Quintrex Informational Flyer

Understanding Trim Tabs

Trim tabs are an undervalued piece of equipment on larger sized trailer boats, especially to those who have never had the pleasure of 'tabs' on a mono hulled boat, hence never experiencing the benefits they provide.

All Quintrex 610 models are supplied standard with **LECTROTAB** trim tabs, an innovative electro-mechanical trim tab from the USA. These trim tabs do not require any hydraulic equipment to function, and therefore there is no 'pump unit' located within the cockpit area.

The following explanations to FAQ's have been provided to help dealers and prospective buyers of Quintrex 610 models understand the many benefits of trim tabs.

Why do I need trim tabs when I have power trim-tilt (PTT) on my outboard?

It is a common misconception that if a boat has power trim on the outboard, it does not need trim tabs!

The main differences between 'outboard PTT' and 'trim tabs' is that an outboard with power trim can only provide fore and aft trim adjustments (bow up/down), while trim tabs can accommodate lateral trim adjustments (to correct heeling/leaning) and trim tabs are a much more efficient 'means' of providing bow-down trim than using the outboard alone. Trim tabs, however, cannot provide bow-up trim like the outboard can when it is trimmed out, which may be required when travelling with a following sea.

When used together, trim tabs and power trim provide optimum performance for the hull while allowing the motor to achieve maximum efficiency.

Are trim tabs easy to use?

Standard control equipment is a pair of rocker or toggle switches, mounted at the helm. Trim tab operation is best done momentarily, or in short bursts, by pressing the switches for about a second or so, and then waiting a few moments before performing further adjustments. Since there is a slight delay in the trim reaction of the boat, this allows time between adjustments to see, and physically feel, how the tab adjustments have altered the ride and handling characteristics of the boat.

Use the switches just like you want to 'trim the boat', i.e:
to lower the bow/raise the stern (without changing lateral trim), push/rock both switches forward simultaneously. This lowers both tabs together, lifting the stern thus lowering the bow.

If the trim tabs are in use (have been lowered), to raise the bow/lower the stern, push both switches backwards. This will raise both tabs together.
to lower the starboard (right) bow, or correct a heel to port (left) push the starboard/ right toggle switch forward. This lowers the port tab which raises the port transom corner thereby lowering the starboard bow, hence correcting the heel to port! If further transom lift/bow down trim is required, once the boat is running plumb, push both switches forward together, as per above.

How do trim tabs work?

Trim tabs are installed low and wide on the transom, adjacent to the hull bottom (planing surface). They work by altering the path of water passing under them while the boat is underway. When adjusted downward, they provide lift, thereby raising the stern and lowering the bow.

The faster the boat speed, the greater the affect of trim tab adjustment, i.e. at slower speeds more trim tab angle/adjustment is required to produce the desired result.

What benefits do trim tabs provide?

Trim tabs allow the boat to be trimmed independently of the motor and therefore provide the following benefits:

They are a highly efficient means of providing bow-down trim, which allows slower planing speeds while maintaining the handling, performance and safety benefits of a boat which is ‘on the plane’.

Trim tabs also increase safety by allowing greater visibility for the skipper by lifting the transom and keeping the bow down while underway at reduced speeds, where normally the boat may have a very ‘bow high’ attitude.

They reduce the stress on the hull (and occupants) by allowing both fore and aft, and lateral trim adjustments to suit any sea condition, thus providing a smoother, drier ride. This maximises occupant comfort and increases their confidence in boat and skipper, therefore providing for a more enjoyable boating experience.

Trim tabs ‘trim the boat’, enabling the outboard to ‘trim the prop’ to suit the conditions. This reduces drag and increases speed, therefore reducing fuel consumption.

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How do trim tabs reduce my fuel consumption?

If an outboard is used to produce bow-down thrust, the outboard is 'trimmed in' to the transom and the propeller is pointing downwards into the water. It is therefore generating downward thrust as well as the normal thrust required to push the boat along. This deviation to the 'optimum' propeller running angle increases 'prop slip' therefore wasting RPM's, and reduces speed.

Trim tabs allow the boat to be trimmed to a more efficient (flatter) angle at lower speeds, while allowing the motor to be trimmed to the most efficient propeller running angle - the result is of course optimum efficiency and minimum fuel consumption.

Will trim tabs be of benefit on my Quintrex 610?

Much of Australia's boating is done on semi-protected waterways where significant wind chop may be prevalent – moderate to high winds over relatively shallow areas which can also be subject to tidal currents. These conditions can provide an uncomfortable experience in any boat!

The effect of wind on any large, high sided trailer boat invariably causes it to lean over when underway. When this happens, one side of the hull becomes very flat to the water which results in pounding as waves slap the 'flatter' side of the hull bottom.

With all mono-hulled planing boats, including technically advanced hulls like the Millennium V-Flare variable deadrise 610 models, it is important to keep the hull 'plumb' or level in all sea conditions to obtain maximum performance from the hull. Trim tabs allow every 610 skipper to overcome wind heel problems and trim the boat effectively to get the most out of his/her boat.

A 'plumb' 610 allows the fine 59o deadrise at entry to slice through the waves evenly, while the Millennium flare gradually deflects and curves the remaining water, generating lift and minimising air-borne spray while absorbing minimum wave energy. The result; a smoother, drier ride - making your day on the water that much more enjoyable...

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