

Ch 8 Fairing the hog and stems

First the top of the hog has to be cut and planed back to a fair curve which flows into the outer surface of the stems.

Then the hog and stems have to be faired so that the garboard plank (the one next to the keel) will lie in a smooth curve against them. Wood needs to be removed from the upper outer corners of the hog and also the stems, making a curved surface for the plank to glue to.

Wood also has to be taken off the outer edges of the frames, bevelling them so they have one flat face at the correct angle to allow the plank to lie flat on them. For this to work, frames 2 and 3 have to be on the front face of the moulds, and frames 4 and 5 on the aft face. If you got this wrong, break the glue joint between the hog and frame, and move them.

To know how much wood to take off, you need to know what a finished plank should look like. Then when you clamp the plank on for a trial fit, you will know that it is ready to glue.

When the plank is lying correctly, it is glued on, and when the glue sets it is planed flush with the outer surfaces of the stems. The edges of the plank where they meet the hog are also planed flat until the flat surface is 2 inches wide, and then the outer keel is glued on top.

The plank and its pair on the other side need to sit down on the hog and stems so that when planed after gluing it makes a continuous 2 inch wide flat for the outer stem and keel to glue on to.

This photo shows a centreline drawn along the hog and down the stems to help the fairing.

The planking is 9mm thick but the exposed face when planed down is wider, since it meets the stem and hog at an angle.

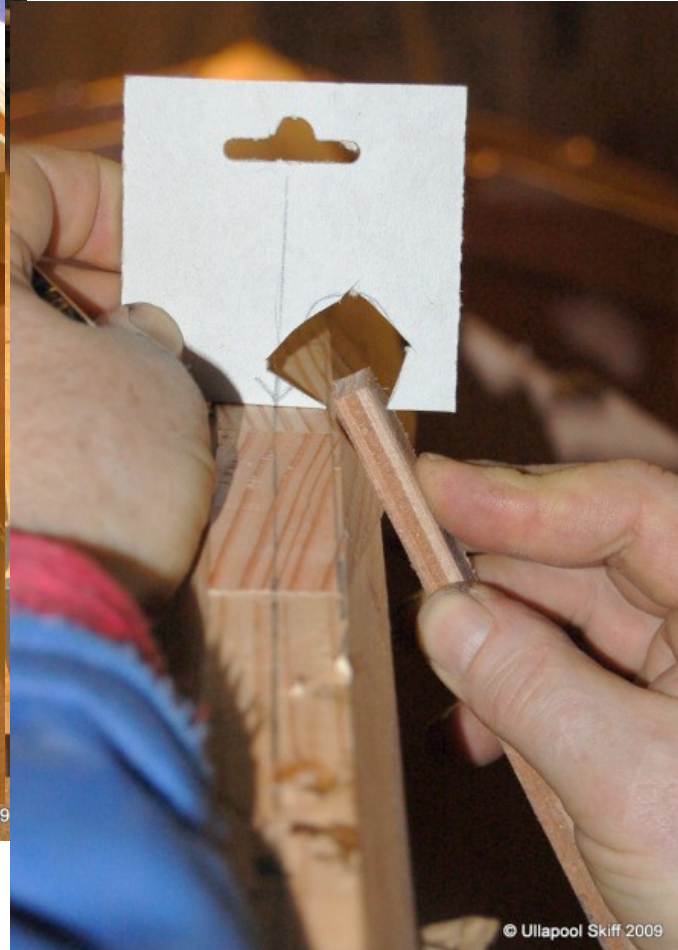
The stem has to be faired down until the outer face of the plank is 1 inch out from the centreline.

As the plank gets more and more horizontal near the middle of the boat, more and more of the top surface of the hog has to be planed away.

In the middle of the boat all the top of the hog is planed away, and when the planks are glued on and the top faired flat to take the keel, the hog is not showing at all. In other words at the middle of the boat away from the ends, the keel is glued to the planking only and not directly to the hog. In this picture the stem and keel are faired most of the way, and it can be seen that the top surface of the hog is being planed away as you go back from the stem.



A simple gauge can be made which makes it easier to tell if enough wood has been taken off.



The gauge has a centreline marked on it and then a chunk cut out to accommodate a scrap piece of ply laid against the faired surface. The point of the gauge at the bottom right which rests against the ply, is exactly 1 inch from the centreline. When the ply is planed flush the flat face will be exactly 2 inches wide, which is what we need to glue the outer stem on to.

Every time you clamp the plank on for a trial fit, look where it bears against the hog or stem, mark that point and then plane some wood off.

To make sure the plank goes back in the same place each time, mark where the centre frame meets it. If you take off too much wood, epoxy is wonderful stuff and will fill big gaps. Just make sure you thicken it enough to not dribble out.