**Coil Cutter Kit Instructions: Dremel & Foredom**

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The Coil Cutter is an easy-to-use tool for safely and quickly cutting wire coils into rings. The Coil Cutter kit is available in two styles: One for a Dremel, and one for a #30 Foredom flex shaft handpiece; the only difference between the kits is the bushing. The Coil Cutter Kit consists of a blade arbor with a replaceable blade, a safety guard/guide, a two-sided coil holder base for cutting different diameters of jump rings, and a stick of Cut Lube. A hex key is provided to install and remove the blade.

Watch our videos online for instructions. Sometimes it is much easier to watch than to read directions. Go to https://bit.ly/2STnLvf to see the videos.

Coils to be cut can be up to 4 inches long and 7/8 inch (22 mm) outside diameter. Coils may be made of 12- through 30-gauge wire. Use non-ferrous metal: copper, silver, aluminum, gold. NOT recommended for steel. The Tips & Tricks section contains some helpful hints for cutting coils into rings.

**INSTALLATION:**

WARNING: Cutter blades can cause severe, permanent injury. Turn off and disconnect all equipment before installing or removing the Coil Cutter. Never touch rotating cutter blades.

**Dremel Installation**

DREMEL Compatibility: Because there are dozens of Dremel varieties, it is not possible for us to test each one with the Coil Cutter Kit. The main thing you need when it comes to choosing a Dremel is the ability to unscrew the top portion, shown in the last photo. You also want to use a corded Dremel, not a cordless version. Kevin always says to buy the cheapest, most basic version, as those are most likely to have the removable top portion. We use a Dremel 200 here in our shop.

Here's one version that would work with the Coil Cutter: https://www.homedepot.com/p/Dremel-200-Series-1-15-Amp-Dual-Speed-Corded-Rotary-Tool-Kit-with-15-Accessories-and-1-Attachment-200-1-15/202349458?source=shoppingads&locale=en-US

1. Turn off and disconnect the rotary tool.
2. Ensure there is no tool in the chuck or collet.
3. Unscrew and remove the chuck or collet closer and collet from the motor tool. Save for future use.
4. Remove the plastic collar from the shaft end of motor tool by unscrewing it (counterclockwise). Save the collar for future use.
5. Screw the Coil Cutter guard/guide on the threaded end of the motor tool housing. Fasten securely.
6. Place the blade arbor over the threaded shaft of the motor tool. Verify that the teeth of the blade are pointing in a counterclockwise direction when looking at the end of the arbor with the screw. If the teeth are pointing in the wrong direction, continue to the Cutter Blade Replacement section before moving on. If the teeth are pointing in the correct direction, continue to the next step.
7. Screw the arbor onto the motor tool shaft until it is tight. Tighten the cutter arbor on the motor tool shaft using the wrench that came with the motor tool or a 3/8-inch open-end wrench.
8. To ensure the blade is centered in the coil holder base slot, remove the top from the coil holder base. Place the blade and guide/shield over the base; the cutter blade should protrude through the slot in the coil holder base top. There should be approximately an equal clearance on each side of the blade.
9. If the blade is not centered in the slot, loosen the screws on the guide/shield and move it left or right to center the blade. Tighten the screws when the blade is centered.

**Foredom #30 Handpiece Installation:**

1. Follow steps 1 & 2 from Dremel Installation.
2. Slide the Coil Cutter guide/shield onto the #30 handpiece. Tighten the set screws by hand.
3. Hold the arbor and blade over the opening in the guide. Verify that the teeth of the cutter are pointing in a counterclockwise direction when looking at the end of the arbor with the screw. If the teeth are pointing in the wrong direction, continue to the Cutter Blade Replacement section before moving on. If the teeth are pointing in the correct direction, continue to the next step.
4. Secure the arbor into the jaws of the flex shaft.
5. To ensure the blade is centered in the coil holder base slot, remove the top from the coil holder base. Place the blade and guide/shield over the base; the cutter blade should protrude through the slot in the coil holder base top. There should be approximately an equal clearance on each side of the blade.
6. If the blade is not centered in the slot, loosen the screws on the guide/shield and move it in or out to center the blade. Tighten the screws when the blade is centered.

**OPERATION**

Before you start: Determine which side of the base you need to use for the size of coil and diameter of wire you’ll be cutting. To check, place your coil in the base and rest the base top on the coil. Place the blade and guide/shield over the base and check to see that the blade extends deep enough to cut through the top of the coil, but not so deep that it will cut through the bottom. The side of the base you use depends on the gauge and diameter of the coil; there is no chart of what side to use for which wire, as there are too many variations of gauge and coil diameter, so be sure to check before getting everything set up!

1. Place the coil holder base in a vise. Never hold the coil holder base in your hand while cutting.
2. Place the wire coil in the groove of the coil holder base. Apply Cut Lube along the top of the coil or thoroughly coat the blade; this extends the life of the blade and provides better cuts. Other inexpensive and readily available lubricants are oil of wintergreen, olive oil, and liquid dish washing detergent.
3. Place the slotted coil holder top on the coil with the stop facing down and toward the left. Use a thin tool to push the coil all the way to the left until it’s up against the welded stop.
4. Tighten the screws until the top is firmly seated across the length of the coil. Make sure not to overtighten the screws; the top should not bow at all.
5. Place the slot of the guide/shield attached to your rotary tool onto the coil holder base with the flat portion of the guide/shield sitting squarely on the base. The coil should be toward the left of the blade.
6. Apply full power to the rotary tool, and slide it toward the left with a steady, even speed. Don’t let the blade contact the coil until full power has been applied to the rotary tool.
7. DO NOT remove the guard/guide from the coil holder base while the blade is still turning. After the coil is cut, turn the rotary tool off and wait for the blade to stop. NOTE: There may be vibrations as the tool comes to a stop.
8. Remove the guard/guide from the base.
9. To cut more coils, remove the screw on the right side of the base to remove the jump rings and replace the coil.
10. Set the freshly cut rings aside and repeat to cut any additional coils.
11. After you’re finished cutting coils, move on to the Blade Removal section, if desired.

**BLADE REMOVAL**

WARNING: Cutter blades can cause severe, permanent injury. Turn off and disconnect all equipment before installing or removing the Coil Cutter. Never touch rotating cutter blades.

1. Disconnect the power from the rotary tool.
2. Use the included 3/8” wrench to loosen and remove the arbor.
3. Remove the guard/guide from the rotary tool and place the components in a convenient storage location.
4. Dremel: Reinstall the parts you removed when installing the Coil Cutter.

**CUTTER BLADE REPLACEMENT**

This section describes the procedures to replace the cutter blade and verify the installation.

1. Hold the arbor in a vise with the socket head screw up.
2. Use the included hex key to remove the screw. Set the screw aside.
3. Remove the blade retainer and blade from the arbor. Set the retainer aside.
4. Ensure there is no dust or other material on either side of the blade, the arbor flange, and the blade retaining plate.
5. Place the blade onto the arbor with the teeth pointing in a counterclockwise direction when looking down at the top of the arbor.
6. Place the retaining plate over the blade with the recess side against the blade.
7. Center the retaining plate over the portion of the arbor protruding through the blade.
8. Install the retaining plate screw and tighten securely with the hex key.
9. Review the Installation section to use the Coil Cutter.

**TIPS & TRICKS**

* If the coil is only partially cut through, discard the coil. Generally, the damaged coil cannot be salvaged. Always practice first with non-ferrous scrap material of the same gauge and temper as your desired material. It’s always better to practice on less-expensive metals before moving on to silver or gold.
* Light-gauge coils (26-gauge and smaller) generally need support while cutting. There are two options:
	+ After winding the coil, but before removing it from the winding mandrel, cover it with one layer of masking tape. Remove the taped coil from the mandrel and place it in the coil holder base. Cut through the tape and the coil.
	+ Wind the coil on a wooden dowel the same size you want the inner diameter of your rings to be. Wrap the end of the coil with masking tape. Place the coil and dowel in the coil holder base. Cut the coil while it’s on the dowel. The dowel will be cut into a little; even when cut, dowels last a long time.
* When winding coils from wire that’s half-hard or has been hardened, the coils generally spring-back open a bit (0.5 to 1.5mm) after removal from the mandrel. If the size of the finished ring is critical, experiment to find the correct size mandrel to start with.
* If you are cutting very small jump rings, there’s a trick to stop from cutting all the way through them. Tape popsicle sticks to the underside of the coil holder base top, one on each side of the slot. This will raise the cutter up enough to stop it from cutting through both sides of the coil.
* DISCLAIMER: No Refunds on used blades or cut lube. If you purchase the kit for the wrong rotary tool and need the other version instead, the correct parts will be $15 in order to cover our costs. Please contact us at sales@potterusa.com.