Precision
Beaded Face-Frame
System
Owner’s Manual
Item# PRS1200
1) Work area safety
   a) Keep work area clean and well lit. Cluttered or dark areas invite accidents.
   b) Don’t use power tools in a dangerous environment. Don’t use power tools in damp or wet locations, or expose them to rain.
   c) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks that can ignite the fumes or dust.
   d) Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.
   e) Make your workshop child proof. Use padlocks, master switches, or remove starter keys.

2) Electrical safety
   a) Ground electric tools. If the tool is equipped with a three-prong plug, it should only be plugged into a grounded three-hole electrical outlet. If the proper outlet is not available, have one installed by an electrician. Never remove the third prong or modify the provided plug in any way.
   b) Do not expose power tools to rain or wet conditions. Water entering a power tool increases the risk of electric shock.
   c) Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
   d) Use a proper extension cord and make sure it is in good condition. When using an extension cord, be sure to use one that is at least as heavy as the cord on your power tool. The smaller the gage number, the heavier the cord. Table 1 on the following page shows the correct cord gauge to use depending on cord length and tool nameplate ampere rating. If in doubt, use the next heavier gage.
   e) When operating electric tools, avoid body contact with grounded or earthed surfaces such as pipes, radiators, kitchen ranges, and refrigerators. Contact with a grounded surface increases the risk of electric shock.
   f) Use safety equipment. Use a face or dust mask when the cutting tool is unintentionally contacted.
   g) Secure workpieces. Use clamps or a vise to hold work when practical. This is safer than using your hand and it frees both hands to operate the tool.
   h) Never stand on the machine. Serious injury could occur if the tool tips or if the cutting tool is unintentionally contacted.
   i) Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts. Roll up long sleeves to the elbow. Wear protective hair covering to contain long hair.
   j) If devices are provided for the connection of dust extraction and collection equipment, ensure these are connected and properly used. Use of these devices reduces dust-related hazards.

3) Personal safety
   a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools can result in serious personal injury.
   b) Always wear safety glasses. Everyday eyeglasses are not safety glasses. Safety glasses have specially constructed lenses, frames, and side shields.
   c) Use safety equipment. Use a face or dust mask when the cutting operation is dusty. Safety equipment such as a dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions reduces personal injuries.
   d) Avoid accidental starting. Make sure the switch is in the off-position before plugging in. Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.
   e) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool can result in personal injury.
   f) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
   g) Secure workpieces. Use clamps or a vise to hold work when practical. This is safer than using your hand and it frees both hands to operate the tool.

4) Power tool use and care
   a) Keep guards in place and in working order.
   b) Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
   c) Use the right tool. Don’t force a tool or attachment to do a job for which it was not designed.
   d) Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
   e) Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
   f) Never leave a tool running unattended. Turn power off. Don’t leave the tool until it comes to a complete stop.
   g) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool and these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
   h) Maintain power tools. Check for misalignment or binding of moving parts, broken parts, and any other condition that may affect power tool operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
   i) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
   j) Use the recommended speed for the cutting tool or accessory and workpiece material.
   k) Only use parts and accessories recommended by the manufacturer. Consult the owner’s manual for recommended accessories. Using improper accessories can cause personal injury.
   l) Use the power tool, accessories, and tool bits in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended can result in a hazardous situation.

5) Service
   a) Have your power tool serviced by a qualified repair person using only identical replacement parts. This ensures that the safety of the power tool is maintained.

6) Safety Instructions specific to using the Precision Beaded Face Frame System
   a) Read, understand, and follow your router and router-table manufacturer’s safety warnings and instructions.
   b) Disconnect the router from power before making adjustments. Never adjust the fence, plate, reducing rings, or any part of the router or router table while the router is running.
   c) Place the router table on a flat surface to prevent tipping or sliding. Never stand on the router table.
   d) Do not attempt to rout warped, twisted, or bowed workpieces. All workpieces must have flat faces and square edges.
General Safety Guidelines

e) Wear gloves when handling router bits. Cutting edges are sharp.
f) Never use dirty, dull, or damaged router bits. Remove wood-resin build-up with a cleaner specifically formulated for cutting tools. Have dull bits sharpened by a qualified person. Discard damaged bits.
g) Make sure at least 75% of the router-bit shank length is securely held in the router collet. To ensure a secure hold, leave \( \frac{3}{16} \) to \( \frac{1}{8} \) [2mm-3mm] between the end of the bit shank and the bottom of the collet.

h) Use the insert-plate reducing ring with the smallest opening that allows the bit to pass through it. A large gap around the bit can allow the workpiece to tip into the bit and kick back.

i) Make sure the workpiece clamp is properly assembled, attached to the fence, and adjusted to securely hold the workpiece. Always use the clamp. Never attempt to hold the workpiece by hand.
j) Adjust router speed to match the diameter of the bit. Reduce router speed when using large-diameter bits. See Table 2 for recommended router speeds.

k) Make sure the router motor is securely clamped in the base before starting the router.

l) Keep hands away from the rotating bit and your body out of the path of the cut. Turn off the router before clearing parts or scrap.
m) Avoid awkward hand positions, where a sudden slip could cause contact with the rotating bit. Never overreach.

n) Make sure the workpiece is clear of the bit and the bit comes to a complete stop before adjusting the workpiece position. Never start the router with the workpiece in contact with the bit.

o) Avoid kickbacks. Kickbacks occur when the workpiece binds or lifts off the table while being routed, causing it to be thrown back toward the operator. To avoid kickbacks and potential injury, use sharp bits, keep the machine aligned and maintained properly, and adequately support the workpiece. Do not attempt to rout workpieces that are twisted, warped, or bowed, or that have loose knots.
p) Periodically check the tightness of fasteners and adjustment and locking knobs and the alignment of the fence. Loose fasteners and knobs and a misaligned fence may cause personal injury.

q) This router-table accessory is designed for a specific application. Do not modify and/or use it for any other application. If you have questions relative to the application of the fence, DO NOT use it until you have contacted Kreg Tool Company and have been advised accordingly.

Guidelines for extension cord use

Extension cords are only to be used for temporary purposes. They do not replace the need for installation of outlets and proper wiring where necessary.

In the shop and on construction sites:
1. Extension cords with an equipment grounding conductor must be used at all times.
2. Extension cords must be protected from damage, and not run through doorways or windows where the doors or windows may close, causing damage to the cord.
3. Extension cords should be a minimum of 16 AWG and be rated for the equipment in use.
4. Extension cords must be periodically inspected to ensure that the insulation and conductivity of the wires are not compromised.
5. Extension cords should not be run through water or allowed to have connections that may be exposed to accumulated water.

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TABLE 1

<table>
<thead>
<tr>
<th>Nameplate Amperes @ 120 V</th>
<th>Extension Cord Length</th>
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<tbody>
<tr>
<td></td>
<td>25'</td>
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<table>
<thead>
<tr>
<th>Recommended Wire Gauge</th>
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<tbody>
<tr>
<td>0.5 - 5</td>
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<tr>
<td>5.1 - 8</td>
</tr>
<tr>
<td>8.1 - 12</td>
</tr>
<tr>
<td>12.1 - 16</td>
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</table>

NR – Not Recommended

TABLE 2

Recommended Router Bit Speeds

<table>
<thead>
<tr>
<th>Bit Diameter</th>
<th>Maximum Speed (RPM)</th>
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<tbody>
<tr>
<td>Up to 1&quot; [25mm]</td>
<td>24,000</td>
</tr>
<tr>
<td>1¼&quot; to 2&quot; [32mm-51mm]</td>
<td>18,000</td>
</tr>
<tr>
<td>2¼&quot; to 2½&quot; [57mm-64mm]</td>
<td>16,000</td>
</tr>
<tr>
<td>3&quot; to 3½&quot; [76mm-89mm]</td>
<td>12,000</td>
</tr>
</tbody>
</table>

Always follow bit manufacturer’s speed recommendations. Some bit designs require specific speeds for safety or performance.

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WARNING: This product can expose you to chemicals including Acrylonitrile and other chemicals, which are known to the State of California to cause cancer and reproductive harm. For more information go to www.P65Warnings.ca.gov.
**Setup**

**Preparation**

1. Unpack the Precision Beaded Face-Frame System. Refer to the Exploded View drawing and Parts list on the following page to confirm that all parts are present.

2. Connect the Sliding Base to the Router Table

   - Fasten the sliding base to the router table T-track with 1" [25mm] T-slot bolts and knobs. Roughly center the sliding base on the table. Do not tighten the knobs.

   **ATTENTION** If your router table does not have a T-track, you must install one centered 6¼" [159mm] from the center of the insert plate. You may purchase a Kreg Mini-Trak or Combo-Trak from your Kreg retailer or by calling Kreg Customer Service.

3. Attach the Fence

   - Attach the fence to the sliding base with button-head screws and nuts.
Align the Fence

4. Align the end of the fence with the end of the sliding base. Insert the fence spacers under fence and tighten the button-head screws. Remove the spacers.

Assemble the Workpiece Clamp and Router-Table Stop

5. Assemble the workpiece clamp and secure it to the fence 1" [25mm] from the end.

To assemble the router-table stop, see the instructions packaged with it. Adjust the lens cursor so the red cursor line is ¼" [6mm] from the edge of the stop arm.

Attach the Control Arm

6. Remove two of the sliding-base plastic caps, assemble the control arm and slide the nuts into the sliding-base T-slots. Position the control arm pivots as shown and tighten the shoulder bolts. Reinstall the plastic caps.

ATTENTION! The control arm should move the slider through the entire range of travel without contacting the fence.
See Manual included with the router-table stop.

### Parts

<table>
<thead>
<tr>
<th>#</th>
<th>DESCRIPTION</th>
<th>PART #</th>
<th>QUANTITY</th>
<th>#</th>
<th>DESCRIPTION</th>
<th>PART #</th>
<th>QUANTITY</th>
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<tbody>
<tr>
<td>A</td>
<td>Handle</td>
<td>FT4029</td>
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<td>M</td>
<td>Shoulder Bolt</td>
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<td>B</td>
<td>¼&quot; Setup Bar</td>
<td>RT10303</td>
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<td>N</td>
<td>Fence Spacers</td>
<td>DK1301</td>
<td>2</td>
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<tr>
<td>C</td>
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<td>RT12001</td>
<td>1</td>
<td>O</td>
<td>Brass Washer</td>
<td>DK1504</td>
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<tr>
<td>D</td>
<td>¼&quot; x 1½&quot; Notch Bit</td>
<td>RT12008</td>
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<td>P</td>
<td>¼&quot; Hex Nut</td>
<td>DK1510</td>
<td>5</td>
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<td>Q</td>
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<td>R</td>
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<td>Button-Head Screw</td>
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Use

Center the Fence

Install the ½" dowel pin in your router and mount the router-table stop on the fence. Align the router-table stop cursor line with the ¼" mark on the fence measuring tape. Position the sliding base/fence assembly with the stop arm lightly in contact with the dowel pin. The stop arm should swing freely. Apply forward pressure to the sliding base/fence assembly to prevent movement and firmly tighten the sliding-base knobs. When installed, the router bit should be centered in the fence opening.

Notch Bit Setup

Remove the dowel pin from the router and install the notch bit. Set the height using the ¼" setup bar. Clamp a scrap piece of face-frame stock to the fence and make a test cut. Use the setup bar to check the depth of the cut.

**ATTENTION** Take care when setting the router bit height. To achieve a tight-fitting joint, bit height must be exact. Test your setup with scrap stock before machining your face-frame parts.

Notch the Stiles

**ATTENTION** The following instructions show how to machine the face frame shown in Example 1 in the following Examples section.

Cut the face-frame parts to length, lay them out the way they will be assembled, and mark the front faces with chalk. To reduce tear-out and ensure that both stiles are machined the same, align the ends and bind them together face-to-face with masking tape.

**ATTENTION** Because you will notch the stiles with a 1½" notch bit, the rails must be cut exactly 1¼" wide. Any variation will produce a poorly fitting joint.

To cut notches for the top and bottom rails, pull the control arm back to fully retract the fence. Position the router-table stop cursor at the measuring-tape zero mark. Place one end of the stiles against the stop, taking care not to deflect it. Secure the stiles with the workpiece clamp. Switch on the router and slowly push the control arm forward, feeding the stiles over the notch bit. Switch off the router and wait until the bit comes to a complete stop. Retract the fence and release the clamp. Rotate the stiles end-for-end, engage the clamp, and repeat the cut.

Re-set the stop at the measuring-tape ¾" mark, and repeat the routing operation on both ends of the stiles.
**Notch the Stiles**

To cut the notch for the drawer rail, find the dimension from the top end of the stiles to the center of the rail (7¼" in this example). Set the stop at this measuring-tape mark. Place the top ends of the stiles against the stop, clamp them in place, and rout the notch.

**ATTENTION** The face frames in Examples 2 and 4 have rails wider than 1½". Notches for these rails are cut in two or more passes, as indicated. An optional bit to cut notches for 2" rails in a single pass is available from your Kreg retailer or by calling Kreg Customer Service.

**Chamfer the Rails**

Retract the fence and set the router stop at the measuring tape ½" mark to the left of the zero mark. Place the end of the rail against the stop and secure it with the clamp. Swing the stop up and make the cut. On the top and bottom rails, chamfer only the inner corners. On the drawer rail, chamfer all four corners.

**Route the Beads**

Replace the Beaded Face-Frame System with the standard fence. Install the bead bit in the router and adjust the height so the top of the cutter just touches the setup bar. Align the face of the fence with the bit pilot bearing.

Switch on the router, place the front faces of the stiles and rails against the fence, and rout the beads. The stiles and upper and lower rails receive beads along the inside edges. The drawer rail receives beads along both edges.
**Example #1**

24"x15" face frame. 1½" stiles and rails. 5" drawer opening, 14½" door opening.

**Example #2**

24"x15" face frame. 1½" stiles, 2" rails. 5" drawer opening, 13" door opening.

**Stiles**

**CUT 1** at zero mark to trim away end material. Repeat on both ends.

**CUT 2** at ¾" mark (center of top and bottom rails). Repeat on both ends.

**CUT 3** at 7¼" mark, (center of middle rail).

**Rails**

Set your stop at ½" on the left side of the bit.

Chamfer all corners of the center rail and only the inside corners of the top and bottom rails.

**Stiles**

**CUT 1** at zero mark to trim away end material. Repeat on both ends.

**CUT 2** at ¾" mark. Repeat on both ends.

**CUT 3** at 1¼" mark. Repeat on both ends.

**CUT 4** at 7¾" mark (top half of the middle rail notch).

**CUT 5** at 8¼" mark (bottom half of the middle rail notch).

**Note:** Purchasing a ¼" x 2" Notch Bit in addition to the ¼" x 1½" Notch Bit included with this product reduces the number of cuts required.

**Rails**

Set your stop at ½" on the left side of the bit.

Chamfer all corners of the center rail and only the inside corners of the top and bottom rails.
Example #3

24"x15" face frame. 1½" stiles and rails. Three 6" drawer openings.

CUT 1 at zero mark to trim away end material. Repeat on both ends.

CUT 2 at ¾" mark (center of top and bottom rails). Repeat on both ends.

CUT 3 at 8¼" mark (centers of the two middle rails). Repeat on both ends.

Stiles

Rails

Set your stop at ½" on the left side of the bit.
Chamfer all corners of the two middle rails and only the inside corners of the top and bottom rails.

Example #4

24"x15" face frame. 1½" stiles, 1½" top and middle rails, 3" bottom rail. 5' drawer opening, 13" door opening.

CUT 1 at zero mark to trim away end material. Repeat on both ends.

CUT 2 at ¾" mark (center of top rail). Repeat on both ends.

CUT 3 at 1½" mark, only on the bottom of the stile.

CUT 4 at 2¼" mark, only on the bottom of the stile.

CUT 5 at 7¼" mark (center of the middle rail).

Note: Purchasing a ¼" x 2" Notch Bit in addition to the ¼" x 1½" Notch Bit included with this product reduces the number of cuts required.

Rails

Set your stop at ½" on the left side of the bit.
Chamfer all corners of the center rail and only the inside corners of the top and bottom rails.
**Precision Router Bits**

These bits are designed for use with the Kreg Precision Beaded Face-Frame System. Each bit features a $\frac{1}{2}$" shank and high-grade carbide tips. We offer six bead bits and four notch bits.

**Accessories**

**For these Bead Bits**
- PRS4250 \(\frac{3}{4}'' \text{ [6mm]} \) bead
- PRS4255 \(\frac{5}{16}'' \text{ [8mm]} \) bead

**Use these Notch Bits**
- PRS4200 \(\frac{1}{4}'' \times \frac{1}{2}'' \text{ [6mm x 38mm]} \)
- PRS4205 \(\frac{1}{4}'' \times 2'' \text{ [6mm x 50mm]} \)

**For these Bead Bits**
- PRS4260 \(\frac{3}{8}'' \text{ [10mm]} \) bead
- PRS4265 \(\frac{5}{8}'' \text{ [10mm]} \) bead
- PRS4270 \(\frac{3}{8}'' \text{ [10mm]} \) bead
- PRS4275 \(\frac{3}{8}'' \text{ [10mm]} \) bead

**Use these Notch Bits**
- PRS4210 \(\frac{1}{4}'' \times \frac{1}{2}'' \text{ [10mm x 38mm]} \)
- PRS4215 \(\frac{1}{4}'' \times 2'' \text{ [10mm x 50mm]} \)