



Technical Bulletin

Date: November 30th, 2016

Product Line: Bambi

Models: Bambi Torrentula

Subject: 5 Pin Cannon plugs replaced with Sure-Seal® Connectors

Background

The Torrentula buckets have historically had problems related to dipping control heads in water. The 5 pin connectors used to send the control signals to the control box from the head, have been identified as the root of many of these problems. The mil-spec connectors are not watertight, allowing the low current signals to short when the connector gets wet.

Recommendations

To resolve this problem SEI is replacing the 5 pin mil-spec connector with 5 pin Sure-Seal® connectors. These new connectors are fully waterproof, very robust and will break apart if the bucket is released from the hook.

SEI recommends installing the new connectors at the control head, longline, and at the bucket end of harness H2.

All the materials listed in the following instructions are included in the conversion kit 013563.

Installation Instructions

Tools Required

- Crimping Tool (SEI No. 013399 or equivalent)
- Sure Seal® insertion tool 070306-0000 or an equivalent
- Wire Stripping Tool
- Knife



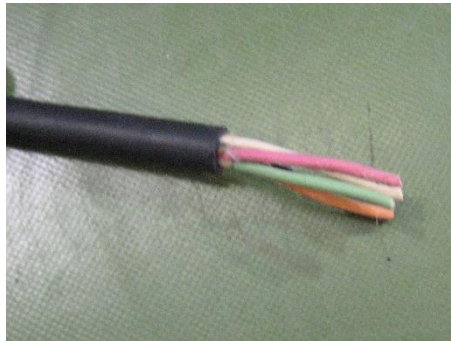
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Materials Required

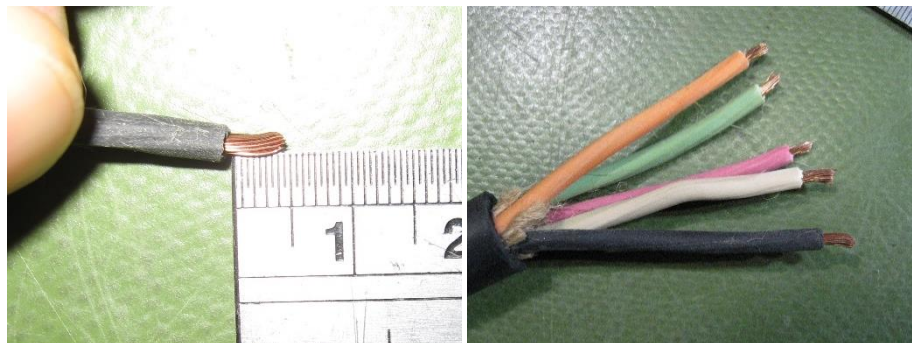
SEI Item No.	Description	Quantity Without Longline	Add for Longline
013394	5 Conductor Plug	1	1
013395	5 Conductor Receptacle	1	1
013396	14-18 AWG Pin crimp contact	10	10
013398	14-18 AWG Socket crimp contact	10	10
001471	Heatshrink, Tube, 3/4, 3:1, BLK	6"	6"

Procedure

1. Cut the cable as close as possible to the Amphenol connector
2. Strip the cable jacket 2 inches
3. Remove the fibre insulation



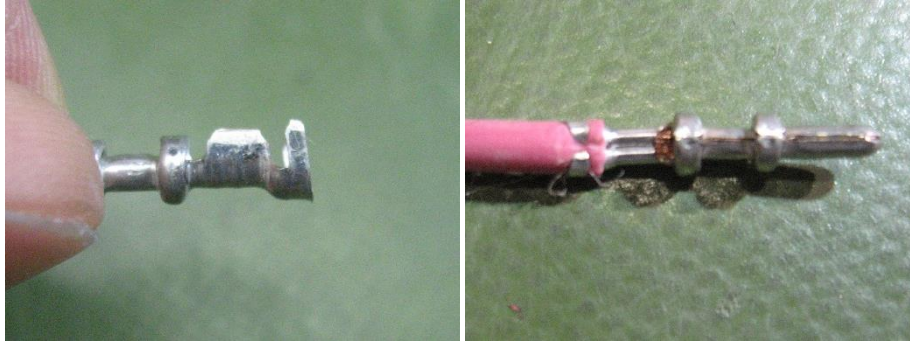
4. Strip conductor insulation 5mm. Stripping more than this may reduce the effective grip of the crimped contact



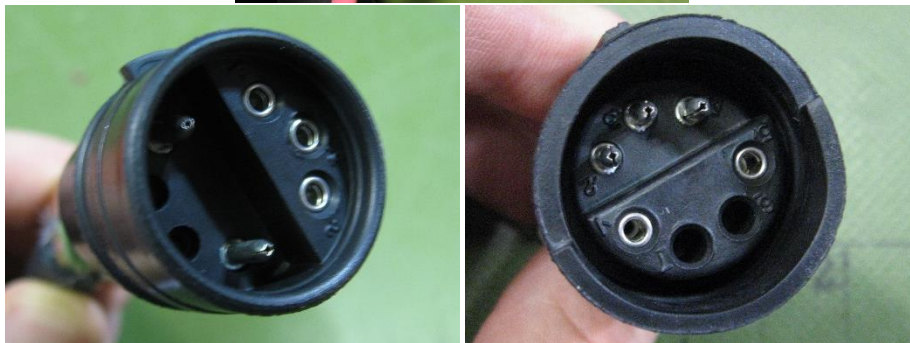
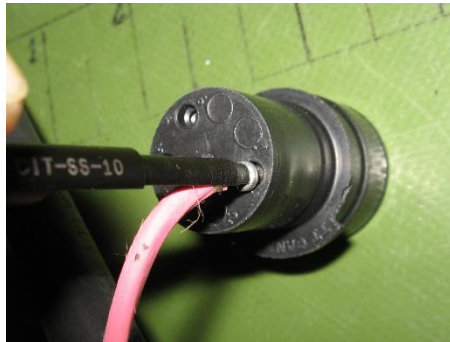
5. Refer to the schematic at the end of these instructions and install the crimped contacts using Crimping tool 013399 or an equivalent. Note that the longer wings are designed to grip the conductor insulation



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6. Slide a 3" section of heat shrink over the cable
7. Refer to the schematic at the end of these instructions and insert the pins and sockets into the connector. Push the contacts into the connector by applying pressure to the rear flange of the contact. Use the Sure-Seal® insertion tool 070306-0000 or an equivalent. The contacts should finish flush with the front face, as shown in the images below



Plug (Left) and Receptacle (Right)

8. Slide the heat shrink over the back of the shell and apply heat to fit it to the connector.



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9. Repeat this process on the mating end.

Aircraft (Top) Side of Harness

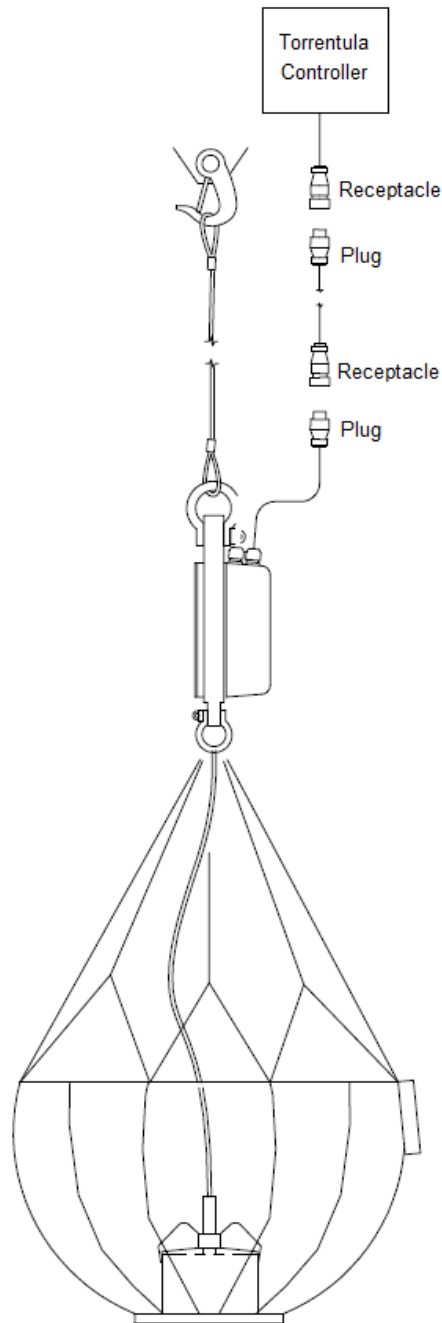
Obsolete Connector	Pin	18/3 Shielded Cable	16/5 SOW Cable	Heat Shrink	Sure Seal Pin	Crimp	Sure-Seal® Connector
Amphenol 97-3101A-14S-05S (socket)	A	White/Blue	Red	3/4" 3:1 3" length	1	Pin	Plug
	B	White/Orange	White		2	Socket	
	C	White	Green		3	Socket	
	D	Shield	Black		4	Socket	
	E	Shield	Orange		5	Pin	

Bucket (Lower) Side of Harness

Obsolete Connector	Pin	18/3 Shielded Cable	16/5 SOW Cable	Heat Shrink	Sure Seal Pin	Crimp	Sure-Seal® Connector
Amphenol 97-3106A-14S-05P (Plug)	A	White/Blue	Red	3/4" 3:1 3" length	1	Socket	Receptacle
	B	White/Orange	White		2	Pin	
	C	White	Green		3	Pin	
	D	Shield	Black		4	Pin	
	E	Shield	Orange		5	Socket	



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This Technical Bulletin is available on the SEI website. <http://www.sei-ind.com/resources/manuals>

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