

# 8-Inch Woodworking Jointer

# **Operating Instructions and Parts List**

Model:TBJ-8-N



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- 1. Read and understand the entire owners 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 the warning labels if they become obscured or removed.
- 4. This jointer 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 jointer, do not use until proper training and knowledge have been obtained.
- 5. Do not use this jointer for other than its intended use.
- 6. Always wear approved safety glasses/face shields while using this jointer. Everyday eyeglasses only have impact resistant lenses; they are not safety glasses.
- 7. Before operating this jointer, remove tie, rings, watches and other jewelry, and roll sleeves up past the elbows. Remove all loose clothing and confine long hair. Non-slip footwear or anti-skid floor strips are recommended. Do **not** wear gloves.
- 8. Wear ear protectors (plugs or muffs) during extended periods of operation.
- 9. Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
  - Lead from lead based paint.
  - Crystalline silica from bricks, 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 face or dust masks that are specifically designed to filter out microscopic particles.

- 10. Do not operate this machine while tired or under the influence of drugs, alcohol or any medication.
- 11. 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.
- 13. 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.
- 16. Make sure the jointer is firmly secured to the stand or a bench 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.**



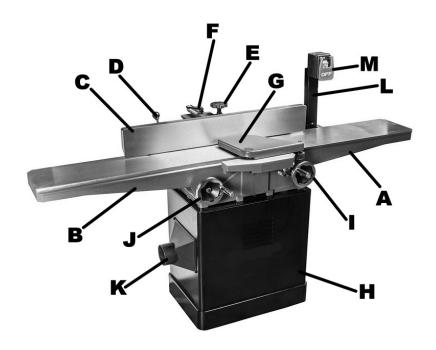
- 21. Make your workshop child proof with padlocks, master switches or by removing starter keys.
- 22. Give your work undivided attention. Looking around, carrying on a conversation and "horse-play" are careless acts that can result in serious injury.
- 23. Maintain a balanced stance at all times so that you do not fall or lean against the knives or other 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 safer.
- 25. Use recommended accessories; improper accessories may be hazardous.
- 26. Maintain tools with care. Keep knives sharp and clean for the best and safest performance. Follow instructions for lubricating and changing accessories.
- 27. Turn off the machine and disconnect from power before cleaning. Use a brush or compressed air to remove chips or debris do not use your 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.
- 30. Remove loose items and unnecessary work pieces from the area before starting the machine.

#### 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.

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

### Identification



A.Infeed Table

B.Infeed Table

C.Fence

D.Fence Tilt Handle

E.Fence Movement Knob F.Fence Movement Lock G.Cutterhead Guard

**H.Cabinet Stand** 

I.Infeed Table Handwheel

J.Outfeed Table Handwheel

K.Dust Port

L.Switch Stand(Optional)
M.Magnitic Switch w.Enmergency Stop Padel

# **Specifications**

Cutting Capacity	8"W x 1/2"D
Cutterhead Speed	5000 RPM
Number of Knives	4
Rabbeting Capacity	pass) 1/2"
Maximum depth of cut(per	pass)1/8"
	8"W x 71"L
Fence	4-4/5"W x 35"L
	8"L x 49/50"W x 1/10"T
Fence Tilt	45°L, 45°R
Positive Stops	45°L, 90°, 45°R
	. 2HP,TEFC Capacity Start Induction

### **Unpacking and Setup**

#### **Contents of Shipping Cartons**

Note: Unit shipped in TWO carton.

**Cabient Stand with Motor (Not Shown)** 

#### **Jointer Body**

Jointer Body Assembly (Not Shown)

- A Fence
- B Fence Carriage Mount
- **6** Fence Tilt Assembly
- D Fence Carriage
- E Drive-Belts\*1
- F Cutterhead Guard
- G Dust Port
- H Handwheel and Handles\*2
- K Push Blocks\*2
- N Fence Handle

#### **Hardware**

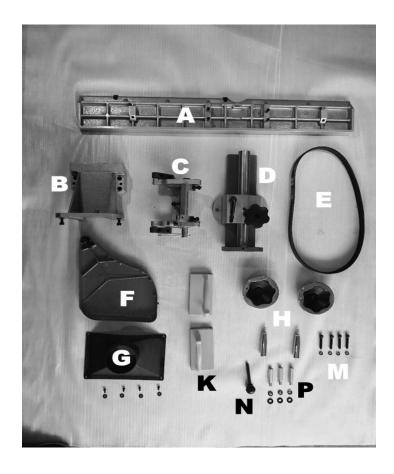
- 3 Jointer Mounting Bolts (P)
- 3 10mm Lock Washer (P)
- 3 10mm Flat Washer (P)
- 4 M5\*10 Phillips Head Screw (for Dust Port)
- 4 10mm Flat Washer (for Dust Port)
- 4 M8\*45 Cap Screw (M for Fence Carriage Mount )
- 4 8mm Lock Washer (M for Fence Carriage Mount )

#### **Tools**

- 3 Hex Wrenches (5, 6, 8 mm)
- 1 8/10mm Open End Wrench
- 1 11/13mm Open End Wrench

#### **Tools Required for Assembly:**

1 Cross Point Screwdriver



**Jointer Body Contents** 

#### **Installing Bed to Stand**

- 1. Use an assistant or hoist mechanism to place bed assembly on top of stand.
- 2. Line up two holes in top of stand with holes in jointer body assembly(Figure 1)
- 3. Attach bed assembly to stand with two 3/8" lock bolts and lock washers (Figure 2). Hand tighten only at this time.
- 4. Line up third hole in stand with hole in bed assembly by viewing through dust chute.
- 5. Install third 3/8" lock bolt and lock washer through dust chute to secure bed to stand.
- 6. Tighten all three mounting bolts with 14mm wrench.

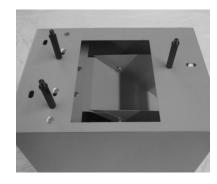


Figure 1

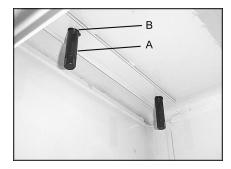


Figure 2

#### **Installing Handwheels**

- 1. Remove screw and washer from shaft.
- 2. Press handwheel onto shaft.(Figure 3)
- 3. Re-install screw and washer.



Figure 3

#### **Installing Fence Carriage Mount to Jointer**

1. Install the fence carriage mount to jointer using four pre-installed cap scraws and lock washers.(Figure 4)

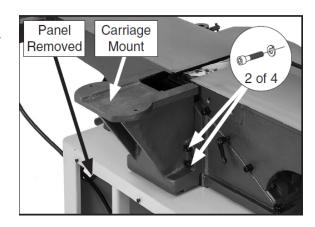


Figure 4

#### **Installing Fence to Fence Carriage Mount**

- 1. Install fence carriage with two pre-installed cap screws and lock washers.(Figure 5)
- 2. Attach the fence to the fence carriage with two pre-installed cap screws.(Figure 5)

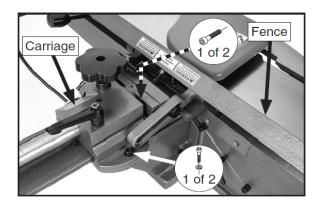


Figure 5

#### **Installing Dust Port**

Install dust port as shown in (Figure 6) with four philips head screws and flat washers which are pre-installed.

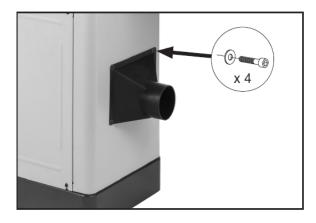


Figure 6

#### **Installing V-Belts**

- 1. Disconnect the machine from the power source, unplug.
- 2. Place v-belts onto cutterhead pulley grooves and through opening in stand.
- 3. In stand, lossen the motor mount bolts. Note-DO NOT completely remove the motor mount bolts(Figure 7).
- 4. Carefully allow the motor to slide upward place v-belt onto motor pulley grooves,tensioning the v-belt with the weight of the motor.
- 5. Check to make sure that motor pulley and cutterhead pulley are vertically aligned(Figure 8) the v-belt does not contact the sides of the opening in the base. If the pulleys are not aligned, loosen the motor mount hex bolt/nuts shaft the motor horizontally as needed to align motor pulley with cutterhead pulley. Re-tighten set screw(Figure 9).
- 6. The v-belt is properly tensioned when finger pressure on the belt half way between the two pulleys causes 1/2" deflection. If the belt is too loose, loosen the motor mounting bolts (Figure 7) on the mounting plate and push down on the plate. When belt tension is correct, re-tighten screws.
- 7. After two hours of operation, check belt tension again. Re-tension if necessary.
- 8. Re-install belt guard and lock knob.

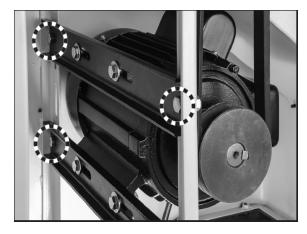


Figure 7

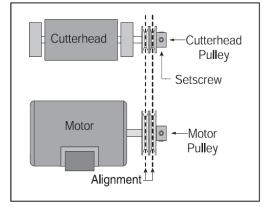


Figure 8



Figure 9

#### **Installing Cutterhead Guard**

- Wind the tang on the torsion spring back a half turn, and slide the guard shaft into the casting so the spring tang points to the right and rests against the casting, as shown in Figure 10.
- 2. Test the guard by pulling it back and letting go.
  - -The guard should snap back over the cutterhead without dragging across the table. If it does, tighten the set screw.
  - -If the guard drags across the table, raise it untill it won't drag, then tighten the set screw.

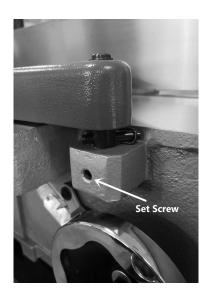


Figure 10

#### **Setting Outfeed Table Hight**

AWARNING Machine should be disconnected from power source at this time! Cutterhead blades are extremely sharp! Use caution when hands are near the cutterhead!

For most jointing operations, the surface of the outfeed table must be level with the knife tips of the cutterhead at their highest point of revolution. The knife tips must project equally from the cutterhead.

The outfeed table and cutterhead are adjusted at the factory and should not require adjustment. However, it may change during the shipment, check the outfeed table hight before use, if it is changed, reset the outfeed table hight as following:

- 1. Disconnect the machine from the power.
- 2. Move cutterhead guard out of the way.
- 3. Loosen outfeet table lock.(Figure 11)
- 4. Place strightedge on outfeet table so it extends over cutterhead, lower outfeed table until strightedge is 0.062" (1/16") above cutterhead body, as determined by using a feeler guage (Figure 12), then tighten outfeed table lock.

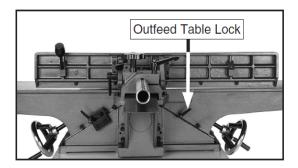


Figure 11

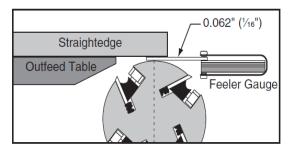


Figure 12

- 5. When the outfeed table and blade number one (or knife insert) are the same height, tighten table lock screw.
  - After the outfeed table has been set, it will need no further adjustments to the cutterhead skip steps 6 through 9 below. It must have its knives parallel with the outfeed table. Proceed as follows:
- 6. Bring the straight edge forward to the front of the outfeed table and confirm that blade is at the same height at the front of the table as it is at the back of the table.
- 7. If blade is higher or lower at one point, Loosen cutterhead gib bolt (A, Figure 13) by turning clockwise as viewed from the infeed table.
- 8. Place the knife setting gauge (B, Figure 13) on the cutterhead over the blade. Find the jack screws through the access holes in the cutterhead(Figure 14) and rotate the jack screws to raise or lower the knife. When the knife is set correctly, it will bearly touch the middle pad of the knife setting jog. Snug the gib bolts tight enough to just hold the knife in place. Repeat STEP 7&8 with the rest of the knives.

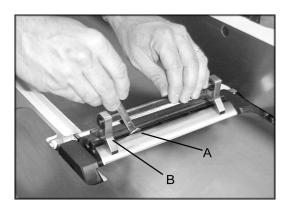


Figure 13

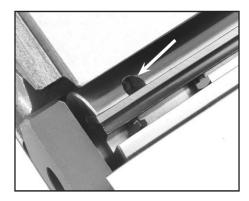


Figure 14

#### **Adjustments**

#### To Set The 90° Fence Stop

**Note**: whenever making an adjustment to the fence, lift the fence up slightly after releasing the lock handle to avoid scratching the table.

- 1. Using a 90° square, adjust the fence to the 90° position, as shown in Figure 15
- 2. Flip the 90° swing stop into the position shown in Figure 16
- 3. Lossen the jam nut on the  $90^{\circ}$  fence stop bolt Figure 16
- 4. Adjust the 90° fence stop bolt until it makes contact with the 90° swing stop.
- 5. Retighten the jam nut lossened in STEP 3.

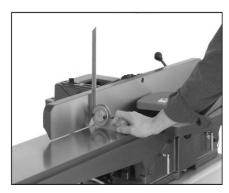


Figure 15

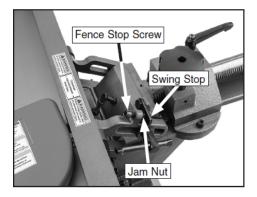


Figure 16

#### To Set the 45° Inward Fence Stop

**Note**: Whenever making an adjustment to the fence, lift the fence up slightly after releasing the lock handle to avoid scratching the table.

- 1. Using a 45° square, adjust the fence to the 45° inward position, as shown in Figure 17
- 2. Lossen the jam nut shown in Figure 18
- Adjust the 45 degree stop bolt until it makes contact with 135 degree stop bolt(Figure 18)
- 4. Retighten the jam nut loosen in Stop 2

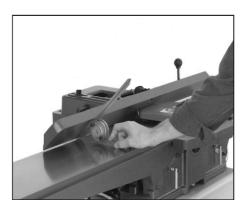


Figure 17

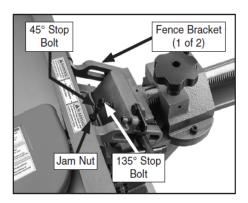


Figure 18

#### To Set the 45° Outward Fence Stop

**Note**: Whenever making an adjustment to the fence, lift the fence up slightly after releasing the lock handle to avoid scratching the table.

- 1. Using a sliding bevel adjusted to 135°, adjust the fence to the 135°(45° outward) position. as shown in Figure 19
- 2. Loosen jam nut on 135 degree stop bolt(Figure 20)
- 3. Adjust 135 degree stop bolt until it makes contact with back of the fence.
- 4. Retighten jam nut loosen in Step 3.



Figure 19

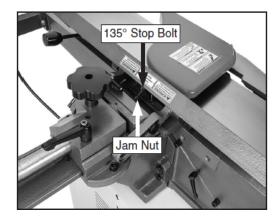


Figure 20

#### **Gib Adjustment**

After a period of use, the gibs may become loose and need adjusting:

- Loosen gib lock nuts and gib lock screws.
   As shown in Figure 21
- 2. Tighten each set screw 1/4 turn starting at the bottom and working up. If a 1/4 turn does not remove all play, take another 1/4 turn. Repeat a 1/4 turn at a time for all three set screws until play is removed.
- 3. Tighten lock screws and lock nuts

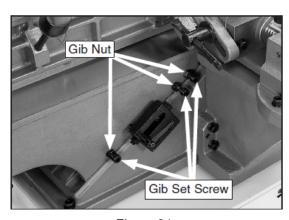


Figure 21

#### **Removing and Replacing Knives**

(Stright Knife Cutterhead Only)

AWARNING Disconnect the machine from the power source before making any adjustment or repair. All knife lock bolts must be firmly tightened or risk ejection of the knife(s) and lock bar from the cutterhead! Failure to comply may cause serious injury!

- 1. Disconnect machine from power source.
- Remove blade guard.
   Caution: blades are sharp! Use great care when hands are arround blade area!
- 3. Loosen the lock screws (Figure 22). Note:
  Loosen screws by turning in a clockwise
  direction as viewed from the infeed table.
  Carefully remove the knife (A, Figure 23), and
  the lock bar with screws (B, Figure 23).
  Repeat for the other two blades.
- 4. Before assembly, clean all parts thoroughly and clear cutterhead knife slots of any dust or debris.
- 5. Insert knife into the cutterhead channel making sure it faces the proper direction.
- Insert lock bar and screws and tighten to hold in place. Blades are set at the proper height when the top of the blade is 1/16" above the cutterhead.
- 7. Repeat for other two blades.
- To set the knives to the outfeed table and to the same height in the cutterhead, see section titled "Leveling Outfeed Table to Cutterhead Knives" found on page 10 of this manual.

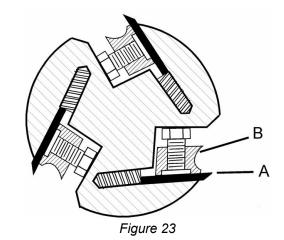


The knife inserts on the Sprial Cutterhead Jointer are four-sided. When dull, simply remove each insert, rotate it 90° for a fresh edge, and reinstall it.

Use the two provided star point screwdrivers to remove the knife insert screw. See Figure 24. Use one of the screwdrivers to help hold the cutterhead in position, and the other to remove the screw. It is advisable to rotate all inserts at the same time to maintain consistent cutting. However, if one or more knife inserts develops a nick, rotate only those inserts that are affected.



Figure 22



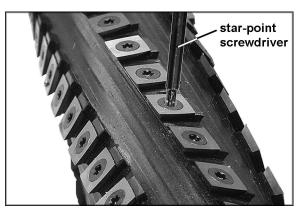


Figure 24

Each knife insert has an etched reference mark so that you can keep track of the rotations.

**IMPORTANT:** When removing or rotating inserts, clean saw dust from the screw, the insert, and the cutterhead platform. Dust accumulation between these elements can prevent the insert from seating properly, and may affect the quality of the cut.

Before installing each screw, lightly coat the screw threads with machine oil and wipe off any excess.

Securely tighten each screw which holds the knife inserts before operating the planer!

AWARNING Make sure all knife insert screws are tightened securely. Loose inserts can be propelled at high speed from a rotating cutterhead, causing injury.

### **Operation**

AWARNING Keep all guards in place and in adjustment at all times during the cutting procedure! Keep hands away from the cutterhead! Do not pass hands directly over the cutterhead! The use of push sticks and/or handle pads are highly recommended when using the jointer! Failure to comply may cause serious injury!

Jointing cuts or edge jointing are made to square an edge of a workpiece. The workpiece is positioned on the jointer with the narrow edge of the workpiece on the infeed table and the major flat surface of the workpiece against the fence (Figure 25).

Planing cuts are similar. The major surface of the workpiece is placed on the table with the narrow edge of the workpiece against the fence (Figure 26).



Figure 25



Figure 26

For jointing and planing cuts pressure is directed three ways; into the fence to ensure a square cut, forward to advance the stock, and downward to avoid chatter and vibration.

For jointing when the material is higher than the fence, the left hand applies pressure into the fence and down toward the table while the right hand pushes forward from behind. Be sure to keep the right hand high up on the material. (Figure 25)

For jointing material that is lower than the fence, use push sticks to protect the hands. For planing, use push blocks. (Figure 26) Never place the right hand on the trailing edge of the material. Hand placement on the trailing edge of the material may cause the hand to come into contact with the blade.

Feed work from right to left at a steady, moderate speed. If you feed the material too slowly, the wood will burn in places. If you feed the material too quickly, ridges will appear in the finished surface.

#### **Jointing Warped Material**

If the work to be jointed is cupped or warped, take light, repetitive cuts until the surface is flat. Forcing the material flat against the table will still leave a warped piece after the cuts have been made.

AWARNING

Never joint any material shorter than eight inches! The material may tip into the jointer's throat and be kicked back! Avoid jointing thin material which could become jammed under the fence or blade guard! Failure to comply may cause serious injury!

#### **Direction of Grain**

Feed the material with of the grain to avoid tearout (Figure 27). If the direction of the grain changes somewhere in the board, try reducing depth of cut and slow the feed speed down to avoid tearout. If results still aren't satisfactory, turn the material around and try feeding through the other way.

#### **Bevel Cut**

To cut a bevel, lock the fence at the desired angle and run the material through, pressing the work firmly against the fence and tables (Figure 28). Several passes may be necessary for the desired result.

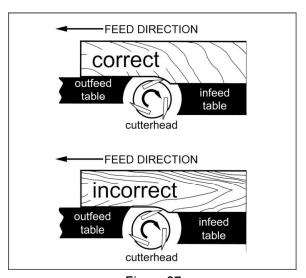


Figure 27



Figure 28

#### **Rabbet Cut**

AWARNING Rabbeting requires the removal of the cutterhead guard. Use extreme caution when making rabbeting cuts and replace the guard immediately after completion! Failure to comply may cause serious injury!

Note: Rabbet cuts are not applicable with the Model JJ-8HH Jointer with helical head.

- 1. Adjust the fence so that the distance between the end of the knives and fence is equal to the width of the rabbet (Figure 29).
- Lower the infeed table an amount equal to the depth of the rabbet. If the rabbet is quite deep, it may be necessary to cut in two or more passes.
- 3. In that event, the table is lowered an amount equal to about half the depth of the rabbet for the first pass, then lowered again to proper depth to complete the cut.

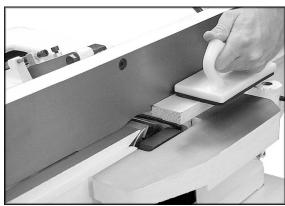


Figure 29

#### **Maintenance**

#### Lubrication

- Use a good grade of light grease on the steel adjusting screws located in the raising and lowering mechanisms of the work tables.
- Occasionally, apply a few drops of light machine oil to the gibs. This permits the tables to slide freely.
- 3. The cutterhead ball bearings are lifetime lubricated and need no further care.

#### **Blade Care**

AWARNING

Blades are extremely sharp!

Use caution when cleaning or changing.

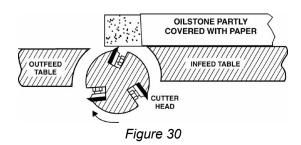
Failure to comply may cause serious injury!

When gum and pitch collect on the blades, carefully remove with a strong solvent. Failure to remove gum and pitch build-up may result in excessive friction and overheating.

#### **Sharpening the Stright Knives**

When blades become dull, touch up blades.

- Disconnect the machine from the power source.
- 2. Remove the fence, blade guard and belt cover.
- 3. To protect the infeed table from scratches, partially cover the sharpening stone with paper. (Figure 30)



- 4. Lay the stone on the infeed table.
- Lower the infeed table and turn the cutterhead by turning the cutterhead pulley.
   The infeed table height is set properly when the stone's surface is flush with the knife bevel.
- 6. Keep the cutterhead from rotating by grasping the cutterhead pulley while sliding the stone back and forth across the table.

Take the same amount of passes for all three blades.

When the blades have been sharpened, if they still are not cutting efficiently, trying to touch up the blades further will only cause the formation of a second beveled edge. When this starts to happen, it is time to replace blades with another set.

It is recommended to keep a second set of blades on hand so that they may be installed while the first set is being professionally sharpened.

#### **Cutterhead Removal**

AWARNING

Blades in the cutterhead are sharp! Use extreme caution when handling the removal of the cutterhead. Failure to comply may cause serious injury!

The entire cutterhead assembly may be removed for cleaning or for bearing and blade replacement. Some woodworkers keep a spare cutterhead with replacement blades should the original cutterhead have to be repaired.

To remove the cutterhead (including bearings, studs, and housing) from the base casting:

- 1. Disconnect the machine from the power source.
- 2. Remove the fence assembly, cutterhead guard, and belt guard.
- 3. Remove the v-belt from the cutterhead pulley.
- 4. Loosen set screw (A, Figure 31) using a hex wrench and remove the cutterhead pulley (B, Figure 31) and key (C, Figure 31).
- 5. Remove nuts (D, Figure 31) and lock washers (E, Figure 31).

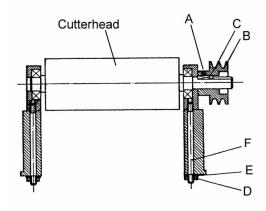
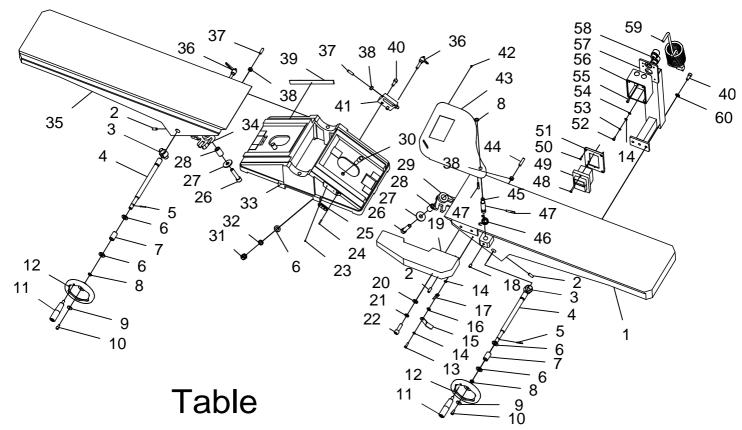


Figure 31

- 6. Lift assembly straight up. Studs (F, Figure 31) will still be attached to the bearing housings.
- 7. Before replacing the cutterhead back into the casting, thoroughly clean the "saddle"
- and the bearing housings of saw dust and grease so that they seat properly.
- 8. To re-install the cutterhead, reverse the above steps.

# **Troubleshooting**

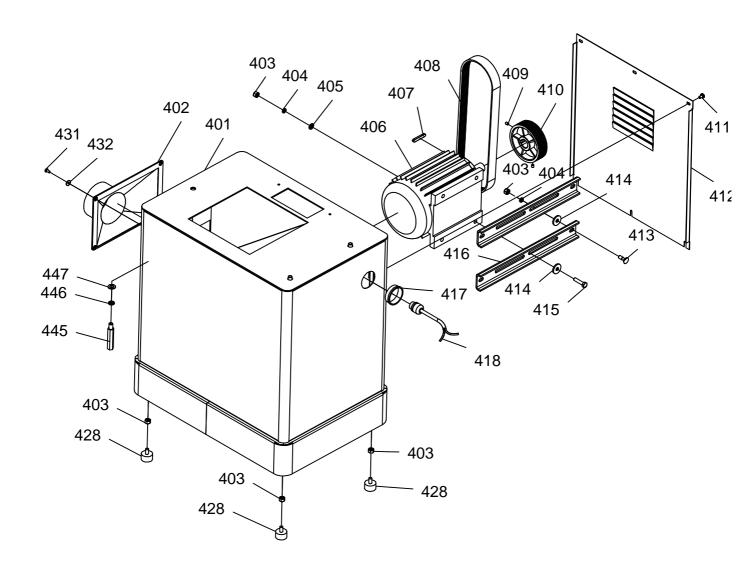
Trouble	Probable Cause	Remedy	
Finished stock is concave on the end.	Knife tip is higher than outfeed table.	Raise outfeed table so it is level with knife tip.	
Back side of finished stock is thicker than the front side.	Outfeed table is higher than knife tip.	Adjust outfeed table so it is level with knife tip.	
Stock is concave in the middle.	Table flatness should be checked with a machinist's square.	Adjust the screws below the table to raise the table ends.	
Both ends of finished stock are cut deeper than the middle.	Ends of tables are higher than middle.	Raise table ends with adjustment screws below tables.	
Infeed or outfeed tables are loose.	Loose gib.	Tighten gibs.	
	One blade set higher than the others.	Readjust blades	
Ripples on planed surface.	Feeding wood too fast.	Feed wood more slowly.	
Kickbacks	Cutting blades are set too high above outfeed table, or they may not be level with outfeed table. (Stright Knife)	Readjust blades (Stright Knife).	
Excessive motor noise.	Motor	Have motor checked by a qualified repair station.	
noise.	Pulley set screw is loose.	Tighten set screw.	
	Circuit overloaded with lights, tools, etc.	Do not share the circuit.	
Motor fails to develop	Undersize wires or circuit too long.	Increase wire sizes, or reduce length of wiring.	
full power or stalls.	Voltage too low.	Request voltage check from the power company.	
	Fuses or circuit breakers do not have sufficient capacity.	Have a qualified electrician install proper size fuses or circuit breakers.	
Motor starts slowly or	Motor	Have motor checked by a qualified repair station.	
fails to come to full speed.	Belt tension too tight.	Adjust belt tension.	
	Bad start capacitor.	Replace start capacitor.	

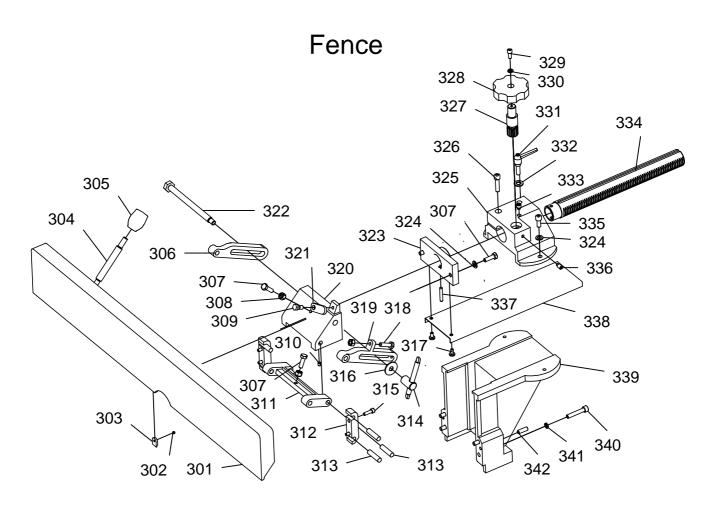


PART	DESCRIPTION	QTY	PART	DESCRIPTION	QTY
1	INFEED TABLE	1	31	HEX NUT M12	2
2	SET SCREW M8*20	3	32	LOCK WASHER 12	2
3	TABLE ADJUST NUT	2	33	BASE	1
4	SCREW SHAFT	2	34	LEFT BRACKET	1
5	ROLL PIN 3*25	2	35	OUTFEED TABLE	1
6	FLAT WASHER 12	6	36	KNOB M6*30	2
7	COLLAR	2	37	SET SCREW M8*25	7
8	EXT RET RING 12	3	38	HEX NUT M8	8
9	FLAT WASHER 6	2	39	GIB	2
10	CAP SCREW M6*12	2	40	CAP SCREW M8*20	4
11	HANDLE	2	41	BLOCK	1
12	HANDWHEEL	2	42	RUBBER WASHER	1
13	PHI HEAD SCREW M5*16	1	43	CUTTER HEAD GUARD	1
14	FLAT WASHER 5	3	44	SPECIAL SCREW	1
15	1/8 PLATE	1	45	GUARD PIVOT SHAFT	1
16	SPECIAL WASHER	1	46	SPRING	1
17	POINTER	1	47	ROLL PIN 6*40	2
18	SET SCREW M8*12	1	48	TAP SCREW ST4.2*30	2
19	RABBET ARM	1	49	SWITCH	1
20	FLAT WASHER 10	2	50	TAP SCREW ST3.5*16	4
21	LOCK WASHER 10	2	51	SWITCH PLATE	1
22	CAP SCREW M10*35	2	52	PHI HEAD SCREW M5*10	1
23	RIVET 2*6	2	53	LOCK WASHER 5	1
24	PIN 4*20	1	54	SERRATED SPACER 5	1
25	SCALE	1	55	CAP SCREW M5*12	4
26	CAP SCREW M12*50	2	56	SWITCH BOX	1
27	FLAT WASHER Φ12*35*3	2	57	SWITCH PADDLE	1
28	BRACKET SLEEVE	2	58	STRAIN FELIEF M20*1.5	2
29	RIGHT BRACKET	1	59	POWER CORD	1
30	SPECIAL SHAFT	2	60	FLAT WASHER 8	2

# Stand

PART	DESCRIPTION	QTY	PART	DESCRIPTION	QTY
401	STAND	1	414	FENDER WASHER 8	8
402	DUST PORT	1	415	HEX BOLT M8*30	4
403	HEX NUT M8	12	416	MOTOR MOUNT PLATE	2
404	LOCK WASHER 8	8	417	PLASTIC GROMMET	1
405	FLAT WASHER 8	4	418	MOTOR CORD	1
406	MOTOR	1	428	RUBBER FOOT M8*16	4
407	KEY 8*40	1	431	PH HEAD SCREW M5*10	4
408	BELT PK1180	1	432	FENDER WASHER 5	4
409	SET SCREW M6*8	2	445	BOLT M10	3
410	MOTOR PULLEY	1	446	LOCK WASHER 10	3
411	PH HEAD SCREW M6*10	6	447	FLAT WASHER 10	3
412	BACK COVER	1			
413	CARRIAGE BOLT M8*25	4			





PART	DESCRIPTION	QTY	PART	DESCRIPTION	QTY
301	FENCE	1	322	LOCK SHAFT	1
302	SET SCREW M5*4	2	323	FENCE RAM SUPPORT	1
303	FENCE GUIDE BLOCK	2	324	FLAT WASHER Φ8	4
304	STUD M10	1	325	FENCE RAM BRACKET	1
305	KNOB M10	1	326	CAP SCREW M8*35	1
306	FENCE TILT ARM (LEFT)	1	327	GEAR	1
307	HEX BOLT M8*25	4	328	STAR KNOB	1
308	HEX NUT M8	3	329	CAP SCREW M6*16	1
309	SHOULDER BOLT	1	330	FLAT WASHER Φ6	1
310	SET SCREW M6*8	2	331	LOCK LEVERE M10*50	1
311	FENCE TILT SUPPORT	1	332	FLAT WASHER Φ10	1
312	FENCE TILT BRACKET	2	333	SET SCREW M10*16	1
313	DOWEL PIN 10*40	6	334	FENCE RAM	1
314	FENCE TILT LOCK LEVER	1	335	CAP SCREW M8*20	2
315	CAP SCREW M6*20	4	336	SET SCREW M8*16	1
316	BIG WASHER	1	337	ROLL PIN 6*50	1
317	PH HE SCREW M6*10	2	338	BELT GUARD	1
318	HEX BOLT M8*30	1	339	CARRIAGE MOUNT	1
319	FENCE TILT ARM (RIGHT)	1	340	CAP SCREW M8*45	4
320	FENCE STOP BRACKET	1	341	LOCK WASHER 8	4
321	90° FENCE STOP	1	342	SET SCREW M8*25	2

#### Cutterhead D) 212 211

PART	DESCRIPCION	QTY
201	CUTER HEAD	1
202	KNIFE	4
203	FLAT CAP SCREW M5*12	8
204	GIB	4
205	GIB BOLT M6*10	16
206	BEARING BLOCK	2
207	STUD	2
208	LOCK WASHER 10	2
209	HEX NUT M10	2
210	BALL BEARING 6204	2
211	HEX BOLT M8*20	1
212	FLAT WASHER Φ8*28	1
213	CUTTERHEAD PULLEY	1
214	COLLAR	1
215	KEY 6*25	1
216	EXT RET RING 10	2
217	KNIFE GAUGE BAR	2
218	KNIFE GAUGE SHAFT	1
219	SET SCREW M6*8	1

# Stand(With Optional Mobility Kit)

PART	DESCRIPTION	QTY	PART	DESCRIPTION	QTY
401	STAND	1	420	FLAT WASHER 12	2
402	DUST PORT	1	421	SHAFT	1
403	HEX NUT M8	11	422	PEDAL BRACKET	1
404	LOCK WASHER 8	11	423	LOCK NUT M8	1
405	FLAT WASHER 8	10	424	CAP SCREW M8*50	3
406	MOTOR	1	425	PEDAL	1
407	KEY 8*40	1	426	TROLLEY UNIVERSAL KIT	1
408	BELT PK1180	1	427	CAP SCREW M8*100	1
409	SET SCREW M6*8	2	428	RUBBER FOOT M8*16	2
410	MOTOR PULLEY	1	429	HEX BOLT M8*50	2
411	PH HEAD SCREW M6*10	6	430	UNIVERSAL WHEEL	2
412	BACK COVER	1	431	PH HEAD SCREW M5*10	4
413	CARRIAGE BOLT M8*25	4	432	FENDER WASHER 5	4
414	FENDER WASHER 8	8	445	BOLT M10	3
415	HEX BOLT M8*30	4	446	LOCK WASHER 10	3
416	MOTOR MOUNT PLATE	2	447	FLAT WASHER 10	3
417	PLASTIC GROMMET	1			
418	MOTOR CORD	1			
440	E CLID OMM	2			

