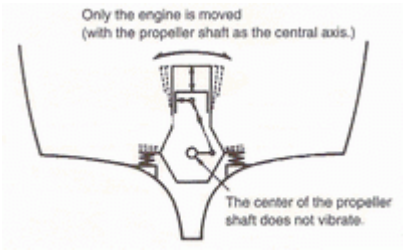
Yanmar Engine Mounts

Firstly, let us make sure we understand that, working from the bottom up, the engine beds, the flexible engine mounts and the engine mount brackets, are separate identities. You **SHOULD NOT**, however, modify the engine mount brackets (the pieces of metal that stick out from the engine that sit on the flexible mounts) so that the distance from the center of the crankshaft to the mounting hole is different from that supplied.

Flexible engine mounts placed between the engine mount brackets (part of the engine) and the engine beds (part of the boat) considerably reduce noise and vibration.

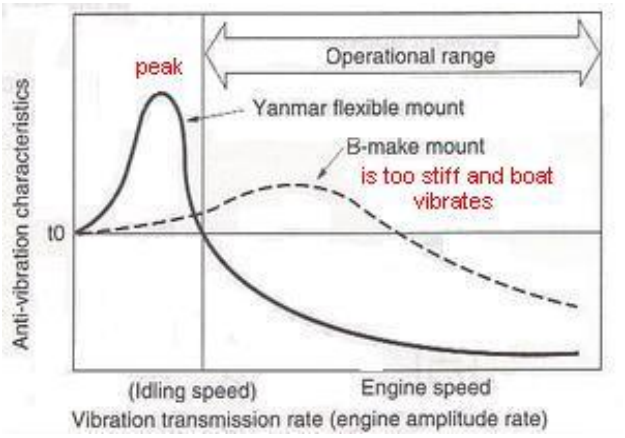


The selection and position of flexible mounts is important for effective dampening.

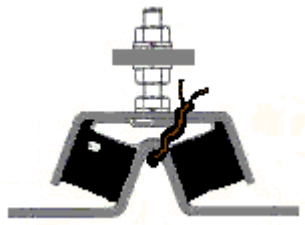
Flexible engine mounts supplied as Yanmar accessories and listed in the original Yanmar brochure and in the parts books as optional parts, are extensively assessed and tested by Yanmar before they are included as a Yanmar part. In my experience, these mounts, fitted as originally intended, are a perfect match for the engine.

From the above picture you can see that a properly mounted engine will always rotate around the crankshaft centerline. If a mount bracket, or brackets, are extended the engine will screw itself around the centerline causing the alignment to be thrown out as soon as the load is applied. It would be like giving ' Long John Silver ' one long and one short crutch to walk with!

Sometimes a customer will complain that the engine mounts are too soft, here's why they are as they are: If the mounts are replaced with stiffer mounts the peak amplitude, as shown on the graph on the right, moves further to the right, above the idle RPM. Vibration becomes very noticable. If your boat vibrates while coming into a bay or the dock, the engine mounts may be too stiff (or faulty, the idle rpm is set too low, the engine is not aligned correctly, the prop is crook, the shaft is bent, etc.). Do not operate the engine in this rpm range until the problem is fixed as the engine may eventually fail. Also, you can see from the peak amplitude point on the diagram that the engine really bounces around as it comes to a stop. **This is normal.**

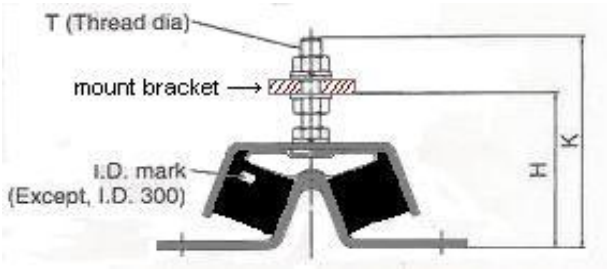


Offshore safety tie



The mount on the left is the type used under 2GM to 4LH series engines, if you need to pass a Cat 4 inspection for off-shore, put a wire or small chain through the centre 'nose' and over the top of the top metal piece and 'Talurite', crimp or u-bolt the ends together. I have never seen this mount fail because the bonding failed from reasonable use. The failures were always incorrect installation, age, or they became covered in diesel.

Mount Dimensions



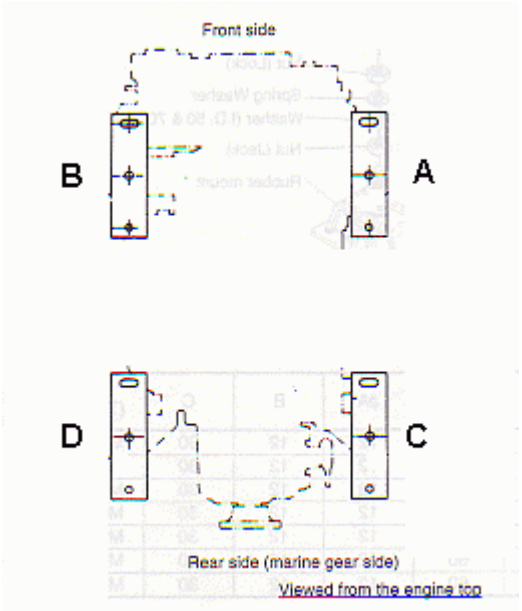
This drawing is for GM, HM, JH and LH series engines. The bottom table has the dimensions for these mounts.On all models, try and keep the engine foot or bracket closer to lower end of dimension 'H' if possible.

Type	I.D. Mark	H		K	L	P	W	øA	B	C	T (Threaddia.)
		Min.	Max.								
GM HM JH and LH series	50	92	102	140	160	128	50	12	12	30	M14 X P1.5
	70	92	102	140	160	128	50	12	12	30	M14 X P1.5
	75	100	110	145	206	174	60	12	12	30	M16 X P1.5
	100	100	110	145	206	174	60	12	12	30	M16 X P1.5
	150	100	110	145	206	174	60	12	12	30	M16 X P1.5
	200	100	110	145	206	174	60	12	12	30	M16 X P1.5
	300	100	110	145	216	184	60	12	12	30	M18 X P1.5

Flexible Engine Mounts - Positions

When you look at the engine mount positioning drawing you may think it is not laid out in a logical order. Remember that Japanese writing is right to left, down the page, so it's half right for everyone. Check the Dimensions chart for the I.D. code for your engine.

Engine mount I.D. code position



Engine model	A	B	C	D
1GM10(V)	70	70	50	50
2GM20(F)	100	100	75	75
2GM20(F)V	100	100	100	100
3GM30(F)	100	100	75	75
3GM30(F)V	100	100	100	100
3JH2 series and 3JH3E	100	150	100	150
4JH2 series and 4JH3E	150	200	150	200
4JH3-TE /HTE /DTE	200	200	200	200
4LH series	300	300	300	300
6LP series	RED	RED	BLUE	BLUE
6LY series	600	600	600	600

Voor 2GM20F: 124772-08341 100

Flexible Engine Mounts - Installation Tips

- The elastomer must not be twisted after the top nut is torqued up.
- 1 full thread must protrude from the top of the nut after the top nut is torqued up. (If not a spacer should be placed under the mount).
- If possible, the engine mount bracket should sit as low as possible on the mount to increase the mount life.