

**TITLE:                    Using the Swivel Knife Assembly with OMEGA ARTPath™  
Controlled Routers**

Category:                Routers – How To

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Summary:              This document provides instructions for using the Swivel Knife Assembly

This document provides instructions for using the Swivel Knife Assembly  
Underlined text indicates change from the previous document.

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Gerber's Routing Systems can produce dimensional signage using a wide variety of materials. With the addition of the Swivel Knife Assembly, the versatility of Gerber's computer-controlled routing systems is further enhanced.

Using the Swivel Knife Assembly, you can create spray masks by cutting surface protection films, in addition to, high quality back lit signs by cutting translucent vinyl that is applied to a translucent acrylic sign face or a vacuum-formed panel.

The Swivel Knife is as easy to install as a standard Router bit and comes with a spring loaded, solid carbide blade.

## Instructions for Use

- 1 Open the job in ART Path®
- 2 Select the Setup menu and click on Tool Edit. Add the Swivel Knife to the tool list (type .001 in the tool diameter box).
- 3 Select the shapes to be cut with the Swivel Knife tool. Assign an Engrave tool path with the Swivel Knife tool for the basic cut.
- 4 Set the Tool Depth and Depth per Pass from .023" to .035". The depth of cut will vary depending on the thickness of the material to be cut. It is recommended that a test cut be done first to ensure proper cutting depth.
- 5 Set the Feed Rate (IPM) and Plunge Rate (IPM) according to the listings below:

D200      FEED 54 / PLUNGE 20AR600    FEED 102 / PLUNGE 20SABRE    FEED 600 / PLUNGE 20



*Note: Excessive plunge rates may cause the tip of the swivel knife blade to chip when it contacts the substrate material. Insufficient plunge rates may result in the inability of the swivel knife blade to properly pierce the film.*

- 6 Go to the ART Path® Output Menu and send the job as “ROUT”.
- 7 Turn off and/or unplug the Routing Motor.
- 8 The Swivel Knife Assembly is installed in the Routing Motor in the same manner as standard Router bits. Tighten the Swivel Knife Assembly into the collet until it is snug. **DO NOT TIGHTEN THE COLLET AS MUCH AS YOU WOULD WHEN MOUNTING A ROUTER BIT. OVER-TIGHTENING CAN RESTRICT THE SWIVEL ACTION AND MAY CAUSE DAMAGE TO THE HOUSING OF THE ASSEMBLY.**
- 9 With the substrate/film securely mounted to your Router Table, initialize the Swivel Knife using the same procedure you normally follow for your model Router.



*Note: Do not drag the Tool Gauge out from under the Swivel Knife Blade. Wait until the Z-axis rises to the init height. This will eliminate the possibility of chipping the cutting tip of the blade.*

- 10 Start the job as you would any other Routing application.