

VDO INSTRUMENTS

A TRADITION OF EXCELLENCE

Since 1921, VDO automotive, nautical, aviation and industrial instruments have been unsurpassed for accuracy and reliability. For engineering innovation, design excellence and production craftsmanship, VDO is the standard by which all other instruments are judged.

Our total commitment to quality has helped make VDO the world's largest independent manufacturer of automotive instruments, and the original equipment choice of many of the world's most prestigious marques including Porsche,

BMW, Mercedes-Benz, Rolls-Royce and VW among others.

Adolf Schindling founded the company known as OTA in Frankfurt, Germany in 1921 with three employees to produce automotive gauges. Ever growing production demand and a 1929 merger with the automotive division of Deuta, a Berlin instrument manufacturer, led to the birth of the VDO trademark (V for United, D for Deuta and O for OTA Apparate).

In 1956 VDO came to the United States opening



VDO Headquarters including production facilities in Winchester, Virginia.



VDO Headquarters and Research & Development Center at Schwalbach, Germany.



A leader in technological advancements, VDO today manufactures LCD instrument panels for original equipment applications.

a sales office to service the replacement needs of its Mercedes-Benz and Volkswagen original equipment accounts and to fill the needs of automobile owners who demanded the finest accessory instruments for their American-made and imported vehicles.

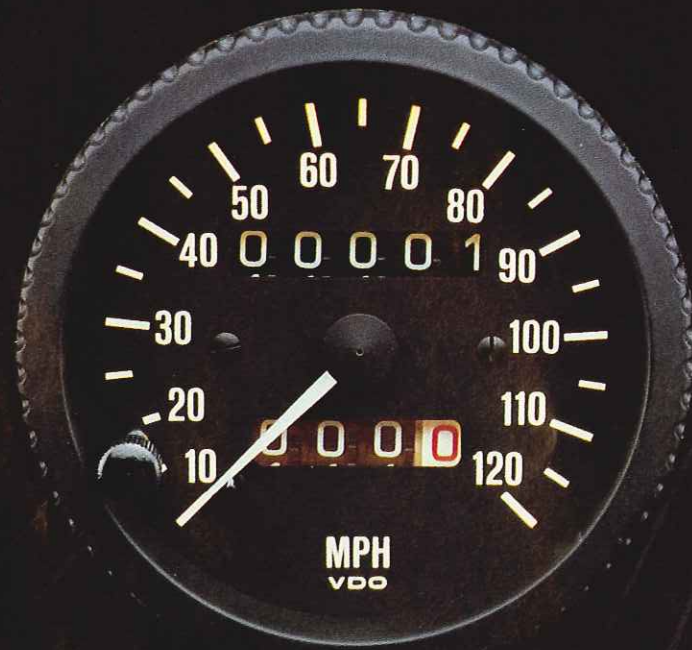
As part of our growing commitment to the American market, VDO opened a new 100,000-square-foot headquarters and manufacturing facility in Winchester, Virginia in 1977. From this facility today, VDO manufactures dashboards, instruments and sensors as original equipment for the automotive industry in America as well as a

variety of complete instrument lines for the ever-growing auto aftermarket.

From tachometers, speedometers, pressure and temperature gauges to volt and ammeters, VDO instruments are designed to accurately monitor a broad range of engine functions and environmental conditions. This allows motorists an extra degree of economy and above all safety.

With a heritage of over 60 years of engineering and production superiority, VDO will continue to lead the industry with new technologies which will meet the requirements of motorists throughout the world now and in the future.

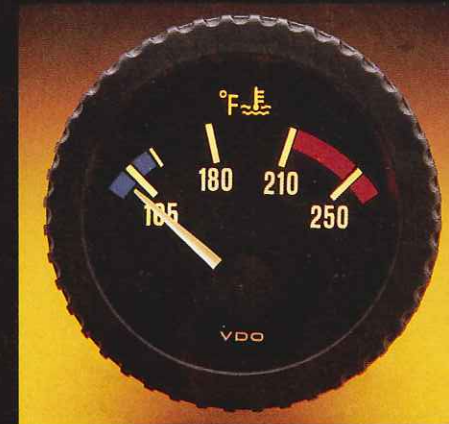
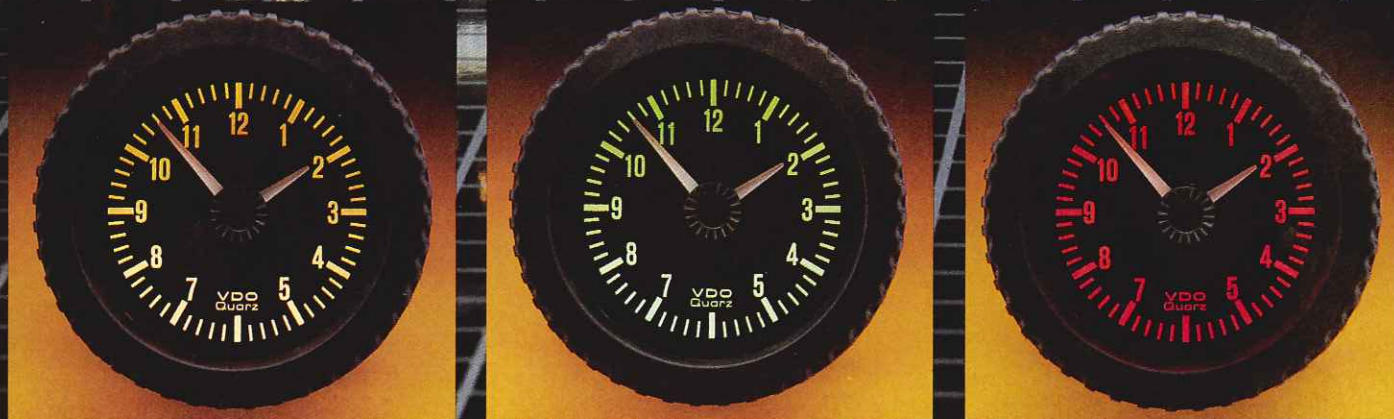
Night Design



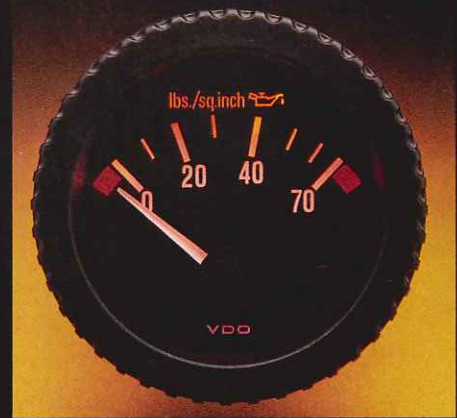
Night Design is the newest addition to the VDO range of automotive instruments. This unique design features technically innovative backlit, translucent characters and pointers, on a matte black face.

Illumination is available in white, green or red-orange colors which are pleasing to the eye while affording drivers instant at-a-glance information. With these colors Night Design gauges complement original equipment illumination.

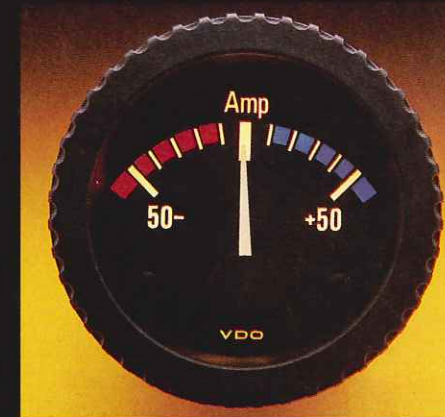
Personalize your instrument panel with unique Night Design instrumentation, available now from VDO.



TEMPERATURE GAUGE
250°F or 300°F, 12 volt, 2 1/16" diameter



PRESSURE GAUGE
70 psi or 150 psi, 12 volt, 2 1/16" diameter



AMMETER
50 amp, 2 1/16" diameter



VOLTMETER
12 volt, 2 1/16" diameter

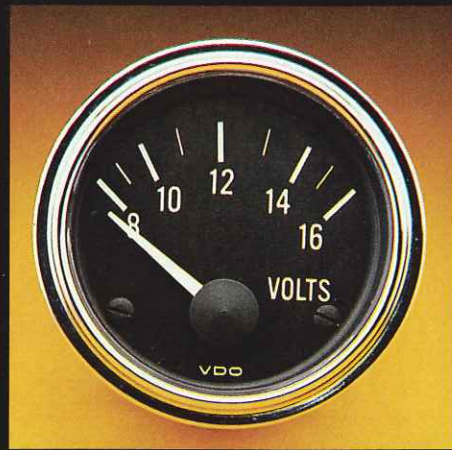


TACHOMETER
7,000 RPM, 4-6-8 cylinder, 12 volt, 3 1/8" diameter
7,000 RPM, 4 cylinder, 12 volt, 2 1/16" diameter

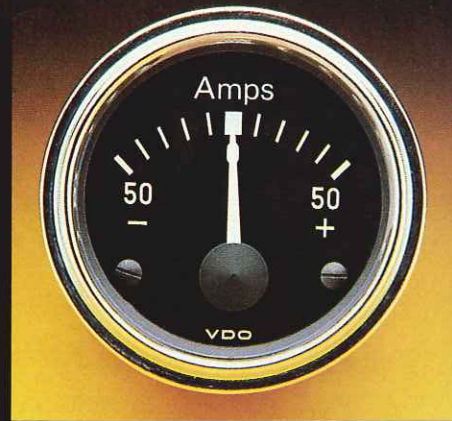
Optional mounting cups are available.



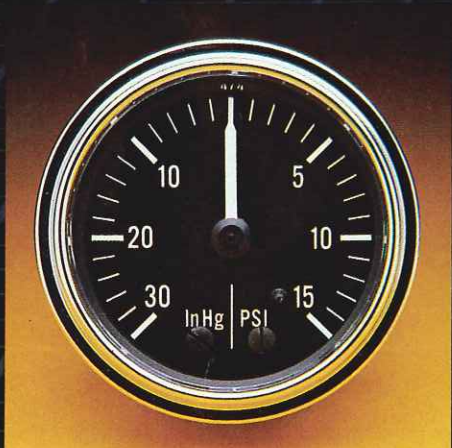
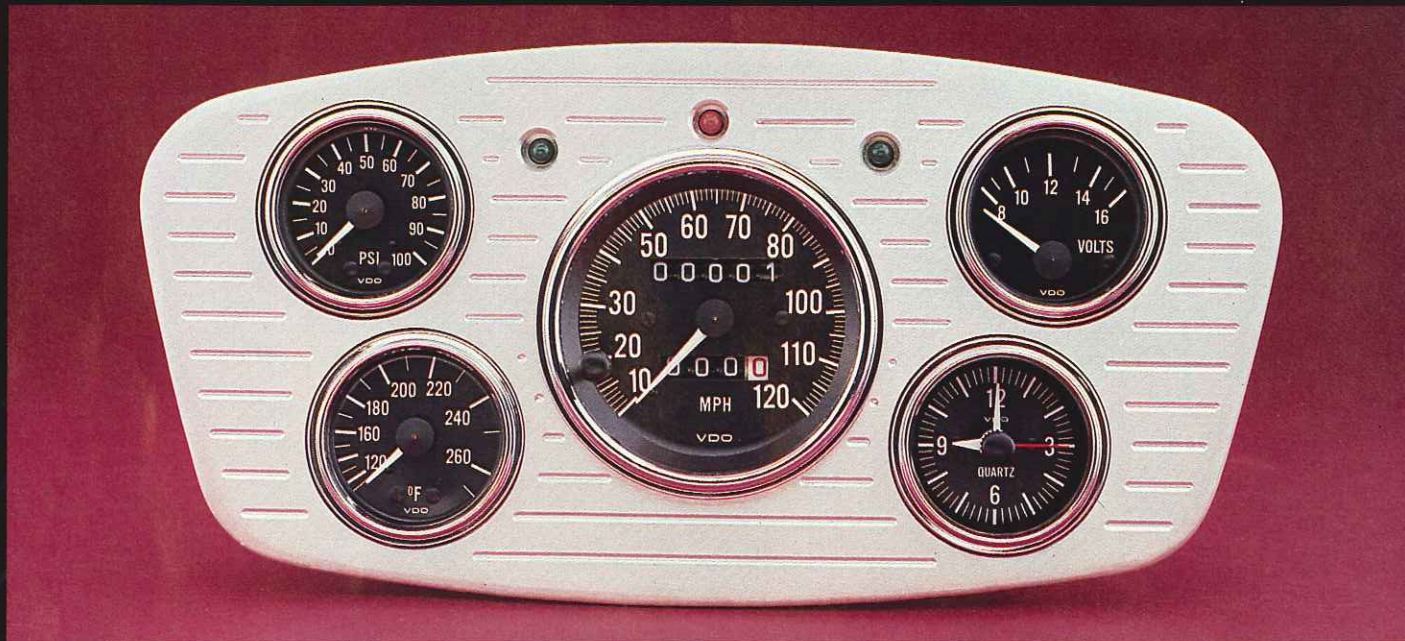
SERIES 1



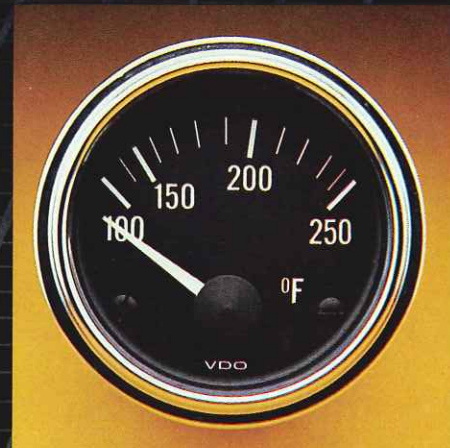
VOLTMETER
12 volt, 2 1/16" diameter



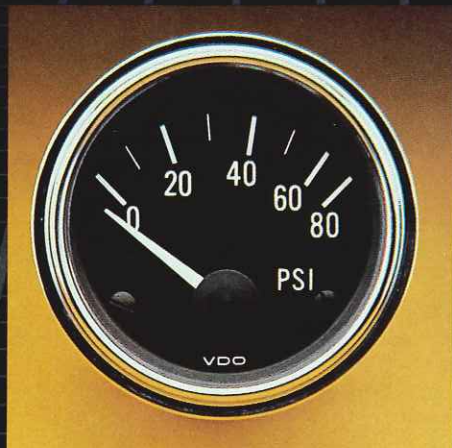
AMMETER
50 amp, 2 1/16" diameter



TURBOCHARGER GAUGE
30 in. hg. to 15 psi, 2 1/16" diameter
[mechanical]



TEMPERATURE GAUGE
250°F or 300°F, 12 volt, 2 1/16" diameter

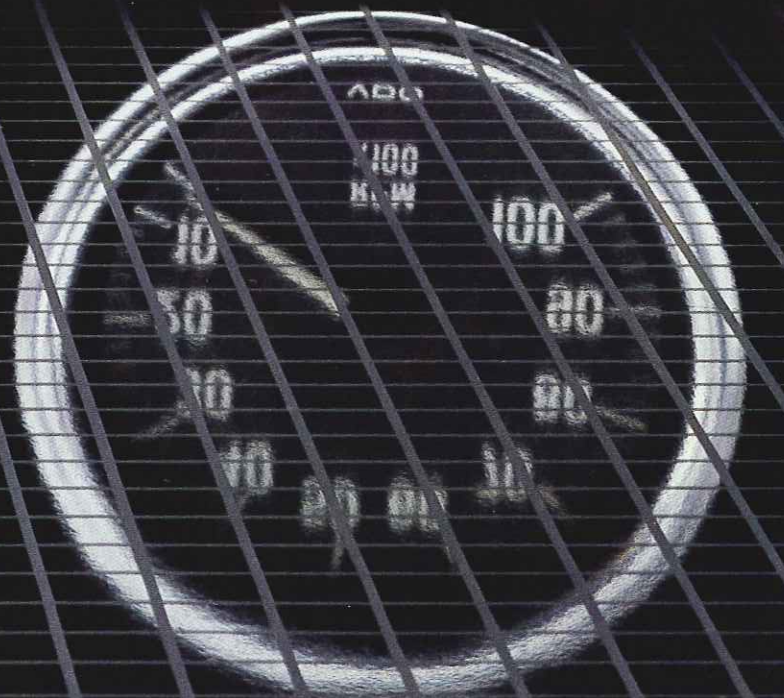
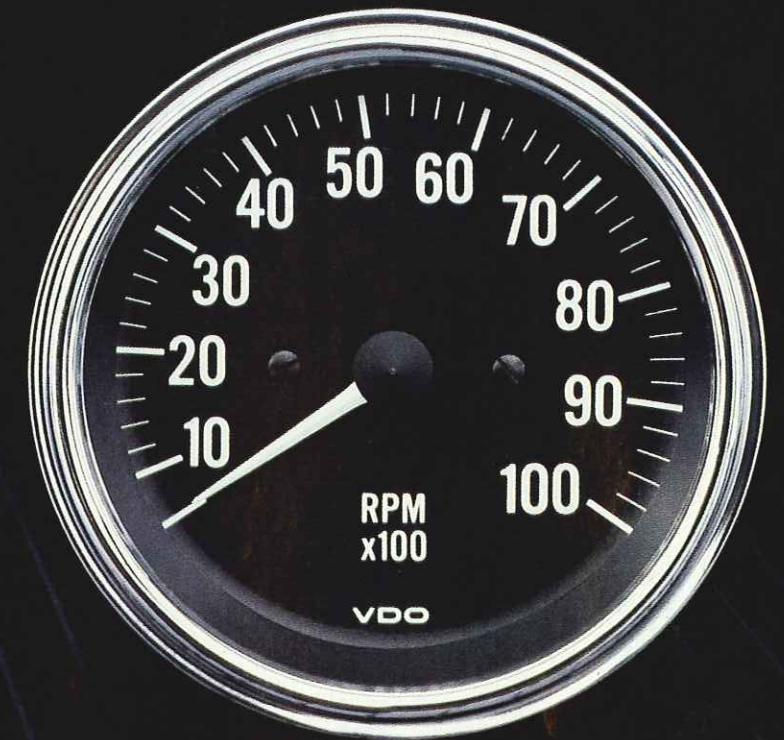


PRESSURE GAUGE
30, 80, or 150 psi, 12 volt, 2 1/16" diameter

The Series 1 Line compliments any interior design, while combining the latest in instrument technology and reliability.

This full line of instruments is readily distinguishable with chrome bezels, matte black gauge faces and is highlighted by easy-to-read white characters.

The Series 1 Line is perfect for updating existing instruments or designing an exciting custom gauge panel.



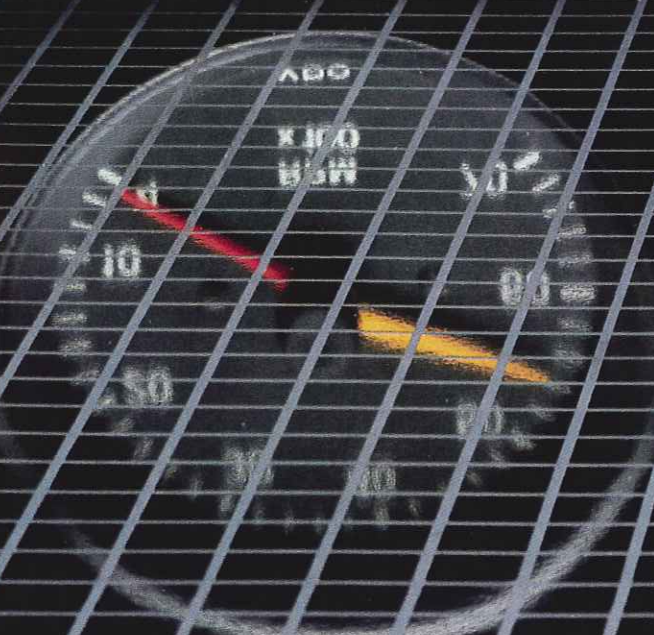
cockpit



The Cockpit Line has introduced the motoring world to new standards of accuracy and reliability with handsome styling designed to enhance any instrument panel.

This full line of instruments features matte black faces, white characters and red pointers. Efficient illumination provides instant day or night readability.

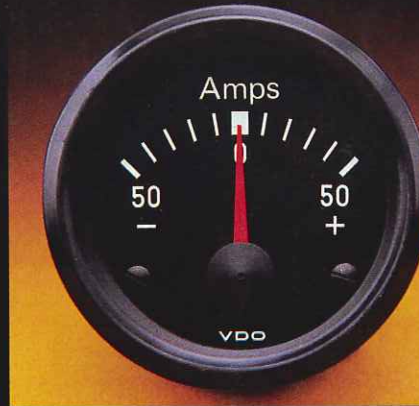
Whatever instrumentation your automobile or driving style requires, you'll find it in the Cockpit Line.



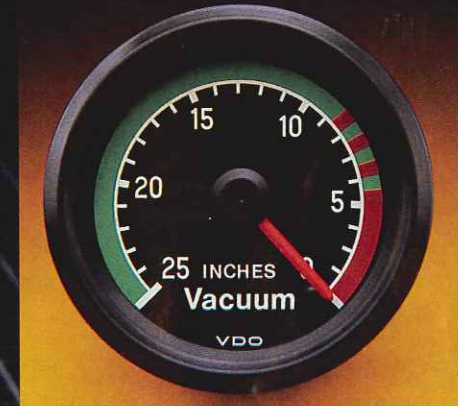
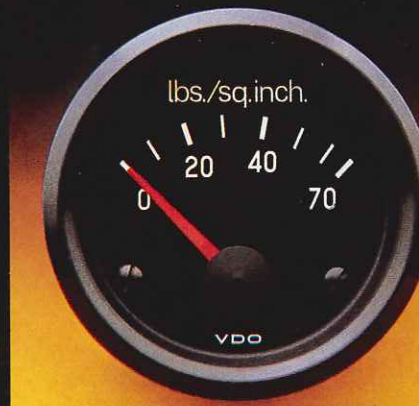
VOLTMETER
12 volt, 2 1/16" diameter



AMMETER
30, 50 or 80 amps, 2 1/16" diameter



TEMPERATURE GAUGE
250°F or 300°F, 12 volt, 2 1/16" diameter



PRESSURE GAUGE
80 or 150 psi, 12 volt, 2 1/16" diameter

CLOCK
Quartz Movement, 12 volt, 2 1/16" diameter

VACUUM GAUGE
25 in. hg., 2 1/16" diameter [mechanical]



VINTAGE

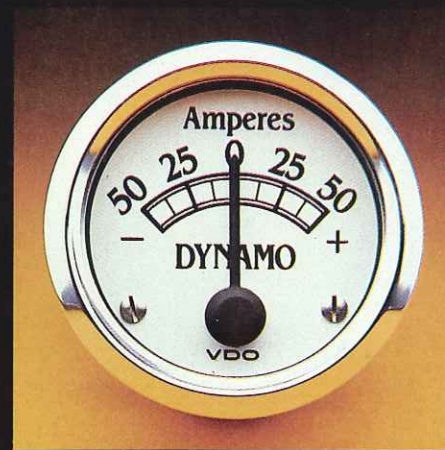


The Vintage Line is for those who want the traditional appearance in automotive instrumentation.

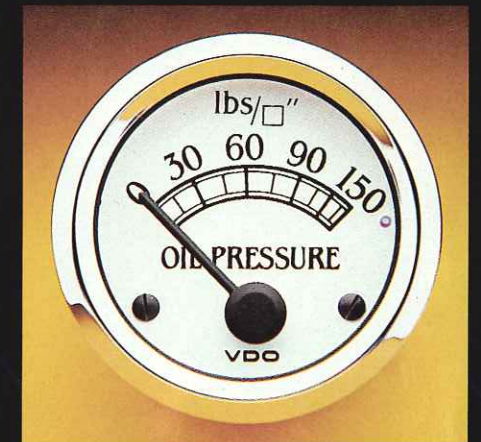
The styling reflects the vintage years of motoring but the technology is strictly modern with VDO quality, dependability and accuracy engineered into every instrument.

Vintage's distinctive styling features matte white faces, black lettering and pointers, and polished chrome bezels.

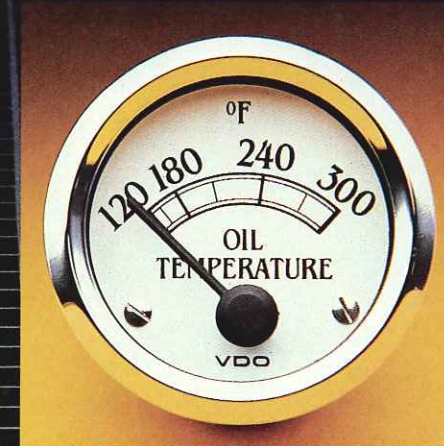
Add a unique finishing touch to that special automotive creation with the Vintage Line.



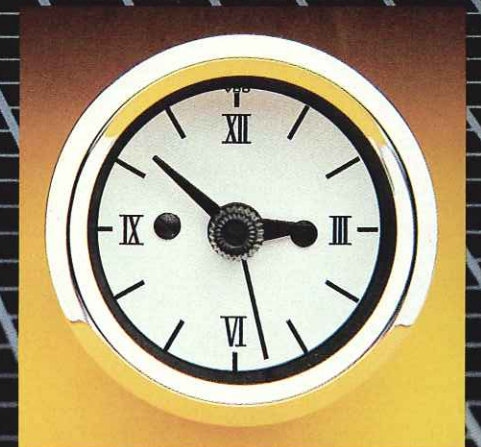
AMMETER
50 amp, 2 1/16" diameter



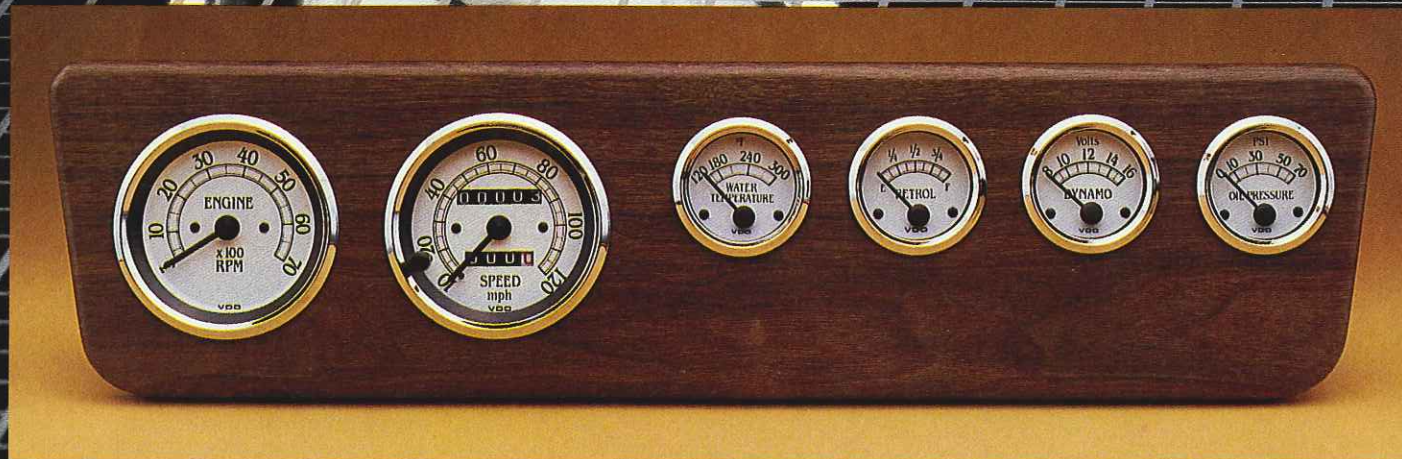
PRESSURE GAUGE
80 or 150 psi, 12 volt, 2 1/16" diameter



TEMPERATURE GAUGE
250°F or 300°F, 12 volt, 2 1/16" diameter



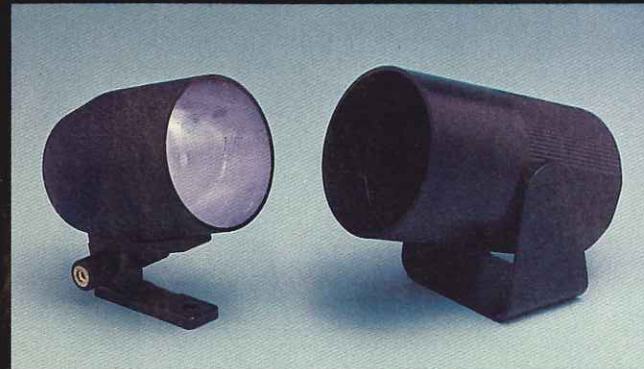
CLOCK
Quartz Movement, 2 1/16" diameter



ACCESSORIES & SENDERS

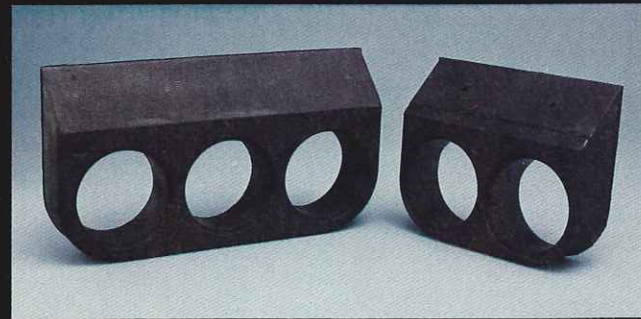
MOUNTING ACCESSORIES

Because the installations of automotive instruments have wide ranging requirements, VDO has produced a variety of mounting accessories to fulfill virtually every need. These accessories allow motorists to tailor instrumentation to their specific requirements. For the complete line of these mounting accessories contact your nearest VDO dealer.



MOUNTING CUPS

VDO offers a variety of metal and plastic mounting cups specifically designed for their various gauge lines. These cups allow VDO instruments to be installed in a wide range of dash and steering column locations.

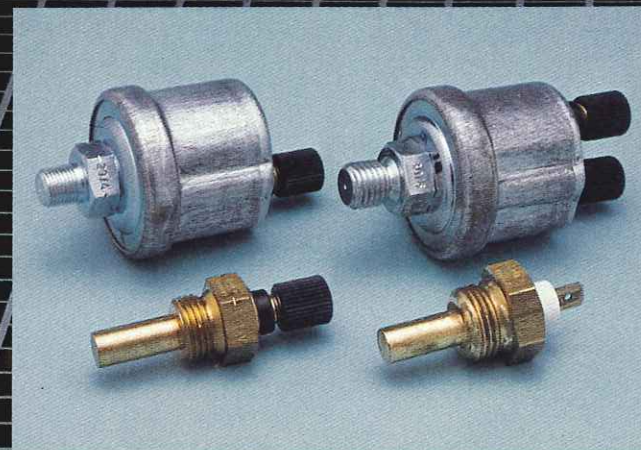


SAFETY MOUNTING BRACKETS

These unique matte black mounting brackets are made of a flexible rubber-like material for safety and can be used to install any 2 1/16" diameter VDO instrument.

SENDERS

VDO sending units are specifically designed to monitor precise engine and environmental conditions. These sending units are available in a full complement of applications and thread sizes.



ADJUSTABLE MOUNTING BRACKETS

These metal brackets are covered with safety plastic and permit VDO gauges to be secured to the dash at the best possible angle for readability.

FUNCTION GUIDE

To assist in the proper selection of automotive instrumentation, the following is a brief description of the function of primary VDO gauges. For detailed explanations of any VDO instruments, please contact your nearest VDO dealer:

AMMETER

Function—The ammeter measures the rate of charge or discharge of the battery. This is an electrical instrument whose function complements that of the voltmeter.

CYLINDER HEAD TEMPERATURE

Function—This is an electrical instrument that reads the actual temperature of an engine cylinder head. By monitoring this temperature motorists can prevent costly engine damage.

OIL PRESSURE

Function—This is an electrical or mechanical instrument that measures the pressure of the lubricating oil of an engine. The proper oil pressure is critical for safe engine operation.

OIL TEMPERATURE

Function—This electrical instrument registers engine oil temperature through a sending unit in the oil pan or engine crankcase. Monitoring proper oil temperature is essential for long engine life and efficiency.

VDO LIMITED WARRANTY

VDO Instruments 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 which is 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 of life of the product, or misapplication, misuse, negligence or accident.

On any part or product found to be defective after examination by VDO Instruments, Inc., VDO Instruments, Inc. will only repair or replace

VDO Instruments, Inc. has made every effort to ensure the accuracy of information in this catalog; however, we are not responsible for printing errors or omissions. The manufacturer, whose policy is one of continuous improvement, reserves the right to discontinue or change specifications, models or prices at any time without obligation.

TACHOMETER

Function—A tachometer is an electronic instrument that monitors the number of engine revolutions per minute (RPM). This instrument can prevent dangerous engine over revving while also helping to conserve fuel.

TURBOCHARGER (Boost)

Function—This is a mechanical instrument to be used with turbocharged or supercharged engines. At low RPM it acts as a vacuum gauge while under acceleration it indicates the amount of "boost" pressure being generated.

VACUUM

Function—This is a mechanical instrument that measures the amount of vacuum in the intake manifold of a gasoline engine. Manifold vacuum is directly related to fuel consumption, therefore, this instrument is often referred to as an engine efficiency gauge.

VOLTMETER

Function—This electrical instrument indicates the actual voltage output and condition of the battery.

WATER TEMPERATURE

Function—This instrument is available in either electrical or mechanical function to monitor the operating temperatures of an engine cooling system. Over heating may cause excessive engine wear or seizure in extreme cases.

the merchandise through the original selling dealer or on a direct basis. All claims should be made through the original selling dealer.

VDO Instruments, Inc. assumes no responsibility for diagnosis, removal and/or installation labor, loss of vehicle use, loss of time, inconvenience or any other consequential expense.

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 Instruments, Inc. or selling dealer. (NOTE: This is a "Limited Warranty" as defined by the Magnuson-Moss Warranty Act of 1975.)

VDO Cockpit, Night Design, Vintage, and Series 1 are Trademarks owned and/or supervised by VDO INSTRUMENTS, INC.
PLEASE NOTE: All instruments are 12 volt and illuminated unless otherwise specified. Sending units and wiring kits must be ordered separately unless listed as a kit.

APPLICATIONS

DESCRIPTION	COCKPIT	SERIES	NIGHT	VINTAGE
	PART NO.	PART NO.	PART NO.	PART NO.
SPEEDOMETER, MECHANICAL				
85 mph, 5/8-18 thread, 3-3/8" dia., ratio 1:0		120 301		
120 mph, 5/8-18 thread, 3-3/8" dia., ratio 1:0, with tripodometer	120 103	120 302		120 745
120 mph, M18 x 1.5 thread, 3-3/8" dia., ratio .78, with tripodometer	120 104	120 303		120 746
120 mph, M18 x 1.5 thread, 3-1/8" dia., ratio .78, with tripodometer	120 777		120 105	120 744
120 mph, 5/8-18 thread, 3 1/8" dia., ratio 1.0, with tripodometer	120 778		120 106	120 743
TACHOMETER, ELECTRONIC, IGNITION HOOK-UP				
7,000 RPM, 4-6-8 cyl., 12 volt, 3-3/8" dia.	333 055	333 301		333 708
10,000 RPM, 4-6-8 cyl., 12 volt, 3-3/8" dia.	333 056	333 302		
7,000 RPM, 4-6-8 cyl., 12 volt, 3-1/8" dia.			333 103	333 707
7,000 RPM, 4 cyl., 12 volt, 3-1/8" dia.	333 032			
7,000 RPM, 6-8 cyl., 12 volt, 3-1/8" dia.	333 034			
10,000 RPM, 4 cyl., 12 volt, 3-1/8" dia.	333 028			
7,000 RPM, 4 cyl., 12 volt, 2-1/16" dia.	333 044		333 102	
TACHOMETER, ELECTRONIC, ALTERNATOR HOOK-UP				
6,000 RPM, 12 volt, 2-1/16" dia.	333 054		333 100	
6,000 RPM, 12 volt, 3-1/8" dia.			333 101	
4,000 RPM, 12 volt, 3-3/8" dia.	333 057	333 303		
TEMPERATURE GAUGE, ELECTRICAL				
250°F, 12 volt, 2-1/16" dia., water	310 039	310 304	310 100	310 710
300°F, 12 volt, 2-1/16" dia., oil	310 012	310 312	310 101	310 709
400°F, 12 volt, 2-1/16" dia., transmission	310 015	310 303		
600°F, 2-1/16" dia., cylinder head	310 701	310 302		
600°F, 2-1/16" dia., cylinder head, complete kit	310 901	310 301		
TEMPERATURE GAUGE, MECHANICAL, INCLUDES 1/2" ADAPTER				
265°F, 2-1/16" dia., water, 72" tubing	180 040	180 301		
265°F, 2-1/16" dia., water, 96" tubing	180 041	180 304		
265°F, 2-1/16" dia., water, 144" tubing		180 302		
265°F, 2-1/16" dia., water, 180" tubing		180 303		
340°F, 2-1/16" dia., oil, 72" tubing		180 315		
340°F, 2-1/16" dia., oil, 96" tubing		180 316		
340°F, 2-1/16" dia., oil, 144" tubing		180 317		
PYROMETER				
1600°F, 2-1/16" dia., complete kit, 6' lead wire	310 036	310 314		
1600°F, 2-1/16" dia., complete kit, 10' lead wire	310 037	310 315		
1600°F, 2-1/16" dia., complete kit, 14' lead wire	310 038	310 316		
OUTSIDE TEMPERATURE GAUGE, ELECTRICAL				
-13°F to +105°F, 12 volt, 2-1/16" dia., complete kit	397 036			
-7°F to 121°F, 12 volt, 2-1/16" dia., complete kit			397 100	
PRESSURE GAUGE, ELECTRICAL				
30 PSI, 12 volt, 2-1/16" dia.		350 301		
80 PSI, 12 volt, 2-1/16" dia.	350 040	340 303	350 100	350 702
150 PSI, 12 volt, 2-1/16" dia.	350 041	350 305	350 101	350 704
PRESSURE GAUGE, MECHANICAL				
15 PSI, 2-1/16" dia.		150 303		
30 PSI, 2-1/16" dia., fuel	150 031	150 331		
100 PSI, 2-1/16" dia., oil	150 030	150 330		
150 PSI, 2-1/16" dia., oil	150 046	150 306		
150 PSI, 2-1/16" dia., air		150 307		
200 PSI, 2-1/16" dia., oil	150 032			
400 PSI, 2-1/16" dia.		150 304		

APPLICATIONS

DESCRIPTION	COCKPIT	SERIES	NIGHT	VINTAGE
	PART NO.	PART NO.	PART NO.	PART NO.
VACUUM GAUGE, MECHANICAL				
30 in. hg., 2-1/16" dia.		150 301		
30 in. hg., 2-1/16" dia., complete kit		150 302		
25 in. hg., 2-1/16" dia.	150 045			
25 in. hg., 2-1/16" dia., complete kit	150 042			
TURBO CHARGER GAUGE, MECHANICAL				
30 in. hg. to 15 PSI, 2-1/16" dia.	150 061	150 361		
TIRE PRESSURE GAUGE, 0-64 PSI				
	150 050			
FUEL GAUGE, ELECTRICAL				
12 volt, 2-1/16" dia., use sender #226 001	301 015	301 301	301 100	301 733
12 volt, 2-1/16" dia., for Beetle	301 020	301 304	301 101	301 736
VOLTMETER				
12 volt, 8-16 volt range, 2-1/16" dia.	332 041	332 341	332 100	332 702
AMMETER				
30 AMP, 2-1/16" dia.	190 030			
50 AMP, 2-1/16" dia.	190 031	190 301	190 100	190 702
80 AMP, 2-1/16" dia.	190 038			
HOURLY METER, ELECTRIC, QUARTZ				
9-28 volt, 2-1/16" dia., illuminated	331 020	331 301		
9-28 volt, 2-1/16" dia., non-illuminated		331 302		
CLOCK				
Quartz movement, 2-1/16" dia.	370 021	370 301	370 100	370 702
MOUNTING ACCESSORIES				
MOUNTING CUP, METAL	240 706	240 708	240 711	
MOUNTING CUP, PLASTIC	240 100	240 102		
	240 101			
	long			
	1x2 1/16"	2x2 1/16"	3x2 1/16"	2x2 1/16"
				1x3 1/8"
MOUNTING BRACKET, METAL	240 075	240 076	240 077	240 078
MOUNTING BRACKET, RUBBER	240 802	240 803	240 804	
CUSTOM CONSOLE	110 869	110 870	110 871	
SENDERS				
TEMPERATURE SENDER, 250°F	323 095	323 420	323 421	323 419
TEMPERATURE SENDER, 300°F	323 057	323 058	323 059	323 060
TEMPERATURE SENDER, 400°F	323 086			323 090
PRESSURE SENDER, 80 PSI	360 003	360 005	360 429	360 001
PRESSURE SENDER, 150 PSI	360 004	360 021		360 015
PRESSURE SENDER, 80 PSI, with warning contact	360 009	360 019		360 006
PRESSURE SENDER, 150 PSI, with warning contact	360 025	360 026		360 023

PLEASE SEE YOUR DEALER FOR ADDITIONAL MOUNTING ACCESSORIES AND SENDERS