# **Precision Insert Plate Assembly**



# Step 3: Mount the Insert Plate Levelers to the table top

These bottom-up mounting levelers - unlike most levelers on the market - attach directly to the bottom side of your router table top, eliminating the need for a supporting rabbet. The design simplifies the installation process and increases the potential adjustability of the leveler.

Use the curved tab on the Insert Plate Levelers to locate each Leveler in the corner of the Insert Plate opening and fasten them in to place using three 1-1/4" coarse thread screws per leveler. Be careful not to overtighten.

Thread the eight 1/4-20 x 1-1/2" cup point socket set screws into the two holes as shown, and thread about half way in.

Note: The 1 ¼" coarse thread screws included are meant to be used on router table top with a minimum thickness of 1". Depending on your setup, you may find it necessary to purchase your own hardware to reduce the possibility of the screws penetrating the surface of the router table top or not providing enough hold-strength.

### **Step 4:** Leveling the Insert Plate to the opening

The unique design of the Precision Insert Plate Levelers and adjustable leveling screw system applies pressure to both sides of the Insert plate so that - once locked in - the Insert Plate stays flush regardless of the weight applied. The 8 Leveling Screws and 4 Lock-Down screws work together to keep the Insert Plate flush with the router table surface at all times.

Set the eight <sup>1</sup>/<sub>4</sub>-20 x 1-<sup>1</sup>/<sub>2</sub>" Set Screws to approximately the same height and lay the Insert Plate into the opening. The Insert Plate should be resting on the eight adjustable set screws. Using an 1/8" Allen Wrench, adjust the set screws from the bottom side of the Insert Plate, being careful to adjust each screw the same distance as the other. Adjust the Insert Plate as close as possible to flush with the surface of the router table top and run your finger along the perimeter of the Insert Plate to check that all edges are flush with the router table top.

Thread the four 1/4-20 x 1-3/4" Phillips Head Machine Screw (Lock-Down Screws) through the countersunk holes into the center hole on each leveler and snug down. Some loosening or tightening of the lock down screws might be necessary to help adjust the insert plate and hold it securely in place. By leveling the insert plate while force is applied in both directions, the insert plate will stay flush regardless of the weight applied.

### **Step 5:** Installing and leveling the Reducing Rings

Insert three 8-32 x ¼" Flat Point Socket Set Screws into the holes, as shown. Place the reducing ring into the Insert Plate opening and rotate counter-clockwise until the set screws fall into the corresponding holes. Adjust the set screws until the reducing ring is perfectly level with the Insert Plate. Secure the reducing ring by threading the 8-32 x 5/16" Phillips Flat Head Machine Screws (Lock-Down Screws) into their holes and tightening snuggly.

As you tighten down the reducing ring, some additional adjustment under tension may be necessary. Adjust each set screw as needed to bring the reducing ring flush with the insert plate. Some loosening or tightening of the lock down screws might be necessary to help adjust the reducing ring and hold it securely in place. By leveling the reducing rings while force is applied in both directions, the rings will stay flush regardless of the weight applied, providing a more level and secure work surface.

Note: We recommend adjusting both reducing rings at this time. This will save time later as you change which reducing ring you want to use, and also reduces the possibility of losing the second set of small Flat Point Socket Set Screws. After you have leveled one reducing ring, remove it and level the other.

# **Precision Insert Plate ASSEMBLY INSTRUCTIONS**

Item# PRS3030













# **Tools Required**:

- Phillips Screwdriver
- 5/64" Allen Wrench
- Masking Tape
- Drill
- Drill Bits
- Countersink Bit

WARNING: This product contains one or more chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

# **Precision Insert Plate Assembly**









# Before you start...

- There are 3 primary installation methods for this Router Table Insert Plate. 1. Installed into your own home built router table.
  - 2. Installed into a Kreg Precision Router Table.
  - 3. Installed into another manufacturer's router table.

These instructions are intended for use with a home built router table and Krea Precision Router Table Insert Plate Levelers. If you are using a manufactured router table, please reference the table's included instructions for insert plate installation.

# Step 1: Mounting Your Router to the Insert Plate

### PLEASE NOTE:

All routers are different. When aligning the router's base plate to the bull's-eye template and Insert Plate, take into consideration all of the controls you will need access to when the router is suspended below the plate during operation. Plan your installation completely and adjust the router orientation accordingly. The router handles do not need to be square with the table or plate for proper operation, so easy access to the on/off switch and other controls should be your #1 priority when attaching the router to the Insert Plate.

Begin by locating the 3/8" phenolic Insert Plate and placing it face down on your workbench. The Kreg Logo on the Insert Plate should not be visible. Take the clear Plastic Template and place the edge marked "FRONT" towards the front edge of the insert plate. Align the template so that the Start Pin Hole marking and the bull's-eye line up perfectly with the Insert Plate. Once positioned correctly, securely tape the template into place using a minimum 1" wide, heavy duty masking tape.

In a later step, you will be duplicating your router's base plate holes into your Insert Plate so that you can connect your router directly to the Insert Plate. First, you must determine the correct size of the holes to drill in your Insert Plate. Remove the base plate from your router and find the bit that fits just inside of the base plate's holes.

Now, center your base plate on the concentric rings of the bull's-eye template. Keep in mind what position you want the router in when it's suspended from the table and make certain the base is rotated to reflect that position. For instance, it's best to have the lock on the router base, and the controls on the router motor, toward the front of the table, or as easily accessible as possible.

Note: If your router is equipped with a built-in lift system, you will need to drill the appropriate holes through the insert plate at this time to gain access to the system and make adjustments to the bit depth of your router after it's been mounted to the insert plate. Once again, use your router base plate to choose the appropriate size drill bit needed for these holes. VERY IMPORTANT - When positioning your base plate for drilling, make sure that none of the holes you are about to drill line up over the pre-drilled Start Pin Hole in the insert plate.

Once you have the base plate from your router aligned where you want it on the template, use a minimum 1" wide, heavy duty masking tape to secure your base plate to the bull's-eye template. Tape on at least four sides of your base plate to ensure a strong and secure hold. The more sides you tape, the more secure the hold.

Whether you use a drill press or hand drill, we recommend you place a scrap piece of wood under the insert plate. This will reduce blowouts as you drill through the insert plate. It's easiest to do this operation on a drill press so the holes are perfectly square to the insert. If you must drill it by hand, be careful to keep the holes straight. Before drilling, securely clamp the insert plate to your bench or drill press to hold it secure and reduce the chance of the material moving as you drill.

After the holes are drilled, remove the base plate & template. Flip the insert plate over and use an 82 degree countersink bit to countersink each hole so the head of the screws sit at flush or slightly below the plate's surface when tightened down. Be very careful not to over drill these holes, as their depth will directly affect the quality of your routing surface.











Begin by placing the Insert Plate on your router table top in the exact location you would like it to be permanently installed. Square it with the table if desired, and carefully trace around the plate with a pencil. Make sure the line is easily visible.

Locate a piece of scrap  $\frac{1}{2}$ " plywood to use as a routing template. The piece must be large enough to be clamped down securely on your router table top. Trace the Insert Plate onto the scrap piece, just as you did to the table top in the first step.

On your router table top, drill a 1/2" hole on the inside of each corner. Use your Jig Saw to "rough-cut" the inside of the line, staying around 1/4" from the line at all times... You will use the router in step four to perfect the cut. Repeat this process on your plywood template.

On the plywood template, use a sander to remove the remaining material inside of the roughed-out opening. Test fit the opening in the template by inserting the Router Table Insert Plate and use a file (or rasp) to make minor adjustments as necessary. Once the Insert Plate fits snuggly into the opening, the template is complete, and you are ready to duplicate the opening in your router table top.

Place the plywood template on the surface of the router table top. Line up your template opening with the traced pencil outline on your router table top and securely clamp the two together. Use your router and top bearing flush trim bit to trim the remaining material from inside the insert plate outline on the table top. Slowly guide the router around the inside of the plywood template to finish the trimming process for the insert plate opening. While trimming, make sure you do not come in contact with the surface below your router table top. Remove the template and go to Step 3.

# Step 2: Cut an opening into your router table top

Please note that the next several steps were intended for use with Kreg Precision Router Table Insert Plate Levelers. If you are using another leveling technique, you may be required to rout a supporting rabbet into your router table top, and purchase other mounting hardware as required.