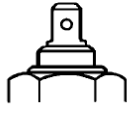
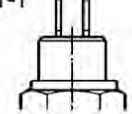
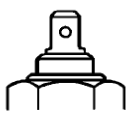
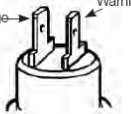


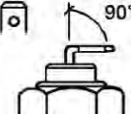




Installation:


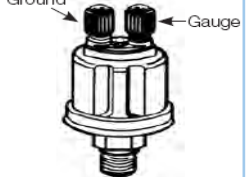
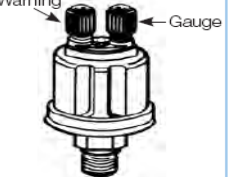
1. **Do not** use Teflon tape or sealant on the threads. It will cause a grounding issue and the sender will not work properly.
2. **Do not** use "T" or angle adapters for temperature senders since the sender tip will not be properly located in the fluid flow.

Temperature Senders:

Types of Senders			
* 1-pole common ground	* □	* 1-pole common ground	** Gauge → Warning
			
Illus. 1	Illus. 2	Illus. 3	Illus. 4
Standard Ground: sender case to common ground	Floating Ground: isolated terminal to common ground	Dual Station: 2 gauges operation from single sender	Dual Station Floating Ground: same as dual station; however, isolated terminal to ground

Types of Connectors			Connection Key
S 1-pole common ground	△ 1-pole common ground	◇ 1-pole common ground M4 stud or knurled nut	
			* Straight .250" spade terminal ◇ 4 mm screw stud S 90° angle .250" spade terminal △ 56 Series "Packard" female terminal, unsealed w/ terminal housing ** Gauge .250" spade terminal; WARNING: .187" spade terminal

Pressure Senders:

Types of Connections		
		
Illus. 1	Illus. 2	Illus. 3
Standard Ground: sender case to common ground; and Dual Station Standard Ground	Floating Ground: isolated terminal to common ground; and Dual Station Floating Ground	Standard Ground with Warning Contact



TEMPERATURE AND PRESSURE SENDERS

Tech Support 1-800-265-1818
http://usa.vdo.com

Instruction Sheet # A2C59519516

Rev 03-2011

Installation Torque

Temperature Senders

Thread Size	Max Torque (Nm)	Max Torque (ft lb)
1/8 – 27 NPTF	10	7
1/4 – 18 NPTF	20	15
3/8 – 18 NPTF	30	22
1/2 – 14 NPTF	30	22
5/8 – 18 UNF-3A	20	15
M10 x 1.0	10	7
M12 x 1.5	15	11
M14 x 1.5	20	15
M16 x 1.5	30	22
M18 x 1.5	30	22

Pressure Senders

Thread Size	Max Torque (Nm)	Max Torque (ft lb)
1/8 – 27 NPTF	30	22
1/4 – 18 NPTF	60	44
3/8 – 18 NPTF	60	44
M10 x 1.0	30	22
M12 x 1.5	40	29
M14 x 1.5	60	44
M16 x 1.5	80	59
M18 x 1.5	100	74

Sender Testing:

Senders can be tested with an OHM meter that measures from 10 to 2,000 OHMs. Connect the positive lead from the tester to the sender terminal and the negative lead to a good ground. The following readings will occur if the sender is operating properly:

Temperature Sender: Room Temp (Sender Dependent) 300 – 1000 Ohms (•)

Pressure Sender: Engine off (Sender Dependent) 10 Ohms (•), 240 Ohms (•)

Merchandise warranted against defects in factory workmanship and materials for a period of 24 months after purchase. This warranty applies to the first retail purchaser and covers only those products exposed to normal use or service. Provisions of this warranty shall not apply to a VDO product used for a purpose for which it is not designed, or which has been altered in any way that would be detrimental to the performance or life of the product, or misapplication, misuse, negligence or accident. On any VDO part or VDO product found to be defective after examination by manufacturer, manufacturer will only repair or replace the merchandise through the original selling dealer. Manufacturer assumes no responsibility for diagnosis, removal and/or installation labor, loss of vehicle use, loss of time, inconvenience or any other consequential expenses. The warranties herein are in lieu of any other expressed or implied warranties, including any implied warranty of merchantability of fitness, and any other obligation on the part of manufacturer, or selling dealer.

(NOTE: This is a "Limited Warranty" as defined by the Magnuson-Moss Warranty Act of 1975.)