



QUESTIONS AND ANSWERS ABOUT ISOFLEX ENGINE MOUNTS

Q: Are the standard mounts supplied with my engine configured to my particular installation?

A: NO, in our experience mounts supplied with your engine are generic i.e. they are supplied with a particular model engine however the gearbox reduction can differ which results in different thrust figures which in turn results in varying amounts of axial movement. The same engine can also be fitted into a variety of different craft that have different requirements and working conditions.

Q: How important is axial movement?

A: For most installations that have down angle, drop centre or vee drive gearboxes we only want the engine axial movement to be 3mm maximum. Working within this tolerance will ensure that the true shaft half coupling alignment to the gearbox output flange will be maintained under maximum applied thrust. This reduces vibration and wear on seals and bearings.

Q: Are Isoflex mounts generic?

A: NO, Isoflex mounts are supplied on a custom basis i.e. the gearbox configuration being either in line, down angle, drop centre or vee drive, placement of the mounts, support of the bell housing, the applied thrust and working conditions are taken into account.

Q: Are all engines four point mounted?

A: NO, applied power and configuration may require four, five, six, or eight point mounting to achieve the required axial movement while still reducing the engine vibration levels throughout the rpm range. We prefer six point mounting with down angle, drop centre, or vee drive applications.

Q: What technical information is available that is relative to my particular installation?

A: Data sheets can be supplied that give Axial Load vs Deflection and Thrust (shear) Load vs Deflection. In house software can model Attenuation (vibration reduction) levels. Installation drawings in 2D and 3D formats are available.

Q: What are Isoflex mounts made from?

A: Isoflex mounts and couplings are manufactured from an engineering grade heat cured polymer alloy exhibiting excellent physical properties and high resistance to oil, fuel, water and hydraulic fluid.

Please note: due to their inherent construction Isoflex mounts and couplings electrically isolate the engine from the engine bed and drive train.

Q: How important is the actual installation of Isoflex mounts into the vessel?

A: Due to their static nature the installation is critical to the life expectancy of the mount. Fabricated engine bracketing can be out of alignment to the engine bed. Soft rubber type mounts can be more forgiving in this area - the down side is that they allow too much axial and horizontal deflection. It is IMPERATIVE that the top of the engine bed is parallel to the base of the engine mounting bracket in all planes to avoid any pre-load on the Isoflex mount base, stud and core material.

Q: How should we place the engine mounts on the engine and transmission?

A: All of the engine mounts used in an installation should be placed on or as near as possible to the crankshaft centreline. If the engine needs to be raised or lowered to the hull, the engine mount to bed base must be adjusted to obtain the necessary relationship with the crankshaft centre line.

Q: Will Isoflex mounts retain my engine should the vessel be in a 360 deg roll.

A: YES, the Isoflex mounts are designed to hold your engine in a fully inverted situation however you must ensure that they are attached to the engine bed's in such a manner that allows the mount to stay in place.

Q: Should I periodically check my engine mounts.

A: YES, most rubber type mounts should be checked every six months for compression and deflection which in turn effects shaft alignment. Isoflex mounts should be checked every twelve months for uneven compression of the cores, fastenings to engine beds and fastenings to engine brackets.

Q: Are Isoflex mounts highly resistant to diesel, petrol and normal engine lubricants.

A: YES, however the studs, nuts and washers are "Chromate Zinc Plated to ASTM B633 SC standards" however, over a period of time they may suffer from corrosion. We recommend that a waterproof grease or clear spray type protective coating be applied to the stud, nuts and washers every twelve months.