

Operating Instructions and Parts Manual Bench-top Drum Sander Model JWDS-1020



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1.0 IMPORTANT SAFETY INSTRUCTIONS

WARNING – To reduce risk of injury:

- 1. Read and understand the entire owner's manual before attempting assembly or operation.
- Read and understand the warnings posted on the machine and in this manual. Failure to comply with all of these warnings may cause serious injury.
- Replace warning labels if they become obscured or removed.
- 4. This drum 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 drum sander, do not use until proper training and knowledge have been obtained.
- Do not use this drum sander for other than its intended use. If used for other purposes, JET disclaims any real or implied warranty and holds itself harmless from any injury that may result from that use.
- Always wear ANSI Z87.1 approved safety glasses or face shield while using this drum sander. (Everyday eyeglasses only have impact resistant lenses; they are *not* safety glasses.)
- Before operating this machine, remove tie, rings, watches and other jewelry, and roll sleeves up past the elbows. Do not wear loose clothing. Confine long hair. Non-slip footwear or anti-skid floor strips are recommended. Do not wear gloves.
- Kickback occurs when the workpiece is thrown towards the operator at a high rate of speed. If you do not have a clear understanding of kickback and how it occurs, DO NOT operate this drum sander.
- 9. Wear hearing protection (plugs or muffs) during extended periods of operation.
- Do not operate this machine while tired or under the influence of drugs, alcohol or any medication.
- Make certain the switch is in the OFF position before connecting the machine to the power supply.
- 12. Make certain the machine is properly grounded.

- Make all machine adjustments or maintenance with the machine unplugged from the power source.
- 14. 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.
- 15. Keep safety guards in place at all times when the machine is in use. If removed for maintenance purposes, use extreme caution and replace the guards immediately after completion of maintenance.
- 16. Make sure the sander is firmly secured to the stand or work table before use.
- 17. 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.
- 18. Provide for adequate space surrounding work area and non-glare, overhead lighting.
- 19. Keep the floor around the machine clean and free of scrap material, oil and grease.
- 20. Keep visitors a safe distance from the work area. Keep children away.
- 21. Make your workshop child proof with padlocks, master switches or by removing starter keys.
- 22. Give your work undivided attention. Looking around, carrying on a conversation and "horse-play" are careless acts that can result in serious injury.
- 23. Maintain a balanced stance at all times so that you do not fall onto moving parts. Do not overreach or use excessive force to perform any machine operation.
- 24. Use the right tool at the correct speed and feed rate. Do not force a tool or attachment to do a job for which it was not designed. The right tool will do the job better and more safely.
- 25. Use recommended accessories; improper accessories may be hazardous.
- 26. Maintain tools with care. Keep conveyor and abrasives clean for the best and safest performance. Follow instructions for lubricating and changing accessories.
- Turn off the machine before cleaning. Use a brush or compressed air to remove chips or debris — do not use bare hands.

- 28. Do not stand on the machine. Serious injury could occur if the machine tips over.
- 29. Never leave the machine running unattended. Turn the power off and do not leave the machine until it comes to a complete stop.
- Remove loose items and unnecessary work pieces from the area before starting the machine.
- 31. Stand out of the path of workpiece when feeding a board.
- 32. Always feed stock against the rotation of drum.
- 33. Keep hands clear when feeding parts onto the conveyor. The part will be forced down as it begins to feed, causing a pinching action between the part and the conveyor table. Never reach into a running machine. Turn off sander, allow it to come to a complete stop, and disconnect from power, before attempting to retrieve parts from beneath the drum.
- 34. Pay particular attention to instructions on reducing risk of kickback.
- 35. Don't use in dangerous environment. Don't use power tools in damp or wet location, or expose them to rain. Keep work area well lighted.

▲ WARNING: This product can expose you to chemicals including lead which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to http://www.p65warnings.ca.gov.

WARNING: Drilling, sawing, sanding or machining wood products generates wood dust and other substances known to the State of California to cause cancer. Avoid inhaling dust generated from wood products or use a dust mask or other safeguards for personal protection.

Wood products emit chemicals known to the State of California to cause birth defects or other reproductive harm. For more information go to http://www.p65warnings.ca.gov/wood.

Familiarize yourself with the following safety notices used in this manual:

This means that if precautions are not heeded, it may result in minor injury and/or possible machine damage.

This means that if precautions are not heeded, it may result in serious, or possibly even fatal, injury.

2.0 About this manual

This manual is provided by JET, covering the safe operation and maintenance procedures for a JET Model JWDS-1020 Drum Sander. This manual contains instructions on installation, safety precautions, general operating procedures, maintenance instructions and parts breakdown. Your machine has been designed and constructed to provide consistent, long-term operation if used in accordance with the instructions as set forth in this document.

This manual is not intended to be an exhaustive guide to sanding methods, choice of stock, selection of abrasives, etc. Additional knowledge may be obtained from experienced users or trade articles. Whatever accepted methods are used, always make personal safety a priority.

If there are questions or comments, please contact your local supplier or JET. JET can also be reached at our web site: www.jettools.com.

Retain this manual for future reference. If the machine transfers ownership, the manual should accompany it.

AWARNINGRead and understand the entire contents of this manual before attempting assembly or operation. Failure to comply may cause serious injury.

Use the provided mail-in card, or register your product online - http://www.jettools.com/us/en/service-and-support/warranty/registration/

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4.0 **Specifications**

Table 1

Model number	JWDS-1020
Stock number	723510
Motor and Electricals	
Drum motor type	Totally enclosed, fan-cooled induction
Horsepower	1 HP (0.75 kW)
Phase	1
Voltage	115 V
Cycle	60 Hz
Listed FLA (full load amps)	8 A
Motor speed	1720 RPM
Starting amps	34.5 A
Running amps (no load)	4.8 A
Running capacitor	30μF 250VAC
Conveyor motor type	totally enclosed DC
Horsepower	1/30 HP (25 W)
Phase	1
Voltage	115 V
Listed FLA (full load amps)	0.6 A
Motor speed	54 RPM
On/off switch	Toggle with safety key
Power transfer	Direct drive
Power cable and plug	SJT 3x16AWG, 300V, 6 ft., 15A plug
Recommended circuit size 1	15 A
Sound emission ²	70.6 dB at 100cm (3.3ft.); 74.7 dB at 50cm (1.6ft.)
Capacities	
Capacities Maximum board width (single pass)	10 in. (254 mm)
	10 in. (254 mm) 20 in. (508 mm)
Maximum board width (single pass)	, ,
Maximum board width (single pass) Maximum board width (two passes) Maximum board thickness Minimum board length	20 in. (508 mm) 3 in. (76.2 mm) 2-3/8 in. (60.3 mm)
Maximum board width (single pass) Maximum board width (two passes) Maximum board thickness	20 in. (508 mm) 3 in. (76.2 mm)
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Maximum board width (single pass) Maximum board width (two passes) Maximum board thickness Minimum board length Minimum board thickness ³ Main materials Main body Drum	20 in. (508 mm) 3 in. (76.2 mm) 2-3/8 in. (60.3 mm) 1/32 in. (0.8 mm)
Maximum board width (single pass) Maximum board width (two passes) Maximum board thickness Minimum board length Minimum board thickness ³ Main materials Main body Drum Conveyor table	20 in. (508 mm) 3 in. (76.2 mm) 2-3/8 in. (60.3 mm) 1/32 in. (0.8 mm) aluminum die casting and steel
Maximum board width (single pass) Maximum board width (two passes) Maximum board thickness Minimum board length Minimum board thickness ³ Main materials Main body Drum Conveyor table Drum height adjustment handle	20 in. (508 mm) 3 in. (76.2 mm) 2-3/8 in. (60.3 mm) 1/32 in. (0.8 mm) aluminum die casting and steel extruded aluminum
Maximum board width (single pass) Maximum board width (two passes) Maximum board thickness Minimum board length Minimum board thickness ³ Main materials Main body Drum Conveyor table Drum height adjustment handle Sanding Drum	20 in. (508 mm) 3 in. (76.2 mm) 2-3/8 in. (60.3 mm) 1/32 in. (0.8 mm) aluminum die casting and steel extruded aluminum steel Plastic
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Maximum board width (single pass) Maximum board width (two passes) Maximum board thickness Minimum board length Minimum board thickness ³ Main materials Main body Drum Conveyor table Drum height adjustment handle Sanding Drum Drum dimensions, L x Dia Drum speed	20 in. (508 mm) 3 in. (76.2 mm) 2-3/8 in. (60.3 mm) 1/32 in. (0.8 mm) aluminum die casting and steel extruded aluminum steel Plastic 10 x 5 in. (254 x 127 mm) 1725 RPM
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Maximum board width (single pass) Maximum board width (two passes) Maximum board thickness Minimum board length Minimum board thickness ³ Main materials Main body Drum Conveyor table Drum height adjustment handle Sanding Drum Drum dimensions, L x Dia Drum speed Abrasive installed Drum elevation per one rotation of handwheel Conveyor speed Conveyor table dimensions	20 in. (508 mm) 3 in. (76.2 mm) 2-3/8 in. (60.3 mm) 1/32 in. (0.8 mm) aluminum die casting and steel extruded aluminum steel Plastic 10 x 5 in. (254 x 127 mm) 1725 RPM 80 Grit, 3in. wide, Alum. Ox. 1/16 in. (1.6 mm) variable within 0 to 10 FPM (0-3 MPM)

Dimensions		
Assembled dimensions, LxWxH	26-27/32 x 17-29/32 x 17-7/8 in. (682 x 455 x 454 mm)	
Shipping dimensions, LxWxH	dimensions, LxWxH 24 x 18-7/8 x 17-5/8 in. (61 x 48 x 44 cm)	
Weights		
Net weight (approx.)	73 lbs. (34 kg)	
Shipping weight (approx.)	82 lbs. (37.19 kg)	

¹ Subject to local/national electrical codes.

L=length, W=width, H=height, Dia=diameter

CFM = cubic feet per minute

The specifications in this manual were current at time of publication, but because of our policy of continuous improvement, JET reserves the right to change specifications at any time and without prior notice, without incurring obligations.

² The specified values are emission levels and are not necessarily to be seen as safe operating levels. As workplace conditions vary, this information is intended to allow the user to make a better estimation of the hazards and risks involved only.

³ Use of a carrier or backer board (not provided) is recommended for cuts 1/16" or less. See sect. 8.3.

AWARNING Read and understand the entire contents of this manual before attempting set-up or operation. Failure to comply may cause serious injury.

5.0 Setup and assembly

Open box and check for shipping damage. Report any damage immediately to your distributor and shipping agent. Any missing parts should be reported to your distributor. Do not discard shipping material until the Drum Sander is assembled and running satisfactorily.

5.1 Shipping contents

- 1 Sander with conveyor table
- 1 Handle
- 4 Foam pads
- 1 Operation and Parts manual
- 1 Product registration card

5.2 Tools required for assembly

3mm hex wrench

Straight edge (such as straight steel bar or carefully jointed board)

Additional tools may be needed for adjustments or mounting the sander to a workbench.

5.3 Handle

Install handle onto elevating screw, aligning flat in handle shaft with flat on elevating screw. Tighten set screw with 3mm hex wrench to secure handle.

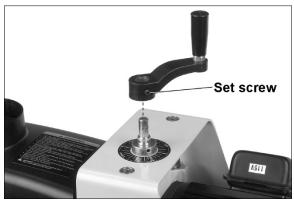


Figure 5-1: installing handle

NOTICE: Remove blocking before turning on sander. Turn crank handle counterclockwise to raise head and loosen blocking for removal.

5.4 Mounting to workbench

The sander should be bolted to a workbench or table to avoid any tendency to creep or slide during sanding operations. Use appropriate fasteners (not provided) through the 4 slots in the machine base.

5.5 **Dust collection**

Dust collection is mandatory for a safe work environment and extended abrasive life. The JWDS-1020 is equipped with a 4-inch dust collection port. Secure a 4-inch dust collection hose (not provided) to the port with a hose clamp (see Figure 5-2). Connect to a high volume dust collector, minimum 400 CFM. Note: Dryer vent hose is not acceptable for this purpose.

A standard shop canister vacuum (16 gal. or larger) can be used for short periods of sanding time but requires converting the hose size down to 2-1/2". An adaptor is required.



Figure 5-2 (hose and clamp not included)

5.6 Installing abrasives

Proper attachment of the abrasive strip to the drum is critical to achieving top performance from your drum sander.

An 80-grit, 3-inch wide abrasive strip is pre-installed on the drum. Optional pre-cut ("Ready-to-Wrap") abrasives of different grits are also available; see *sect. 18.0.*

(TIP: If you are using an after-market abrasive, use a new JET-supplied abrasive as a template to quickly cut a new strip. Alternatively, a diagram is supplied in Figure 5-3 showing trim measurements.)

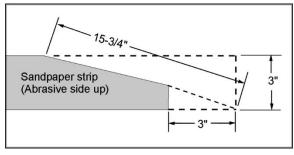


Figure 5-3: abrasive trimming – (not applicable to Ready-to-Wrap strips)

- 1. Rotate hood latch counterclockwise to open.
- 2. Press fastener lever (Figure 5-4) on outboard (left) end of drum, and insert tapered end of abrasive through slit in fastener, as shown.

 Align tapered edge of abrasive strip with left edge of drum. Insert enough strip so that the right edge aligns with the reference notch; this will ensure the proper length of strip to be secured at the opposite end of the drum.

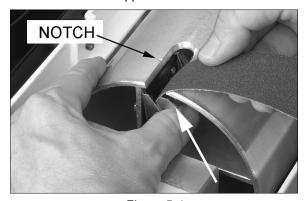


Figure 5-4

- 4. Release fastener lever to secure end of strip.
- Begin wrapping abrasive around drum. The tapered edge of strip end should follow as closely as possible to edge of drum.
- 6. Continue to wrap abrasive in spiral fashion by rotating drum with one hand and guiding strip with the other. See Figure 5-5.

Successive windings of strip must *not have any* overlap. They should be flush with previous windings or with a slight gap between.

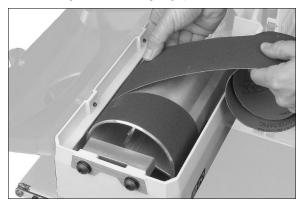


Figure 5-5

- Press inboard take-up lever (Figure 5-6) and insert trailing end of strip as far as it will go. If necessary, trim tapered end of abrasive strip.
- 8. Release inboard take-up lever to secure strip.

All abrasive strips will stretch over time as they are used, and may stretch enough to allow the take-up lever to reach its lowest position so that it cannot maintain tension on the strip. If this occurs, follow the above procedures to reset the take-up lever.

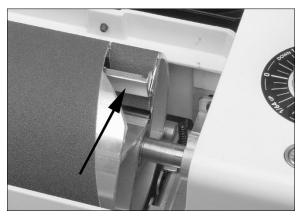


Figure 5-6

6.0 Electrical connections

AWARNING
All electrical connections must be done by a qualified electrician in compliance with all local codes and ordinances. Failure to comply may result in serious injury.

The JWDS-1020 Sander is rated at 115-volt power only. The sander comes with a plug designed for use on a circuit with a *grounded outlet* that looks like the one pictured in Figure 6-1.

Before connecting to power source, be sure switch is in *off* position.

It is recommended that the sander be connected to a dedicated 15 amp circuit with circuit breaker or fuse. If connected to a circuit protected by fuses, use time delay fuse marked "D". Local codes take precedence over recommendations.

6.1 GROUNDING INSTRUCTIONS

This machine must be grounded. 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.

AWARNING 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. Failure to comply may cause serious or fatal injury.

Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug.

Repair or replace damaged or worn cord immediately.

This tool is intended for use on a circuit that has an outlet that looks like the one illustrated in Figure 6-1. An adapter, shown in Figure 6-1, may be used to connect this plug to a 2-pole receptacle as shown in Figure 6-1 if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. The green-colored rigid ear, lug, and the like, extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box.

In Canada, the use of a temporary adaptor is not permitted by the Canadian Electrical Code, C22.1.

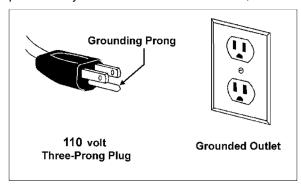


Figure 6-1

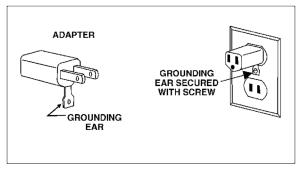


Figure 6-2

6.2 Extension cords

The use of extension cords is discouraged; try to position machines near the power source. If an extension cord is necessary, make sure it is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table 2 shows correct size to use

depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

Recommended Gauges (AWG) of Extension Cords

		Extension Cord Length *				
	25	50	75	100	150	200
Amps	feet	feet	feet	feet	feet	feet
< 5	16	16	16	14	12	12
5 to 8	16	16	14	12	10	NR
8 to 12	14	14	12	10	NR	NR
12 to 15	12	12	10	10	NR	NR
15 to 20	10	10	10	NR	NR	NR
21 to 30	10	NR	NR	NR	NR	NR

*based on limiting the line voltage drop to 5V at 150% of the rated amperes.

NR: Not Recommended.

Table 2

7.0 Adjustments

7.1 Drum Height Control

Drum height and depth of cut are controlled by the height adjustment handle (see Figure 5-1). Rotating handle clockwise lowers drum, counterclockwise raises it. One revolution of handle will move drum approximately 1/16" (or 1/4 turn = approx. 1/64"), as shown on the label below handle.

7.2 Depth scale

The depth scale indicates distance between bottom of sanding drum and top of conveyor belt. Adjustment is performed by "zeroing" the scale.

- 1. Unplug sander from power source.
- With an abrasive strip on drum, lower drum to where it touches top of conveyor belt. Note: Make sure drum contacts belt, not just the feed rollers.
- 3. At this drum position, the (top edge of) depth scale pointer should align with zero mark on scale. If it does not, loosen screw (Figure 7-1) and shift pointer to align with zero.
- 4. Retighten screw.

Note: Depending on desired accuracy, you may need to repeat this process when installing different abrasive grits.

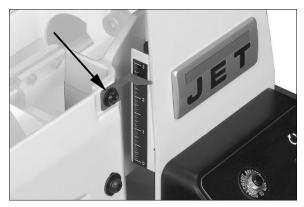


Figure 7-1: depth scale adjustment

7.3 Conveyor belt tension/tracking

Conveyor belt tension adjustment may be necessary during the break-in period to compensate for belt stretching, and also after long-term use.

7.3.1 Belt tension adjustment

NOTE: Insufficient belt tension will cause slippage of conveyor belt on drive roller during sanding operation. The conveyor belt is too loose if it can be stopped by hand pressure applied directly to top of moving conveyor belt. Excessive belt tension can result in bent rollers, bent brackets, and/or premature wearing of bushings or conveyor belt.

To adjust conveyor belt tension:

- 1. Slightly loosen four screws (A, Figure 7-2) on infeed side of conveyor, with 4mm hex wrench (two screws on each side).
- 2. Turn take-up screw (B, Figure 7-2) with 5mm hex wrench. Do this on *both sides* of conveyor to obtain approximately equal tension on both sides of sanding belt when taut.
- 3. Tighten four screws (A, Figure 7-2).
- Check conveyor belt tracking before operating machine. Proceed to sect. 7.3.2.

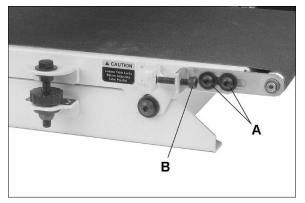


Figure 7-2: belt tension adjustment

7.3.2 Tracking adjustment

A belt tracks correctly when it moves centrally on the conveyor rollers without drifting to either side. Tracking adjustments are made while conveyor belt is running.

- 1. Make sure proper belt tension has been achieved (sect. 7.3.1).
- Turn on conveyor and set to maximum speed. Watch for tendency of conveyor belt to drift to one side of conveyor.
- 3. If conveyor drifts, slightly loosen two screws (A, Figure 7-2) and turn take-up screw (B, Figure 7-2) on *one side* of conveyor as needed.

Note: Adjust take-up screw only 1/4-turn at a time. Allow time for belt to react to adjustments before proceeding further.

4. When adjustment is satisfactory, tighten two screws (A, Figure 7-2).

Avoid over-adjusting, as this may affect belt tension. If tension is affected, if may become necessary to use both take-up screws to accomplish tensioning and tracking.

7.4 Inspecting drum alignment

The sanding drum must be parallel to conveyor table for proper machine operation. The sanding drum comes pre-aligned from the manufacturer. If a problem with drum alignment should occur, follow the instructions below.

First, inspect the alignment with a gauge of some kind. The following procedure uses a steel straightedge as a gauge.

- 1. Unplug sander from power source.
- Open hood and remove abrasive strip from drum.
- 3. Position gauge (F, Figure 7-3) between drum and conveyor table at *outboard* side of drum.

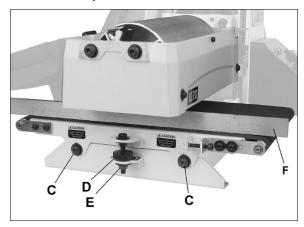


Figure 7-3: drum alignment

- With hood open, lower sanding drum while slowly rotating drum by hand, until drum lightly contacts gauge. NOTE: Make sure gauge is contacted by the drum, not just the tension rollers. Make a note of the measurement on the sander's depth scale.
- 5. Remove gauge and place under drum at *inboard* side.

6. If drum does not contact gauge equally on both ends of drum, alignment is needed.

7.4.1 Performing drum alignment

To align conveyor table with drum:

1. Loosen both table locking screws (C, Figure 7-3) with 5mm hex wrench.

ACAUTION Loosen both table locking screws before adjusting drum alignment. Failure to comply may cause damage to conveyor table.

- 2. To *raise* outboard end of table, loosen lock nut (E, Figure 7-3) and rotate knurled nut (D, Figure 7-3) clockwise.
- To *lower* outboard end of table, rotate knurled nut (D) counterclockwise, and tighten lock nut (E).
- 4. Verify setting using the gauge. Make further adjustments using knurled nut as needed.
- 5. Retighten table lock screws (C).

7.4.2 Fine-tuning drum alignment

Note: This is an operational test for sanding boards wider than the drum. Perform this procedure only after you have become familiar with sander operation.

When sanding boards wider than the drum, table alignment is critical and table must be adjusted exactly level to slightly lower on the outboard end. This will prevent any ridges from developing in the stock. Always check this on a piece of scrap wood, as follows, before sanding the work piece.

- Run a piece of scrap wood approximately 6" wide by 18 to 20" long through the sander sideways so that end of board extends past outboard side of drum.
- 2. Without changing drum height, rotate board 180° and sand the same side.
- 3. If a ridge is visible where the drum overlaps, lower table at outboard end (see sect. 7.4.1).
- 4. Repeat this process until the ridge is eliminated and entire board is sanded.

Note: When sanding narrow stock (less than 10"), return conveyor table to parallel position.

7.5 Tension roller adjustment

The infeed and outfeed rollers are tensioned to provide downward pressure on the workpiece to prevent slippage on the feed conveyor. Tension rollers have been set by the manufacturer, but should be inspected and may require adjustment as the sander receives use.

AWARNING Improperly adjusted tension rollers (i.e. those set too high, rendering them

non-functional) could allow kickback of pieces being sanded.

Tension roller pressure may be increased or decreased by turning the screws on the tension roller brackets (Figure 7-4) at each end of drum..

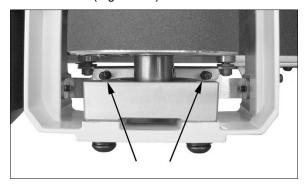


Figure 7-4: tension adjustment screws

Too much tension roller pressure can result in a "snipe" mark, which is a visible line running across the width of the board and located approximately 2-1/4" from end of board.

If snipe occurs on the leading end of board, adjust outfeed tension roller. If the snipe occurs on trailing end of board, adjust infeed tension roller.

8.0 **Operations**

Before using your drum sander, review the previous sections on initial set-up and adjustment. Before operating, make sure an abrasive strip is mounted and a proper dust collection system is connected.

8.1 Basic Operating Procedure

- 1. Establish depth of cut.
- 2. Start dust collection system.
- 3. Start sanding drum (with control panel switch, Figure 8-1).
- 4. Start conveyor and select feed rate (with control panel dial, Figure 8-1).
- 5. Feed stock through machine.

To feed stock through the sander, rest and hold board to be sanded on conveyor belt, allowing conveyor belt to carry board into drum. Once stock is halfway through, reposition yourself to outfeed side of machine to receive and control board as it exits.

ACAUTION Board will be forced down against conveyor table as it begins feeding, causing pinching hazard. Keep fingers away.

drum comes to a complete stop.

8.2 Switch safety key

To prevent unauthorized use of sander, turn off main switch and pull out safety key (Figure 8-1). Store key in a safe place. Key must be reinserted to start sander.

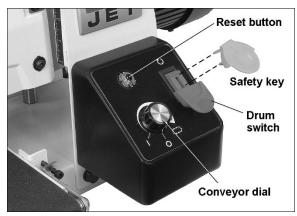


Figure 8-1: control panel

8.3 Circuit breaker reset

If the sander becomes overloaded, the built-in breaker will trip to help protect the motor. Allow the machine to cool down, then push the reset button (Figure 8-1) to restart.

If overloading happens frequently, refer to Troubleshooting, sect. 11.0.

8.4 Setting depth of cut

Adjusting the drum sander for proper contact between abrasive and stock determines the depth of cut. The depth of cut is controlled by the height adjustment handle.

It may take experimentation to determine proper depth of cut, given the variables of abrasive grit, type of wood, and feed rate. For best results, use scrap wood to practice sanding and to develop skill and familiarity with the machine before doing finish work.

A combination of several variables will determine proper depth of cut to use, including the following:

- 1. Abrasive type and grit size.
- 2. Width of piece being processed.
- 3. Hardness of piece.
- 4. Feed rate of conveyor belt.

NOTE: The use of a carrier or backer board (not provided), is recommended for cuts 1/16" or less. This is a flat board, usually of wood or MDF, slightly larger than the workpiece and of even thickness, placed beneath the workpiece as it is fed through the sander. The workpiece may be attached to the carrier with rubber cement, carpenter's tape or some other easily removable adhesive. Some operators use a rubber or textured surface on the carrier to help stabilize the workpiece by simple friction.

8.5 Establishing drum height

A good rule of thumb when sanding with grits finer than 80:

- To establish drum height, position stock under the drum. Do NOT start drum.
- 2. Lower drum to the stock thickness, making sure drum can still be rotated by hand while just contacting stock.

AWARNING Do not start drum while in contact with stock.

- 3. Without changing drum height, turn on conveyor and run the stock out from under the drum. Start sanding drum and sand stock at that same position.
- 4. With the drum operating, feed stock under the drum from the infeed side and against the rotation of the drum. Always maintain control of the stock to avoid kickback and/or slippage.

NOTE: If motor heats up during operation, depth of cut may be too great for size of grit and/or feed rate may be too fast.

For sanding with grits coarser than 80, you can lower the drum slightly.

Always maintain control of stock. Through practice you will learn the proper depth of cut considering the variables above.

A faster feed rate allows faster sanding but fewer revolutions of the drum per inch of sanding. A slower feed rate provides more revolutions of the drum per inch of sanding to allow a greater depth of cut and smooth sanding.

Begin experimenting with the feed rate set at about 40% to 50% of maximum. The best feed rate will depend on a number of factors, including type of stock, grit and depth of cut used, and whether the stock is fed directly in line with the conveyor table or at an angle. If the drum motor is lugging down, if conveyor belt is slipping, or if you observe a ripple effect on the stock, slow the feed rate. If the finish is smooth and the machine is not overworking, you can experiment using a faster feed rate.

Also try a faster feed rate or less depth of cut if the stock you are working begins to show burn marks. With cherry, hard maple or other hardwoods, using a shallower depth of cut and a faster feed rate will help minimize burn marks. Slightly angling the stock as it is fed into the machine will also help prevent burning the stock.

Because of the wide range of variables, it is important to experiment with your specific conditions and make adjustments to achieve the optimum feed rate. If problems occur, first check and adjust the feed rate, referring to sect. 11.0, Troubleshooting.

8.6 Maximum performance tips

The versatility designed into the JWDS-series drum sander allows it to be used for a variety of tasks that will boost return on your investment. For example, it will speed up fine sanding work often done with slower, dust-generating hand sanders, and will achieve fine thickness adjustments not possible on some sanders. It can be used to surface figured woods — bird's eye or curly maple, for example — which can be damaged if fed through a planer.

Learning how to use its adjustments and controls will allow you to fine-tune the machine for maximum results. The best results come from experimenting with different abrasive grits and machine adjustments to fit the job at hand. Following is a list of useful tips which can help you improve performance of your sander.

8.6.1 **Dust collection**

When connecting dust collectors, remember that straight pipe will not restrict airflow as much as flexible tubing. Y's and elbows will restrict airflow less than T's. Also, a hose smaller than 2-1/2" diameter should not be used.

8.6.2 Multiple-piece sanding runs

When abrasive planing (or thickness sanding) a run of similar pieces that you want to have the same thickness, it is best to determine the thickness of the thinnest piece and process all pieces to that same thickness in one session. Be aware that the sander will remove cups and crowns in the workpiece; consider this when measuring and processing stock to the same thickness.

8.6.3 Simultaneous multiple pieces

When sanding multiple pieces simultaneously, make sure to stagger (step) the pieces across the width of the conveyor belt. This provides better contact with the tension rollers. Try to process only multiple pieces of similar thickness.

If there is a significant thickness difference, the thinner pieces can slip on the conveyor belt if they do not contact the tension rollers. Also note that pieces thicker than 3/4" should be longer than the minimum normally recommended to prevent tipping of the stock.

8.6.4 Edge sanding

When edge sanding, the sander will mimic the opposite edge of the stock which is lying on the conveyor belt. Because of this, it is important for the stock edge to have been ripped at the proper angle to the face before the sanding process. When edge sanding stock that is less than 3/4" wide or more than 2" high, it is good procedure to stack and clamp several pieces together to prevent them from slipping or tipping on the conveyor belt.

8.6.5 Sanding imperfect stock

When sanding stock with a cup or crown, place the crown up. This will stabilize the stock to help prevent tipping or rocking during sanding. After the crown has been removed and the top is flat, turn the stock over and sand the opposite side. To avoid personal injury, take special care when sanding stock that is twisted, bowed, or otherwise varies in thickness from end to end. If possible, support such stock as it is being sanded to keep it from slipping or tipping. Use extra roller stands, help from another person, or hand pressure on the stock, to minimize potentially hazardous situations.

8.6.6 Face frames and raised panel doors

It is very important to have the proper abrasive contact when doing this type of sanding. If the machine is set to take an excessive depth of cut, the result can be a gouge or dip as the drum goes from sanding the rails at full width to sanding just a few inches of width on the stiles. To prevent this make sure, when using abrasives finer than 80 grit, that the drum is in contact with the wood but can still be spun by hand. If there is room, angling the stock on the conveyor belt can also help.

Slowing the conveyor feed when coming to a rail in the stock can help prevent a dip or gouge. This allows the abrasive to work the wider width with less effort, and to achieve better consistency of the finished surface.

8.6.7 Stock feeding angle

Some pieces, because of their dimensions, will need to be fed into the machine at a 90° angle (perpendicular to drum). However, even a slight offset angle of stock will provide for more effective stock removal. The optimum feeding angle for stock removal is about 60°.

Angling the workpiece for stock removal provides other advantages, such as less loading of certain areas of the drum due to glue lines or mineral streaks in the stock, more even wear of abrasive strips, potentially faster feed rates, and lighter loads on the motor. Note that to get the best final finish, however, the stock should be fed through the machine so it will be sanded in line with the grain of the wood on the final one or two passes.

9.0 User-maintenance

AWARNING Before doing maintenance on the machine, disconnect it from the electrical supply (pull out the plug), unless indicated otherwise. Failure to comply may cause serious injury.

9.1 Cleaning and lubrication

For best results, make cleaning the sander a regular shop procedure. Allowing excess build-up of dust and debris can adversely affect performance through loading of the abrasives, slippage on the conveyor table, and/or accumulation of material inside the drums which can throw off the center of balance.

Leave the dust collector on when cleaning dust from the drums. Also brush the conveyor belt after cleaning operations. If not cleaned, the conveyor belt could allow stock to slip during sanding operations.

NOTE: Bearings are pre-sealed and require no lubrication.

- Lubricate elevating leadscrew (A, Figure 9-1) as needed.
- Clean sawdust from abrasive strip and brush dust from conveyor belt.
- Keep guide bars clean (B, Figure 9-1).
- Blow dust from motor vents and switch area.
 Blow dust from inside of sanding drum, which may cause vibration or offset the center of balance.
- Check all set screws for tightness on parts such as bearings, conveyor table, and couplings.

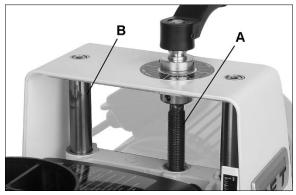


Figure 9-1

9.2 Drum maintenance

The drum should not require removal from the machine under normal circumstances. Should maintenance ever become necessary, the drum has been designed for easy removal and replacement.

 Remove two socket head screws (C, Figure 9-2) on the bearing block.

- Loosen two screws on the coupling (D, Figure 9-2).
- Carefully slide drum out of coupling and remove from machine.

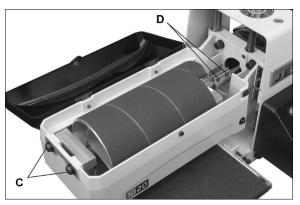


Figure 9-2: drum removal

9.3 Conveyor belt replacement

- 1. Disconnect sander from power.
- 2. Raise drum to highest position.
- Loosen two screws (E, Figure 9-3) and turn take-up screws (F, Figure 9-3) on both sides of conveyor to relieve belt tension, and slide the driven roller fully inward.
- 4. Loosen two table locking screws (G, Figure 9-3).
- 5. Remove lock nut (G, Figure 9-3).
- 6. Remove two socket head screws that attach conveyor table to base.
- 7. Lift up conveyor table and remove it from machine. Avoid tearing the belt on any edges underneath the conveyor table.
- 8. Set conveyor on motor side and slide conveyor belt off end of conveyor table.
- Install new belt and re-install conveyor table. Check alignments, and tension and track the new belt.

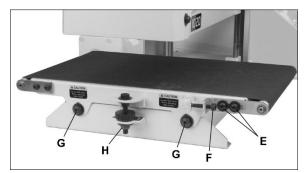


Figure 9-3

Note: If conveyor belt continually tracks to one side of the machine, reversing the belt on the conveyor table may remedy the problem. To make sure the conveyor table is not twisted, place a level on the conveyor table. Level the machine if needed. If there is still a problem, proceed with the steps below:

Step 1: Check conveyor drive roller and driven roller to make sure they are parallel to surface of conveyor table. To do this, first center conveyor belt on the conveyor table. Then lay a straight-edge on the exposed edge of conveyor table on left (outboard) side, extending it over the roller. Note distance between roller and straightedge.

Step 2: Now repeat Step 1 on right (inboard) side of conveyor. Compare the measurements from side to side. If they are not equal, loosen one of the brackets that hold the roller in place. Tip this bracket until distance between roller and straight-edge are equal from side to side, then tighten bracket.

9.4 Commutator brush inspection

To maintain motor efficiency, inspect the two carbon brushes every two months, or more frequently if sander is heavily used. Stalling or loss of power may be a symptom of worn carbon brushes. If one brush is worn out, replace both at the same time.

ACAUTION Continued use of damaged or worn brushes may result in damage to motor armature.

- 1. Unplug sander from power source.
- 2. Unscrew and remove cap with flat blade screwdriver. See Figure 9-4.
- Gently pry up an edge of the brass clip, until the spring causes it to disengage from hole. (Notice orientation of brush as you remove it; it should be inserted in the same manner; curvature of brush will match curvature of motor.)

- 4. Pull out brush and inspect. Brush should be replaced if any of the following are discovered:
 - Brush has worn to about 1/2-inch long.
 - Signs of crumbling, burning or breaking.
 - End of brush is rough or pitted.
 - · Abnormal coloration of spring
 - Broken lead in spring
 - Collapsed spring
- Install new brush (or reinstall current brush) and gently press it all the way into hole until the brass clip is secured.
- 6. Install cap.
- 7. Repeat for other brush.

NOTE: It is recommended that sander be run without load for several minutes to seat new brushes.

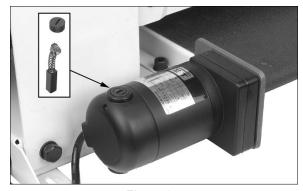


Figure 9-4

9.5 Additional servicing

Any additional servicing should be performed by an authorized service technician.

10.0 Abrasives

The abrasive material you choose will have a substantial effect on the performance of your sander. Variations in paper type, weight, coating and durability all contribute to achieving your desired finish.

JET Abrasives are available in Ready-To-Wrap[™] pre-cut lengths or in the convenient Ready-To-Cut pre-marked box. Your JET dealer can recommend the best choice for your application.

10.1 Selecting drum abrasives

It is important to select the proper grit of abrasive for the type of sanding being performed to achieve maximum results. As with any sanding operation, first begin sanding with a coarser grit, depending upon the roughness of the stock or the amount of stock to be removed. Then progressively work toward finer grits. The chart below shows the general uses for the various grits.

The amount of stock to be removed is a major consideration when choosing the grit grade with which to begin. Grits 24, 36, 50 and 60 are primarily designed for stock removal. Grits 24 and 36 will remove the most material in one pass, whether you are doing abrasive planing, cleaning up glued panels, or flattening stock. Grits from 100 through 220 are primarily finishing grits designed to remove the scratch pattern from the previous grit used. For best results, never skip more than one grit grade when progressing through a sanding sequence.

For fine work, such as furniture, try not to skip any grit grades during the sanding process.

In general, premium quality abrasives will produce a better finish with a less noticeable scratch pattern.

Note: Grits that are too fine can sometimes burnish the wood and leave a glossy surface which will not accept stains evenly. This will vary by type of wood. Oak, for example, is susceptible to burnishing because of its open pores.

10.2 Cleaning abrasive strips

Regularly clean the abrasive strip on the drum with commercially available cleaning sticks, following the manufacturer's directions. When cleaning, also brush the stick crumbs from the drum while it is still rotating.

In some cases, heavy loaded areas can be removed with Plexiglas held on edge over the rotating drum.

ACAUTION Always wear eye protection while performing sandpaper cleaning, and take all precautions to avoid any contact of hands or clothing with the rotating drum.

Cloth-backed abrasives can be cleaned by soaking in paint thinner or mineral spirits for 20 minutes to one hour, then using a brush to remove any build-up. Dry the abrasive strips completely before using. Any used solvents should be discarded in compliance with environmental regulations.

10.3 Increasing abrasive life

Abrasive life can be increased not only by cleaning, but by removing the abrasive strip from the drum and reversing it. To do this, remove the strip and use what was the trailing end as the starting end on the left (outboard) side of the drum. Reversing the strip will provide a fresh set of cutting edges on the abrasive.

10.4 Abrasive selection guide

Grit	Common Application
24	Abrasive planing, surfacing rough-sawn boards, maximum stock removal, glue removal.
36	Abrasive planing, surfacing rough-sawn boards, maximum stock removal, glue removal.
50	Surfacing and dimensioning boards, truing warped boards
60	Surfacing and dimensioning boards, truing warped boards.
80	Light dimensioning, removal of planer ripples.
100	Light surfacing.
120	Light surfacing, minimal stock removal.
150	Finish sanding, minimal stock removal.
180	Finish sanding only, not for stock removal.
220	Finish sanding only, not for stock removal.

Table 3

11.0 Troubleshooting JWDS-series Drum Sander

Symptom	Possible Cause	Correction *	
Drum motor won't start	No incoming current.	Check connections at plug or circuit panel.	
when switch is activated.	Safety key missing from switch.	Install safety key.	
	Low voltage.	Check power line for proper voltage.	
	Open circuit in motor or loose connection.	Inspect all lead connections on motor for loose or open connections.	
	Switch malfunction.	Replace switch.	
Drum motor will not start: fuses blow or circuit	Short circuit in line cord or plug.	Inspect cord or plug for damaged insulation and shorted wires.	
breakers trip.	Short circuit in motor or loose connections.	Inspect all connections on motor for loose shorted terminals or worn insulation.	
	Incorrect fuse or circuit breaker in power line.	Install correct fuse or circuit breaker.	
Drum motor overheats.	Air circulation through motor restricted.	Clean motor fan with compressed air to restore normal air circulation.	
	Motor overloaded, excess feed rate.	Reduce conveyor speed.	
	Motor overloaded, excess depth of cut.	Reduce depth of cut.	
Drum motor stalls, resulting in blown fuses	Short circuit in motor or loose connections.	Inspect connections on motor for loose or shorted terminals or worn insulation.	
or tripped circuit.	Low voltage.	Correct low voltage conditions.	
	Incorrect fuse or circuit breaker in power line.	Install correct fuse or circuit breaker.	
Loud, repetitive noise or vibration coming from machine.	Fasteners loose.	Inspect fasteners and tighten where needed.	
	Motor fan is hitting cover.	Tighten fan or shim fan cover.	
	Machine not level.	Place sander on flat surface, shim if needed.	
Conveyor motor stalls.	Excessive depth of cut.	Reduce depth of cut; use coarser grit; reduce feed rate.	
Conveyor belt slips on	Improper conveyor belt tension.	Adjust belt tension.	
drive roller.	Excessive depth of cut and/or feed rate.	Reduce depth of cut and/or feed rate.	
Abrasive strip comes off	Slack in abrasive strip on drum.	Remove slack in strip.	
drum.	Abrasive improperly wrapped.	Read the section on installing abrasives, and rewrap.	
Abrasive strip is loose.	Strip caught on inside edge of slot, or on inboard side of drum.	Re-adjust the strip end in the slot and/or trim the abrasive edge.	
	Strip not cut properly.	Re-cut and re-install the abrasive strip.	
Abrasive loads up	Excessive depth of cut.	Reduce depth of cut.	
prematurely.	Excessive feed rate.	Reduce feed rate.	
	Inadequate dust collection.	Increase airflow at dust port.	
	Inadequate abrasive.	Use an open-coat abrasive.	
Line or groove in stock.	Inconsistent feed rate.	Do not stop or change the feed rate while feeding stock.	
Snipe marks.	Improper tension on rollers.	Re-tension rollers.	

Symptom	Possible Cause	Correction *	
Sander burns wood.	Abrasive strip is overlapped.	Re-wrap abrasive strip.	
	Abrasive is loaded.	Clean abrasive.	
	Depth of cut excessive for fine grit.	Use coarser grit or reduce depth of cut.	
	Feed rate too slow.	Increase feed rate.	
	Abrasive is worn.	Replace abrasive.	
Board slips on conveyor belt.	Tension rollers too high.	Lower tension rollers.	
	Excessive feed rate.	Reduce feed rate.	
	Dirty or worn conveyor belt.	Replace conveyor belt.	
Ripples in sanded surface. A. Non-uniformly spaced	A. Uneven feed rate.	Conveyor belt slipping (see above) Board slips on conveyor belt (see above). Conveyor motor stalls (see above).	
ripples. B. Uniformly spaced ripples.	B. Conveyor table flexing or vibration.	Reduce depth of cut and/or feed rate. Chec for loose bolts, loose shaft coupling set screws, or out-of-balance drum.	
Wood is gouged.	Stock slipping on conveyor.	Correct depth of cut or roller tension.	
	Work piece not properly supported.	Add work supports for long work pieces.	

^{*} **WARNING:** Some corrections may require a qualified electrician.

12.0 Optional accessories

The following abrasives are available for the JWDS-1020 Benchtop Drum Sander (Abrasive strips are 3" wide, cloth backed, aluminum oxide, resin bond, open coat.)

```
Ready-To-Wrap<sup>™</sup> Abrasive Strip, 60 Grit, (6 wraps in a box)
60-1060
              Ready-To-Wrap<sup>™</sup> Abrasive Strip, 80 Grit, (6 wraps in a box)
60-1080
              Ready-To-Wrap<sup>™</sup> Abrasive Strip, 100 Grit, (6 wraps in a box)
60-1100
              Ready-To-Wrap<sup>™</sup> Abrasive Strip, 120 Grit, (6 wraps in a box)
60-1120
              Ready-To-Wrap<sup>™</sup> Abrasive Strip, 150 Grit, (6 wraps in a box)
60-1150
              Ready-To-Wrap<sup>™</sup> Abrasive Strip, 180 Grit, (6 wraps in a box)
60-1180
60-1220
              Ready-To-Wrap<sup>™</sup> Abrasive Strip, 220 Grit, (6 wraps in a box)
              Premium Ready-To-Cut<sup>™</sup> Abrasive Strip, 36 Grit
60-9036
              Premium Ready-To-Cut<sup>™</sup> Abrasive Strip, 60 Grit
60-9060
              Premium Ready-To-Cut<sup>™</sup> Abrasive Strip, 80 Grit
60-9080
              Premium Ready-To-Cut<sup>™</sup> Abrasive Strip, 100 Grit
60-9100
              Premium Ready-To-Cut<sup>™</sup> Abrasive Strip, 120 Grit
60-9120
              Premium Ready-To-Cut<sup>™</sup> Abrasive Strip, 150 Grit
60-9150
              Premium Ready-To-Cut<sup>™</sup> Abrasive Strip, 180 Grit
60-9180
              Premium Ready-To-Cut<sup>™</sup> Abrasive Strip, 220 Grit
60-9220
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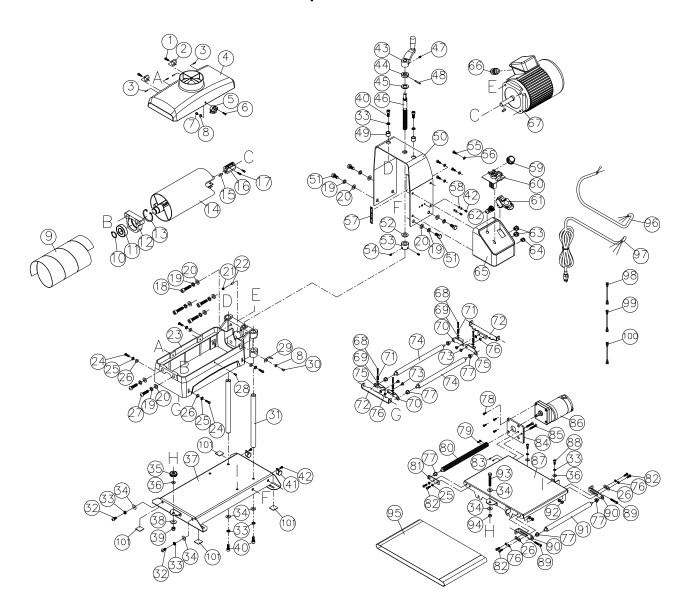
13.0 Replacement Parts

Replacement parts are listed on the following pages. To order parts or reach our service department, call 1-800-274-6848 Monday through Friday, 8:00 a.m. to 5:00 p.m. CST. Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

Non-proprietary parts, such as fasteners, can be found at local hardware stores, or may be ordered from JET.

Some parts are shown for reference only, and may not be available individually.

13.1.1 JWDS-1020 Drum Sander – Exploded View

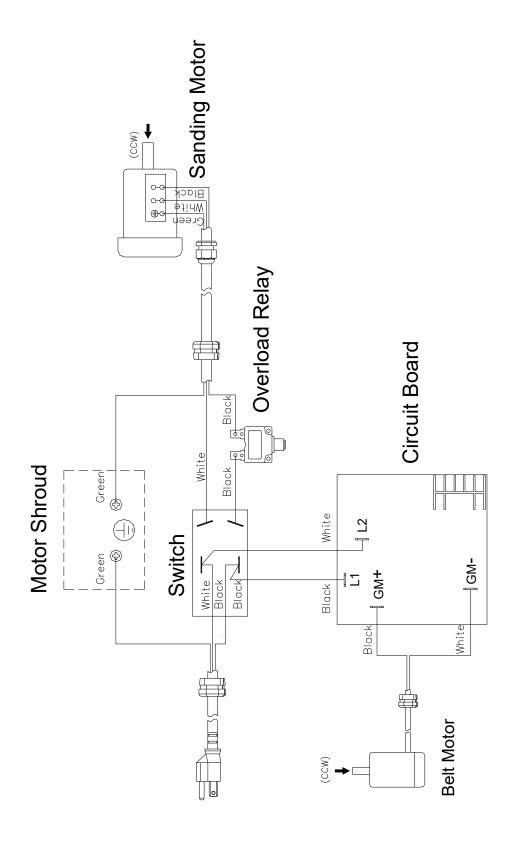


13.1.2 JWDS-1020 Drum Sander Parts List

Index No	Part No	Description	Size	Qty
1	TS-1503041	. Socket Head Cap Screw	M6 x 1.0P x 16L	2
2	JWDS1632-103	. Drum Carriage Hinge		2
3	JWDS1632-103	Spring Pin	3 x 14L	4
		. Dust Hood		
		. Knob		
6	TS-1502041	. Socket Head Cap Screw	M5 x 0.8P x 16L	1
7	TS-1541011	. Nylon Lock Hex Nut	M5 x 0.8P	1
8	TS-1550031	. Flat Washer	5.1 x 12 x 1T	2
9		Abrasive (see sect. 12.0 for replacements)		1
		C-Retainer Ring Ext. (Re:14A)		
		Ball Bearing (Re:14A)		
		Outboard Bearing Housing (Re:14A)		
		C-Retainer Ring Int. (Re:14A)		
		Drum (Re:14A)		
		Drum Assembly (includes #10-17)		
		. Key		
		. Coupling		
		Socket Head Cap Screw		
		Socket Head Cap Screw		
		Lock Washer		
		. Flat Washer		
		Socket Head Set Screw		
		. PU Block		
		Drum Carriage		
		. Socket Head Button Screw		
		. Lock Washer		
		. Flat Washer		
		. Socket Head Button Screw		
		. Socket Head Cap Screw		
		. Pointer		
		. Phillips Pan Hd Machine Screw		
		. Guide Bar		
		Socket Head Button Screw		
		. Lock Washer		
		. Flat Washer		
		. Knob		
		. Flat Washer		
		. Base		
		. Flat Washer		
		. Nylon Lock Hex Nut		
		Socket Head Cap Screw w/thrdlckr		
		. Cable Holder		
		. Phillips Pan Hd Machine Screw		
		. Crank Handle		
		. Collar		
45	JWDS1632-140	. Oilite Washer		1
		. Height Adjusting Screw		
		. Socket Head Set Screw		
		Spring Pin		
		. Spacer		
		. Motor Shroud		
		. Hex Cap Screw		
		. Nylon Washer		
		. Collar		
		Socket Head Set Screw		
		. Pan Hd Phillips Tapping Screw		
		. Flat Washer		
		Depth Scale		
58	F002007	. Lock Washer, Ext. Tooth	M5	1 1
		. Knob		
Ja	IVIZZ 44- 180	INIIUU	•••••	1

Index No		Description	Size	Qty
		Circuit Board		
		Switch		
		Switch Key (not shown)		
62	.JWDS1020-162	Overload Relay		1
		Strain Relief		
		Strain Relief		
		Control Box (incl. LM000390 Label)		
		Strain Relief		
		Motor		
		Running Capacitor (not shown)		
		Fan Cover (not shown)		
		Cooling Fan (not shown)		
		Wiring Box		
		Wiring Box Cover		
		Phillips Round Head Machine Screw		
		Flat Washer		
		Right Tension Roller Suspension Bracket		
		Compression Spring		
		Tension Roller Fixed Bracket		
		Shoulder Screw		
		Tension Roller		
		Left Tension Roller Suspension Bracket		
		Wave Washer		
//	.PM2244-130	Oilite Bushing		/
		Socket Head Flat Screw		
		Socket Head Set Screw		
		Drive Roller		
		Drive Roller Bracket		
		Socket Head Button Screw		
		Socket Head Set Screw		
		Belt Motor Plate		
		Socket Head Flat Screw		
		Belt Motor		
87	.JWDS1020-187	Conveyor Table		1
		Socket Head Cap Screw		
		Socket Head Cap Screw		
		Take-up Slide Bracket		
		Driven Roller		
		Nylon Lock Hex Nut		
		Hex Cap Screw		
		Hex Nut		
		Conveyor Belt		
		Motor Cable		
		Power Cable		
		Internal Connection Cable (Black)S		
		Internal Connection Cable (White)S		
		Internal Connection Cable (Black)S		
101	.JVVDS1020-1101	Foam Pad (set of 4)	A" A"	4
	.JE1-441	JET Logo (not shown)	4 X4	1
		Warning Label, JWDS-1020 (not shown)		
	. LIVIUUUJÖÖ	ID Label, JWDS-1020 (not shown)		T
		Incremental Depth Scale (not shown)		
		Caution Label - Table Lock (not shown)		
	.JVVDS1632-163	Depth Scale (not shown)		1
		Parallel Adjust Label (not shown)		
		Motor Label, JWDS-1020 (not shown)		
		Belt Motor Label (not shown)		
	. LIVIUUU39U	Control Panel Label (not shown)		1

14.0 Electrical Connections for JWDS-1020



15.0 Warranty and service

JET® warrants every product it sells against manufacturers' defects. If one of our tools needs service or repair, please contact Technical Service by calling 1-800-274-6846, 8AM to 5PM CST, Monday through Friday.

Warranty Period

The general warranty lasts for the time period specified in the literature included with your product or on the official JET branded website.

- JET products carry a limited warranty which varies in duration based upon the product. (See chart below)
- Accessories carry a limited warranty of one year from the date of receipt.
- Consumable items are defined as expendable parts or accessories expected to become inoperable within a reasonable amount of use and are covered by a 90 day limited warranty against manufacturer's defects.

Who is Covered

This warranty covers only the initial purchaser of the product from the date of delivery.

What is Covered

This warranty covers any defects in workmanship or materials subject to the limitations stated below. This warranty does not cover failures due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, improper repair, alterations or lack of maintenance. JET woodworking machinery is designed to be used with Wood. Use of these machines in the processing of metal, plastics, or other materials outside recommended guidelines may void the warranty. The exceptions are acrylics and other natural items that are made specifically for wood turning.

Warranty Limitations

Woodworking products with a Five Year Warranty that are used for commercial or industrial purposes default to a Two Year Warranty. Please contact Technical Service at 1-800-274-6846 for further clarification.

How to Get Technical Support

Please contact Technical Service by calling 1-800-274-6846. **Please note that you will be asked to provide proof of initial purchase when calling.** If a product requires further inspection, the Technical Service representative will explain and assist with any additional action needed. JET has Authorized Service Centers located throughout the United States. For the name of an Authorized Service Center in your area call 1-800-274-6846 or use the Service Center Locator on the JET website.

More Information

JET is constantly adding new products. For complete, up-to-date product information, check with your local distributor or visit the JET website.

How State Law Applies

This warranty gives you specific legal rights, subject to applicable state law.

Limitations on This Warranty

JET LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD OF THE LIMITED WARRANTY FOR EACH PRODUCT. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. JET 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.

JET sells through distributors only. The specifications listed in JET printed materials and on official JET website are given as general information and are not binding. JET reserves 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. JET® branded products are not sold in Canada by JPW Industries, Inc.

Product Listing with Warranty Period

90 Days – Parts; Consumable items

1 Year - Motors; Machine Accessories; Air Tool Accessories

1 Year Wear and Tear - Air Tools

2 Year – Metalworking Machinery; Electric Hoists, Electric Hoist Accessories; Woodworking Machinery used for industrial or commercial purposes

3 Year - Woodworking Bench Top Machinery

5 Year – Woodworking Machinery

Limited Lifetime – JET Parallel clamps; VOLT Series Electric Hoists; Manual Hoists; Manual Hoist Accessories; Shop Tools; Warehouse & Dock products; Hand Tools: Air Tools

NOTE: JET is a division of JPW Industries, Inc. References in this document to JET also apply to JPW Industries, Inc., or any of its successors in interest to the JET brand.

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