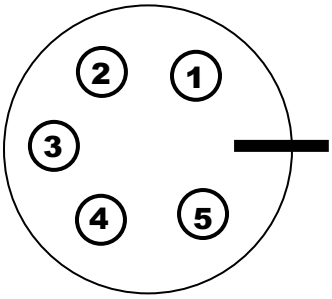
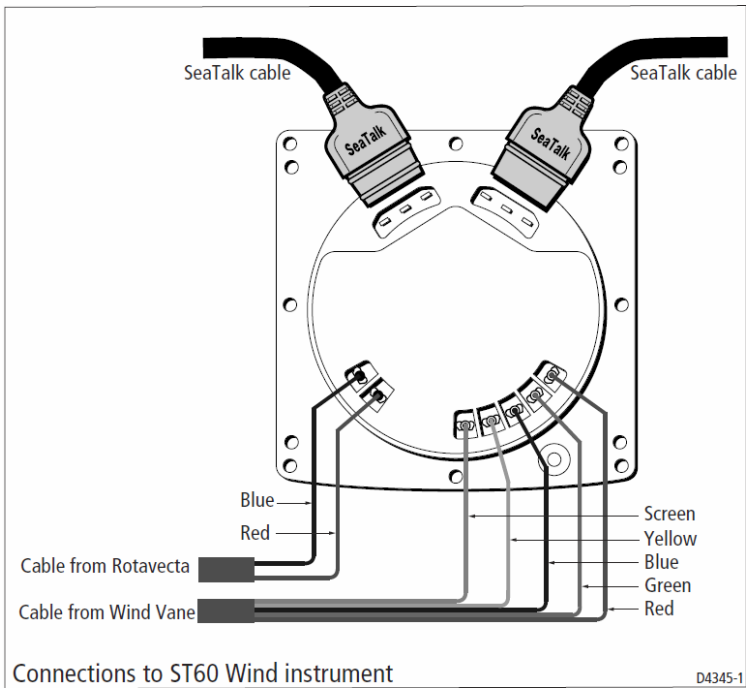
ST 60 Wind Transducer Tests & Alignment



PIN	WIRE	FUNCTION
1	**BLACK**	**0V - SHIELD**
2	**RED**	+ 8VDC SUPPLY
3	**GREEN**	+ 2-6 VDC STB DIRECTIONAL ELEMENT
4	**BLUE**	+ 2-6 VDC PORT DIRECTIONAL ELEMENT
5	**YELLOW**	+ 0-5 VDC SPEED

Looking into Masthead transducer arm plug



Electrical Check.
Red to shield should read 8 volts DC steady. This is the masthead power supply, coming from the ST50/ST60 display head. If the head is damaged, you may need to provide this power from another source to test the masthead.
Blue to Shield should read anywhere between 2 and 6 volts DC. This is the port side directional element. The voltage changes as the vane turns.
Green to Shield should read anywhere between 2 and 6 volts DC. This is the starboard side directional element.
Yellow to shield should read between 0 and 5 volts DC. This is the wind speed circuit. The faster the wind is blowing, the higher the voltage will read.

If any of these readings are out of spec, you should assume the masthead is damaged, and it should be repaired or replaced.
Raymarine has a repair shop you can ship these transducers to for repair. I believe it is about $145.00 to rebuild the unit. Go to their web site for more info. If you have an authorized dealer nearby, you can take it to him.

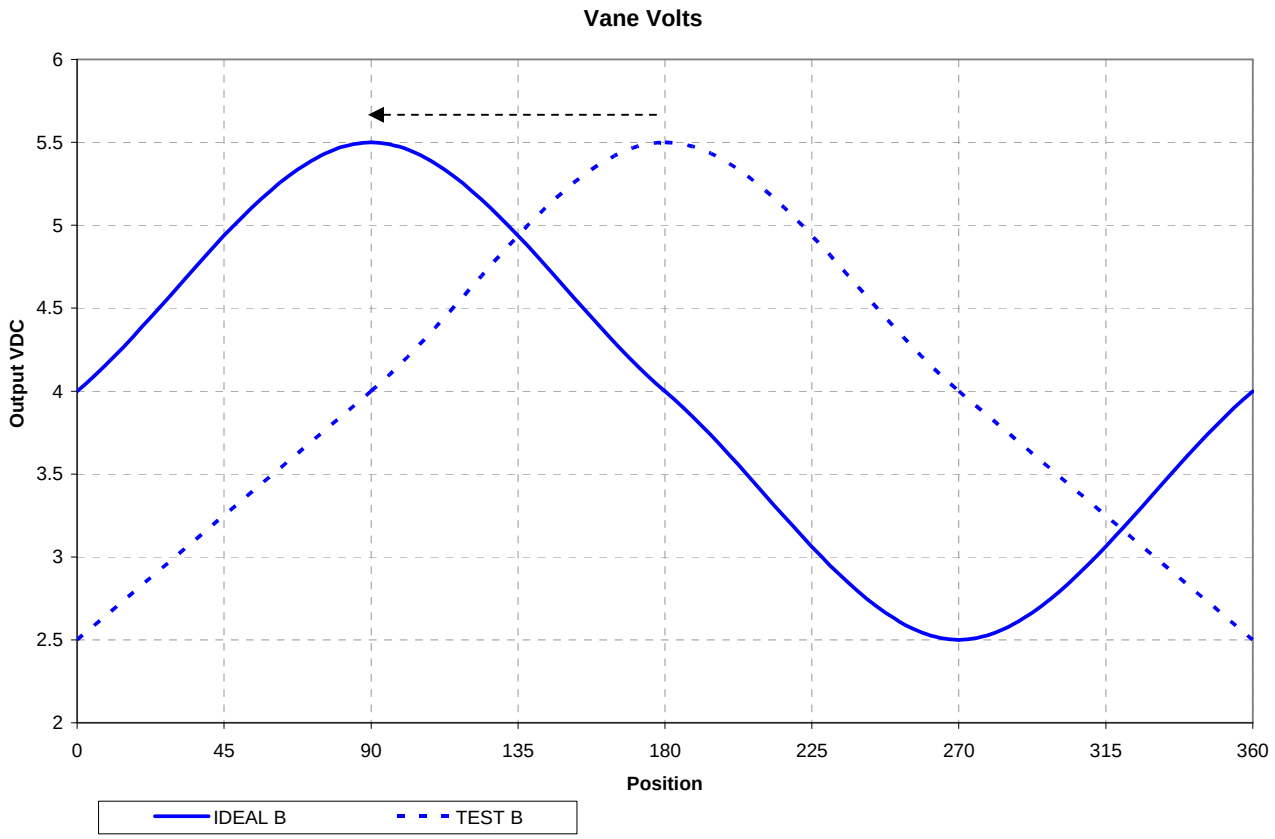
This link from RM is the source of the data below

Raymarine Wind Vane Test: Wind - Windvane_test_V1.pdf (89.54 KB)

PHYSICAL ALINGEMENT

Basically if all is working in accordance with the above, then align the transducer so that the maximum voltage, on PIN 4, is achieved with the vane pointing to Starboard.

VANE POSITION	CONNECTION	TYPICAL VALUES VDC	CONNECTION	TYPICAL VALUES VDC
PS (Supply)	**RED - BLACK**	8.0	--	--
POSITION	**BLUE - BLACK**	--	**GREEN - BLACK**	--
FORWARD (0 & 360)	½ PS	4.0	½ PS + 1-2	5.5
STARBOARD (90)	½ PS + 1-2	5.5	½ PS	4.0
AFT (180)	½ PS	4.0	½ PS – 1-2	2.5
PORT (270)	½ PS – 1-2	2.5	½ PS	4.0



Note: Test Voltage indicates that vane transducer should be rotated 90º CCW