



DRILL GUIDE FOR PREMIUM CASTER WHEELS 556425

INTRODUCTION

This drill guide is used to position mounting holes for the 3" Caster upgrade. It is used with one of the caster mounting screws and the supplied drill bit. It replaces the paper template supplied with the 3" Caster Upgrade.



SAFETY

WARNING

READ, UNDERSTAND AND FOLLOW ALL THE INFORMATION IN THIS OWNER'S MANUAL.

The meanings of **WARNINGS, CAUTIONS, AND NOTES** are:

WARNING

A **WARNING** is given when failure to follow the directions could result in injury, loss of limb, or life.

CAUTION

A **CAUTION** is given when failure to follow the directions could result in temporary or permanent damage to the equipment.

NOTE

A **NOTE** is used to highlight an important procedure, practice or condition.

NOTE

It is important to provide adequate lighting in your shop area.

PARTS LIST

523008	Drill Guide	1
523009	9/32" Drill Bit	1
854669	Owners Manual	1

Eye Protection

- Always wear eye protection when you use power equipment. Use goggles, safety glasses or a face shield to protect your eyes.
- Goggles completely surround and protect your eyes. Many goggles will also fit over regular glasses. Be sure your goggles fit closely, but comfortably.
- Safety glasses don't fog as easily as goggles and can be worn all the time. Regular eyeglasses normally have only impact resistant lenses. They are not safety glasses.
- A face shield protects your entire face. And you can flip it up out of the way when you don't need it. A face shield can be used with regular glasses.

Ear Protection

- Prolonged exposure to high noise levels from high speed power equipment can damage your hearing.

- **Hearing protectors screen out noise that can damage your ears. Wear hearing protection when you are exposed to high intensity power equipment noise.**

WARNING

- ◆ **Read, understand and follow the Mark V/7 Owner's Manual and the manual for every power tool you use.**
- ◆ **Additional warnings, cautions and instructions and operating techniques are provided in the Shopsmith book, Power Tool Woodworking for Everyone. (A copy is included with your new Mark V/7, and is also available from Shopsmith.)**
- ◆ **Wear proper eye and ear protection. Also, wear a dust mask.**
- ◆ **Plan every operation before you begin. If you are in doubt about how to perform an operation safely, do not attempt it. Consult your Owners Manuals and Power Tool Woodworking for Everyone textbook for proper, safe technique. If you are still unsure about performing the operation, contact a Shopsmith Customer Service associate.**

TOOLS REQUIRED

- Variable-speed electric hand drill
- 9/32" twist drill bit
- Light machine Oil
- Small rat-tail file

MACHINE SET-UP, DISSASSEMBLY & REASSEMBLY

Follow the instructions included in your Premium Caster Package. They will take you through SAFETY and MACHINE SET-UP & DISSASSEMBLY. No additional tools will be needed to use the Drill Guide.

USING THE DRILL GUIDE

The Drill Guide has three holes and a captured pin. One hole is 1/4" diameter and the other two are 9/32" diameter. The pin slips in an existing hole in the leg of your machine. This aligns the 1/4" hole with the other existing hole in the leg. With this alignment, a caster mounting screw and nut are used to secure the Drill Guide in place while you drill through the two 9/32" holes to create the location for the new 3" Caster Upgrade mounting position.

In the 3" Caster upgrade instructions, step 3 of the section titled, Caster Disassembly and Removal from Machine Legs, the instructions begin to describe the use of the paper templates. Skip Steps 4, 5 and 6. Follow the steps outlined below to use the Drill Guide to drill the new caster mounting holes in the legs of your machine.

Mounting the Drill Guide to the Leg

1. Place the pin of the drill guide in the hole in the leg of your machine, closest to the foot of the machine, as shown in Figure 1.



Figure 1

NOTE

You may need to run the 9/32" drill bit through this hole to remove paint from the inside of the hole. Otherwise this hole may seem too

small to allow the pin of the drill guide to slip into the hole.

2. Slip a caster mounting screw through the $\frac{1}{4}$ " hole in the Drill Guide. This hole will align with the other old caster-mounting hole in the leg. Thread a nut fully on this screw and tighten this screw, securing the drill guide tightly to the leg of the machine, see Figure 2.



Figure 2

3. Drill the new $\frac{9}{32}$ " diameter holes in the legs.
 - a. Place a drop of oil on each cutting flute of the drill bit, see Figure 3.



Figure 3

- b. Place the drill bit in the $\frac{9}{32}$ " diameter hole of the Drill Guide, as shown in Figure 4.
 - c. Start the drill at a slow speed.

Figure 4



- d. As the bit begins to cut, increase the drill speed slightly. You know you are at the right speed when the bit is making shavings, see Figure 5. You are running the drill too fast if the shavings turn blue.



Figure 5



Drilling steel creates a lot of heat. The drill bit and the metal you are drilling becomes very hot. Drilling steel also creates shavings that are hot and sharp.

Be careful to make sure that you allow the drill bit, the metal surrounding the drilled hole and shavings to cool before touching them or sweeping the shavings into a trash can.

The hot shavings can be a fire hazard if not allowed to cool.

This hot metal will cause burns to your skin.

The sharp shavings can cut you, your children or pets if miss-handled or left behind on the floor.

Use a brush to sweep the shavings into a dustpan and dispose of them properly **ONLY after they have cooled.**

4. De-burr the newly drilled holes. Use a rat-tail file to remove any burrs left by the drilling process, as shown in Figure 6. Pay special attention to the inside of the legs. If burrs are left on the inside of the legs, they will interfere with the installation of the caster brackets.



Figure 6

Repeat steps 1-4 on the other four caster bracket locations. Then return to the Caster Re-assembly to Legs step on page-4 of the 3" Caster Upgrade Instructions. Continue to follow these instructions until the upgrade is completed.

NOTE

If you have further questions or need additional assistance, please contact Customer Service Toll Free 800/762-7555. Or visit our website: www.shopsmith.com

