

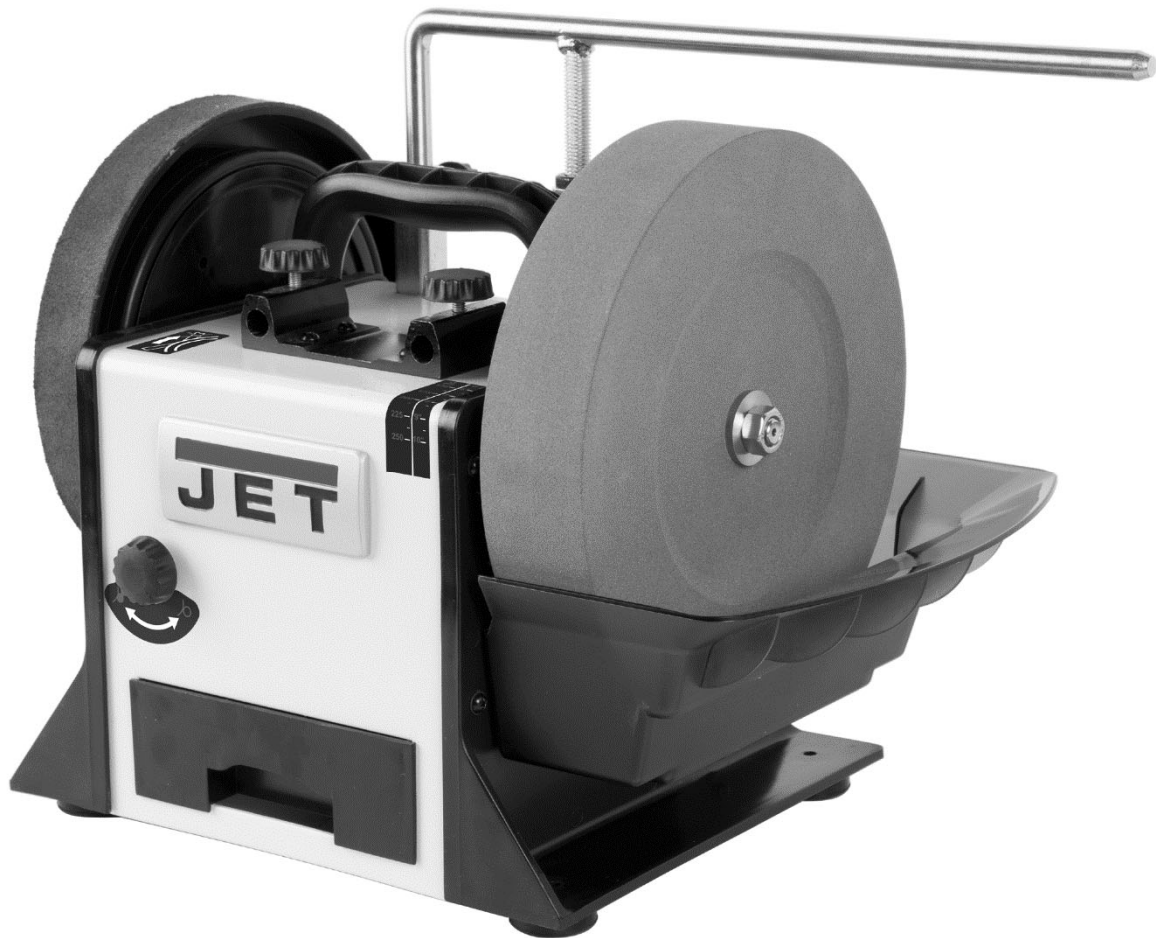


Model no.:	Stock no.:
Serial no.:	
Purchased from:	
Date purchased:	Date in service:

Operating Instructions and Parts Manual

10" Slow Speed Wet Sharpener

Model JWS-10



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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.
2. 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.
3. Replace warning labels if they become obscured or removed.
4. This machine is designed for grinding and sharpening of ferrous tools only. Machining of other materials is not permitted and may be carried out in specific cases only after consulting with the manufacturer.
5. This machine must be operated only by persons familiar with its operation and maintenance and who are familiar with its hazards.
6. Do not use this machine 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.
7. Do not modify the machine.
8. Always wear protective eye wear when operating machinery. Eye wear shall be impact resistant, protective safety glasses with side shields which comply with ANSI Z87.1 specifications. Use of eye wear which does not comply with ANSI Z87.1 specifications could result in severe injury from breakage of eye protection. (Everyday eyeglasses only have impact resistant lenses; they are NOT safety glasses.)
9. Make certain the machine is properly grounded.
10. Wear proper apparel. Do not wear loose clothing, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Wear protective hair covering to contain long hair. Non-slip footwear is recommended.
11. Wear protective clothing such as apron or safety shoes, where the grinding activity presents a hazard to the operator.
12. Avoid wearing gloves when possible. If a glove must be worn to hold a long-bladed tool, use extra caution that the glove does not catch and pull the hand into parts of the machine or a tool blade.
13. Wear ear protectors (plugs or muffs) if the particular work requires it.
14. Do not operate this machine while tired or under the influence of drugs, alcohol or any medication.
15. Make certain the switch is in the OFF position before connecting the machine to the power supply.
16. Make certain the machine is properly grounded.
17. Make all machine adjustments or maintenance with the machine unplugged from the power source.
18. 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.
19. 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.
20. Periodically check screws and bolts for tightness.
21. 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.
22. Provide for adequate space surrounding work area and non-glare, overhead lighting.
23. Keep the floor around the machine clean and free of scrap material, oil and grease.
24. Keep visitors a safe distance from the work area. Keep children away.
25. Make your workshop child proof with padlocks, master switches or by removing starter keys.
26. Give your work undivided attention. Looking around, carrying on a conversation and "horse-play" are careless acts that can result in serious injury.
27. Keep proper footing and balance at all times so that you do not fall into or lean against the grinding wheel or other moving parts. Do not overreach or use excessive force to perform any machine operation.
28. Disconnect grinder from power source before servicing and when changing abrasive wheels.
29. Use recommended accessories. The use of improper accessories may cause risk of injury to persons.
30. Turn off the machine before cleaning. Use a brush to remove chips or debris — do not use bare hands.
31. Never leave the grinder running unattended. Turn power off and do not leave machine until wheels come to a complete stop.
32. Remove loose items and unnecessary work pieces from the area before starting the grinder.

33. Don't use in dangerous environment. Don't use power tools in damp or wet location, or expose them to rain. Don't use this grinder in a flammable environment. Keep work area well lighted.
 34. Keep work area clean. Cluttered areas and benches invite accidents.
 35. Use the right tool. Don't force tool or attachment to do a job for which it was not designed.
 36. Use 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 product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table 2 (see sect. 7.2) shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.
 37. Connection and repair work on the electrical installation must be carried out by a qualified electrician.
 38. Tools are sharp and can lead to serious injuries; always handle them with care.
 39. Never perform any operation freehand. Tools to be sharpened must be held in/on the appropriate fixture and be guided firmly with both hands to prevent them being thrown off during the sharpening operation.
 40. Never place your hand near the cutting area, grinding stone and honing wheel while machine is in operation.
 41. Never attempt to hone a tool against the rotation – the tool will be thrown off and the honing wheel will be damaged.
 42. Make sure the power cord does not present a tripping hazard.
 43. The stone wheel is designed for wet operation only. Do not use the wheel dry – it will cause rapid overheating and potential damage to wheel and the tool being sharpened.
 44. Do not overtighten wheel nut.
 45. Frequently clean grinding dust from the machine.
 46. Inspect abrasive wheels for cracks or other forms of damage. Perform a "ring test" to check wheel integrity. Do not use a faulty or damaged wheel.
 47. Verify that maximum RPM of abrasive wheels is compatible with speed of grinder. Do not remove the blotter (label) from either side of a grinding wheel.
 48. Allow wheel to reach full RPM before starting the grinding operation.
 49. Do not crowd the work so that the wheels slow.
 50. Do not grind on the side of a wheel; do all work on the grinding face or edge. The only exception is if the wheel is specifically rated for side grinding.
 51. Do not grind aluminum or magnesium, as these may pose a fire hazard.
 52. Do not start the machine while a workpiece is contacting a wheel.
- ⚠ WARNING:** Some dust, fumes and gases created by power sanding, sawing, grinding, drilling, welding and other construction activities contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Some examples of these chemicals are:
- lead from lead based paint
 - crystalline silica from bricks, cement and other masonry products
 - arsenic and chromium from chemically treated lumber
- Your risk of exposure 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 dust masks that are specifically designed to filter out microscopic particles. For more information go to <http://www.p65warnings.ca.gov/> and <http://www.p65warnings.ca.gov/wood>.

SAVE THESE INSTRUCTIONS

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

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

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

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3.0 About this manual

This manual is provided by JET, covering the safe operation and maintenance procedures for a JET Model JWS-10 Wet Sharpener. This manual contains basic 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.

The operator is encouraged to familiarize him/herself with ANSI B7.1 – *Safety Requirements for Use, Care and Protection of Abrasive Wheels*.

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.

 **WARNING Read and understand the entire contents of this manual before attempting assembly or operation! Failure to comply may cause serious injury!**

Register your product using the mail-in card provided, or register online:

<http://www.jettools.com/us/en/service-and-support/warranty/registration/>

4.0 Specifications

Table 1

Model number	JWS-10	
Stock number	727100	
Motor and Electricals		
Motor	Brushed DC, 120V, 1.8A	
Power source required	120V AC, single phase, 60Hz	
On/off switch	rocker style, waterproof	
Power cable size	18AWG x 3C SJTW, 6 ft. (182 cm)	
Power plug installed	5-15P, 15A, 125V	
Recommended minimum circuit size ¹	10A	
Noise emission ²	Acoustic power, idling	74.0 dB(A)
	Acoustic pressure, idling	68.7 dB(A)
Wheels		
Stone Wheel size (dia. x width x bore)	10 x 2 x 1/2 in. (250 x 50 x 12 mm)	
Stone wheel material	single alundum	
Stone wheel grit	220	
Wheel speed, no load	Variable, 90-150 RPM	
Honing wheel size (dia. x width)	9 x 1-3/16 in. (230 x 30 mm)	
Honing wheel material	ABS+, leather tire	
Main materials		
Arbor	SUS-304 Steel	
Housing	Steel	
Knobs and Handle	ABS Polyimide	
Dimensions		
Base mounting holes, centers, (WxD)	10X7-7/8in (255X200mm)	
Footprint (WxD)	12 x 10.15 in. (305 x 258 mm)	
Overall dimensions (LxWxH)	16 x 12 x 13 in. (400 x 300 x 330 mm)	
Shipping dimensions (LxWxH)	19-1/2 x 15 x 17 in. (495.3 x 381 x 431.8 mm)	
Weights		
Net weight	22.5 lb (10.2 kg)	
Shipping weight	23.5 lb (10.7 kg)	

¹ subject to local/national electrical codes.

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.

L = length, W = width, H = height, D = depth

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.

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5.0 Unpacking

Separate all parts from the packing material. Remove the storage tray and the foam bracing from near the motor. Check each part against Table 1. Make certain that all items in the *Standard* column are included in the shipping container and accounted for before discarding any packing material.

Note: *Optional Accessories* are available for purchase by calling your local dealer or JET.

5.1 Standard Components and Optional Accessories

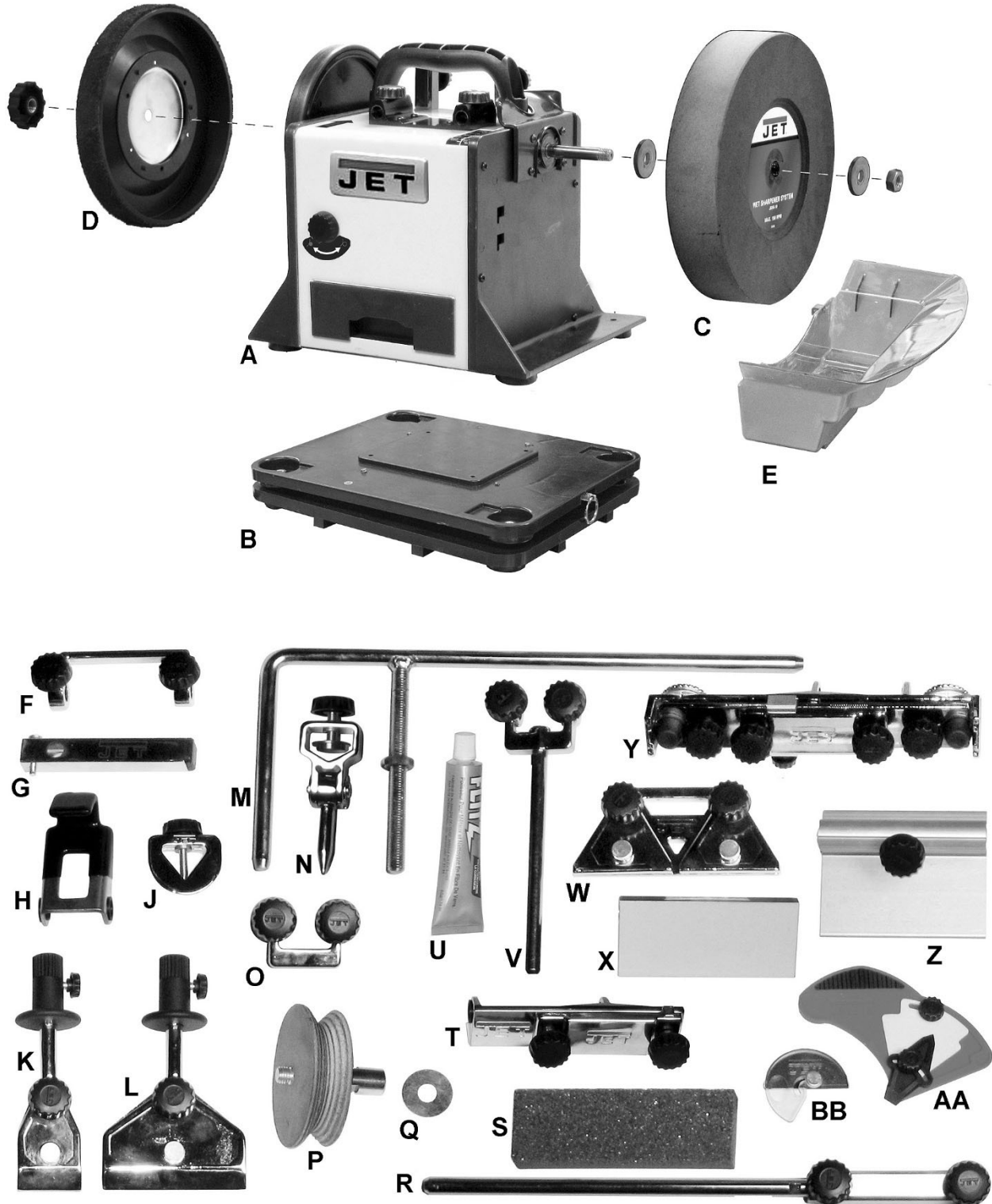


Figure 5-1

Item	Stock No	Model No	Description	Standard	Optional
A	727100	JWS-10	Slow Speed Wet Sharpener w/ accessories	x	
B	727001		Rotational Base Assembly		x
C	707022		Stone Wheel	x	
D	727023		Leather Honing/Strop Wheel	x	
E	727000-143		Water Tank	x	
F,G	727003	DT-1	Diamond Truing Tool		x
H	708031	AJ-1	Axe Jig		x
J	708025	STJ-1	Carving Tool Jig		x
K	708019	KJ-1	Knife Jig		x
L	727006	LKJ	Long Knife Jig		x
M	727019	SA-1	Support Arm	x	
N,O	708020	GJ-1	Gouge Jig		x
P,Q	727013	PLH-1	Profiled Leather Honing Wheel		x
R	727020	SAE-1	Support Arm Extension Assembly		x
S	708017	SG-1	Stone Grader	x	
T	727014	SEJ-1	Straight Edge Jig		x
U	708023		Honing Compound	x	
V	727012	SWGJ-1	Side Wheel Grinding Jig		x
W,X	708026	SJ-1	Scissors Jig		x
Y	727016	PCJ-1	Plane Camber Jig		x
Z	727018	TR-1	Tool rest		x
AA	727010	AMD-1	Angle Measuring Device	x	
BB	708041	AMD-2	Existing Angle Measuring Device	x	
	727200		Wood Turning Jig Set (includes J, N, O, chisel angle jig, hex wrench)		x
	727300		Blade Jig Set (includes H, K, W, X)		x
	M-727100		Manual for JWS-10	x	

Table 2

For assembly, operation, adjustments, maintenance and troubleshooting, please see the DVD included with this machine.

6.0 Setup and assembly

⚠WARNING The Wet Sharpener must be disconnected from power during assembly.

Inspect the Wet Sharpener – if any damage is found, notify your dealer immediately. Do not use a damaged machine.

Clean all rust-protected surfaces with a mild solvent.

Remove shipping foam: A foam block is inserted inside the machine to prevent the motor shaft from resting on the drive wheel during shipment. Remove storage drawer, turn machine on its side, and remove the foam block before operating.

The machine should be placed on a stable and level surface. It can be bolted down if needed.

6.1 Mounting stone wheel

Install stone wheel (C) on shaft. See Figure 5-1. Place a washer on each side of wheel, and tighten nut.

Note: The stone has already been trued by the manufacturer.

6.2 Installing water tank

Install water tank (F) to lower mounting position on side of machine. See cover photo.

Fill the tank with water up to the “MAX” marked level.

The stone will soak up a lot of water – approximately 0.5L (1/2 qt.) – within the first 15 minutes.

As the stone wears to a smaller diameter, the tank must be moved to the upper mounting position.

6.3 Support arm (optional)

Install the accessory support arm (M, Figure 5-1) to the vertical or the horizontal sleeves, depending upon the specific sharpening to be done. Always tighten knobs to secure.

6.4 Storage

The machine has an integrated drawer (E, Figure 5-1) where the standard accessories can be stored for quick access.

The existing angle measuring device (T, Figure 5-1) will stick to the magnets on the designated place at the side of the machine.

The angle measuring device (S, Figure 5-1) has integrated magnets and will stick to any surface on the machine body.

7.0 Electrical connections

⚠WARNING Electrical connections should be made by a qualified electrician in compliance with all relevant codes. This tool must be properly grounded.

The wet sharpener is prewired for 120V single phase power, and is supplied with a plug designed for use on a circuit with a grounded outlet that looks like the one pictured in A, Figure 6-1.

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

It is recommended that the wet sharpener be connected to a minimum 10-amp circuit with circuit breaker or fuse. If using fuses, they should be time-delay fuses marked “D”. **Local codes take precedence over recommendations.**

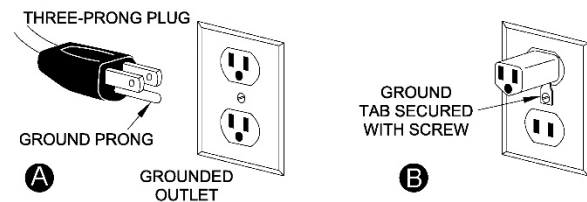


Figure 6-1: plug configurations

7.1 Grounding instructions

1. All Grounded, Cord-connected Tools:

This tool 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.

⚠WARNING 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.

2. *Grounded, cord-connected tools intended for use on a supply circuit having a nominal rating less than 150 volts:*

This tool is intended for use on a circuit that has an outlet that looks like the one illustrated in **A**, Figure 6-1. An adapter, shown in **B** and **C**, may be used to connect this plug to a 2-pole receptacle as shown in **B** 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. *This adapter is not permitted in Canada.* 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.

7.2 Extension cords

The use of extension cords is discouraged. Try to position equipment near the power source. If an extension cord becomes necessary, use only three-wire extension cords that have three-prong grounding type plugs and three-prong receptacles that accept the tool's plug. Replace or repair damaged or worn cord immediately.

Make sure your extension cord is good condition, and is 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 1 shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number (AWG), the heavier the cord.

Amp Rating		Volts	Total length of cord in feet			
More Than	Not More Than	120	25	50	100	150
			AWG			
0	6		18	16	16	14
6	10		18	16	14	12
10	12		16	16	14	12
12	16		14	12	Not Recommended	

Extension Cord Recommendations
Table 3

8.0 Adjustments

8.1 Sharpening jig set up

1. Use the existing angle measuring device to establish the tool's cutting edge (Figure 10-1).

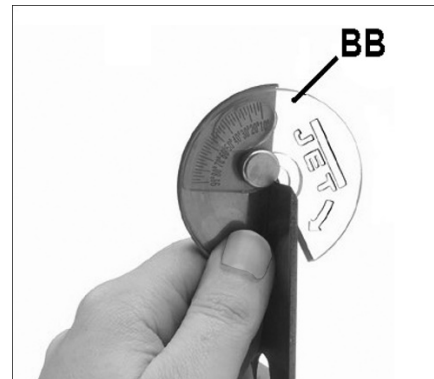


Figure 8-1

2. Clamp the tool in the appropriate jig.
3. Adjust the support arm (Figure 10-2) and change the tool clamping position to achieve the correct grinding angle.
4. Set the tool angle and wheel diameter on supplied angle measuring device. See Figure 10-2. Tighten both knobs.

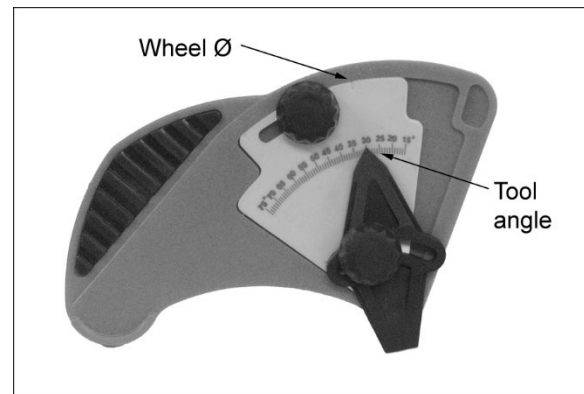


Figure 8-2

5. Place device on wheel and against jig, as shown. Make additional adjustments to jig position as needed.

NOTE: The correct stone diameter needs to be set on the scale to achieve proper angle reading.



Figure 8-3 (optional straight edge jig shown)

8.2 Torque adjustment

During heavy use, the friction drive may slip. If this occurs, turn the torque adjust knob (Figure 10-3) clockwise to increase pressure to the friction drive.

Note: When machine is not in use, or if additional torque is not required, release the pressure to avoid permanent deformation of friction drive components.



Figure 8-4

9.0 Basic operation

⚠WARNING Always wear safety glasses or face shield. Familiarize yourself with all safety instructions in sect. 1.0 before operating this machine. Failure to comply may result in serious injury.

⚠CAUTION Make sure the water level in the tank is sufficient to keep the stone wheel wet. Never use the wheel dry – it will cause rapid overheating and potential damage to wheel and tool.

The rocker switch on the Wet Sharpener body starts and stops the machine.

The speed adjustment knob can be set to accommodate the particular sharpening or honing procedure needed. It can also be used to compensate for gradual reduction in wheel diameter.

The stone is designed for wet sharpening only. Always fill the water tank with clean tap water, and make sure the wheel contacts the water before operating.

9.1 Stone wheel dressing

See Figure 9-1.

The supplied dual surface stone grader (S) dresses the stone wheel for fine or coarse sharpening.

6. Start the machine.
7. Move the stone grader left/right evenly to dress the stone.
8. The stone may be dressed for fine or coarse sharpening at any time by using the correct side of the stone grader.



Figure 9-1

9.2 Tool grinding

See Figure 9-2

Never perform any tool grinding operation freehand.

Tools to be sharpened must be held in the appropriate fixture and be guided firmly so they will not be thrown off during the sharpening process.

The wet sharpener may have to be turned to a more convenient operating position.

Check that support arm is parallel to wheel surface.

Generally, you will achieve the best result by grinding *against* the wheel. See Figure 9-2.



Figure 9-2 (optional straight edge jig shown)

Move the tool left/right to ensure even wear across the wheel.

Narrow or convex cutting edges require less pressure.

Use both hands to stabilize the tool/jig during the sharpening process.

9.3 Tool honing

See Figure 9-3.

Honing is used to remove burrs from the sharpening process, and to develop a very fine edge on a tool.

It is recommended to rub a very light application of machine tool oil onto the honing leather before proceeding.

Apply honing compound to the honing wheel. A piece of card can be used to spread it evenly on the wheel as the wheel is rotating on slow speed. If honing performance begins to diminish, reapply compound.

For quick burr removal, alternately hone both sides of the cutting edge.

Always hone *with* wheel rotation. See Figure 9-3.

CAUTION Do not attempt to hone *against* the wheel (A, Figure 8-3); the tool will catch and may be forced from the hand. Also the honing wheel will be damaged.

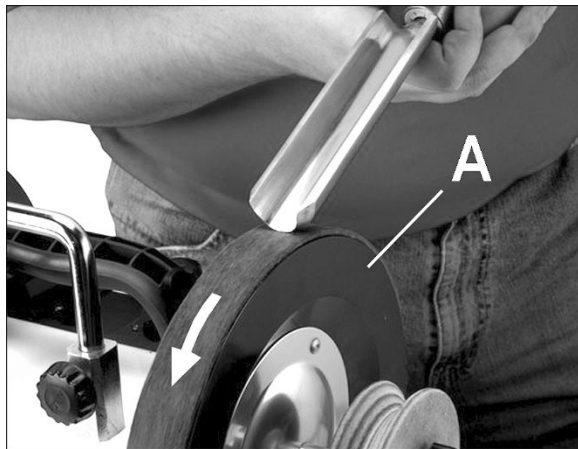


Figure 9-3

10.0 User Maintenance

For safety, turn the switch to OFF and remove plug from the power source outlet before adjusting and maintaining the wet sharpener. If the power cord is worn, cut or damaged in any way, have it replaced immediately.

10.1 Care of grinding wheels

In normal use, grinding wheels may become cracked, grooved, rounded at the edges, chipped, out of true or loaded with foreign material.

Cracked wheels should be replaced IMMEDIATELY. The other conditions can be remedied with a dressing tool. See *sect. 9.1*.

Do not store a wet stone in freezing temperatures.

When machine is not in use, remove water tank. The stone wheel should not sit idle in water for long periods of time.

Frequently empty the water tank, and refill with fresh water. Clean out debris or shavings.

10.2 Wheel replacement

Before replacing a grinding wheel, perform a "ring test" on the replacement wheel as follows. The wheel must be completely dry.

1. Loop a piece of string through the grinding wheel hole and suspend the wheel by holding up the string.
2. Tap the wheel with a piece of scrap wood or a wooden dowel.
3. A good wheel will "ring"; a defective wheel will "thud". Discard any wheel that does not "ring".

An internal defect may not be apparent by visual inspection alone. The ring test may identify an internal crack or void.

IMPORTANT: If you replace a wheel, obtain one with a safe rated speed at least as high as the *NO LOAD RPM* of the Wet Sharpener. See *sect. 4* for wheel specifications.

10.3 Commutator brush inspection

To maintain motor efficiency, inspect the two carbon brushes every six months or more frequently if machine 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.

CAUTION Continued use of a damaged or worn brush may result in damage to motor armature.

1. Unplug wet sharpener from power source.
2. Remove the drawer and the honing wheel.
3. Position wet sharpener on its side.
4. Loosen the switch box and pull it outward to provide more space for turning the motor and accessing both brushes. See Figure 10-1.

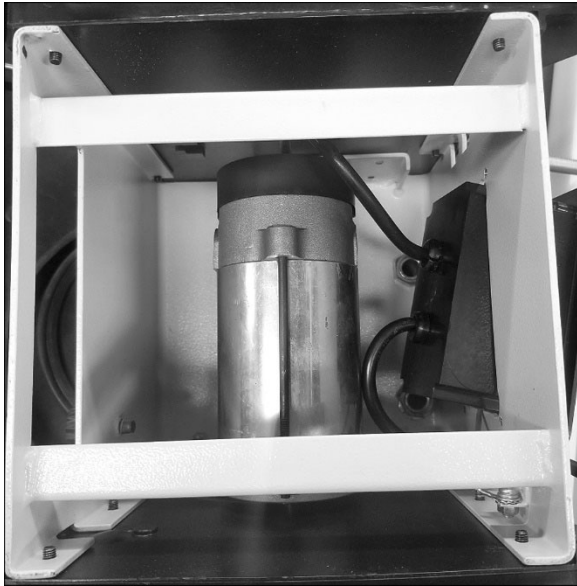


Figure 10-1

5. Use a tool to unscrew and remove cap. Note: If standard tools will not fit the space, a box wrench and flat head bit can be maneuvered successfully, as shown in Figure 10-2.

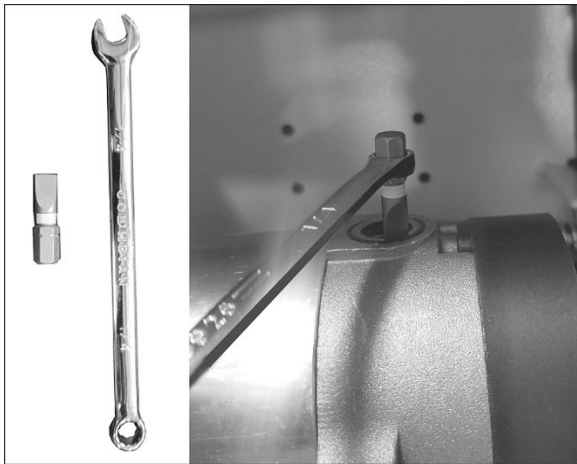


Figure 10-2

6. The spring will disengage brush 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.)
7. Pull out brush and inspect. Brush should be replaced if any of the following are discovered:

- Brush has worn to about 1/8-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

8. Install new brush (or reinstall current brush if only inspecting) and gently press it all the way into hole.
9. Install cap.
10. Repeat for opposite brush.
11. Retighten switch box, turn wet sharpener upright and reinstall honing wheel and drawer.

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

10.4 Cleaning

CAUTION Metal shavings may still be hot from recent grinding operations. Make sure shavings and debris are cold before cleaning the grinder.

Brush all shavings from the motor housing and support arm. Check grinding wheel for cracks and chips. Replace if damaged.

Frequently empty and refill the water tank. Clean out any shavings or sludge from the bottom.

CAUTION Avoid use of the following cleaning chemicals or solvents: gasoline, carbon tetrachloride, chlorinated solvents, ammonia and household detergents containing ammonia.

10.5 Lubrication

All motor bearings are permanently lubricated and sealed at the factory and require no additional lubrication.

10.6 Additional servicing

Any other servicing should be performed by an authorized service representative.

11.0 Troubleshooting JWS-10 Wet Sharpener

11.1 Motor and electrical problems

Table 4

* **WARNING:** Some corrections may require a qualified electrician.

Symptom	Possible Cause	Correction *
Motor will not start.	Not connected to power source.	Verify that plug is properly inserted into receptacle.
	Motor cord cut or abraded.	Replace with new cord.
	Fuse blown or circuit breaker open.	Re-set. May be too many machines on one line.
	Plug on cord is faulty.	Replace with new plug.
	Low line 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.
	Faulty switch.	Replace switch.
	Open circuit in motor or loose connection.	Inspect all lead connections on motor for loose or open connections.
	Motor failure.	Contact JET technical service.
Motor will not start; fuses blow or circuit breakers trip.	Too many electrical machines running on same circuit.	Turn off other machines and try again.
	Incorrect fuse.	Use time-delay fuse, or go to circuit with higher rated fuse or breaker.
	Wheels cannot rotate because of obstruction.	Unplug and clear wheels of any obstruction.
	Undersized extension cord.	Use correct size extension cord.
	Short circuit in line cord or plug.	Inspect cord or plug for damaged insulation and shorted wires.
	Short circuit in motor or loose connections.	Inspect all connections on motor for loose or shorted terminals or worn insulation.
Motor slows, or fails to develop full power.	Low line voltage.	Check power line for proper voltage.
	Motor overloaded.	Reduce load to motor; do not press so hard.
	Motor failure.	Contact JET technical service.
Motor stalls, resulting in blown fuses or tripped circuit.	Motor overloaded.	Reduce load on motor; do not press so hard.
	Short circuit in motor or loose connections.	Inspect connections on motor for loose or shorted terminals or worn insulation.
	Low voltage.	Correct the low voltage conditions.
	Incorrect fuses or circuit breakers in power line.	Install correct fuses or breakers.
	Loose connections.	Inspect connections.

Symptom	Possible Cause	Correction *
Excessive vibration.	Machine on uneven surface.	Place machine on flat surface.
	Stone wheel out of balance.	Dress wheel.
	One side of wheel is saturated.	Allow wheel to dry. Do not leave idle wheel immersed in water.
	Loose fasteners.	Check all fasteners.

11.2 Mechanical and operational problems

Table 5

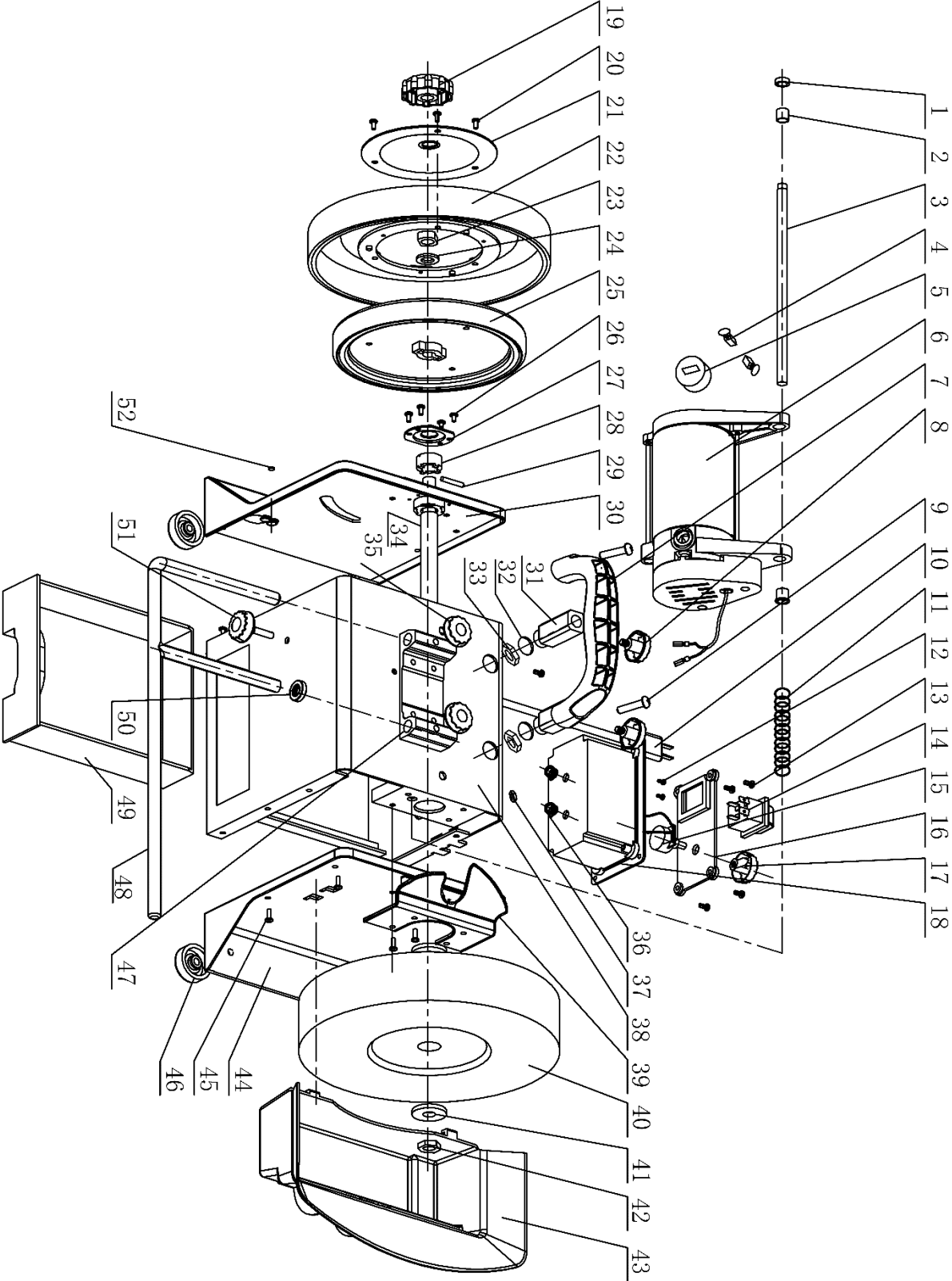
Symptom	Possible Cause	Correction *
Wheel doesn't hold an edge, or wears too rapidly.	Too much pressure being applied.	Use lighter pressure; let the wheel do the work.
	Poor grade of wheel.	Use quality wheels.
Marring of tool edge.	Debris on wheel.	Dress wheel for a fresh surface. Clean debris from tank, and refill with fresh water.
Wheel slips during rotation.	Insufficient torque adjustment.	Use torque adjust knob to remedy.
	Screw or knob not tightened down.	Tighten down wheel fasteners (do not overtighten).
Grinding creates a slight angle along width of tool.	Jig is slipping.	Make sure jig is tightened down.
	Support arm not parallel to wheel.	Adjust support arm to make parallel.

12.0 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.

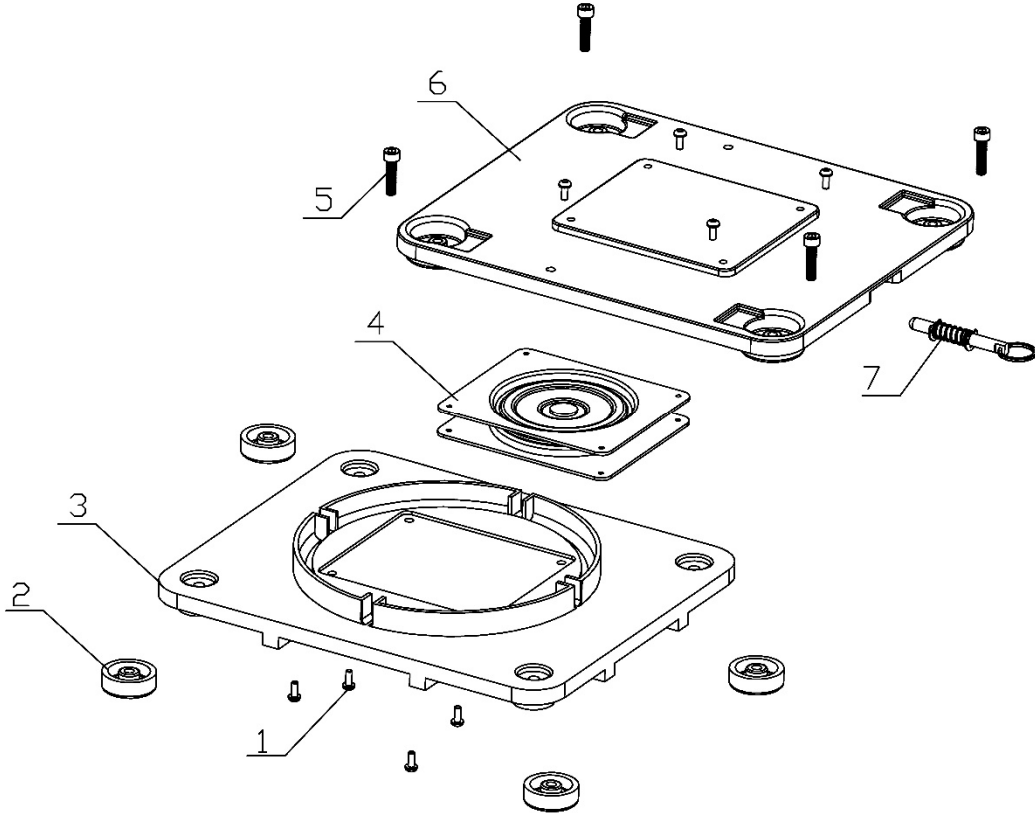
12.1.1 727100 Wet Sharpener Assembly – Exploded View



12.1.2 727100 Wet Sharpener Assembly – Parts List

Index No.	Part No.	Description	Size	Qty
1	727000-101	Spacer	Ø10x18x1.5 mm	1
2	727000-102	Bushing		2
3	727000-103	Motor Mount Shaft		1
4	727000-104	Carbon Brush		2
5	727000-105	Carbon Brush Cover		2
6	727000-106	Motor	Brushed DC	1
7	727000-107	Handle		1
8	727000-108	Knob w/M6 Bolt Insert		2
9	727000-109	Socket Head Cap Screw	M8-16 x 20	2
10	727000-110	Power Cable with Plug		1
11	727000-111	Pressure Spring		1
12	727000-112	Self-Tapping Screw		2
13	727000-113	Self-Tapping Screw	ST4x14 mm	4
14A	727000-114A	Switch Assembly (#14 thru 18)		1
14	727000-114	Waterproof On/Off Switch		1
15	727000-115	Speed Actuator (Potentiometer)		1
16	727000-116	Switch Box Cover		1
17	727000-117	Speed Switch Knob w/Indicator		1
18	727000-118	Switch Box		1
19	727000-119	Honing Wheel Lock Knob		1
20	727000-120	Self-Tapping Screw	ST4x6 mm	3
21	727000-121	Honing Wheel End Cover		1
22	727023	Honing Wheel with Leather		1
23	727000-123	Lock Nut		1
24	TS-2360121	Flat Washer	M12x24x1.5	2
25	727000-125	Drive Wheel		1
26	727000-126	Self-Tapping Screw	ST3.5x6 mm	8
27	727000-127	Slide Bearing Cover		2
28	727000-128	Slide Bearing		2
29	727000-129	Pin		1
30	727000-130	Left Machine Support		1
31	727000-131	Vertical Support		2
32	727000-132	Washer	Ø18.5x24x0.6 mm	2
33	727000-133	Lock Nut		2
34	727000-134	Drive Shaft		1
35	727000-135	Horizontal Support Knob		2
36	727000-136	Cord Strain Relief	6P-4	3
37	TS-1541031	Nylon LockNut	M8	2
38	727000-138	Machine Body		1
39	727000-139	Water Shield		1
40	707022	Stone Wheel		1
41	727000-141	Washer		2
42	TS-1540081	Hex Nut	M12 x 1.75	1
43	727000-143	Water Tank		1
44	727000-144	Right Machine Support		1
45	TS-1533032	Pan Head Screw	M5 x 10	27
46	727000-146	Rubber Foot		4
47	727000-147	Horizontal Support		1
48	727019	SA-1 Support Arm Assembly		1
49	727000-149	Drawer		1
50	727000-150	Lock Nut		1
51	727000-151	Torque Adjusting Knob		1
52	727000-152	Cylinder Magnet		1
53	JET-113	JET Logo (not shown)	113 x 47 mm	1

12.2.1 727001 Rotational Base Assembly (Optional) – Exploded View



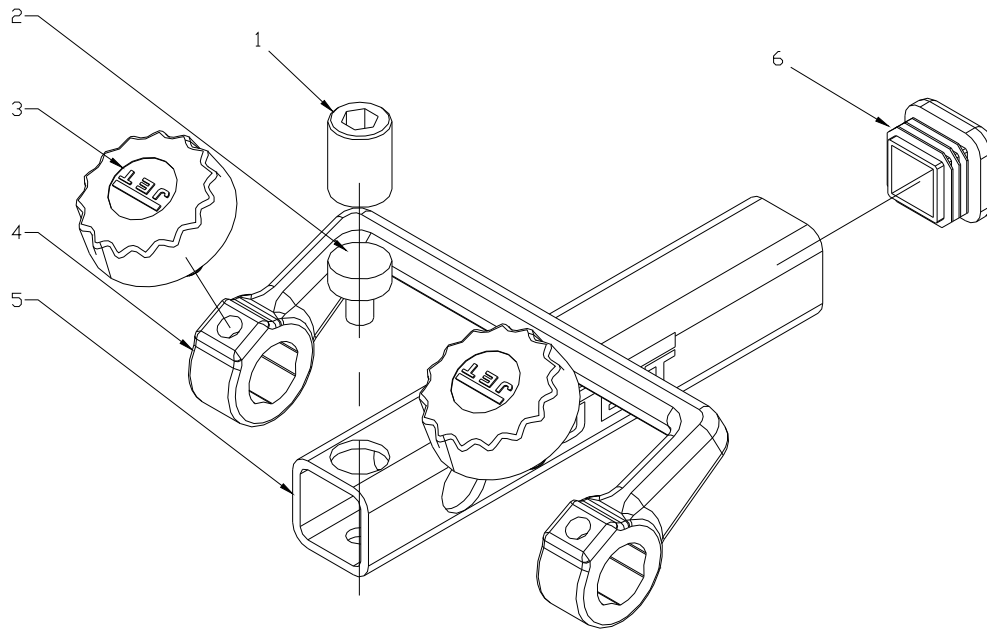
12.2.2 727001 Rotational Base Assembly (Optional) – Parts List

Index No.	Part No.	Description	Size	Qty
	727001	Rotational Base Assembly (#1 thru 7)		
1	727001-101	Cross Pan Head Screw with flat washer	M4x10	8
2	727001-102	Rubber Foot		4
3	727001-103	Lower Part of Base		1
4	727001-104	Rotating Assembly		1
5	TS-1503051	Socket Head Cap Screw	M6x20	4
6	727001-106	Upper Part of Base		1
7	727001-107	Locating Pin Assembly		1

12.3 DT-1 Diamond Truing Tool (Optional Accessory)

Stock # 727003

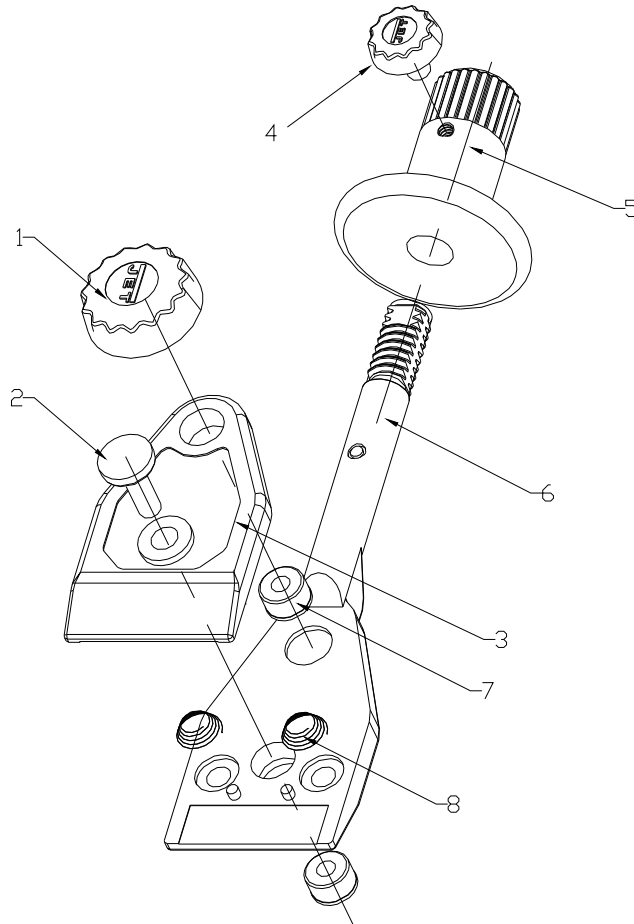
Index No	Part No	Description	Size	Qty
1	727003-101	Lock Screw		1
2	727003-102	Diamond Tip		1
3	727000-108	Knob w/M6 Bolt Insert		2
4	727003-104	Holder		1
5	727003-105	Square Tube		1
6	727003-106	Tube End Cover		1



12.4 KJ-1 Knife Jig (Optional Accessory)

Stock # 708019

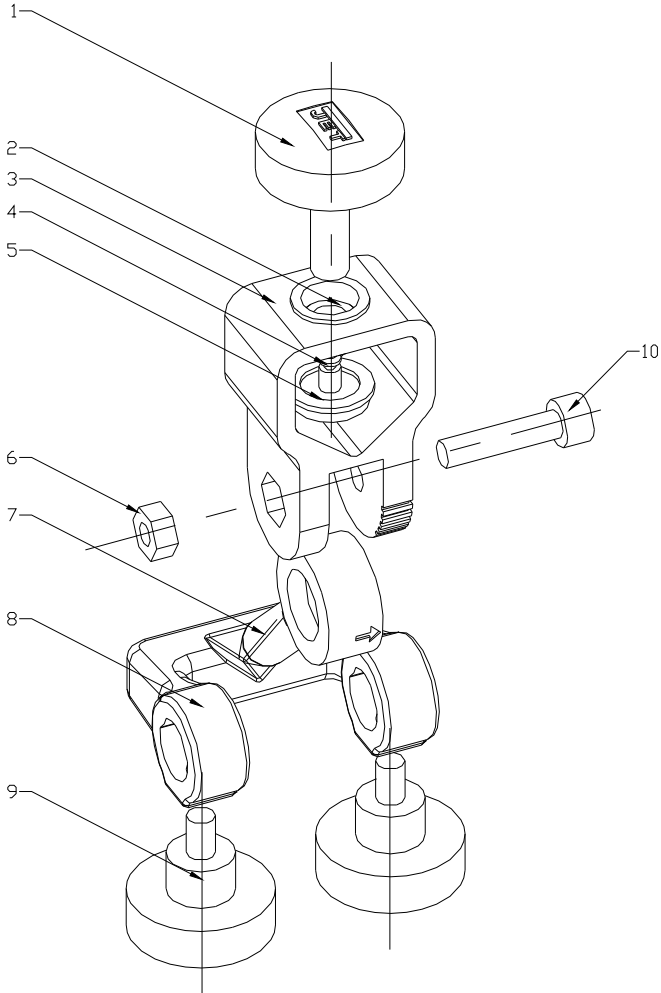
Index No	Part No	Description	Size	Qty
1	708019-101	Knob		1
2	708019-102	Adjusting Knob		1
3	708019-103	Top Plate		1
4	708019-104	Knob		1
5	708019-105	Handle		1
6	708019-106	Bottom Plate		1
7	708019-107	Brass Insert		2
8	708019-108	Cone Spring		2



12.5 GJ-1 Gouge Jig (Optional Accessory)

Stock # 708020

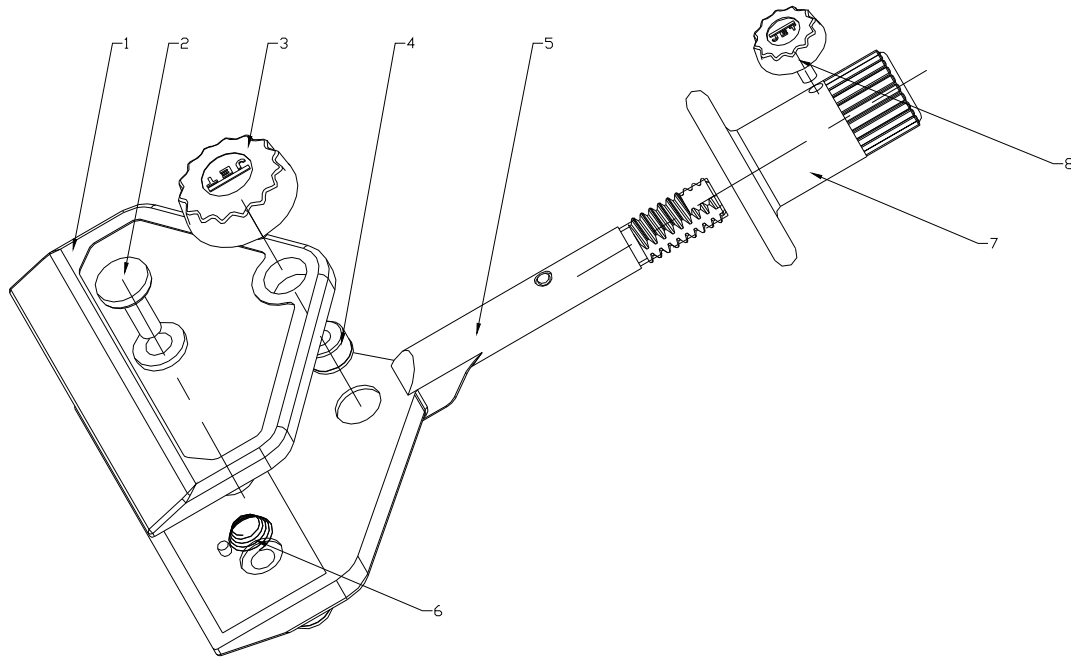
Index No	Part No	Description	Size	Qty
1	708020-101	Knob		1
2	708020-102	Brass Insert		1
3	708020-103	Body		1
4	708020-104	Rubber Ring		1
5	708020-105	Brass End Piece		1
6	TS-1540041	Hex Nut	M6	1
7	708020-107	Pivot		1
8	708020-108	Holder		1
9	727000-108	Knob w/M6 Bolt Insert		2
10	TS-1503061	Socket Head Cap Screw	M6x25	1



12.6 LKJ Long Knife Jig (Optional Accessory)

Stock # 727006

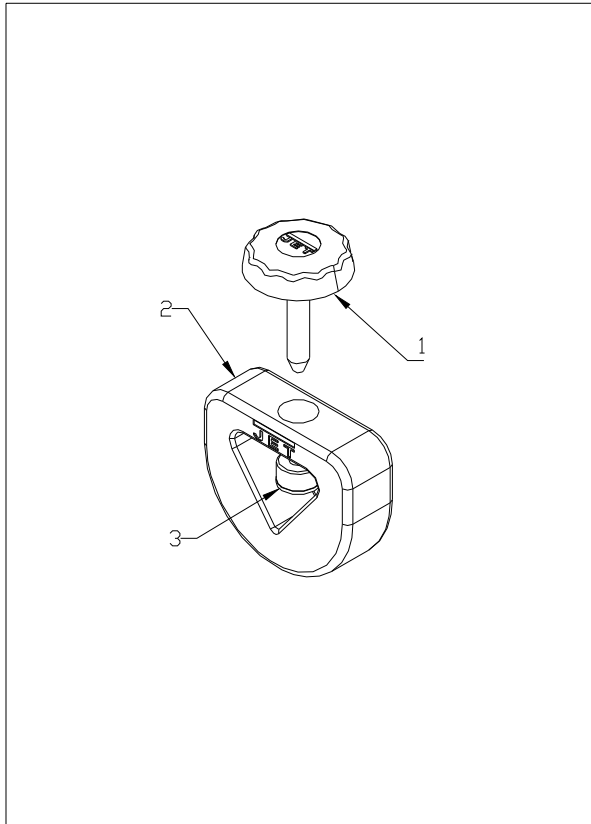
Index No	Part No	Description	Size	Qty
1	727006-101	Top Plate		1
2	708019-102	Adjusting Knob		1
3	708019-101	Knob		1
4	708019-107	Brass Insert		2
5	727006-105	Bottom Plate		1
6	708019-108	Cone Spring		2
7	708019-105	Handle		1
8	708019-104	Knob		1



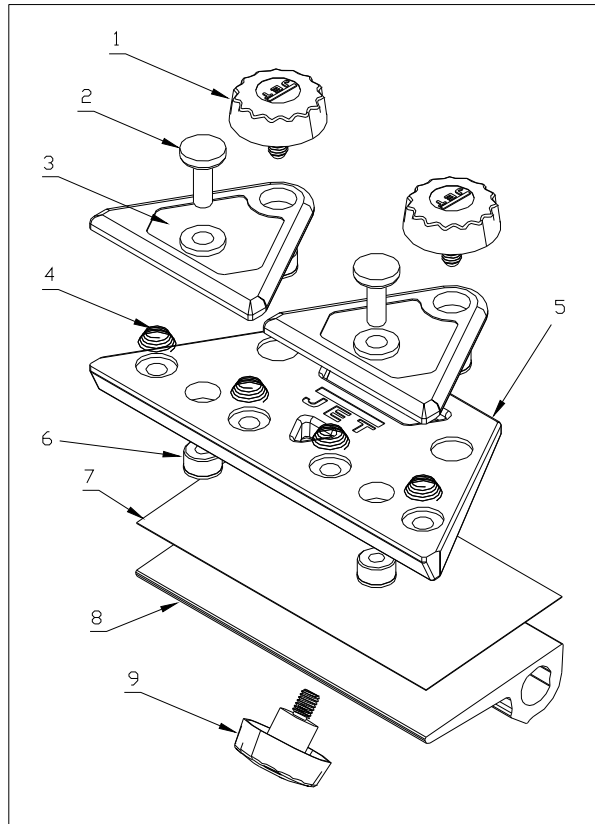
12.7 STJ-1 Carving Tool Jig (Optional Accessory)

Stock # 708025

Index No	Part No	Description	Size	Qty
1	708016-101	Knob		1
2	708025-102	Body		1
3	708025-103	Brass Insert		1



STJ-1 – Carving Tool Jig



SJ-1 – Scissors Jig

12.8 SJ-1 Scissors Jig (Optional Accessory)

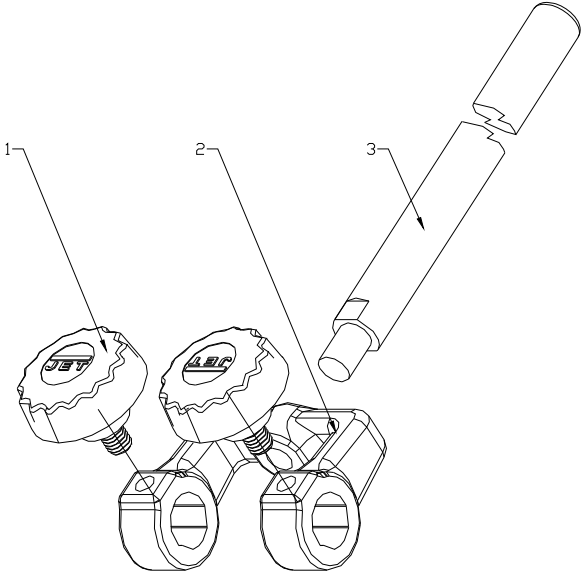
Stock # 708026

Index No	Part No	Description	Size	Qty
1	708019-101	Knob		2
2	708019-102	Adjusting Knob		2
3	708026-103	Top Plate		2
4	708019-108	Cone Spring		4
5	708026-105	Bottom Plate		1
6	708019-107	Brass Insert		4
7	708026-107	Plastic Slide Sheet		1
8	708026-108	Scissors Jig Rest		1
9	727000-108	Knob w/M6 Bolt Insert		1

12.9 SWGJ-1 Side Wheel Grinding Jig (Optional Accessory)

Stock # 727012

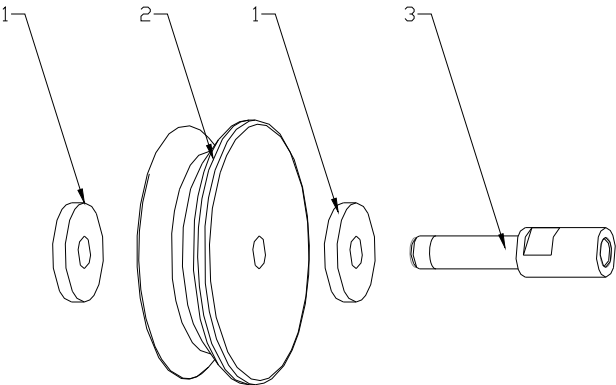
Index No	Part No	Description	Size	Qty
1	727000-108	Knob w/M6 Bolt Insert		2
2	727012-102	Holder		1
3	727012-103	Bar		1



12.10 PLH-1 Profiled Leather Honing Wheel (Optional Accessory)

Stock # 727013

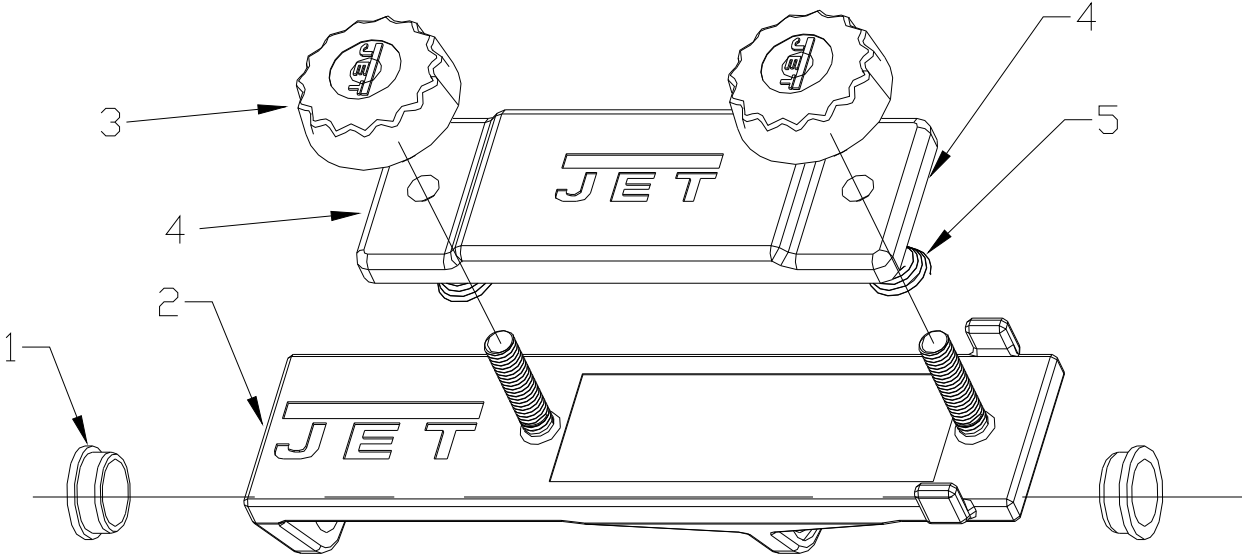
Index No	Part No	Description	Size	Qty
1	727000-141	Washer		2
2	727013-102	Leather Wheel		1
3	727013-103	Shaft		1



12.11 SEJ-1 Straight Edge Jig (Optional Accessory)

Stock # 727014

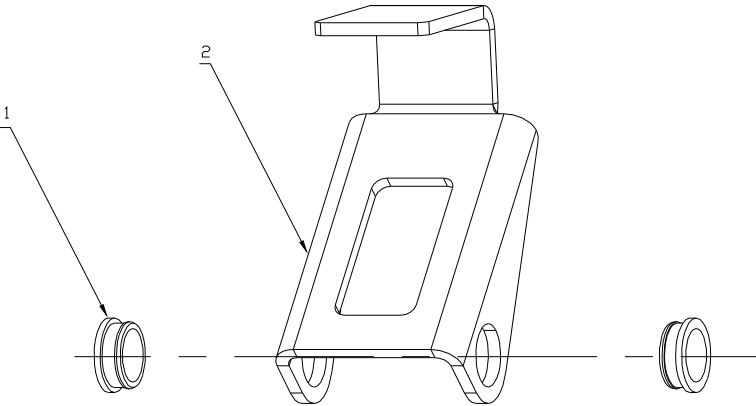
Index No	Part No	Description	Size	Qty
1	727014-101	Bushing		2
2	727014-102	Bottom Plate		1
3	727014-103	Knob		2
4	727014-104	Top Plate		1
5	708019-108	Cone Spring		2



12.12 AJ-1 Axe Jig (Optional Accessory)

Stock # 708031

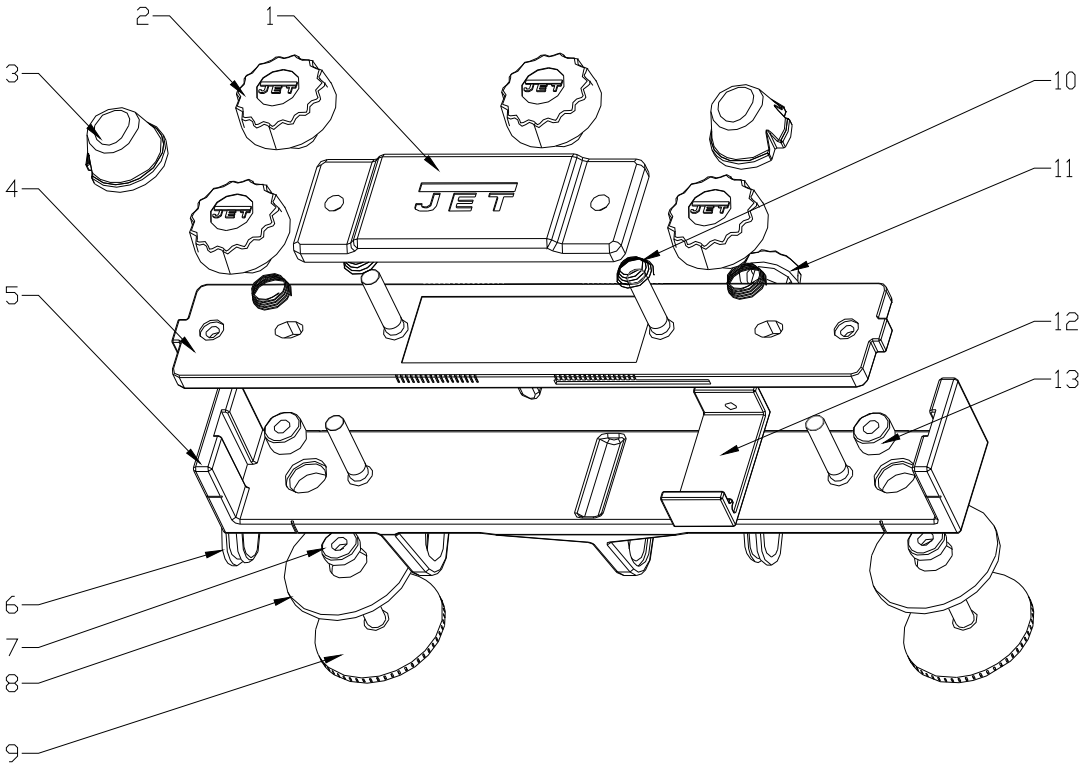
Index No	Part No	Description	Size	Qty
1	727014-101	Bushing		2
2	708031-102	Axe Holder		1



12.13 PCJ-1 Plane Camber Jig (Optional Accessory)

Stock # 727016

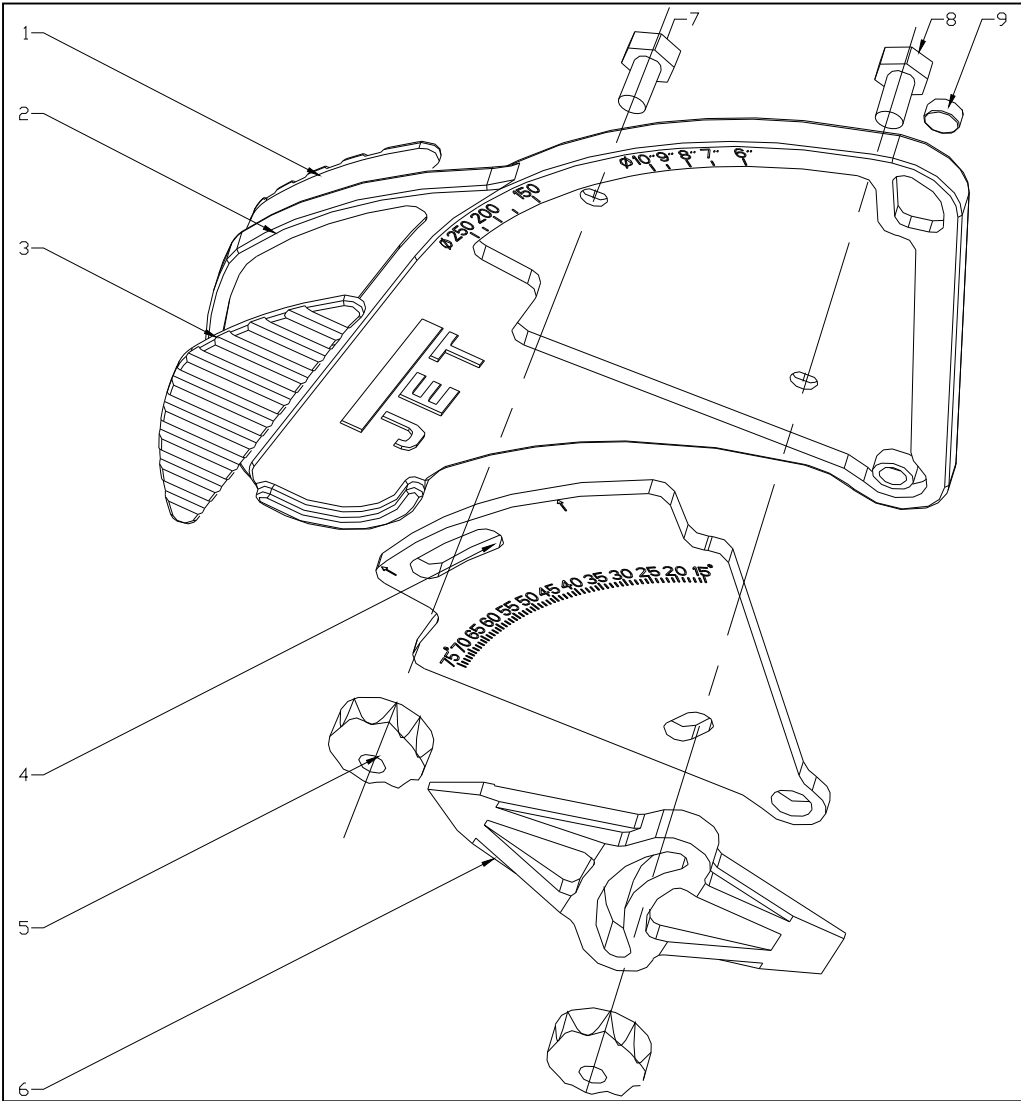
Index No	Part No	Description	Size	Qty
1	727014-104	Top Plate		1
2	727014-103	Knob		4
3	727016-103	Rubber Rest		2
4	727016-104	Middle Plate		1
5	727016-105	Bottom Plate		1
6	727014-101	Bushing		2
7	727016-107	Lock Plate Brass Insert		2
8	727016-108	Lock Plate		2
9	727016-109	Adjusting Screw		2
10	708019-108	Cone Spring		4
11	727016-111	Knob		1
12	727016-112	Slide Plate		1
13	727016-113	Brass Insert		2



12.14 AMD-1 Angle Measuring Device (Optional Accessory)

Stock # 727017

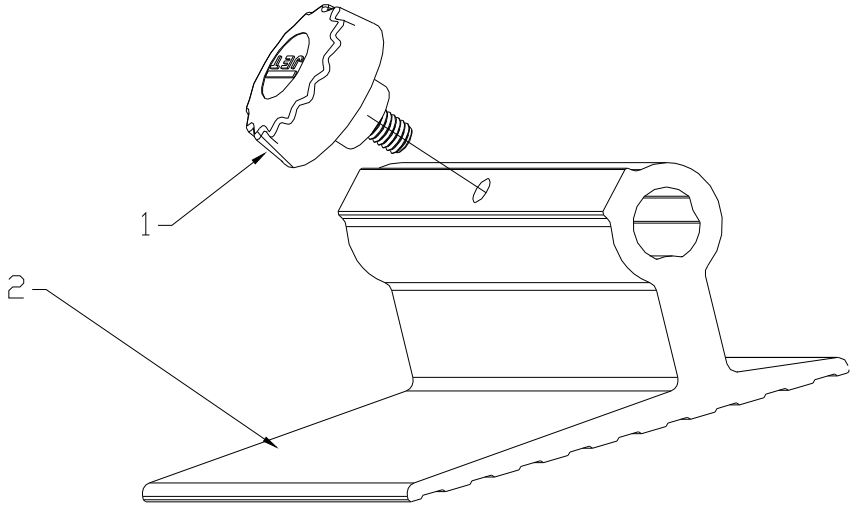
Index No	Part No	Description	Size	Qty
1	727017-101	Bottom Rubber Grip		1
2	727017-102	Angle Measuring Body		1
3	727017-103	Top Rubber Grip		1
4	727017-104	Angle Measuring Dial		1
5	727017-105	Knob		2
6	727017-106	Indicator		1
7	727017-107	Hex Bolt	M4x8	1
8	727017-108	Hex Bolt	M4x14	1
9	727017-109	Cylinder Magnet		1



12.15 TR-1 Tool Rest (Optional Accessory)

Stock # 727018

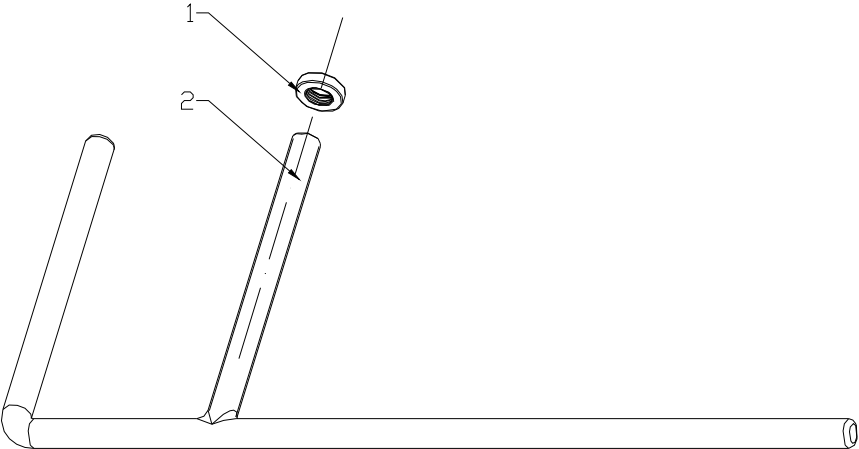
Index No	Part No	Description	Size	Qty
1	727000-108	Knob w/M6 Bolt Insert		1
2	727018-102	Tool Rest		1



12.16 SA-1 Support Arm Assembly

Stock # 727019

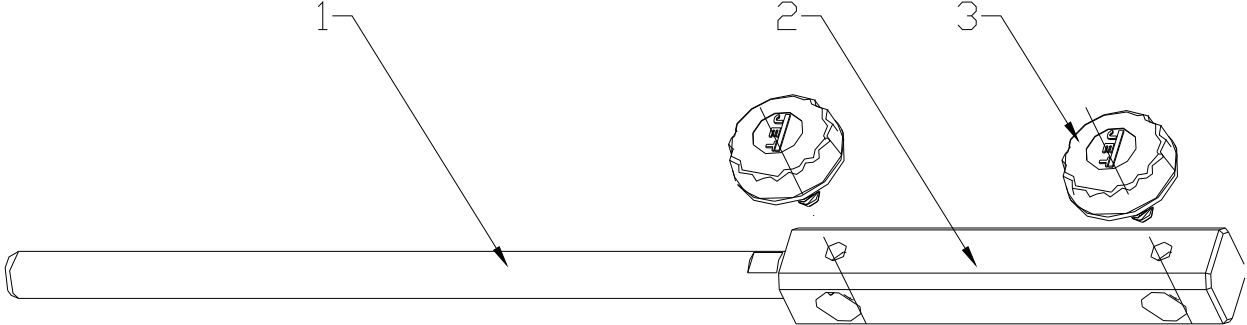
Index No	Part No	Description	Size	Qty
1	727019-101	Support Arm		1
2	727019-102	Adjusting Nut		1



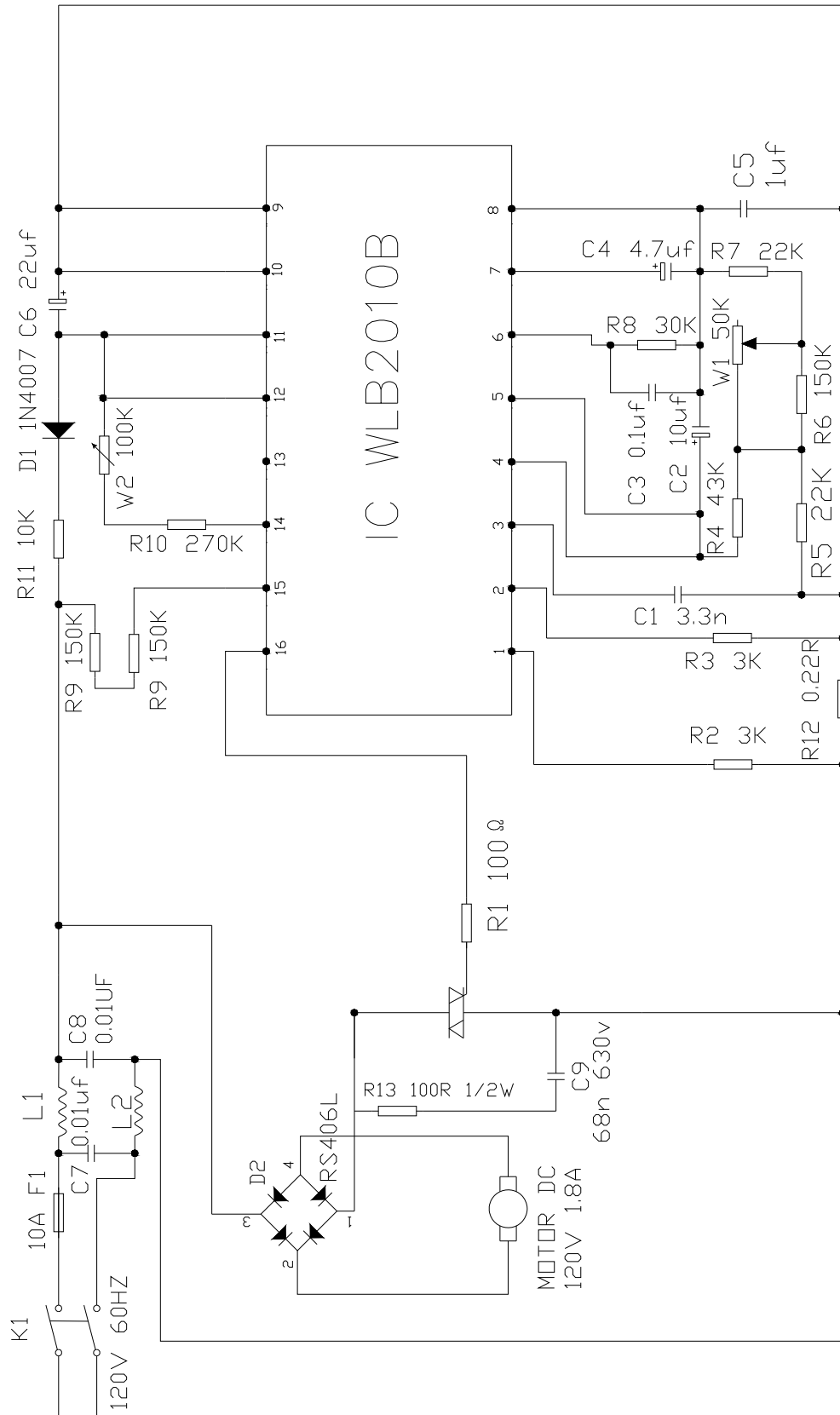
12.17 SAE-1 Support Arm Extension Assembly (Optional Accessory)

Stock # 727020

Index No	Part No	Description	Size	Qty
1	727020-101	Extension Bar		1
2	727020-102	Extension Bar Base		1
3	727000-108	Knob w/M6 Bolt Insert		2



13.0 Electrical connections for JWS-10 Wet Sharpener



14.0 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 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.

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Product Listing with Warranty Period

90 Days – Parts; Consumable items
1 Year – Motors; Machine Accessories
2 Year – Metalworking Machinery; Electric Hoists, Electric Hoist Accessories; Woodworking Machinery used for industrial or commercial purposes; Air Tools
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

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