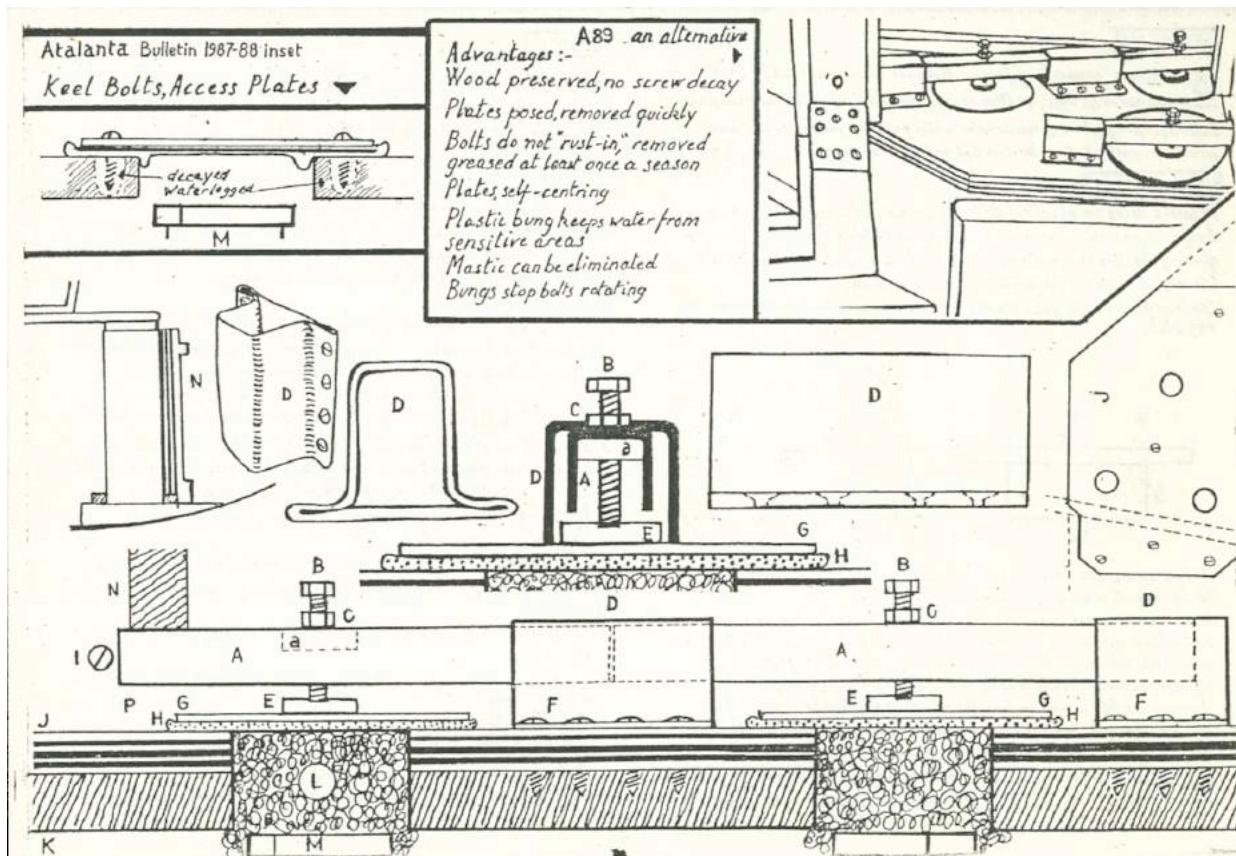




Paper Q1 Alternative Keel Bolt Access Covers

Bernard Upton A89 Colchide

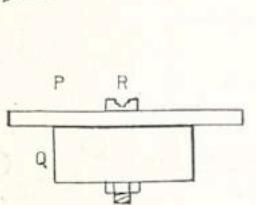


Materials

Polyurethane expanding foam; Hexagon S.S. screws $1\frac{3}{8} \times \frac{1}{4}$ (6);
S.S. wood screws, $1 \times 3\frac{1}{4}$, 40 (Housings); "Fibrodor" a product of Veneziani
Paints, impregnation of access holes before painting, hardens wood and
prevents water entry; British Col have similar product: Epoxy Glue.

Useful Tools

Flexible drive on electric drill $\frac{5}{16}$ chuck, 40" long, used with round
Surform, round rasps and sanding bobs to form the access holes after
gluing ply; Mounting clamp for electric drill, it can be fixed on bulk side;
Clamps, 4 or 5 very large mouth + 9 very small;
Centring bung, to pose Housings, U bar screws, Access plates in
register.



'P' the same diameter as access plate
'Q' the small wooden bung fits an access hole.
'R' the centre screw has a small depression drilled thereto and serves via its
screwdriver slot to line up centre of housings, the depression takes the U bar
screw and determines the correct position of bar for centre of plate.
Inches are conversions from metric and the UK trade may not supply similar
dimensions. A89 is 1000 km from the owner's home, which increased the time
taken for the work. To make and assemble in the workshop then fit in the boat
is more logical. A89 is sheathed in woven glassfibre set in Araldite epoxy;
the motor is a German diesel 10 h.p. with hydraulic driven folding prop.

Legend

- A 'U'bar, $7\frac{1}{2} \times \frac{3}{4} \times \frac{3}{8}$, walls $\frac{1}{8}$, (6).
- a Small stud piece, spot welded inside to increase threads.
- B Hexagon screw, $1\frac{3}{8} \times \frac{1}{4}$ diameter, (6).
- C Lock nuts, (6).
- D Housing for ends of 'U'bars, $2\frac{3}{8} \times 1 \times 1\frac{1}{8}$ + flanges, (6). Cut from box
girder, must have centre-line precise across access holes.
- E Nylon buttons, (6) dia: $1\frac{1}{8}$, depression in centres to seat pressure screw 'B';
they are glued to centres of access plates; cut from nylon bar.
- F S.S. wood screws, $1\frac{3}{8} \times \frac{1}{8}$ dia: nos: 40, to fix housings.
- G Access plates.
- H Plastazote grade P056, $\frac{1}{8}$ thick. Bakelite Xylonite, Croydon. Ref: Donovan
Service Manual, appdx1. A thin layer of Sealastic can be used between plate,
plastazote, keel box to stop 'sandwich' slipping when applying pressure.
- I Wood screw at foot of keel bolt 'U'bar, centres pressure screw on plate,
the 2nd bar bolts against the 1st and thus centres its screw on plate.
- J Wood ply cover plate $\frac{1}{8}$ thick, 20×12 , epoxy glued to box side, using
5 large mouth clamps + 3 small ones in each access hole, + 5 or more wood
screws in positions where clamp will not pass. Ref: Bulletin 1987/5, p26,
Tayford (A85). The box tops in forward cabin should be removed.
- K Original $\frac{3}{8}$ heel box ply.
- L Expanded polyurethane foam sprayed into access holes to form w/t bungs,
also hold water from access plates. Ref Bulletin 1986/7, p16. Late C. Wood (A78).
- M Keel bolt.
- N Diagonal Bulkhead showing a cut through which to slip plate J + 2 holes
for 'U' bars.
- O Bunk traverse cut away and replaced to permit 'J' to slip alongside box.

Materials

Marine ply $\frac{9}{16}$: 'U' steel bar about 50" long $3\frac{1}{2} \times \frac{3}{4}$, walls $\frac{1}{8}$;
Round nylon bar (or other plastic), $\frac{1}{2} \times 1$ diameter;



Paper Q1 Alternative Keel Bolt Access Covers

Bernard Upton A89 Colchide

