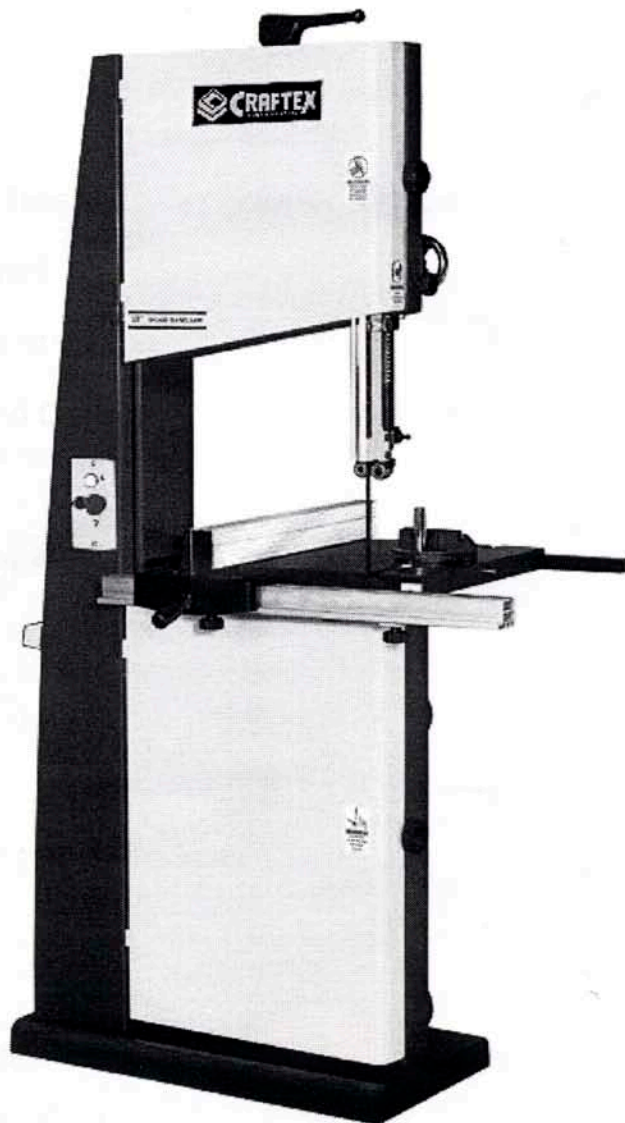




OWNERS MANUAL



CT103N – 18” WOOD BAND SAW



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CT103N WOOD CUTTING BAND SAW

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GENERAL SAFETY INSTRUCTIONS

EXTREME CAUTION SHOULD BE USED IN OPERATING ALL POWER TOOLS. KNOW YOUR POWER TOOL, BE FAMILIAR WITH ITS OPERATION. READ THE OWNER'S MANUAL AND PRACTICE SAFE USAGE PROCEDURES AT ALL TIMES.

- ❑ **CONNECT** your machine **ONLY** to the matched and specified power source.
- ❑ **WEAR SAFETY GLASSES, RESPIRATORS, HEARING PROTECTION and SAFETY SHOES** when operating heavy machinery. **Always wear safety glasses.**
- ❑ **DO NOT** wear loose clothing or jewellery when operating machinery.
- ❑ **A Safe Environment is important.** Keep the area free of dust, dirt and other debris in the immediate vicinity of the machine.
- ❑ **BE ALERT!** Do Not Use prescription or other drugs that may affect your ability or judgement to safely use this machine.
- ❑ **DISCONNECT** the power source when changing tool bits and or any equipment.
- ❑ **NEVER** leave an operating tool unattended.
- ❑ **ALWAYS** keep blades, knives or bits sharp and properly aligned.
- ❑ **ALWAYS** keep all safety guards in place and ensure their proper function.
- ❑ **ALWAYS** make sure that any tools used for adjustments are removed before operating the machine.
- ❑ **ALWAYS** secure your work with the appropriate clamps or vices.
- ❑ **ALWAYS** keep bystanders safely away while operating machinery.
- ❑ **THINK SAFETY. WORK SAFELY.** Never attempt a procedure if it does not feel safe or comfortable.

GROUNDING INSTRUCTIONS

This appliance must be grounded, if it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having equipment-ground conductor and grounding plug. The plug must be inserted into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

WARNING – Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance – if it will not fit the outlet have a proper outlet installed by a qualified electrician.

For grounded, cord – connected appliances:

This appliance is for use on a circuit having a normal rating more than 120volt and is factory – equipped with a specific electric cord and plug to permit connection to a proper electric circuit. Make sure that the appliance is connected to an outlet having the same configuration as the plug. No adapter should be used with this appliance. If the appliance must be reconnected for use on a different circuit, qualified service personnel should make the reconnection.

For permanently connected appliance:

This appliance must be connected to a ground metal, permanent wiring system; or an equipment – grounding conductor must be run with the circuit conductors and connected to the equipment grounding terminal or lead on the appliance.

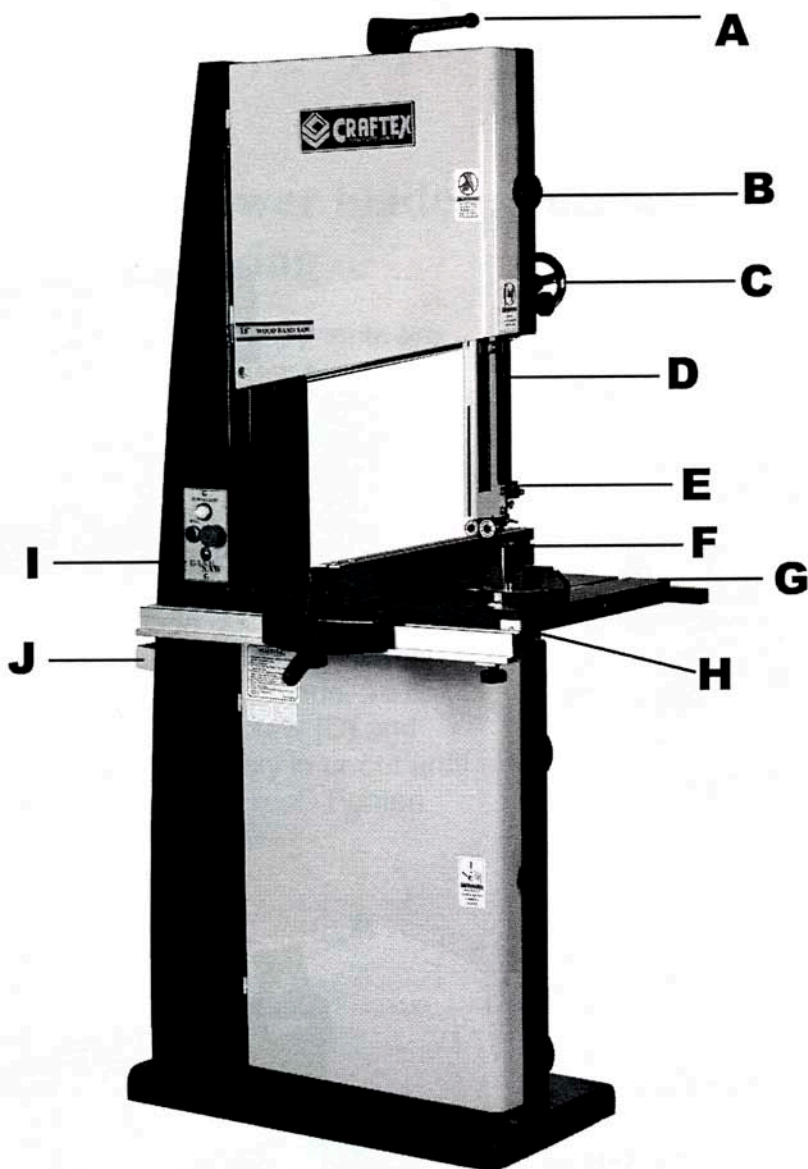
CT103N, 18" Wood Band Saw

As part of the growing line of Craftex woodworking equipment, we are proud to offer the CT103N 18" Wood Band Saw. The Craftex name guarantees Craft Excellence. By following the instructions and procedures laid out in this owner's manual, you will receive years of excellent service and satisfaction. The CT103N is a professional tool and like all power tools, proper care and safety procedures should be adhered to.

FEATURES

- Motor – 2HP, 3 Speed, Single Phase 220 Volts.
- Motor Speed – 3450 RPM.
- Motor Switch – Magnetic.
- Blade Speed – 1,480, 2,300 & 3,260 FPM.
- Fully Balanced Cast Iron Wheels with Coplanar Shim Adjustments.
- Table Size – 17 3/4" X 17 3/4" with 6" steel wing on the left.
- Table Material – Precision Ground Cast Iron.
- Table Height – 37"
- Table Tilts – 50° left, 10° right.
- Throat – 17 1/2"
- Cutting Height – 12" rack & pinion adjustment.
- Blade Size – 1/4" – 1 1/4" 133" long.
- Fence – precision aluminum fence with optical cursors.
- Miter Gauge – 'T' Slot, Included.
- Overall Height – 74"
- Gross Weight – 175 kg

CT103N Wood Band Saw



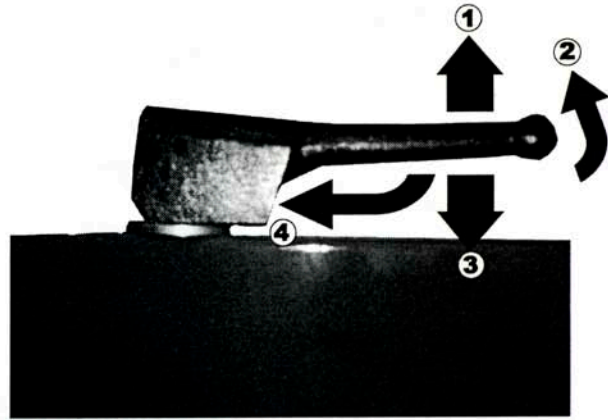
- A. Quick Release Tension Handle**
- B. Door Knob**
- C. Guide Bar Handle**
- D. Guide Bar**
- E. Blade Guide Support (Upper)**
- F. Blade**
- G. Working Table**
- H. Blade Guide Support (Lower)**
- I. Switch**
- J. Tool Tray**

CT103N Wood Band Saw

Operation

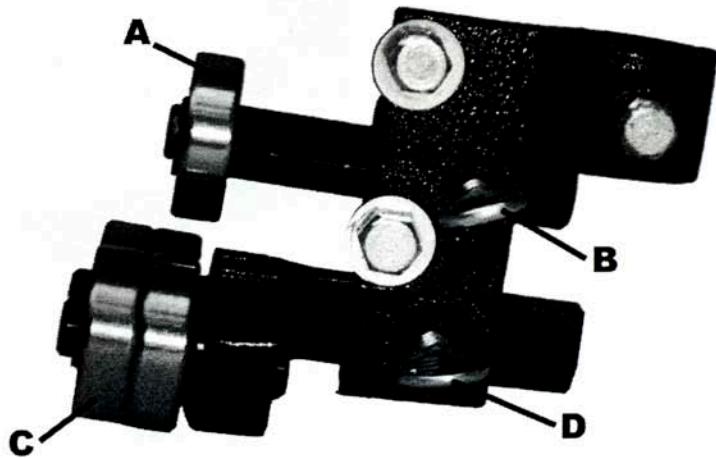
Quick release / Blade tensioning

1. To release the blade tension lift the quick release handle on the top of the band saw. You can now remove and replace your blade.
2. Turn counterclockwise to release blade tension.
3. Turn handle down to tighten blade.
4. Turn clockwise to tighten blade.



Adjusting upper blade support bearing.

The blade support bearing (A) should be adjusted so it almost touches the back of the saw blade when the blade is tracking properly. To adjust, loosen thumbscrew (B) and slide bracket in or out until the adjustment is correct. Tighten lever. The blade guide bearing (C) should be adjusted so they almost touch the side of the blade. The front edge of the guide bearings must be positioned just behind the "gullets" of the saw teeth. To adjust, loosen thumbscrew (D) and slide bearing assembly in or out until the adjustment is correct. Tighten lever. Replace blade guard.

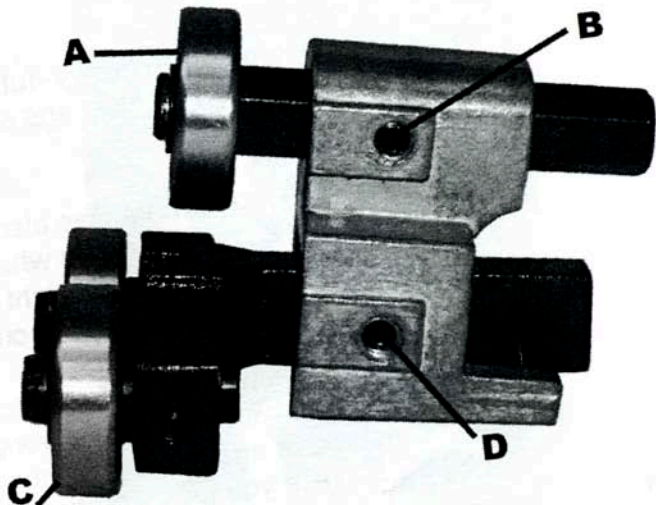


CT103N Wood Band Saw

Operation Cont.

Adjusting lower blade support bearing

The lower bearing adjustments are similar to the upper bearing adjustments. The blade support bearing (A) should be adjusted so it almost touches the back of the saw blade. To adjust, loosen hex screw (B) and slide bracket in or out until the adjustment is correct. Tighten screw. The blade guide bearings (C) should be adjusted so they almost touch the sides of the blade. To adjust, loosen hex screw (D) and slide bearing assembly in or out until the adjustment is correct. Tighten hex screw.



CT103N Wood Band Saw

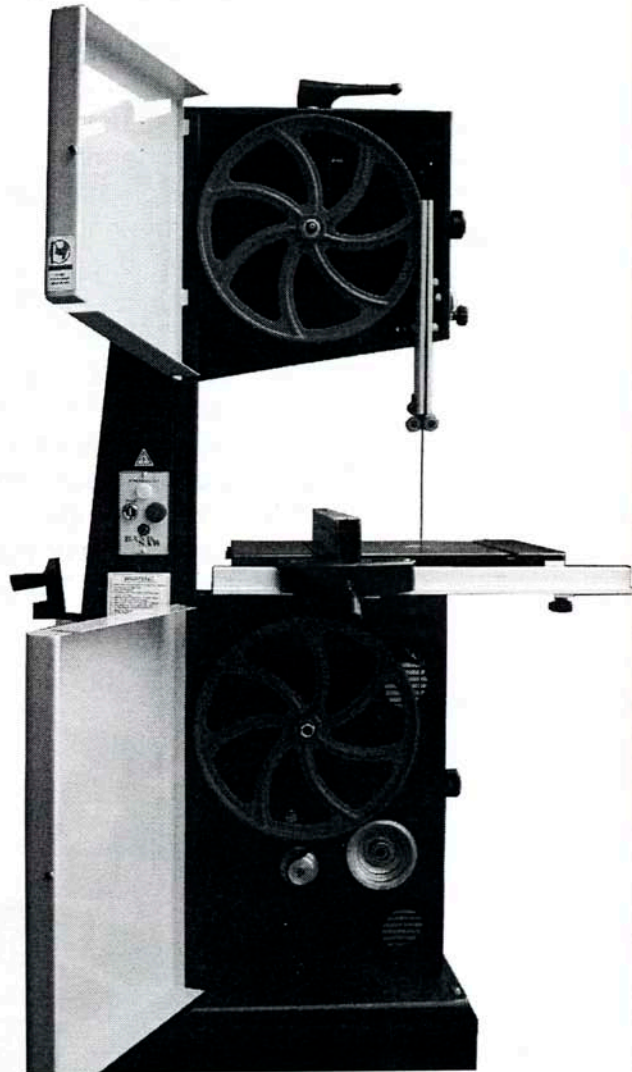
Operation Cont.

Cast Iron Wheels

The CT103N comes with heavy-duty cast iron wheels for added stability and overall performance.

A coplanar shim adjustment was also added for better alignment of the wheels that allow the blade to run as straight as possible ensuring the straightest of cuts.

This feature will help improve the band saw performance with the wheels working together instead of against each other. The end result will give you less vibration, more power, accuracy and less wandering. This will be noticed most when it comes to re-sawing and making straight cuts with blades larger than 1/4".



CT103N Wood Band Saw

Operation Cont.

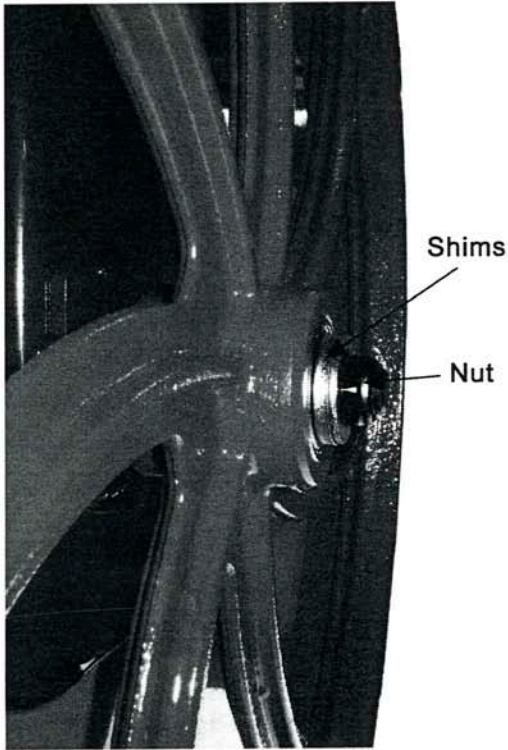


Fig. 1

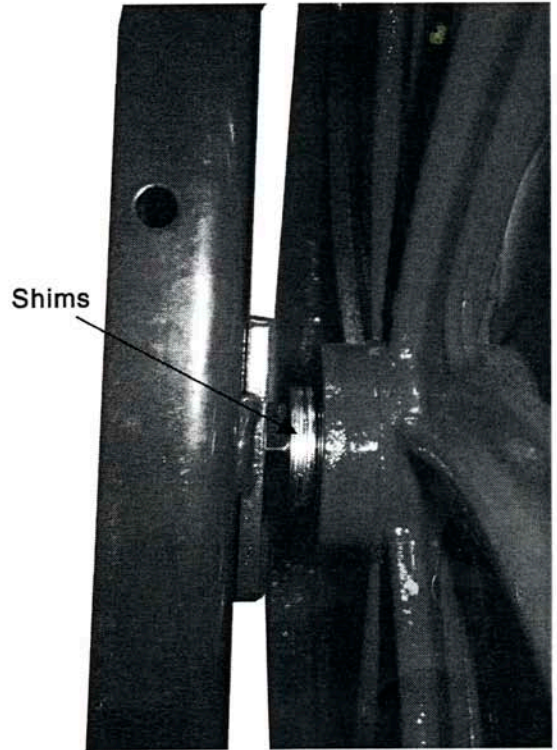


Fig. 2

Coplanar Adjustment

In figure 1 & 2 we can see the shims for adjusting the top wheel in front and behind the cast iron wheel. To move the wheel out remove the nut and shims then remove the wheel. Now you can add shims to the back of the wheel as required. Replace the wheel and any remaining shims and the nut and tighten. To move the wheel in remove the cast iron wheel as mentioned above and remove the shims from behind the wheel, replace the wheel and shims and nut and retighten.

CHANGING SPEEDS for CT103N

The motor has a 3-step pulley which will give you the 3 feed-speeds. The belt tension is adjusted by loosening the nut “A” (see **figure-1**), and the motor bracket lock “B” under the motor (see **figure-1**) and moving the motor slightly.

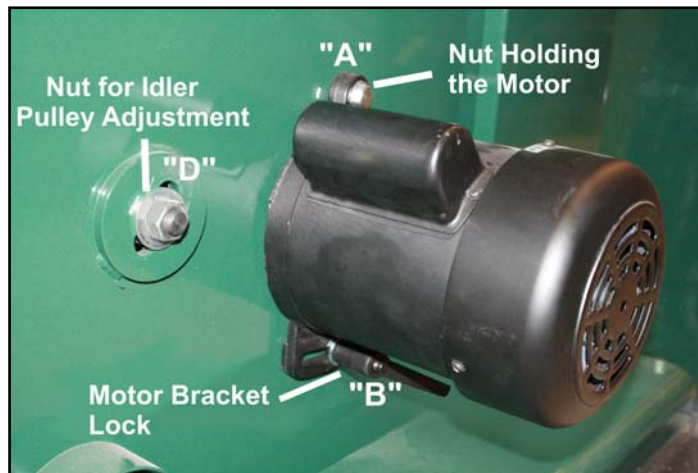


Figure-1 Shows the Nuts and the Motor Bracket Lock

Idler pulley is a 4-step pulley “C” (see **figure-2**). The 3 steps are to line up with the motor pulley for the 3 feed-speeds and the 4th one is to drive the pulley behind the wheel. The idler pulley can be adjusted by loosening the nut “D” (see **figure-1**) at the back of the machine and adjusting it.

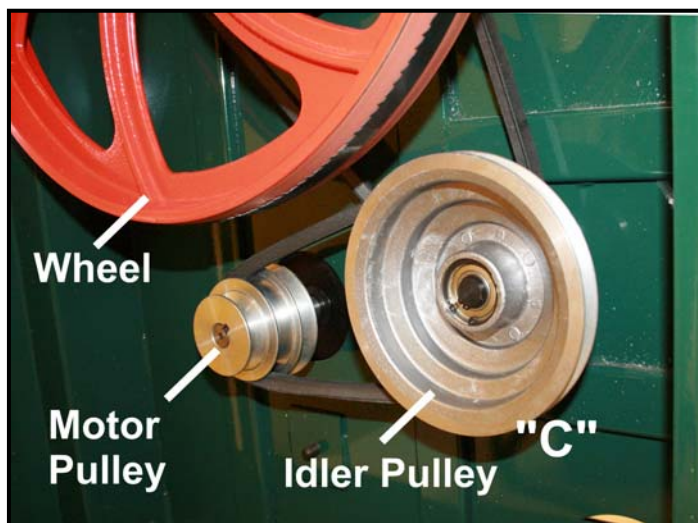


Figure- 2 Shows the Pulleys and the Wheel Inside the Cabinet

CT103N Wood Band Saw

Operation Cont.

Alignment Procedure

This procedure should only take a couple of minutes for you to accomplish. The first step is to check and see if the saw is already aligned.

1. Take a blade $\frac{3}{4}$ " or larger and install onto the band saw. The reason for this is that smaller blades are more flexible than the larger ones. At this point make sure you have the correct tension for the blade you are using before you proceed.
2. With the aid of a straight edge, check to see if the wheels are parallel with each other. Place the straight edge in the middle of the wheels, if it touches the tops and bottoms both wheels then they are parallel and in line. You may have to angle the top wheel to get them parallel. At this point if you have determined that the wheels are in alignment then you may use the saw without any further adjustments. If the straight edge does not touch the wheels at all points then you will have to make an adjustment.
3. When you have to make this adjustment you must measure how far the wheel must be moved to achieve coplanar alignment. The measurement must be taken at two points, of the same wheel, the top and the bottom of the wheel. This measurement must be the same at both points where the straight edge is not touching. If the measurement is not the same at both points then angle the top wheel until both measurements are exactly the same. Place your straight edge in the middle of the wheels and with a ruler measure the distance from the wheel to the straight edge at both points, this will tell you how much is required to align the wheel.
4. Remove the nut, washer and shims from the shaft. Now remove the wheel to reveal the shims behind the wheel. With the measurement you have at this point you will either have to add or remove the shims. Once completed replace the wheel and any shims the washer and nut and tighten. (Refer to page 10 Fig.1 & 2).
5. Repeat steps 1 & 2 to make sure you have made the correct adjustments to the band saw.

CT103N 18" Wood Band Saw

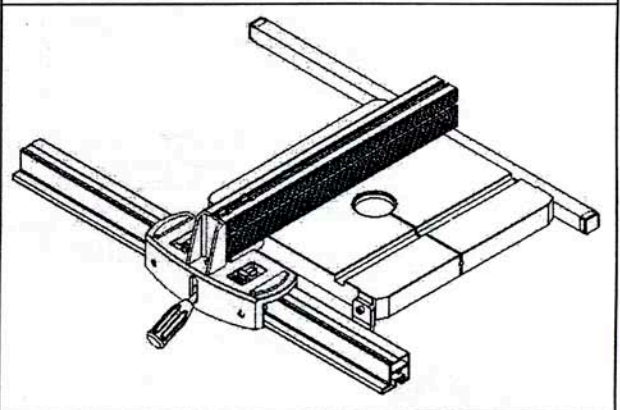
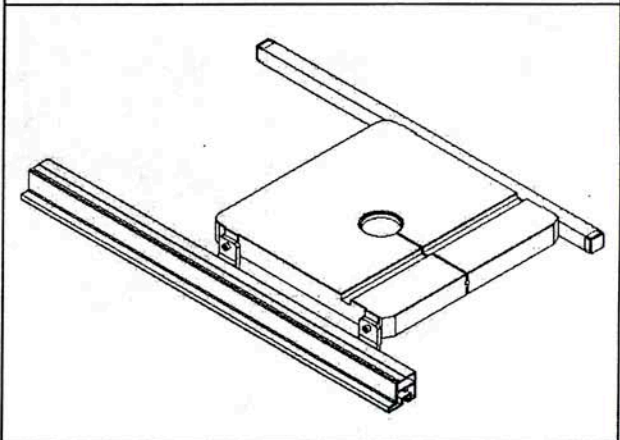
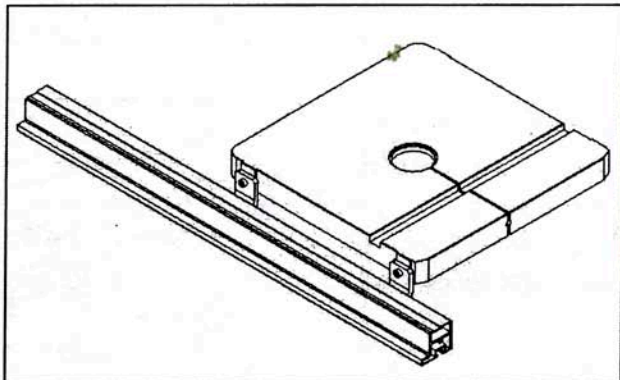
Fence Installation

The CT103N comes complete with a precision aluminum fence with optical cursors for superior accuracy. Select the fence components and fasteners from the parts.

1. Install front fence rail brackets to the front edge of the band saw table as indicated with the fasteners provided. Attach the front rip fence to the fence rails provided.

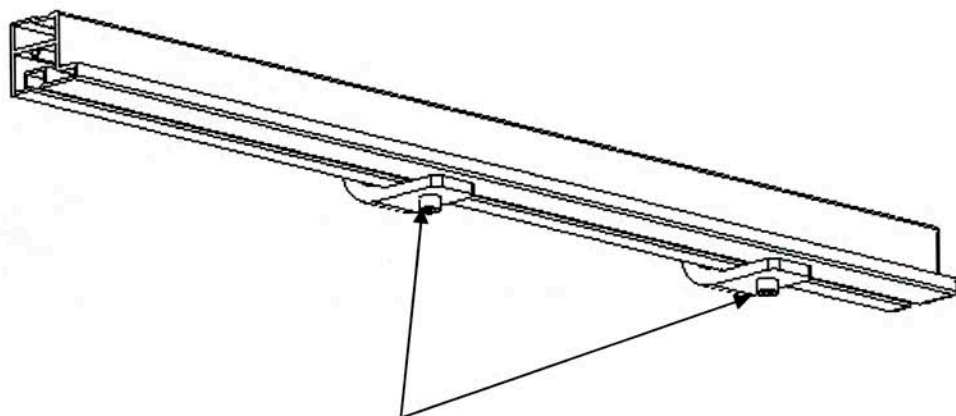
2. Attach the rear rip fence rail to the rear of the band saw table with the fasteners provided.

3. Attach the adhesive-backed tape measure to the top of the rip fence rail. With the rip fence-locking handle in the raised position, slide the rip fence onto the front rail.

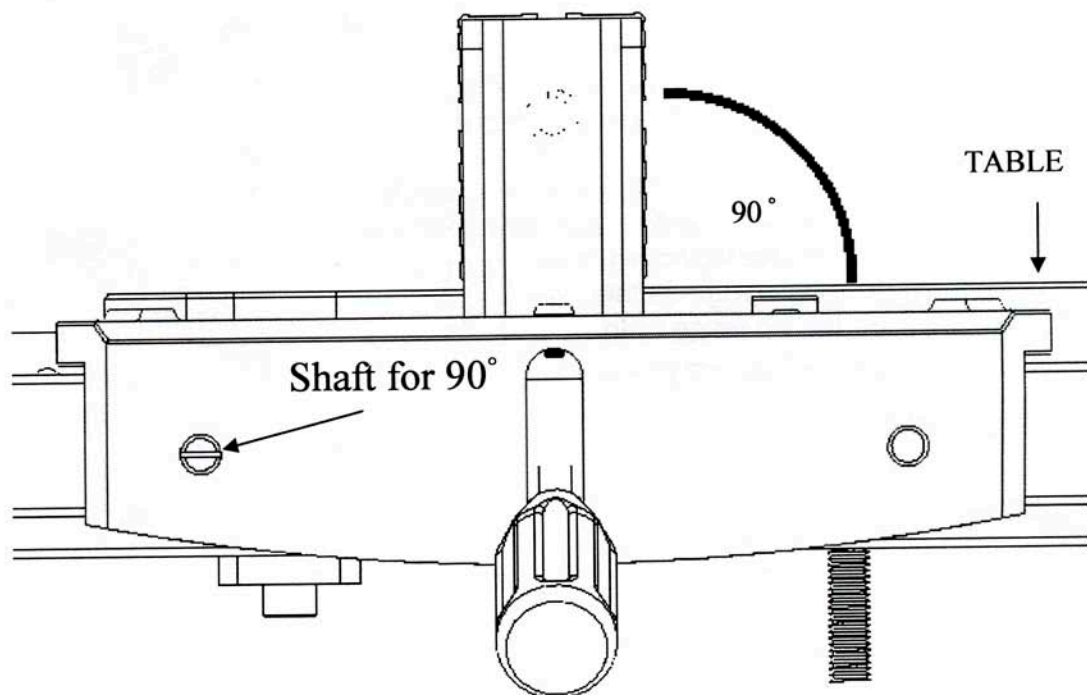


CT103N 18" Wood Band Saw

ADJUSTMENT



ADJUSTING SCREW

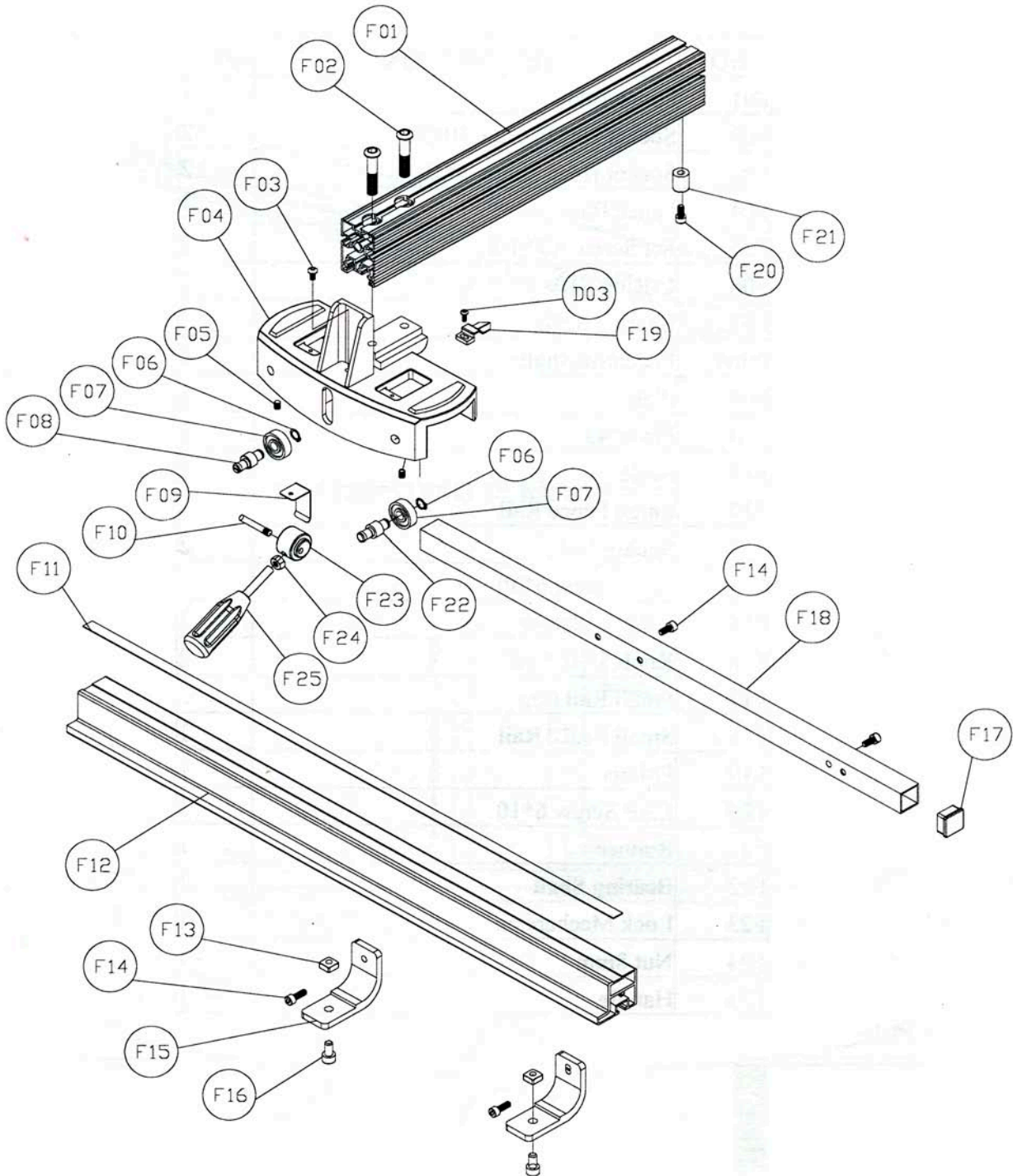


CT103N 18" Wood Band Saw

Fence Parts List

NO.	DESCRIPTION	Q'TY
F01	Fence Body	1
F02	Socket Head Screw 10*25	2
F03	Socket Head Screw 5*10	2
F04	Fence Base	1
F05	Set Screw 1/4*1/4	2
F06	C-Ring S10	2
F07	Bearing 6200	2
F08	Eccentric Shaft	4
F09	Plate	1
F10	Pin 6*43	1
F11	Scale	1
F12	Large Fence Rail	1
F13	Square Nut	2
F14	CAP Screw 6*30	4
F15	L Type Plate	2
F16	Knob 5/16"*5/8"	2
F17	Small Rail Cap	2
F18	Small Fence Rail	1
F19	Pointer	1
F20	CAP Screw 6*10	1
F21	Runner	1
F22	Bearing Shaft	1
F23	Lock Mechanism	1
F24	Nut 8mm	1
F25	Handle	1

CT103N Wood Band Saw Fence Schematic



CT103N Wood Band Saw

Parts List

PART	DESCRIPTION	PART	DESCRIPTION
1	BODY	31	SQUARE NUT
2	HANDLE	32	POINTER
3	WASHER	33	SPRING
4	UPPER WHEEL BRACKET	34	RETAINER
5	SCREW	35	5/16" HEX NUT
6	UPPER WHEEL SHAFT	36	KNOB
7	BEARING	37	CORD
8	UPPER WHEEL	38	KNOB
9	TIRE	39	1/4"-3/4" SOC HD SCREW
10	C-RING	40	CORD
11	1/2" HEX NUT	41	6mm PIN
12	BLADE	42	3/8" HEX NUT
13	PIN	43	3/8"-5" SCREW
14	UPPER WHEEL GUARD	44	COVER
15	LOWER GUARD	45	3/4" HEX NUT
16	1/4"-3/8" SCREW	46	SCREW
17	1/4" LOCK WASHER	47	ADJUSTING SCREW
18	3/4" HEX NUT-L	48	BEARING HOUSING
19	LOWER WHEEL	49	5/8" HEX NUT
20	SPACER	50	BELT
21	SHAFT	51	1/4"-3/8" SET SCREW
22	3/8" HEX NUT	52	PULLEY
23	BEARING	53	PULLEY
24	KEY 5x5	54	MOTOR PULLEY
25	NUT	55	BELT
26	1/2" WASHER	56	C-RING
27	3/16"-1/2" PAN HD SCREW	57	SHAFT
28	SWITCH	58	5/8" WASHER
28A	MAG SWITCH	59	MOTOR
29	SWITCH PLATE	60	3/8" WASHER
29A	SWITCH PLATE	61	KNOB
30	1/2" NUT	62	3/8"-2 1/2" SCREW

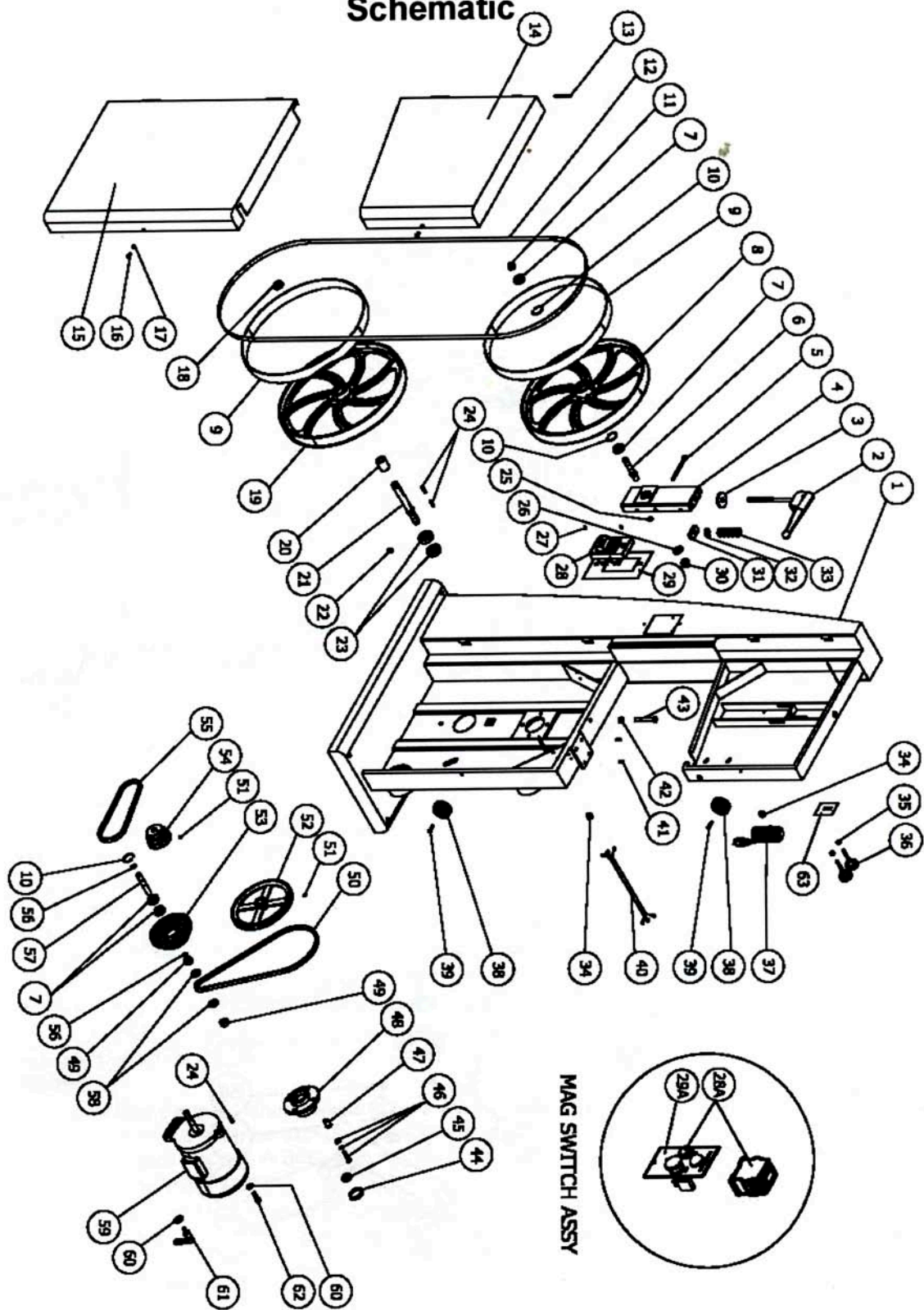
CT103N Wood Band Saw

Parts List

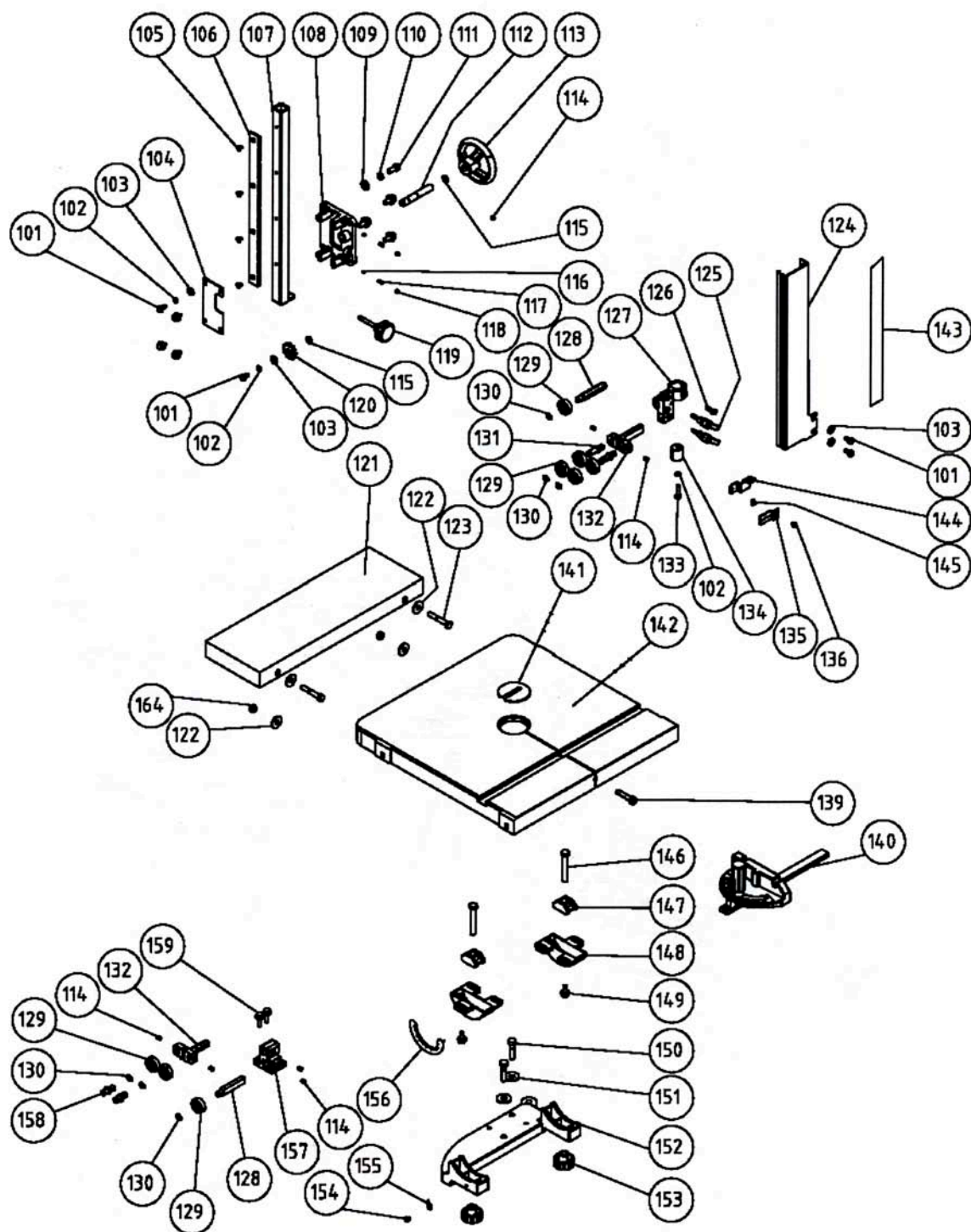
PART	DESCRIPTION	PART	DESCRIPTION
101	1/4"-3/8" SCREW	134	GUIDE POST
102	1/4" LOCK WASHER	135	POINTER
103	1/4" WASHER	136	3/16" SCREW
104	GUIDE BAR COVER	137	
105	M5 SCREW	138	
106	GEAR	139	PIN
107	GUIDE BAR	140	GAUGE
108	BRACKET	141	TABLE INSERT
109	5/16" WASHER	142	TABLE
110	5/16" LOCK WASHER	143	SCALE
111	5/16"-5/8" SCREW	144	POINTER PLATE
112	SHAFT	145	1/4"-3/8" SCREW
113	HAND WHEEL	146	3/8"-2/1/2" SCREW
114	1/4" SET SCREW	147	CLAMP SHOE
115	C-RING	148	TRUNNION
116		149	SCREW
117	SPRING	150	3/8"-2" SCREW
118	M6 SET SCREW	151	3/8" WSHER
119	KNOB	152	TABLE BRACKET
120	GEAR	153	KNOB
121	EXTENSION TABLE	154	3/16" SCREW
122	5/16" WASHER	155	POINTER
123	5/16"-2" SCREW	156	SCALE
124	BLADE COVER	157	BRACKET
125	KNOB	158	GUIDE SHAFT(S)
126	1/4"-3/4" SCREW	159	SCREW
127	BRACKET	160	
128	BEARING SUPPORT BRACKET	161	
129	BEARING	162	
130	C-RING	163	
131	GUIDE SHAFT(L)	164	5/16" HEX NUT
132	SUPPORT	165	
133	1/4"-3/4" CAP ACREW	166	

CT103N Wood Band Saw

Schematic



CT103N Wood Band Saw Schematic





WARRANTY

CRAFTEX 2 YEAR LIMITED WARRANTY

Craftex warrants every product to be free from defects in materials and agrees to correct such defects where applicable. This warranty covers **two years** for parts and 90 days for labour (unless specified otherwise), to the original purchaser from the date of purchase but does not apply to malfunctions arising directly or indirectly from misuse, abuse, improper installation or assembly, negligence, accidents, repairs or alterations or lack of maintenance.

Proof of purchase is necessary.

All warranty claims are subject to inspection of such products or part thereof and Craftex reserves the right to inspect any returned item before a refund or replacement may be issued.

This warranty shall not apply to consumable products such as blades, bits, belts, cutters, and chisels, punches etceteras.

Craftex shall in no event be liable for injuries, accidental or otherwise, death to persons or damage to property or for incidental contingent, special or consequential damages arising from the use of our products.

RETURNS, REPAIRS AND REPLACEMENTS

To return, repair, or replace a Craftex product, you must visit the appropriate Busy Bee Tools showroom. Craftex is a brand of equipment that is exclusive to Busy Bee Tools.

For replacement parts directly from Busy Bee Tools, for this machine, please call 1-800-461-BUSY(2879), and have your credit card and part number handy.

- All returned merchandise will be subject to a minimum charge of 15% for re-stocking and handling with the following qualifications.
- Returns must be pre-authorized by us in writing.
- **We do not accept collect shipments.**
- Items returned for warranty purposes must be insured and shipped pre-paid to the nearest warehouse (see locations on inside back cover of this manual).
- Returns must be accompanied with a copy of your original invoice as proof of purchase. Returns must be in an un-used condition and shipped in their original packaging a letter explaining your reason for the return. Incurred shipping and handling charges are not refundable.
- Busy Bee will repair or replace the item at our discretion and subject to our inspection.
- Repaired or replaced items will be returned to you pre-paid by our choice of carriers.
- Busy Bee reserves the right to refuse reimbursement or repairs or replacement if a third party without our prior authorization has carried out repairs to the item.
- Repairs made by Busy Bee are warranted for 30 days on parts and labour.
- Any unforeseen repair charges will be reported to you for acceptance prior to making the repairs.
- The Busy Bee Parts & Service Departments are fully equipped to do repairs on all products purchased from us with the exception of some products that require the return to their authorized repair depots. A Busy Bee representative will provide you with the necessary information to have this done.
- For faster service it is advisable to contact the nearest Busy Bee location for parts availability prior to bringing your product in for repairs.

For more information, call Toll Free 1-800-461-BUSY(2879)

or visit www.busybeetools.com