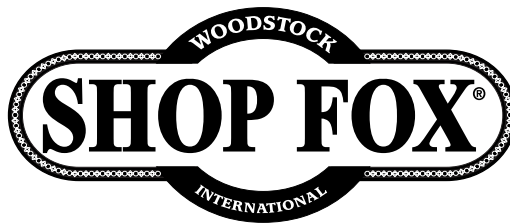


Model W1744S 12" Parallelogram Jointer with Spiral Cutterhead Manual Insert



Phone #: (360) 734-3482 • Online Tech Support: tech-support@shopfox.biz • Web: www.shopfox.biz

The Model W1744S is the same as the Model W1744, except it has a spiral cutterhead. Besides the data sheet and parts in this insert, the content in the Model W1744 owner's manual is the same for both machines. Before operating your new machine, you **MUST** read and understand this insert and the entire Model W1744 manual to reduce the risk of injury from improper use or setup.

If you have any further questions about this manual insert or the differences between the Model W1744S and the Model W1744, contact our Technical Support at (360) 734-3482 or email tech-support@shopfox.biz.



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#10756TR

Printed in China



MACHINE SPECIFICATIONS



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MODEL W1744S 12" PARALLELOGRAM JOINTER with SPIRAL CUTTERHEAD

Motor

Type	TEFC Capacitor Start Induction
Horsepower	3 HP
Voltage	220V
Prewired	220V
Phase	Single
Amps	15A
Speed	3450 RPM
Cycle	60 Hz
Number Of Speeds	1
Power Transfer	V-Belt Drive
Bearings	Sealed and Lubricated

Main Specifications

Cutterhead Information

Cutterhead Type	Spiral with German-Made Indexable Carbide Inserts
Cutterhead Diameter	3 ⁷ / ₈ "
Cutterhead Speed	4950 RPM
Number of Cutter Spirals	4
Number of Indexable Inserts	60
Cutter Insert Type	Indexable Carbide with 4 Cutting Edges
Cutter Dimensions	14 x 14 x 2 MM

Cutting Capacities

Maximum Width of Cut	12"
Maximum Depth of Cut (per pass)	1 ¹ / ₈ "
Maximum Rabbeting Depth	3 ³ / ₄ "
Bevel Jointing	0° -45° Left and Right
Number of Cuts per Minute	19,800

Table Information

Table Size	83 ¹ / ₂ "L x 12 ³ / ₄ "W x 1 ⁷ / ₈ "T
Floor to Table Height	31 ⁵ / ₈ "
Table Adjustment Type	Handwheel
Table Movement Type	Parallelogram

Fence Information

Fence Length	46 ³ / ₄ "
Fence Height	5 ³ / ₈ "
Fence Thickness	1 ¹ / ₂ "
Fence Stops	45° to Left, 45° to Right, 90°

Overall Dimensions

Weight	884 lbs.
Length	84"
Width	33"
Height	43 ¹ / ₂ "
Foot Print (Length/Width)	44 ¹ / ₄ " x 18"

Construction Materials

Base	Cast Iron
Body	Cast Iron
Cabinet	Cast Iron
Fence	Precision Ground Cast Iron
Guard	Molded Aluminum
Table	Precision Ground Cast Iron
Paint	Powder Coated

Shipping Dimensions**Carton #1**

Type	Wood Crate
Content	Machine
Weight	1045 Lbs.
Length/Width/Height	89" x 32" x 41"

Electrical

Switch	Magnetic Switch with Thermal Overload Protection
Switch Voltage	220V
Cord Length	5 ft.
Cord Gauge	12 gauge
Recommended Circuit Size	20 amp
Included Plug	No
Recommended Plug	6-20

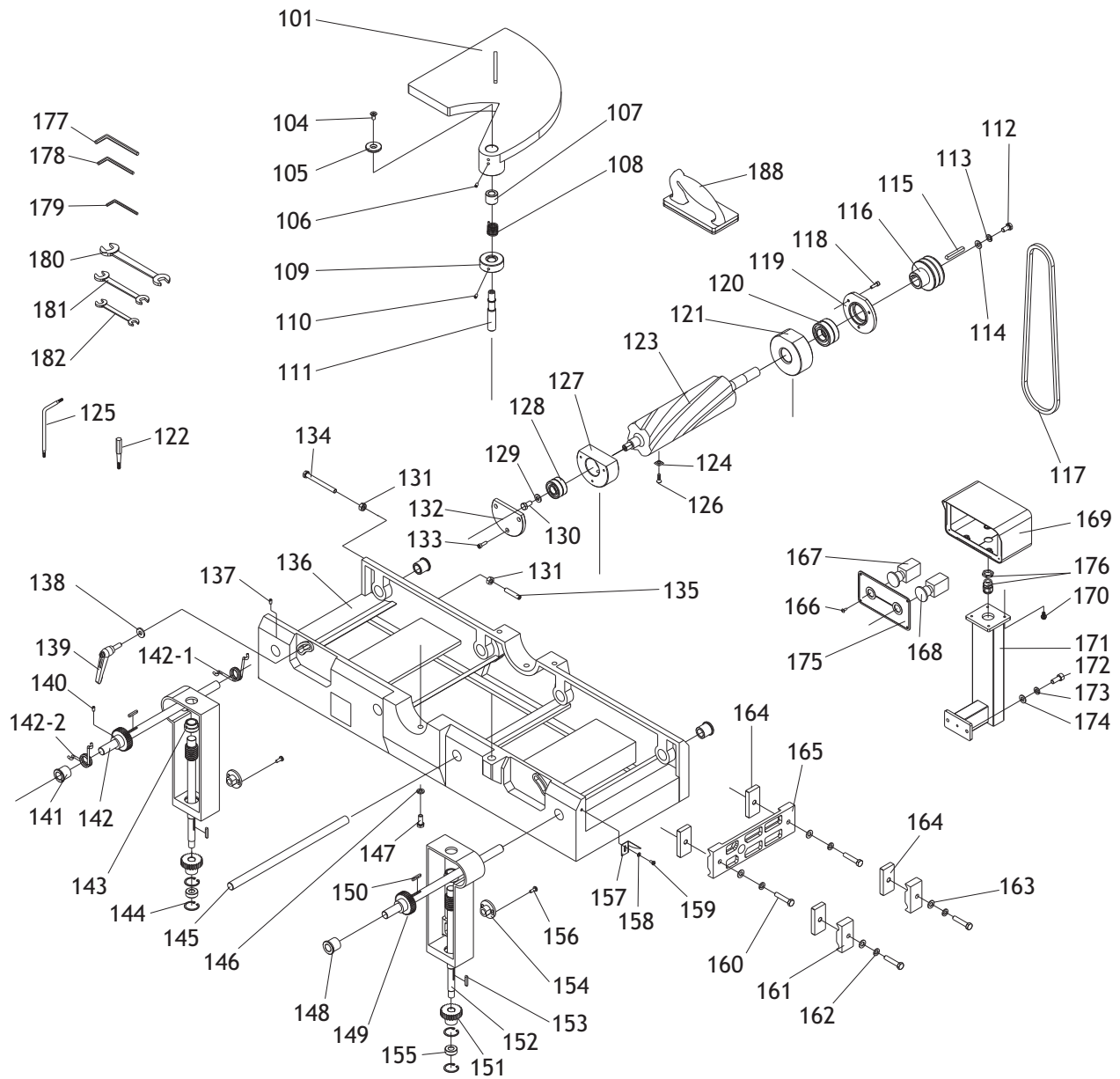
Other

Number of Dust Ports	1
Dust Port Size	5"
Mobile Base	Built-In
Customer Assembly Time	45 Minutes
Warranty	2 Year
Country of Origin	China

Features

Spiral Cutterhead with German-Made Indexable Carbide Inserts
Built-In Mobile Base
3 HP Motor
Easy-to-Reach Pedestal Mounted Control Panel
Parallelogram Table Design Allows for Full Adjustability and Calibration
5³/₈" Tall Fence
Sturdy Cabinet Stand
Handwheel Controlled Table Movement
Included Push Blocks

Base Breakdown

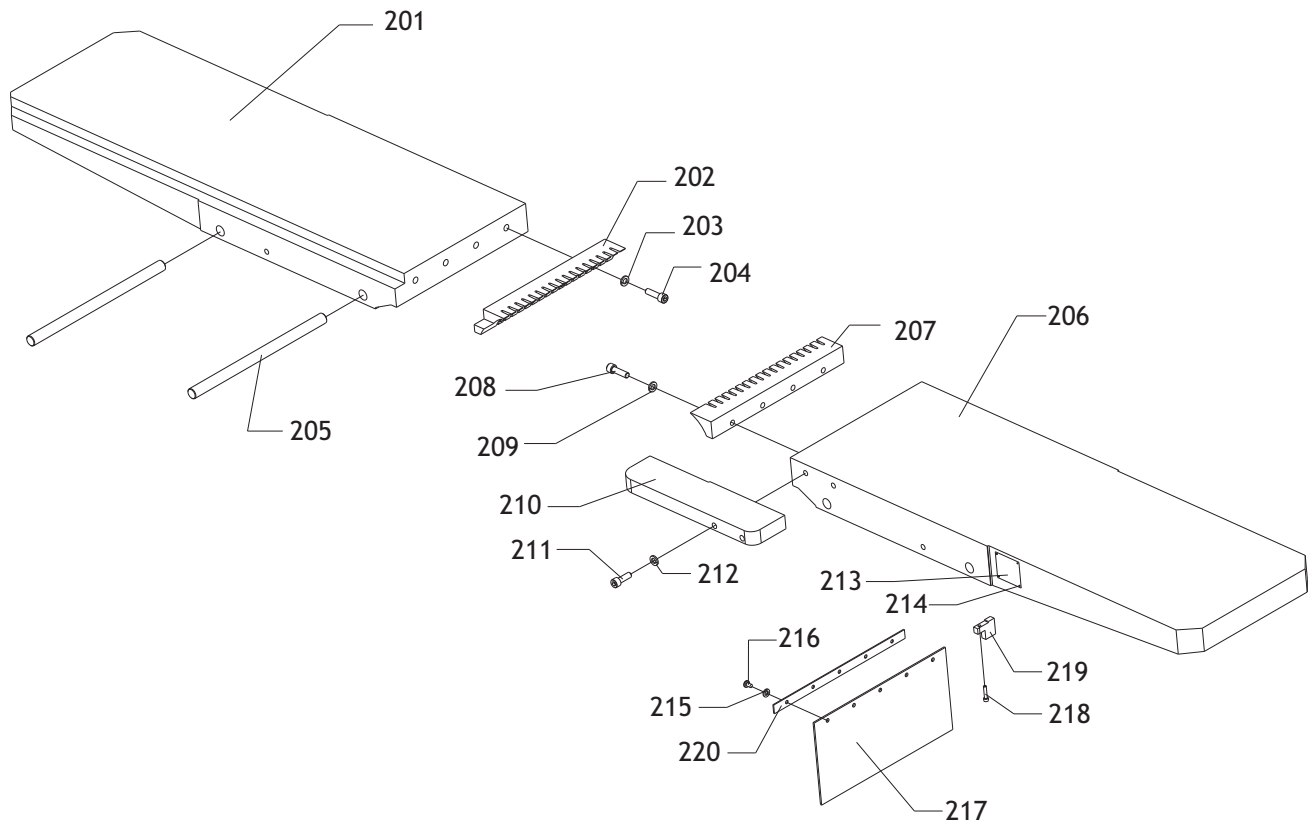


Base Parts List

REF	PART #	DESCRIPTION
101	X1744101	CUTTERHEAD GUARD
104	XPFH23M	FLAT HD SCR M8-1.25 X 16
105	X1744105	SPECIAL FLAT WASHER
106	XPSS04M	SET SCREW M6-1 X 12
107	X1744107	ADAPTER
108	X1744108	TORSION SPRING 28 X 26 X 2.5
109	X1744109	SHAFT COLLAR
110	XPSS04M	SET SCREW M6-1 X 12
111	X1744111	SHAFT
112	X1744112	CUTTERHEAD SCREW
113	XPLW06M	LOCK WASHER 10MM
114	XPW04M	FLAT WASHER 10MM
115	XPB111	KEY 8 X 8 X 60
116	X1744116	CUTTERHEAD PULLEY
117	XPVA55	V-BELT A-55 4L550
118	XPSB02M	CAP SCREW M6-1 X 20
119	X1744119	BEARING COVER
120	XP6206	BALL BEARING 6206ZZ
121	X1744121	BEARING SUPPORT
122	X1741S227	DRIVER BIT TORX T20
123	X1744S123	SPIRAL CUTTERHEAD
124	X1741S164	INDEXABLE INSERT 14 X 14 X 2
125	X1741S228	L-WRENCH TORX T20
126	X1741S166	FLAT HD TORX SCR T20 M6-1 X 15
127	X1744127	BEARING SUPPORT
128	XP62042RZ	BALL BEARING 6204-2RZ
129	XPW01M	FLAT WASHER 8MM
130	X1744130	CUTTERHEAD SCREW
131	XPB02M	HEX NUT M10-1.5
132	X1744132	BEARING COVER
133	XPSB02M	CAP SCREW M6-1 X 20
134	XPB156	HEX BOLT M10-1.5 X 150
135	XPSS71M	SET SCREW M10-1.5 X 60
136	X1744136	BASE
137	XPSS04M	SET SCREW M6-1 X 12
138	XPW04M	FLAT WASHER 10MM
139	X1744139	LOCK HANDLE
140	XPSS03M	SET SCREW M6-1 X 8
141	X1744141	ECCENTRIC BUSHING
142	X1744142	SHAFT
142-1	X1744142-1	LEFT TORSION SPRING
142-2	X1744142-2	RIGHT TORSION SPRING

REF	PART #	DESCRIPTION
143	X1744143	STOP BLOCK
144	XPR21M	INT RETAINING RING 35MM
145	X1744145	SHAFT
146	XPLW06M	LOCK WASHER 10MM
147	XPB32M	HEX BOLT M10-1.5 X 25
148	X1744148	BUSHING
149	X1744149	WORM GEAR
150	XPB12M	KEY 5 X 5 X 30MM
151	X1744151	GEAR
152	X1744152	WORM
153	XPB112	KEY 4 X 4 X 35
154	X1744154	SLIDE STOP BLOCK
155	XP62022RZ	BALL BEARING 6202-2RZ
156	X1744156	SPECIAL FLAT SCREW
157	X1744157	POINTER
158	XPW02M	FLAT WASHER 5MM
159	XPS09M	PHLP HD SCR M5-.8 X 10
160	XPB73M	HEX BOLT M10-1.5 X 50
161	X1744161	CLAMP BLOCK
162	XPLW06M	LOCK WASHER 10MM
163	XPW04M	FLAT WASHER 10MM
164	X1744164	CLAMPING BLOCK
165	X1744165	CLAMP PLATE
166	XPHTEK4M	TAP SCREW M4 X 8
167	X1744167	STOP BUTTON
168	X1744168	START BUTTON
169	X1744169	SWITCH BOX
170	XPFS16M	FLANGE SCREW M8-1.25 X 16
171	X1744171	SWITCH BOX BRACKET
172	XPB32M	HEX BOLT M10-1.5 X 25
173	XPLW06M	LOCK WASHER 10MM
174	XPW04M	FLAT WASHER 10MM
175	X1744175	CONTROL PANEL FACE
176	X1744176	BALL STRAIN RELIEF
177	XPAW10M	HEX WRENCH 10MM
178	XPAW08M	HEX WRENCH 8MM
179	XPAW03M	HEX WRENCH 3MM
180	XPWR1719	COMBO WRENCH 17/19MM
181	XPWR1214	COMBO WRENCH 12/14MM
182	XPWR1012	COMBO WRENCH 10/12MM
188	X1744188	PUSH BLOCK

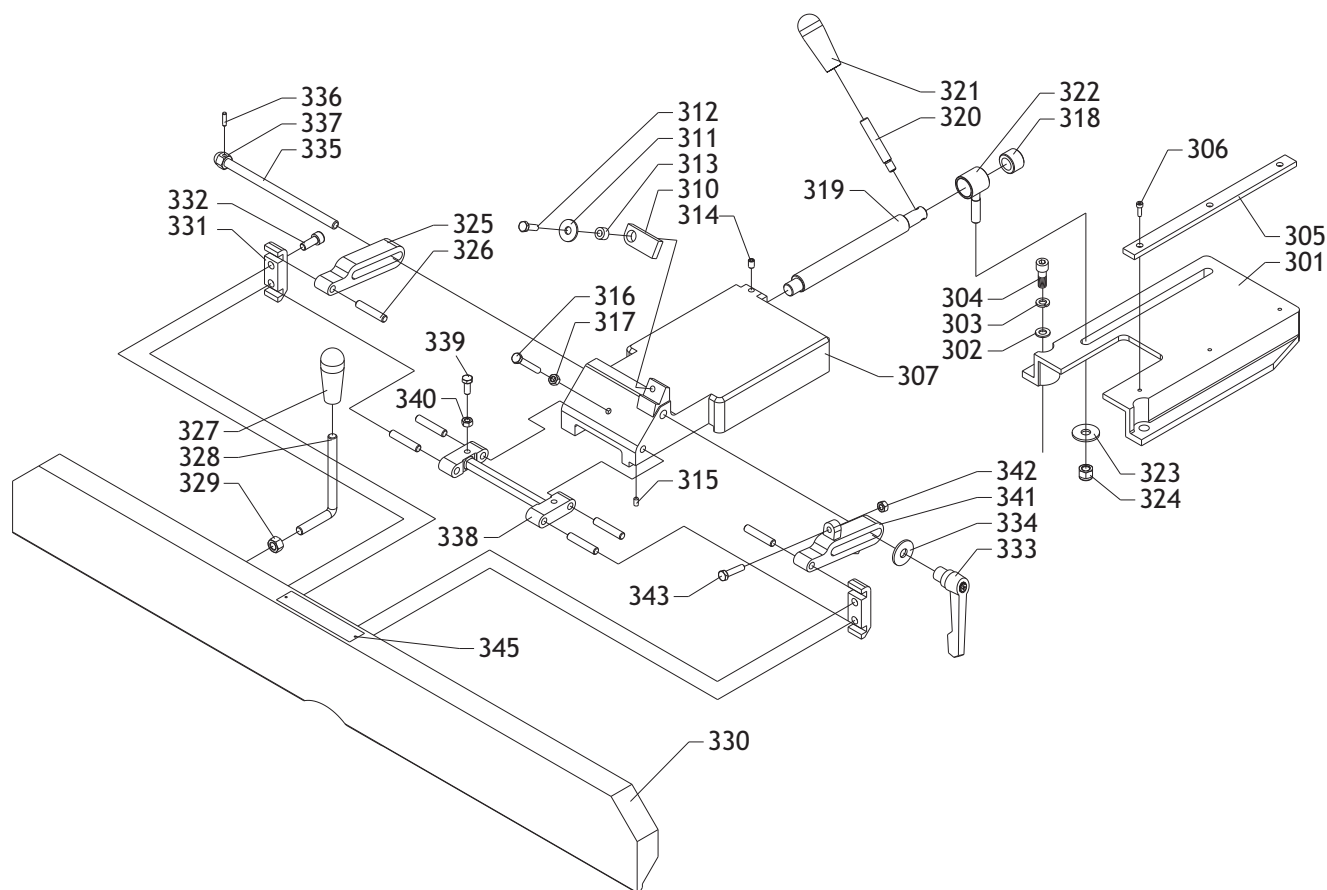
Tables Breakdown



REF	PART #	DESCRIPTION
201	X1744201	TABLE (LEFT)
202	X1744202	TABLE LIP (LEFT)
203	XPLW06M	LOCK WASHER 10MM
204	XPSB84M	CAP SCREW M10-1.5 X 35
205	X1744205	SHAFT
206	X1744206	TABLE (RIGHT)
207	X1744207	TABLE LIP (RIGHT)
208	XPSB84M	CAP SCREW M10-1.5 X 35
209	XPLW06M	LOCK WASHER 10MM
210	X1744210	RABBETING ARM

REF	PART #	DESCRIPTION
211	XPSB72M	CAP SCREW M10-1.5 X 30
212	XPLW06M	LOCK WASHER 10MM
213	X1744213	DEPTH SCALE
214	X1744214	2 X 4 RIVET
215	XPW03M	FLAT WASHER 6MM
216	XPSB04M	CAP SCREW M6-1.0 X 10
217	X1744217	DUST DEFLECTOR
218	XPSB38M	CAP SCREW M5-.8 X 25
219	X1744219	STOP BLOCK
220	X1744220	BAR

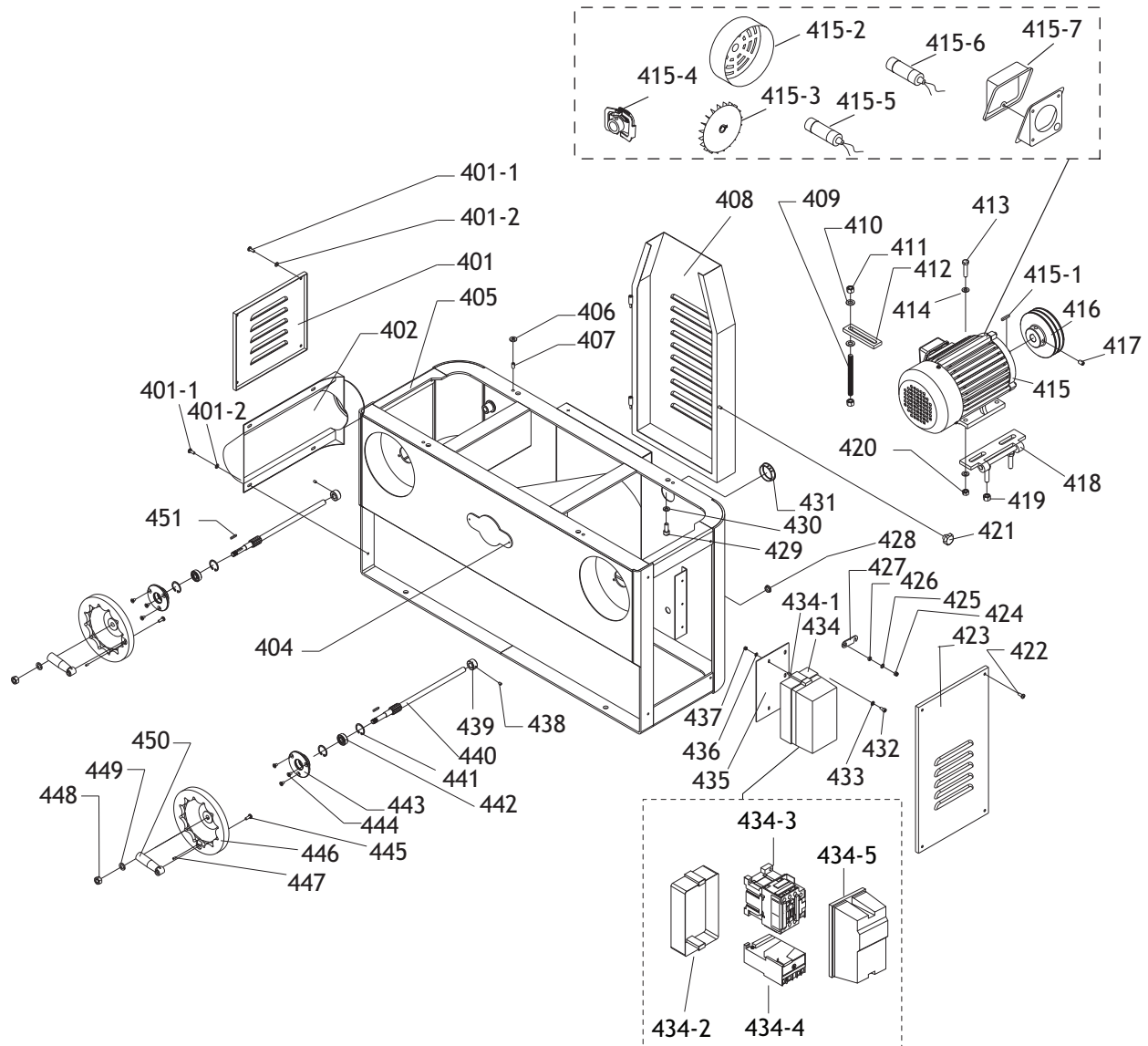
Fence Breakdown



REF	PART #	DESCRIPTION
301	X1744301	FENCE BRACKET
302	XPW06M	FLAT WASHER 12MM
303	XPLW05M	LOCK WASHER 12MM
304	XPSB77M	CAP SCREW M12-1.75 X 30
305	X1744305	SLIDING RAIL
306	XPSB20M	CAP SCREW M5-.8 X 14
307	X1744307	SLIDING BRACKET
310	X1744310	BLOCK
311	XPW01M	FLAT WASHER 8MM
312	XPB07M	HEX BOLT M8-1.25 X 25
313	X1744313	COLLAR
314	XPSS14M	SET SCREW M8-1.25 X 12
315	XPSS04M	SET SCREW M6-1 X 12
316	XPB30M	HEX BOLT M8-1.25 X 55
317	XPN03M	HEX NUT M8-1.25
318	X1744318	COLLAR
319	X1744319	ECCENTRIC SHAFT
320	X1744320	HANDLE ROD
321	X1744321	HANDLE
322	X1744322	SLIDING BUSHING ASSY
323	XPW06M	FLAT WASHER 12MM

REF	PART #	DESCRIPTION
324	X1744324	SPECIAL HEX NUT M12
325	X1744325	LEFT BRACKET
326	X1744326	PIN
327	X1744327	HANDLE
328	X1744328	HANDLE ROD
329	XPN09M	HEX NUT M12-1.75
330	X1744330	FENCE
331	X1744331	CLAMP
332	XPSB64M	CAP SCR M10-1.5 X 25
333	X1744333	LOCK LEVER ASSY
334	XPW06M	FLAT WASHER 12MM
335	X1744335	DOUBLE END THREADED ROD
336	XPRP03M	ROLL PIN 5 X 20
337	X1744337	SPECIAL NUT M12
338	X1744338	SUPPORT BRACKET
339	XPB09M	HEX BOLT M8-1.25 x 20
340	XPN03M	HEX NUT M8-1.25
341	X1744341	RIGHT BRACKET
342	XPN03M	HEX NUT M8-1.25
343	XPB20M	HEX BOLT M8-1.25 X 35
345	X1744345	RIVET 2 X 5

Stand Breakdown



Stand Parts List

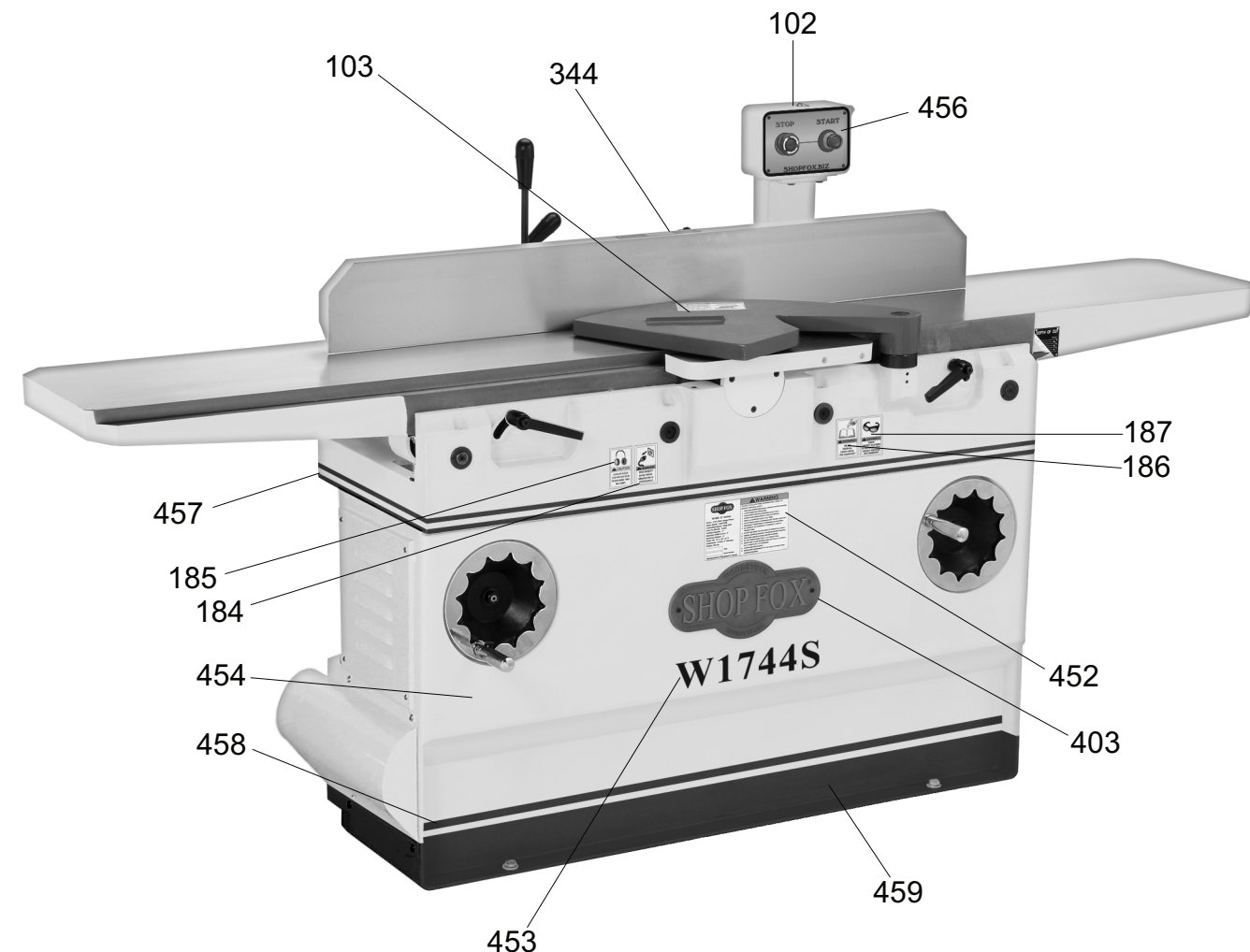
REF	PART #	DESCRIPTION
401	X1744S401	VENTED COVER
401-1	XPSBS18M	BUTTON HD CAP SCR M6-1 X 18
401-2	XPW03M	FLAT WASHER 6MM
402	X1744402	DUST HOOD
404	XPHTK4M	TAP SCREW M4 X 8
405	X1744405	CABINET
406	X1744406	RUBBER WASHER 8MM
407	XPSS80M	SET SCREW M8-1.25 X 15
408	X1744408	PULLEY COVER
409	X1744409	TENSION ROD
410	XPW06M	FLAT WASHER 12MM
411	XPNO9M	M12-1.75 HEX NUT
412	X1744412	TENSION PLATE
413	XPB116M	HEX BOLT M10-1.5 X 45
414	XPW04M	FLAT WASHER 10MM
415	X1744415A	MOTOR 3HP 200V V2.03.08
415-1	XPK33M	KEY 5 X 5 X 45
415-2	X1744415A-2	MOTOR FAN COVER V2.03.08
415-3	X1744415A-3	MOTOR FAN V2.03.08
415-4	X1744415A-4	CENTRIFUGAL SWITCH V2.03.08
415-5	X1744415A-5	S CAPACITOR 200M 250V V2.03.08
415-6	X1744415A-6	R CAPACITOR 20M 400V V2.03.08
415-7	X1744415A-7	JUNCTION BOX V2.03.08
416	X1744416	MOTOR PULLEY
417	XPSS75M	SET SCREW M10-1.5 X 16
418	X1744418	MOTOR BRACKET
419	XPNO9M	HEX NUT M12-1.75
420	XPNO2M	HEX NUT M10-1.5
421	X1744421	PULLEY COVER LOCK KNOB
422	XPSBS18M	BUTTON HD CAP SCR M6-1 X 18
423	X1744423	RIGHT ACCESS DOOR
424	X1744424	SPECIAL HEX NUT M6

REF	PART #	DESCRIPTION
425	XPW03M	FLAT WASHER 6MM
426	X1744426	ADAPTOR
427	X1744427	LATCH
428	X1744428	SMALL STRAIN RELIEF
429	XPSB88M	CAP SCREW M10-1.25 X 25
430	XPLW06M	LOCK WASHER 10MM
431	X1744431	BIG STRAIN RELIEF
432	XPSB04M	CAP SCREW M6-1.0 X 10
433	XPW03M	FLAT WASHER 6MM
434	X1744434	MAGNETIC SWITCH
434-1	XPS06M	PHLP HD SCR M5-.8 x 20
434-2	X1744S434-2	SWITCH BOX BACK COVER
434-3	X1744S434-3	CONTACTOR
434-4	X1744S434-4	OL RELAY
434-5	X1744S434-5	SWITCH BOX FRONT COVER
435	X1744435	SWITCH PLATE
436	XPW02M	FLAT WASHER 5MM
437	XPNO6M	HEX NUT M5-.8
438	XPSS03M	SET SCREW M6-1 X 8
439	X1744439	COLLAR
440	X1744440	SPIRAL GEAR SHAFT
441	XPR29M	INT RETAINING RING 32MM
442	XP6201	BALL BEARING 6201
443	X1744443	BEARING SUPPORT
444	XPFH04M	FLAT HEAD SCR M6-1 X 8
445	XPFS14M	FLANGE SCREW M6-1 X 16
446	X1744446	HAND WHEEL
447	XPRP78M	ROLL PIN 4 X 10
448	XPNO9M	HEX NUT M12-1.75
449	XPW06M	FLAT WASHER 12MM
450	X1744450	FOLDING HANDLE
451	XPK34M	KEY 5 X 5 X 20

Labels/Cosmetic Parts

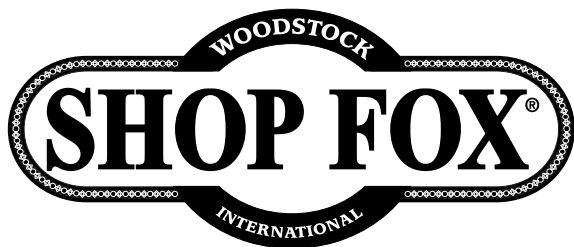
!WARNING

Safety labels warn about machine hazards and how to prevent machine damage or injury. The owner of this machine **MUST** maintain the original location and readability of all labels on this machine. If any label is removed or becomes unreadable, **REPLACE** that label before allowing the machine to enter service again. Contact Woodstock International, Inc. at (360) 734-3482 or www.shopfoxtools.com to order new labels.



REF	PART #	DESCRIPTION
102	XLABEL-04	ELECTRICITY LABEL
103	X1741302	CUTTERHEAD GUARD LABEL
184	XLABEL02B	UNPLUG POWER LABEL 220
185	XLABEL15	EAR PROTECTION LABEL
186	XLABEL08	READ MANUAL LABEL
187	XLABEL01	SAFETY GLASSES LABEL
344	X1741301	FENCE WARNING LABEL
403	XPLOGO1	SHOP FOX LOGO PLATE

REF	PART #	DESCRIPTION
452	X1744S452	MACHINE ID LABEL
453	X1744S453	MODEL NUMBER LABEL
454	XPAINTSF701	PAINT FOR SHOP FOX MACHINES
456	X1744456	CONTROL PANEL LABEL
457	X1741310	TWO LINE BLACK STRIPING
458	X1741309	ONE LINE BLACK STRIPING
459	XPPAINT-7	BLACK PAINT



Model W1744

12" HEAVY DUTY JOINTER

MANUAL UPDATE

This update covers changes made to the machine after the owner's manual was printed. Keep this update with your owner's manual for future reference. *If you have questions, contact Tech Support at (360) 734-3482 or by email at tech_support@shopfox.biz.*

Why the Update?

We recently re-designed the Model W1744 motor and changed the capacitor wiring. **Figure 1** shows the new motor wiring.

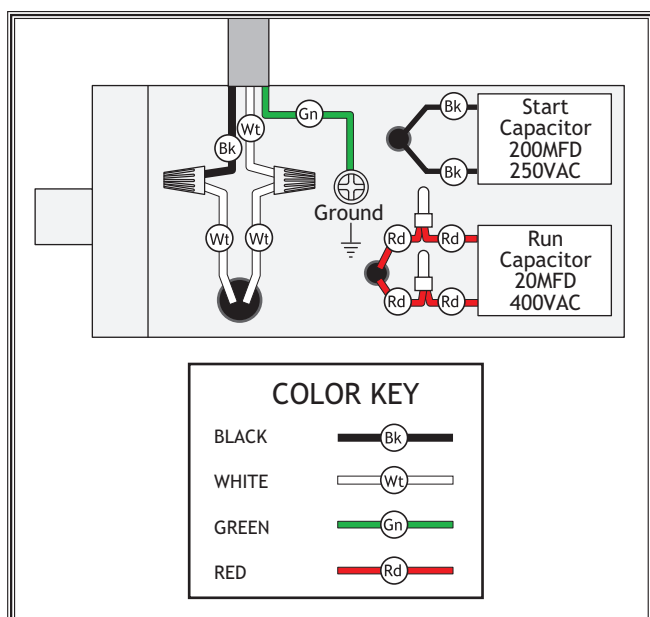


Figure 1. Model W1744 new motor and capacitor wiring.

New Parts for W1744

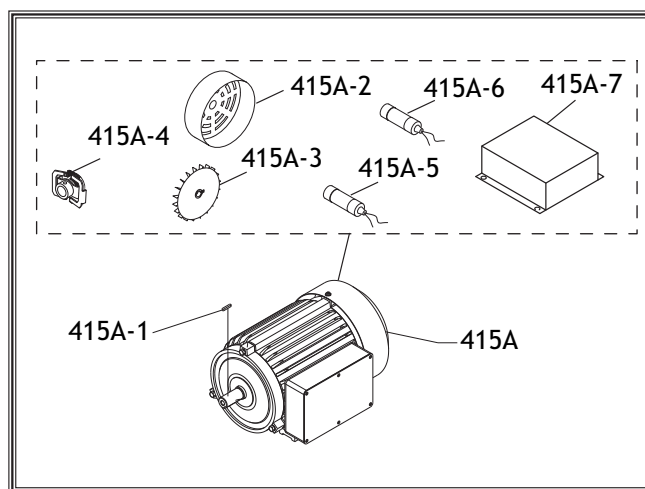


Figure 2. W1744 new motor breakdown.

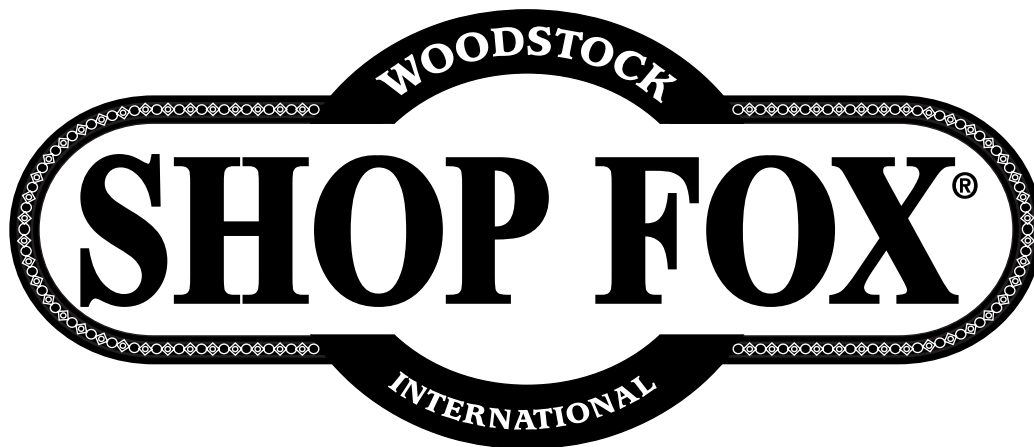
REF	PART #	DESCRIPTION
415A	X1744415A	MOTOR 3HP 220V V2.03.08
415A-1	XPK33M	KEY 5 X 5 X 45
415A-2	X1744415A-2	MOTOR FAN COVER V2.03.08
415A-3	X1744415A-3	MOTOR FAN V2.03.08
415A-4	X1744415A-4	CENTRIFUGAL SWITCH V2.03.08
415A-5	X1744415A-5	S CAPACITOR 200M 250V
415A-6	X1744415A-6	R CAPACITOR 20M 400V
415A-7	X1744415A-7	JUNCTION BOX V2.03.08

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#10619BL

Printed in China



MODEL W1744 12" HEAVY DUTY JOINTER



OWNER'S MANUAL

Phone: (360) 734-3482 • On-Line Technical Support: tech-support@shopfox.biz

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WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.

Failure to read, understand and follow the instructions given in this manual may result in serious personal injury, including amputation, electrocution or death.

The owner of this machine/equipment is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, blade/cutter integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

WARNING!

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks, cement and other masonry products.
- Arsenic and chromium from chemically-treated lumber.

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

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USE THE QUICK GUIDE PAGE LABELS TO SEARCH OUT INFORMATION FAST!

INTRODUCTION

Woodstock Technical Support

We stand behind our machines! In the event that questions arise about your machine, parts are missing, or a defect is found, please contact Woodstock International Technical Support at (360) 734-3482 or send e-mail to: tech-support@shopfox.biz. Our knowledgeable staff will help you troubleshoot problems and send out parts for warranty claims.

If you need the latest edition of this manual, you can download it from <http://www.shopfox.biz>. If you still have questions after reading the latest manual, or if you have comments please contact us at:

Woodstock International, Inc.
Attn: Technical Support Department
P.O. Box 2309
Bellingham, WA 98227

About Your New Jointer

Your new **SHOP FOX®** Jointer has been specially designed to provide many years of trouble-free service. Close attention to detail, ruggedly built parts and a rigid quality control program assure safe and reliable operation.

The Model W1744 is capable of a wide variety of surface jointing/planing, edge jointing, rabbeting, and beveling operations. The handwheels allow you to make precision table adjustments, the control panel is easily accessible and the solid cabinet provides a vibration dampening base for smooth-quality cuts. The Model W1744 also features parallelogram bed adjustment and extra tall 5³/₈" cast-iron fence. Woodstock International, Inc. is committed to customer satisfaction in providing this manual. It is our intent to include all the information necessary for safety, ease of assembly, practical use and durability of this product.

Specifications

Motor:

Type TEFC Capacitor Start Induction
 Horsepower..... 3 HP
 Phase / Voltage.....Single-Phase / 220V
 Amps..... 18A
 Cycle / RPM60 Hertz / 3450 RPM
 Switch Magnetic w/Thermal Overload Protection
 Power TransferBelt Drive
 Bearings..... Sealed Ball Bearings

Capacity:

Maximum Depth of Cut (per pass) $\frac{1}{8}$ "
 Maximum Rabbeting Depth $\frac{3}{4}$ "
 Maximum Width of Cut 12"
 Cutterhead Speed 4950 RPM
 Cuts Per Minute..... 19,800

Overall Dimensions:

Table Size 13" W x 83" L
 Height (from floor to table) $31\frac{11}{16}$ "
 Overall Length 84"
 Overall Width 33"
 Shipping Weight 1,036 lbs.
 Net Weight 875 lbs.
 Carton Size $88\frac{3}{8}$ " x $29\frac{3}{4}$ " x $40\frac{1}{2}$ "
 Stand Footprint $44\frac{1}{4}$ " x 17"
 Cutterhead 4-Knife
 Cutterhead Diameter $3\frac{3}{4}$ "
 Cutterhead Knife Size 12 " x $1\frac{1}{8}$ " x $1\frac{9}{64}$ "

Construction:

Tables Parallelogram Design, Precision Ground Cast Iron
 Fence Assembly Cast Iron
 Body Assembly Cast Iron
 Stand One Piece Steel Cabinet
 Guard Moulded Aluminum
 Bearings Shielded and Lubricated

Features:

..... Parallelogram Beds
 Top Mount Switch Controls
 $5\frac{3}{8}$ " Tall Fence
 Included 5" Dust Port
 Included Push Blocks

Controls and Features

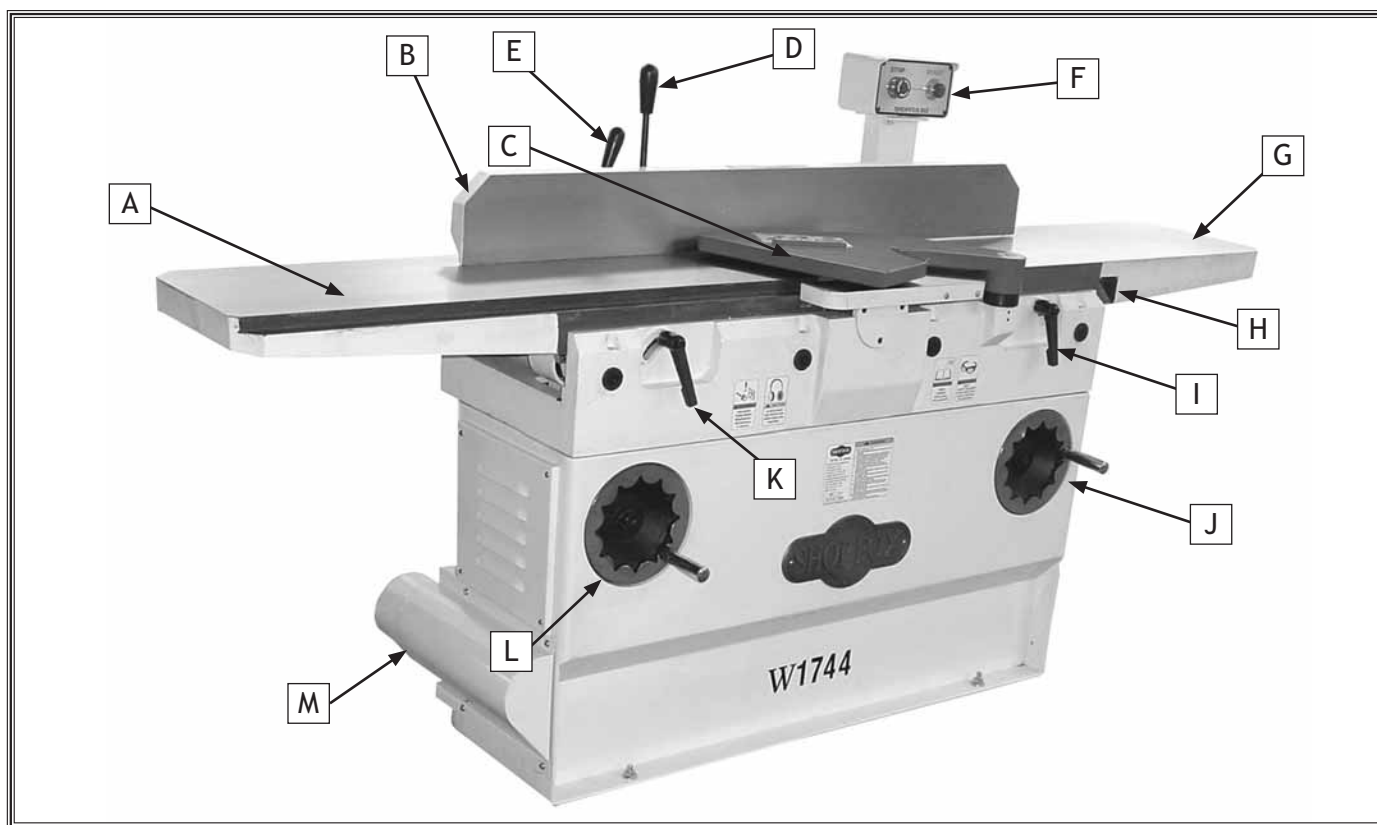


Figure 1. W1744 controls and features.

- A. Outfeed Table
- B. Fence
- C. Cutterhead Guard
- D. Fence Tilt Lever
- E. Fence Lock Handle
- F. Control Panel
- G. Infeed Table
- H. Depth Scale
- I. Infeed Table Lock
- J. Infeed Table Adjustment Handwheel
- K. Outfeed Table Lock
- L. Outfeed Table Adjustment Handwheel
- M. Dust Port

SAFETY

**READ MANUAL BEFORE OPERATING MACHINE.
FAILURE TO FOLLOW INSTRUCTIONS BELOW WILL
RESULT IN PERSONAL INJURY.**

DANGER

Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.

WARNING

Indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.

CAUTION

Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury.

NOTICE

This symbol is used to alert the user to useful information about proper operation of the equipment, and/or a situation that may cause damage to the machinery.

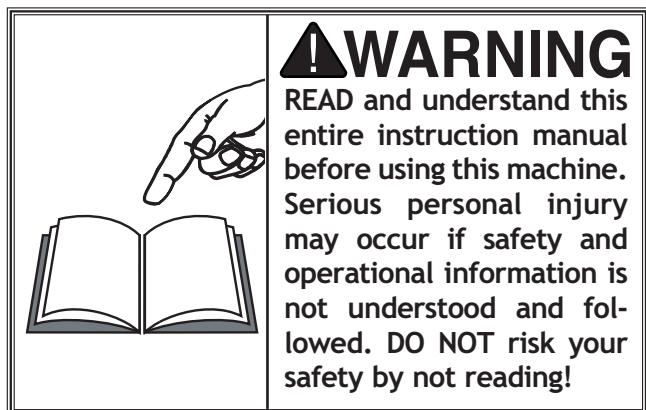
Standard Safety Instructions

1. **READ THROUGH THE ENTIRE MANUAL BEFORE STARTING MACHINERY.** Machinery presents serious injury hazards to untrained users.
2. **ALWAYS USE ANSI APPROVED SAFETY GLASSES WHEN OPERATING MACHINERY.** Everyday eye-glasses only have impact resistant lenses—they are NOT safety glasses.
3. **ALWAYS WEAR AN ANSI APPROVED RESPIRATOR WHEN OPERATING MACHINERY THAT PRODUCES DUST.** Wood dust is a carcinogen and can cause cancer and severe respiratory illnesses.
4. **ALWAYS USE HEARING PROTECTION WHEN OPERATING MACHINERY.** Machinery noise can cause permanent hearing damage.
5. **WEAR PROPER APPAREL.** DO NOT wear loose clothing, gloves, neckties, rings, or jewelry which may get caught in moving parts. Wear protective hair covering to contain long hair and wear non-slip footwear.
6. **NEVER OPERATE MACHINERY WHEN TIRED, OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.** Be mentally alert at all times when running machinery.
7. **ONLY ALLOW TRAINED AND PROPERLY SUPERVISED PERSONNEL TO OPERATE MACHINERY.** Make sure operation instructions are safe and clearly understood.
8. **KEEP CHILDREN AND VISITORS AWAY.** Keep all children and visitors a safe distance from the work area.
9. **MAKE WORKSHOP CHILD PROOF.** Use padlocks, master switches, and remove start switch keys.

10. **NEVER LEAVE WHEN MACHINE IS RUNNING.** Turn power off and allow all moving parts to come to a complete stop before leaving machine unattended.
11. **DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.
12. **KEEP WORK AREA CLEAN AND WELL LIT.** Clutter and dark shadows may cause accidents.
13. **USE A GROUNDED EXTENSION CORD RATED FOR THE MACHINE AMPERAGE.** Undersized cords overheat and lose power. Replace extension cords if they become damaged. DO NOT use extension cords for 220V machinery.
14. **ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING MACHINERY.** Make sure switch is in OFF position before reconnecting.
15. **MAINTAIN MACHINERY WITH CARE.** Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. **MAKE SURE GUARDS ARE IN PLACE AND WORK CORRECTLY BEFORE USING MACHINERY.**
17. **REMOVE ADJUSTING KEYS AND WRENCHES.** Make a habit of checking for keys and adjusting wrenches before turning machinery ON.
18. **CHECK FOR DAMAGED PARTS BEFORE USING MACHINERY.** Check for binding and alignment of parts, broken parts, part mounting, loose bolts, and any other conditions that may affect machine operation. Repair or replace damaged parts.
19. **USE RECOMMENDED ACCESSORIES.** Refer to the instruction manual for recommended accessories. The use of improper accessories may cause risk of injury.
20. **DO NOT FORCE MACHINERY.** Work at the speed for which the machine or accessory was designed.
21. **SECURE WORKPIECE.** Use clamps or a vise to hold the workpiece when practical. A secured workpiece protects your hands and frees both hands to operate the machine.
22. **DO NOT OVERREACH.** Keep proper footing and balance at all times.
23. **MANY MACHINES WILL EJECT THE WORKPIECE TOWARD THE OPERATOR.** Know and avoid conditions that cause the workpiece to "kickback."
24. **ALWAYS LOCK MOBILE BASES (IF USED) BEFORE OPERATING MACHINERY.**
25. **BE AWARE THAT CERTAIN DUST MAY BE HAZARDOUS** to the respiratory systems of people and animals, especially fine dust. Make sure you know the hazards associated with the type of dust you will be exposed to and always wear a respirator approved for that type of dust.

Additional Safety Instructions for Jointers

SAFETY



1. **JOINTER KICKBACK.** "Kickback" is when the workpiece is thrown off the jointer table by the force of the cutterhead. Always use push blocks and safety glasses to reduce the likelihood of injury from "kickback." If you do not understand what kickback is, or how it occurs, **DO NOT** operate this machine.
2. **CUTTERHEAD ALIGNMENT.** Keep the top edge of the outfeed table aligned with the edge of the knife at top dead center (TDC) to avoid kickback and personal injuries.
3. **PUSH BLOCKS.** Always use push blocks whenever surface planing. Never pass your hands directly over the cutterhead without a push block.
4. **WORKPIECE SUPPORT.** Supporting the workpiece adequately at all times while cutting is crucial for making safe cuts and avoiding injury. Never attempt to make a cut with an unstable workpiece.
5. **KICKBACK ZONE.** The "kickback zone" is the path directly through the end of the infeed table. Never stand or allow others to stand in this area during operation.
6. **MAXIMUM CUTTING DEPTH.** The maximum cutting depth for one pass is $\frac{1}{8}$ ". Never attempt any single cut deeper than this!
7. **JOINTING WITH THE GRAIN.** Jointing against the grain or jointing end grain is dangerous and could produce chatter or excessive chip out. Always joint with the grain.
8. **KEEPING GUARDS IN PLACE.** With the exception of rabbeting, all operations must be performed with the guard in place. After rabbeting, be sure to replace the guard.
9. **PROPER CUTTING.** When cutting, always keep the workpiece moving toward the outfeed table until the workpiece has passed completely over the cutterhead. Never back the work toward the infeed table.
10. **USING GOOD STOCK.** Jointing safety begins with your lumber. Inspect your stock carefully before you feed it over the cutterhead. Never joint a board that has loose knots, nails, or staples. If you have any doubts about the stability or structural integrity of your stock, **DO NOT** joint it!

Avoiding Potential Injuries



Figure 2. Correct operator and workpiece position, guard is in place, and push blocks are being used.



Figure 3. Never surface plane without push blocks!



Figure 5. Never stand directly behind the workpiece!



Figure 4. Never plane/edge-joint with the guard removed!



Figure 6. Never joint end grain!

220V Operation

The SHOP FOX® Model W1744 is prewired for 220 volt, single-phase operation. The motor supplied with your new Model W1744 jointer is rated at 3 HP and will draw approximately 18 amps. For 220V operation, we recommend using a NEMA L6-20 plug and receptacle (see Figure 7). For 220V operation, only connect your machine to a circuit that is protected by a 20 amp circuit breaker.

⚠ CAUTION: Using a circuit breaker rated higher than 20 amps will increase the risk of fire!

Keep in mind that a circuit being used by other machines or tools at the same time will add to the total load being applied to the circuit. Add up the load ratings of all machines on the circuit. If this number exceeds the rating of the circuit breaker or fuse, use a different circuit.

Extension Cords

We do not recommend using an extension cord for 220V equipment. Instead, arrange the placement of your machinery and installed wiring to eliminate the need for extension cords. If you must use an extension cord, please use the following guidelines:

- Use cords rated for Standard Service
- Never exceed a length of 50 feet
- Use cords with 12 ga. wire or bigger
- Ensure cord has a ground wire and pin
- Do not use cords in need of repair

Grounding

This machine must be grounded! The electrical cord supplied with this machine does not come with a 220 volt plug. Use a plug with a ground pin. If your outlet does not accommodate a ground pin, have it replaced by a qualified electrician or have an appropriate adapter installed and grounded properly. An adapter with a grounding wire does not guarantee the machine will be grounded. A ground source must be verified.

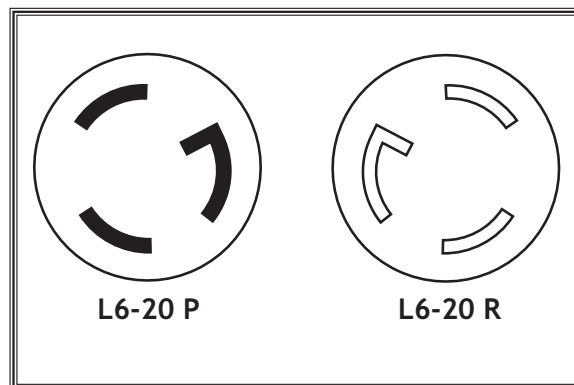
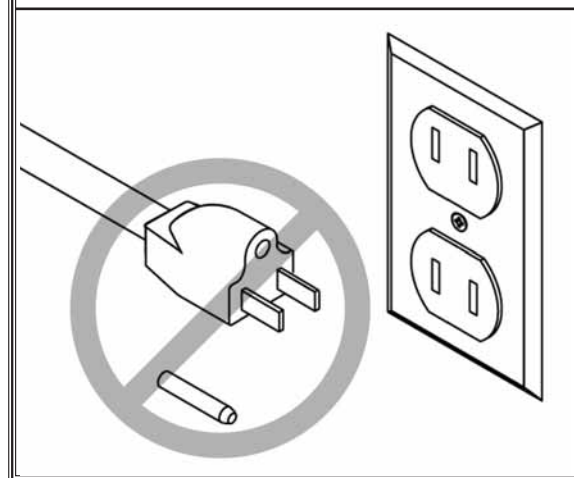


Figure 7. L6-20 220V 3-prong plug and outlet.

⚠ WARNING

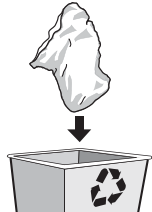
This equipment must be grounded. Verify that any existing electrical outlet and circuit you intend to plug into is actually grounded. If it is not, it will be necessary to run a separate 12 AWG copper grounding wire from the outlet to a known ground. Under no circumstances should the grounding pin be removed from any three-pronged plug or serious injury may occur.



SET UP

Unpacking

The **SHOP FOX®** Model W1744 has been carefully packaged for safe transporting. If you notice the machine has been damaged, please contact your authorized **SHOP FOX®** dealer immediately.



! WARNING

SUFFOCATION HAZARD!

Immediately discard all plastic bags and packing materials to eliminate suffocation hazards for children and animals.

Items Needed for Set Up

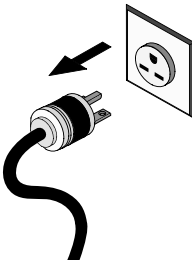
The following items are needed, but not included, to setup your machine:

- Safety Glasses (for each person).....1
- Solvent1
- Shop Rags for Cleaning As Needed
- Extra Person for Lifting Help1
- Fork Lift, Engine Hoist, or Boom Crane1
- Lifting Straps (900 lb. Capacity)2
- Straightedge (see **Page 17**).....1
- Phillips Screwdriver #21



! WARNING

READ and understand this entire instruction manual before using this machine. Serious personal injury may occur if safety and operational information is not understood and followed. **DO NOT** risk your safety by not reading!



! WARNING

UNPLUG power cord before you do any assembly or adjustment tasks! Otherwise, serious personal injury to you or others may occur!

Inventory

The following is a description of the main components shipped with the **SHOP FOX®** Model W1744. Lay the components out to inventory them.

Wood Crate Contents (Figure 8 & 9)	Qty
A. Stand Assembly	1
B. Fence Assembly	1
C. Fence Bracket.....	1
D. Push Blocks	2
E. Knife Setting Jig (Not Shown)	1

Tools and Hardware (Not Shown)	Qty
• Hex Wrenches 3, 4, 8, 10mm	1 Each
• Open End Wrench 10/12, 12/14, 17/19mm....	1 Each

Assembly Fasteners (Not Shown)	Qty
• Cap Screws M12-1.75 x 30 (Fence)	2
• Flat Washers 12mm (Fence)	3
• Lock Washers 12mm (Fence)	2
• Lock Nut M12-1.75 (Fence)	1
• Flat Washers 10mm (Pedestal)	2
• Cap Screws M10-1.5 x 25 (Pedestal)	2

If any parts appear to be missing, examine the packaging carefully to be sure those parts are not among the packing materials. If any parts are missing, find the part number in the back of this manual and contact Woodstock International, Inc. at (360) 734-3482 or at tech-support@shopfox.biz

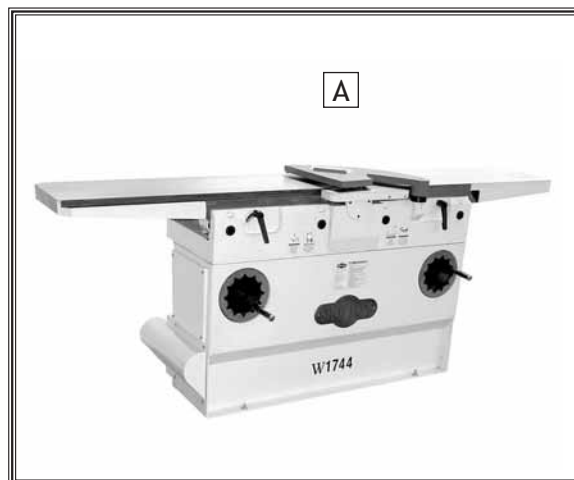


Figure 8. Box 1 contents.

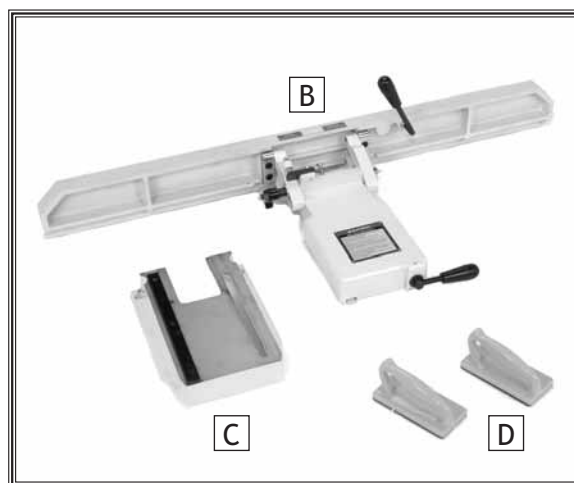


Figure 9. Additional box 1 contents.

NOTICE

When ordering replacement parts, refer to the parts list and diagram in the back of the manual.

NOTICE

Some hardware/fasteners on the inventory list may arrive pre-installed on the machine. Check these locations before assuming that any items from the inventory list are missing.

Machine Placement

- **Floor Load:** This machine distributes a heavy load in a small footprint. Some floors may require additional bracing to support both machine and operator.
- **Working Clearances:** Consider existing and anticipated needs, size of material to be processed through the machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your jointer.
- **Lighting:** Lighting should be bright enough to eliminate shadow and prevent eye strain.

Lifting Jointer

The Model W1744 requires the use of lifting equipment such as a forklift, engine hoist or boom crane. DO NOT lift the machine by hand.

If you are unsure how to lift this jointer, consult a qualified professional.



To lift the jointer, do these steps:

1. Wrap lifting straps around the infeed and outfeed tables. Position the straps as close to the base as possible to prevent damaging the tables.
2. With lifting straps positioned evenly, lift the jointer (**Figure 10**) off of the pallet and onto the floor.

! CAUTION



MAKE your shop "child safe." Ensure that your workplace is inaccessible to youngsters by closing and locking all entrances when you are away. **NEVER** allow untrained visitors in your shop when assembling, adjusting or operating equipment.



Figure 10. Model W1744 supported evenly by two lifting straps.

Cleaning Machine

The table and other unpainted parts of your jointer are coated with a waxy grease that protects them from corrosion during shipment. Clean this grease off with a solvent cleaner or citrus-based degreaser. **DO NOT** use chlorine-based solvents such as brake parts cleaner or acetone—if you happen to splash some onto a painted surface, you will ruin the finish.

CAUTION



ALWAYS work in well-ventilated areas far from possible ignition sources when using solvents to clean machinery. Many solvents are toxic when inhaled or ingested. Use care when disposing of waste rags and towels to be sure they **DO NOT** create fire or environmental hazards.

WARNING



NEVER use gasoline or other petroleum-based solvents to clean with. Most have low flash points, which make them extremely flammable. A risk of explosion and burning exists if these products are used. Serious personal injury may occur if this warning is ignored!

Mounting to Shop Floor

Although not required, we recommend that you mount your new machine to the floor. Because this is an optional step and floor materials may vary, floor mounting hardware is not included. It will be necessary to use a precision level to level your machine.

Bolting to Concrete Floors

Lag shield anchors with lag bolts and anchor studs (Figure 11) are two popular methods for anchoring an object to a concrete floor. We suggest you research the many options and methods for mounting your machine and choose the best that fits your specific application.

NOTICE

Anchor studs are stronger and more permanent alternatives to lag shield anchors; however, they will stick out of the floor, which may cause a tripping hazard if you decide to move your machine at a later point.



Figure 11. Typical concrete mounting hardware.

Fence

Make sure the underside of the fence, the top of the carriage and top of the table have been thoroughly cleaned of all the export grease before installing the fence, or the fence will not slide easily and will get quickly gummed up when exposed to sawdust. The fence has a keyway slot built into the underside of it that fits over the key on the table. These keep the fence perpendicular to the cutterhead during adjustments.



To install the fence:

1. Align the mounting holes on the fence bracket and jointer, and fasten with the M12-1.75 x 30 cap screws, flat washers and lock washers as shown in **Figure 12**.
2. With the help of an assistant, lift the fence assembly over the fence bracket, slip the sliding bushing on the carriage into the slot on the fence bracket, as shown in **Figure 13**, and make sure the key and keyway slot fit snugly.
3. Secure the bolt with a 12mm flat washer and lock nut.

Checking Cutterhead Guard Operation

Though the cutterhead guard is pre-installed, you should check to make sure it works.

1. Pull the guard back and let it go. The guard should spring back over the cutterhead.
 - If the guard drags across the table, raise it slightly so it won't drag.
 - If the guard does not spring back over the cutterhead, loosen the set screws shown in **Figure 14**, remove the cutterhead guard, and reinstall it so the flat part of the guard shaft faces the set screws. Check to make sure the cutterhead guard works.

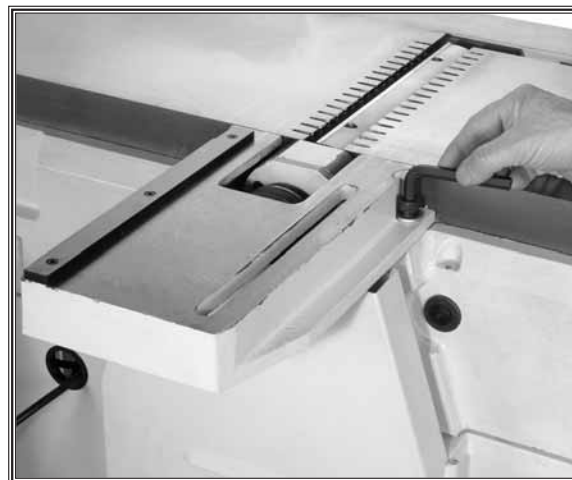


Figure 12. Installing fence bracket.

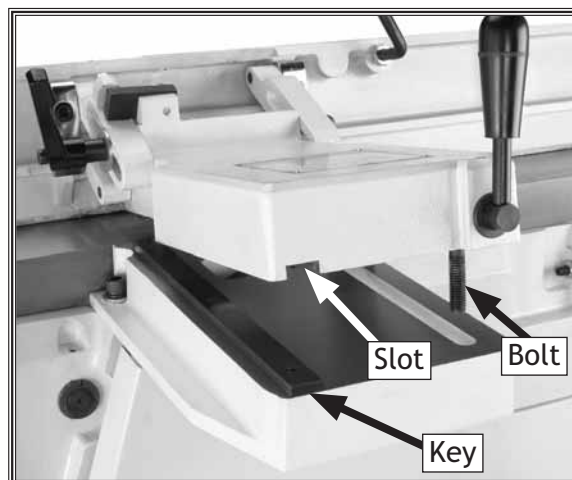


Figure 13. Installing fence assembly.

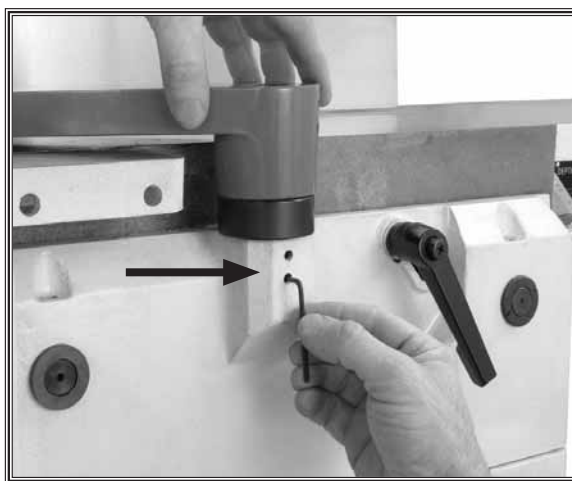


Figure 14. Removing cutterhead guard.

Pedestal Switch

The pedestal switch is upside down for shipping purposes.

To set up the pedestal switch, do these steps:

1. Remove the M10-1.5 x 25 cap screws and flat washers shown in **Figure 15**.
2. Turn the pedestal upright and fasten it to the jointer with the cap screws and washers removed in **Step 1**, as shown in **Figure 16**.



Figure 15. Location to remove pedestal mounting hardware (one side shown).



Figure 16. Mounting pedestal in upright position.

Knife Setting Jig

Assemble the jig as shown in Figure 17.

Checking Outfeed Table Height

The outfeed table **MUST** be level with the knives when they are at top-dead-center or the workpiece cannot be feed across the jointer safely. The outfeed table height is factory set, but we recommend that you check it to make sure that it didn't change during shipping.

To check the outfeed table height, do these steps:

1. Place a straightedge on the outfeed table so it extends over the cutterhead.
2. Rotate the cutterhead pulley until one of the knives is at top-dead-center (TDC), as illustrated in Figure 18.

When correctly set, the knife will barely touch the straightedge, as shown in Figure 19.

- If your outfeed table is correctly set, no adjustments are necessary.
- If the knife lifts the straightedge off the table or it is below the straightedge, then the outfeed table must be re-set. Refer to **Setting Outfeed Table Height** on Page 36.

Dust Port

The dust port is installed at the factory, so just attach it to an adequate dust collection system.

Recommended CFM at Dust Port: 615 CFM

Do not confuse this CFM recommendation with the rating of the dust collector. To determine the CFM at the dust port, you must take into account many variables, including the CFM rating of the dust collector, the length of hose between the dust collector and the machine, the amount of branches or wyes, and the amount of other open lines throughout the system. Explaining this calculation is beyond the scope of this manual. If you are unsure of your system, consult an expert or purchase a good dust collection "how-to" book.



Figure 17. Knife setting jig assembly.

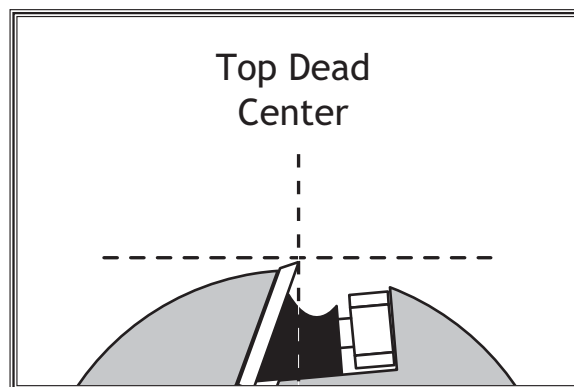


Figure 18. Cutterhead knife at top-dead-center.

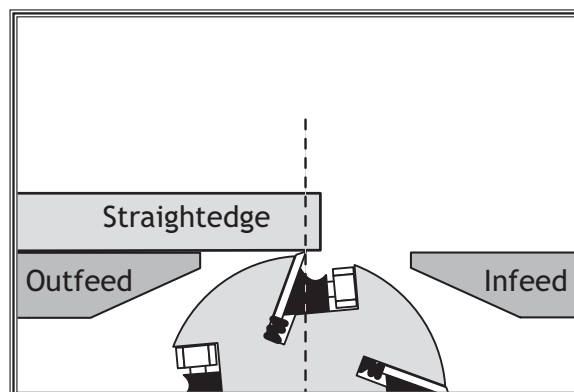


Figure 19. Using a straightedge to align outfeed table height with knife at TDC.

⚠ CAUTION

DO NOT operate the Model W1744 without an adequate dust collection system. This machine creates substantial amounts of wood dust while operating. Failure to use a dust collection system can result in short and long-term respiratory illness.

Test Run

Complete this process once you have familiarized yourself with all instructions in this manual. The purpose of the test run is to make sure the motor is working properly before proceeding.

To begin the test run, do these steps:

1. Read the entire instruction manual first!
2. Make sure all tools and foreign objects have been removed from the machine.
3. Review **Page 10** and connect your machine to the power source.
4. Make sure the red STOP button is in the out position by twisting it.
5. Turn the jointer **ON**.
 - The jointer should run smoothly with little or no vibration.
 - Immediately turn the jointer **OFF** if you suspect any problems, and refer to **Page 43** to trouble-shoot/fix any problems before starting the jointer again.
 - If the source of an unusual noise or vibration is not readily apparent, contact our technical support for help at (360) 734-3482 or contact us online at tech-support@shopfox.biz.

WARNING



Projectiles thrown from the machine could cause serious eye injury. Wear safety glasses during assembly and operation.

WARNING



Loose hair and clothing could get caught in machinery and cause serious personal injury. Keep loose clothing rolled up and long hair tied up and away from machinery.

OPERATIONS

General

The Model W1744 will perform many types of operations that are beyond the scope of this manual. Many of these operations can be dangerous or deadly if performed incorrectly.

The instructions in this section are written with the understanding that the operator has the necessary knowledge and skills to operate this machine. **If at any time you are experiencing difficulties performing any operation, stop using the machine!**

If you are an inexperienced operator, we strongly recommend that you read books, trade articles, or seek training from an experienced jointer operator before performing any unfamiliar operations. **Above all, your safety should come first!**

WARNING



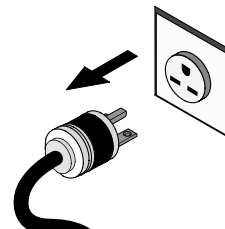
READ and understand this entire instruction manual before using this machine. Serious personal injury may occur if safety and operational information is not understood and followed. **DO NOT** risk your safety by not reading!

WARNING



Always wear safety glasses when operating the jointer. Failure to comply may result in serious personal injury.

WARNING



DO NOT investigate problems or adjust the jointer while it is running. Wait until the machine is turned **OFF**, unplugged and all working parts have come to a complete stop before proceeding!

Basic Controls

This section covers the basic controls used during routine operations.

START Button: Starts motor only if the STOP button is in the out position (**Figure 20**).

STOP Button: Stops motor when pushed in and disables the START button. Enable the START button by twisting the STOP button until it springs forward in the out position.

Table Movement: To move the infeed table, loosen the table lock (**Figure 21**), move the table with the table handwheel in the preset range, then tighten the table lock. The outfeed table is preset with no range of movement allowed, so if it gets accidentally unlocked it will not move. To adjust the preset range of movement, refer to **SERVICE** about setting table heights.

Fence Movement: The fence has a lock handle that keeps it in position (**Figure 22**). To move the fence, loosen the lock handle and slide the fence where needed.

Fence Tilting: The tilt lock (**Figure 22**) secures the fence at any position in the available range. The stop block sets the fence tilt to 90°. Positive stops stop the fence at 45° inward and 45° outward, for common 45° bevel cuts. Even when the fence is resting against the positive stops, the tilt lock must be tightened before cutting.

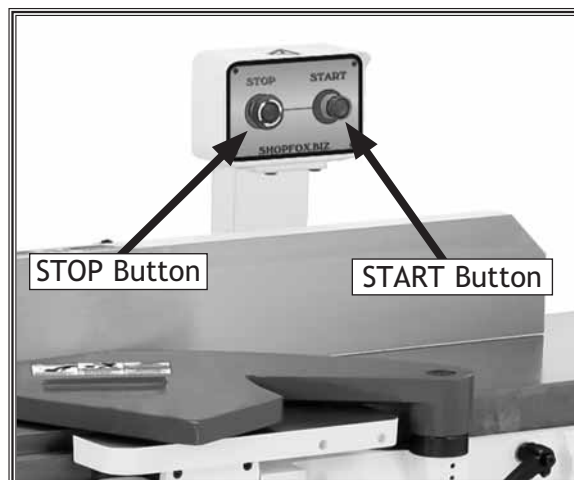


Figure 20. START/STOP button locations.

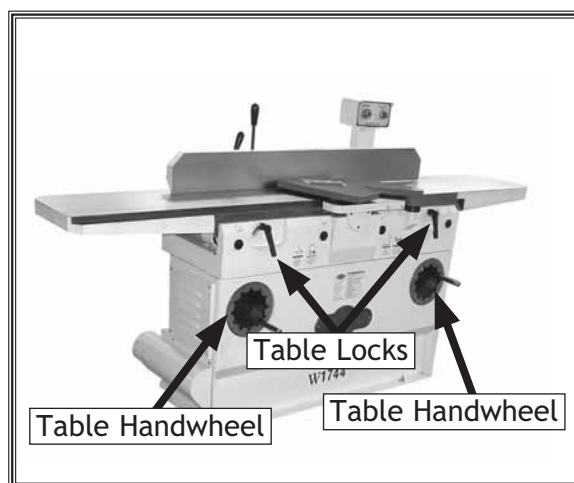


Figure 21. Table control locations.

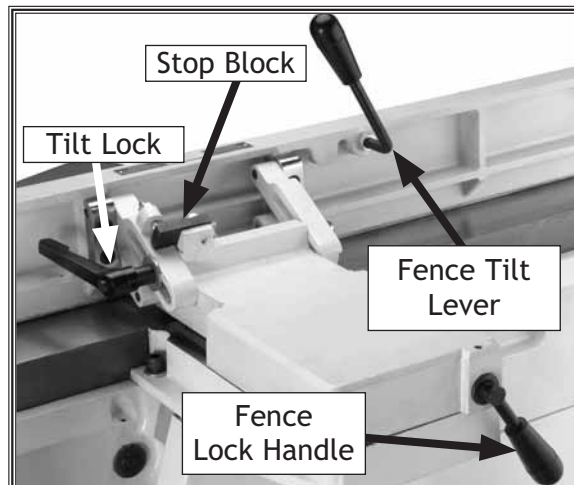


Figure 22. Fence lock, tilt lock and stop block locations.

Stock Inspection and Requirements

Here are some rules to follow when choosing and jointing stock:

- **DO NOT joint or surface plane stock that contains knots.** Injury to the operator or damage to the workpiece can occur if the knots become dislodged during the cutting operation.
- **DO NOT joint or surface plane against the grain direction.** Cutting against the grain increases the likelihood of stock kickback, as well as tear-out on the workpiece.
- **Jointing and surface planing with the grain produces a better finish and is safer for the operator.** Cutting with the grain is described as feeding the stock on the jointer so the grain points down and toward you as viewed on the edge of the stock (Figure 23).

Note: If the grain changes direction along the edge of the board, decrease the cutting depth and make additional passes.

- **Remove foreign objects from the stock.** Make sure that any stock you process with the jointer is clean and free of any dirt, nails, staples, tiny rocks or any other foreign objects that may damage the jointer blades.
- **Only process natural wood fiber through your jointer.** Never joint MDF, particle board, plywood, laminates or other synthetically made materials.
- **Make sure all stock is sufficiently dried before jointing.** Wood with a moisture content over 20% will cause unnecessary wear on the knives and poor cutting results.
- **Make sure your workpiece exceeds the minimum dimension requirements (Figures 24 & 25) before edge jointing or surface planing, or it may break or kick back during the operation!**

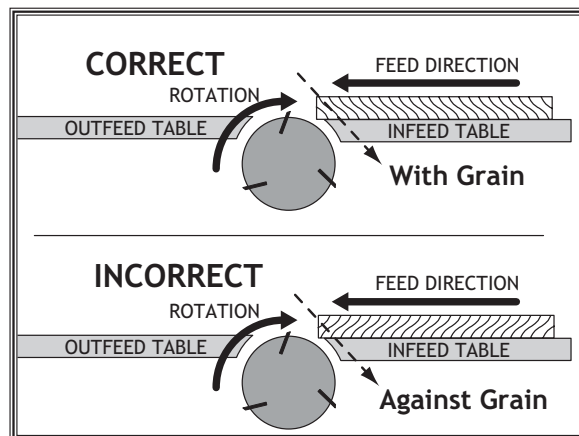


Figure 23. Correct setting for grain alignment.

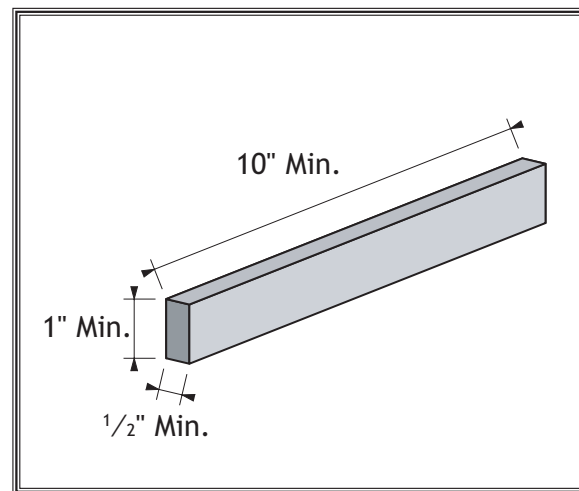


Figure 24. Minimum dimensions for edge jointing.

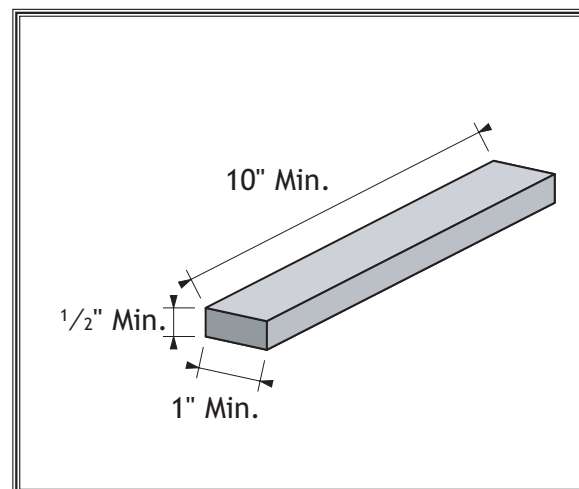


Figure 25. Minimum dimensions for surface planing.

Squaring Stock

Squaring stock involves four steps performed in the order below:

1. **Surface Plane On The Jointer:** The concave face of the workpiece is surface planed flat with the jointer (Figure 26).
2. **Surface Plane On a Thickness Planer:** The opposite face of the workpiece is surface planed flat with a thickness planer (Figure 27).
3. **Edge Joint On The Jointer:** The concave edge of the workpiece is jointed flat with the jointer (Figure 28).
4. **Rip Cut On A Table Saw:** The jointed edge of the workpiece is placed against a table saw fence and the opposite edge cut off (Figure 29).

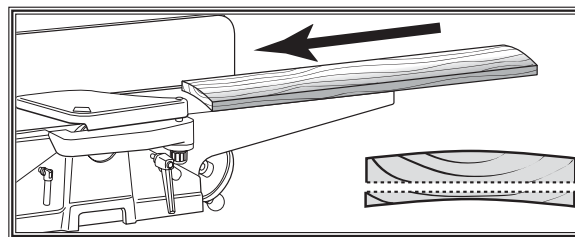


Figure 26. Surface plane on the jointer.

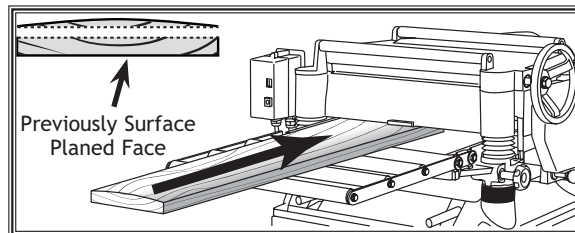


Figure 27. Surface plane on a thickness planer.

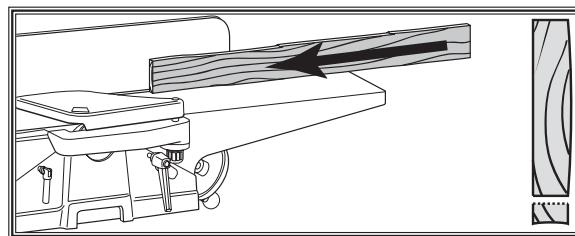


Figure 28. Edge joint on the jointer.

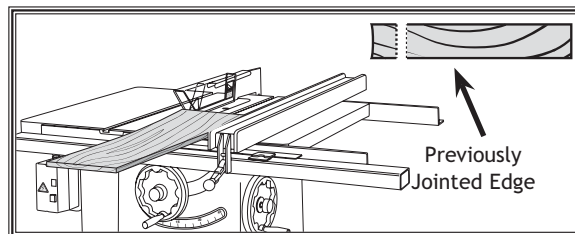


Figure 29. Rip cut on a table saw.

Surface Planing

The purpose of surface planing on the jointer is to make one flat face on a piece of stock (see **Figures 30 & 31**) to prepare it for surface planing on a thickness planer.

NOTICE

If you are not experienced with a jointer, set the depth of cut to 0, and practice feeding the workpiece across the tables as described. This procedure will better prepare you for the actual operation.

To surface plane on the jointer, do these steps:

1. Read and understand **SAFETY**, beginning on **Page 6**.
2. Make sure your stock has been inspected for dangerous conditions as described in the **Stock Inspection & Requirements** instructions, beginning on **Page 21**.
3. Set the cutting depth for your operation. (We suggest $\frac{1}{32}$ " for surface planing, using a more shallow depth for hard wood species or for wide stock.)
4. Make sure your fence is set to 90°
5. If your workpiece is cupped (warped), place it so the concave side is face down (**Figure 31**) on the surface of the infeed table.
6. Start the jointer.
7. With a push block in each hand, press the workpiece against the table and fence with firm pressure, and feed the workpiece over the cutterhead (**Figure 30**).

Note: If your leading hand (with push block) gets within 4" of the cutterhead, lift it up and over the cutterhead, and place the push block on the portion of the workpiece that is on the outfeed table. Now, focus your pressure on the outfeed end of the workpiece while feeding, and repeat the same action with your trailing hand when it gets within 4" of the cutterhead. To keep your hands safe, **DO NOT** let them get closer than 4" from the cutterhead when it is moving!

8. Repeat **Step 7** until the entire surface is flat.



Figure 30. Typical surface planing operation.

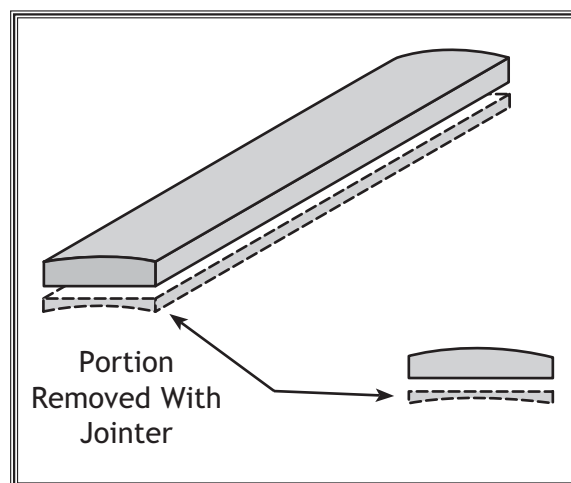


Figure 31. Illustration of surface planing results.

⚠ WARNING

Failure to use push blocks when surface planing may result in cutterhead contact, which will cause serious personal injury. Always use push blocks to protect your hands when surface planing on the jointer.

Edge Jointing

The purpose of edge jointing is to produce a finished, flat-edged surface (see **Figures 32 & 33**) that is suitable for joinery or finishing. It is also a necessary step when squaring rough or warped stock.

NOTICE

If you are not experienced with a jointer, set the depth of cut to 0", and practice feeding the workpiece across the tables as described below. This procedure will better prepare you for the actual operation.

To edge joint on the jointer, do these steps:

1. Read and understand **SAFETY**, beginning on **Page 6**.
2. Make sure your stock has been inspected for dangerous conditions as described in the **Stock Inspection** instructions, beginning on **Page 21**.
3. Set the cutting depth for your operation. **Note:** We suggest between $\frac{1}{16}$ " and $\frac{1}{8}$ " for edge jointing, using a more shallow depth for hard wood species or for wide stock.
4. Make sure the fence is set to 90°.
5. If your workpiece is cupped (warped), place it so the concave side is face down (**Figure 33**) on the surface of the infeed table.
6. Start the jointer.
7. Press the workpiece against the table and fence with firm pressure. Use your trailing hand to guide the workpiece through the cut, and feed the workpiece over the cutterhead (See **Figure 32**).

Note: If your leading hand gets within 4" of the cutterhead, lift it up and over the cutterhead, and place it on the portion of the workpiece that is over the outfeed table. Now, focus your pressure on the outfeed end of the workpiece while feeding, and repeat the same action with your trailing hand when it gets within 4" of the cutterhead. To keep your hands safe, **DO NOT** let them get closer than 4" from the cutterhead when it is moving!

8. Repeat **Step 7** until the entire edge is flat.



Figure 32. Typical edge jointing operation.

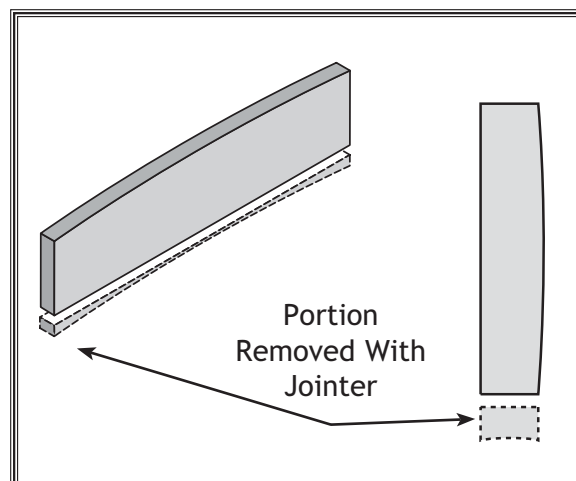


Figure 33. Illustration of edge jointing results.

Bevel Cutting

The purpose of bevel cutting is to cut a specific angle into the edge of a workpiece (see **Figures 34 & 35**).

The Model W1744 has preset fence stops at 45° inward, 90°, and 45° outward (135°). If your situation requires a different angle, the preset fence stops can be easily adjusted for your needs.

To bevel cut on the jointer, do these steps:

1. Read and understand **SAFETY**, beginning on **Page 6**.
2. Make sure your stock has been inspected for dangerous conditions as described in the **Stock Inspection** instructions, beginning on **Page 21**.
3. Set the cutting depth for your operation.

Note: We suggest between $\frac{1}{16}$ " and $\frac{1}{8}$ " for bevel cutting, using a more shallow depth for hard wood species or for wide stock.

4. Make sure your fence is set to the angle of your desired cut.
5. If your workpiece is cupped (warped), place it so the concave side is face down on the surface of the infeed table.
6. Start the jointer.
7. With a push block in your leading hand, press the workpiece against the table and fence (**Figure 34**) with firm pressure, and feed the workpiece over the cutterhead.

Note: If your leading hand gets within 4" of the cutterhead, lift it up and over the cutterhead, and place the push block on the portion of the workpiece that is on the outfeed table. Now, focus your pressure on the outfeed end of the workpiece while feeding, and repeat the same action with your trailing hand when it gets within 4" of the cutterhead. To keep your hands safe, **DO NOT** let them get closer than 4" from the cutterhead when it is moving!

8. Repeat **Step 7** until the angled cut is satisfactory to your needs.

NOTICE

If you are not experienced with a jointer, set the depth of cut to 0", and practice feeding the workpiece across the tables as described below. This procedure will better prepare you for the actual operation.



Figure 34. Typical bevel cutting operation.

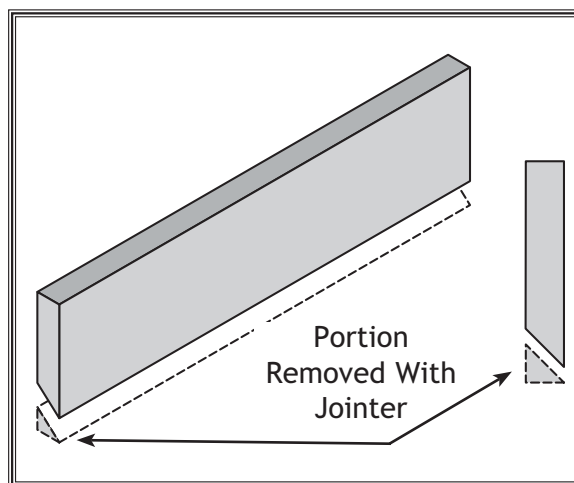


Figure 35. Illustration of bevel cutting results.

Rabbet Cutting

The purpose of rabbet cutting is to remove a section of the workpiece edge (see **Figures 36 & 37**). When combined with another rabbet cut edge, the rabbet joints create a simple, yet strong method of joining stock.

To rabbet cut on the jointer, do these steps:

1. Read and understand **SAFETY**, beginning on **Page 6**.
2. Make sure your stock has been inspected for dangerous conditions as described in the **Stock Inspection** instructions, beginning on **Page 21**.
3. Set the cutting depth for your operation.

Note: We suggest between $\frac{1}{16}$ " and $\frac{1}{8}$ " for rabbet cutting, using a more shallow depth for hard wood species or for wide stock.

4. Remove the cutterhead guard.
5. Make sure your fence is moved forward, so the amount of infeed/outfeed table exposed is the same as the size of your rabbet. Also, make sure your fence is set to 90° .
6. Start the jointer.
7. With a push block in each hand, press the workpiece against the table and fence (**Figure 36**) with firm pressure, and feed the workpiece over the cutterhead.

Note: If your leading hand gets within 4" of the cutterhead, lift it up and over the cutterhead, and place the push block on the portion of the workpiece that is on the outfeed table. Now, focus your pressure on the outfeed end of the workpiece while feeding, and repeat the same action with your trailing hand when it gets within 4" of the cutterhead. To keep your hands safe, **DO NOT** let them get closer than 4" from the cutterhead when it is moving!

8. Repeat **Step 7** until the your rabbet is cut to depth.

NOTICE

If you are not experienced with a jointer, set the depth of cut to 0", and practice feeding the workpiece across the tables as described below. This procedure will better prepare you for the actual operation.

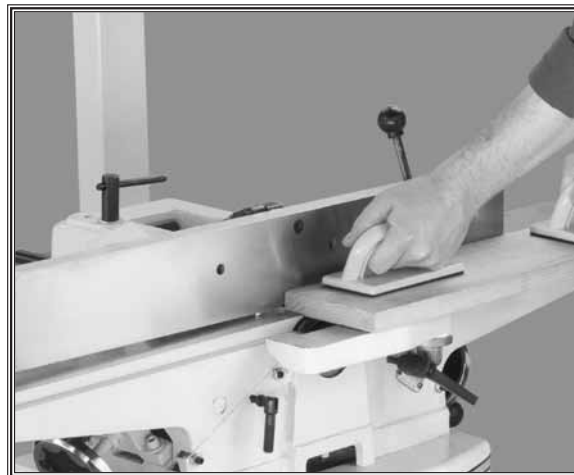


Figure 36. Typical rabbet cutting operation.

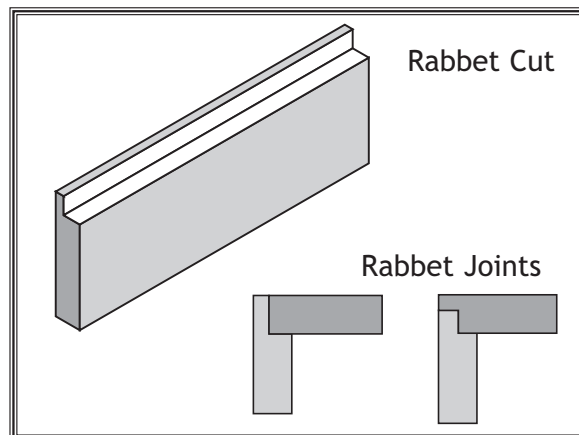


Figure 37. Illustration of rabbet cutting effects and a few sample joints.

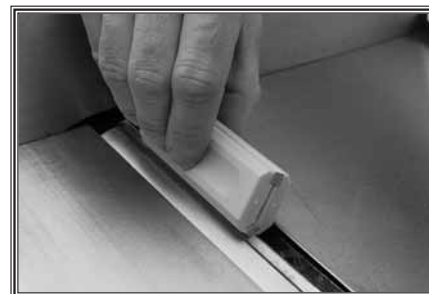
⚠ WARNING

When the cutterhead guard is removed, attempting any other cut besides a rabbet directly exposes the operator to the moving cutterhead. **ALWAYS** replace the cutterhead guard after rabbet cutting!

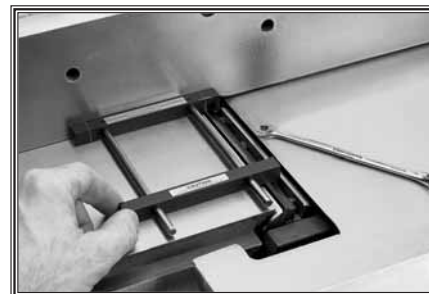
Jointer Accessories

The following jointer accessories may be available through your local Woodstock International Inc. Dealer. If you do not have a dealer in your area, these products are also available through online dealers. Please call or e-mail Woodstock International Inc. Customer Service to get a current listing of dealers at: 1-800 545-8420 or at sales@woodstockint.com.

The **D1123 Knife Honer** sharpens planer and jointer knives to a razor keen edge without removing them from cutterheads. The honing tool features two 400 grit stones, a flat stone for sharpening bevels, and a diagonal stone for flat edges. Each stone has four surfaces, which can be adjusted to provide a fresh sharpening surface.



The **W1211 Steel Body Jig** is a patented jointer knife setting jig for perfect alignment every time! Allows you to shift nicked knives to get a perfect cut to an accuracy of + or - 0.001". We offer knife-setting jigs and extensions for almost all jointers. Made in the USA. Also available: W1210 Polycarbonate Bodied Jig, and W1213 Carbide Jig.



MAINTENANCE

General

Regular periodic maintenance on your **SHOP FOX®** Model W1744 will ensure its optimum performance. Make a habit of inspecting your machine each time you use it.

Check for the following conditions and repair or replace when necessary:

- Loose mounting bolts.
- Worn switch.
- Worn or damaged cords and plugs.
- Damaged V-belts.
- Any other condition that could hamper the safe operation of this machine.

Cleaning

Cleaning the Model W1744 is relatively easy. Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it.

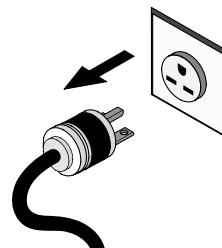
Protect the unpainted cast iron surfaces on the table by wiping the table clean after every use—this ensures moisture from wood dust does not remain on bare metal surfaces.

Keep tables rust-free with regular applications of quality metal protectants.

V-Belts

To ensure optimum power transmission from the motor to the blade, the V-belts must be in good condition (free from cracks, fraying and wear) and properly aligned and tensioned (refer to the instructions on **Page 39**).

! WARNING



MAKE SURE that your machine is unplugged during all maintenance procedures! If this warning is ignored, serious personal injury may occur.

Lubrication

Since all bearings are sealed and permanently lubricated, simply leave them alone until they need to be replaced. **DO NOT** lubricate them.

Maintenance Schedule

- **Daily:**
 - Vacuum all dust on and around the machine.
 - Wipe down tables and all other unpainted cast iron with a metal protectant.
- **Every Month:**
 - V-belt tension, damage, or wear.
 - Clean/vacuum dust buildup from inside cabinet and off of motor.

SERVICE

General

This section covers the most common service adjustments or procedures that may need to be made during the life of your machine.

If you require additional machine service not included in this section, please contact Woodstock International Technical Support at (360) 734-3482 or send e-mail to: tech-support@shopfox.biz.

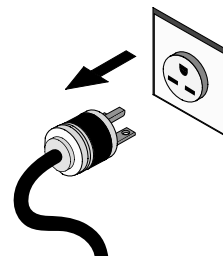
Inspecting Knives

The height of the knives can be inspected with a straightedge to ensure that they are set evenly with the outfeed table at their highest point in the cutterhead rotation.

To inspect the knives, do these steps:

1. DISCONNECT JOINTER FROM POWER SOURCE!
2. Remove the cutterhead guard or block it out of the way.
3. Using a straightedge, check the height of each knife at its highest point in relation to the outfeed table, in each of the straightedge positions, as shown in **Figure 38**.
 - The knives are set correctly when they just touch the bottom of the straightedge in each of the straightedge positions.
 - If the knives do not touch the straightedge or they lift it up in any of the positions, then those knives need to be adjusted.

WARNING



MAKE SURE that your machine is unplugged during all service procedures! If this warning is ignored, serious personal injury may occur.

Black Lines Represent
Straightedge Positions
From Overhead View

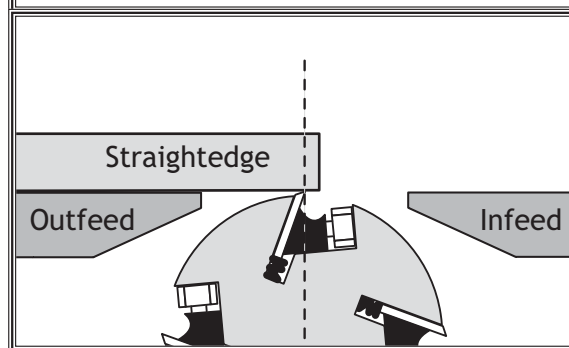
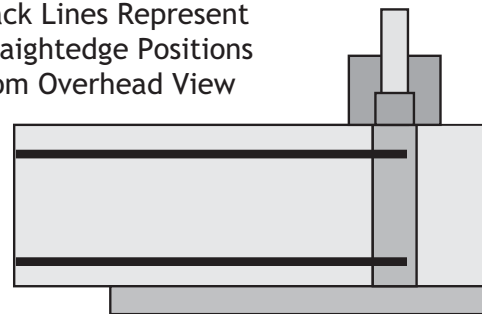


Figure 38. Checking knife height with a straightedge.

Adjusting/Replacing Knives

Setting the knives correctly is crucial to the proper operation of the jointer and is very important in keeping the knives sharp. If one knife is higher than the others, it will do the majority of the work, and thus, dull much faster than the others.

There are two options for setting the knives—the straightedge method and the knife setting jig method. Each option has advantages and disadvantages and the correct one for you will become a matter of personal preference. For best results, the tables must be parallel with each other (**Checking/Adjusting Table Parallelism on Page 34**) and the outfeed table height must be properly set (**Setting Outfeed Table Height on Page 36**).

Straightedge Method: A high quality straightedge is held flat against the outfeed table and the knife heights are set to the bottom of the straightedge, as shown in **Figure 38**. Because the knife projection height from the cutterhead is dependent on the outfeed table height, the outfeed table must be set as described in **Setting Outfeed Table Height on Page 36** for this method to work correctly.

When using a straightedge to set the knives, you will not need to move the outfeed table once it is set and you will always be assured that the knives are even with the outfeed table in their highest point of rotation—even if the cutterhead is not parallel with the outfeed table.

Knife Setting Jig Method: Both tables are lowered to fit the jig on the cutterhead, as shown in **Figure 39**, and the knife heights are set to just touch the middle pad of the jig.

The knife setting jig makes it easy to ensure that the knives project out of the cutterhead evenly. After using the knife setting jig to set the knives, you have to re-adjust the outfeed table height to ensure that it is even with the knives at their highest point of rotation. If you are using the positive stops on the tables, they will need to also be reset before operation.

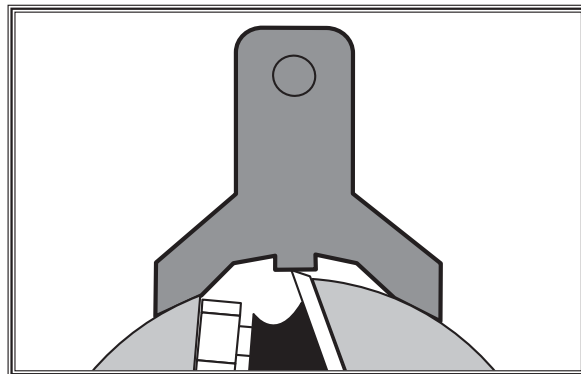


Figure 39. Using knife setting jig to set knife height.

The Model W1744 comes with both jack screws and springs inside the cutterhead to provide two options for adjusting the knives (see **Figure 40**).

Note: Only one of these options is needed to set the knives—see **Step 5** for clarification.

To adjust/replace the knives, do these steps:

1. DISCONNECT JOINTER FROM POWER SOURCE!
2. Remove the cutterhead guard from the table and move the fence back as far as it will go.
3. Open the pulley cover to expose the cutterhead pulley.
4. Rotate the cutterhead pulley to get access to one of the cutterhead knives.
5. Loosen the cutterhead gib bolts, starting in the middle, and alternating back and forth until all of the gib bolts are loose, but not falling out.
 - If this is the first time you are setting the knives, remove the gib and knife from the cutterhead. Decide which adjustment option you are going to use between the jack screws and the springs.
 - If you decide to use the jack screws, remove the springs from the cutterhead (they are located directly below the knives).
 - If you decide to use the springs, just thread the jack screws completely into the cutterhead so they will not get lost. Replace the gib and knife.
6. Remove and clean the gibs and clean inside the cutterhead slot to remove all pitch or sawdust. Coat the knives and gibs with a metal protectant, then fit the gibs back in the cutterhead with the new knives.

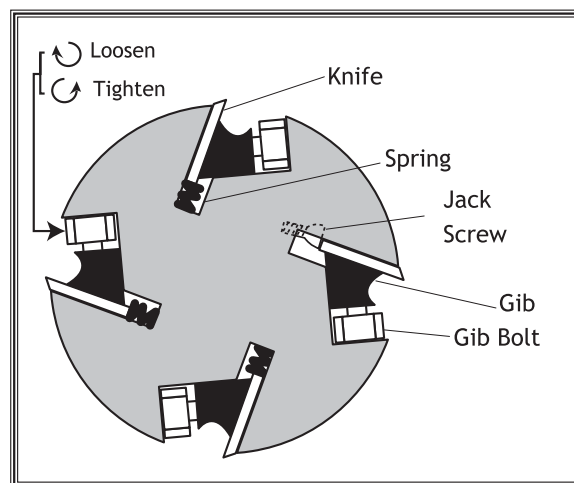


Figure 40. Cutterhead profile diagram.

7. Adjusting the knife heights:

Jack Screws: Using a 3mm hex wrench, find the jack screws through the access holes in the cutterhead (**Figure 41**) and rotate the jack screws to raise or lower the knife. When the knife is set correctly, it will barely touch the bottom of the straightedge or the knife setting jig middle pad. Snug the gib bolts tight enough to just hold the knife in place. Repeat on the other side of the cutterhead, then repeat **Steps 5-7** with the rest of the knives.

Springs: Push the knife down with the straightedge or middle pad of the knife setting jig, keeping the straightedge flat against the outfeed table or the knife setting jig feet evenly against the cutterhead. Tighten the gib bolts just tight enough to hold the knife in place. Repeat on the other side of the cutterhead, then repeat **Steps 5-7** with the rest of the knives.

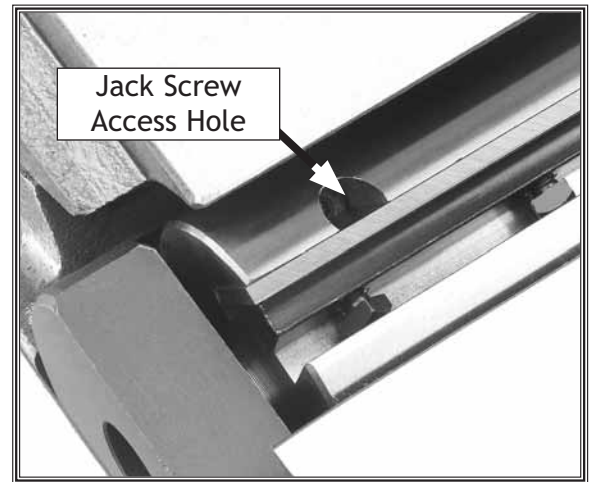


Figure 41. Jack screw access hole.

8. Rotate the cutterhead to the first knife you started with. Slightly tighten all the gib bolts, starting at the ends and working your way to the middle by alternating left and right (**Figure 42**). Repeat this step on the rest of the knives.

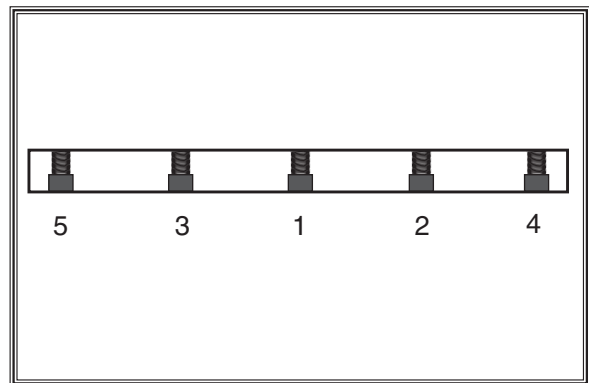


Figure 42. Gib bolt tightening sequence.

9. Repeat **Step 8**.

10. Repeat **Step 8**, but final tighten each gib bolt.

11. If you used the knife setting jig to set the knife heights, use the straightedge to adjust the outfeed table height evenly with the knives at top dead center (the highest point in their rotation). If you used the straightedge to set the knife heights, skip to the next step.

12. Replace the cutterhead guard and close the pulley cover.

Checking/Adjusting Table Parallelism

If the tables are not parallel with the cutterhead or each other, then poor cutting results and kickback may occur.

Checking Outfeed Table

To check the outfeed table parallelism, do these steps:

1. DISCONNECT JOINTER FROM POWER SOURCE!
2. Remove the cutterhead guard and fence.
3. Loosen the outfeed table lock located at the front of the machine, and loosen the jam nuts and adjustment bolts located at the back of the machine (see **Figure 43**).
4. Place the straightedge on the outfeed table so it hangs over the cutterhead, and lower the outfeed table until the straightedge just touches the cutterhead body, as shown in **Figure 44** (rotate the cutterhead if necessary).
5. Place the straightedge in the positions shown in **Figure 45**. In each position, the straightedge should touch the cutterhead and sit flat on the outfeed table.
 - If the straightedge touches the cutterhead and sits flat across the outfeed table in each position, then the outfeed table is already parallel with the cutterhead. Check the infeed table to make sure that it is parallel with the outfeed table.
 - If the straightedge does not touch the cutterhead and sit flat on the outfeed table in any of the positions, then the outfeed table is not parallel with the cutterhead. Correct the outfeed table parallelism, then correct the infeed table parallelism.

Checking Infeed Table

To check the infeed table parallelism, do these steps:

1. Follow all the steps for checking the outfeed table parallelism to first make sure that the outfeed table is parallel with the cutterhead.
2. Raise the outfeed table higher than the cutterhead.

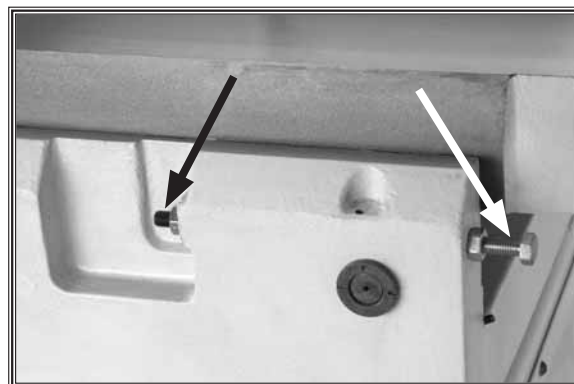


Figure 43. Table positive stop bolts.

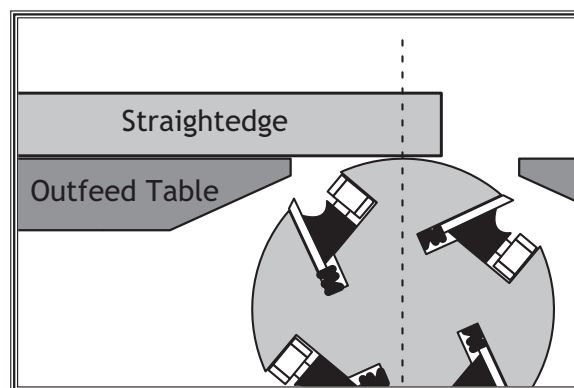


Figure 44. Adjusting outfeed table even with cutterhead body.

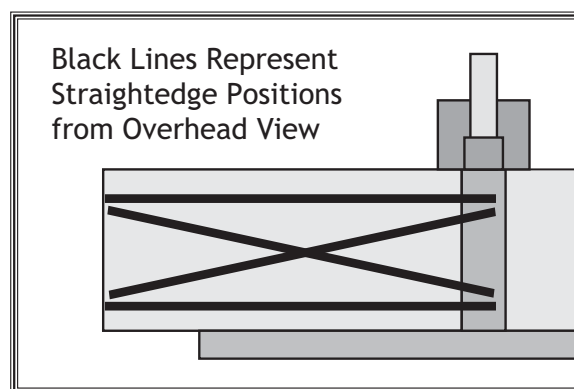


Figure 45. Straightedge positions for verifying if outfeed table is parallel with cutterhead.

3. Place the straightedge halfway across the infeed table and halfway over the outfeed table, and adjust the infeed table even with the outfeed table, as shown in **Figure 46**.
4. Place the straightedge in the positions shown in **Figure 47**. In each position, the straightedge should sit flat against both the outfeed table and the infeed table.
 - If the straightedge sits flat against both the infeed and outfeed table, then the tables are parallel.
 - If the straightedge does not sit flat against both the infeed and outfeed table in any of the positions, then the infeed table needs to be adjusted parallel with the outfeed.

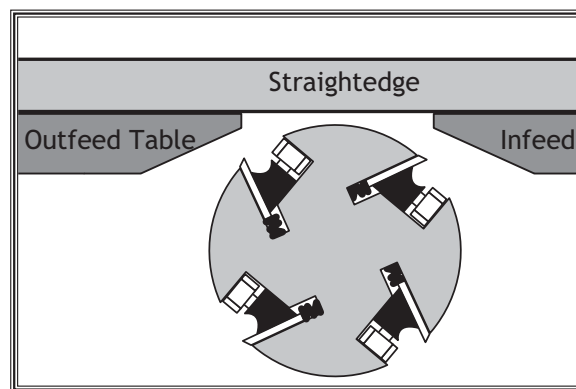


Figure 46. Infeed and outfeed tables set evenly.

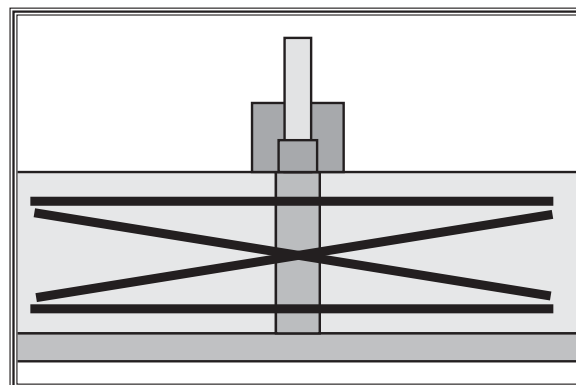


Figure 47. Straightedge positions for checking infeed/outfeed parallelism.

Adjusting Table Parallelism

For safe and proper cutting results, the tables must be parallel to the cutterhead. Adjusting them to be parallel is a task of precision and patience, and may take up to one hour to complete. Luckily, this is considered a permanent adjustment and should not need to be repeated for the life of the machine.

Due to the complex nature of this task, we recommend that you double check the current table positions to make sure that they really need to be adjusted before starting.

The tables have four eccentric bushings under each corner that allow the tables to be adjusted parallel. These eccentric bushings are locked in place by piggybacked set screws (one on top of the other) and adjusted when rotated.

The correct order for adjusting the table parallelism is to first adjust the outfeed table parallel with the cutterhead, then adjust the infeed table parallel with the outfeed table.

When setting the outfeed table, all measurements must be made from the cutterhead body—not the knives—or results may get skewed the next time you change knives.

IMPORTANT: The steps below are intended to be performed in succession with the steps involved in checking the outfeed table. Do not continue until you have followed those steps.

To adjust the table parallelism, do these steps:

1. Place the straightedge on the outfeed table so it hangs over the cutterhead, and lower the outfeed table until the straightedge just touches the cutterhead body, as shown in **Figure 44** (rotate the cutterhead if necessary).
2. Remove the set screw from each of the four eccentric bushings (**Figure 48**) under the outfeed table, and loosen the set screws underneath those removed set screws.
3. Place the straightedge in one of the positions shown in **Figure 45**, and adjust the table (a small hammer and punch or pin-type spanner wrench may be necessary to turn the eccentric bushings) so that the straightedge touches the cutterhead while lying flat across the outfeed table. Repeat this step with each of the remaining straightedge positions as many times as necessary until the outfeed table is parallel with the cutterhead.
4. Tighten/replace the set screws in the eccentric bushings on the outfeed table.
5. Remove the set screw from each of the four eccentric bushings under the outfeed table, and loosen the set screws underneath those removed set screws.
6. Place the straightedge halfway across the infeed table and halfway over the outfeed table, and adjust the infeed table even with the outfeed table, as shown in **Figure 46**.
7. Place the straightedge in one of the positions shown in **Figure 47**, and adjust the eccentric bushings under the infeed table so the straightedge lies flat against both tables. Repeat this step with each of the remaining straightedge positions as many times as necessary until the infeed table is parallel with the outfeed table.
8. Tighten/replace the set screws in the eccentric bushings on the infeed table.
9. Set the outfeed table height (refer to the next subsection).
10. Set the knives (refer to **Page 30**).
11. Reinstall the cutterhead guard and fence.

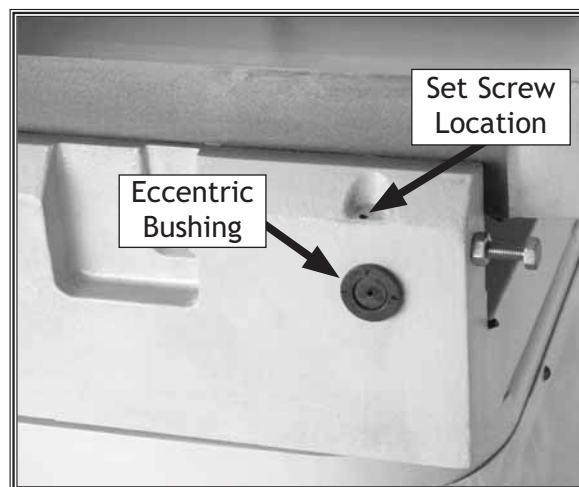


Figure 48. Eccentric bushing and set screw location.

Setting Outfeed Table Height

The outfeed table height must be even with the top of the cutterhead knives. If the outfeed table is set too low, there will be snipe. If the outfeed table is set too high, the workpiece will hit the edge of the outfeed table during operation, increasing the chance of kickback.

To set the outfeed table height, do these steps:

1. DISCONNECT JOINTER FROM POWER SOURCE!
2. Check/adjust the table parallelism.
3. Remove the cutterhead guard and fence.
4. Loosen the outfeed table lock located at the front of the machine, and loosen the jam nuts and positive stop bolts located at the back of the machine (see **Figure 43**).
5. Place the straightedge on the outfeed table so it hangs over the cutterhead, and lower the outfeed table until the straightedge is 0.062" above the cutterhead body, as determined by using the feeler gauges (see **Figure 49**).
6. Tighten the outfeed table lock located at the front of the machine, and tighten the positive stop bolts and jam nuts located at the back of the machine (see **Figure 43**).
7. Set the knife heights to the new outfeed table height.

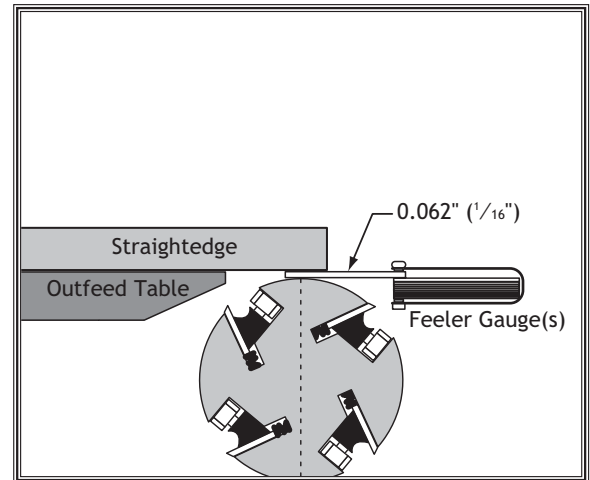


Figure 49. Using feeler gauge(s) to set outfeed table height.

Setting Infeed Table Height

The infeed table on the Model W1744 has positive stop bolts that, when properly set up, allow the operator to quickly adjust the infeed table between finish/final cuts and shaping/heavy cuts.

We recommend setting the minimum depth of cut to $\frac{1}{32}$ " and the maximum depth of cut to $\frac{1}{8}$ " for most operations. DO NOT exceed $\frac{1}{8}$ " cut per pass on this machine or kickback and serious injury may occur!

Each positive stop bolt (**Figure 50**) controls the top or bottom range of the table movement. The jam nut locks the positive stop bolt in position so it won't move during operation.

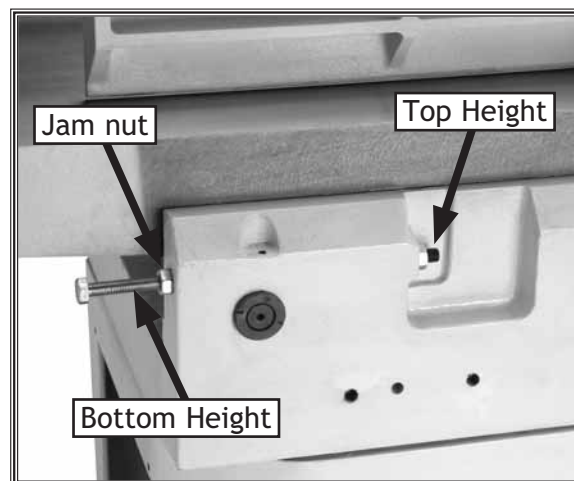


Figure 50. Positive stop bolts for infeed table.

Calibrating Depth Scale

The depth scale on the infeed table can be calibrated or "zeroed" if it is not correct.

To calibrate the depth scale, do these steps:

1. DISCONNECT JOINTER FROM POWER SOURCE!
2. Loosen the infeed table positive stop bolts.
3. Use the straightedge to help adjust the infeed table exactly even with the outfeed table, as shown in **Figure 51**.
4. Using a screwdriver, adjust the scale pointer to "0" (**Figure 52**), then reset the infeed table positive stops.

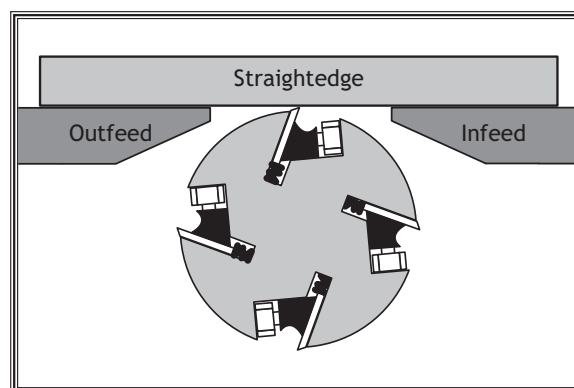


Figure 51. Infeed table even with outfeed table.



Figure 52. Depth scale adjusted to "0" position.

Setting Fence Stops

The fence stops simplify the task of adjusting the fence to 45° inward, 90°, and 45° outward (135°).

To set the 45° inward fence stop, do these steps:

1. Tilt the fence approximately 45° inward (**Figure 53**) onto the positive stop bolts using a square.
2. Loosen the jam nut on the 45° inward positive stop bolt shown in **Figure 54**.
3. Adjust the positive stop bolts until the fence is exactly 45° inward while resting on the bolts (verify the angle with a 45° square).
4. Retighten the jam nut loosened in **Step 2**.

To set the 90° fence stop, do these steps:

1. Lower the stop block against the fence, as shown in **Figure 55**, and loosen the fence tilt lock.
2. Tilt the fence to the 90° position.
3. Using a 90° square, check the fence angle.
4. If it is not set at exactly 90°, loosen the jam nut and adjust the positive stop bolt until the fence is exactly 90° as shown in **Figure 55**.
5. Tighten the jam nut.

To set the 45° outward fence stop, do these steps:

1. Raise the stop block, loosen the fence tilt lock, and position the fence against the 45° outward positive stop bolt.
2. If the fence is not set at exactly 45° outward, loosen the jam nut on the 45° outward fence positive stop bolt (**Figure 56**).
3. Adjust the 45° outward positive stop bolt until the fence is exactly 45° outward while resting on the bolt (check the angle with a sliding bevel set to 135°).
4. Retighten the jam nut loosened in **Step 2**.



Figure 53. Fence adjusted 45° inward.

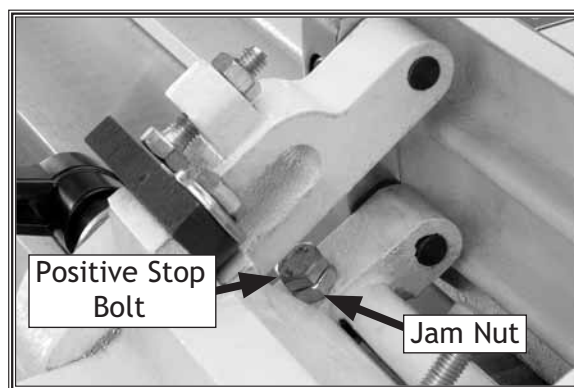


Figure 54. 45° inward positive stop bolt.

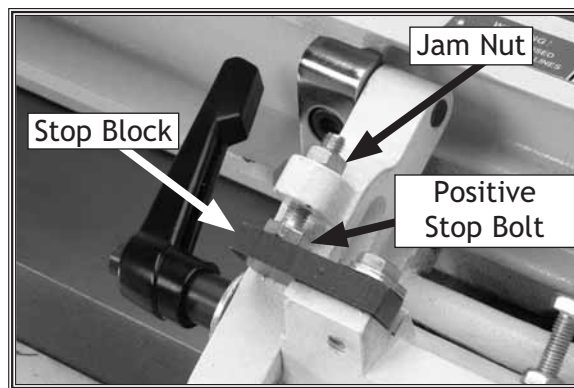


Figure 55. Adjusting fence to 90°.

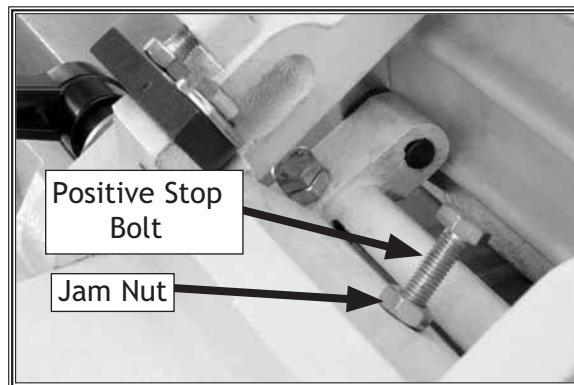


Figure 56. Adjusting fence 45° outward.

V-Belts

Inspect the V-belts closely; if you notice fraying, cracking, glazing, or any other damage, replace the belts. A worn or damaged V-belt will not provide optimum power transmission from the motor to the drum and feed belt.

V-belt removal and replacement is simply a matter of loosening the V-belts, rolling them off of the pulleys, replacing them with new belts, then retensioning them.

To replace the V-belts, do these steps:

1. DISCONNECT JOINTER FROM POWER SOURCE!
2. Open the pulley cover.
3. Loosen the fasteners on the tension rod that hold the motor to the bracket (**Figure 57**).
4. Lift the motor up and slide the V-belts off of the motor pulley and cutterhead pulley.
5. Slide the new belts onto the pulleys and tighten the motor bracket fasteners.

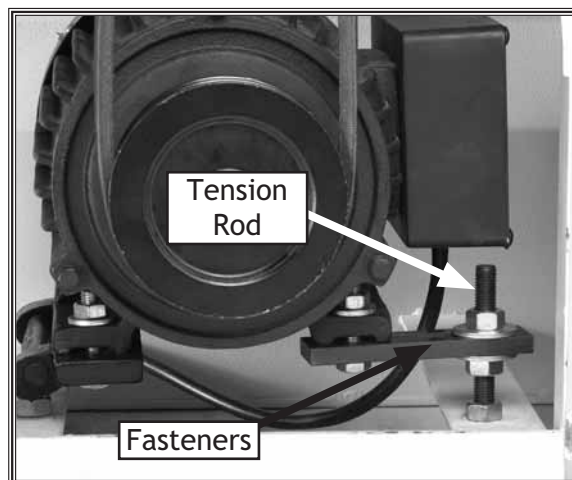


Figure 57. Fasteners needed to be loosened for V-belt replacement.

Pulley Alignment

Pulley alignment is another important factor in power transmission and belt life. The pulleys should be parallel to each other and in the same plane (coplanar) for optimum performance.

Each pulley can be adjusted by loosening the motor mount fasteners, sliding the motor in or out, and retightening the fasteners to lock the motor pulley in place.

To align the pulleys, do these steps:

1. DISCONNECT JOINTER FROM POWER SOURCE!
2. Open the pulley cover.
3. Visually check the alignment of the two pulleys to make sure that they are aligned and that the V-belts are straight up and down (see **Figure 58**).
 - If the pulleys are aligned, tighten the motor mounts and go to **Step 8**.
 - If the pulleys are NOT aligned, do **Steps 4 & 5**.

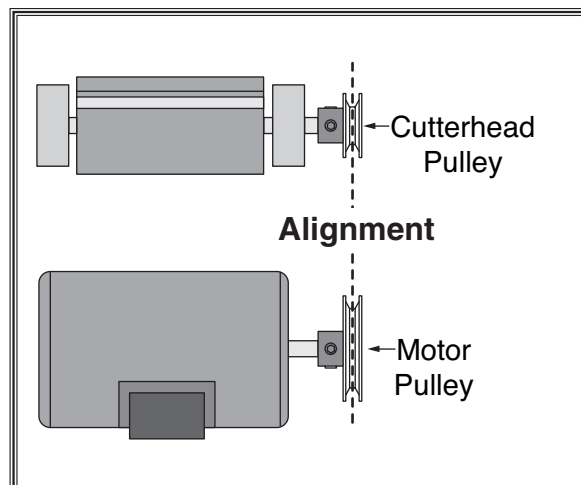


Figure 58. Pulleys aligned.

4. Loosen the fasteners that hold the motor to the brackets shown in **Figure 59**.
5. Shift the motor horizontally as needed to align the motor pulley with the cutterhead pulley.
6. Tighten the fasteners that hold the motor to the brackets. V-belts should be parallel and aligned as shown in **Figure 58**.
7. Adjust the pulleys again, if necessary, until they are coplanar (parallel and aligned) with each other.
8. Close the pulley cover.

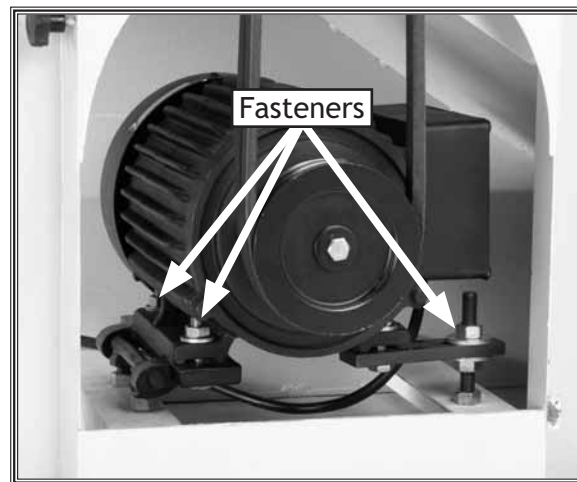
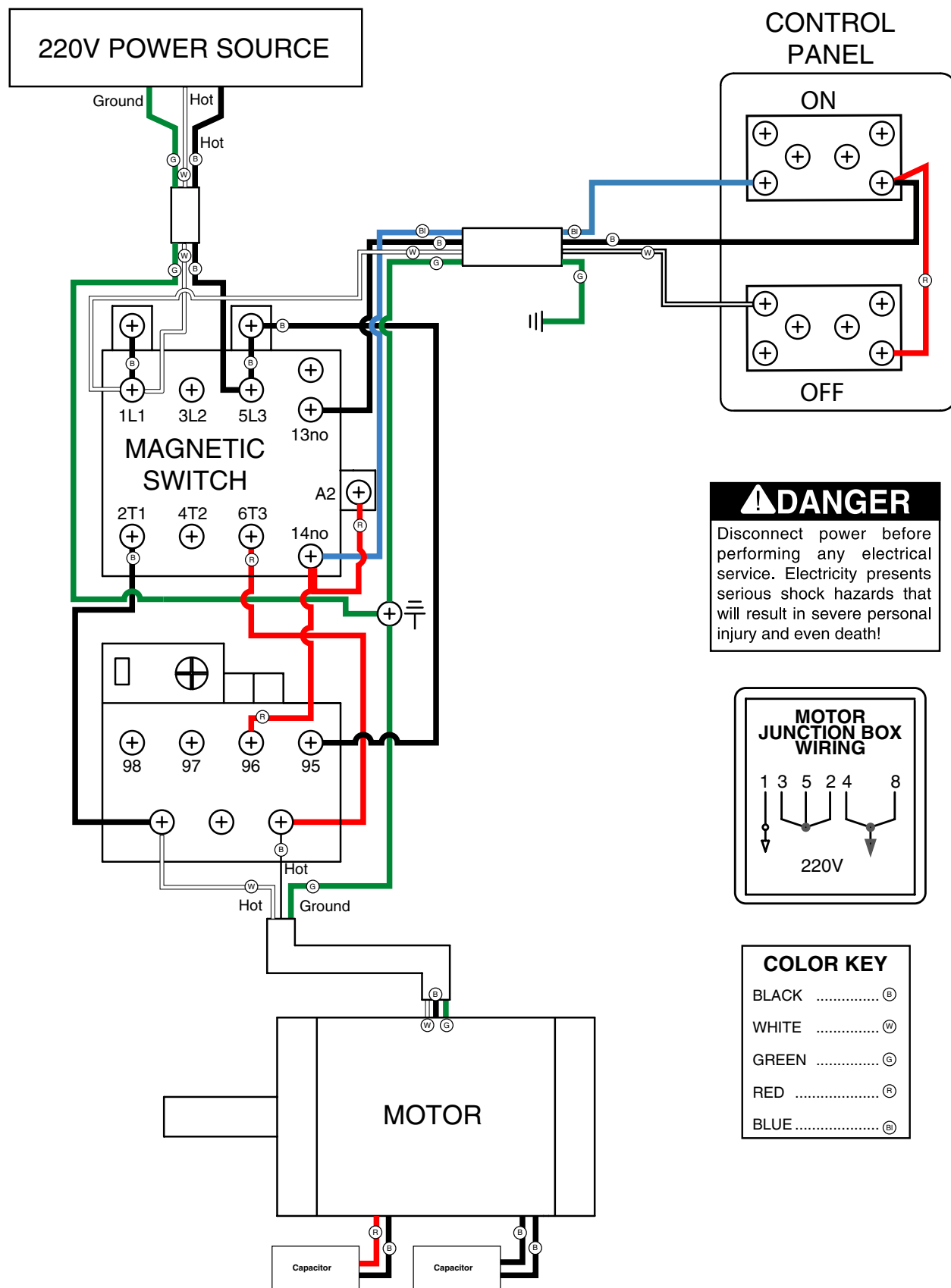


Figure 59. Motor mount fasteners for adjusting pulley alignment.

Wiring Diagram W1744



Electrical Components

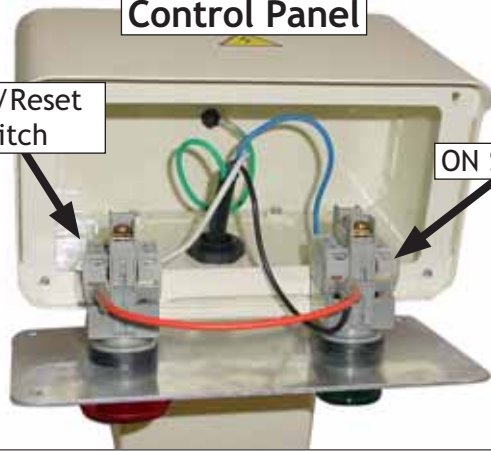
Motor Junction Box



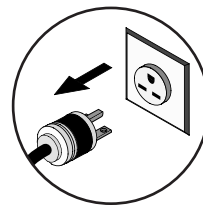
Control Panel

STOP/Reset Switch

ON Switch



Troubleshooting



This section covers the most common problems and corrections with this type of machine. **WARNING! DO NOT** make any adjustments until power is disconnected and moving parts have come to a complete stop!

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Motor will not start.	1. Stop button depressed. 2. Thermal overload protection tripped in magnetic switch. 3. Low voltage. 4. Open circuit in motor or loose connections.	1. Twist the stop button to allow it to pop out. 2. Press the "Reset" button on the thermal overload relay, located inside the magnetic switch. 3. Check power line for proper voltage. 4. Inspect all lead connections on motor for loose or open connections.
Fuses or circuit breakers blow.	1. Short circuit in line cord or plug.	1. Repair or replace cord or plug for damaged insulation and shorted wires.
Motor overheats.	1. Motor overloaded. 2. Air circulation through the motor restricted.	1. Reduce load on motor. 2. Clean out motor to provide normal air circulation.
Motor stalls or shuts off during a cut.	1. Motor overloaded during operation. 2. Thermal overload protection tripped in magnetic switch. 3. Short circuit in motor or loose connections. 4. Circuit breaker tripped.	1. Reduce load on motor; take lighter cuts. 2. Press the "Reset" button on the thermal overload relay, located inside the magnetic switch. 3. Repair or replace connections on motor for loose or shorted terminals or worn insulation. 4. Install correct circuit breaker; reduce # of machines running on that circuit (circuit overload).
Blade slows when cutting or makes squealing noise, especially on start-up.	1. V-belt loose. 2. V-belt worn out.	1. Tighten V-belt (Page 39). 2. Replace V-belt (Page 39).
Loud, repetitious noise coming from machine.	1. Pulley setscrews or keys are missing or loose. 2. Motor fan is hitting the cover. 3. V-belts are damaged.	1. Inspect keys and setscrews. Replace or tighten if necessary. 2. Adjust fan cover mounting position, tighten fan, or shim fan cover. 3. Replace V-belts (Page 39).
Vibration when running or cutting.	1. Loose or damaged blade. 2. Damaged V-belt. 3. Worn cutterhead bearings.	1. Tighten or replace blade. 2. Replace. 3. Check/replace cutterhead bearings.

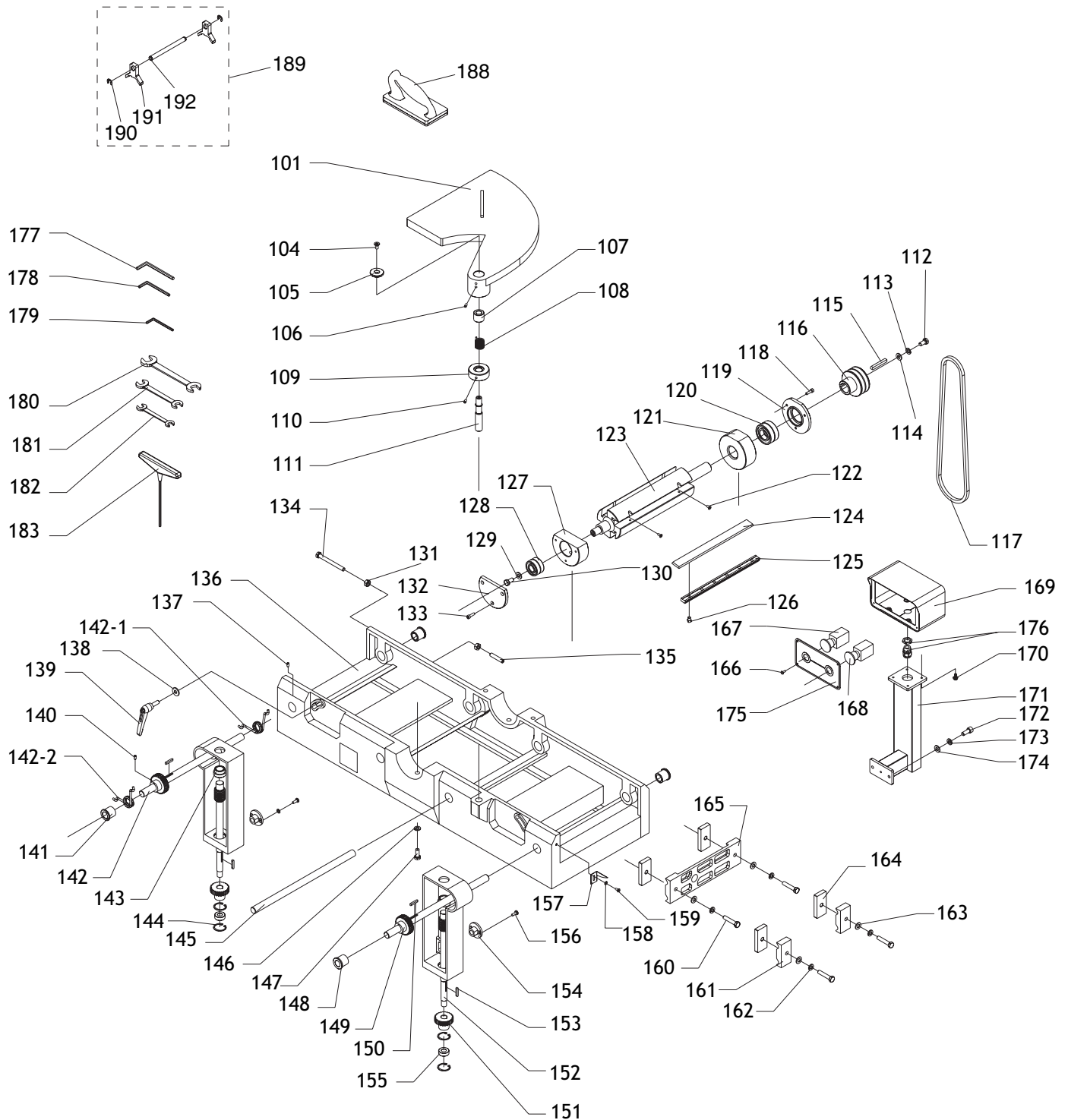
Table

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Tables are hard to adjust	1. Table lock is engaged or partially engaged. 2. Table stops blocking movement.	1. Completely loosen the table lock. 2. Loosen/reset table positive stops.

Cutting

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Excessive snipe (gouge in the end of the board that is uneven with the rest of the cut).	1. Outfeed table is set too low. 2. Operator pushing down on trailing end of the workpiece.	1. Align outfeed table with cutterhead knife at top dead center (Page 17). 2. Reduce/eliminate downward pressure on that end of workpiece.
Workpiece stops in the middle of the cut.	1. Outfeed table is set too high.	1. Align outfeed table with cutterhead knife at top dead center (Page 17).
Chipping.	1. Knots or conflicting grain direction in wood. 2. Nicked or chipped blades. 3. Feeding workpiece too fast. 4. Taking too deep of a cut.	1. Inspect workpiece for knots and grain (Page 21); only use clean stock. 2. Adjust one of the nicked knives sideways; replace knives (Page 31). 3. Slow down the feed rate. 4. Take a smaller depth of cut. (Always reduce cutting depth when surface planing or working with hard woods.)
Fuzzy Grain.	1. Wood may have high moisture content or surface wetness. 2. Dull knives.	1. Check moisture content and allow to dry if moisture is too high. 2. Replace knives (Page 31).
Long lines or ridges that run along the length of the board	1. Nicked or chipped knives.	1. Adjust one of the nicked knives sideways; replace knives (Page 31).
Uneven cutter marks, wavy surface, or chatter marks across the face of the board.	1. Feeding workpiece too fast. 2. Knives not adjusted at even heights in the cutterhead.	1. Slow down the feed rate. 2. Adjust the knives so they are set up evenly in the cutterhead (Page 31).
Board edge is concave or convex after jointing.	1. Board not held with even pressure on infeed and outfeed table during cut. 2. Board started too uneven. 3. Board has excessive bow or twist along its length. 4. Insufficient number of passes.	1. Hold board with even pressure as it moves over the cutterhead. 2. Take partial cuts to remove the extreme high spots before doing a full pass. 3. Surface plane one face so there is a good surface to position against the fence. 4. It may take 3 to 5 passes to achieve a perfect edge, depending on the starting condition of the board and the depth of cut.
Uneven cut or breakout when rabbeting.	1. Uneven feed rate. 2. Depth of cut too deep. 3. Knives not adjusted evenly with each other in the cutterhead. 4. Nicked or chipped knives.	1. Feed the board evenly and smoothly during the cut. 2. Raise the infeed table to take a smaller depth of cut. Never exceed $\frac{1}{16}$" per pass when rabbeting. 3. Adjust the knives so they are set up evenly in the cutterhead (Page 31). 4. Adjust one of the nicked knives sideways; replace knives (Page 31).

Base Assembly



Base Parts List

REF	PART #	DESCRIPTION
101	X1744101	CUTTERHEAD GUARD
104	XPFH23M	FLAT HD SCR M8-1.25 X 16
105	X1744105	SPECIAL FLAT WASHER
106	XPSS04M	SET SCREW M6-1 X 12
107	X1744107	ADAPTER
108	X1744108	TORSION SPRING
109	X1744109	SHAFT COLLAR
110	XPSS04M	SET SCREW M6-1 X 12
111	X1744111	SHAFT
112	X1744112	CUTTERHEAD SCREW
113	XPLW06M	LOCK WASHER 10MM
114	XPW04M	FLAT WASHER 10MM
115	XPB111	KEY 8 X 8 X 60
116	X1744116	CUTTERHEAD PULLEY
117	XPVA55	V-BELT A-55 4L550
118	XPSB02M	CAP SCREW M6-1 X 20
119	X1744119	BEARING COVER
120	XP6206	BALL BEARING 6206ZZ
121	X1744121	BEARING SUPPORT
122	XPFH05M	FLAT HEAD SCREW M5-.8 X 12
123	X1744123	CUTTERHEAD
124	X1744124	KNIFE
125	X1744125	KNIFE BAR (GIB)
126	X1744126	KNIFE LOCK SCREW (GIB SCREW)
127	X1744127	BEARING SUPPORT
128	XP62042RZ	BALL BEARING 62042RZ
129	XPW01M	FLAT WASHER 8MM
130	X1744130	CUTTERHEAD SCREW
131	XPB02M	HEX NUT M10-1.5
132	X1744132	BEARING COVER
133	XPSB02M	CAP SCREW M6-1 X 20
134	XPB156	HEX BOLT M10-1.5 X 150
135	XPSS71M	SET SCREW M10-1.5 X 60
136	X1744136	BASE
137	XPSS04M	SET SCREW M6-1 X 12
138	XPW04M	FLAT WASHER 10MM
139	X1744139	LOCK HANDLE
140	XPSS03M	SET SCREW M6-1 X 8
141	X1744141	ECCENTRIC BUSHING
142	X1744142	SHAFT
142-1	X1744142-1	LEFT TORSION SPRING
142-2	X1744142-2	RIGHT TORSION SPRING
143	X1744143	STOP BLOCK
144	X1744144	INTERIOR RETAINING RING 35MM

REF	PART #	DESCRIPTION
145	X1744145	SHAFT
146	XPLW06M	LOCK WASHER 10MM
147	XPB32M	HEX BOLT M10-1.5 X 25
148	X1744148	BUSHING
149	X1744149	WORM GEAR
150	XPB12M	KEY 5 X 5 X 30MM
151	X1744151	GEAR
152	X1744152	WORM
153	XPB112	KEY 4 X 4 X 35
154	X1744154	SLIDE STOP BLOCK
155	XP62022RZ	BALL BEARING 62022RZ
156	X1744156	SPECIAL FLAT SCREW
157	X1744157	POINTER
158	XPW02M	FLAT WASHER 5MM
159	XPS09M	PHLP HD SCR M5-.8 X 10
160	XPB73M	HEX BOLT M10-1.5 X 50
161	X1744161	CLAMP BLOCK
162	XPLW06M	LOCK WASHER 10MM
163	XPW04M	FLAT WASHER 10MM
164	X1744164	CLAMPING BLOCK
165	X1744165	CLAMP PLATE
166	XPBTEK4M	TAP SCREW M4 X 8
167	X1744167	STOP BUTTON
168	X1744168	START BUTTON
169	X1744169	SWITCH BOX
170	XPB514M	FLANGE SCREW M8-1.25 X 16
171	X1744171	SWITCH BOX BRACKET
172	XPSB64M	CAP SCREW M10-1.5 X 25
173	XPLW06M	LOCK WASHER 10MM
174	XPW04M	FLAT WASHER 10MM
175	X1744175	BUTTON PLATE
176	X1744176	BALL STRAIN RELIEF
177	XPAW10M	HEX WRENCH 10MM
178	XPAW08M	HEX WRENCH 8MM
179	XPAW03M	HEX WRENCH 3MM
180	XPWR1719	COMBO WRENCH 17/19MM
181	XPWR1214	COMBO WRENCH 12/14MM
182	XPWR1012	COMBO WRENCH 10/12MM
183	X1744183	T-HANDLE 4MM
188	X1744188	PUSH BLOCK
189	X1744189	KNIFE GAUGE ASSEMBLY
190	XPR39M	EXT RETAINING RING 8MM
191	X1744191	KNIFE GAUGE BLOCK
192	X1744192	KNIFE GAUGE ROD

Table Assembly

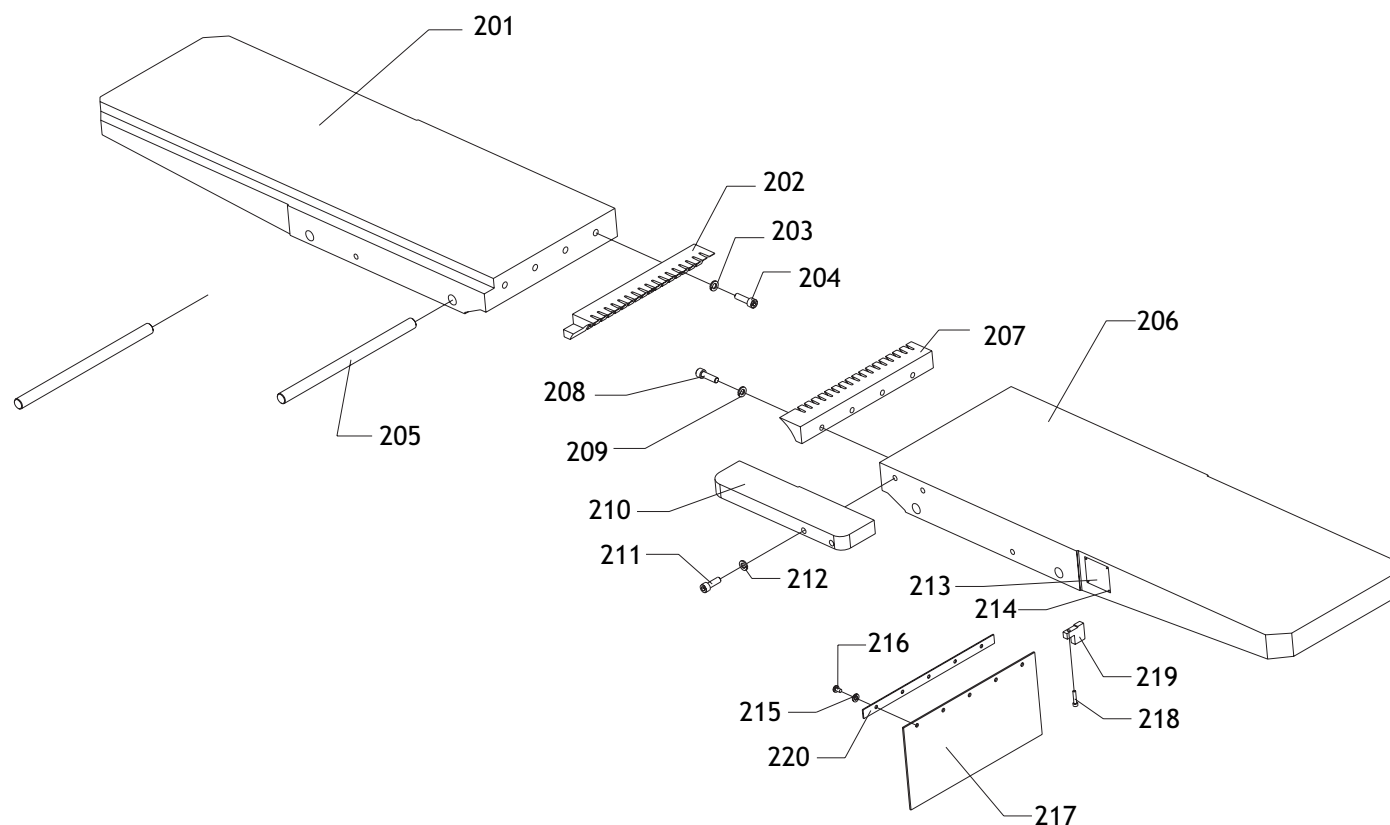
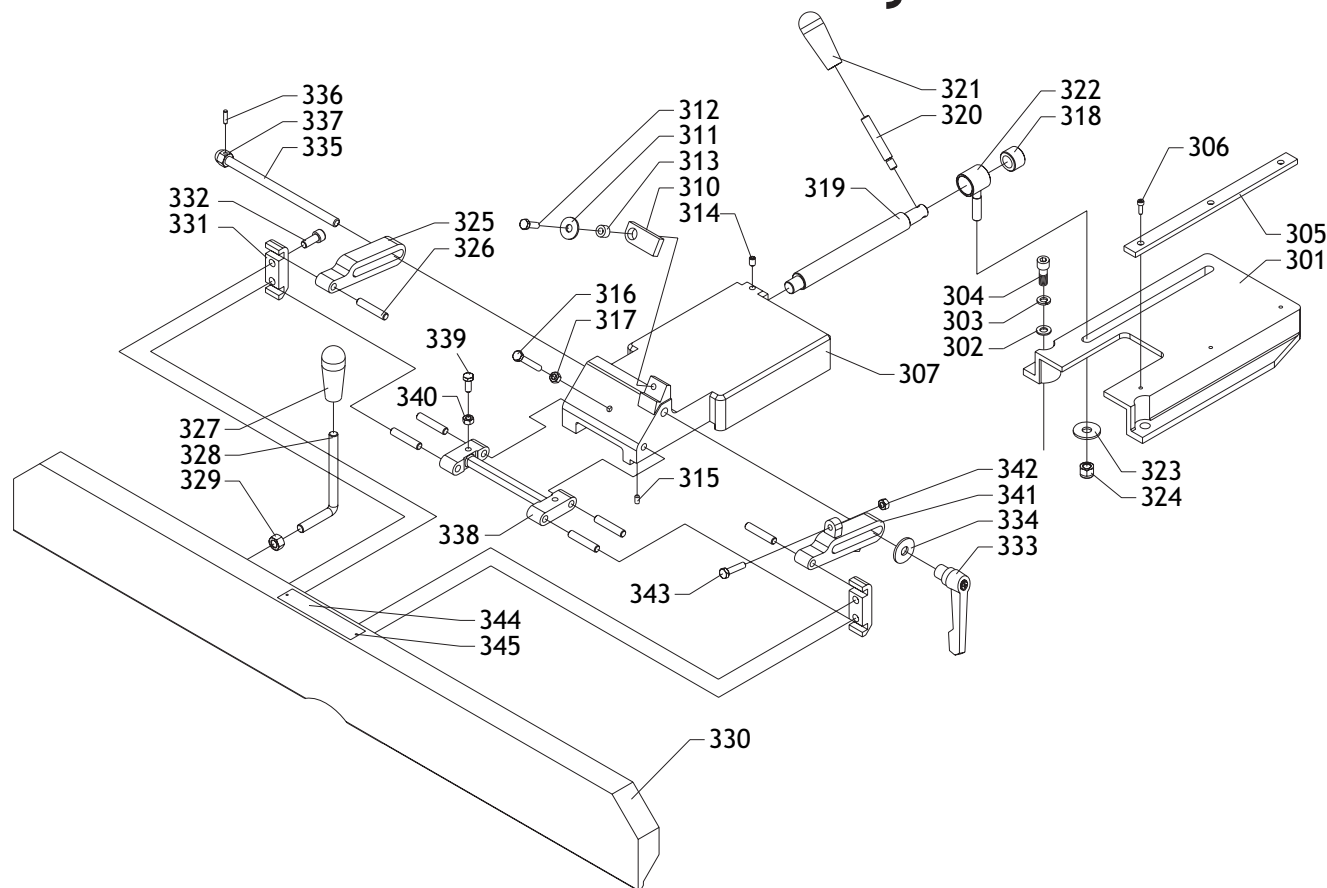


Table Parts List

REF	PART #	DESCRIPTION
201	X1744201	TABLE (LEFT)
202	X1744202	TABLE LIP (LEFT)
203	XPLW06M	LOCK WASHER 10MM
204	XPSB84M	CAP SCREW M10-1.5 X 35
205	X1744205	SHAFT
206	X1744206	TABLE (RIGHT)
207	X1744207	TABLE LIP (RIGHT)
208	XPSB84M	CAP SCREW M10-1.5 X 35
209	XPLW06M	LOCK WASHER 10MM
210	X1744210	RABBETING ARM

REF	PART #	DESCRIPTION
211	XPSB72M	CAP SCREW M10-1.5 X 30
212	XPLW06M	LOCK WASHER 10MM
213	X1744213	DEPTH SCALE
214	X1744214	2 X 4 RIVET
215	XPW03M	FLAT WASHER 6MM
216	XPSB04M	CAP SCREW M6-1.0 X 10
217	X1744217	DUST DEFLECTOR
218	XPSB38M	CAP SCREW M5-.8 X 25
219	X1744219	STOP BLOCK
220	X1744220	BAR

Fence Assembly

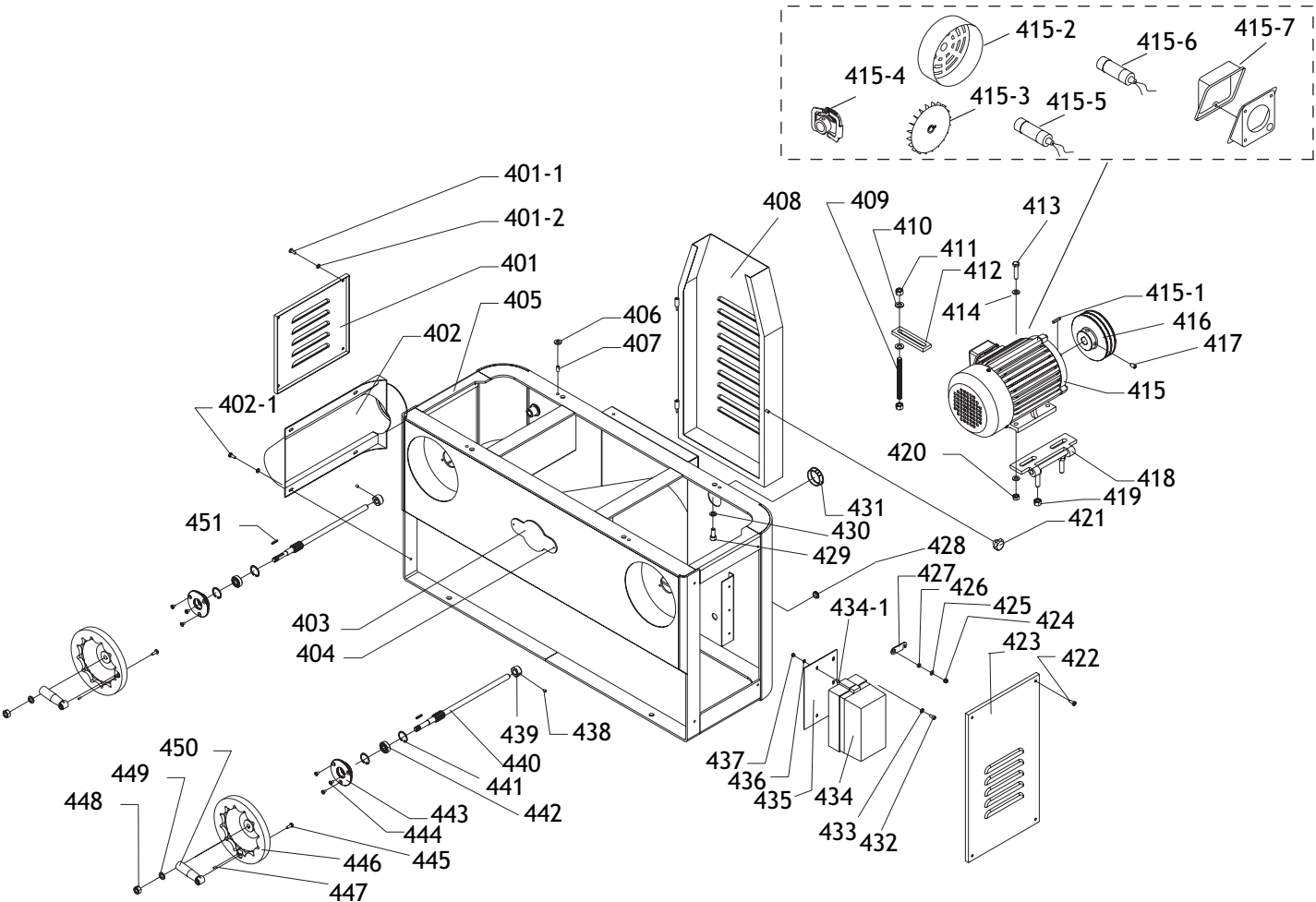


Fence Parts List

REF	PART #	DESCRIPTION
301	X1744301	FENCE BRACKET
302	XPW06M	FLAT WASHER 12MM
303	XPLW05M	LOCK WASHER 12MM
304	XPSB77M	CAP SCREW M12-1.75 X 30
305	X1744305	SLIDING RAIL
306	XPSB20M	CAP SCREW M5-.8 X 14
307	X1744307	SLIDING BRACKET
310	X1744310	BLOCK
311	XPW01M	FLAT WASHER 8MM
312	XPB07M	HEX BOLT M8-1.25 X 25
313	X1744313	COLLAR
314	XPSS14M	SET SCREW M8-1.25 X 12
315	XPSS04M	SET SCREW M6-1 X 12
316	XPB30M	HEX BOLT M8-1.25 X 55
317	XPN03M	HEX NUT M8-1.25
318	X1744318	COLLAR
319	X1744319	ECCENTRIC SHAFT
320	X1744320	HANDLE ROD
321	X1744321	HANDLE
322	X1744322	SLIDING BUSHING ASSY
323	XPW06M	FLAT WASHER 12MM
324	X1744324	SPECIAL HEX NUT M12

REF	PART #	DESCRIPTION
325	X1744325	LEFT BRACKET
326	X1744326	PIN
327	X1744327	HANDLE
328	X1744328	HANDLE ROD
329	XPN09M	HEX NUT M12-1.75
330	X1744330	FENCE
331	X1744331	CLAMP
332	XPSB64M	CAP SCREW M10-1.5 X 25
333	X1744333	LOCK LEVER ASSY
334	XPLW05M	FLAT WASHER 12MM
335	X1744335	DOUBLE END THREADED ROD
336	XPRP03M	ROLL PIN 5 X 20
337	X1744337	M12 SPECIAL NUT
338	X1744338	SUPPORT BRACKET
339	XPB09M	HEX BOLT M8-1.25 x 20
340	XPN03M	HEX NUT M8-1.25
341	X1744341	RIGHT BRACKET
342	XPN03M	HEX NUT M8-1.25
343	XPB20M	HEX BOLT M8-1.25 X 35
344	X1744344	CUTTERHEAD WARNING LABEL
345	X1744345	2 X 5 RIVET

Stand Assembly

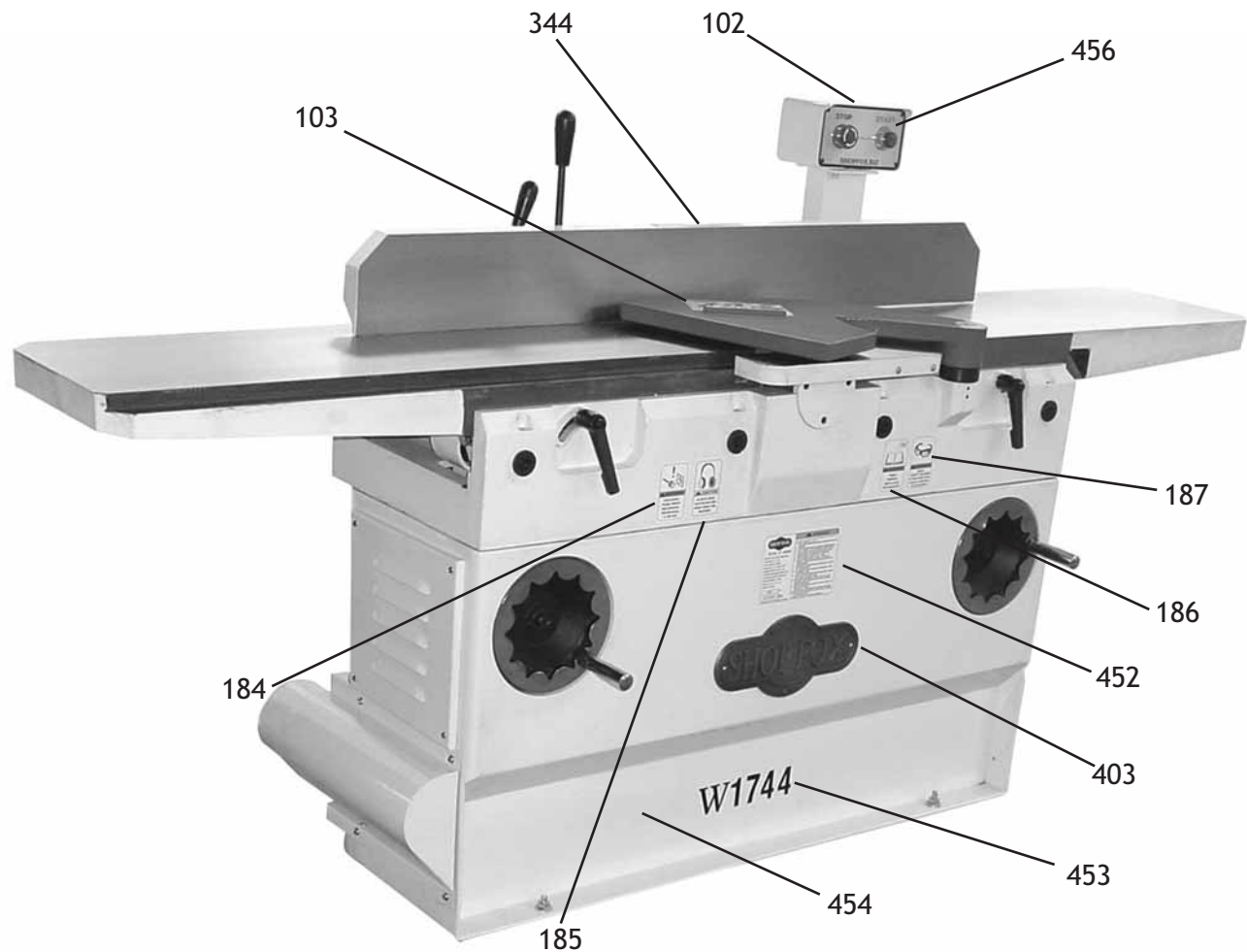


Stand Parts List

REF	PART #	DESCRIPTION
401	X1744401	LEFT ACCESS DOOR
401-1	XPSBS18M	BUTTON HD CAP SCR M6-1 X 18
401-2	XPW03M	FLAT WASHER 6MM
402	X1744402	DUST HOOD
402-1	XPSBS11M	BUTTON HD CAP SCR M6-1 X 10
403	X1744403	SHOP FOX LOGO PLATE
404	XPHTEK4M	TAP SCREW M4 X 8
405	X1744405	CABINET
406	X1744406	RUBBER WASHER 8MM
407	XPSS80M	SET SCREW M8-1.25 X 15
408	X1744408	PULLEY COVER
409	X1744409	TENSION ROD
410	XPW06M	FLAT WASHER 12MM
411	XPN09M	M12-1.75 HEX NUT
412	X1744412	TENSION PLATE
413	XPB116M	HEX BOLT M10-1.5 X 45
414	XPW04M	FLAT WASHER 10MM
415	X1744415	MOTOR
415-1	X1744415-1	KEY 5 X 5 X 45
415-2	X1744415-2	MOTOR FAN COVER
415-3	X1744415-3	MOTOR FAN
415-4	X1744415-4	CENTRIFUGAL SWITCH
415-5	X1744415-5	START CAPACITOR 500MFD 125VAC
415-6	X1744415-6	RUN CAPACITOR 20MFD 250VAC
415-7	X1744415-7	JUNCTION BOX
416	X1744416	MOTOR PULLEY
417	XPSS75M	SET SCREW M10-1.5 X 16
418	X1744418	MOTOR BRACKET
419	XPN09M	HEX NUT M12-1.75
420	XPN02M	HEX NUT M10-1.5
421	X1744421	PULLEY COVER LOCK KNOB

REF	PART #	DESCRIPTION
422	XPSBS18M	BUTTON HD CAP SCR M6-1 X 18
423	X1744423	RIGHT ACCESS DOOR
424	X1744424	SPECIAL HEX NUT M6
425	XPW03M	FLAT WASHER 6MM
426	X1744426	ADAPTOR
427	X1744427	LATCH
428	X1744428	SMALL STRAIN RELIEF
429	XPSB88M	CAP SCREW M10-1.25 X 25
430	XPLW06M	LOCK WASHER 10MM
431	X1744431	BIG STRAIN RELIEF
432	XPSB04M	CAP SCREW M6-1 X 10
433	XPW03M	FLAT WASHER 6MM
434	X1744434	MAGNETIC SWITCH
434-1	XPS06M	PHLP HD SCR M5-.8 x 20
435	X1744435	SWITCH PLATE
436	XPW02M	FLAT WASHER 5MM
437	XPN06M	HEX NUT M5-.8
438	XPSS03M	SET SCREW M6-1 X 8
439	X1744439	COLLAR
440	X1744440	SPIRAL GEAR SHAFT
441	XPR29M	INT RETAINING RING 32MM
442	XP6201	BALL BEARING 6201
443	X1744443	BEARING SUPPORT
444	XPFH04M	FLAT HEAD SCR M6-1 X 8
445	XPFS14M	FLANGE SCREW M6-1 X 16
446	X1744446	HANDWHEEL
447	XPRP78M	ROLL PIN 4 X 10
448	XPN09M	HEX NUT M12-1.75
449	XPW06M	FLAT WASHER 12MM
450	X1744450	FOLDING HANDLE
451	XPB34M	KEY 5 X 5 X 20

Warning Label Parts List



REF	PART #	DESCRIPTION
102	X1744102	ELECTRICITY LABEL
103	X1744103	CUTTERHEAD GUARD WARNING LABEL
184	XLABEL02B	UNPLUG POWER 220-440 LABEL
185	XLABEL15	EAR PROTECTION LABEL
186	XLABEL08	READ MANUAL LABEL
187	XLABEL01	SAFETY GLASSES LABEL

REF	PART #	DESCRIPTION
344	X1744344	CUTTERHEAD WARNING LABEL
403	X1744403	SHOP FOX LOGO PLATE
452	X1744452	MACHINE ID LABEL
453	X1744453	MODEL NUMBER LABEL
454	XPAINTSF701	PAINT FOR SHOP FOX MACHINES
456	X1744456	CONTROL PANEL FACE

WARNING

Safety labels warn about machine hazards and ways to prevent injury. The owner of this machine **MUST** maintain the original location and readability of the labels on the machine. If any label is removed or becomes unreadable, **REPLACE** that label before using the machine again. Contact **SHOP FOX®** at (360) 734-3482 or www.shopfoxtools.com to order new labels.

Warranty

Woodstock International, Inc. warrants all **SHOP FOX®** machinery to be free of defects from workmanship and materials for a period of two years from the date of original purchase by the original owner. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, lack of maintenance, or reimbursement of third party expenses incurred.

Woodstock International, Inc. will repair or replace, at its expense and at its option, the **SHOP FOX®** machine or machine part which in normal use has proven to be defective, provided that the original owner returns the product prepaid to the **SHOP FOX®** factory service center or authorized repair facility designated by our Bellingham, WA office, with proof of their purchase of the product within two years, and provides Woodstock International, Inc. reasonable opportunity to verify the alleged defect through inspection. If it is determined there is no defect, or that the defect resulted from causes not within the scope of Woodstock International Inc.'s warranty, then the original owner must bear the cost of storing and returning the product.

This is Woodstock International, Inc.'s sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant that **SHOP FOX®** machinery complies with the provisions of any law or acts. In no event shall Woodstock International, Inc.'s liability under this warranty exceed the purchase price paid for the product, and any legal actions brought against Woodstock International, Inc. shall be tried in the State of Washington, County of Whatcom. We 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.

Every effort has been made to ensure that all **SHOP FOX®** machinery meets high quality and durability standards. We reserve the right to change specifications at any time because of our commitment to continuously improve the quality of our products.

Warranty Registration

Name _____

Street _____

City _____ State _____ Zip _____

Phone # _____ Email _____ Invoice # _____

Model # _____ Serial # _____ Dealer Name _____ Purchase Date _____

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. **Of course, all information is strictly confidential.**

1. How did you learn about us?

_____ Advertisement

_____ Friend

_____ Local Store

_____ Mail Order Catalog

_____ Website

_____ Other:

2. How long have you been a woodworker/metalworker?

_____ 0-2 Years

_____ 2-8 Years

_____ 8-20 Years

_____ 20+ Years

3. How many of your machines or tools are Shop Fox®?

_____ 0-2

_____ 3-5

_____ 6-9

_____ 10+

4. Do you think your machine represents a good value?

_____ Yes

_____ No

5. Would you recommend Shop Fox® products to a friend?

_____ Yes

_____ No

6. What is your age group?

_____ 20-29

_____ 30-39

_____ 40-49

_____ 50-59

_____ 60-69

_____ 70+

7. What is your annual household income?

_____ \$20,000-\$29,000

_____ \$30,000-\$39,000

_____ \$40,000-\$49,000

_____ \$50,000-\$59,000

_____ \$60,000-\$69,000

_____ \$70,000+

8. Which of the following magazines do you subscribe to?

_____ Cabinet Maker

_____ Popular Mechanics

_____ Today's Homeowner

_____ Family Handyman

_____ Popular Science

_____ Wood

_____ Hand Loader

_____ Popular Woodworking

_____ Wooden Boat

_____ Handy

_____ Practical Homeowner

_____ Woodshop News

_____ Home Shop Machinist

_____ Precision Shooter

_____ Woodsmith

_____ Journal of Light Cont.

_____ Projects in Metal

_____ Woodwork

_____ Live Steam

_____ RC Modeler

_____ Woodworker West

_____ Model Airplane News

_____ Rifle

_____ Woodworker's Journal

_____ Modeltec

_____ Shop Notes

_____ Other:

_____ Old House Journal

_____ Shotgun News

9. Comments: _____

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Place
Stamp
Here



WOODSTOCK INTERNATIONAL INC.
P.O. BOX 2309
BELLINGHAM, WA 98227-2309



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