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***GPS
Antenna/Cable
Installation Guide***



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Introduction

This document is provided as a guide when installing or replacing the GPS antenna and cable (FSJ1XXX) to the ORCA® RX-103. The installation notes provided herein are intended to serve as a guide only. They do not serve as material required for the certification of technicians for the installation, repair, or alteration of the ORCA® system.

Materials Supplied:

Line Item	Quantity	Description
1	1	GPS antenna w/ coaxial cable (3 m)
2	1	90° stainless steel bracket
3	xx'	FSJ1XXX coaxial cable
4	2	FITSM-C SMA male connector
5	1	SMA plug-plug adapter

Install Cable

The GPS antenna is bolted to a 90° stainless steel bracket. Each bracket has two holes which are used for securing to a foundation (see section 6 for hole dimensions). The foundation should be stainless steel and welded or bolted to the super structure or mast.

Secure the 90° stainless steel bracket to the ORCA® RX antenna bracket and foundation by lining up the two ¼" holes on each bracket and fasten using 1¼" x 20 hex bolts and nylon lock nuts.

Attach the GPS antenna to the 90° stainless steel bracket by inserting the threaded GPS antenna base through the ¾" hole in the bracket and secure using threaded retaining nut. GPS and RX antenna assembly should appear as shown in figure 1.

Terminate one end of FSJ1XXX cable with SMA male connector (see Attachment 1 for guidance).

Insert heat shrink over terminated end of FSJ1XXX cable.

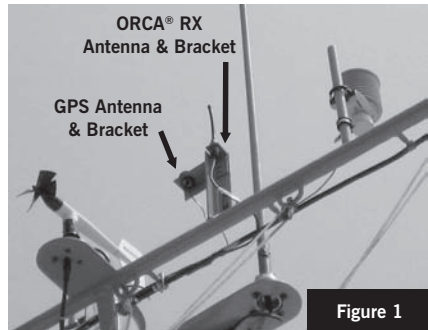


Figure 1

Connect terminated ends of FSJ1XXX cable and GPS antenna cable using SMA adapter (see figures 2 & 3).

Slide heat shrink tubing over SMA connector/ adapter assembly.

Using a heat gun, apply heat evenly to entire tube (see figure 4).

Ensure adhesive seals around the perimeter of the tube and onto the cable on both ends (see figure 5).

Feed cable through stuffing tube. Leave sufficient slack (6"-12") at stuffing tube for cable bend (see figure 6).

Pull cable through stuffing tube and into vessel's interior.

Measure cable to reach RX-103 receiver. Leave sufficient slack (6"-12"). Cut cable to length.

Install SMA connector on the unterminated end of the FSJ1XXX cable (see Attachment 1 for guidance).

Energize circuit and turn on receiver at power button.

Perform system test:

- » Activate ORCA® transmitter from the bow or stern of the vessel (whichever is further from the receiver antenna).
- » When signal is detected by the receiver, ensure the audible alarm activates and the LCD displays the vessel ID, transmitter ID (serial number), the transmitter battery strength (Good or Weak), RSSI (received signal strength indicator), and lat/long of the vessel.
- » Deactivate transmitter.

For additional assistance, please contact BriarTek at 703.548.7892 or through our website at www.briartek.com.

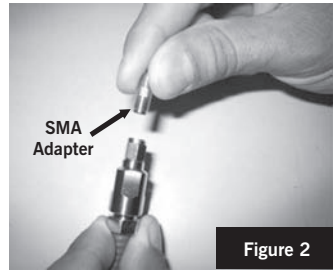


Figure 2

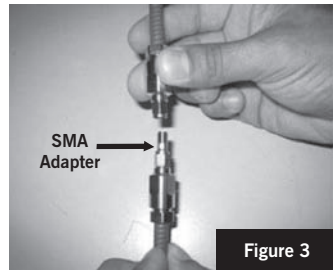


Figure 3



Figure 4

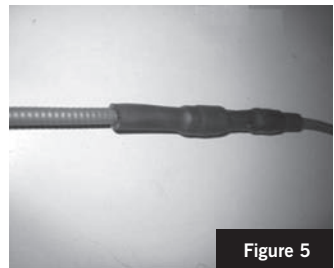


Figure 5

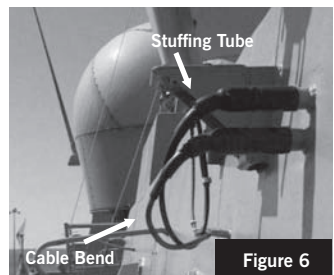
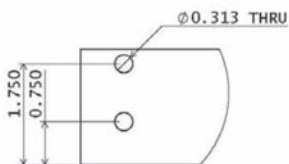
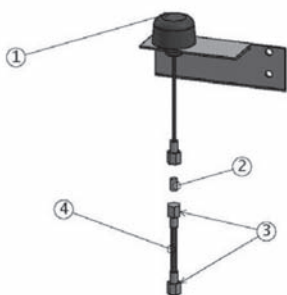
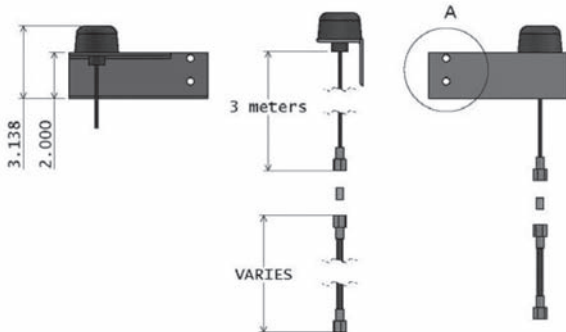
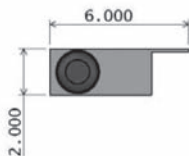


Figure 6

Specifications

System	MOBI
Sub System	Receiver
Part Number	ORCARX-GA102A
Description	ORCA GPS Antenna and cable



DETAIL A
MOUNTING

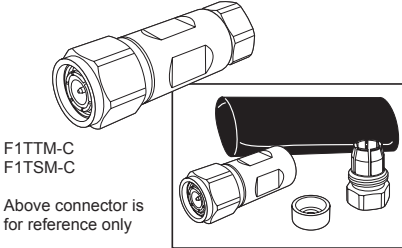
Item	Description
1	GPS Antenna with 3m coax cable
2	SMA Adapter, Female-Female
3	SMA Connector, Male
4	Helix Cable, FSJ1-50A

Installation Instructions

Bulletin 237823

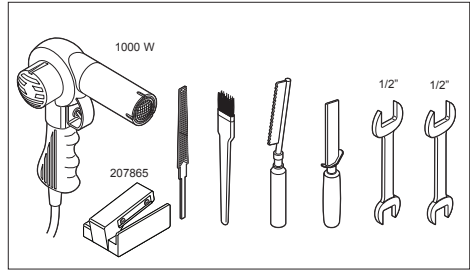
Revision B

TTM and TSM Connectors
for HELIAX® FSJ1-50A Coaxial Cable



F1TTM-C
F1TSM-C

Above connector is
for reference only



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Tips and Techniques (SP50047) available by FAX-On-Demand.
Los consejos prácticos y técnicos (SP50047) pueden solicitarse por fax.

Conseils et techniques (SP50047) disponibles par fax à la demande.
TIPS und Anleitungen (SP50047) auf Faxanfrage erhältlich.

Dicas e Técnicas (SP50047) disponíveis via pedido por fax.
提示與方法 (SP50047) 可以通過電傳獲得

1

Cut cable.
Cortar el cable.
Coupez le câble.
Kabel abschneiden.
Corte o cabo.
切割電纜

2

Trim cable jacket.
Recortar la envuelta del cable.
Coupez la gaine du câble.
Kabelmantel abziehen.
Retire a capa do cabo.
切整電纜外皮

3

Trim inner conductor.
Cortar el conductor interno.
Coupez le conducteur intérieur.
Innenleiter abschneiden.
Limpe o condutor interno.
切整內心導體

4

Remove foam and adhesive.
Retirar el material de espuma y el adhesivo.
Enlevez la mousse et l'adhésif.
Verschäumung und Klebeband entfernen.
Remove a espuma e o adesivo.
去除泡沫塑料和粘潔劑

5

Taper inner conductor, deburr, and remove debris.
Dar forma cónica al conductor interno, quitar virutas, retirar los restos.
Effilez le conducteur intérieur, ébavurez, enlevez les débris.
Innenleiter abschärfen. Entgraten. Metallspäne entfernen.
Ataraxe o condutor interno, remova rebarba, remova os detritos.
錐削內心導體，去除毛口，去除殘渣

6

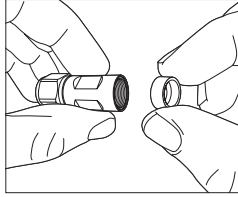
Add clamping nut flush with outer conductor.
Añadir la fuerza sujetadora a ras del conductor externo.
Mettez en place l'écrou de serrage et alignez-le sur le conducteur extérieur.
Klemmutter bündig mit Außenleiter montieren.
Coloque a porca de aperto rente ao condutor externo.
上緊固螺母使其與外導體平齊。

(continued on next page)

Attachment 1

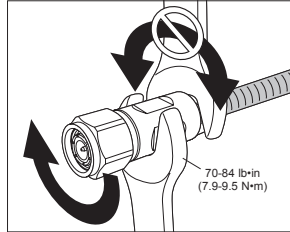
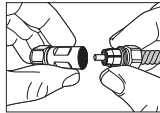
7

Place bushing in connector body.
Colocar el casquillo en el cuerpo del conector.
Insérez la bague dans le corps du connecteur.
Buchse in Steckergehäuse einsetzen.
Colocar a bucha no corpo do conector.
將襯套置入接頭體內。



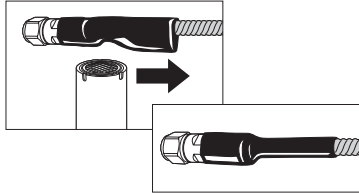
8


Attach connector body.
Añadir el cuerpo del conector.
Fixez le corps du connecteur.
Steckergehäuse befestigen.
Coloque o corpo do conector.
安裝接頭體



9

Apply heat shrink tube.
Aplicar el tubo de termocongrimiento.
Mettez en place la gaine thermorétractable.
Schrumpfschlauch überziehen.
Aqueça o tubo plástico.
加熱縮緊套管



	表一 有毒有害物質或元素名稱及含量標示格式					
	有毒有害物質或元素					
部件名稱 (Part Name)	鉛 (Pb)	汞 (Hg)	鎘 (Cd)	六價鉻 (Cr6+)	多溴聯苯 (PBB)	多溴二苯醚 (PBDE)
連接器 (Connector)	X	○	○	○	○	○
○: 表示有毒有害物質在該部件所有的均質材料中的含量均在SJ/T 11363-2006規定的限量要求以下。 X: 表示該有毒有害物質至少在該部件的某一均質材料中的含量超出SJ/T 11363-2006規定的限量要求。						

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