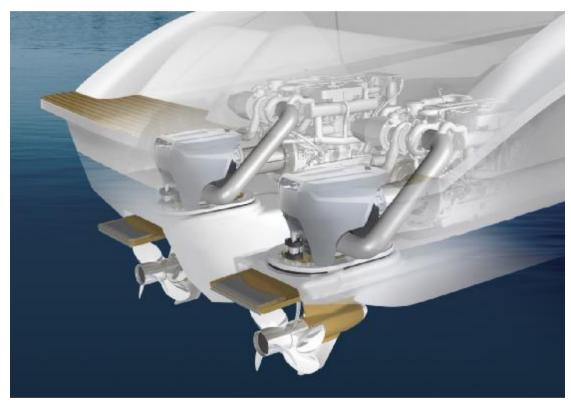




### What is Zeus?





- Complete prop to helm propulsion system
- Improves boat performance and efficiency
- Provides more intuitive operation





#### **BRANDING**

CMD's Zeus 3500

SmartCraft Precision Pilot

Zeus Pod, control system, and any QSB engine

CMD's Zeus 3800

SmartCraft Precision Pilot

Zeus Pod, control system, and any QSC engine

Zeus 3500 System name including all system

components

Zeus Pod Actual pod name (pod only)

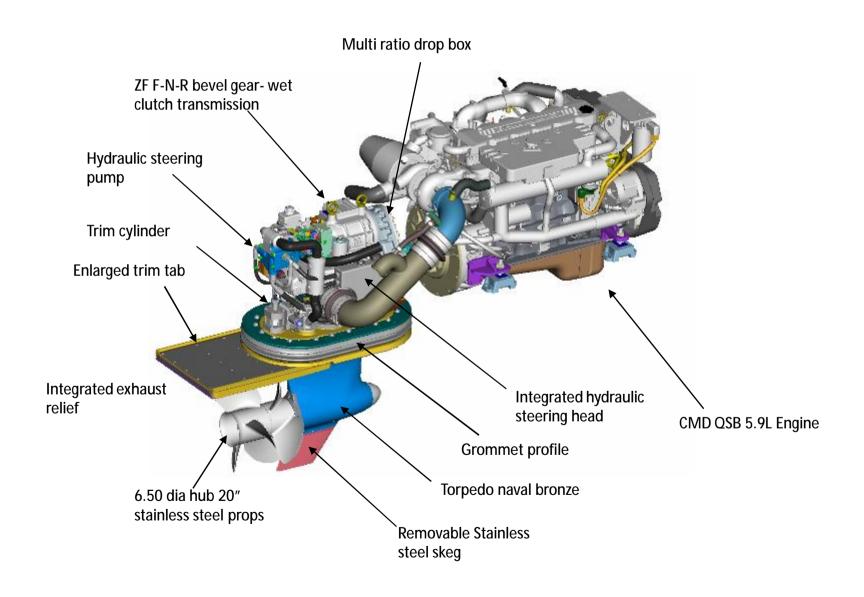
Precision Pilot Control system name including Autopilot,

Joystick Docking, Auto Trim, Skyhook

**Electronic Anchor** 

SmartCraft Vessel Integration System - networking

## **Zeus Powertrain System**



#### **Zeus Pod**

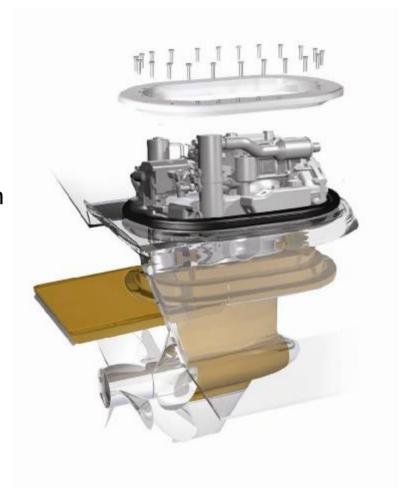
- Proven propulsion technology
  - counter-rotating stainless steel rear facing propellers
  - Through hub exhaust
- Bronze gearcase mounted in tunnel for protection and reduced draft
- Independent vectoring drives
  - Improved maneuverability
- Integrated trim control system
  - In water tests show a 2.5x improvement over conventional tabs; improefficiency during acceleration and normal tab operations with improve list and roll control
  - Automated trim control with manual override
- Reduced NVH
- Up to 600 HP



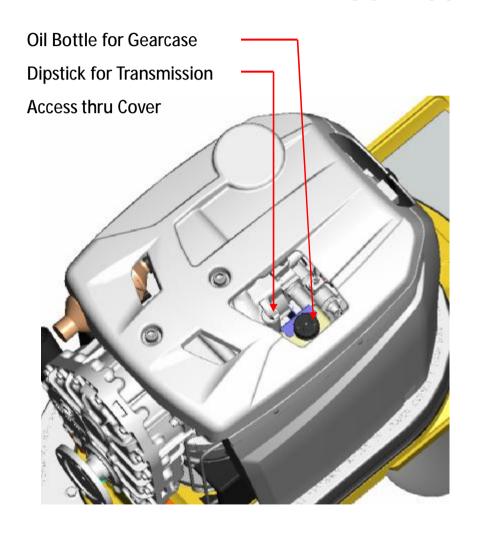
**Zeus Pod Without Cover** 

# Simple Installation

- Entire pod installs as a single piece
- Minimal engine alignment required
- Integrated trim control system
- Integrated engine and accessories water system



## **Service Access**



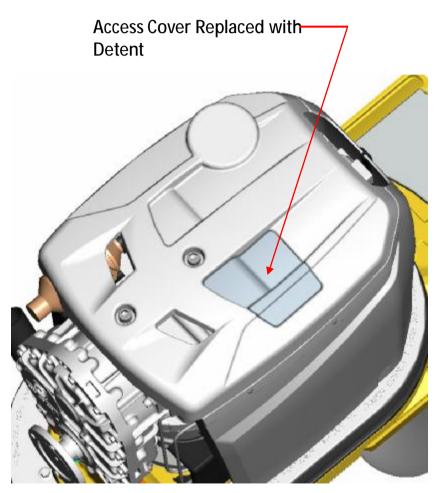


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# Water Inlet

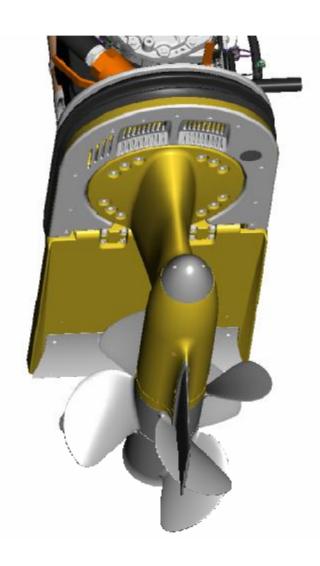


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# Powers up to 600 HP

- Zeus 3500
  - QSB5.9-380
  - QSB5.9-425
  - QSB5.9-480
- Zeus 3800
  - QSC8.3-550
  - QSC8.3-600



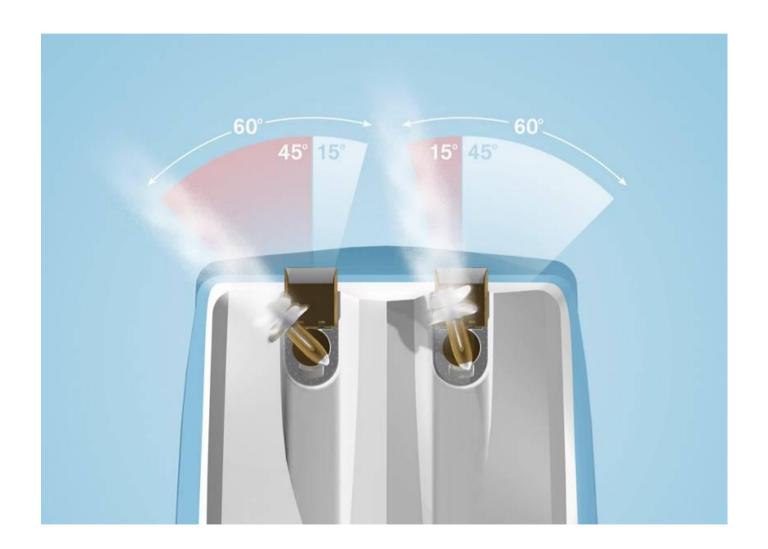
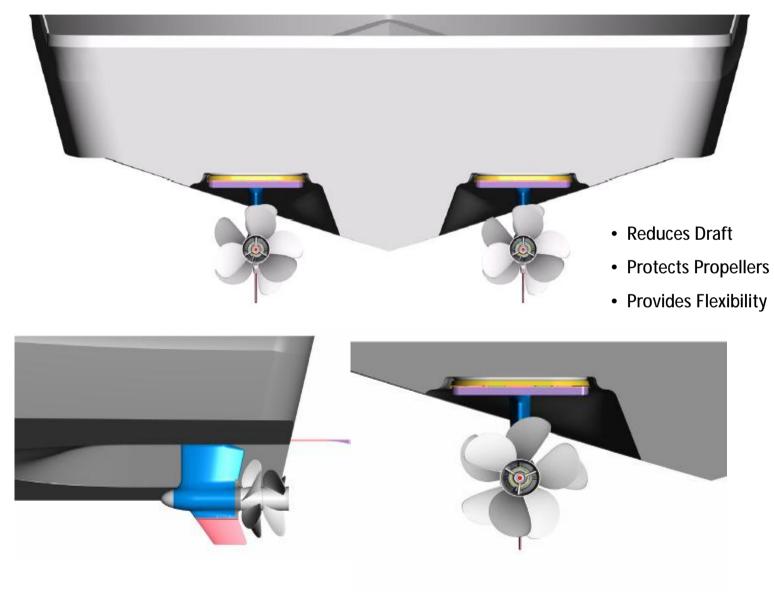


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# **Zeus Tunnel System Enhances Safety**



## **Gearcase Mounted Below Boat in Tunnel**

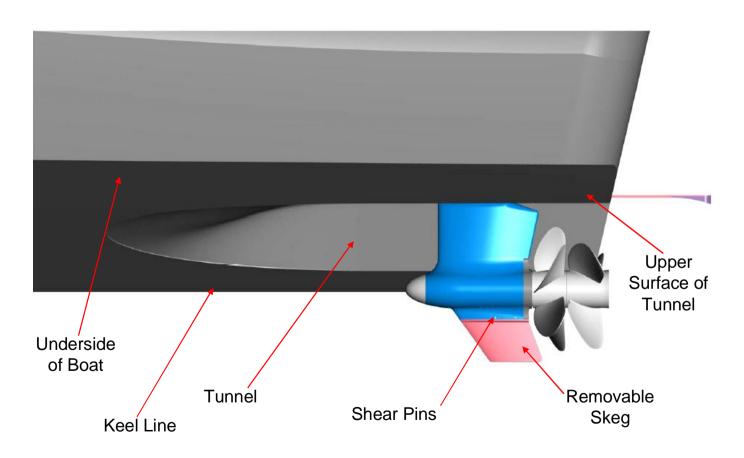
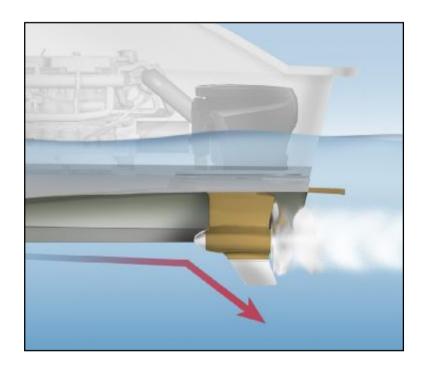


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### **Designed for Safety**

- Rear Facing Props
  - Propellers are protected by the pod gear case and skeg
  - Maintains maximum efficiency
    - Forward facing propellers accelerate turbulent water across gear case, increasing form drag
- Tunnel Mounting
  - Reduces draft
  - The torpedo on the pod is the same depth as the keel
  - Most floating objects will be deflected downwards by the keel and skeg away from the propellers
- Shearable Skeg
  - The skeg is designed to shear below the torpedo, minimizing damage to the pod
- Breakaway Pod
  - In the unlikely event a substantial object enters the tunnel, the pod can breakaway leaving the hull intact
  - Trim tab protects bottom of hull during a breakaway



### **Increased Efficiency**

		QSC 500 inboard	QSB 425 Zeus	Improvement
WOT	Speed (MPH)	35.6	37.8	6.2%
	Fuel Economy (MPG)	0.69	0.9	30.4%
	Range	207	270	30.4%

- 425 HP Zeus cruise matches 500HP inboard WOT
- All data taken with full fuel and water on a 45' cruiser
- Zeus pusher propellers do not increase form drag by accelerating water across gearcase
- Automated trim tab improves fuel economy at mid-range vs. typical operator trim selections

### Simplified Vessel Control - Joystick

- Three axis joystick control
- Lateral translation without thrusters
- Proportions and directs thrust as needed
- Designed in integration
- Proven SmartCraft technology

Total vessel directional control utilizing vectored thrust management

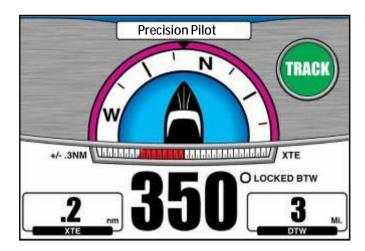


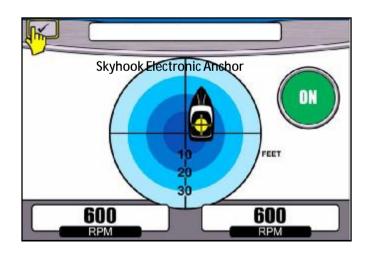
### **Superior Design**

- Fast reliable response from hydraulic control
  - Ø Eliminates sense of transitions from one motion to another
- No vertical thrust component to induce rolling
- Automated yaw control maintains true sideways motion even as boat and environmental conditions change
- 1200 rpm power available in joystick mode
- Adjustable sensitivity

#### **Precision Pilot**

- Traditional autopilot functions
  - **Ø** Fully integrated design, supply channel, and service network
  - **Ø** Compatible with NEMA 0183/2000 chart plotters
- Auto trim control
- Cruise control
- Skyhook Electronic Anchor<sup>TM</sup>
  - Ø Holds current position
  - Ø Maintains boat on fixed heading





## Simplified Vessel Control – Digital Throttle and Shift

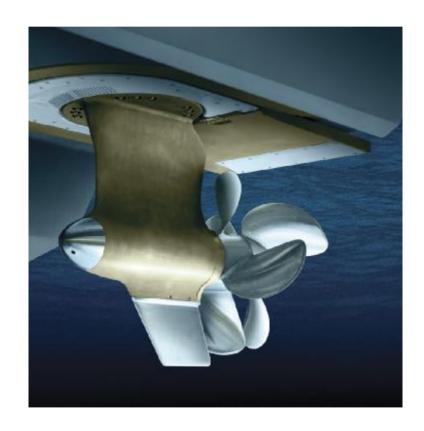
- Smart start/stop (press button and release)
- Improved throttle and shift control
  - **Ø** Multiple styling options
  - Ø Smooth shifting
  - Ø Adjustable detents
  - Ø Station transfer and station lock
  - Ø Auto synch
  - Ø +/- increment
  - Ø 1 Lever
  - Ø Dock
  - Ø Warm-up
- Simplified engine room harnessing
- Start/stop and breakers in engine room



DTS Premium Shown on Picture

## **Integrated Automated Trim Control System**

- Automatically optimizes
  - Acceleration
  - Visibility
  - Fuel economy at midrange speeds
- More efficient than conventional trim tabs
- Can be manual controlled



#### **Zeus Eliminates:**

- Bow thruster
- Autopilot
- Shafts, struts, rudders
- Propellers
- Trim tabs and controls
- Pick-ups, thruhulls, seacocks
- Steering system
- Rudder indicators
- Pro shaft alignment
- Main exhaust piping
- Installation labor for above components
- Multiple vendors

### **Next Generation Steering System**

- Speed sensitive steering authority
- Self-centering (on, off, on in neutral)
- Mechanical tilt
- Programmable feel
  - Ø Non-linear wheel output
  - Ø Steering limits
  - Ø Number of turns lock to lock
  - Ø Forced feedback wheel
  - Ø Pod toe in

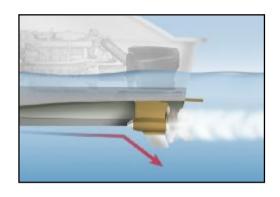


Allows boat brands and models to differentiate the feel of the vessel in the customers' hands

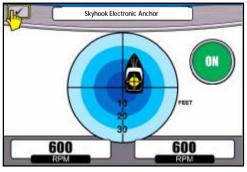
#### Zeus vs. IPS

- Designed for safety
  - Rear facing props
  - Tunnel mount
  - Breakaway skeg
  - Trim tab protection
  - Slower pod shear speed
- Better Joystick
- Skyhook Electronic Anchor™
- Integrated automated trim control system
- Idle relief
- Increased content
- Same efficiency









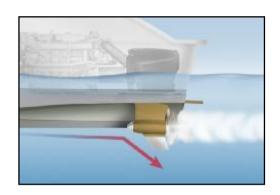
#### Zeus vs. IPS

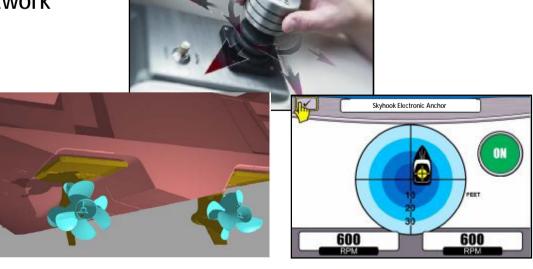
Feature	Benefit	Zeus	IPS
Rear facing props	Prop safety	Rear Facing	Forward facing
Tunnel mounted pods	Pod safety	Tunnel mounted	Exposed
Breakaway skeg	Pod safety	✓ Standard	Not available
Joystick operation	Easy docking	Standard	Option
Joystick auto yaw correction	Auto correction in changing conditions	Standard	Not available
SkyHook Electronic Anchor	Holds fixed position in any condition	Option	Not available
Precision Pilot (Autopilot)	Simplifies navigation	Standard	3 <sup>rd</sup> party option
Integrated auto trim tab system	Visibility, acceleration & fuel economy	Standard	Not available
Trolling valve	Precise speed control with joystick	Standard	Not available
Hydraulic steering actuation	Reliability and faster response	Standard	Not available
Back up steering pump	Quick transition to back up system	Standard	Not available
Accessories water system	Simplified installation	Standard	Not available
Overall pod configuration	Up to 15% speed, 30% fuel improvement	✓ Standard	Standard
Pod cover	Aesthetics and component protection	Standard	Not available
Mounting points for lift eyes	Ease of installation	Standard	Not available
MerCathode	Active galvanic corrosion protection	Standard	Not available
Idle exhaust gas relief	Reduces vibration	Standard connection	Not available
Propulsion power	6 liter engine platform	√ 480 hp	√ 435 hp
Propulsion power	8.3 liter engine platform	√ 550 hp	Not available
In-water pod oil change	Eliminates costly haul-out	Standard	Not available
Installation options	Zeus & inboard fit into same mold	Standard	Not available
Installation options	Current molds take Zeus tunnel inserts	Standard	Not available

Comparison information based on company web sites and industry editorial reviews as of (7/2/07). For updated information, see your local representative.

## **Zeus Benefits Summary**

- Designed for safety
- Increased efficiency
- Joystick operation
- Skyhook Electronic Anchor™
- Integrated automated trim control system
- Integrated autopilot
- Improved maneuverability
- Single supplier / service network





# Warranty

Cummins MerCruiser Diesel Base Warranty	QSD Inboard & Sterndrive	QSB/C/M Inboard	Zeus
Parts / Labour	Yes	Yes	Yes
Travel	no	Reasonable	Reasonable
Duration	2 year	2 year / 1000 hrs	2 year / 1000 hrs
Removal & installation	no	Yes	Yes
Extended Components	no	6 years / 3000hrs	6 years / 3000hrs
Starter alternator	1 year	1 year / 300 hrs	1 year / 300 hrs
Turbocharger	1 year	2 years	2 years
Fuel injection valves	1 year	2 years	2 years
Instrumentation panel	1 year	1 year	1 year
Maintenance components	Follows consumer law	90 days	90 days
Pod Corrosion	1 year	NA	3 years/1500 hours
Transferrable	Yes	Yes	Yes