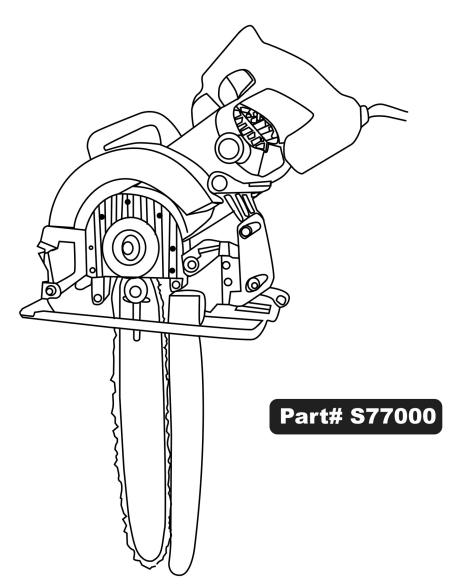
# SUPERIOR STEEL

## BEAM CUTTER INSTRUCTION MANUAL



#### **BEFORE YOU BEGIN:**

1. Read this owners manual in its entirety before installing or operating the Beam Cutter and also read the owner's manual for you circular saw.

#### **INSTALLING TO AVOID DAMAGE TO THE BEAM CUTTER**

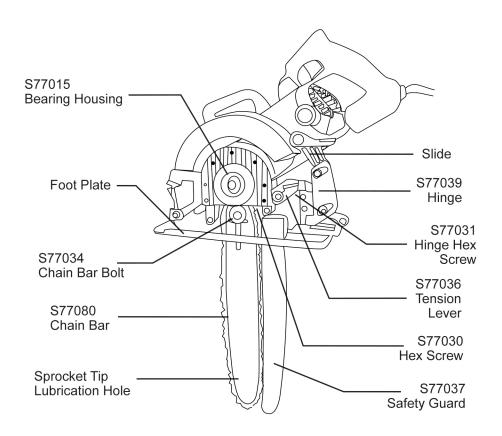
### IMPORTANT THINGS TO REMEMBER WHEN INSTALLING THE BEAM CUTTER

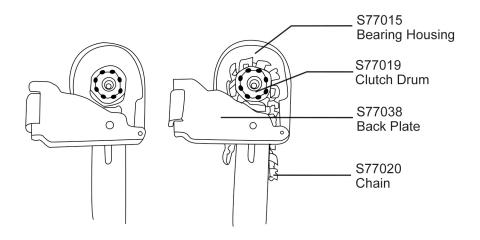
- 1 .Do not overtighten the main arbor bolt.
- 2. ALWAYS use the beveled washer on the main bolt when installing the Beam Cutter. Failure to do so will damage the main bearing housing.
- 3. Be sure to loosen the hinge plate before installing. Beam Cutter must be parallel with the circular saw.
- 4. Be sure to lower foot plate of the circular saw before installing the Beam Cutter.
- 5. Due to design changes the Bosch and Skil wormdrive saws the lower retractable saw guard must be removed for the Beam Cutter to fit.

#### **BOLT KIT PARTS LIST:**

Part #	Qty.	Name	Application	*Application Key
S77012	1	Hex Key	All	# Manufacturer
S77022	1	0.788" Bushing	1,2,4,5	1 Back & Decker
S77023	1	3/8" Arbor Bolt	1,2,4,5,7	2 Craftsman
S77025	1	8 mm Arbor Bolt	3	3 Makita
S77027	1	Beveled Washer	All	4 Milwaukee
S77042	2	Carrage Bolts	All	5 Skil
				6 Dewalt
				7 Bosch

<sup>\*</sup>Complete parts breakdown is located on page 3



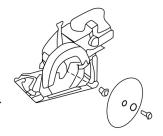


#### **INSTALLING THE BEAM CUTTER**

#### \*BE SURE SAW IS UNPLUGGED BEFORE INSTALLING BEAM CUTTER\*

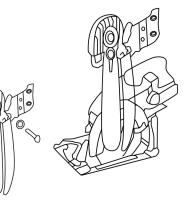
#### REMOVING CIRCULAR SAW BLADE

- 1. Open foot plate to it's fully extended position.
- 2. While depressing lock button, remove blade bolt, outer washer, blade and inner washer or diamond.

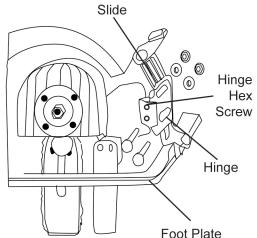


#### **INSTALL BEAM CUTTER BLADE ASSEMBLY**

- Slip Bushing S77022 in place (No bushing is required for some saws)
- 4. With foot plate fully extended, slide Beam Cutter blade first through the top of the table plate, then align the center hole of the Beam Cutter with the saw spindle.
- Drop the Beam Cutter in place, making sure that the center hole of the Beam Cutter aligns with the spindle of the saw.



- 6. Loosen the 2 screws on the Beam Cutter hinge with 5/32" hex wrench.
- Bolt hinge on Beam Cutter to slide on saw and finger-tighten. Bolts, washers and nuts are provided for this purpose.
- \*NOTE: Be sure to use the beveled washer when attaching bolt for proper operation of the Beam Cutter.

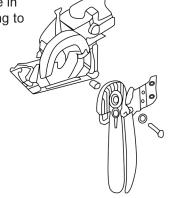


- 8. Screw bolt, with beveled washer on counterclockwise (#S77023 for Black & Decker', Milwaukee', Craftsman" and Skil' #S77025 for Makita through center hole in Beam Cutter. Make sure washer is on bolt - failing to use the supplied beveled washer may cause damage to the bearing.
- 9. At this point, align Beam Cutter so that it is perpendicular (to the foot plate of the saw).

#### TIGHTEN BOLTS AND SCREWS

- With the Beam Cutter properly aligned, and while depressing the lock button, tighten the master bolt with a 9/16" wrench.
- 11. Tighten the bolts holding the hinge plate to the slide with a 1/2" wrench.
- 12. Tighten screws on hinge assembly with a 5/32" hex wrench.

\*NOTE: After installing the Beam Cutter, please check to make sure that there is enough tension on the chain. If more tension is desired, loosen the tension screw and hinge bolts (#S77042) and push the tension lever to achieve the desired tension level. Then re-tighten the tension screw.



**WARNING:** All chain-type cutting tools can kickback and cause loss of control of the tool and lead to the possibility of serious injury.

#### **OPERATING PROCEDURES:**

## PLEASE INSPECT THE FOLLOWING BEFORE OPERATING THE BEAM CUTTER.

CORD: Inspect the cord and extension cord for damage.

OIL: Oil or lubricate the chain before use.

Chain: Inspect for proper tension and sharpness and damage.

**Secure:** Make sure that all loose clothing or long hair is secure before use. **READ:** Please read the safety section to better prevent the danger of kickback.

#### **OPERATING PROCEDURES CONTINUED:**

#### AVOID KICKBACK!!

Kickback is a dangerous occurrence where the saw has a tendency to kick back toward the user when it encounters resistance. Kickback results in a backward and/or upward motion of the saw and occurs most frequently when attempting to cut too close to the tip of the guide bar.

#### To Avoid Kickback:

ALWAYS work with a sharp, tight chain and support your work properly.

If the chain binds while making a cut, or when making an incomplete cut, release the trigger and hold the saw still until the chain comes to a stop.

DO NOT attempt to remove the saw from the work while the chain is moving.

PULL the trigger and allow the chain to reach full speed before resuming or starting a cut. ALWAYS use two hands and maintain a firm grip.

DO NOT attempt to cut material above shoulder height.

DO NOT attempt to cut in awkward positions.

**WARNING!** WEAR SAFETY GOGGLES WITH SIDE SHIELDS FOR EYE PROTECTION WHEN OPERATING THE BEAM CUTTER OR ANY OTHER POWER TOOL

#### **Operating Hints:**

- · Always secure material to be cut.
- For rip cuts, use a fence to make smooth, straight cuts.
- Do not allow scraps to build up beneath blade.
- · Keep chain sharp and well lubricated.
- Keep work area clean and clutter free.
- Grasp saw with a firm grip, using both hands.

#### **ADJUSTING CHAIN TENSION:**

Chain tension should be checked before any cutting and also periodically throughout the job. To adjust chain tension, follow these steps:

#### **FINE ADJUSTMENT**

REMOVE THE BEAM CUTTER FROM THE SAW BEFORE PERFORMING FINE ADJUSTMENT

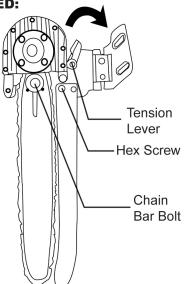
**WARNING!** ALWAYS USE HEAVY DUTY GLOVES WHEN HANDLING THE CHAIN TO PREVENT ACCIDENTAL INJURY TO HANDS OR FINGERS.

**ADJUSTING CHAIN TENSION CONTINUED:** 

- 1. Loosen the chain adjustment tension lever screw and hex screw above the tension lever with a 5/32" hex key wrench.
- 2. **VERY IMPORTANT** Loosen hinge bolts before performing fine adjustment.
- 3. Push the lever down to obtain proper tension.
- 4. Re-tighten the lever screw and hex bolt.

#### **GROSS ADJUSTMENT**

The fine adjustment is only effective up to 1/8" adjustment. For more adjustment, loosen the chain bar bolt (S77034) and slide the chain bar downward to tighten the chain.

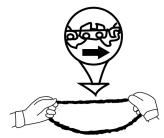


#### **CHANGING THE CHAIN:**

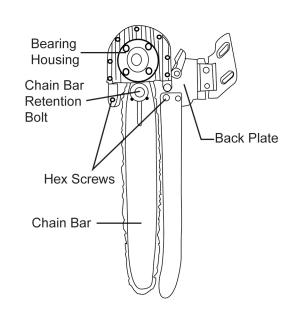
#### **FOLLOW THESE STEPS**

- 1. Remove Beam Cutter from saw.
- 2. Remove chain bar by first removing chain bar retention bolt and washer.
- 3. Separate bearing housing from back plate by unscrewing hex screws with 5/32" hex key

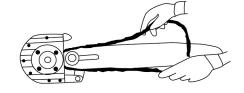
- 4. Make sure chain cutters face in the direction of rotation.
- Place chain behind clutch drum and onto sprocket teeth.



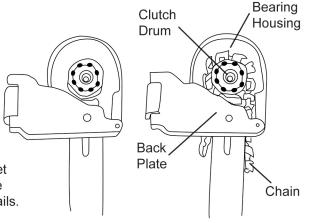
Reattach bearing housing to back plate by replacing hex screws, then reattach chain bar with bolt and washer.



7. Guide chain along the top of the chain bar and around the sprocket tip, setting drive links in the chain bar rail. It may be necessary to adjust the sprockets on the chain bar nose.



8. Pull chain bar forward to take up slack in the chain and tighten bolt with wrench to firmly secure it. Make sure the chain fits in chain bar rail along bottom of bar. Move chain back and forth to make sure it is in mesh with the sprocket and that chain drive links are lined up with the chain bar rails.



#### **MAINTENANCE GUIDELINES:**

BE SURE SAW IS UNPLUGGED BEFORE PERFORMING MAINTENANCE ON YOUR BEAM CUTTER

#### **CIRCULAR SAW**

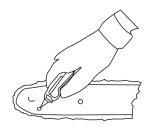
Please follow saw manufacturer's guidelines for proper maintenance.

#### **BEAM CUTTER CHAIN BAR**

Keep the chain bar sprocket tip well lubricated with frequent applications of lubricant to the chain bar tip.

When lubricating the sprocket tip, wear heavy gloves and make sure the power cord is unplugged.

- 1. Clean the sprocket tip to remove any debris.
- 2. Insert the tip of the lubricating gun into the lubrication hole and inject grease until it appears on the outside edge of the sprocket tip.
- 3. Rotate the chain by hand and repeat the procedure until the entire sprocket tip is lubricated.



- 4. Spraying the bar and chain with a silicone lubricant is very effective for keeping the chain sharp and running smoothly. Spray every 10 or 15 cuts.
- 5. The Beam Cutter runs much slower than a chain saw and does not require as much lubricant. Clean the chain bar rails when they appear dirty and each time the chain is removed. The tip of a screwdriver works well for this job.

#### **CHAIN**

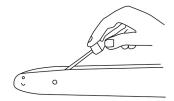
Maintain proper chain tension.

Proper tension is important and should be checked before each use.

Always keep chain clean and sharp to prevent kickback and to ensure optimal performance and safety.

New chains will require adjusting after as few as 5 cuts. This is normal, as new chains often will stretch.

File diameter of chain is 5/32" or 4.5mm.



#### **MAINTENANCE CHART**

Maintenance Procedure	Before Each Use	After Each Use	As Needed
Check Chain Tension	Х		
Oil Chain	x		
Lubricate Sprocket Tip		Х	
Clean Chain		Х	
Sharpen Shain Blades			х
Clean Chain Bar Rails			х

#### **GENERAL SAFETY TIPS:**

- 1. Wear tight fitting clothes. Keep all parts of your body, clothing and jewelry away from the saw during the chain saw use.
- 2. Wear safety goggles for eye protection.
- 3. Wear heavy duty safety work shoes or boots.
- 4. Keep children, animals and other bystanders well away from the work area.
- 5. Make sure the saw is properly grounded before use consult your circular saws owner's manual.

#### **BEAM CUTTER SAFETY PROCEDURES:**

- 1. Make sure that all screws and nuts are tight and that chain tension is correct before using.
- 2. Always keep the blade in front of you while cutting never try to cut toward your body.
- 3. Use the Beam Cutter for lumber and wood building products only- NEVER use the Beam Cutter to cut trees, vines, plastics, or metals.
- 4. Always use BOTH HANDS and a firm grip when operating the Beam Cutter. Use your thumb to encircle the handles for best grip.
- 5, Do not place hot saw near flammable materials.
- 6. Keep handles dry and grease free.
- 7. Do not operate saw under medication, while feeling fatigued, or while drinking alcohol,
- 8. Do not operate saw during hazardous weather conditions such as rain or snowfall.
- 9. Do not operate saw in awkward positions that require outstretched arms or one-handed use.
- 10. If your arms start to feel heavy or become stiff, STOP immediately and rest Resting periodically is a good practice you should not operate the saw for prolonged periods.
- 11. Do not try to stop a moving chain with any object or bodily part such as hand or foot
- 12. Never leave the saw unattended, especially if children are present.
- 13. Do not allow sawdust or other debris to build up on the saw, blade, or motor.
- 14 Never remove the kickback guard or other safety device from your Beam Cutter or circular saw.
- If unfamiliar with proper chain sharpening techniques, take your blade to your nearest distributor.
- 16. Always make sure power cord is unplugged before changing chain, installing Beam Cutter assembly, lubricating chain, or performing any other maintenance on your saw.
- 17. PREVENT KICKBACK! Please thoroughly review the kickback prevention techniques explained on page 6.

#### **PARTS LIST**

PART#	DESCRIPTION
S77020	CHAIN
S77080	BAR FOR CHAIN
S77012	5/32" HEX KEY
S77015	BEARING HOUSING
S77016	BEARING
S77017	BEARING RETAINER RING
S77018	SPACER STEP RING
S77019	CHAIN DRIVE GEAR
S77045	SHAFT ADAPTER
S77022	0.788 LENGTH BUSHING
S77023	3/8 - 24 L.H. BOLT 1-1/2" LENGTH
S77025	8mm - 1.25 L.H. BOLT 2-1/2" LENGTH
S77027	3/8" I.D.THICK WASHER
S77028	5/16" I.D.THICK WASHER
S77029	10-24 x 3/8" BUTTON HEAD SCREW
S77030	1/4"-20 x 1" BUTTON HEAD SCREW
S77031	1/4"-20 x 1/2" BUTTON HEAD SCREW
S77032	1/4" I.D. SPRING WASHER
S77033	NYLON 1/4" I.D. WASHER
S77034	5/16"-18 x 1" BOLT
S77035	BAR WASHER 5/16" I.D. x 1-5/8"
S77036	ADJUSTING LEVER
S77037	SAFETY (KICKBACK) GUARD
S77038	MAIN PLATE ADAPTER
S77039	HINGE PLATE