

# Service Bulletin

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## **Zeus Propeller Selection**

NOTICE The information in this bulletin supersedes propeller selection documentation in Zeus Application manuals published prior to this Service Bulletin publication date.

#### Models Affected

Description	Serial Range
Zeus 3000 series pod drives	All

#### Scope

Worldwide

### Situation

For each new boat model, the required propeller set should be predicted for a fully loaded vessel by a Marine Architect, and should be verified by sea trial in conjunction with a responsible Integration Engineer. Once the correct pitch or propeller combination is determined for a fully loaded vessel, the OEM or selling dealer is responsible for ordering the propellers directly from Mercury Marine.

The vessel propeller selection for Zeus 3000 pod drive applications typically provides the same pitch on the front and rear propellers.

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### Correction

It is important to achieve the engine rated speed and appropriate load factor on the Zeus propulsion system when selecting propellers. Mercury Marine desires a 92–95% load factor target at full throttle during the initial vessel sea-trials. This load factor target provides allowance for vessel fouling and additional loads the customer may add which are greater than the sea trial weight. Occasionally, a pitch difference between the front and rear propellers is needed to achieve optimum performance. When a pitch difference is needed, the rear propeller is always the higher pitch. The maximum allowable pitch difference between front and rear props is one pitch number. For example, the rear propeller is M9 and the front propeller is M8. Following this requirement will allow for equal propeller loads and maintain optimal durability on the Zeus propulsion system.



- a Front thrust hub
- **b** Front propeller
- Front propeller nut **C** -
- d -Rear thrust hub
- Rear propeller e -
- Rear propeller nut f -

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