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APPLICATION NOTE NO. 86

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Change to SBE *9plus* CTD Bottom Contact Switch Connector (JB6)

This Application Note discusses a change to the bottom contact switch bulkhead connector on the SBE *9plus* CTD.

Through mid-February 2007, the configuration of the SBE *9plus* included three 2-pin, **male**, bulkhead connectors:

- JT1 sea cable connector on the top end cap
- JB3 pump connector on the bottom end cap
- JB6 bottom contact connector on the bottom end cap

The *9plus* is usually deployed with a dummy plug on the JB6 bottom contact connector (because most customers do not use a bottom contact switch). Over the years, a small number of customers have mistakenly removed the dummy plug and plugged the 250-volt sea cable into JB6, causing extensive damage to the electronics that renders the *9plus* inoperable until one of the PCBs is replaced. To prevent this expensive user error, **all** SBE *9plus* CTDs built after mid-February 2007 will use a 2-pin **female** bulkhead connector for JB6 to differentiate JB6 from the JT1 sea cable connector.

Note: It is rare for the sea cable to be mistakenly plugged into the JB3 pump connector, most likely because there is always a pump cable on this connector.

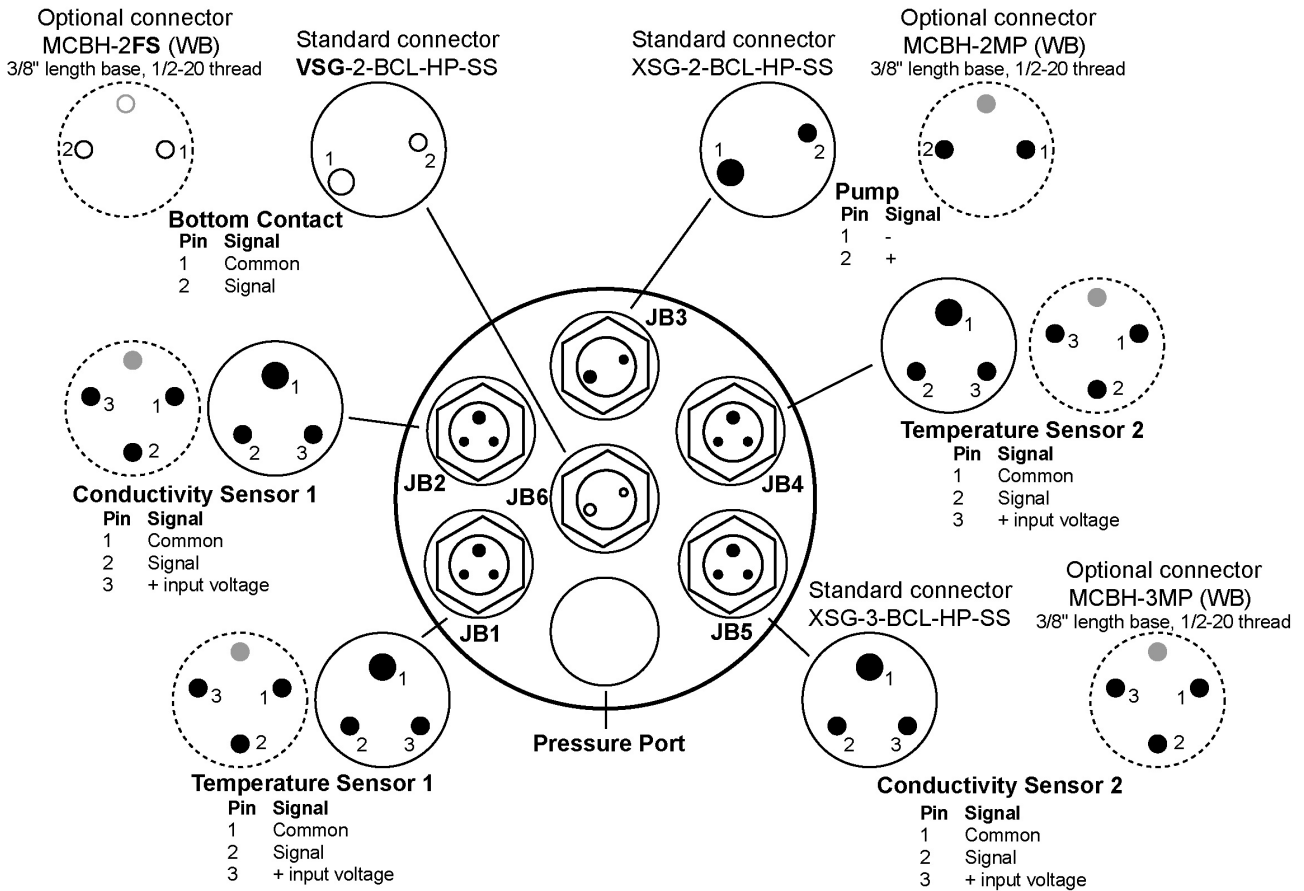
For existing SBE *9plus* CTDs, Sea-Bird will change the JB6 bottom contact connector on request, at our usual price for this type of work. Note that a new dummy plug and (if applicable) a new cable to a bottom contact switch are also required if the connector is changed. **Contact Sea-Bird for pricing and for scheduling information.**

Part Numbers for new bulkhead connector, cables, and dummy plugs:

Part Number	Description
172265	VSG-2BCL-HP-SS bulkhead connector
172266	VMG-2FSD-HP dummy plug for bulkhead connector
172267	RMG-2FS to VMG-2FS cable, bottom contact switch to <i>9plus</i>
172268	MCBH-2FS (WB) AL wet-pluggable bulkhead connector for <i>9plus</i> with aluminum housing
172269	MCBH-2FS (WB) TI wet-pluggable bulkhead connector for <i>9plus</i> with titanium housing
172270	MCIL-2FS to MCIL-2MP cable, bottom contact switch to <i>9plus</i> (wet-pluggable bulkhead connectors on both)
171795	MCDC-2MP dummy plug for wet-pluggable bulkhead connector

See below for a drawing of the *9plus* bottom end cap.

SBE 9plus Bottom End Cap



Notes:

1. Wet-pluggable (MCBH) connectors are available in anodized aluminum or titanium; connector type must match SBE 9plus housing (standard aluminum or optional titanium).
2. All the 3-pin connectors are the same type; see the connector callout for JB5.