

Shingle/Lap Sider

Safety, Operation, Maintenance,

SLR-S

rev. A1.00

Safety is our #1 concern! Read and understand all safety information and instructions before operating, setting up or maintaining this machine.

Form #621

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SECTION 1 OPERATION

The Shingle/Lap Siding Option (SLR) allows you to quickly saw tapered shingles or siding with your Wood-Mizer sawmill. Read the instructions in this section completely before operating the SLR.

See Figure 1-1. The major components of the SLR option are identified below.



FIG. 1-1

1.1 Installation and Setup

- 1. Position the SLR on the mill bed with the mounting brackets around the front and rear bed rails. The shift lever should be at the front end of the mill. Make sure the SLR frame is lying flat on the bed rails. DO NOT tighten the clamp bolts on the bed rails. The clamp bolts should only be tightened before towing the sawmill with the SLR attached.
- **2.** Slide the SLR frame all the way over toward the inboard side of the sawmill bed until the SLR stops touch the bed rail stop blocks.

See Figure 1-2.



FIG. 1-2

1.2 Cutting Wood Shingles

To cut tapered shingles, up to six wood blocks are clamped over each cam. The siding tilt adjustment bolts are adjusted down to prevent the lifting rollers from tilting the SLR frame. When the shift lever is thrown, the cams lift the back of each wood block. The shingle taper adjustment bolt is used to control how much taper is sawn into the shingles.

- Saw a log into a cant the width you want your shingles. The maximum width the SLR can accept for shingles is 12" (304.8 mm). Use a chainsaw to cut the cant into blocks the length you want your shingles. The minimum length the SLR can accept for shingles is 14" (350 mm). The maximum length for shingles is 24" (610 mm). To reduce the risk of vibration causing the blocks to work loose from the clamps, a maximum block height of 12" (300 mm) is recommended.
- 2. Install the SLR to the sawmill bed (<u>See Section 1.1</u>).
- 3. Adjust the shingle taper adjustment bolt all the way out and throw the shift lever up.
- **4.** Adjust the siding taper adjustment bolts clockwise until you can spin the siding lift rollers by hand. The lift rollers should not tilt the SLR frame when the shift lever is thrown.
- **5.** Adjust the clamps as close to the SLR frame as possible. This will insure the rear of the blocks are positioned over the cams. Turn the clamp handles counterclockwise until each clamp is all the way out.

See Figure 1-3.



- **6.** Position the first block in the front clamp assembly with the front edge of the block even with the front edge of the clamp.
- **7.** Slide the outer clamp half in until it contacts the block. Turn the clamp handle clockwise to firmly clamp the block in position. Be sure the block is securely clamped so the block will not come loose while being cut.
- 8. Repeat procedure to clamp remaining wood blocks.

See Figure 1-4.



See Figure 1-5.

- **9.** Before adjusting the SLR for the amount of shingle taper, push the shift lever down and make a trim cut to level all of the blocks.
- 10. Move the blade to the top of the back edge of the first block. Raise the shift lever until the block tilts to the desired taper. For example: if you want to cut shingles that are 1/8" on one end and 5/16" on the other end, adjust the SLR for 3/16" taper (5/16"-1/8"=3/16"). Adjust the shingle taper adjustment bolt until in contacts the shift lever linkage. Secure the bolt in position with the jam nut.



FIG. 1-5

- **11.** Always follow all safety and operating procedures explained in the sawmill operator's manual when using the SLR.
- **12.** Raise the shift lever and lower the blade the thickness of the thin end of the shingle. Make a cut and return the carriage. Each shingle should match tapers to the setting you want. If they don't, repeat Step 9 above.
- **13.** Push the shift lever down and lower the blade the thickness of the thick end of the shingle. Make a cut and return the carriage.
- **14.** Repeat Steps 12 13 down to the heart of the cants. Unclamp the cants, flip 180° and reclamp. Continue sawing down as low as the SLR clamps will allow.

1.3 Cutting Lap Siding

To cut tapered siding, a single cant is clamped in the SLR. The siding taper adjustment bolts are adjusted up so the lifting rollers tilt the SLR frame. When the shift lever is thrown, the SLR frame tilts sideways.

- 1. Saw a log into a cant the width you want your siding. The maximum width the SLR can accept is 12" (304.8 mm). If necessary, use a chain saw to cut the cant to the length of siding you want.
- 2. Install the SLR to the sawmill bed (<u>See Section 1.1</u>).
- **3.** Adjust the shingle taper adjustment bolt to 1/4". This will stop the shift lever when the lift rollers reach their maximum height. Adjust the siding taper adjustment bolts all the way up so they do not lift the SLR frame from the bed rails.
- **4.** Adjust the clamps so the inner halves are inside the cams (used for shingles only). This will insure the cams don't contact the cant. Turn the clamp handle clockwise until the clamp is inside the cams.

NOTE: To saw cants wider than 10", the cams must be adjusted out of the way. Be sure to mark each cam location so it can be returned to its original position for sawing shingles. If the adjustable clamps do not provide enough adjustment to secure the cant, use wood spacers between the cant and clamp.

See Figure 1-6.



- 5. Position the cant so it is centered in the SLR frame.
- **6.** Tighten the front clamp to secure one end of the cant. Slide the outer clamp half in until it contacts the block. Turn the clamp handle clockwise to firmly clamp the block in position. Be sure the block is securely clamped so the block will not come loose while being cut.
- 7. Repeat the procedure to clamp the rear of the cant.

See Figure 1-7.



FIG. 1-7





FIG. 1-8



Width (C)	Max. Taper (A - B)
4"	3/16"
6"	5/16"
8"	7/16"
10"	9/16"
12"	11/16"
	TABLE 1-1

8. Before adjusting the SLR for the amount of siding taper, pull the shift lever up and make a trim cut to level the cant.

9. Move the blade so it is positioned even with the top of the cant. Push the shift lever down and measure the amount of taper. Adjust the front siding taper adjustment bolt down to adjust the amount of taper. **For example:** if you want to cut siding that is 1/8" on one end and 5/16" on the other end, adjust the SLR for 3/16" taper (5/16"-1/8"=3/16"). Repeat this procedure at the rear of the cant with the rear siding taper adjustment bolt.



- **10.** Follow all safety and operating procedures explained in the sawmill operator's manual when using the SLR.
- **11.** Push the shift lever down and lower the saw head the thickness of the thin end (A) of the siding. To cut the siding in our example above, the first drop would be 1/8".
- **12.** Make a cut and return the carriage. Check the taper of the board. If adjustment is necessary, repeat Step 9 above.
- 13. Pull the shift lever up and lower the saw head the thickness of the thick end plus the thickness of the thin end plus the thickness of the blade (B + A + Blade Thickness). Allowing for a 3/16" blade thickness in the example above, the second drop would be 5/8" (5/16" + 1/8" + 3/16"). Make a cut and return the carriage.
- **14.** Repeat Steps 11 13 down to the heart of the cant. Unclamp the cant, flip 180° and reclamp. Continue sawing down as low as SLR clamps will allow.