Power Series
X-model hole cutters

WARNING! ALWAYS read and follow the operating and safety instructions in the power tool manual and instructions for its use. ALWAYS wear safety goggles, gloves and other appropriate safety items for protection.

Capacity
1. For cutting round holes in ceilings, walls and floors.
2. Cuts holes with diameter 1 1/4"-1 7/8" (40-430mm)
3. Cutting Depth: 3 1/4"-1 1/8" (5-30mm) from one side only
4. Cuts veneer, plywood, gypsum- board, plaster, acrylic sheet, fiber cement board, etc.

How to use the Power X-model
1. Set both cutting-blades on blade-holders tightly and correctly as shown in Figure A. Figures B and C are INCORRECT.
2. To adjust the hole size locate the inner edges of the blade holders against the size graduation mark. For example, set each blade holder at number 3/4 for a 3/8 inch (9mm) diameter hole.
3. Set the two blade-holders at the desired graduation mark on the measure-bar and tightly screw in the hex-screws using the L-shaped hexagonal wrench.
4. Before cutting, securely clamp the piece to be cut, then start cutting after carefully setting the twist-drill at the center of the desired hole.
5. When using a power-drill, be sure to align the hole cutter so that both blades start cutting at the same time, and gradually cut through the work piece. Abrupt contact of the blades with the work piece may cause the drill to stall or kick back and result in injury to the operator.
6. When deep boring: 1 1/4" up to maximum of 2" (30-50mm) first use the Power X-model to cut from one side of the board, and then start cutting again from the other side until the blades bore through making a doughnut shaped disc as shown in Figures 1, 2, and 3.

TIPS: The tungsten carbide blades which are pre-installed on the hole cutter are the best blades to use for sheetrock, plaster, fiberglass, aluminum and brass sheet, tin, OSB, and most plywoods. The high speed steel blades in the kit have a finer cutting edge and produce a smoother edge when cutting wood, MDF, plastics, soft acoustic ceiling tile, Formica, and laminates. With hand drills with multiple speed ranges use the lowest setting to provide the most torque. When using a stationary drill press the minimum speed possible may be higher than the recommended speed and it may be necessary to operate at 400 RPMs or high prevent the motor from stalling.

The adjustable hole cutter should be gradually pushed against the surface to be cut and the blades allowed to cut the material. It does not require a great deal of pressure like a cup style hole saw and with the twin blades it will still cut rapidly. If cutting plywood or OSB with glue there may be vibration. It is best to tighten the tension spring, and if using a keyed chuck to retighten it after starting the cut. The orange knob also can be used to adjust the cutting depth to cut only through the work piece as when cutting a hole in a ceiling through 5/8" thick sheetrock. Keyless chucks tend to self-tighten with vibration and work the best with the hole cutters.

When cutting plaster with wood lath the blades can be used to cut the wood as well as the plaster but with metal lath there will be greater difficulty. There are many types of metal lath used over the past 50 years so there are many different cutting situations. If there is too much effort for the hole cutter and drill to cut through the metal mesh behind the plaster it may be better to use a carbide grit blade in a reciprocating saw or metal snips to cut the metal after the hole cutter has cut through the plaster. Expect blade life cutting plaster is 50% that of sheetrock. If you need technical assistance please contact us at (631) 663-1100 Monday through Friday 8:00 a.m. - 5:00 p.m. PST.

Recommended operating speeds:

<table>
<thead>
<tr>
<th>Diameter Holes</th>
<th>Power-Drill Speeds</th>
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<tbody>
<tr>
<td>1 1/4&quot;, 2 1/4&quot; (40-55mm)</td>
<td>800 r.p.m.</td>
</tr>
<tr>
<td>2 1/4&quot;, 3 1/8&quot; (57-100mm)</td>
<td>600 r.p.m.</td>
</tr>
<tr>
<td>4&quot;, 5/8&quot; (102-150mm)</td>
<td>400 r.p.m.</td>
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<tr>
<td>6&quot;, 1/2&quot; (150-300mm)</td>
<td>300 r.p.m.</td>
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<tr>
<td>12&quot;, 1&quot; (305-430mm)</td>
<td>200 r.p.m.</td>
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