Radial Construction

To trim your parts off the sheet start sanding the back with 180 grit sandpaper. Once the paper starts breaking through switch to a finer grit, 280 will do nicely. Sand in a circular motion applying even pressure over the part. Counting the strokes then rotating the part will help keep things even. A little special attention will be needed at the tops of the cylinder heads near the end. Note: wet sanding will prevent the paper from becoming "clogged".
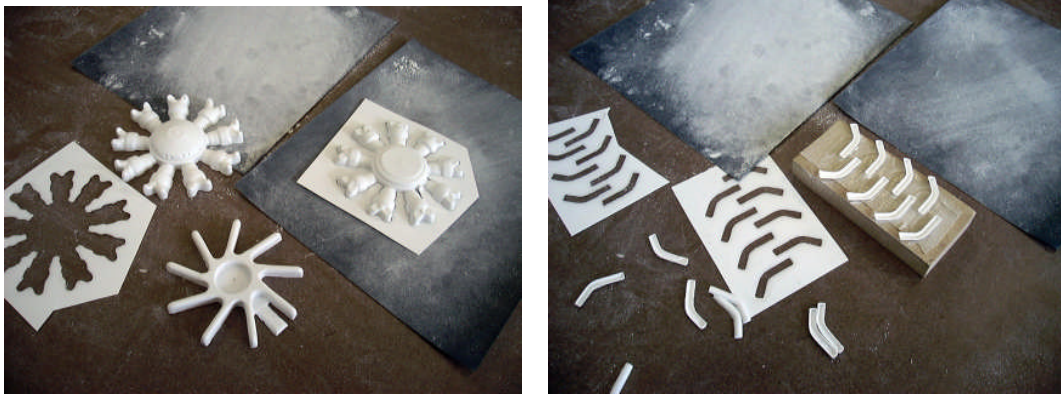
When trimming the exhaust stacks; some carpet tape on a scrap piece of wood will help you keep the parts flat while they are being trimmed. The carburetor, spark plugs, and pushrod tubes are trimmed with a razor. When you cut the plugs off the sheet use a slight angle so they will be more upright in relation to the cylinder. Also cut the pushrod tubes at an angle to maintain a round look.

Prop a pencil 1/4 inch above the table to mark the "offset" of the manifold. When you finish the part should resemble a spider.

Assemble the motor halves by dropping the alignment ring in one of the halves. Place the other half in place with out cement. Find the cylinders with a dimple at it's base. These cylinders are mated for the best fit.


Photo #6 Apply modelers cement with the edge of a knife along the edges of the cylinders. Work one cylinder at a time until complete.

After the motor has dried completely sand the seam to remove any flashing that remains. Note: a strip of sandpaper stretched between a bent coat hanger will help you to reach in between the cylinders.
To bond the exhaust stacks together apply model cement to the edge of a nonporous block. This allows you to "dip" the edges into the cement, and then mate the other half to the part. Only the center portion of the part is used on the motor so concentrate the alignment there.
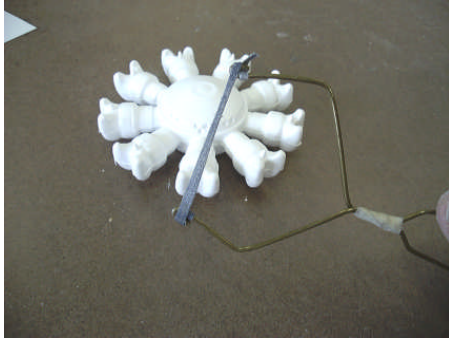
Painting before the final assembly is done will ease the assembly process. But keep in mind that if you want to continue using the modelers cement you will have to scrape the paint away.