

General Instructions

The Band Saw Blade (BSB) and Band Saw Guide (BSG) Nozzles can be mounted in a variety of ways to accommodate many different band saw designs. It is critical that the nozzles be mounted so the saw blade is centered in the nozzle, and properly positioned so the lubricant is applied to the correct areas of the blade (**Fig. 1 & 2**). To simplify the installation process, mounting templates are provided (**pages 6 & 7**) and can be used to help find the proper mounting locations. Additionally, there are ruler marks on the BSB Nozzle body (**Fig. 1**) that align with the top of the blade to confirm the nozzle is positioned properly.

Band Saw Blade Nozzle

The BSB Nozzle comes in 3 different lengths to accommodate various blade sizes.

Part number*	A (blade size)	Dimension B
303710-1-A	Up to 1" [25.4 mm]	1.90" [48.3 mm]
303710-2-A	Up to 2" [50.8 mm]	2.90" [73.7 mm]
303710-3-A	Up to 3" [76.2 mm]	3.90" [99.1 mm]

*Nozzle shown without mounting kit, but is included with all "-A" part numbers

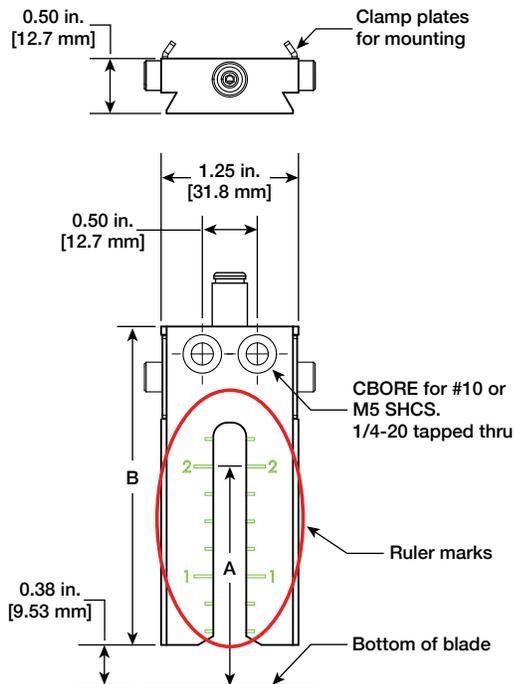


Figure 1: Band Saw Blade Nozzle dimensions

Band Saw Guide Nozzle

Part number*	BSG length
303710-G-A	1.28" [932.4 mm]

*Nozzle shown without mounting kit, but is included with all "-A" part numbers

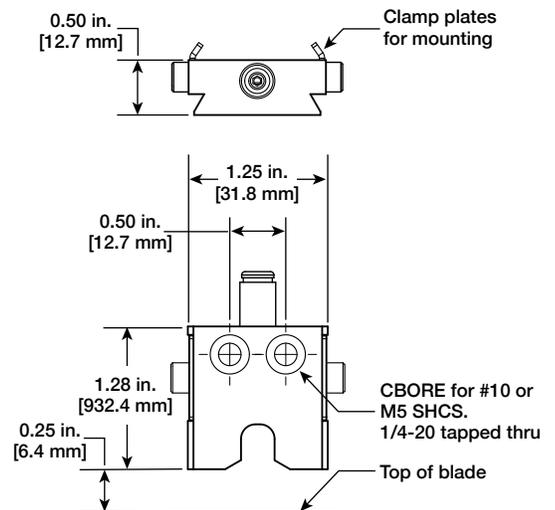


Figure 2: Band Saw Guide Nozzle dimensions

Nozzle can be mounted in several different ways:

- A) If you don't need vertical adjustment, you can mount directly to your guide block or a user-supplied sheet metal bracket.
- B) If you need vertical adjustability and have access to the guide block, you can use the rail mount components from the Band Saw Nozzle Mounting Kit (303720).
- C) If you need vertical adjustability but don't have access to the guide block, you can use the block mount components from the Band Saw Nozzle Mounting Kit (303720).

A) Mounting directly to the guide block

If the guide block is large enough, the nozzle can be mounted directly to it. The block must be at least 1.25" [31.8 mm] wide and must extend at least (blade width + 1.28" [31.8 mm]) above the bottom of the blade.

Alternately, the mounting holes in the nozzle body are tapped with 1/4-20 threads to allow for bolting through sheet metal (**Fig. 6**)

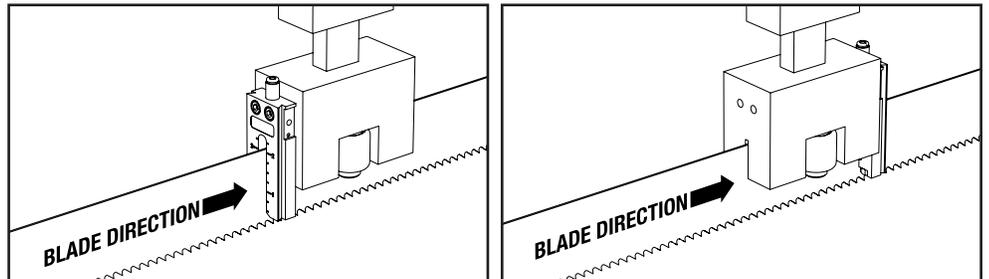


Figure 3: The Band Saw Blade Nozzle can be mounted directly to the entry or exit of the blade guide

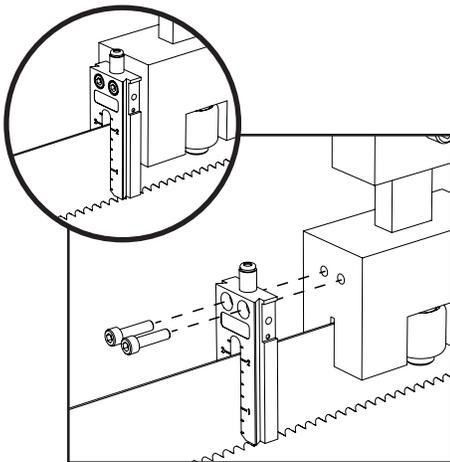


Figure 4: Mounting the Band Saw Blade Nozzle directly to the entry side of the blade guide block (10-32 x 1/2" socket head cap screw) (2 pcs)

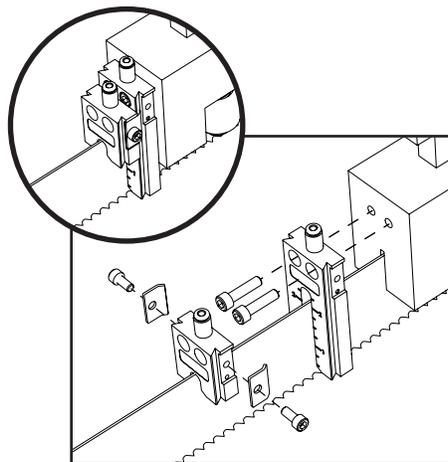


Figure 5: Mounting the Band Saw Blade and Guide Nozzles 'back-to-back' directly to the entry side of the blade guide block. (10-32 x 1/2" socket head cap screws) (2 pcs)

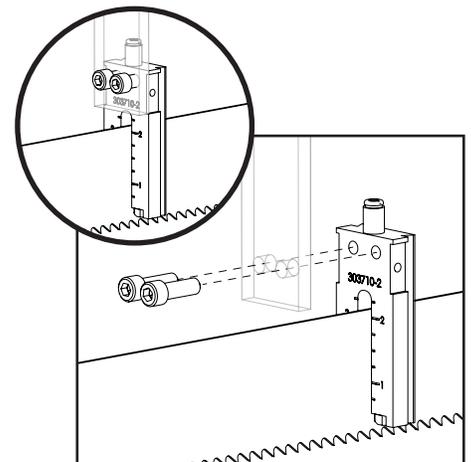


Figure 6: Alternate mounting using 1/4-20 tapped holes

Important - When mounting the Band Saw Guide Nozzle alone or in tandem with the Band Saw Blade Nozzle, the Band Saw Guide Nozzle must be mounted on the entry side of the guide for it to effectively lubricate the guide block. **(See Figure 7)**

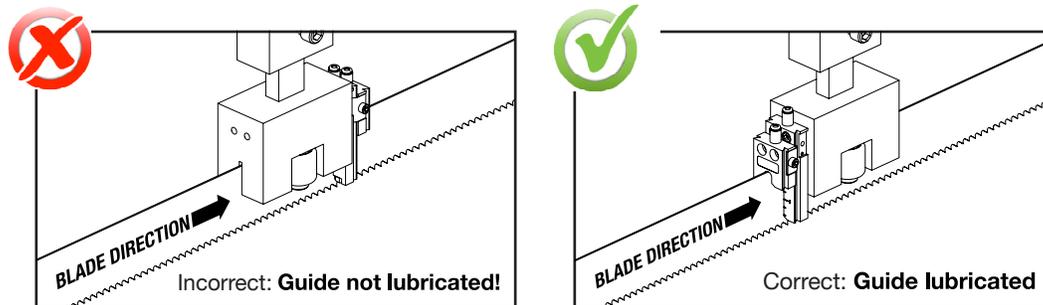


Figure 7: Mount the Band Saw Guide Nozzle on the entry side of the blade guide for proper lubrication

Mounting Procedure

- 1) Using the supplied dimensions and template (**Template A, page 6**), locate and mark the position of mounting holes on the guide block or user-supplied sheet metal bracket.
- 2) Place the Band Saw Blade Nozzle over the marks and verify that the bottom of the saw blade is 0.38" [9.5 mm] below the nozzle body (**Fig. 1, page 1**). Also confirm that the nozzle is properly centered over the blade.
- 3) Remove the guide block or bracket.
- 4) Drill the mounting holes:
 - a) If mounting to the guide block, drill and tap two 10-32 x 3/4" [19 mm] deep holes at the marked location. If metric fasteners are preferred, drill and tap two M5 x 0.8 holes. **Note:** Metric fasteners are not supplied.
 - b) If mounting to a bracket, drill two 1/4" [6.4 mm] screw clearance holes at the marked location.
- 5) Reinstall the guide block or bracket.
- 6) Mount the nozzle(s):
 - a) **Mounting the Band Saw Blade Nozzle:** Install the nozzle to the guide block using the supplied 10-32 x 1/2" socket head screws. Alternately, use 1/4-20 fasteners if installing the nozzle to a bracket. Use blue Loctite® on threads. Verify that the top of the blade is flush with the ruler mark for the blade size installed, the blade is centered in the nozzle, and the nozzle is vertically plumb.
 - b) **Mounting the Band Saw Guide Nozzle:** Loosen the clamp plates of the Band Saw Guide Nozzle and engage the plates into grooves on the Band Saw Blade Nozzle body. Position the Band Saw Guide Nozzle vertically, and tighten the clamp plates to secure the Band Saw Guide Nozzle in position. The bottom of the Band Saw Guide Nozzle body should be a proximately 0.25" [6.4 mm] above the top of the blade for proper guide lubrication.

B) Mounting to the guide block using the rail mount option in the mounting kit

To allow for more adjustability in nozzle positioning, the rail mount option in the Band Saw Nozzle Mounting Kit (303720) can be used. Using the rail mount option allows the nozzle position to be easily adjusted by sliding the nozzle up or down and tightening the side clamps to secure it in place. The rail mount adds 0.25" [6.4 mm] to the thickness and allows a maximum of 1.88" [7.8 mm] additional vertical adjustment.

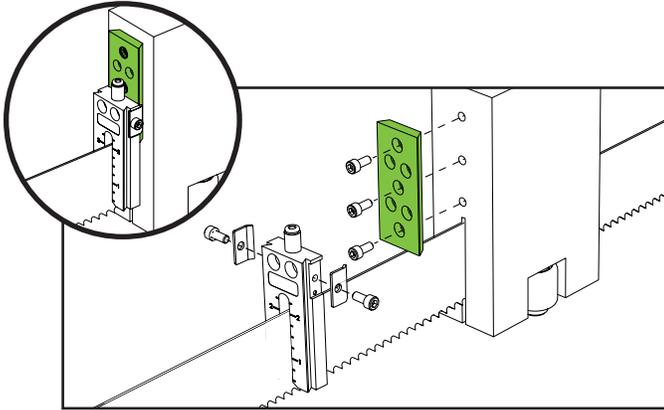


Figure 8: Mounting the Band Saw Blade Nozzle to the guide block using rail mount option

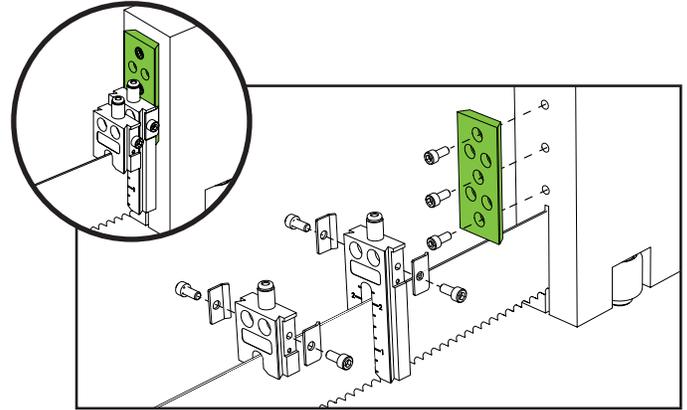


Figure 9: Mounting the Band Saw Blade Nozzle and Band Saw Guide Nozzle to the guide block using rail mount option

NOTE: For the Band Saw Guide Nozzle to be effective, it must be mounted on the entry side of the guide (**Fig. 7, page 3**).

Mounting Procedure

- 1) Using the supplied dimensions and template (**Template B, page 7**), determine the best position for the rail mount. Ensure the rail mount is horizontally centered on the blade and vertically positioned so when the nozzle is mounted to the rail, the bottom of the saw blade is 0.38" [9.5 mm] below the bottom of the Band Saw Blade Nozzle body (**Fig. 1, page 1**). Confirm the bottom of the rail mount is not in contact with the top of the band saw blade. If the rail mount is too long, it can be shortened as long as two of the three mounting holes are used.
- 2) Mark the required position for the rail mount holes on the guide block. Use a #8 (0.199" [5.0 mm] diameter) transfer punch to help properly mark the hole locations.
- 3) Remove the guide block.
- 4) Drill and tap two 8-32 x 3/4" [19 mm] deep holes in the guide block at the marked locations. If metric fasteners are preferred, drill and tap two M4 x 0.7 holes. **Note:** Metric fasteners are not supplied.
- 5) Reinstall the guide block.
- 6) Attach the rail mount using the supplied 8-32 x 3/8" socket head cap screws. Use blue Loctite® on threads. Confirm the rail mount is centered on the blade and is vertically straight.
- 7) Mount the nozzle(s):
 - a) **Mounting the Band Saw Blade Nozzle:** With the clamp plates loose, position the Band Saw Blade Nozzle on the rail mount according to blade size and the ruler mark on the nozzle body. Tighten the clamp plates to secure the nozzle in position. Verify that the top of the blade is flush with the ruler mark for the blade size being used. The bottom of the nozzle body should be approximately 0.38" [9.5 mm] above the bottom of the blade.
 - b) **Mounting the Band Saw Blade and Band Saw Guide Nozzle:** Install the Band Saw Blade Nozzle as described in step 7a). Loosen the clamp plates of the Band Saw Guide Nozzle and engage the plates into grooves on the Band Saw Blade Nozzle body. Position the Band Saw Guide Nozzle vertically, and tighten the clamp plates to secure the Band Saw Guide Nozzle in position. The bottom of the nozzle should be approximately 0.25" [6.4 mm] above the top of the blade for proper guide lubrication.

C) Mounting to the blade guard using the block mount option in the mounting kit

If the nozzle is to be mounted into the blade guard or other surface that is perpendicular to the saw blade, the block mount option in the Band Saw Nozzle Mounting Kit (303720) can be used. Using the block mount option allows the nozzle position to be easily adjusted by sliding the nozzle up or down and tightening the side clamps to secure in place. The block mount adds 0.50" [12.7 mm] to the thickness and allows the nozzle to be placed at a right angle to the mounting surface.

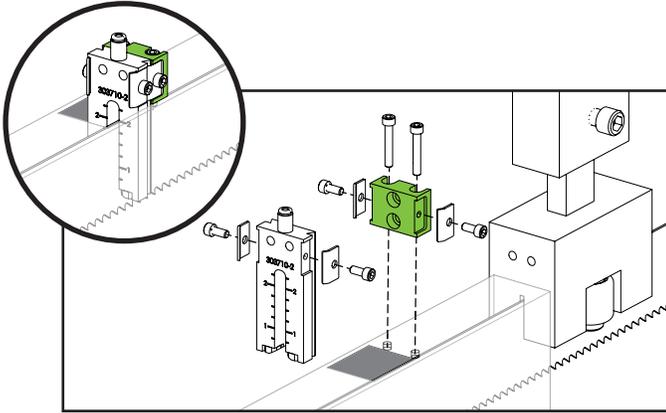


Figure 10: Mounting the Band Saw Blade Nozzle to the blade guard using the block mount option

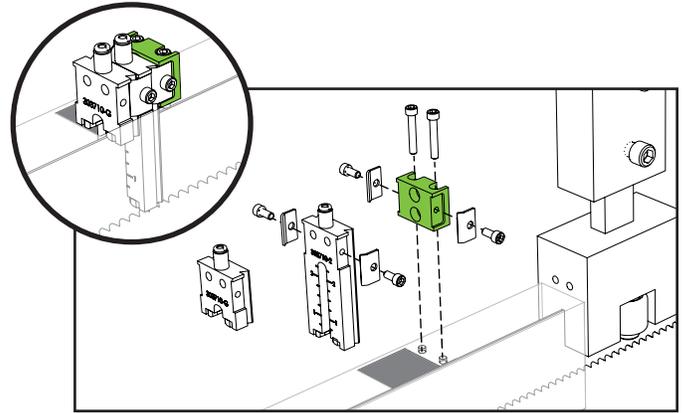


Figure 11: Mounting the Band Saw Blade and Band Saw Guide Nozzle to the blade guard using the block mount option

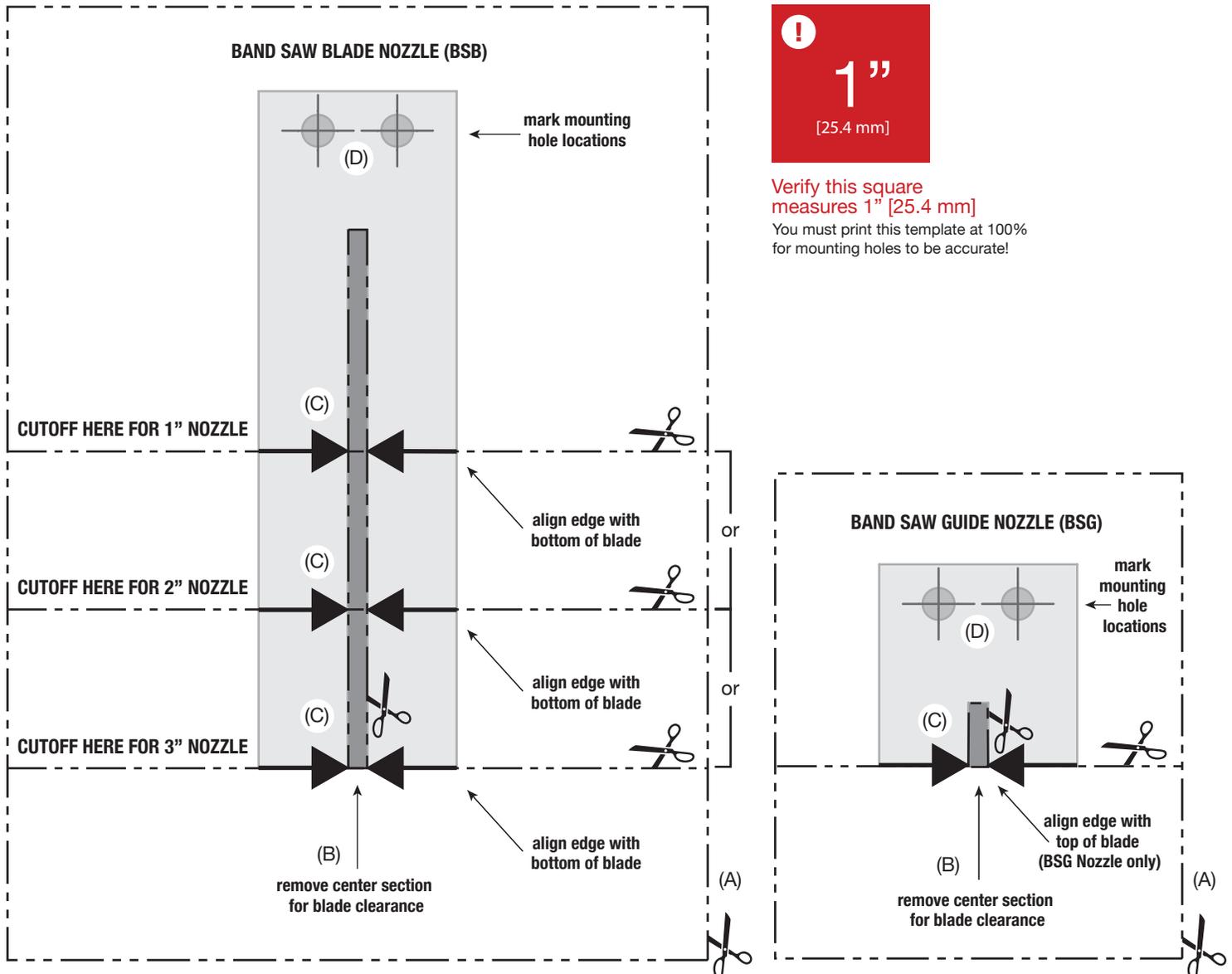
Mounting Procedure

- 1) Locate the position on the guard where the nozzle will not interfere with the operation of the saw.
- 2) Locate the centerline of the saw blade in the guard.
- 3) Using the supplied dimensions and templates, mark the opening needed for the nozzle to be inserted inside the guard. This hole will be approximately 1-1/2" x 3/4" [38.1 mm x 19 mm] when using one nozzle, and 1-1/2" x 1-1/4" [38.1 mm x 31.8 mm] when using two nozzles. Note that the longer dimension of the cutout should be perpendicular to the blade direction.
- 4) Cut the necessary hole into the guard to insert the nozzle.
- 5) Using the supplied dimensions or template, determine the best position for the block mount option. Ensure that the block mount is centered on the blade and vertically straight.
- 6) Mark the location of the block mount holes on the guard. Depending on which mounting holes are used, a #8 (0.199" [5.0 mm] diameter) or #16 (0.177" [4.5 mm] diameter) transfer punch can help with properly marking the hole positions.
- 7) Drill and tap two 8-32 or 10-32 holes through the guard at the marked locations. If metric fasteners are preferred, drill and tap with an M4 or M5 tap. Note metric fasteners are not supplied.
- 8) Attached the block mount to the guard with the supplied #8 or #10 fasteners.
- 9) Mount the nozzle(s):
 - a) **Mounting the Band Saw Blade Nozzle:** With the clamp plates loose, position the Band Saw Blade Nozzle on the block mount according to blade size and the ruler mark on the nozzle body. Tighten the clamp plates to secure the nozzle in position. Verify that the top of the blade is flush with the ruler mark for the blade size being used. The bottom of the nozzle body should be approximately 0.38" [9.5 mm] above the bottom of the blade.
 - b) **Mounting the Band Saw Blade and Band Saw Guide Nozzle:** Loosen the clamp plates of the Band Saw Guide Nozzle and engage the plates into grooves on the Band Saw Blade Nozzle body. Position the Band Saw Guide Nozzle vertically, and tighten the clamp plates to secure the Band Saw Guide Nozzle in position. The bottom of the nozzle should be approximately 0.25" [6.4 mm] above the top of the blade for proper guide lubrication.

Mounting Template A

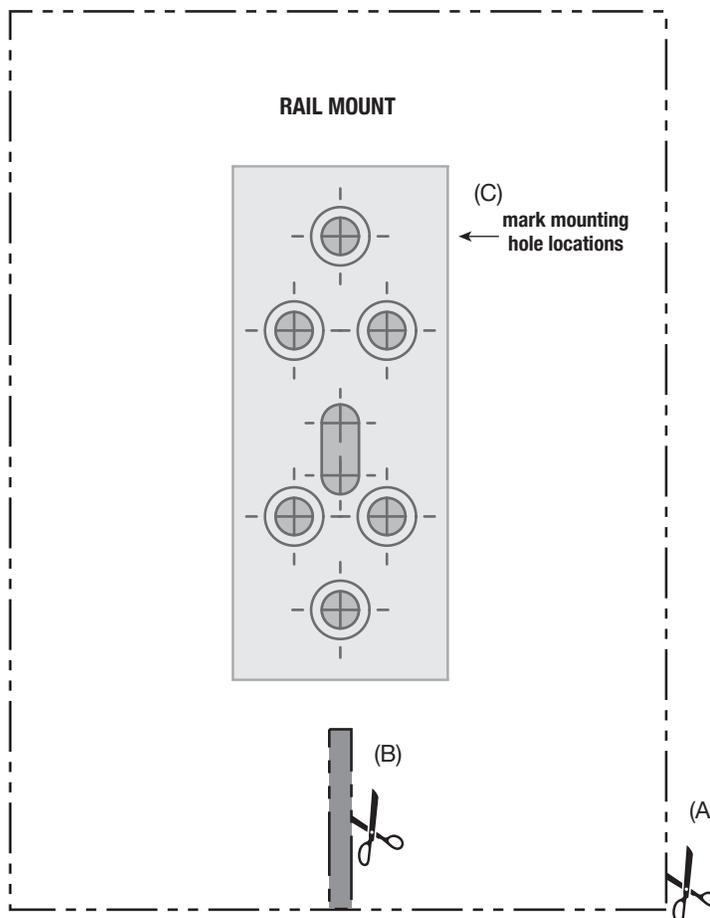
Band Saw Blade and Band Saw Guide Nozzle to Guide

- 1) STOP! - IMPORTANT - first verify that this template has printed at 100% by measuring the red square below.
- 2) Using scissors or a blade, cut out the template along the dotted line (A) and cut out the dark gray strip (B).
- 3) Determine your blade size and cut the template at the appropriate mark.
- 4) For the BSB template, slip the template over your band saw's blade until the bottom of the blade lines up with the black arrows (C). For the BSG template, position the template so the top of the blade lines up with the black arrows (C).
- 5) Secure the template to the guide block with tape using care to keep the black arrows (C) aligned with the proper edge of the blade.
- 6) Center your punch or other marking device on the dark gray circles (D) and mark the hole locations.
- 7) Drill and tap two 10-32 x 3/4" [19.1 mm] deep holes to receive 10-32 mounting screws. If metric fasteners are preferred, use M5 x 0.8 tap and fasteners.



Mounting Template B Rail mount option to guide

- 1) **STOP! - IMPORTANT** - first verify that this template has printed at 100% by measuring the red square below.
- 2) Using scissors or a blade, cut the template along the dotted line (A) and cut out the dark gray strip (B).
- 3) Slip the template over your bandsaw's blade and position the bottom edge of the rail mount at least 0.25" [6.4 mm] above the top of the blade. The rail mount may need to be mounted further away from the blade depending on the blade size and guide design.
- 4) Ensure the template is centered and plumb, and then secure the template to the guide block with tape.
- 5) Hold the nozzle over the template so the bottom of the nozzle is 0.38" [9.7 mm] above the bottom of the blade, and confirm the side clamps will engage with the rail mount. If not, reposition the template.
- 6) Select the two best hole locations for attaching the rail mount. Selected locations will vary depending on guide block designs.
- 7) Center your punch or other marking device on the dark gray circles (C) and mark the hole locations.
- 8) Drill and tap two 8-32 x 3/4" [19.1 mm] deep holes to receive 8-32 mounting screws. If metric fasteners are preferred, use M4 x 0.7 tap and fasteners.



Verify this square measures 1" [25.4 mm]
You must print this template at 100% for mounting holes to be accurate!