



6910 Spindle Sander

Owner's Manual





WELCOME!

This manual has been prepared for the owner and operators of a 6910 Spindle Sander. Its purpose, aside from machine operation, is to promote safety through the use of accepted correct operating and maintenance procedures. Completely read the safety and maintenance instructions before operating or servicing the machine. To obtain maximum life and efficiency from your OLIVER Sander, and to aid in using the machine safely, read this manual thoroughly and follow instructions carefully.

Warranty & Service

OLIVER warrants every product it sells. If one of our tools needs service or repair, please contact Oliver Machinery before embarking on the repair. Failure to do so could void the warrantee. To contact Oliver Machinery, please call 1-800-559-5065, or visit www.olivermachinery.net.

More Information

Remember, OLIVER is consistently adding new products to the line. For complete, up-to-date product information, check with your local OLIVER distributor, or visit www.olivermachinery.net

OLIVER Warranty

OLIVER makes every effort to assure that its products meet high quality and durability standards and warrants to the original retail consumer/purchaser of our products that each product be free from defects in materials and workmanship as follow: 2 YEAR LIMITED WARRANTY ON ALL PRODUCTS UNLESS SPECIFIED OTHERWISE. This Warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, repair or alterations outside our facilities, or to a lack of maintenance.

OLIVER LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD SPECIFIED ABOVE, FROM THE DATE THE PRODUCT WAS PURCHASED AT RETAIL. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG THE IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. OLIVER SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES TO PERSONS OR PROPERTY, OR FOR INCIDENTAL, CONTINGENT, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OUR PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

To take advantage of this warranty, the product or part must be returned for examination, to Oliver headquarters in Seattle. An explanation of the complaint must accompany the merchandise. If our inspection discloses a defect, we will either repair or replace the product, or refund the purchase price if we cannot readily and quickly provide a repair or replacement, if you are willing to accept a refund. We will return repaired product or replacement at OLIVER'S expense, but if it is determined there is no defect, or that the defect resulted from causes not within the scope of OLIVER'S warranty, then the user must bear the cost of storing and returning the product. This warranty gives you specific legal rights; you may also have other rights which vary from state to state. OLIVER sells through distributors only. Members of the OLIVER reserve the right to effect at any time, without prior notice, those alterations to parts, fittings, and accessory equipment which they may deem necessary for any reason whatsoever.

WARNING

- **Wear eye protection.**
- **Always keep guards in place and in proper operating condition. Do not operate the machine without the guards for any reason.**
- **This sander is intended to be used with wood and wood products only. Use of this sander and a dust collector with metal products is a potential fire hazard.**
- **Support the workpiece adequately at all times during operation; maintain control of the work at all times.**
- **This sander is designed and intended for use by properly trained and experienced personnel only.**
- **If you are not familiar with the proper and safe operation of a sander, do not use until proper training and knowledge has been obtained.**
- **REMOVE ADJUSTING KEYS AND WRENCHES.** Form a habit of checking to see that keys and adjusting wrenches are removed from the machine before turning it on.
- **KEEP THE WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
- **DON'T USE IN A DANGEROUS ENVIRONMENT.** Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.
- **KEEP CHILDREN AWAY.** All visitors should be kept a safe distance from the work area.
- **MAKE THE WORKSHOP KIDPROOF** with padlocks, master swatches, or by removing starter keys.
- **DON'T FORCE THE MACHINE.** It will do the job better and safer at the rate for which it was designed.
- **USE THE RIGHT TOOL.** Don't force a machine or attachment to do a job for which it was not designed.
- **USE THE PROPER EXTENSION CORD.** Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your machine will draw. An undersized cord will cause a drop in the line voltage resulting in power loss and overheating. The table following shows the correct size to use depending on the cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. Remember, the smaller the gauge number, the heavier the cord.

Volts	Total Length of Cord in Feet	
	120V	25
AWG		
16		14

- **WEAR PROPER APPAREL.** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
- **ALWAYS USE SAFETY GLASSES.** Also use face or dust masks if the cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses; they are not safety glasses.
- **DON'T OVERREACH.** Keep proper footing and balance at all times.
- **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- **ALWAYS DISCONNECT THE MACHINE FROM THE POWER SOURCE BEFORE SERVICING.**
- **REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure the switch is in the off position before plugging in.

- **USE RECOMMENDED ACCESSORIES.** The use of accessories and attachments not recommended by OLIVER may cause hazards or risk of injury to persons.
- **NEVER STAND ON A MACHINE.** Serious injury could occur if the machine is tipped.
- **CHECK DAMAGED PARTS.** Before further use of the machine, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function - check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
- **NEVER LEAVE THE MACHINE RUNNING UNATTENDED. TURN POWER OFF.** Don't leave the machine until it comes to a complete stop.
- **SOME DUST CREATED** by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
 - Lead from lead based paint
 - crystalline silica from bricks and cement and other masonry products, and
 - arsenic and chromium from chemically-treated lumber.

Your risk from those exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specifically designed to filter out microscopic particles

- **DO NOT** operate tool while under the influence of drugs, alcohol or any medication.
- **AVOID** kickback by sanding in accordance with directional arrows.
- **DO NOT** sand pieces of material that are too small to be safely supported.
- **WHEN** sanding a large workpiece, provide additional support at table height.
- **ADDITIONAL INFORMATION** regarding the safe and proper operation of this product is available from the National Safety Council, 1121 Spring Lake Drive, Itasca, IL 60143-3201, in the Accident Prevention Manual for Industrial Operations and also in the safety Data Sheets provided by the NSC. Please also refer to the American National Standards Institute ANSI 01.1 Safety Requirements for Woodworking Machinery and the U.S. Department of Labor OSHA 1910.213 Regulations.
- **SAVE THESE INSTRUCTIONS** refer to them often and use them to instruct others.

GROUNDING INSTRUCTIONS

Caution: This tool must be grounded while in use to protect the operator from electric shock.

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current

to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a qualified electrician.

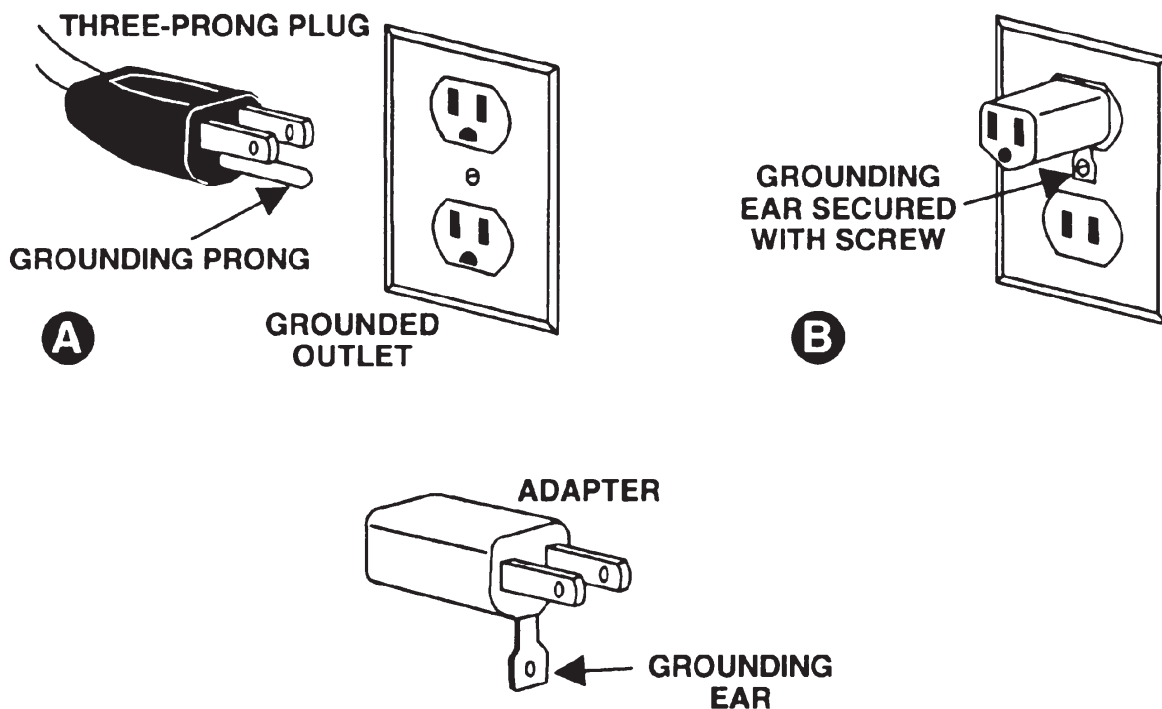
Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor, with insulation having an outer surface that is green with or without yellow stripes, is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded. Use only three wire extension cords that have three-prong grounding plugs and three-pole receptacles that accept the tool's plug.

Repair or replace a damaged or worn cord immediately.

115 Volt Operation

As received from the factory, your sander is ready to run at 115 volt operation. This sander, when wired for 115 volt, is intended for use on a circuit that has an outlet and a plug that looks like the one illustrated in (A). A temporary adapter, which looks like the adapter as illustrated in (B), may be used to connect this plug to a two-pole receptacle, as shown in (B) if a properly grounded outlet is not available. The temporary adapter should only be used until a properly grounded outlet can be installed by a qualified electrician. This adapter is not applicable in Canada. The green colored rigid ear, lug, or tab, extending from the adapter, must be connected to a permanent ground such as a properly grounded outlet box, as shown in (B).



SPECIFICATIONS OLIVER 6910

Stock Number.....	6910
Table Size	24"W x 24"L
Table Tilt (down)	45°
Dust Chute Diameter	4"
Spindle Speed (RPM)	1,725
Oscillations Per Minute	75
Length of Oscillation	1-1/2"
Motor (TEFC).....	2HP, 1Ph
.....	115/230V Prewired 115V
Net Weight (approx.).....	298 Lbs.

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The specifications in this manual are given as general information and are not binding. OLIVER reserves the right to effect, at any time and without prior notice, changes or alterations to parts, fittings, and accessory equipment deemed necessary for any reason whatsoever.

CONTENTS OF THE SHIPPING CONTAINER

1. Sander
3. Table Insert Rings
2. Spindle Wrenches
1. 2mm Hex Wrench
- 10 Removable Spindles
- 1/4" x 5" Steel and Sanding Sleeve
- 3/8" x 6" Steel and Sanding Sleeve
- 1/2" x 6" Steel and Sanding Sleeve
- 5/8" x 6" Steel and Sanding Sleeve
- 3/4" x 9" Steel and Sanding Sleeve
- 1" x 9" Rubber and Sanding Sleeve
- 1-1/2" x 9" Rubber and Sanding Sleeve
- 2" x 9" Rubber and Sanding Sleeve
- 3" x 9" Rubber and Sanding Sleeve
- 4" x 9" Rubber and Sanding Sleeve
- 1 Owner's Manual
- 1 Warranty Card

Tools Required for Assembly & Adjustments

1. 26mm Wrench or Large Adjustable Wrench
1. 6mm Hex Wrench
1. Square



WARNING

Read and understand the entire contents of this manual before attempting assembly or operation of the sander!

Failure to comply may cause serious injury!

UNPACKING

1. Remove all contents from shipping carton.
2. Report any damage to your distributor.
3. Do not discard any shipping material until the sander has been assembled and is running properly.
4. With help from another person move the sander off of the pallet and into the desired position.
5. Remove the protective coating found on the table with a putty knife and a cleaning solvent that will not damage painted surfaces.



Mounting Sanding Sleeves

1. Thoroughly clean the arbors (A, Fig. 1) on all of the spindle assemblies. Also clean the arbor housing on the sander.
2. Slip the sanding sleeve (B, Fig. 1) over the spindle and hold in place by tightening the set screw (C, Fig. 1) with the supplied 2mm hex wrench.
3. Repeat for all of the steel spindle assemblies.
4. To protect the sanding assemblies place them in the holders found on the sides of the sander, see Figure 2.

Installing Sanding Assemblies

WARNING

Disconnect the sander from the power source when installing or removing sanding assemblies.

Failure to comply may cause serious injury!

1. Thoroughly clean the arbor and arbor housing before installing the sanding assemblies.
2. Thread the arbor (A, Fig. 3) into the arbor housing (B, Fig. 3).
3. Use the provided wrenches to hold the lower arbor housing nut (C, Fig. 3) while turning the arbor nut (D, Fig. 3) clockwise.

Removing Sanding Assemblies

1. **Disconnect the sander from the power source, unplug.**
2. Use the provided wrenches to hold the upper arbor housing nut (E, Fig. 3) while turning the arbor nut (D, Fig. 3) counterclockwise.

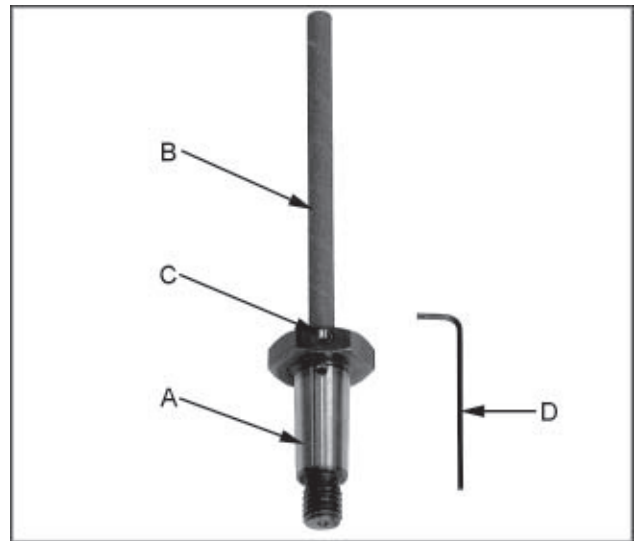


Fig. 1



Fig. 2

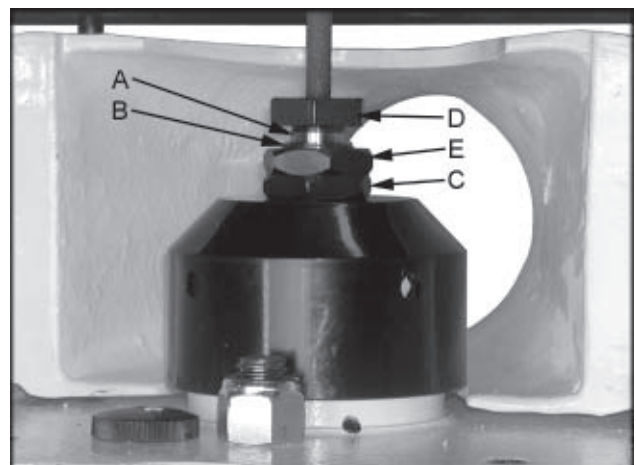


Fig. 3

Table Insert

1. **Disconnect the sander from the power source, unplug.**
2. Choose the insert (A, Fig. 4) that most closely matches the diameter of the sanding drum.
3. Line up the notch in the insert with the spring pin in the table (B, Fig. 4), and press in place.
4. Remove the insert by pressing up from underneath.
Note: Keep the opening in the table clean so that the insert can be easily put in place, and removed.
Sanding Assembly 90° to Table
1. Loosen the lock knobs (C, Fig. 5) on trunnions and position the table so that it rests against the 90° stop (D, Fig. 6). Tighten lock knobs.
2. Place a square (E, Fig. 5) on the working side of the table, and make sure the sanding drum is perpendicular to the table.
3. If an adjustment needs to be made loosen the hex nut (F, Fig. 6).
4. Loosen lock knobs.
5. Rotate the 90° stop in the appropriate direction until the table rests 90° to the sanding drum.
6. Tighten the hex nut while holding the stop.
7. Adjust pointer (G, Fig. 6) so that it indicates the "0" position on the scale.

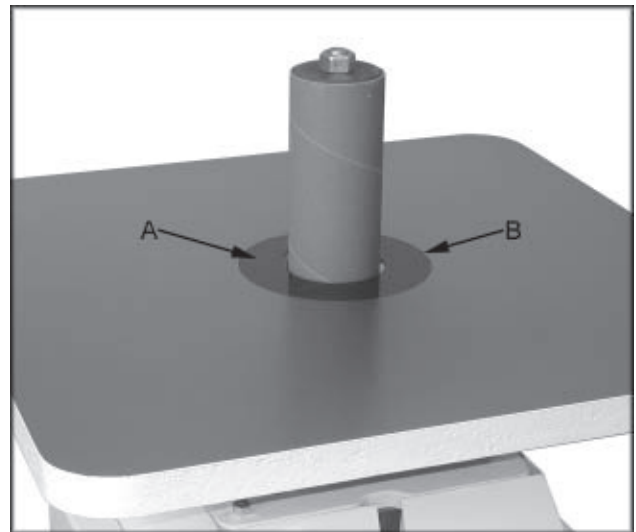


Fig. 4

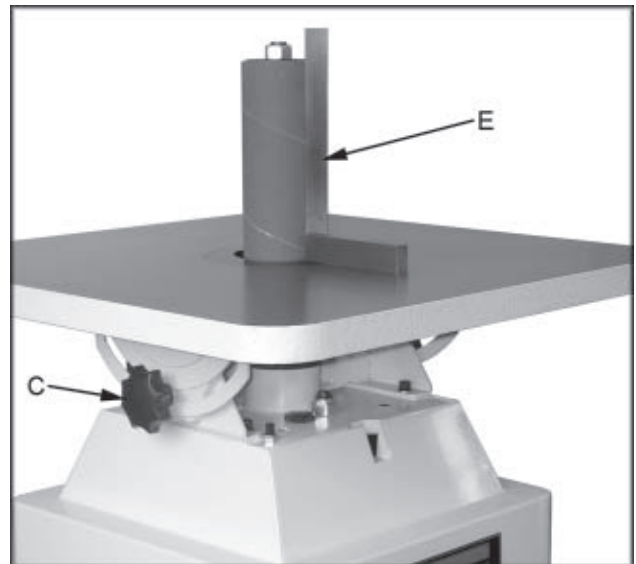


Fig. 5

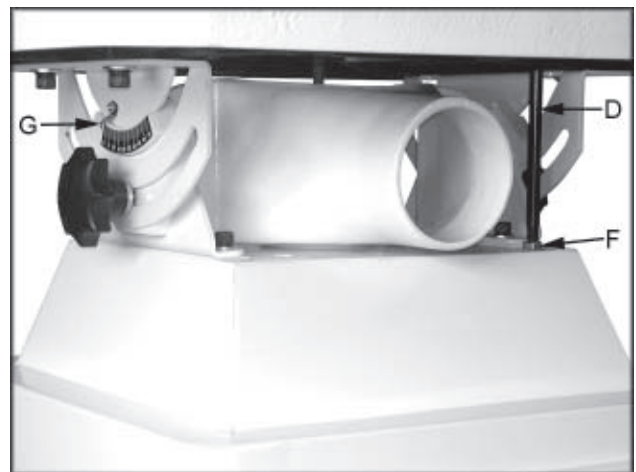


Fig. 6

Replacing Sanding Sleeves

1. Loosen hex nut (A, Fig. 7) with a 26mm wrench, or large adjustable wrench.
2. Slide the sanding sleeve (B, Fig. 7) off the drum and replace with a new sanding sleeve.

Note: If the sanding sleeve is not easily removed cut the sleeve off and clean the drum before reinstalling a new sleeve.

3. If you are replacing the sanding sleeves on the steel spindles loosen the set screw found on the arbor nut.
4. Remove sanding sleeve from the spindle and replace with a new sanding sleeve.

Note: If the sanding sleeve is not easily removed cut the sleeve off and clean the drum before reinstalling a new sleeve.

5. Tighten the set screw.

Dust Collection

In order to collect wood dust; attach a dust collection hose to the dust port.

MAINTENANCE

The manufacturer recommends replacing the 90 SAE gear lube at 800 hours of use.

1. Open the door on the back side of the machine to access the drain plug (C, Fig. 8). Use a 6mm hex wrench to remove the drain plug.
2. Refill oil through the oil cap (D, Fig. 9). The oil capacity is two quarts.
3. The oil sight glass (E, Fig. 8) should read between the “high” and “low” marks. Keep the machine and all attachments clean.

All bearings are permanently lubricated and require no further service.

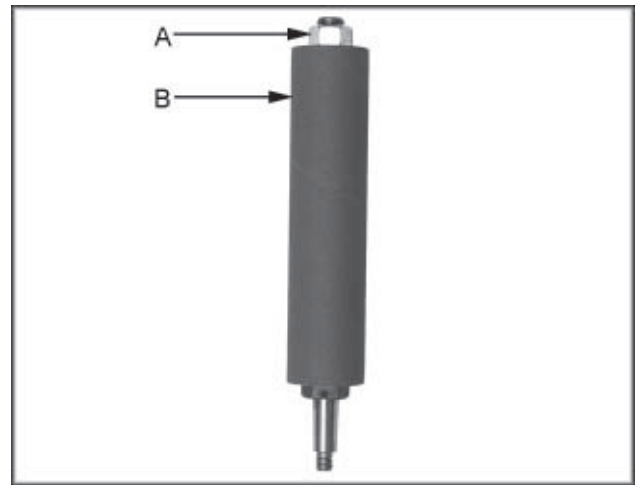


Fig. 7

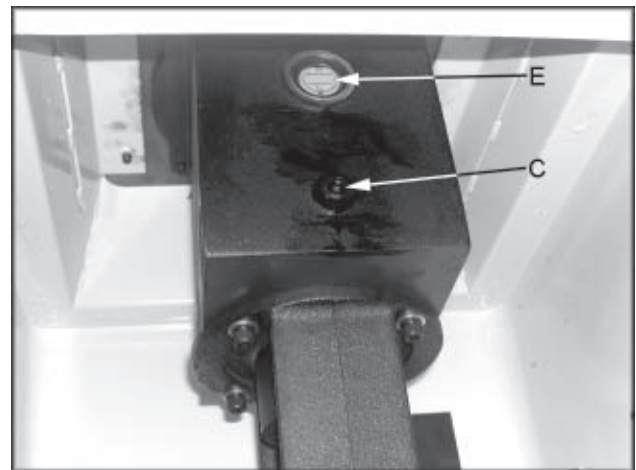


Fig. 8

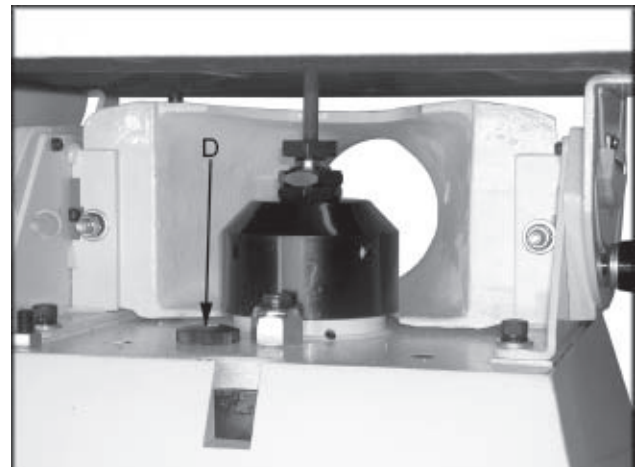


Fig. 9

TROUBLESHOOTING

Trouble	Possible Cause	Solution
Sander will not start	<ol style="list-style-type: none"> 1. Sander unplugged from wall or motor 2. Fuse blown or circuit breaker tripped 3. Cord damaged 4. Starting capacitor bad 	<ol style="list-style-type: none"> 1. Check all plug connections 2. Replace fuse or reset circuit breaker 3. Replace cord 4. Replace starting capacitor
Sanding drum does not come up to speed	<ol style="list-style-type: none"> 1. Extension cord too light or too long 2. Low current 	<ol style="list-style-type: none"> 1. Replace with adequate size and length cord 2. Contact a qualified electrician
Machine vibrates excessively	<ol style="list-style-type: none"> 1. Stand or base on uneven surface 	<ol style="list-style-type: none"> 1. Adjust stand or base so that it rests evenly on the floor
Sanded edge not square	<ol style="list-style-type: none"> 1. Table not square to sanding drum 	<ol style="list-style-type: none"> 1. Use a square to adjust table to sanding drum
Sanding marks on wood	<ol style="list-style-type: none"> 1. Wrong grit sanding sleeve 2. Feed pressure too great 	<ol style="list-style-type: none"> 1. Use coarser grit for stock removal and fine grit for finish sanding. 2. Never force workpiece