



Model D3606, D3607, D3608, D3609, D3610 3-Jaw Chuck Instruction Sheet

Introduction

Your new **SHOP FOX®** Three Jaw Chuck is self-centering, that has an extra set of reversible jaws (except Model D3606) for clamping onto the inside diameter of a workpiece. With proper care the chuck will provide years of trouble-free clamping.

WARNING

DISCONNECT your lathe from power before you begin installation, and **NEVER** leave the chuck key inserted in the chuck! If this warning is ignored, you could seriously injure yourself or others!

General Installation

To mount this chuck, you must machine a new shoulder on your lathe's chuck-mounting flange so the chuck and shoulder fit will be snug. The mating surface between the two must be flush with no gaps. If the fit is too tight, **DO NOT** use the chuck mounting cap screws to draw the two surfaces together, or you will crack or warp the chuck and mounting flange.

If the existing shoulder diameter is too small for the chuck, and there is not enough cast iron on the chuck-mounting flange to allow for machining a new shoulder, acquire a blank chuck-mounting flange and machine that one instead. Installing a chuck without the correct shoulder support or relying only on the cap screws to mount the chuck is unsafe. Chuck rotation must be concentric.

General Use

Once installed, the chuck is ready for use; however, **READ** and **UNDERSTAND** your lathe owner's manual before using your new chuck. To open the jaws, insert the chuck key and turn it counterclockwise. Insert the workpiece fully into the chuck and tighten the jaws until they firmly clamp the workpiece. There is no need to tighten more than one adjuster, as all jaws work together. **DO NOT** allow the jaws to protrude along the edge of the chuck more than half their length, as this could cause the chuck to fracture. For material that exceeds the clamping diameter of the chuck, you must change the jaws.

Inventory

Your chuck was carefully packaged. If you notice it is damaged or missing parts, contact your **SHOP FOX®** dealer immediately.

Model D3606 2" 3-Jaw Chuck	Qty
Chuck with External/Internal Jaws	1
Torque Lever	2

Model D3607 4" 3-Jaw Chuck	Qty
Chuck with Installed External Jaws.....	1
Internal Jaws	3
Chuck Key (8mm)	1
Hex Wrench (6mm)	1
Cap Screws M8-1.25 x 20	3
Test Certificate	1

Model D3608 5" 3-Jaw Chuck	Qty
Chuck with Installed External Jaws.....	1
Internal Jaws	3
Chuck Key (10mm)	1
Hex Wrench (6mm).....	1
Cap Screws M8-1.25 x 20	3
Test Certificate	1

Model D3609 6" 3-Jaw Chuck	Qty
Chuck with Installed External Jaws.....	1
Internal Jaws	3
Chuck Key (10mm)	1
Hex Wrench (6mm).....	1
Cap Screws M8-1.25 x 20	3
Test Certificate	1

Model D3610 8" 3-Jaw Chuck	Qty
Chuck with Installed External Jaws.....	1
Internal Jaws	3
Chuck Key (12mm)	1
Hex Wrench (8mm).....	1
Cap Screws M10-1.5 x 25	3
Test Certificate	1

WARNING

Always disconnect the lathe from power before installing, removing, or servicing the chuck. Failure to do this may result in serious personal injury.

Changing Jaws

A number either 1, 2, or 3 is stamped in the guide slot of each jaw. Each slot in the chuck is also numbered. When you insert the jaw into the chuck, these numbers must match.

To reverse the jaws, do these steps:

1. Remove all three jaws from the chuck body, and position the lead thread of the scroll gear to the right of slot #1.

Note: *The lead thread is the outer-most initial thread of the spiral-cut scroll gear. This thread catches the first thread of each chuck jaw. When you turn the chuck key clockwise, the jaws are pulled to the center of the chuck.*

2. Starting with jaw #1, insert the jaw into jaw slot #1 in the chuck.
3. Turn the chuck key to advance the scroll counterclockwise $\frac{1}{3}$ of a revolution while maintaining inward pressure on the jaw to ensure that it engages with the lead thread of the scroll gear.
4. Position the the scroll-gear lead thread just to the right of slot #2, and insert jaw #2.
5. Again, turn the chuck key to advance the scroll counterclockwise $\frac{1}{3}$ of a revolution while maintaining inward pressure on the jaw to ensure that it engages with the scroll.
6. Repeat Steps 4 and 5 on jaw #3.
7. Rotate the chuck key—all three jaws should converge at the center of the chuck. If they do not, repeat Steps 1-7.

Maintenance

To maintain smooth chuck operation, do these steps as required:

1. Remove the chuck from the lathe.
2. Remove the chuck jaws.
3. Remove the three rear chuck-cover screws (or the snap ring on Model D3606).
4. Lift the back cover off of the chuck to expose the ring/scroll gear and the pinion gears.
5. Remove the three pinion retaining screws, the three pinions, and the ring/scroll gear.
6. Using mineral spirits and a brush, clean all metal parts and blow dry.
7. Use a small paint brush to liberally coat all moving parts, gears, and thread teeth with a layer of white lithium grease.
8. Assemble the chuck, and reinstall it on the lathe.
9. Wipe the chuck exterior with a light coat of machine oil to prevent rust.

Should you have any question about this product or its use, please contact the dealer where you purchased it, or you can contact Woodstock International Technical Support at 360-734-3482 between the hours of 7:00 am and 5:00 pm PST, or send e-mail to: tech-support@shopfox.biz.

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