User Manual

Read and understand this manual before using machine.

8” INDUSTRIAL JOINTER

Model Number
40605

C US

STEEL CITY TOOL WORKS

Manual Part No. OR70871

THANK YOU for purchasing your new Steel City Jointer. This jointer has been designed, tested, and inspected with you, the customer, in mind. When properly used and maintained, your jointer will provide you with years of trouble free service, which is why it is backed by one of the longest machinery warranties in the business.

This jointer is just one of many products in the Steel City's family of woodworking machinery and is proof of our commitment to total customer satisfaction.

At Steel City we continue to strive for excellence each and every day and value the opinion of you, our customer. For comments about your jointer or Steel City Tool Works, please visit our web site at **www.steelcitytoolworks.com** .

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INTRODUCTION

This user manual is intended for use by anyone working with this machine. It should be kept available for immediate reference so that all operations can be performed with maximum efficiency and safety. Do not attempt to perform maintenance or operate this machine until you have read and understand the information contained in this manual.

The drawings, illustrations, photographs, and specifications in this user manual represent your machine at time of print. However, changes may be made to your machine or this manual at any time with no obligation to Steel City Tool Works.

WARRANTY

STEEL CITY TOOL WORKS
5 YEAR LIMITED WARRANTY

Steel City Tool Works, LLC ("SCTW") warrants all "STEEL CITY TOOL WORKS" machinery to be free of defects in workmanship and materials for a period of 5 years from the date of the original retail purchase by the original owner. SCTW will repair or replace, at its expense and at its option, any SCTW machine, machine part, or machine accessory which in normal use has proven to be defective, provided that the customer returns the product, shipping prepaid, to an authorized service center with proof of purchase and provides SCTW with a reasonable opportunity to verify the alleged defect by inspection. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, or lack of maintenance, or to repairs or alterations made or specifically authorized by anyone other than SCTW. Normal wear components are also excluded under this coverage. Every effort has been made to ensure that all SCTW machinery meets the highest quality and durability standards. We reserve the right to change specifications at any time due to our commitment to continuous improvement of the quality of our products.

EXCEPT AS SET FORTH ABOVE, SCTW MAKES NO EXPRESS OR IMPLIED REPRESENTATIONS OR WARRANTIES WITH RESPECT TO ITS MACHINERY, OR ITS CONDITION, MERCHANTABILITY, OR FITNESS FOR ANY PARTICULAR PURPOSE OR USE. SCTW FURNISHES THE ABOVE WARRANTIES IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY SPECIFICALLY DISCLAIMED.

SCTW SHALL NOT BE LIABLE FOR ANY (A) SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION LOSS OF PROFITS, ARISING FROM OR RELATED TO THIS WARRANTY, THE BREACH OF ANY AGREEMENT OR WARRANTY, OR THE OPERATION OR USE OF ITS MACHINERY, INCLUDING WITHOUT LIMITATION DAMAGES ARISING FROM DAMAGE TO FIXTURES, TOOLS, EQUIPMENT, PARTS OR MATERIALS, DIRECT OR INDIRECT LOSS CAUSED BY ANY OTHER PARTY, LOSS OF REVENUE OR PROFITS, FINANCING OR INTEREST CHARGES, AND CLAIMS BY ANY THIRD PERSON, WHETHER OR NOT NOTICE OF SUCH POSSIBLE DAMAGES HAS BEEN GIVEN TO SCTW; (B) DAMAGES OF ANY KIND FOR ANY DELAY BY OR FAILURE OF SCTW TO PERFORM ITS OBLIGATIONS UNDER THIS AGREEMENT; OR (C) CLAIMS MADE A SUBJECT OF A LEGAL PROCEEDING AGAINST SCTW MORE THAN ONE (1) YEAR AFTER SUCH CAUSE OF ACTION FIRST AROSE.

The validity, construction and performance of this Warranty and any sale of machinery by SCTW shall be governed by the laws of the Commonwealth of Pennsylvania, without regard to conflicts of laws provisions of any jurisdiction. Any action related in any way to any alleged or actual offer, acceptance or sale by SCTW, or any claim related to the performance of any agreement including without limitation this Warranty, shall take place in the federal or state courts in Allegheny County, Pennsylvania.

STEEL CITY TOOL WORKS

WARRANTY CARD

Name _____
Street _____
Apt. No. _____
City _____ State _____ Zip _____
Phone Number _____
E-Mail _____

Product Description: _____
Model No.: _____
Serial No. _____

The following information is given on a voluntary basis and is strictly confidential.

1. Where did you purchase your STEEL CITY machine?
   Store: _____
   City: _____

2. How did you first learn of Steel City Tool Works?
   ___ Advertisement ___ Mail Order Catalog
   ___ Web Site ___ Friend
   ___ Local Store Other_____

3. Which of the following magazines do you subscribe to?
   ___ American Woodworker ___ American How-To
   ___ Cabinetmaker ___ Family Handyman
   ___ Fine Homebuilding ___ Fine Woodworking
   ___ Journal of Light Construction ___ Old House Journal
   ___ Popular Mechanics ___ Popular Science
   ___ Popular Woodworking ___ Today's Homeowner
   ___ WOOD ___ Woodcraft
   ___ WOODEN Boat ___ Woodshop News
   ___ Woodsmith ___ Woodwork
   ___ Woodworker ___ Woodworker's Journal
   ___ Workbench Other_____

4. Which of the following woodworking / remodeling shows do you watch?
   ___ Backyard America ___ The American Woodworker
   ___ Home Time ___ The New Yankee Workshop
   ___ This Old House ___ Woodwright's Shop
   Other_____

5. What is your annual household income?
   ___ $20,000 to $29,999 ___ $30,000 to $39,999
   ___ $40,000 to $49,999 ___ $50,000 to $59,999
   ___ $60,000 to $69,999 ___ 70,000 to $79,999
   ___ $80,000 to $89,999 ___ $90,000 +

6. What is your age group?
   ___ 20 to 29 years ___ 30 to 39 years
   ___ 40 to 49 years ___ 50 to 59 years
   ___ 60 to 69 years ___ 70 + years

7. How long have you been a woodworker?
   ___ 0 to 2 years ___ 2 to 8 years
   ___ 8 to 20 years ___ over 20 years

8. How would you rank your woodworking skills?
   ___ Simple ___ Intermediate
   ___ Advance ___ Master Craftsman

9. How many Steel City machines do you own? _____

10. What stationary woodworking tools do you own?
    Check all that apply.
    ___ Air Compressor ___ Band Saw
    ___ Drill Press ___ Drum Sander
    ___ Dust Collection ___ Horizontal Boring Machine
    ___ Jointer ___ Lathe
    ___ Mortiser ___ Panel Saw
    ___ Planer ___ Power Feeder
    ___ Radial Arm Saw ___ Shaper
    ___ Spindle Sander ___ Table Saw
    ___ Vacuum Veneer Press ___ Wide Belt Sander
    Other_____

11. Which benchtop tools do you own? *Check all that apply.*
    ___ Belt Sander ___ Belt / Disc Sander
    ___ Drill Press ___ Band Saw
    ___ Grinder ___ Mini Jointer
    ___ Mini Lathe ___ Scroll Saw
    ___ Spindle / Belt Sander Other_____

12. Which portable / hand held power tools do you own?
    Check all that apply.
    ___ Belt Sander ___ Biscuit Jointer
    ___ Dust Collector ___ Circular Saw
    ___ Detail Sander ___ Drill / Driver
    ___ Miter Saw ___ Orbital Sander
    ___ Palm Sander ___ Portable Thickness Planer
    ___ Saber Saw ___ Reciprocating Saw
    ___ Router Other_____

13. What machines / accessories would you like to see added to the STEEL CITY line?
    _____
    _____

14. What new accessories would you like to see added?
    _____
    _____

15. Do you think your purchase represents good value?
    ___Yes ___ No

16. Would you recommend STEEL CITY products to a friend?
    ___ Yes ___ No

17. Comments:
    _____
    _____
    _____
    _____
    _____

CUT HERE

FOLD ON DOTTED LINE

PLACE
STAMP
HERE

Steel City Tool Works
P.O. Box 10529
Murfreesboro, TN 37129

FOLD ON DOTTED LINE

PRODUCT SPECIFICATIONS

Motor Specifications:

Type	TEFC Induction, Ball Bearing
Continuous Duty Horsepower	2 HP
Amps	10.5
Voltage	230
Phase	Single
Hertz	60
RPM	3450 (no load)

Product Specifications:

Noise Level (Decibel)	80 dB
Table	8” x 76-1/2”
Knives, High Speed Steel	3 @ 1/8” x 3/4” x 8”
Knife Adjustment	Jackscrews
Maximum Speed of Cutterhead	5500 RPM
Knife Cuts Per Minute	16,500 CPM
Maximum Depth-of-Cut	5/8”
Maximum Rabbeting Cut	5/8” x 8”
Fence Size Overall	5” x 36”

Product Dimensions:

Footprint	37” x 17-1/2”
Length	76-1/2”
Width	26”
Height	49”
Total Net Weight	508 lbs. with stand

Shipping Dimensions:

JOINTER

Carton Type	Crate
Length	81-1/4”
Width	25”
Height	12-1/2”
Gross Weight	427 lbs.

STAND

Carton Type	Cardboard
Length	38”
Width	18”
Height	27”
Gross Weight	172 lbs.

ACCESSORIES AND ATTACHMENTS

There are a variety of accessories available for your Steel City Product. For more information on any accessories associated with this and other machines, please contact your nearest Steel City distributor, or visit our website at: **www.steelcitytoolworks.com**.

DEFINITION OF TERMS

Edge Jointing: The process of making the edge of a piece of stock straight and square

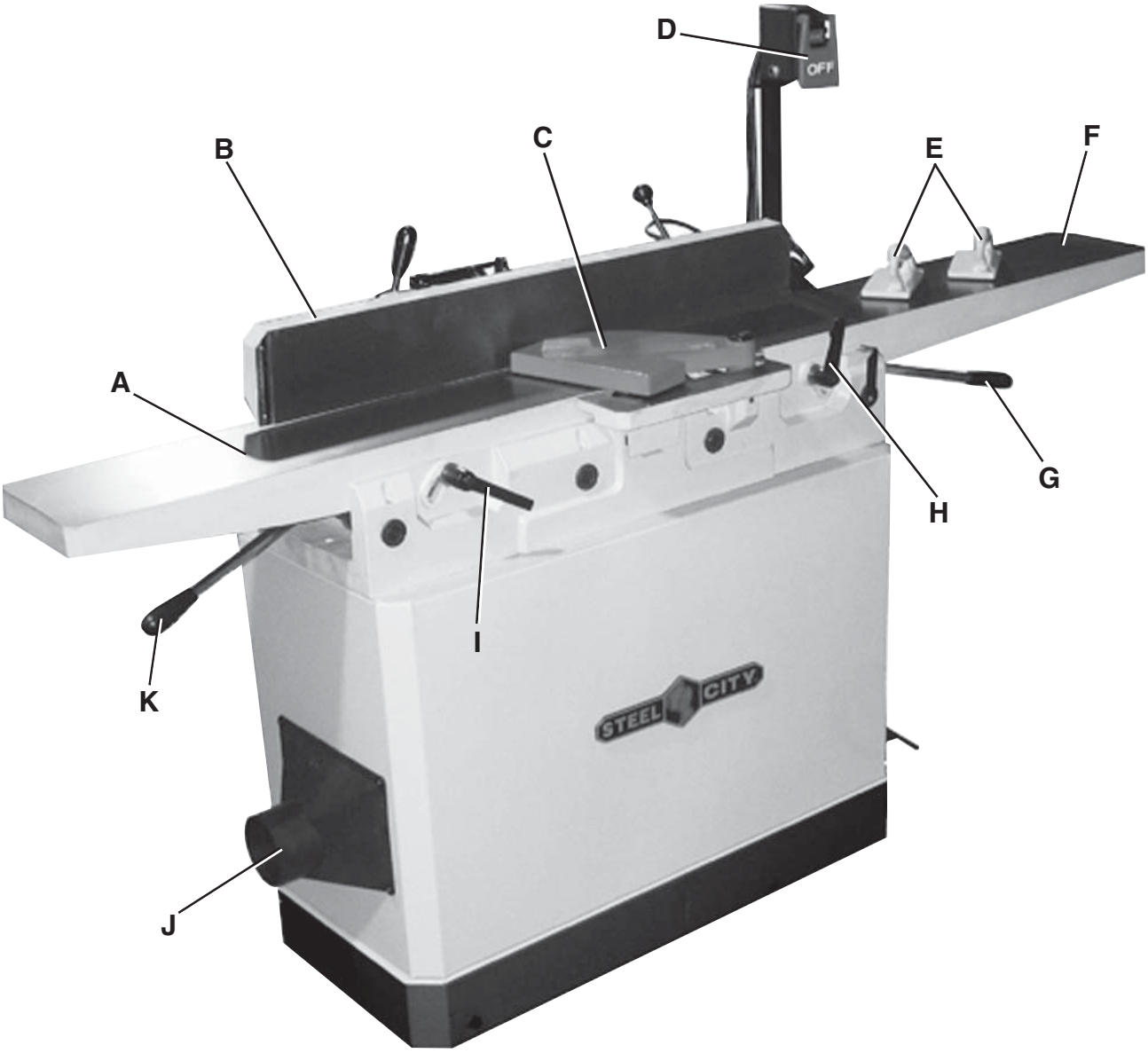
Face Jointing: Similar to edge jointing except rather then the edge it is the face of the board that is being machined flat and square.

Gum, Pitch or Resin: A sticky sap based residue that comes from wood products.

Rabbet: A rectangular cut or groove along or near the edge of a piece of wood that allows another piece to fit into it to form a joint

Snipe: Gouging or depression of the board at the ends. Snipe can occur either at the beginning of the board going into the jointer or at the end of the board as it comes out of the jointer.

FEATURE IDENTIFICATION



A) Outfeed Table
B) Fence
C) Cutterhead Guard
D) On/Off Switch
E) Push Blocks
F) Infeed Table
G) Infeed Table Adjustment Handle
H) Infeed Table Lock
I) Outfeed Table Lock
J) Dust Port
K) Outfeed Table Adjustment Handle

GENERAL SAFETY

⚠ WARNING

TO AVOID serious injury and damage to the machine, read and follow all Safety and Operating Instructions before assembling and operating this machine.

This manual is not totally comprehensive. It does not and can not convey every possible safety and operational problem which may arise while using this machine. The manual will cover many of the basic and specific safety procedures needed in an industrial environment.

All federal and state laws and any regulations having jurisdiction covering the safety requirements for use of this machine take precedence over the statements in this manual. Users of this machine must adhere to all such regulations.

Below is a list of symbols that are used to attract your attention to possible dangerous conditions.

⚠

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ 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, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices.

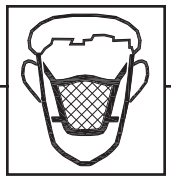
CAUTION

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

NOTICE

This symbol is used to alert the user to useful information about proper operation of the machine.

⚠ WARNING



Exposure to the dust created by power sanding, sawing, grinding, drilling and other construction activities may cause serious and permanent respiratory or other injury, including silicosis (a serious lung disease), cancer, and death. Avoid breathing the dust, and avoid prolonged contact with dust. The dust may contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

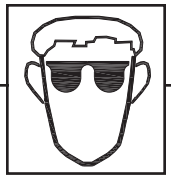
Some examples of these chemicals are:

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

Always operate tool in well ventilated area and provide for proper dust removal. Use a dust collection system along with an air filtration system whenever possible. Always use properly fitting NIOSH/OSHA approved respiratory protection appropriate for the dust exposure, and wash exposed areas with soap and water.

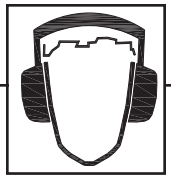
1. To avoid serious injury and damage to the machine, read the entire User Manual before assembly and operation of this machine.

⚠ WARNING



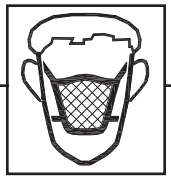
2. **ALWAYS** wear eye protection. Any machine can throw debris into the eyes during operations, which could cause severe and permanent eye damage. Everyday eyeglasses are **NOT** safety glasses. **ALWAYS** wear Safety Goggles (that comply with ANSI standard Z87.1) when operating power tools.

⚠ WARNING



3. **ALWAYS** wear hearing protection. Plain cotton is not an acceptable protective device. Hearing equipment should comply with ANSI S3.19 Standards.

⚠ WARNING



4. **ALWAYS** wear a NIOSH/OSHA approved dust mask to prevent inhaling dangerous dust or airborne particles.

5. **ALWAYS** keep the work area clean, well lit, and organized. **DO NOT** work in an area that has slippery floor surfaces from debris, grease, and wax.

6. **ALWAYS** unplug the machine from the electrical receptacle when making adjustments, changing parts or performing any maintenance.

7. **AVOID ACCIDENTAL STARTING**. Make sure that the power switch is in the "OFF" position before plugging in the power cord to the electrical receptacle.

⚠ WARNING

8. **AVOID** a dangerous working environment. **DO NOT** use electrical tools in a damp environment or expose them to rain or moisture.

⚠ WARNING

9. **CHILDPROOF THE WORKSHOP AREA** by removing switch keys, unplugging tools from the electrical receptacles, and using padlocks.

10. **DO NOT** use electrical tools in the presence of flammable liquids or gasses.

11. **DO NOT FORCE** the machine to perform an operation for which it was not designed. It will do a safer and higher quality job by only performing operations for which the machine was intended.

12. **DO NOT** stand on a machine. Serious injury could result if it tips over or you accidentally contact any moving part.

13. **DO NOT** store anything above or near the machine.

14. **DO NOT** operate any machine or tool if under the influence of drugs, alcohol, or medication.

15. **EACH AND EVERY** time, check for damaged parts prior to using any machine. Carefully check all guards to see that they operate properly, are not damaged, and perform their intended functions. Check for alignment, binding or breakage of all moving parts. Any guard or other part that is damaged should be immediately repaired or replaced.

16. Ground all machines. If any machine is supplied with a 3-prong plug, it must be plugged into a 3-contact electrical receptacle. The third prong is used to ground the tool and provide protection against accidental electric shock. **DO NOT** remove the third prong.

17. Keep visitors and children away from any machine. **DO NOT** permit people to be in the immediate work area, especially when the machine is operating.

18. **KEEP** protective guards in place and in working order.

19. **MAINTAIN** your balance. **DO NOT** extend yourself over the tool. Wear oil resistant rubber soled shoes. Keep floor clear of debris, grease, and wax.

20. **MAINTAIN** all machines with care. **ALWAYS KEEP** machine clean and in good working order. **KEEP** all blades and tool bits sharp.

21. **NEVER** leave a machine running, unattended. Turn the power switch to the OFF position. **DO NOT** leave the machine until it has come to a complete stop.

22. **REMOVE ALL MAINTENANCE TOOLS** from the immediate area prior to turning the machine ON.

23. **SECURE** all work. When it is possible, use clamps or jigs to secure the workpiece. This is safer than attempting to hold the workpiece with your hands.

24. **STAY ALERT**, watch what you are doing, and use common sense when operating any machine. **DO NOT** operate any machine tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.

25. **USE ONLY** recommended accessories. Use of incorrect or improper accessories could cause serious injury to the operator and cause damage to the machine. If in doubt, **DO NOT** use it.

26. **THE USE** of extension cords is not recommended for 230V equipment. It is better to arrange the placement of your equipment and the installed wiring to eliminate the need for an extension cord. If an extension cord is necessary, refer to the chart in the Grounding Instructions section to determine the minimum gauge for the extension cord. The extension cord must also contain a ground wire and plug pin.

27. Wear proper clothing, **DO NOT** wear loose clothing, gloves, neckties, or jewelry. These items can get caught in the machine during operations and pull the operator into the moving parts. Users must wear a protective cover on their hair, if the hair is long, to prevent it from contacting any moving parts.

28. **SAVE** these instructions and refer to them frequently and use them to instruct other users.

29. Information regarding the safe and proper operation of this tool is also available from the following sources:

    Power Tool Institute
    1300 Summer Avenue
    Cleveland, OH 44115-2851
    www.powertoolinstitute.org

    National Safety Council
    1121 Spring Lake Drive
    Itasca, IL 60143-3201

    American National Standards Institute
    25 West 43rd Street, 4th floor
    New York, NY 10036
    www.ansi.org

    ANSI 01.1 Safety Requirements for
    Woodworking Machines, and the U.S. Department of Labor regulations
    www.osha.gov

PRODUCT SAFETY

1. Serious personal injury may occur if normal safety precautions are overlooked or ignored. Accidents are frequently caused by lack of familiarity or failure to pay attention. Obtain advice from supervisor, instructor, or another qualified individual who is familiar with this machine and its operations.

2. Every work area is different. Always consider safety first, as it applies to your work area. Use this machine with respect and caution. Failure to do so could result in serious personal injury and damage to the machine.

3. Prevent electrical shock. Follow all electrical and safety codes, including the National Electrical Code (NEC) and the Occupational Safety and Health Regulations (OSHA). All electrical connections and wiring should be made by qualified personnel only.

⚠ WARNING

4. **TO REDUCE** the risk of electrical shock. **DO NOT** use this machine outdoors. **DO NOT** expose to rain or moisture. Store indoors in a dry area.

5. **STOP** using this machine, if at any time you experience difficulties in performing any operation. Contact your supervisor, instructor or machine service center immediately.

6. Safety decals are on this machine to warn and direct you to how to protect yourself or visitors from personal injury. These decals **MUST** be maintained so that they are legible. **REPLACE** decals that are not legible.

7. **DO NOT** leave the unit plugged into the electrical outlet. Unplug the unit from the outlet when not in use and before servicing, performing maintenance tasks, or cleaning.

8. **ALWAYS** turn the power switch “OFF” before unplugging the jointer.

⚠ WARNING

9. **DO NOT** handle the plug or jointer with wet hands.

10. **USE** accessories only recommended by Steel City.

11. **DO NOT** pull the jointer by the power cord. **NEVER** allow the power cord to come in contact with sharp edges, hot surfaces, oil or grease.

12. **DO NOT** unplug the jointer by pulling on the power cord. **ALWAYS** grasp the plug, not the cord.

13. **REPLACE** a damaged cord immediately. **DO NOT** use a damaged cord or plug. If the jointer is not operating properly, or has been damaged, left outdoors or has been in contact with water.

14. **DO NOT** use the jointer as a toy. **DO NOT** use near or around children.

15. **ENSURE** that the machine sits firmly on the floor before using. If the machine wobbles or is unstable, correct the problem by using shims or blocks prior to operation.
16. **ALWAYS** keep hands and fingers away from the blades when operating.
17. **USE** push blocks on any materials less than 3" in height or thickness.
18. **DO NOT** use the jointer on pieces less than 10" in length.
19. **NEVER** use the jointer with the depth of cut at more than 1/8".
20. **ALWAYS** keep the cutterhead guard in place during any jointing operation. Check it periodically to insure that it is operating smoothly.
21. **MAINTAIN** the proper relationship between the infeed and outfeed tables and the cutterhead knives.
22. **NEVER** remove any chips without turning off the machine and disconnecting the power.
23. **NEVER** turn on the machine if the workpiece is in contact with the cutterhead.
24. **ALWAYS** feed against the rotation of the cutterhead. Never apply feed pressure with your hands directly over the cutterhead. Always lift your hands, one at a time, over the cutterhead as you pass the work along the jointer bed. Always support the workpiece and maintain control throughout the operation.
25. **KEEP** cutterhead knives sharp and free of all rust and pitch.
26. **ALWAYS** disconnect the machine from the power source before making any adjustments.
27. **NEVER** perform "free hand" operations. Use the fence to position and guide the workpiece.

ELECTRICAL REQUIREMENTS

⚠ WARNING

To reduce the risk of electric shock, follow all electrical and safety codes, including the National Electric Code (NEC) and the Occupational Safety and Health Regulations (OSHA). All electrical connections and wiring should be made by qualified personnel only.

The switch provided with your jointer is designed for 230 volt single phase usage only. The switch has a plug that is designed to plug into a 230 volt outlet. There are many different configurations for 230 volt outlets, so it is conceivable that the configuration of the plug may not match the configuration of your existing outlet. If this is the case, you will have to replace the plug with a UL/CSA approved plug that matches the configuration of your 230V outlet.

GROUNDING INSTRUCTIONS

⚠ WARNING

This machine **MUST BE GROUNDED** while in use to protect the operator from electric shock.

In the event of a malfunction or breakdown, **GROUNDING** provides the path of least resistance for electric current and reduces the risk of electric shock. The plug **MUST** be plugged into a matching electrical receptacle that is properly installed and grounded in accordance with **ALL** local codes and ordinances.

If a plug is provided with your machine **DO NOT** modify the plug. If it will not fit your electrical receptacle, have a qualified electrician install the proper connections to meet all electrical codes local and state. All connections must also adhere to all of OSHA mandates.

IMPROPER ELECTRICAL CONNECTION of the equipment-grounding conductor can result in risk of electric shock. The conductor with the green insulation (with or without yellow stripes) is the equipment-grounding conductor. **DO NOT** connect the equipment-grounding conductor to a live terminal if repair or replacement of the electric cord or plug is necessary.

Check with a qualified electrician or service personnel if you do not completely understand the grounding instructions, or if you are not sure the tool is properly grounded.

PLUGS/RECEPTACLES

⚠ WARNING

- Electrocution or fire could result if this machine is not grounded properly or if the electrical configuration does not comply with local and state electrical codes.
- **MAKE CERTAIN** the machine is disconnected from power source before starting any electrical work.
- **MAKE SURE** the circuit breaker does not exceed the rating of the plug and receptacle.

The motor supplied with your machine is a 230 volt, 60 hertz, single phase motor. Never connect the green or ground wire to a live terminal.

A machine with a 230 volt plug should only be connected to an outlet having the same configuration as the plug.

EXTENSION CORDS

⚠ WARNING

To reduce the risk of fire or electrical shock, use the proper gauge of extension cord. When using an extension cord, be sure to use one heavy enough to carry the current your machine will draw.

The smaller the gauge-number, the larger the diameter of the extension cord is. If in doubt of the proper size of an extension cord, use a shorter and thicker cord. An undersized cord will cause a drop in line voltage resulting in a loss of power and overheating.

⚠ CAUTION

USE ONLY a 3-wire extension cord that has a 3-prong grounding plug and a 3-pole receptacle that accepts the machine's plug.

If you are using an extension cord outdoors, be sure it is marked with the suffix "W-A" ("W" in Canada) to indicate that it is acceptable for outdoor use.

Make certain the extension cord is properly sized, and in good electrical condition. Always replace a worn or damaged extension cord immediately or have it repaired by a qualified person before using it.

Protect your extension cords from sharp objects, excessive heat, and damp or wet areas.

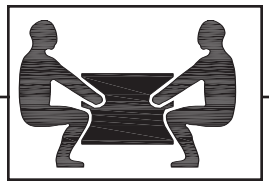
MINIMUM RECOMMENDED GAUGE FOR EXTENSION CORDS (AWG)

230 VOLT OPERATION ONLY

	25' LONG	50' LONG	100' LONG
0 to 6 Amps	16 AWG	16 AWG	14 AWG
6 to 8 Amps	16 AWG	16 AWG	12 AWG
8 to 12 Amps	14 AWG	14 AWG	10 AWG
12 to 15 Amps	12 AWG	12 AWG	10 AWG
15 to 20 Amps	10 AWG	10 AWG	Not recommended

UNPACKING & INVENTORY

⚠ WARNING



- The machine is heavy, two people are required to unpack and lift.
- Use a safety strap to avoid tip over when lifting machine.

Check shipping carton and machine for damage before unpackaging. Carefully remove packaging materials, parts and machine from shipping carton. Always check for and remove protective shipping materials around motors and moving parts. Lay out all parts on a clean work surface.

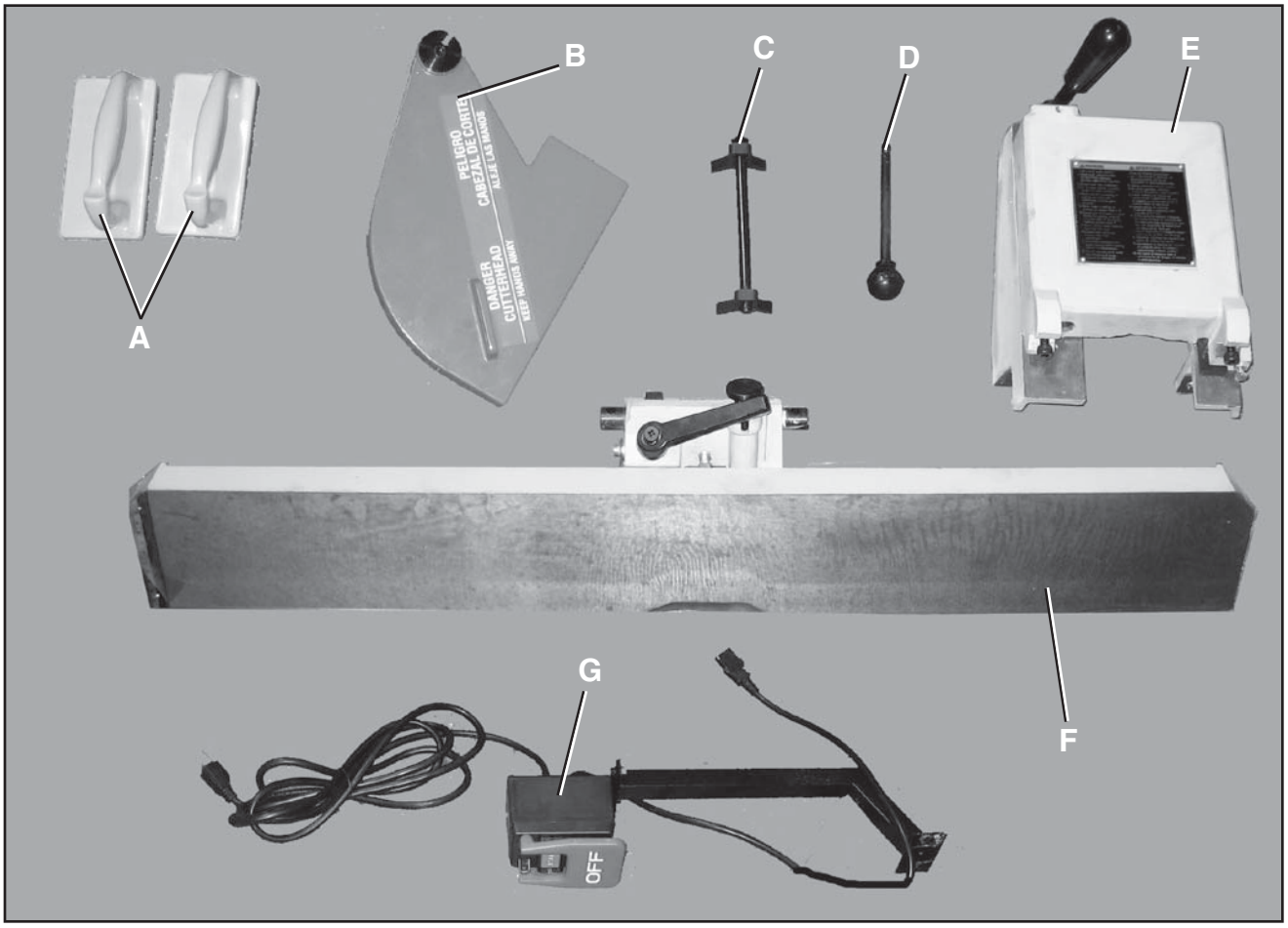
Remove any protective materials and coatings from all of the parts and the jointer. The protective coatings can be removed by spraying WD-40 on them and wiping it off with a soft cloth. This may need to be redone several times before all of the protective coatings are removed completely.

After cleaning, apply a good quality paste wax to any unpainted surfaces. Make sure to buff out the wax before assembly.

Compare the items to inventory figures; verify that all items are accounted for before discarding the shipping box.

⚠ WARNING

If any parts are missing, do not attempt to plug in the power cord and turn "ON" the machine. The machine should only be turned "ON" after all the parts have been obtained and installed correctly. For missing parts, contact Steel City at 1-877-SC4-TOOL.

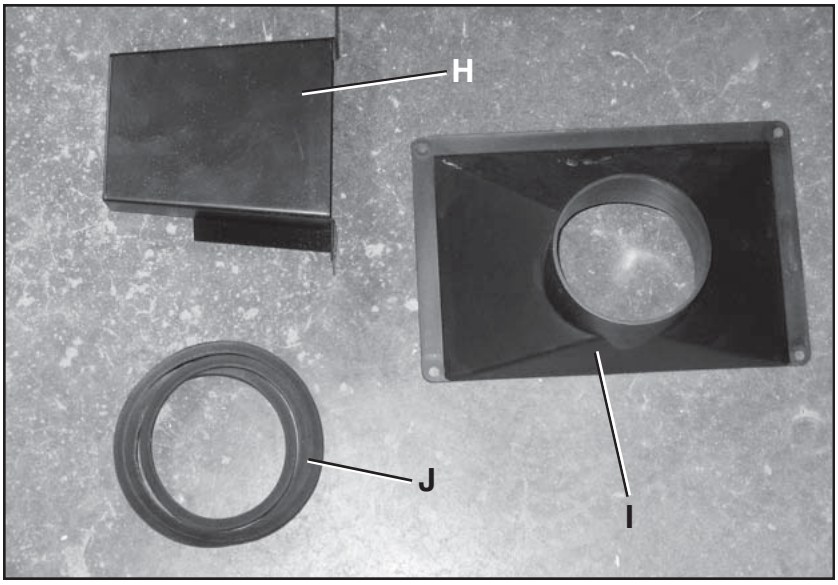


A) Push Blocks (2)
B) Cutterhead Guard
C) Knife Setting Jig
D) Fence Handle
E) Fence Carriage Assembly
F) Fence
G) On/Off Switch

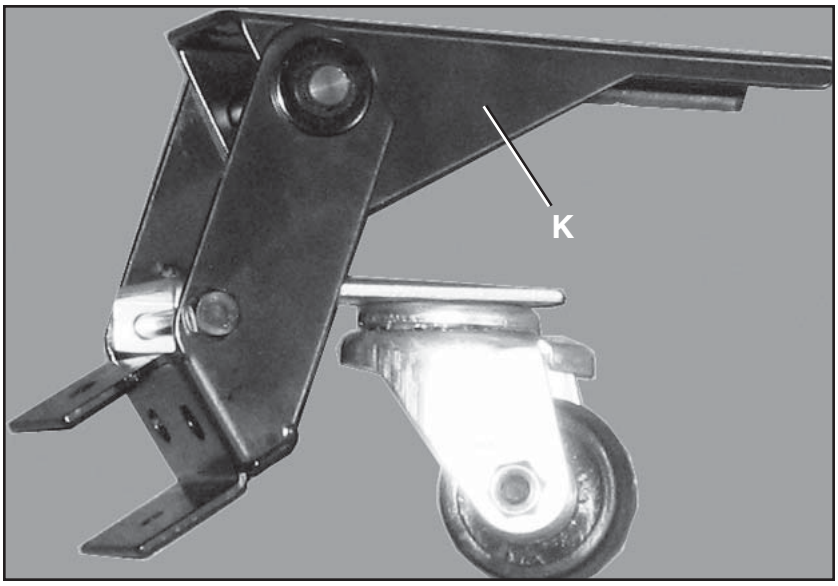
H) Pulley Cover

I) Dust Port

J) Belt



K) Swivel Caster Assembly



L) Jointer Base

ASSEMBLY

⚠ WARNING

MAKE CERTAIN THAT THE MACHINE IS DISCONNECTED FROM THE POWER SOURCE.

MOUNTING MOTOR TO STAND

1. The motor is bolted to the top of the stand and must be attached to the motor mounting brackets
2. Turn stand upside down as shown. **SEE FIG 1.**

Fig. 1

3. Remove the six screws (A) and remove panel (B) from the stand. **SEE FIG 2.**
4. Remove the bolts that attach the motor to the stand.
5. Align the holes in the motor mounting plate with the slots in the two motor mounting brackets (C). Make sure that the motor shaft (D) is facing towards the opening in the stand (E) as shown in Fig. 3. Fasten the motor plate to the mounting brackets using four hex head bolts. Do not fully tighten at this time. **SEE FIG. 3.**

Fig. 2

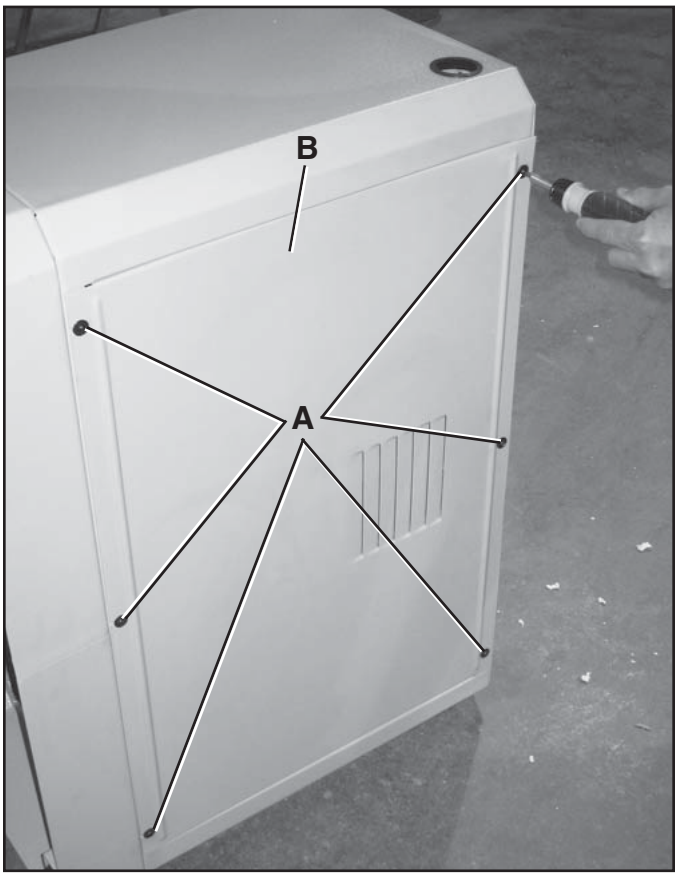
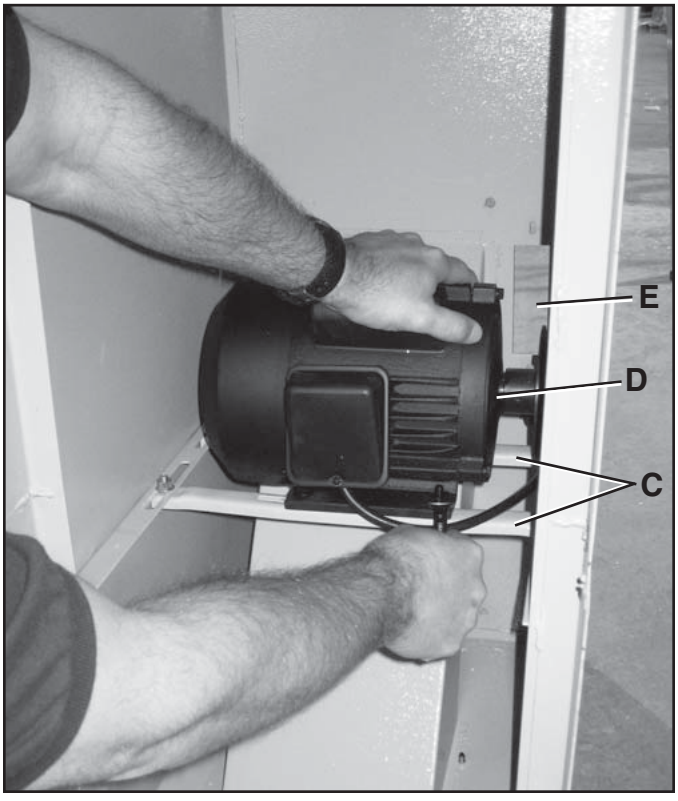


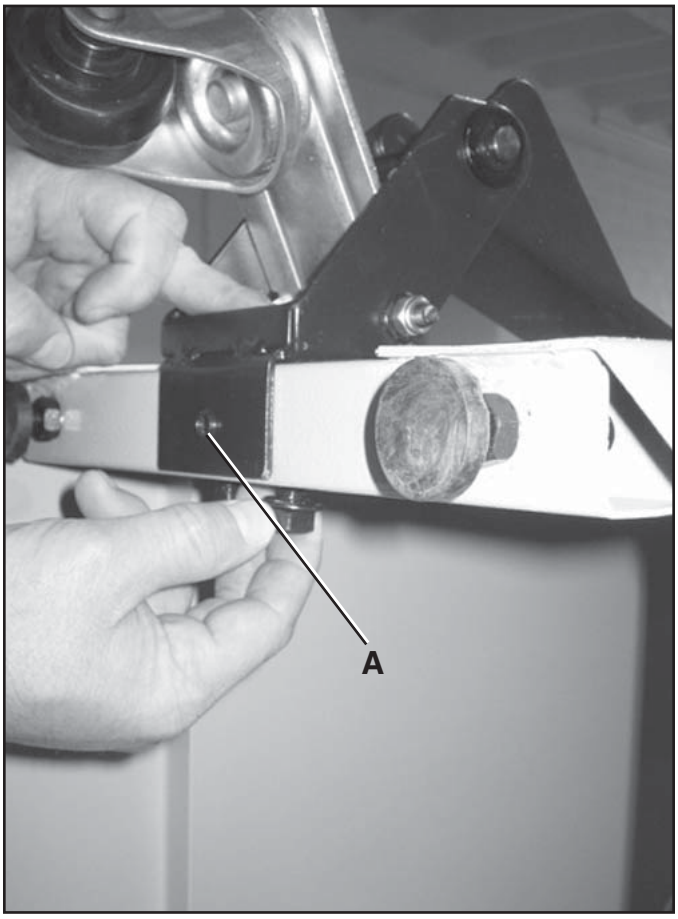
Fig. 3



LOCKING FOOT PEDAL

1. Place the locking foot pedal assembly onto the cross brace.

Fig. 4



2. Install the two M10-1.55 x 55mm hex bolts, flat washers and hex nuts through the front of the locking foot pedal assembly as shown. **SEE FIG 4.**

3. Install the single M8-1.25 x 50mm hex bolt through the single hole(A) in the bottom of the brace. **SEE FIG 4.**

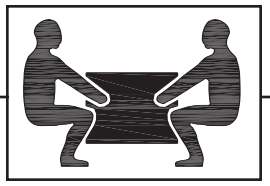
4. Raise the stand upright

5. Lock the foot pedal down

6. Level the cabinet front –to-back and side-to-side by adjusting the leveling feet.

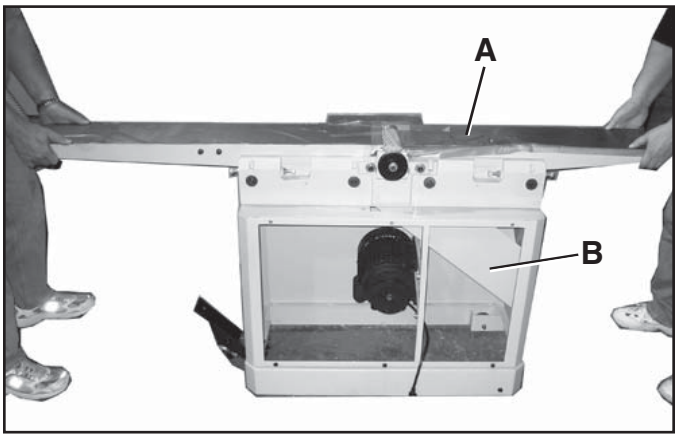
MOUNTING JOINTER TO STAND

⚠WARNING



- The machine is heavy, two people are required to unpack and lift.

Fig. 5



The Jointer is extremely heavy. Have two or more people help lift and move it around when assembling.

1. Have one person lift up on each side of the jointer and place the jointer on top of the stand. **SEE FIG 5.**

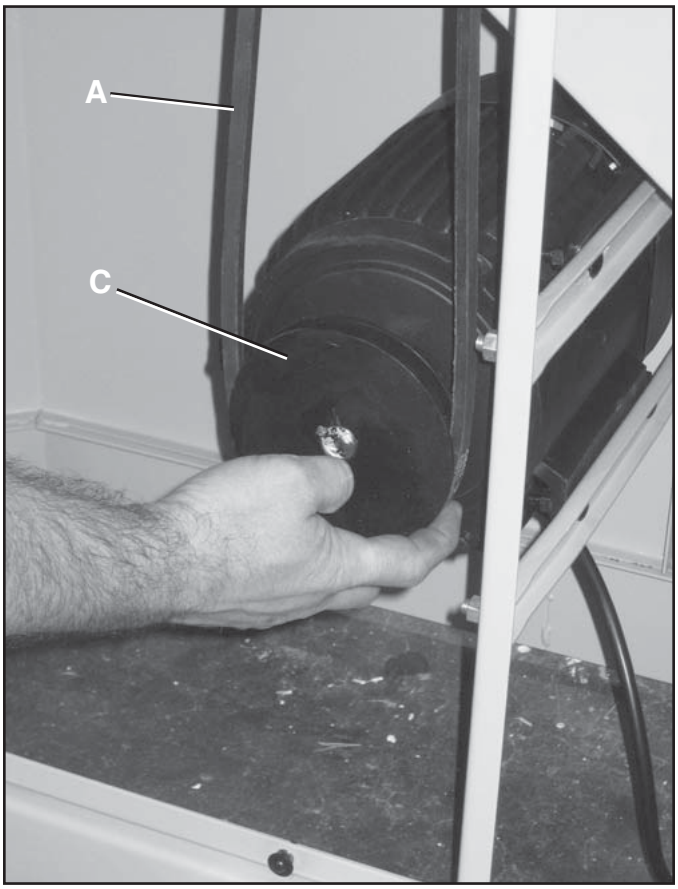
2. Line up the eight holes on the top of the stand with the eight threaded holes on the bottom of the jointer base.

3. Fasten the jointer to the stand using the eight socket head cap screws, eight flat washers and eight lockwashers.

NOTICE: The outfeed end of the jointer (A) must be pointed towards the end of the stand with the dust chute (B). **SEE FIG 5.**

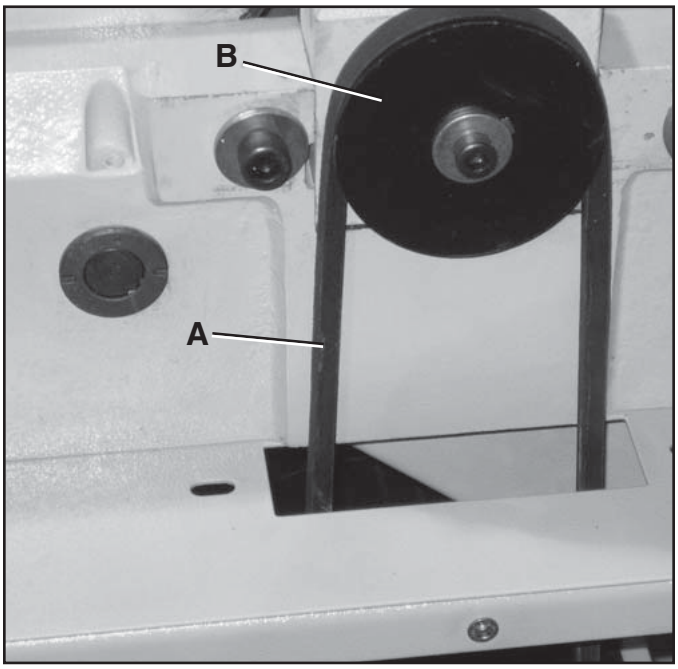
ASSEMBLING BELT AND ALIGNING PULLEYS

Fig. 6



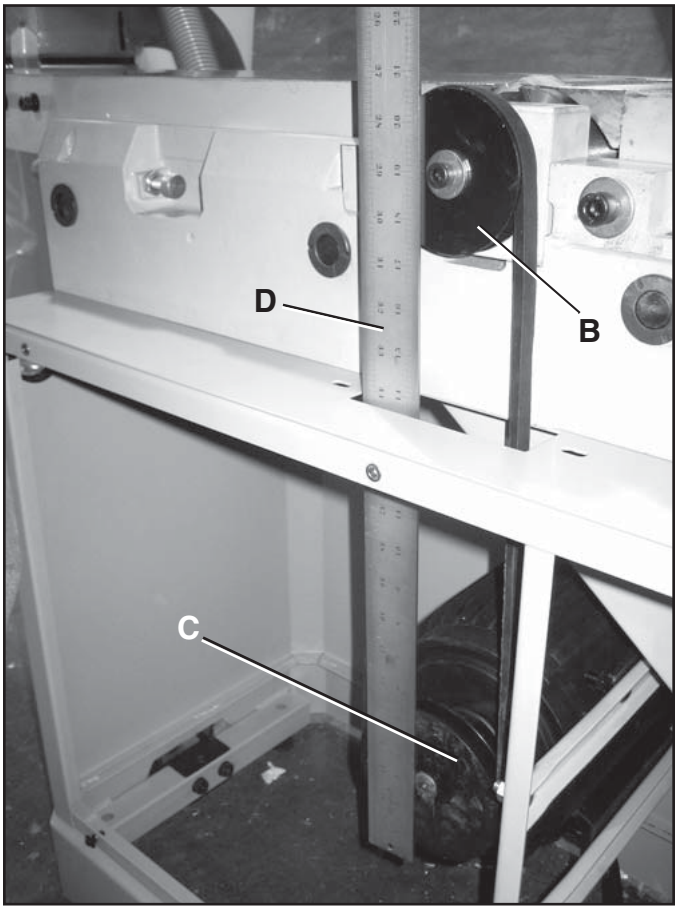
1. Place belt (A), in groove of cutterhead pulley (B) and motor pulley (C). **SEE FIGS. 6 AND 7.**

Fig. 7



2. Make certain the motor pulley (C) is properly aligned with cutterhead pulley (B) by placing a straight edge (D) Fig. 8, onto the face of each pulley as shown. **SEE FIG. 8.**

Fig. 8



3. If an adjustment is needed, the motor pulley can be moved in or out on the motor shaft, or the motor can be shifted by loosening motor mounting screws. After adjustments are made, tighten motor mounting hardware and motor pulley set screw.

ADJUSTING BELT TENSION

1. Correct belt tension is obtained when there is approximately 1” deflection at the center span of the belt using light finger pressure.

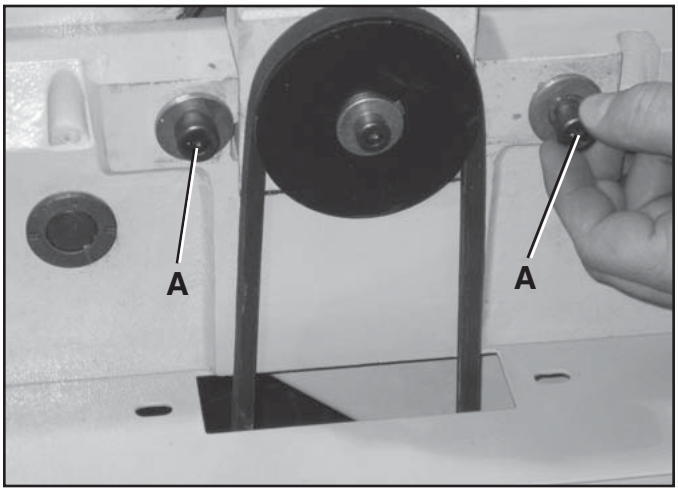
2. If an adjustment is required, the motor can be raised or lowered to obtain the correct belt tension.

3. Tighten motor mounting hardware after tension is applied, making sure alignment of the pulleys is not disturbed.

ASSEMBLING FENCE CARRIAGE ASSEMBLY

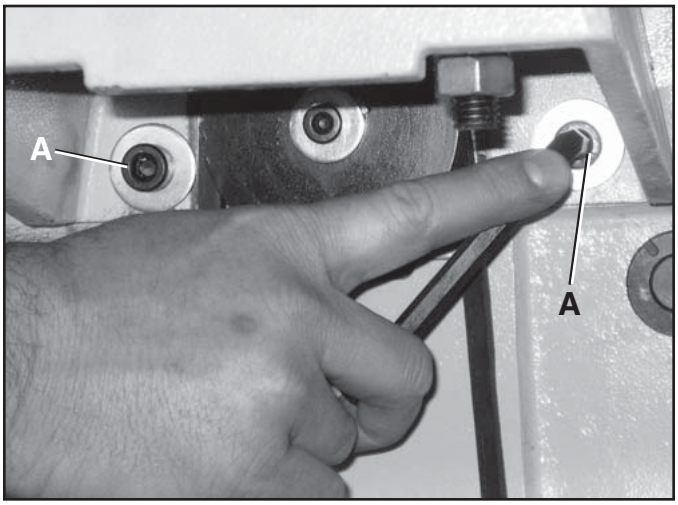
1. Remove the two M10 x 1.5 x 30mm hex socket head screws (A) and 10mm flat washers from the back of the jointer. These are located on either side of the cutterhead pulley. **SEE FIG. 11.**

Fig. 11



2. Align the two holes in the fence carriage assembly with the two tapped holes in the back of the jointer base. These are the same holes that you removed the screws from in the previous step. Insert the M10 x 1.5 x 30mm hex socket head screw with a 10mm flat washer, through the hole in the fence carriage assembly and thread the screw into the tapped holes in the back of the jointer. Repeat this process for the remaining hole in the fence carriage assembly and the tapped hole in the back of the jointer. **NOTE: THE TOP SURFACE OF THE FENCE CARRIAGE ASSEMBLY MUST BE LEVEL WITH THE TOP SURFACE OF THE OUTFEED TABLE**. Once the fence carriage assembly is level with the outfeed table, tighten the two screws (A) securely with an 8mm hex wrench. **SEE FIG. 12.**

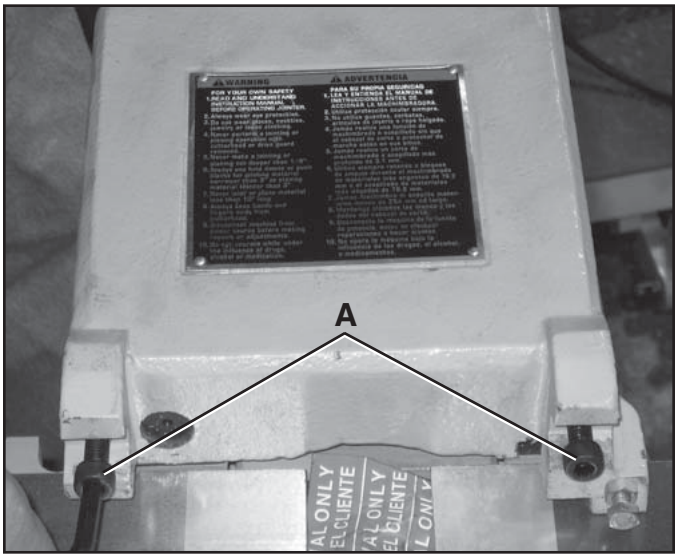
Fig. 12



ASSEMBLING FENCE

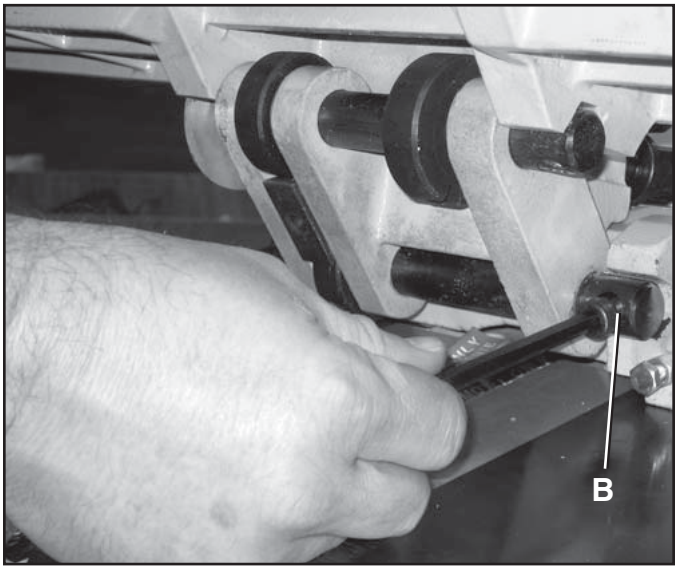
1. Remove the two M8 x 1.25 x 30mm hex socket head screws (A). **SEE FIG. 13.**

Fig. 13



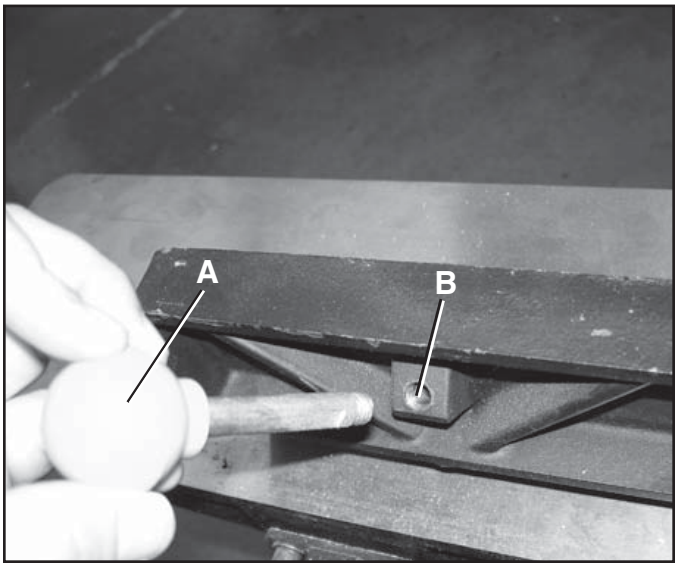
2. Align the two holes, one of which is shown at (B) Fig. 14, in the fence with the two holes in the fence carriage assembly. These are the same holes you removed the hex socket head screws from in the previous step. Insert the screw through the hole in the fence and thread the screw into the tapped hole in the fence carriage assembly and tighten securely with a 6mm hex wrench. Repeat this process for the remaining hole in the fence and fence carriage assembly. **SEE FIG. 14.**

Fig. 14



3. Thread the fence tilting handle (A) into the tapped hole (B) in the fence. **SEE FIG. 15.**

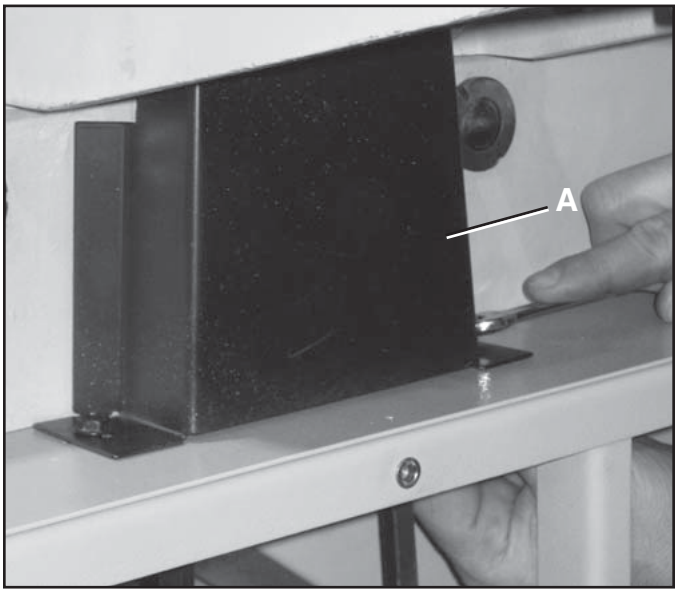
Fig. 15



ASSEMBLING CUTTERHEAD PULLEY/BELT GUARD

1. Align the two holes in the cutterhead pulley/belt guard (A) with the two holes in the top of the stand. **SEE FIG. 15A.**

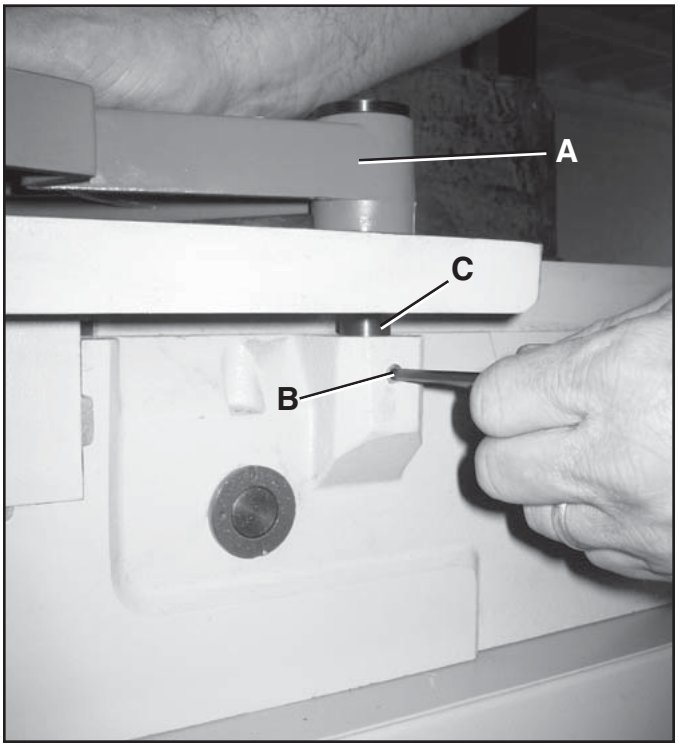
Fig. 15A



2. Place a 1/4" flat washer on an 1/4-20 x 5/8" hex head screw, and insert the screw through the hole in the cutterhead pulley/guard (A) and the hole in the top of the stand. Thread a 1/4-20 hex nut onto the screw and tighten securely. Repeat this process for the other hole in the cutterhead pulley/belt guard.

ASSEMBLING CUTTERHEAD GUARD

Fig. 16



CUTTERHEAD GUARD:

⚠ CAUTION

The cutterhead guard return spring is factory pre-loaded. No further adjustments should be necessary. When the guard is, installed properly it should return to the fence automatically after the workpiece has passed over the cutterhead. Be sure the guard is functioning properly before using the jointer.

1. Move the fence all the way to the rear of the table exposing the cutterhead.
2. Rotate the cutterhead using the drive belt by hand until there are no blades exposed. If this is not possible, place a piece of cardboard over the cutterhead. This is done to avoid exposure of hand to sharp blade.
3. Locate the mounting hole on the right hand side of the rabbetting ledge. Be sure the 4 MM locking set screw is not protruding into the mounting hole at this time.
4. Place a 6 MM allen wrench into the top bolt of the guard (A) and place the guard above the table positioned over the cutterhead. **SEE FIG 16.**
5. Rotate the 6 MM allen wrench clockwise slightly until the flat on the mounting shaft lines up with the 4 mm allen set screw (B) on the side of the mounting hole.

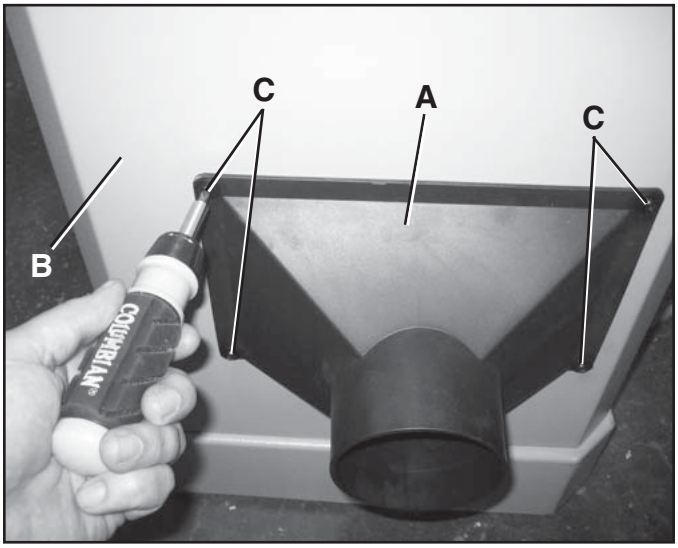
6. Drop the shaft (C) in the hole until it is seated.
7. Tighten the 4mm set screw.
8. Check guard clearance to be sure it is not dragging over table surface or cutterhead. If the guard is too low, loosen the 4mm allen set screw and raise the guard slightly.

CAUTION: Test the guard and be sure it springs back to the fence when pulled out. Test with the fence in its furthest position from the guard. Make it a habit to check this important safety feature every time before using the jointer.

ASSEMBLING DUST CHUTE

The jointer stand has a built-in dust chute. If this machine is to be used with a dust collection system, the supplied dust port (A) can be fastened to jointer stand (B) with four #10-16 x 1/2" hex head screws (C). **SEE FIG. 17.**

Fig. 17



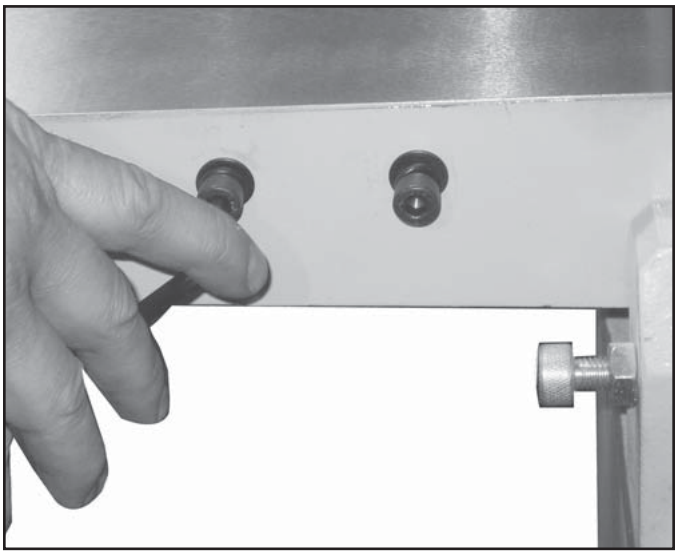
A standard 4" dust collection hose can be attached to dust collector connector.

NOTE: DO NOT ATTACH DUST PORT IF YOU DO NOT PLAN TO CONNECT THE JOINTER TO A DUST COLLECTION SYSTEM.

ATTACHING SWITCH

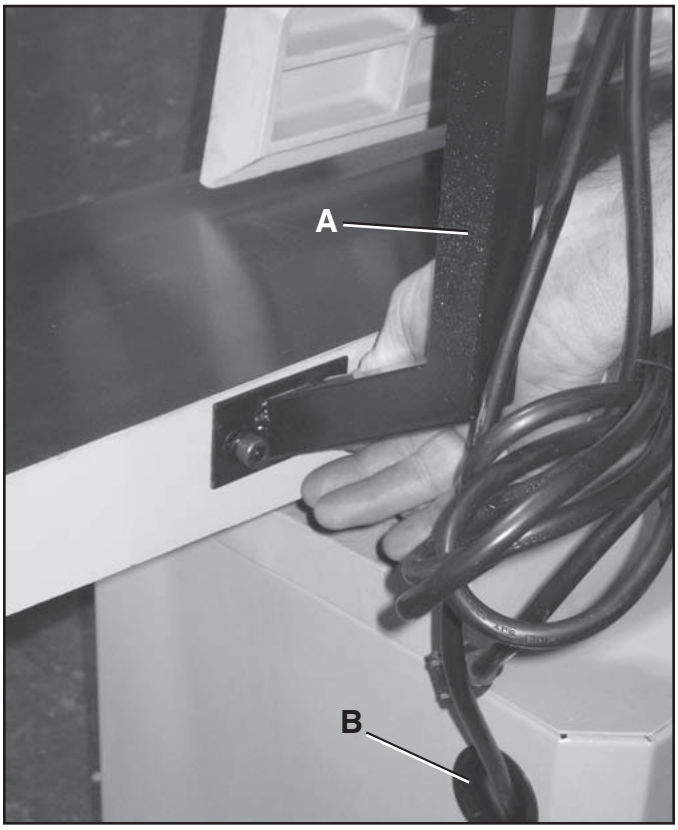
1. Remove the two socket head cap screws, lock washers, and flat washers located on the back side of the infeed table. **SEE FIG 18.**

Fig. 18



2. Line up the holes in the switch bracket (A) with the threaded holes in the infeed table and attach switch bracket using the hardware removed in step 1. **SEE FIG 19**.
3. Insert the cord that attaches to the motor through the hole (B) in the jointer stand.

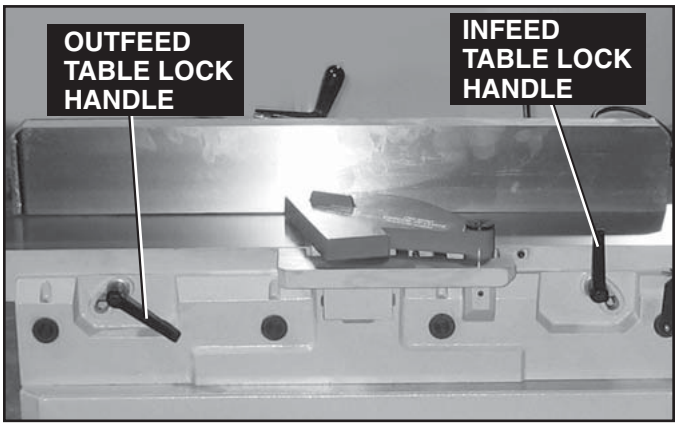
Fig. 19



ADJUSTMENTS

INFEED TABLE ADJUSTMENTS

Fig. 20

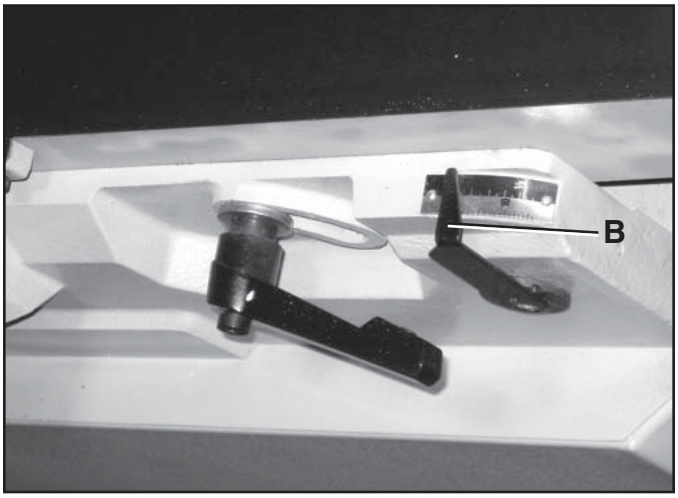


To raise or lower the infeed table, loosen infeed table lock handle and move the table raising and lowering hand lever (A), up or down until the table is at the desired position and tighten infeed table lock handle. **NOTE:** The table lock handle can be repositioned by pulling out the handle and repositioning it on the serrated nut located underneath the handle. **SEE FIGS. 20 AND 21.**

Fig. 21

The depth of cut of the infeed table (position of table in relationship with the cutting circle) can be read with the pointer and scale (B). **SEE FIG. 22.**

Fig. 22



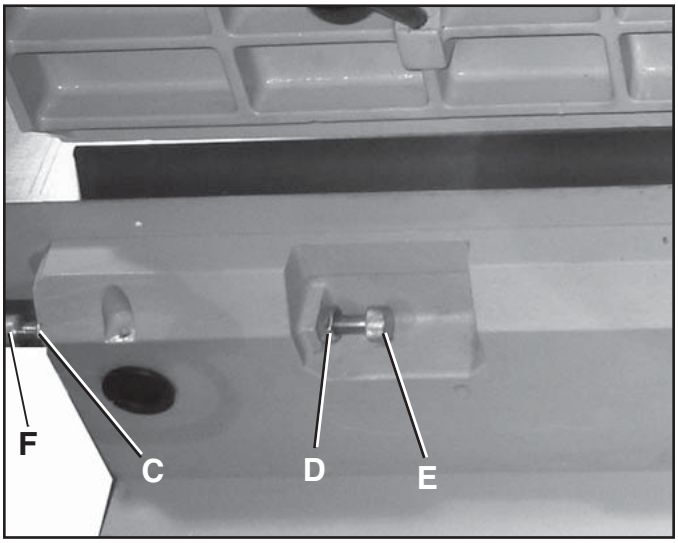
INFEED TABLE POSITIVE STOPS

⚠ WARNING

DISCONNECT MACHINE FROM POWER SOURCE.

Positive stops are provided to limit the height of the infeed table. The positive stops can be set by loosening lock nuts (C) and (D), and turning the two adjusting screws (E) and (F). We recommend that the height of the infeed table be adjusted so that the table, at its highest point, will be 1/2mm (.020”) below the highest point of the knives. This is an important feature of your jointer which enables you to rapidly position the infeed table for a finish or final cut. **SEE FIG. 23.**

Fig. 23



OUTFEED TABLE ADJUSTMENTS

⚠ WARNING

DISCONNECT MACHINE FROM POWER SOURCE.

The outfeed table must be exactly level with the knives when the knives are at their highest point of revolution. To move the outfeed table, loosen table lock handle and move the table raising and lowering hand lever (A) up or down until the table is level with the knives. It may be necessary to loosen the two locknuts (B) and (D), and the two adjusting screws (C) and (E) when moving the table up or down. When the outfeed table is exactly level with the knives at their highest point of revolution, tighten table lock handle and turn adjusting screw (E) until it bottoms. Then tighten lock nut (D). Screw (C) is also a positive stop for the lower limit of the outfeed table. We suggest that this stop also be tightened with locknut (B), when the outfeed table is set level with the knives. This will prevent the outfeed table from accidentally being lowered. **SEE FIGS. 24 AND 25.**

Fig. 24

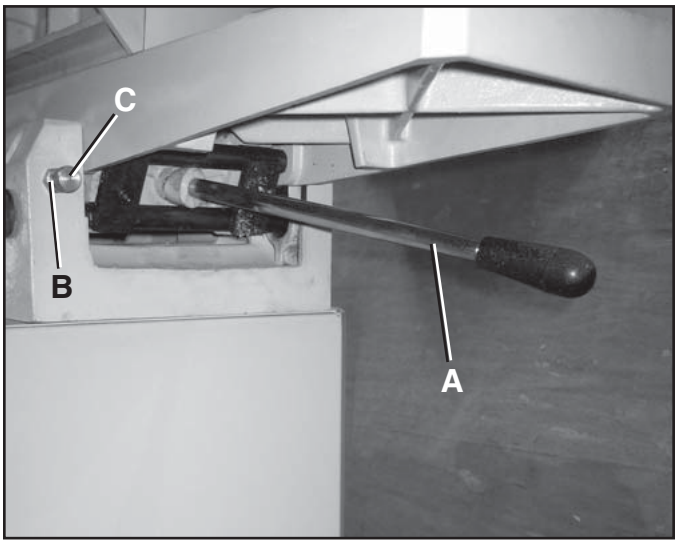
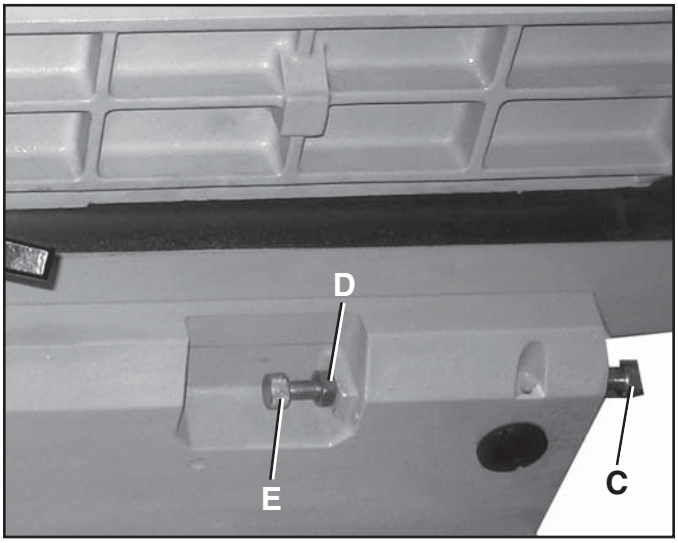


Fig. 25



KNIFE ADJUSTMENTS

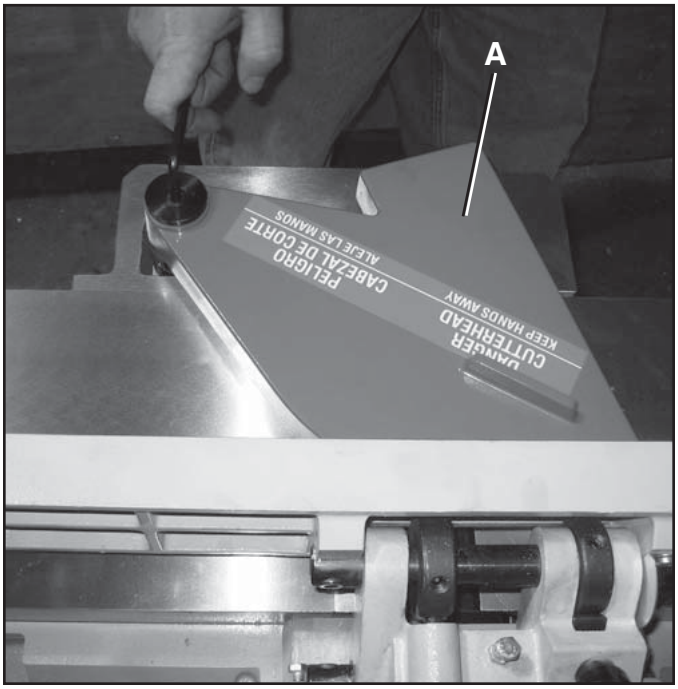
In order to do accurate work, the knives must be exactly level with the outfeed table. To check and adjust, proceed as follows:

⚠ WARNING

DISCONNECT MACHINE FROM POWER SOURCE.

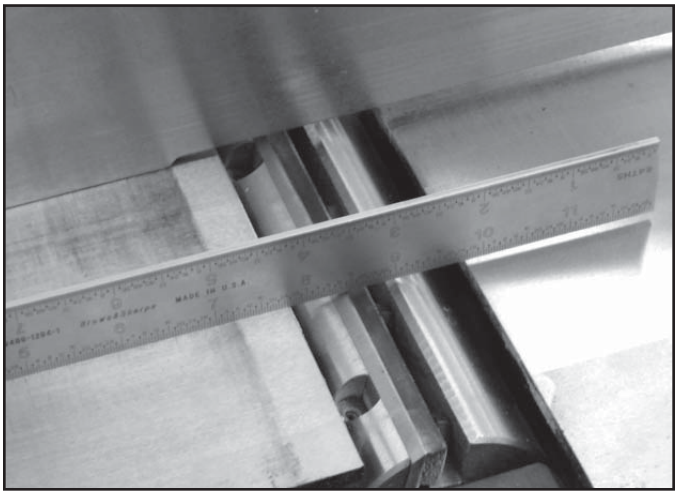
1. Loosen infeed table lock lever and lower infeed table as described under section “INFEED TABLE ADJUSTMENTS”.
2. Remove cutterhead guard (A). **SEE FIG. 26.**

Fig. 26



3. Place a steel straight edge on the outfeed table, extending over the cutterhead as shown. **SEE FIG. 27.**

Fig. 27



4. Carefully rotate the cutterhead by hand. The knives should just touch the straight edge.

5. If the knife is high or low at either end, slightly turn the four screws (B), in the knife locking bar clockwise to loosen, using an open end wrench (C). Then, using an allen wrench, adjust the height of the knife by turning the knife raising screws (D) counterclockwise to lower and clockwise to raise the knife. **SEE FIGS. 28 AND 29.**

Fig. 28

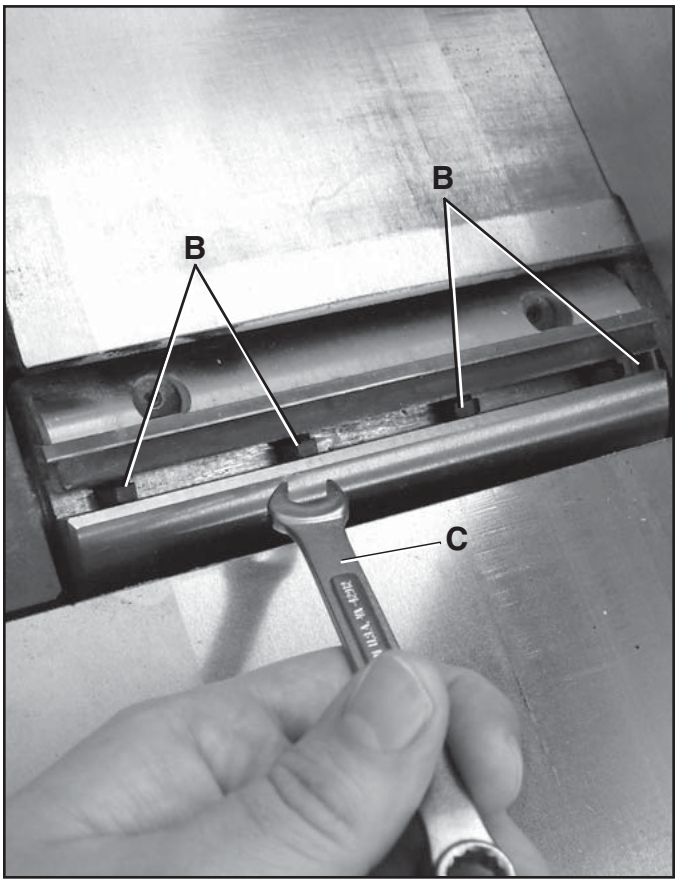
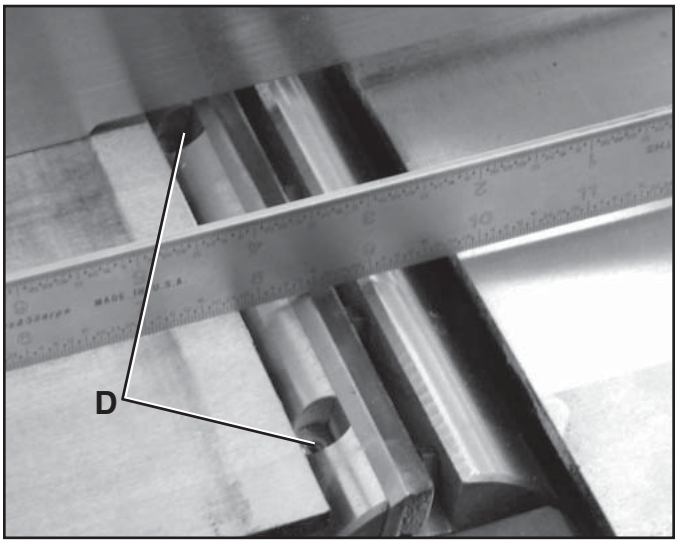


Fig. 29



⚠ WARNING

CARE MUST BE TAKEN WHEN HANDLING THE KNIVES, AS THE CUTTING EDGES ARE VERY SHARP. WEAR PROTECTIVE GLOVES WHEN HANDLING THE KNIVES.

If the knife is to be lowered, it will be necessary to carefully push down on the knife with a scrap piece of wood, after screws (D) have been turned counterclockwise to achieve desired depth. Tighten four screws (B) by turning them counterclockwise, after adjustment is made.

6. Repeat these procedures for adjusting the remaining two knives if necessary, and replace cutterhead guard removed in STEP 2.

7. If the knives are set too low, the finished surface will be curved.

8. If the knives are set too high, the work will be gouged, curved, or bowed at the end of the cut.

9. As a final check, run a piece of work slowly over the knives for 6 to 8 inches. The wood should rest firmly on both tables with no open spaces under the finished cut.

ADJUSTING FENCE POSITIVE STOPS

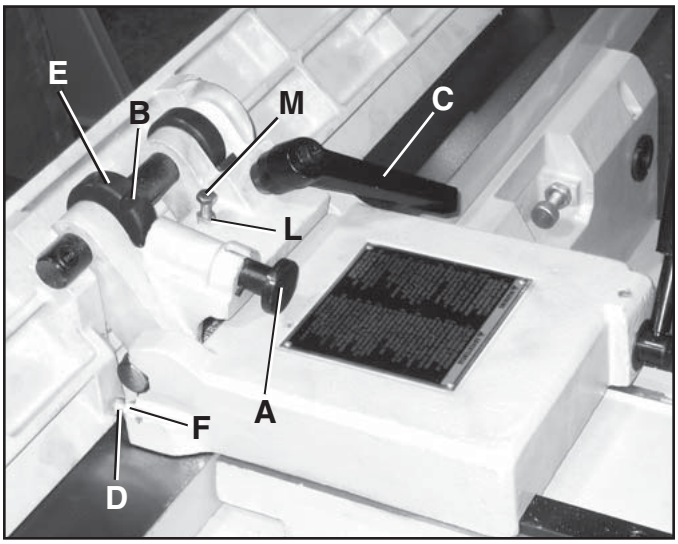
The fence on your jointer is equipped with positive stops at the most used fence positions of 90 degrees and 45 degrees in and out. To check and adjust the positive stops, proceed as follows:

⚠ WARNING

DISCONNECT MACHINE FROM POWER SOURCE.

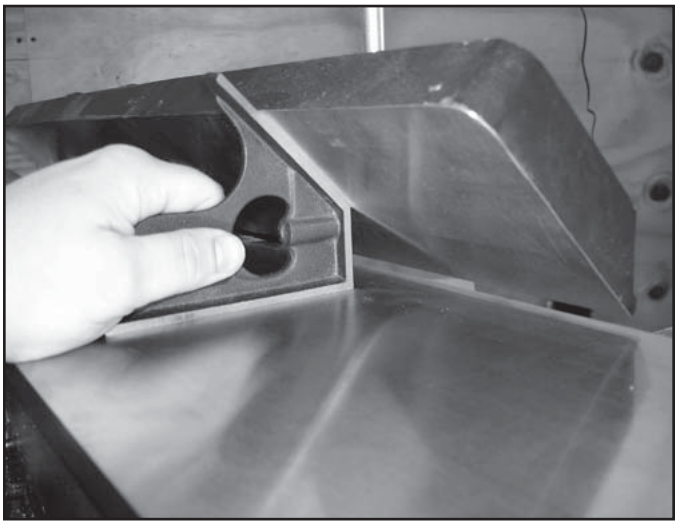
1. Position the fence 90 degrees to the table by making sure end of plunger (A) is engaged in notch in index collar (B), as shown, and tighten lock-handle (C). **SEE FIG. 30**.

Fig. 30



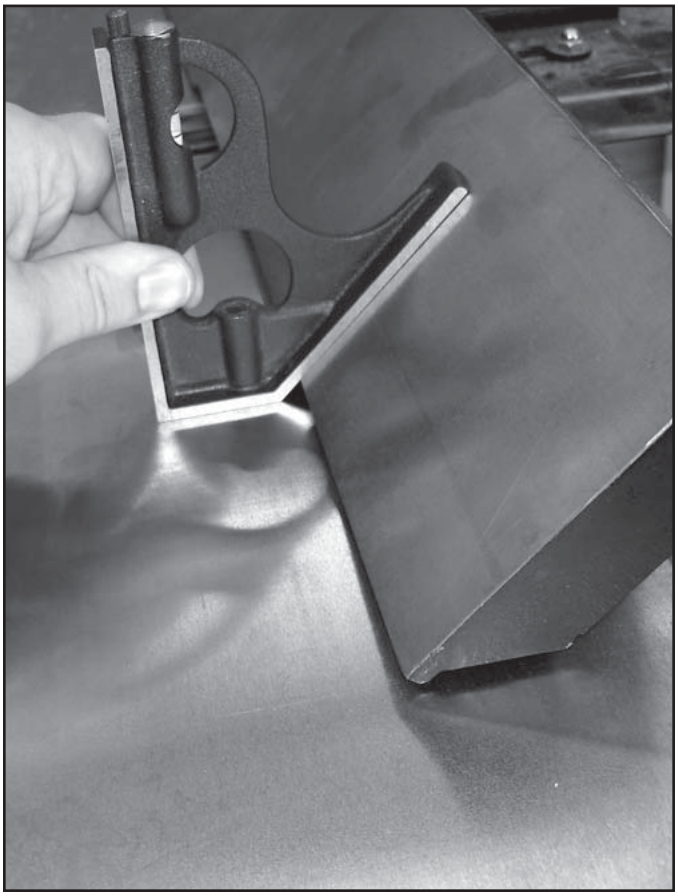
2. Using a square, check to see if the fence is at 90 degrees to the table.
3. If the fence is not at 90 degrees to the table, loosen set screw (E) in the index collar (B), and loosen the fence locking handle (C). Move the fence until you are certain it is at 90 degrees to the table and tighten locking handle (C) and set screw (E).
4. To tilt the fence in or out, loosen handle (C), pull out plunger (A), and move the fence to the desired angle.
5. Tilt the fence inward as far as possible and using a combination square, check to see if the fence is tilted inward 45 degrees. If an adjustment is necessary, loosen locknut (F), and turn adjusting screw (D) in or out until the fence is 45 degrees to the table, and tighten locknut (F). Then tighten lock handle (C). **SEE FIGS. 30 AND 31.**

Fig. 31



6. Tilt the fence outward as far as possible and using a combination square, check to see if the fence is tilted outward 45 degrees, as shown. If an adjustment is necessary, loosen lock handle (C). Loosen locknut (L) and turn adjusting screw (M) until the fence is at 45 degrees to the table. Then tighten locknut (L) and lock handle (C). **SEE FIGS. 30 AND 32.**

Fig. 32



CUTTERHEAD ROTATION

⚠WARNING

The rotation of the cutterhead must be in a clockwise direction when viewed from the left side of the machine; that is, the knives must be rotating toward the infeed table from the top. If the cutterhead rotation is incorrect, disconnect the machine from the power source and interchange leads T5 and T8 in the motor junction box.

OPERATIONS

According to many OSHA, ANSI, STATE, and LOCAL CODES, it is the Employers Responsibility to:

- **PERMIT ONLY** trained and authorized employees to operate equipment.
- **INSPECT AND MAINTAIN** guards, safety devices and start/stop controls.
- **INSTRUCT, TRAIN** and **SUPERVISE** the safe method of work.

⚠WARNING

Serious personal injury may occur if normal safety precautions are overlooked or ignored. Accidents are frequently caused by lack of familiarity or failure to pay attention. Obtain advice from supervisor, instructor, or another qualified individual who is familiar with the machine and its operations.

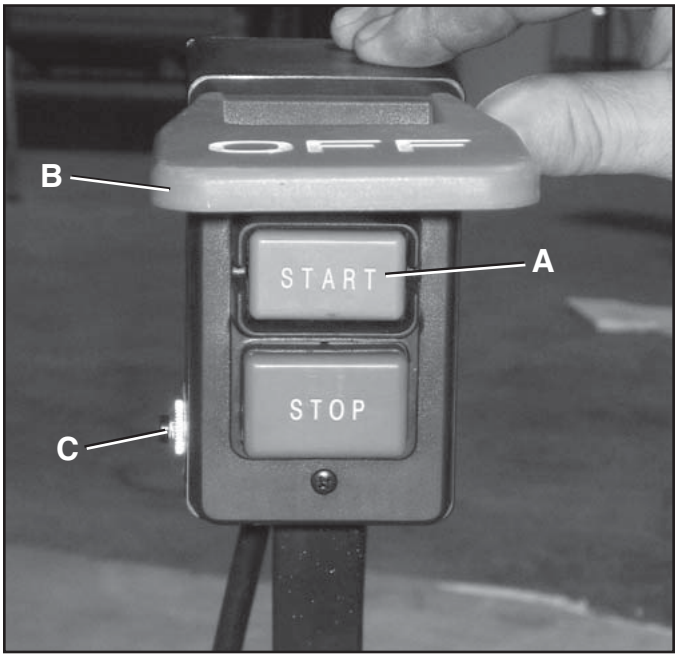
Every work area is different. Always consider safety first, as it applies to your work area. Use any machine with respect and caution. Failure to do so could result in serious personal injury and damage to the machine.

STOP using the machine, if at any time you experience difficulties in performing any operation. Contact your supervisor, instructor or machine service center immediately.

START/STOP SWITCH

The START/STOP switch assembly is located above the infeed table. To turn the jointer “ON”. push the green start button (A). To turn the jointer “OFF”, push the red stop paddle (B). **SEE FIG. 32A.**

Fig. 32A



⚠WARNING

CHILDPROOF THE WORKSHOP AREA by removing switch keys, unplugging tools from the electrical receptacles, and using padlocks.

LOCKING SWITCH IN THE "OFF" POSITION

When the jointer is not in use, the start button can be locked so that it cannot be started, using a padlock through the holes in the side of the start button.

CIRCUIT BREAKER

Your jointer is supplied with a resettable circuit breaker (C). It is located on the side of the start/stop switch box. If the motor shuts off or fails to start due to an overload condition, turn the jointer “OFF”, let the motor cool for three to five minutes, and push the reset button on the circuit breaker to reset the breaker. The motor can then be turned on again in the usual manner. **SEE FIG. 32A.**

The following directions will give the beginner a start on jointer operations. Use scrap pieces of lumber to check settings and to get the feel of the operations before attempting regular work.

CAUTION

THE KNIVES ON THE JOINTER WILL NOT WEAR EVENLY BY FEEDING THE WOOD THROUGH THE SAME SPOT ON THE TABLE EVERY TIME. FEED THE WOOD THROUGH THE JOINTER AT DIFFERENT SPOTS ON THE TABLE BY REPOSITIONING THE FENCE WHEN POSSIBLE, TO HELP ELIMINATE UNEVEN WEAR OF THE KNIVES.

⚠WARNING

ALWAYS USE CUTTERHEAD GUARD AND KEEP HANDS AWAY FROM CUTTERHEAD. ALWAYS USE PUSH BLOCKS WHENEVER POSSIBLE. NEVER MAKE JOINTING AND PLANING CUTS DEEPER THAN 1/8” IN ONE PASS.

PLACEMENT OF HANDS DURING FEEDING

At the start of the cut, the left hand holds the work firmly against the infeed table and fence, while the right hand pushes the work toward the knives. After the cut is underway, the new surface rests firmly on the outfeed table. The left hand should then be moved to the work on the outfeed table, at the same time maintaining flat contact with the fence. The right hand presses the work forward, and before the right hand reaches the cutterhead, it should be moved to the work on the outfeed table.

⚠ WARNING

NEVER PASS HANDS DIRECTLY OVER THE CUTTERHEAD.

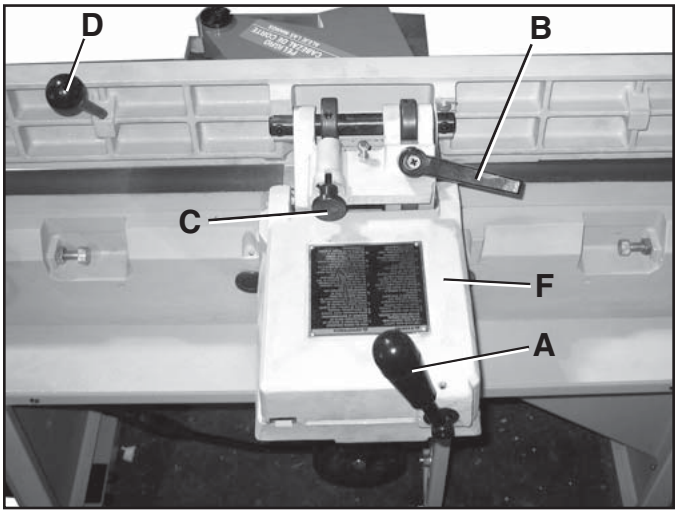
DIRECTION OF GRAIN

Avoid feeding work into the jointer against the grain. The result will be chipped and splintered edges. Feed with the grain to obtain a smooth surface.

FENCE OPERATION

The fence can be moved across the table by loosening lock lever (A), moving the fence to the desired position, and tighten lock lever (A) securely. As the fence is moved across the table, the sliding portion of the fence bracket (F) guards the cutterhead in back of the fence. **SEE FIG. 33.**

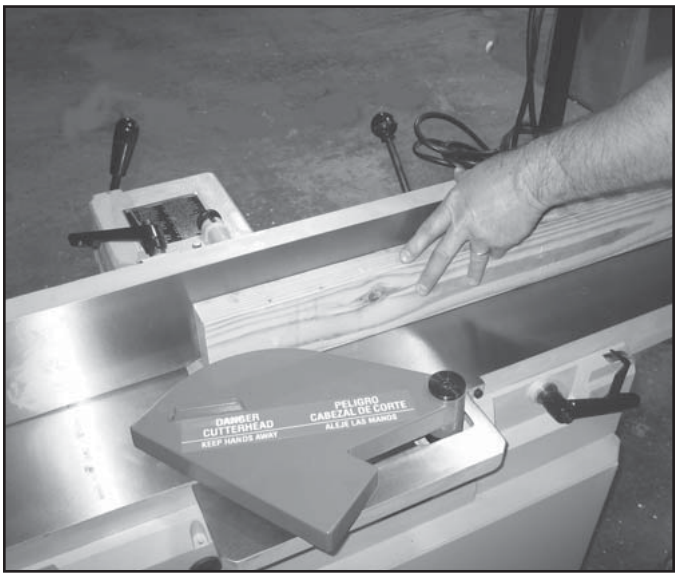
Fig. 33



JOINTING AN EDGE

This is the most common operation for the jointer. These cuts are made to square an edge of a workpiece. Set the guide fence square with the table. Depth of cut should be the minimum required to obtain a straight edge. Hold the best face of the piece firmly against the fence throughout the feed as shown in Fig. 34. **SEE FIG. 34.**

Fig. 34



CAUTION

MAXIMUM DEPTH OF CUT SHOULD NOT BE MORE THAN 1/8" IN ONE PASS.

⚠ CAUTION

DO NOT PERFORM JOINTING OPERATIONS ON MATERIAL SHORTER THAN 10 INCHES, NARROWER THAN 3/4 INCH, OR LESS THAN 1/2 INCH THICK.

SURFACING

Surfacing is identical to the jointing operation except for the position of the workpiece. For surfacing, the major flat surface of the workpiece is placed on the infeed table of the jointer with the narrow edge of the workpiece against the fence, as shown in Fig. 35. The workpiece is moved from the infeed table, across the cutterhead to the outfeed table, establishing a flat surface on the workpiece. **SEE FIG. 35.**

Fig. 35

⚠WARNING

ALWAYS USE PUSH BLOCKS WHEN PERFORMING SURFACING OPERATIONS AND NEVER PASS YOUR HANDS DIRECTLY OVER THE CUTTERHEAD.

CAUTION

MAXIMUM DEPTH OF CUT SHOULD NOT BE MORE THAN 1/8" IN ONE PASS.

BEVELING

To cut a bevel, lock the fence at the required angle and run the work across the knives while keeping the work firmly against the fence and tables. Several passes may be necessary to arrive at the desired result. When the angle is small, there is little difference whether the fence is tilted in or out. However, at greater angles approaching 45 degrees, it is increasingly difficult to hold the work properly when the fence is tilted out. The advantage of the double-tilting fence is appreciated under such conditions. When tilted in, the fence forms a V-shape with the tables, and the work is easily pressed into the pocket while passing it across the knives. If the bevel is laid out on the piece in such direction that this involves cutting against the grain, it will be better to tilt the fence out.

TAPER CUTS

One of the most useful jointer operations is cutting an edge to a taper. This method can be used on a wide variety of work. Tapered legs of furniture are a common example. Instead of laying the piece on the infeed table, lower the forward end of the work onto the outfeed table. Do this very carefully, as the piece will span the knives, and they will take a "bite" from the work with a tendency to kick back unless the piece is firmly held. Now push the work forward as in ordinary jointing. The effect is to surface off all the stock in front of the knives, to increasing depth, leaving a tapered surface. The ridge left by the knives when starting the taper may be removed by taking a very light cut according to the regular method for jointing, with the infeed table raised to its usual position. Practice is required in this operation, and the beginner is advised to make trial cuts on waste material. Taper cuts over part of the length and a number of other special operations can easily be done by the experienced craftsman.

CUTTING A RABBET

When making a rabbet cut, the cutterhead guard must be removed.

⚠CAUTION

AFTER THE RABBET CUT IS COMPLETED, BE CERTAIN GUARD IS REPLACED.

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

SURFACING WARPED PIECES

If the wood to be surfaced is dished or warped, take light cuts until the surface is flat. Avoid forcing such material down against the table; excessive pressure will spring it while passing the knives, and it will spring back and remain curved after the cut is completed.

SURFACING SHORT OR THIN WORK

⚠ CAUTION

WHEN SURFACING SHORT OR THIN PIECES, ALWAYS USE PUSH BLOCKS TO MINIMIZE ALL DANGER TO THE HANDS.

Fig. 35 illustrates using the push blocks properly. **SEE FIG. 35.**

⚠ CAUTION

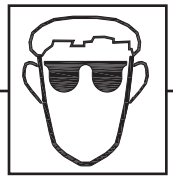
DO NOT PERFORM SURFACING OPERATIONS ON MATERIAL SHORTER THAN 10 INCHES, NARROWER THAN 3/4 INCH, WIDER THAN 8 INCHES, OR LESS THAN 1/2 INCH THICK.

MAINTENANCE

- **DO NOT** begin cleaning up until you have read and understand all of the clean up instructions.
- Follow proper Lock-Out/Tag-Out procedures prior to cleaning this machine or any part of this machine.
- Read and follow current MSDS (Material Safety Data Sheets) and technical data sheets that relate to the cleaning materials used.
- **DO NOT USE FLAMMABLE MATERIALS TO CLEAN JOINTER.**

CLEANING

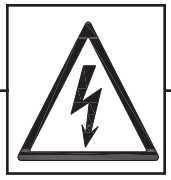
⚠ WARNING



With the machine unplugged, blow off motor with low pressure air to remove dust or dirt. Air pressure above 50 P.S.I. should not be used as high-pressured air may damage insulation. The operator should always wear a respirator and eye protection when using compressed air.

Do not allow chips and dust to accumulate under jointer. Keep area clean and in safe order.

⚠ WARNING



Turn the power switch “OFF” and unplug the power cord from its power source prior to any maintenance.

LUBRICATION

The jointer has sealed lubricated bearings in the motor housing that do not require any additional lubrication from the operator.

Repairs to the jointer should be performed by trained personnel only. Contact your nearest Steel City Dealer for authorized service. Unauthorized repairs or replacement with non-factory parts could cause serious injury to the operator and damage to the jointer.

After considerable use, the knives will become dull and it will not be possible to do accurate work. Unless badly damaged by running into metal or other hard material, the knives may be sharpened as follows:

WHETTING KNIVES

⚠ WARNING

DISCONNECT MACHINE FROM POWER SOURCE.

Use a fine carborundum stone; cover it partly with paper to avoid marking the table. Lay the stone on the infeed table, lower the table and turn the cutterhead forward until the stone lies flat on the bevel of the knife. Hold the cutterhead from turning, and whet the beveled edge of the knife, stroking lengthwise by sliding the stone back and forth across the table. Do the same amount of whetting on each of the three knives.

REMOVING, REPLACING, AND RESETTING KNIVES

If the knives are removed from the cutterhead for replacement or sharpening, care must be used in removing, replacing, and resetting them.

⚠ WARNING

DISCONNECT MACHINE FROM POWER SOURCE.

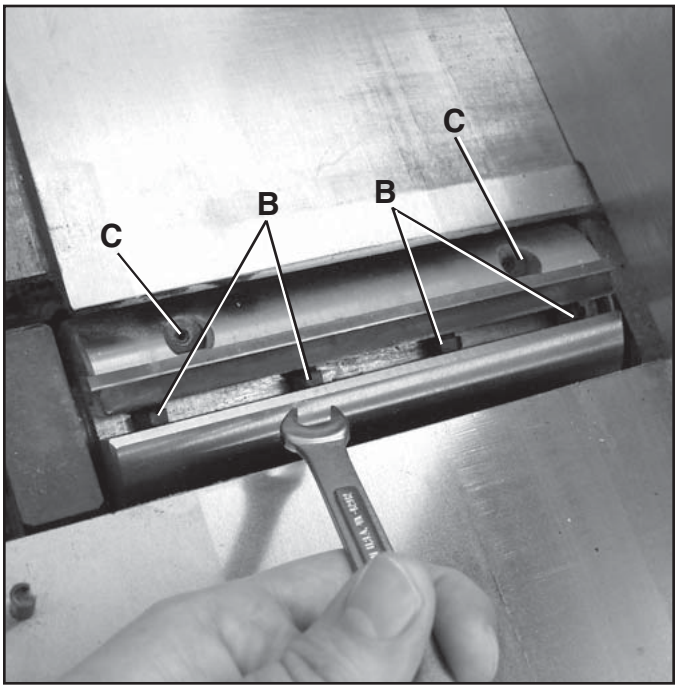
1. Move the fence to the rear and remove the cutterhead guard.

⚠ WARNING

BE EXTREMELY CAREFUL THAT YOUR HANDS DO NOT COME IN CONTACT WITH THE KNIVES. THE KNIVES ARE VERY SHARP. WEAR PROTECTIVE GLOVES WHEN HANDLING THE KNIVES.

2. Using wrench (A) Fig. 36, slightly loosen the four locking screws (B) in each knife slot by turning the screws (B) clockwise. Loosen screws (B) further and remove knife and knife locking bar. **SEE FIG. 36.**

Fig. 36



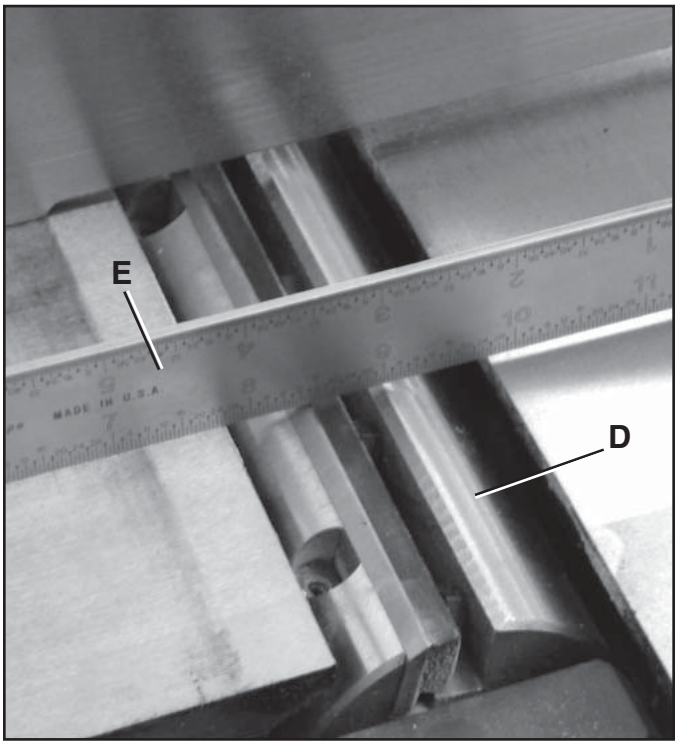
4. Using an allen wrench, lower the two knife adjustment blocks to the bottom of the cutterhead by turning screws (C) counterclockwise in all three slots of the cutterhead.
5. Before assembling knives, make certain the knives and locking bars are thoroughly clean and free of gum and pitch.
6. Place the knife locking bars and knives into each slot in the cutterhead.

⚠ WARNING

CARE MUST BE TAKEN WHEN INSERTING THE KNIVES, AS THE CUTTING EDGES ARE VERY SHARP. WEAR PROTECTIVE GLOVES WHEN HANDLING THE KNIVES.

7. Push the knife down as far as possible and turn each screw (B) counterclockwise just enough to hold the knife in position. Replace the remaining two knives in the same manner.
8. The knives are adjusted correctly when the cutting edge of the knife extends out .015" from the cutterhead diameter.
9. Carefully rotate the cutterhead until the round portion of the cutterhead is on top as shown.
10. Place a .015" feeler gage on the cutterhead and using a straight edge on the rear table, adjust the height of the rear table until it is .015" above the cuttinghead diameter.
11. Lock the rear table in position and remove the feeler gage.
12. Lower the infeed table and place a straight edge (E) on the outfeed table extending over the cutterhead (D) as shown. **SEE FIG. 37.**

Fig. 37



13. Rotate the cutterhead by hand until the knife is at its highest point **at each end of the cutterhead**. To raise the knife, use an allen wrench and turn raising screw clockwise until the knife just touches the straight edge on each end and center of the cutterhead when the knife is at its highest point.When you are certain the knife is adjusted properly, tighten the four locking screws by turning them counterclockwise.
14. Adjust the remaining two knives in the same manner. **MAKE CERTAIN THAT ALL KNIVES ARE SECURELY FASTENED IN CUTTERHEAD BEFORE TURNING ON POWER.**
15. Replace cutterhead guard.

TROUBLESHOOTING GUIDE

Motor and Machine Operation

PROBLEM	LIKELY CAUSE(S)	SOLUTION
Motor will not start.	1. Low voltage. 2. Open circuit in motor or loose connections.	1. Check power line for proper voltage. 2. Inspect all lead connections on motor for loose or open connections.
Fuses or circuit breakers blow.	1. Short circuit in line cord or plug.	1. Repair or replace cord or plug for damaged insulation and shorted wires
Motor fails to develop full power (output of motor decreases rapidly with decrease in voltage at motor terminals).	1. Power supply circuit overloaded with lights, appliances, and other motors. 2. Undersized wires or circuits too long.	1. Reduce load on circuit. 2. Increase wire sizes or reduce length of the circuit.
Motor overheats.	1. Motor overloaded during operation. 2. Air circulation through the motor restricted.	1. Reduce load on motor; take lighter cuts. 2. Clean out motor to provide normal air circulation.
Motor stalls or shuts off during a cut.	1. Motor overloaded during operation. 2. Short circuit in motor or loose connections. 3. Circuit breaker tripped.	1. Reduce load on motor; take lighter cuts. 2. Repair or replace connections on motor for loose or shorted terminals or worn insulation. 3. Install correct circuit breaker; reduce number of machines running on that circuit (circuit overload).
Blade slows when cutting or makes a squealing noise, especially on start-up.	1. V-belt loose. 2. V-belt worn out.	1. Tighten V-belt. 2. Replace V-belt.
Loud, repetitious noise coming from machine.	1. Pulley setscrews or keys are missing or loose. 2. Motor fan is hitting the cover. 3. V-belts are damaged.	1. Inspect keys and setscrews. Replace or tighten if necessary. 2. Adjust fan cover mounting position, tighten fan, or shim fan cover. 3. Replace V-belts.
Vibration when running or cutting.	1. Loose or damaged blade. 2. Damaged V-belt. 3. Worn cutterhead bearings.	1. Tighten or replace blade. 2. Replace. 3. Check/replace cutterhead bearings.

Table

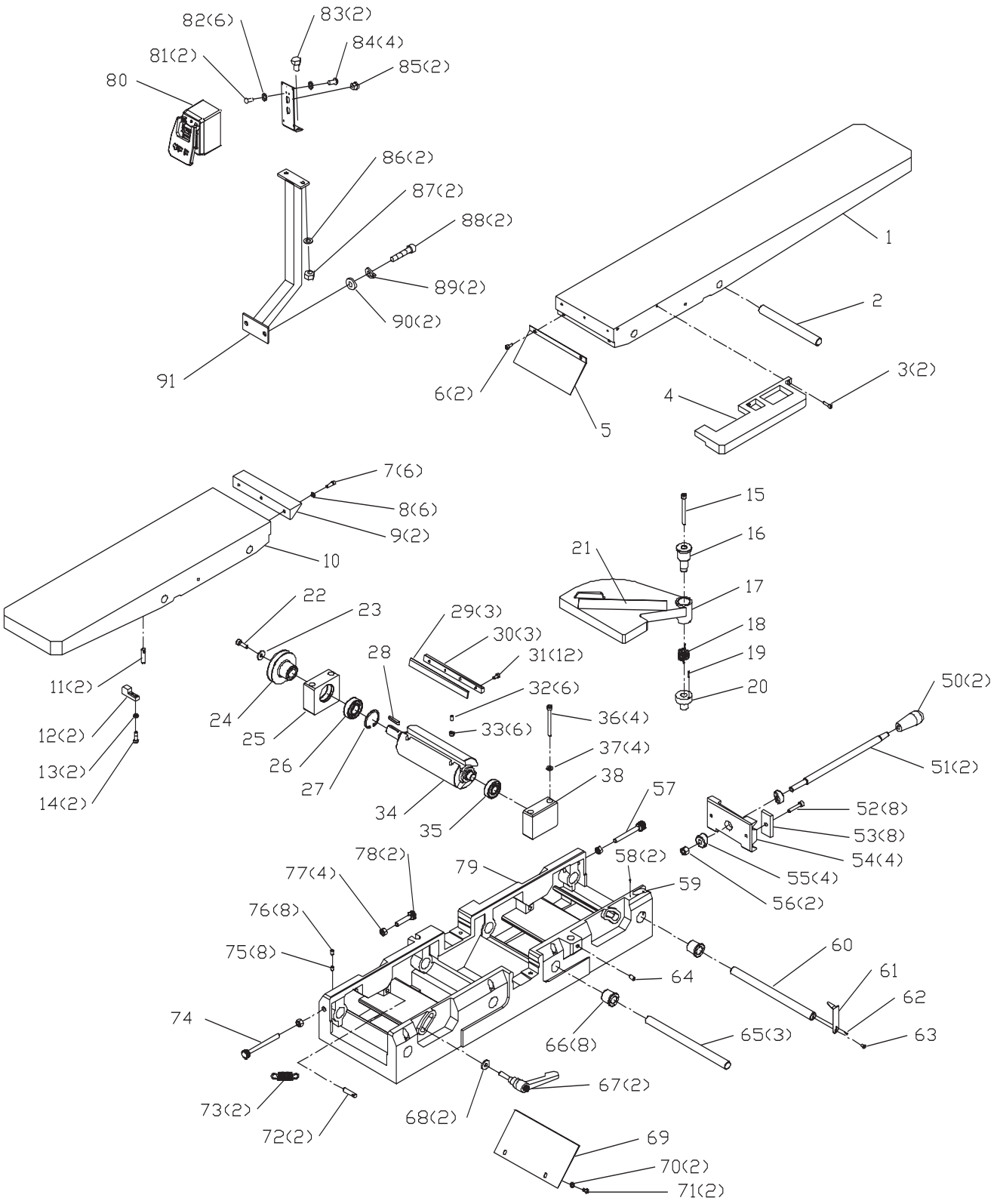
PROBLEM	LIKELY CAUSE(S)	SOLUTION
Tables are hard to adjust.	1. Table lock is engaged or partially engaged.	1. Completely loosen the table lock.

Cutting

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

◆ NOTES ◆

PARTS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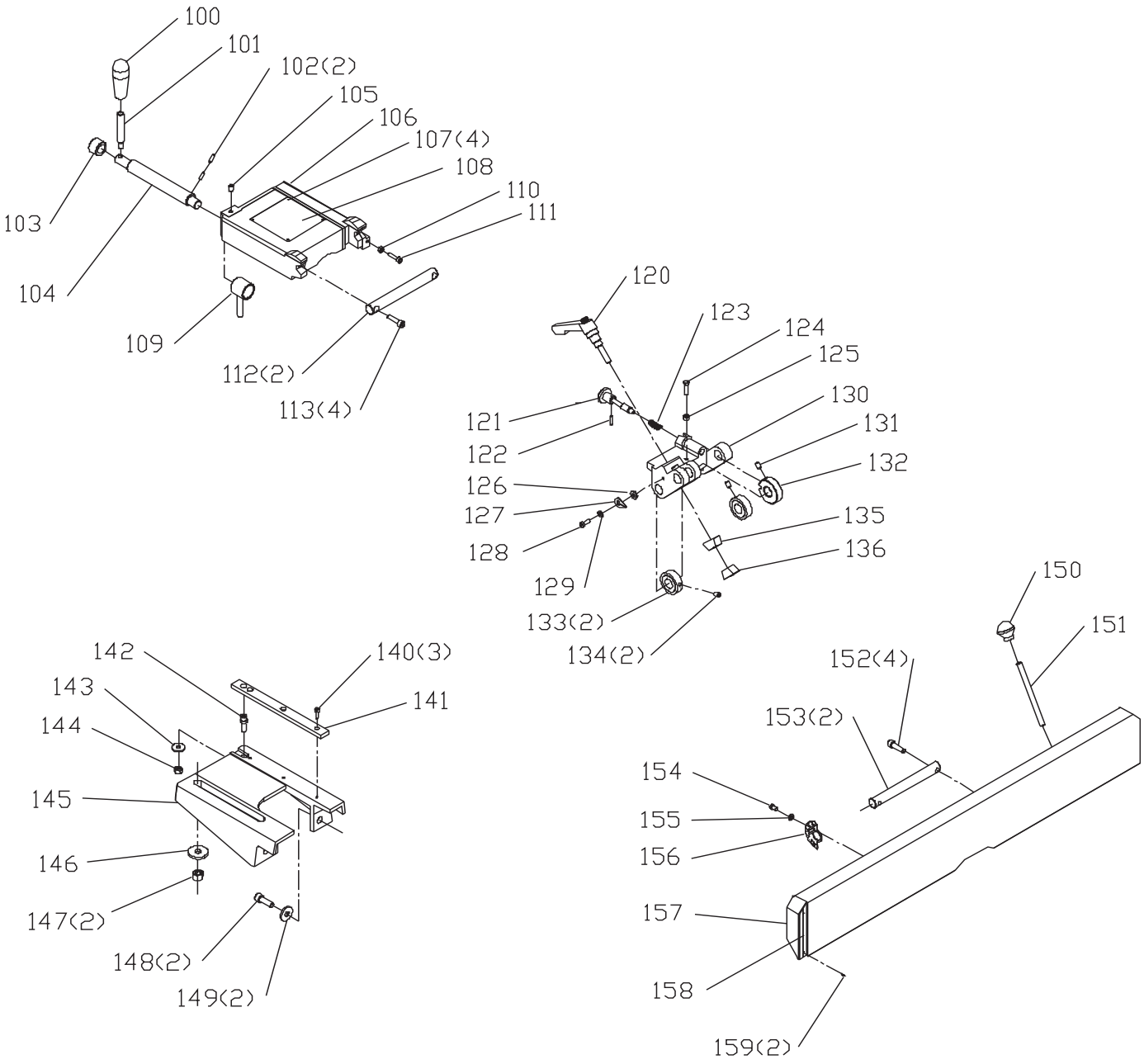
KEY NO.	PART NO.	DESCRIPTION	QTY.
1	OR70789	INFEED TABLE	1
2	OR70790	TABLE SHAFT	4
3	OR93374	M6X20MM SOC HD CAP SCR	2
4	OR70791	RABBETING TABLE EXTENSION	1
5	OR70792	CHIP DEFLECTOR	1
6	OR93372	M6 x 12mm SOC HD CAP SCR	2
7	OR93374	M6 x 20mm SOC HD CAP SCR	6
8	OR90059	M6 FLAT WASHER	6
9	OR70793	TABLE LIP	2
10	OR70794	OUTFEED TABLE	1
11	OR93935	SPRING PIN	2
12	OR70795	BUMPER	4
13	OR90502	M6 LOCK WASHER	4
14	OR93936	M6 x 25mm SOC HD CAP SCR	4
15	OR93937	M8 x 80mm SOC HD CAP SCR	1
16	OR70796	GUARD CLAMP	1
17	OR70797	CUTTER HEAD GUARD	1
18	OR93938	SPRING	1
19	OR93939	3mm x 16mm SPRING PIN	1
20	OR70798	SUPPORT	1
21	OR70799	GUARD WARNING LABEL	1
22	OR91806	M8 x 25mm SOC HD CAP SCR	1
23	OR93940	FLAT WASHER 8.4mm x 25mm x 3mm	1
24	OR70800	CUTTER HEAD PULLEY	1
25	OR70801	BEARING BLOCK RH	1
26	OR93941	BALL BEARING	1
27	OR93942	47mm INT. RET. RING	1
28	OR93943	6mm x 6mm x 35mm KEY	1
29	OR70802	KNIFE	3
30	OR70803	KNIFE LOCK BAR	3
31	OR93944	KNIFE LOCK BAR SCR	12
32	OR93945	M5 x 16mm HEX SOC SET SCR	6
33	OR70804	KNIFE LIFTER	6
34	OR70805	CUTTER HEAD	1
35	OR93946	BALL BEARING	1
36	OR93937	M8 x 80mm SOC HD CAP SCR	4
37	OR90248	M8 LOCK WASHER	4
38	OR70806	BEARING BLOCK LH	1
50	OR70807	KNOB	2
51	OR70808	LEVER	2
52	OR92923	M8 x 40mm SOC HD CAP SCR	8
53	OR70809	CLAMP PLATE	8
54	OR70810	PIVOT BRACKET	4
55	OR70811	ADJUSTING BLOCK	4
56	OR90280	M12 HEX NUT	2
57	OR70812	MEDIUM ADJUSTING SCR	1
58	OR93947	RIVET	2
59	OR70813	SCALE	1
60	OR70814	TABLE SHAFT	1
61	OR70815	POINTER	1
62	OR91791	3mm x 10mm SPRING PIN	1
63	OR91829	M4 x 10mm FLAT HD SCR	1
64	OR93380	M8 x 16mm HEX SOC SET SCR	1
65	OR70816	TABLE SHAFT	3
66	OR70817	ECCENTRIC BUSHING	8
67	OR70818	TABLE LOCK LEVER	2
68	OR93948	FLAT WASHER 8.4mm x 30mm x 5mm	2
69	OR70819	CHIP BREAKER	1
70	OR90059	M6 FLAT WASHER	2
71	OR90333	M6 x 12mm HEX HD SCR	2
72	OR93979	SPRING PIN	2
73	OR93978	SPRING	2
74	OR70822	LONG ADJUSTING SCR	1
75	OR90222	M6 x 10mm HEX SOC SET SCR	8
76	OR90222	M6 x 10mm HEX SOC SET SCR	8
77	OR90228	M10 HEX NUT	4
78	OR70823	SHORT ADJUSTING SCR	2
79	OR70824	BASE	1
80	OR70825	SWITCH ASSY	1
81	OR93814	M5 x 20mm PAN HD SCR	2
82	OR90362	M5 EXT TOOTH WASHER	6
83	OR93949	M6 x 12mm FLANGE SCR	2
84	OR93950	FLAT HD SCR	4
85	OR93980	STRAIN RELIEF	2
86	OR90059	M6 FLAT WASHER	2
87	OR90235	M6 HEX NUT	2
88	OR91806	M8 x 25mm SOC HD CAP SCR	2
89	OR90248	M8 LOCK WASHER	2
90	OR90311	M8 FLAT WASHER	2
91	OR70827	SWITCH BRACKET	1
92	OR70828	SWITCH BOX PLATE	1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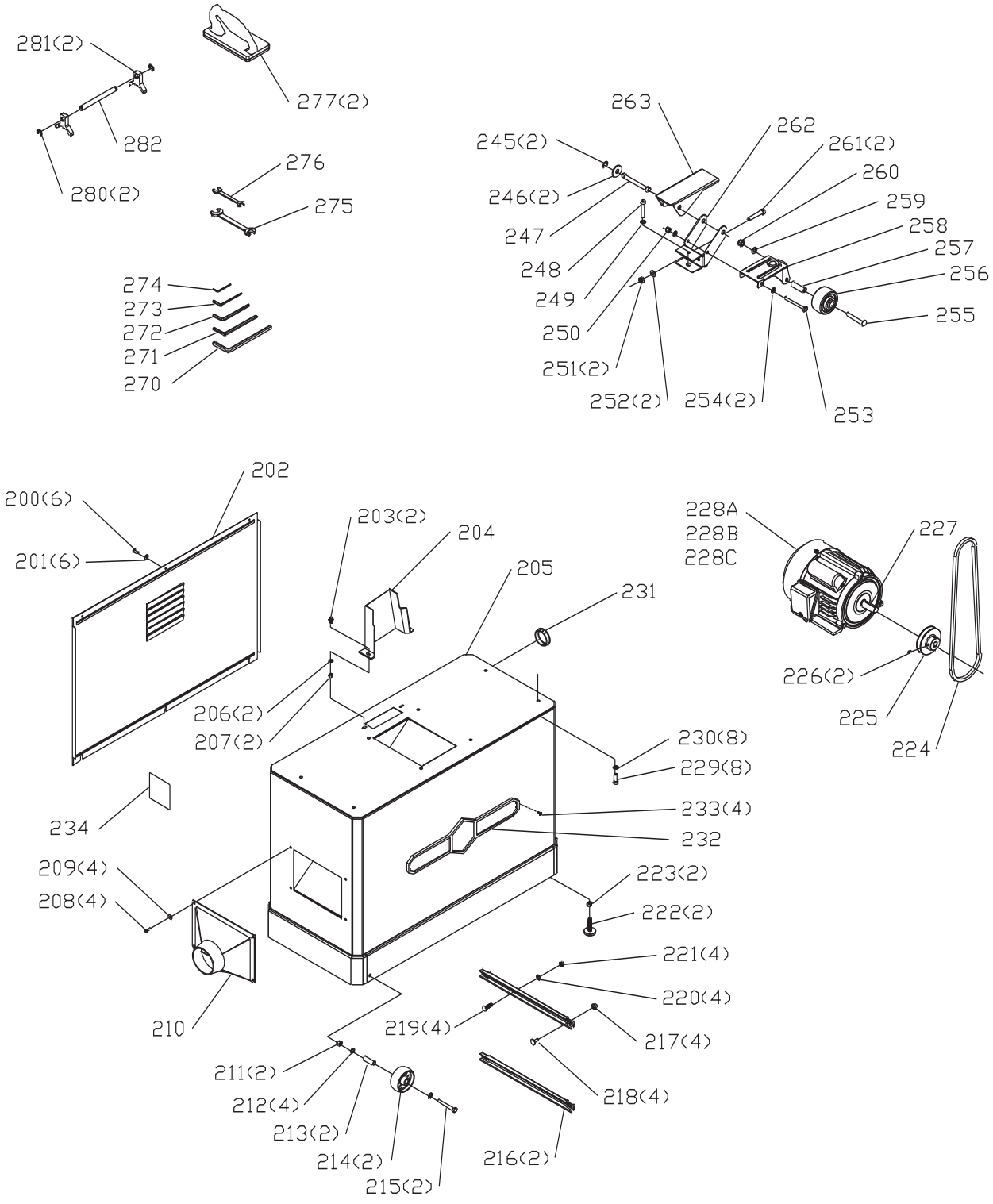
100	OR93981	KNOB	1
101	OR70830	STUD	1
102	OR93951	M6 x 16mm HEX SOC SET SCR	2
103	OR70831	BUSHING	1
104	OR70832	ECCENTRIC SHAFT	1
105	OR93913	M8 x 12mm HEX SOC SET SCR	1
106	OR70833	FENCE CARRIAGE	1
107	OR93952	RIVET	4
108	OR70834	FENCE CARRIAGE WARNING LABEL	1
109	OR70835	COLLAR	1
110	OR90235	M6 HEX NUT	1
111	OR91749	M6 x 25mm HEX HEAD SCR	1
112	OR70836	SHAFT	1
113	OR92174	M8 x 30mm SOC HD CAP SCR	2
120	OR70837	LOCK LEVER	1
121	OR70838	INDEX PIN ASSEMBLY	1
122	OR91793	3mm x 20mm SPRING PIN	1
123	OR93953	SPRING	1
124	OR91749	M6 x 25mm HEX HEAD BOLT	1
125	OR90235	M6 HEX NUT	1
126	OR93954	WASHER 6.5mm x 16mm x 3mm	1
127	OR70839	POINTER	1
128	OR90938	M6 x 16mm CHEESE HD SCR	1
129	OR90059	M6 FLAT WASHER	1
130	OR70840	SWIVEL	1
131	OR93913	M8 x 12mm HEX SOC SET SCR	1
132	OR70841	COLLAR	1
133	OR70842	LOCK COLLAR	2
134	OR93913	M8 x 12mm HEX SOC SET SCR	1
135	OR70843	CLAMP	1
136	OR70844	THREADED CLAMP	1
140	OR93955	M5 x 16mm SOC HD CAP SCR	3
141	OR70845	GIB	1
142	OR70846	ECCENTRIC STUD	1
143	OR93956	FLAT WASHER 8.4mm x 25mm x 3mm	1
144	OR90307	M8 HEX NUT	1
145	OR70847	FENCE SUPPORT	1
146	OR93957	FLAT WASHER 12.7mm x 38mm x 5mm	1
147	OR90280	M12 HEX NUT	2
148	OR93958	M10 x 30mm SOC HD CAP SCR	2
149	OR93959	FLAT WASHER 10.4mm x 30 mm x 3mm	2
150	OR70848	BALL HANDLE	1
151	OR70849	STUD	1
152	OR92174	M8 x 30mm SOC HD CAP SCR	2
153	OR70836	SHAFT	1
154	OR93960	M6 x 10mm CHEESE HD SCR	1
155	OR90059	M6 FLAT WASHER	1
156	OR70850	TILT SCALE	1
157	OR70851	FENCE	1
158	OR70852	SCALE	1
159	OR70853	RIVET	2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KEY NO.	PART NO.	DESCRIPTION	QTY.
200	OR91778	M5 x 16mm PAN HD SCR	6
201	OR90462	M5 FLAT WASHER	6
202	OR70854	PANEL	1
203	OR93961	M6 x 12mm FLANGE SCR	2
204	OR70855	BELT GUARD	1
205	OR70856	CABINET	1
206	OR90059	M6 FLAT WASHER	2
207	OR90235	M6 HEX NUT	2
208	OR91778	M5 x 16mm PAN HD SCR	4
209	OR90462	M5 FLAT WASHER	4
210	OR70857	DUST CHUTE	1
211	OR90307	M8 HEX NUT	2
212	OR90311	M8 FLAT WASHER	4
213	OR70858	SLEEVE	2
214	OR70859	WHEEL	2
215	OR93962	M8 x 65mm HEX HEAD BOLT	2
216	OR70860	MOTOR BRACKET	2
217	OR93963	MOTOR BRACKET NUT	4
218	OR93964	MOTOR BRACKET SCREW	4
219	OR93965	MOTOR CARRIAGE SCREW	4
220	OR93966	FLAT WASHER	4
221	OR93967	MOTOR CARRIAGE NUT	4
222	OR93968	ADJUSTING SCR	2
223	OR90369	3/8 -16 HEX NUT	2
224	OR93969	V-BELT	1
225	OR70861	MOTOR PULLEY	1
226	OR90222	M6 x 10mm HEX SOC SET SCR	2
227	OR90219	5mm x 5mm x 30mm KEY	1
228A	OR70423	2HP MOTOR	1
228B	OR70370	MOTOR SPEC PLATE	1
228C	OR70862	CAPACITOR	1
229	OR91806	M8 x 25mm SOC HD CAP SCR	8
230	OR90248	M8 LOCK WASHER	8
231	OR93977	CABLE GROMMET	1
232	OR70484	NAME PLATE	1
233	OR93823	RIVET	1
234	OR70318	SPEC PLATE	1
245	OR93970	9mm EXT RET RING	2
246	OR93971	FLAT WASHER 13mm x 30mm x 3mm	2
247	OR70863	SHAFT	1
248	OR91497	M8 x 50mm HEX HEAD SCR	1
249	OR90311	M8 FLAT WASHER	1
250	OR90307	M8 HEX NUT	1
251	OR90228	M10 HEX NUT	2
252	OR90230	M10 FLAT WASHER	2
253	OR93972	M8 x 100mm HEX HEAD SCR	1
254	OR90311	M8 FLAT WASHER	2
255	OR93973	SPECIAL BOLT	1
256	OR70864	TROLLEY WHEEL	1
257	OR70865	SLEEVE	1
258	OR70866	TROLLEY BRACKET	1
259	OR90230	M10 FLAT WASHER	1
260	OR90228	M10 HEX NUT	1
261	OR93974	M10 x 55mm HEX HEAD BOLT	2
262	OR70867	PEDAL BRACKET	1
263	OR70868	PEDAL	1
270	OR90292	8MM HEX KEY	1
271	OR91729	6MM HEX KEY	1
272	OR91728	5MM HEX KEY	1
273	OR90291	4MM HEX KEY	1
274	OR90289	2.5MM HEX KEY	1
275	OR93975	12-14MM OPEN END WRENCH	1
276	OR90908	8-10MM OPEN END WRENCH	1
277	OR90238	PUSH BLOCK	2
280	OR93976	8mm EXT RET RING	2
281	OR70869	KNIFE GAUGE BLOCK	2
282	OR70870	KNIFE GAUGE ROD	1
285	OR70871	OWNERS MANUAL (NOT SHOWN)	1
286	OR70872	OWNERS MANUAL FRENCH (NOT SHOWN)	1
287	OR70873	OWNERS MANUAL SPANISH (NOT SHOWN)	1

◆ NOTES ◆

STEEL CITY TOOL WORKS

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5 Year Warranty