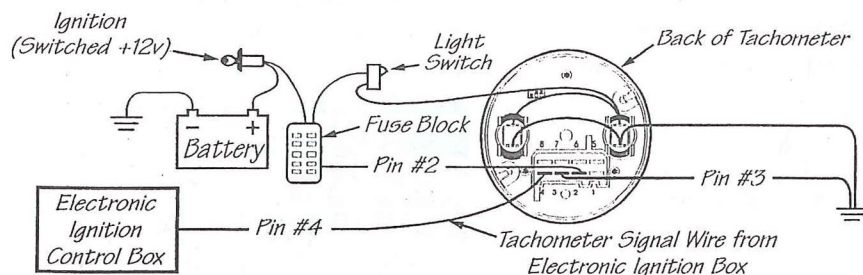
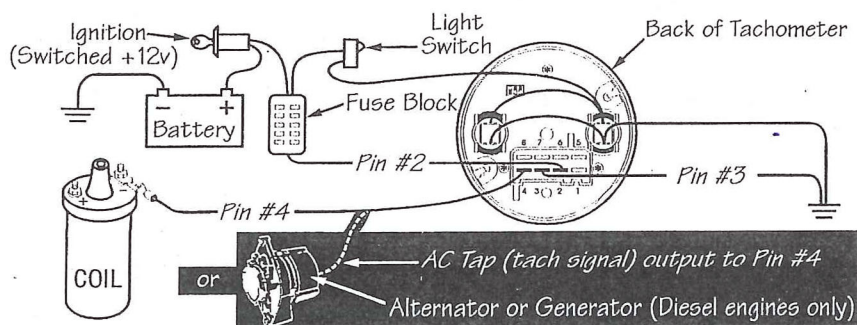


## Wiring with Electronic Ignition



## Wiring with Coil



**Diagram D**

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

## 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 sequential 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.)

## 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.

**IMPORTANT:** Mounting dimensions vary for different gauges. Please be certain to follow the instructions for your specific gauge as described below.

### Tachometer Installation:

1. Select the location where you will mount the gauge, and mark a center point.

### CAUTION!!!

These instructions contain information about gauges of different sizes. 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.

2. Cut either a 3 1/8" (80 mm) or a 3 3/8" (85 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 VDO Spin-Lok™ Mounting Clamp over the back of the tachometer. It's direction depends on the thickness of the panel (Diagram B). Tighten the clamp 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 at #2] ➔

## 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	1
5.	Installation Instructions	1

**VDO® North America**

## Programmable Tachometer

### Installation Instructions

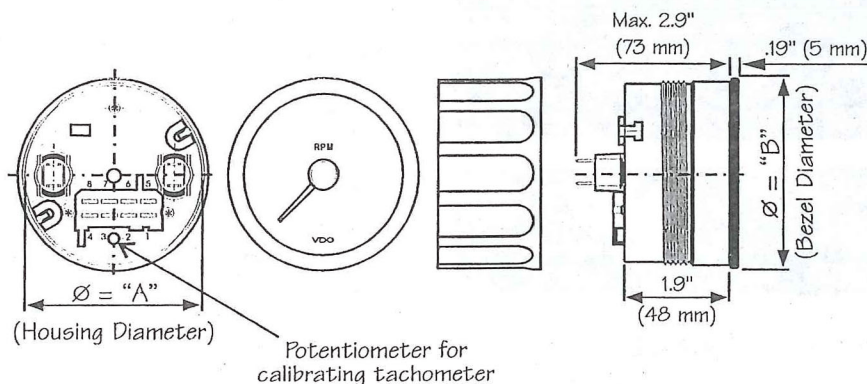
Instruction Sheet # 0 515 012 020  
Rev. 03-00

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.



Tachometer:	"A"	"B"
3 1/8" (80 mm)	3 1/8" (80 mm)	3.32" (84 mm)
3 3/8" (85 mm)	3 3/8" (85 mm)	3.56" (89 mm)
4" (100 mm)	4" (100 mm)	4.16" (104 mm)

**Table 1**



**Diagram A**  
Gauge dimensions

## 2 CONTINUE HERE

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

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

### Configuring the Tachometer:

Before your VDO Tachometer will function properly with your engine, you will need to configure it as shown in Diagram C.

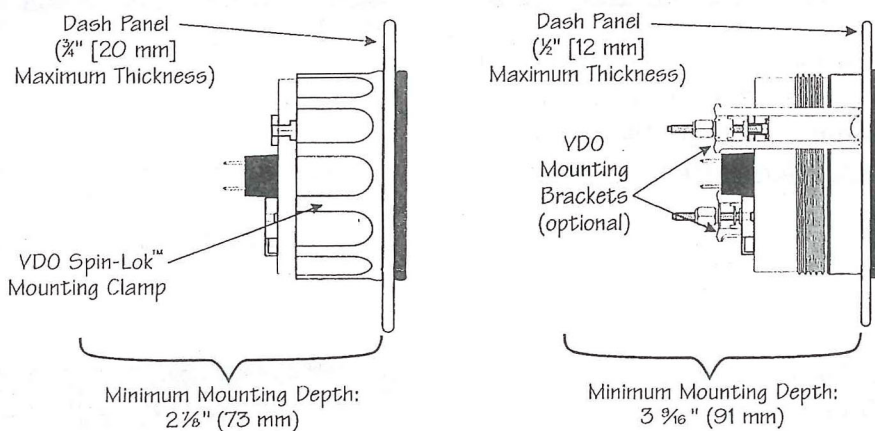
The table at the top shows how to set the DIP switches for use with an ignition coil;

the table at the bottom shows how to set the DIP switches when using the tachometer with an alternator.

Note that manual fine tuning can be done using the potentiometer on the rear of the instrument. Its location is shown in Diagram A.

**NOTE:** THIS PROCEDURE SHOULD BE DONE BY AN EXPERIENCED MECHANIC ONLY, USING A HAND-HELD REFERENCE TACHOMETER. FINE CALIBRATION CAN BE MADE BETWEEN 30% AND 100% USING THIS FIXED REFERENCE.

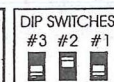
At this point, the installation and wiring of your new VDO Programmable Tachometer is complete. Turn on the ignition and the lights in the car and check to see that the instrument and light work properly. If they don't, re-check your wiring, referring to Diagram D.



**Diagram B**

Proper mounting using VDO's Spin-Lok™ Mounting Clamp or an optional mounting bracket

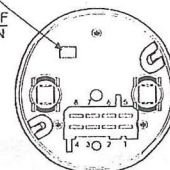
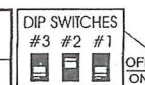
IGNITION COIL, TERMINAL 1 (4 Stroke Engines ONLY)			
Dip Switch #1	Dip Switch #2	Dip Switch #3	Cylinder
On	Off	Off	4
On	Off	On	6
On	On	Off	8



Use this table if you are using your tachometer with an ignition coil.

Use this table if your ignition is the type that provides a pulse-per-revolution type signal.

Alternator A/C Tap			
Dip Switch #1	Dip Switch #2	Dip Switch #3	Impulses per Revolution
Off	Off	Off	8-12
Off	Off	On	12-17
Off	On	Off	17-25



**Diagram C**

Tachometer configuration for use with ignition coil (top); alternator (bottom)