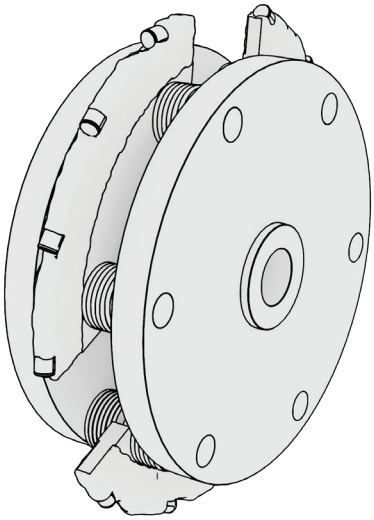
Diamond Router Blade Installation Guide

(For Crafco, Marathon, and Cimline Crack Routers)



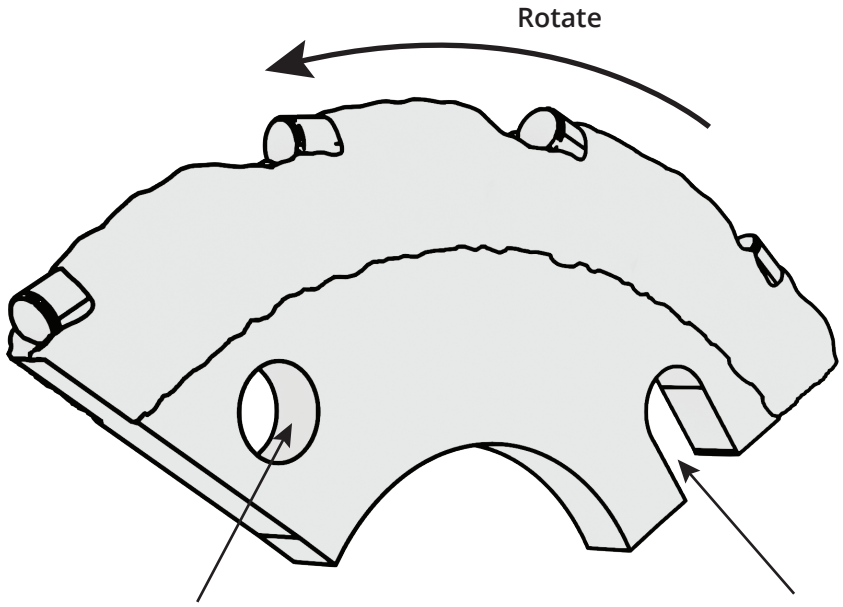
Key Differences
Carbide bits are installed loosely, with some wobble.
Dark Matter Blades must be installed tight, with no lateral movement.
3 Blades replace 6 carbide bits.

Required Parts
Supplied with router:
- Standard router drum (Crafco, Marathon, or Cimline)
- 6 Standard router pins (7/8 in.)
- Retaining brackets + bolts
- Hardened spacers (7/8 in., approx. 9/64 in. thick, 15/16 in. ID, 1 3/4 in. OD)

Included in this kit:
- 3 Diamond Router Blades (included)
- 12 Curved shim spacers (included)

Step 1 – Remove Old Bits
A. Remove the bit mounting pins according to your router manufacturer's instructions.
B. Keep all spacers for reuse. Replace any that are damaged.
C. Inspect the pins and replace any that show damage or excessive wear.
D. Clean and lightly grease reusable pins.

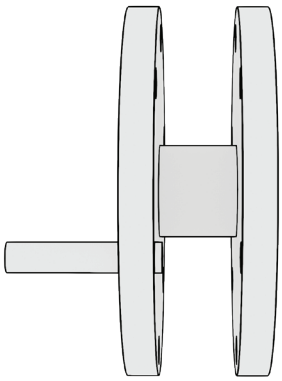
NOTICE: It is vital you ensure the blades are mounted so that they spin the correct direction. The solid round hole on the blade is the leading edge (front), the U-shaped mounting slot is at the trailing edge (back) of the blade. Insert blade so that leading edge is first to make contact with pavement while cutting. ***RUNNING BLADES BACKWARDS WILL DESTROY THEM***!



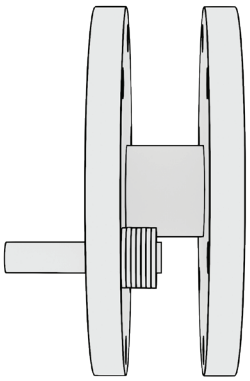
Step 2 - ***(continued on back)***

Step 2 – Install Blade
Each blade will be installed using 2 pin positions on the router drum.

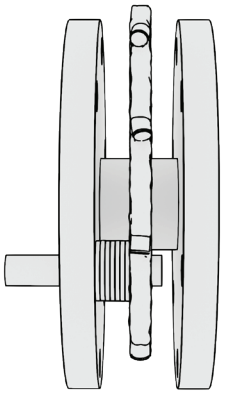
A. Insert the pin through one side of the drum.



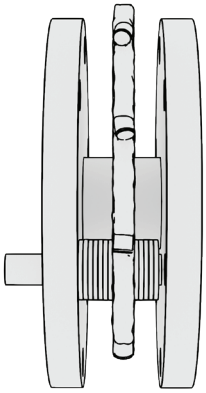
B. Add the determined number of spacers to achieve desired blade offset (see Routing Width Guide).



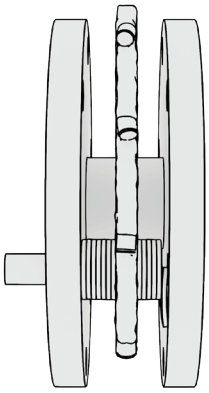
C. Slide pin through the mounting hole in the Blade. *Mount leading edge of blade first (circular mounting hole).*



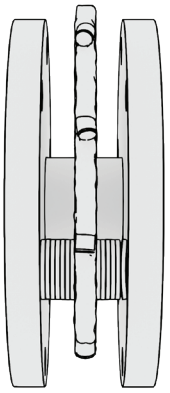
D. Add spacers on the other side of blade as pin is further inserted.



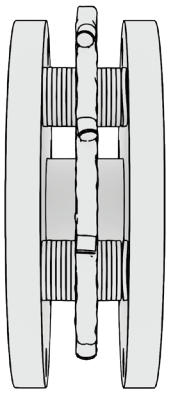
E. Use curved shim spacers as needed to ensure spacers fit tight and hold blade firmly in place. Tap shim spacers into place with hammer if needed.



F. Finish inserting pin into drum. Secure pin retainers back in place.

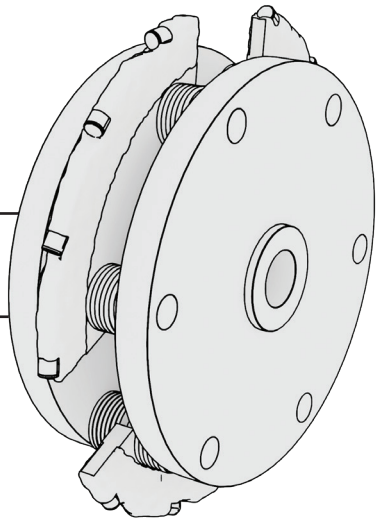


G. Repeat steps A through F on the second pin.



Step 3

Repeat step 2 until all 3 blades are installed.

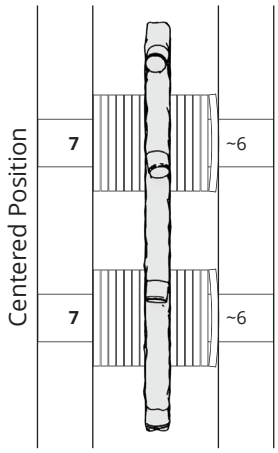
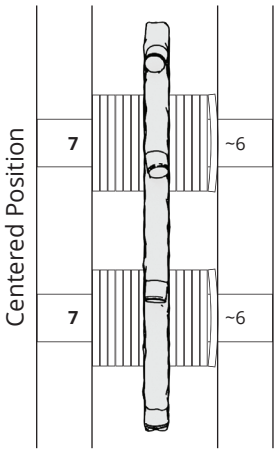
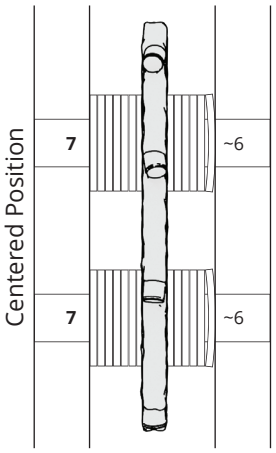
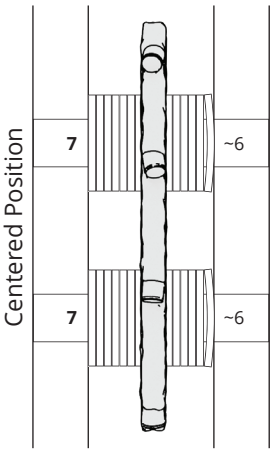
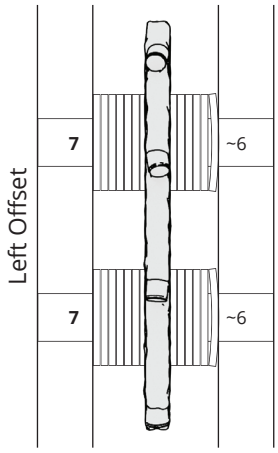
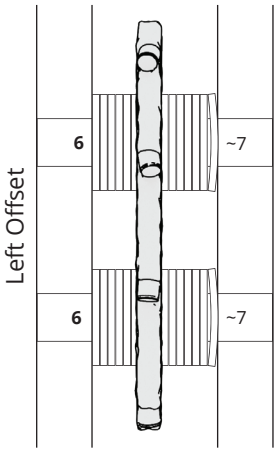
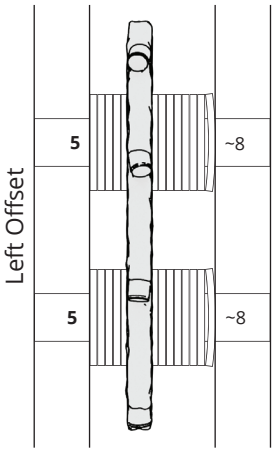
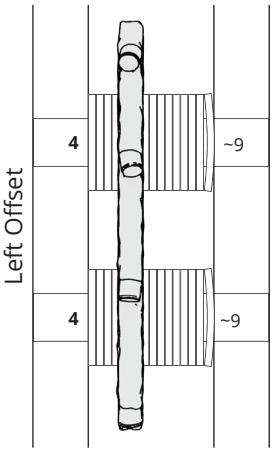
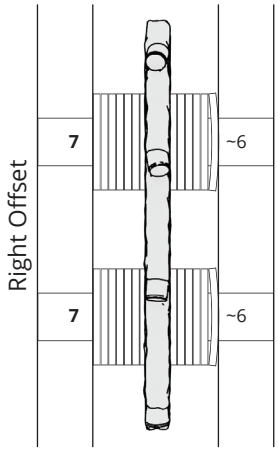
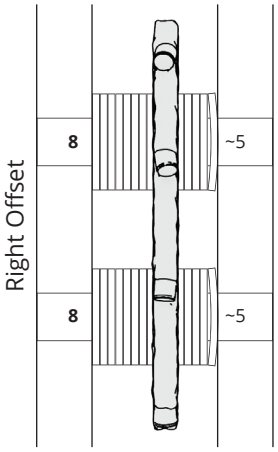
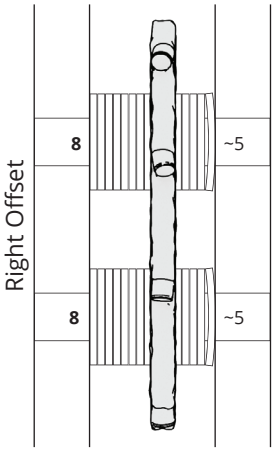
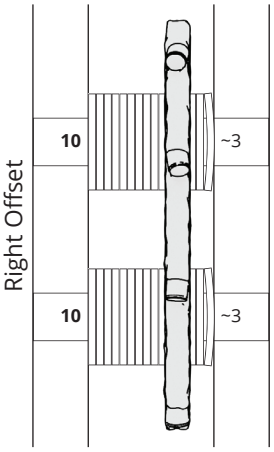


ROUTING WIDTH GUIDE

Guidelines:

- Ensure all spacers are uniform width. Measure the spacer width for use below.
- Always count/measure spacers from the same (left) side of the drum. This ensures consistent measurements and spacing.
- Always keep at least one blade position centered, and when offsetting other blades, offset one left of center and one right.
- Determine number of spacers needed on left side of blade to position as close to centered as possible. This is the base offset.
- For left/right offsets, start with base offset then remove/add spacers as equally as possible to achieve the desired total cut width. The total offset will be (right offset - left offset) * spacer width. This number added to blade width (0.59") will give you the total cut width.

Example: *(using ~1.5" cut diagramed below on far right)*
Total offset: *right offset (10) - left offset (4) which means the total offset is 6 and 6 * spacer width(.141") = 0.846"*
Cut Width: *total offset (0.846") + blade width (0.59") = 1.436" (~1.44")*

Examples shown are for spacers 0.141" wide. Adjustments should be made if using spacers that are a different width.

For ~1/2" cut (.59"):	**For ~3/4" cut (0.87"):**	**For 1" cut:**	**For ~1.5" cut (1.44"):**