

INSTALLATION GUIDE

DYNAMIC TRIM CONTROL SYSTEM

SERIES S

ZIPWAKE

CHOOSE COMFORT. ENJOY PERFORMANCE.

TOOLS

Drill bits
 Ø 2.5 mm (3/32")
 Ø 3 mm (1/8")
 Ø 3.5 mm (9/64")
 Ø 4 mm (5/32")
 Ø 5 mm (3/16")



Hole saw
 Ø 19 mm (3/4")
 Ø 76 mm (3")



Screw bits
 T10
 T20
 T25
 T30



Power drill



Sealant



Flat screwdriver



Bits screwdriver



Wrench

13 mm (33/64")
 27 mm (1 1/16")



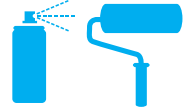
Utility knife



Hacksaw

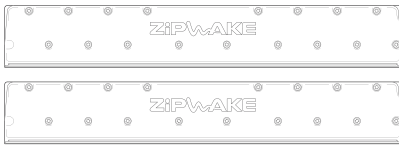


Antifouling



THE KIT BOX CONTAINS

INTERCEPTOR



2 x Interceptors
 with Cable 3 m & Cable Covers

DISTRIBUTION UNIT



1 x Distribution Unit
 with Power Cable 4 m

1 x Extension Cable
 1.5 m / 3 m

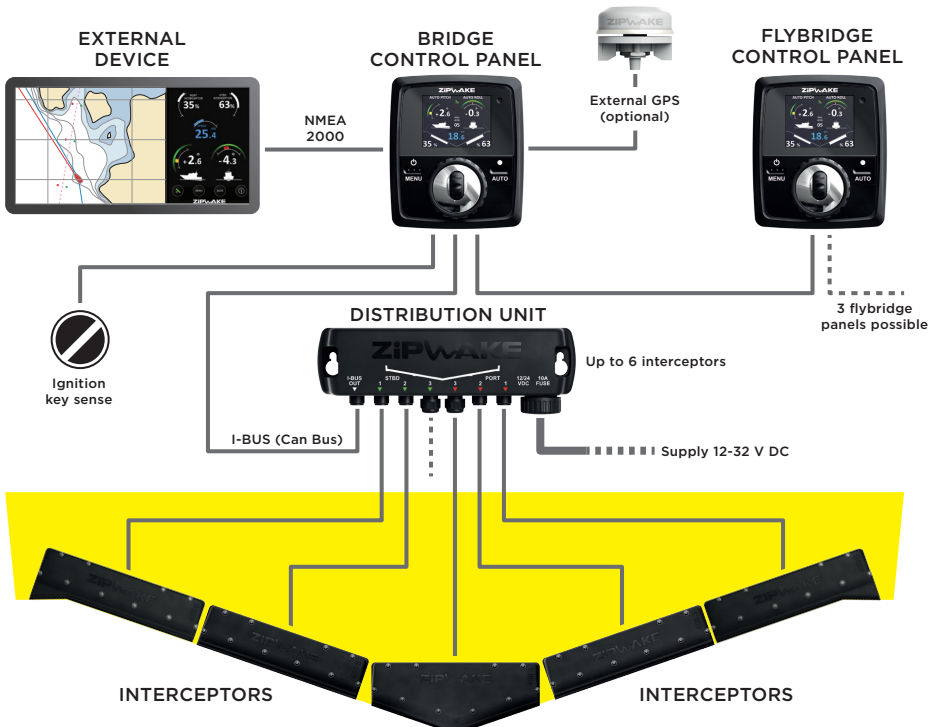
CONTROL PANEL



1 x Control Panel
 with Standard Cable 7 m

- + Operator's Manual
- + Warranty Card
- + Installation Guide
- + Drill Templates
- + Operator's Quick Guide
- + Startup Checklist

SYSTEM OVERVIEW

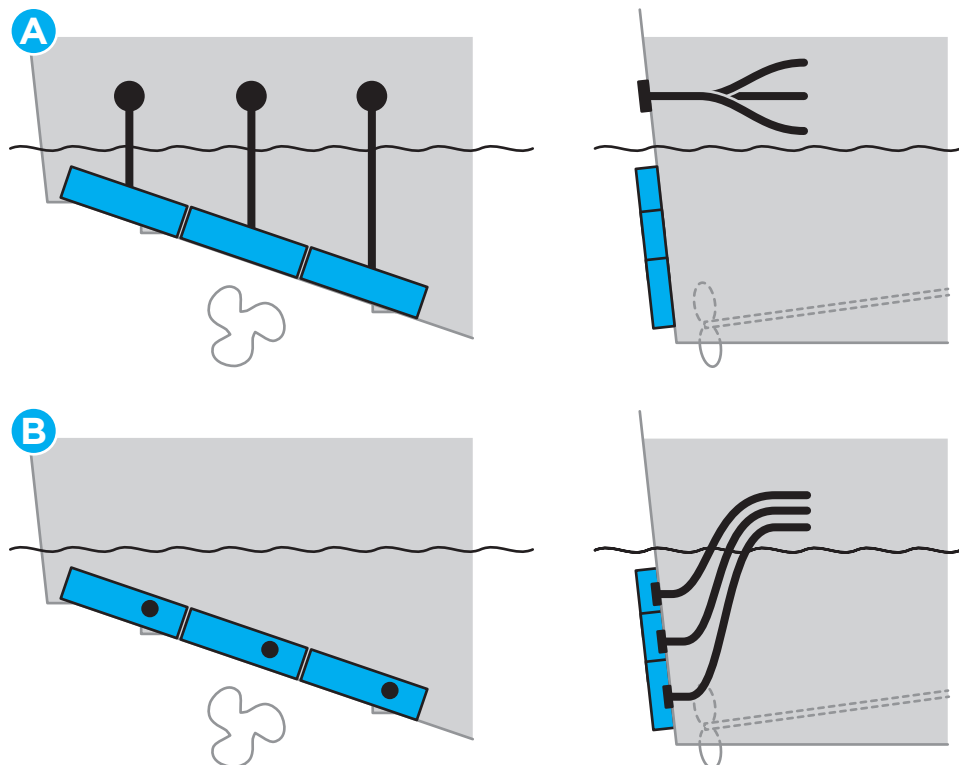


INTERCEPTOR

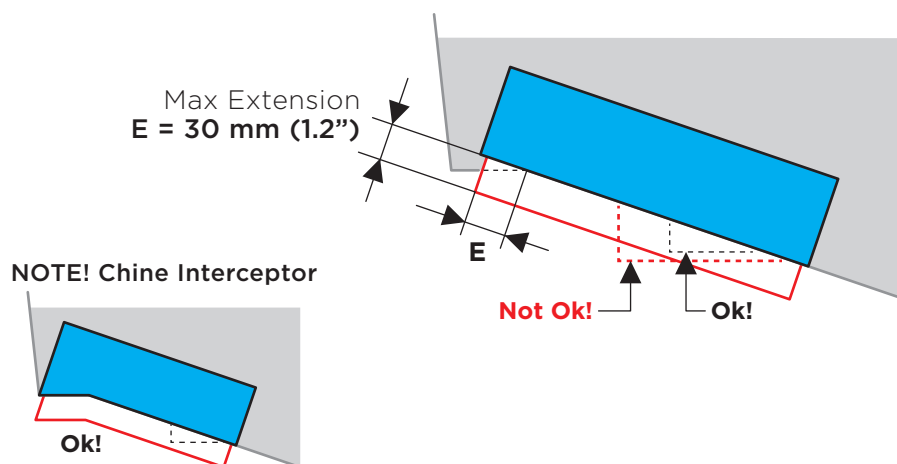
1 MOUNTING OPTIONS

THRU-HULL CABLE FITTINGS

Depending on preference, the Interceptors can be mounted with thru-hull cable fittings above the waterline (A) or below, concealed behind the Interceptors (B).



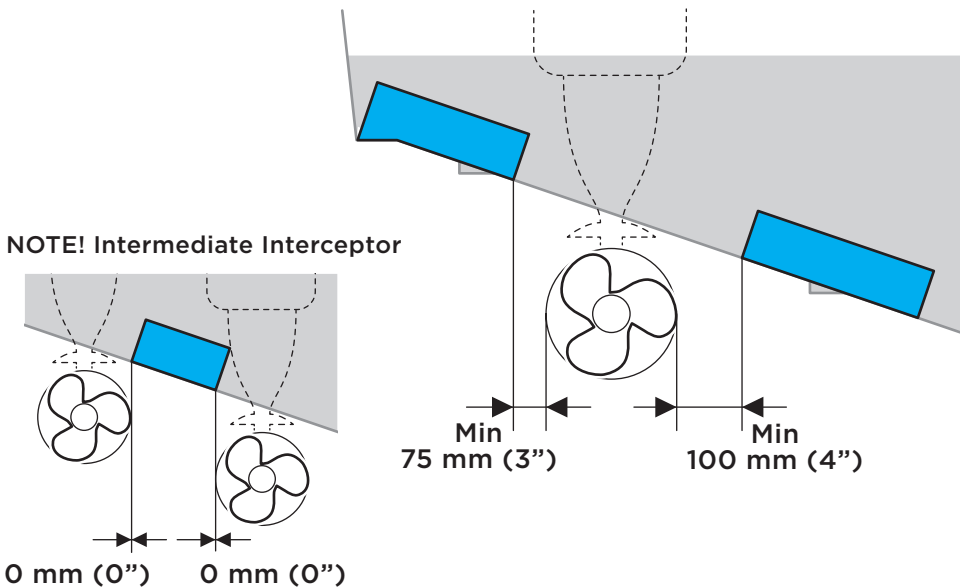
ALLOWED SPRAY RAIL OVERLAP



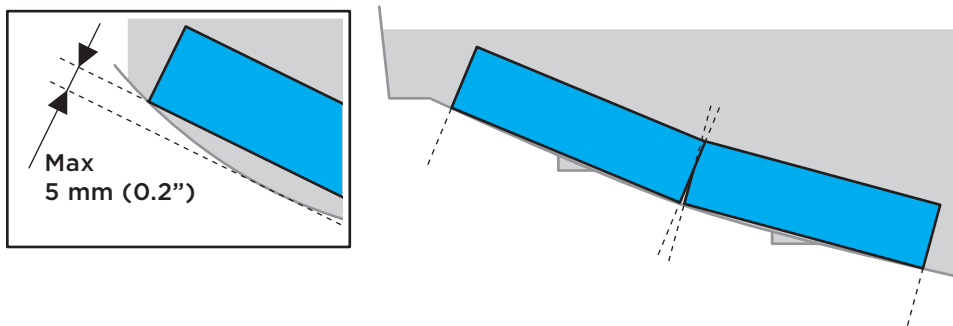
INTERCEPTOR

PROPELLER CLEARANCE

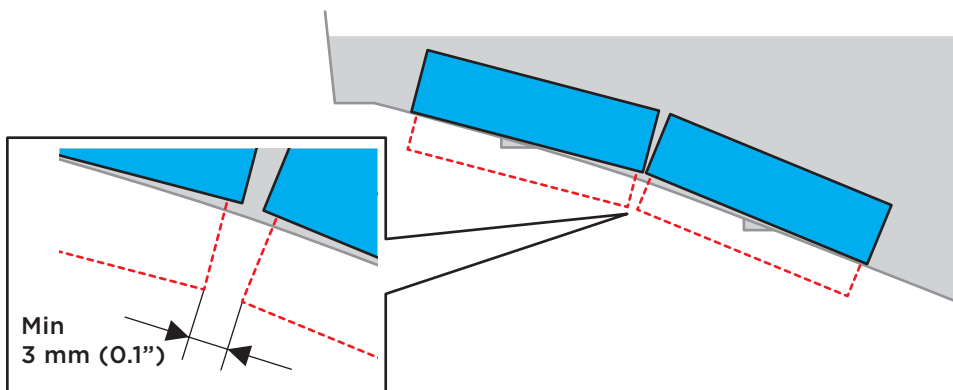
If the boat has an outboard engine or sterndrive, the Interceptors must be mounted with clearance to the propeller(s).



CONVEX BOTTOM CURVATURE



CONCAVE BOTTOM CURVATURE

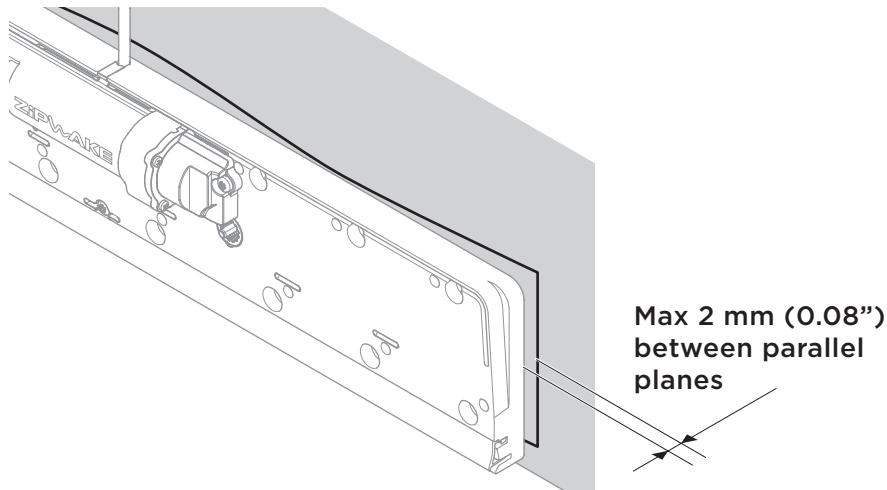


INTERCEPTOR

2 PREPARE THE TRANSOM

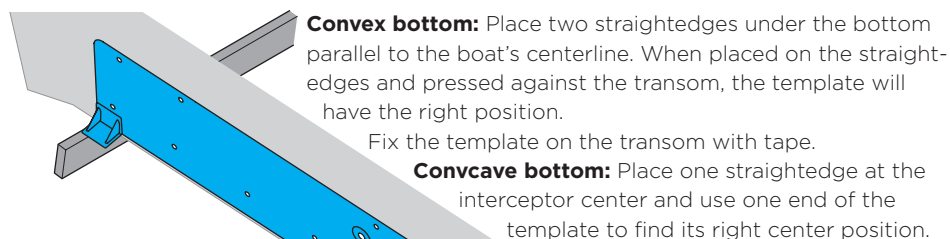
ENSURE A FLAT SURFACE FOR EACH INTERCEPTOR

The transom must be relatively flat where the Interceptors are mounted to ensure that they work properly.



DRILLING TEMPLATE

Start mounting the Interceptors as far outward as possible, although well inside the transom. Continue inwards when installing multiple Interceptors.



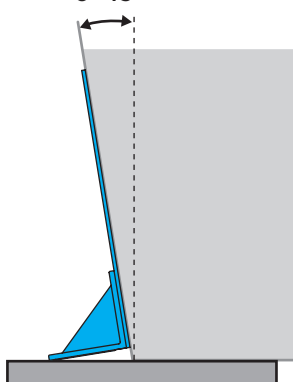
1. Drill pilot holes
2. Remove the template
3. Drill holes

Only if a concealed thru-hull fitting will be used



1. Pilot hole \varnothing 3 mm (1/8")
2. Hole saw \varnothing 19 mm (3/4")

0 -15°



Drill holes for the Interceptors

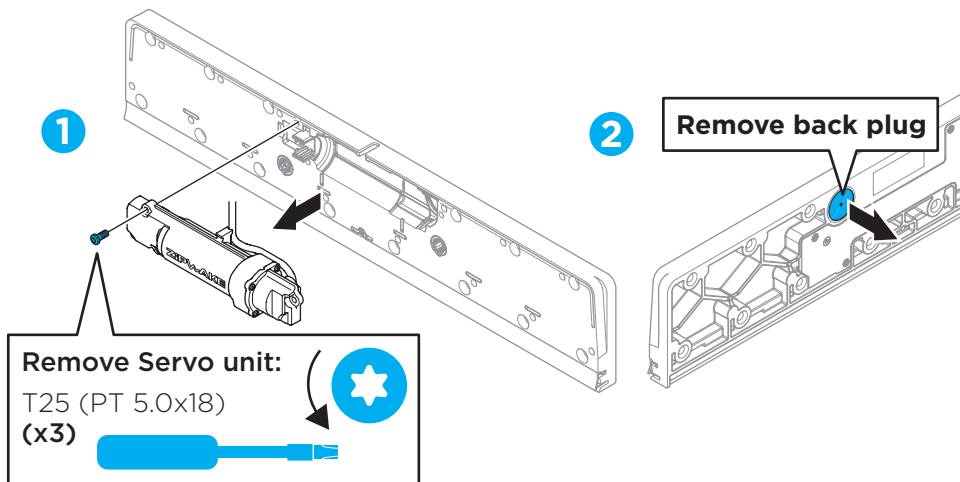


- | | | |
|---------------|----------------------------|------------|
| 1. Pilot hole | \varnothing 3 mm (1/8") | 300 S: x6 |
| 2. Drill | \varnothing 5 mm (3/16") | 450 S: x10 |
| | | 600 S: x14 |
| | | 750 S: x18 |

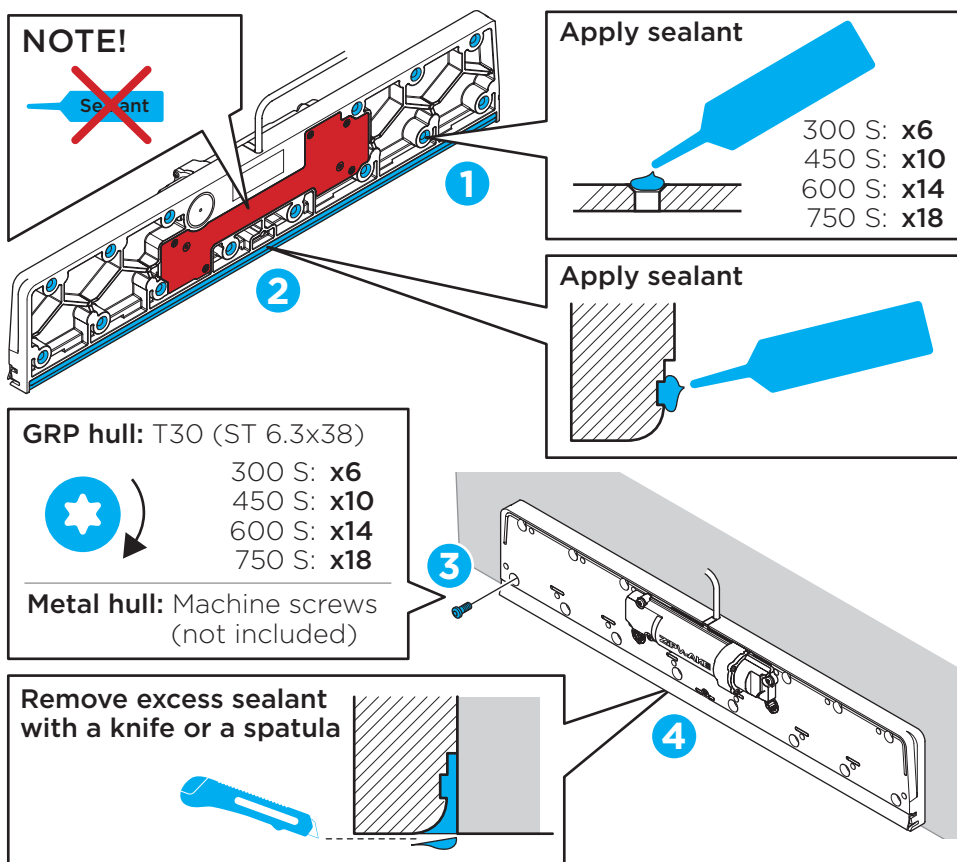
INTERCEPTOR

3 INSTALL THE BACK PLATES

- A. REMOVE THE SERVO UNIT IF A CONCEALED THRU-HULL FITTING WILL BE USED AND CONTINUE TO STEP B. IF NOT, GO STRAIGHT TO STEP B.



B. MOUNT THE BACK PLATE



INTERCEPTOR

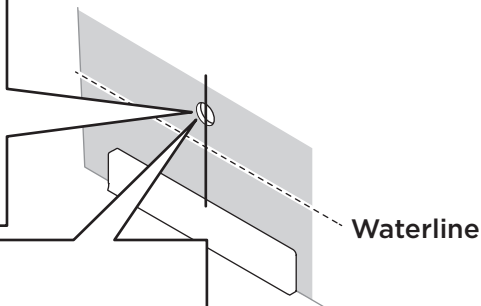
4A INSTALL THRU-HULL FITTINGS ABOVE THE WATERLINE

1 Drill hole for thru-hull fitting

Align the hole with the Interceptor cable

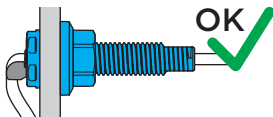
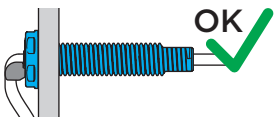


1. Pilot hole \varnothing 3 mm (1/8")
2. Hole saw \varnothing 19 mm (3/4")

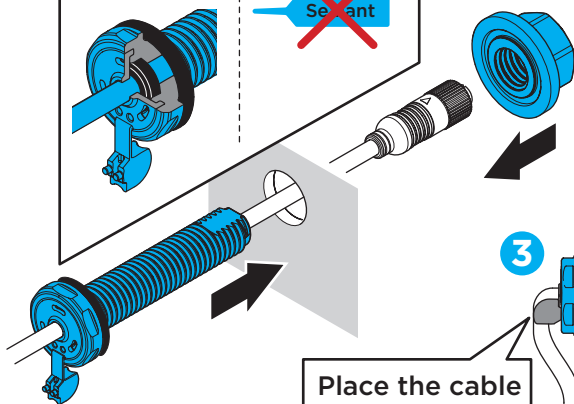



Option:

1. Pilot hole \varnothing 3 mm (1/8")
2. Hole saw \varnothing 16 mm (5/8")
3. Tap M18 x 2.5



2 NOTE!



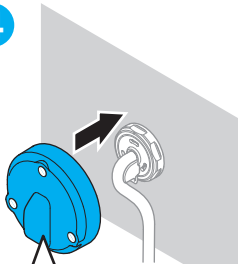
Tighten: 
27 mm (1 1/16") wrench
10 Nm (7.4 lb-ft)

3

Place the cable
in the clip

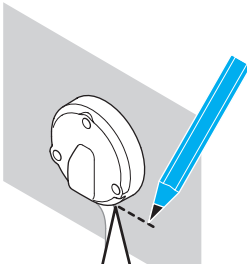
Hold: 
13 mm (33/64") wrench

4



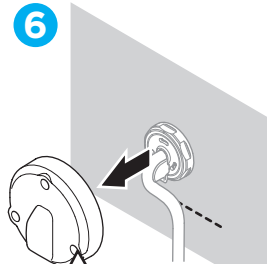
Place the cover on
the thru-hull fitting

5



Mark the lower edge
of the thru-hull cover

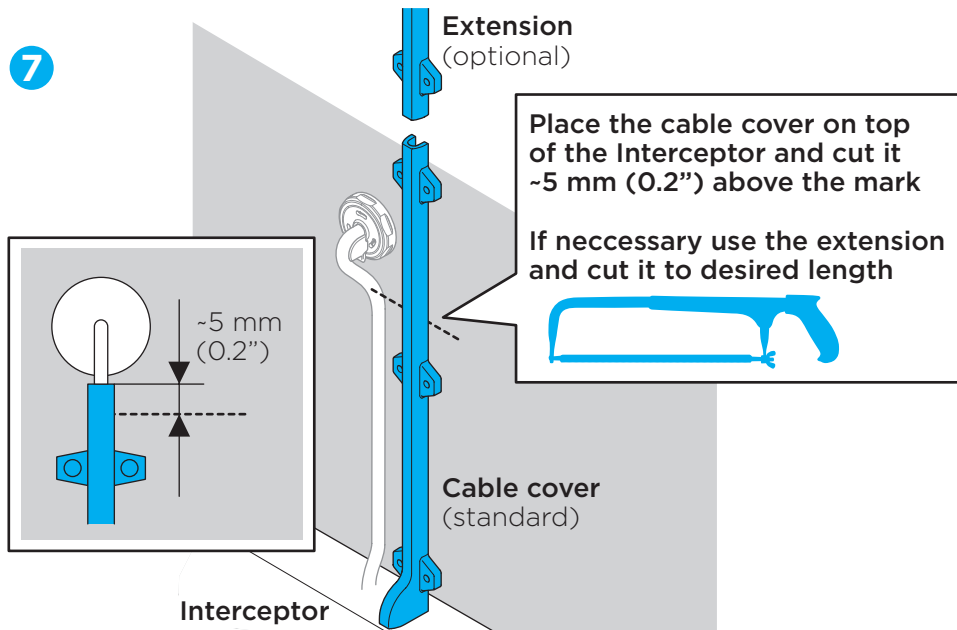
6



Remove the thru-
hull cover

INTERCEPTOR

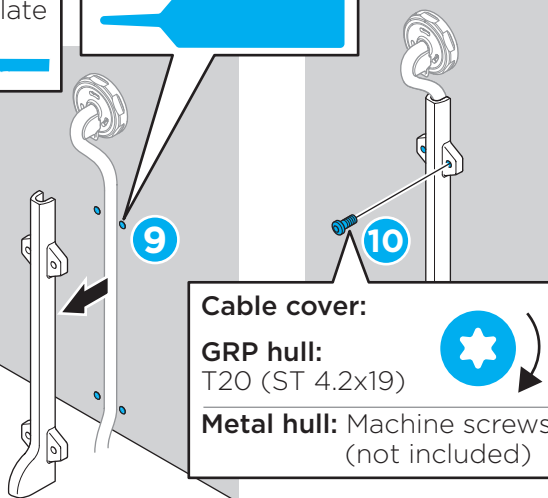
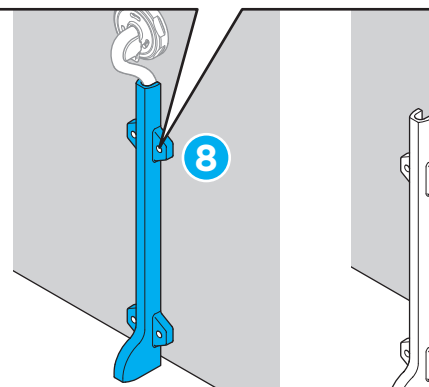
7



Drill holes for the cable cover
Use the cover as a drill template

Ø 3.5 mm (9/64")

Apply sealant



Cable cover:

GRP hull:
T20 (ST 4.2x19)

Metal hull: Machine screws
(not included)

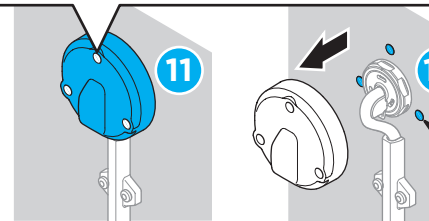
Drill holes (x3) for the cover
Use the cover as a drill template

Ø 5 mm (3/16")

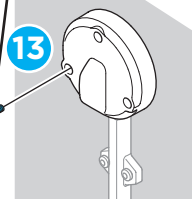
Thru-hull cover:

GRP hull:
T30 (ST 6.3x38) (x3)

Metal hull: Machine screws
(not included)



Apply sealant (x3)

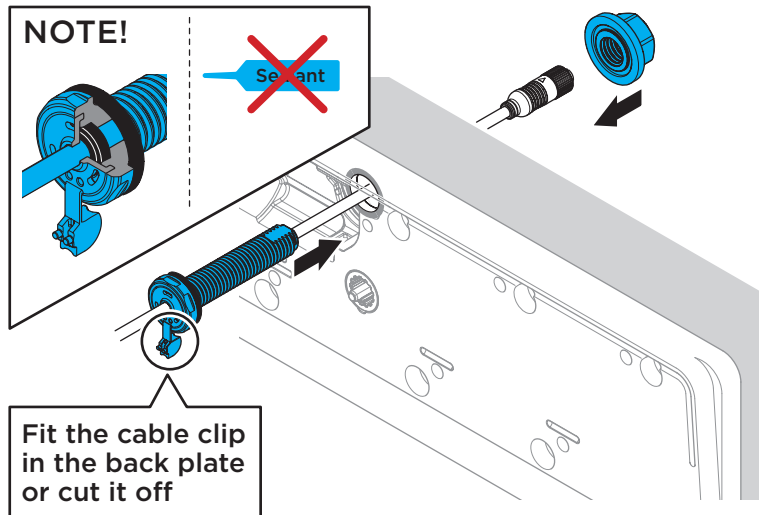


INTERCEPTOR

4B INSTALL CONCEALED THRU-HULL FITTINGS UNDER THE WATERLINE


1

NOTE!

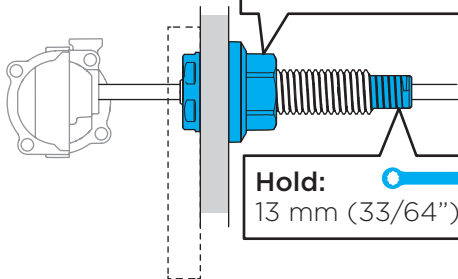


Fit the cable clip in the back plate or cut it off

2

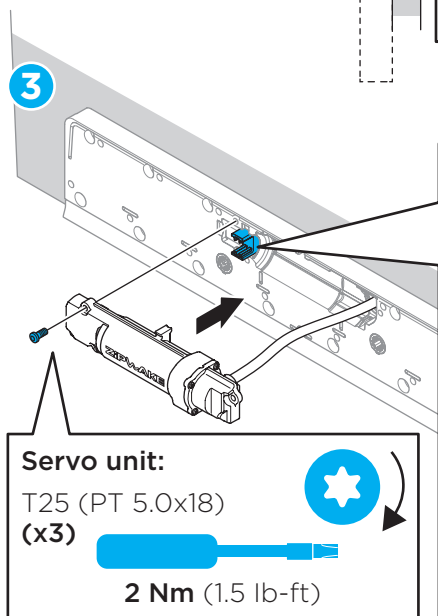
Tighten: 
27 mm (1 1/16") wrench
10 Nm (7.4 lb-ft)

Hold: 
13 mm (33/64") wrench




3

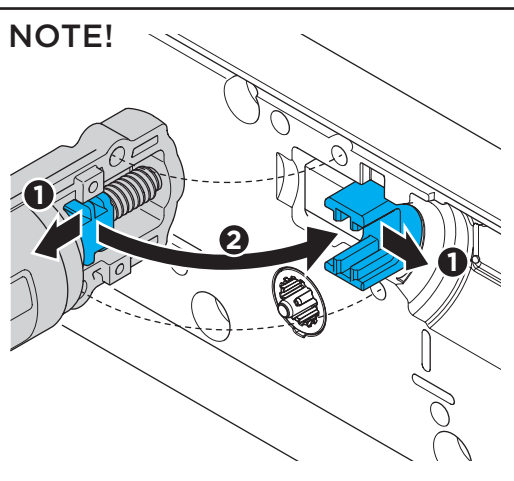
NOTE!



Servo unit:

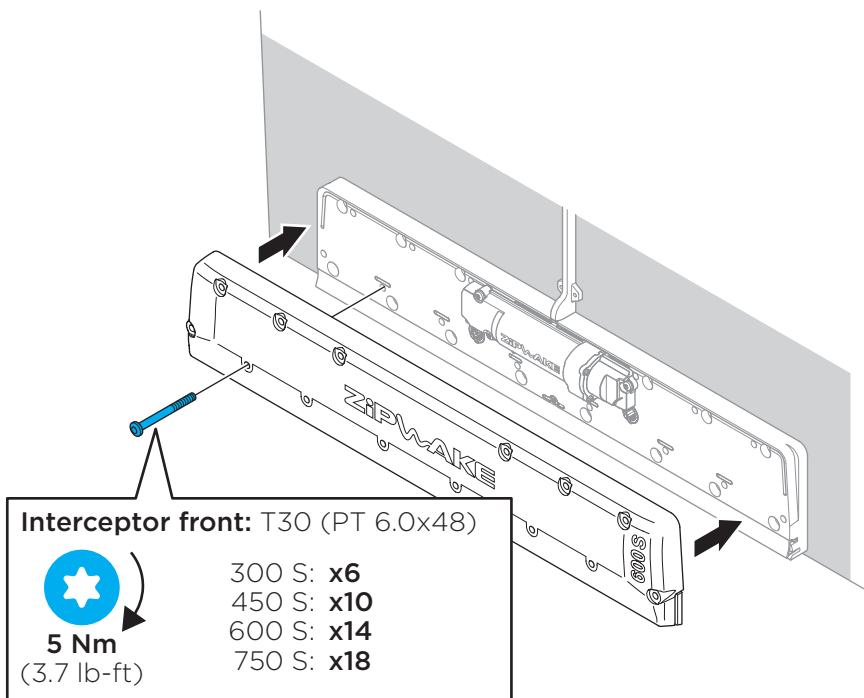
T25 (PT 5.0x18)
(x3)


2 Nm (1.5 lb-ft)

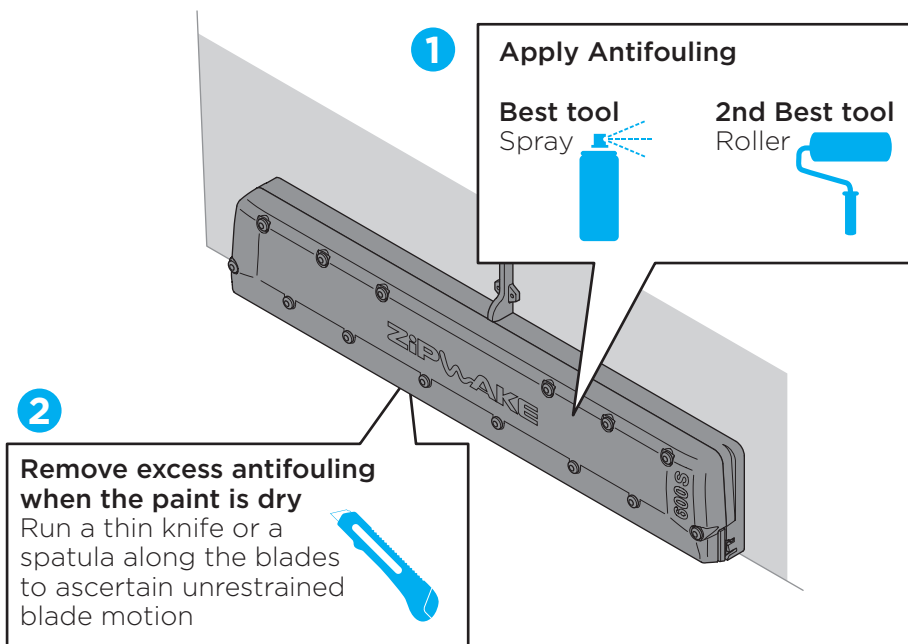


INTERCEPTOR

5 INSTALL THE INTERCEPTOR FRONTS



6 PAINT THE INTERCEPTORS WITH ANTIFOULING



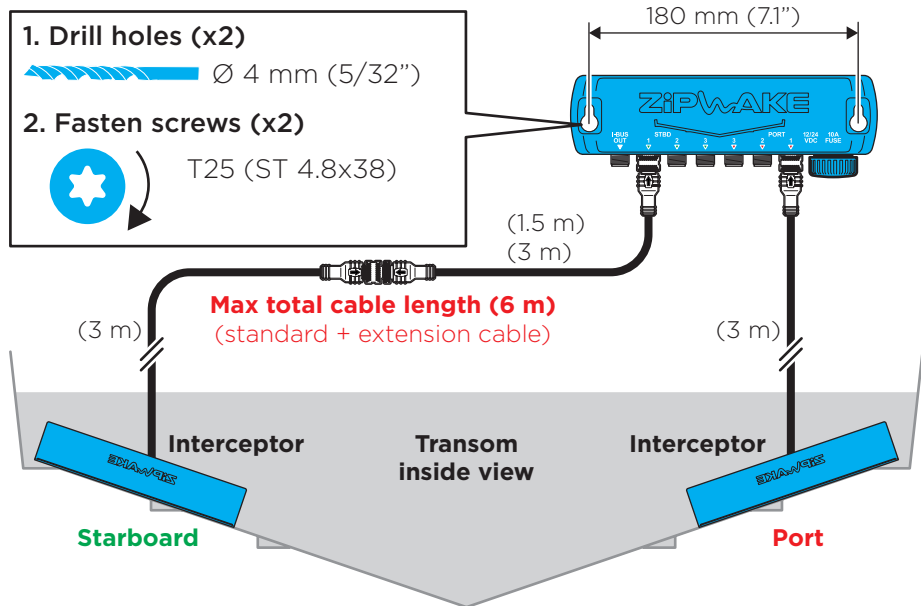
DISTRIBUTION UNIT

1 MOUNT THE DISTRIBUTION UNIT

Mount the distribution unit inboard where it is easy to connect it to both interceptors and power supply (battery) e.g. the engineroom or other suitable compartment.

NOTE!

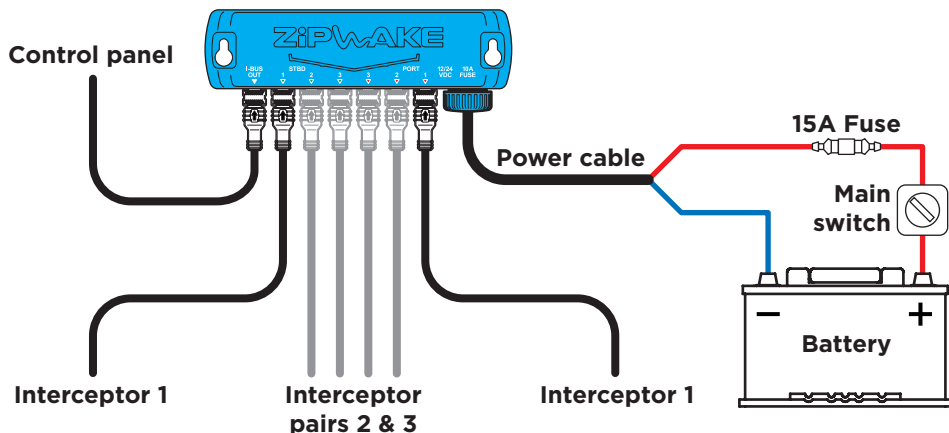
The maximum cable length (including extra cable) from an interceptor to the distribution unit is 6 m (20 ft).



2 CONNECT THE DISTRIBUTION UNIT

NOTE!

Detailed wiring diagram is available at the end of this folder.

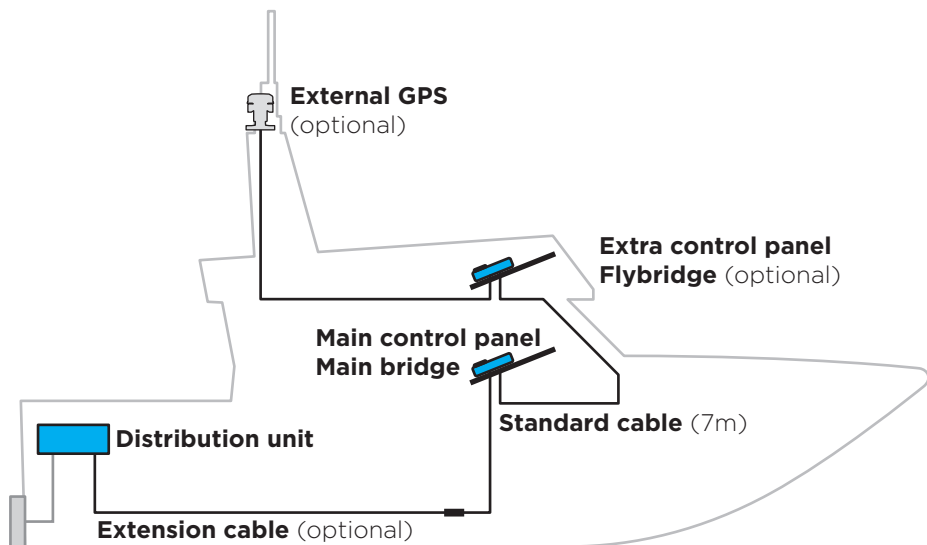


NOTE! The system allows an unpaired Interceptor mounted on the center of the transom. A centerline mounted Interceptor should always be connected to port side 3 to work properly.

CONTROL PANEL

1 ROUTE CABLES

Route the cables between the control panel(s), the distribution unit and optional equipment. Use optional extension cables if necessary. A detailed wiring diagram is available on the other side of this folder.

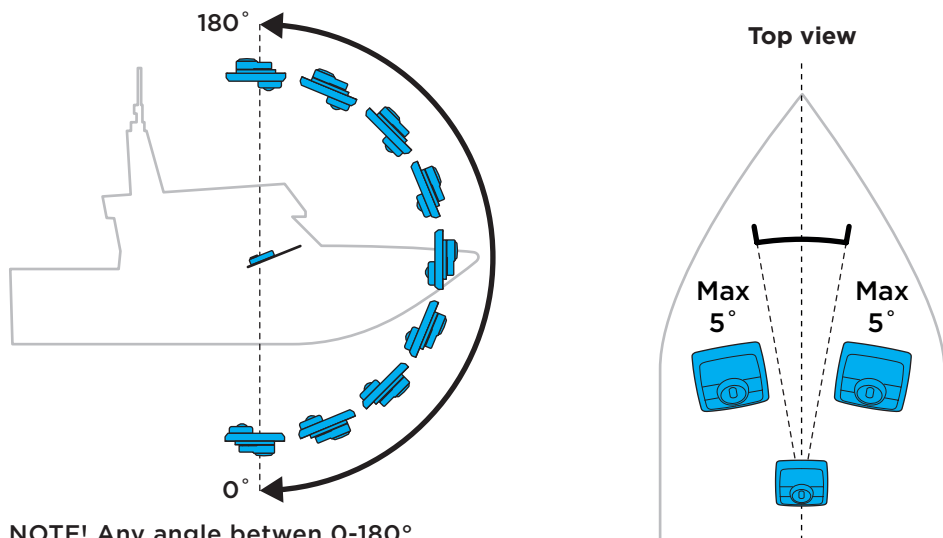


2 PREPARE THE DASH

The control panel must be mounted within certain angles relative to the boat's axes for the built-in sensors to deliver reliable output.

Locate a free area on the dash suitable for mounting the control panel. Use the control panel's template as a guide to see if it will fit next to other instruments.

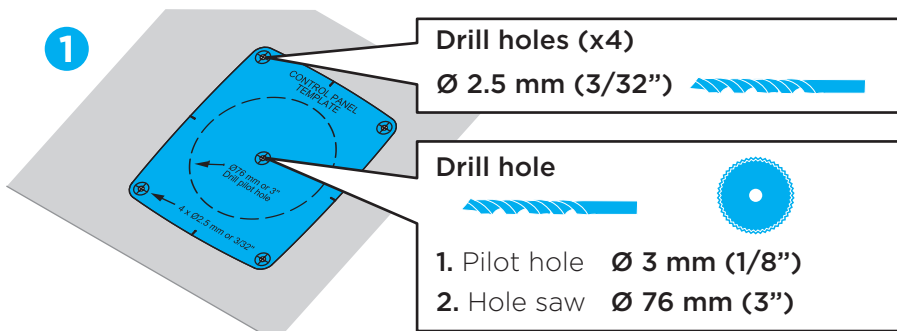
NOTE! 0.5 m (1.6 ft) safe distance to magnetic compass.



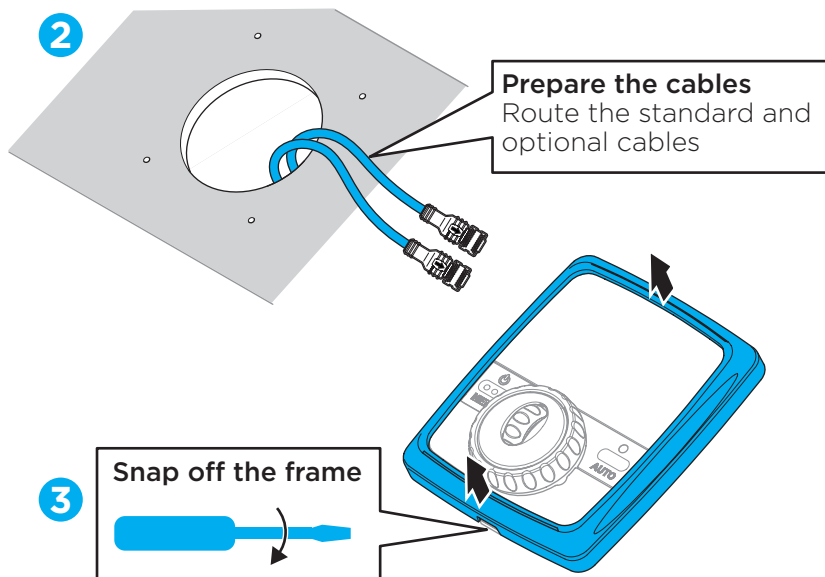
NOTE! Any angle between 0-180°

CONTROL PANEL

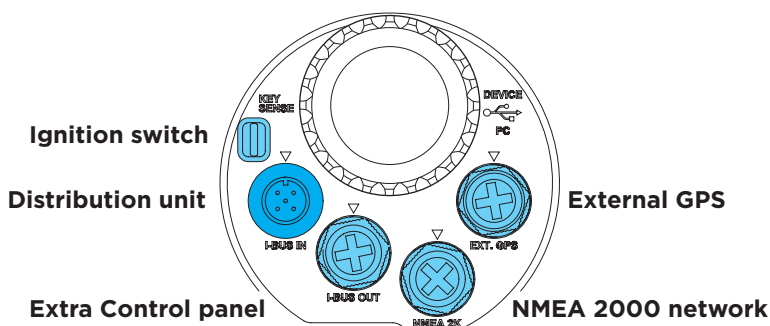
3 MOUNT THE CONTROL PANEL



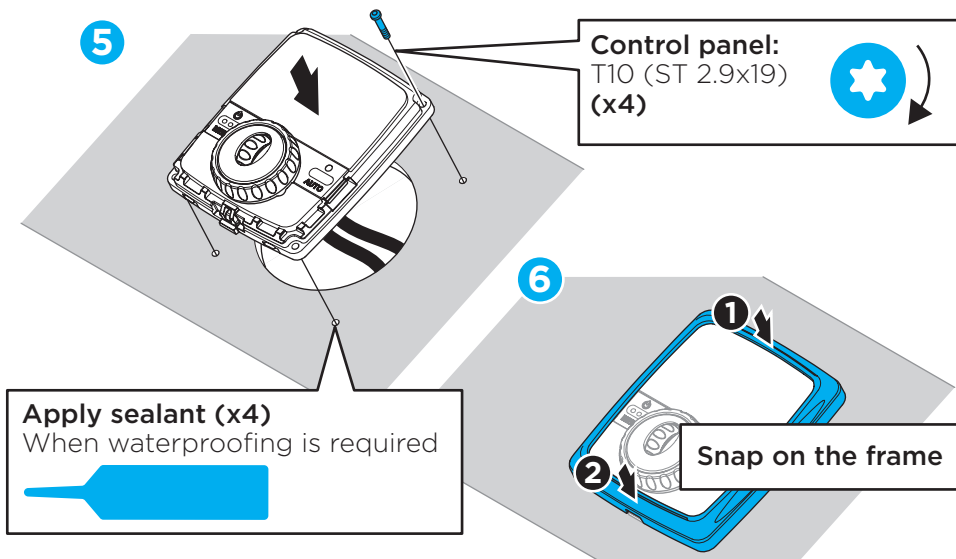
Flush mount option: refer to www.zipwake.com for a drawing and 3D model.



4 Connect the cables on the back of the Control panel.



CONTROL PANEL

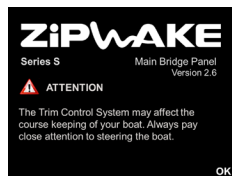


4 INITIAL START

Refer to the Operator's Manual for detailed information about setting up and operating the system.

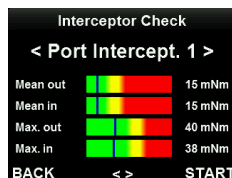
SET UP THE SYSTEM

Press and hold the POWER/MENU button until the Zipwake logo appears on the display and follow the steps on the screen.



INTERCEPTOR CHECK

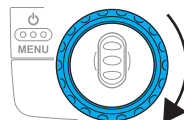
It is recommended that a first check is always made right after installing the interceptors, before launching the boat. If an interceptor then shows excessive servo motor torque, the prime suspect is the flatness of the transom behind the interceptor and/or excess antifouling between its blades.



NOTE! Corrective actions are always necessary in the event that too high torque levels are observed. **All readings must be green!**

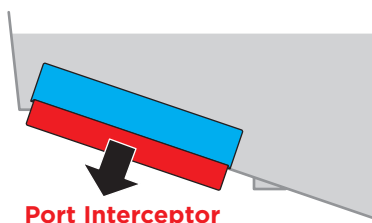
VERIFY FUNCTION ON SHORE

1. Turn the Roll wheel clockwise
2. Port side Interceptor(s) should move out
3. Reverse direction for starboard



IMPORTANT

Always use the controls to move the Interceptor blades. Never try to force the Interceptor blades by hand.



Port Interceptor

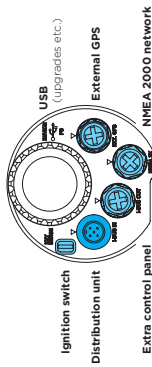
WIRING DIAGRAM

ACCESSORIES AND SPARE PARTS

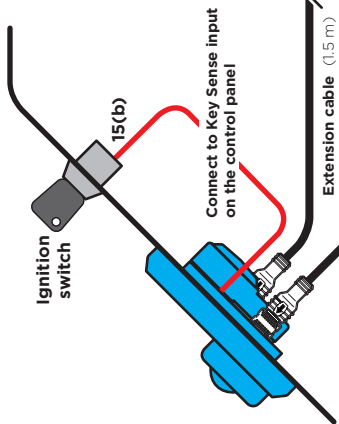
Model	Part No.	Description
CP-S	2011238	CONTROL PANEL S WITH STANDARD CABLE 7 M
DU-S	2011239	DISTRIBUTION UNIT S WITH POWER CABLE 4 M
IT300-S	2011232	INTERCEPTOR 300 S WITH CABLE 3 M & CABLE COVERS
IT450-S	2011233	INTERCEPTOR 450 S WITH CABLE 3 M & CABLE COVERS
IT600-S	2011234	INTERCEPTOR 600 S WITH CABLE 3 M & CABLE COVERS
IT750-S	2011235	INTERCEPTOR 750 S WITH CABLE 3 M & CABLE COVERS
IT450-S V13	2011482	INTERCEPTOR 450 S V13 WITH CABLE 3 M & CABLE COVERS
IT450-S V16	2011483	INTERCEPTOR 450 S V16 WITH CABLE 3 M & CABLE COVERS
IT450-S V19	2011484	INTERCEPTOR 450 S V19 WITH CABLE 3 M & CABLE COVERS
IT450-S V22	2011485	INTERCEPTOR 450 S V22 WITH CABLE 3 M & CABLE COVERS
IT300-S CHINE PORT	2011702	INTERCEPTOR 300 S CHINE PORT SIDE WITH CABLE 3 M & CABLE COVERS
IT300-S CHINE STBD	2011703	INTERCEPTOR 300 S CHINE STARBOARD SIDE WITH CABLE 3 M & CABLE COVERS
IT450-S CHINE PORT	2011704	INTERCEPTOR 450 S CHINE PORT SIDE WITH CABLE 3 M & CABLE COVERS
IT450-S CHINE STBD	2011705	INTERCEPTOR 450 S CHINE STARBOARD SIDE WITH CABLE 3 M & CABLE COVERS
IT300-S INTER	2011701	INTERCEPTOR 300 S INTERMEDIATE WITH CABLE 3 M & CABLE COVERS
EC1.5-M12	2011258	M12 EXTENSION CABLE 1.5 M
EC3-M12	2011259	M12 EXTENSION CABLE 3 M
EC5-M12	2011260	M12 EXTENSION CABLE 5 M
EC10-M12	2011261	M12 EXTENSION CABLE 10 M
SC7-M12	2011257	M12 STANDARD CABLE 7 M
CP-S ALU FRAME	2011281	CONTROL PANEL S ALU FRAME
CP-S COVER	2011381- 2011385	CONTROL PANEL S COVER WHITE, LIGHT GRAY, MID GRAY, DARK GRAY, BLACK
CC-S	2011071	CABLE COVER S
GPU	2011240	GLOBAL POSITIONING UNIT WITH CABLE 5 M & MOUNT KIT
SU-S	2011230	SERVO UNIT S WITH CABLE 3 M
IT300-S FRONT	2011252	INTERCEPTOR 300 S FRONT
IT450-S FRONT	2011253	INTERCEPTOR 450 S FRONT
IT600-S FRONT	2011254	INTERCEPTOR 600 S FRONT
IT750-S FRONT	2011255	INTERCEPTOR 750 S FRONT
IT450-S V13 FRONT	2011492	INTERCEPTOR 450 S V13 FRONT
IT450-S V16 FRONT	2011493	INTERCEPTOR 450 S V16 FRONT
IT450-S V19 FRONT	2011494	INTERCEPTOR 450 S V19 FRONT
IT450-S V22 FRONT	2011495	INTERCEPTOR 450 S V22 FRONT
IT300-S CHINE PORT FRONT	2011742	INTERCEPTOR 300 S CHINE PORT SIDE FRONT
IT300-S CHINE STBD FRONT	2011743	INTERCEPTOR 300 S CHINE STARBOARD SIDE FRONT
IT450-S CHINE PORT FRONT	2011744	INTERCEPTOR 450 S CHINE PORT SIDE FRONT
IT450-S CHINE STBD FRONT	2011745	INTERCEPTOR 450 S CHINE STARBOARD SIDE FRONT
IT300-S INTER FRONT	2011741	INTERCEPTOR 300 S INTERMEDIATE FRONT
GB-S	2011622	GIMBAL BRACKET FOR CONTROL PANEL S

WIRING DIAGRAM

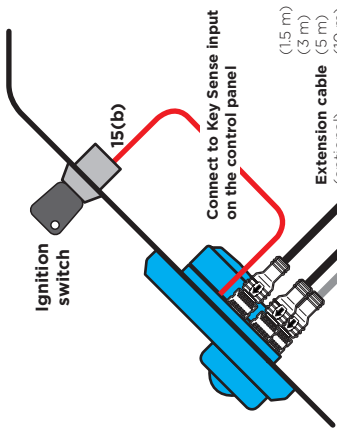
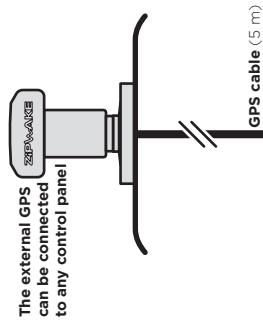
MAIN CONTROL PANEL (CP-S)



EXTRA CONTROL PANEL (CP-S)



EXTERNAL GPS (GPU)



Standard cable (7 m)

DISTRIBUTION UNIT (DU-S)



Extension cable (optional) (1.5 m) (3 m) (5 m) (10 m)

Standard cable (7 m)

To NMEA 2000 backbone
(optional GPS source)

Visit www.zipwake.com for additional information such as:

- Operator's Manual and Installation Guide in different languages
- Product specifications, including a list of accessories and spare parts
- Application examples and Interceptor mounting options
- Drawings and 3D models of system components
- Software upgrades for your Dynamic Trim Control System
- Programming Manual for external control application development

ZIPWAKE

CHOOSE COMFORT. ENJOY PERFORMANCE.