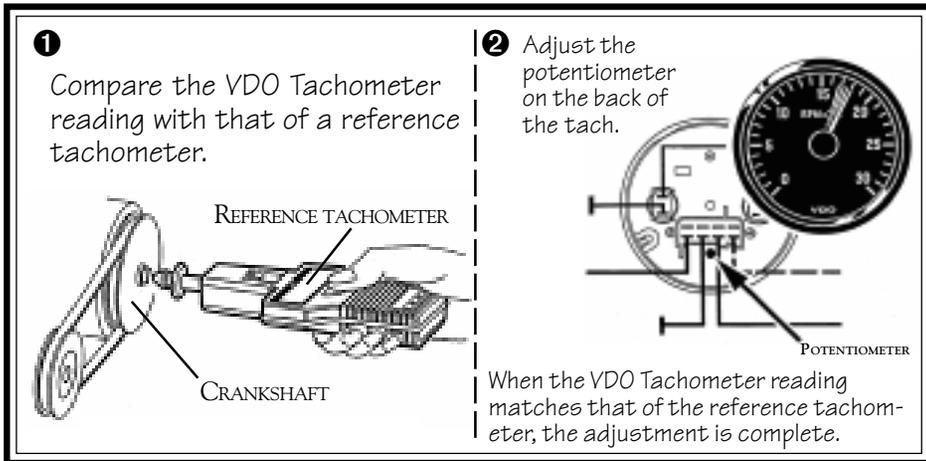


**Diagram E**

Proper wiring of the **VDO Programmable Tachometer** with typical ignition systems



**Diagram F**

Fine adjustment of the VDO Tachometer when used with an alternator

### Siemens 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.)

Siemens VDO . <http://sso-usa.siemensvdo.com/> . Phone: 1-800-265-1818

If in doubt, please contact your dealer or VDO Instruments at (800) 265-1818.

**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.

### Tachometer Installation:

**NOTE:** If you will use your tachometer with an alternator, you must first wire it (Diagram E) and calibrate it (Diagrams D & F) before mounting it. For all other applications, start here.

1. Select the location where you will mount the gauge, and mark a center point.
2. Cut either a 3 1/8" (80 mm) or a 3 3/8" (85

### CAUTION!!!

These instructions contain information about gauges of different sizes. **Consequently, you must determine the size of your gauge before cutting any holes!**

### Tools and Materials Needed For Installation:

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

mm) or a 4" (100 mm) hole, depending on the size of the tachometer you're installing. If the gauge is too snug, use a file to slightly enlarge the opening. (Diagram A)

3. Slip the mounting bracket or the VDO Spin-Lok™ Clamp over the back of the tachometer as shown in Diagram B. Tighten until the tachometer can no longer be rotated by hand. **DO NOT OVERTIGHTEN.**

### Wiring the Tachometer:

1. Run wires from the tachometer location to a:

- a) +12 volt power terminal.

(This positive power source **MUST BE SWITCHED**, and should be protected with a fuse);

[text continues] →

### Parts List

Item	Description	Quantity
1.	Programmable Tachometer (3 1/8" [80 mm] diameter)	1 or
	Programmable Tachometer (3 3/8" [85 mm] diameter)	1 or
	Programmable Tachometer (4" [100 mm] Tachometer)	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 or mounting bracket	1
5.	Installation Instructions	1

## Siemens® VDO

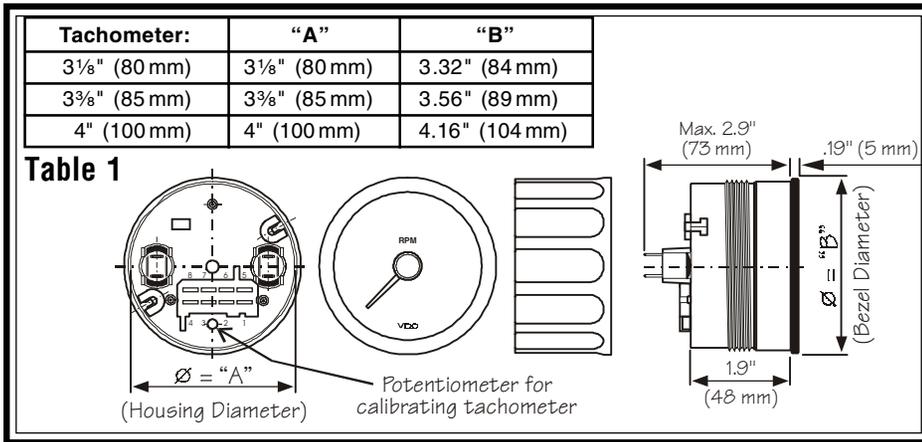
### Programmable Tachometer

#### Installation Instructions

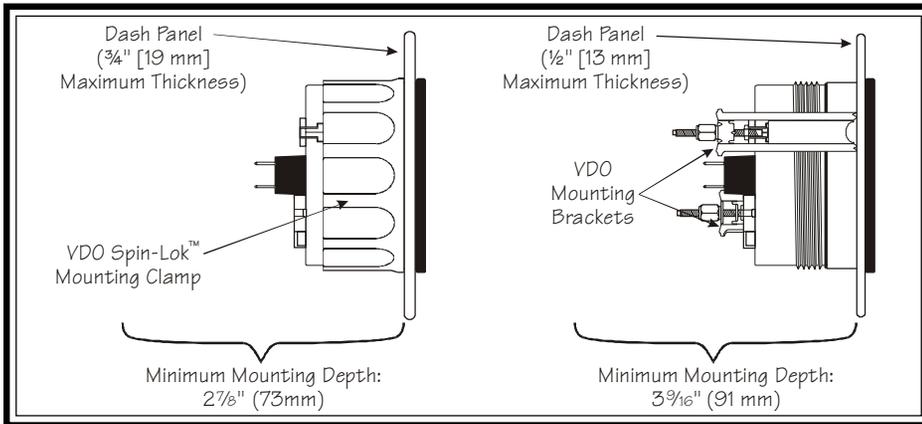
Instruction Sheet # 0 515 012 020  
Rev. 09-04

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

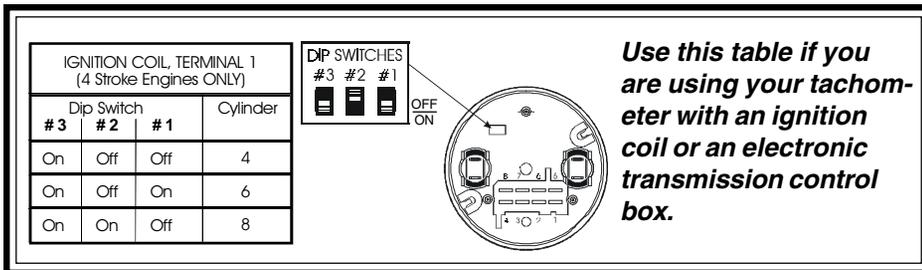
To Begin, go to # **1**



**Diagram A**  
Gauge dimensions



**Diagram B**  
Proper mounting with VDO's Spin-Lok<sup>®</sup> Clamp or mounting bracket



**Diagram C**  
With Coil or ECM, use this table to set switches for number of cylinders

- b) light switch (also after the fuse in the fuse box);
- c) **good** ground location;
- d) location of the signal source (alternator, coil or other tachometer signal source).

2. Connect wiring to the appropriate tachometer terminals as shown in Diagram E.

**Configuring the VDO Tachometer:**

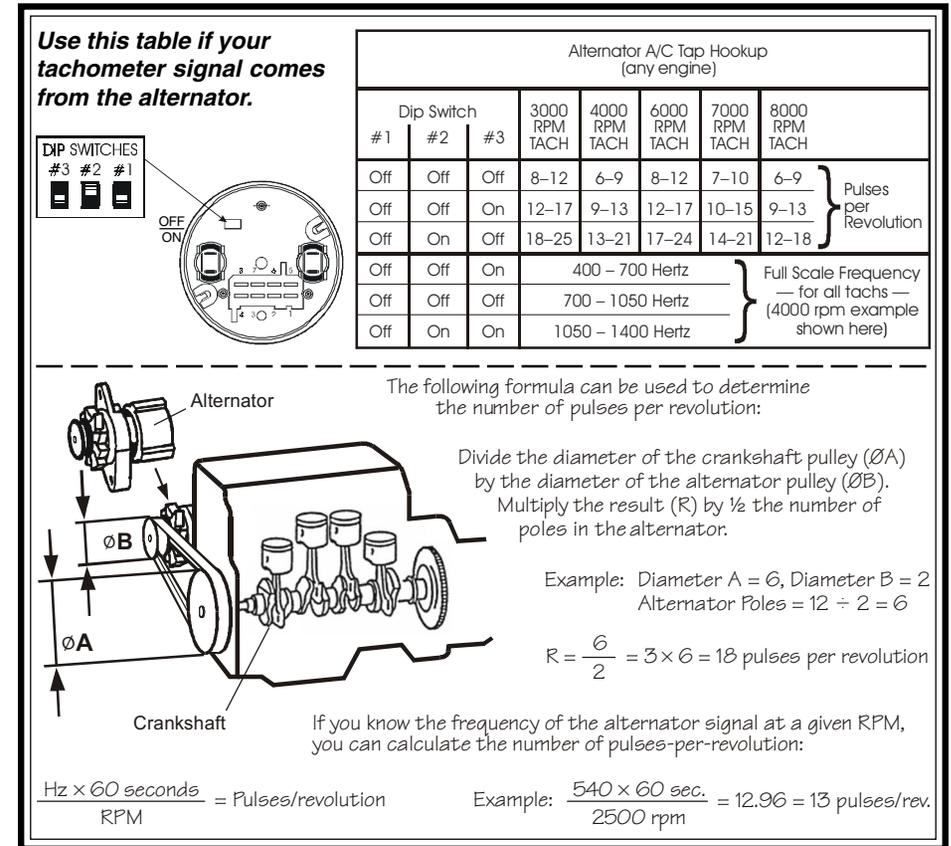
Before the tachometer will function properly with your engine, you will need to set the switches as shown in Diagrams C or D.

Diagram C shows how to set the switches for

use with an ignition coil or electronic control box; Diagram D shows how to set the switches when using the tachometer with an alternator.

On tachometers used **with alternators only**, fine tuning must be performed (after you set the switches) by using the potentiometer on the rear of the instrument. See Diagram F.

At this point, the installation and wiring of your new VDO Programmable Tachometer is complete. Turn on the ignition and the lights in the car and check to see that the instrument and light work properly. If they don't, re-check your wiring, referring to Diagram E.



**Diagram D**  
With alternator, use this table to calculate pulses/revolution & set switches