

JACK PLATE For Outboard Engine

Manual for Owner, Installer

SJP-ST06-100

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1.1 Introduction

Proper operation and handling in accordance with this manual at all times is essential to ensure safety and proper functioning on board. Failing to understand the contents of this manual prior to operation and/or handling may, in the worst case, cause irreparable damage or fatal accidents. Read this manual thoroughly and understand its contents prior to departure.

- Read this manual thoroughly for a proper understanding of its contents.
- Place this manual on board at all times and keep it in an accessible location.
- Be careful not to lose or spoil this manual when not in use.
- In case of resale or transfer of the system, make sure to pass this manual on to the new owner.
- The illustrations and/or contents of this manual may partially differ from the actual product due to changes in specifications.

• A Message to Customers:

Thank you for purchasing the Hydraulic Jack Plate by Seafirst. This manual provides information, together with precautions, on the proper installation, operation, maintenance and repair, and inspection of the equipment. Please read this manual carefully before operating for the proper use of the system. This system must be installed by a person with a basic understanding of Jack Plates and the ability to maintain them. An attempt to install without such knowledge and ability may result in system failure and mechanical damage. If you are not a professional mechanic, have your dealership install the system for you. When operating a boat, keep this manual inboard at all times to prevent its loss or getting wet. When you transfer or resell the Jack Plate, make sure to pass this manual on to the new owner.

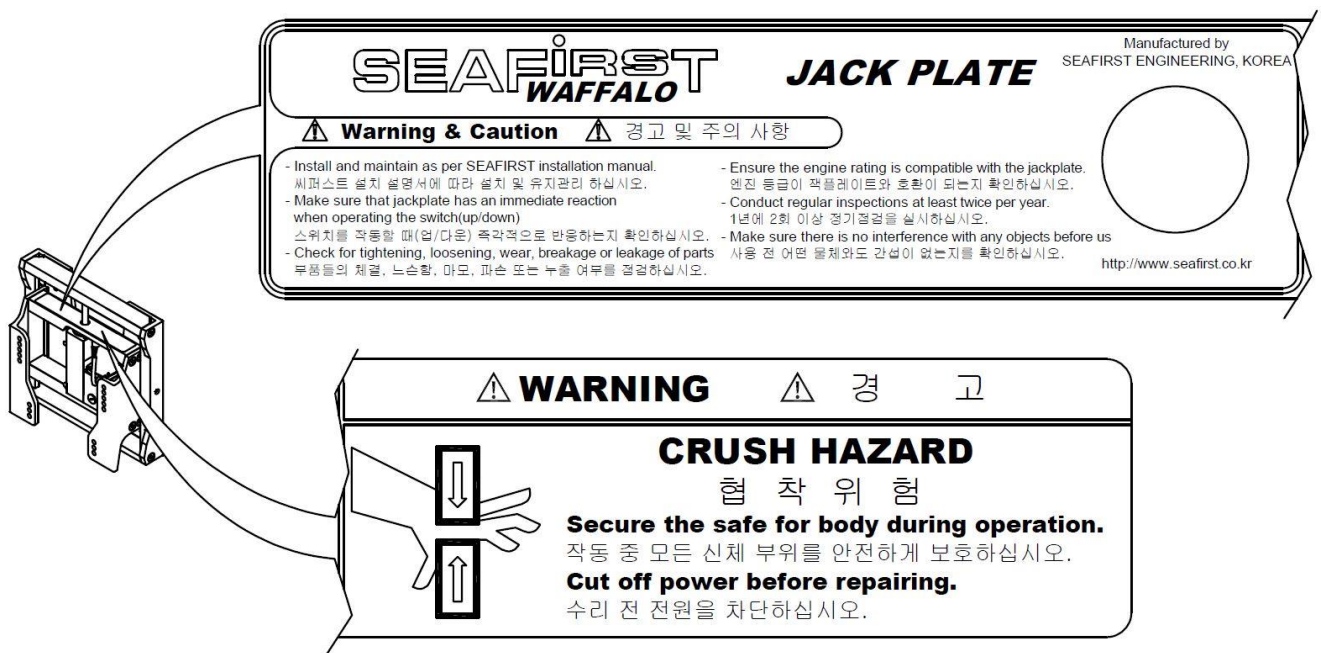
• A Message to Dealerships:

Provide information about the product to customers and inform them of the necessary precautions. Make sure to handover this manual and any parts not used during installation to the customer.



ATTENTION

- The safety-related information supplied below is intended to inform users of the precautions and warnings about the product.
- If your product does not have the label shown below, please contact Seafirst.



2.1 Main Components and Functions

The Jack Plate by Seafirst consists of following parts as shown in the figure below.

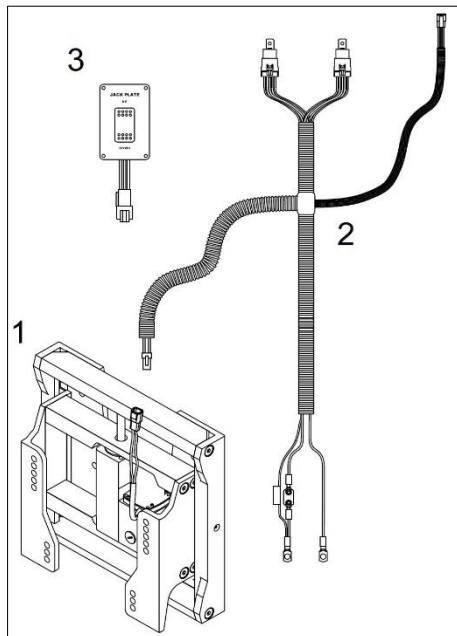


Figure 1.

Component	Description
1. Jack Plate	Hydraulic power pack enclosed that lifts the outboard engine with a lift range of 141 mm (5.5")
2. Relay Wiring Harness	Connects Jack Plate, switch, and battery together; with water proof case.
3. Local Switch	Gives electrical signals to operate the Jack Plate

2.2 How to Operate

- Press the "Up" switch to raise the jack plate and the outboard engine.
- Press the "Down" switch to lower the Jack Plate and the outboard engine.

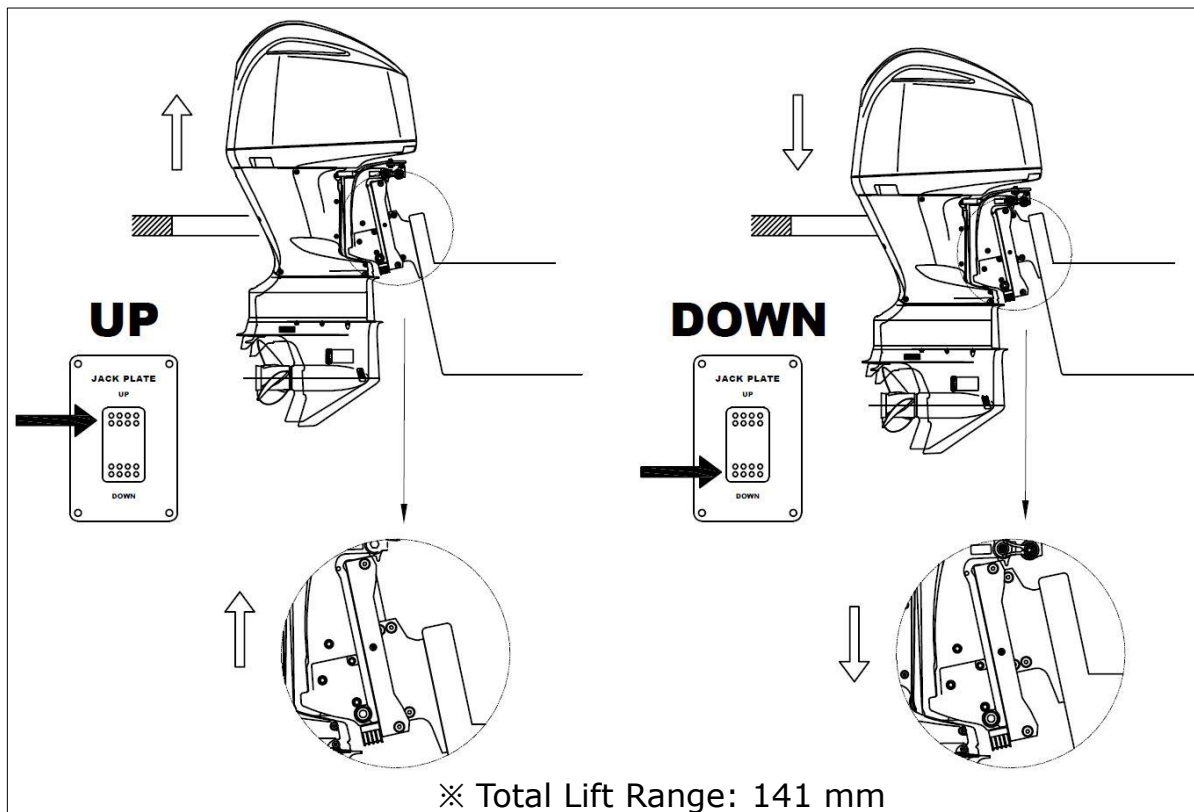


Figure 2.

3.1 Mounting the Jack Plate to the Transom

1) Specifications

- Model: SJP-ST06
- DC12V
- Standard Jack Plate model is compatible with engine up to 350 HP.
- Time to lift engine by 5.5" (=141 mm; max gain): 8.5 seconds
- Solid engine support and easy up or down movement while driving
- 6"(152.4 mm) setback
- Weight: 22 kg

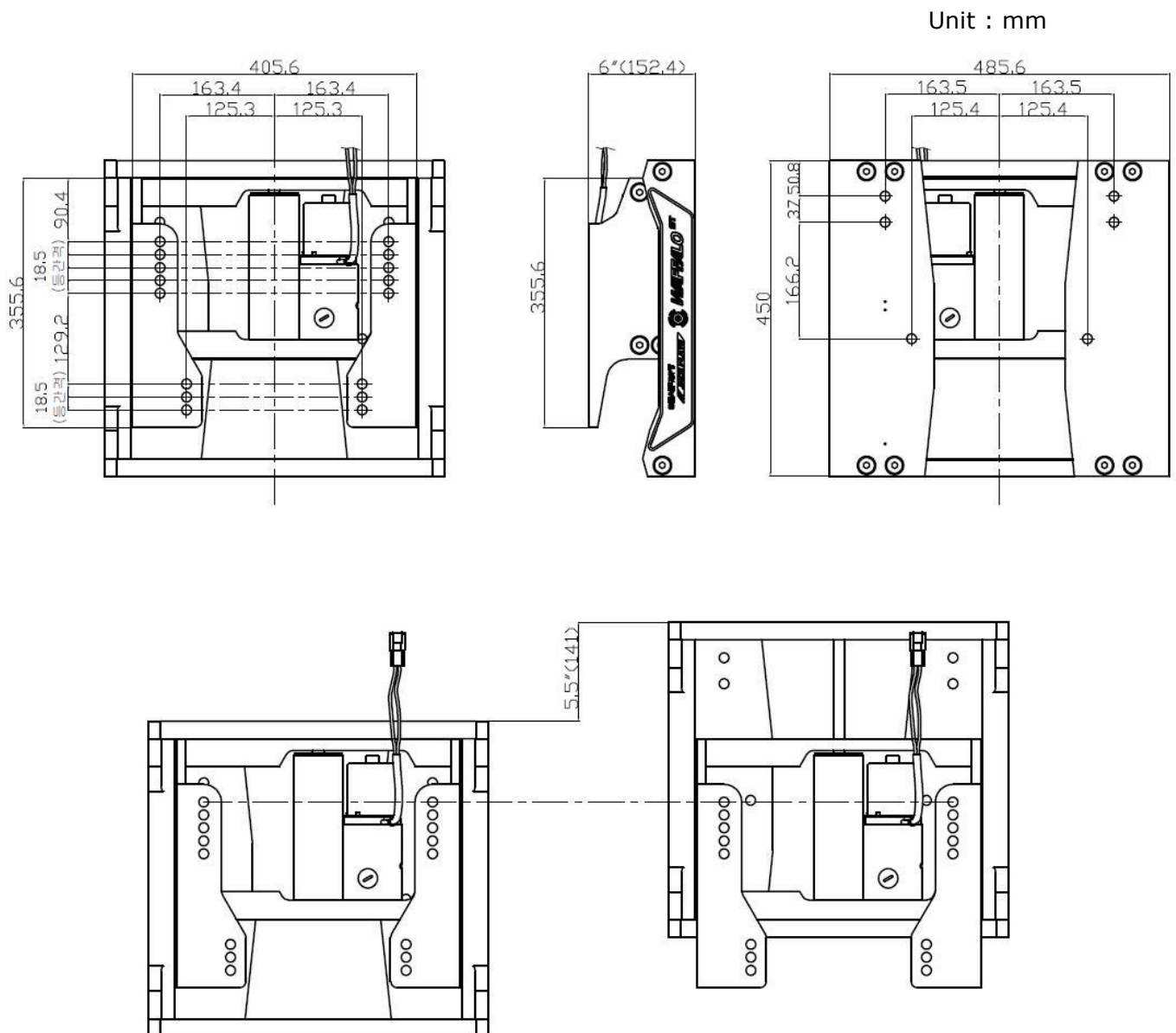


Figure 3.

2) Installation

The following is a guide to installing the Jack Plate on the transom. Proceed with assembly in the order shown below.

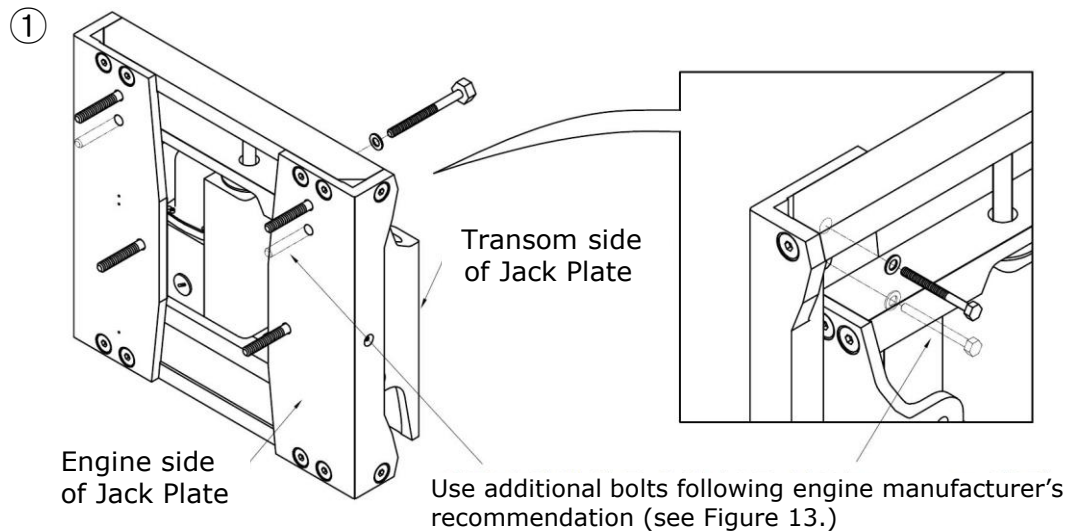


Figure 4.

⚠ ATTENTION

- Before connecting the Jack Plate to the transom, insert the bolts and washers (not supplied) into the corresponding positions as shown in the figure above (note the direction of insertion).
- It is recommended to use 2 additional bolts when the Jack Plate setback is 10 inches or more, or the horsepower rating of outboard engine is 250 HP or higher (see Figure 13).
- Bolts, nuts, washers are not provided. Use the parts recommended by engine manufacturer.

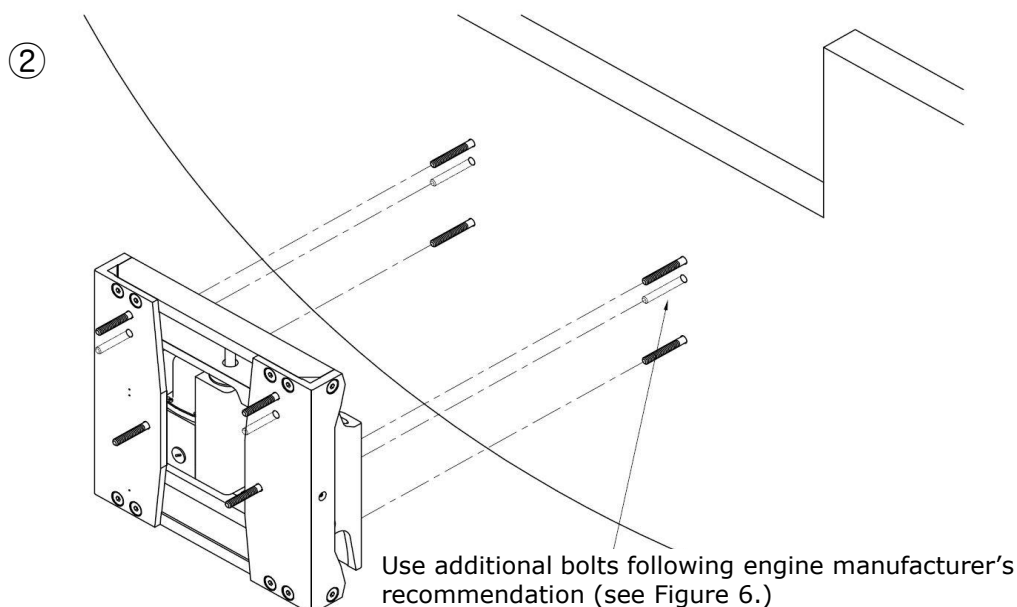


Figure 5.

⚠ ATTENTION

- Mount the Jack Plate the and transom using bolts and washers (not supplied) as shown above.
- It is recommended to use 2 additional bolts when the Jack Plate setback is 10 inches or more, or the horsepower rating of the outboard engine is 250 HP or higher (see Figure 6).
- Treat the bolt holes of the transom with silicone.
- Bolts, nuts, washers are not provided. Use the parts recommended by engine manufacturer.



ATTENTION

- When operating the Jack Plate, make sure that it does not interfere with other parts and equipment.
- Using unapproved bolts and washers may cause the outboard engine to detach from the boat.
- For bolt-tightening torque, follow the recommendations of the engine manufacturer.
- It is recommended to use 2 additional bolts when the Jack Plate setback is 10 inches or more, or the horsepower rating of the outboard engine is 250 HP or higher. (see Figure 6.)
- Temporarily connecting the relay wiring harness will allow operating Jack Plate. This can help with the insertion of the engine bolts. Refer to the "Relay Wiring Harness installation" section.
- Mounting hardware for Jack plate-transom connection and Jack Plate-outboard connection
 - a) Stainless steel engine bolts supplied or approved by the engine manufacturer
 - b) Stainless steel washers supplied or approved by the engine manufacturer
 - c) Nylon nuts supplied or approved by the engine manufacturer
- If there is no engine supplied hardware, the bolts must follow KS D 3698 and the minimum yield strength must be 380 MPa and the tensile strength must be 690 MPa.

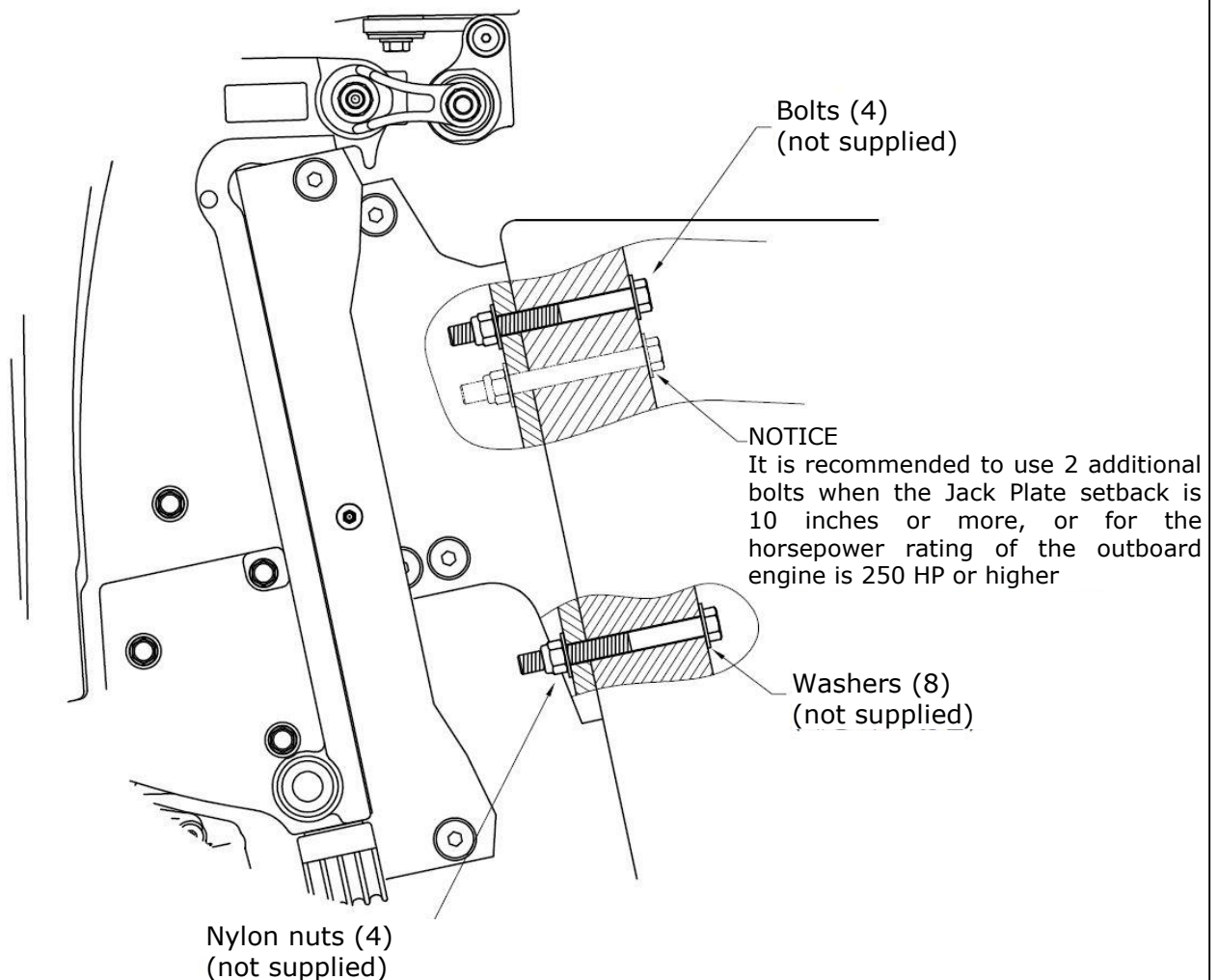


Figure 6.

3.2 Relay Wiring Harness

1) Specifications

- DC12V
- Rated Current: 40 A
- Max. Current: 60 A

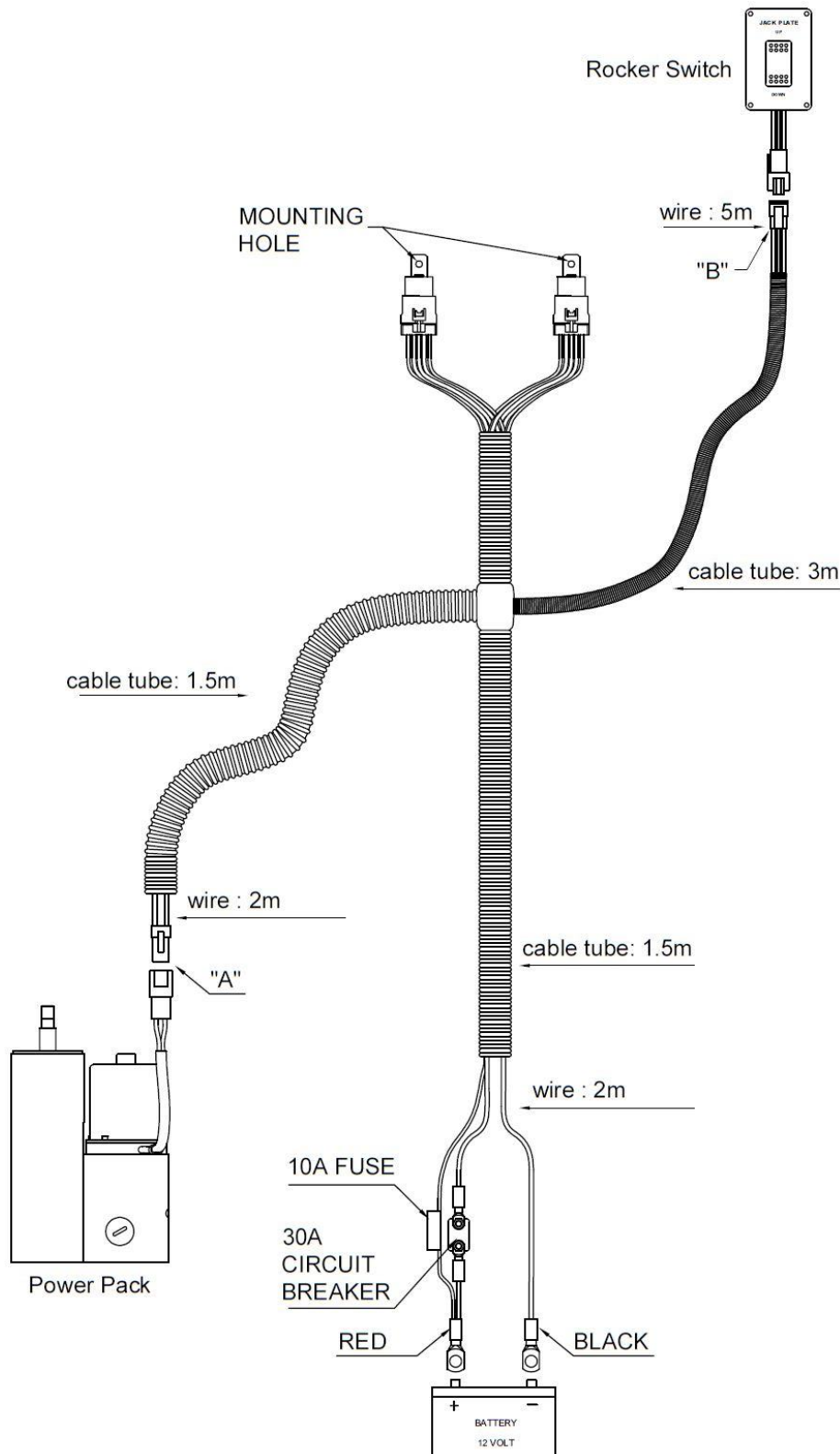


Figure 7.

2) Installation

The following is a guide to connecting the harness to the battery and power pack. Install the harness in the order shown below.

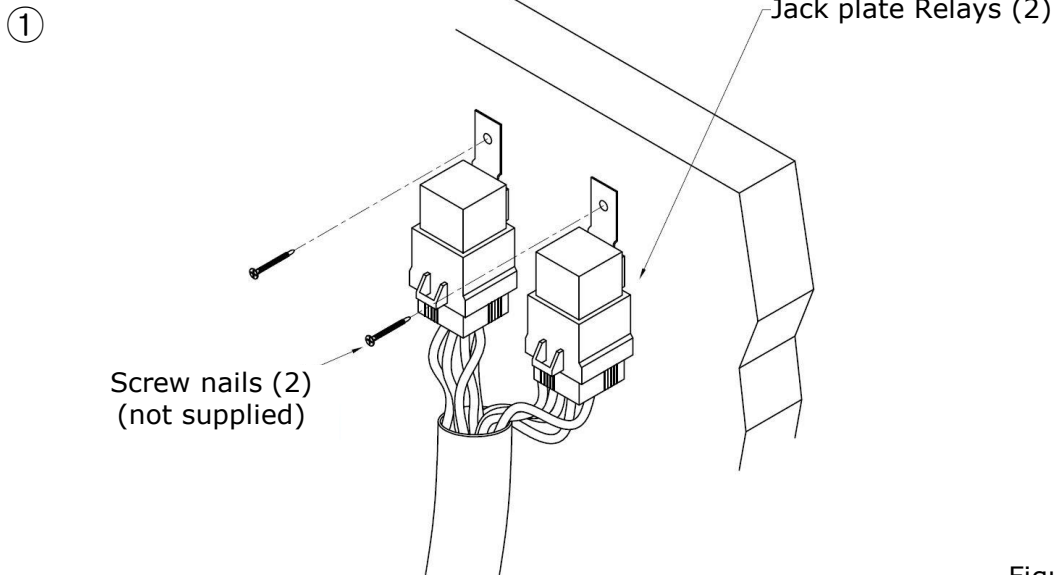


Figure 8.



ATTENTION

- Secure the relay of the harness as shown in the figure above in a dry place free from seawater or moisture (battery storage room, etc.).
- The relay must be attached in a dry location near the back of the boat.
- Screw nails are not supplied.

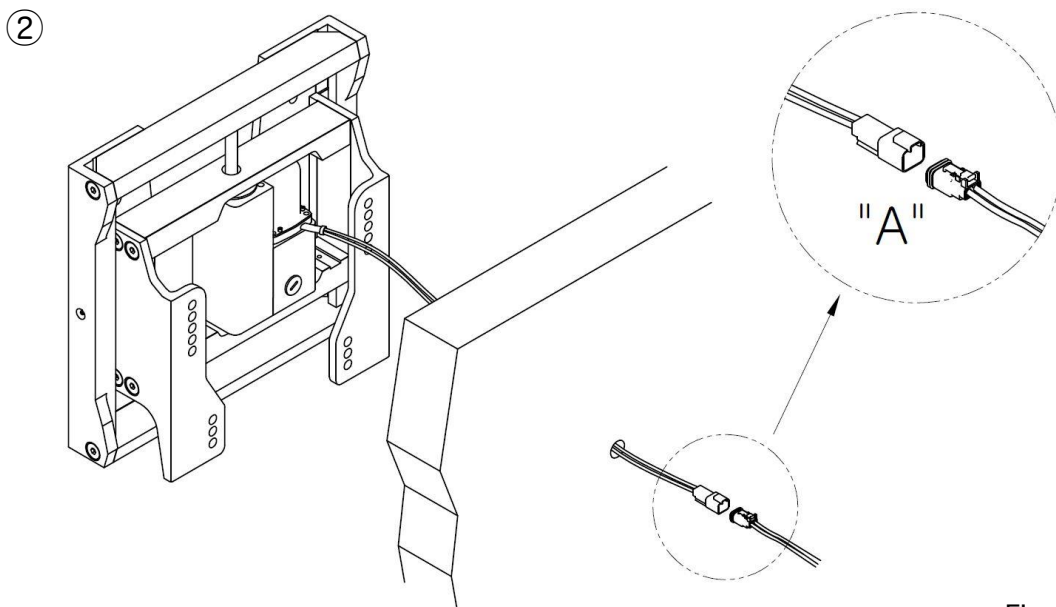


Figure 9.



ATTENTION

- Connect the actuator connection "A" (see "Relay Harness Specifications" section) of the harness to the power pack connection.
- Wire so that the harness is not interfered or kinked by other equipment and components.

③

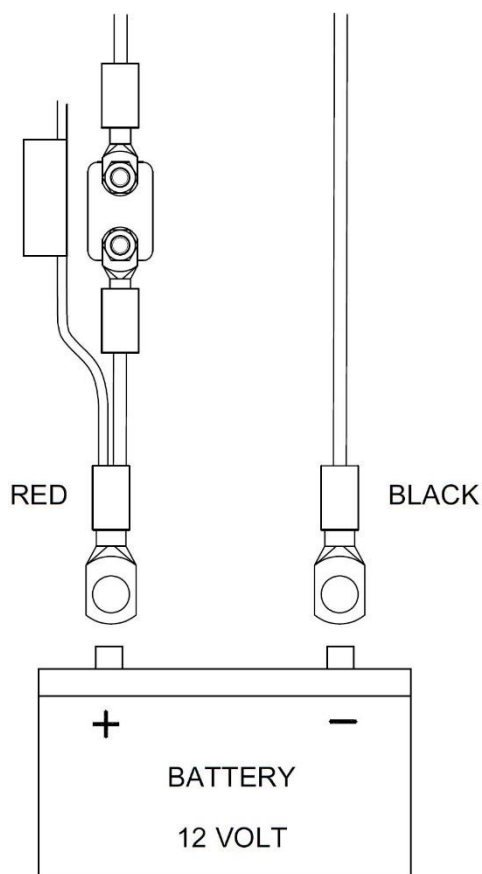


Figure 10.



ATTENTION

- Connect the red wire to the positive terminal (+) of the 12V engine battery.
- Connect the black wire to the negative terminal (-) of the same 12V engine battery.
- Check the color of the wires, making sure that wires are connected to the positive (+) and negative (-) ends correctly as shown above.

3.3 Switch Panel

1) Specifications

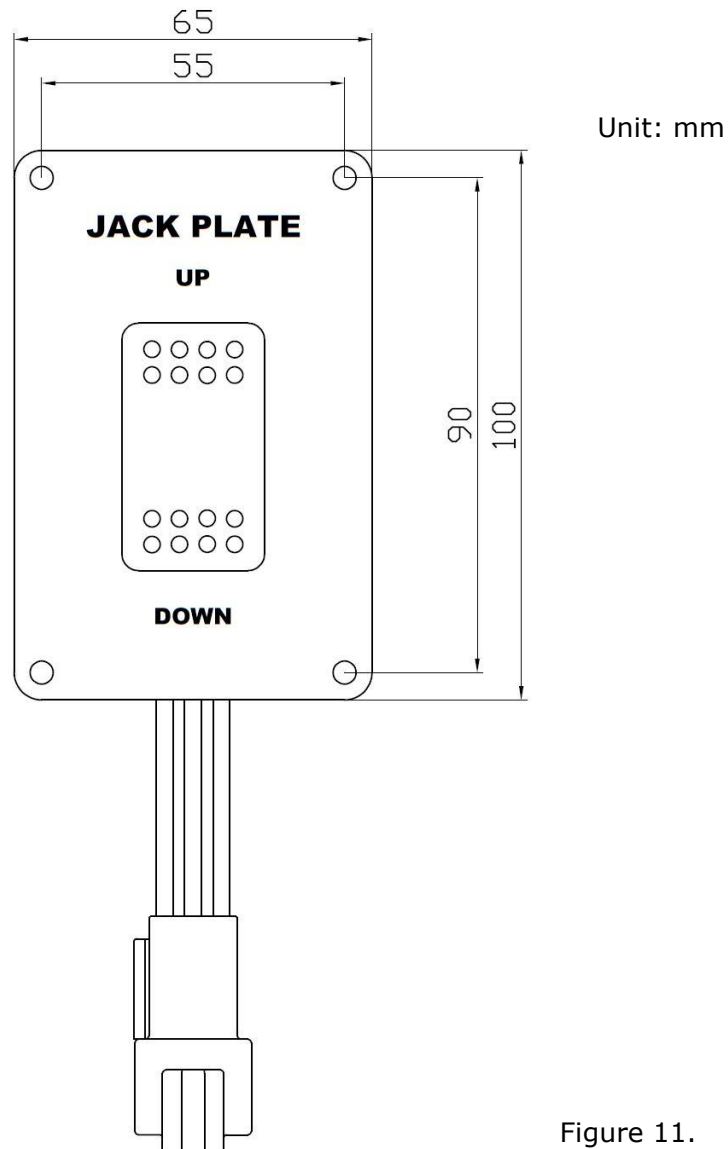


Figure 11.

2) Installation

The following is a guide to connecting the switch panel to the harness. Install the product as described below.

! ATTENTION

- Secure the switch panel to a suitable location on the boat with screw nails (not supplied).
- Connect the "B" part, which is a switch connection of the harness (see "Relay Harness Specifications" section), to the switch connector.
- If the operating direction of the jack plate does not match the operating direction of the rocker switch, swap the position of green and blue wires on the switch connector.

3.4 Mounting the outboard engine to the Jack Plate

1) Installation

The following is a guide to attaching an outboard engine to the Jack Plate. Install the outboard engine to the Jack Plate in the order shown below.

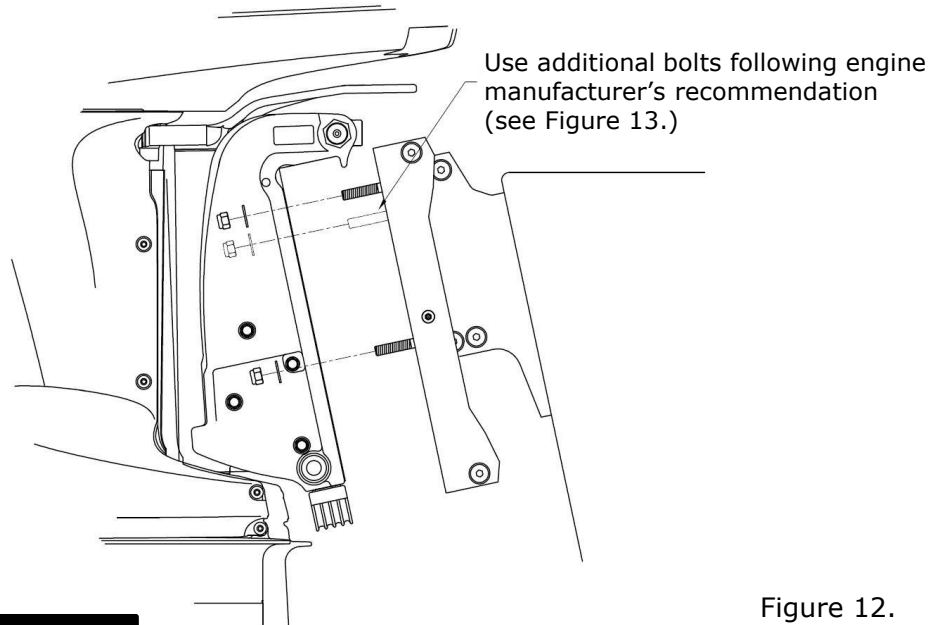


Figure 12.

ATTENTION

- Among the many holes on the outboard engine, select the hole set that best suits the boat and the purpose of use.
- Align and mount the bolts to the positions of the selected holes.
- Install and tighten the washers and the nylon nuts (not supplied).
- Consider using additional bolts as recommended by the engine manufacturer (see Figure 13).
- The bolt tightening torque shall follow 1200 kgf·cm (122 Nm) or the value recommended by the engine manufacturer.

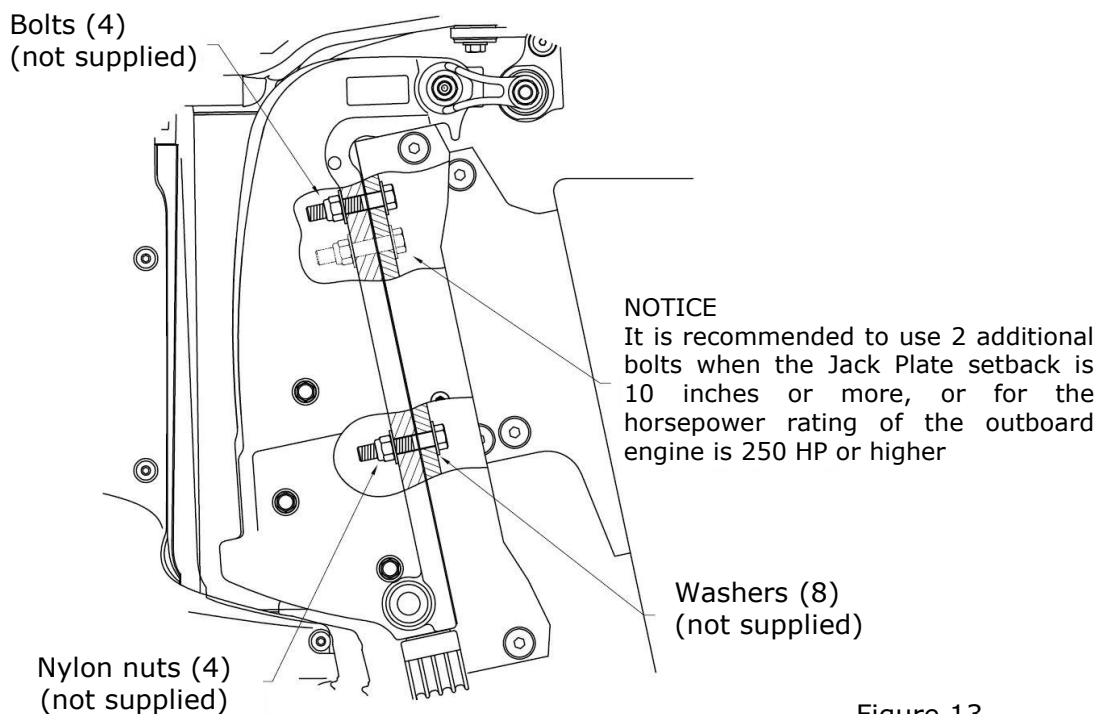


Figure 13.

4.1 Interference Testing

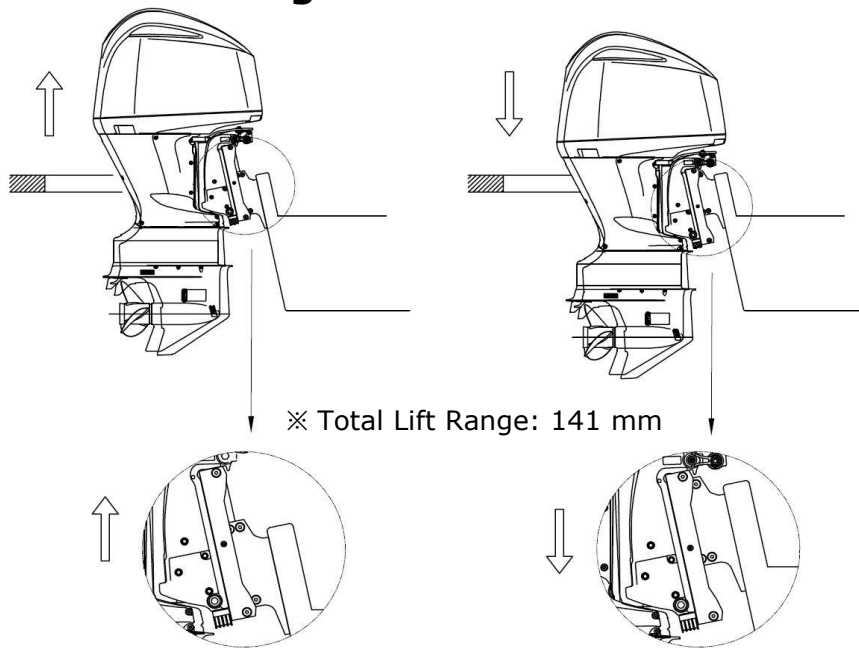


Figure 14.

- Check that the Jack Plate moves freely within the entire lift range, from the lowest position to the highest position.

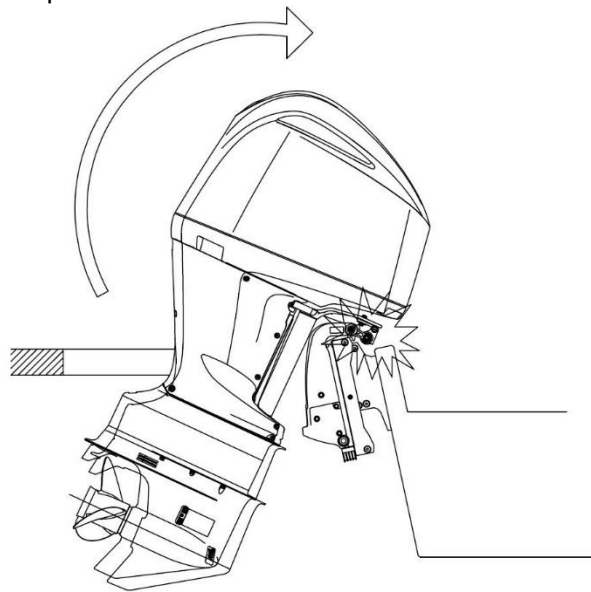


Figure 15.

- With the steering wheel centered at Jack Plate full down position, tilt the engine carefully and ensure that there is no interference during this process.
- Check for interference between the Jack Plate, cylinder, tie bar, hose, outboard engine, or other components.



ATTENTION

- Interference testing is an essential testing procedure after Jack Plate installation and before boat operation. Failure to follow this procedure may result in the loss of control of the boat and subsequent property damage, personal injury and/or death.
- If there is interference, action must be taken to do one of the following:
 - a) Add a tilt limiter to the outboard engine to prevent the engine from reaching a position where interference is possible.
 - b) Move the outboard engine up to higher mounting bolt holes.

5.1 Maintenance



ATTENTION

- Improper installation and maintenance can result in property damage and personal injury. Maintenance requirements are subject to change depending on the climate, the frequency of use, and the purpose of use.
- After first use, check the following every 100 hours or 6 months:
 - a) Check the transom bolts and engine bolts are tightened to the recommended torque values.
 - b) Inspect Jack Plate for any damage, cracks, and wear.
 - c) Inspect electrical cables for any damage and proper connection.
- Do not operate the boat if a component is not functioning properly.
- All work performed on this system must be completed by a qualified mechanic with knowledge of the work.

5.2 Trailering and Storage



ATTENTION

- The Seafirst Jack Plate is a hydraulic system and will hold its set position during operation and short-term storage, but its position may change during transportation and long-term storage.
- During trailering or storage, the outboard engine should be positioned in the lowest vertical position and trim position angle which will not allow interference.

Memo

