

Diagram C
Proper wiring of the Engine Synchronizer

VDO Limited Warranty

VDO North America warrants all merchandise 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 part or product found to be defective after examination by VDO North America, VDO North America will only repair or replace the merchandise through the original selling dealer or on a direct basis. VDO North America 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 or fitness, and any other obligation on the part of VDO North America, or selling dealer.

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

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1 BEGIN HERE

CAUTION:

Read these instructions thoroughly before making installation. Do not deviate from assembly or wiring instructions. Always disconnect battery ground before making any electrical connections. If in doubt, please contact your dealer or VDO Instruments at (540) 665-2428.

Gauge Calibration:

The VDO Engine Synchronizer must be calibrated before it will work properly in your application.

Refer to the Gauge Calibration Table to calibrate the gauge before you install it.

Gauge Installation:

1. Select the location for the instrument and cut a 3 3/8" hole. (See Diagram A)
2. Insert the gauge and secure it with the VDO Spin-Lok™ Clamp. DO NOT OVERTIGHTEN. (See Diagram B)

[text continues at #2] →

Parts List

Item	Description	Quantity
1.	Engine Synchronizer (3 3/8" [85 mm] diameter)	1
2.	Lamp Socket (Push in, wedge-type)	2
3.	Light Bulb (12-volt / G.E. #158 or equivalent)	2
4.	VDO Spin-Lok™ Clamp	1
5.	Light Diffuser	1
6.	Installation Instructions	1

CAUTION!!!

These instructions contain information about a 3 3/8" gauge. ***The size of the mounting hole must be no larger than 3.36"*** Be aware of this if you intend to cut a new hole for the gauge.

Tools and Materials Needed For Installation:

16 Gauge stranded, insulated wire
Insulated 1/4" spade connectors, female
3 3/8" hole saw
Drill and drill bit set
Half-round file
Tape measure or ruler
Small tools: wrench or nut driver, utility knife, pliers, etc.

VDO
Marine

Engine Synchronizer Installation Instructions

Instruction Sheet # 0 511 012 459
Rev. 04-01

INSTRUCTIONS FOR THE INSTALLATION OF THE ENGINE SYNCHRONIZER ARE CONTAINED HEREIN. USE IS RESTRICTED TO 12-VOLT NEGATIVE GROUND ELECTRICAL SYSTEMS. LIGHT BULB, IF SUPPLIED, IS 12 VOLT.

To Begin, go to #1

CYLINDERS	APPLICATIONS	△ Hz FULL SCALE	DIP SWITCH SETTINGS		
			1	2	
4		16.67	OFF	OFF	OFF
6		25	ON	OFF	OFF
8		33.33	OFF	ON	OFF
O.B.		50	ON	ON	OFF
ALT.	Low Output	125	OFF	OFF	ON
ALT.	High Output	208.33	ON	OFF	ON
IND.	Low Output	1050	OFF	ON	ON
IND.	High Output	1300	ON	ON	ON

Engine Synchronizer Calibration Table

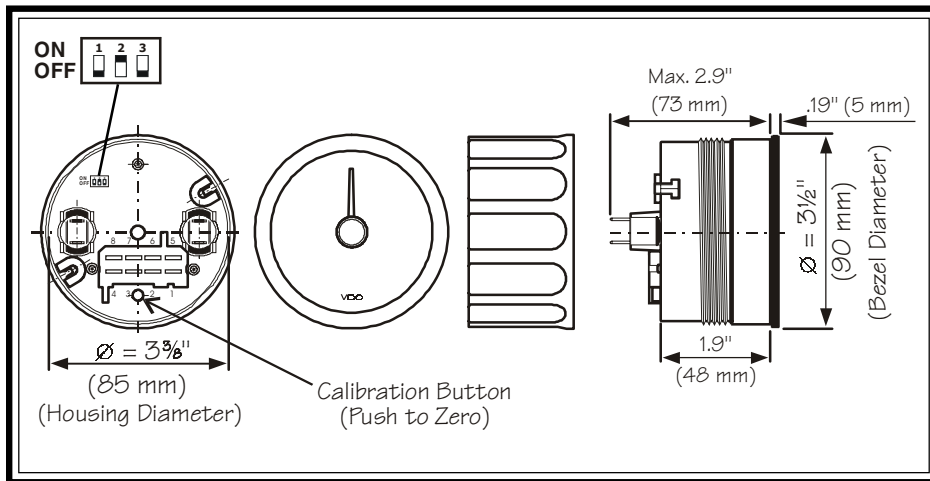


Diagram A
Gauge dimensions

2 CONTINUE HERE

Wiring the Gauge:

1. Connect the appropriate positive (+), ground (negative [-]), and signal wires to the gauge and gauge lamp sockets as shown in Diagram C.

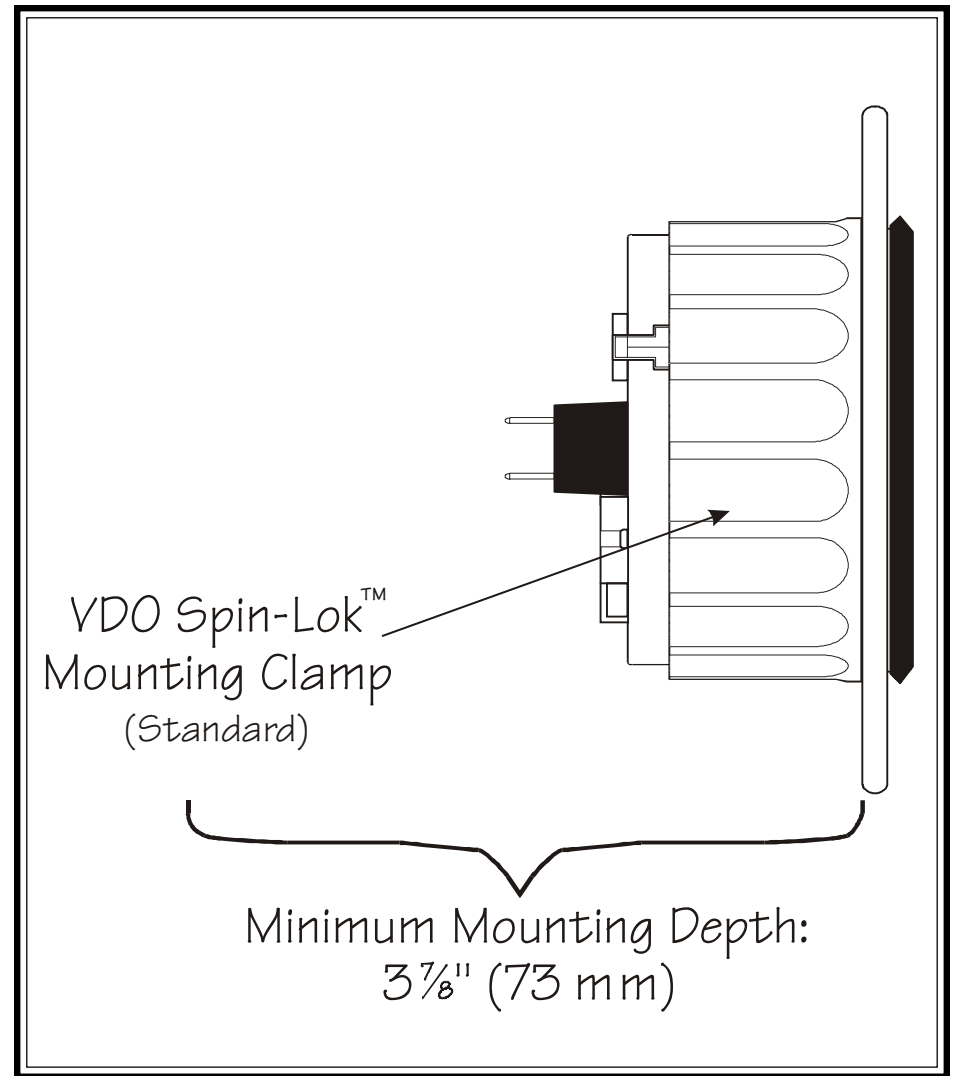


Diagram B
Proper mounting using VDO's Spin-Lok[®] Mounting Clamp