

## Securing Freedom 21 Rubber Mast Boot in Place



The usual method for application of the rubber mast boot on UK built F21's is to clamp the tapered rubber mast boot to the mast and to the mast hole boss on the deck with stainless steel hose clamps. Leaving the mast boot clamped to the mast when the mast is removed and stored – see photo. However, since the mast hole boss is moulded with a significant draft angle, see attached sketch, the stainless steel hose clamp always rides up the mast boss when tightened and will not stay in place.

I fixed this by making-up an annular disk of cured GRP laminate, which was made to overlap the outer edge of the mast boss by about 5mm. This overlap prevented the stainless steel hose clamp from riding up the mast hole boss and ensured that the stainless steel hose clamp secures the rubber mast boot firmly in place. Since the annular disk will

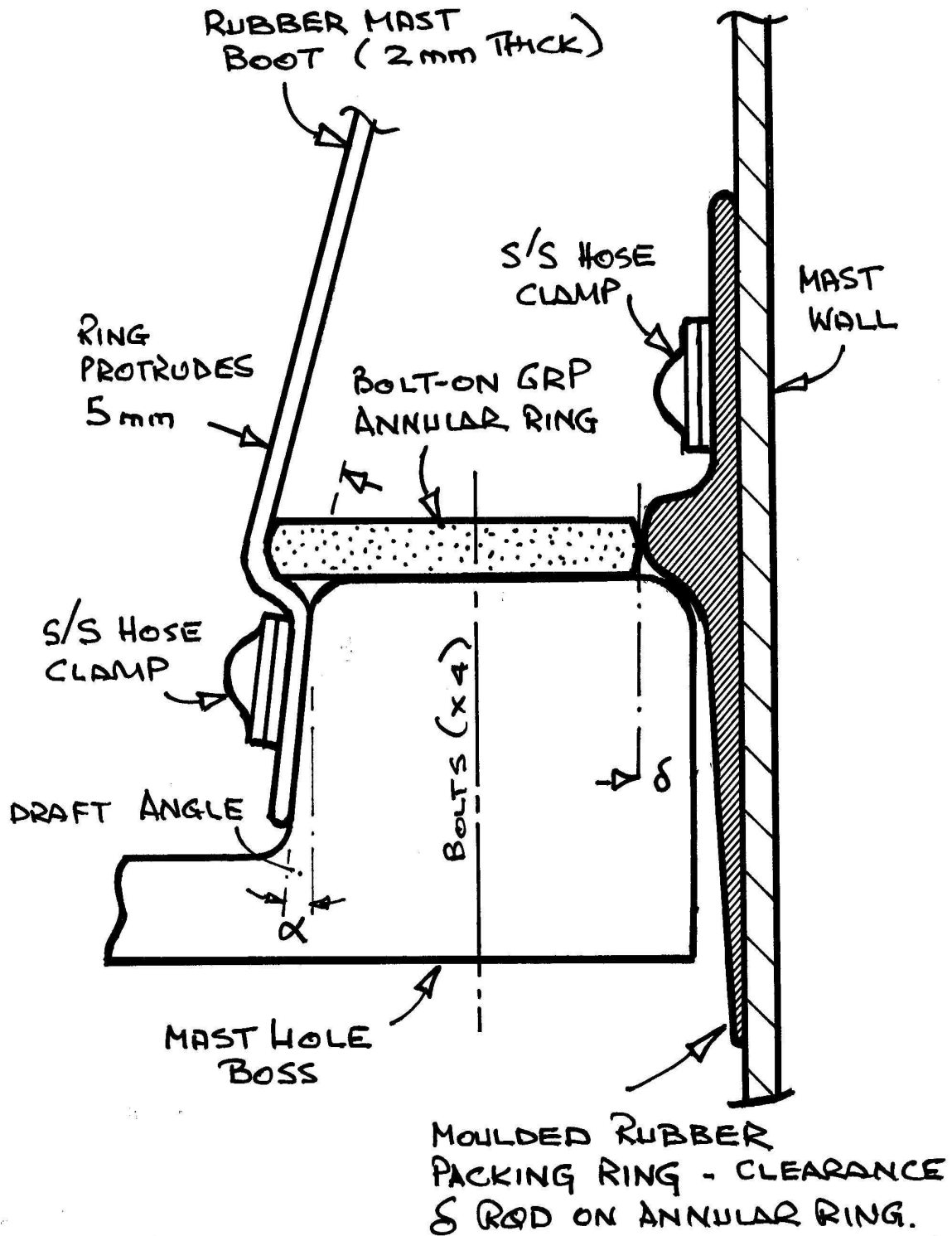
always be protected from the elements by the rubber mast boot it is only necessary to bolt the disk to the mast hole boss with 4 countersunk stainless steel bolts. The annular disc could also be made-up from phenolic resin/cotton cured laminate – not sure of USA trade names but the common UK brand is TUFNOL?

There is a clearance made between the inner edge of the annular disk and the mast hole since my boat has a moulded hard rubber packing ring that locates between the mast and the mast hole. Other owners use plastic or wood wedges to secure the mast in the mast hole and in this case it would also be advisable to have this clearance so that the wedges can bear on the mast & the mast hole.



Incidentally I made up my mast boot from free tractor tyre inner tube (about 2mm thick) with solvent-based rubber adhesive using my damaged mast boot as a pattern.

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✪ NOT TO SCALE