

ADDRESS

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Advice Notes On Paddle Assembly:

Please treat this as practical advice, rather than explicit instructions. If you want further help before starting, please contact your supplier.

I say to contact your supplier as these notes will equally apply to any type of paddle.

But, read all of this beforehand and get everything to hand before you start any of it, or you could be sorry.

Please note, these blades (supplied by me) have been machine prepared to go directly into the shafts supplied with no further preparation.

This is not how they are supplied from the manufacturers, but I feel I am better suited to prepare them without the risk of damage which makes assembly a lot easier for you.

You are recommended to use an epoxy adhesive such as Araldite Rapid. Everything about this type of product makes it perfect for the job. There are lots of other makes offering similar products, but in general, you want it to have the following words somewhere in the description:-

Epoxy, Adhesive, Rapid / Quick



This pack will have enough adhesive to assemble at least two sets of paddles with some waste if you are not too silly.

Why not use regular epoxy adhesive ?

Well, for a start it takes at least 12 hours to cure. In that time, you could knock your paddle and accidentally change the feather between the blades without knowing. If there is something to blame the dog/child for – this will be it !

The adhesive is thinner and has a greater chance to leave gaps between the spigot and shaft – weakening the overall bond.

The regular epoxy adhesive has a slightly stronger bond strength but is more resistant to heat. Therefore, if you ever need to remove the blade from the shaft without cutting the shaft, it will be much harder.

Why not use regular epoxy ?

Regular epoxy resin requires very careful measurement and can sometimes have a very short working life before it becomes unusable through a chemical process called exotherm – where enough heat is generated to distort the shape of a baked bean can (if you use that as a mixing pot) ! There are all sorts of dangers here beside burning, allergic reactions, hazardous fumes as well as strict rules for the disposal of chemicals.

Apart from that, regular epoxy resin is pretty thin in terms of viscosity, and you'll get awful runs of resin which will be seriously difficult to clean up – especially after it's gone hard.

Trust me. Don't use regular epoxy resin.

Make sure you are well prepared as you will not have much time once the two parts of the adhesive are mixed. The air temperature will have a lot to do with this, as well as the proportions of the 'resin' and 'hardener' you use (usually an equal amount of each). Generally two things will remain constant here.

1. The hotter the temperature, the quicker the mix will go off.

2. The more 'hardener' you use, the quicker the mix will go off.

In both the above options, you have the great potential to drive yourself to distraction and possibly cause an expensive mess that you may have the option to be able to put up with, while all the time you will find you have to explain why your paddle blade sticks out of the shaft so much or why there is a really odd feather between the blades.

If you get the proportions badly wrong with the rapid adhesive, then other things will happen, but providing you mix it well enough, even with the smallest amount of hardener, it will go off – eventually.

There are actually so many ways you could get this wrong, better for you to ask me in person when you've got a drink and good comfy seat so you can laugh at other people's misfortune in comfort.

So - Read the instructions prior to use on any new substances. They are not difficult or complicated to use and it will take just a few minutes to read – and possibly save you an expensive or messy mistake which could have otherwise been totally avoided.

Use protective gloves. Even the kind used at petrol stations will be better than nothing. You probably don't use epoxy enough to know if you are allergic to it, and wearing gloves will make you a lot more careful with where you put your hands to save spreading the adhesive all over the place.

Use a suitable work area. The following are not suitable and will get you in big trouble: Kitchen Worktop. Car Bonnet or back of an estate car. Inside a Caravan or Motorhome. Inside your bedroom or the living room. Any part of a Swimming Pool. And not in the Rain !

Check thoroughly your required length of paddle before cutting the shaft as you will be entirely responsible for any mistake you make. You only need to cut one end of the CPS shafts.

You should use a course 60-80 grit paper to rough up the inside of the shaft at both ends after cutting to your required length.

Re-measure the whole paddle assembly before any adhesive is used ! In practice, if you cut it 1cm too short, you could easily leave 5mm gap at each and without too much problem, and that's a lot cheaper than buying a new shaft !

Now, this may sound silly, but 110cm is very different to 101cm. On a tape measure, you can easily make that mistake.

Measure and Check Twice – Cut Once !!!

Fit the Control Hand end First. So, if you paddle right handed, it's the Right Hand Blade. Mark the blades with tape and writing if you have to, but if you get this wrong, you will be very sorry !

Dispense only as much adhesive as you need for one blade at a time. Fix it, then let it set before moving onto the second end.

Mix the adhesive thoroughly for at least one minute.

Apply the adhesive to the inside of the shaft all around the tube to approximately 3-4cm down the inside.

Apply adhesive to the spigot of the blade (the part which enters the shaft) – all the way around, rotating it all the time, or it will drip adhesive on your very expensive trainers/living room carpet. Insert the blade, removing any excess with the application stick before it drips off.

Once the first blade is set, fit the Control Hand Grip by peeling off the orange backing tape and fit it in your own required position (usually in-line with the spine of the blade 2-3 cm down from the end of the shaft at that end), by applying normal grip pressure along its length.

Wrap two layers of electrical tape at each end of the grip to secure it in place. This will normally be sufficient to last as long as the paddle. The double sided tape on the underside of the grip is very strong and shouldn't need to be replaced if you apply it dry.

Pull off approximately 6cm of electrical tape and wrap it gently around the joint of the blade and shaft that you just put together. This will help it stay put while drying. If you left too much adhesive, then this will be a sticky mess, so remove any excess first.

For the cleanest finish use a paper towel to remove the excess you can't take off with the application stick, then have a little acetone on another piece of paper towel to wipe off the remaining adhesive.

When fitting the second blade, it's usually a good idea to have your previous paddle handy as a guide to set the feather (angle between the blades). Even if you wish to change the feather slightly or the blades are a different shape, it will still help as a guide, and could save you making them up with a left handed feather !

In practice most people will not tell the difference in angles less than 5°. Most common are 90°, 85°, 80° and 75°. 100° (for example) probably means someone made a mistake and decided to put up with it, but in practice, this puts more strain on the wrists and requires more rotation for every stroke pulled.

Make sure the second end of the shaft is roughed up on the inside – most people will forget this and this accounts for why most people's paddles spin !

Test the feather before the adhesive finally sets or you could have your feather at 100° instead of 80° for example.

Fit the Second Blade as you did for the first, but not making the same mistakes (if you made any)!

Then stand it somewhere securely out of reach, where your overly enthusiastic dog won't think it's a new treat from the vet (on account of it not smelling tasty), or a young child who wants to start playing polo way before their time !

It's not a race to assemble a paddle. Do it right in as much time as it takes and enjoy the product of your efforts.

Warnings

This is an aggressive sport, but if you look after your equipment, then it can give you long and reliable service.

Maintenance is essential every so often, but if you leave things too long, then it becomes more difficult to maintain, and then you have to start considering how to 'Repair' rather than how to 'Maintain' your kit.

Throwing your kit around will damage it !

Standing on, or running over it with bicycle or a car, will not help either, nor will banging your paddle on your boat in frustration for something, and the average goal frame will always be stronger than the average paddle blade or shaft from repeated hard impacts, which will have an obvious outcome.

If you feel there is likely to be a manufacturing problem with your kit, then speak to your supplier, passing on the serial number of the blades will be an essential part of this.

Clyde Hammond. January 2017