hole in hub row a empty.



At this stage, lock in the first row of spokes by adding the nipples. I know. I didn't call them that, what can you do?

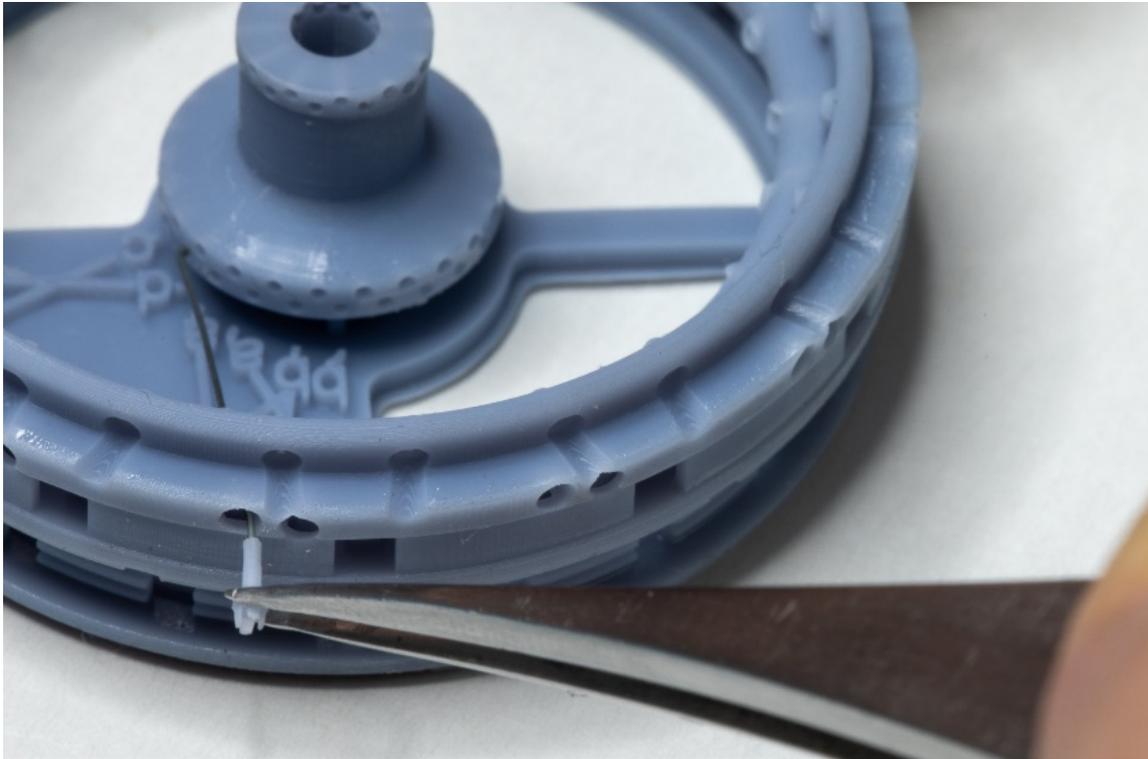
Just cut about 12 (plus a few spares, there are plenty extra) at this stage so as not to lose them.



Cut here

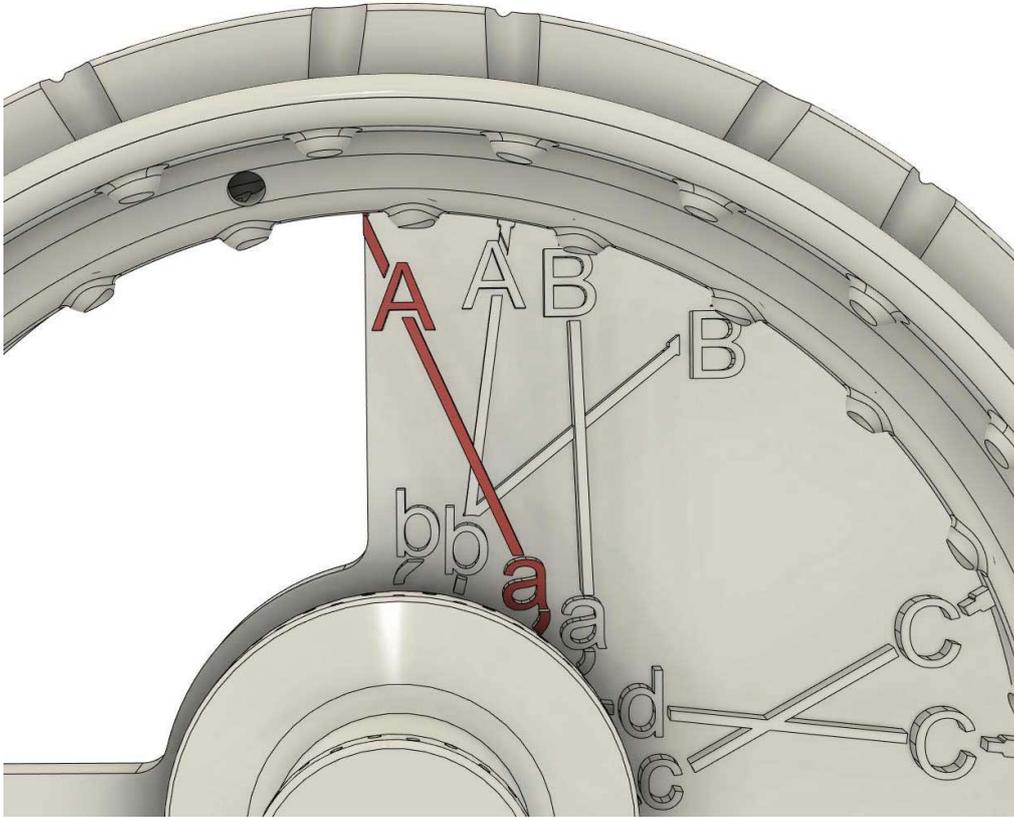
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Thread a nipple onto each spoke from outside the rim, use the magnifier, push tool or tweezer tips for this on the counter-sunk holes on the centre row of the rim. This can be tricky until you get the hang of it, if necessary, very slightly flex the spoke so the end of the nipple can exit the hole in the rim smoothly. You will find there is a knack to this and gets easier as you progress!



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Next, we will be lacing **a-A**, this is the back row of the rim and the remaining back row of the hub that you left every other hole empty in the last step.



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Continue as before, you should get to here



This completes the back row, **a**, of the hub. Add the nipples as before

Next we will thread **b-B** using the guide on the jig and the same techniques as before ie use every other hole on row **b** of the hub, again add the nipples.



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You should end up here



Spokes **b-A** don't require bending at all, use the now familiar technique to insert these. Note they go in front of **a-A** spokes and behind the rest, they will naturally fit if you are correct at this point!



Add the rest of the **b-A** spokes and add the nipples as before. As there is now no risk of clogging the holes **ab** of the hub, double check every spoke is inserted correctly and fully, then a run a very small amount of ultra-thin CA around the **ab** rows of the hub to lock the spokes in position.

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Moving on to row **c** and **d** of the hub, the procedure is the same, ie use the guide on the jig, EXCEPT you fill EVERY hole in row **c** and **d** not every other, you do however skip every other hole in the rim **C** as before.

Add the nipples as before and you should end up with this



At this stage, lock off rows **c** and **d** of the hub with ultra thin CA as before, checking everything is fully inserted first.

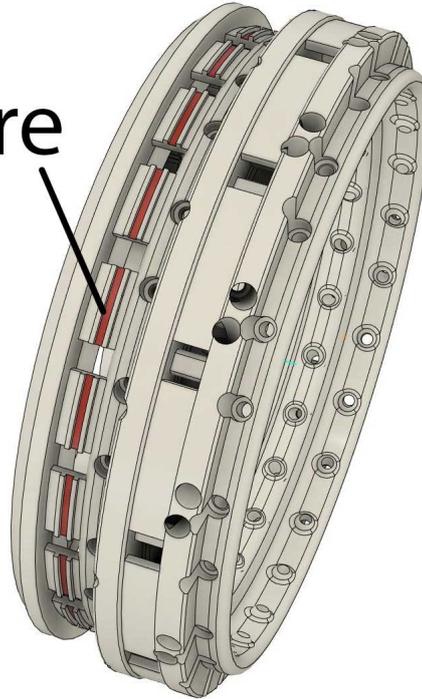
Now is the time to straighten any kinks in the spokes and make sure everything is running straight. If so, put a blob of medium CA on each nipple outer surface to fully lock the wheel. A cocktail stick is good for this job.



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It's now time to release the wheel from the jig. Take care to handle the wheel by the rim and do not bend or compress the spokes. You will see there is a cutting guide formed of two ridges on the edge of wheel jig, this is where to cut.

Cut here



Carefully, using a razor saw cut through each attachment point.



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The stubs you are left with can be removed with a knife or sharp side cutters



Finally sand the rear face smooth



You've got three more to make now - enjoy 😊

You may need to clear the hole in the hub with a round file if some of your spokes over-extend into it.

centre knock offs and tyre valves are also included in the set, there is a pre-printed hole in the rim for the valve, so don't drill another one!

I recommend priming with Tamiya fine surface primer or similar with at least two very fine coats. Paint the colour of your choice, with very thinned, multiple coats to preserve the detail