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all you need to spin your dreams...

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Welcome to the Majacraft family

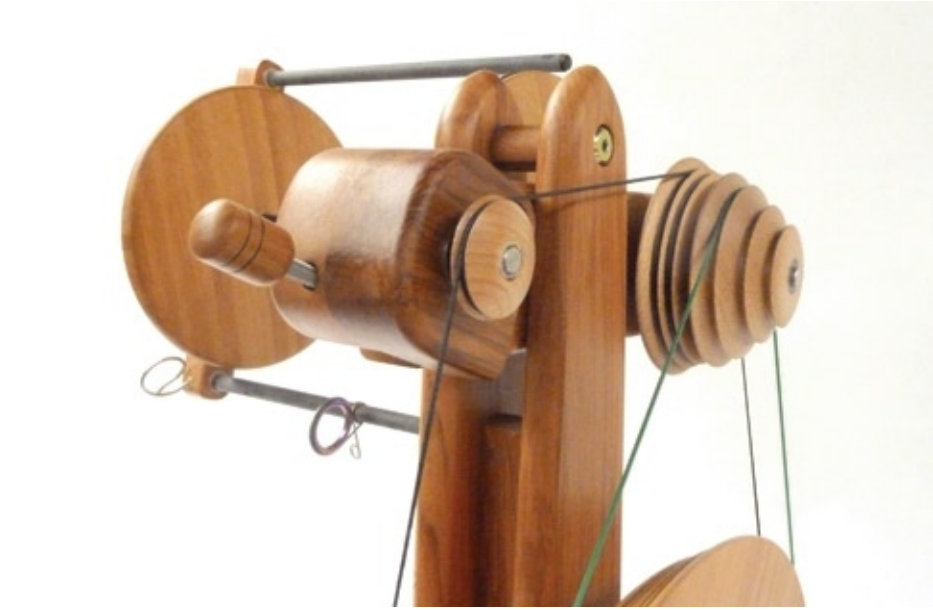
Congratulations on purchasing your new Majacraft Overdrive spinning head.

The Overdrive head is based on the double drive design of the Aura spinning wheel. The primary difference is in the size of the bobbin. The regular Majacraft Jumbo bobbin holds approximately one litre volume of yarn (1 and 2/3 pints) whereas the Overdrive bobbin holds 5 litres - over a gallon!

It will fit on all Majacraft castle style wheels* so if you have a Majacraft wheel, you already have the foundation of a production style spinning wheel. The double drive means that the spinning is still light and responsive even with a full bobbin.

We hope you enjoy your Overdrive spinning head and can't wait to see what you can create.

From the team at Majacraft, Good spinning!



Important notes

The Overdrive head with a full bobbin of yarn can be quite hefty. For this reason, you need to keep the handle and head of your spinning wheel in the vertical balanced position. Tilting the handle right over with a large weight on it and then expecting the wheel or the handle not to fall over is unrealistic.

If you are having trouble tightening the handle nut firmly enough, a light smear of vaseline or petroleum jelly on the thread of the drive wheel axle where the handle nut screws on will let you tighten the handle as desired.

* excluding the Little Gem and Pioneer

Installing the Overdrive head

On the Aura

Installing your Overdrive head is very simple on the Aura. The process is identical to installing the standard Aura head. A special low profile M6 countersunk screw and shouldered washer have been included in your Overdrive kit.

Start by removing your existing Aura spinning head. Use the 4mm Allen T-wrench to unscrew the JCB bolt that secures the head to the handle. Make sure you hold the head so it does not drop off as the screw is removed. Once free, place the original head carefully to one side.

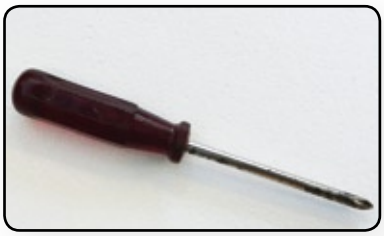
Now place the Overdrive spinning head behind the upright with the flyer shaft facing to the front and the white nylon guides on the head located inside the handle slot. The Overdrive head is directional so when you are sitting in the spinning position in front of the wheel, the flyer shaft will be on the left hand side. Slide the countersunk screw through the shouldered washer and then through the slot in the handle and tighten it carefully.

The Overdrive head can be raised or lowered to suit the tensioning of the drive belts and the height you wish to spin at. The recommended approximate position is the countersunk screw positioned half way up the slot. Read the instructions on “Setting the head position” before finally tightening the screw.

On the Rose/Suzie/Suzie Professional

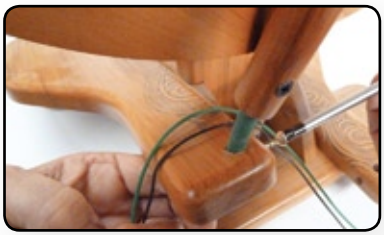
Installing the Overdrive head on the Rose/Suzie wheels requires a little more work. The black bobbin drive band is going to need to be put on which will require unscrewing the conrods from the pedals.

Bobbin drive band



You will require a posidrive/Phillips screwdriver and the black bobbin drive belt

Using the posidrive screwdriver, start by unscrewing the gold 25mm (1”) screw in the side of the pedal that secures the green joiner to the pedal. It does not matter if you choose the left or right pedal. The screw only needs to be unscrewed sufficiently to slide the green joiner out.



Siip the joiner out of the pedal and then lay the black bobbin drive band on the top of the pedal. Put the green joiner back into the hole in the pedal making sure that the conrod goes through the inside of the drive band loop.

Push the green joiner through the hole in the pedal. It should protrude through the bottom of the pedal about 1mm-2mm. Check the alignment of the rod end in the crank assembly. The instructions for crank alignment are in your wheel assembly manual (if you cannot find it then download it from the Majacraft web site). When the rod end is aligned correctly, screw the 25mm screw back into place. The screw should only be tightened until the head just touches the side of the pedal. DO NOT OVERTIGHTEN!

Repeat the process described above for the remaining conrod. When this is complete, the bobbin drive band will be looped around the conrods as shown in the image to the right.

Overdrive head into the handle

Use the 4mm T wrench to unscrew the M6 60mm bolt holding the existing head in place. Take care not to lose the wooden spacer. Slide the head up and out and place it carefully to one side..

With your new Overdrive head, slide it down into the handle. It is directional so if you are sitting down at the wheel, the flyer shaft will go on the left hand side. Push the JCB bolt in a little way through the hole in the top of the handle. Align the wooden spacer tube in the handle so the bolt will can be pushed through the centre.

Screw the JCB bolt into place without tightening it fully. Read the instructions on “Setting the head position” before finally tightening the JCB bolt.

Because the Suzie and Rose do not have the specialised groove for the bobbin drive band like the Aura, we need to improvise. To put the bobbin drive band on, you will need to put it on through the black groove of the bobbin drive pulley and idler pulley on the head. On the drive wheel, use the smallest diameter groove.

The green drive band goes through one of the grooves on the flyer drive pulley and the remaining grooves on the drive wheel.

Modifications for early Roses and Suzies

Earlier Roses (and the Alpaca wheel) have a coach bolt at the top of the handle and a large wooden nut to clamp the head in place. This nut will interfere with the bobbin drive band of the Overdrive head.

If you have an older Rose then an M8 dome nut will be included in your kit. You will need to replace the wooden nut on your handle with this dome nut.

Plan to replace this nut when you are putting the Overdrive head into the handle.

The instructions for removing your existing head are similar to those for described in the “Overdrive head into the handle” section. The only difference will be the requirement to unscrew the wooden nut and tap the coach bolt out of the handle. Put your wooden nut safely in storage once it is removed.

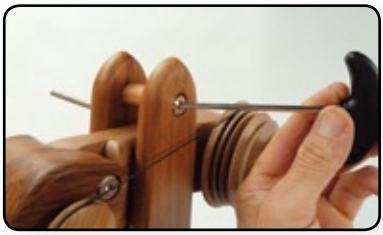
When you are ready to retighten the head in the handle. Use the M8 dome nut with a 13mm ring spanner or adjustable spanner to tighten it.

Once the head is in place and secured, the black bobbin drive band will clear the nut and allow the Overdrive to work properly.

Setting the head position

Remove the green Flyer Drive belt if it is on. It is assumed that the Bobbin Drive band is on. The black band can be in either groove of the bobbin drive pulley

Turn the tension adjust knob at the side of the spinning head Adjust Block until it is at the mid-point of its movement. The extremes being the adjuster screw right in (Adjust Block fully open) and the Adjust Block sitting hard against the spinning head (fully closed)

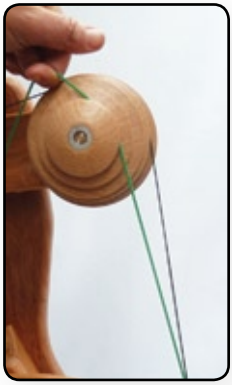


Slightly loosen the JCB bolt that secures the head to the handle using your 4mm allen T wrench. (this applies to the Aura and post 2012 Roses and Suzies). Otherwise loosen the 13mm dome nut.

Now slide the head (up or down until the Bobbin Drive band is firm but not too tight. When the head is tightened, it can sometimes straighten up and put more tension on the Bobbin Drive band (particularly on the Aura. This is why it is not necessary to make the bobbin drive super tight.

Now tighten the bolt holding the head on.

The Bobbin drive band should be quite tight now. You can screw the tension adjust knob out a bit to release the tension. When set like this, when the Adjust Block is fully closed, the Bobbin Drive belt should be quite loose which equates to lots of slip on the Bobbin Drive (0% drive). When the adjuster screw is tightened to about half way through its movement, the Bobbin Drive belt should be quite tight which equates to 100% drive on the bobbin



Replace the green Flyer Drive belt on to the groove that is most suitable for your purpose.

Now you can turn the tension adjust knob inward or outward to create the strength of pull that you require.

Flyer and bobbin

If you look at the Overdrive bobbin end that has the blackened tension groove, you will notice two small holes near the flyer shaft hole. These holes are to locate on the drive pins embedded in the Aura drive system on the head. This end of the bobbin must go on the flyer shaft first and the holes align with the pins in the drive system.

If you have some petroleum jelly or vaseline, rub a small smear onto the flyer shaft. This has already been done at the factory so is not essential. Now slide the bobbin on.

At this point screw the flyer on to the flyer shaft. It may help to hold the pulley with your left hand and tighten the flyer with your right (assuming you are right handed). It may also be treadled on by holding the flyer in one hand and treadling the wheel in an anticlockwise direction. Secure the flyer fully by holding the flyer drive pulley with one hand and giving the flyer one last small tighten with the other.

Using the tension adjustment

Description of Overdrive tensioning

How to use the tensioning system on your Overdrive head.

Because this wheel has a different tensioning system with a huge number of options, it requires a rethink about how to tension for spinning. There are two words that will help it all make sense: Strength and Speed.

Strength refers to the “Strength of the Pull”

Speed refers to the “Speed of the Pull”

Strength

The Strength of the Pull is determined by the tension adjust knob on the side of the head. If the tension adjust is screwed right out and the Bobbin Drive band is loose, the pull is very weak. If the tension adjust is screwed in and the bobbin drive band is tight, the pull is very strong and quite simply ‘there ain’t no way you are going to stop it’.

A **strong pull** is needed when making a yarn that is very shaggy (boa-like tailspun), has big add-in’s or any other high-drag texture. The strong pull will tug these elements around corners and through guides so you don’t need to hand-wind the bobbin. At the same time, if your speed is slow, it allows you to get enough twist to keep it all together. A strong pull will also produce a very even amount of twist because it is not possible to ‘hold it back’ to introduce more twist without potentially breaking the yarn.

A **weak pull** is good for yarns or sections in your yarn when there is very little texture to give resistance or drag. It is also best for if you want to introduce more twist to your yarn or if you are trying to spin a very fine yarn.

Speed

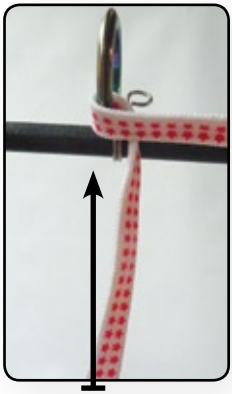
The Speed of the Pull is determined by the difference in size between the groove the Bobbin Drive band is in and the groove the Flyer Drive band is in. If they are very similar size then the yarn will pull in slowly. If they are very different then the yarn will pull in fast. The final element is how full the bobbin is, a full bobbin will pull yarn in much faster than an empty bobbin. As you spin you may need to screw the tension screw out a little to stop the yarn pulling in at the speed it is capable of.

From here you can think about what you would like to achieve as the Overdrive head will allow you to produce similar effects in different ways.

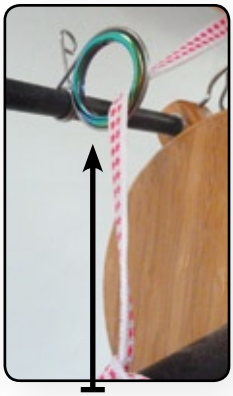
A **fast pull** is handy when making extreme novelty yarns that need little twist or have sections that don’t, or when spinning long fibres that may not need a lot of twist, such as silk.

A **slow pull** comes in handy when “building a yarn”, such as when you stop, add things in, or create a specific effect in an isolated spot and you need time to do it without the yarn getting yanked out of your hand. Slow pull is also good for light and fluffy yarns such as mohair or boucle where you want to spin slow and create textures as well as add twist. Lace-weight yarns require a slow pull too (also a weak pull so that lots of twist can be added)..

How to thread the Overdrive flyer



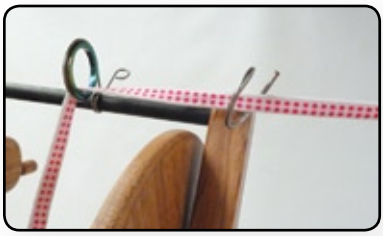
INCORRECT



CORRECT

Pass the yarn through the ceramic ring of the large flyer hook on the flyer arm. The yarn goes in the ring from the flyer head side and out toward the orifice end of the flyer.

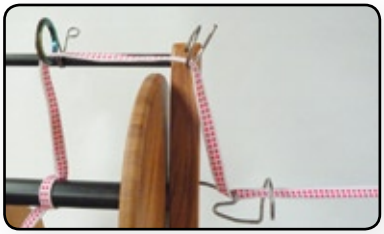
Thread the yarn through the ring on the end of the flyer bar. You can either push it straight through the ring or alternatively slip it through the pigtail.



If you are spinning fine yarn then take the yarn over the orifice close to the flyer bar, so it sits in the 'V' (delta) shaped angle, underneath, up between the 'V'. The delta is designed to hold the yarn still when spinning finer yarns.

Now you can thread the yarn through the large halo ring.

If you are spinning a very large yarn then bypass the delta and go straight through the halo.



And now the Overdrive flyer has been threaded

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Accessories

More bobbins! If you need extra Overdrive bobbins then they are available by ordering from your dealer.

We offer a tensioned lazy kate for Overdrive bobbins. It holds two bobbins and has a special rod with sliding flyer hooks to help the yarn flow off the bobbins easily when plying.

Final notes

Majacraft projects are invariably collaborative efforts. They involve input from one or many people during the development process. Suzy Brown (Woolwench) has provided a lot of the ... impetus!... necessary to propel the Overdrive head into production so thank you Suzy for your motivation and valuable feedback!

It would not have been possible of course without the help and support of everyone at Majacraft so thanks to the team also - Owen Glynis, Rob, Lance and Andrea.

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DEALER

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Notes