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# Jaltest Marine 17.1 Presentation



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## INDEX

1. Overview .....	2
2. Jaltest Marine in numbers. ....	3
3. Jaltest Marine 17.1, new software functions .....	4
3.1 Technical information display and actions in troubleshooting steps .....	4
3.2 Tables print in reports.....	5
3.3 System Scan: Inform the user that the system excludes some systems .....	5
3.4 Others .....	6
4. Jaltest Marine 17.1. New diagnosis functions .....	7
4.1 INBOARD ENGINE.....	7
4.1.1 CATERPILLAR.....	7
4.1.2 CUMMINS .....	7
4.1.3 CUMMINS MERCUISER DIESEL .....	7
4.1.4 MAN .....	8
4.1.5 MERCURY / MERCUISER .....	8
4.1.6 SCARAB NEW BRAND!.....	9
4.1.7 VM MOTORI .....	9
4.1.8 VOLVO PENTA .....	9
4.1.9 WEBER.....	10
4.1.10 YANMAR.....	10
4.2 OUTBOARD ENGINE .....	10
4.2.1 EVINRUDE .....	10
4.2.2 JOHNSON .....	10
4.2.3 MERCURY / MARINER .....	11
4.2.4 NISSAN .....	11
4.2.5 SELVA .....	12
4.3 JET SKI .....	12
4.3.1 KAWASAKI.....	12
4.3.2 YAMAHA.....	12

## 1. Overview

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Jaltest Marine continues to evolve in every new version by improving the graphic interface and extending diagnosis contents on the systems, making the app easier to use. In addition, new brands and models are added with new developments, establishing as the leader diagnosis tool in the multibrand area.

Down below this Jaltest Marine version update is summarized including, among others, the following news:

- Improvements in the vessel System Scan.
- Improvements in the data logging and diagnosis reports.
- New systems Mercury, Mariner and MerCruiser via CAN.
- Digital Throttle and Shift, DTS in diesel engines.

Finally, it should be recalled that GRP module has more and interesting functions available when a “GRP Enterprise” network is created. This network increases the ability to manage the garage resources (vessel reception, client portfolio, repair orders and workshop tasks management, etc.) In addition, with “GRP Enterprise” you can create as many Jaltest user accounts as you wish.

## 2. Jaltest Marine in numbers.

Jaltest Marine continues to evolve in every version by improving the graphic interface and extending contents on the systems, making the app easier to use.

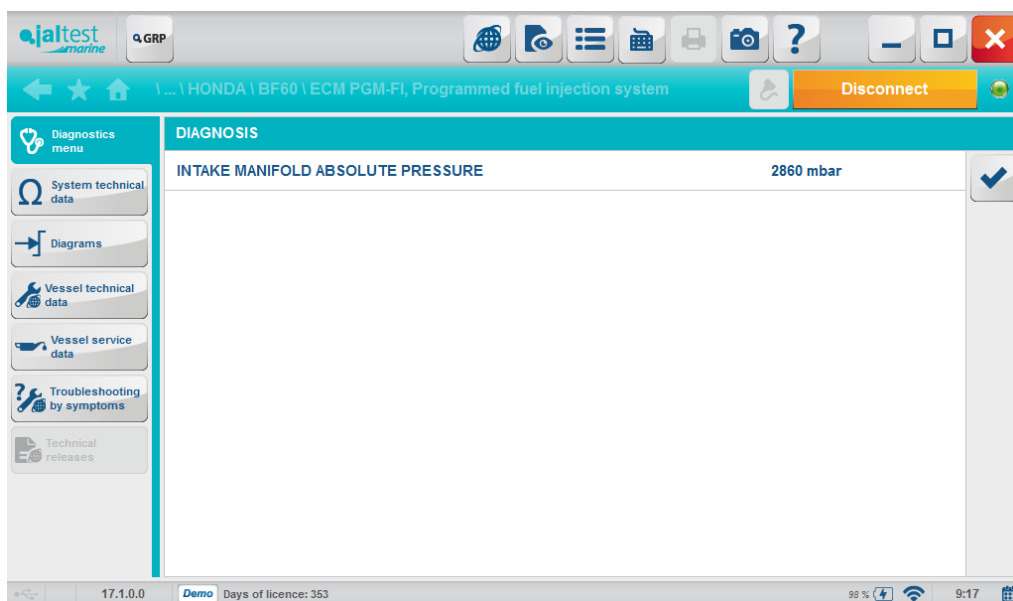
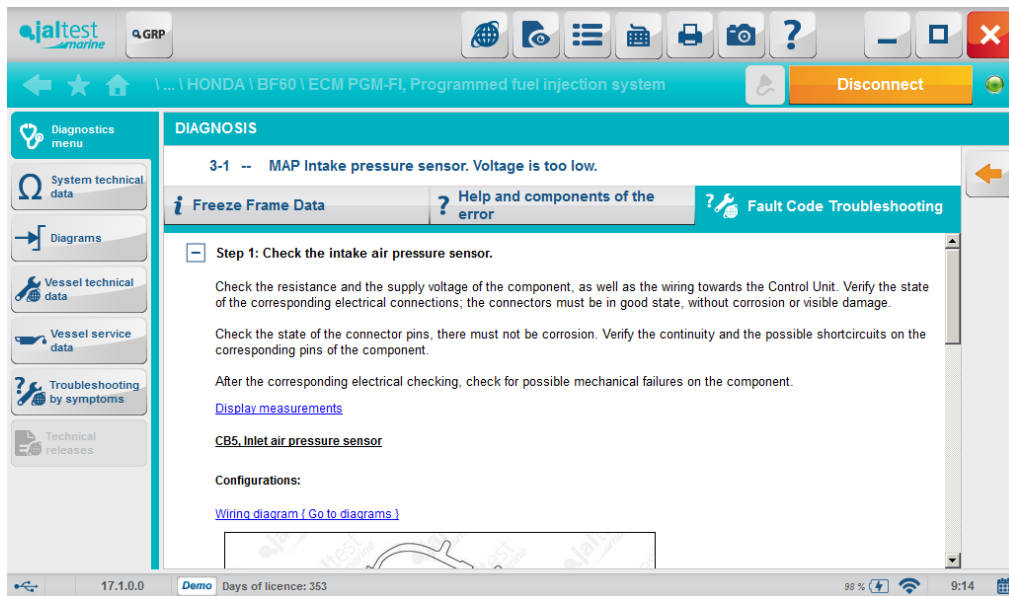
A table with the main data about the progress made in this version can be found. For further information about Jaltest Marine coverage and other news, please visit **Jaltest Marine Report** or contact the specialized staff via the tool distribution network.

Development 17.1		
	New	Total
<b>Brands</b>	<b>1</b>	<b>31</b>
<b>Models</b>	<b>6</b>	<b>620</b>
<b>Systems</b>	<b>79</b>	<b>1021</b>
<b>Systems with Wiring Diagrams</b>	<b>123</b>	<b>923</b>

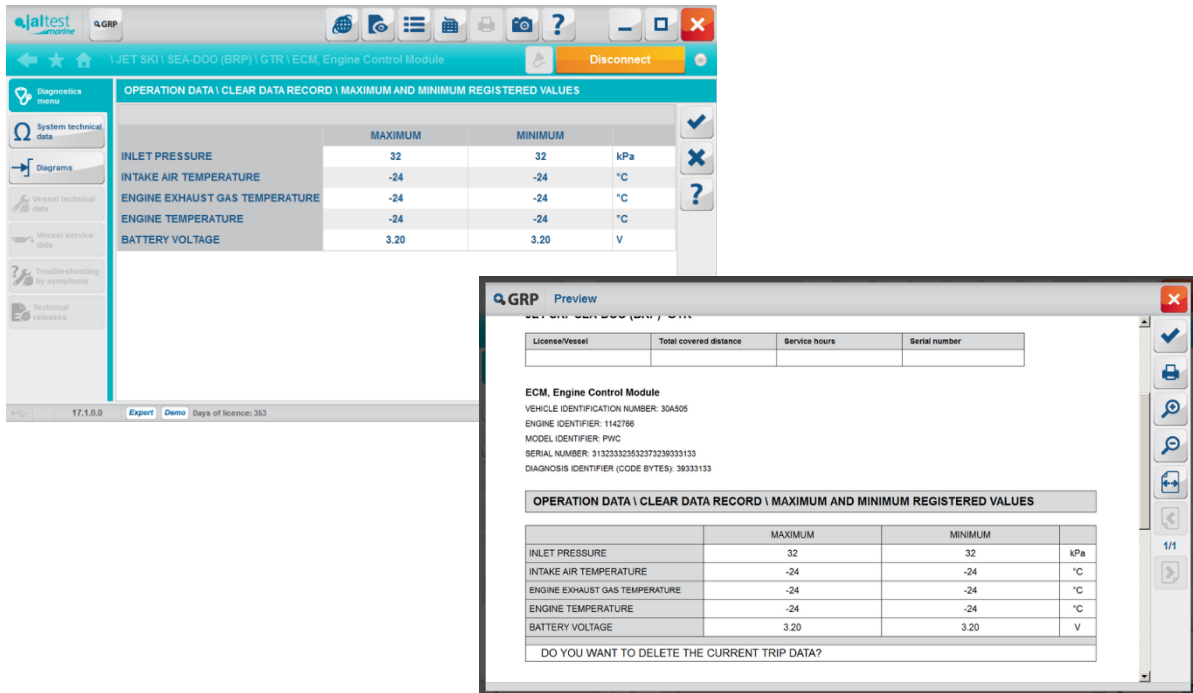
### 3. Jaltest Marine 17.1, new software functions

#### 3.1 Technical information display and actions in troubleshooting steps

Troubleshooting and procedures, either by diagnosis fault code or by symptom of the vessel, offer hyperlinks to different entities such as: actions, components, wiring diagram, other troubleshootings, and even it is possible to surf between the different steps. Now the system can also be monitored through the measurements during the checking.

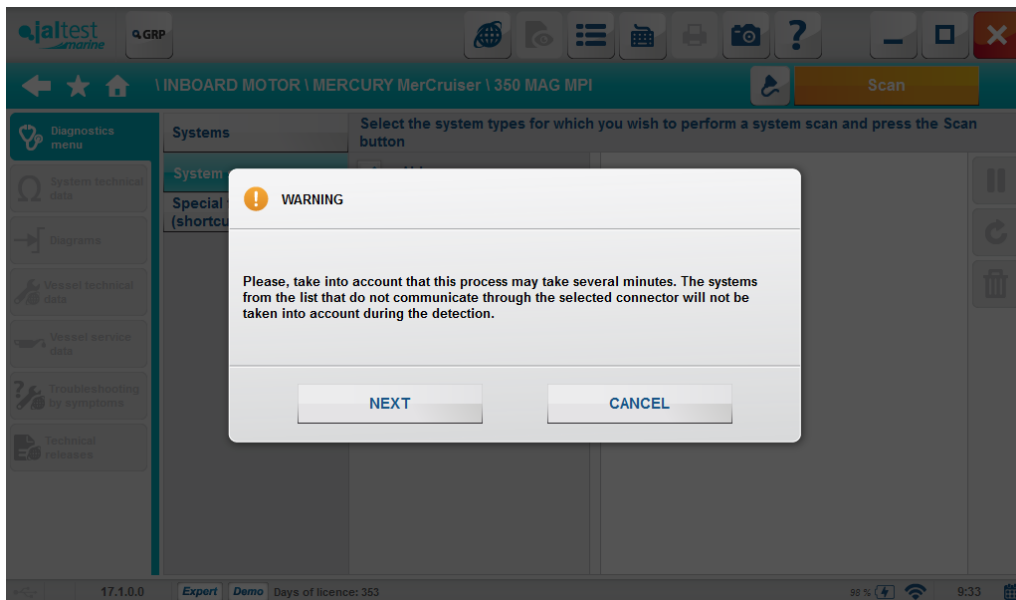


### 3.2 Tables print in reports



### 3.3 System Scan: Inform the user that the system excludes some systems

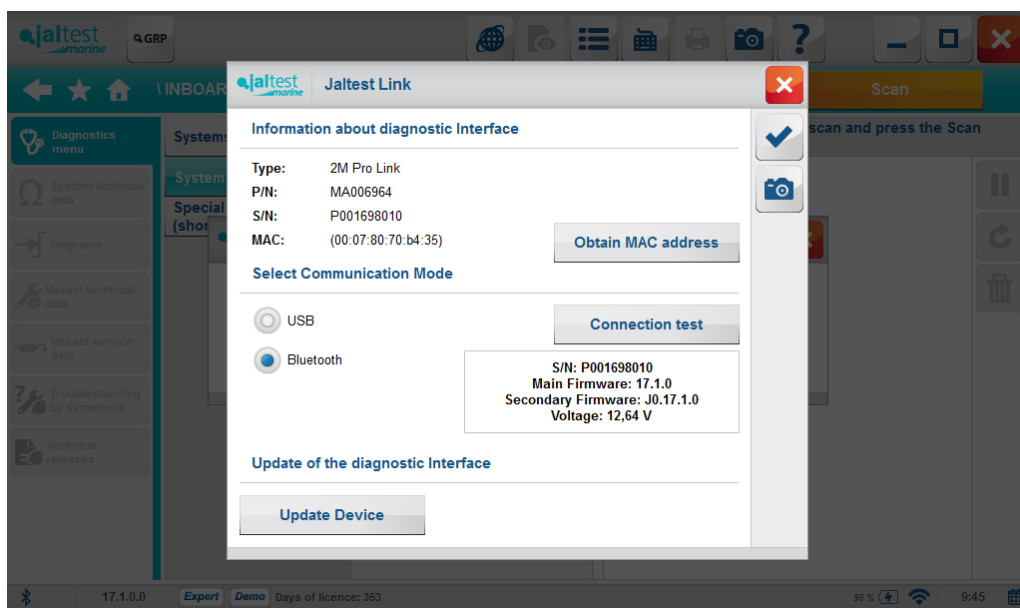
When some of the systems of the model communicate through a different connector from the selected, they are excluded from the System Scan and the customer is warned about this fact.



### 3.4 Others

Besides the above mentioned, it is highly advisable to consider other improvements and modifications that have been carried out.

- **Vessel technical data** visualization will therefore require an **internet connection**.
- The remaining number of **days left of the license** is shown in the Jaltest Marine status bar.
- The **power supply voltage** of the device is obtained in a **connection test**.



- Warning display in the measurements representation by graphs.
- The update of the highlighted data of the system every time an action is finished.

## 4. Jaltest Marine 17.1. New diagnosis functions

**Note:** This is only a summary of the most important information about this new version. For further information, please visit **Jaltest Marine Report**.

### 4.1 INBOARD ENGINE

#### 4.1.1 CATERPILLAR

##### *Coverage improvement and functions*

Incorporation of Caterpillar specific troubleshooting by symptoms in models:

- C-12
- C-15
- 3126B

#### 4.1.2 CUMMINS

##### *Coverage improvement and functions*

DTS (Digital Throttle and Shift) control system development for Cummins range engine:

- QSB 5.9
- QSB 6.7
- QSC 8.3
- QSL 9
- QSM 11

The main function of this system is to configure and adapt the lever control to the engine.

##### *Relevant content summary*

- DTS system also has manual diagnosis and error help.
- One of the innovations in 17.1 is a Cummins complete and specific troubleshooting by symptoms in all the models.

#### 4.1.3 CUMMINS MERCUISER DIESEL

##### *Coverage improvement and functions*

DTS (Digital Throttle and Shift) control system development for Cummins MerCruiser diesel range engine:

- QSD 2.0 115
- QSD 2.0 130
- QSD 2.0 150
- QSD 2.0 170
- QSD 2.8 220
- QSD 4.2 270
- QSD 4.2 320
- QSD 4.2 350

The main function of this system is to configure and adapt the lever control to the engine.



### Relevant content summary

- DTS system also has manual diagnosis and error help.
- One of the innovations in 17.1 is a Cummins complete and specific troubleshooting by symptoms in all the models.

#### 4.1.4 MAN

### Relevant content summary

Incorporation of MAN complete and specific troubleshooting by symptoms for V-type engines and in-line engines.

#### 4.1.5 MERCURY / MERCUISER

### Coverage improvement and functions

- One of the innovations in 17.1 is the Mercury/MerCruiser PCM system via CAN. JDC 617M is the diagnosis connector used in these new systems.
- Another innovation is the system scan to facilitate the identification of CAN systems in the vessel CAN bus.

Systems are present in the following models:

- |                          |           |                         |
|--------------------------|-----------|-------------------------|
| ○ 350 MAG Black Scorpion | ○ 4.3 MPI | ○ 6.2 MPI               |
| ○ 350 MAG MPI            | ○ 5.0 MPI | ○ 8.2 MPI               |
| ○ 377 MAG MPI            | ○ 5.7 MPI | ○ MX 6.2 Black Scorpion |

- DTS (Digital Throttle and Shift) control system development for Mercury diesel range engine:
  - 2.0 115 MD
  - 2.0 130 MD
  - 2.0 150 MD
  - 2.0 170 MD
  - 2.8 220 MD
  - 4.2 270 MD
  - 4.2 320 MD
  - 4.2 350 MD

The main function of this system is to configure and adapt the lever control to the engine.

### Relevant content summary

- Incorporation of DTS system wiring diagram, which is present in the following models:

- |               |              |                |
|---------------|--------------|----------------|
| ○ 5.0MPI      | ○ 6.2 MPI    | ○ 8.1S HO      |
| ○ 350 MAG MPI | ○ 496 MAG    | ○ 8.1S Horizon |
| ○ 5.7 MPI     | ○ 496 MAG HO | ○ 8.2 MPI      |

Possible configurations that can be implemented by the system are:

- One engine / Panel (Type 1)
- One engine / Binnacle (Type 2)
- Two engines / Binnacle (Type 2) 2005
- Two engines / Binnacle (Type 2) 2006

- One engine / Slim Binnacle (Type 2)
  - Three engines / Binnacle (Type 2)
- Incorporation of new MR engine management system wiring diagram configurations in the following models:
- 496 MAG
  - 496 MAG HO
  - 8.1S HO
  - 8.1S Horizon
- Incorporation of MerCruiser diesel complete and specific troubleshooting by symptoms for all the brand family of models.

#### **4.1.6 SCARAB NEW BRAND!**

##### *Coverage improvement and functions*

New brand of Jet Drive/Jet Boat vessels for boating sport and recreation, mainly used to water skiing.

Here below you can find the models that are currently present in Jaltest Marine:

- 165
- 195
- 215
- 255

The following functions are available in MR engine management system: diagnosis, ECU data, parameters, measurements selection, components actuations, checking, maintenance reset, intake throttle calibration and operation data.

##### *Relevant content summary*

Apart from the previously mentioned, wiring diagram, system technical data and images are available for all the models.

#### **4.1.7 VM MOTORI**

##### *Relevant content summary*

Incorporation of a VM Motori complete and specific troubleshooting by symptoms for all the MR engine family.

#### **4.1.8 VOLVO PENTA**

##### *Coverage improvement and functions*

Incorporation of EDC CP system, which is a lever control system of engines with EDC1 control unit. This system does not have diagnostic functions with connection to the system.

In 17.1, the following models will be present:

- |           |           |
|-----------|-----------|
| ○ KAD300  | ○ TAMD73P |
| ○ KAD44P  | ○ TAMD74C |
| ○ KAMD300 | ○ TAMD74L |
| ○ KAMD44P | ○ TAMD74P |
| ○ TAMD72P | ○ TAMD75P |

#### **Relevant content summary**

- The new system EDC CP has manual diagnosis, wiring diagrams, technical data, technical releases to calibrate the lever control and the idle speed adjustment.
- Incorporation of the wiring diagram in all the HIU (Helm Interface Unit) systems.

#### **4.1.9 WEBER**

##### **Coverage improvement and functions**

Update and optimization of MPE-750 engine management system development to meet RS232 standard communication protocol, by considerably improving system operation.

#### **4.1.10 YANMAR**

##### **Relevant content summary**

Incorporation of Yanmar complete and specific troubleshooting by symptoms for all the models of the brand.

## **4.2 OUTBOARD ENGINE**

#### **4.2.1 EVINRUDE**

##### **Coverage improvement and functions**

Update and optimization of EMM engine management system of E-TEC and Ficht Ram models to meet RS232 standard communication protocol, by improving systems operation.

##### **Relevant content summary**

In 17.1, technical information of the North American brand models 4-Stroke is completed. It includes: wiring diagram, image component and location image system technical data.

#### **4.2.2 JOHNSON**

##### **Relevant content summary**

One of the innovations in Jaltest Marine 17.1 is to supplement technical information of the following models:

- |      |       |       |
|------|-------|-------|
| ○ 40 | ○ 70  | ○ 140 |
| ○ 50 | ○ 90  | ○ 200 |
| ○ 60 | ○ 115 | ○ 225 |

They include: wiring diagram, system technical data, image component and location images.

### 4.2.3 MERCURY / MARINER

#### Coverage improvement and functions

Incorporation of new engine management systems whose control are via CAN.

It is a new generation of Mercury ECM CAN control unit. The main difference between it and ECM 555 control units is that it has a single connector in the control unit instead of two.



The diagnosis connector also changes, JDC 617M has to be used. The new CAN systems are present in the following models:

- |                  |                 |                 |
|------------------|-----------------|-----------------|
| ○ 100 FourStroke | ○ 150 SeaPro    | ○ 60 SeaPro     |
| ○ 115 FourStroke | ○ 30 FourStroke | ○ 75 FourStroke |
| ○ 115 Pro XS     | ○ 40 FourStroke | ○ 75 SeaPro     |
| ○ 115 SeaPro     | ○ 40 SeaPro     | ○ 80 FourStroke |
| ○ 135 FourStroke | ○ 50 FourStroke | ○ 90 FourStroke |
| ○ 150 FourStroke | ○ 60 FourStroke | ○ 90 SeaPro     |

#### Relevant content summary

- Wiring diagram, technical data, image component, location image, and Mercury/Marine specific symptoms of ECM CAN system.
- DTS (Digital Throttle and Shift) system wiring diagram, which can be present in the models of Verado and OptiMax families.

Here below, the possible types of configurations that can be implemented by the system are listed:

- One engine / Panel (Type 1)
- One engine / Binnacle (Type 2)
- Two engines / Binnacle (Type 2) 2005
- Two engines / Binnacle (Type 2) 2006
- One engine / Slim Binnacle (Type 2)
- Three engines / Binnacle (Type 2)

### 4.2.4 NISSAN

#### Relevant content summary

- Checking and update of the wiring diagrams in all models.
- Incorporation of Nissan complete and specific troubleshooting by symptoms for all the brand models.

#### **4.2.5 SELVA**

##### *Relevant content summary*

- Checking and update of the wiring diagrams in all models.
- Incorporation of Selva complete and specific troubleshooting by symptoms for all the brand models.

#### **4.2.6 SUZUKI**

##### *Relevant content summary*

Checking and update of the wiring diagrams in all models.

#### **4.2.7 TOHATSU**

##### *Relevant content summary*

Checking and update of the wiring diagrams in all models.

#### **4.2.8 YAMAHA**

##### *Relevant content summary*

- Checking and update of the wiring diagrams in all the models
- Incorporation of Yamaha complete and specific troubleshooting by symptoms for all the brand models.

### **4.3 JET SKI**

#### **4.3.1 KAWASAKI**

##### *Relevant content summary*

Incorporation of vessel technical data and service data in all STX models.

#### **4.3.2 YAMAHA**

##### *Relevant content summary*

Incorporation of Yamaha complete and specific troubleshooting by symptoms for all the brand models.