

Title:	Engine Coolant Probe Update			
Number:	PB_663	Release Date:	11/06/23	
Revision Number:	Not Applicable	Revision Date:	Not Applicable	
Chassis Type:	Custom Chassis			
Component Description:	Coolant Probe			
Parts:	See Table Below			

Subject:

As a product improvement, Pierce will be changing coolant probes from a contact probe to a capacitive sensor.

Description:

Previous engine coolant probes used a direct contact sensor with two probes directly in contact with the coolant when full. These contacts are subject to scaling deposits which can eventually cause an erroneous reading of the coolant fluid level. The new coolant probe senses the presence of coolant by a capacitive means. The electronics are not in direct contact with coolant, providing enhanced protection against scaling deposit failures.

Original Part Number	Original Item Description	New Part Number	New Item Description
3569716	SEND, LOW COOLANT PROBE 1/4"	63-2169	SEND, LOW COOLANT PROBE .25 NPT

If any additional support is needed, please open a technical support incident on Pierceparts.com.

SPECIFICATION

Liquid types: Water based liquids such as coolant or washer fluid.

Electrical rating

Supply voltage: 5±0.25 VDC.

Supply current: 5 mA + source output.

Alarm delay time: 0 to 25 s rising or falling (factory set).

Connection: 3 way Packard Metripack 150 connector.

Power up delay: 0 to 10 s (factory set).

Power up state: 'In Liquid' or 'Out of Liquid' (factory set).

Output type: Voltage.

Output pin: **Pin B.**

Output state in liquid*: 1.2±0.25 VDC

Output state in air*: 3.75±0.25 VDC

Output current: 10 mA maximum.

Connections: See diagram below.

*Outputs are factory selectable; opposite states and alternative values from 0.5-4.5 VDC are available on request.

Environmental Ratings

Ingress: IP67 (with mating connector fitted).

Max. pressure: 5.0 Bar (72 psi)

Temp. range: -40 °C to +125 °C (-40 °F to + 257 °F)

Weight: 70 g typical (dependent on thread size)

EMC: ISO13766:2006

Construction

Body: Brass.

Probe: PTFE.

Terminals: Brass, Tin Plated.

Seals: EPDM & FVMQ.

Connector: PA66 30% Glass Filled Nylon.

Thread sealant: Vibra-Seal 516 (taper thread variants only).

Vibration (15.3 Grms)
3 orthogonal planes for 3 hours per plane
Testing performed in accordance with BSEN 60068-2-64:1993

Drop: 1 m to concrete surface.

¼" NPTF M14 x 1.5
½" NPTF M18 x 1.5
¾" NPTF Others on request
½" BSPP
½" BSPT

TYPICAL APPLICATION

Thread	Torque	Thread	Torque
¼" NPTF	9 Nm	M14x1.5	10 Nm
¾" NPTF	11 Nm	M18x1.5	15 Nm
½" NPTF	20 Nm		
½" BSPP	15 Nm		
½" BSPT	20 Nm		