

Robert Sorby
SHEFFIELD ENGLAND



PATRIOT woodturning chuck

Proudly designed and
manufactured in
Sheffield, England

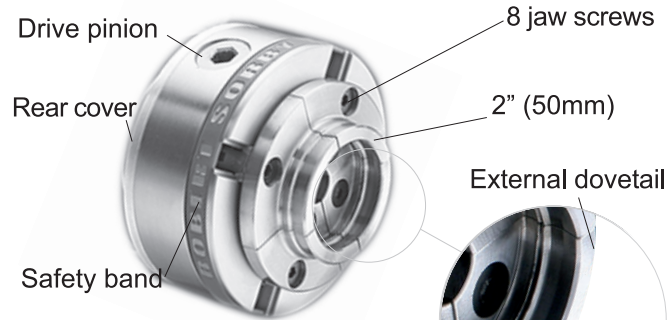
The Robert Sorby Patriot lathe chuck has been designed after listening to what woodturners want from a woodturning chuck.

It has a smooth 1" (25mm) of movement in expansion and contraction, built-in safety features including the unique silicon band. All jaws have an internal and external dovetail and extra gripper teeth. It is lightweight and compact but capable of coping with any project.

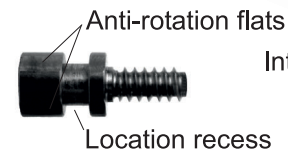
Together with an extensive range of optional jaws and accessories the Patriot chuck allows the woodturner to produce all his favourite projects.

Contents

Patriot woodturning chuck



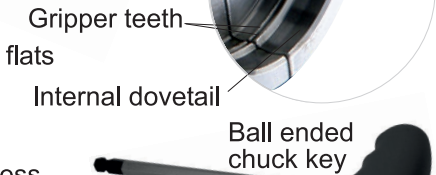
Wood screw



Insert retention screw



Hexagonal keys



Insert spanner



Lathe spindle thread adaptor options

Chuck insert



Chuck exert



Please note: The Robert Sorby Compatriot is a body only version of the chuck and does not contain the same contents as the Patriot.

Details of contents

Safety band

This unique feature is made from silicon rubber and is design to protect from any injury caused by accidental contact with the outer edge of the rotating chuck.

Rear cover

An aluminium back plate to ensure the main gearing of the Patriot chuck is kept dust free.

Easy access inside the chuck for maintenance and servicing.

2" (50mm) Jaws

Standard jaws fitted with internal and external dovetail. Gripper teeth for additional holding of awkward pieces of wood.

Wood screw

A very positive self-threading wood screw. The body has anti-rotation flats and a location recess to guarantee a positive hold in the chuck jaws.

Chuck key

Large moulded handle for a positive grip. Ball ended for easy access around large projects.

Hexagonal keys

The 4mm key is for use on the jaw screws. The 3mm key is for the insert retention screw.

Lathe spindle thread adaptor options

When purchasing a Patriot chuck you will require a lathe spindle thread adaptor which is available as a Chuck insert or Chuck exert.

A range of inserts with internal threads to suit most woodturning lathes are available up to a spindle thread size of 1 1/4".

These are screwed into the body of the chuck and held in place by the insert retention screw.

Inserts can be interchanged when upgrading lathes. If your lathe is over 1 1/4" you have two options in either 1 1/2" x 6 dual thread or M33 x 3.5mm thread.

Option 1: A dedicated body for screwing directly onto the lathe spindle.

A large selection of woodturning lathes with M33 x 3.5mm spindle thread now have a reverse option. This represents a safety issue which Robert Sorby has now addressed with the added features incorporated into its M33 x 3.5mm (RSPCN34) direct thread, dedicated Patriot chuck.

A location groove has been machined into the mount section of the chuck to allow lathe manufacturers the option of supplying a locking collar to secure the chuck in place when the lathe is in reverse. Robert Sorby has also included a grub screw for locking the chuck onto the spindle on other M33 x 3.5mm lathes.

Option 2: A Chuck exert which allows you to use a standard chuck body and also use the chuck on other lathes with smaller spindle threads using inserts.

Using the Patriot chuck

Safety

Always read the instructions before using any type of machinery. Ensure that all parts are secure and all safety checks have been done prior to operation.

The Patriot chuck is supplied with the standard 2" (50mm) jaws already fitted ready for use.

Fitting the insert

Ensure that all surfaces are perfectly clean. Screw the insert into the back of the chuck body and tighten with the insert spanner supplied.

Thread the insert retention screw into the small hole in the side of the chuck body and secure into place using the 3mm hexagonal key.

Fitting the chuck onto your lathe

Place the spindle lock on you lathe. Carefully locate the thread of the insert over the thread of your lathe spindle and slowly screw it into place. Once it is fully hand tightened, secure it into place with the insert spanner.

Note

If you have a 1 1/4"x 8 insert you will notice a small grub screw in the side. This should be tightened into place to enable the lathe to be used in reverse.

Operating your Patriot chuck

The ergonomically designed chuck key allows for an easy one-handed operation, invaluable when mounting your project.

Place the ball end of the chuck key into the drive pinion and rotate to expand or contract the jaws.

With an internal and external dovetail you can securely hold any spigot or recess.

The internal gripper teeth give extra grip on uneven or awkward projects.

Project ideas using the Patriot chuck

Turning a 5" (125mm) diameter bowl

A small bowl can be turned from a raw bowl blank to the finished item using the standard accessories included with the Patriot chuck.

Firstly drill a 5/16" (8mm) diameter and a minimum of 3/8" (10mm) deep hole in the centre of your bowl blank.

Place the woodscrew into the jaws of the chuck and ensure the 4 flats are adjacent to the jaw slides and the nose of the jaw slots into the recess. Now tighten the jaws so that the woodscrew is held securely in place.

Lock the lathe using the spindle lock and screw the bowl blank onto the woodscrew. Ensure the bowl tightens up against the face of the jaws. Set the lathe speed as required and proceed to form the shape of the underneath of your bowl.

It is at this point you need to decide whether you are going to use a spigot (foot) or a recess to hold the bowl to hollow it out. Whichever one you are going to use it is highly recommended that you cut a small dovetail into it to ensure a positive hold by the dovetail in the jaws.

If you are going to use a spigot, the minimum diameter has to be 1 11/16" (43mm).

The minimum diameter for a recess must be 2" (50mm). These sizes are a guide to the full circle diameter of the jaws but due to the 1" (25mm) range of movement in the jaws, the spigot and recess can be any size within this range.

Once you have finished the outside of the bowl and cut the spigot or recess the blank can be unscrewed from the woodscrew. Now remove the woodscrew from the chuck and place somewhere safe.

You can now hold the bowl using the spigot or recess. Using the chuck key expand the jaws into the recess or contract onto the spigot and ensure a good tight hold.

The inside of your bowl can now be hollowed out and finished.

Optional ideas for finishing your bowl

Once you have finished your bowl and you would like to remove the spigot or recess so there is not any signs of how it was held in the chuck, you can use the optional Bowl Reversing Jaws.

These are large plate jaws with eight silicon rubber buttons that can be placed in any of the ten positions in each plate, to gently but securely hold the rim of your bowl. This allows you to turn away the spigot or recess using light cuts.

The Bowl Reversing Jaws are just one of many of a large range of jaws and accessories that fit the Patriot chuck.

There is a set of jaws and other accessories to suit hundreds of different woodturning projects. These include 1" (25mm) and Pin Jaws for fine delicate work and a range of bowl jaws in a variety of sizes up to a spigot diameter of almost 5". For extremely large and awkward projects there is the Deep Grip Jaws.

For full details on all the optional jaws and accessories please see the Patriot woodturning chuck jaws leaflet.

For more information on these or any other Robert Sorby products, please contact your nearest stockist or

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