

Weatherproof Fairing for Freedom 21 Lifting Keel Pulleys

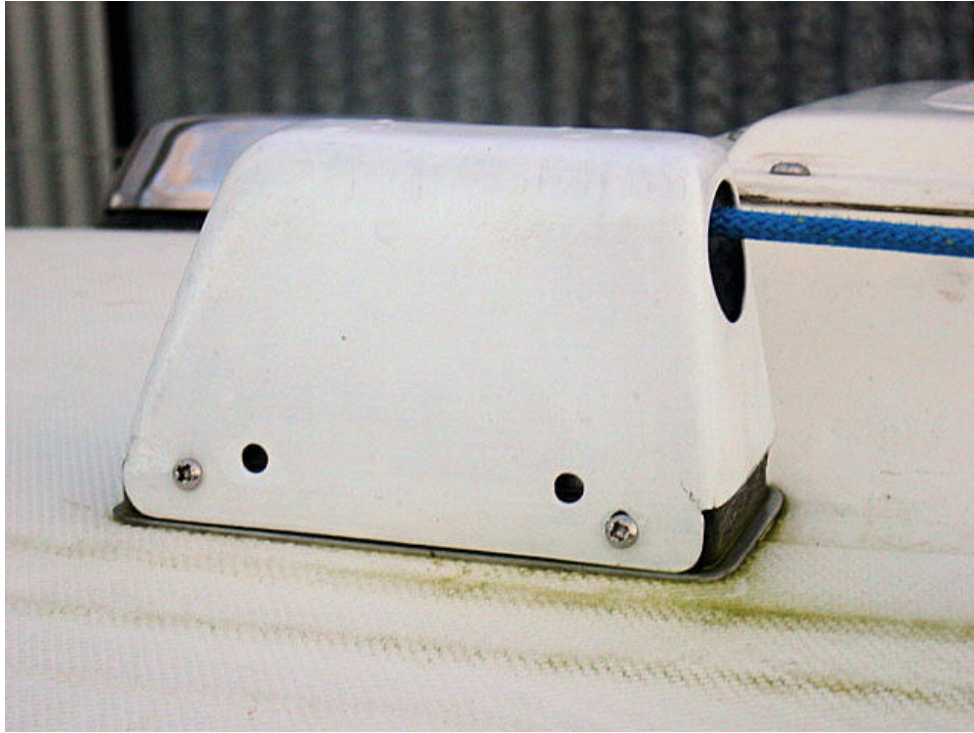
The UK-built Freedom 21 with twin lifting keels has a keel lifting arrangement that utilises the cabin roof mounted winches for raising the keels via a multi-part purchase block system and a lifting line that passes through the cabin roof and down to the keels. The turning block mounted on the cabin roof is open to the weather and rainwater can pass down the tube that carries the lifting line and enter the cabin. I was concerned that this arrangement also gave a possible route for rainwater ingress into the balsa cored cabin roof structure and I decided to make-up some bolt-on GRP fairings for the turning blocks.



I measured the turning block units and make-up a hardwood male pattern for the required fairing. The pattern was painted with 2-part polyurethane paint and waxed with a release wax to prevent adhesion of the wet lay-up epoxy/glassfibre laminate. To get a good finish on the component to minimise filling I used a fine weave glass fabric (7781style, 9 oz/sq.yd weight and 0.009" thickness) and applied 4 layers with a room temperature cure epoxy laminating resin.

Having made the pattern with generous draft angles the finished moulding was easily released from the pattern, sanded, filled and painted with 2-part polyurethane paint.





The turning blocks were fitted on wooden base plates and since these were slightly different in size it was necessary to cut the fairings so they located only on the sides of the base plates with small stainless steel self-tapping screws. The hole for the keel lifting line was carefully marked and cut out with a hole saw. I also drilled two small drainage holes in the outboard face of the fairings to allow any rainwater driven into the fairings by wind to drain onto the cabin roof.

The fairings were fitted with a light smear of silicone sealant to allow easy disassembly for servicing on the pulleys and replacement of the lifting line.

I find this to be a neat and attractive modification that serves to prevent water ingress onto the cabin and roof structure.

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21st October 2006