



# Which Anodes Should I Use?

## Chart A

For Vessels with AC Shore Connections and no Galvanic Isolation<sup>(1)</sup>

	Inboard				Outdrive		Outboard	
	Fiberglass <sup>(2)</sup>	Aluminum <sup>(3)</sup>	Steel <sup>(4)</sup>	Wood <sup>(5)</sup>	Alum Prop <sup>(6)</sup>	SS Prop <sup>(7)</sup>	Alum Prop <sup>(6)</sup>	SS Prop <sup>(7)</sup>
Salt	<b>Zn/Al</b>	<b>Zn/Al</b>	<b>Zn/Al</b>	<b>Zn/Al</b>	<b>Zn/Al</b>	<b>Zn/Al</b>	<b>Zn/Al</b>	<b>Zn/Al</b>
Brackish	<b>Al/Zn</b>	<b>Al/Zn</b>	<b>Al/Zn</b>	<b>Al/Zn</b>	<b>Al/Zn</b>	<b>Al</b>	<b>Al/Zn</b>	<b>Al</b>
Fresh	<b>Mg/Al</b>	<b>Mg/Al</b>	<b>Mg/Al</b>	<b>Al</b>	<b>Mg/Al</b>	<b>Mg/Al</b>	<b>Mg/Al</b>	<b>Mg/Al</b>

- Without a galvanic isolation device, a vessel at dock can galvanically couple to nearby vessels via the ground wire in the AC shore power cable. The performance and service life of a vessel's anodes will be affected by underwater metals of nearby vessels.
- On fiberglass inboard boats the underwater metals are typically stainless steel and bronze attached to the vessel's bonding system. In salt and brackish water use zinc anodes for galvanic compatibility with other vessels at dock. In freshwater, use more active aluminum or magnesium anodes for self-cleaning performance.
- Aluminum hulls are susceptible to corrosion in all water types. In salt and brackish water use zinc anodes for dockside compatibility. In freshwater, use more active anodes for self cleaning performance. Caution: Magnesium anodes should never be use on aluminum metal in salt water.
- Steel hulls are susceptible to corrosion in all water types. In salt and brackish water use zinc anodes for dockside compatibility. In freshwater, use more active aluminum or magnesium anodes for self-cleaning performance.
- Wood hulls with metal fittings on a bonding system are subject to alkali delignification of the wood fibers around metal fittings. Use anodes only with a corrosion controller.
- Outdrives and outboards with aluminum propellers should use zinc anodes for dockside compatibility in salt and brackish waters. In freshwater, use more active aluminum or magnesium anodes for self-cleaning performance.
- Stainless steel propellers of outdrives and outboards are galvanically incompatible with their aluminum housings and tend to inflict severe corrosion. Use zinc anodes for dockside compatibility in salt and brackish water, and more active aluminum and magnesium anodes in freshwater. Exception: Outdrives with dual stainless steel propellers (e.g., Bravo 3) should use more active aluminum anodes in salt and brackish water and, whenever possible, magnesium in freshwater.