28

Almighty Frybridge Cruiser

PONAM-28Ⅲ

TOYOTA

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TOYOTA MARINE
PONAM
28 III

Exterior

Flush-surface windows

The beautifully designed curved windows create a gentle front shape and provide improved visibility in the lower helm while underway. They are installed with the same UV-filtering green glass as in the side windows.

Flybridge

Providing a 360 ° view, the flybridge can comfortably seat five people, the most in its class. This luxurious space allows you to experience being one with the sea while enjoying the sight of the water and the feeling of the wind.

Helm station

The efficient layout of the meters and switches provide enhanced operability. In addition, nautical instruments such as GPS fishfinders and radar can be installed in front of the passenger seat.

Cabin door

Installed with UV-filtering green glass, the cabin door is designed with a wide opening for easy entry and exit, and joins the cabin and aft deck.

Aft deck & aft deck seats

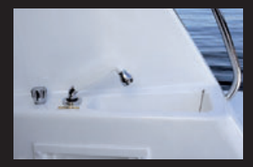
The aft deck, boasting the maximum width in the 28-foot class, provides a variety of uses. Five people can sit in the aft deck seats and directly experience the joys of the sea.

Side pockets

The multiple storage spaces allow quick access to ropes, fishing gear or any other item that may be needed.

Washbowl/sprayer

A washbowl and sprayer are standard features. The pull-out spout can be used for a variety of applications.



Swimming platform/ stepladder

The spacious platform is designed to allow convenient access to the sea.

Interior

Cabin & lower helm

One step into the cabin extends into a cozy space offering maximum quietness. A spacious cabin and a lower helm unaffected by seasonal or weather conditions ensure good maneuvering visibility.

Sofa & table

The L-shaped sofa is designed to easily seat four adults. Cushions ease the shock of waves, providing comfort, even during long cruises. Furthermore, by lowering the table, the sofa can be converted into a bed that fits two adults.

Bow berth

This provides a roomy space for an adult to lounge. The design, which introduces plenty of light, creates a comfortable space.

Galley

In addition to a sink, storage compartments and shelves, a large cooking area is available.
The easy-to-use design makes the time spent in the cabin even more enjoyable.

Refrigerator

With careful attention to usability, the refrigerator is positioned under the driver's seat, providing easy access from the galley or the salon.

Storage

With a design that efficiently uses space, storage is available in various locations, such as under the starboard sofa in the cabin and under the bow berth cushion.

Sofa storage

Bow berth storage

Head

The electric marine toilet has electric valves, increasing its ease of use.
In addition, a sink with a mirror and storage space are provided.

*The photos may contain objects for display or optional parts.

Providing a powerful drive with twin 3 l direct-injection turbo diesel engines that achieve both a high output and low fuel consumption by utilizing a common rail system.

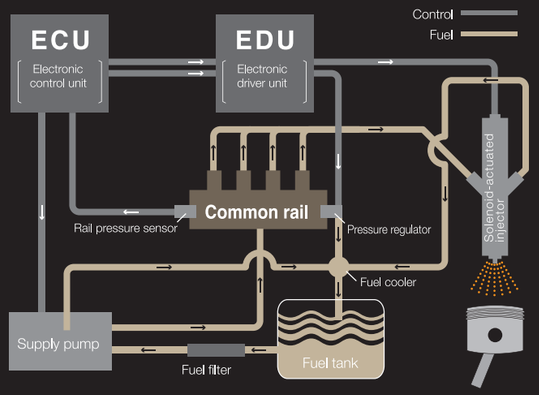
■Marine engine

TOYOTA M1KD-V D-4D*

*D-4D : Direct Injection 4 Stroke Common Rail Diesel Engine

Common rail system

The common rail system stores high-pressure fuel in the common rail via the supply pump, which supplies fuel, then injects the fuel through the solenoid-actuated injectors. Sensors detect the engine condition and a computer controls the fuel injection timing and quantity in order for the engine to operate under ideal conditions, greatly reducing the production of black or white smoke at engine startup or during acceleration.



► High output and low fuel consumption

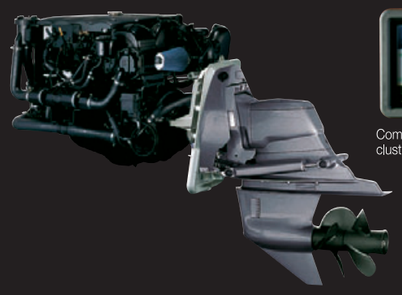
By utilizing common rail and DOHC 4-valve systems in addition to optimizing the compression ratio, a greater balance between higher power and lower fuel consumption is achieved.

► Improved noise reduction

By utilizing the common rail system as well as a balance shaft to suppress engine vibrations, less vibration and low noise are achieved.

► Lightweight and compact

By utilizing DOHC 4-valve-compatible aluminum heads and optimizing the installation positions of the heat exchanger and intercooler, a drastically lighter weight and greater compactness are achieved.



Combination instrument cluster

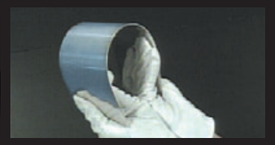
■Cylinder arrangement/number: In-line / 4
■Cylinder stroke × bore: 96 × 103 mm
■Displacement: 2,982 cc
■Maximum power: 136 kW (185 PS) at 3,400 rpm
■Maximum common rail pressure: 180 MPa
■Valve train: DOHC 4-valve belt & gear drive
■Supercharging method: Turbocharger

An aluminum hull that provides a safe and comfortable ride—delivering an unprecedented sense of security

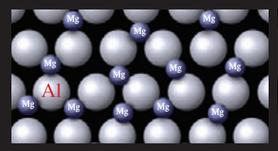
■Aluminum hull

A5083 (JIS H-4000), which is used by Toyota Marine for their aluminum hulls, boasts a particularly high strength among the many types of aluminum. This aluminum contains approximately 4.5% magnesium. The surface of aluminum has a strong intrinsic rust-resistant property since it is protected with an oxidized film. By adding alloy components, starting with magnesium, the corrosion resistance and strength of the aluminum have been dramatically increased. In addition, since it is resistant to external stresses as well as fractures, compared with other materials such as fiber-reinforced plastic (FRP), this aluminum is safer and the optimum material for vehicles traveling at high speeds.

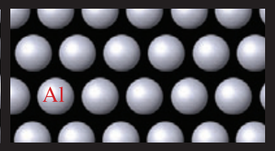
■Aluminum alloy A5083



■Pure aluminum

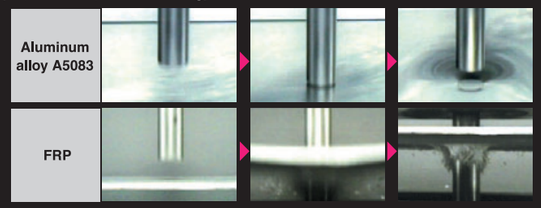


■Model of aluminum alloy A5083



■Model of pure aluminum

[Impact comparison testing]



Highly rigid aluminum frame construction absorbs even the fear of waves.

The aluminum frame construction adopted by Toyota Marine for the hull, while absorbing as much as possible of the impact load from waves, effectively disperses it to the entire hull frame to minimize warping and bending of the entire hull. In order to achieve this, every component had to be optimally positioned for each area, i.e., keel, chines and beam. Furthermore, with feedback from data obtained through impact simulation analyses and numerous tests, impacts are better dispersed, compared with FRP, and vibrations are quickly reduced to create a comfortable ride.

World-class Toyota control technology—ensuring new joys of the sea

■Auto flaps

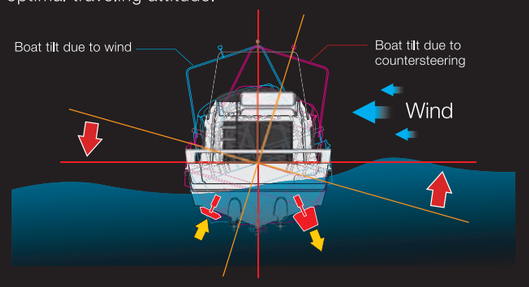
With this system, the boat attitude is detected by various sensors and kept optimal through appropriate operation of the flaps. Controlling the boat' s left and right tilt (roll) and keeping it at a horizontal attitude lessens the impact from waves. In addition, activating the flaps at startup reduces bow up when the boat takes off. As a result, forward visibility can be maintained, providing increased safety. Furthermore, controlling to achieve optimum planing attitude reduces the vertical movement (pitching) of the bow, where stress occurs during long-term cruising.

Automatically adjusts the trim angle to maintain the optimum planing attitude.

When the boat takes off, the flaps activate to prevent the bow from rising.
In addition, the optimum planing attitude is maintained while underway.

Automatically adjusts the heel angle to maintain the optimal boat position.

The hull tilt that occurs as a result of crosswinds or countersteering is automatically detected by the auto flap system, which operates the left and right flaps to adjust the boat to its optimal traveling attitude.



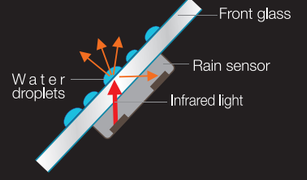
Toyota Marine technology—focusing on creating a cozy space

■Air conditioning with dehumidification control

Utilizing advanced technology refined for automobiles, this boat is installed with a high-performance air conditioner that exceeds common expectations for a cruiser. The dehumidification (defogging) control makes cabin life comfortable throughout the year while allowing safe cruising from the lower helm by reducing fogging of the front window.

■Rain-sensing semi-automatic wipers

The rain sensor positioned on the front glass detects the amount of water droplets from spray or rain, and then wiper operation is automatically controlled to ensure a clear view. They can also be operated manually.



When water droplets form on the surface of the glass, the reflection of the infrared light, which normally is totally reflected, disperses, and the reduction in the received light is detected, causing the wipers to be operated.

■Joyful Talk

The high-performance microphone and speakers allow for safe and easy conversation between the cabin and flybridge. While you are talking, the volume of the audio system is automatically lowered to allow high-quality communication.

■AM/FM radio with CD player

Enjoy a pleasant musical environment provided by various music sources, not only from the radio and CD player, but also from an iPod or MP3 player connected via USB.