

CUSTOMER SERVICES BULLETIN

HOW TO MAKE A PLUG

A plug is the original item that a fiberglass mold will be taken from. Since it is the final product that the mold will be produced from, it is important that the plug has the same specifications that are required in the final product.

A plug can be made from a variety of different materials. These materials include, but are not limited to wood, plaster, arborite, polyester resin, fiberglass, polyurethane foam, etc. The only requirement is that the plug material **MUST** be compatible with the resin system you are utilizing. If the plug is to be made from a porous material such as wood, foam or plaster, the surface must first be sealed with resin.

If the end use product is to have a smooth surface, the plug must have a smooth surface. Any flaw or scratch will be reproduced in exact detail as the mold will take a mirror image of the plug. Once the plug is sealed, sand smooth the surface with 180 grit sandpaper. Once the surface is smooth, wet sand the surface with 320 grit wet/dry sandpaper, working your way up through 600 grit to 1200 grit wet. This will remove all sanding marks from the previous grits.

Once wet sanding is complete, polish the surface by applying Aqua-Buff 1000 and Aqua-Buff 2000 Cut Polish as described in the HOW TO CUT POLISH GELCOAT bulletin.

The plug is now prepared for the application of Oscar's OP 600 Mold Release Wax. This wax is in a paste form and contains a high carnauba content, and is similar in looks and application of car wax. Five thin coats of wax are recommended. Using a clean, lint free cloth, apply the first coat by hand using an overlapping, circular motion paying close attention to make sure that wax is rubbed into all radius areas, nooks and crannies. Allow to dry to a complete haze (20 - 30 MIN.) and polish up by hand using a clean, dry, lint-free cloth. Allow two hours between coats to permit solvent to flash off before applying the second coat. Repeat waiting period between subsequent coats.



After the final coat of wax, allow the mold to sit at room temperature overnight. This will set and harden the carnauba wax. After this point, the surface may then be buffed to a high gloss, mirror finish.

Poly Vinyl Alcohol (PVA) can now be sprayed on with a proper spray gun or applied to the surface of the wax using a soft, lint-free cloth. The PVA will dry in approximately 30 - 60 minutes and is then ready for the first layer of gelcoat. **Note:** If using Honey Wax, do not use PVA.

Attempting to rush or short-cut the above said specifications will result in failure of the mold to be produced from the plug.



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