



## Distributor rotor — laser template

Laser cut 1/4"-thick acrylic

### Rotor

The rotor rotates inside the distributor cap.

hub diam = 1.5", center-to-tip radius =  $1 + \frac{3}{16}$ ", tip width =  $\frac{7}{8}$ "

The metal contacts strip will be inserted into slots on the rotor top.

Laser cut one thin middle slot to tightly anchor the center tab of the contacts strip.

slot length =  $\frac{1}{4}$ ", slot width (laser lines separation) =  $\frac{1}{32}$ "

Laser cut three thick slots to loosely contain the free ends of the contacts strip.

slot length =  $\frac{9}{32}$ ", slot width (laser lines separation) =  $\frac{1}{16}$ "

Two conical springs will be glued into circular pits in the rotor, behind the contacts strip.

The contact centers are at center of hub and 2" from center of hub.

Laser etch two circular pits with deeper outer rings.

Circular pits: OD = .275", depth =  $\sim 1.2$  mm ( $< \frac{1}{16}$ " )

Rings: OD = .275", ID =  $\frac{3}{16}$ ", depth =  $\sim 1.8$  mm ( $> \frac{1}{16}$ " )

### Outer spline connector

The star-shaped spline connector allows the rotor to be connected at different angles.

The outer spline connector is cemented to the back side of the rotor.

OD = 1.5"

Outer star shape: 32 points, OD = 1.25", ID = 1"

### Inner spline connector

The inner spline connector is cemented to the D-shaft.

D-hole = .5" x .45"

The laser outline for the inner star is slightly larger than the outer star for a tighter fit, accounting for laser kerf.

OD = 1.275"