

# KIT MASTERING FOR RESIN CASTING

WONDERFEST 2005

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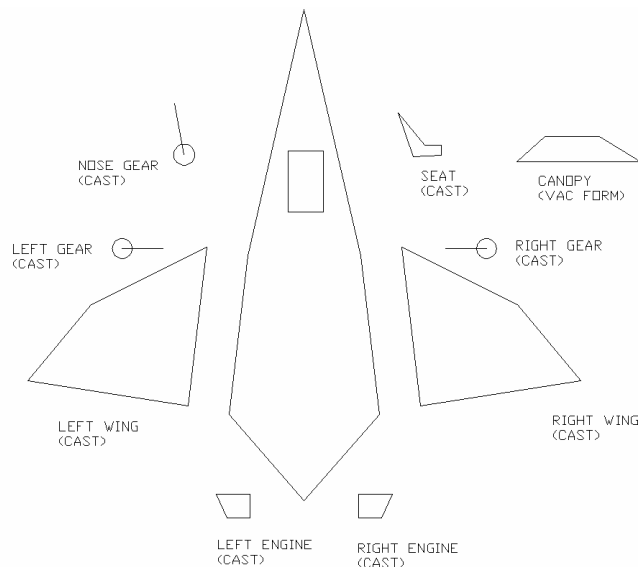
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There are a number of things to think about when you decide to make a kit Master or "Pattern" as some of the professionals like to call it. You cannot simply build the Pattern they decide to cast it.

This seminar and handout is meant to give you a basic set of guidelines to follow when you decide to embark on making a pattern for resin casting

## -Parts Breakdown:

-Pre-Plan parts breakdown before you begin work! Making a simple diagram of the various parts that will be make up the model can be very important.

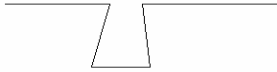


-simpler shapes = easier to cast. Shapes with protrusions going off in several directions can be very difficult if not impossible to cast.

-solid masters are better. Sometimes during the molding process it is necessary to vacuum the master after rubber has been poured over it. If there is lots of fine surface detail it can trap small bubbles in the mold that will be transferred to castings and ruin the fine detail duplication.

**-Engraved panel lines:**

- v shaped better then rectangular
- Think fine lines "Tamiya/Hasagawa/Finemolds" quality



BAD: RUBBER WILL STICK IN GROOVE AND RIP OUT OF MOLD



OK: RUBBER MAY STILL STICK IN GROOVE AND RIP OUT OF MOLD BUT THE CHANCES ARE SOMEWHAT REDUCED

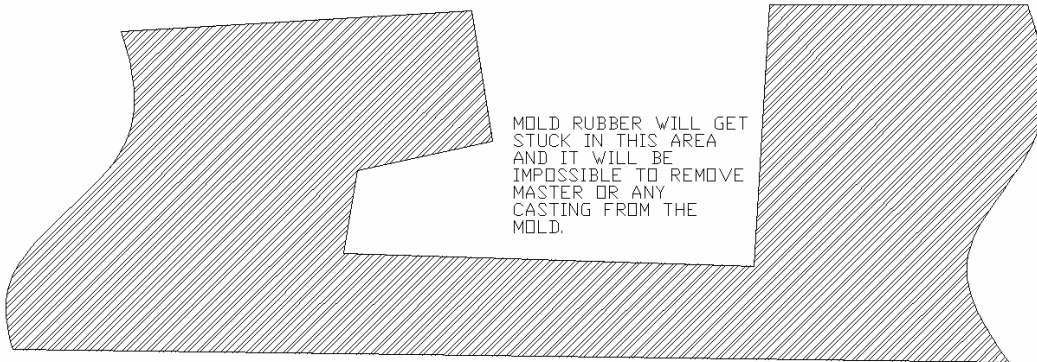


BEST: RUBBER WILL NOT STICK IN GROOVE BUT WILL RELEASE EASILY.

**-Undercuts:**

- not too deep
- not too thin
- no "mold locks"

MOLD LOCK



CROSS SECTION OF COCKPIT TUB

**-Alignment pins/locating tabs:**

- tabs better than pins
- If pins make square for positive alignment.
- tabs or pins require a slight taper for better fit
- Slots and holes slightly tapered for better mold release.
- No holes drilled through to hollow interior spaces! Rubber will seep into the master during the molding process and the master may be destroyed during the de-molding process.
- not too deep. Deep holes or slots will increase the probability of the mold tearing out subsequently destroying the mold.

**-Surface Finish:**

- Smooth like styrene (Finemolds)
- Polishing is ALWAYS necessary. You cannot just hose on the primer and hope for the best. To get that styrene like finish you must polish with increasing grits of sandpaper or micromesh polishing clothes.
- DO NOT over do primer. Details will be softened or lost completely. Tamiya Fine and Mr Surfacer 1000 prime in an aerosol can are good. Mr Surfacer thinned with their one thinner and sprayed through and airbrush is best.
- Glue marks around added details are a no-no and should be avoided at all costs. Use a toothpick with a bit of contact cement or double sided tape to apply small detail pieces. Simply dip them in the glue and then locate them. If you do get some glue marks carefully sand and polish around to remove it. These marks will show up in the castings. Primer will help cover these but not entirely.

SHORTENED MOLD LIFE MEANS HIGHER EXPENSES. HIGHER EXPENSES MEANS HIGHER KIT COST. HIGHER KIT COSTS MEANS FEWER SALES. FEWER SALES MEANS FEWER PEOPLE GET TO ENJOY AND APPRECIATE YOUR WORK.