

# 6" DRUM SANDER W/2" DRUM SANDER SLEEVES

## Introduction

2" Sanding Sleeves of multiple grits can be used at the same time on a single 6" Drum Sander. This allows you to progressively sand from coarse, through medium to fine without changing either the drum or removing the sleeves. Simply start with the coarse grit sleeve at the bottom of the 6" Sanding Drum, the medium sleeve in the middle and the fine sanding sleeve at the top of the drum. Quickly sand away the heavy mill marks with the coarse sleeve, then extend the quill so the medium grit sleeve aligns with the stock then sand that surface. When smoothed with the medium grit, extend the quill further until the fine grit aligns with the stock and complete the process with the fine sleeve.

The 6" Drum Sander with 2" Sleeves can be used with or without the Oscillating Drum Sander Attachment (555754). A vacuum extension which accommodates the deep penetration of the 6" Drum Sander through the Table Insert and collects the fine sanding dust from the three different sleeves. It is available for Mark V Model 500 (556265) and Mark V Model 505, 510, 520 and Mark 7 (556257).

## Safety

## WARNING

- √ Read, Understand and Follow all instruction in the Mark V manuals before using this accessory.
- √ Make sure the machine is turned off and unplugged before installing the Drum Sander.



Ref No.	Part No.	Item Description Qty
_ 1	555948 222458	6" Drum Sander 5/16-18x1/4 Set screw
2	5030079	Hub Drum Spindle1
3	503009 503010	Rubber Sleeve
5	522235	Hex Head Screw1
6	522236	Spacer1
7	522901	2" Sanding Sleeve, Coarse Grit 1
8 9	522902 522903	2" Sanding Sleeve, Med. Grit 1 2" Sanding Sleeve, Fine Grit 1

- √ Always use proper Safety Equipment and Procedures when operating machines.
- **V** Be sure to tighten all setscrews securely before using.
- √ The use of the 6" Drum Sander as a thickness sander or edge sander where stock is placed between drum sander and table or fence, see Fig. 3 & Fig. 4, could result in personal injury. Under NO CIRCUMSTANCES should this product be used as a thickness sander or edge sander in this fashion.





#### **ASSEMBLY**

The Sleeves are mounted to the drum progressively from bottom to top. The Shopsmith Drum Sander is uniquely designed so that the single hex bolt can be tightened to securely fasten all three 2" sanding sleeves in place. When the sleeves are worn out from use, this bolt can be loosened and any of the three sleeves can be easily removed and replaced.

- 1. Remove the protective plastic cover from the new sleeves you plan to use.
- 2. Loosen the hex bolt at the bottom of the Sanding drum with your ½" wrench
- 3. Place the drum on the bench with the bolt head down.
  - Slip the coarse-grit sleeve over the drum and let it rest on the bench at the bottom of the 6" Sanding Drum, as shown in Figure 7.

Figure 7



 Slip the medium-grit sleeve over the drum and place it against the coarse sleeve, as shown in Figure 8.

Figure 8



 Slide the fine-grit sanding sleeve on the top of the drum, see Figure 9.

Figure 9



4. Pick up the entire Sanding Drum Assembly and tighten the hex bolt with the ½" wrench. Hold the drum and the sleeves so the three sleeves stay in contact with each other and are centered on the drum.

USING THE 6" DRUM SANDER WITH 2" SLEEVES

**Speeds** 

## **NOTE**

Refer to Speed Chart on Back page of these instructions.

To get the most life out of your sanding sleeves, to avoid loading them up with impacted wood dust and prevent burning the wood, the speed of the machine must be lowered as you use finer and finer grit sanding sleeves. Also, you will find that sanding end-grain will be easier, with a lighter pressure against the drum. This too will cause less loading and burning at slower speeds.

## **NOTE**

Use an Abrasive Cleaning Stick (753523) often to clean the sanding sleeves. This will keep them cutting longer and working faster.

## WARNING

We recommend that you use dust collection with drum sanding operations. Different wood dusts effects all people differently. Some wood dust can be toxic and cause respiratory problems and skin irritation or rashes. Use the Drum Sander Vacuum attachment (514499) with vacuum Extender (556257) whenever using the 6" Drum Sander with 2" Sleeves.

#### **OPERATIONS**

## WARNING

- ◆ In order to edge sand with the shaper fence, you must remove the rear guard from the shaper fence. Always replace the rear guard on the shaper fence after edge sanding with the Drum Sander.
- 1. For straight edge sanding with the Shaper/ Drum Sander Fence, see Figure 1.



Figure 1

- Position the fence boards parallel to each other and within 1/8" of the sanding drum.
- When changing to a finer grit, the face
  of the fence will need to be repositioned to be a small amount so it is still
  slightly proud of the sanding grit. Since
  the coarse grit sleeve is slightly larger
  than the medium or fine grit sleeves,
  the finer sleeves will no longer contact
  the wood if the fence is not adjusted.
- Adjusting the fence position can be done easiest, by moving the table in the carriage, rather than adjusting the fence itself.
- 2. For curved edge sanding without fence, see figure 2.
- For edge sanding with the Oscillating Drum Sander. The Oscillating Drum Sander can be used for either straight-line sanding



Figure 2

with the Shaper/Drum Sander Fence or for sanding curved edges free-hand.



Figure 3

- Raise the table to move from grit to grit rather than extending the Quill. This avoids having to reposition the Oscillating Drum Sander each time.
- The length of the stroke plus the thickness of the wood can not be greater than the 2" height of the sanding sleeve.
   Adjust the stroke to keep only one grit sleeve in contact with the wood.
- Center the wood in the center of the sleeve at the center of the stroke.

The Drum Sander with multiple grit sleeves is very versatile. It can be used for inside and outside curves, joint edging, smoothing rabbet edges, etc. It is especially convenient when used in combination with the Shopsmith Oscillating Sander (555754) or Shopsmith Bandsaw (555943) or the Shopsmith Scroll Saw (555715).

## **Dust Collection**

Can be accomplished with the addition of the drum sanding dust chute package (556257 for Model 505, 510, 520 or Mark 7) (556265 for Model 500). This package allows you to adjust the drum through the table for any grit, while still capturing the dust. See Figure 6.



Fig. 6

# **Drum Sanding Speed Chart**

Abrasive	Hardwood	Softwood
Coarse	J (1900 RPM)	K (2050 RPM)
Medium	I (1750 RPM)	J (1900 RPM)
Fine	H (1600 RPM)	I (1750 RPM)

#### **NOTE**

These speeds are for 60 hz. operations. For 50 hz. operations, refer to Table 1-1 on Page 12 of Power Tool Woodworking for Everyone.

Fig. 5

#### NOTE

If you have any questions about your Shopsmith 6" Drum Sander, please call our Customer Service Department TOLL-FREE at 1-800-762-7555, drop us an e-mail at techsupport@shopsmith.com, visit our website at www.shopsmith.com.