



SIDE-POWER
Thruster Systems

SHP SERIES

OPERATIONAL HYDRAULIC USER MANUAL

**Keep this
manual onboard!**



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SLEIPNER MOTOR AS

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Important User Considerations and Precautions 3

User Manual

Thruster Operation	4
Control Panel.....	5
Maintenance	6 - 7
Troubleshooting	8
Checklist.....	9
Spare Parts.....	10

Products

SH1000/513-BA45 - SH1000 Tunnel thruster, Ø513mm
SH100/185T-U06 - SH100 Tunnel thruster, U06
SH100/185T-U10 - SH100 Tunnel thruster, U10
SH160/215T-U14 - SH160 Tunnel thruster, U14
SH160/215T-U06 - SH160 Tunnel thruster, U06
SH240/250TC-U08 - SH240 Tunnel thruster, U08
SH240/250TC-U10 - SH240 Tunnel thruster, U10
SH240/250TC-U19 - SH240 Tunnel thruster, U19
SH320/300TC-U16 - SH320 Tunnel thruster, U16
SH320/300TC-U19 - SH320 Tunnel thruster, U19 [Archived]
SH320/300TC-U08 - SH320 Tunnel thruster, U8
SH320/300TC-U23 - SH320 Tunnel thruster, U23
SH320/300TC-U14 - SH320 Tunnel thruster, U14
SH320/300TC-U11 - SH320 Tunnel thruster, U11
SH320/300TC-BA19 - SH320 Tunnel thruster, BA19
SH320/300TC-BA16 - SH320 Tunnel thruster, BA16
SH420/386TC-U37 - SH420 Tunnel thruster, U37
SH420/386TC-BA40 - SH420 Tunnel thruster, BA40
SH420/386TC-BA32 - SH420 Tunnel thruster, BA32
SH420/386TC-U33 - SH420 Tunnel thruster, U33
SH420/386TC-U26 - SH420 Tunnel thruster, U26
SH420/386TC-BA40-S - SH420 Tunnel thruster, BA40
SH420/386TC-U29 - SH420 Tunnel thruster, U29
SH550/BA40-S - Hydraulikk thruster, >550kg
SH550/386TC-P52 - SH550 Tunnel thruster, P52
SH550/386TC-BA60 - SH550 Tunnel thruster, BA60
SH550/386TC-BA32 - SH550 Tunnel thruster, BA32
SH550/386TC-BA40 - SH550 Tunnel thruster, BA40
SH550/386TC-U50 - *Hydraulikk thruster >550-U50
SH550/386TC-U33 - SH550 Tunnel thruster, U33
SH550/386TC-U37 - SH550 Tunnel thruster, U37
SH550/386TC-BA40-S - SH550 Tunnel thruster, BA40
SH550/386TC-BA75 - SH550 Tunnel thruster, BA75
SH550/386TC-G45 - SH550 Tunnel thruster, G45
SH700/412-BA60 - SH700 Tunnel thruster, BA60
SH700/412-BA75 - SH700 Tunnel thruster, BA75
SH700/412-BA45 - SH700 Tunnel thruster, BA45
SH700/412-BA56 - SH700 Tunnel thruster, BA56 [Archived]
SH1000/513-BA110 - * BRUK SH1000/513-BA110D13
SH1000/513-G80 - SH1000 Tunnel thruster, G80
SH1000/513-BA125 - SH1000 Tunnel thruster, BA125
SH1000/513-G75 - SH1000 Tunnel thruster, G75
SH1000/513-BA80 - SH1000 Tunnel thruster, BA80
SH1000/513-G70 - SH1000 Tunnel thruster, G70
SH1000/513-BA60 - SH1000 Tunnel thruster, BA60
SH1000/513-BA110D13 - SH1000 Tunnel thruster, BA110
SH1400/610-BA160 - SH1400 Tunnel thruster, BA160
SH1400/610-BA125 - SH1400 Tunnel thruster, BA125
SH1400/610-BA80 - SH1400 Tunnel thruster, BA80
SH1400/610-BA180 - SH1400 Tunnel thruster, BA180
SH1400/610-BA110 - SH1400 Tunnel thruster, BA110
SH1400/610-BA150 - SH1400 Tunnel thruster, BA150 [Archived]
SH1400/610-BA080 - SH1400 Tunnel thruster, BA80
SH100/185T-U11 - SH100 Tunnel thruster, U11
SH160/215T-U08 - SH160 Tunnel thruster, U08 [Archived]
SH1000/513-BA75 - SH1000 Tunnel thruster, BA75
SH160/215T-U11 - SH160 Tunnel thruster, U11 [Archived]
SH320/300TC-U10 - SH320 Tunnel thruster, U10
SH550/386TC-BA56 - SH550 Tunnel thruster, BA56
SH1000/513-BA90 - SH1000 Tunnel thruster, BA90
SH100/185T-U08 - SH100 Tunnel thruster, U08 [Archived]
SH160/215T-U10 - SH160 Tunnel thruster, U10
SH240/250TC-U14 - SH240 Tunnel thruster, U14
SH240/250TC-U16 - SH240 Tunnel thruster, U16
SH240/250TC-U11 - SH240 Tunnel thruster, U11
SH550/386TC-BA45 - SH550 Tunnel thruster, BA45

DECLARATION OF CONFORMITY

MC_0020



Sleipner Motor AS
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N-1612 Fredrikstad, Norway

Declare that this product with accompanying standard control systems complies with the essential health and safety requirements according to:

DIRECTIVE 2013/53/EU
DIRECTIVE 2014/30/EU
DIRECTIVE 2014/35/EU

IMPORTANT

Failure to follow the Considerations and precautions can cause serious injury / damage and will render all warranty given by Sleipner Motor AS VOID.

Never use thrusters when close to objects/ persons or pets in the water. The thruster will draw objects into the tunnel and the rotating propellers. This will cause serious injuries and damage the thruster.

- Always turn the control device/panel off when the thruster is not in use or when leaving the boat.
- When leaving the boat always turn off the main power switch for the thruster.
- Never use thrusters out of water.
- If the thruster stops giving thrust while running, there is possibly a problem in the drive system. You must immediately stop running the thruster and turn it off. Running the thruster for more than a few seconds without resistance from the propeller can cause serious damage to the thruster.
- If the performance of the thruster is reduced check the hydraulic system or check the tunnel for marine growth.
- If two panels are operated with conflicting directions at the same time the thruster will not run. If both are operated in the same direction, the thruster will run in this direction.
- If you notice any faults with the thruster switch it off to avoid further damage.
- It is the owner/ captain/ other responsible parties full responsibility to assess the risk of any unexpected incidents on the vessel. If the thruster stops giving thrust for some reason while manoeuvring you must have considered a plan on how to avoid damage to persons or other objects.
- The primary purpose of the thruster is to manoeuvre/ dock the vessel. Expect reduced performance at higher speeds.

! Please refer to the graphic for special considerations relating to your model !

Take time to practice operation in open water to become familiar with the thruster and to avoid damages to your boat or people.

How to use the Thruster

1. Turn on the main power switch for the thruster. **(NB: Always turn off the main power switch when not on-board.)**
2. Turn on the control panel by pushing both "ON" buttons on the Side-Power panel simultaneously.
* Turn off the control panel by pushing both "OFF" button

(NB: Control panels designed for the hydraulic system have a replace the secondary 'OFF' button with a red 'STOP' button for an emergency stop function.)

Joystick Control

To Turn the bow in the desired direction move the joystick in the direction you wish the bow to move.

Button Control

For 'HOLD' function.

* For other controls like foot switches or toggle-switches please refer to that products user manual for detailed operational use.

How to use a combined bow and stern thruster

The combination of a bow and stern thruster offers total manoeuvrability to the boat and the ability to move the bow and the stern separately from each other. This enables you to move the boat sideways in both directions and turn the boat around its axis 360° staying stationary.

(NB: At speed the side thruster will have little or no effect to steer the vessel.)

Proportional control thruster

For proportional control move the joystick equivalent to the amount of thrust you intend to receive.

PRO proportional CONTROL PANEL



*PJC221

*PJC222

PJC211

PJC212

*Developed for Hydraulic Thrusters
Compatible for all DC and AC thrusters

Commercial CONTROL PANEL



PJC321-L

PJC322-L

PJC321-MCL2

PJC233-MCL2

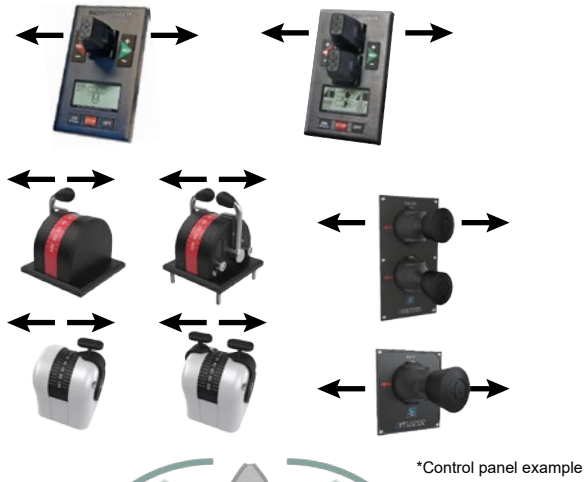
PJC321

PJC322

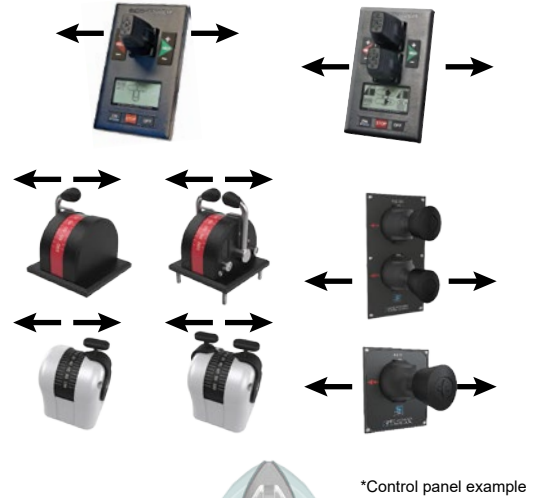
S-Link REMOTE CONTROL



Activating the bow thruster



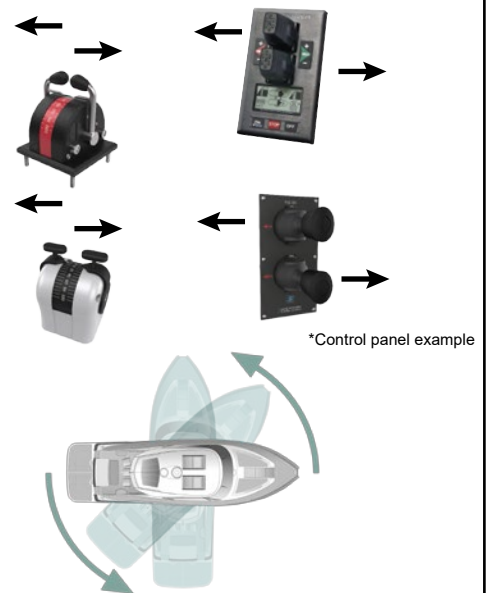
Activating the stern thruster



Activating both bow and stern thruster to push the boat sideways



Activating both bow and stern thruster to rotate the boat on axis



! Please refer to the graphic for special considerations relating to your model !

As a part of the seasonal service of your Thruster before every season, always check that:

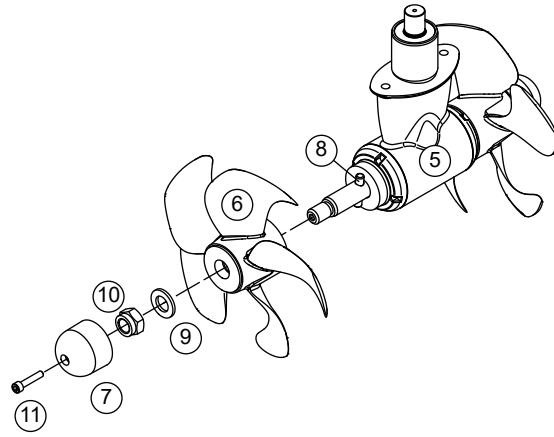
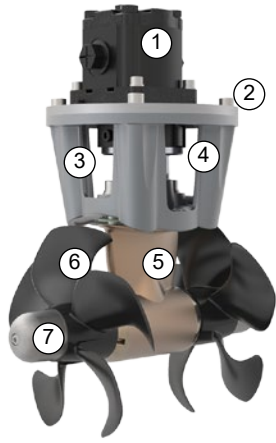
In Water/ Out of the Water

- The area around the thruster inside the boat is clean and dry. Ensure there are no signs of water or oil leaks.
- All electrical connections are clean and fastened firmly.
- Ensure that your batteries are in good condition.

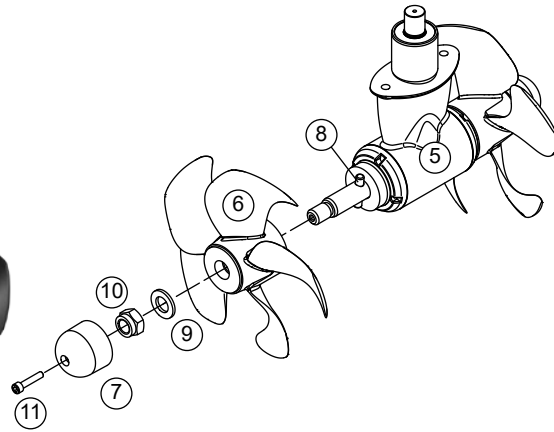
Out of Water

- Check the propeller(s) or tunnel for any damage for example impact damage.
- The propeller(s) is fastened securely to the gear leg.
- Check all components of thruster are fastened securely.
- Clean the tunnel and gear leg from marine growth.
- Paint the propeller and gear leg with anti-fouling before every season to keep it clean from sea growth. **(NB: Never paint the anode, rubber seals or propeller shaft. Ensure paint does not enter the space between the propeller and the gear leg.)**
- Change the anode before every season, or when half the anode has eroded. Always use a sealant or thread glue on the securing screw to ensure that it does not fall off.
- Ensure propellers are attached correctly. **(NB: Counter rotating models use a left hand/ right hand propeller.)**
- If an external oil tank is installed with your model, ensure the oil level remains the same.

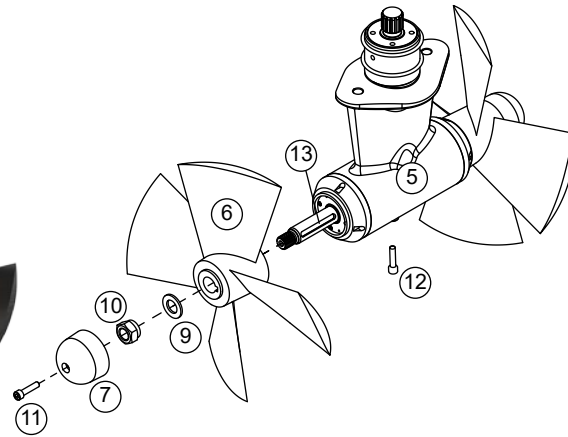
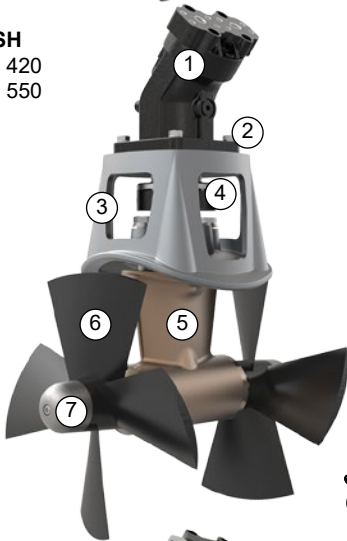
SH
* 100
* 160
* 240



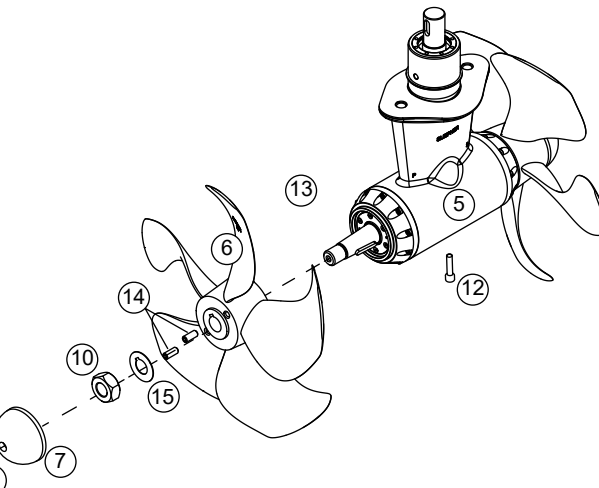
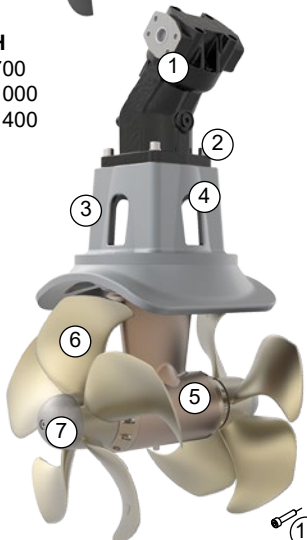
SH
* 320



SH
* 420
* 550



SH
* 700
* 1000
* 1400



- KEY:**
- 1. Hydraulic Motor
 - 2. Mounting Plate
 - 3. Motor bracket
 - 4. Flexible coupling
 - 5. Gear Leg
 - 6. Propeller
 - 7. Anode
 - 8. Drive pin
 - 9. Washer
 - 10. Lock Nut
 - 11. Fastening Screw for anode
 - 12. Oil drain screw
 - 13. Shaft Key
 - 14. Anode pins
 - 15. Locking Washer

Before seeking assistance from the website help desk from your Side-Power dealer/ distributor, please perform these tests.
(NB: If you are unable to understand what to check, you must consult a Side Power distributor.)

CHECK	SOLUTION
The motor runs, but there is no thrust	
Check propellers are fitted, fastened correctly and not damaged on the prop shaft.	Re-fasten or replace if necessary
On counter rotating models ensure LH and RH propellers are installed correctly	Install correctly
Check the flexible coupling between the motor and drive shaft is fitted correctly and not damaged.	Replace if necessary
Check the gears are not damaged.	Replace if necessary
The thrusters performance is reduced	
Check the propeller, gear house and tunnel are free from growth/ barnacles or debris and damage.	If there is growth in the tunnel, this will disturb/ block the water flow and significantly reduce performance
Check oil pressure and levels.	Fill if necessary

Before seeking assistance from the website help desk from your Side-Power dealer/ distributor, please perform these tests.
(NB: If you are unable to understand what to check, you must consult a Side Power distributor.)

Control panels operating on the S-link system display all faults via the control panel interface or via other warning methods.

To review any issues of your product refer to the appropriate user manual for a complete list of fault codes and troubleshooting guides.

For additional supporting documentation, we advise you to visit our website www.side-power.com for the spare parts list.



CHECK TO PERFORM	DATE											
The thruster components are fastened securely.												
The area around the thruster is clean and dry. If there are signs of water or oil leaks												
Paint the propeller and gear leg with anti-fouling.												
Batteries are in good condition.												
All electrical connections are clean and fastened firmly.												
Change the anode.												
Check oil in the oil reservoir.												

For the most up to date documentation, we advise you to visit our website www.side-power.com for the spare parts list.

For additional supporting documentation, we advise you to visit our website www.side-power.com for the spare parts list.

1. The equipment manufactured by Sleipner Motor AS (The "Warrantor") is warranted to be free from defects in workmanship and materials under normal use and service.
2. This Warranty is in effect for of two years (Leisure Use) or one year (Commercial use) from the date of purchase by the user. Proof of purchase must be included, to establish that it is inside the warranty period.
3. This Warranty is transferable and covers the product for the specified time period.
4. In case any part of the equipment proves to be defective, other than those parts excluded in paragraph 5 below, the owner should do the following:
 - (a) Prepare a detailed written statement of the nature and circumstances of the defect, to the best of the Owner's knowledge, including the date of purchase, the place of purchase, the name and address of the installer, and the Purchaser's name, address and telephone number;
 - (b) The Owner should return the defective part or unit along with the statement referenced in the preceding paragraph to the warrantor, Sleipner Motor AS or an authorized Service Centre, postage/shipping prepaid and at the expense of the Purchaser;
 - (c) If upon the Warrantor's or Authorized Service Centre's examination, the defect is determined to result from defective material or workmanship, the equipment will be repaired or replaced at the Warrantor's option without charge, and returned to the Purchaser at the Warrantor's expense;
 - (d) no refund of the purchase price will be granted to the Purchaser, unless the Warrantor is unable to remedy the defect after having a reasonable number of opportunities to do so. Prior to refund of the purchase price, Purchaser must submit a statement in writing from a professional boating equipment supplier that the installation instructions of the Installation and Operation Manual have been complied with and that the defect remains;
 - (e) warranty service shall be performed only by the Warrantor, or an authorized Service Centre, and any attempt to remedy the defect by anyone else shall render this warranty void.
5. There shall be no warranty for defects or damages caused by faulty installation or hook-up, abuse or misuse of the equipment including exposure to excessive heat, salt or fresh water spray, or water immersion except for equipment specifically designed as waterproof.
6. No other express warranty is hereby given and there are no warranties which extend beyond those described in section 4 above. This Warranty is expressly in lieu of any other expressed or implied warranties, including any implied warranty of merchantability, fitness for the ordinary purposes for which such goods are used, or fitness for a particular purpose, and any other obligations on the part of the Warrantor or its employees and representatives.
7. There shall be no responsibility or liability whatsoever on the part of the Warrantor or its employees and representatives for injury to any person or persons, or damage to property, loss of income or profit, or any other consequential or resulting damage or cost which may be claimed to have been incurred through the use or sale of the equipment, including any possible failure or malfunction of the equipment, or part thereof.
8. The Warrantor assumes no liability for incidental or consequential damages of any kind including damages arising from collision with other vessels or objects.
9. This warranty gives you specific legal rights, and you may also have other rights which vary from country to country.

Worldwide sales and service



www.side-power.com



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