instructions for installation and operation

MAGNA DADO

MAGNA PRECISION DADO is designed to operate on circular or radial saws having a 3/4" or 7/8" arbor. To use on 3/4" arbor, press out removable bushing. Read carefully instructions below for mounting MAGNA DADO on saw arbor.

MAGNA DADO blade assembled

Caution: Never attempt to adjust MAGNA DADO when arbor nut is tight. Always loosen nut when adjusting hub—failure to do so will strip adjusting gears.

To mount on SHOPSMITH:
1. Mount MAGNA DADO on the 5/8" SHOPSMITH arbor with the side containing the large flat washer against the shoulder of the arbor, and the recessed side facing out.

Notes: Do not use the washers which are furnished with the SHOPSMITH arbor. Use only the washers included with the MAGNA DADO.

2. Replace hex nut on the arbor so that it fits in the recess but do not tighten until desired setting has been made.

3. MAGNA DADO can be left on the arbor at the "0" setting and used as a conventional saw.

4. Spindle speed is very important. Excessive vibration may occur if the following instructions are not followed. For DADO cuts up to 1/2" wide, use the normal sawing speed of 3000-4000 RPM (high speed setting on SHOPSMITH pulley). For cuts over 1/2" wide, use speed between 1500-2000 RPM (intermediate pulley setting on SHOPSMITH).

To mount on saws other than SHOPSMITH:
See instructions on following page.

To set width of DADO cut:
1. Loosen arbor nut and adjust either of the two hex sockets on the DADO hub with 1/8" Allen wrench. A quick micro-setting from 5/32" to 7/8" may thereby be obtained.

2. Secure index setting by locking arbor nut tightly.

3. Rotate blade by hand to be certain there is no interference with the saw table or saw insert plate.

Suggestions:
1. To facilitate setting an accurate width of cut, a DADO gauge stick with graduated notches should be made (see sketch). Each notch should represent consecutive alphabetical setting of the DADO head. Label notches with appropriate setting. This gauge stick can be used whenever it is necessary to cut a dado slot to fit a given dimension or piece of lumber. A new gauge stick should be made each time the blade is sharpened.

2. Any single-blade dado will leave a slight arc in the groove bottom equal to the radius of the blade itself. This radius will not be noticed on narrow dado cuts, and is of course not important on any width "blind end" groove. If the bottom radius is significant for any special job, make two or more narrow cuts, or stop the groove slightly inside the edge and clean with a hand chisel.

\[ \text{gauge stick showing graduated notches in alphabetical sequence} \]

3. When blade becomes dull, the hub may be disassembled and rotated 180 degrees so that inner plate lugs engage opposite holes in the blade. This will bring into action a different set of cutting teeth and will thereby prolong blade life between sharpenings.

4. Sharpening: The special tooth form on the MAGNA PRECISION DADO blade was developed to provide maximum support for the cutting edge of each tooth and thus provide longer life and use between sharpening periods. The teeth on the DADO blade are set to provide ample chip clearance when the saw is set at "0" and used as a conventional heavy-duty circular saw. Because it is important to maintain tooth form and set, it is strongly recommended that the MAGNA DADO blade be jointed and sharpened only by a professional saw filer.
To mount MAGNA DADO on saws other than SHOPSMITH:

1. If there is a removable side plate on the under table saw guard, or otherwise sufficient clearance between arbor end and saw frame, mount MAGNA DADO as on SHOPSMITH. Many saws are equipped with a half size arbor nut. This nut, when tightened, would rest in the DADO hub recess and would require a socket wrench. To eliminate this, use a full size nut.

2. If under table guard is not removable and there is insufficient clearance between arbor end and frame, MAGNA DADO should be disassembled and then reassembled on the arbor.

To disassemble and install on arbors with limited clearance:

1. Set at zero.

2. Support DADO assembly with two blocks placed on either side of lock pin. Hub recess should face up.

3. Use screw driver to remove two Nylok screws.

4. Mount MAGNA DADO parts on arbor—large washer first. Insert the recessed bushing last to support the washers.

5. Reassemble parts after removal from arbor and hold together with two Nylok screws. Tighten these securely and then back them off just a bit.

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**Part List**

<table>
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<tr>
<th>Part No.</th>
<th>Description</th>
<th>Lbs.</th>
<th>Ozs.</th>
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<tr>
<td>120621</td>
<td>Wrench—Allen</td>
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<td>6401</td>
<td>Screw—Nylok</td>
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<tr>
<td>2419</td>
<td>Hub—Dado Saw</td>
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<td>Blade—Dado Saw</td>
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<td>Bushing—Dado Saw</td>
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<tr>
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