

Marine Notice No. 26 of 2012

Notice to Small Craft Owners, Users, Manufacturers and Repairers

Outboard Engines Installed on Small Craft

This Marine Notice is primarily addressed to small craft owners, users, manufacturers and repairers. The purpose of this Marine Notice is:

- 1. To raise public awareness about the different types of outboard engines for use on small craft in view of recent Marine Casualty Investigation Board (MCIB) reports, concerns of the public and in the interest of maintaining safety standards.
- 2. To draw attention to the different ways to install outboard engines on small craft.
- 3. To highlight the EU legislation that outboard engines must be in compliance with.

Different Types of Outboard Engines for Use on Small Craft

There are three types of outboard engines for use on small craft:

- Two-stroke or four-stroke spark ignition (petrol);
- Compression ignition (diesel);
- Electric.

The majority of outboard engines are of the spark ignition type.

Different ways to install Outboard Engines on small craft

An outboard engine may be directly mounted on the transom, or may include a fixed or lifting bracket.

The manufacturer should recommend the maximum power and weight limits for outboard engine(s) that may be fitted on a small craft.

The transom of a small craft should be strong enough to support the weight of the outboard engine(s) and the resultant forces when propelling the craft ahead or astern and manoeuvring at maximum power.

Depending upon the shape, angle and/or construction of a transom, the installation of a bracket allows an outboard engine to be mounted on a transom at the optimum position for thrust and manoeuvrability performance. In addition, a lifting bracket assists the user to raise an outboard engine clear of the water and any obstacles.

The manufacturer of a fixed and lifting bracket made available on the market should recommend BOTH a maximum power AND a maximum weight for an outboard engine that may be mounted on the bracket. Particular attention should be paid when fitting a four-

stroke outboard engine – the engine power should be within the maximum power limit of the bracket AND the weight should not exceed the maximum weight limit of the bracket.

EU Legislation with which Outboard Engines must Comply

All outboard engines made available on the market since 1 January 1995 come within the scope of the Machinery Directive¹ that harmonises the health and safety requirements for the design and construction of machinery, and since 1 January 1996 come within the scope of the electro-magnetic compatibility (EMC) Directive², the objective of which is to create an acceptable electro-magnetic environment in the European Union.

<u>In addition</u>, outboard engines installed on craft intended for sports and leisure purposes are required to comply with the Recreational Craft Directive³ relating to the owner's manual, the handling characteristics of craft, outboard engine starting, and exhaust and noise emissions, as follows –

- 2-stroke outboard engines since 1st January 2007;
- 4-stroke outboard engines since 1st January 2006.

Frequently Asked Questions

How do I know if a craft complies with the Recreational Craft Directive?

- If a craft is affixed with the CE marking, the manufacturer is indicating that he takes responsibility for the conformity of the craft with the Recreational Craft Directive **and** any other applicable Directives.
- When a craft is made available on the market it must be accompanied by a Declaration of Conformity declaring that the craft satisfies all the essential requirements of the Directive.

How do I know that an outboard engine complies with the Recreational Craft Directive?

• The outboard engine is affixed with the CE marking **and** is accompanied by a Declaration of Conformity declaring it complies with the Recreational Craft Directive.

Where can I find the CE marking on a recreational craft?

• Look for the Builder's Plate. The Builder's Plate should be visible from the helmsman's position and marked "CE" (see example of a Builder's Plate below).

¹ For more information on the Machinery Directives see following link: <u>http://ec.europa.eu/enterprise/sectors/mechanical/machinery/</u>

² For more information on the electro-magnetic compatibility Directives see following link: <u>http://ec.europa.eu/enterprise/sectors/electrical/emc/</u>

³ For more information on the Recreational Craft Directive see Marine Notices <u>No. 45 of 2011</u> and <u>No. 56 of 2011</u> and the following link: <u>http://ec.europa.eu/enterprise/sectors/maritime/documents/recreational-craft/</u>

How do I know the maximum size outboard engine(s) that is recommended by the manufacturer?

- Look for the Builder's Plate. The Builder's Plate should be visible from the helmsman's position and marked with the manufacturer's recommended maximum load including the mass of the outboard engine, persons and luggage, etc. (see example of a Builder's Plate below), **and**
- Consult the Owner's Manual. The manual should contain information on the maximum recommended engine power (Kw), and the maximum recommended engine mass/weight (kg).

Recommended Do's and Don'ts

DO -

Check Builder's Plate for information on the maximum size of outboard engine(s) allowed.

Check Owner's Manual for information on the maximum engine power and engine mass/weight of outboard engine(s) allowed.

Check that the transom is structurally sound.

Check, if fitted, that the outboard bracket is sufficiently strong, both for the power <u>and</u> the weight of the outboard engine.

Check the condition of outboard brackets from time to time to ensure that they remain fit for service.

DO NOT -

Install an outboard engine of a power and/or weight in excess of the manufacturer's recommended limits as to do so may adversely affect the transom structure, stability, buoyancy and handling characteristics, and put at risk the safety of the persons on board the craft as well as other small craft users.



Example of a Builder's plate for a small craft powered by an outboard engine

Manufacturer's name

Boat design category

Maximum persons capacity

Manufacturer's recommended maximum load including the mass of the outboard engine(s) but excluding the mass of the contents of fixed fuel and water tanks when full

CE Mark and Notified Body's identification number (if applicable)

Director General, Maritime Safety Directorate, Department of Transport, Tourism and Sport, Leeson Lane, Dublin 2, Ireland.

22/05/2012

For any technical assistance in relation to this Marine Notice, please contact: The Marine Survey Office, Leeson Lane, Dublin 2, tel: +353-(0)1-678 3400. For general enquiries, please contact the Maritime Safety Policy Division, tel: +353-(0)1-678 3418. Written enquiries concerning Marine Notices should be addressed to: Maritime Safety Directorate, Department of Transport, Tourism and Sport, Leeson Lane, Dublin 2, Ireland. email: marinenotices@dttas.ie or visit us at: www.dttas.ie