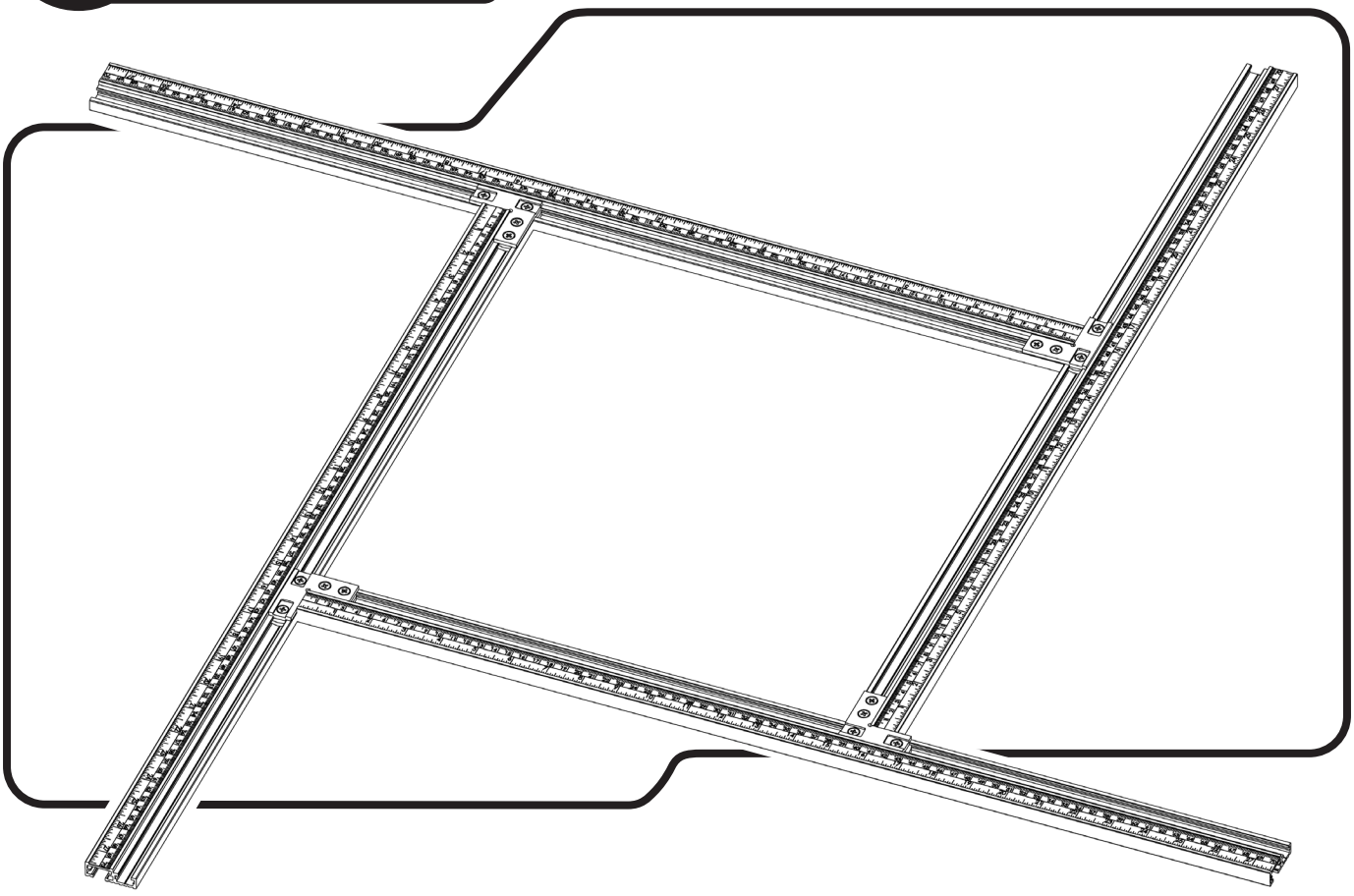
Model No. 71867

Owner's Manual

POWERTEC®

Router Jig

QUESTION...
1•847•780•6120



Visit us on the web at **www.powertecproducts.com**

You will need this manual for safety instructions, operating procedures, and warranty. Put it and the original sales invoice in a safe, dry place for future reference.

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PRODUCT SPECIFICATIONS

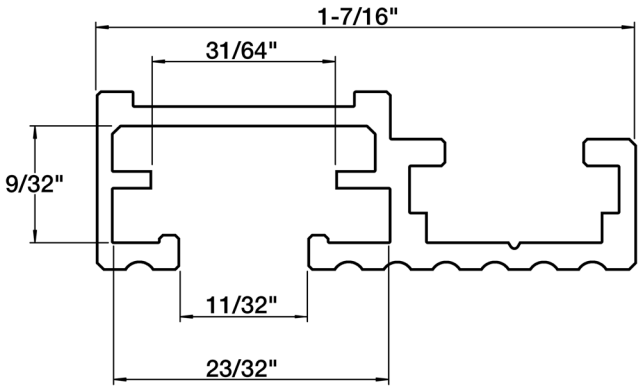
RECOMMENDED ROUTER BIT SPEEDS

BIT DIAMETER	MAXIMUM SPEED
Up to 1" (25 mm)	22,000-24,000 rpm
1" to 2" (25 mm - 51 mm)	18,000-22,000 rpm
2" to 2-1/2" (51 mm - 64 mm)	12,000-16,000 rpm
2-1/2" to 3-1/2" (64 mm - 89 mm)	8,000-12,000 rpm

POWERTEC **71867 Routing Jig is designed for routing out square and rectangular openings and creating face panel molding for use with a portable plunge router, guide bushings, and suitable router bits.**

NOTE: *Always follow bit manufacturer's speed recommendations. Some bit designs require specific speeds for safety or performance.*

Alloy Extrusion Section Dimensions



⚠WARNING

For your own safety, read and understand all warnings and operating instructions before using any tool or equipment.

⚠WARNING

Some dust created by power sanding, sawing, grinding, drilling and other construction activities can expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks and cement and other masonry products.
- Arsenic and chromium from chemically-treated lumber.

NOTE: *Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area and work with approved safety equipment. Always wear OSHA/NIOSH approved, properly fitting face mask or respirator when using such tools.*

⚠WARNING

Failure to follow these rules may result in serious personal injury. Remember that being careless for even a fraction of a second can result in severe personal injury.

WORK PREPARATION

- Wear proper apparel. Do not wear loose clothing, gloves, neckties, rings, bracelets or other jewelry which may get caught in moving parts of the tool.
- Wear protective hair covering to contain long hair.
- Wear safety shoes with non-slip soles.
- Wear safety glasses complying with United States ANSI Z87.1. Everyday glasses have only impact resistant lenses. They are NOT safety glasses.
- Wear face mask or dust mask if operation is dusty.
- Be alert and think clearly. Never operate power tools when tired, intoxicated or when taking medications that cause drowsiness.

WORK AREA PREPARATION

- Keep work area clean. Cluttered work areas invite accidents.
- Do not use power tools in dangerous environments. Do not use power tools in damp or wet locations. Do not expose power tools to rain.
- Work area should be properly lit.
- Proper electrical receptacle should be available for tool. Three-prong plug should be plugged directly into properly grounded, three-prong receptacle.
- Extension cords should have a grounding prong and the three wires of the extension cord should be of the correct gauge.
- Keep visitors at a safe distance from work area.
- Keep children out of the work area. Ensure your work shop is child-proof. Use padlocks, master switches or remove switch keys to prevent any unintentional use of power tools.

TOOL MAINTENANCE

- Always unplug tool prior to inspection.
- Consult manual for specific maintaining and adjusting procedures.
- Keep tool lubricated and clean for a safe operation.
- Remove adjusting tools. Form habit of checking to see adjusting tools or accessories are removed before switching tool on.
- Keep all parts in working order. Check to determine that guard or other parts will operate properly and perform their intended function.
- Check for damaged parts. Check for alignment of moving parts, binding, breakage, mounting and any other condition that may affect tool's operation.
- A guard or any other part that is damaged should be properly repaired or replaced. Do not perform makeshift repairs.

TOOL OPERATION

- Avoid accidental start-up. Make sure that the tool is in the "OFF" position before plugging in.
- Use the right tool for your job. Do not force your tool or attachment to do a job for which it was not designed.
- Disconnect tool when changing parts.
- Don't force the workpiece on the machine. Damage to the machine and/or injury may result.
- Never leave tool running unattended. Turn the power off and do not leave tool until it comes to a complete stop.
- Do not overreach. Loss of balance can make you fall into a working machine, causing injury.
- Never stand on tool. Injury could occur if the tool tips, or if you accidentally contact the cutting tool.
- Know your tool. Learn the tool's operation, application and specific limitations before using it.
- Use a proper extension cord of the correct gauge. The extension cord should have a grounding prong, and should be in good condition.
- Handle workpiece correctly. Keep hands away from moving parts.
- Turn tool off if it jams.

⚠CAUTION

Think safety! Safety is a combination of operator common sense and alertness at all times when tool is being used.

⚠WARNING

Do not attempt to operate tool until it is completely assembled according to the instructions.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE

CONTENTS

CONTENTS

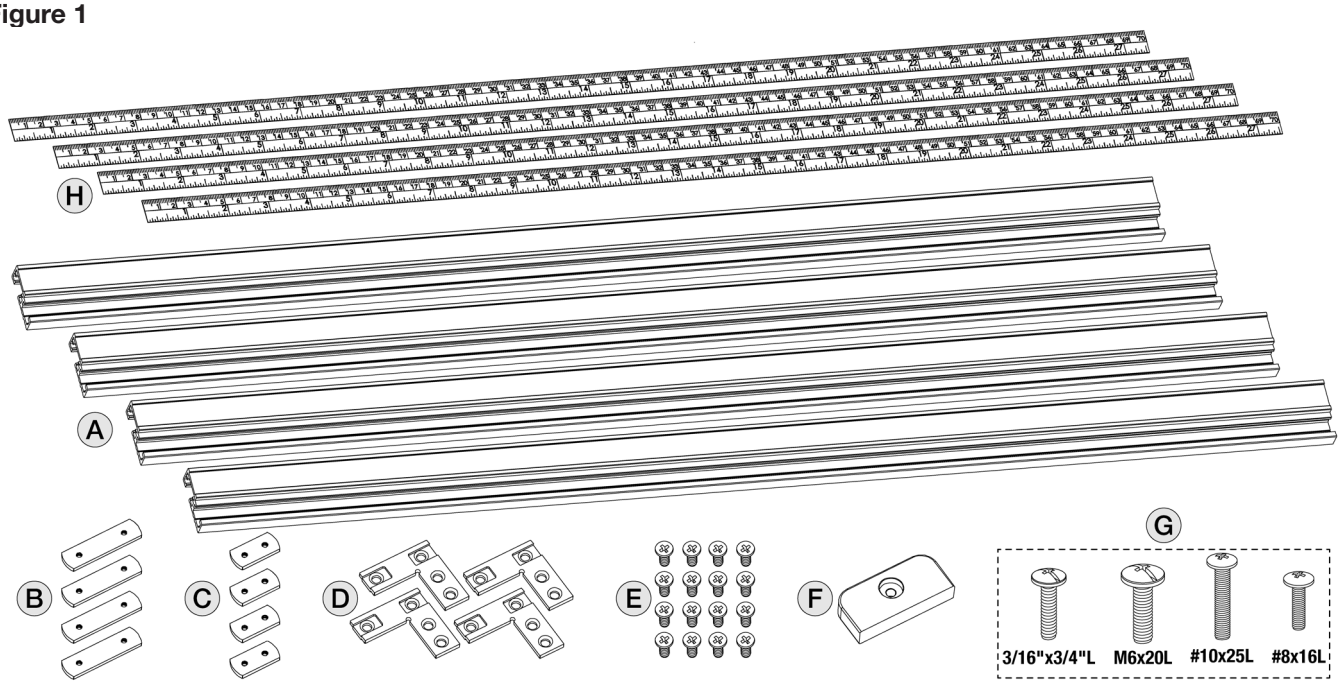
Examine carton for shipping damage. Check immediately whether all parts and accessories are included.

If anything is missing or broken, contact your retailer or call **847-780-6120.**

NOTE: *Carefully remove all contents from shipping carton. The shipping carton contains:*

ITEM	DESCRIPTION	QTY
A	Adjustable Frame 27-1/2"	4
B	LONG Sliding Nut - M4	4
C	SHORT Sliding Nut - M4	4
D	Square Bracket	4
E	Flathead Screw M4 x 8mm	16
F	Anti-tilt Shoe	1
G	Screw Set (4 sizes) for Anti-tilt Shoe	1 ea.
H	Tape Measure 27-1/2" L	4

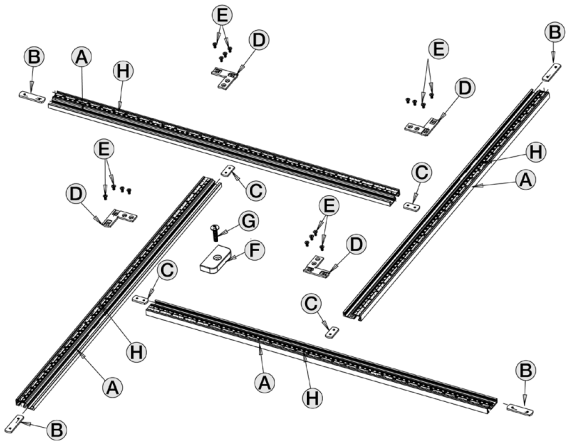
Figure 1



ASSEMBLY

TOOLS NEEDED (not included):
Phillips® screwdriver, squares, clamps.

Figure 2 Assembly Layout Guide



[Step 1] Apply Tape Measure (H). Remove 1" of backing at a time, carefully position and press onto Adjustable Frame (A).

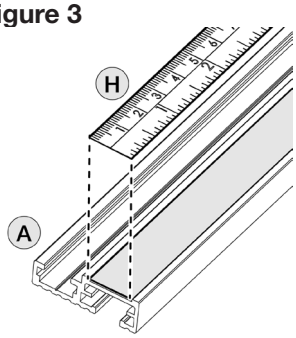
[Step 2] Insert SHORT Sliding Nut (C) into each end of Frame (A). On all 4 Frames, position Square Bracket (D) at the end and on top of Short Sliding Nut and Frame. Secure using Flathead Screws (E).

[Step 3] Insert LONG Sliding Nut (B) into end of another Connecting Frame (A) and place under the Square Bracket.

[Step 4] Insert Flathead Screws (E) through Square Bracket into LONG Sliding Nut (B). ***Do not tighten at this time.***

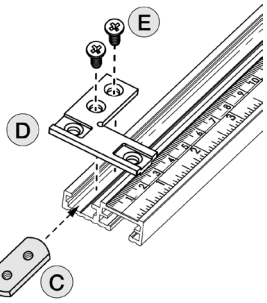
[Step 1]

Figure 3



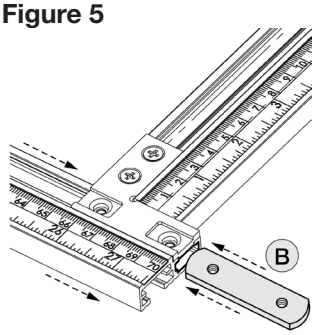
[Step 2]

Figure 4



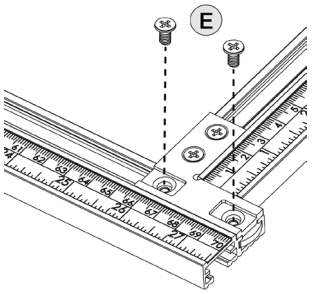
[Step 3]

Figure 5



[Step 4]

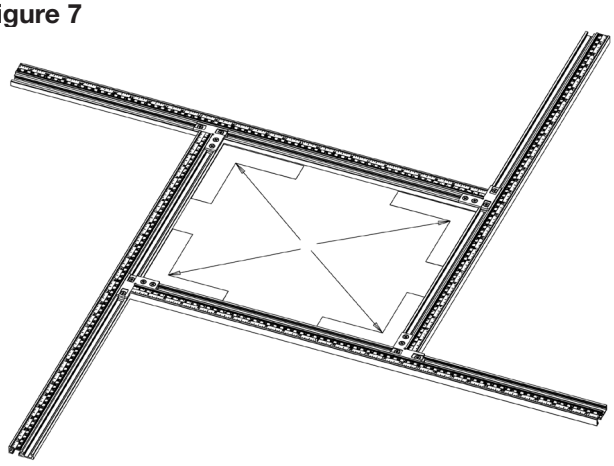
Figure 6



[Step 5] Square the Frame

After all Adjustable Frames have been attached, set a square in each corner to ensure the frame is parallel and square.

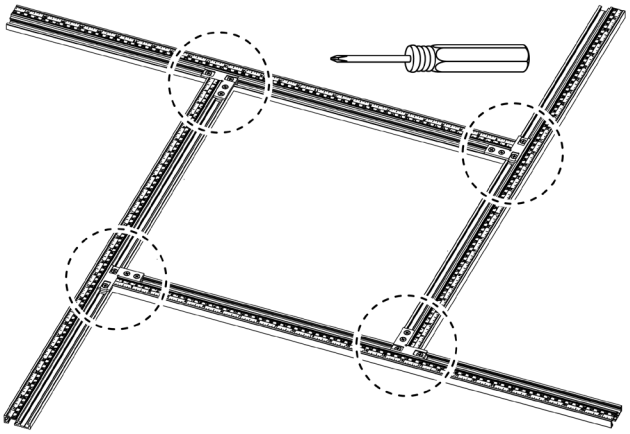
Figure 7



[Step 6] Secure the Frame

Once square, tighten all screws with a Phillips screwdriver (not included).

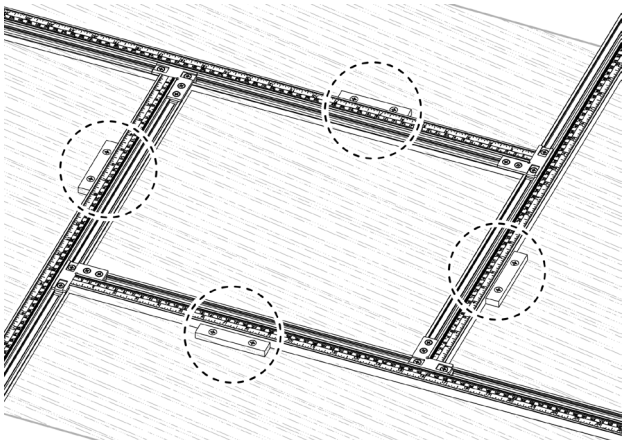
Figure 8



[Step 7] Secure in Place

Option 1: With Jig square and configuration and size determined—position in place using wood blocks as stops. Screw in place to hold position.

Figure 9



[Step 8] Secure in Place

Option 2: With Jig square and configuration and size determined—position in place using clamps (sold separately) designed to be inserted into Frame (A).

Figure 10

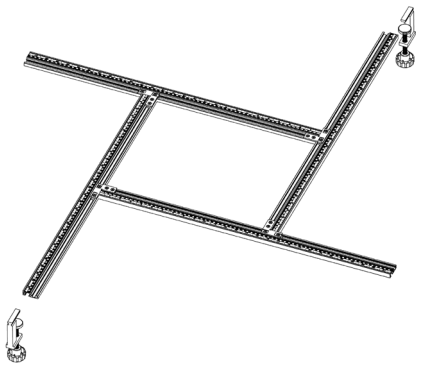


Figure 11

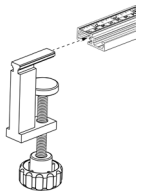
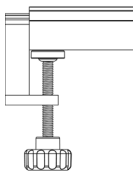


Figure 12



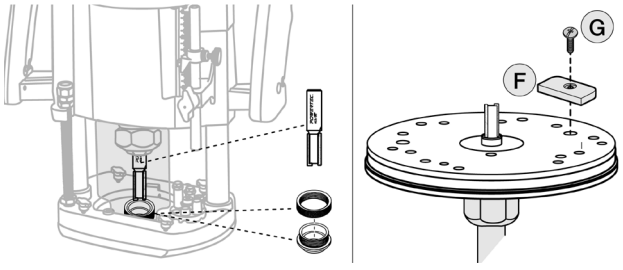
(Sold Separately) ***POWERTEC*** **71439** Universal Fence Clamp.

ROUTER SET UP

⚠CAUTION

Precise cuts are essential. ***Use a Plunge Router (not included).*** Fixed Base Routers not recommended.

Figure 13 Prepare Plunge Router



1. Insert proper guide bushing into router base.
2. Hand twist to secure lock nut onto the guide bushing.
3. Always choose a router bit (not included) appropriate for the depth of cut needed for the specific project.
4. Insert and secure router bit into collet on router.

NOTE: *Some routers may require a router plate adaptor. If using a router plate adaptor (not included), add the plate thickness to cutting depth when setting bit depth.*

5. Choose an appropriate screw from Screw Set (G) to attach Anti-Tilt Shoe (F) onto router plate.

⚠WARNING

Ensure router bit will pass through the guide bushing by leaving at least a 3mm clearance (E).

Figure 14

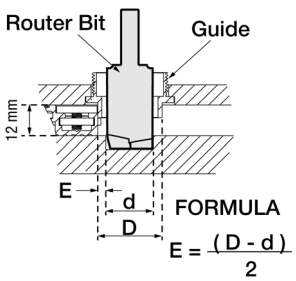
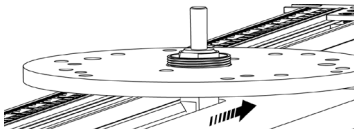


Figure 15



NOTE: *As the guide bushing is larger than the router bit diameter, there will be an offset. Offset must be calculated when setting the frames of the jig.*

6. Use a Phillips head screwdriver (not included) to tighten.
7. Before routing, turn on router and allow router bit to get up to speed before entering workpiece.
8. Test cut on a scrap board. Adjust bit height as needed
9. **Rout the path:** When routing out square and rectangular openings, ensure bit depth is set according to bit and router manufacturing guidelines. Reset bit and repeat operation until opening is cut.
10. Turn **OFF** the router. **DO NOT** remove it until the bit comes to a complete stop.

OPERATION

SETUP OPTIONS (four examples)

Figure 16

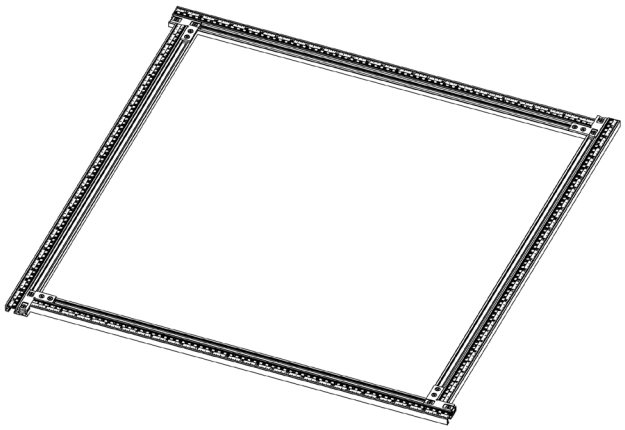
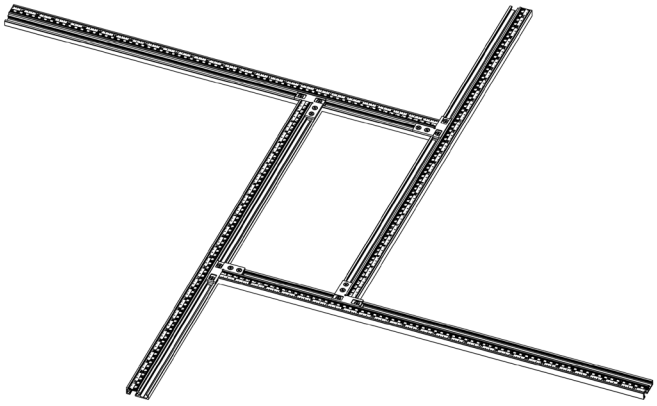


Figure 17



FEED DIRECTION

Figure 18

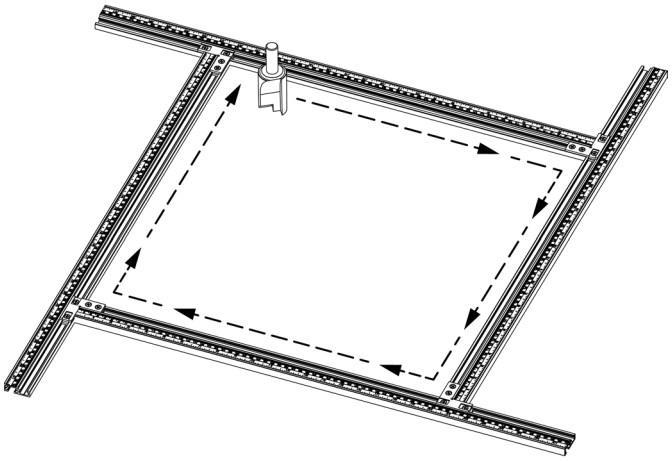
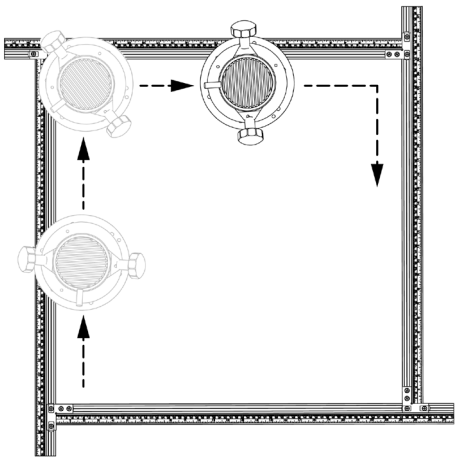
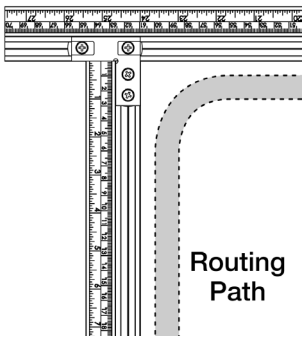


Figure 19



CORNER EXAMPLES

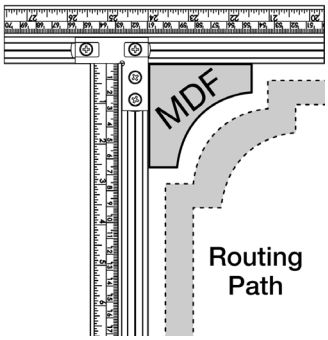
Figure 20



Turning Corners

- After setting depth of cut, place router with guide bushing against inside edge of frame.
- Turn router ON.
- Get up to speed.
- Plunge down and rout in a clockwise direction.
- At the corner carefully rotate router so Anti-tilt Shoe does not touch the frame.

Figure 21



Decorative Corners

- An MDF corner piece can be custom made and secured using a dab of hot glue in the corner of the frame.
- MDF should be at least 5/16" to 7/16" thick.

⚠WARNING

Follow all manufacturers safety precautions for the Router to be used. Read and follow instructions carefully. Failure to do so could lead to serious injury.

⚠WARNING

Risk of personal injury. Do not remove the router from the Jig until the bit has come to a complete stop. Do not adjust the setting while the router is operating. Failure to do so could result in physical harm or equipment damage.

⚠WARNING

When servicing, use only identical replacement parts. Use of any other parts may create a hazard or cause product damage.

⚠WARNING

Keep the Router Jig dry, clean, and free from oil and grease. Always use a clean cloth when cleaning. Never use brake fluids, gasoline, petroleum-based products or any strong solvent to clean the Router Jig. Chemicals can damage, weaken or destroy plastic which may result in serious personal injury.

POWERTEC®

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