Special Feet Options

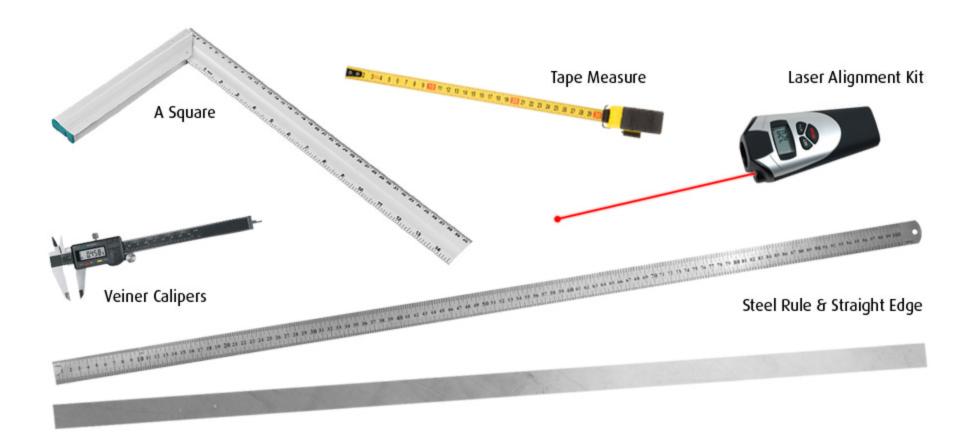
Are you replacing an old engine with a new Beta Marine engine?

Beta 'Special Feet'

'Beta' engines have been fitted into thousands of yachts around the world with our standard engine feet. However engine bearers 'can' and 'do' vary from our standard, so we offer our unique service of designing and manufacturing "Special Engine Feet" to suit your engine bearers. It becomes so much easier when replacing your old engine when your new engine just drops onto your existing engine bearers and lines up with your propeller shaft. We have made hundreds of "Special Feet" over the years and not only do they look better they can substantially reduce the time and installation costs.

Engine Bearers

The engine bearers that you have in your boat should 'extend as far forward and aft as possible, be well braced and securely fastened to form an integral part of the hull'. It is simplest if they provide a solid mounting position that is parallel to the propeller shaft, but very often there is very limited space available and the engine bearers can be stepped; horizontal to the waterline (with down angled gearboxes), or a totally unusual design. There are some very capable marine engineers who redesign engine installations, so sometimes there are very challenging measurements to take.



How Does It Work?

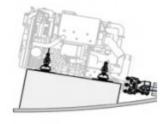
- 1. You need a copy of one of our 'Special Feet' forms that is the closest layout to your installation/situation. You can select and download the appropriate drawing, or we can post a copy to you.
- 2. You now need suitable tools to measure, generally a good tape measure and a couple of straight edges, or a laser beam, etc... so that you can take all the necessary measurements from your boat for us to design and manufacture your Special Feet. We just need to accurately establish where the engine bearers are relative to the propeller shaft, and measuring is always much easier with the old engine removed. **IMPORTANT!** Normally the engine bearers and propeller shaft are parallel, but this is not always the case. All measurements are taken from the propeller shaft (the datum).
- As soon as possible please send us the 'Special Feet Form' with all your measurements clearly legible, either by email, post or fax. Alternatively once you have
 collected all your data, you now have the option to enter your measurements and send them directly to Beta Marine via our online forms (please don't forget to include
 your name and contact details on the form).
- 4. a) We use the dimensions that you have given us to create a drawing of your special feet; and we then send the drawing to you for careful checking and require you to
 - b) When you return the drawing to us that you have signed off as correct; your payment is committed and we will manufacture the 'Special Feet' exactly to the dimensions that are on the drawing.
 - If you find a problem then contact us with the correct measurements and we will revise the drawing until it is correct, but we charge for each set of special feet supplied. Where possible we will fit them to the engine, but if they will not fit in the engine shipping skid we will send the feet loose and fit standard feet. All bolts will be provided to fit the special feet to the engine. You will need to drill and tap new holes for the flexible mounts unless you have the same bolt holes as the mount drawings below (please note the engine size).

Where Do I Start?

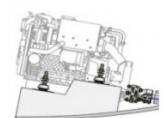
Below we list out the most common installations that a boat builders will often use to install an engine. Once you know the type of installation you have, click on the relevant link below to see a step-by-step guide on how to measure your engine mounts correctly.

Beta Marine cannot be held responsible for the incorrect fitment of an engine due to incorrect measurements being supplied to us. If you are unsure on which installation you currently have, please contact us before filling out any of the special feet forms, and if possible supply a photo or installation drawing so we can advise you on the best course of action.

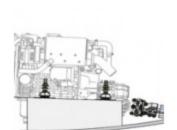
Normal Installations – Engine Bearers Parallel to Propeller Shaft



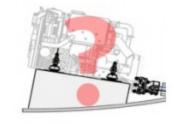
Stepped / Split Level Bearers – Engine Bearers Parallel to Propeller Shaft



Down Angle Gearbox – Engine Bearers NOT Parallel to Propeller Shaft



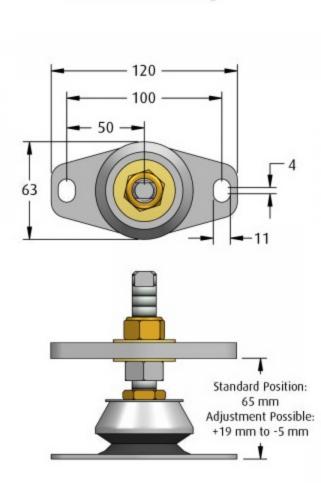
Alternative Installations
– Please Contact Beta Marine



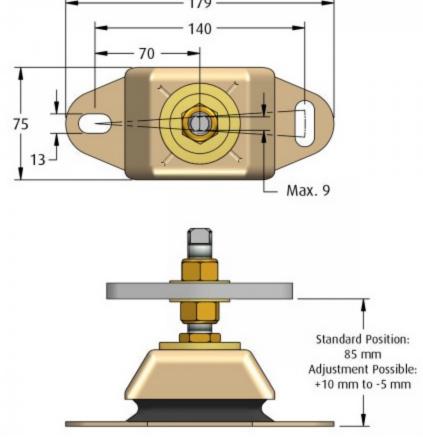
Flexible Mountings

We supply 'Flexible Mountings' with all our engines as standard. Correctly installed, the flexible mountings will isolate the majority of the engine vibration from the boat. Our flexible engine mounts are adjustable for height and width.

Beta 10 to Beta 38 Small Flexible Mountings



Beta 43 to Beta 150 Large Flexible Mountings



Engine Pads

If the flexible mountings are wider than your engine bearers, Beta Marine can supply solid mounting pads that fit between the flexible mountings and your engine bearers.

Marine propulsion engines are often installed at an angle (dimension J). Please note the maximum angle of installation is 15 degrees, however we recommend that this angle is kept as low as possible (by using a down angle gearbox for example).

Otherwise you will need to take careful attention to oil levels and dipstick markings, quantity and water filling (expansion bottle). If you have any doubts please speak to Beta Marine for help.

