

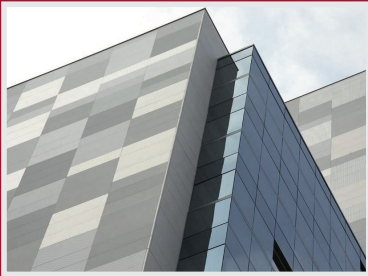
## INTRODUCING OUR KEEP-NUT™ DRILLING MACHINE

The **KDM110 KEEP-NUT™ Drilling Machine** from **Chemical Concepts™**, is a lightweight, precision tool for drilling panels and countertops. This machine will enable any operator to repeatedly and efficiently drill holes with the correct dimensions for use with the Keep-nut anchoring system. This machine can also be used to as a general-purpose, portable drill press for many other applications.

Using an array of compatible bits, the machine can prepare holes in a variety of hard surfaces including granite, marble, engineered stone, UHPC, ceramics, glass, and composites. The vacuum-foot allows secure attachment to rough surfaces including unpolished granite and textured materials. This water-cooled, pneumatic machine requires only a single airline and a water feed to operate.

Use with thin-wall core bits to drill faucet holes in record time without a CNC.

- Fast, efficient drilling of anchor holes for Keep-nut Anchoring System
- Lightweight and easy to operate
- Water cooled and air-operated
- Vacuum-foot for secure attachment to rough or even vertical surfaces
- Built in depth stop for precise, repeatable results



Ventilated Facades



Under-mount Sink Anchor



Panel and Ceiling Hanging

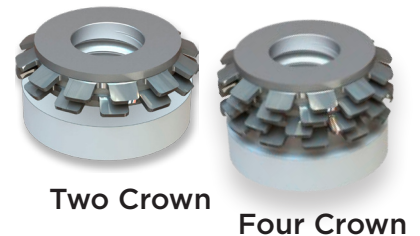


Faucet Hole Drilling

**KEEP-NUT™** is a press-in self-anchoring insert that provides a permanent threaded fixing in panels or countertops made of marble, granite, composites, carbon, Corian®, HPL, glass and others hard surface materials.

The **KEEP-NUT™** insert is specifically developed to fasten ventilated façades, wall-coverings, décor, furniture, under-mount sinks, as well as a variety of other applications. The Keep-Nut is made of stainless steel for durability and performance in exterior applications.

Available in different lengths to fit several different panel thicknesses, **KEEP-NUT™** can be installed quickly by drilling the material to the correct hole diameter and pressing in the insert. **KEEP-NUT™** inserts have several advantages. The preparation needed is just a cylindrical hole drilled by CNC or the KDM series manual tools. In addition, assembly by pressure is quick and easy and does not require use of adhesives.

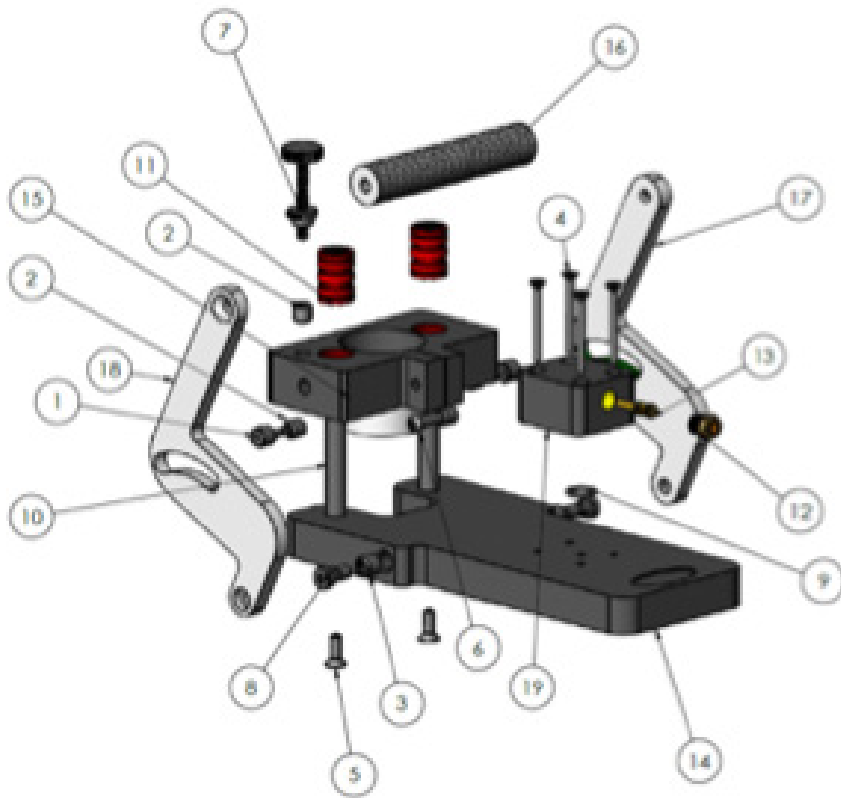


Two Crown

Four Crown

## PART DRAWING

ITEM NO.	DESCRIPTION	QTY.
1	Cam Follower	2
2	Thread Insert 1/4" - 20 to 7/16" - 14	4
3	Thread Insert 5/16" - 18 to 1/2" - 13	3
4	FHCS #10-24 x 2"	4
5	FCHS 1/4" - 20 x 3/4"	2
6	BHCS 1/4" - 20 x 1 1/4"	1
7	Adjustment Screw	1
8	SHSS 5/16" - 18 x 3/8"	2
9	O Ring	1
10	Ceramic Shaft	2
11	Linear Bushing	2
12	Hex Union 1/4" to 1/4" NPT	1
13	Venturi Valve	1
14	Fixture Base	1
15	Clamping Block	1
16	Handle	1
17	Arm	1
18	Arm	1
19	Venturi Block	1



## TROUBLE SHOOTING

**LOSS OF SUCTION:** If the unit loses suction and the vacuum is unable to securely adhere to the surface the most likely cause is a blockage in the venturi. Debris can become lodged in the venturi which prevents the unit from creating enough suction. To correct this, the venturi needs to be disassembled and the blockage removed. Once the obstruction is removed the unit should return to full functionality. Follow the steps below:

1. Using a hex key loosen the screws (4) that secure the venturi block (19), and remove the venturi block from the base.
2. Using the appropriately sized wrench (size?) remove the 1/4" NPT fitting (12) on the venturi block.
3. Remove the valve (13) inside the venturi block.
4. Visually inspect for any debris trapped in the venturi block; Use a blow gun to clear out any debris lodged in the cavity.
5. Reassemble parts as shown in the parts diagram on page 3; Check for proper suction.

