

TITLE: Cutting 3M™ Scotchlite™ Series 3800 High Intensity Grade Reflective Material on Your Gerber Friction Plotter

Gerber FastFact #: 5260

Supplied by: Technical Hardware Support

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Summary: This document offers two equally effective methods for cutting 3M™ Scotchlite™ Series 3800 High Intensity Grade Reflective material. One uses transfer tape on the face of the material, the other uses the material “as is.” The method you use is a matter of personal choice.

Cutting the material with transfer tape:

1. Apply transfer tape to the top reflective surface. (Be sure to eliminate all bubbles and creases when applying the transfer tape.)
2. Load the material into the plotter upside down, so the backing is facing up.
3. Load a 60° blade into the knife holder.
4. Set the Knife Cutting Speed and Pen Up Speed to 20 inches/second.
5. Set the Knife Cutting Acceleration and Pen Up Acceleration to 2 g.
6. Set the Tool Force to at least 200 grams.
7. Set the depth to the knife blade so it cuts completely through the backing and the vinyl, but scores the transfer tape only lightly.
8. Perform a test cut to determine if this force and depth of cut are correct for the material you are using. If not, adjust step 6 and step 7.

Note: Be certain to reverse the image prior to cutting the job.

Cutting the material as is:

1. Load a 60° blade into the knife holder.
2. Set the Knife Cutting Speed and Pen Up Speeds to 4 inches/second.
3. Set the Knife Cutting Acceleration and Pen Up Acceleration to 1g.
4. Set the Tool Force to at least 200 grams.
5. Set the depth of the knife blade to cut completely through the vinyl, but only score the backing material.

Perform a test cut to determine if this force and depth of cut are correct for the material you are using. If not, adjust step 4 and step 5.