# **CHAINSAW MILLING ATTACHMENT**

# INSTRUCTION MANUAL AND OPERATION GUIDE

SM65/SM72/SM328

- Read this instruction manual carefully before attempting to assemble or operate this chainsaw milling attachment
- Keep this manual for future reference.

# Introduction

We appreciate your purchase of this quality chainsaw milling attachment.

This attachment converts your chainsaw into a portable milling machine, a great tool for craftsmen, woodworkers and carpenters.

We constantly develop the mill. If the specification or parts are inconsistent with the content in this manual, please refer to the actual product.

# **IMPORTANT:**

Be extremely careful of the chainsaw cutting chain while in use.

Never assemble or dismantle any parts of the mill when the chainsaw is running.

Never allow children to operate a chainsaw milling attachment.

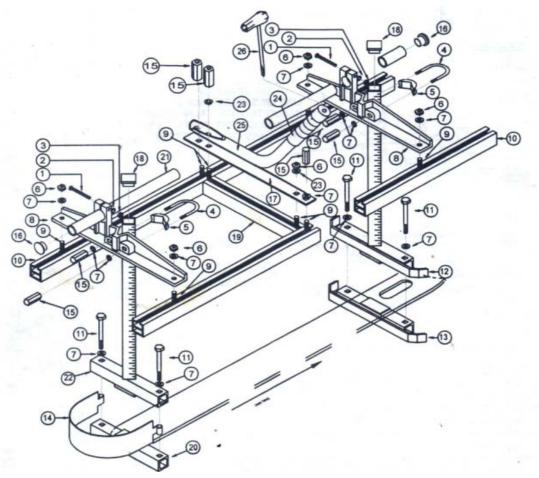
Never operate under the influence of alcohol, drugs, or medication.

Never work with children, pets or bystanders within 10 metres of the mill when operating.

DO NOT run your chainsaw with the mill on it in an enclosed area - exhaust from the chainsaw engine contains carbon monoxide which can be fatal.

Always use appropriate protective clothing when operating the mill. Gauntlets, safety glasses, ear protection, chainsaw trousers, safety boots and a dust mask should always be worn/used during operation.

# 1.PARTS LIST:



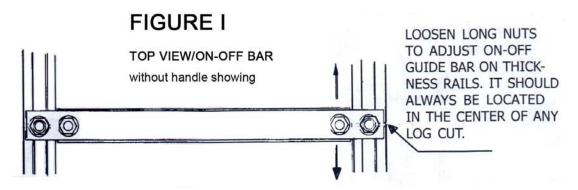
PART NO.	QTY.	DESCRIPTION	
1	2	SCREW 10-32	
		(Sunk screw used	
		for some models)	
2		NOT USED	
3	2	LOCK NUT(None if	
		sunk screw is used)	
4	2	U-CLAMP	
5	2	POST CLAMP	
6	-	HEX NUT	
		(Use Part No.15 for	
		some models)	
7	15	FLAT WASHER	
8	2	END BRACKET	
9	8	CRG BOLT	
10	2	THICK RAIL	
11	2	HEX BOLT	
12	2	THRUST END	

PART NO.	QTY.	DESCRIPTION	
13	2	CLAMP BRKT	
14	1	NOSE GUARD	
15	7	COUPLING NUT	
16	2	END CAP	
17	1	TIE BAR	
18	2	RISER POST CAP	
19	1	ON/OFF BAR	
20	1	CLAMP BRKT	
21	1	FIXING TUBE	
22	1	ADJ POST	
23	2	LOCK WASHER	
		(SAME AS PART 7	
		FOR SOME MODELS)	
24	1	HANDLE	
		GRIP	
25	1	HANDLE	
26	1	WRENCH	

# 2.ASSEMBLY INSTRUCTION:

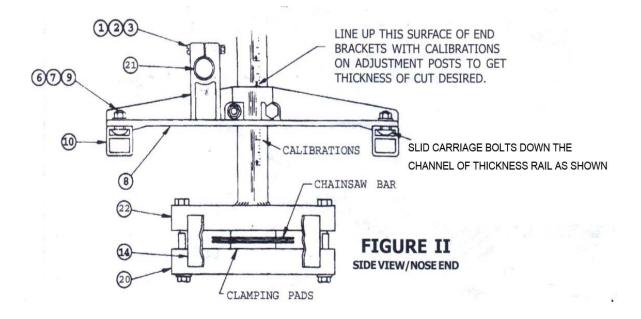
# STEP 1 ( See Figure I)

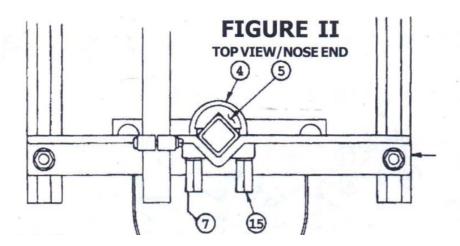
Attach tie bar ( item 17 ) and handle (item 25) to on-off bar (item 19) using two  $5/16 - 18 \times 3/4$  carriage bolts (item 9), two lock washer (item 23) and one 5/16 hex nut ( item 6 ) and one coupling nut (item 15). Then attach unit to thickness rails ( item 10 ) using two 5/16 - 18 carriage bolts ( item 9) one 5/16 flat washer ( item 7 ) and two 5/16 - 18 coupling nuts ( item 15 ).



# STEP 2 ( See figure II )

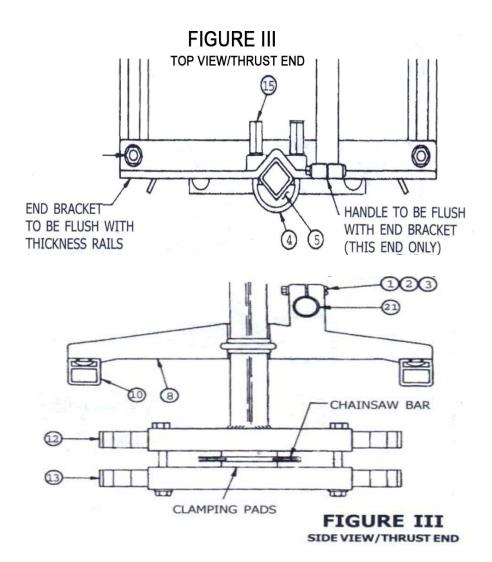
Attach end bracket ( item 8 ) to thickness rails ( item 10 ) using two  $5/16-18\times3/4$  carriage bolts ( item 9 ) two 5/16 flat washers ( item 7 ) and two 5/16-18 hex nuts ( item 6 ). Tighten hex nuts finger tight only.





# STEP 3 (See figure III)

Attach 2nd end bracket ( item 8 ) to thickness rails ( item 10 ) using two  $5/16 - 18 \times 3/4$  carriage bolts ( item 9 ) two 5/16 flat washers ( item 7 ) and two 5/16 - 18 hex nuts (item 6 ). Now tighten hex nuts. Be sure that end brackets are flush with thickness rails ( see Figure III top view ).



# **STEP 4** ( see Figure II & III )

Slide handle through large holes in end brackets. Secure handle at thrust end ( Figure III ) flush with end bracket using # 10-32 x 1 1/2 pan head. screw ( item 1 ) # 10 lock washer ( item 2 ) and # 10-32 hex nut( item 3 ). The same applies to the nose end (Figure II ) but do not tighten nut.

# **STEP 5** ( See Figure II Side view )

Insert two  $5/16 - 18 \times 3$  Hex head bolts ( item 11 ) through 5/16 flat washers and into holes in adjustment post ( item 22 ). Slide bolts through nose guard ( item 14 )and then through clamping bracket ( item 20 ). Nuts are welded to the clamping bracket. Start hex head bolts ( item 11) into nuts on bottom of bracket. Leave loose so there is a gap for mounting chain saw bar.

# **STEP 6** ( See Figure III side view )

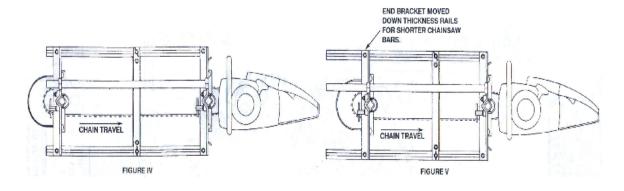
Insert two  $5/16 - 18 \times 3$  Hex head bolts ( item 11 ) through 5/16 flat washers ( item 7 ) through adjustment post ( item 12 ) and into clamping bracket ( item 13 ) engaging nuts on bottom of clamping bracket. Leave loose so there is a gap for the saw bar.

# STEP 7 ( See Figure II )

Attach nose end post assembly to end bracket using U-Clamp (item 4) post clamp (item 5) two 5/16 flat washers (item 7) and coupling nuts (item 15). Tighten coupling nuts (item 15) after setting calibration at 3" (see Figure II Side View).

# STEP 8 ( See Figure III )

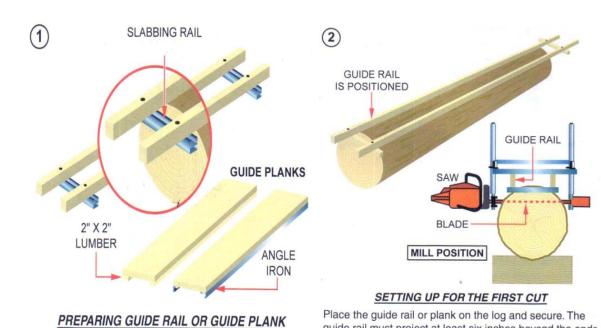
Attach thrust end post assembly to end bracket using U-clamp (item 4) post clamp (item 5) two 5/16 flat washers (item 7), and coupling nuts (item 15). Tighten coupling nuts after setting calibration at 3" (See Figure II Side View).



## STEP 9

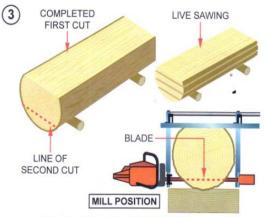
Slide nose of chain saw bar between clamping pads of thrust end and on through to the clamping pads of the nose end ( see Figure IV& V ). Slide bar through thrust end until the saw is within 1 inch of the thrust end post ( item 12 ). Center clamping pads on bar and tighten hex head bolts ( item 11 ). Adjust nose end of mill ( figures IV & V-see back page) so the nose guard misses the end of the chain and the clamping pad is not contacting the sprocket in the nose of the bar. To do so loosen the nuts ( item 6 ) holding bracket( item 8 ) and slide post and bracket assembly into position. Tighten nuts (item 6 ) and nut ( item 3) on bracket ( item 8 ) to secure handle ( item 21) in place. Make sure clamping pads are centered on saw bar and tighten hex bolts (item 11). Check that all nuts and bolts are tight. Insert end caps ( item 16 & 18). Mill is now ready for operation.

# 3. HOW TO MAKE PLANKS WITH THE CHAINSAW MILL:



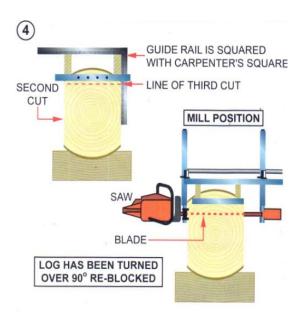
guide rail must project at least six inches beyond the ends of the log so that the saw will leave the cut level and even. This basic or first cut determines the accuracy of all later cuts. Make sure it is true and that will help produce the

maximum amount of lumber from the log.



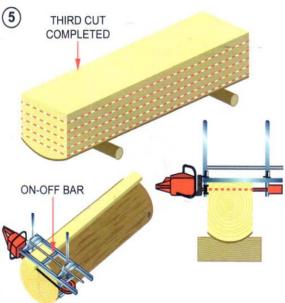
#### MAKING READY FOR THE SECOND CUT

Remove the guide rail and first cut slab. If you wish to "live saw" the log, adjust the mill for the desired depth of cut and saw mill the log as it lies. To produce a level and straight cut, keep the rails of the mill level and in contact with the log. To produce a "CANT" for a specific dimension, lower the mill to make your second cut. Wedge this cut open as the saw comes out of the cut to prevent the saw bar from pinching the chain. This second cut produces a surface parallel to the first cut. Remember to keep the on-off guide bar in the middle of the log to lead the saw in and out of the cut.



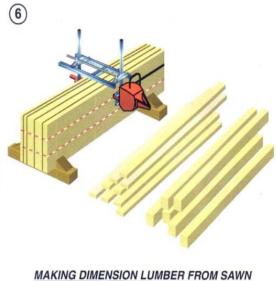
#### PREPARING TO MAKE THE THIRD CUT

Now rotate the log 90 degrees, brace the log firmly and fasten the guide rail. Use a carpenter's square to insure that the third slabbing cut will be a rigt angle to the faces of the first and second cuts.



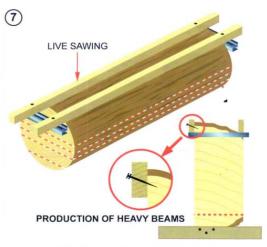
#### READY TO CONVERT CANT INTO LUMBER

You are now ready to convert the cant into lumber. Remove the slab and guide rail. Determine the thickness of the planks or boards to be produced and set the gauge to the correct thickness. Remember that the mill slides on the level surface of each previous cut so take care that the on-off guide bar is centered on the cant to insure the saw enters and leaves the cut evenly.



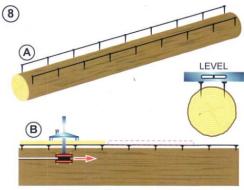
#### **PLANKS**

When you desire to make dimension lumber; gather the saw planks as shown and clamp firmly. Now adjust the thickness gauge as required so as to cut 2" x 2's', 2" x 6"s, or 2" x 12"s as an example. Keep in mind that if various sizes are planned to be taken from the same log, such as 4" x 4"x, 6" x 6", 4" x 8", etc., the various dimensions needed must be allowed for when making the previous cuts. See step five.



#### TIMBER-CANTS-BEAMS-ETC., FROM LARGE LOGS

To split larger logs into two or more sections, proceed as in step two through step four. The sizes of these heavy pieces are controlled by the setting of the thickness frame. The guide rail is used in the same manner as previously described. The cuts may require wedging open due to heavy weight.



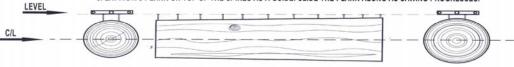
#### STEPS TAKEN IN THE MAKING OF PREMIUM LENGTH BEAMS

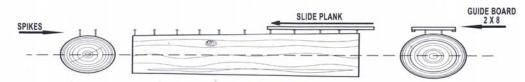
When cutting extra long or premium beams, we recommend this procedure for making the initial cut. Before placing the guide board (2" x 6" or 2" x 12"), drive 2 spikes at each end (level) and stretch a heavy cord from one end of the log to the other. Drive spikes or lags to the height of the cord as a means of keeping the guide rail true and level (A). Place guide board on spikes and cut about 3/4 of the length of the guide rail, raise the mill and slide the guide rail ahead along the heads of the lags or spikes (B). Continue cutting in this fashion unil the first cut

# 4.HOW TO SAW LOGS LARGER THAN YOUR SLABBING RAIL

- TOOLS REQUIRED: SPIRIT LEVEL, HAMMER, 4" SPIKES, A 2 X 8 PLANK AND ROLL OF NYLON OR POLY CORD.
- 1. NAIL TWO SPIKES AT EACH END OF LOG.

- 1. NAIL TWO STREAM EACH END OF LOG.
  2. LEVEL SPIKES WITH SPIRIT LEVEL AT EACH END AS SHOWN.
  3. FOR A LEVEL CUT, MEASUREMENT TO TOP OF SPIKES FROM CENTER OF LOG SHOULD BE THE SAME FOR BOTH ENDS.
  4. USING STRONG POLY OR NYLON CORD, STRETCH CORD FROM ONE SET OF SPIKES TO THE OTHER.
  5. DRIVE SPIKES TO HEIGHT OF LINE ALONG THE LOG, STAGGER SPIKES EVERY THREE FEET.
  6. LAY A 2 X 8 PLANK ON TOP OF THE SPIKES AS A GUIDE. SLIDE THE PLANK ALONG AS SAWING PROGRESSES.

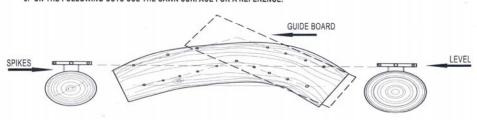


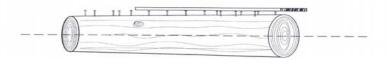


### **CUTTING CURVED OR IRREGULAR SHAPED LOGS**

- TOOLS REQUIRED: SPIRIT LEVEL, HAMMER, 4" SPIKES, A 2 X 8 PLANK AND ROLL OF NYLON OR POLY CORD.
- 1. NAIL TWO SPIKES AT EACH END OF LOG.

  - NAIL TWO SPIKES AT EACH END OF LOG.
     LEVEL SPIKES WITH SPIRIT LEVEL AT EACH END AS SHOWN.
     TIE CORD TO ONE SPIKE AND STRETCH CORD FROM ONE SET OF SPIKES BACK TO THE OTHER.
     HAMMER ENOUGH SPIKES TO HEIGHT OF CORD TO SUPPORT PLAN AS SHOWN. ON SHORTER LOGS. TWO ADDITIONAL SPIKES IN THE CENTER SHOULD DO.
     ADJUST YOUR MILL TO DESIRED CUTTING DEPTH AND FOLLOW BOARD FOR YOUR FIRST CUT. MOVING THE BOARD AS NEEDED TO COMPLETE CUTS
     ON THE FOLLOWING CUTS USE THE SAWN SURFACE FOR A REFERENCE.





DATE:	
NAME:	
ADDRESS:	
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REMARK:	

