

VESSEL MAINTENANCE

Checking your boat structure.



Aluminium hulls

As the owner of a boat with an aluminium hull, you should look for electrolysis and fractured welds. Electrolysis will cause the aluminium to corrode and is caused by dissimilar metals and debris being in contact.

Keep a regular check on the hull. It is especially important to maintain a clean bilge as corrosion will lead to holes in the aluminium. "Hard points" caused by seat, frame or support connections to side and bottom plating will often cause the plate to fatigue and crack.

Fibreglass (GRP) hulls

Outbound - heading out to sea

Two problems are common in older fibreglass boats. These are:

- > delamination which can lead to rotting of the timber core material
- > fractures in the glass laminate.

Transom cores should be looked at especially if the motor has been changed or removed sometime during the boat's life. You should remove the engine mounting bolts and inspect the timber inside the fibreglass. Water can enter through these holes and become trapped inside causing the timber to rot, reducing the structural integrity of the hull. This can also happen with the bungs so it is important to remove bilge drain plugs and inspect.

Delamination and rotting can happen with the frames of the boat so where possible remove the flooring and check.

Fibreglass fractures can also occur in areas of stress, at joints and where point loads exist.



It is recommended you seek the opinion of a boat builder if unsure of your boat's integrity. For more information, please visit www.transportsafety.vic.gov.au

Boat structure checklist

Check for rot/corrosion	Sound	Monitor	Repair/comments
Around main engine bolts			
At fastenings, rivets and screws			
In bilge and around bung holes			
Auxillary engine brackets			
Ski hooks and berley bins			
Boarding ladder/added pod connections			
Where bilge water sits			
Other hull fittings			

Stress fractures	Sound	Monitor	Repair/comments
Around dive doors			
Transom/hull connection gussets			
Keel			
Where hull sits on trailer rollers			
Seat post mounting points			
Bulkhead joins			
Osmosis in hull (small bubbles)			
At frame and seat connections			
Welding on transom brackets			

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Transport Safety Victoria wishes to acknowledge Marine and Safety Tasmania for use of this content.

Where to get more information

- > **Phone:** 1800 223 022
- > **Website:** www.transportsafety.vic.gov.au
- > **Email:** information@transportsafety.vic.gov.au

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