

Microplus 501 Explorer Sliding Door

Hi,

My name is Rich and I own a 501!

I'm an engineer, fisherman and keen woodworker when I get the time.

I've lost count of the hours I've spent trying to find parts for my 501 on the net, phone and in shops!

The Microplus forums have been incredibly useful in getting ideas from fellow members on what can be done with these great boats, trouble is there's no technical information on "How to".

This is where I may be able to offer some help and give a little back.

This is the first of these proposed pages (and my first stab at doing anything like this!) so if I cock up now and then take it easy on me cos I'm only trying to help!

Please feel free to ask questions but remember I am not a marine engineer and I have no affiliations with any websites I may suggest in these articles, they are purely sites I have used or found to supply the parts needed, feel free to brows them and make your own mind up.

Right that's all that stuff out the way (I wont go through it all again, promise)

A couple of notes before we set off.

Although it may look a tad daunting at first glance I have tried to include hints and tips to make it easy to follow step by step. The idea being not to memorise it all but use it as you go.

Green is advice and tips

Red are please don't ignore

Here we go.

Number One: 501 Explorer Sliding Door.

Background and thought process.

On the boat I purchased the door was in a bit of a sorry state, many years of opening and closing and size 10's trampling on the rail! Very Very wobbly. The basic principle was sound, the execution was however not!

It was a good idea to have a door that slid out the way opposed to a hinged door which by its very nature would stick out and swing about getting in the way.

Inside the cabin behind the helm was a GRP panel with two recesses moulded into it, this didn't seem to make too much sense, they were rather small and looked like it would be problem getting things (apart from maybe a tea towel) to stay put.

I was also racking my brain as to where I would fit the shiny new CD player, only one thing for it..... The GRP panel had to go; this left enough space to mount the player from the outside. (See pictures)



This shows CD player, bottom right, mounted. (Please excuse unfinished wiring) from inside cabin.



This shows CD player mounted, bottom left.

Parts list:

1 off 10ft (3 metre) length of 25mm x 25mm x 3mm U channel aluminium

-Online Approx£40 delivered from "the aluminium shop.com" (£25 min order)

1 off half sheet of marine grade ply

-local timber yard approx £20

1 off half sheet of white faced hardboard

-Local timber yard approx £6

9 off M6 x 25 countersunk bolts (stainless steel)

-Online £1 each +delivery from "tastynuts.com" I kid you not!!! Various colours available! ☺

5 Off M6 dome nuts

-online £0.18p each + delivery from sea-screw.com

4 Off M6 Nyloc nuts + M6 washers (as needed).

-as above

Self grip edge seal as needed

-online from northeasternrubber.com (various colours £1-£3 per metre)

Hook and loop tape

-eBay

Scrap of wood laying about and a couple of screws

Drop of glue

Tools:

Drill

Drill bits -6.5mm and 13mm

Jigsaw

Hacksaw

Tape and marker pen

Tape measure

13mm countersink bit (hex drive if possible, then you can use it with an extension, you'll see why later)

10mm spanner

Driver bits to suit bolts

Getting Started, The Door

Remove existing door, hinges, rails etc!

Remove GRP panel.

Measure width of door opening, door will need to be 25mm-50mm wider than the opening (bear in mind that if you over allow for width here the door will project to far when open, ideally you need 40mm projection with door open, this gives enough room to fit a handle!)

Play with a tape measure to find what suits, when door is opened fully it will contact top left hand corner first, this is where you need to measure from you will see a vertical flat just above a curve where the GRP panel used to mount that runs the width of the cabin, this is where the top rail will mount later.

Measure the height of the door opening from the top of the GRP step at the bottom of the door right up past the top of the opening to the top of the flat mentioned above, take away 10mm (this allows for the thickness of the channel section we will use later and 3mm clearance for the door)

You now have your door dimensions!!!! Just make sure you use 18mm stock when making your door. (Other size stock can be used but rail material must be ordered to suit it. I chose 25mm x 25mm x 3mm channel because this leaves a 19mm space in which to fit the door which is 18mm thick)

The 3mm wall thickness is also strong enough to cope with a bit of bashing.

The cheapest door can be cut to size for you at most timber yards or DIY superstores in the UK (B&Q Homebase etc) or find a good woodworker!!! Wink wink! ☺

The Rails:

You will need your door made before continuing

Ok, now you have a door to fit.

Refer back to the flat you used to measure for the door width, measure it wall to wall and take away 50mm, trust me, any less and you wont be able to fit it later.

Cut two lengths of your channel section to this size.

Bottom Rail:

Lay one length of the cut channel so it sits on the little lip (step) on the cabin side of the door opening.

It will run parallel to the sink unit base (if fitted) look along it's length to make sure the door will clear the lip of the sink when fitted (you want to be able to slide hardboard between the door and sink) I had to trim the edge of the door aperture to allow the rail to move sternward, thus creating enough clearance!

Mark four equally spaced positions in the bottom of the channel section above the door lip (our fixing points)

This is the awkward bit, measure the space from the underside of the channel to the floor behind the sink, this is for the wooden block support. It's not easy but important, to loose and the weight of the door will push down in this area and could break the lip on the door at the opposite end of the rail. NOT GOOD!

Mark two positions to fix wooden support at the point you measured the space.

Top Rail:

Hold top rail in position (I used a couple of spring clamps) mark five convenient fixing locations where you can fit mounting screws (they will protrude through the wall so check both sides!!)



You can see the location of the bottom rail and three of the top rail mounting holes here.

Top and Bottom Rail Preparation for fitting:

In bottom rail drill the four fixing holes 6.5mm and countersink so that a 6mm csk screw sits just below the surface of the channel section face (**Proud will foul door bottom**)

Drill and countersink the wooden block fixing holes, cut block to length, screw and glue into place

I used a ½" countersink bit on an extension so the drill chuck cleared the inside faces of the channel.

In top rail drill the 5 fixing holes 6.5mm. Drill from the front face all the way through the back face.

Open up the holes in the front face to allow your countersink to pass right through (**this allows you to countersink the inside of the back face**)

Countersink the inside of the back face to suit a 6mm csk screw.

Remove any sharp edges with a file and finish with abrasive paper.

(Everything needs to be nice and smooth to prevent door fouling)

The rails are now ready for fitting.

Fitting

Place bottom rail into position and check it sits flat on the door lip and that the wooden support block sits correctly.

Drill through the four countersunk holes and fix bottom rail into position using M6 screws (**check screw heads are flush or below surface of channel section**)

Put top rail on door first then slot both into position on lower rail.

With door in position you will easily see if any adjustments are needed to the flange that runs around door aperture.

With door centred in rail drill a fixing hole at either end of rail (**lift rail 2mm for clearance**) bolt hand tight into position. Look along length of top rail and check it sits flush against the flat part of the GRP

(make a note of this). You may need to use washers (as I did) to compensate for any deviations in the surface and to ensure the rail is not distorted when tightened up.

Check door operation

With the top rail supported at either end it's easy to slide door clear and drill the remaining three fixing holes.

Insert all bolts, fit washers and push into place (this is where your wife/mate/kids will be needed)

I used dome nuts when fixing for a better finished look

Tighten, test and admire your handiwork!! 😊



Finished door

Door Cover Panel:

The door cover panel is white faced hardboard which I found to be thin enough to slide between the door and sink unit easily cut to shape and clean looking.

I would advise making a cardboard template before cutting the hardboard, take your time and trim a little off at a time; you will get there in the end!!!

Use the hook and loop tape (Velcro) to attach the panel into position and fitted rubber edging to finish



I hope this article has been of some use to you, I have tested the techniques described earlier but cannot accept responsibility for your boat, If you have ANY DOUBTS, DO NOT START WORK! Contact me first!

As you will have seen, my boat is very much a “work in progress” at the moment.

Some planned works include refitting the outside under seat storage cupboards and refitting the cabin cupboard with new door, top and shelves.

Any suggestions / comments are welcome.

Good luck and happy sailing!

Rich