



CUSTOMER SERVICES BULLETIN

HOW TO MAKE A ONE PIECE FIBERGLASS MOLD

A fiberglass mold is used to reproduce fiberglass products and is the exact reverse (mirror image) of the item to be produced.

When taking a mold from a plug (the original shape), the first two layers to go on the plug are Fiber-Tek Black Tooling Gelcoat. Tooling gelcoat is used because it offers a high-gloss hard surface with good release properties. Tooling gelcoat is black in colour, but is available in other colours. Tooling gelcoat should contrast with the colour of the gelcoat to be used for the finished product. For waxing procedures, refer to the How To Make A Plug customer services bulletin or the Waxing a Fiberglass Plug And Mold bulletin.

Gelcoat is usually sprayed to ensure uniform thickness, however it can be brushed or rolled onto smaller plugs paying close attention to ensure uniform coverage. If the gelcoat is not put on evenly, cure problems and premature release may result. Each gelcoat layer should be applied at a 10 - 15 Mil thickness to prevent wrinkling when the next layer is applied. Each gelcoat layer should cure for 6 - 8 hours before the next layer of gelcoat or fiberglass is applied.

At this point the first layer of fiberglass can be applied. The first and second layer of fiberglass should be chopped strand mat to prevent pattern transfer through the gelcoat, which may happen if other fiberglass materials are used. The mold can then be built up alternating layers of mat and woven roving. Different molds, depending on size, can be reinforced with wood which will add stiffness and reduce overall weight.

Once the fiberglass lay-ups are complete, the mold must be post cured (left sitting) on the plug for a period of one week at room temperature to avoid warping. To remove the mold from the plug, small wooden or plastic wedges can be used to separate the edges. With a rubber mallet, gently tap the plug and, with patience, the two parts will separate.

It is strongly recommended that all steps are followed to ensure a high quality product.

COAST FIBER-TEK PRODUCTS LTD.

1306 Boundary Road, Burnaby, B.C. V5K 4T6
Phone: (604) 294-8116 Fax: (604) 294-8754

