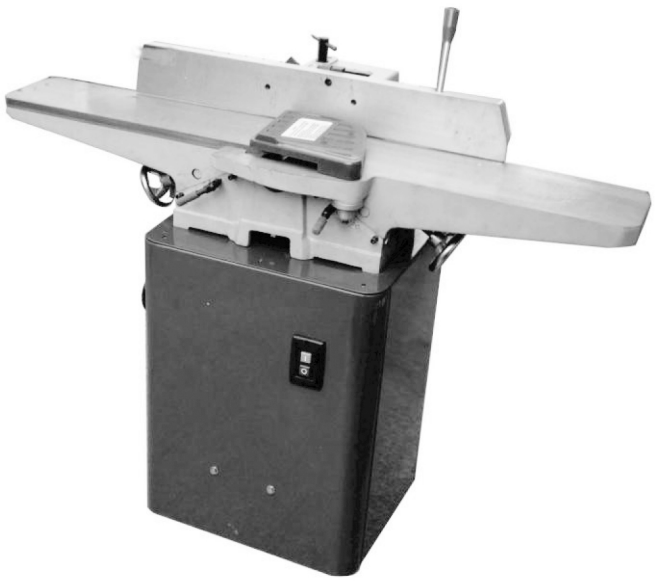
WOOD JOINTER

INSTRUCTION MANUAL



SECTION 1: SAFETY

WARNING

For Your Own Safety Read Instruction Manual Before Operating This Equipment

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words which are 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.

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. It may also be used to alert against unsafe practices.

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

WARNING

Safety Instructions For Power Tool

1. **KEEP GUARDS IN PLACE and in working order.**
2. **REMOVE ADJUSTING KEYS AND WRENCHES.**

Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning on.

3. **KEEP WORK AREA CLEAN**. Cluttered areas and benches invite accidents.
4. DO NOT USE IN DANGEROUS ENVIRONMENT. Do not use power tools in damp or wet locations, or where any flammable or noxious fumes may exist. Keep work area well lighted.
5. KEEP CHILDREN AND VISITORS AWAY. All children and visitors should be kept a safe distance from work area.
6. MAKE WORKSHOP CHILD PROOF with padlocks, master switches, or by removing starter keys.
7. DO NOT FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
8. USE RIGHT TOOL. Do not force tool or attachment to do a job for which it was not designed.
9. USE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. Conductor size should be in accordance with the chart below. The amperage rating should be listed on the motor or tool nameplate. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Your extension cord must also contain a ground wire and plug pin. Always repair or replace extension cords if they become damaged.

Minimum Gauge for Extension Cords

AMP RATING	LENGTH		
	25FT	50FT	100FT
0-6	18	16	16
7-10	18	16	14
11-12	16	16	14
13-16	14	12	12
17-20	12	12	10
21-30	10	10	No

10. WEAR PROPER APPAREL. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain longhair.
11. ALWAYS USE SAFETY GLASSES. Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
12. SECURE WORK. Use clamps or a vise to hold work when practical. It's safer than using your hand and frees both hands to operate tool.
13. DO NOT OVERREACH. Keep proper footing and balance at all times.
14. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for

best and safest performance. Follow Instructions for lubricating and Changing access-ories.

15.USERECOMMENDEDACCESSORIES. Consult the owner's Manual for recommended accessories. The use of improper

16. REDUCE THE RISK OF UNINTENTIONAL STARTING. On machines with magnetic contact starting switches there is a risk of starting if the machine is bumped or jarred. Always disconnect from power source before adjusting or servicing. Make sure switch is in OFF position before reconnecting.

17. MANY WOODWORKING TOOLS CAN "KICKBACK" THE WORKPIECE toward the operator if not handled properly. If you do not understand what kickback is, or how to prevent it, Do Not operate this machine.

18.CHECK DAMAGED PARTS.

Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.

19.NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF. Do not leave tool until it comes to a complete stop.

20.NEVER OPERATE A MACHINE WHEN TIRED, OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL. Full mental alertness is required at all times when running a machine.

21..NEVER ALLOW UNSUPER-VISED OR INEXPERIENCED PERSONNEL TO OPERATE THE MACHINE. Make sure any instructions you give in regards to machine operation are approved, correct, safe, and clearly understood.

22.IF AT ANY TIME YOU ARE EXPERIENCING DIFFICULTIES performing the intended operation, stop using the machine! Then contact our service department or ask a qualified expert how the operation should be performed.

Additional Safety Instructions For Jointers

1. JOINTING SAFETY BEGINS With your lumber. Inspect your stock carefully before you feed it over the cutterhead. If you have any doubts about the stability or structural Integrity of your stock, DO NOT JOINT IT!

2. MAINTAIN PROPER RELATIONSHIPS of infeed and outfeed table surfaces and cuthead knife path.

3. ALWAYS USE A PUSH BLOCK when jointing. Never place your hands directly over the cutterhead.

4. SUPPORT THE WORKPIECE adequately all times during operation, maintain control over the work at all times.

5. WHEN JOINTING, do not stand directly at the end of either table. Position yourself just to the side of the infeed table to avoid possible kickbacks.

6. NEVER MAKE JOINTING CUTS deeper than 1/8".

7. NEVER JOINT A BOARD that has loose knots.All defects should be cut out of the board before it is planed or jointed.

8. NEVER JOINT end grain.

9. JOINT WITH THE GRAIN. Jointing against the grain is dangerous and could produce chatter or excessive chip out.

10. WITH THE EXCEPTION OF RABBETING, all operations must be performed with the guard in place. Aftter rabbeting ,Be sure to replace the guard.

11. NEVER BACK THE WORK toward the infeed table.

12.HABITS-GOOD AND BAD-are hard to break. Develop good habits in your shop and safety will become second-nature to you.

13. “KICKBACK” is when the workpiece is thrown off the jointer table by the force of the cutterheads. 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.

14. BE AWARE THAT CERTAIN WOODS MAY CAUSE AN ALLERGIC REACTION in people and animals, especially when exposed to fine dust. Make sure you know what type of wood dust you will be exposed to and always wear an approved respirator.

SECTION 2 INTRODUCTION

Unpacking

The jointer is shipped from the manufacturer in two carefully packed carton. If you discover the machine is damaged after you've signed for delivery, immediately call Customer Service for advice.

When you are completely satisfied with the condition of your shipment, you should inventory its parts.

WARNING

If moving this machine up or down stairs, the machine must be dismantled and moved in smaller pieces. Make sure floor and stair structures are capable of supporting the combined weight of the machine parts and the people moving them.

WARNING

The jointer is a heavy machine. DO NOT over-exert yourself while unpacking or moving your machine – you will need assistance. Serious personal injury may occur if safe moving methods are not followed.

NOTICE

A full parts list and breakdown can be found toward the end of this manual. For easier assembly, or to identify specific parts, please refer to the detailed illustrations at the end of the manual.

CLEAN UP

The unpainted surfaces are coated with a waxy oil to protect it from corrosion during shipment. Remove this protective coating with a solvent cleaner or citrus-based degreaser . Avoid chlorine-based solvents as they may damage painted surfaces should they come in contact. Always follow the usage instructions on the product you choose for clean up.

WARNING

Do not use gasoline or other petroleum-based solvents. They 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

CAUTION

Many of the solvents commonly used to clean machinery can be toxic when inhaled or ingested. Always work in well-ventilated areas far from potential ignition sources when dealing with solvents. Use care when disposing of waste rags and towels to be sure they do not create fire or environmental hazards. Keep children and animals safely away when cleaning and assembling this machine.

WARNING

Do not smoke while using solvents. A risk of explosion or fire exists and may be the result serious personal injury may occur.

Site Considerations

FLOOR LOAD

This jointer represents a moderate

weight load in a small footprint. Most commercial or home shop floors should be sufficient to carry the weight. If you question the strength of your floor,you may wish to check with an architect or structural engineer in your area to make certain it can handle the load.

WORKING CLEARANCES

Working clearances can be thought of as the distances between machines and obstacles that allow safe operation of every machine without limitation. Consider existing and anticipated machine needs, size of material to be processed through each machine, and space for auxiliary stands and/or work tables. Also consider the relative position of each machine to one another for efficient material handling. Be sure to allow yourself sufficient room to safely run your machines in any foreseeable operation.

LIGHTING AND OUTLETS

Lighting should be bright enough to eliminate shadow and prevent eye strain. Electrical circuits should be dedicated or large enough to handle combined motor amp loads. Outlets should be located near each machine so power or extension cords are not obstructing high-traffic areas. Be sure to observe local electrical codes for proper installation of new lighting, outlets, or circuits.

CAUTION

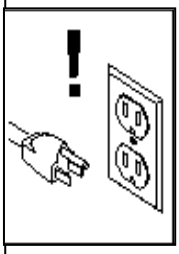
Make your shop "child safe." Ensure that your workplace is inaccessible to youngsters by closing and locking all entrances when you are away. Never allow visitors in your shop when assembling, adjusting or operating equipment.

SECTION 3:ASSEMBLY

WARNING

All die-cut metal parts have a sharp edge (called "flashing") on them after th **formed. This is removed at the factory. Sometimes, though, a bit of flashing might escape inspection. Please examine the edges of all die-cut metal parts before handling them or serious injury may occur.**

WARNING



Disconnect power to the machine when performing any maintenance, assembly or adjustments. Failure to do this may result in serious personal injury.

WARNING

Keep loose clothing rolled up and out of the way of machinery and

WARNING

Wear safety glasses during the entire assembly process. Failure to comply may result in serious personal injury.

Most of this Jointer has been assembled at the factory, but some parts must be assembled or installed after delivery. We have organized the assembly process into steps. Please follow along in the order presented here.

Jointer to Stand

This step will require at least two people. To mount the jointer to the stand:

1. Lift the main unit onto the stand, making sure to position the cutterhead pulley over the slot in the top of the stand.
2. Carefully align the mounting holes in the stand with the threaded holes in the base of the jointer. Secure the jointer to the stand using the three M10 special bolts and 10mm flat washers provided. Be sure not to over tighten

warning

The jointer main unit is very heavy – you will need assistance when lifting it onto the stand. Serious personal injury may occur if safe moving methods are not followed.

V-Belt

1. Loosen the motor adjusting bolts until you can attach the V-Belt to the pulleys. See Figure 1/A

figure A

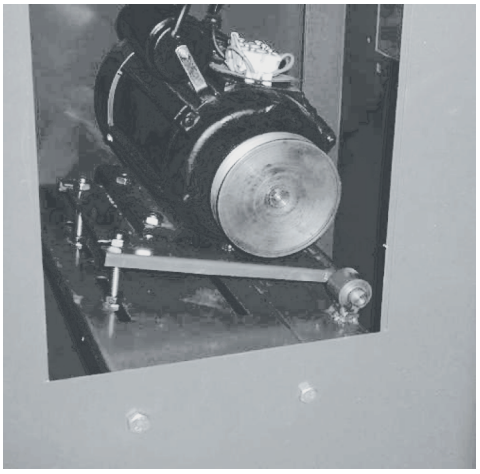


Figure 1. Motor adjusting bolts.

2.Align the motor and cutterhead pulleys with each other using a plumb bob or straightedge. Move the motor until the face of the motor pulley is aligned with the cutterhead pulley and tighten the motor adjusting bolts. (see figure 2)

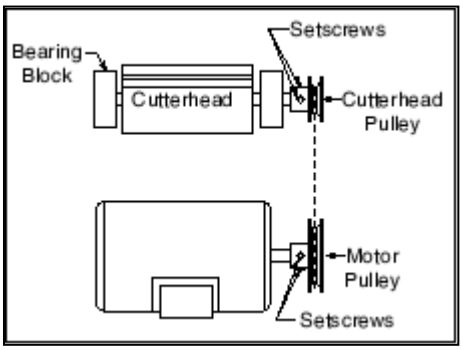


Figure2. Pulley and v-belt aligned

FENCE

Place the fence body on the fence support, making sure that it fits over the key. See Figure 3. nsert the locking screw and thread on the special nut provided. The flange on the special nut should protrude upward when installed correctly.

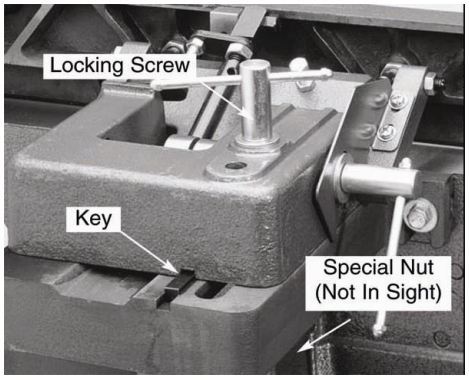


Figure 3. Fence support mechanism.

NOTICE

DO NOT slide the fence across the outfeed table. Scratching will result.

Cutter Guard

1. The cutterhead guard pivot shaft is slotted on the end. This slot fits over the tang at the end of a spring located in the spring housing. See Figure4. Look down the pivot hole to get an idea where this tang is located.
2. Remove the setscrew from the slotted end of the pivot shaft. Rotate the spring housingcounter-clockwiseapproximately 1 turn. Insert the guard shaft into the pivot hole, lining up the slot with the tang.
3. The cutterhead guard shaft should fit all the way inside the pivot hole when properly engaged with the spring tang and should hold the guard against the fence.
4. The cutterhead guard should be held firmly against the fence, completely cover the cutterhead, and move back into position when released. If this has not been achieved, repeat Steps 2-3,

increasing the number of turns on the spring housing to 1-1/2. Re-install the setscrew into the end of the pivot shaft.

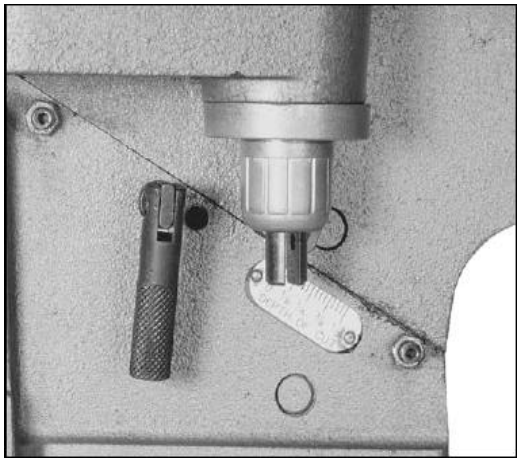


Figure 4.Spring housing

Belt guard

Use two M8*12 hex bolt install the belt guard to the jointer base casting. Do not over tighten. **See figure 5.**

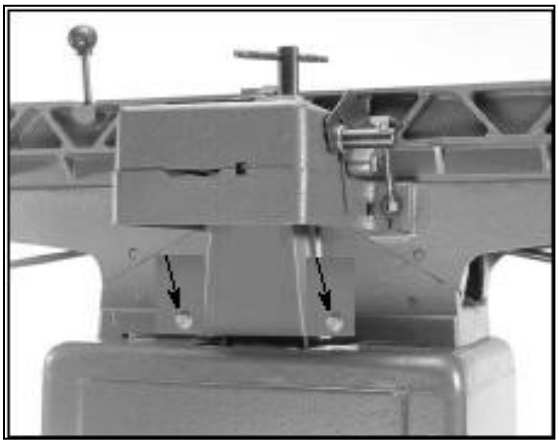
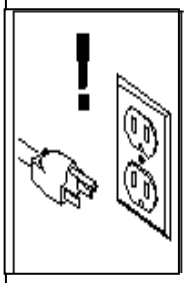


Figure 5. Belt guard attachment.

WARNING

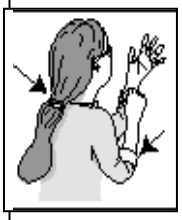
DO NOT attempt any step of assembly, adjustments, or maintenance while your Jointer is running.Ensure that the switch isoff,power is disconnected and moving parts have stopped before making adjustments. Failure to comply may result in serious personal injury.

SECTION 4: ADJUSTMENTS



WARNING

Disconnect power to the machine when performing any maintenance, assembly or adjustments. Failure to do this may result in serious personal injury.



WARNING

Keep loose clothing rolled up and out of the way of machinery and keep hair pulled back.

WARNING

Wear safety glasses during the entire assembly process. Failure to comply may result in serious personal injury.

Table Gibs

warning

Always lock the table with the table lock before using the jointer. If this step is not observed, the table could slide down while the jointer is operating. Serious personal injury may occur.

The function of the gibs are to allow precise adjustment of the table movement along the dovetail ways. Adjustment of the gib will dictate how easy it will be to move the tables up and down with the handwheels. To adjust gibs:

1.Unscrew the upper and lower check nuts on the infeed table several turns, leaving the lock handle tight. See Figure 6.

2.Loosen the table lock handle and adjust the upper and lower gib setscrews until table movement is smooth and controlled.

3.Once the gib has been properly adjusted, tighten check nuts and repeat Steps 1-2 for the outfeed table.

4.Make sure there is no side-to-side movement of the tables once the check nuts have been tightened. If there is, repeat Steps 1-4.

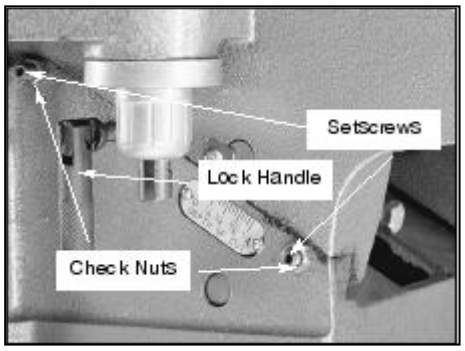


Figure 6.Location of check nuts

Knives

WARNING

These knives are extremely sharp. Never grab the cutterhead directly to rotate it. Always use the drive pulley. Always be sure the jointer is disconnected from its power source before you make any adjustments. Serious personal injury may occur.

KNIFE INSPECTION

The knives of your jointer must be periodically replaced or adjusted. Adjustments should be as precise as possible with tolerances within .002"-.003" to prolong the sharpness of the knife edges. Improperly adjusted knives can unbalance the cutterhead and shorten bearing life, as well as produce

substandard jointing or planing results. The knives are set at the factory using jack screws or springs before shipping. Now is a good time to double-check the knife settings. To inspect and adjust knife

1.Unplug the jointer!

2.Remove the upper cover or cutterhead guard to expose the top of the cutterhead.

3.Carefully turn the cutterhead (using the pulley) until the first knife is at top dead center.

4.Using the knife setting gauge, check the knife height. The jig should sit solidly with both feet on the cutterhead. **See Figure 7.**If the knife is adjusted properly, the contact point at the center of each adjuster should just touch the tip of the knife. If the knife does not make contact, or if the knife causes the adjuster's legs to not seat on the cutterhead, the knives need to be adjusted.

> **CAUTION**
>
> Remember, jointer knives are extremely sharp. Use care when handling during removing or installing.

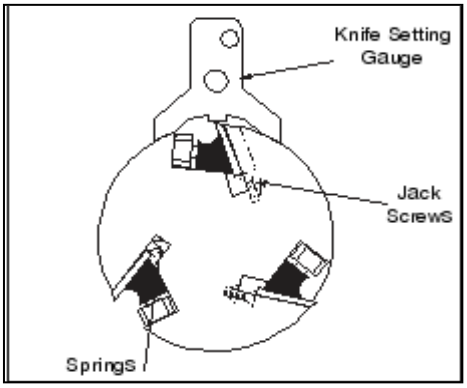


Figure 7 shows the location of the springs and jack screws.

ADJUSTMENTS USING JACK SCREWS

When using jack screws, it is not necessary to install the springs. The knives are locked into the cutterhead with wedge-type gibs and gib bolts. Jack screws under the knives allow fine tuning to help in the setting process. To realign the knives:

1.Unplug the jointer!

2.Loosen the gib bolts until the knife is loose in the slot. The gib bolts turn clockwise to loosen and counterclockwise to tighten (when facing the head of the bolt). See Figure 8 and 8B.

3.Place the knife setting gauge on the cutterhead as described previously, so the feet are securely planted on the cutterhead.

4.Adjust the screws below each end of the knife until both feet of the gauge rest evenly on the cutterhead and the knife is just touching the bottom of the middle foot of the gauge. The gauge will set the knives at a uniform protrusion of approximately .070" above the cutterhead. The knife height should vary no more than .002"-.003" across the length of the cutterhead.

5.Maintain a constant pressure on the gauge while retightening the gib bolts.

6.Repeat the same procedure on the remaining knives. As mentioned before, the standard knife setting gauge is satisfactory for reasonably accurate knife setting tasks.

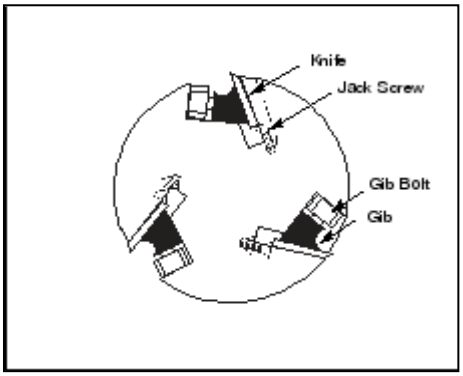


Figure 8 shows the parts of the cutterhead.

ADJUSTMENTS USING SPRINGS.

The knives are locked into the cutterhead with wedge type gibs and gib bolts. When using springs:

1.Unplug the jointer!

2.Loosen the gib bolts until the knife is loose in the slot. The gib bolts turn cloc-kwise to loosen and counterclockwise to tighten (**when facing the head of the bolt**). **See Figure 8A and 8B.**

3.Place the knife setting gauge on the cutterhead as described previously, so the feet are securely planted on the cutterhead. Make sure the gauge extension rod is parallel to the cutterhead to maintain accuracy.

4.The downward pressure provided by the gauge will set the knives at a uniform protrusion of approximately.070" above the cutterhead. The knife height should vary no more than .002"-.003" across the length of the cutterhead.

5.Maintain a constant pressure on the gauge while retightening the gib bolts.

6.Repeat the same procedure on the remaining knives. As mentioned before, the standard knife setting gauge is satisfactory for reasonably accurate knife setting tasks.

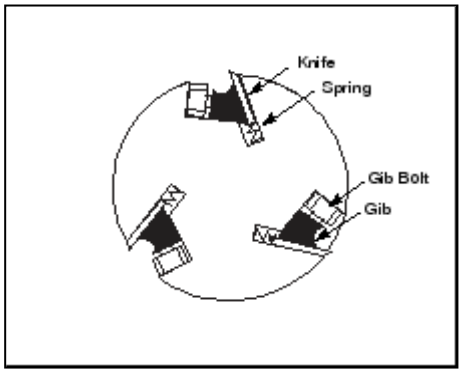


Figure 8A shows the location of the springs.

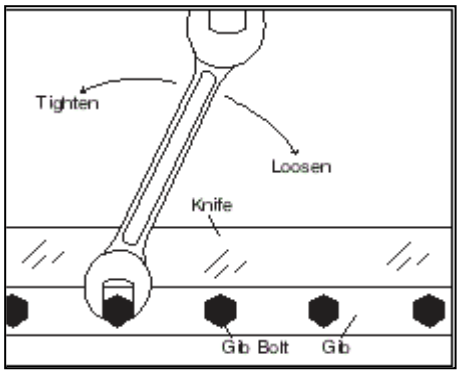


Figure 8B. Tightening the gib bolts.

90° Fence Stop

1.Place a square on the outfeed table fai-rly close to the cutterhead. See Figure 9.

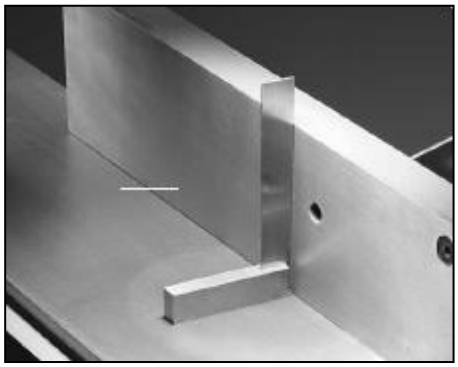


Figure9.Use of square to align fence.

2.Loosen the fence lock handle and the check-nut on the positive stop bolt. Turn the bolt against the tab until the fence contacts the edge of the square evenly.

3.Tighten the checknut on the stop bolt and tilt the fence forward, then back against the stop. See Figure 10.

4.Re-check with the square. Tightening the checknut will move the stop bolt slightly, so some trial-and-error may be necessary to perfect your settings.

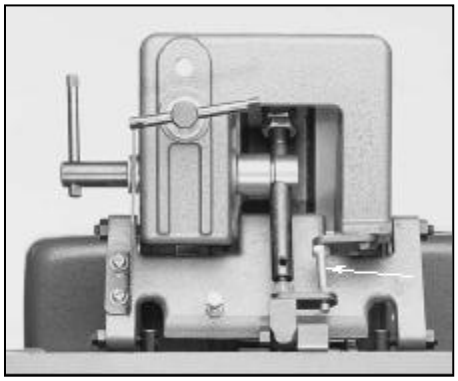


Figure 10.Location of the fence's positive stop bolt.

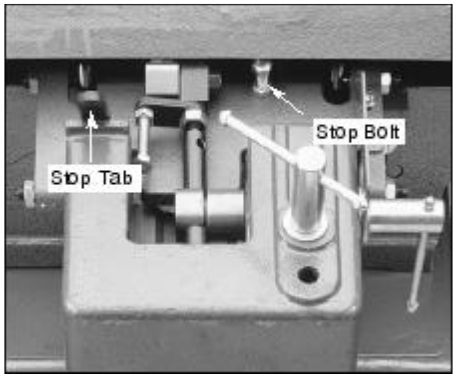


Figure 11.Location of stop bolt and stop tab.

45° Fence Stop

The fence can be tilted to 45° by loosening the lock handle, lifting up the 90° positive stop tab, and moving the fence in the desired direction. To set the 45° tab stop:

1.Loosen checknut and lower fence until it rests on the stop bolt. See Figure 11.

2.Using a bevel gauge set to 45°, place the heel of the bevel on the outfeed table and the blade against the fence.

3.If there is a gap between the bevel's blade and the face of the fence, turn the stop bolt until the gap is gone.

4.Tighten jam nut. Move your fence forward, then back against the stop. Recheck the stop bolt.

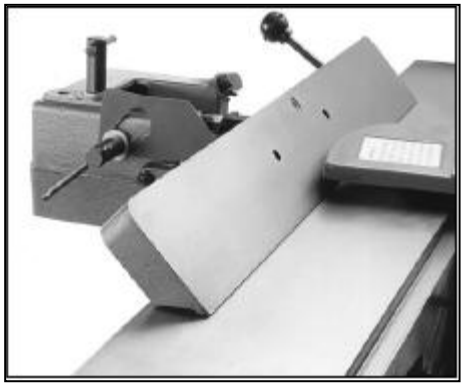


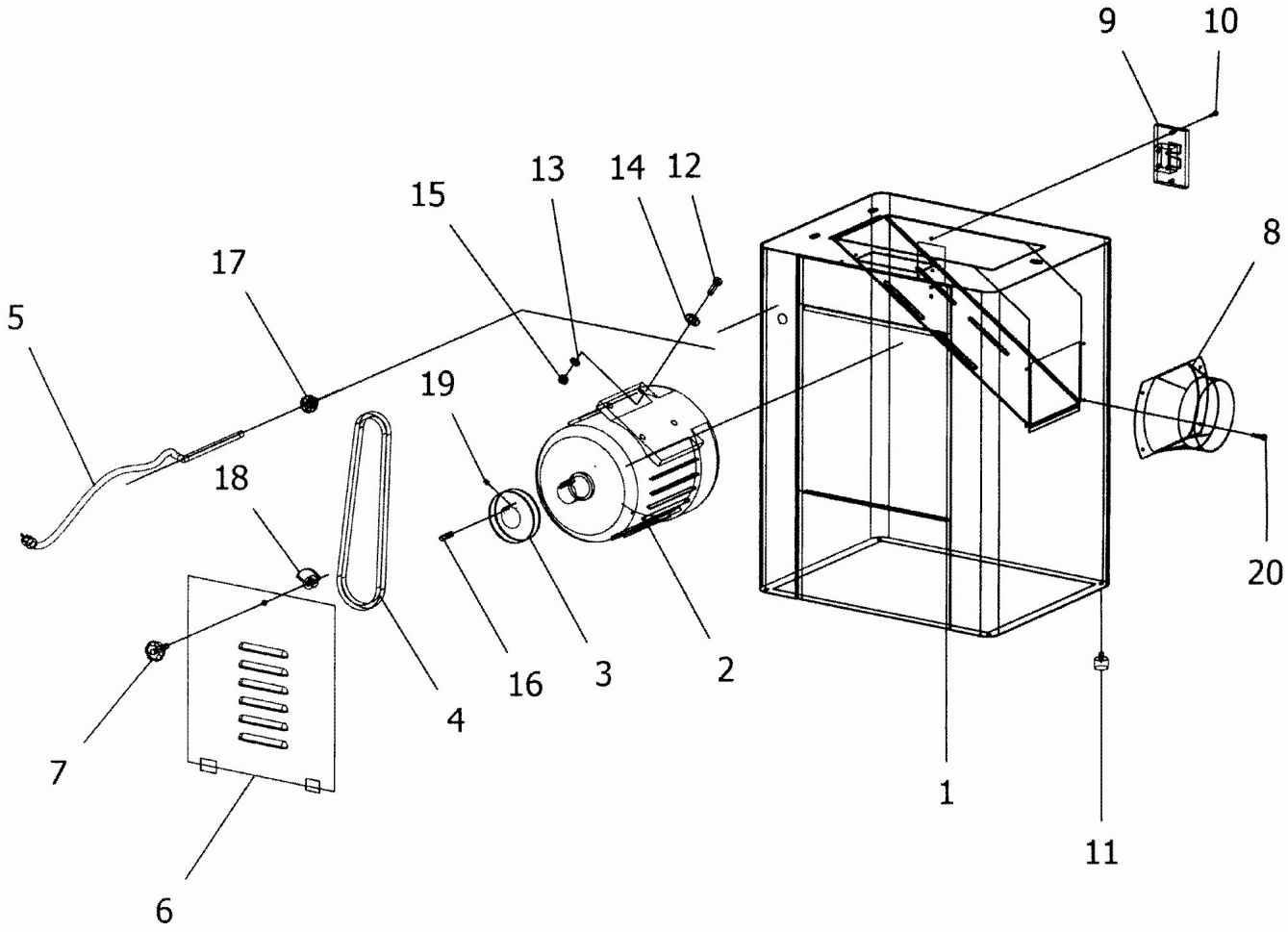
Figure 12.Jointer fence in 45° stop position.

WARNING

Jointer knives are dangerously sharp. Use extreme caution when handling knives or working near them. Serious personal injury may occur.

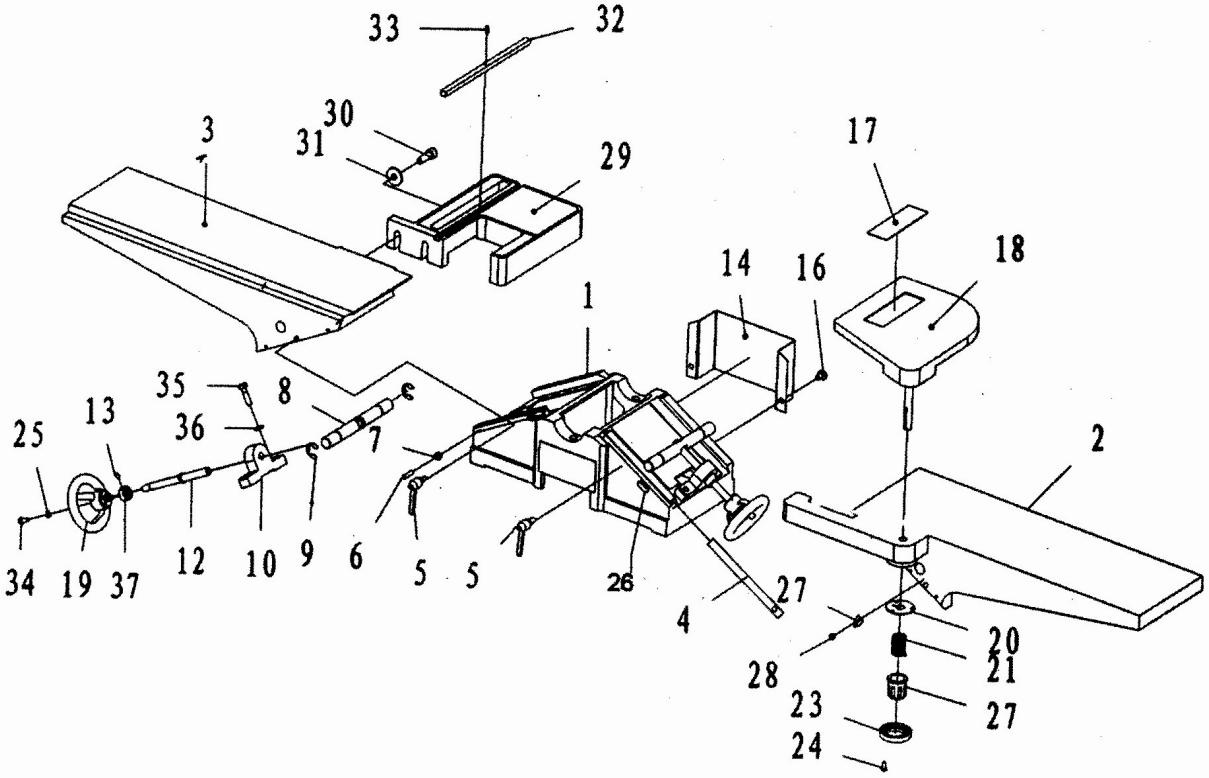
After all the job,you should tighten all the bolt that you have installed,then install the dust collect hood.

STAND ASSEMBLY DIAGRAM AND PART LIST



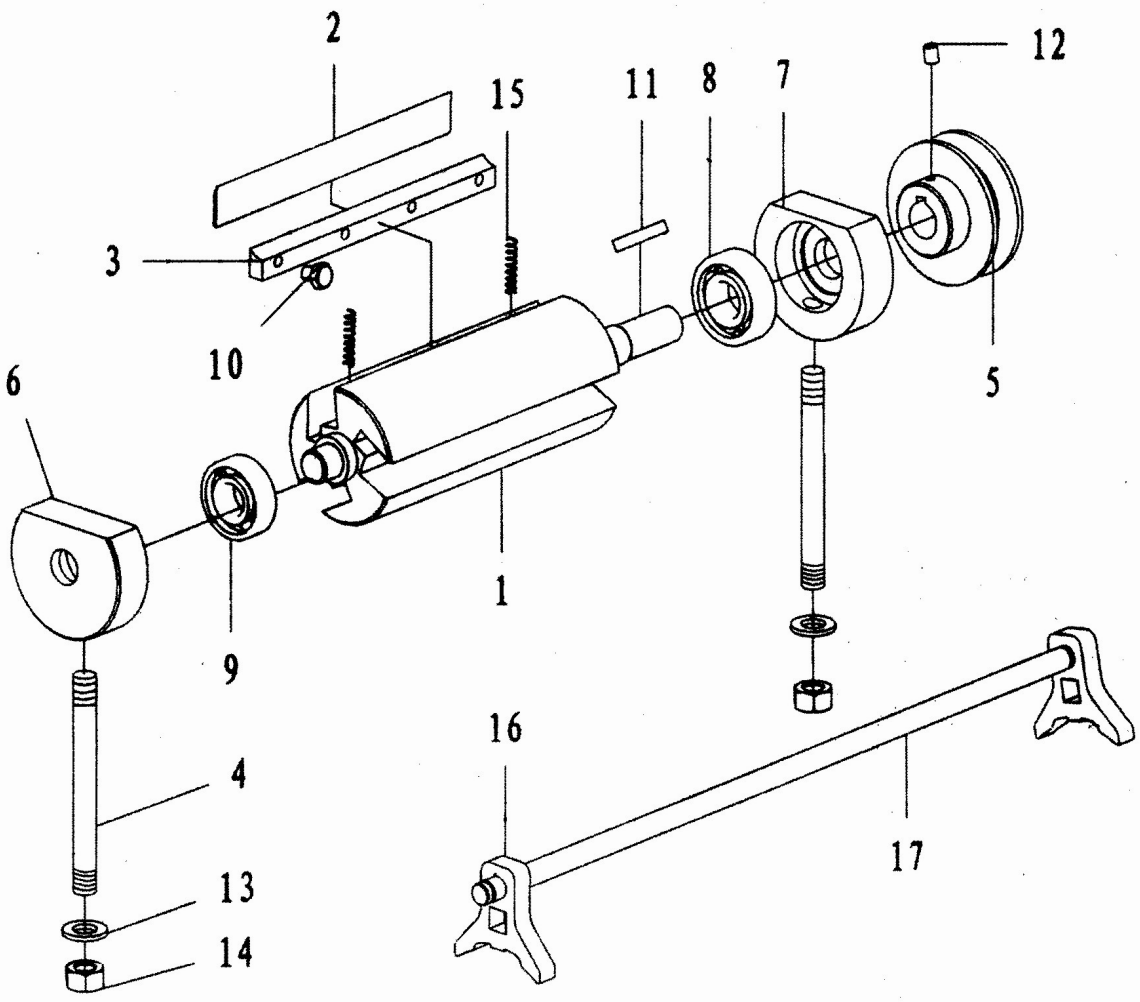
REF	DESCRIPTION	REF	DESCRIPTION
1	STAND	11	RUBBER FOOD M8*16
2	MOTOR	12	HEX BOLT M8*30
3	MOTOR PULLEY	13	WASHER 8
4	BELT	14	BIG WASHER 8
5	POWER CORD	15	NUT M8
6	PROTECT DOOR	16	KEY 5*25
7	HANDLE M8*20	17	STRAIN RELAFE
8	DUST COLECT HOOD	18	LATCH
9	SWITCH	19	SET SCREW M6*8
10	SCREW M5*10	20	SCREW M5*10

BODY ASSEMBLY DIAGRAM AND PART LIST



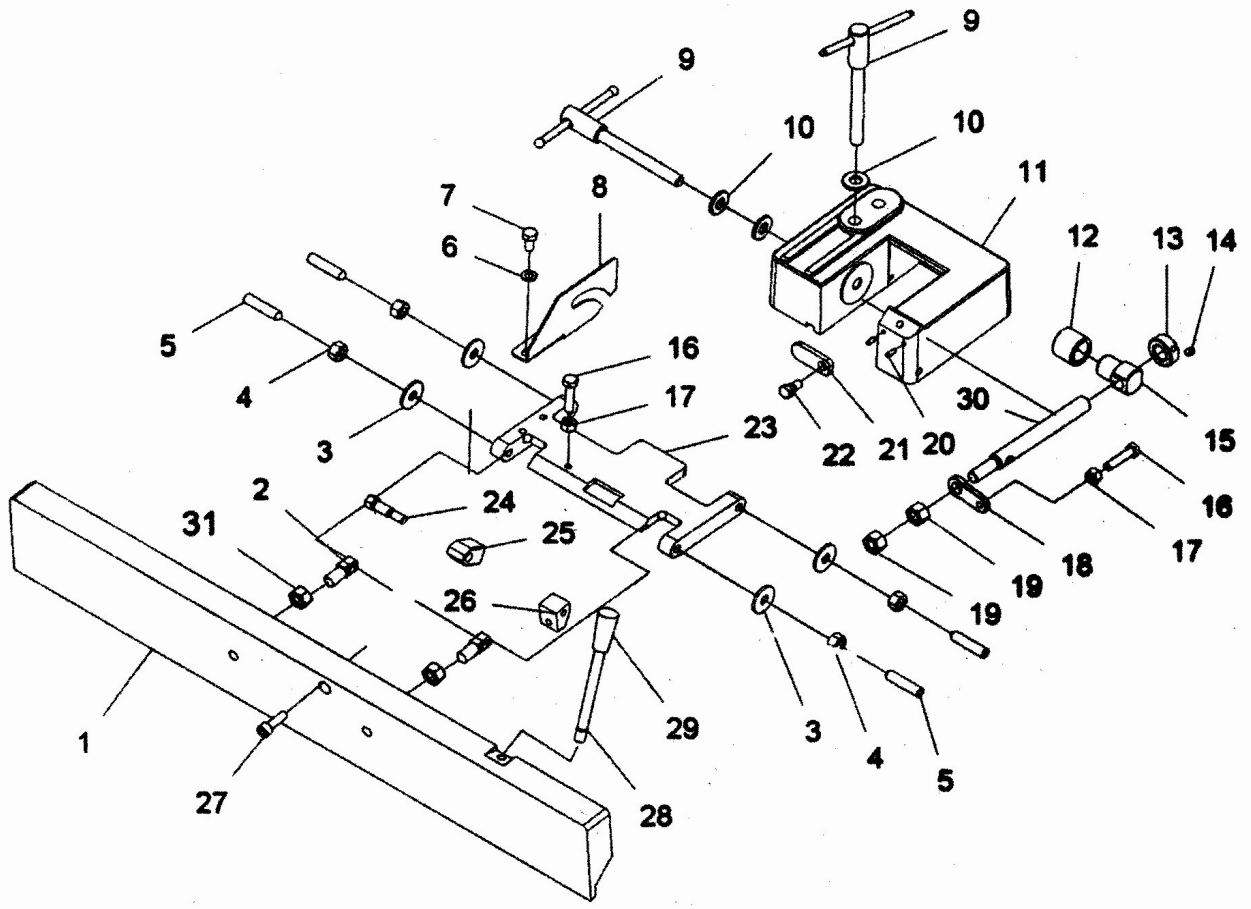
REF	DESCRIPTION	REF	DESCRIPTION	REF	DESCRIPTION
1	BASE	14	BELT GUARD	26	SCALE
2	FRONT TABLE	15	FLAT WASHER 8	27	POINTER
3	REAR TABLE	16	SCREW M8*12	28	SCREW M5*6
4	GIB	17	WARING LABLE	29	FENCE SUPPORT
5	ADJUST LOCK SCREW	18	CUTTER HEAD GUARD	30	HEX BOLT M10*30
6	BOLT M6*25	19	HAND WHEEL	31	FLAT WASHER 10
7	NUT M6	20	RETAINER WASHER	32	KEY
8	TABLE ADJUST ROD	21	SPRING	33	ROLL PIN 4*12MM
9	E-CLIP 19	22	SPRING HOUSE	34	BOLT M6*12
10	LEAD SCREW BRACKET	23	HOUSING MOUNT	35	BOLT M8*25
11	FLAT WASHER	24	SCREW M5*12	36	FLAT WASHER
12	LEAD SCREW	25	FLAT WASHER 6	37	RING
13	SET SCREW M6*8				

BODY ASSEMBLY DIAGRAM AND PART LIST



REF	DESCRIPTION	REF	DESCRIPTION
1	CUTTER HEAD	9	BALL BEARING-66202
2	BLADE SET OF THREE	10	HEX BOLT-M6×8
3	BLADE GIB	11	KEY-A5X5X32
4	STUD	12	SET SCREW-M6X8
5	CUTTER PULLRY	13	WASHER-10
6	LEFT BEARING BLOCK	14	NUT-M10
7	RIGHT BEARING BLOCK	15	SPRING
8	BALL BEARING-66203	17	KNIFE GAUGE
		16	KNIFE GAUGE BAR

BODY ASSEMBLY DIAGRAM AND PART LIST



REF	DESCRIPTION	REF	DESCRIPTION
1	FENCE	16	BOLT M8*35
2	PIVOT STUD	17	NUT M8
3	FLAT WASHER 10	18	90° STOP TAB
4	NUT M10	19	NUT M12
5	SPECIAL SCREW M10*45	20	PIN 4*12
6	FLAT WASHER 8	21	STOP TAB
7	SCREW M8*16	22	SPECIAL BOLT
8	FENCELOCK BRACKET	23	FENCE HINGE
9	LOCKING SCREW	24	SPECIAL CAP SCREW
10	FLAT WASHER 12	25	FENCE STOP BRACKET
11	FENCE BASE	26	FENCE BRACKET
12	FENCE TILT SLEEVE	27	SCREW M8*30
13	RING	28	TILT LEVER
14	SET SCREW M6*8	29	KNOB M10
15	FENCE TILT CLAMP	30	FENCE ADJUSTMENT ROD
		31	HEX NUT M12*1