

DYNAMIC TRIM CONTROL SYSTEM

FOR INTEGRATION

SERIES E

INSTALLATION GUIDE

ZIPWAKE

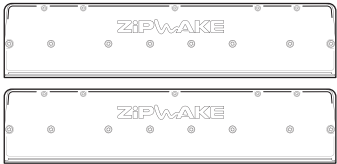
CHOOSE COMFORT. ENJOY PERFORMANCE.

TOOLS

Drill bits Ø 3 mm (1/8") Ø 4 mm (5/32") Ø 6.5 mm (1/4")	Hole saw Ø 19 mm (3/4") Ø 16 mm (5/8") (optional)	Thread Tap (optional) M18 x 2.5	Screw bits T25 T30 T40
Power drill	Sealant	Flat screwdriver Bits screwdriver	Wrench 13 mm (33/64") 27 mm (1 1/16")
	Utility knife	Hacksaw	Antifouling

KIT BOX CONTENTS

INTERCEPTOR



2 x Interceptors
with Cable 3 m & Cable Cover

DISTRIBUTION UNIT



1 x Distribution Unit
with Power Cable 6 m

INTEGRATOR MODULE

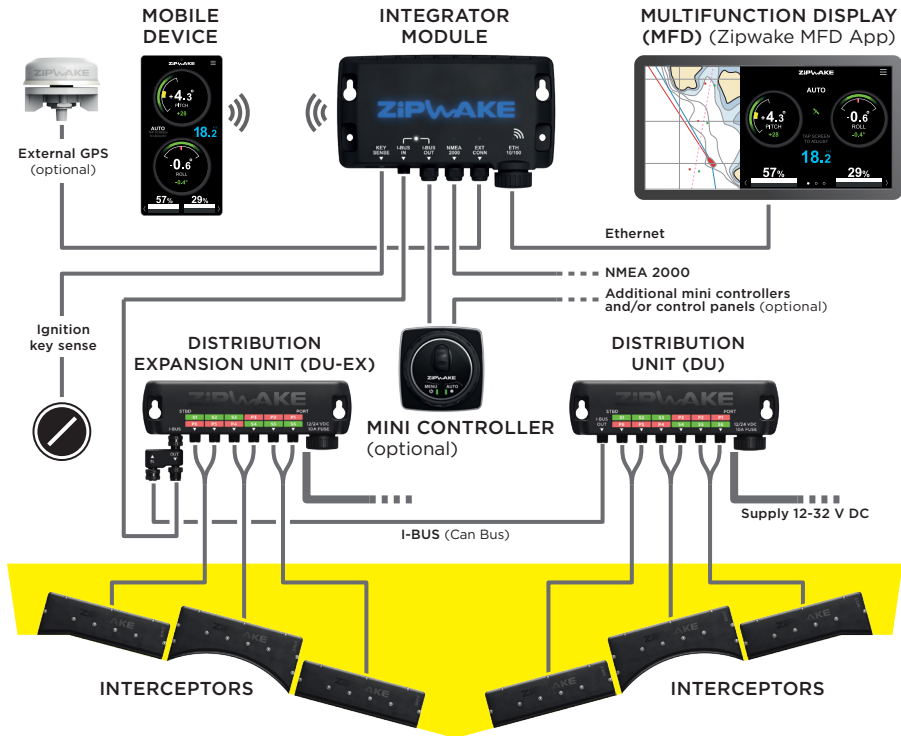


1 x Integrator Module

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



SYSTEM OVERVIEW

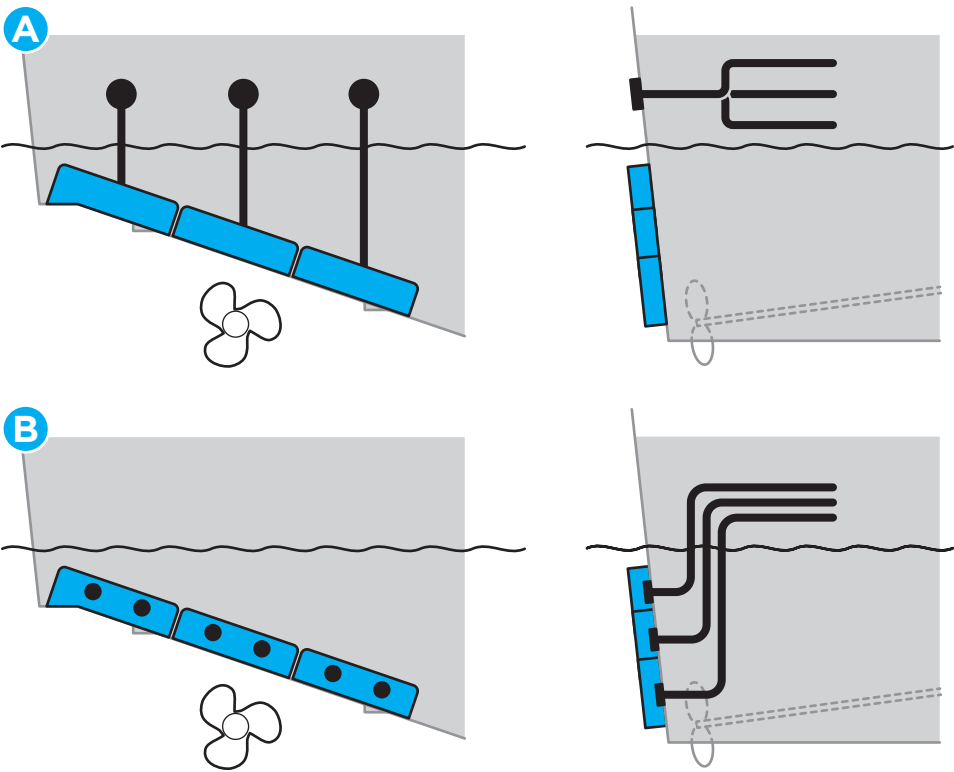


INTERCEPTOR

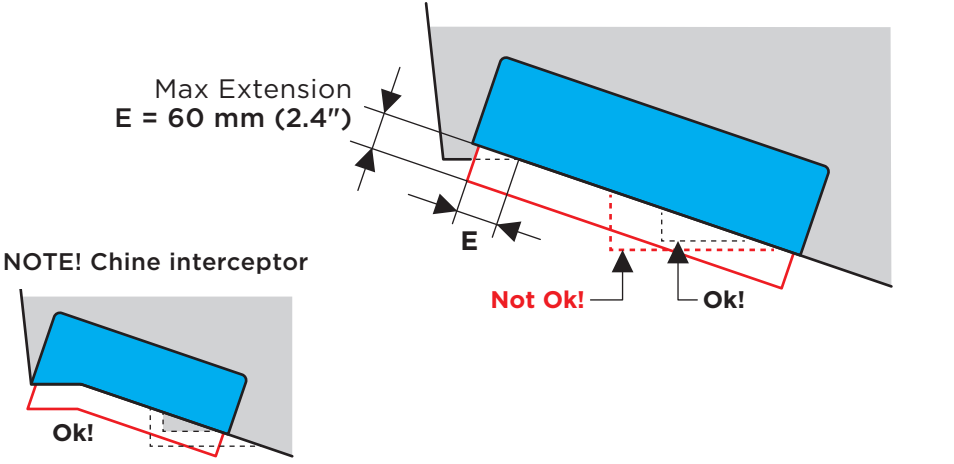
1 MOUNTING OPTIONS

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).



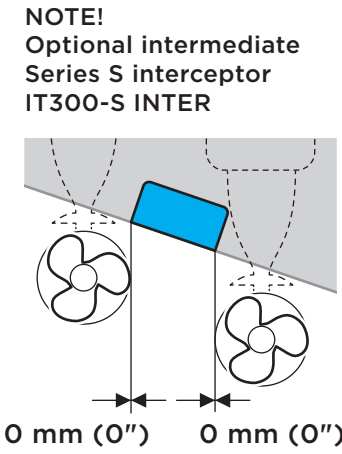
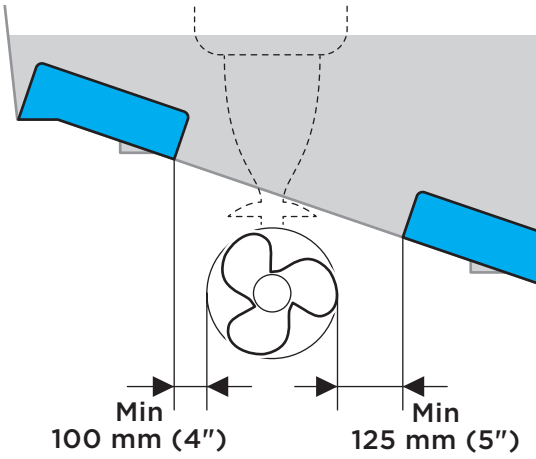
ALLOWED SPRAY RAIL OVERLAP



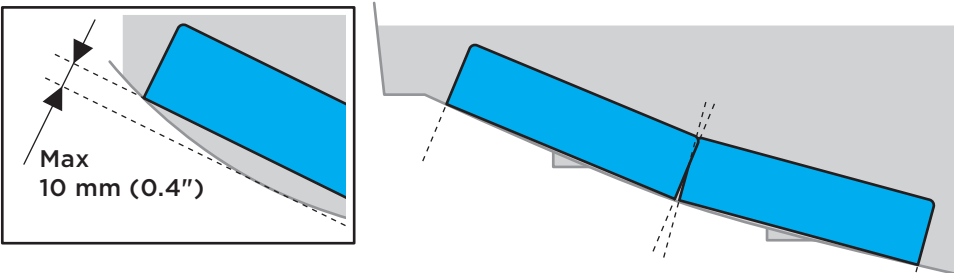
INTERCEPTOR

PROPELLER CLEARANCE

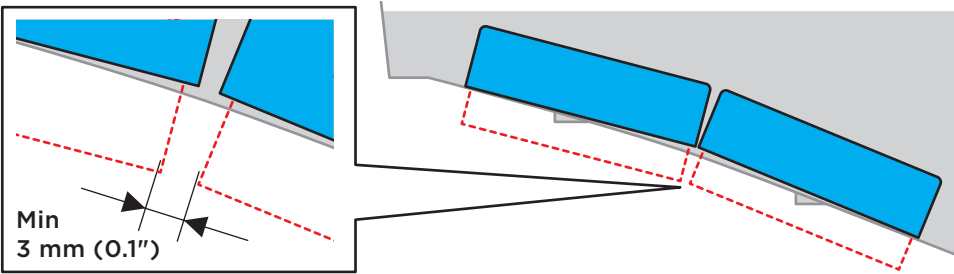
If the boat has an outboard engine or sterndrive, the interceptors must be mounted with clearance to the propeller(s).



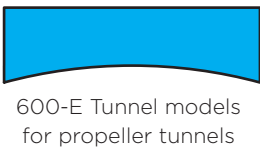
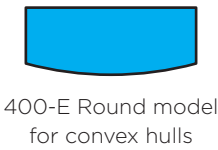
CONVEX BOTTOM CURVATURE



CONCAVE BOTTOM CURVATURE



OPTIONAL

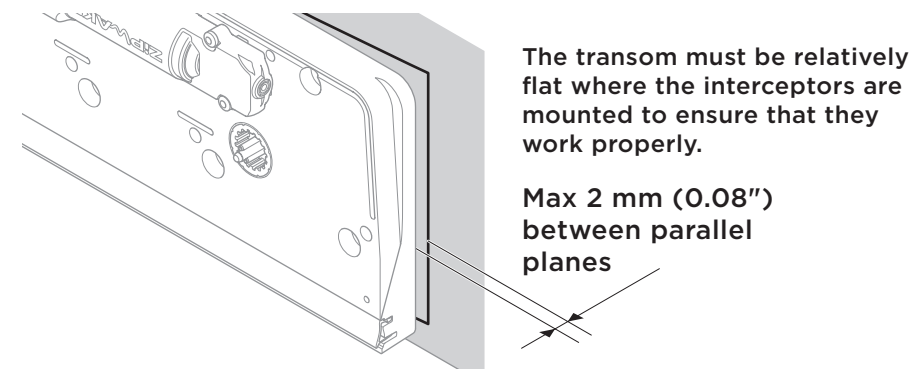


NOTE! Same tolerances and clearances as straight/chine interceptors.

INTERCEPTOR

2 PREPARE THE TRANSOM

ENSURE A FLAT SURFACE FOR EACH INTERCEPTOR



DRILLING TEMPLATE

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

Convex bottom: Place two straightedges under the bottom parallel to the boat's centerline. When placed on the straight-edges and pressed against the transom, the template will have the right position. Fix the template on the transom with tape.

Concave bottom: Place one straightedge at the interceptor center and use one end of the template to find its right center position.

NOTE! Only if a concealed thru-hull fitting will be used

Option 1:

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

Option 2 (threaded hole):

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

IT600/800/1000-E are dual-servo interceptors (2 holes)

IT400-E is a single-servo interceptor (1 hole)

1 Drill pilot holes

2 Remove the template

3 Drill holes

Drill holes for the interceptors

	400 E: x6
	600 E: x9
	800 E: x13
	1000 E: x17

- 1. Pilot hole $\varnothing$ 3 mm (1/8")
- 2. Drill $\varnothing$ 6.5 mm (1/4")

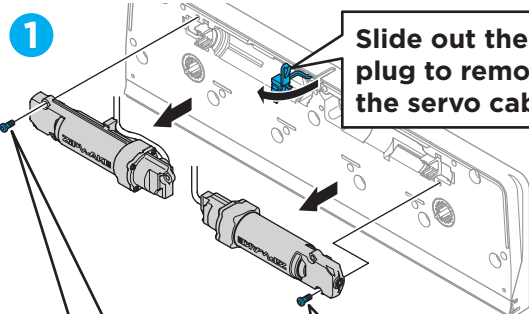
0 -15°

INTERCEPTOR

3 INSTALL THE BACK PLATES

A. FOR THRU-HULL FITTINGS ABOVE THE WATERLINE
GO STRAIGHT TO STEP B

1

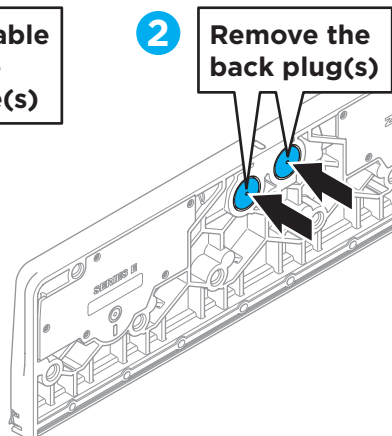


Slide out the cable plug to remove the servo cable(s)

Remove Servo unit(s):
T25 (PT 5.0x18)
(x3)



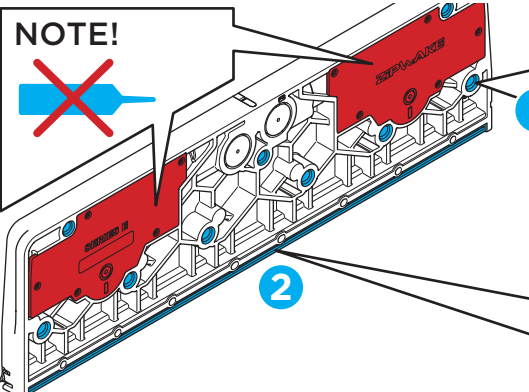
2



Remove the back plug(s)

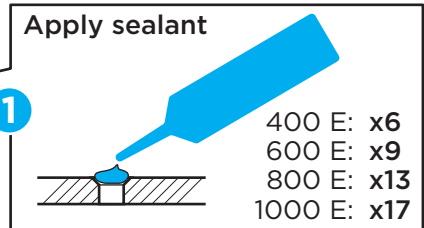
B. MOUNT THE BACK PLATE

NOTE!



1

Apply sealant



400 E: x6
600 E: x9
800 E: x13
1000 E: x17

GRP hull: T40 (ST 8.0x45)

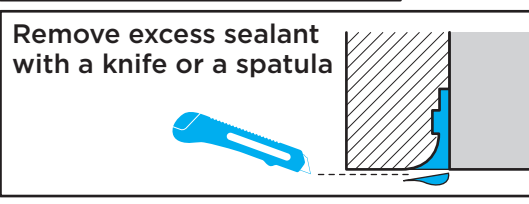


400 E: x6
600 E: x9
800 E: x13
1000 E: x17

Metal hull: Machine screws
(not included)

3

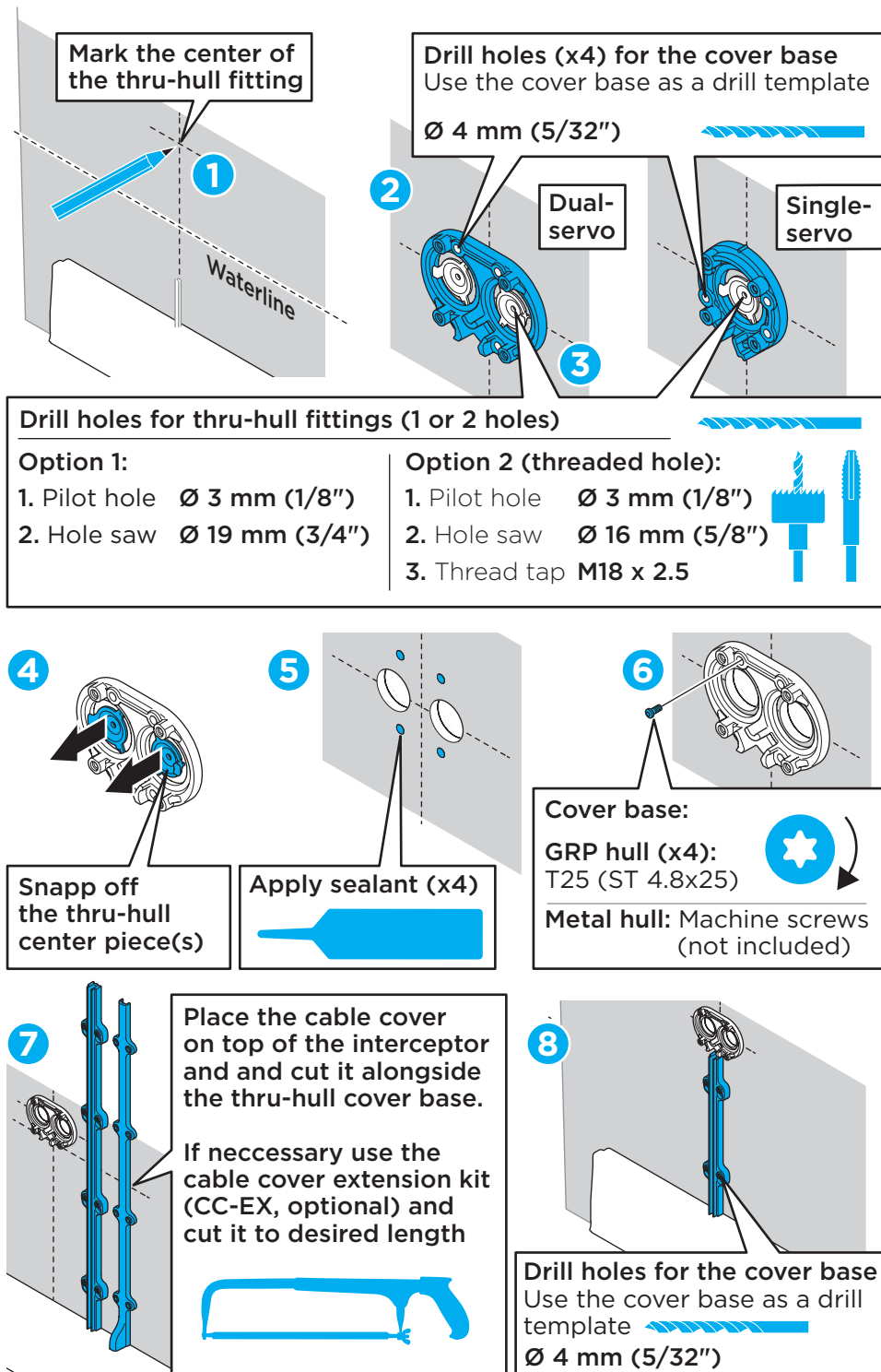
Remove excess sealant
with a knife or a spatula



4

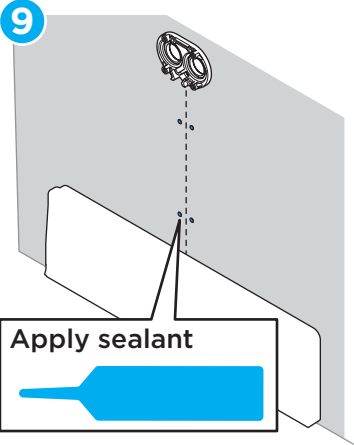
INTERCEPTOR

4A INSTALL THRU-HULL FITTINGS ABOVE THE WATERLINE



INTERCEPTOR

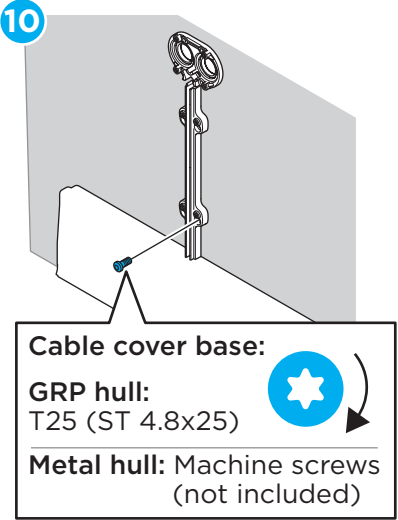
9



Apply sealant

Diagram 9 shows a blue sealant being applied to the base of the cable cover where it meets the hull. A dashed line indicates the application point.

10



Cable cover base:
GRP hull: T25 (ST 4.8x25)
Metal hull: Machine screws (not included)

Diagram 10 shows the cable cover base being secured to the hull with a screw. A star icon indicates the screw location.

11

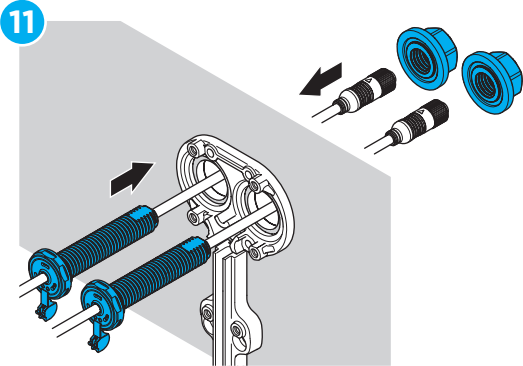
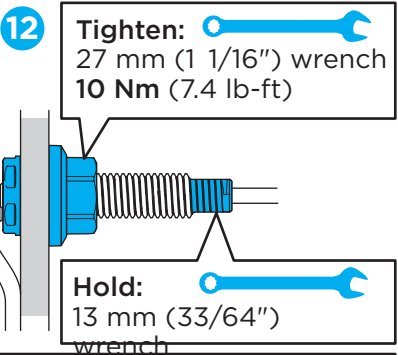


Diagram 11 shows the cable being inserted into the clip. Arrows indicate the direction of insertion.

12



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

Hold: 13 mm (33/64") wrench

Diagram 12 shows the cable cover base being tightened and held in place. A wrench is shown tightening the screw.

NOTE! Threaded hole

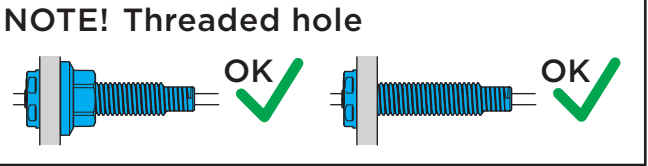
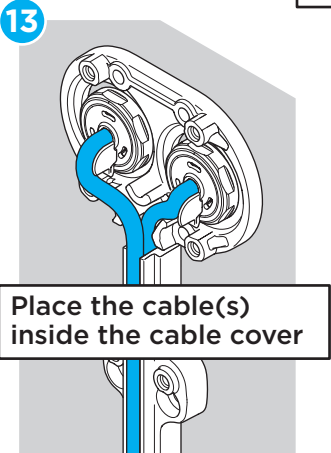


Diagram showing two examples of threaded holes with green checkmarks, indicating they are OK.

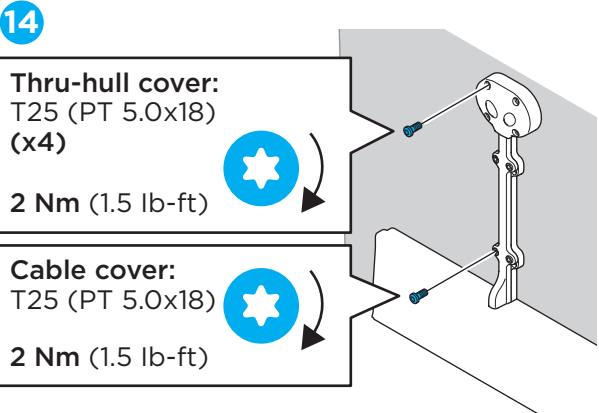
13



Place the cable(s) inside the cable cover

Diagram 13 shows the cable being placed inside the cable cover. Arrows indicate the direction of placement.

14



Thru-hull cover:
T25 (PT 5.0x18) (x4)
2 Nm (1.5 lb-ft)

Cable cover:
T25 (PT 5.0x18)
2 Nm (1.5 lb-ft)

Diagram 14 shows the thru-hull cover and cable cover being secured with screws. Star icons indicate the screw locations.

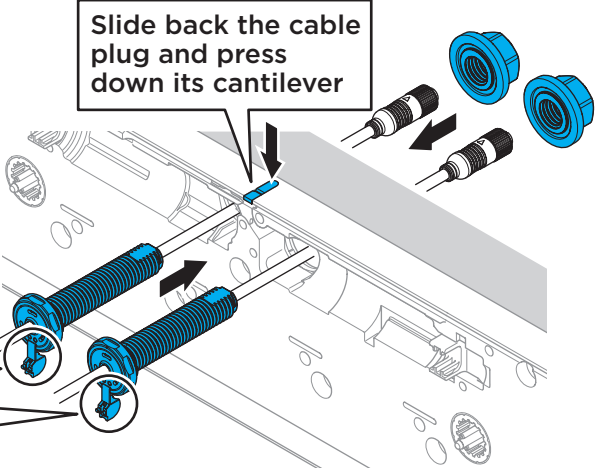
INTERCEPTOR

4B INSTALL CONCEALED THRU-HULL FITTINGS UNDER THE WATERLINE

1

Slide back the cable plug and press down its cantilever

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

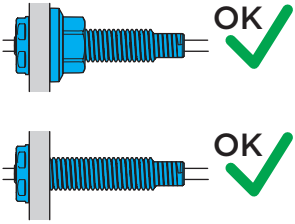


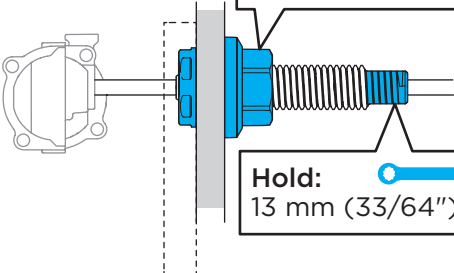
2

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

Hold:  13 mm (33/64") wrench

NOTE!
Threaded hole





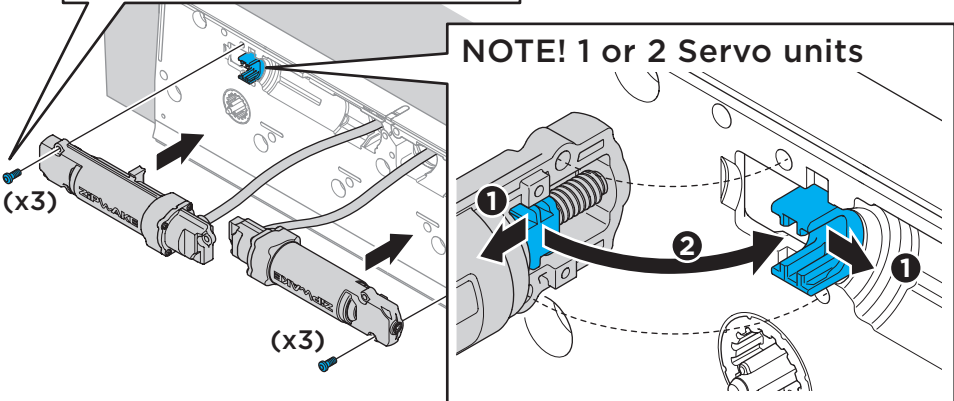
3

Servo unit(s): T25 (PT 5.0x18)

 2 Nm (1.5 lb-ft)

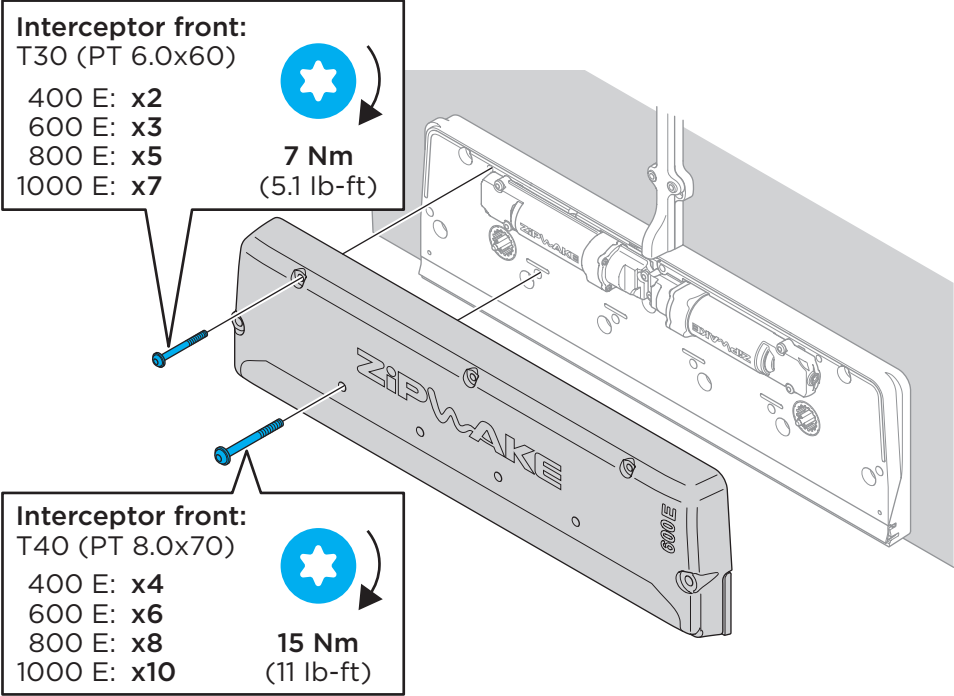


NOTE! 1 or 2 Servo units

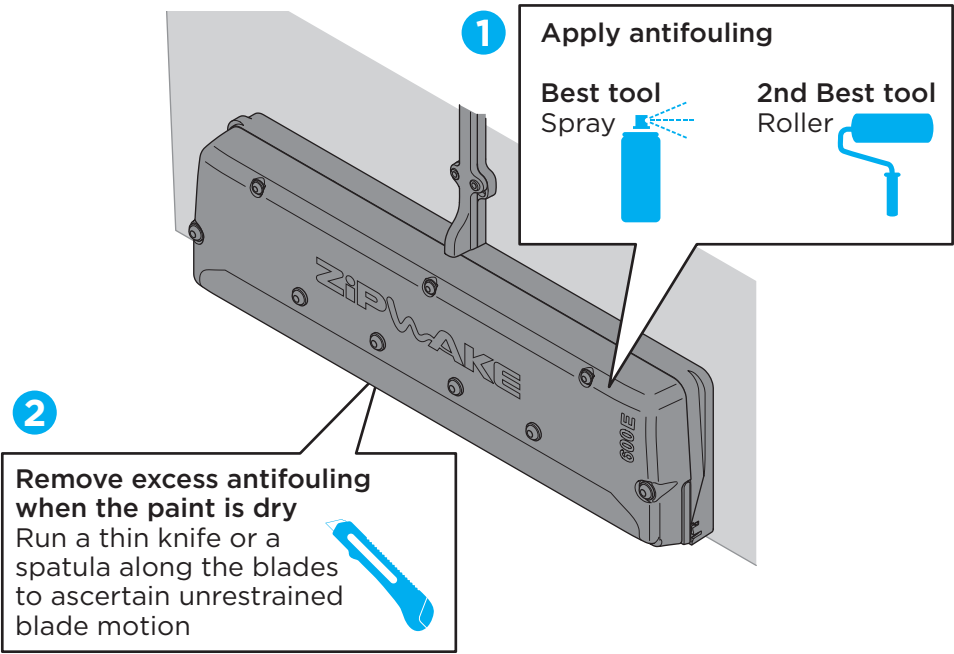


INTERCEPTOR

5 INSTALL THE INTERCEPTOR FRONTS



6 PAINT THE INTERCEPTORS WITH ANTIFOULING



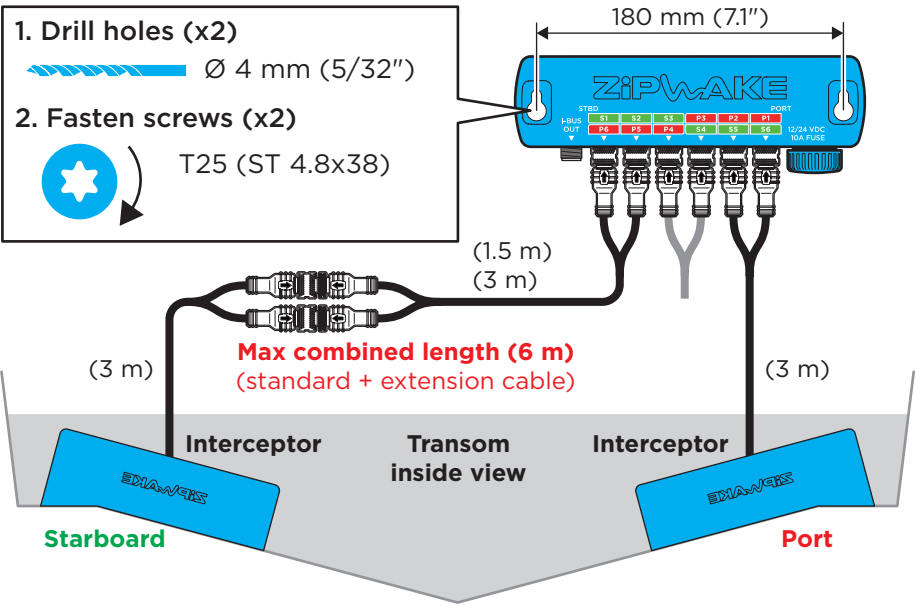
DISTRIBUTION UNIT

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 engine room or other suitable compartment.

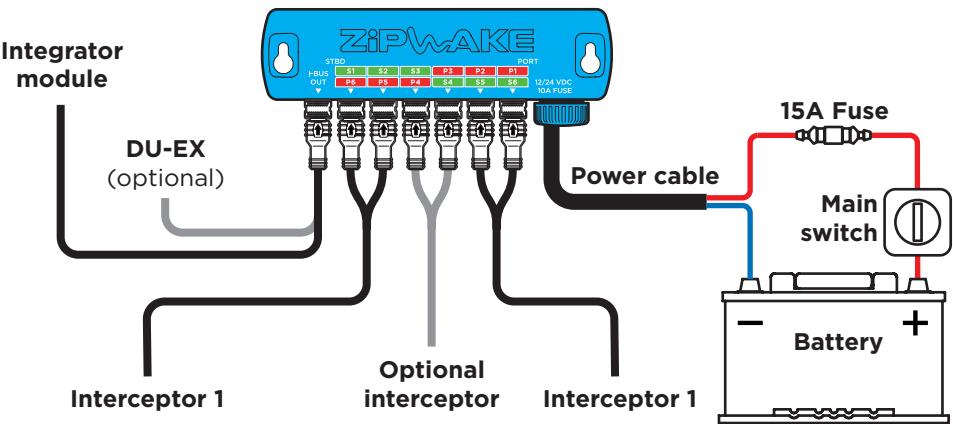
NOTE!

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.



INTEGRATOR MODULE —

1 MOUNT THE INTEGRATOR MODULE

Mount the integrator module on a rigid surface where it is easy to connect it to the distribution unit and other equipment e.g. under the dash or another suitable compartment. If the system will be used with mobile devices, mount the integrator module for maximum signal strength.

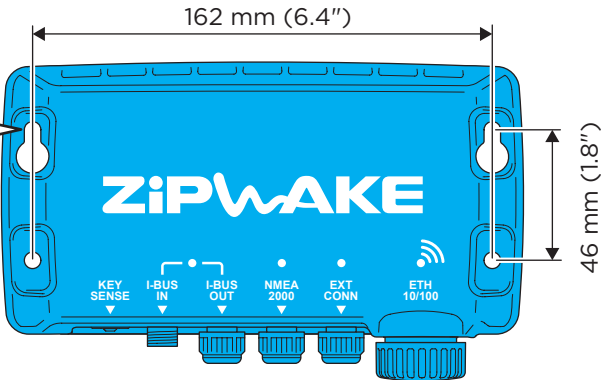
NOTE!

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

1. Drill holes (x4)
Ø 4 mm (5/32")

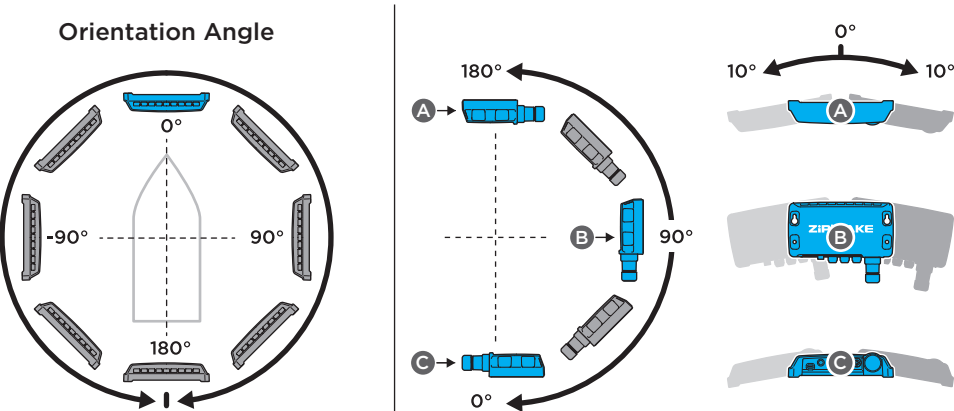

2. Fasten screws (x4)
T25 (ST 4.8x38)





MOUNTING RESTRICTIONS

Mount the integrator module within the angles shown below.



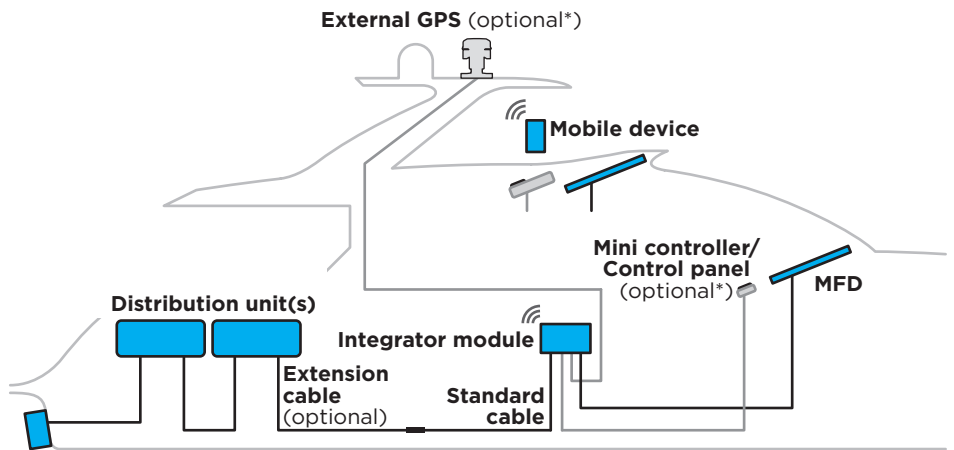
NOTE!

Make sure the integrator module orientation angle (mounting angle relative the boat's forward direction) is set as accurately as possible during initial start-up.

INTEGRATOR MODULE —

2 CONNECT THE INTEGRATOR MODULE

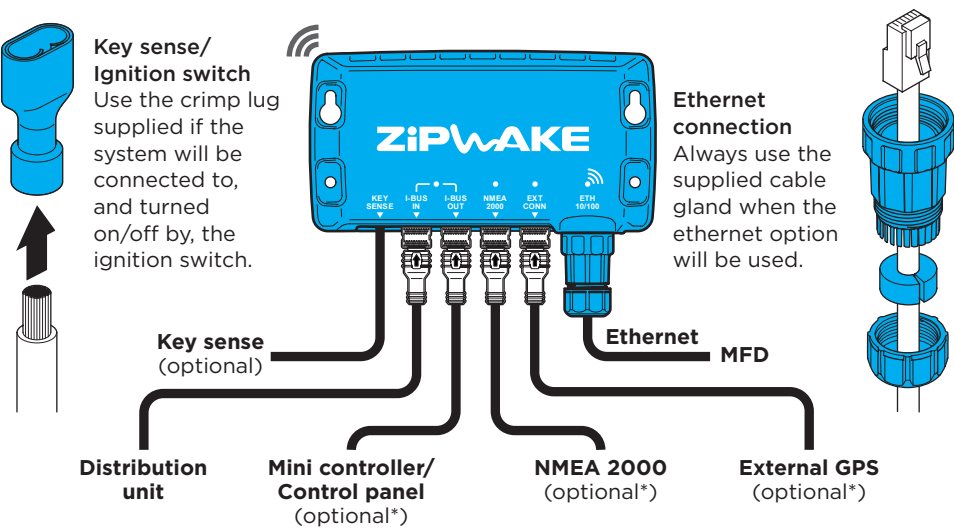
Route the cables between the integrator module, the distribution unit and optional multifunction display (MFD) and/or other equipment. Use optional extension cables if necessary.



With the integrator module connected, the system can be controlled from one or several devices e.g. an MFD, a mobile device, a Zipwake mini controller or a Zipwake control panel.

NOTE!

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



*** IMPORTANT** The integrator module requires at least one external GPS signal via NMEA 2000, a Zipwake external GPS or a Zipwake control panel.

INTEGRATOR MODULE —

3 INITIAL START

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

SETTING UP THE SYSTEM

MULTIFUNCTION DISPLAY (MFD)

The Zipwake application automatically appears on a connected (compatible) MFD. Refer to the MFD manufacturer or manual for detailed information on compatible models and how to launch integration applications such as the Zipwake Integrator Module interface on your MFD model. At first start-up, follow the steps on the MFD to complete system installation.

MOBILE DEVICE

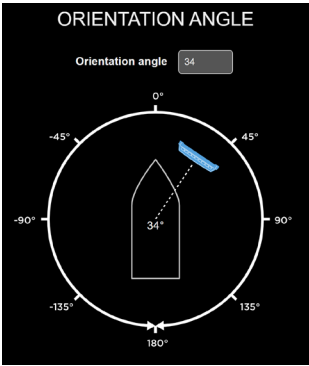
Scan the QR-code on the integrator module label **1** to connect to the Wi-Fi network (also available from the System Information page when the Zipwake application is installed). Scan the QR-code from integrator module label **2** to launch the Zipwake application (APP) and add it to the device start screen for future use.



NOTE!

Make sure the integrator module orientation angle (mounting angle relative the boat’s forward direction) is set as accurately as possible within $\pm 5^\circ$.

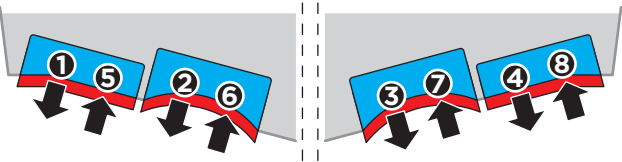
If the orientation angle is difficult to measure or estimate, use a compass or a mobile device compass application to determine the angle.



INTERCEPTOR CHECK

Carry out an Interceptor Check to verify function immediately after installation and before launching the boat. Repeat this before every launch.

The check repeats a 5 stroke sequence, where each interceptor blade is extended, one by one, from port to starboard and then retracted in the same order. Visually confirm that the interceptors move accordingly during the check.



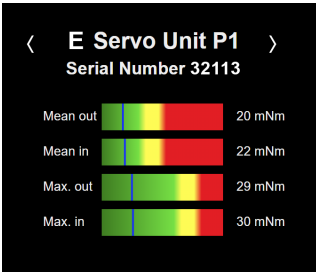
All readings must be green!

Corrective actions are always necessary when excessive torque levels are observed.

Verify the flatness of the transom, excess use of sealant behind the interceptor and/or excess antifouling between the blades and adjust if needed.

IMPORTANT

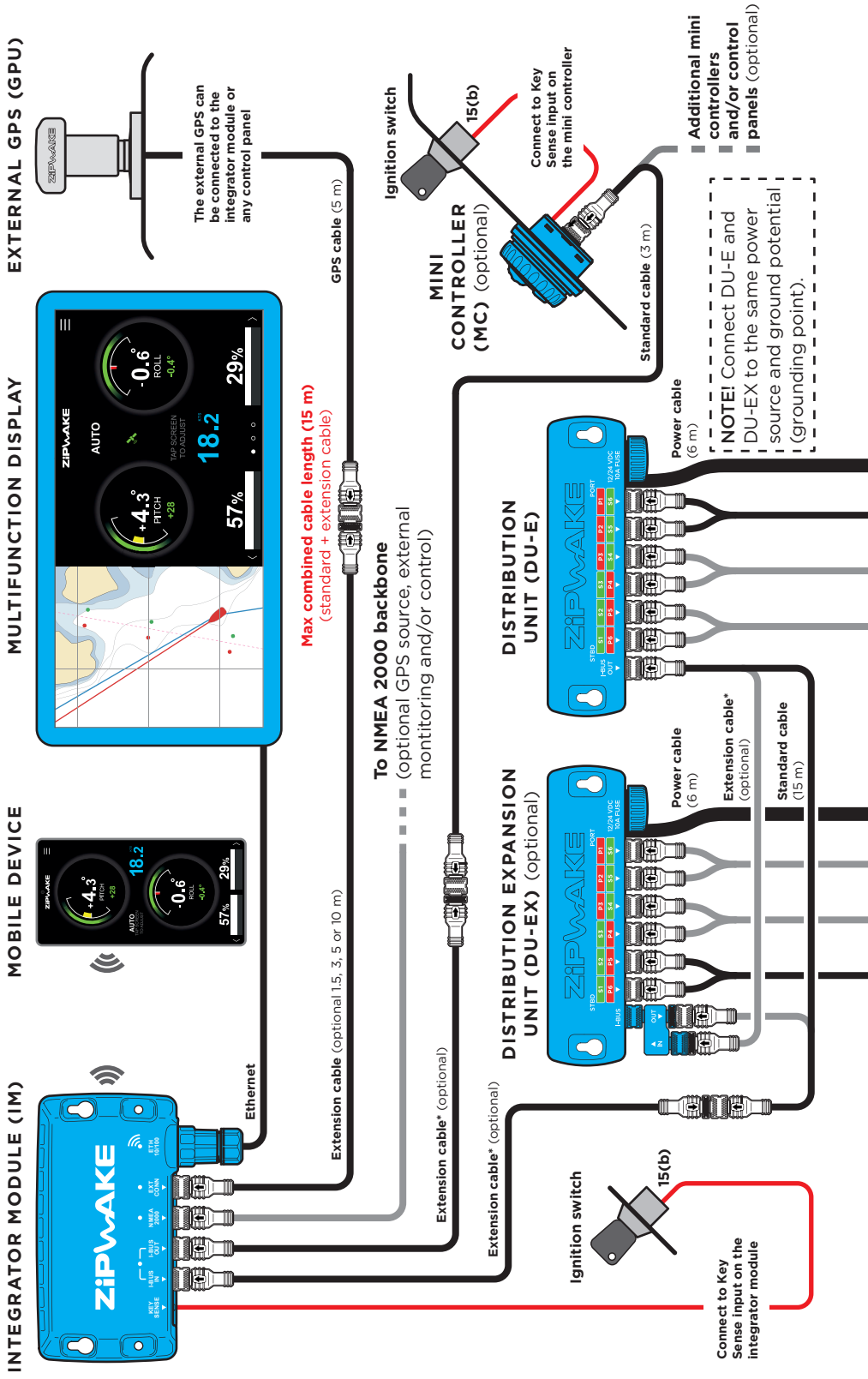
Always use the controls to move the Interceptor blades. Never try to force the Interceptor blades by hand.



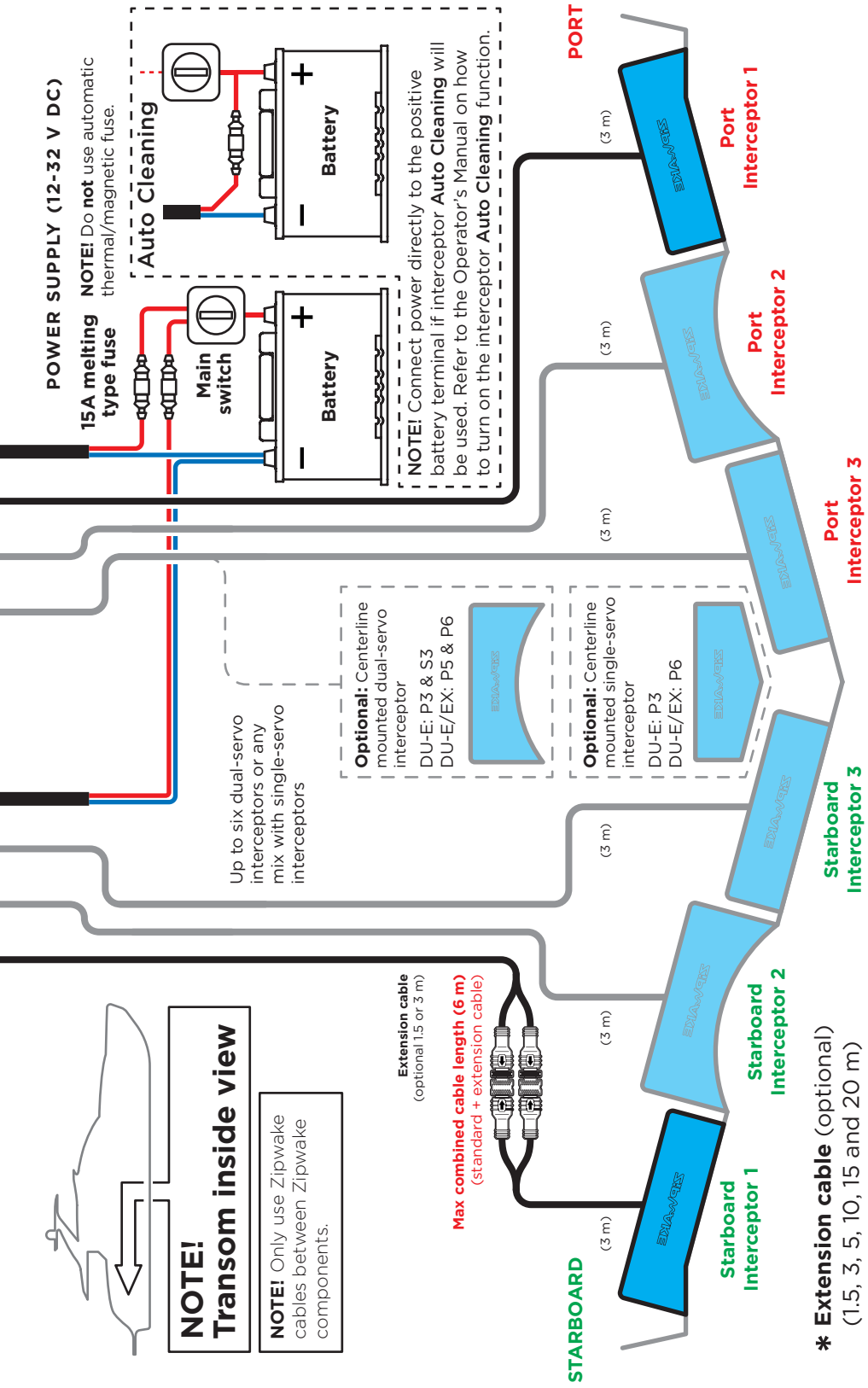
WIRING DIAGRAM

ACCESSORIES

Model	Part No.	Description
MC	2012401	MINI CONTROLLER WITH STANDARD CABLE 3 M
CP-E	2012032	CONTROL PANEL E WITH STANDARD CABLE 15 M
DU-EX	2012034	DISTRIBUTION EXPANSION UNIT E WITH POWER CABLE 6 M
IT400-E	2012215	INTERCEPTOR 400 E WITH CABLE 3 M & CABLE COVER
IT600-E	2012018	INTERCEPTOR 600 E WITH CABLE 3 M & CABLE COVER
IT800-E	2012019	INTERCEPTOR 800 E WITH CABLE 3 M & CABLE COVER
IT1000-E	2012020	INTERCEPTOR 1000 E WITH CABLE 3 M & CABLE COVER
IT600-E TUNNEL R500	2012021	INTERCEPTOR 600 E TUNNEL R500 WITH CABLE 3 M & CABLE COVER
IT600-E TUNNEL R600	2012022	INTERCEPTOR 600 E TUNNEL R600 WITH CABLE 3 M & CABLE COVER
IT600-E TUNNEL R800	2012023	INTERCEPTOR 600 E TUNNEL R800 WITH CABLE 3 M & CABLE COVER
IT400-E CHINE PORT	2012216	INTERCEPTOR 400 E CHINE PORT SIDE WITH CABLE 3 M & CABLE COVER
IT400-E CHINE STBD	2012217	INTERCEPTOR 400 E CHINE STARBOARD SIDE WITH CABLE 3 M & CABLE COVER
IT600-E CHINE PORT	2012024	INTERCEPTOR 600 E CHINE PORT SIDE WITH CABLE 3 M & CABLE COVER
IT600-E CHINE STBD	2012025	INTERCEPTOR 600 E CHINE STARBOARD SIDE WITH CABLE 3 M & CABLE COVER
CP ALU FRAME	2011281	CONTROL PANEL ALU FRAME
CP COVER	2011381-2011385	CONTROL PANEL COVER WHITE, LIGHT GRAY, MID GRAY, DARK GRAY, BLACK
GPU	2011240	GLOBAL POSITIONING UNIT WITH CABLE 5 M & MOUNT KIT
GB	2011622	GIMBAL BRACKET FOR CONTROL PANEL
CC-EX	2012036	CABLE COVER EXTENSION E KIT
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
EC15-M12	2012038	M12 EXTENSION CABLE 15 M
EC20-M12	2012039	M12 EXTENSION CABLE 20 M



WIRING DIAGRAM



Visit zipwake.com for additional information such as:

- Operator's Manuals and Installation Guides 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
- NMEA 2000 documentation

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