

# 24" x 24" OSCILLATING SPINDLE MANUAL



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# Safety Rules

## READ CAREFULLY BEFORE OPERATING THE MACHINE

1. Learn the machine's applications and limitations, as well as the specific potential hazards particular to this machine. Follow available safety instructions and safety rules carefully.
2. Keep working area clean and be sure adequate lighting is available.
3. Do not wear loose clothing, gloves, bracelets, necklaces, or ornaments. Wear face, eye, ear, respiratory and body protection devices, as indicated for the operation or environment.
4. Keep hands well away from sander head and all moving parts. Do not clear chips and sawdust away with hands. Use a brush.
5. Make sure the spindles are moving at the operation speed before sanding.
6. Do not push the sanding spindles too hard. The spindles will perform better and be safer working at the rate for which it was designed.
7. Whenever possible use a dust collector with shaving hood to minimize health hazards.
8. Never leave the machine with the power on.
9. Keep children away. Make sure that visitors are kept at a safe distance from the work area.
10. Use recommended speed sanding accessory and workpiece material.
11. Never stand on tool. Serious injury could occur if the tool is tipped or if the sanding tool is unintentionally contacted.
12. Be sure sanding spindles are securely locked in the machine.
13. Use suitable support if stock does not have a flat surface
14. Do not force the machine. It will do the job better and be safer at a rate for which it was designed.
15. Keep guards in place and in working order. If a guard must be removed for maintenance or cleaning make sure it is properly attached before using the tool again.
16. Be sure that key and adjusting wrenches have been removed before turning power on.
17. Use only accessories designed for the machine.
18. Make sure tool is properly grounded. If tool is equipped with three-prong plug, it should be plugged into a three-pole electrical receptacle. Never remove the third prong.
19. Always disconnect tool before servicing and when changing accessories such as spindle sizes.
20. Make sure that switch is in "OFF" position before plugging in cord.
21. Hold material firmly against the table.
22. Use ONLY recommended accessories. Use of accessories NOT recommended may result in a risk of injury.
23. Do not use this spindle sander for other than its intended use. If used for other purposes, Laguna Tools, Inc., disclaims any real or implied warranty and holds itself harmless for any injury, which may result from that use.

Laguna Tools spindle sanders are carefully tested and inspected before shipment and, if properly used, will give perfect results. However, a reasonable amount of care and attention is necessary to ensure perfect performance and accurate work. It is imperative that you take a few moments to familiarize yourself with these instructions, as they will no doubt save you a lot of time.

## **LAGUNA TOOLS OSCILLATING SPINDLE SANDER**

1. This machine has been designed for grinding or polishing curves and surfaces of wood, plastic, or metal materials.
2. For process of irregular round-curve workpieces, the machine provides an optional bench for adjustment to any degree of angle.
3. To keep machine and parts in perfect condition, change oil lubricant after every 800 hours of operation.
4. The machine is equipped with ten sanding arbors, three round inserts and two open spanners. Install them carefully and properly to avoid any cutting damage.
5. When selecting a sanding arbor, it should depend on the size of the round curve of the polished workpiece. The sanding arbor should be smaller than the curve of the polished workpiece.
6. It is recommended to mark on the workpiece before moulding to ensure that while in process it follows your marks to give precise and correct results. NOTE: Never attempt to ground or cut the workpiece with the powerful sanding arbor to achieve correctness and preciseness.
7. Clean the sanding arbor and the main shaft hole before inserting the sanding arbor into the main shaft. NOTE: Never screw the sanding arbor tightly; otherwise it might be difficult to take off.
8. After every use of the machine, clean and polish all parts. Polish bench with specialized oil; always re-adjust bench to the proper position of a 90° angle.

### **ATTENTION!**

**BEFORE OPERATING THIS MACHINE, HAVE ALL WORKERS AND  
OPERATORS READ THIS MANUAL ATTENTIVELY!  
AVOIDING THIS PROCEDURE CAN CAUSE SERIOUS DAMAGE TO  
MACHINE AND RISK PUTTING THE WORKER OR OPERATOR  
IN A DANGEROUS SITUATION!**

## Unpacking and Cleanup

To ensure maximum performance from your Laguna Tools spindle sander, clean it properly and install it accurately before use. As soon as you receive the spindle sander, we recommend you follow these procedures:

1. Finish removing the contents of the shipping carton and compare with the contents list.
2. Report damage, if any, to your local distributor.
3. Clean all rust-protected surfaces with a mild solvent or kerosene. Do not use lacquer thinner, paint thinner, or gasoline. These will damage painted surfaces.
4. To prevent rust, apply a light coating of paste wax to surface.

### **WARNING!**

**NEVER ATTEMPT TO CLEAN MACHINE WHEN IT IS  
PLUGGED INTO THE POWER SOURCE!  
IGNORING THIS PROCEDURE CAN CAUSE DAMAGE TO  
YOUR MACHINE AND WILL PUT THE WORKER  
IN A DANGEROUS SITUATION!**

## Maintenance of Spindle Sander

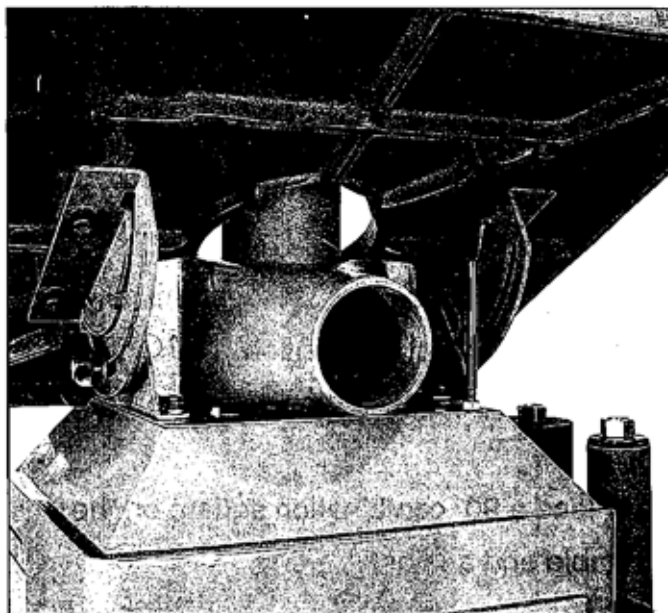
1. To keep your spindle sander in perfect condition, clean machine and attachments at all times.
2. Clean tapered sleeves and tapered socket before every use. This will protect spindle sleeves from nicks.
3. Bent sleeves are easily straightened by placing them in the tapered socket and slipping a small pipe over the steel shaft. Using a dial indicator, check that it is in the correct position.
4. Check gearbox for proper oil level (approx. 1/4 up on sight glass).
5. We recommend that a small amount of grease be applied to table tilting screw once a month.
6. No lubrication is required for the bearings, which are permanently lubricated.

# Instructions for Operation

1. Select a spindle that is smaller than the curve to be sanded.
2. Use an insert plate that comes closest to the spindle without touching it.
3. Make sure that spindle is positioned properly in the taper sleeve socket. With the wrench provided, tighten the nut. NOTE: Never overtighten, because it may be difficult to remove the spindle later.
4. When table is set at a 90° angle, sanding may be done from any corner or location on the table around spindle.
5. When table is positioned at any angle other than 90°, it is necessary to position the work piece over the centerline, as shown on table surface.
6. Always lock the table with the hand nut when setting at any angle. Also, to prevent movement, lock the tilting gear shaft.
7. Always loosen both table lock and tilting gear lock before changing the angle position of the table. Never force the table if it does not tilt easily, because the locks might be still engaged. Never attempt to override the stop locks, which will cause damage to the tilting performance.
8. A backing board is recommended when sanding thin pieces of metal or any other material. A backing board can be easily constructed by using a piece of wood the length of the table, pushing it into the spindle until a half circle is formed. Clamp each end of the board to the table and proceed to sand the thin material.
9. Before leaving the machine, remove any particles or pieces left over, and always return the table to a 90° angle.

## Connect the Flexible Hose

The machine is furnished with a dust hood under the table at the back side of the machine. The outlet of the dust hood is 4" in diameter. Use a 4" flexible hose to connect the dust hood outlet to the dust collector.

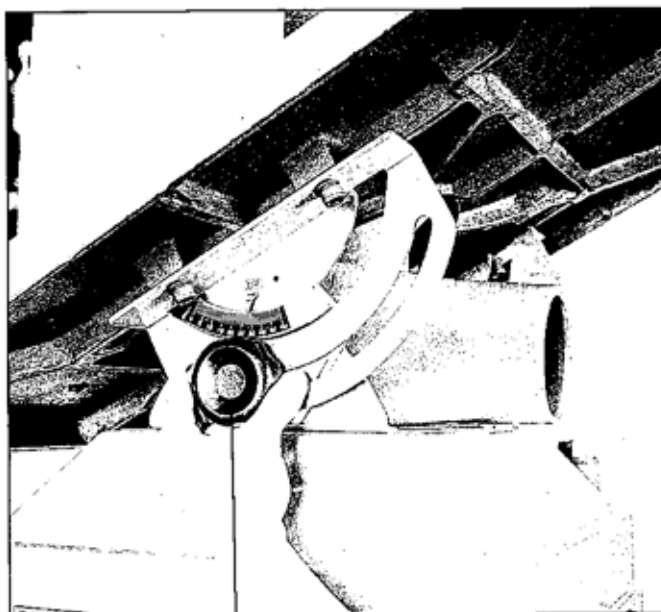


 **CAUTION**

**DO NOT OPERATE THE MACHINE UNTIL  
THE DUST COLLECTOR IS WORKING**

## Tilting the Table

1. Loosen the two table lock knobs (A), located under the table at both sides of machine.
2. Tilt the table forward to the desired angle with your hands.
3. An angle scale is provided at the right side of the trunnion to indicate the degree of table tilt.
4. Tighten the two table lock knobs securely after the table degree has been adjusted.

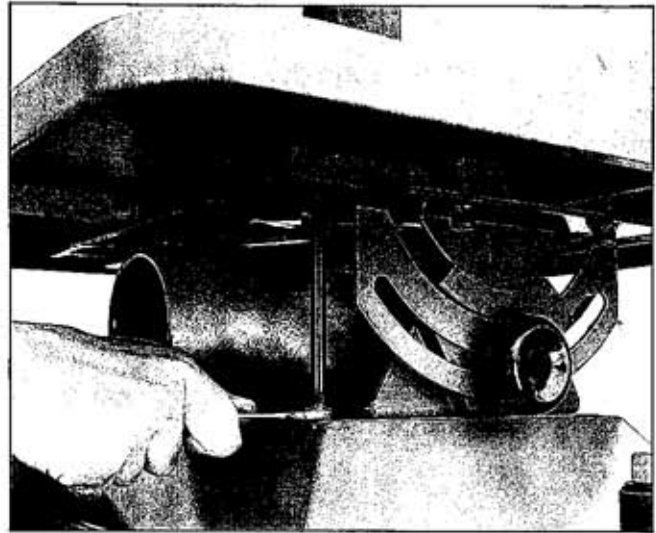


A



# Adjust the Squareness Between the Table and Drum

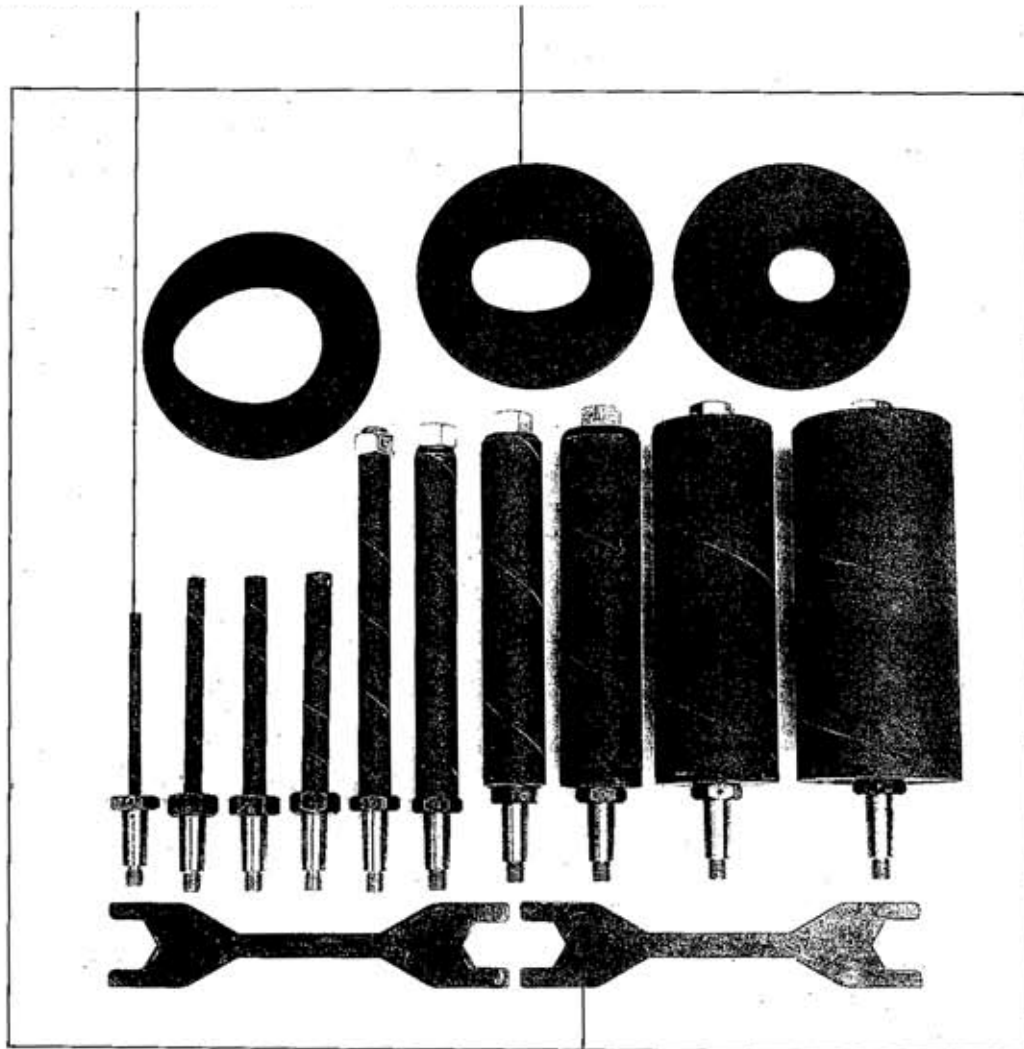
1. The squareness between the table and drum has been factory adjusted before shipment. However, after a long period of operation, the squareness may become inaccurate.
2. To adjust the squareness, set the table to a flat horizontal position. The table tilting scale should read zero degrees.
3. Place a 90° combination square on the table and against the drum.
4. If the table is not 90° from the drum, adjust the angle of the table by changing the height of the resting post as shown.
5. If the table is 90° from the drum but the scale does not read zero degrees, set the scale to read zero degrees by loosening the screw on the angle indicator and setting the arrow to zero.



## Loose Parts Bag

Sanding Drums 10 pcs

Table Inserts 3 pcs



Open-end wrench 2 pcs



## Selection Guide for Drum to Table Insert

This machine is furnished with 10 drums. Drum diameters range from 1/4" to 4". Three table inserts are supplied. If the drum diameter is changed, the table inserts needs to be changed to the appropriate size.

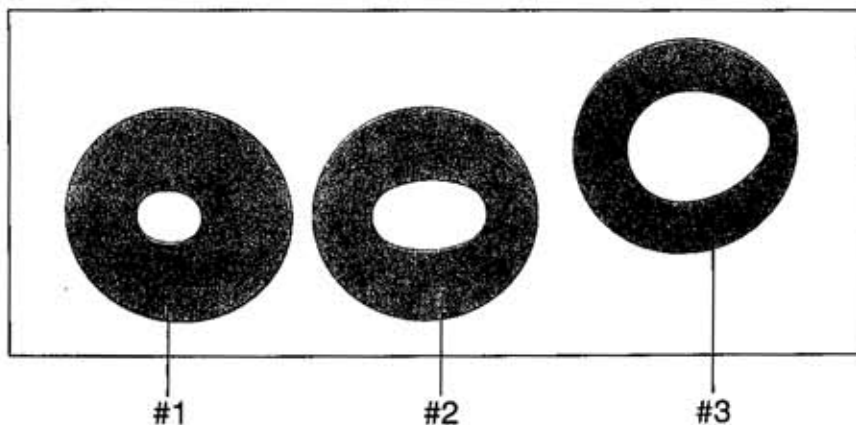
The table below shows which table insert to use for various drum diameters.

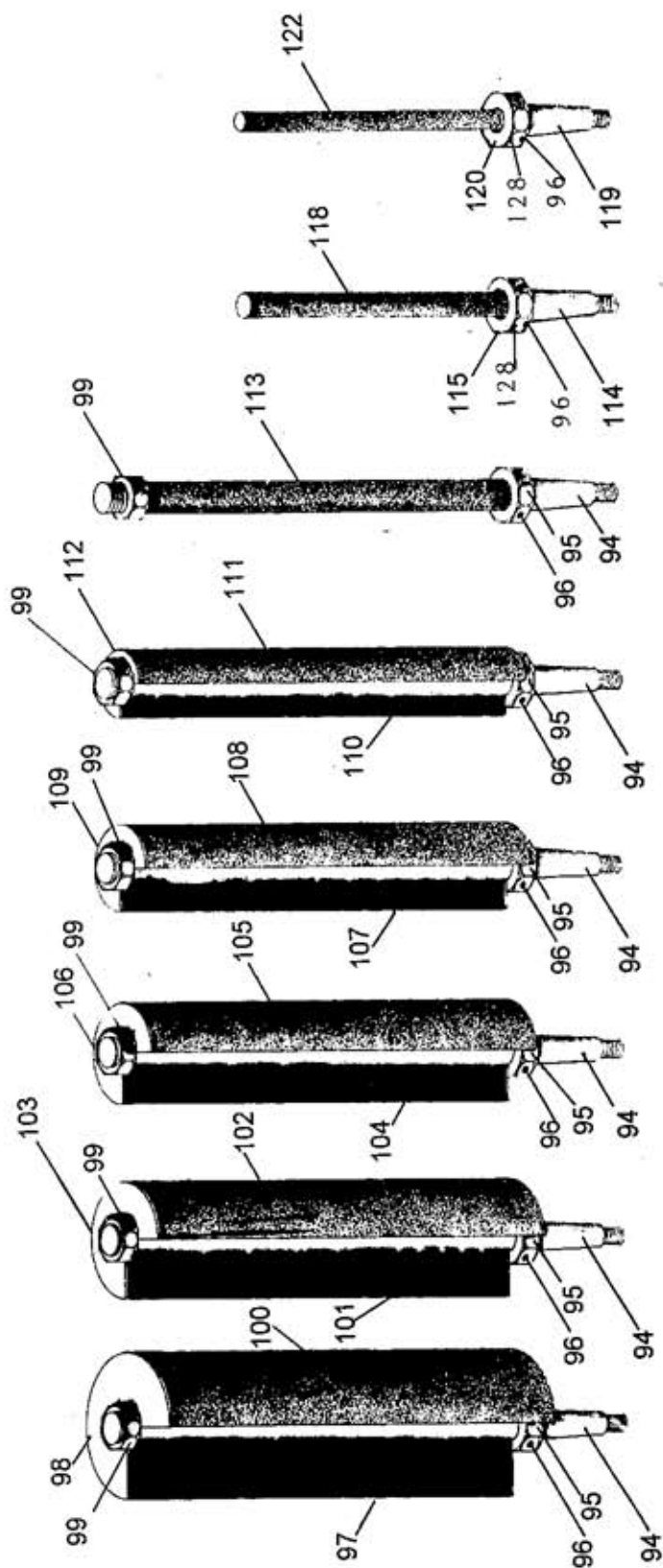
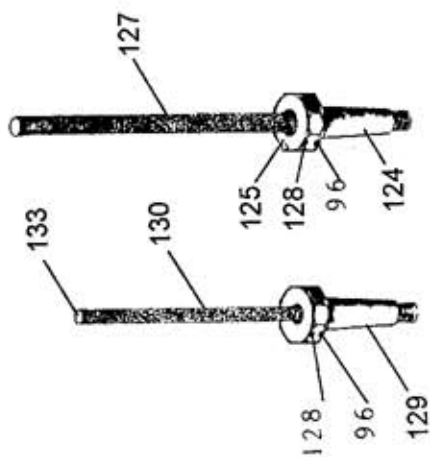
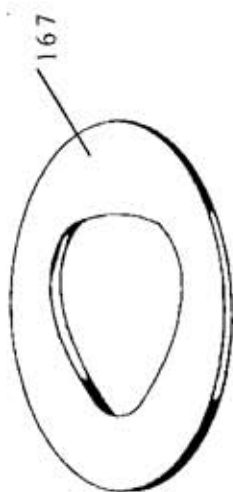
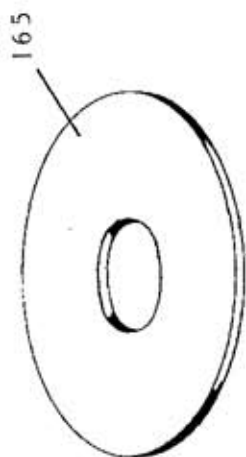
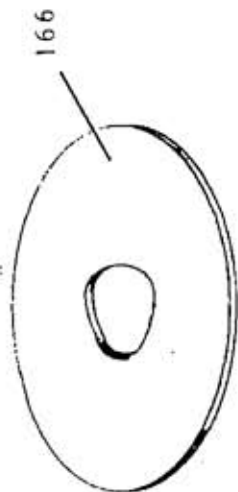
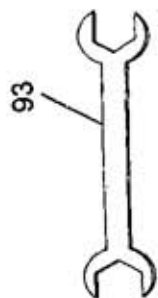


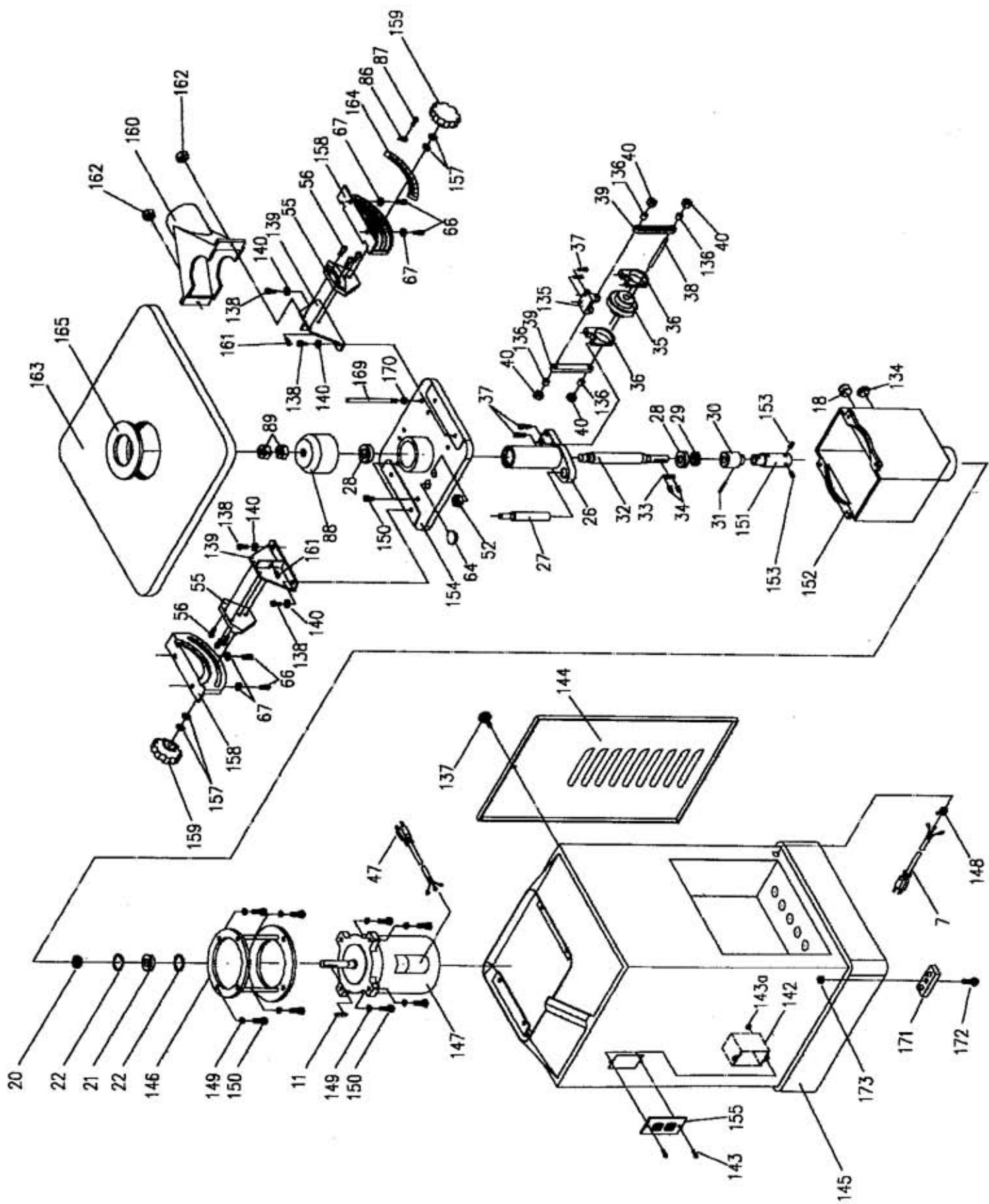
# WARNING!

**FAILURE TO USE THE CORRECT INSERT  
WITH THE CORRESPONDING DRUM  
MAY RESULT IN INJURY!**

Drum Diameter	Table Insert
#1 1/4" Dia. x 5" long	#1
#2 3/8" Dia. x 6" long	#1
#3 1/2" Dia. x 6" long	#1
#4 5/8" Dia. x 6" long	#1
#5 3/4" Dia. x 9" long	#1
#6 1" Dia. x 9" long	#2
#7 1 1/2" Dia. x 9" long	#2
#8 2" Dia. x 9" long	#3
#9 3" Dia. x 9" long	None
#10 4" Dia. x 9" long	None









## Oscillating Vertical Spindle Sander

PART No.	REFERENCE No.	DESCRIPTION	QTY.
7	L0000000	Power Cord	1
11	S0400525	Key	1
18	30101011	Oil Indicator	1
20	30101014	Oil Seal	1
21	C1206206	Ball Bearing	1
22	S0526500	C Snap Ring	2
26	30103014	Sleeve	1
27	30103015	Guide Rail Shaft	1
28	C1206205	Ball Bearing	2
29	30103016	Locking Nut	1
30	30103017	Worm	1
31	S0310530	Spring Pin	1
32	30103018	Main Shaft	1
33	S0400550	Key	1
34	S0010210	Set Screw	1
35	30103019	Spur Gear	1
36	30103020	Brass Bushing	2
37	S0010501	Hex Socket Cap Screw	4
38	30103021	Transmission Rod Shaft	2
39	30103022	Transmission Rod	2
40	S0110600	Locking Nut	4
47	L0000000	Switch Cord	1
52	S0110503	Locking Nut	1
55	30101029	Rear Trunnion Bracket	2
56	S0010510	Hex Screw	6
64	30101035	Oil Lid	1
66	S0010610	Hex Socket Cap Screw	4
67	S0210600	Washer	4
86	40301032	Width Pointer	1
87	S0030304	Screw	1
88	30101049	Cap	1
89	30101050	Nut	2
93	30105054A	Wrench	2
94	30105055	Arbor	6
95	30105056	Hex Nut	6
96	S0313525	Spring Pin	10
97	30105057	P.V.C	1
98	30105058	Washer	2
99	30105059	Nut	6
100	30105060	Sanding Cloth	1
101	30105061	P.V.C	1

## Oscillating Vertical Spindle Sander

PART No.	REFERENCE No.	DESCRIPTION	QTY.
102	30105062	Sanding Cloth	1
103	30105063	Washer	2
104	30105064	P.V.C	1
105	30105065	Sanding Cloth	1
106	30105066	Washer	2
107	30105067	P.V.C	1
108	30105068	Sanding Cloth	1
109	30105069	Washer	2
110	30105070	P.V.C	1
111	30105071	Sanding Cloth	1
112	30105072	Washer	2
113	30105073	Sanding Cloth	1
114	30105074	Arbor	1
115	30105075	Hex Nut	1
118	30105076	Sanding Cloth	1
119	30105077	Arbor	1
120	30105078	Hex Nut	1
122	30105079	Sanding Cloth	1
124	30105080	Arbor	1
125	30105081	Hex Nut	1
127	30105082	Sanding Cloth	1
128	S0050305	Screw	4
129	30105083	Hex Nut	1
130	30105084	Sanding Cloth	1
133	30105085	Arbor	1
134	30101004	Oil Plug	1
135	30105087	Brass Bushing Bracket	1
136	30105088	Shaft Brass Bushing	4
137	30101005	Knob	1
138	S0010510	Screw	4
139	30101030a	Bracket Base	2
140	S0210500c	Washer	4
141	S0020510	Screw	6
142	10105052n	Switch Box	1
143	S0030324	Screw	3
143a	S0110300	Nut	3
144	30101002j-1	Vent Hood	1
145	30101002JM	Column	1
146	30101003a	Motor Bracket	1
147	M3131211E	Motor	1
148	S1006P1	Strain Relief Bushing	1



## Oscillating Vertical Spindle Sander

PART No.	REFERENCE No.	DESCRIPTION	QTY.
149	S0230506	Spring Washer	8
150	S0010501	Hex Screw	12
151	30102008a	Coupling Head	1
152	30101009a	Tank Lid	1
153	S0050404	Set Screw	2
154	30101013a	Tank Lid	1
155	W0000001	Switch	1
157	S0210600	Washer	4
158	30101033a	Rear Trunnion	2
159	30101031j	Locking Knob	2
160	30101034a	Dust Cover	1
161	S0020501	Hex Screw	2
162	S0110500	Nut	2
163	30101036a	Working Table	1
164	30101047a	Scaie	1
165	30105051a	Table Insert (medium)	1
166	30105052a	Table Insert (small)	1
167	30105053a	Table Insert (Large)	1
169	30101027a	Fixed Rod	1
170	S0110600	Nut	1
171	10401029	Rubber Feet	4
172	S0030512	Sinking Head Screw	4
173	S0110500	Nut	4
174	J3010001	Logo	1



# **LAGUNA**

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