

Small gelcoat repairs

Removing redundant deck fittings also means having to fill the holes left by old fixings. David Parker shows how to make a neat repair

Modern electronics have made life much easier for boaters, but as they go out of date or get replaced they can also leave an unwanted legacy – holes in the boat.

I inherited several redundant deck fittings with my boat and loads of old wiring which had once powered them shoved under headlining panels. Fittings included a Differential GPS antenna (left over from when signals were deliberately degraded), a TV aerial, an external antenna for a chart plotter which no longer existed and unused deck glands. Removing the old fittings meant repairing the numerous fixing holes.

I decided to tackle all the old fittings and holes at once so I didn't have to repeat the various stages each time.

The most time consuming part of the job may be to lower a headlining to fit a deck patch underneath. A patch isn't essential and I have filled holes without one, but it does make a much stronger job and you can be sure it'll be watertight even if there's a failure of the cosmetic filler above in the future (typically, shrinkage cracks can occur if too much filler is applied at once with no reinforcement or the surface has not been prepared properly). The under deck patch also reinforces the holes should you ever want to add another fitting in the same place.

Materials

- Gelcoat filler
- Abrasive paper
- Masking tape
- Cleaner
- Patching material
- Filler or adhesive



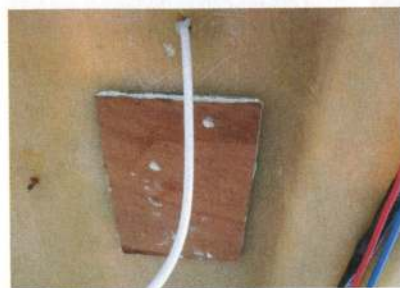
1 The removal of various old antennas left mounting brackets and cable glands which needed to come off too.



2 This was the location of an old cable deck gland. First clean the area thoroughly, in particular make sure all the old sealant is removed.



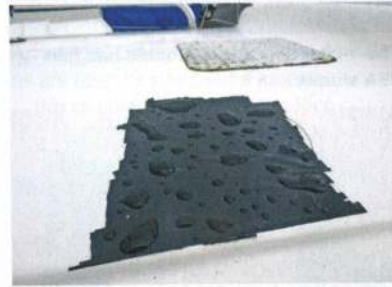
3 Use a solvent to ensure a grease-free surface and also keep the holes dry to ensure good adhesion when you come to fit the patch underneath.



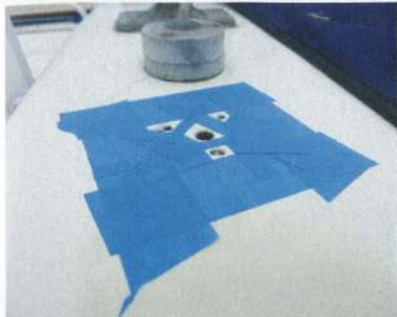
4 It may be necessary to lower the headlining to fit a patch. Here I used a piece of marine plywood bonded to the area underneath the holes with fast drying marine filler (see panel, right).



5 Lightly abrade the area around the holes with 240-grit paper and then ream the edges with a knife. This helps ensure maximum adhesion of the gelcoat filler. Clean out all swarf.



6 I wanted to make sure the adhesive filler on the patch underneath was fully cured before progressing so I moved on to preparing the other repairs. Taping this area overnight ensured no rain got in.



7 Next put masking tape around the holes. The collage of masking is to ensure broken edges around the original badly-drilled holes are also filled.



8 The drilling of these original holes was much neater and surrounding gelcoat had not been damaged. Taping up was therefore more straightforward.



9 Gelcoat filler is now mainly sold in tubes but a little goes a long way. This small 165gm tube has lasted well and will fill a lot of minor holes.



10 Follow the manufacturer's mixing instructions. For small amounts of filler shallow plastic container lids are ideal and should mean minimum waste.



11 Spread the filler proud of the area to be repaired: it will shrink marginally as it dries. It has a work time of about 8 minutes and cures in about 20 minutes.



12 Once cured the high points can be abraded down quickly with 60-grit wet and dry paper. Masking tape left on at this stage protects surrounding areas.



13 With initial sanding done the tape can come off, taking excess filler with it and revealing just the high points over the holes and damaged gelcoat.



14 Use 120- or 240-grit wet and dry to further reduce the filled area then move on to finer grits such as a 600-grit. I gave it a final smoothing with 1,000-grit.



15 The final jobs are to apply gelcoat polish and then a wax to seal it. This is the end result – a neat job that'll keep the weather out.

Attaching backing pads and patches



Marine plywood backing pads can be used for a variety of different repairs on board. I've tried various ways of attaching them including using two-part epoxy with fillers, standard adhesive, fast acting epoxy and adhesive sealant.

However the quickest and easiest way I have come across is to use two-part polyester marine filler. It is easy to mix up and I always keep a tub on board. What makes it particularly handy is that, when mixed, it has the

perfect consistency for spreading and a generously coated pad will then also bond to an irregular surface such as ungelcoated chopped GRP mat.

Furthermore, unlike the runnier fast-acting epoxy which you often have to hold in place, the thixotropic nature of the filler paste means that a light pad will more often than not stay in place of its own accord. It is also fast curing so if it does require pressure you only have to hold it there for a few minutes at most.