

READ THIS FIRST

Model W1741/W1741S ***IMPORTANT UPDATE***

Applies to Models Mfd. Since 4/14
and Owner's Manual February, 2006

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



The following changes were made to these machines since the owner's manual was printed:

- Certified as meeting CSA 22.2 #71.2-8 and UL 987-7th standards.
- Changed the motor nominal voltage from 220V to 240V, and motor amperage from 18A to 15A.
- Changed full-load current rating from 18A to 15A.
- Added a power cord with a 6-20 plug.
- Bolted the motor to the inside of the stand for shipping purposes.
- Replaced the motor and cutterhead pulleys with aluminum versions designed for ribbed V-belts.
- Replaced the V-belt with a ribbed V-belt.

This document provides relevant updates to portions of the owner's manual that no longer apply and additional information required by CSA—aside from this information, all other content in the owner's manual applies and **MUST** be read and understood for your own safety. **IMPORTANT: Keep this update with the owner's manual for future reference.** *If you have any further questions, contact our Technical Support.*

Changed Specifications

Electrical

Power Requirement240V, Single-Phase, 60 Hz

Motor

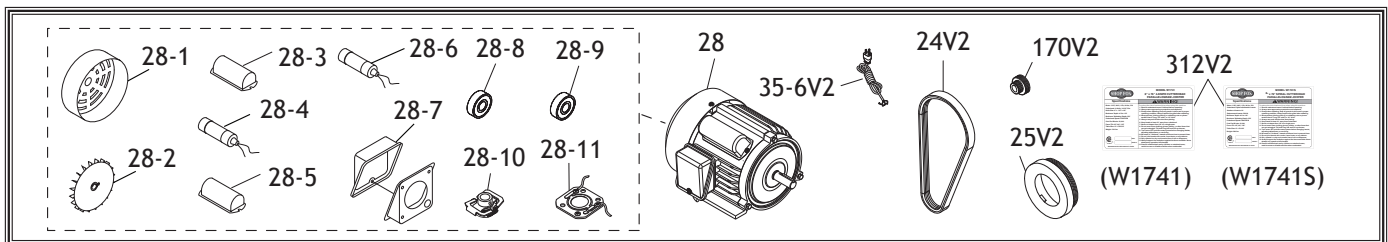
Voltage 240V

Amps..... 15A

Operation Info

Cutterhead Speed 4800 RPM

New/Revised Parts



REF	PART #	DESCRIPTION
24V2	X1741024V2	RIBBED V-BELT 8PK-1172 V2.03.09
25V2	X1741025V2	MOTOR PULLEY ALUM V2.03.09
28	X1741028	MOTOR 3HP 240V 1-PH
28-1	X1741028-1	MOTOR FAN COVER
28-2	X1741028-2	MOTOR FAN
28-3	X1741028-3	CAPACITOR COVER
28-4	X1741028-4	S CAPACITOR 200M 250V
28-5	X1741028-5	CAPACITOR COVER
28-6	X1741028-6	R CAPACITOR 30M 450V

REF	PART #	DESCRIPTION
28-7	X1741028-7	MOTOR JUNCTION BOX
28-8	X1741028-8	BALL BEARING
28-9	X1741028-9	BALL BEARING
28-10	X1741028-10	CENTRIFUGAL SWITCH 16MM 3450
28-11	X1741028-11	CONTACT PLATE 16MM
35-6V2	X1741035-6V2	POWER CORD 12G 3W 72" 6-20P V2.07.12
312V2	X1741312V2	MACHINE ID LABEL CSA V2.07.12 (W1741)
312V2	X1741S312V2	MACHINE ID LABEL CSA V2.07.12 (W1741S)
170V2	X1741170V2	CUTTERHEAD PULLEY ALUM V2.03.09



COPYRIGHT © AUGUST, 2012 BY WOODSTOCK INTERNATIONAL, INC., REVISED APRIL, 2014 (MN)

WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE OR FORM WITHOUT

THE WRITTEN APPROVAL OF WOODSTOCK INTERNATIONAL, INC. #15234BLTS Printed in China

Motor Installation

Follow the instructions below before performing any steps in the **Assembly** section, starting on **Page 14** of the **W1741 Owner's Manual**.

To install the motor, do these steps:

1. With the help of another person, tip the stand shipping box upside down, then open the bottom of the box to expose the top of the stand.
2. Place a piece of cardboard on the floor, tip the cabinet shipping box over so that the cabinet top is on the protective cardboard, then remove the shipping box and plastic from the cabinet.
3. Reach inside the cabinet, remove the accessories box, ribbed V-belt, dust port, and place the control panel pedestal off to the side.

Note: *Keep the cap screws and flat washers that secure the control panel pedestal to the inside of the cabinet so they can be used to install the pedestal in a future step.*

4. Use a 12mm wrench to remove the two hex nuts and flat washers that secure the motor to the cabinet top.

Note: *Retain the two carriage bolts, hex nuts, and flat washers so that they can be used to install the motor in **Step 8**.*

5. Using cardboard to protect the stand and another person to hold the motor, place the stand on its left side so that the dust chute faces the floor.
6. Remove the rear stand panel.
7. Place the motor on the two motor mount brackets with the pulley facing the rear of the cabinet, as shown in **Figure 1**.
8. Attach the motor to the motor mount brackets with (4) M8-1.25 x 25 carriage bolts, 8mm flat washers, and M8-1.25 hex nuts (two sets from inventory and two sets that were removed in **Step 4**), as shown in **Figure 1**.
9. Refer to **Page 14** of the Owner's Manual and follow the assembly instructions, starting at **Step 2**.

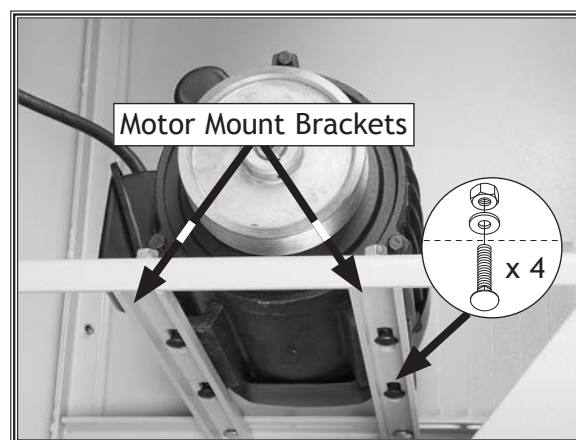


Figure 1. Motor attached to the motor mounts.

SAFETY

For Your Own Safety, Read Manual Before Operating Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures—this responsibility is ultimately up to the operator!



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



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



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 or a situation that may cause damage to the machinery.

Standard Machinery Safety Instructions

OWNER'S MANUAL. Read and understand this owner's manual **BEFORE** using machine.

TRAINED OPERATORS ONLY. Untrained operators have a higher risk of being hurt or killed. Only allow trained/supervised people to use this machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make workshop kid proof!

DANGEROUS ENVIRONMENTS. Do not use machinery in areas that are wet, cluttered, or have poor lighting. Operating machinery in these areas greatly increases the risk of accidents and injury.

MENTAL ALERTNESS REQUIRED. Full mental alertness is required for safe operation of machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.

ELECTRICAL EQUIPMENT INJURY RISKS. You can be shocked, burned, or killed by touching live electrical components or improperly grounded machinery. To reduce this risk, only allow an electrician or qualified service personnel to do electrical installation or repair work, and always disconnect power before accessing or exposing electrical equipment.

DISCONNECT POWER FIRST. Always disconnect machine from power supply **BEFORE** making adjustments, changing tooling, or servicing machine. This eliminates the risk of injury from unintended startup or contact with live electrical components.

EYE PROTECTION. Always wear ANSI-approved safety glasses or a face shield when operating or observing machinery to reduce the risk of eye injury or blindness from flying particles. Everyday eyeglasses are not approved safety glasses.

WEARING PROPER APPAREL. Do not wear clothing, apparel, or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to avoid accidental slips, which could cause loss of workpiece control.

HAZARDOUS DUST. Dust created while using machinery may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material, and always wear a NIOSH-approved respirator to reduce your risk.

HEARING PROTECTION. Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

REMOVE ADJUSTING TOOLS. Tools left on machinery can become dangerous projectiles upon startup. Never leave chuck keys, wrenches, or any other tools on machine. Always verify removal before starting!

INTENDED USAGE. Only use machine for its intended purpose—never make modifications without prior approval from Woodstock International. Modifying machine or using it differently than intended will void the warranty and may result in malfunction or mechanical failure that leads to serious personal injury or death!

AWKWARD POSITIONS. Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.

CHILDREN & BYSTANDERS. Keep children and bystanders at a safe distance from the work area. Stop using machine if they become a distraction.

GUARDS & COVERS. Guards and covers reduce accidental contact with moving parts or flying debris—make sure they are properly installed, undamaged, and working correctly.

FORCING MACHINERY. Do not force machine. It will do the job safer and better at the rate for which it was designed.

NEVER STAND ON MACHINE. Serious injury may occur if machine is tipped or if the cutting tool is unintentionally contacted.

STABLE MACHINE. Unexpected movement during operation greatly increases risk of injury or loss of control. Before starting, verify machine is stable and mobile base (if used) is locked.

USE RECOMMENDED ACCESSORIES. Consult this owner's manual or the manufacturer for recommended accessories. Using improper accessories will increase risk of serious injury.

UNATTENDED OPERATION. To reduce the risk of accidental injury, turn machine **OFF** and ensure all moving parts completely stop before walking away. Never leave machine running while unattended.

MAINTAIN WITH CARE. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. A machine that is improperly maintained could malfunction, leading to serious personal injury or death.

CHECK DAMAGED PARTS. Regularly inspect machine for any condition that may affect safe operation. Immediately repair or replace damaged or mis-adjusted parts before operating machine.

MAINTAIN POWER CORDS. When disconnecting cord-connected machines from power, grab and pull the plug—NOT the cord. Pulling the cord may damage the wires inside, resulting in a short. Do not handle cord/plug with wet hands. Avoid cord damage by keeping it away from heated surfaces, high traffic areas, harsh chemicals, and wet/damp locations.

EXPERIENCING DIFFICULTIES. If at any time you experience difficulties performing the intended operation, stop using the machine! Contact Technical Support at (360) 734-3482.

Additional Safety for Jointers

JOINTER INJURY RISKS. Familiarize yourself with the main injury risks associated with jointers—always use common sense and good judgement to reduce your risk of injury. **Main injury risks from jointers:** amputation/lacerations from contact with the moving cutterhead, entanglement/crushing injuries from getting caught in moving parts, blindness or eye injury from flying wood chips, or impact injuries from workpiece kickback.

KICKBACK. Know how to reduce the risk of kickback and kickback-related injuries. “Kickback” occurs during the operation when the workpiece is ejected from the machine at a high rate of speed. Kickback is commonly caused by poor workpiece selection, unsafe feeding techniques, or improper machine setup/maintenance. Kickback injuries typically occur as follows: (1) operator/bystanders are struck by the workpiece, resulting in impact injuries (i.e., blindness, broken bones, bruises, death); (2) operator’s hands are pulled into blade, resulting in amputation or severe lacerations.

GUARD REMOVAL. Except when rabbeting, never remove guards during operation or while connected to power. Always replace guard after rabbeting. You could be seriously injured if you accidentally touch the spinning cutterhead or get entangled in moving parts. Before removing sawdust, turn jointer **OFF** and disconnect power before clearing. Immediately replace guards.

DULL/DAMAGED KNIVES/INSERTS. Only use sharp, undamaged knives/inserts. Dull, damaged or rusted knives/inserts increase risk of kickback.

OUTFEED TABLE ALIGNMENT. To reduce the risk of kickback and personal injuries, keep the outfeed table even with the knives/inserts at top dead center (the highest point during rotation). If the outfeed table is set too low, the workpiece may rock against the cutterhead. If the table is set too high, the workpiece may hit the outfeed table and get stuck over the cutterhead.

INSPECTING STOCK. To reduce the risk of kickback injuries or machine damage, thoroughly inspect and prepare the workpiece before cutting. Verify the workpiece is free of nails, staples, loose knots or other foreign material. Workpieces with minor warping should be surface planed first with the cupped side facing the infeed table.

GRAIN DIRECTION. Jointing against the grain or end grain increases the required cutting force, which could produce chatter or excessive chip out, and lead to kickback.

CUTTING LIMITATIONS. To reduce the risk of accidental cutterhead contact or kickback, never perform jointing, planing, or rabbeting cuts on pieces smaller than 8" long, $\frac{3}{4}$ " wide, or $\frac{1}{4}$ " thick.

MAXIMUM CUTTING DEPTH. To reduce the risk of kickback, never cut deeper than $\frac{1}{8}$ " per pass.

PUSH BLOCKS. To reduce the risk of accidental cutterhead contact, always use push blocks when planing materials less than 3" high or wide. Never pass your hands directly over the cutterhead without a push block.

WORKPIECE SUPPORT. To reduce accidental cutterhead contact and kickback, support workpiece continuously during operation. Position and guide workpiece with fence; support long or wide stock with auxiliary stands.

FEED WORKPIECE PROPERLY. To reduce the risk of kickback, never start jointer with workpiece touching cutterhead. Allow cutterhead to reach full speed before feeding. Never back work toward the infeed table.

SECURE KNIVES/INSERTS. Loose knives or improperly set inserts can become dangerous projectiles or cause machine damage. Always verify knives/inserts are secure and properly adjusted before operation. Straight knives should never project more than $\frac{1}{8}$ " (0.125") from cutterhead body.

ELECTRICAL

Circuit Requirements

This machine must be connected to the correct size and type of power supply circuit, or fire or electrical damage may occur. Read through this section to determine if an adequate power supply circuit is available. If a correct circuit is not available, a qualified electrician **MUST** install one before you can connect the machine to power.

A power supply circuit includes all electrical equipment between the breaker box or fuse panel in the building and the machine. The power supply circuit used for this machine must be sized to safely handle the full-load current drawn from the machine for an extended period of time. (If this machine is connected to a circuit protected by fuses, use a time delay fuse marked D.)

Full-Load Current Rating

The full-load current rating is the amperage a machine draws at 100% of the rated output power. On machines with multiple motors, this is the amperage drawn by the largest motor or sum of all motors and electrical devices that might operate at one time during normal operations.

Full-Load Current Rating at 240V 15 Amps

Circuit Requirements

This machine is prewired to operate on a 240V power supply circuit that has a verified ground and meets the following requirements:

Circuit Type 240V, 60 Hz, Single-Phase
Circuit Size 20 Amps
Plug/Receptacle NEMA 6-20

WARNING

The machine must be properly set up before it is safe to operate. **DO NOT** connect this machine to the power source until instructed to do so later in this manual.

WARNING



Incorrectly wiring or grounding this machine can cause electrocution, fire, or machine damage. To reduce this risk, only an electrician or qualified service personnel should do any required electrical work on this machine.

NOTICE

The circuit requirements listed in this manual apply to a dedicated circuit—where only one machine will be running at a time. If this machine will be connected to a shared circuit where multiple machines will be running at the same time, consult with an electrician to ensure that the circuit is properly sized for safe operation.

Grounding Requirements

This machine **MUST** be grounded. In the event of certain types of malfunctions or breakdowns, grounding provides a path of least resistance for electric current to travel—in order to reduce the risk of electric shock.

Improper connection of the equipment-grounding wire will increase the risk of electric shock. The wire with green insulation (with/without yellow stripes) is the equipment-grounding wire. If repair or replacement of the power cord or plug is necessary, do not connect the equipment-grounding wire to a live (current carrying) terminal.

Check with a qualified electrician or service personnel if you do not understand these grounding requirements, or if you are in doubt about whether the tool is properly grounded. If you ever notice that a cord or plug is damaged or worn, disconnect it from power, and immediately replace it with a new one.

For 240V Connection

This machine is equipped with a power cord that has an equipment-grounding wire and NEMA 6-20 grounding plug. The plug must only be inserted into a matching receptacle (see **Figure 2**) that is properly installed and grounded in accordance with local codes and ordinances.

Extension Cords

We do not recommend using an extension cord with this machine. Extension cords cause voltage drop, which may damage electrical components and shorten motor life. Voltage drop increases with longer extension cords and smaller gauge sizes (higher gauge numbers indicate smaller sizes).

Any extension cord used with this machine must contain a ground wire, match the required plug and receptacle, and meet the following requirements:

Minimum Gauge Size at 240V 12 AWG
Maximum Length (Shorter is Better) 50 ft.

WARNING

The machine must be properly set up before it is safe to operate. **DO NOT** connect this machine to the power source until instructed to do so later in this manual.

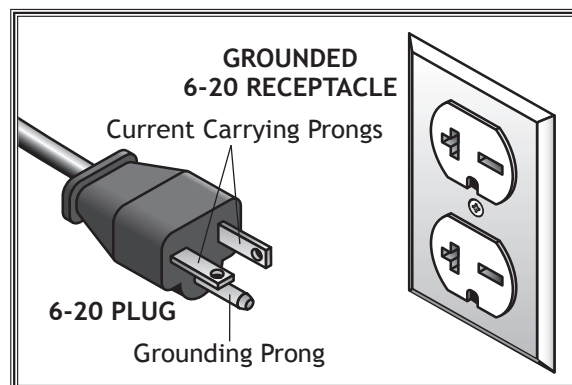
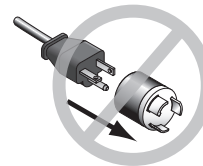


Figure 2. NEMA 6-20 plug & receptacle.

CAUTION



No adapter should be used with the required plug. If the plug does not fit the available receptacle or the machine must be reconnected to a different type of circuit, the reconnection must be made by an electrician or qualified service personnel and it must comply with all local codes and ordinances.

Wiring Diagram



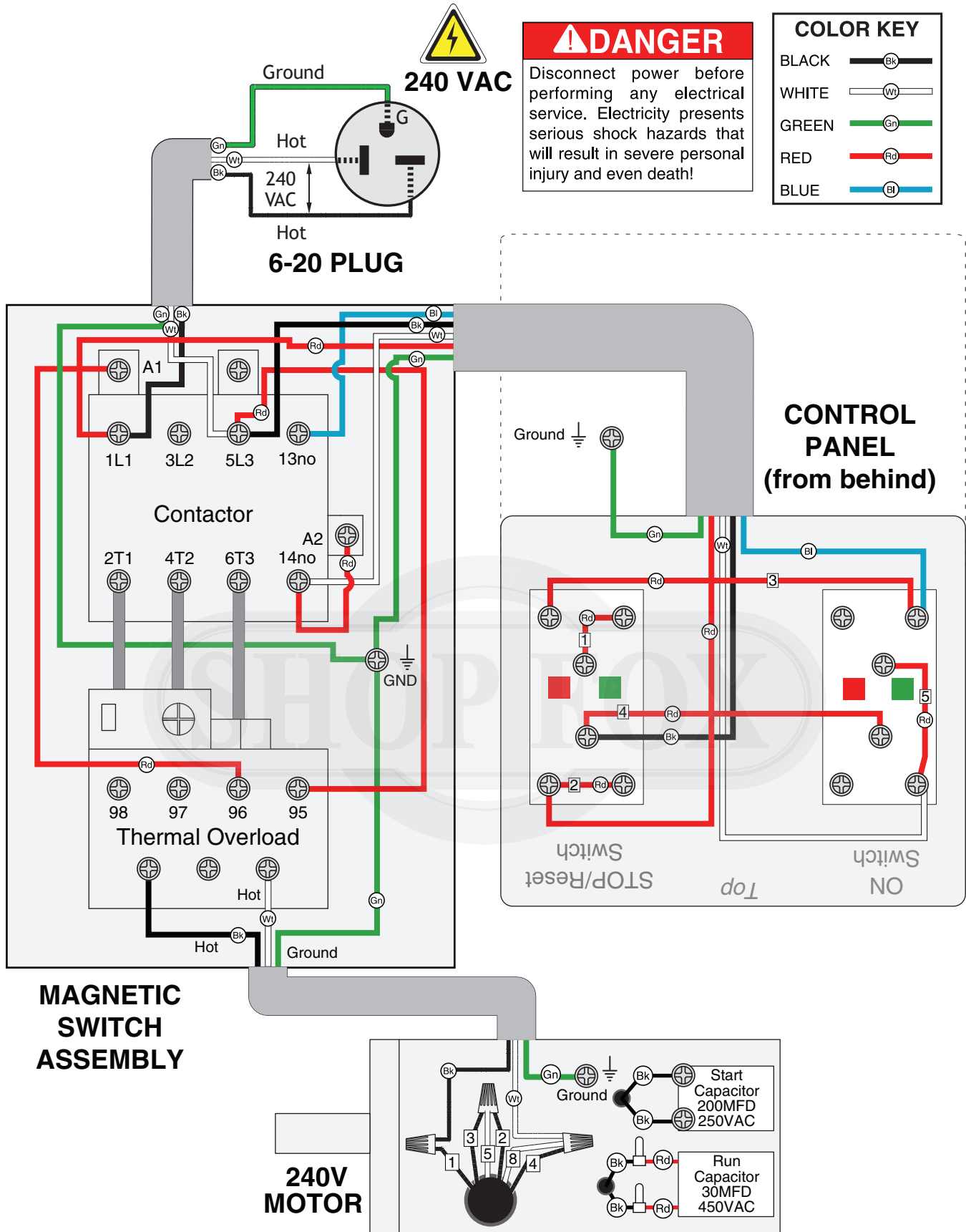
240 VAC

! DANGER

Disconnect power before performing any electrical service. Electricity presents serious shock hazards that will result in severe personal injury and even death!

COLOR KEY

BLACK	
WHITE	
GREEN	
RED	
BLUE	



READ THIS FIRST

Model W1741/W1741S ***IMPORTANT UPDATE***

Applies to Models Mfg. Since 7/12
and Owner's Manual February, 2006

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



The following changes were recently made to these machines since the owner's manual was printed:

- Now certified to meet CSA 22.2 #71.2-8 and UL 987-7th standards.
- Changed the motor nominal voltage from 220V to 240V and added a power cord with a plug.
- Bolted the motor to the inside of the stand for shipping purposes.
- Replaced the motor and cutterhead pulleys with aluminum versions designed for ribbed V-belts.
- Replaced the V-belt with a ribbed V-belt.

This document provides relevant updates to portions of the owner's manual that no longer apply and additional information required by CSA—aside from this information, all other content in the owner's manual applies and **MUST** be read and understood for your own safety. **IMPORTANT: Keep this update with the owner's manual for future reference. If you have any further questions, contact our Technical Support.**

Changed Specifications

Electrical

Power Requirement240V, Single-Phase, 60 Hz

Motor

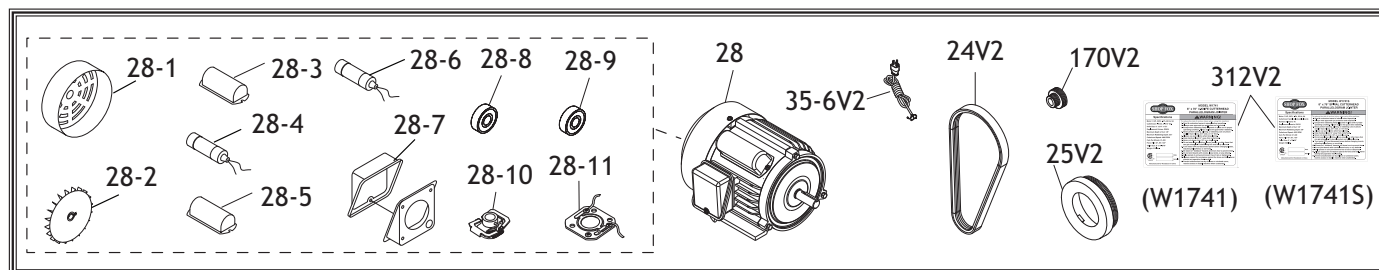
Voltage 240V

Amps..... 9A

Operation Info

Cutterhead Speed 4800 RPM

New/Revised Parts



REF	PART #	DESCRIPTION
24V2	X1741024V2	RIBBED V-BELT 8PK-1172 V2.03.09
25V2	X1741025V2	MOTOR PULLEY ALUM V2.03.09
28	X1741028	MOTOR 3HP 240V 1-PH
28-1	X1741028-1	MOTOR FAN COVER
28-2	X1741028-2	MOTOR FAN
28-3	X1741028-3	CAPACITOR COVER
28-4	X1741028-4	S CAPACITOR 200M 250V
28-5	X1741028-5	CAPACITOR COVER
28-6	X1741028-6	R CAPACITOR 30M 450V

REF	PART #	DESCRIPTION
28-7	X1741028-7	MOTOR JUNCTION BOX
28-8	XP6204ZZ	BALL BEARING 6204ZZ
28-9	XP6203ZZ	BALL BEARING 6203ZZ
28-10	X1741028-10	CENTRIFUGAL SWITCH 16MM 3450
28-11	X1741028-11	CONTACT PLATE 16MM
35-6V2	X1741035-6V2	PWR CORD 12G 3W 72" 6-20P V2.07.12
312V2	X1741312V2	MACHINE ID LABEL CSA V2.07.12 (W1741)
312V2	X1741S312V2	MACHINE ID LABEL CSA V2.07.12 (W1741S)
170V2	X1741170V2	CUTTERHEAD PULLEY ALUM V2.03.09



COPYRIGHT © AUGUST, 2012 BY WOODSTOCK INTERNATIONAL, INC.

WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE OR FORM WITHOUT

THE WRITTEN APPROVAL OF WOODSTOCK INTERNATIONAL, INC.

#15234BLTS Printed in China

Motor Installation

Follow the instructions below before performing any steps in the **Assembly** section, starting on **Page 14** of the **W1741 Owner's Manual**.

To install the motor, do these steps:

1. With the help of another person, tip the stand shipping box upside down, then open the bottom of the box to expose the top of the stand.
2. Place a piece of cardboard on the floor, tip the cabinet shipping box over so that the cabinet top is on the protective cardboard, then remove the shipping box and plastic from the cabinet.
3. Reach inside the cabinet, remove the accessories box, ribbed V-belt, dust port, and place the control panel pedestal off to the side.

Note: *Keep the cap screws and flat washers that secure the control panel pedestal to the inside of the cabinet so they can be used to install the pedestal in a future step.*

4. Use a 12mm wrench to remove the two hex nuts and flat washers that secure the motor to the cabinet top.

Note: *Retain the two carriage bolts, hex nuts, and flat washers so that they can be used to install the motor in **Step 8**.*

5. Using cardboard to protect the stand and another person to hold the motor, place the stand on its left side so that the dust chute faces the floor.
6. Remove the rear stand panel.
7. Place the motor on the two motor mount brackets with the pulley facing the rear of the cabinet, as shown in **Figure 1**.
8. Attach the motor to the motor mount brackets with (4) M8-1.25 x 25 carriage bolts, 8mm flat washers, and M8-1.25 hex nuts (two sets from inventory and two sets that were removed in **Step 4**), as shown in **Figure 1**.
9. Refer to **Page 14** of the Owner's Manual and follow the assembly instructions, starting at **Step 2**.

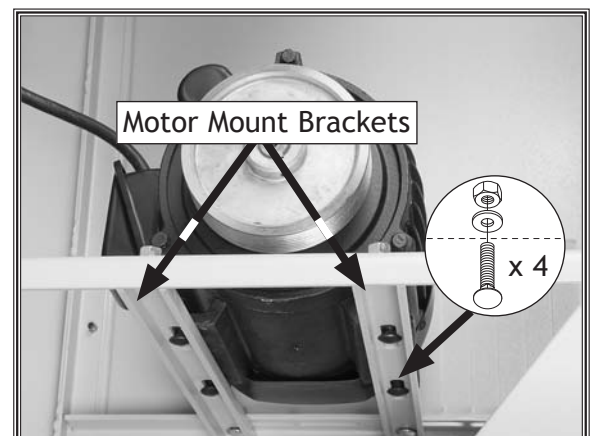


Figure 1. Motor attached to the motor mounts.

SAFETY

For Your Own Safety, Read Manual Before Operating Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures—this responsibility is ultimately up to the operator!



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



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



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 or a situation that may cause damage to the machinery.

Standard Machinery Safety Instructions

OWNER'S MANUAL. Read and understand this owner's manual **BEFORE** using machine.

TRAINED OPERATORS ONLY. Untrained operators have a higher risk of being hurt or killed. Only allow trained/supervised people to use this machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make workshop kid proof!

DANGEROUS ENVIRONMENTS. Do not use machinery in areas that are wet, cluttered, or have poor lighting. Operating machinery in these areas greatly increases the risk of accidents and injury.

MENTAL ALERTNESS REQUIRED. Full mental alertness is required for safe operation of machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.

ELECTRICAL EQUIPMENT INJURY RISKS. You can be shocked, burned, or killed by touching live electrical components or improperly grounded machinery. To reduce this risk, only allow an electrician or qualified service personnel to do electrical installation or repair work, and always disconnect power before accessing or exposing electrical equipment.

DISCONNECT POWER FIRST. Always disconnect machine from power supply **BEFORE** making adjustments, changing tooling, or servicing machine. This eliminates the risk of injury from unintended startup or contact with live electrical components.

EYE PROTECTION. Always wear ANSI-approved safety glasses or a face shield when operating or observing machinery to reduce the risk of eye injury or blindness from flying particles. Everyday eyeglasses are not approved safety glasses.

WEARING PROPER APPAREL. Do not wear clothing, apparel, or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to avoid accidental slips, which could cause loss of workpiece control.

HAZARDOUS DUST. Dust created while using machinery may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material, and always wear a NIOSH-approved respirator to reduce your risk.

HEARING PROTECTION. Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

REMOVE ADJUSTING TOOLS. Tools left on machinery can become dangerous projectiles upon startup. Never leave chuck keys, wrenches, or any other tools on machine. Always verify removal before starting!

INTENDED USAGE. Only use machine for its intended purpose and never make modifications not approved by Woodstock. Modifying machine or using it differently than intended may result in malfunction or mechanical failure that can lead to serious personal injury or death!

AWKWARD POSITIONS. Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.

CHILDREN & BYSTANDERS. Keep children and bystanders at a safe distance from the work area. Stop using machine if they become a distraction.

GUARDS & COVERS. Guards and covers reduce accidental contact with moving parts or flying debris—make sure they are properly installed, undamaged, and working correctly.

FORCING MACHINERY. Do not force machine. It will do the job safer and better at the rate for which it was designed.

NEVER STAND ON MACHINE. Serious injury may occur if machine is tipped or if the cutting tool is unintentionally contacted.

STABLE MACHINE. Unexpected movement during operation greatly increases risk of injury or loss of control. Before starting, verify machine is stable and mobile base (if used) is locked.

USE RECOMMENDED ACCESSORIES. Consult this owner's manual or the manufacturer for recommended accessories. Using improper accessories will increase risk of serious injury.

UNATTENDED OPERATION. To reduce the risk of accidental injury, turn machine **OFF** and ensure all moving parts completely stop before walking away. Never leave machine running while unattended.

MAINTAIN WITH CARE. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. A machine that is improperly maintained could malfunction, leading to serious personal injury or death.

CHECK DAMAGED PARTS. Regularly inspect machine for any condition that may affect safe operation. Immediately repair or replace damaged or mis-adjusted parts before operating machine.

MAINTAIN POWER CORDS. When disconnecting cord-connected machines from power, grab and pull the plug—NOT the cord. Pulling the cord may damage the wires inside, resulting in a short. Do not handle cord/plug with wet hands. Avoid cord damage by keeping it away from heated surfaces, high traffic areas, harsh chemicals, and wet/damp locations.

EXPERIENCING DIFFICULTIES. If at any time you experience difficulties performing the intended operation, stop using the machine! Contact Technical Support at (360) 734-3482.

Additional Safety for Jointers

JOINTER INJURY RISKS. Familiarize yourself with the main injury risks associated with jointers—always use common sense and good judgement to reduce your risk of injury. **Main injury risks from jointers:** amputation/lacerations from contact with the moving cutterhead, entanglement/crushing injuries from getting caught in moving parts, blindness or eye injury from flying wood chips, or impact injuries from workpiece kickback.

KICKBACK. Know how to reduce the risk of kickback and kickback-related injuries. “Kickback” occurs during the operation when the workpiece is ejected from the machine at a high rate of speed. Kickback is commonly caused by poor workpiece selection, unsafe feeding techniques, or improper machine setup/maintenance. Kickback injuries typically occur as follows: (1) operator/bystanders are struck by the workpiece, resulting in impact injuries (i.e., blindness, broken bones, bruises, death); (2) operator’s hands are pulled into blade, resulting in amputation or severe lacerations.

GUARD REMOVAL. Except when rabbeting, never remove guards during operation or while connected to power. Always replace guard after rabbeting. You could be seriously injured if you accidentally touch the spinning cutterhead or get entangled in moving parts. Before removing sawdust, turn jointer **OFF** and disconnect power before clearing. Immediately replace guards.

DULL/DAMAGED KNIVES/INSERTS. Only use sharp, undamaged knives/inserts. Dull, damaged or rusted knives/inserts increase risk of kickback.

OUTFEED TABLE ALIGNMENT. To reduce the risk of kickback and personal injuries, keep the outfeed table even with the knives/inserts at top dead center (the highest point during rotation). If the outfeed table is set too low, the workpiece may rock against the cutterhead. If the table is set too high, the workpiece may hit the outfeed table and get stuck over the cutterhead.

INSPECTING STOCK. To reduce the risk of kickback injuries or machine damage, thoroughly inspect and prepare the workpiece before cutting. Verify the workpiece is free of nails, staples, loose knots or other foreign material. Workpieces with minor warping should be surface planed first with the cupped side facing the infeed table.

GRAIN DIRECTION. Jointing against the grain or end grain increases the required cutting force, which could produce chatter or excessive chip out, and lead to kickback.

CUTTING LIMITATIONS. To reduce the risk of accidental cutterhead contact or kickback, never perform jointing, planing, or rabbeting cuts on pieces smaller than 8" long, $\frac{3}{4}$ " wide, or $\frac{1}{4}$ " thick.

MAXIMUM CUTTING DEPTH. To reduce the risk of kickback, never cut deeper than $\frac{1}{8}$ " per pass.

PUSH BLOCKS. To reduce the risk of accidental cutterhead contact, always use push blocks when planing materials less than 3" high or wide. Never pass your hands directly over the cutterhead without a push block.

WORKPIECE SUPPORT. To reduce accidental cutterhead contact and kickback, support workpiece continuously during operation. Position and guide workpiece with fence; support long or wide stock with auxiliary stands.

FEED WORKPIECE PROPERLY. To reduce the risk of kickback, never start jointer with workpiece touching cutterhead. Allow cutterhead to reach full speed before feeding. Never back work toward the infeed table.

SECURE KNIVES/INSERTS. Loose knives or improperly set inserts can become dangerous projectiles or cause machine damage. Always verify knives/inserts are secure and properly adjusted before operation. Straight knives should never project more than $\frac{1}{8}$ " (0.125") from cutterhead body.

ELECTRICAL

Circuit Requirements

This machine must be connected to the correct size and type of power supply circuit, or fire or electrical damage may occur. Read through this section to determine if an adequate power supply circuit is available. If a correct circuit is not available, a qualified electrician **MUST** install one before you can connect the machine to power.

A power supply circuit includes all electrical equipment between the breaker box or fuse panel in the building and the machine. The power supply circuit used for this machine must be sized to safely handle the full-load current drawn from the machine for an extended period of time. (If this machine is connected to a circuit protected by fuses, use a time delay fuse marked D.)

Full-Load Current Rating

The full-load current rating is the amperage a machine draws at 100% of the rated output power. On machines with multiple motors, this is the amperage drawn by the largest motor or sum of all motors and electrical devices that might operate at one time during normal operations.

Full-Load Current Rating at 240V 9 Amps

Circuit Requirements

This machine is prewired to operate on a 240V power supply circuit that has a verified ground and meets the following requirements:

Circuit Type 240V, 60 Hz, Single-Phase
Circuit Size 20 Amps
Plug/Receptacle NEMA 6-20

⚠ WARNING

The machine must be properly set up before it is safe to operate. **DO NOT** connect this machine to the power source until instructed to do so later in this manual.

⚠ WARNING



Incorrectly wiring or grounding this machine can cause electrocution, fire, or machine damage. To reduce this risk, only an electrician or qualified service personnel should do any required electrical work on this machine.

NOTICE

The circuit requirements listed in this manual apply to a dedicated circuit—where only one machine will be running at a time. If this machine will be connected to a shared circuit where multiple machines will be running at the same time, consult with an electrician to ensure that the circuit is properly sized for safe operation.

Grounding Requirements

This machine **MUST** be grounded. In the event of certain types of malfunctions or breakdowns, grounding provides a path of least resistance for electric current to travel—in order to reduce the risk of electric shock.

Improper connection of the equipment-grounding wire will increase the risk of electric shock. The wire with green insulation (with/without yellow stripes) is the equipment-grounding wire. If repair or replacement of the power cord or plug is necessary, do not connect the equipment-grounding wire to a live (current carrying) terminal.

Check with a qualified electrician or service personnel if you do not understand these grounding requirements, or if you are in doubt about whether the tool is properly grounded. If you ever notice that a cord or plug is damaged or worn, disconnect it from power, and immediately replace it with a new one.

For 240V Connection

This machine is equipped with a power cord that has an equipment-grounding wire and NEMA 6-20 grounding plug. The plug must only be inserted into a matching receptacle (see **Figure**) that is properly installed and grounded in accordance with local codes and ordinances.

Extension Cords

We do not recommend using an extension cord with this machine. Extension cords cause voltage drop, which may damage electrical components and shorten motor life. Voltage drop increases with longer extension cords and the gauge smaller gauge sizes (higher gauge numbers indicate smaller sizes).

Any extension cord used with this machine must contain a ground wire, match the required plug and receptacle, and meet the following requirements:

Minimum Gauge Size at 240V 14 AWG
Maximum Length (Shorter is Better) 50 ft.

WARNING

The machine must be properly set up before it is safe to operate. **DO NOT** connect this machine to the power source until instructed to do so later in this manual.

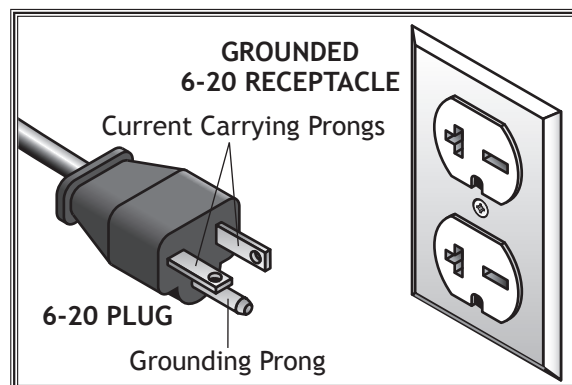
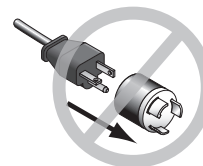


Figure 2. NEMA 6-20 plug & receptacle.

CAUTION



No adapter should be used with the required plug. If the plug does not fit the available receptacle or the machine must be reconnected to a different type of circuit, the reconnection must be made by an electrician or qualified service personnel and it must comply with all local codes and ordinances.

Wiring Diagram



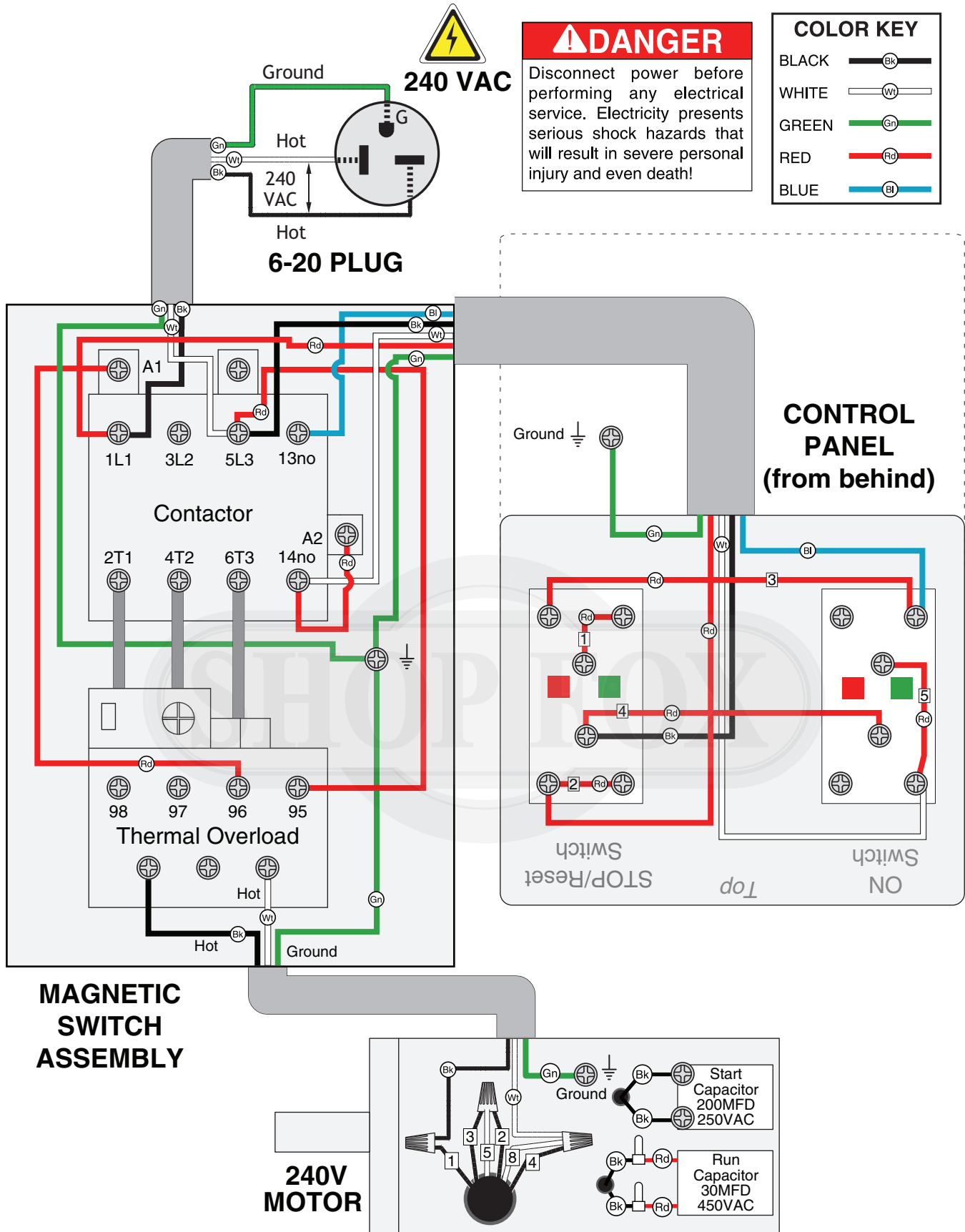
240 VAC

⚠ DANGER

Disconnect power before performing any electrical service. Electricity presents serious shock hazards that will result in severe personal injury and even death!

COLOR KEY

BLACK	
WHITE	
GREEN	
RED	
BLUE	





Model W1741

LIGHTED CONTROLS

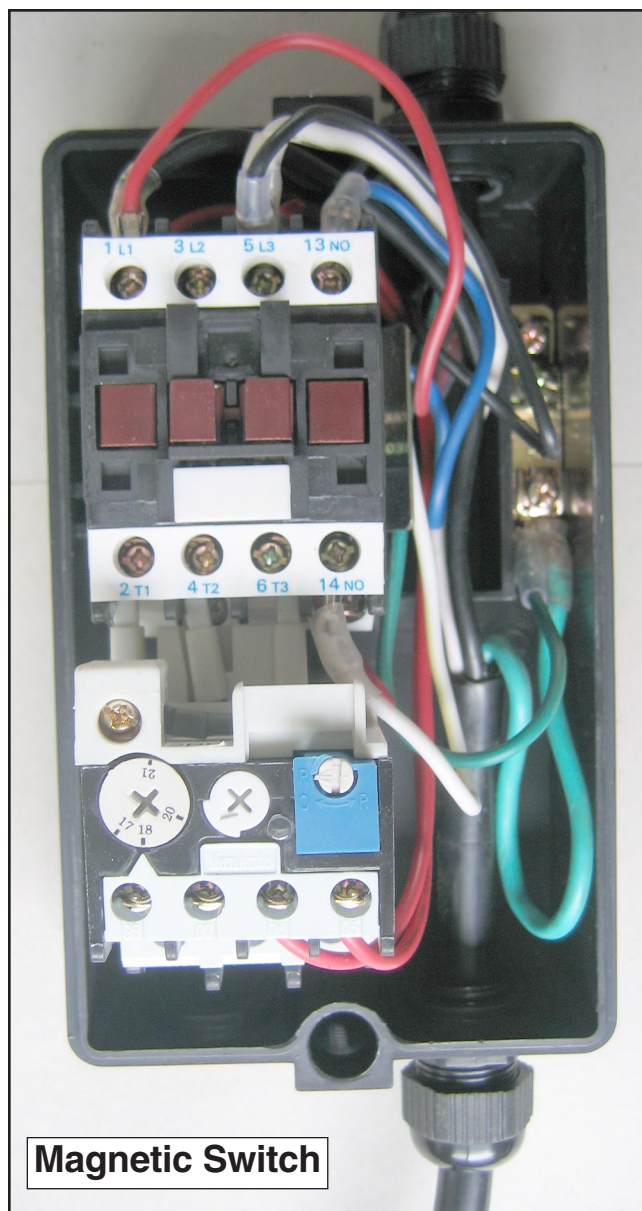
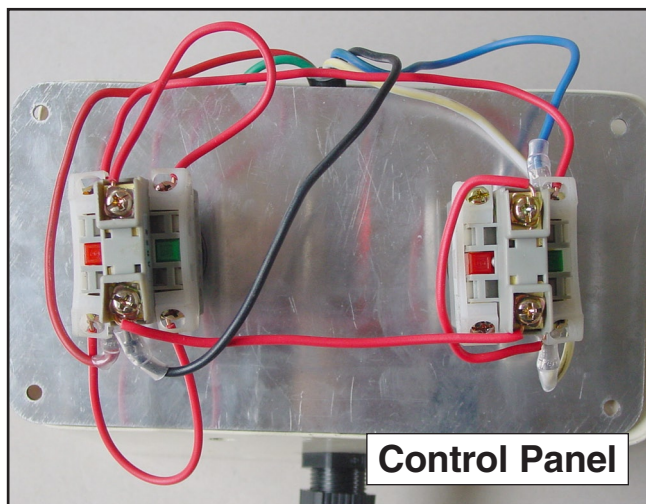
MANUAL UPDATE

Improvements to this machine were made since the manual was originally printed, and this update covers those changes. Keep this update with your owner's manual in case you ever need to refer to it. *If you have questions, contact Tech Support at (360) 734-3482 or by email at tech_support@shopfox.biz.*

Lighted Controls

We added lights in the control panel buttons to indicate when there is power to the machine.

The addition of these lights changes the wiring diagram and two of the electrical components pictures on **Page 40** of the owner's manual.



COPYRIGHT © MAY, 2006 BY WOODSTOCK INTERNATIONAL, INC.





**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE OR FORM WITHOUT
THE WRITTEN APPROVAL OF WOODSTOCK INTERNATIONAL, INC.**

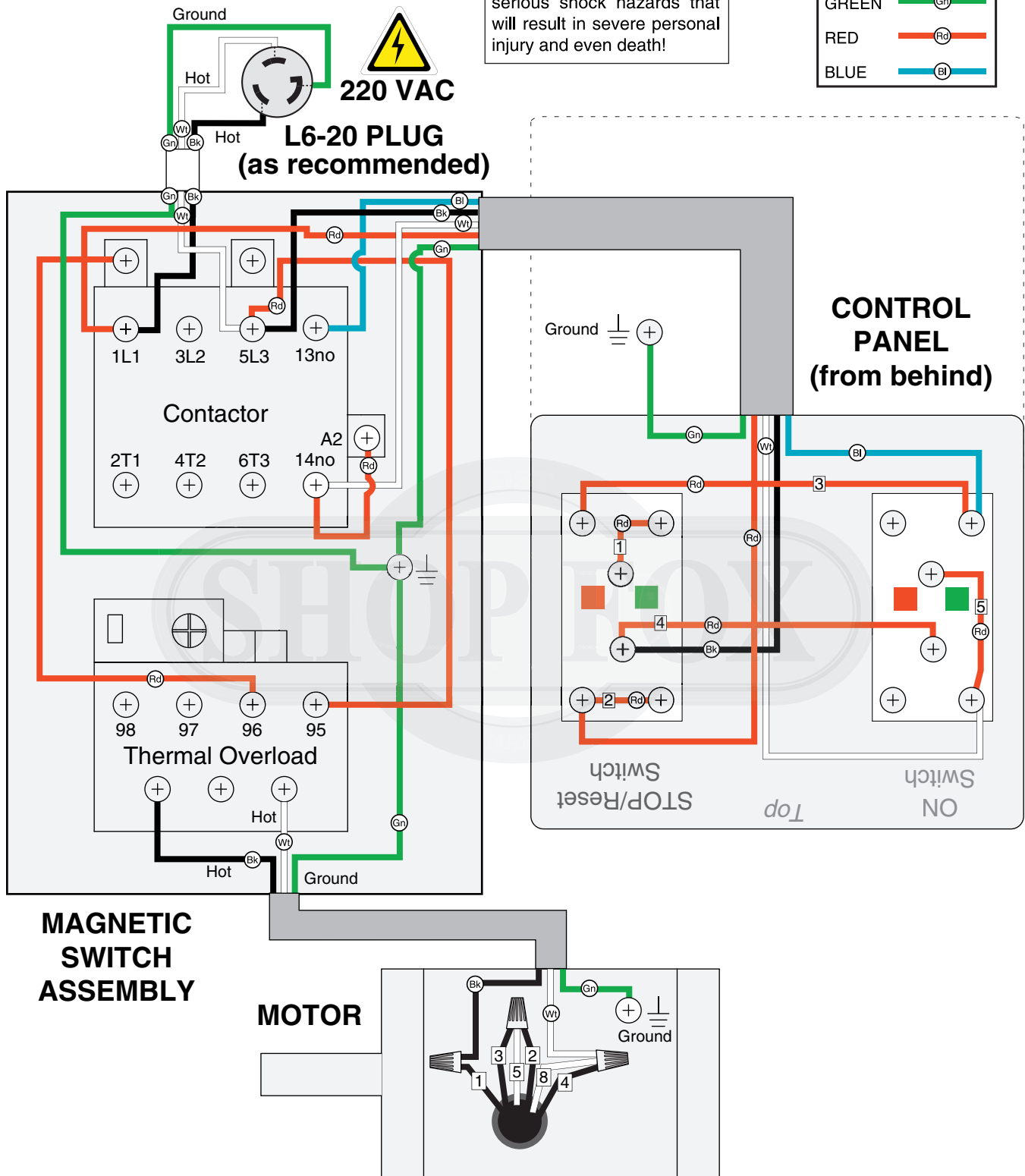
W1741 Wiring Diagram — February, 2007

⚠ DANGER

Disconnect power before performing any electrical service. Electricity presents serious shock hazards that will result in severe personal injury and even death!

COLOR KEY

BLACK	
WHITE	
GREEN	
RED	
BLUE	



Woodstock International, Inc.
P.O. Box 2309
Bellingham, WA 98227



Phone: (800) 840-8420
FAX: (360) 676-1075
www.woodstockinternational.com

Dear Valued Customer,

Your new Shop Fox Model W1741 8" Jointer may or may not have switch buttons with light bulbs inside. If your machine does have these type of switch buttons, the light bulb inside is not intended to be functional with your machine and is not wired as such, or displayed in the wiring diagram in your owner's manual.

The buttons with bulbs start and stop the machine as intended, and they will not hinder the performance of your machine in any way.

Sincerely,
The Woodstock International Quality Control Team

Woodstock International, Inc.
P.O. Box 2309
Bellingham, WA 98227



Phone: (800) 840-8420
FAX: (360) 676-1075
www.woodstockinternational.com

Dear Valued Customer,

Your new Shop Fox Model W1741 8" Jointer may or may not have switch buttons with light bulbs inside. If your machine does have these type of switch buttons, the light bulb inside is not intended to be functional with your machine and is not wired as such, or displayed in the wiring diagram in your owner's manual.

The buttons with bulbs start and stop the machine as intended, and they will not hinder the performance of your machine in any way.

Sincerely,
The Woodstock International Quality Control Team



Model W1741 8" Jointer Manual Update

Why the Update?

The motor is now securely bolted to the inside of the stand for shipping purposes. This update covers the setup needed to install the motor in the stand. Use these instructions first, then proceed with the setup as described in the owner's manual.

Motor Installation

Before mounting the jointer on the stand, the motor must be removed from its shipping position (**Figure 1**) and installed on the motor mounts (**Figure 2**).

To install the motor, do these steps:

1. Turn the stand upside down and unbolt the motor from the stand.
2. Use the fasteners that attach the motor to the stand to attach it to the motor mounts, as shown in **Figure 2**.

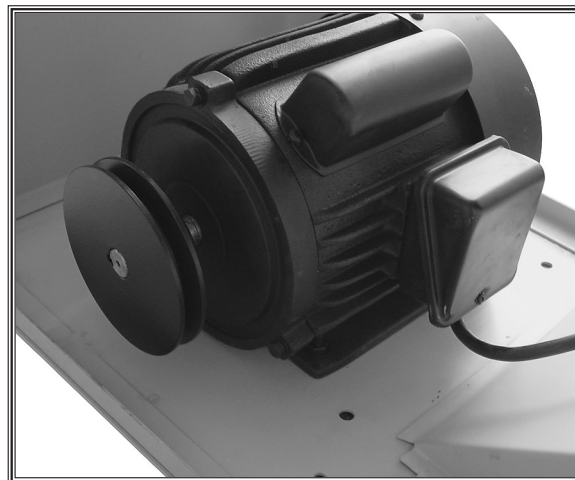


Figure 1. Motor as shipped.



Figure 2. Motor attached to the motor mounts.

COPYRIGHT © APRIL, 2006 BY WOODSTOCK INTERNATIONAL, INC.

**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE OR FORM WITHOUT
THE WRITTEN APPROVAL OF WOODSTOCK INTERNATIONAL, INC.**

#8165TR

Printed in China

Woodstock International, Inc.
P.O. Box 2309
Bellingham, WA 98227



Phone: (800) 840-8420
FAX: (360) 676-1075
www.woodstockinternational.com

Dear Valued Shop Fox Customer,

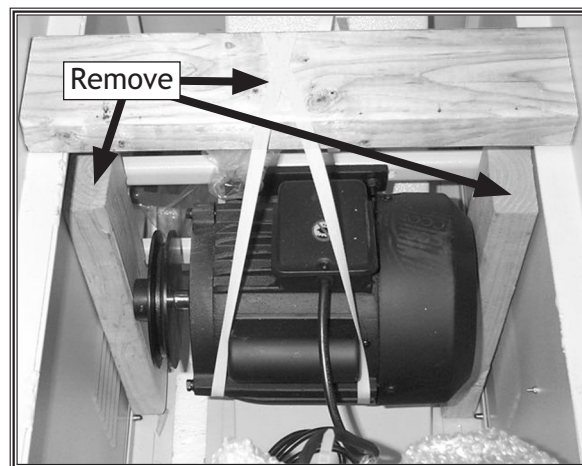
Your new Model W1741 may have wood bracing inside the cabinet to protect the motor and brackets during shipping. This wood bracing must be removed before assembly.

To remove the wood bracing, do these steps:

1. Cut the plastic banding and remove the top 2x4.
2. Remove the screws that hold the two boards in place, then remove the boards.

Your machine is now ready for assembly.

Sincerely,
The Shop Fox Quality Control Team



Woodstock International, Inc.
P.O. Box 2309
Bellingham, WA 98227



Phone: (800) 840-8420
FAX: (360) 676-1075
www.woodstockinternational.com

Dear Valued Shop Fox Customer,

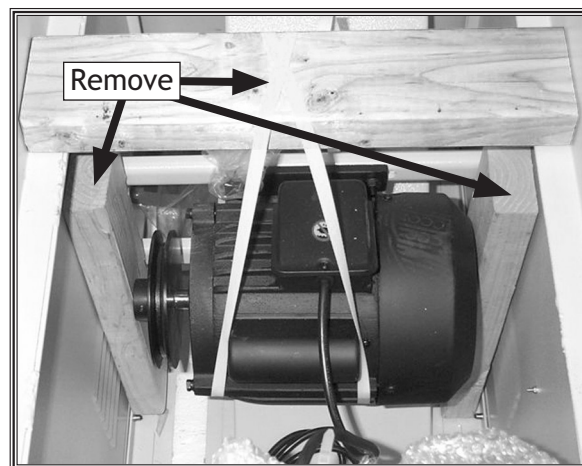
Your new Model W1741 may have wood bracing inside the cabinet to protect the motor and brackets during shipping. This wood bracing must be removed before assembly.

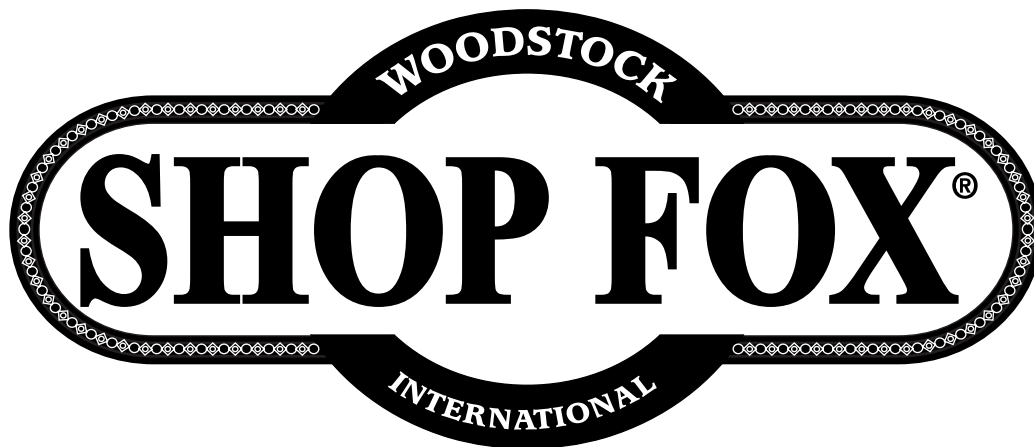
To remove the wood bracing, do these steps:

1. Cut the plastic banding and remove the top 2x4.
2. Remove the screws that hold the two boards in place, then remove the boards.

Your machine is now ready for assembly.

Sincerely,
The Shop Fox Quality Control Team





MODEL W1741 8" JOINTER



OWNER'S MANUAL

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

COPYRIGHT © FEBRUARY, 2006 BY WOODSTOCK INTERNATIONAL, INC.

WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE OR FORM WITHOUT
THE WRITTEN APPROVAL OF WOODSTOCK INTERNATIONAL, INC.

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.

Contents

INTRODUCTION	3
Woodstock Technical Support	3
About Your New Jointer	3
Specifications	4
Controls and Features	5
SAFETY	6
Standard Safety Instructions	6
Additional Safety Instructions for Jointers	8
Avoiding Potential Injuries	9
220V Operation	10
Extension Cords	10
Grounding	10
SET UP	11
Unpacking	11
Items Needed for Set Up	11
Inventory	12
Machine Placement	13
Cleaning Machine	13
Assembly	14
Knife Setting Jig	18
Test Run	19
OPERATIONS	20
General	20
Basic Controls	21
Stock Inspection and Requirements	22
Squaring Stock	23
Surface Planing	24
Edge Jointing	25
Bevel Cutting	26
MAINTENANCE	27
General	27
Cleaning	27
V-Belts	27
Lubrication	27
Maintenance Schedule	27



SERVICE	28
General	28
Inspecting Knives	28
Adjusting/Replacing Knives	29
Checking/Adjusting Table Parallelism	32
Setting Outfeed Table Height	35
Setting Infeed Table Height	36
Calibrating Depth Scale	36
Setting Fence Stops	37
V-Belt	38
Pulley Alignment	39
Electrical Components	40
W1741 Wiring Diagram	41
Troubleshooting	42
Stand Breakdown	44
Stand Parts List	45
Jointer Breakdown	46
Jointer Parts List	47
Warning Label Parts	49
Warranty	50



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 have comments about this manual, please contact us at:

Woodstock International, Inc.
Attn: Technical Documentation Manager
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 W1741 is capable of a wide variety of surface jointing/planing, edge jointing, and beveling operations. The table adjustment levers allow you to make precision table adjustments, the control panel is easily accessible and the built in mobile base makes moving the jointer easy and convenient. The Model W1741 also features parallelogram bed adjustment, a 3HP motor, a 4-knife cutterhead, and an extra tall 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 Width of Cut8"
 Cutterhead Speed 5350 RPM
 Cuts Per Minute.....21,400

Overall Dimensions:

Table Size 8" X $76\frac{3}{8}$ " L
 Height (from floor to table) $32\frac{5}{8}$ "
 Overall Length $76\frac{3}{8}$ "
 Overall Width $23\frac{1}{2}$ "
 Shipping Weight 600 lbs.
 Net Weight 510 lbs.
 Wood Crate Size $81\frac{1}{2}$ " x $25\frac{1}{2}$ " x $12\frac{1}{2}$ "
 Cardboard Box Size 38" x 18" x $27\frac{1}{2}$ "
 Stand Footprint $44\frac{1}{2}$ " x $16\frac{1}{2}$ "
 Cutterhead 4-Knife
 Cutterhead Diameter $3\frac{3}{16}$ "
 Cutterhead Knife Size 8" x $\frac{3}{4}$ " x $\frac{1}{8}$ "

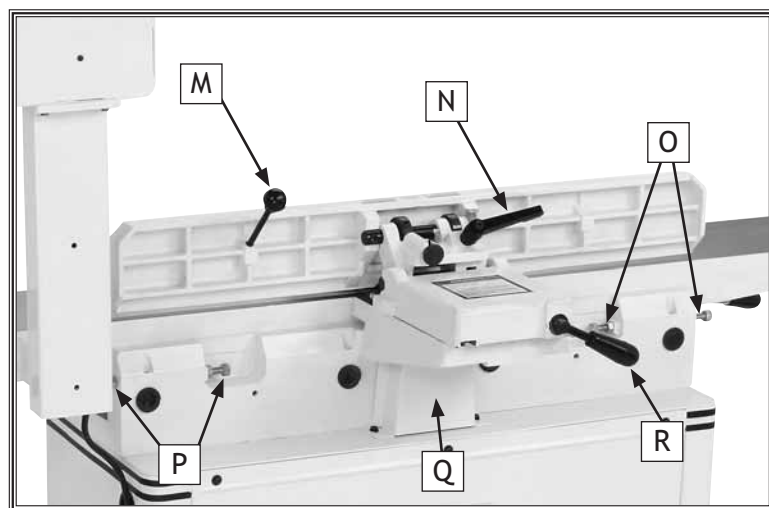
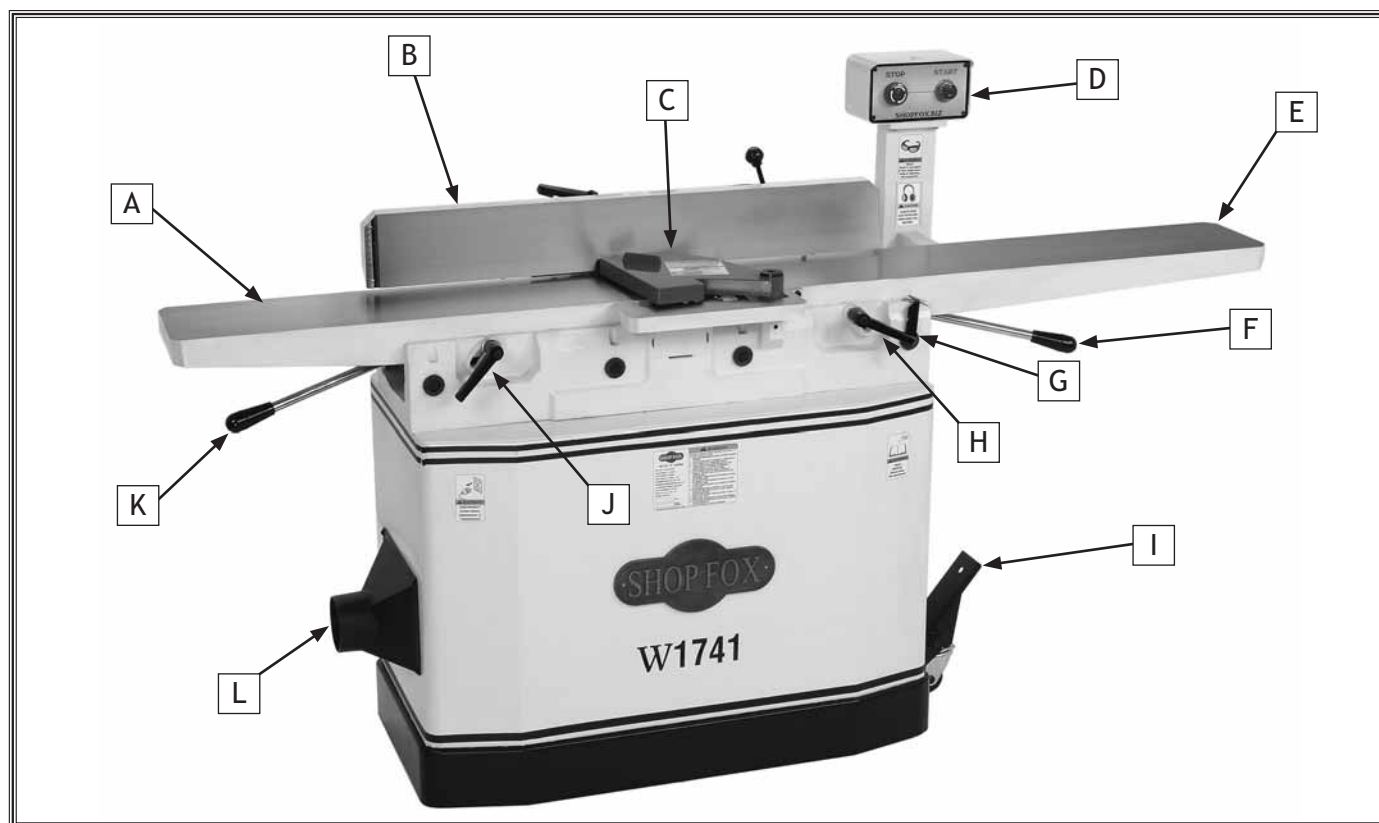
Construction:

Tables Precision Ground Cast Iron
 Fence Assembly..... Cast Iron
 Body Assembly Cast Iron
 Stand One Piece Steel Cabinet
 Guard..... Die Cast Metal
 Bearings..... Shielded and Lubricated

Features:

..... Parallelogram-Style Tables
 Top Mount Switch Controls
 5" Tall Fence
 Included 4" Dust Port
 Included Push Blocks

Controls and Features



- A. Outfeed Table
- B. Fence
- C. Cutterhead Guard
- D. Control Panel
- E. Infeed Table
- F. Infeed Table Adjustment Lever
- G. Cutting Depth Scale
- H. Infeed Table Lock
- I. Mobile Base Lock Pedal
- J. Outfeed Table Lock
- K. Outfeed Table Adjustment Lever
- L. Dust Port
- M. Fence Tilt Handle
- N. Fence Tilt Lock
- O. Outfeed Table Positive Stops
- P. Infeed Table Positive Stops
- Q. Belt Guard
- R. Fence Lock

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.

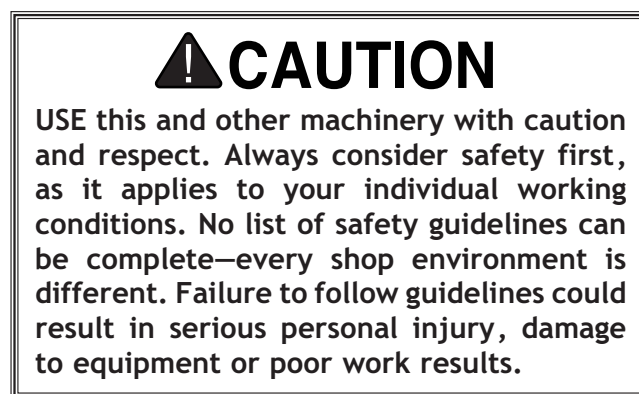
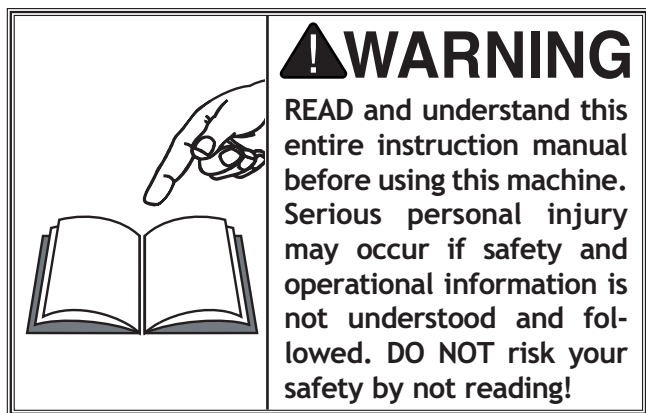
Standard Safety Instructions

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 A NIOSH 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 over-heat 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 1. Correct operator and workpiece position, guard is in place, and push blocks are being used.



Figure 2. Never surface plane without push blocks!



Figure 4. Never stand directly behind the workpiece!



Figure 3. Never plane/edge-joint with the guard removed!



Figure 5. Never joint end grain!

220V Operation

The motor supplied with the Model W1741 is rated at 3 HP and will draw approximately 18 amps at max load during 220V operation.

Connect your machine to a circuit (wire, breaker, plug, receptacle) that is rated for 20 amps.

Also, we recommend using a NEMA-style L6-20 plug and outlet (see **Figure 6**) to connect your machine to power.

We recommend connecting this machine to a dedicated circuit with a verified ground, using the circuit breaker size given. Never replace a circuit breaker with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes.

If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, you may create a fire hazard—consult a qualified electrician to reduce this risk.

Extension Cords

We do not recommend using extension cords. 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.

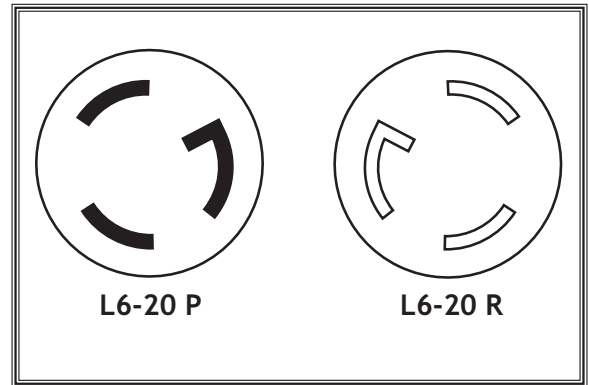
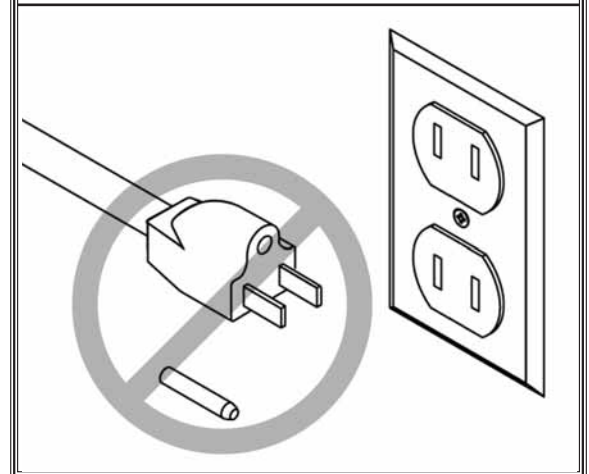


Figure 6. L6-20 220V 3-prong plug and outlet.

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 W1741 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

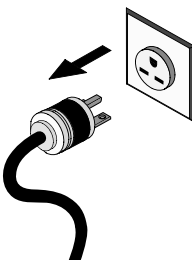
The following items are needed, but not included, to setup your machine:

- People for Lifting Help4
- Straightedge.....1
- Phillips Screwdriver #21
- Wrench or Socket 17mm1
- Wrench or Socket 14mm1
- Wrench or Socket 13mm1



!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 W1741. Lay the components out to inventory them.

Wood Crate: (Figure 7)		Qty
A. Jointer Assembly	1	
B. Carriage	1	
C. Fence	1	
D. Extension Table	1	
E. Push Blocks	2	
F. Cutterhead Guard	1	
G. Hex Wrenches 2.5, 4, 5, 6, 8mm	1 Each	
H. Handle	1	
I. Fence Tilt Lever	1	
J. Open-end Wrench 8/10, 12/14mm	1 Each	
K. Knife Setting Jig (not shown)	1	

Cardboard Box: (Figure 8)		Qty
L. Stand Assembly w/Motor	1	
M. Pedestal Switch	1	
N. Wheel Assembly	1	
O. Belt Guard	1	
P. Dust Port	1	
Q. V-Belt	1	

Assembly Fasteners		Qty
• Hex Bolt M8-1.25 x 50 (Wheel/Stand)	1	
• Flat Washer 8mm (Wheel/Stand)	1	
• Hex Bolts M10-1.5 x 55 (Wheel/Stand)	2	
• Flat Washers 10mm (Wheel/Stand)	2	
• Hex Nuts M10-1.5 (Wheel/Stand)	2	
• Cap Screws M8-1.25 x 25 (Jointer/Stand)	8	
• Lock Washers 8mm (Jointer/Stand)	8	
• Flange Bolts M6-1 x 10 (Belt Guard)	2	
• Hex Nuts M6-1 (Belt Guard)	2	
• Flat Washers 6mm (Belt Guard)	2	
• Cap Screws M6-1 x 20 (Extension Table)	2	
• Cap Screws M10-1.5 x 30 (Carriage)	2	
• Flat Washers 10mm (Carriage)	2	
• Cap Screws M8-1.25 x 30 (Fence)	2	
• Cap Screws M10-1.5 x 25 (Pedestal)	2	
• Lock Washers 10mm (Pedestal)	2	
• Flat Washers 10mm (Pedestal)	2	
• Phillips Screws M5-.8 x 16 (Dust Port)	4	
• Flat Washers 5mm (Dust Port)	4	

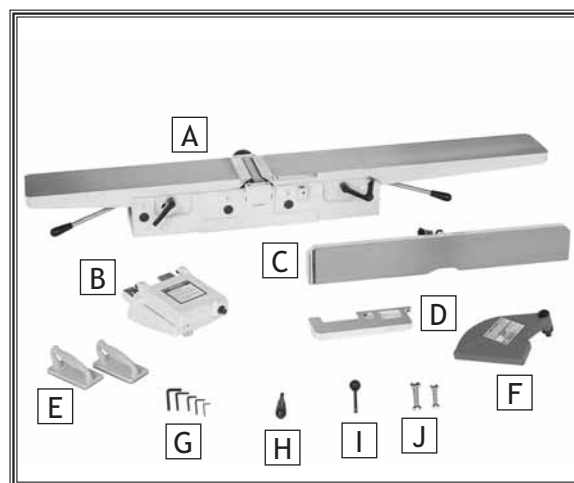


Figure 7. Wood crate inventory.

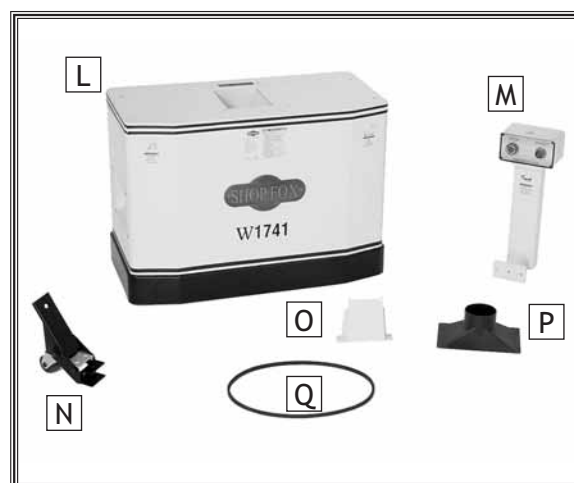


Figure 8. Cardboard box inventory.

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.

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

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.

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.

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.

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!

Assembly

To attach the wheel, do these steps:

1. Carefully lay the stand on its side so you can access the underside.
2. Use the M8-1.25 x 50 hex bolt and 8mm flat washer to bolt the wheel assembly to the stand, as shown in **Figure 9**.
3. Use the two M10-1.5 x 55 hex bolts, 10mm flat washers, and M10-1.5 hex nuts to further secure the wheel assembly to the stand, as shown in **Figure 10**.
4. Turn the stand rightside up and remove the back cover.



Figure 9. Bolting wheel assembly to stand.



CAUTION

The jointer is very heavy. The next step requires 4 strong people or power lifting equipment to lift the jointer.

5. Lift the jointer onto the stand and align the mounting holes.
6. Use the provided eight M8-1.25 x 25 cap screws and 8mm lock washers to secure the jointer to the stand, as shown in **Figure 11**.



Figure 10. Securing wheel assembly to stand.



Figure 11. Securing the jointer to stand.

Continued on next page 

7. Loosen the motor bracket bolts shown in **Figure 12**.
8. Put the V-belt on the motor pulley, then roll it onto the cutterhead pulley, as shown in **Figure 13**.
9. Check the alignment of the pulleys to make sure the V-belt is straight up and down.
 - If the pulleys are aligned, go to **Step 13**.
 - If the pulleys are NOT aligned, follow **Steps 10-12**.
10. Remove the V-belt and loosen the motor mount bolts.
11. Shift the motor horizontally as needed to align the pulleys, and tighten the motor mount bolts.
12. Reinstall the V-belt on the pulleys.
13. Pull down on the motor with one hand to keep tension on the V-belt, and tighten the motor bracket bolts with your other hand.

Note: *DO NOT use a mechanical device to push the motor down farther than you can by hand or you will overtighten your V-belt, which will lead to shortened bearing life in the motor or cutterhead.*

14. Use the two M6-1 x 10 flange bolts, M6-1 hex nuts, and 6mm flat washers to install the belt guard, as shown in **Figure 14**.
15. Replace the cover on the back of the jointer stand.

CAUTION

The belt guard **MUST** be installed before operating the jointer or the moving V-belt will be exposed, creating an entanglement hazard at the back of the jointer.

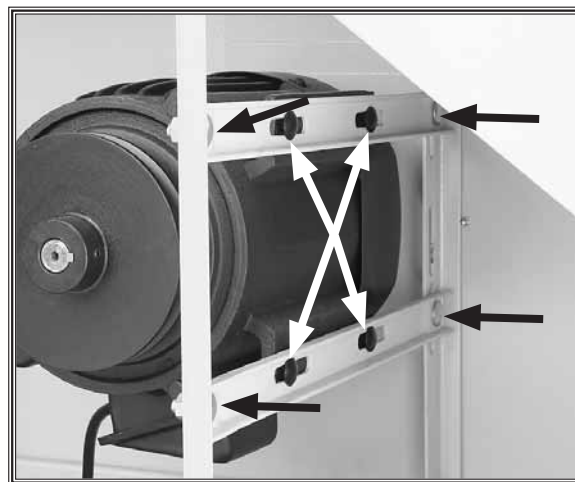


Figure 12. Motor bracket bolts (black arrows) and motor mount bolts (white arrows).

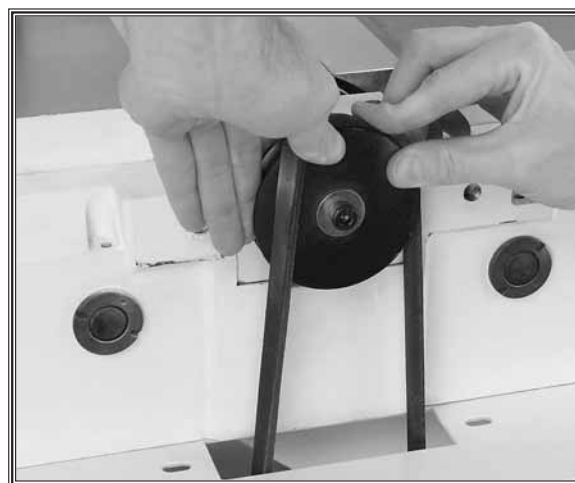


Figure 13. Rolling the V-belt onto the cutterhead pulley.

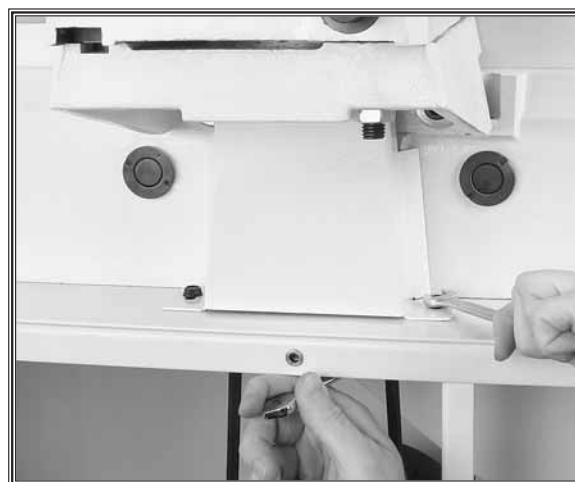


Figure 14. Installing the belt guard.

Continued on next page 

16. Use the two M6-1 x 20 cap screws to attach the extension table to the front of the jointer, as shown in **Figure 15**, but do not fully tighten the cap screws yet.
17. Using a straightedge, make the extension table flush with the infeed table, then tighten the two cap screws to secure the extension table in place.

NOTICE

The outfeed table **MUST** be level with the knives at their highest point during rotation or else 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.

18. Place a straightedge on the outfeed table so it extends over the cutterhead.
19. Carefully rotate the cutterhead pulley and notice if the knife contacts the straightedge when the knife is at its highest point in the rotation (top dead center or TDC), as shown in **Figure 16**.
 - The knife will barely touch the straightedge when the outfeed table is set correctly. If the outfeed table is set correctly, continue with the next step.
 - If the knife lifts the straightedge or does not contact the straightedge, the outfeed table must be adjusted. Do the procedure given in **Setting Outfeed Table Height** on **Page 35**, then continue with the next step in this section.
 - If one knife is even with the outfeed table but other knives are not, then the knife height must be adjusted. Refer to **Adjusting/Replacing Knives** on **Page 30**.
20. Use the provided two M10-1.5 x 30 cap screws and two 10mm flat washers to attach the fence carriage to the back of the jointer, as shown in **Figure 17**.
21. Mount the lock handle on the carriage.

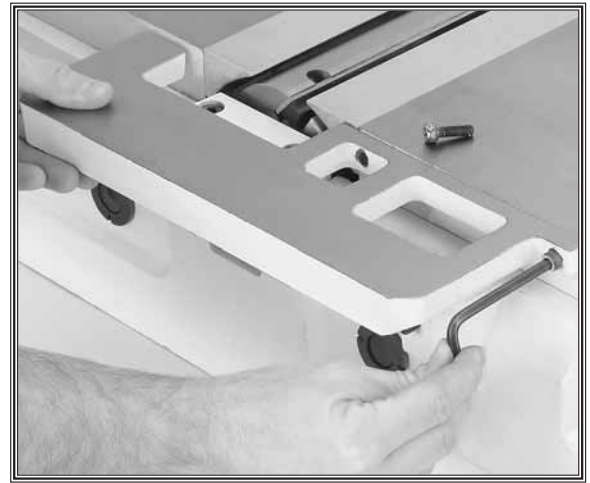


Figure 15. Attaching extension table to jointer.

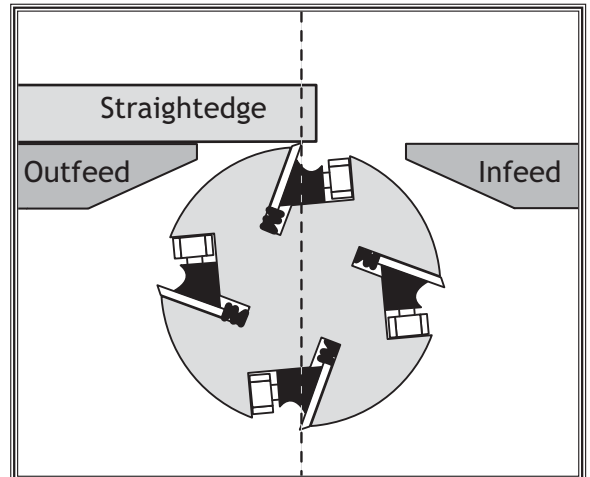


Figure 16. Using a straightedge to make sure outfeed table is level with knives at their highest point of rotation (TDC).

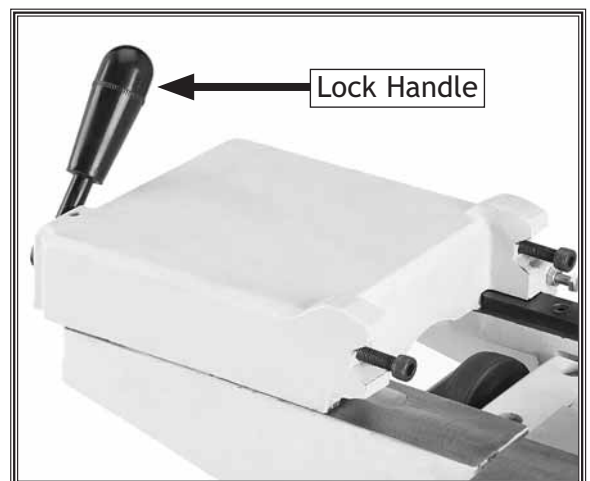


Figure 17. Fence carriage mounted on the back of the jointer.

Continued on next page 

22. Attach the fence to the carriage with the two M8-1.25 x 30 cap screws, as shown in **Figure 18**.
23. Install the tilt lever in the fence (**Figure 19**).
24. Insert the shaft of the cutterhead guard into the hole at the front of the infeed table, making sure that the flat part of the shaft faces the set screw.
25. Tighten the setscrew against the shaft (see **Figure 20**) to secure the cutterhead guard in place.

WARNING

The cutterhead guard is a critical safety feature on this machine—you **MUST** install and verify that it is working as intended before using the jointer! Failure to do this will greatly increase the chances of a serious injury when operating the jointer.

26. Test that the cutterhead guard is working correctly by pulling it back and letting go. The cutterhead guard should quickly spring back over the cutterhead when you do this.
 - If the guard does not quickly spring back over the cutterhead when you perform this test, then remove it and repeat **Steps 24-26**. Do not continue with the assembly until the cutterhead guard is working correctly.



Figure 18. Attaching fence to carriage.



Figure 19. Installing the tilt lever.



Figure 20. Securing the cutterhead guard.

27. Use the two M10-1.5 x 25 cap screws, 10mm lock washers, and 10mm flat washers to attach the pedestal switch to the back of the jointer, as shown in **Figure 21**.
28. Use the four M5-.8 x 16 Phillips head screws and 5mm flat washers to install the dust port on the jointer stand, as shown in **Figure 22**.

⚠ CAUTION

DO NOT operate the Model W1741 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.

Recommended CFM at Dust Port: 400 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 Y's, 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.

Knife Setting Jig

Assemble the knife setting jig as shown in **Figure 23**.



Figure 21. Attaching pedestal switch to the back of the jointer.



Figure 22. Attaching dust port to jointer stand.

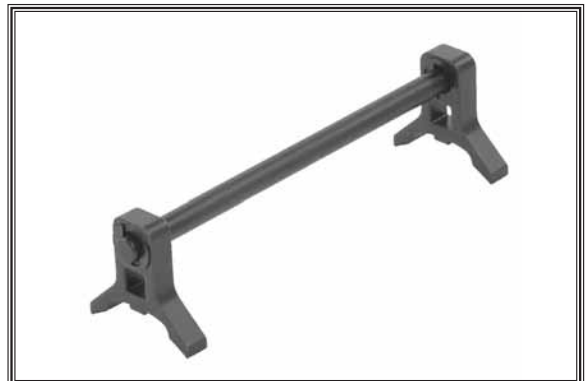


Figure 23. Knife setting jig assembly.

Test Run

Complete this process once you have familiarized yourself with all instructions in this manual.

To test run the jointer, 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 42** to troubleshoot/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 W1741 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



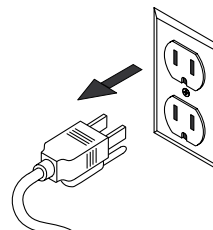
READ and understand this entire instruction manual before using this machine. Serious personal injury may occur if safety and operational information is not understood and followed. **DO NOT** risk your safety by not reading!

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.

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.

START Button: Starts motor only if the STOP button is in the out position (**Figure 24**).

Table Movement: To move the infeed table, loosen the table lock (**Figure 25**), move the table with the table lever, then tighten the table lock. The infeed table will only move through the preset range of the positive stops. To adjust the infeed table positive stops refer to **Setting Infeed Table Height** on **Page 36**.

The outfeed table is preset with positive stops so no range of movement is allowed (if it gets accidentally unlocked it will not move). To adjust the outfeed table positive stops refer to **Setting Outfeed Table Height** on **Page 35**.

Fence Movement: The fence has a lock handle that keeps it in position (**Figure 26**). To move the fence, loosen the lock handle and slide the fence where needed.

Fence Tilting: The tilt lock (**Figure 26**) secures the fence at any position in the available range. The plunger locks into an indexing ring to easily set 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.

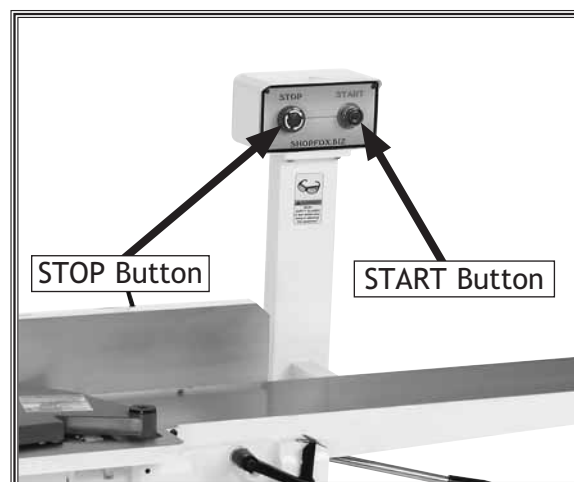


Figure 24. START/STOP button locations.

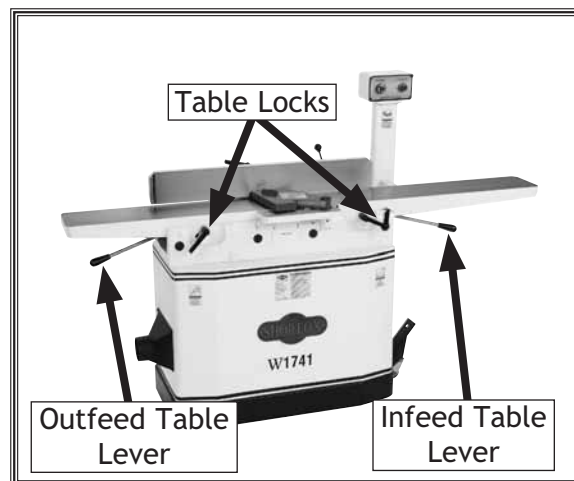


Figure 25. Table control locations.

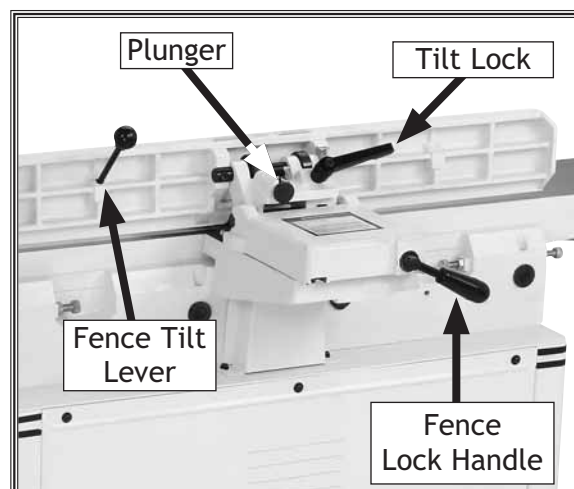


Figure 26. Fence lock, tilt lock and stop block locations.

Stock Inspection and Requirements

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

- **DO NOT joint or surface plane stock that contains loose 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 27).

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 28 & 29) before edge jointing or surface planing, or it may break or kick back during the operation!**

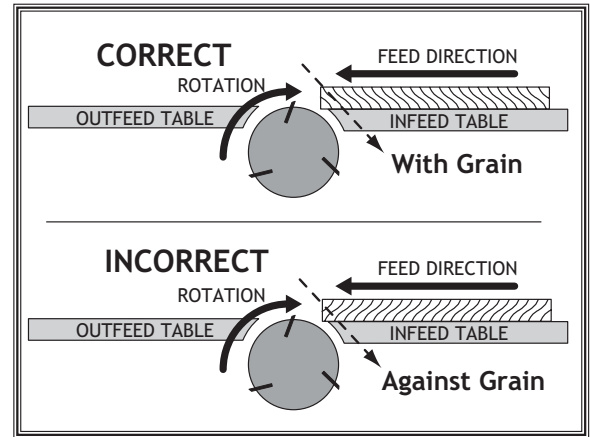


Figure 27. Correct setting for grain alignment.

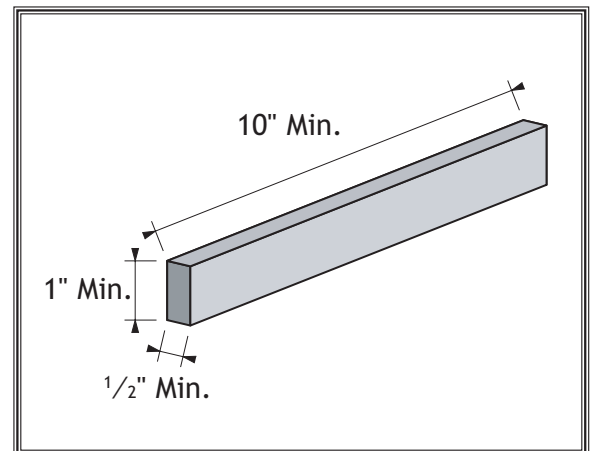


Figure 28. Minimum dimensions for edge jointing.

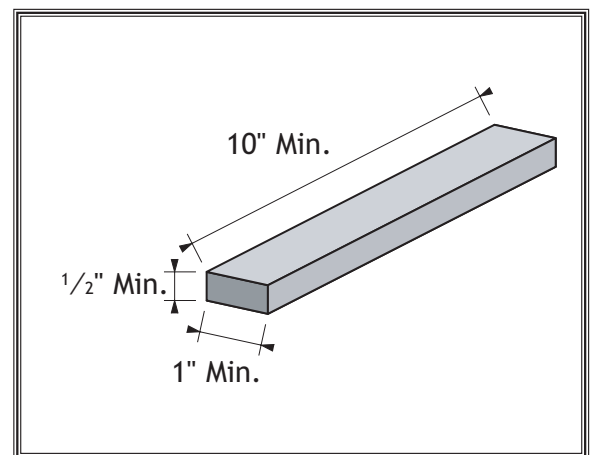


Figure 29. Minimum dimensions for surface planing.

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 30).
2. **Surface Plane On a Thickness Planer:** The opposite face of the workpiece is surface planed flat with a thickness planer (Figure 31).
3. **Edge Joint On The Jointer:** The concave edge of the workpiece is jointed flat with the jointer (Figure 32).
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 33).

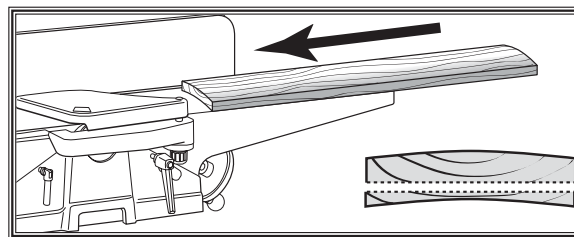


Figure 30. Surface plane on the jointer.

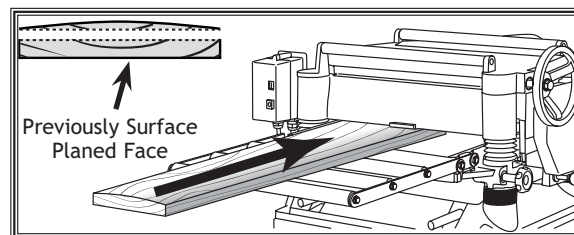


Figure 31. Surface plane on a thickness planer.

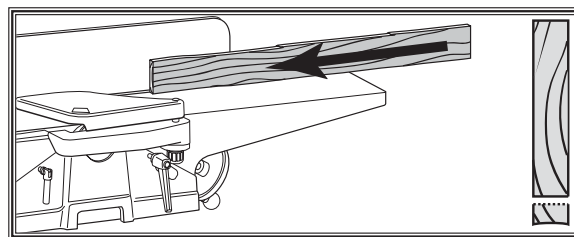


Figure 32. Edge joint on the jointer.

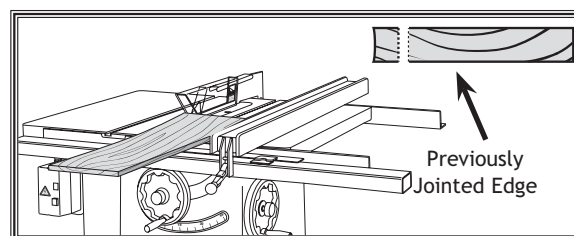


Figure 33. Rip cut on a table saw.

Surface Planing

The purpose of surface planing on the jointer is to make one flat face on a piece of stock (see **Figures 34 & 35**) 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 below. 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 22**.
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 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 34**).

Note: When 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 34. Typical surface planing operation.

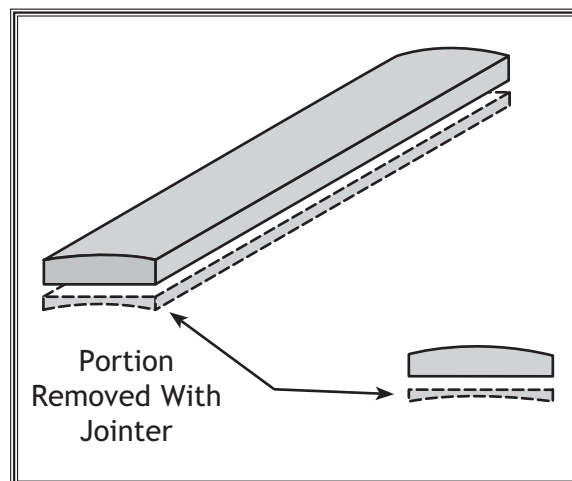


Figure 35. Illustration of surface planing results.

! 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 36 & 37**) 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 22**.
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 37**) 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 36**).

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 if 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 36. Typical edge jointing operation.

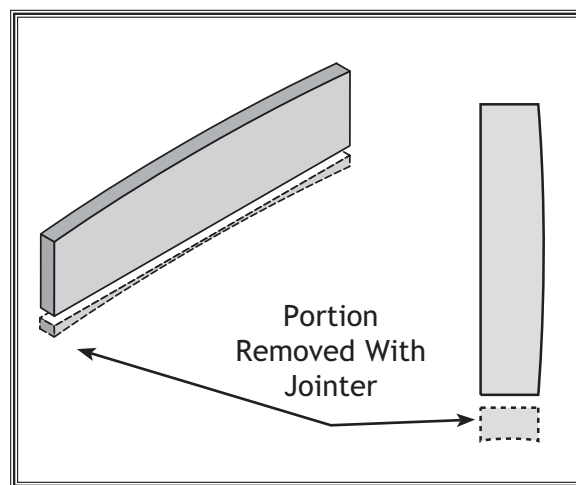


Figure 37. Illustration of edge jointing results.

Bevel Cutting

The purpose of bevel cutting is to cut a specific angle into the edge of a workpiece (see **Figures 38 & 39**).

The Model W1741 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 22**.
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 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 38. Typical bevel cutting operation.

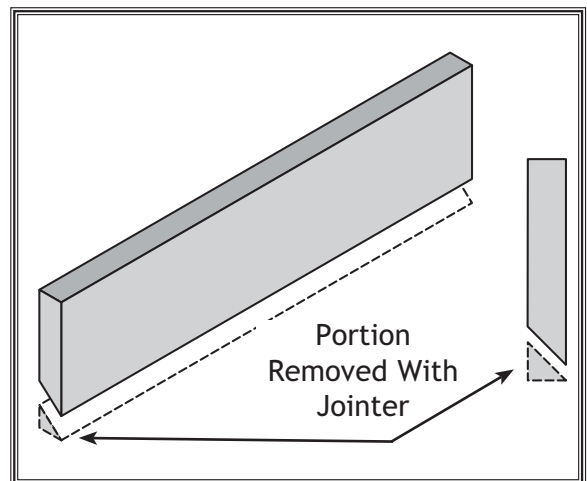


Figure 39. Illustration of bevel cutting results.

MAINTENANCE

General

Regular periodic maintenance on your **SHOP FOX®** Model W1741 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-belt.
- Any other condition that could hamper the safe operation of this machine.

Cleaning

Cleaning the Model W1741 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.

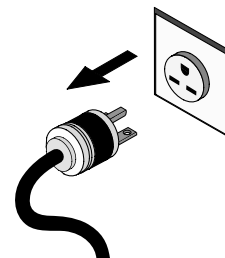
Protect the unpainted cast iron surfaces on the table by wiping the table clean after every use—this ensures moisture from wood dust does not remain on bare metal surfaces.

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

V-Belts

To ensure optimum power transmission from the motor to the blade, the V-belt must be in good condition (free from cracks, fraying and wear) and properly aligned and tensioned (refer to the instructions on **Page 38**).

! 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.

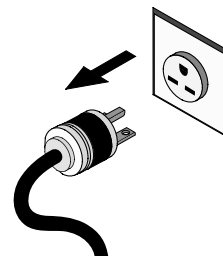
Inspecting Knives

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, at each of the straightedge positions shown in **Figure 40**.
 - 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

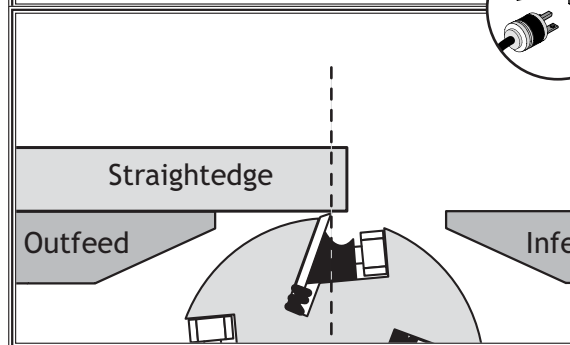
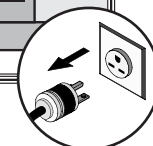
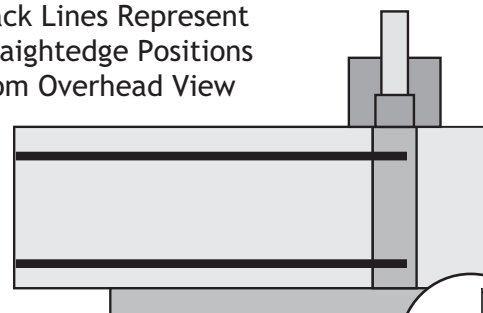


Figure 40. Checking knife height with a straightedge.

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 33**) and the outfeed table height must be properly set (**Setting Outfeed Table Height on Page 35**).

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 40**. 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 35** 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 41**, 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. Also, for the knife setting jig to work correctly, the outfeed table must be parallel with the cutterhead.

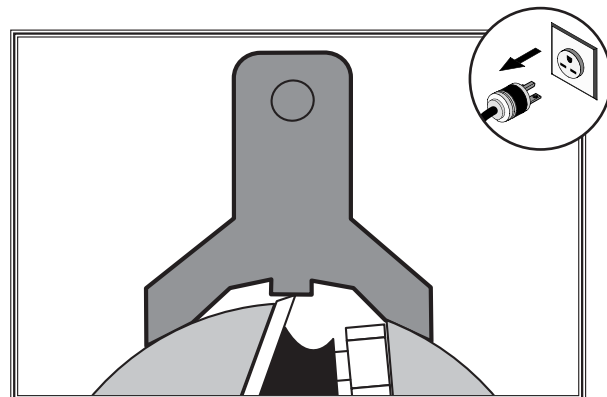


Figure 41. Using knife setting jig to set knife height.

The Model W1741 comes with both jack screws and springs inside the cutterhead to provide two options for adjusting the knives (see **Figure 42**).

Note: Only one of these options is needed to set the knives—**Step 5** gives the details.

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 back 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 (see **Figure 43**), starting in the middle, and alternating back and forth until all of the gib bolts are loose, but not falling out.

First Time Only

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.

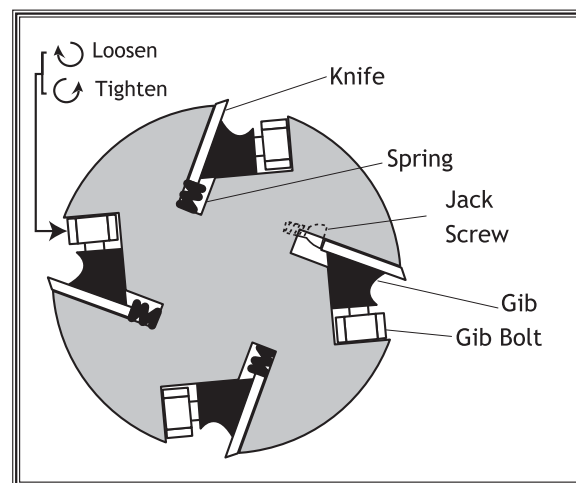


Figure 42. Cutterhead profile diagram.

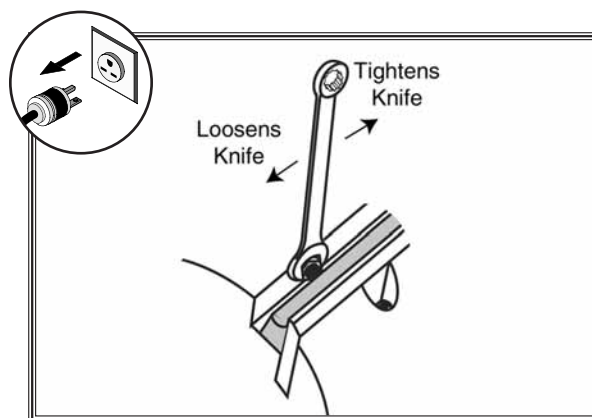


Figure 43. Gib bolt loosening/tightening direction.

7. Adjusting the knife heights:

Jack Screws: Using a 3mm hex wrench, find the jack screws through the access holes in the cutterhead (**Figure 44**) 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.

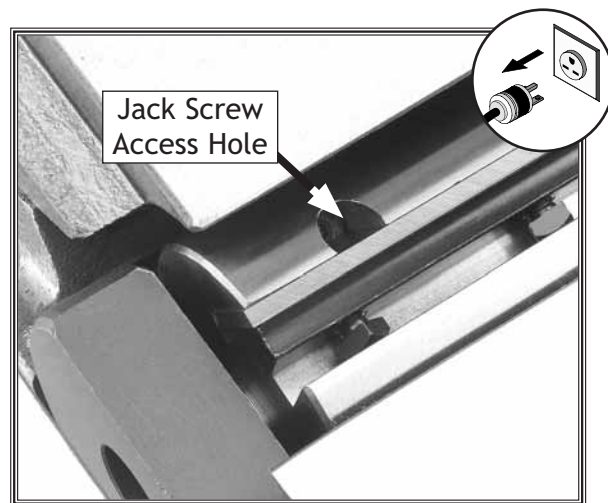


Figure 44. Jack screw access hole.

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 45**). Repeat this step on the rest of the knives.

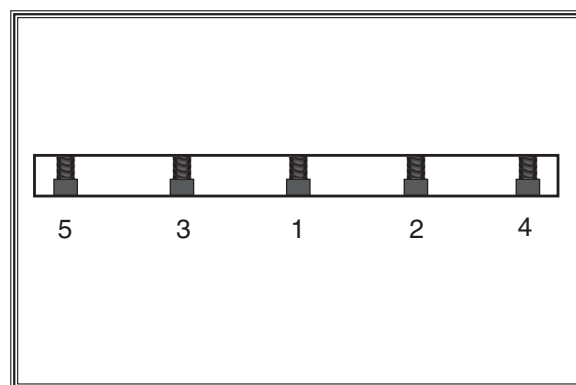


Figure 45. Gib bolt tightening sequence.

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 back 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 46**).
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 47** (rotate the cutterhead if necessary).
5. Place the straightedge in the positions shown in **Figure 48**. 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.



Figure 46. Table positive stop bolts.

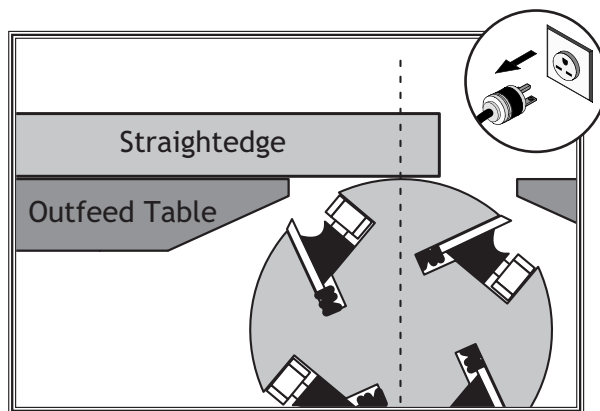


Figure 47. Adjusting outfeed table even with cutterhead body.

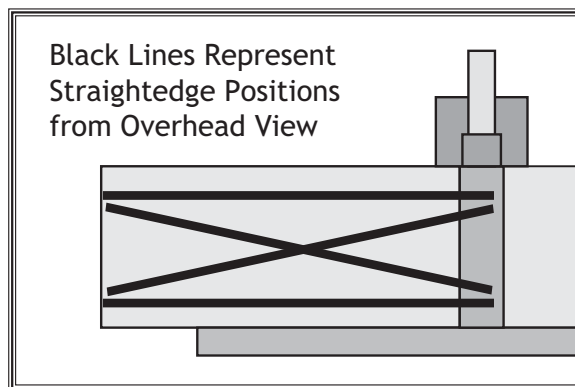


Figure 48. Straightedge positions for verifying if outfeed table is parallel with cutterhead.

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.

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 49**.
4. Place the straightedge in the positions shown in **Figure 50**. 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.

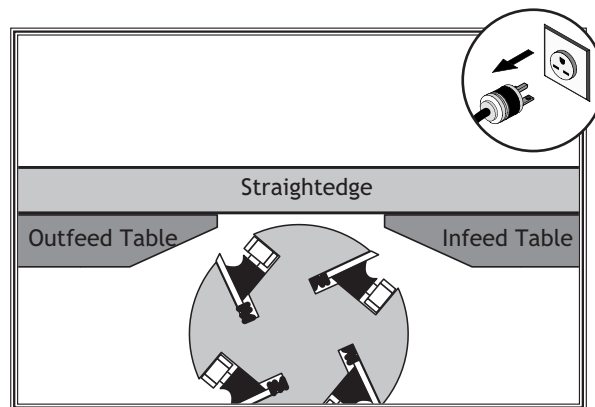


Figure 49. Infeed and outfeed tables set evenly.

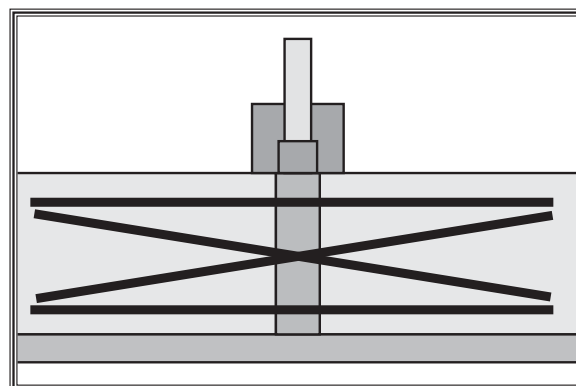


Figure 50. Straightedge positions for checking infeed/outfeed parallelism.

Adjusting Table Parallelism

For safe and proper cutting results, the tables must be parallel with 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 the eccentric bushing is 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 next steps are intended to be performed in succession with the same steps for 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 47** (rotate the cutterhead if necessary).
2. Remove the set screw from each of the four eccentric bushings (**Figure 51**) 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 48**, 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 49**.
7. Place the straightedge in one of the positions shown in **Figure 50**, 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 29**).
11. Reinstall the cutterhead guard and fence.

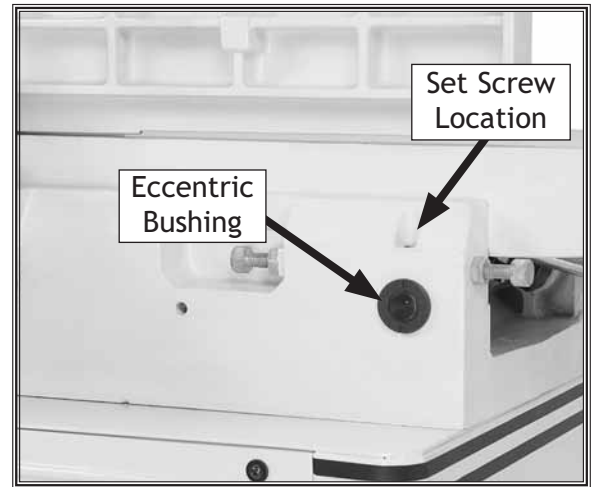


Figure 51. Eccentric bushing and set screw location.

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.

Setting the outfeed table requires some type of feeler gauge to get the height correct. Because a 0.062" ($1/16$ ") feeler gauge may be hard to find, you may need to stack two feeler gauges to make up this thickness.

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 46**).
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" ($1/16$ ") above the cutterhead body, as determined by using the feeler gauges (see **Figure 52**).
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 46**).
7. Set the knife heights to the new outfeed table height.

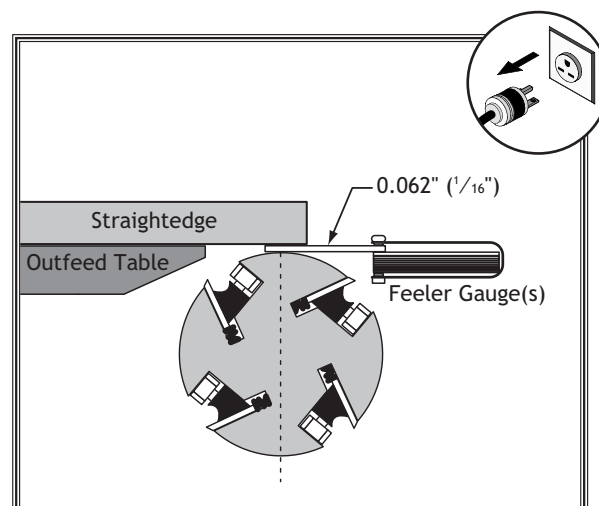


Figure 52. Using feeler gauge(s) to set outfeed table height.

Setting Infeed Table Height

The infeed table on the Model W1741 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 53**) controls the top or bottom range of the table movement. The jam nut locks the positive stop bolt in position so it will not move during operation.

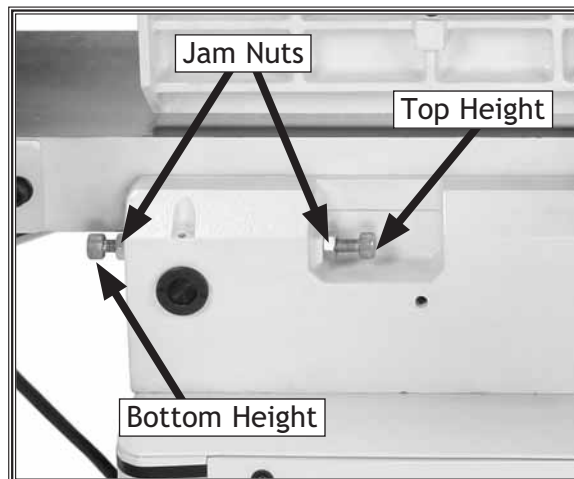


Figure 53. Positive stop bolts for infeed table.

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 54**.
4. Using a screwdriver, adjust the scale pointer to "0" (**Figure 55**), then reset the infeed table positive stops.

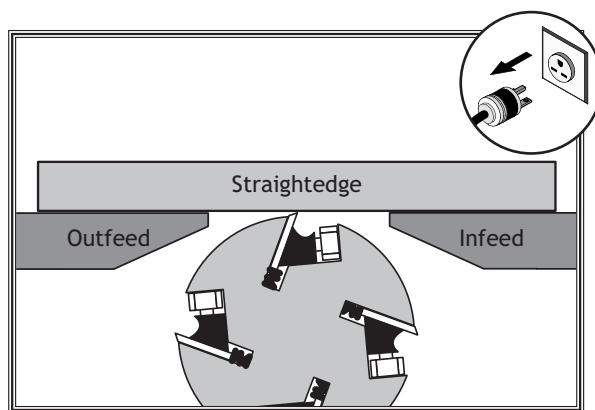


Figure 54. Infeed table even with outfeed table.

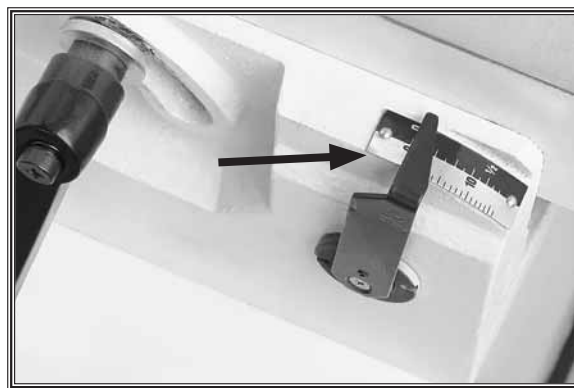


Figure 55. Depth scale adjusted to "0" position.

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 56**) onto the positive stop bolts, using a 45° square as a gauge.
2. Loosen the jam nut on the 45° inward positive stop bolt shown in **Figure 56**.
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. Loosen the set screw in the plunger lock collar shown in **Figure 57**, and loosen the fence tilt lock.
2. Using a 90° square, adjust the fence to the 90° position, as shown in **Figure 58**.
3. Tighten the set screw in the plunger lock collar.
4. Adjust the indicator (if necessary) to 0° to calibrate the fence tilt scale.

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

1. Loosen the fence tilt lock, and position the fence against the 45° outward positive stop bolt.
2. Loosen the jam nut on the 45° outward fence positive stop bolt (**Figure 59**).
3. Adjust the 45° outward positive stop bolt until the fence is exactly 45° outward while resting on the bolt, as shown in **Figure 59**.
4. Retighten the jam nut loosened in **Step 2**.

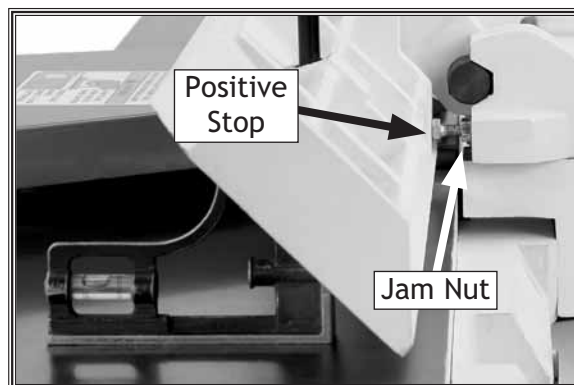


Figure 56. Fence adjusted 45° inward.

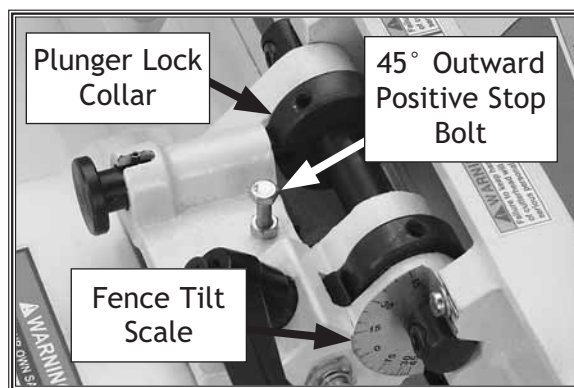


Figure 57. Fence controls.



Figure 58. Adjusting fence to 90°.

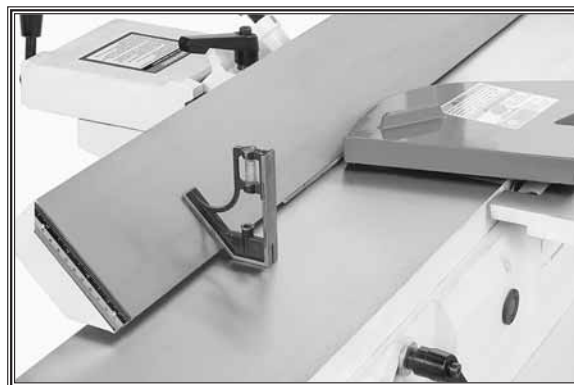


Figure 59. Adjusting fence 45° outward.

V-Belt

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

V-belt removal and replacement is simply a matter of loosening the motor bracket bolts, rolling the belt off of the pulleys, rolling the new one on, then retensioning the belt and tightening the motor bracket bolts.

To replace the V-belts, do these steps:

1. DISCONNECT JOINTER FROM POWER SOURCE!
2. Open the back cover.
3. Loosen the motor bracket bolts shown in **Figure 60**.
4. Roll off the old V-belt and roll on the new V-belt, as shown in **Figure 61**.
5. Check the alignment of the pulleys to make sure the V-belt is straight up and down.
 - If the pulleys are aligned, go to **Step 9**.
 - If the pulleys are NOT aligned, follow **Steps 6-8**.
6. Remove the V-belt and loosen the motor mount bolts.
7. Shift the motor horizontally as needed to align the pulleys, and tighten the motor mount bolts.
8. Reinstall the V-belt on the pulleys.
9. Pull down on the motor with one hand to keep tension on the V-belt, and tighten the motor bracket bolts with your other hand.

Note: DO NOT use a mechanical device to push the motor down farther than you can by hand or you will overtighten your V-belt, which will lead to shortened bearing life in the motor or cutterhead.

11. Reinstall the belt guard.
12. Replace the cover on the back of the jointer stand.

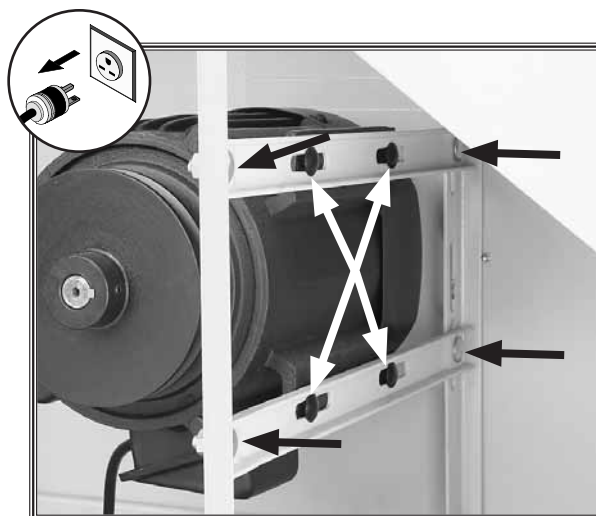


Figure 60. Motor bracket bolts (black arrows) and motor mount bolts (white arrows).

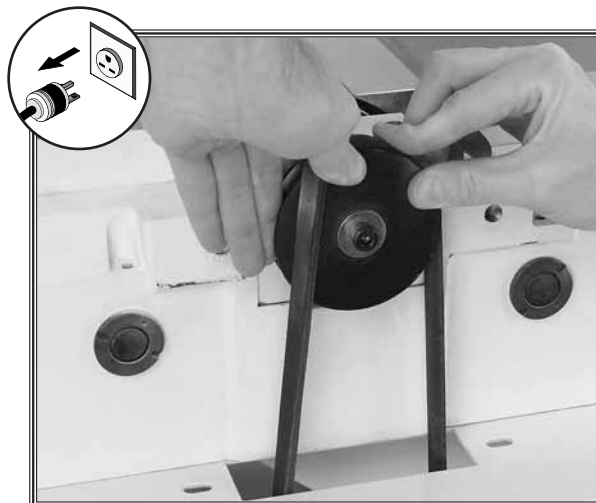


Figure 61. Rolling the V-belt onto the cutterhead pulley.

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 bolts, 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 back cover and remove the belt guard.
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 62**).
 - If the pulleys are aligned, go to **Step 8**.
 - If the pulleys are NOT aligned, do **Steps 4-7**.
4. Loosen the motor mount bolts shown in **Figure 63**.
5. Shift the motor horizontally as needed to align the motor pulley with the cutterhead pulley.
6. Tighten the motor mount bolts.
7. Close the back cover and reinstall the belt guard.

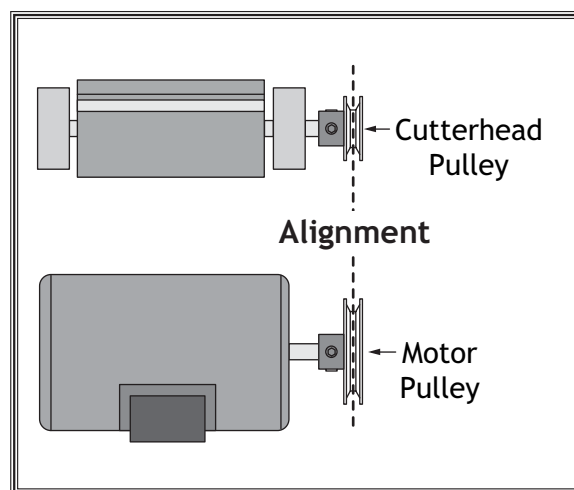


Figure 62. Pulleys aligned.

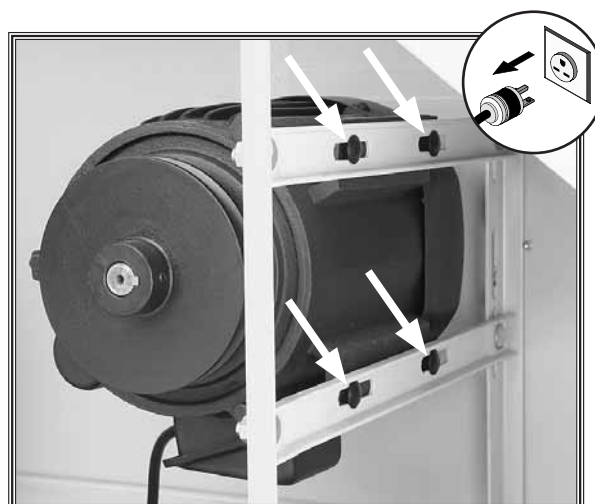
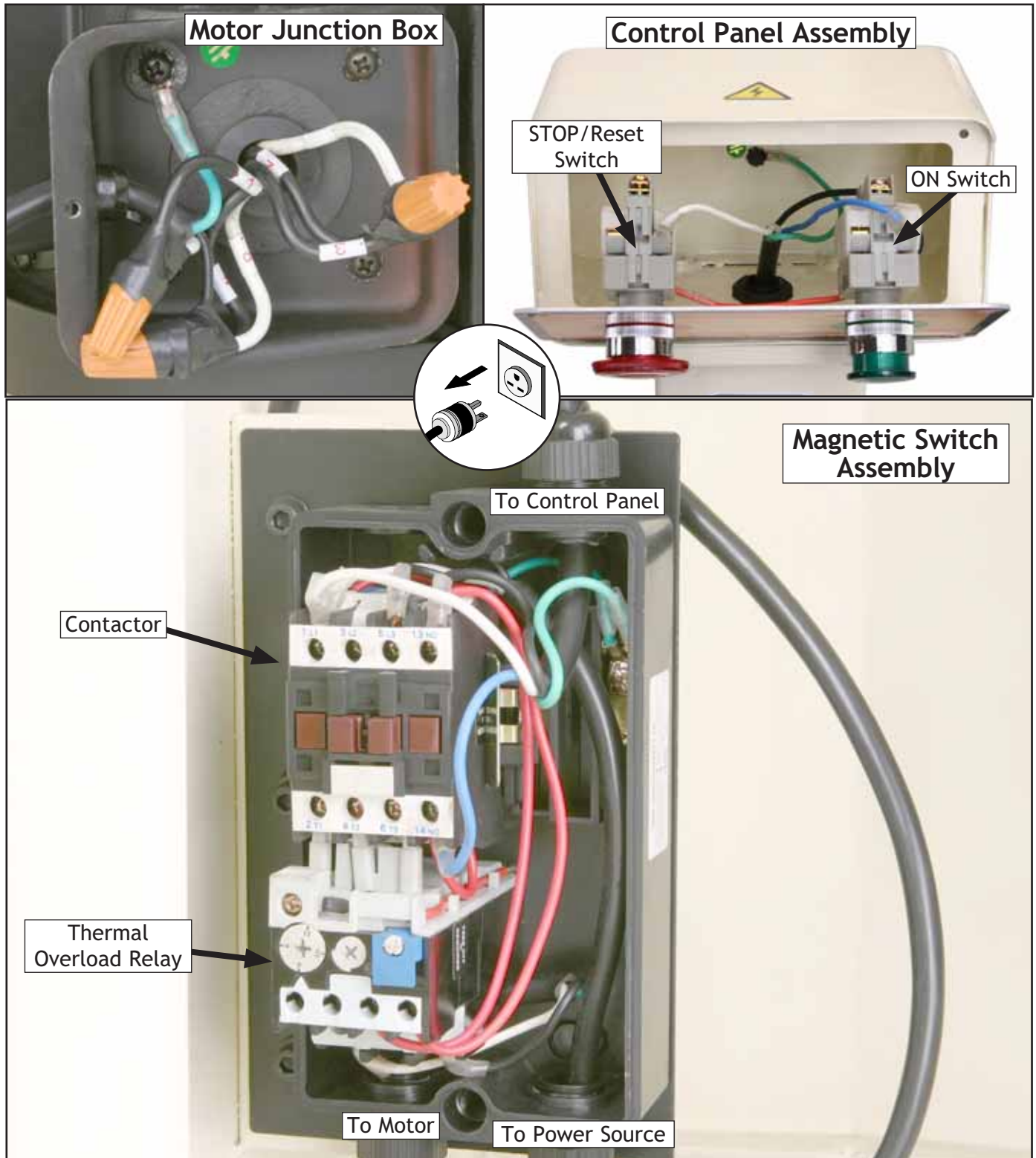
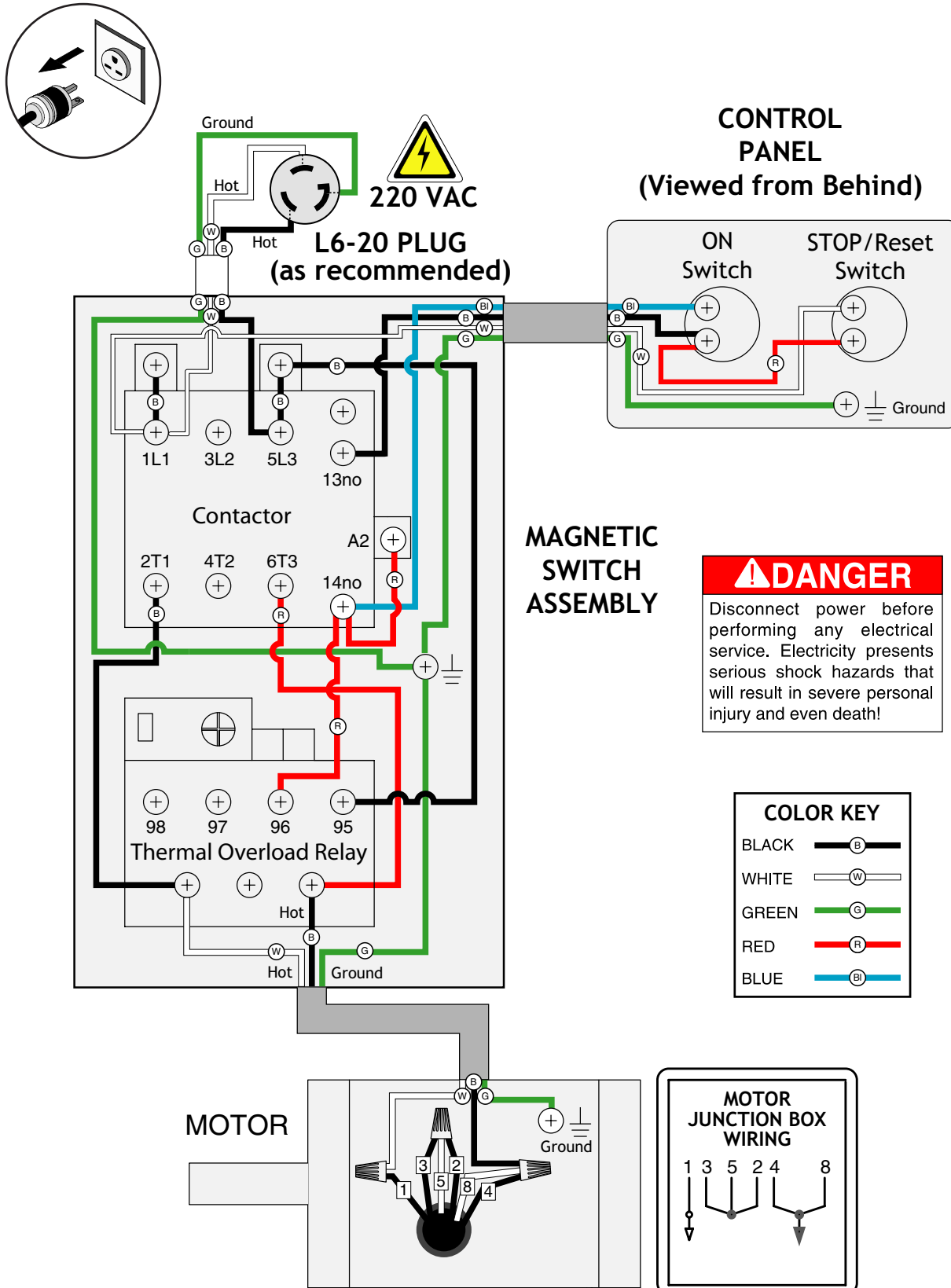


Figure 63. Motor mount bolts for adjusting pulley alignment.

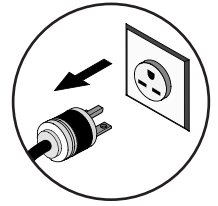
Electrical Components



W1741 Wiring Diagram



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.	<ol style="list-style-type: none"> 1. Stop button depressed. 2. Thermal overload protection tripped in magnetic switch. 3. No power. 4. Open circuit in motor or loose connections. 	<ol style="list-style-type: none"> 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 circuit breaker. 4. Inspect all lead connections on motor for loose or open connections.
Fuses or circuit breakers blow.	<ol style="list-style-type: none"> 1. Short circuit in line cord or plug. 	<ol style="list-style-type: none"> 1. Repair or replace cord or plug for damaged insulation and shorted wires.
Motor overheats.	<ol style="list-style-type: none"> 1. Motor overloaded. 2. Air circulation through the motor restricted. 	<ol style="list-style-type: none"> 1. Reduce workpiece feed rate. 2. Clean out motor to provide normal air circulation.
Motor stalls or shuts off during a cut.	<ol style="list-style-type: none"> 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. 	<ol style="list-style-type: none"> 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. Reduce # of machines running on that circuit.
Blade slows when cutting or makes squealing noise, especially on start-up.	<ol style="list-style-type: none"> 1. V-belt loose. 2. V-belt worn out. 	<ol style="list-style-type: none"> 1. Tighten V-belt (Page 38). 2. Replace V-belt (Page 38).
Loud, repetitious noise coming from machine.	<ol style="list-style-type: none"> 1. Pulley setscrews or keys are missing or loose. 2. Motor fan is hitting the cover. 3. V-belt are damaged. 	<ol style="list-style-type: none"> 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-belt (Page 38).
Vibration when running or cutting.	<ol style="list-style-type: none"> 1. Loose or damaged blade. 2. Damaged V-belt. 3. Worn cutterhead bearings. 	<ol style="list-style-type: none"> 1. Tighten or replace blade. 2. Replace. 3. Check/replace cutterhead bearings.

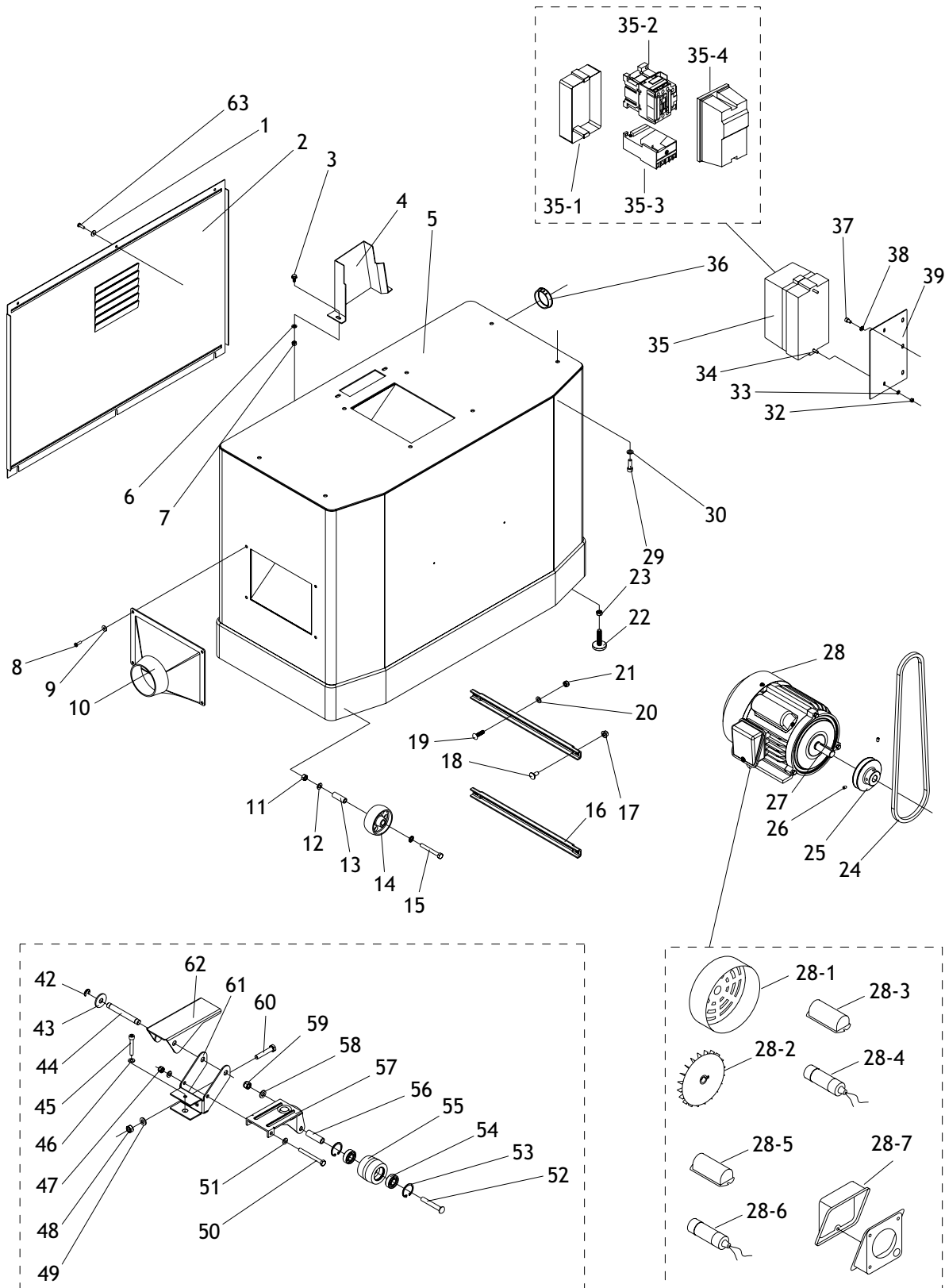
Table

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Tables are hard to adjust.	<ol style="list-style-type: none"> 1. Table lock is engaged or partially engaged. 2. Table stops blocking movement. 	<ol style="list-style-type: none"> 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).	<ol style="list-style-type: none"> 1. Outfeed table is set too low. 2. Operator pushing down on trailing end of the workpiece. 	<ol style="list-style-type: none"> 1. Align outfeed table with cutterhead knife at top dead center (Page 16). 2. Reduce/eliminate downward pressure on that end of workpiece.
Workpiece stops in the middle of the cut.	<ol style="list-style-type: none"> 1. Outfeed table is set too high. 	<ol style="list-style-type: none"> 1. Align outfeed table with cutterhead knife at top dead center (Page 16).
Chipping.	<ol style="list-style-type: none"> 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. 	<ol style="list-style-type: none"> 1. Inspect workpiece for knots and grain (Page 22); only use clean stock. 2. Adjust one of the nicked knives sideways; replace knives (Page 30). 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.	<ol style="list-style-type: none"> 1. Wood may have high moisture content or surface wetness. 2. Dull knives. 	<ol style="list-style-type: none"> 1. Check moisture content and allow to dry if moisture is too high. 2. Replace knives (Page 30).
Long lines or ridges that run along the length of the board.	<ol style="list-style-type: none"> 1. Nicked or chipped knives. 	<ol style="list-style-type: none"> 1. Adjust one of the nicked knives sideways; replace knives (Page 30).
Uneven cutter marks, wavy surface, or chatter marks across the face of the board.	<ol style="list-style-type: none"> 1. Feeding workpiece too fast. 2. Knives not adjusted at even heights in the cutterhead. 	<ol style="list-style-type: none"> 1. Slow down the feed rate. 2. Adjust the knives so they are set up evenly in the cutterhead (Page 30).
Board edge is concave or convex after jointing.	<ol style="list-style-type: none"> 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. 	<ol style="list-style-type: none"> 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.	<ol style="list-style-type: none"> 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. 	<ol style="list-style-type: none"> 1. Feed the board evenly and smoothly during the cut. 2. Raise the infeed table to take a smaller depth of cut. Never exceed 1/16" per pass when rabbeting. 3. Adjust the knives so they are set up evenly in the cutterhead (Page 30). 4. Adjust one of the nicked knives sideways; replace knives (Page 30).

Stand Breakdown

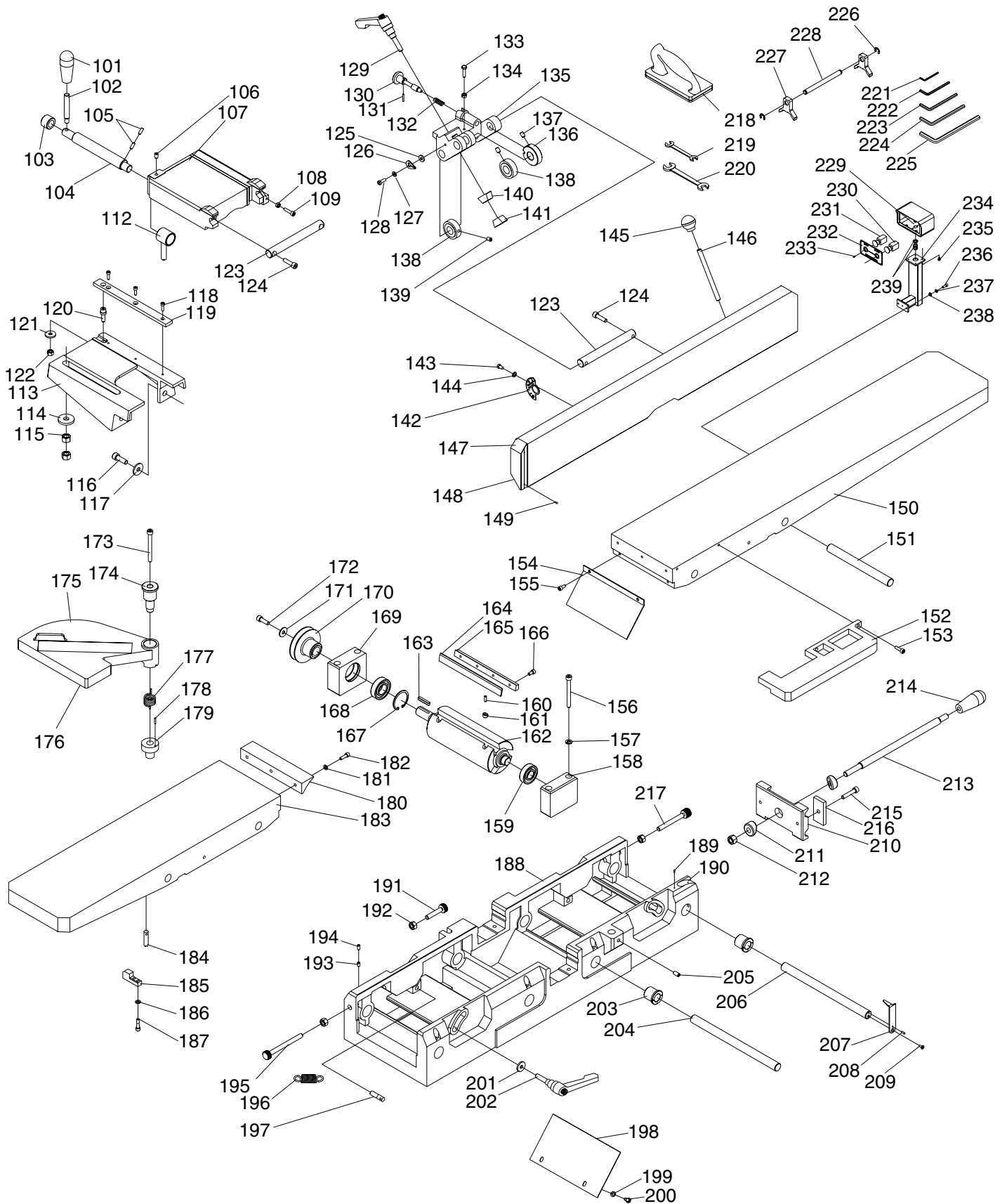


Stand Parts List

REF	PART #	DESCRIPTION
1	XPW02M	FLAT WASHER 5MM
2	X1741002	PANEL
3	XPFS02M	FLANGE SCREW M6-1 X 12
4	X1741004	BELT GUARD
5	X1741005	CABINET STAND
6	XPW03M	FLAT WASHER 6MM
7	XPNO1M	HEX NUT M6-1
8	XPS40M	PHLP HD SCR M5-.8 X 16
9	XPW02M	FLAT WASHER 5MM
10	X1741010	DUST PORT
11	XPNO3M	HEX NUT M8-1.25
12	XPW01M	FLAT WASHER 8MM
13	X1741013	SLEEVE
14	X1741014	WHEEL
15	XPB86M	HEX BOLT M8-1.25 X 65
16	X1741016	MOTOR BRACKET
17	X1741017	MOTOR BRACKET NUT
18	X1741018	MOTOR BRACKET SCREW
19	X1741019	MOTOR CARRIAGE SCREW
20	X1741020	MOTOR CARRIAGE WASHER
21	X1741021	MOTOR CARRIAGE NUT
22	X1741022	ADJUSTING SCREW
23	XPNO8	HEX NUT 3/8-16
24	XPVA45	V-BELT A-45 4L450
25	X1741025	MOTOR PULLEY
26	XPSS02M	SET SCREW M6-1 X 6
27	XPK12M	KEY 5 X 5 X 30
28	X1741028	3 HP MOTOR
28-1	X1741028-1	MOTOR FAN COVER
28-2	X1741028-2	MOTOR FAN
28-3	X1741028-3	CAPACITOR COVER
28-4	XPC300S	S CAPACITOR 300M 125V
28-5	X1741028-5	CAPACITOR COVER
28-6	X1741028-6	R CAPACITOR 40M 250V
28-7	X1741028-7	JUNCTION BOX
29	XPSB31M	CAP SCREW M8-1.25 X 25
30	XPLW04M	LOCK WASHER 8MM
32	XPNO6M	HEX NUT M5-.8
33	XPW02M	FLAT WASHER 5MM
34	XPS06M	PHLP HD SCR M5-.8 X 20

REF	PART #	DESCRIPTION
35	X1741035	MAGNETIC SWITCH ASSY
35-1	X1741035-1	SWITCH BACK COVER
35-2	X1741035-2	CONTACTOR
35-3	X1741035-3	THERMAL OVERLOAD RELAY
35-4	X1741035-4	SWITCH FRONT COVER
36	X1741036	STRAIN RELIEF
37	XPSB04M	CAP SCREW M6-1 X 10
38	XPW03M	FLAT WASHER 6MM
39	X1741039	SWITCH PLATE
42	XPR16M	EXT RETAINING RING 9MM
43	XPW06M	FLAT WASHER 12MM
44	X1741044	SHAFT
45	XPB22M	HEX BOLT M8-1.25 X 50
46	XPW01M	FLAT WASHER 8MM
47	XPNO3M	HEX NUT M8-1.25
48	XPNO2M	HEX NUT M10-1.5
49	XPW04M	FLAT WASHER 10MM
50	XPB45M	HEX BOLT M8-1.25 X 100
51	XPW01M	FLAT WASHER 8MM
52	X1741052	SPECIAL BOLT
53	XPR21M	INT RETAINING RING 35MM
54	XP6202	BALL BEARING 6202Z
55	X1741055	TROLLEY WHEEL
56	X1741056	SLEEVE
57	X1741057	TROLLEY BRACKET
58	XPW04M	FLAT WASHER 10MM
59	XPNO2M	HEX NUT M10-1.5
60	XPB144M	HEX BOLT M10-1.5 X 55
61	X1741061	PEDAL BRACKET
62	X1741062	PEDAL
63	XPS40M	PHLP HD SCR M5-.8 X 16
64	X1741063	TROLLEY WHEEL
65	X1741064	SLEEVE
66	X1741065	TROLLEY BRACKET
67	XPW04M	FLAT WASHER 10MM
68	XPNO2M	HEX NUT M10-1.5
69	XPB144M	HEX BOLT M10-1.5 X 55
70	X1741069	PEDAL BRACKET
71	X1741070	PEDAL

Jointer Breakdown



Jointer Parts List

REF	PART #	DESCRIPTION
101	X1741101	KNOB M10-1.5
102	X1741102	STUD
103	X1741103	BUSHING
104	X1741104	ECCENTRIC SHAFT
105	XPSS11M	SET SCREW M6-1 X 16
106	XPSS14M	SET SCREW M8-1.25 X 12
107	X1741107	FENCE CARRIAGE
108	XPN01M	HEX NUT M6-1
109	XPB10M	HEX BOLT M6-1 X 25
112	X1741112	COLLAR
113	X1741113	SUPPORT
114	XPW06M	FLAT WASHER 12MM
115	XPN09M	HEX NUT M12-1.75
116	XPSB72M	CAP SCREW M10-1.5 X 30
117	XPW04M	FLAT WASHER 10MM
118	XPSB24M	CAP SCREW M5-.8 X 16
119	X1741119	GIB
120	X1741120	ECCENTRIC STUD
121	XPW01M	FLAT WASHER 8MM
122	XPN03M	HEX NUT M8-1.25
123	X1741123	SHAFT
124	XPSB13M	CAP SCREW M8-1.25 X 30
125	XPW03M	FLAT WASHER 6MM
126	X1741126	POINTER
127	XPW03M	FLAT WASHER 6MM
128	XPS11M	BUTTON HD CAP SCREW M6-1 X 16
129	X1741129	LOCK LEVER M10-1.5 X 35
130	X1741130	INDES PIN ASSEMBLY
131	XPRP42M	ROLL PIN 3 X 20
132	X1741132	COMPRESSION SPRING
133	XPB10M	HEX BOLT M6-1 X 25
134	XPN01M	HEX NUT M6-1
135	X1741135	SWIVEL
136	X1741136	COLLAR
137	XPSS14M	SET SCREW M8-1.25 X 12
138	X1741138	LOCK
139	XPSS14M	SET SCREW M8-1.25 X 12
140	X1741140	CLAMP
141	X1741141	THREAD CLAMP
142	X1741142	TILT SCALE
143	XPS68M	PHLP HD SCR M6-1 X 10
144	XPW03M	FLAT WASHER 6MM
145	X1741145	BALL KNOB M10-1.5
146	X1741146	STUD

REF	PART #	DESCRIPTION
147	X1741147	FENCE
148	X1741148	SCALE
149	X1741149	RIVET
150	X1741150	INFEED TABLE
151	X1741151	TABLE SHAFT
152	X1741152	TABLE EXTENSION
153	XPSB02M	CAP SCREW M6-1 X 20
154	X1741154	CHIP DEFLECTOR
155	XPSB26M	CAP SCREW M6-1 X 12
156	XPSB148M	CAP SCREW M8-1.25 X 80
157	XPLW04M	LOCK WASHER 8MM
158	X1741158	BEARING BLOCK LH
159	XP60042RS	BALL BEARING 6004 2RS
160	XPSS34M	SET SCREW M5-.8 X 16
161	X1741161	KNIFE LIFTER
162	X1741162	CUTTERHEAD
163	XPB74M	KEY 6 X 6 X 35
164	X1741164	KNIFE (SET OF 4)
165	X1741165	GIB
166	X1741166	GIB SCREW
167	XPR25M	INT RETAINING RING 47MM
168	XP60052RS	BALL BEARING 6005 2RS
169	X1741169	BEARING BLOCK RH
170	X1741170	CUTTERHEAD PULLEY
171	XPW01M	FLAT WASHER 8MM
172	XPSB31M	CAP SCREW M8-1.25 X 25
173	X1741173	CAP SCREW M8-1.25 X 80
174	X1741174	GUARD CLAMP
175	X1741175	CUTTERHEAD GUARD
176	X1741176	GUARD WARNING LABEL
177	X1741177	TORSION SPRING
178	X1741178	ROLL PIN 3 X 16
179	X1741179	SUPPORT
180	X1741180	TABLE LIP
181	XPW03M	FLAT WASHER 6MM
182	XPSB02M	CAP SCREW M6-1 X 20
183	X1741183	OUTFEED TABLE
184	X1741184	SPRING PIN
185	X1741185	BUMPER
186	XPLW03M	LOCK WASHER 6MM
187	XPSB06M	CAP SCREW M6-1 X 25
188	X1741188	BASE
189	X1741189	RIVET
190	X1741190	SCALE

Jointer Parts List

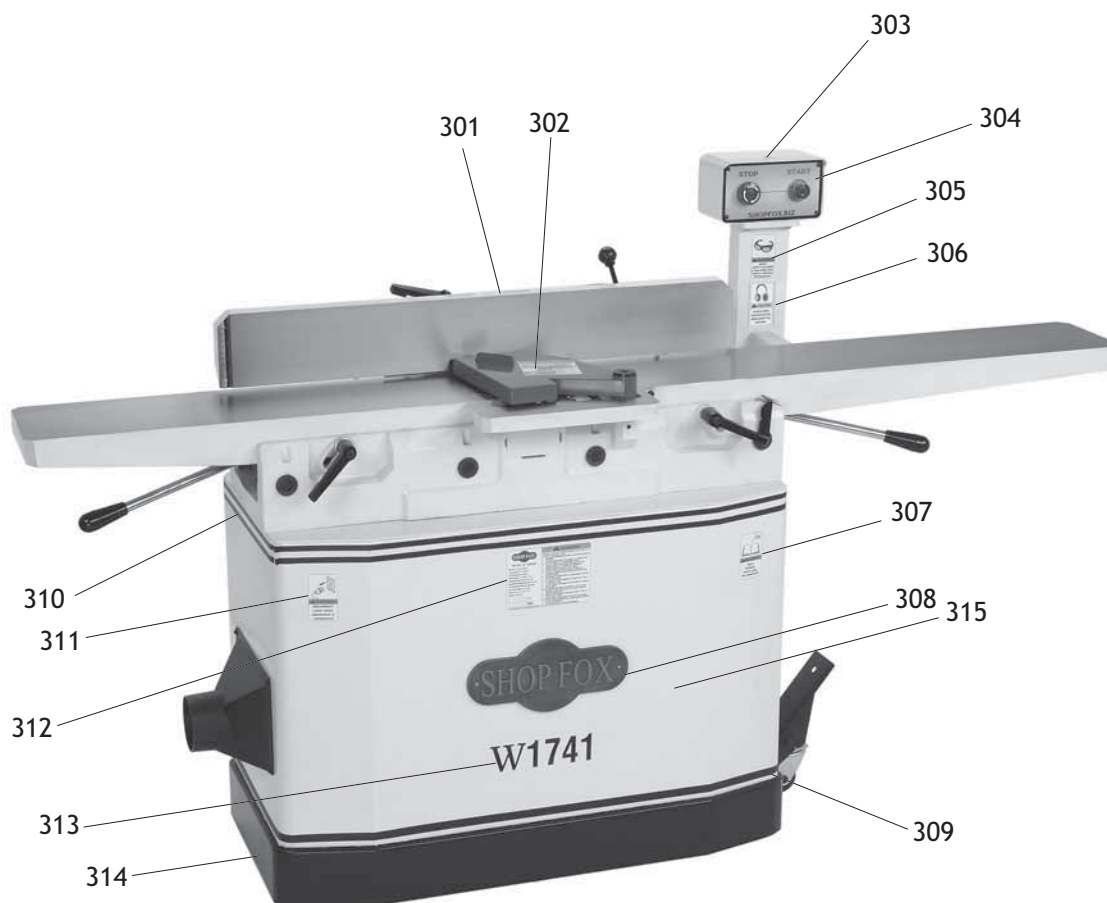
REF	PART #	DESCRIPTION
191	X1741191	SHORT ADJUSTING SCREW
192	XPNO2M	HEX NUT M10-1.5
193	XPSS01M	SET SCREW M6-1 X 10
194	XPSS01M	SET SCREW M6-1 X 10
195	X1741195	LONG ADJUSTING SCREW
196	X1741196	EXTENSION SPRING
197	X1741197	SPRING PIN
198	X1741198	CHIP BREAKER
199	XPW03M	FLAT WASHER 6MM
200	XPB02M	HEX BOLT M6-1 X 12
201	XPW01M	FLAT WASHER 8MM
202	X1741202	TABLE LOCK LEVER M8-1.25 X 30
203	X1741203	ECCENTRIC BUSHING
204	X1741204	TABLE SHAFT
205	XPSS06M	SET SCREW M8-1.25 X 16
206	X1741206	TABLE SHAFT
207	X1741207	POINTER
208	XPRXP44M	ROLL PIN 3 X 10
209	XPFH19M	FLAT HD SCR M4-.7 X 10
210	X1741210	PIVOT BRACKET
211	X1741211	ADJUSTING BLOCK
212	XPNO9M	HEX NUT M12-1.75
213	X1741213	LEVER
214	X1741214	HANDLE KNOB M12-1.75
215	XPSB12M	CAP SCREW M8-1.25 X 40

REF	PART #	DESCRIPTION
216	X1741216	CLAMP PLATE
217	X1741217	MEDIUM ADJUSTING SCREW
218	X1741218	PUSH BLOCK
219	X1741219	OPEN END WRENCH 8-10MM
220	X1741220	OPEN END WRENCH 12-14MM
221	XPAW02.5M	HEX KEY 2.5MM
222	XPAW04M	HEX KEY 4MM
223	XPAW05M	HEX KEY 5MM
224	XPAW06M	HEX KEY 6MM
225	XPAW08M	HEX KEY 8MM
226	XPR39M	EXT RETAINING RING 8MM
227	X1741227	KNIFE GAUGE BLOCK
228	X1741228	KNIFE GAUGE ROD
229	X1741229	CONTROL BOX
230	X1741230	START BUTTON
231	X1741231	STOP BUTTON
232	X1741232	CONTROL PANEL
233	XPHEK4M	TAP SCREW M4 X 8
234	X1741234	SWITCH PEDESTAL ARM
235	X1741235	FLANGE SCREW M6-1 X 16
236	XPSB64M	CAP SCREW M10-1.5 X 25
237	XPLW06M	LOCK WASHER 10MM
238	XPW04M	FLAT WASHER 10MM
239	X1741239	BALL STRAIN RELIEF

Label/Cosmetic Parts

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.



REF	PART #	DESCRIPTION
301	X1741301	FENCE/CUTTERHEAD LABEL
302	X1741302	CUTTERHEAD GUARD LABEL
303	X1741303	ELECTRICITY LABEL
304	X1741304	CONTROL PANEL FACE
305	X1741305	SAFETY GLASSES LABEL
306	X1741306	HEARING PROTECTION LABEL
307	X1741307	READ MANUAL LABEL
308	X1741308	SHOP FOX LOGO PLATE

REF	PART #	DESCRIPTION
309	X1741309	ONE LINE STRIPING
310	X1741310	TWO LINE STRIPING
311	X1741311	UNPLUG 220V POWER LABEL
312	X1741312	MACHINE ID LABEL
313	X1741313	W1741 MODEL # LABEL
314	X1741314	BLACK TOUCH UP PAINT
315	X1741315	SF WHITE TOUCH UP PAINT

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: _____

FOLD ALONG DOTTED LINE



Place
Stamp
Here



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



FOLD ALONG DOTTED LINE

TAPE ALONG EDGES--PLEASE DO NOT STAPLE