ApexRise Hydraulic Suspension Motor Lift

Installation Manual

Buyer should obtain this brochure upon purchase or after installation

Before using the lift, you should read the tips given in the manual, which will help you safely use the lift on the water and when transporting the boat.

Here is the list of tools you will need

Tools and fixtures:

1. Drill with drills Ø 5.0 mm and 12.0 mm.
2. Two wrenches for 22
3. Phillips head screwdriver
4. Motor bracket for lift installation

Fasteners and accessories:

1. Stainless steel bolts with hexagonal heads Ø 12.0 mm corresponding length *-4 pcs.
2. Stainless steel nuts with capron bushings Ø 12.0 mm-4 pcs.
3. Stainless steel washers Ø 12.0 mm-8 pcs.

Fasteners and accessories (not included):

1. Silicone sealant type RTV for sealing fastening holes in the transom (recommended)-1 tube.
2. Dielectric paste for coating electrical connections (recommended)-1 tube.
3. Safety bolts corresponding to the mounting clamps on the motor.

*** To determine the required bolt length, see the information on the next page.**

Before starting installation

Since the installation on each boat is unique in its own way, you should determine on the spot what fasteners will be required. In any case, it is recommended to use reliable stainless steel bolts Ø 12.0 mm.

For motors with bolt mounting on the transom, you will need two sets of bolts, nuts and washers-one to attach the support frame of the lift to the boat, the other to attach the motor to the frame of the lift.

If the motor is already mounted, its mounting bolts can be used again to attach the lift frame to the boat transom. In doing so, make sure that only high-quality stainless steel bolts are used in an intact condition.

If the motor is clamped, only one set of Ø 12.0 mm bolts with washers and nuts will be required to install the frame on the transom; Of course, we must not forget about the safety bolts.

How to determine the length of bolts fastening to the transom

Since all trunks are different, you will need to independently determine the desired length of fastening bolts. If holes are drilled under the bolts, you can determine the thickness of the transom by the length of the hole: you just need to add 5 cm to the thickness of the transom.

How to determine the length of bolts fastening the motor to the lift

To determine the correct length of the motor mounting bolts, you should measure the thickness of the motor mounting frame and add 2.5 cm.

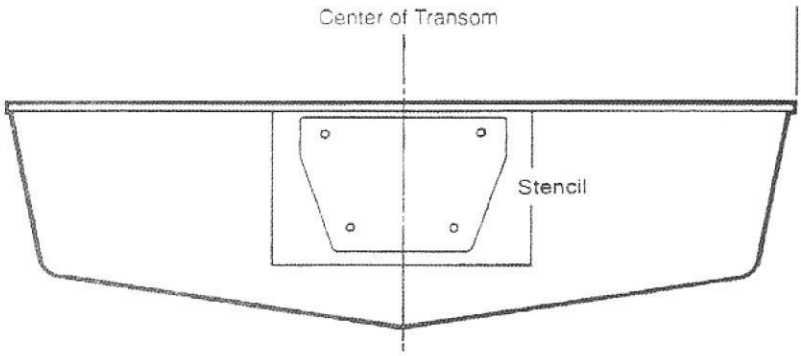
Ensure sufficient length of couplings and cables

The lift frame removes the boat's outboard motor from the controls, batteries and fuel tank by 17.5 cm. Before installing the lift frame, the necessary slack should be provided in the appropriate couplings and cables. The easiest way to check this is: lean the motor on a temporary support-on a bracket-holder and unfasten the fastening clamp or fastening bolts. Move the motor away from the transom by 18 cm without disconnecting the connecting couplings and cables.

Note: Increasing the distance between the boat hull and the outboard motor increases the efficiency of the propulsion system as a whole. As the propeller moves away from the transom, the water turbulence will be less in the propeller working area, which improves its working conditions.

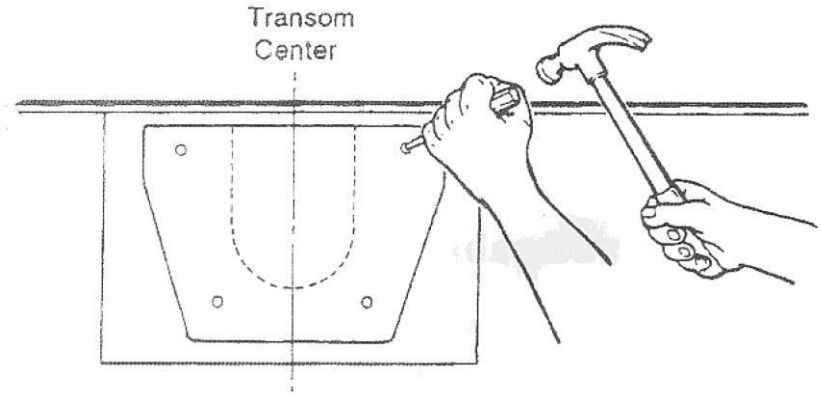
Install frame lift A

The frame of the lift has pre-drilled mounting holes according to the industry standard scheme. If the boat transom already has the appropriate holes drilled, go to step 4 later on this page. If there are no holes, do the following:



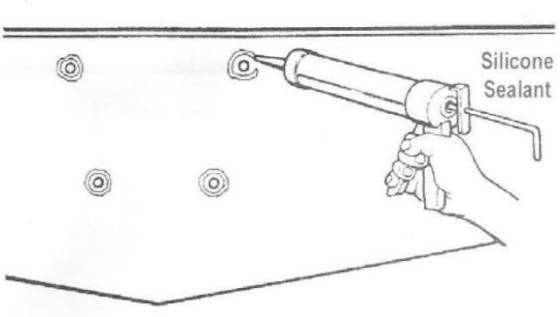
1. Place the template relative to the center line of the transom. The projections of the holes should not coincide with the moldings, ribs, etc. available on the transom.

2. Having correctly positioned the template, strengthen it and drill the centers of the holes to be drilled.



3. Use a Ø 5.0 mm drill to drill a guide hole in each marked location, ensuring that they are coaxial and do not interfere with the installation of fastening bolts in the holes. Drill the holes with a drill Ø 12.0 mm.

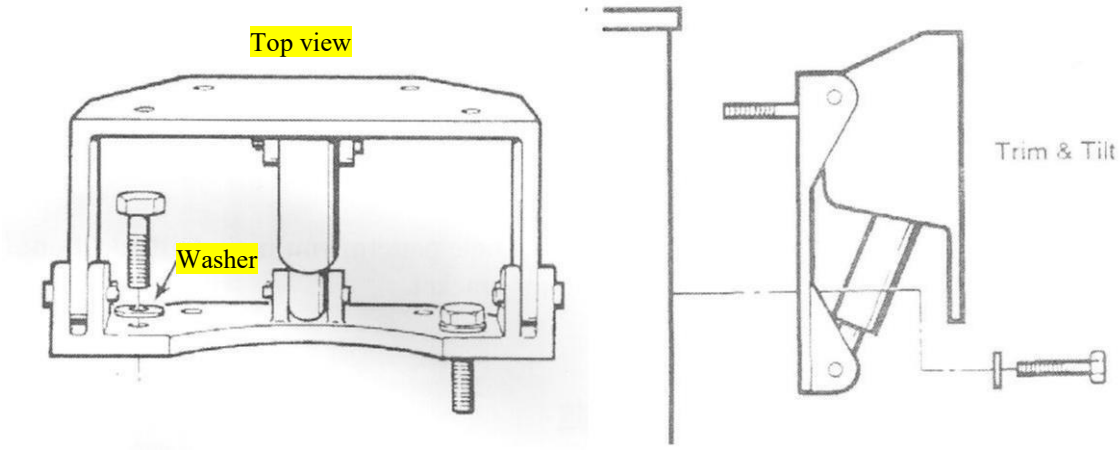
4. Before installing the frame, ring a strip of RTV silicone sealant around each hole to seal it.



Silicone
Sealant

5. To attach the lift frame to the transom, you should use 4 (four) Ø 12.0 mm stainless steel bolts with complete washers and nuts with capron bushings. First screw the bolts with the washers into both top holes. Tape the bolt heads to hold them in place, lift the frame to the transom, and, matching the holes with the bolts, put the frame on the bolts. Put washers and nuts on the bolts from inside the boat. The nuts should not be tightened completely before installing the bottom bolts.

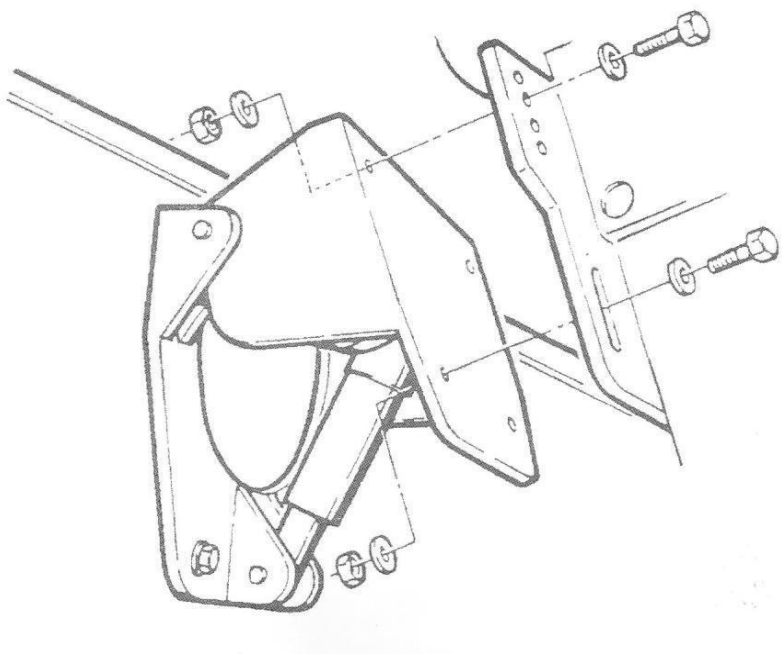
Note: To provide more free space for installing the mounting bolts, you can temporarily connect the battery and move the lift frame to the working position. This will make it easier to install the top bolts.



6. The installation is completed by inserting two lower mounting bolts into the holes and strengthening them with capron nuts with washers. Fully tighten each bolt, taking care not to damage the transom or frame of the lift.

Motor installation

Motor bolt mount

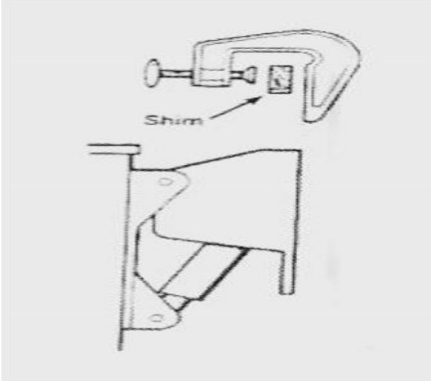


1. The frame has holes to fit most outboard motor bolt mount plates.

2. Attach the motor plate to the lift frame using 4 (four) Ø 12.0 mm stainless steel bolts of suitable length, putting on washers on both sides of each bolt. Secure all bolts with nuts with nylon bushings tightly, but try not to tear the bolts and nuts.

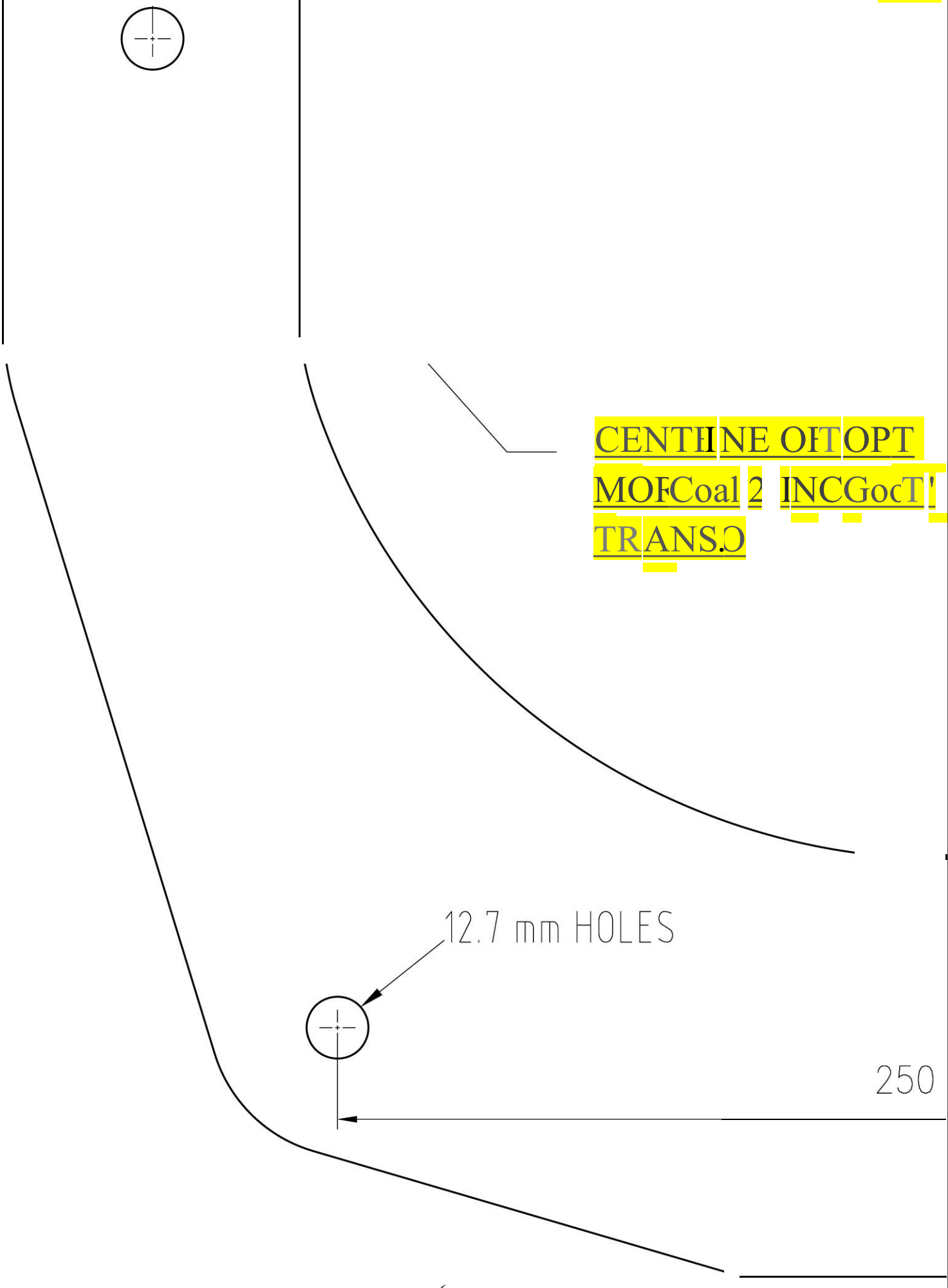
3. If the location of the holes in the motor mounting plate does not conform to the industry standard layout of the mounting bolts, additional holes can be drilled in the plate to secure the motor mounting plate to the lift frame.

Transom trim



1. From a wooden bar with a section of 5x7. 5 cm, cut a die about 28 cm long.

2. Attach a wooden plate from the inside to the motor base plate and hold it in place by "putting" the motor on top of the lift frame.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MOFCoal 2 INCGocT'
TRANS.O
12.7 mm HOLES
250

mm

Where holes should be
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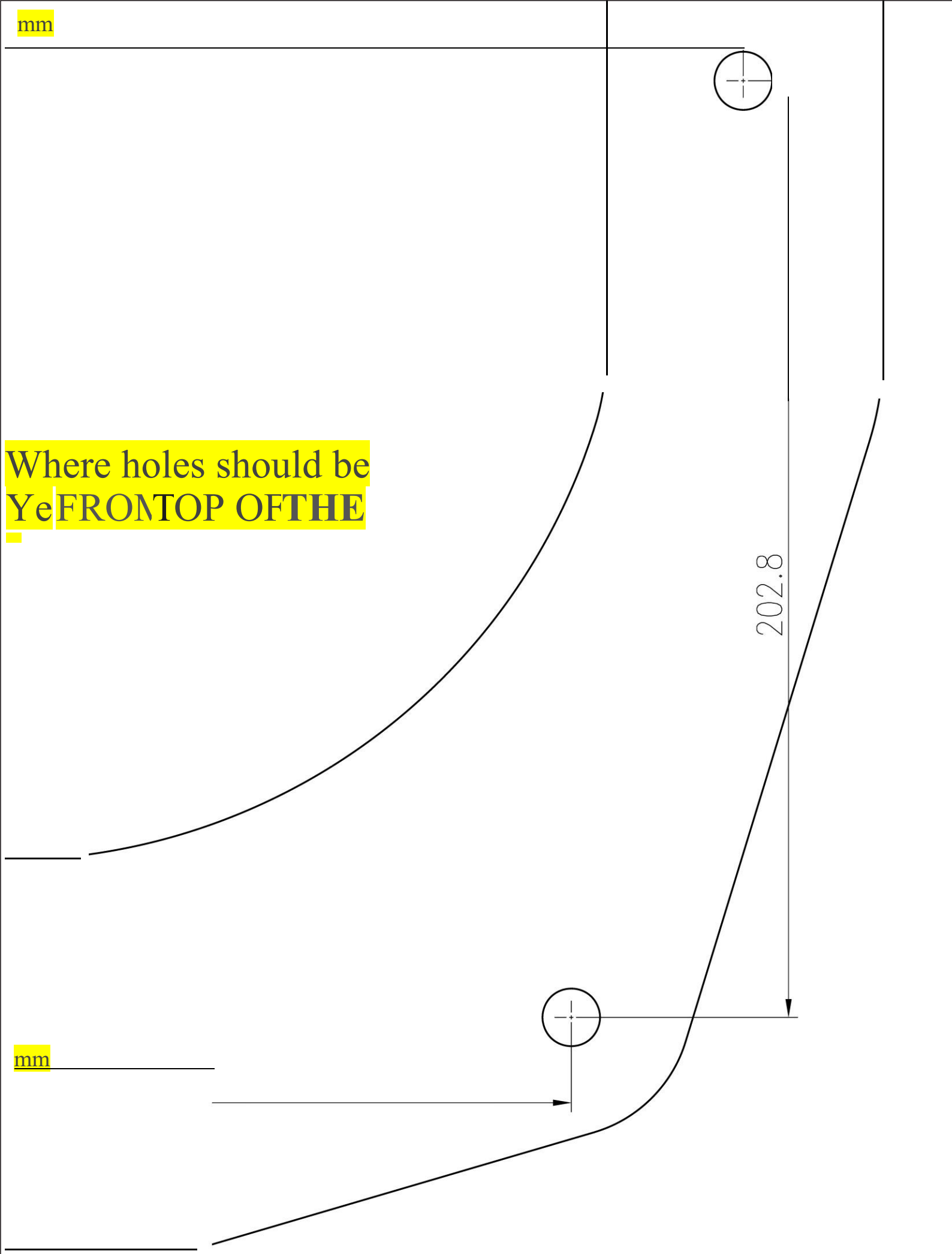
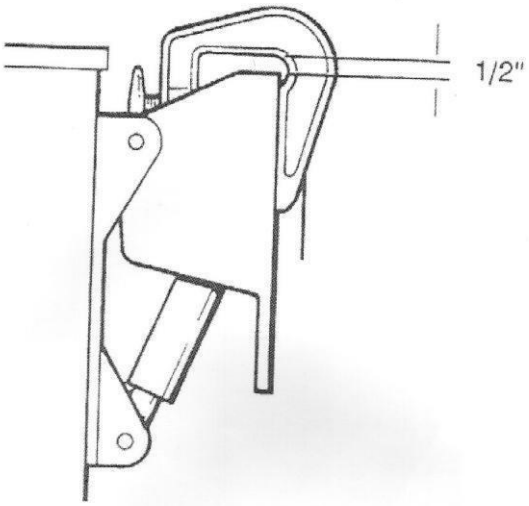


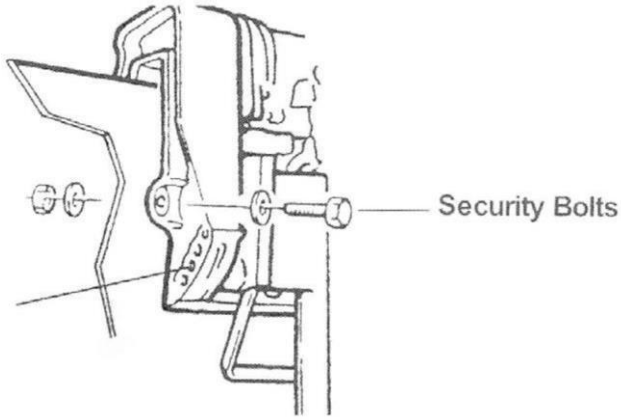
mm

3. Leaving approximately 15 mm of clearance, tighten the clamp clamp.



Ø 12.7 mm

4. Before completing the installation of the lift, the lift frame with the motor should be fully extended at low speed to check whether the clamps or clamp handles do not interfere with the movement of the frame. Otherwise, the motor should be reinstalled.



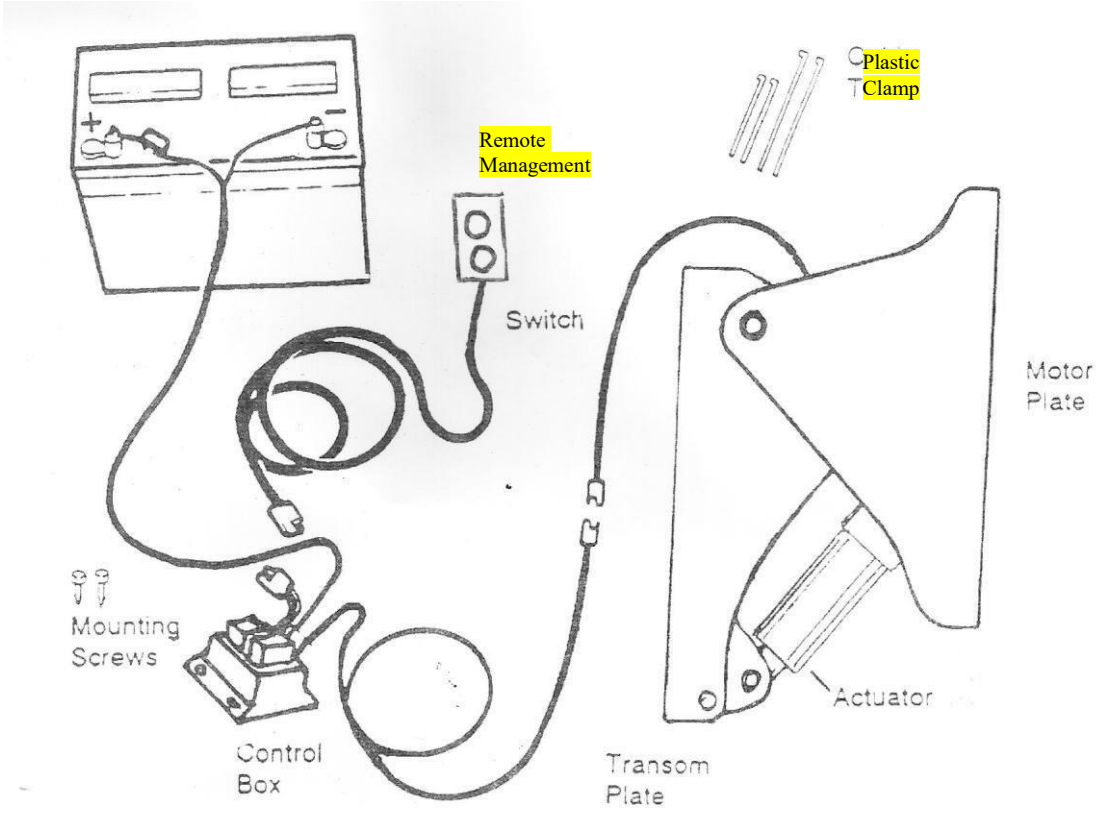
NOTE:
To adjust the degrees of full tilt needed simply select the correct tilt pin placement on the outboard motor.

5. Install safety bolts for the clamp, for which purpose drill mounting holes in the mounting clamp, which must correspond in location and size to the holes for safety bolts in the mounting clamps of the outboard motor.

In addition, it is recommended to wrap loops of cord on the handles of the clamps so that they are not accidentally lost on the move if they loosen from vibration.

Electrical connections

The lift is designed to operate from a conventional boat battery with a voltage of 12V and does not require a separate battery. The procedure for connecting the lift to the main battery is shown below:



1. Use set screws to secure the electrical distribution box inside the boat.

2. The push-button switch should be strengthened and installed in a convenient place closer to the driver's seat. On a motor with a tiller, the lift switch should be attached to the tiller with clamps or electrical tape.

3. Run three wires from the switch on the side of the remote control and two wires from this box to the lift frame.

4. Apply a little dielectric grease to the connectors and connect them (it is recommended to wrap these connectors with water-repellent electrical tape or enclose them in a plastic tube).

5. After connecting all contacts and wires, connect the ring contacts to the battery:
Red conductor-to the positive terminal, black-to the negative terminal.

6. Turn on the hoist to raise and lower the motor to check whether there is sufficient weakness in the electrical conductors, and then strengthen the conductors with complete clamps so that they are not clamped by the moving parts of the hoist during operation.

Tips for use

With proper use and care, the lift will serve for many years. There are two main causes of malfunctions for which the following precautions should be followed.

1. Transportation

The lift pusher is a precise electro-hydraulic product capable of developing a force of up to 44.13 kN to control the hitch angle of a powerful outboard motor. The hydraulic cylinder of the pusher ensures that when folded, it will never "fold" spontaneously.

However, like the original motor hitch mechanism, this lift is not designed to hold the motor while transporting the boat. Transportation on a trailer can create significant effort on the stern of the boat,damage the lift mechanism and the suspension motor itself. Therefore, when Transportation, the motor must be in the extreme lower position or it needs to be strengthened with additional clamps.

Warranty

This 12-month warranty on the device is provided to the direct buyer, without transfer to third parties. The manufacturer reserves the right, at its sole discretion, to repair or replace any part in the hydraulic trim that may fail or be defective during the warranty period from the date of purchase. For warranty repairs or replacement of TRIMA, the Buyer must provide a warranty card confirming the date of purchase and notify the Dealer by all convenient methods and contacts about warranty repairs.

Disclaimer of warranty:

Failure to follow the instructions contained in this manual for the operation of the hydraulic trim for the boat motor will lead to the cancellation of the warranty. This warranty applies to defects in the parts and materials from which the kit is made.