

Dado Sets

Dado Sets

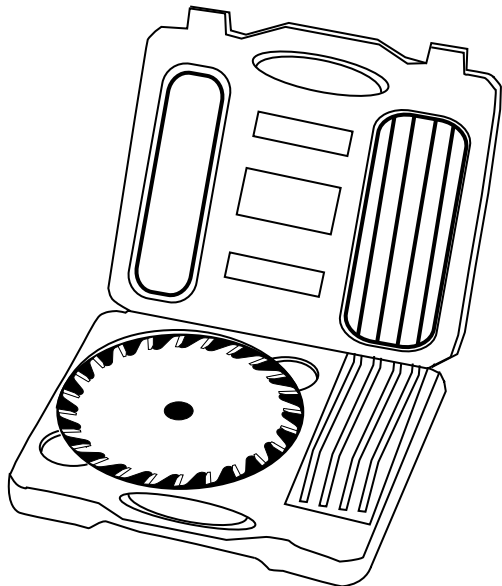
Dado Sets

INSTRUCTION MANUAL

Rated excellent by:

**AMERICAN
WOODWORKER**

Fine
WoodWorking



Case is standard on 6" through 8"



IMPORTANT SAFETY/USAGE INSTRUCTIONS PLEASE READ!!

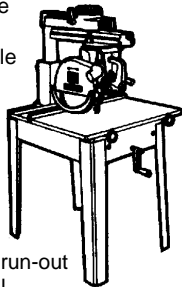
Thank you for purchasing this top-quality cutting tool from Amana Tool. For your safety and to achieve good results, please read and fully understand these instructions before using this product.

DESCRIPTION

The Amana stacking dado set is a professional quality carbide tipped tool that will give years of trouble-free service provided that they are properly maintained, re-sharpened and used in accordance with this booklet and other appropriate reference materials.

MACHINE SELECTION

Dado sets can be used on high quality table saws or radial arm saws with 1-1/2 or more horsepower. Do not use this product in any under-powered table saw or other type of equipment such as a miter saw, portable circular saw, compound miter saw, portable table saw, etc. It is very important that your machine is stable, free of vibration and has minimal arbor run-out tolerances (.003" maximum). The run-out can easily be checked using a dial



indicator and magnetic base.

In addition, the table insert (if using a table saw) must be of the appropriate type for dado sets, the arbor length must be adequately long, and the flanges/ hardware must be in good condition.

Consult your machine's owners' manual for further information.

Machine Checklist ✓

- | | |
|--|---------------------------------------|
| <input type="checkbox"/> 1-1/2 HP minimum | <input type="checkbox"/> Hardware |
| <input type="checkbox"/> Flanges | <input type="checkbox"/> Table Insert |
| <input type="checkbox"/> .003" Run-out maximum | <input type="checkbox"/> Arbor Length |

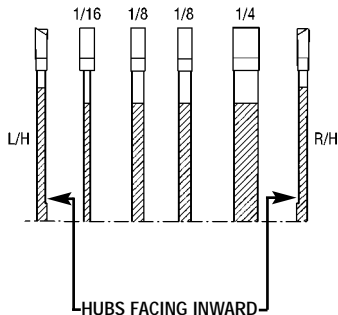
DADO/ARBOR SIZES

The following is a general guideline with regard to dado diameter versus the appropriate size machine and arbor size:

Dado Diameter	Machine Capacity	Arbor Diameter
6" through 8"	10" through 12"	5/8" through 1"
10"	12" through 14"	5/8" through 1"
12"	14" and up	1" and up

NOTE: Always use the smallest diameter dado set that will accomplish the task.

ILLUSTRATION 1

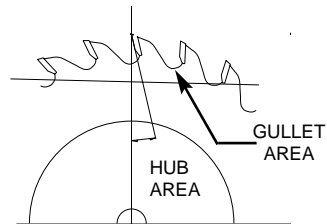


MACHINE SET-UP

Using the tables elsewhere in this manual, determine the dado width (kerf) that you would like to cut and proceed with the following:

- Unplug and lock out all power to the machine.
- Remove table insert, if using a table saw.
- Remove lock nut, collar(s), and blade from arbor.
- Carefully clean and inspect arbor, threads, lock nut, flanges, dado components and all safety devices & guards.
- Determine the proper rotation of the outside blades (the 'face' or flat-side of the teeth should

ILLUSTRATION 2



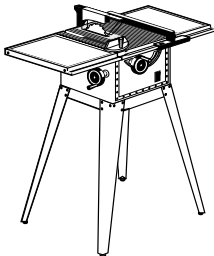
INTERIOR SIDEVIEW OF L/H OUTSIDE BLADE

be facing the front of the machine - see *illustration #1*). Begin by placing the first collar on the arbor (if not already attached), then the first outside blade (the hub should face inward). Next, add the appropriate chipper(s) and shim(s) from the table, being sure to stagger the chippers 90 degrees from each other. In addition, the teeth of the chipper(s) should be placed within the gullet area of the outside blades (see *illustration #2*). Finally, add the second outside blade then the collar from the machine and properly tighten the lock nut according to the machine manufacturers' specifications. Double check that all components are tight and that no carbide teeth are touching each other.

MACHINE SET-UP (cont.)

It is advisable to line up the ATB teeth on both outside blades in order to take an accurate measurement.

- f.) If using a table saw, replace the table insert with the proper type. Warning: Never attempt any cutting without the table insert in place. The work-piece must properly supported near the cutting area.
- g.) Check all guards and safety devices before restoring power.
- h.) Perform a test cut to check the set-up.
- i.) Warning: Both outside dado blades must be used. Never attempt to use the chippers without both outside blades in place.



DADO SIZE CHART

NOTE: The information provided below is intended as a guide only and does not account for any re-sharpening or normal manufacturing and run-out tolerances. As always, measure twice - cut once.

Groove Size	Outside Blade		Inside Chippers			*Shims			
	Blade R/H	Blade L/H	1/16"	1/8"	1/4"	Gold .002"	Yellow .004"	Clear .010"	White .020"
.257"	1	1	-	-	-	-	-	-	-
.312" (5/16")	1	1	-	-	-	-	1	1	2
.320"	1	1	1	-	-	-	-	-	-
.343" (11/32")	1	1	1	-	-	1	-	-	1
.375" (3/8")	1	1	1	-	-	-	1	1	2
.382"	1	1	-	1	-	-	-	-	-
.437" (7/16")	1	1	-	1	-	-	1	2	2
.445"	1	1	1	1	-	-	-	-	-
.468" (15/32")	1	1	1	1	-	1	-	-	1
.472" (12mm)	1	1	1	1	-	1	1	-	1
.500" (1/2")	1	1	1	1	-	-	1	1	2
.507"	1	1	-	-	2	-	-	-	-
.562" (9/16")	1	1	-	-	1	-	1	1	2
.570"	1	1	1	-	1	-	-	-	-
.593" (19/32")	1	1	1	-	1	1	-	-	1
.625" (5/8")	1	1	1	-	1	-	1	1	2
.629" (16mm)	1	1	1	-	1	-	2	1	2
.687" (11/16")	1	1	-	1	1	-	1	1	2
.695"	1	1	1	1	1	-	-	-	-
.708" (18mm)	1	1	1	1	1	1	-	1	-
.718" (23/32")	1	1	1	1	1	1	-	-	1
.750" (3/4")	1	1	1	1	1	-	1	1	2
.812" (13/16")	1	1	-	2	1	-	1	1	2
.820"	1	1	1	2	1	-	-	-	-

***NOTE:** With assemblies requiring shims, it is advisable to spread them out between different components as opposed to stacking them all together.

DADO SET COMPONENTS

Application: To cut grooves and dados from 1/8" through 13/16", or larger than 13/16" with additional chippers.

Standard #3 set consists of two outside saw blades and four inside chippers. Outside saw blades feature hollow-ground plates for proper clearance, and alternate top bevel (ATB) grind with every sixth tooth flat ground (FT). See charts below for additional components. All 8" diameter sets now have 5° negative hook angle for smoother cuts.

Complete #3 Sets

Tool No.	Dia.	*Teeth	Grind	Kerf Range	Bore
656030	6	18	ATB/FT	1/8 - 13/16	5/8
658030	8	24	ATB/FT	1/8 - 13/16	5/8
658030-1	8	24	ATB/FT	1/8 - 13/16	1
~ 658030-AK	8	24	ATB/FT	1/8 - 13/16	5/8
† 658040	8	46	ATB/FT	1/8 - 13/16	5/8
† 658040-1	8	46	ATB/FT	1/8 - 13/16	1
651030	10	24	ATB/FT	1/8 - 13/16	5/8
651030-1	10	24	ATB/FT	1/8 - 13/16	1
651230	12	24	ATB/FT	1/8 - 13/16	1

† 8" X 46T set for super smooth cuts in cabinet grade plywoods and melamine. 5° negative hook angle.

~NEW 'Anti-Kickback' design.

***NOTE:** Teeth refers to the number of teeth for each outside saw blade.

Dado Set Combinations

Max. Width of Groove	Number of Chippers required		
	1/16	1/8	1/4
13/16	1	2	1
1-1/16	1	2	2
1-9/16	1	2	4
2-1/16	1	2	6
3-1/16	1	2	10
4-1/16	1	2	14

Molded Plastic Storage Case

Product No.	Description
658000	Plastic case only (empty) Fits 6" through 8" sets only.

Dado Shim Sets

The perfect accessory for any dado set with 5/8" or 1" bore. Set includes 14 color-coded plastic shims in various thicknesses for precise adjustment of your dado set. Especially useful for undersized plywood, etc. Order No. DSS-100 (5/8" bore) or DSS-101 (1" bore).

Set includes the following:

Quantity	Shims	Inch	MM	Color
4		.002	.05MM	Gold
2		.004	.10MM	Yellow
4		.010	.25MM	Clear
4		.020	.50MM	White



DSS-100

Dado Chippers 6" to 12"
Flat Top (FT) Grind/Two teeth per chipper

Dia.	Bore	Order No.			
		Chipper Thickness			
		'B' 1/16	'B' 1/8	'B' 1/4	'B' 3/32
6	5/8	651660	651860	651460	—
8	5/8	651680	651880	651480	651280
~ 8	5/8	651680-AK	651880-AK	651480-AK	651280
8	1	651680-1	651880-1	651480-1	—
10	5/8	651610	651810	651410	—
10	1	651610-1	651810-1	651410-1	—
12	1	651612	651812	651412	—

~NEW 8" 'Anti-Kickback' chippers.

Outside Saw Blades 6" to 12"
ATB/FT Grind

Order No.	Order No.	Dia.	Bore	Teeth	Kerf
L/H	R/H				
656010	656010-R	6	5/8	18	.126
658010	658010-R	8	5/8	24	.126
~658010-AK	658010-AK-R	8	5/8	24	.126
658010-1	658010-1-R	8	1	24	.126
658020	658020-R	8	5/8	46	.126
658020-1	658020-1-R	8	1	46	.126
651010	651010-R	10	5/8	24	.126
651010-1	651010-1-R	10	1	24	.126
651210	651210-R	12	1	24	.126

~NEW 8" 'Anti-kickback' outside blades.

NOTE: Specify left or right hand. Although each outside saw is sold separately, it is recommended to buy one set of both blades so the O.D. matches. See illustration above for description.

SAFETY CHECKLIST

- Unplug machine while changing or adjusting blades or other components.
- Machine safety guards in place and functioning correctly.
- Wear proper eye, ear and face protection.
- Do not exceed maximum R.P.M. as listed (see table below).
- Use all necessary factory flanges, lock nut, etc.
- Use both outside dado blades.
- Wide or deep cuts should be performed in multiple passes.

MAXIMUM R.P.M. TABLE

Dado Set <u>Diameter</u>	Maximum <u>R.P.M.</u>
6"	9,500
8"	7,000
10"	5,700
12"	4,800

MAINTENANCE

To maintain a safe and high-quality cut, regular re-sharpening is required. This should be performed by a qualified sharpening service only. Also, all of the components of the dado set should be re-ground at the same time to ensure that the outside diameter (O.D.) matches.

WARNING:

Carbide cutting tips may chip or fragment during use. Always use machine guards and wear proper eye protection while operating and power tools and machinery. Keep hands and loose clothing away from cutting area.

CAUTION:

Grinding of this product will produce dust of potentially hazardous ingredients. Use adequate ventilation and read M.S.D.S. (Material Safety Data Sheets).

NOTICE:

This guide is intended for general information only and should not be considered a substitute for your power tools' owner's manual, nor a guide to safe woodworking practices. Please consult other appropriate reference materials.

TECHNICAL ASSISTANCE

For technical assistance, please contact the Amana Tool Technical Hot-Line @ 1-800-445-0077 or visit our website @ <http://www.amanatool.com>. Our e-mail address is tools@amanatool.com.