

www.vdo-gauges.com

# Instrumentation Catalog

For the Automotive and Truck Enthusiast

- Instruments
- Accessories
- Senders
- Camera Systems
- Sensors









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### VDO – the real deal.

There are a lot of gauges out there. Gauges with brands you know. Gauges with names you've never heard of. Great styles and not so great styles.

Which brand do you choose?

Style, fit and finish are things you can see with your own eyes, but quality is harder to see from the outside. Who has the quality, reliability and precision that every owner wants for their ride?

Well, here's one thing to keep in mind.

Of all those gauge brands, only one comes from a manufacturer that produces original equipment instrumentation for new car manufacturers around the world. Manufacturers like GM, Ford, BMW, Porsche and Mercedes. These manufacturers demand quality and precision at the highest levels ever seen in the history of automotive manufacturing.

The brand is VDO, from Continental. The level of quality, reliability and dependability that goes into our instrumentation for those car makers also goes into every VDO gauge we build for you.

When you combine our world-class VDO quality, jewel-like finish and range of styles, VDO stands alone as the single best choice for your ride, for today and for years ahead.

While there are plenty of gauge styles and brands claiming they can deliver the goods, only one brand has proven it time and again to the most demanding customers in the business. VDO is the real deal.



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# VDO - A heritage of quality and innovation

While our latest instruments offer revolutionary technologies such as GPS speed senders and plug-and play wiring harnesses, these innovations are just a part of a VDO technology evolution that reaches back over 100 years.

From the first "Eddy current" speedometer invented in 1902 by Otto Schulze, to our latest Viewline gauge series, VDO has been at the leading edge of instrumentation technology and one of the industry's most trusted instrument brands.

#### Staying on the edge with innovation

The VDO instrument evolution has included innovations such as the introduction of stepper motors that delivered greater precision and accuracy than had ever been seen before. Our Spin-Lok™ mounting system made installations easier, faster and more secure. We pioneered 'through dial lighting' as well as LED dial illumination, to make our gauges easier to read and more stylish. VDO in-gauge LCD screens brought new monitoring capabilities to instrumentation, and our self-contained electronics eliminated the need for black boxes in high-tech instrumentation.

Today, our innovation evolution extends beyond gauges. The adjustable design of our VDO ALAS II fuel senders helps ensure accurate and reliable readings even in unusual tank shapes, sizes or configurations. Our new line of in-vehicle cameras and screens extend your monitoring capabilities beyond the dash panel to include the complete environment around you and your vehicle.

#### World-class manufacturing

VDO Instruments are designed, built and brought to you by Continental Automotive Systems, one of the top 10 automotive suppliers in the world. From automotive tires, brakes and sensors, to fully integrated electronic components, we have automotive technology, resources and manufacturing capabilities that can only be found among the 'Tier One' suppliers to the world's leading auto manufacturers. That's why, when it comes to gauges, VDO is in a league by itself.





Today, most gauge manufacturers only assemble their instruments. Most don't even make their own gauge movements or sensors, which are critical to instrument accuracy. Every VDO gauge starts with one of our own patented movements, specifically designed for the requirements and performance criteria of that instrument.

All VDO gauges are manufactured in our factories that have earned highly coveted QS or TS9000 automotive quality ratings. We produce over 100,000 VDO instruments a day in these state-of-the art facilities, and each instrument delivers the level of quality and consistency that car makers demand. With that experience, you know we can deliver the quality and performance you want and expect for your vehicle's instrumentation.

In addition to maintaining end-to-end manufacturing control of our instruments, we are one of the few companies in the world that design and manufacture our own fuel, pressure and temperature senders. We make sure that our gauges and accessories fit together and work together to deliver the most accurate readings possible, while providing years of trouble free service.

For over 100 years, VDO Instruments have earned a best-in-class reputation for performance, accuracy and uncompromising quality among car owners and enthusiasts who demand the best. Today, we continue to work to deliver the innovation, functionality and durability that has made VDO the leading choice in instrumentation worldwide – not only in the automotive industry, but also in the commercial, marine, power sports and custom vehicle markets.



1902 – Eddy Current speedometer



1984 "Night Design" VDO was first to introduce "through dial" illumination and illuminated pointers.



2000 "Millenium Series" ushers in a new era of illumination and style.



1995 VDO "Vision" unveils the first "auto-calibrating" speedometer that required no black box.



"Viewline" series represents 100 years of innovation and technology.

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The catalog you're holding represents our latest offering of world class instruments and accessories for the custom vehicle enthusiast – everything you'll need for your car, truck, street rod, hot rod, show car or kit car.

Everything you need for your ride to shine has been perfected, revolutionized, and then perfected again. To make your build easier, we offer a broad range of five and six gauge kits, including Viewline Kits with our new SpeedHarness plug-and-play wiring. Our kits give you everything needed for a complete installation and offer you an excellent value for your investment. We offer a wide range of traditional and contemporary styles, gauge sizes, bezels and colors to meet every car owner's needs. Regardless of which VDO gauge series you choose, you can count on the VDO tradition of excellence for rocksolid reliability, attention to detail, fit and finish.

We wish you the best of success with your project and hope you will make VDO your first choice in instrumentation for your custom vehicle.

To see the most up-to-the minute VDO innovations, visit: www.vdo-gauges.com



Continental facilities reach worldwide, bringing you our economies of scale.











# VDO – Over a century of industry milestones

- 1902 "Eddy current" speedometer invented by Otto Schulze.
- 1929 "VDO" becomes a registered trademark.
- 1956 VDO invents first electronic speedometer.
- 1984 VDO introduces through dial illumination and illuminated pointers.
- 1986 VDO brings flat LCD displays to the market.
- 1971 VDO opens manufacturing facility in Winchester, VA.
- 1990s VDO incorporates LED technology.
- 1993 VDO introduces microprocessor-controlled, stepper motor technology.
- 1994 Mannesmann AG acquires VDO to become Mannesmann VDO.
- 1995 VDO debuts auto-calibrating speedometer with integrated electronics.
- 2000s VDO delivers 5,000 speedometers and 120,000 instrument movements on a daily basis.
- 2000 VDO Millennium Series allows dial and back lighting color changes.
- 2000 Siemens Automotive merges with Mannesmann VDO, to become Siemens VDO Automotive.
- 2003 Siemens VDO Automotive introduces VDO CANcockpit Instrument System that can directly access the digital data from an engine's electronics system.
- 2007 Continental acquires Siemens VDO Automotive AG. VDO brand instrumentation is part of the Continental Commercial Vehicles & Aftermarket business unit.
- 2010 VDO Viewline Series offers interchangeable bezels and plug-and-play wiring.
- 2011 VDO Instruments online catalog websites launched for Auto Enthusiast, Marine, and Special OEM markets.
- 2012 VDO GPS Speed Sender brings new accuracy and simplicity to electronic speedometer installations.
- 2012 VDO vehicle cameras and monitors bring new safety to custom vehicles.



VDO - then and now



1960s – Mercedes Benz Instrument Cluster



VDO Instrument distribution facility, Allentown, PA



VDO Instrument distribution facility, Babenhausen Germany



1950s -VW Instrument Cluster

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### 2012 New Products



#### VDO vehicle cameras and screens

Building your ride is a painstaking process. You poured your blood, sweat and tears (not to mention time and money) into making it perfect. Shouldn't you do everything possible to keep your baby pristine? VDO vehicle cameras and LCD monitor screens will help you do just that.

VDO vehicle cameras can help eliminate blind spots, so you can avoid hitting anything that could harm you or your car. Whether it's on the show grounds or out on the highway, the extended visibility these cameras provide can save your investment and even your life.

VDO LCD monitor screens can accept up to four simultaneous camera inputs.\*

\*Check location regulations for use of video in motor vehicles.

See pages 10-11 for product information.



#### VDO Viewline 5" Quad Gauges

Our new Viewline Multi-function gauges feature patented VDO movements, LED illumination and LED warning lights for each gauge. All connections are made through two SpeedHarness™ plug-n-play connectors for easy hookup.

See page 16 for Viewline Onyx product information. See page 21 for Viewline Ivory product information.



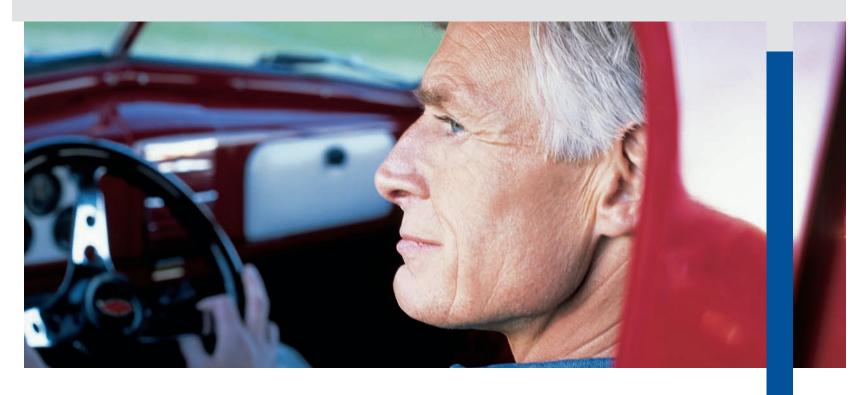
#### **VDO GPS Speed Sender**

VDO GPS Speed Sender: No transmission cables. No calibration. No kidding.

Now, make any VDO electronic speedometer into an incredibly accurate GPS-driven Speedometer. With the VDO GPS Speed Sender, there's no calibration or transmission cables required. No buttons or switches to activate. Just hook up power and ground and you're ready to go.

The VDO GPS sender's small size allows a variety of easy mounting options including the back of the speedo. The sender features an LED activity status indicator and a signal loss protection circuit that continues to transmit last known speed until the GPS signal is regained.

See page 58 for product information.























#### VDO Viewline 2 1/16" Tachometers

Now, VDO Viewline Tachometer technology is available in a compact 2 1/16" (52mm) size. These tachometers are preset from the factory and require no dip-switch setting or calibration.

See page 15 for Viewline Onyx product information. See page 20 for Viewline Ivory product information.

#### **VDO Billet Panels and Kits**

We've expanded our line with our precision machined billet instrument panels to include panel / instrument kits that come complete with wiring harness and all the hardware needed for a fast, complete installation.

See page 51 for Billet Panel information.

#### LED Replacement Bulbs

Colored, long life LED bulbs are designed to fit in traditional wedge based bulb sockets. In addition to adding a dash of style, these LED bulbs draw less power, last 20,000 hours or more, and operate at cooler temperatures.

See page 67 for LED Replacement Bulb information.

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# Camera Systems



VDO LCD monitor screens can accept up to four camera inputs.\*

\*Check location regulations for use of video in motor vehicles.



#### Camera Kits

Catalog Number	Description
A2C59519820	5.6" Display with Rear View Mini Camera with Parking Guide Lines
A2C59519819	7" Display with Rear View Mini Camera with Parking Guide Lines
A2C59519821	7" Quad Display with 2 Side Mount Cameras and 2 Large Rear View Cameras
A2C59519818	7" Quad Display with 2 Side Mount Cameras and 2 Small Rear View Cameras
A2C59519822	7" Quad Display with 2 Side Mount Cameras and a Rear View Mini with Parking Guide Lines



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# Camera Systems



#### Mini Cameras

Rear View Backup cameras offer enhanced visibility both inside and outside the vehicle

Catalog Number	Description
A2C59519794-S	Mini Camera with Parking Guide Lines
A2C59519795-S	Rear View Mini Camera



#### 120 ° View Cameras

 $120^\circ$  view cameras offer enhanced visibility both inside and out utilize infrared LED for enhanced nighttime visibility.

Catalog Number	Description
A2C59519790-S	120 Degree Rear View Camera Large with Sun Guard
A2C59519792-S	120 Degree Rear View Camera Large with Sun Guard and Audio Input Option
A2C59519791-S	120 Degree Rear View Camera Small with IR LED Lights



#### Side Mount Cameras

 $120^{\circ}$  Side View Cameras allow better visibility and maneuvering. Infrared LED's enhance nighttime viewing.

Catalog Number	Description
A2C59519793-S	120 Degree Direct Mount Side View Camera with IR LED Lights



#### Camera Displays

These flexible and compact displays have multiple mounting options, and are capable of multiple viewing displays.

Catalog Number	Description
A2C59519796-S	5.6" Single Camera Display
A2C59519797-S	7" Dual View Camera Display
A2C59519798-S	7" Quad View Camera Display

#### Camera Accessories

Catalog Number	Description
A2C59519799-S	16ft (5m) Extension Cable
A2C59519800-S	33ft (10m) Extension Cable
A2C59519801-S	65ft (20m) Extension Cable

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# VDO Viewline: OEM technology. OEM quality. In each and every instrument.







Viewline Onyx with chrome round bezel



Viewline Ivory with black round bezel



Viewline Sterling with chrome triangle bezel



- Spin-Lok™ mounting a VDO innovation developed to safeguard against mounting panel warping and make installation fast and easy.
- 2. Single PCB increases reliability and minimizes instrument depth.
- 3. Built-in LED warning indicators (up to 5) are programmable to OEM-specified function.
- **4.** Single cavity connectors reduce wiring installation time.
- Reverse polarity and over voltage protection virtually eliminate the possibility of installation failures.

- 6. VDO is one of the few companies in the world to design, patent and manufacture stepper motors and resistive movements.
- Corrosion-free and flame retardant materials comply with manufacturer's latest specifications.
- 8. Laser welded lenses ensure the highest level of protection against water intrusion.
- Dual domed lenses eliminate fogging – another VDO innovation.
- 10. LED lit pointers and 'through dial lighting' minimize current consumption while optimizing nighttime viewing.

- Detail finish ring enhances the overall appearance of finished instrument – a VDO exclusive.
- 12. Designed to withstand continuous 25 G vibrations and 100 G single shock, to ensure maximum reliability of each instrument.
- Large, multifunction backlit LCD provides easy readout of programmed functions.
- 14. Customer installed bezels with nine style choices allow for greater styling differentiation between product lines.

#### Introducing the VDO Viewline SpeedHarness $^{\text{TM}}$ - designed for plug-and-play gauge installations.

The revolutionary VDO SpeedHarness cuts gauge installation time in half and eliminates the chance for wiring the gauge to the wrong sensor. Each gauge connection is clearly imprinted with the type of gauge it is meant for, eliminating the potential for connecting the wrong wire to a gauge. The connectors also feature a keyed tab that only allows a 'one-way' hook up to prevent cross-wiring and short circuits.

The harness comes in three sections. One section connects to the sensors and senders under the hood, while another section connects under the dash to power, ground, turn signal indicators, etc. The remaining section hooks up to the gauges. The two halves connect with prewired OE-style connectors, eliminating the chance for crossed wires.



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Viewline Onyx with chrome bezel 6 gauge kit

#### Ford Instrument Kits

Catalog Number	Description
600 9702	5 Instrument Kit for Ford with 3 3/8" 120 MPH Speedometer and Black Bezels
600 97026	6 Gauge for Ford with 3 3/8" 120 MPH Speedometer, 6K Tachometer and Black Bezels
600 97121	5 Instrument Kit for Ford with 3 3/8" 120 MPH Speedometer and Chrome Bezels
600 97121 160	5 Instrument Kit for Ford with 3 3/8" 160 MPH Speedometer and Chrome Bezels
600 971216	6 Instrument Kit for Ford with 3 3/8" 120 MPH Speedometer, 6K Tachometer and Chrome Bezels
600 971216 160	6 Instrument Kit for Ford with 3 3/8" 160 MPH Speedometer, 6K Tachometer and Chrome Bezels
600-97121-A2	6 Instrument Ford Muscle Car Kit with 3 % 120 MPH Speedometer, 6K Tachometer, ALAS II Fuel Sender and Chrome Bezels

#### **GM Instrument Kits**

Catalog Number	Description
600 97021	5 Gauge Kit for GM with 3 3/8" 120 MPH Speedometer and Black Bezels
600 970216	6 Gauge Kit for GM with 3 3/8" 120 MPH Speedometer, 6K Tachometer and Black Bezels
600 9712	5 Gauge Kit for GM with 3 3/8" 120 MPH Speedometer and Chrome Bezels
600 9712 160	5 Gauge Kit for GM with 3 3/8" 160 MPH Speedometer and Chrome Bezels
600 97126	6 Gauge Kit for GM with 3 3/8" 120 MPH Speedometer, 6K Tachometer and Chrome Bezels
600 97126 160	6 Gauge Kit for GM with 3 3/8" 160 MPH Speedometer, 6K Tachometer and Chrome Bezels
600-97126-A2	6 Gauge GM Muscle Car Kit with 3 3/8" 120 MPH Speedometer, 6K Tachometer, ALAS II Fuel Sender and Chrome Bezels

#### **GPS Instrument Kits**

Viewline instrument kits include everything needed for installation, including an OEM grade wire harness! Kits include VDO GPS speed sender and require NO SPEEDOMETER PROGRAMMING!

Catalog Number	Description
600 97121 GPS	5 Gauge Kit with GPS Speed Sender, 3 % Speedometer and Chrome Bezels

#### 55-56 Chevy Instrument Kits

Designed to fit in a factory or reproduction dash bezel, this panel features fully modern VDO Viewline Instruments. The speedometers feature 1-button auto calibration, user defined speed warning, left and right turn signals, emergency brake warning and high-beam indicator while the LCD features odometer, trip-odometer, voltage and clock. Each small instrument features it's own built in LED illumination and warning lights. Kit includes all required senders, instrument harnesses and adapters (including LSx).

Catalog Number	Description
A2C59519684	1955-56 Chevrolet Dash Insert Kit with Viewline Onyx Gauges. Includes Senders and Adapters (including LSx)

#### Instrument Kit Contents

- 120 MPH with Turn Signal, Emergency Brake and High-Beam Warning Lights or 160 MPH Electronic Speedometer
- 80 PSI Oil Pressure Gauge, Electrical
- 250°F Temperature Gauge, Electrical
- Fuel Gauge
- 8-16V Voltmeter
- 221°F Temperature Switch
- 250°F Temperature Sender
- 80 PSI Pressure Sender with low pressure warning contact

- GM, Ford or GPS Speed Sender
- ALAS I 6"-15" Adjustable Length Fuel Sender or ALAS II Sender
- 1/8x27 NPT x1/4", 3/8" and 1/2" adapter kit for pressure sender
- 1/2" Adapter for Temperature Sender
- 6 Gauge Kits include matching 8,000 RPM Tachometer

See page 65 for complete wire harness assembly





A2C53194759-S

#### Programmable Speedometers with Autocalibration & Multifunction LCD

Speedometers feature 1-button auto calibration and user defined speed warning. LCD features odometer, trip-odometer, voltage and clock. Accepts signal inputs from Hall Effect and inductive sender and most electronic controlled transmission outputs.

Catalog Number	Description
A2C53194759-S	120 MPH 3 3/8" (85mm) Electronic Speedometer 12/24V
A2C53194639-S	120 MPH 5" Dial ( 4 3/8" (110mm) mounting ) Electronic Speedometer 12/24V
A2C53194765-S	160 MPH 3 <sup>3</sup> / <sub>8</sub> " (85mm) Electronic Speedometer 12/24V



A2C53408268-S

#### Programmable Speedometers with Tell-Tales, Autocalibration & Multifunction LCD

Speedometers feature 1-button auto calibration, user defined speed warning, left and right turn signals, emergency brake warning and high-beam indicator. LCD features odometer, trip-odometer, voltage and clock. Accepts signal inputs from Hall Effect and inductive sender and most electronic controlled transmission outputs.

Catalog Number	Description
A2C53408268-S	120 MPH 3 3/8" (85mm) Electronic Speedometer with Warning Lights & Autocalibration 12/24V



#### **Pre-Programmed Tachometers**

These tachometers are preset from the factory and require no dip-switch setting or calibration.

Catalog Number	Description
A2C53210899-S-3P	6,000 RPM 2 1/16" (52mm) Tachometer. For 6 Cylinder Gas Engines 12/24V (3 Pulse/Rev Signal)
A2C53210899-S-4P	6,000 RPM 2 1/16" (52mm) Tachometer. For 8 Cylinder Gas Engines 12/24V (4 Pulse/Rev Signal)
A2C53210899-S-2P	6,000 RPM 2 1/16" (52mm) Tachometer. For 4 Cylinder Gas Engines 12/24V (2 Pulse/Rev Signal)
A2C53210895-S-2P	8,000 RPM 2 1/16" (52mm) Tachometer. For 4 Cylinder Gas Engines 12/24V (2 Pulse/Rev Signal)
A2C53210895-S-3P	8,000 RPM 2 1/16" (52mm) Tachometer. For 6 Cylinder Gas Engines 12/24V (3 Pulse/Rev Signal)
A2C53210895-S-4P	8,000 RPM 2 1/16" (52mm) Tachometer. For 8 Cylinder Gas Engines 12/24V (4 Pulse/Rev Signal)

A2C53210899-S

See page 26 for bezel information, See page 58 for speedometer and tachometer senders For technical specifications and dimensions, please visit our website at www.vdo.com/usa



#### Programmable Tachometers with Multifunction LCD

Programmable tachometers feature: User defined rev. limit warning, LCD display for total hours, resettable hours, voltage and clock. Accepts signal inputs from electronic controlled ignitions with tachometer output terminal, standard coil ignition, alternator signal and 12V square wave

A2C53194872-S

Catalog Number	Description	
A2C53194593-S	6,000 RPM 5" Dial (4 3/8" (110mm) mounting) Tachometer with 2 Hourmeters, Clock and Voltmeter 12/24V	
A2C53194872-S	6,000 RPM 3 3/8" (85mm) Tachometer with 2 Hourmeters, Clock and Voltmeter 12/24V	
A2C53194590-S	8,000 RPM 5" Dial (4 3/8" (110mm) mounting) Tachometer with 2 Hourmeters, Clock and Voltmeter 12/24V	
A2C53194885-S	8,000 RPM 3 3/8" (85mm) Tachometer with 2 Hourmeters, Clock and Voltmeter 12/24V	



#### **Programmable Tachometers**

Programmable tachometers accept signal inputs from 2,4,6,8,10,12 & 16 cylinder standard coil ignition. Viewline programming software (available separately) allows use with alternator and 12V square signals, as well as activate the user defined rev. limit warning .

Catalog Number	Description
A2C53218716-S	3,000 RPM 3 % (85mm) Tachometer 12/24V
A2C53218722-S	4,000 RPM 3 <sup>3</sup> /8" (85mm) Tachometer 12/24V
A2C53218726-S	6,000 RPM 3 % (85mm) Tachometer 12/24V
A2C53218713-S	7,000 RPM 5" Dial (4 %) (110mm) mounting) Tachometer 12/24V
A2C53408405-S	8,000 RPM 3 % (85mm) Tachometer 12/24V



#### **Quad Gauges**

Quad gauges display fuel level, water temperature, oil pressure and voltage.

Catalog Number	Description	
A2C81561900-S	Quad Gauge 8-16V/80 PSI/250°F/E-F Fuel. 5" Dial ( $4\mbox{\%}\mbox{m}$ (110mm) Mounting) 12V. Use with VDO senders.	A/1/ALAS
A2C53371945-S	Quad Gauge 8-16Volt/5bar/120°C/o-1/1 Fuel. 5" Dial (4 %" (110mm) mounting) 12V. Use with VDO senders.	



#### Fluid Temperature Gauge and Sender Kits, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description
A2C53413355-K2	250°F Water Temperature Gauge 12/24V with VDO Sender and Metric Thread Adapters
A2C53413355-K1	250°F Water Temperature Gauge 12/24V with VDO Sender and US Thread Adapters
A2C53191360-K2	250°F Water Temperature Gauge 12V with VDO Sender and Metric Thread Adapters
A2C53191360-K1	250°F Water Temperature Gauge 12V with VDO Sender and US Thread Adapters
A2C53413386-K1	250°F/120°C Water Temperature Gauge 12/24V with VDO Sender and US Thread Adapters
A2C53413386-K2	250°F/120°C Water Temperature Gauge 12/24V with VDO Sender and Metric Thread Adapters
A2C53191722-K1	250°F/120°C Water Temperature Gauge 12V with VDO Sender and US Thread Adapters



#### Fluid Temperature Gauges, Electrical, 2 1/16" (52mm) Dia

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A2C53413386-S

Catalog Number Description A2C53413355-S 250°F Water Temperature Gauge 12/24V, Use with VDO Sender A2C53191360-S 250°F Water Temperature Gauge 12V, Use with VDO Sender A2C53413386-S 250°F/120°C Water Temperature Gauge 12/24V, Use with VDO Sender Α 300°F/150°C Oil Temperature Gauge 12/24V, Use with VDO Sender A2C53413405-S



#### Outside Temperature Gauge Kit, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description
A2C53210847-K	-10/+120°F Outside Temperature Gauge 12/24V with VDO Sender



Pyrometer Kit, Electrical, 2 1/16" (52mm) Dia

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Catalog Number	Description
A2C53210907-K	1650°F Pyrometer 12/24V with VDO Sender

A2C53210907-S

See page 26 for bezel information, See page 58 for tachometer senders, See pages 56-58 for temperature senders For technical specifications and dimensions, please visit our website at www.vdo.com/usa





#### Oil Pressure Gauge and Sender Kits, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description
A2C53413141-K2	150 PSI/10 bar Gauge 12/24V & Sender Kit with Metric Thread Adapters
A2C53413157-K2	150 PSI/10 bar Gauge 12/24V & Sender Kit with Metric Thread Adapters, ISO Symbol
A2C53413141-K1	150 PSI/10 bar Gauge 12/24V & Sender Kit with US Thread Adapters
A2C53413157-K1	150 PSI/10 bar Gauge 12/24V & Sender Kit with US Thread Adapters, ISO Symbol
A2C53412998-K2	80 PSI Oil Pressure Gauge 12/24V with VDO Sender and Metric Thread Adapters
A2C53412998-K1	80 PSI Oil Pressure Gauge 12/24V with VDO Sender and US Thread Adapters
A2C53191733-K2	80 PSI/5 bar Gauge 12V & Sender Kit with Metric Thread Adapters
A2C53191733-K1	80 PSI/5 bar Gauge 12V & Sender Kit with US Thread Adapters
A2C53413151-K2	80 PSI/5 bar Oil Pressure Gauge 12/24V with VDO Sender and Metric Thread Adapters
A2C53413151-K1	80 PSI/5 bar Oil Pressure Gauge 12/24V with VDO Sender and US Thread Adapters



#### Oil Pressure Gauges, Electrical, 2 1/16" (52mm) Dia



A2C53413151-S

Catalog Number	Description	See Sender Table
A2C53413141-S	150 PSI/10 bar Oil Pressure Gauge 12/24V, Use with VDO Sender	5
A2C53413157-S	150 PSI/10 bar Oil Pressure Gauge 12/24V, Use with VDO Sender, ISO Symbol	5
A2C53412998-S	80 PSI Oil Pressure Gauge 12/24V, Use with VDO Sender	1
A2C53413151-S	80 PSI/5 bar Oil Pressure Gauge 12/24V, Use with VDO Sender	1
A2C53191733-S	80 PSI/5 bar Oil Pressure Gauge 12V, Use with VDO Sender	1



A2C53191382-S

#### Turbo & Boost Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
A2C53417219-S	2 bar/28 PSI Turbo Gauge 12/24V, Use with VDO Sender	8
A2C53191728-S	2 bar/28 PSI Turbo Gauge 12V, Use with VDO Sender	8
A2C53417177-S	30 PSI Boost Gauge 12/24V Use with VDO sender	8
A2C53191382-S	30 PSI Boost Gauge 12V Use with VDO sender	8

See page 26 for bezel information, See pages 54-55 for pressure senders For technical specifications and dimensions, please visit our website at www.vdo.com/usa



A2C53191757-K

- Catalog I

#### Fuel Level Gauge and Sender Kits, 2 1/16" (52mm) Dia

Catalog Number	Description
A2C53412987-K	Fuel Gauge 12/24V and ALAS I Fuel Sender Kit
A2C53191757-K	Fuel Gauge 12V and ALAS I Fuel Sender Kit



A2C53191757-S

#### Fuel Level Gauges, Electrical, 2 1/16" (52mm) Dia

	Catalog Number	Description	See Sender Table
	A2C53412988-S	Fuel Gauge 12/24V, Use with 240-33 Ohm Sender	ALAS I & II
	A2C53412987-S	Fuel Gauge 12/24V, Use with 3-180 Ohm Sender	ALAS I & II
	A2C53191758-S	Fuel Gauge 12V, Use with 240-33 Ohm Sender	ALAS I & II
	A2C53191757-S	Fuel Gauge 12V, Use with 3-180 Ohm Sender	ALAS I & II



A2C53191766-S

#### Voltmeters, 2 1/16" (52mm) Dia

Catalog Number	Description
A2C53191766-S	12V Voltmeter

#### Clocks, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description
A2C53321687-S	Analog Clock 12V



Viewline Onyx with black triangle bezel



Viewline Onyx with chrome round bezel

See page 26 for bezel information, See pages 61-64 for ALAS I & II fuel senders For technical specifications and dimensions, please visit our website at www.vdo.com/usa













Viewline Ivory with chrome bezel 6 gauge kit

#### Ford Instrument Kits

Catalog Number	Description
600 9706	5 Instrument Kit for Ford with 3 3/8" 120 MPH Speedometers
600 9706 160	5 Instrument Kit for Ford with 3 3/8" 160 MPH Speedometer
600 97066	6 Instrument Kit for Ford with 3 3/8" 120 MPH Speedometer and 6K Tachometer
600 97066 160	6 Instrument Kit for Ford with 3 3/8" 160 MPH Speedometer and 6K Tachometer
600-97066-A2	6 Instrument Ford Muscle Car Kit with 3 3/8" 120 MPH Speedometer, 6K Tachometer and ALAS II Fuel Sender

#### **GM Instrument Kits**

Catalog Number	Description
600 97061	6 Gauge Kit for GM with 3 % 120 MPH Speedometer, 6K Tachometer
600 97061 160	5 Gauge Kit for GM with 3 % 160 MPH Speedometer
600 970616	5 Gauge Kit for GM with 3 % 120 MPH Speedometer
600 970616 160	6 Gauge Kit for GM with 3 % 160 MPH Speedometer, 6K Tachometer
600-97061-A2	6 Gauge GM Muscle Car Kit with 3 3/8" 120 MPH Speedometer, 6K Tachometer, ALAS II Fuel Sender

#### **GPS Instrument Kits**

Viewline instrument kits include everything needed for installation, including an OEM grade wire harness! Kits include VDO GPS spee sender and require NO SPEEDOMETER PROGRAMMING!

Catalog Number	Description
600 970616 GPS	5 Gauge Kit with GPS Speed Sender and 3 3/8" 120 MPH Speedometer

#### 55-56 Chevy Instrument Kits

Designed to fit in a factory or reproduction dash bezel, this panel features fully modern VDO Viewline Instruments. The speedometers feature 1-button auto calibration, user defined speed warning, left and right turn signals, emergency brake warning and high-beam indicator while the LCD features odometer, trip-odometer, voltage and clock. Each small instrument features it's own built in LED illumination and warning lights. Kit includes all required senders, instrument harnesses and adapters (including LSx).

Catalog Number	Description
A2C59519685	1955-56 Chevrolet Dash Insert Kit with Viewline Ivory Gauges. Includes Senders and Adapters (including LSx)

#### **Instrument Kit Contents**

- 120 MPH with Turn Signal, Emergency Brake and High-Beam Warning Lights or 160 MPH Electronic Speedometer
- 80 PSI Oil Pressure Gauge, Electrical
- 250°F Temperature Gauge, Electrical
- Fuel Gauge
- 8-16V Voltmeter
- 221°F Temperature Switch
- 250°F Temperature Sender
- 80 PSI Pressure Sender with low pressure warning contact

- GM, Ford or GPS Speed Sender
- ALAS I 6"-15" Adjustable Length Fuel Sender, or ALAS II Sender
- 1/8x27 NPT x1/4", 3/8" and 1/2" adapter kit for pressure sender
- 1/2" Adapter for Temperature Sender

6 Gauge Kits include matching 8,000 RPM Tachometer

See page 65 for complete wire harness assembly

See page 26 for bezel information

For technical specifications and dimensions, please visit our website at www.vdo.com/usa





A2C53194766-S

#### Programmable Speedometers with Autocalibration & Multifunction LCD

Speedometers feature 1-button auto calibration and user defined speed warning. LCD features odometer, trip-odometer, voltage and clock. Accepts signal inputs from Hall Effect and inductive sender and most electronic controlled transmission outputs.

Catalog Number	Description
A2C53194760-S	120 MPH 3 3/8" (85mm) Electronic Speedometer 12/24V
A2C53194766-S	160 MPH 3 3/8" (85mm) Electronic Speedometer 12/24V



A2C53408300-S

#### Programmable Speedometers with Tell-Tales, Autocalibration & Multifunction LCD

Speedometers feature 1-button auto calibration, user defined speed warning, left and right turn signals, emergency brake warning and high-beam indicator. LCD features odometer, trip-odometer, voltage and clock. Accepts signal inputs from Hall Effect and inductive sender and most electronic controlled transmission outputs.

Catalog Number	Description
A2C53408300-S	120 MPH 3 3/8" (85mm) Electronic Speedometer with Warning Lights & Autocalibration 12/24V



A2C53210897-S-2P

#### **Pre-Programmed Tachometers**

These tachometers are preset from the factory and require no dip-switch setting or calibration.

Catalog Number	Description
A2C53210897-S-2P	6,000 RPM 2 <sup>1</sup> / <sub>16</sub> " (52mm) Tachometer. For 4 Cylinder Gas Engines 12/24V (2 Pulse/Rev Signal)
A2C53210897-S-3P	6,000 RPM 2 <sup>1</sup> / <sub>16</sub> " (52mm) Tachometer. For 6 Cylinder Gas Engines 12/24V (3 Pulse/Rev Signal)
A2C53210897-S-4P	6,000 RPM 2 <sup>1</sup> / <sub>16</sub> " (52mm) Tachometer. For 8 Cylinder Gas Engines 12/24V (4 Pulse/Rev Signal)
A2C53210892-S-2P	8,000 RPM 2 <sup>1</sup> / <sub>16</sub> " (52mm) Tachometer. For 4 Cylinder Gas Engines 12/24V (2 Pulse/Rev Signal)
A2C53210892-S-3P	8,000 RPM 2 <sup>1</sup> / <sub>16</sub> " (52mm) Tachometer. For 6 Cylinder Gas Engines 12/24V (3 Pulse/Rev Signal)
A2C53210892-S-4P	8,000 RPM 2 1/16" (52mm) Tachometer. For 8 Cylinder Gas Engines 12/24V (4 Pulse/Rev Signal)



#### Programmable Tachometers with Multifunction LCD

Programmable tachometers feature: User defined rev. limit warning, LCD display for total hours, resettable hours, voltage and clock. Accepts signal inputs from electronic controlled ignitions with tachometer output terminal, standard coil ignition, alternator signal and 12V square wave applications.

Catalog Number	Description
A2C53194875-S	6,000 RPM 3 3/8" (85mm) Tachometer with 2 Hourmeters, Clock and Voltmeter 12/24V
A2C53194887-S	8,000 RPM 3 3/8" (85mm) Tachometer with 2 Hourmeters, Clock and Voltmeter 12/24V

See page 26 for bezel information, See page 58 for speedometer and tachometer senders For technical specifications and dimensions, please visit our website at www.vdo.com/usa



#### **Programmable Tachometers**

Programmable tachometers accept signal inputs from 2,4,6,8,10,12 & 16 cylinder standard coil ignition. Viewline programming software (available separately) allows use with alternator and 12V square signals, as well as activate the user defined rev. limit warning.

Catalog Number	Description
A2C53218718-S	3,000 RPM 3 3/8" (85mm) Tachometer 12/24V
A2C53218724-S	4,000 RPM 3 3/8" (85mm) Tachometer 12/24V
A2C53218727-S	6,000 RPM 3 <sup>3</sup> / <sub>8</sub> " (85mm) Tachometer 12/24V
A2C53408441-S	8,000 RPM 3 <sup>3</sup> / <sub>8</sub> " (85mm) Tachometer 12/24V



#### **Quad Gauges**

Quad gauges display fuel level, water temperature, oil pressure and voltage.

Catalog Number	Description	See Sender Table
A2C81562100-S	2C81562100-S Quad Gauge 8-16V/80 PSI/250°F /E-F Fuel. 5" Dial (4 %" (110mm) Mounting) 12V. Use with VDO senders.	
A2C53371946-S	Quad Gauge 8-16Volt/5bar/120°C/o-1/1 Fuel. 5" Dial (4 3/s" (110mm) mounting) 12V. Use with VDO senders.	A/1/ALAS



A2C53191726-K1

#### Fluid Temperature Gauge and Sender Kits, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	
A2C53413384-K2	250°F Water Temperature Gauge 12/24V with VDO Sender and Metric Thread Adapters	
A2C53413384-K1	250°F Water Temperature Gauge 12/24V with VDO Sender and US Thread Adapters	
A2C53191370-K2	250°F Water Temperature Gauge 12V with VDO Sender and Metric Thread Adapters	
A2C53191370-K1	250°F Water Temperature Gauge 12V with VDO Sender and US Thread Adapters	
A2C53413388-K2	250°F/120°C Water Temperature Gauge 12/24V & Sender Kit with Metric Thread Adapters	
A2C53413388-K1	250°F/120°C Water Temperature Gauge 12/24V & Sender Kit with US Thread Adapters	
A2C53191726-K2	250°F/120°C Water Temperature Gauge 12V & Sender Kit with Metric Thread Adapters	
A2C53191726-K1	250°F/120°C Water Temperature Gauge 12V & Sender Kit with US Thread Adapters	



A2C53191727-S

#### Fluid Temperature Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
A2C53413384-S	250°F Water Temperature Gauge 12/24V, Use with VDO Sender	А
A2C53191370-S	250°F Water Temperature Gauge 12V, Use with VDO Sender	А
A2C53413388-S	250°F/120°C Water Temperature Gauge 12/24V, Use with VDO Sender	А
A2C53191726-S	250°F/120°C Water Temperature Gauge 12V, Use with VDO Sender	А
A2C53413407-S	300°F /150°C Oil Temperature Gauge 12/24V, Use with VDO Sender	В
A2C53191727-S	300°F /150°C Oil Temperature Gauge 12V, Use with VDO Sender	В



A2C53210844-S

#### Outside Temperature Gauge Kit, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description
A2C53210844-K	-10/+120°F Outside Temperature Gauge 12/24V with VDO Sender



A2C53210905-S

#### Pyrometer Kit, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description
A2C53210905-K	1650°F Pyrometer 12/24V with VDO Sender













Viewline Ivory with chrome round bezel



#### Oil Pressure Gauge and Sender Kits, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description
A2C53413312-K2	150 PSI/10 bar Gauge 12/24V & Sender Kit with Metric Thread Adapters
A2C53413312-K1	150 PSI/10 bar Gauge 12/24V & Sender Kit with US Thread Adapters
A2C53191748-K2	150 PSI/10 bar Gauge 12V & Sender Kit with Metric Thread Adapters
A2C53191748-K1	150 PSI/10 bar Gauge 12V & Sender Kit with US Thread Adapters
A2C53413136-K2	80 PSI Oil Pressure Gauge 12/24V with VDO Sender and Metric Thread Adapters
A2C53413136-K1	80 PSI Oil Pressure Gauge 12/24V with VDO Sender and US Thread Adapters
A2C53191419-K2	80 PSI Oil Pressure Gauge 12V with VDO Sender and Metric Thread Adapters
A2C53191419-K1	80 PSI Oil Pressure Gauge 12V with VDO Sender and US Thread Adapters
A2C53413289-K2	80 PSI/5 bar Gauge 12/24V & Sender Kit with Metric Thread Adapters
A2C53413289-K1	80 PSI/5 bar Gauge 12/24V & Sender Kit with US Thread Adapters
A2C53191745-K2	80 PSI/5 bar Gauge 12V & Sender Kit with Metric Thread Adapters
A2C53191745-K1	80 PSI/5 bar Gauge 12V & Sender Kit with US Thread Adapters



A2C53191748-S

#### Oil Pressure Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
A2C53413312-S	150 PSI/10 bar Oil Pressure Gauge 12/24V, Use with VDO Sender	5
A2C53191748-S	150 PSI/10 bar Oil Pressure Gauge 12V, Use with VDO Sender	5
A2C53413136-S	80 PSI Oil Pressure Gauge 12/24V, Use with VDO Sender	1
A2C53191419-S	80 PSI Oil Pressure Gauge 12V, Use with VDO Sender	1
A2C53413289-S	80 PSI/5 bar Oil Pressure Gauge 12/24V, Use with VDO Sender	1
A2C53191745-S	80 PSI/5 bar Oil Pressure Gauge 12V, Use with VDO Sender	1



#### Fuel Level Gauge and Sender Kits, 2 1/16" (52mm) Dia

Catalog Number	Description
A2C53191761-K	Fuel Gauge 12V and ALAS I Fuel Sender Kit

#### Fuel Level Gauge and Sender Kits, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description
A2C53412991-K	Fuel Gauge 12/24V and ALAS I Fuel Sender Kit

See page 26 for bezel information, See pages 61-64 for ALAS I & II fuel senders, See pages 54-55 for pressure senders

For technical specifications and dimensions, please visit our website at www.vdo.com/usa





A2C53191761-S

#### Fuel Level Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
A2C53412991-S	0-1/1 Fuel Gauge 12/24V, Use with 3-180 Ohm Sender	ALAS I & II
A2C53412993-S	Fuel Gauge 12/24V, Use with 240-33 Ohm Sender	ALAS I & II
A2C53191763-S	Fuel Gauge 12V, Use with 240-33 Ohm Sender	ALAS I & II
A2C53191761-S	Fuel Gauge 12V, Use with 3-180 Ohm Sender	ALAS I & II



A2C53191768-S

#### Voltmeters, 2 1/16" (52mm) Dia

Catalog Number	Description	
A2C53191768-S	12V Voltmeter	

#### Clocks, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description
A2C53311885-S	Analog Clock 12V



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### Viewline Sterling













Viewline Sterling with chrome bezel 6 gauge kit

1955-56 Chevrolet Dash Insert Kit

#### Ford Instrument Kits

Catalog Number	Description
600 9704	5 Instrument Kit for Ford with 3 3/8" 120 MPH Speedometer
600 97046	6 Instrument Kit for Ford with 3 3/8" 120 MPH Speedometer and 6K Tachometer
600-97046-A2	6 Instrument Ford Muscle Car Kit with 3 3/8" 120 MPH Speedometer, 6K Tachometer and ALAS II Fuel Sender

#### **GM Instrument Kits**

Catalog Number	Description
600 97041	5 Gauge Kit for GM with 3 3/6" 120 MPH Speedometer
600 970416	6 Gauge Kit for GM with 3 3/8" 120 MPH Speedometer and 6K Tachometer
600-97041-A2	6 Gauge GM Muscle Car Kit with 3 3/8" 120 MPH Speedometer, 6K Tachometer, ALAS II Fuel Sender

#### **GPS Instrument Kits**

Viewline instrument kits include everything needed for installation, including an OEM grade wire harness! Kits include VDO GPS spee sender and require NO SPEEDOMETER PROGRAMMING!

Catalog Number	Description
600 97041 GPS	5 Gauge Kit with GPS Speed Sender, 3 %" 120 MPH Speedometer

#### 55-56 Chevy Instrument Kits

Designed to fit in a factory or reproduction dash bezel, this panel features fully modern VDO Viewline Instruments. The speedometers feature 1-button auto calibration, user defined speed warning, left and right turn signals, emergency brake warning and high-beam indicator while the LCD features odometer, trip-odometer, voltage and clock. Each small instrument features it's own built in LED illumination and warning lights. Kit includes all required senders, instrument harnesses and adapters (including LSx).

Catalog Number	Description
A2C59519686	1955-56 Chevrolet Dash Insert Kit with Viewline Sterling Gauges. Includes Senders and Adapters (including LSx)

#### Instrument Kit Contents

- 120 MPH with Turn Signal, Emergency Brake and High-Beam Warning Lights or 160 MPH Electronic Speedometer
- 80 PSI Oil Pressure Gauge, Electrical
- 250°F Temperature Gauge, Electrical
- Fuel Gauge
- 8-16V Voltmeter
- 221°F Temperature Switch
- 250°F Temperature Sender

- 80 PSI Pressure Sender with low pressure warning contact
- GM, Ford or GPS Speed Sender
- ALAS I 6"-15" Adjustable Length Fuel Sender, or ALAS II Sender
- 1/8x27 NPT x1/4", 3/8" and 1/2" adapter kit for pressure sender
- 1/2" Adapter for Temperature Sender

#### 6 Gauge Kits include matching 8,000 RPM Tachometer

See page 65 for complete wire harness assembly



#### Programmable Speedometers with Tell-Tales, Autocalibration & Multifunction LCD

Speedometers feature 1-button auto calibration, user defined speed warning, left and right turn signals, emergency brake warning and high-beam indicator. LCD features odometer, trip-odometer, voltage and clock. Accepts signal inputs from Hall Effect and inductive sender and most electronic controlled transmission outputs.

Catalog Number	Description
A2C53408303-S	120 MPH 3 3/8" (85mm) Electronic Speedometer with Warning Lights & Autocalibration 12/24V

See page 26 for bezel information, See page 58 for speedometer senders

## Viewline Sterling



#### Programmable Tachometers with Multifunction LCD

Programmable tachometers feature: User defined rev. limit warning, LCD display for total hours, resettable hours, voltage and clock. Accepts signal inputs from electronic controlled ignitions with tachometer output terminal, standard coil ignition, alternator signal and 12V square wave applications.

A2C53408402-S

Catalog Number	Description
A2C53408402-S	8,000 RPM 3 3/6" (85mm) Tachometer with 2 Hourmeters, Clock and Voltmeter 12/24V



#### **Programmable Tachometers**

Programmable tachometers accept signal inputs from 2,4,6,8,10,12 & 16 cylinder standard coil ignition. Viewline programming software (available separately) allows use with alternator and 12V square signals, as well as activate the user defined rev. limit warning.

Catalog Number	Description
A2C53408445-S	8,000 RPM 3 <sup>3</sup> / <sub>8</sub> " (85mm) Tachometer 12/24V



A2C53406051-K1

#### Fluid Temperature Gauge and Sender Kits, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description
A2C53406050-K2	250°F Water Temperature Gauge 12V with Sender Kit Metric Thread Adapters
A2C53406050-K1	250°F Water Temperature Gauge 12V with Sender Kit US Thread Adapters
A2C53406051-K2	250°F/120°C Water Temperature Gauge 12V with Sender Kit Metric Thread Adapters
A2C53406051-K1	250°F/120°C Water Temperature Gauge 12V with Sender Kit US Thread Adapters



A2C53406050-S

#### Fluid Temperature Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
A2C53406050-S	250°F Water Temperature Gauge 12V, Use with VDO Sender	А
A2C53406051-S	250°F/120°C Water Temperature Gauge 12V. Use with VDO Sender	А



#### Oil Pressure Gauge and Sender Kits, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description
A2C53406052-K2	80 PSI Oil Pressure Gauge 12V and Sender Kit Metric Thread Adapters
A2C53406052-K1	80 PSI Oil Pressure Gauge 12V and VDO Sender with US Thread Adapters
A2C53406053-K2	80 PSI/5 bar Oil Pressure Gauge 12V and Sender Kit Metric Thread Adapters
A2C53406053-K1	80 PSI/5 bar Oil Pressure Gauge 12V and Sender Kit US Thread Adapters



A2C53406053-K1

#### Oil Pressure Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
A2C53406052-S	80 PSI Oil Pressure Gauge 12V, Use with VDO Sender	1
A2C53406053-S	80 PSI/5 bar Oil Pressure Gauge 12V, Use with VDO Sender	1



#### Fuel Level Gauge and Sender Kits, 2 1/16" (52mm) Dia

Catalog Number	Description
A2C53406054-K	Fuel Gauge 12V and ALAS I Fuel Sender Kit



Fuel Level Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
A2C53406054-S	Fuel Gauge 12V, Use with 3-180 Ohm Sender	ALAS I & II



Voltmeters, 2 1/16" (52mm) Dia

Catalog Number	Description
A2C53406019-S	12V Voltmeter

A2C53406019

# Viewline Bezels and Harnesses

#### Viewline Bezels

#### 52MM Viewline Bezels

	Size	Color	Shape
A2C53186027-S	2 <sup>1</sup> / <sub>16</sub> in (52mm)	Black	Round
A2C53186029-S	2 <sup>1</sup> / <sub>16</sub> in (52mm)	Chrome	Round
A2C53186028-S	2 <sup>1</sup> / <sub>16</sub> in (52mm)	White	Round
A2C53186024-S	2 <sup>1</sup> / <sub>16</sub> in (52mm)	Black	Triangle
A2C53186026-S	2 <sup>1</sup> / <sub>16</sub> in (52mm)	Chrome	Triangle
A2C53186025-S	2 <sup>1</sup> / <sub>16</sub> in (52mm)	White	Triangle



#### 85MM Viewline Bezels

	Size	Color	Shape
A2C53192913-S	3 <sup>3</sup> / <sub>8</sub> in (85mm)	Black	Round
A2C53192914-S	3 <sup>3</sup> / <sub>8</sub> in (85mm)	Chrome	Round
A2C53192916-S	3 <sup>3</sup> / <sub>8</sub> in (85mm)	White	Round
A2C53192917-S	3 <sup>3</sup> / <sub>8</sub> in (85mm)	Black	Triangle
A2C53192918-S	3 <sup>3</sup> / <sub>8</sub> in (85mm)	Chrome	Triangle
A2C53192920-S	3 <sup>3</sup> / <sub>8</sub> in (85mm)	White	Triangle

#### 110MM (5" Dial) Viewline Bezels

	Size	Color	Shape
A2C53210749-S	4 <sup>1</sup> / <sub>4</sub> in (110mm)	Black	Round
A2C53210761-S	4 <sup>1</sup> / <sub>4</sub> in (110mm)	Chrome	Round
A2C53210760-S	4 <sup>1</sup> / <sub>4</sub> in (110mm)	White	Round
A2C53210763-S	4 <sup>1</sup> / <sub>4</sub> in (110mm)	Black	Triangle
A2C53210765-S	4 <sup>1</sup> / <sub>4</sub> in (110mm)	Chrome	Triangle
A2C53210764-S	4 <sup>1</sup> / <sub>4</sub> in (110mm)	White	Triangle

All bezels are available in 10 pack bulk by changing part number suffix to a "B"  $\,$ 

#### Viewline Installation Accessories

#### Programming & Mode Button for Viewline

240-046	Programming & Mode Button for Viewline Speedometer or Tachometer250" Spade Connector. Black with Chrome Surround
240 205	Programming & Mode Button for Viewline Speedometer or Tachometer - 1/8" Spade Connector. Black with Black Surround

#### Wiring Harness & Accessories for Viewline

240 099	14 Pole Connector and Pins for 1 Viewline Instrument. Does Not Include Wire Lead
240 098	8 Pole Connector and Pins for 1 Viewline Instrument. Does Not Include Wire Lead
A2C53422790-S	Replacement 14 Pole Harness with 500mm Leads for 1 Viewline Speedometer or Tachometer with 5 Telltales
240 204	Replacement 14 Pole Harness with 500mm Leads for 1 Viewline Speedometer or Tachometer
240 201	Replacement 8 Pole Harness with 500mm Leads for 1 Viewline Instrument
240 202	Optional 8 Pole Harness with 500mm Leads for 1 Viewline Voltmeter, Hourmeter or Clock
240 097	8 Pole Retrofit Harness. Use When Upgrading To Viewline From a Non-Viewline Instrument
240 203	Replacement 8 Pole Harness with Leads for 1 Viewline Ammeter and Shunt
240 048	Connection Pins for Viewline Connectors



### Vision Silverstone



Vision Silverstone feature stunning silver dials and matching plated bezels, clear white graphics and red pointers. VDO patented movements provide smooth and accurate performance and long life dependability.

Standard 0.25" spade connectors simple wiring and VDO Spin-lok $^{\text{TM}}$  mounting makes installation fast and easy while providing a full 360° degrees of mounting force.

#### Ford Instrument Kits

VDO instrument kits include everything needed for installation. Kits include Ford or GM speedometers as shown, and premium fuel sender. Kits include red light diffusers to change illumination color. Colored LED bulb kits available separately.

Catalog Number	Description
600 9001	5 Gauge Kit for Ford with 3 3/8" 120 MPH Speedometer
600 90016	6 Gauge Kit for Ford with 3 % 120 MPH Speedometer and 8K Tachometer

#### **GM Instrument Kits**

Catalog Number	Description
600 900	5 Gauge Kit for GM with 3 3/8" 120 MPH Speedometer
600 9006	6 Gauge Kit for GM with 3 3/8" 120 MPH Speedometer and 8K Tachometer

#### Instrument Kit Contents

- 120 MPH Electronic Speedometer
- 80 PSI Oil Pressure Gauge, Electrical
- 250°F Temperature Gauge, Electrical
- Fuel Gauge
- 8-16V Voltmeter
- 250°F Temperature Sender
- 80 PSI Pressure Sender
- GM Speedometer Sender
- 6"-23" Adjustable Length Fuel Sender
- 1/8x27NPTx 1/4", 3/8" and 1/2" adapter kit for pressure sender
- 1/2" adapter for temperature sender
- 6 Gauge Kits include matching 8,000 RPM Tachometer

See page 65 for complete wire harness assembly





## Vision Silverstone

#### Programmable Speedometers with Autocalibration & Resettable LCD Tripodometer

Speedometers features push button odometer and trip odometer clearly displayed in the LCD window. Unique auto-calibration feature allows for easy adjustment and can be used with Hall Effect and inductive senders or most electronic controlled transmission outputs

Catalog Number	Description
437-901	120 MPH 3 3/8" Electronic Speedometer with Autocalibration

#### **Programmable Tachometers**

For use on 4,5,6 & 8 cylinder application engines with standard coil ignitions, most square wave electronic control ignitions with tachometer output terminal and alternators with "w" tachometer terminal.

Catalog Number	Description
333 900	8,000RPM 3 3/8" Tachometer

#### Fluid Temperature Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
310 9002	250°F Temperature Gauge with VDO Sender and Metric Thread Adapters	
310 9001	250°F Temperature Gauge with VDO Sender and US Thread Adapters	
310 900	250°F Temperature Gauge, Use with VDO Sender	А

#### Oil Pressure Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
350 9042	80 PSI Oil Pressure Gauge with VDO Sender and Metric Thread Adapters	
350 9041	80 PSI Oil Pressure Gauge with VDO Sender and US Thread Adapters	
350 904	80 PSI Oil Pressure Gauge, Use with VDO Sender	1

#### Fuel Level Gauge and Sender Kits, 2 1/16" (52mm) Dia

Catalog Number	Description
301 900K	Fuel Gauge and ALAS Fuel Sender Kit

#### Fuel Level Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
301 900	Fuel Gauge, Use with 10-184 Ohm Sender	ALAS

#### Voltmeters, 2 1/16" (52mm) Dia

332 900 8-16V Voltmeter	Catalog Number	Description
	332 900	8-16V Voltmeter





Vision Instruments features crisp black dials and matching bezels. High contrast clear white graphics and red pointers make Vision instruments easy to read. VDO patented movements provide smooth and accurate performance and long life dependability.

Standard 0.25" spade connectors simple wiring and VDO Spin-lok  $^{\text{TM}}$  mounting makes installation fast and easy while providing a full 360° degrees of mounting force. Included light diffusers allow the dial illumination color to be changed to red or green.

#### Ford Instrument Kits

Catalog Number	Description
600 9031	5 Gauge Kit for Ford with 3 1/8" 120 MPH Speedometer
600 9041	5 Gauge Kit for Ford with 3 % 120 MPH Speedometer
600 9021	5 Gauge Kit for Ford with 4" 120 MPH Speedometer
600 902201	5 Gauge Kit for Ford with 4" 220 MPH Speedometer
600 90416	6 Gauge Kit for Ford with 3 3/8" 120 MPH Speedometer and 7K Tachometer
600 60261	6 Gauge Kit for Ford with 4" 120 MPH Speedometer and 8K Tachometer
600 9022061	6 Gauge Kit for Ford with 4" 220 MPH Speedometer and 8K Tachometer

#### **GM Instrument Kits**

Catalog Number	Description
600 903	5 Gauge Kit for GM with 3 1/8" 120 MPH Speedometer
600 902	5 Gauge Kit for GM with 4" 120 MPH Speedometer
600 90220	5 Gauge Kit for GM with 4" 220 MPH Speedometer
600 904	5 Gauge Kit for GM with 3 3/8" 120 MPH Speedometer
600 9026	6 Gauge Kit for GM with 4" 120 MPH Speedometer and Tachometer
600 902206	6 Gauge Kit for GM with 4" 220 MPH Speedometer and 8K Tachometer
600 9046	6 Gauge Kit for GM with 3 3/s" 120 MPH Speedometer and 7K Tachometer

#### Instrument Kit Contents

- 120 MPH or 220 MPH Electronic Speedometer
- 80 PSI Oil Pressure Gauge, Electrical
- 250°F Temperature Gauge, Electrical
- Fuel Gauge
- 8-16V Voltmeter
- 250°F Temperature Sender
- 80 PSI Pressure Sender
- GM or Ford Speedometer Sender
- 6"-23" Adjustable Length Fuel Sender
- 1/8x27 NPT x <sup>1</sup>/<sub>4</sub>", <sup>3</sup>/<sub>8</sub>" and <sup>1</sup>/<sub>2</sub>" adapter kit for pressure sender
- $\bullet$   $^{1}\!/_{2}"$  Adapter for Temperature Sender

6 Gauge Kits include matching 7,000 RPM Tachometer

4" Kits use 8,000 RPM Tachometer

See page 65 for complete wire harness assembly



#### Programmable Speedometers with Autocalibration & Resettable LCD Tripodometer

Speedometers features push button odometer and trip odometer clearly displayed in the LCD window. Unique auto-calibration feature allows for easy adjustment and can be used with Hall Effect and inductive senders or most electronic controlled transmission outputs

Catalog Number	Description
437 151	120 MPH 3 1/8" Electronic Speedometer with Autocalibration, 12V
437 153	120 MPH 3 %" Electronic Speedometer with Autocalibration, 12V
437 155	120 MPH 4" Electronic Speedometer with Autocalibration, 12V
437 159	220 MPH 4" Electronic Speedometer with Autocalibration, 12V

#### **Programmable Tachometers**

For use on 4,5,6 & 8 cylinder application engines with standard coil ignitions, most square wave electronic control ignitions with tachometer output terminal and alternators with "w" tachometer terminal.

Catalog Number	Description
333 152	3,000 RPM 3 3/8" Tachometer, 12V
333 156	4,000 RPM 2 1/16" Tachometer, 12V
333 158	6,000 RPM 2 1/16" Tachometer, 12V
333 151	7,000 RPM 3 1/8" Tachometer, 12V
333 155	7,000 RPM 3 % Tachometer, 12V
333-990	8,000 RPM 2 1/16" Tachometer and Black Mounting Cup, 12V
333-992	8,000 RPM 2 1/16" Tachometer and Chrome Mounting Cup, 12V
333 159	8,000 RPM 2 1/16" Tachometer, 12V
333 160	8,000 RPM 4" Tachometer, 12V

#### Fluid Temperature Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
310 1052	250°F Water Temperature Gauge with VDO Sender and Metric Thread Adapters, 12V	
310 1051	250°F Water Temperature Gauge with VDO Sender and US Thread Adapters, 12V	
310 105	250°F Water Temperature Gauge, Use with VDO Sender, 12V	А
310 1062	300°F Oil Temperature Gauge with VDO Sender and Metric Thread Adapters, 12V	
310 1061	300°F Oil Temperature Gauge with VDO Sender and US Thread Adapters, 12V	
310 106	300°F Oil Temperature Gauge, Use with VDO Sender, 12V	В
310 111	300°F Transmission Temperature Gauge, Use with VDO Sender, 12V	В
310 1072	400°F Transmission Temperature Gauge with VDO Sender and Metric Thread Adapters, 12V	
310 1071	400°F Transmission Temperature Gauge with VDO Sender and US Thread Adapters, 12V	
310 107	400°F Transmission Temperature Gauge, Use with VDO Sender, 12V	С

#### Fluid Temperature Gauges, Mechanical, 2 1/16" (52mm) Dia

Catalog Number	Description
180 101	265°F Mechanical Water Temperature Gauge wit 72" Capillary, 12V

#### Outside Temperature Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description
397 154	120°F Outside Temperature Gauge Kit with Sender and Harness, 12V

#### Pyrometer, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description
310 153	1600°F Pyrometer with Sender and Harness, 12V
310 151	1600°F Pyrometer, Requires 323 892 Sender, 12V

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Vision Black shown in 240 214 Billet Panel

#### Oil Pressure Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
350 1062	100 PSI Oil Pressure Gauge with VDO Sender and Metric Thread Adapters, 12V	
350 1061	100 PSI Oil Pressure Gauge with VDO Sender and US Thread Adapters, 12V	
350 107	100 PSI Oil Pressure Gauge, Use with US Sender, 12V	4
350 106	100 PSI Oil Pressure Gauge, Use with VDO Sender, 12V	3
350 1082	150 PSI Oil Pressure Gauge with VDO Sender and Metric Thread Adapters, 12V	
350 1081	150 PSI Oil Pressure Gauge with VDO Sender and US Thread Adapters, 12V	
350 109	150 PSI Oil Pressure Gauge, Use with US Sender, 12V	
350 108	150 PSI Oil Pressure Gauge, Use with VDO Sender, 12V	5
350 110	400 PSI Oil Pressure Gauge, Use with VDO Sender, 12V	7
350 1042	80 PSI Oil Pressure Gauge with VDO Sender and Metric Thread Adapters, 12V	
350 1041	80 PSI Oil Pressure Gauge with VDO Sender and US Thread Adapters, 12V	
350 105	80 PSI Oil Pressure Gauge, Use with US Sender, 12V	2
350 104	80 PSI Oil Pressure Gauge, Use with VDO Sender, 12V	1

#### Oil Pressure Gauges, Mechanical, 2 1/16" (52mm) Dia

Catalog Number	Description
150 1072	100 PSI Mechanical Oil Pressure Gauge with Tubing Kit and Metric Thread Adapters, 12V
150 1071	100 PSI Mechanical Oil Pressure Gauge with Tubing Kit and US Thread Adapters, 12V
150 107	100 PSI Mechanical Oil Pressure Gauge, 12V
150 1112	150 PSI Mechanical Oil Pressure Gauge with Tubing Kit and Metric Thread Adapters, 12V
150 1111	150 PSI Mechanical Oil Pressure Gauge with Tubing Kit and US Thread Adapters, 12V
150 111	150 PSI Mechanical Oil Pressure Gauge, 12V

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#### Air Pressure Gauges, Mechanical, 2 1/16" (52mm) Dia

Catalog Number	Description
150 112	150 PSI Mechanical Air Pressure Gauge, 12V

#### Turbo & Boost Gauges, Mechanical, 2 1/16" (52mm) Dia

Catalog Number	Description
150 1011	15 PSI Mechanical Boost Gauge with Tubing and US Thread Adapters, 12V
150 101	15 PSI Mechanical Boost Gauge, 12V
150 1042	30 PSI Mechanical Boost Gauge with Tubing Kit and Metric Thread Adapters, 12V
150 1041	30 PSI Mechanical Boost Gauge with Tubing Kit and US Thread Adapters, 12V
150 104	30 PSI Mechanical Boost Gauge, 12V
150 1212	30" HG-25 PSI Turbo Gauge with Tubing Kit and Metric Thread Adapters, 12V
150 1211	30" HG-25 PSI Turbo Gauge with Tubing Kit and US Thread Adapters, 12V
150 121	30" HG-25 PSI Turbo Gauge, 12V

#### Fuel Level Gauge and Sender Kits, 2 1/16" (52mm) Dia

Catalog Number	Description
301 104K	Fuel Gauge and ALAS Fuel Sender Kit, 12V

#### Fuel Level Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
301 106	Fuel Gauge, Use with 0-90 Ohm Sender or Dual Station with 10-180 Ohm Sender, 12V	ALAS
301 104	Fuel Gauge, Use with 10-184 Ohm Sender, 12V	ALAS
301 105	Fuel Gauge, Use with 240-33 Ohm Sender, 12V	ALAS

#### Voltmeters, 2 1/16" (52mm) Dia

Catalog Number	Description
332 103	12V Voltmeter

#### Clocks, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description
370 155	Analog Clock, 12/24V
370 100	Quartz Analog Clock, 12/24V

#### Vacuum Gauges, Mechanical, 2 1/16" (52mm) Dia

Catalog Number	Description
150 131	30" HG Vacuum Gauge, 12V



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### Vision Chrome



Vision Chrome features crisp black dials and polished chrome bezels. High contrast clear white graphics and red pointers make Vision instruments easy to read. VDO patented movements provide smooth and accurate performance and long life dependability.

Standard 0.25" spade connectors simple wiring and VDO Spin-lok™ mounting makes installation fast and easy while providing a full 360° degrees of mounting force. Included light diffusers allow the dial illumination color to be changed to red or green.

#### Ford Instrument Kits

Catalog Number	Description
600 9911	5 Gauge Kit for Ford with 3 3/8" 120 MPH Speedometer
600 9921	5 Gauge Kit for Ford with 4" 120 MPH Speedometer
600 99116	6 Gauge Kit for Ford with 3 % 120 MPH Speedometer and 7K Tachometer
600 99261	6 Gauge Kit for Ford with 4" 120 MPH Speedometer and 7K Tachometer

#### **GM Instrument Kits**

Catalog Number	Description
600 991	5 Gauge Kit for GM with 3 3/8" 120 MPH Speedometer
600 992	5 Gauge Kit for GM with 4" 120 MPH Speedometer
600 9926	6 Gauge Kit for GM with 4" 120 MPH Speedometer and 8K Tachometer
600 9916	6 Gauge Kit for GM with 3 3/8" 120 MPH Speedometer and 6KTachometer

#### Instrument Kit Contents

- 120 MPH Electronic Speedometer
- 80 PSI Oil Pressure Gauge, Electrical
- 250°F Temperature Gauge, Electrical
- Fuel Gauge
- 8-16V Voltmeter
- 250°F Temperature Sender
- 80 PSI Pressure Sender
- GM or Ford Speedometer Sender
- 6"-23" Adjustable Length Fuel Sender
- 1/8x27 NPT x <sup>1</sup>/<sub>4</sub>", <sup>3</sup>/<sub>8</sub>" and <sup>1</sup>/<sub>2</sub>" adapter kit for pressure sender
- $\bullet$   $^{1}\!/_{\!2}$  " Adapter for Temperature Sender

6 Gauge Kits include matching 7,000 RPM Tachometer See page 65 for complete wire harness assembly

4" Kits use 8,000 RPM Tachometer



## Vision Chrome

#### Programmable Speedometers with Autocalibration & Resettable LCD Tripodometer

Speedometers features push button odometer and trip odometer clearly displayed in the LCD window. Unique auto-calibration feature allows for easy adjustment and can be used with Hall Effect and inductive senders or most electronic controlled transmission outputs

Catalog Number	Description
437 191	120 MPH 3 3/8" Electronic Speedometer with Autocalibration, 12V
437 198	120 MPH 4" Electronic Speedometer with Autocalibration, 12V

#### Programmable Tachometers

For use on 4,5,6 & 8 cylinder application engines with standard coil ignitions, most square wave electronic control ignitions with tachometer output terminal and alternators with "w" tachometer terminal.

Catalog Number	Description
333 199	3,000 RPM 3 3/8" Tachometer, 12V
333 197	6,000 RPM 3 3/8" Tachometer, 12V
333 195	8,000 RPM 4" Tachometer, 12V

#### Fluid Temperature Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
310 1952	250°F Temperature Gauge with VDO Sender and Metric Thread Adapters, 12V	
310 1951	250°F Temperature Gauge with VDO Sender and US Thread Adapters, 12V	
310 195	250°F Temperature Gauge, Use with VDO Sender, 12V	А
310 1962	300°F Temperature Gauge with VDO Sender and Metric Thread Adapters, 12V	
310 1961	300°F Temperature Gauge with VDO Sender and US Thread Adapters, 12V	
310 196	300°F Temperature Gauge, Use with VDO Sender, 12V	В

#### Fluid Temperature Gauges, Mechanical, 2 1/16" (52mm) Dia

Catalog Number	Description
180 191	265°F Mechanical Temperature Gauge with 72" Capillary, 12V

#### Pyrometer, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description
310 193	1600°F Pyrometer with Sender and Harness, 12V
310 191	1600°F Pyrometer, 12V

#### Oil Pressure Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
350 1962	100 PSI Oil Pressure Gauge with VDO Sender and Metric Thread Adapters, 12V	
350 1961	100 PSI Oil Pressure Gauge with VDO Sender and US Thread Adapters, 12V	
350 196	100 PSI Oil Pressure Gauge, Use with VDO Sender, 12V	3
350 1982	150 PSI Oil Pressure Gauge with VDO Sender and Metric Thread Adapters, 12V	
350 1981	150 PSI Oil Pressure Gauge with VDO Sender and US Thread Adapters, 12V	
350 199	150 PSI Oil Pressure Gauge, Use with US Sender, 12V	
350 198	150 PSI Oil Pressure Gauge, Use with VDO Sender, 12V	5
350 290	400 PSI Oil Pressure Gauge, Use with VDO Sender, 12V	7
350 1942	80 PSI Oil Pressure Gauge with VDO Sender and Metric Thread Adapters, 12V	
350 1941	80 PSI Oil Pressure Gauge with VDO Sender and US Thread Adapters, 12V	
350 195	80 PSI Oil Pressure Gauge, Use with US Sender, 12V	2
350 194	80 PSI Oil Pressure Gauge, Use with VDO Sender, 12V	1

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# Vision Chrome



#### Oil Pressure Gauges, Mechanical, 2 1/16" (52mm) Dia

Catalog Number	Description
150 1972	100 PSI Mechanical Oil Pressure Gauge with Tubing Kit and Metric Thread Adapters, 12V
150 1971	100 PSI Mechanical Oil Pressure Gauge with Tubing Kit and US Thread Adapters, 12V
150 197	100 PSI Mechanical Oil Pressure Gauge, 12V
150 1922	150 PSI Mechanical Oil Pressure Gauge with Tubing Kit and Metric Thread Adapters, 12V
150 1921	150 PSI Mechanical Oil Pressure Gauge with Tubing Kit and US Thread Adapters, 12V
150 192	150 PSI Mechanical Oil Pressure Gauge, 12V

#### Turbo & Boost Gauges, Mechanical, 2 1/16" (52mm) Dia

Catalog Number	Description
150 1912	15 PSI Boost Gauge with Tubing Kit and Metric Thread Adapters, 12V
150 1911	15 PSI Boost Gauge with Tubing Kit and US Thread Adapters, 12V
150 191	15 PSI Boost Gauge, 12V
150 1942	30 PSI Mechanical Boost Gauge with Tubing Kit and Metric Thread Adapters, 12V
150 1941	30 PSI Mechanical Boost Gauge with Tubing Kit and US Thread Adapters, 12V
150 194	30 PSI Mechanical Boost Gauge, 12V

#### Fuel Level Gauge and Sender Kits, 2 1/16" (52mm) Dia

Catalog Number	Description
301 194K	Fuel Gauge and ALAS Fuel Sender Kit, 12V

#### Fuel Level Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
301 194	Fuel Gauge, Use with 10-184 Ohm Sender, 12V	ALAS
301 195	Fuel Gauge, Use with 240-33 Ohm Sender, 12V	ALAS

#### Voltmeters, 2 1/16" (52mm) Dia

Catalog Number	Description
332 193	12V Voltmeter

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## Cockpit White & Chrome













Cockpit White & Chrome delivers distinctive American styling, backed with VDO's Cockpit quality and accuracy. Sharp black font contrasts with crisp white dials, chrome bezels and computer balanced red pointers.

Standard 0.25" spade connectors simple wiring and VDO Spin-lok  $^{\text{TM}}$  mounting makes installation fast and easy while providing a full 360° degrees of mounting force.

#### Ford Instrument Kits

Catalog Number	Description
600 9441	5 Gauge Kit for Ford with 3 3/8" 120 MPH Speedometer
600 94461	6 Gauge Kit for Ford with 3 %" 120 MPH Speedometer and 7K Tachometer

#### **GM Instrument Kits**

Catalog Number	Catalog Number Description	
600 944	5 Gauge Kit for GM with 3 3/8" 120 MPH Speedometer	
600 9446	6 Gauge Kit for GM with 3 %" 120 MPH Speedometer and 7K Tachometer	

#### **GPS Instrument Kits**

VDO instrument kits include everything needed for installation. Kits include VDO GPS speed sender and require NO SPEEDOMETER PROGRAMMING! Colored LED bulb kits available separately to change illumination color.

Catalog Number	Description
600 944 GPS	5 Gauge Kit with GPS Speed Sender 3 3/8" 120 MPH Speedometer

#### **Instrument Kit Contents**

- 120 MPH Electronic Speedometer
- 80 PSI Oil Pressure Gauge, Electrical
- 250°F Temperature Gauge, Electrical
- Fuel Gauge
- 8-16V Voltmeter
- 250°F Temperature Sender
- 80 PSI Pressure Sender
- GM or Ford Speedometer Sender
- 6"-23" Adjustable Length Fuel Sender
- 1/8x27 NPT x 1/4", 3/8" and 1/2" adapter kit for pressure sender
- 1/2" Adapter for Temperature Sender

6 Gauge Kits include matching 7,000 RPM Tachometer See page 65 for complete wire harness assembly



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# Cockpit White & Chrome

#### Programmable Speedometers with Autocalibration & Resettable LCD Tripodometer

Speedometers feature push button odometer and trip odometer clearly displayed in the LCD window. Unique auto-calibration feature allows for easy adjustment and can be used with Hall Effect and inductive senders or most electronic controlled transmission outputs.

Catalog Number	Description
437 244	120 MPH 3 3/8" Electronic Speedometer with Autocalibration

#### **Programmable Tachometers**

For use on 4,5,6 & 8 cylinder application engines with standard coil ignitions, most square wave electronic control ignitions with tachometer output terminal and alternators with "w" tachometer terminal.

Catalog Number	Description
333 244	7,000 RPM 3 % Tachometer

#### Fluid Temperature Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
310 2442	250°F Water Temperature Gauge with VDO Sender and Metric Thread Adapters	
310 2441	250°F Water Temperature Gauge with VDO Sender and US Thread Adapters	
310 244	250°F Water Temperature Gauge, Use with VDO Sender	А

#### Oil Pressure Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
350 2442	80 PSI Oil Pressure Gauge with VDO Sender and Metric Thread Adapters	
350 2441	80 PSI Oil Pressure Gauge with VDO Sender and US Thread Adapters	
350 244	80 PSI Oil Pressure Gauge, Use with VDO Sender	1

#### Fuel Level Gauge and Sender Kits, 2 1/16" (52mm) Dia

Catalog Number	Description
301 244K	Fuel Gauge and ALAS Fuel Sender Kit

#### Fuel Level Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
301 244	Fuel Gauge, Use with 10-184 Ohm Sender	ALAS

#### Voltmeters, 2 1/16" (52mm) Dia

Catalog Number	Description
333 244	8-16V Voltmeter



Cockpit White and Chrome shown in 240 210 Billet Panel

### Cockpit



The gauge that started it all. Years of research have revealed the best combination of colors for readability and reduced eye fatigue. Cockpit instruments feature VDO patented movements, computer balanced pointers and fully illuminated dials. Sharp black dials and classic bezels are accented by

deep red pointers and white graphics. Standard 0.25" spade connectors simple wiring and VDO Spin-lok<sup>TM</sup> mounting makes installation fast and easy while providing a full 360° degrees of mounting force.

#### Aircooled VW Instrument Kits

Catalog Number	Description
600 9206	6 Gauge Kit for Air-cooled VW's with 3 3/8" 120 MPH Speedometer and 7K Tachometer

#### Ford Instrument Kits

Catalog Number	Description
600 9241	5 Gauge Kit for Ford with 3 3/8" 120 MPH Speedometer
600 9231	5 Gauge Kit for Ford with 3 1/8" 120 MPH Speedometer
600 921601	5 Gauge Kit for Ford with 3 3/8" 160 MPH Speedometer
600 92416	6 Gauge Kit for Ford with 3 %" 120 MPH Speedometer and 7K Tachometer
600 9216016	6 Gauge Kit for Ford with 3 %" 160 MPH Speedometer and 7K Tachometer

#### **GM Instrument Kits**

Catalog Number	Description
600 923	5 Gauge Kit for GM with 3 1/8" 120 MPH Speedometer
600 924	5 Gauge Kit for GM with 3 3/8" 120 MPH Speedometer
600 92160	5 Gauge Kit for GM with 3 3/8" 160 MPH Speedometer
600 9246	6 Gauge Kit for GM with 3 3/8" 120 MPH Speedometer and 7K Tachometer
600 921606	6 Gauge Kit for GM with 3 3/8" 160 MPH Speedometer and 7K Tachometer

#### **Instrument Kit Contents**

- 120 MPH or 160 MPH Electronic Speedometer
- 80 PSI Oil Pressure Gauge, Electrical
- 250°F Temperature Gauge, Electrical
- Fuel Gauge
- 8-16V Voltmeter
- 250°F Temperature Sender
- 80 PSI Pressure Sender
- GM or Ford Speedometer Sender
- 6"-23" Adjustable Length Fuel Sender
- 1/8x27 NPT x 1/4", 3/8" and 1/2" adapter kit for pressure sender
- 1/2" Adapter for Temperature Sender





VW kit substitutes 600F Cylinder Head Temperature gauge and sender for 250F Temperature Gauge and sender, and contains fuel gauge matched to OE VW fuel sender.

## Cockpit

#### Programmable Speedometers with Autocalibration & Resettable LCD Tripodometer

Speedometers feature push button odometer and trip odometer clearly displayed in the LCD window. Unique auto-calibration feature allows for easy adjustment and can be used with Hall Effect and inductive senders or most electronic controlled transmission outputs.

Catalog Number	Description
437 053	160 MPH 3 <sup>3</sup> / <sub>8</sub> " Electronic Speedometer with Autocalibration
437 050	120 MPH 3 1/8" Electronic Speedometer with Autocalibration
437 052	120 MPH 3 3/8" Electronic Speedometer with Autocalibration

#### **Programmable Tachometers**

For use on 4,5,6 & 8 cylinder application engines with standard coil ignitions, most square wave electronic control ignitions with tachometer output terminal and alternators with "w" tachometer terminal.

Catalog Number	Description
333 055	7,000 RPM 3 3/8" Tachometer
333 051	7,000 RPM 3 1/8" Tachometer

#### Fluid Temperature Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
310 012	300°F Oil Temperature Gauge, Use with VDO Sender	В
310 0121	300°F Oil Temperature Gauge with VDO Sender and US Thread Adapters	
310 0122	300°F Oil Temperature Gauge with VDO Sender and Metric Thread Adapters	
310 015	400°F Transmission Temperature Gauge, Use with VDO Sender	С
310 091	400°F Transmission Temperature Gauge with VDO Sender	
310 039	250°F Water Temperature Gauge, Use with VDO Sender	А
310 0391	250°F Water Temperature Gauge with VDO Sender and US Thread Adapters	
310 0392	250°F Water Temperature Gauge with VDO Sender and Metric Thread Adapters	

#### Fluid Temperature Gauges, Mechanical, 2 1/16" (52mm) Dia

Catalog Number	Description
180 087	340°F Oil Temperature Gauge with 96" Capillary

#### Cylinder Head Temperature Gauges, Electrical, 2 1/18" (52mm) Dia

Catalog Number	Description
310 901	600F Cylinder Head Temperature Gauge with Sender and Harness

#### Oil Pressure Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
350 041	150 PSI Oil Pressure Gauge, Use with VDO Sender	5
350 0411	150 PSI Oil Pressure Gauge with VDO Sender and US Thread Adapters	
350 0412	150 PSI Oil Pressure Gauge with VDO Sender and Metric Thread Adapters	
350 040	80 PSI Oil Pressure Gauge, Use with VDO Sender	1
350 0401	80 PSI Oil Pressure Gauge with VDO Sender and US Thread Adapters	
350 0402	80 PSI Oil Pressure Gauge with VDO Sender and Metric Thread Adapters	
350 065	100 PSI Oil Pressure Gauge, Use with VDO Sender	3
350 0651	100 PSI Oil Pressure Gauge with VDO Sender and US Thread Adapters	
350 0652	100 PSI Oil Pressure Gauge with VDO Sender and Metric Thread Adapters	

#### Oil Pressure Gauges, Mechanical, 2 1/16" (52mm) Dia

Catalog Number	Description
150 030	100 PSI Mechanical Oil Pressure Gauge
150 0301	100 PSI Mechanical Oil Pressure Gauge with Tubing Kit and US Thread Adapters

#### Oil Pressure Gauges, Mechanical, 2 1/16" (52mm) Dia

Catalog Number	Description
150 0302	100 PSI Mechanical Oil Pressure Gauge with Tubing Kit and Metric Thread Adapters

#### Turbo & Boost Gauges, Mechanical, 2 1/16" (52mm) Dia

Catalog Number	Description
150 051	15 PSI Mechanical Boost Gauge
150 0511	15 PSI Mechanical Boost Gauge with Tubing and US Thread Adapters
150 0512	15 PSI Mechanical Boost Gauge with Tubing and Metric Thread Adapters
150 052	30 PSI Mechanical Boost Gauge
150 0521	30 PSI Mechanical Boost Gauge with Tubing and US Thread Adapters
150 0522	30 PSI Mechanical Boost Gauge with Tubing and Metric Thread Adapters
150 063	30" HG-25 PSI Mechanical Turbo Gauge
150 0631	30" HG-25 PSI Mechanical Turbo Gauge with Tubing Kit and US Thread Adapters
150 0632	30" HG-25 PSI Mechanical Turbo Gauge with Tubing Kit and Metric Thread Adapters

#### Fuel Level Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
301 015	Fuel Gauge, Use with 10-184 Ohm Sender	ALAS
301 015K	Fuel Gauge and ALAS Fuel Sender Kit	
301 020	Fuel Gauge, Use with Classic VW beetle Sender	ALAS
301 030	Fuel Gauge, Use with 0-90 Ohm Sender or Dual Station with 10-180 Ohm Sender	ALAS

#### Voltmeters, 2 <sup>1</sup>/<sub>16</sub>" (52mm) Dia

Catalog Number	Description
332 041	8-16V Voltmeter

#### Vacuum Gauges, Mechanical, 2 1/16" (52mm) Dia

Catalog Number	Description
150 042	30" HG Vacuum Gauge with Tubing Kit



Cockpit Black shown in 240 210 Polished Billet Panel

### Cockpit White













Cockpit White features clean European influenced styling and VDO patented movements and legendary quality. Black graphics contrasts with white dials, black bezels and computer balanced red pointers.

Standard 0.25" spade connectors simple wiring and VDO Spin-lok $^{\text{TM}}$  mounting makes installation fast and easy while providing a full 360° degrees of mounting force.

#### Ford Instrument Kits

Catalog Number	Description
600 9211	5 Gauge Kit for Ford with 3 1/8" 120 MPH Speedometer
600 9221	5 Gauge Kit for Ford with 3 3/8" 120 MPH Speedometer
600 92216	6 Gauge Kit for Ford with 3 3/6" 120 MPH Speedometer and 7K Tachometer

#### **GM Instrument Kits**

Catalog Number	Description
600 921	5 Gauge Kit for GM with 3 1/8" 120 MPH Speedometer
600 922	5 Gauge Kit for GM with 3 3/8" 120 MPH Speedometer
600 9226	6 Gauge Kit for GM with 3 3/g" 120 MPH Speedometer and 7K Tachometer

#### Instrument Kit Contents

- 120 MPH Electronic Speedometer
- 80 PSI Oil Pressure Gauge, Electrical
- 250°F Temperature Gauge, Electrical
- Fuel Gauge
- 8-16V Voltmeter
- 250°F Temperature Sender
- 80 PSI Pressure Sender

- GM or Ford Speedometer Sender
- 6"-23" Adjustable Length Fuel Sender
- $\bullet$  1/8x27 NPT x1/4", 3/8" and 1/2" adapter kit for pressure sender
- 1/2" Adapter for Temperature Sender
- 6 Gauge Kits Include Matching 7,000RPM Tachometer

See page 65 for complete wire harness assembly

#### Programmable Speedometers with Autocalibration & Resettable LCD Tripodometer

Speedometers feature push button odometer and trip odometer clearly displayed in the LCD window. Unique auto-calibration feature allows for easy adjustment and can be used with Hall Effect and inductive senders or most electronic controlled transmission outputs.

Catalog Number	Description
437 201	120 MPH 3 1/8" Electronic Speedometer with Autocalibration
437 202	120 MPH 3 % Electronic Speedometer with Autocalibration

#### **Programmable Tachometers**

For use on 4,5,6 & 8 cylinder application engines with standard coil ignitions, most square wave electronic control ignitions with tachometer output terminal and alternators with "w" tachometer terminal.

Catalog Number	Description
333 251	7,000 RPM 3 1/8" Tachometer
333 255	7,000 RPM 3 % Tachometer

# Cockpit White

#### Fluid Temperature Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
310 2392	250°F Water Temperature Gauge with VDO Sender and Metric Thread Adapters	
310 2391	250°F Water Temperature Gauge with VDO Sender and US Thread Adapters	
310 239	250°F Water Temperature Gauge, Use with VDO Sender	А

#### Fluid Temperature Gauges, Mechanical, 2 1/16" (52mm) Dia

Catalog Number	Description
180 208	340°F Mechanical Oil Temperature Gauge with 96" Capillary

#### Pyrometer, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description
310 240	1600°F Pyrometer with Sender and Harness

#### Oil Pressure Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
350 2402	80 PSI Oil Pressure Gauge with VDO Sender and Metric Thread Adapter	
350 2401	80 PSI Oil Pressure Gauge with VDO Sender and US Thread Adapter	
350 240	80 PSI Oil Pressure Gauge, Use with VDO Sender	1

#### Oil Pressure Gauges, Mechanical, 2 1/16" (52mm) Dia

Catalog Number	Description
150 202	100 PSI Mechanical Oil Pressure Gauge
150 2022	100 PSI Mechanical Oil Pressure Gauge with Tubing Kit and Metric Thread Adapters
150 2021	100 PSI Mechanical Oil Pressure Gauge with Tubing Kit and US Thread Adapters

#### Turbo & Boost Gauges, Mechanical, 2 1/16" (52mm) Dia

Catalog Number	Description
150 211	15 PSI Mechanical Boost Gauge
150 206	30" HG-25 PSI Mechanical Turbo Gauge
150 2062	30" HG-25 PSI Mechanical Turbo Gauge with Tubing Kit and Metric Thread Adapters
150 2061	30" HG-25 PSI Mechanical Turbo Gauge with Tubing Kit and US Thread Adapters

#### Fuel Level Gauge and Sender Kits, 2 1/16" (52mm) Dia

Catalog Number	Description
301 216K	Fuel Gauge and ALAS Fuel Sender Kit

#### Fuel Level Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
301 216	Fuel Gauge, Use with 10-184 Ohm Sender	ALAS

#### Voltmeters, 2 1/16" (52mm) Dia

Catalog Number	Description
332 241	8-16V Voltmeter

#### Vacuum Gauges, Mechanical, 2 1/16" (52mm) Dia

Catalog Number	Description
150 212	30" HG Mechanical Vacuum Gauge with Tubing Kit

Cockpit Royale shown in 240 211 Billet Panel

### Heritage Chrome













Heritage Chrome ushers in the era of Spats and Zoot Suits! Black pointers and antique font offsets the parchment colored dials and polished chrome bezels for that distinctive look found on early American cars. Behind each dial, though,

are all modern VDO movements and technology. Standard 0.25" spade connectors simple wiring and VDO Spin-lok™ mounting makes installation fast and easy while providing a full 360° degrees of mounting force.

#### 33-34 Ford Kits

Kit includes premium machined billet aluminum dash insert, preinstalled and wired instruments, all necessary senders and instructions.

Catalog Number	Description	
A2C59519573-K 1933-1934 Ford Dash Insert with Pre-Wired Heritage Chrome Gauges. Includes all Senders & Adapters. For Ford Powertra		
A2C59519572-K	1933-1934 Ford Dash Insert with Pre-Wired Heritage Chrome Gauges. Includes all Senders & Adapters. For GM Powertrains (including LSx)	

#### Ford Instrument Kits

Catalog Number	Description
A2C59519573	5 Gauge Kit for Ford with 3 3/8" 120 MPH Speedometer
A2C59519575	6 Gauge Kit for Ford with 3 3/8" 120 MPH Speedometer and 7K Tachometer

#### **GM Instrument Kits**

Catalog Number Description	
A2C59519572	5 Gauge Kit for GM with 3 3/8" 120 MPH Speedometer
A2C59519574	6 Gauge Kit for GM with 3 3/8" 120 MPH Speedometer and 7K Tachometer

#### **Instrument Kit Contents**

- 120 MPH Electronic Speedometer
- 80 PSI Oil Pressure Gauge, Electrical
- 250°F Temperature Gauge, Electrical
- Fuel Gauge
- 8-16V Voltmeter
- 250°F Temperature Sender
- 80 PSI Pressure Sender
- GM or Ford Speedometer Sender
- 6"-23" Adjustable Length Fuel Sender
- $\bullet$  1/8x27 NPT x  $^{1}\!/_{4}$  ",  $^{3}\!/_{8}$  " and  $^{1}\!/_{2}$  " adapter kit for pressure sender
- 1/2" Adapter for Temperature Sender

6 Gauge Kits include matching 7,000 RPM Tachometer See page 65 for complete wire harness assembly



# Heritage Chrome

#### Programmable Speedometers with Autocalibration & Resettable LCD Tripodometer

Speedometers feature push button odometer and trip odometer clearly displayed in the LCD window. Unique auto-calibration feature allows for easy adjustment and can be used with Hall Effect and inductive senders or most electronic controlled transmission outputs.

Catalog Number	Description
A2C53402383-S	120 MPH 3 3/8" Electronic Speedometer with Autocalibration

#### **Programmable Tachometers**

For use on 4,5,6 & 8 cylinder application engines with standard coil ignitions, most square wave electronic control ignitions with tachometer output terminal and alternators with "w" tachometer terminal.

Catalog Number	Description
A2C53402384-S	7,000 RPM 3 % Tachometer

#### Fluid Temperature Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
A2C53402715-K2 250°F Water Temperature Gauge with VDO Sender and Metric Thread Adapters		
A2C53402715-K1	250°F Water Temperature Gauge with VDO Sender and US Thread Adapters	
A2C53402715-S	250°F Water Temperature Gauge, Use with VDO Sender	А

#### Oil Pressure Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
A2C53402717-K2 80 PSI Oil Pressure Gauge with VDO Sender and Metric Thread Adapters		
A2C53402717-K1	80 PSI Oil Pressure Gauge with VDO Sender and US Thread Adapters	
A2C53402717-S	80 PSI Oil Pressure Gauge, Use with VDO Sender	1

#### Fuel Level Gauge and Sender Kits, 2 1/16" (52mm) Dia

Catalog Number	Description
A2C53402714-K	Fuel Gauge and ALAS Fuel Sender Kit

#### Fuel Level Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
A2C53402714-S	Fuel Gauge, Use with 10-184 Ohm Sender	ALAS

#### Voltmeters, 2 1/16" (52mm) Dia

Catalog Number	Description
A2C53402716-S	8-16V Voltmeter



33-34 Ford Billet Panel

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### Cockpit Royale



Cockpit Royale brings the nostalgic look of the '30's an '40's to your dash, backed with VDO quality and accuracy. Antique black font contrasts with crisp white dials, chrome bezels and computer balanced black pointers.

Standard 0.25" spade connectors simple wiring and VDO Spin-lok™ mounting makes installation fast and easy while providing a full 360° degrees of mounting force.

#### Ford Instrument Kits

Catalog Number	Description
600 9261	5 Gauge Kit for Ford and 3 1/8" 120 MPH Speedometer
600 9271	5 Gauge Kit for Ford with 3 3/8" 120 MPH Speedometer
600 92716	6 Gauge Kit for Ford with 3 3/8" 120 MPH Speedometer and 7K Tachometer

#### **GM Instrument Kits**

Catalog Number	Description
600 926	5 Gauge Kit for GM with 3 1/8" 120 MPH Speedometer
600 927	5 Gauge Kit for GM with 3 % a" 120 MPH Speedometer
600 9276	6 Gauge Kit for GM with 3 3/8" 120 MPH Speedometer and 7K Tachometer

#### **GPS Instrument Kits**

VDO instrument kits include everything needed for installation. Kits include VDO GPS speed sender and require NO SPEEDOMETER PROGRAMMING! Colored LED bulb kits available separately to change illumination color.

Catalog Number	Description
600 927 GPS	5 Gauge Kit with GPS Speed Sender and 3 %" 120 MPH Speedometer

#### Instrument Kit Contents

- 120 MPH Electronic Speedometer
- 80 PSI Oil Pressure Gauge, Electrical
- 250°F Temperature Gauge, Electrical
- Fuel Gauge
- 8-16V Voltmeter
- 250°F Temperature Sender
- 80 PSI Pressure Sender
- GM, Ford or GPS Speed Sender
- 6"-23" Adjustable Length Fuel Sender
- 1/8x27 NPT x1/4", 3/8" and 1/2" adapter kit for pressure sender
- 1/2" Adapter for Temperature Sender

6 Gauge Kits include matching 7,000 RPM Tachometer See page 65 for complete wire harness assembly



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# Cockpit Royale

#### Programmable Speedometers with Autocalibration & Resettable LCD Tripodometer

Speedometers features push button odometer and trip odometer clearly displayed in the LCD window. Unique auto-calibration feature allows for easy adjustment and can be used with Hall Effect and inductive senders or most electronic controlled transmission outputs

Catalog Number	Description
437 750	120 MPH 3 1/8" Electronic Speedometer with Autocalibration
437 752	120 MPH 3 % Electronic Speedometer with Autocalibration

#### **Programmable Tachometers**

For use on 4,5,6 & 8 cylinder application engines with standard coil ignitions, most square wave electronic control ignitions with tachometer output terminal and alternators with "w" tachometer terminal.

Catalog Number	Description
333 707	7,000 RPM 3 1/8" Tachometer
333 708	7,000 RPM 3 %" Tachometer

#### Fluid Temperature Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
310 7102	250°F Water Temperature Gauge with VDO Sender and Metric Thread Adapters	
310 7101	250°F Water Temperature Gauge with VDO Sender and US Thread Adapters	
310 710	250°F Water Temperature Gauge, Use with VDO Sender	А
310 7091	300°F Oil Temperature Gauge with VDO Sender and Metric Thread Adapters	
310 7092	300°F Oil Temperature Gauge with VDO Sender and US Thread Adapters	
310 709	300°F Oil Temperature Gauge, Use with VDO Sender	В

#### Oil Pressure Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
350 7022	80 PSI Oil Pressure Gauge with VDO Sender and Metric Thread Adapter	
350 7021	80 PSI Oil Pressure Gauge with VDO Sender and US Thread Adapter	
350 702	80 PSI Oil Pressure Gauge, Use with VDO Sender	1

#### Fuel Level Gauge and Sender Kits, 2 1/16" (52mm) Dia

Catalog Number	Description
301 733K	Fuel Gauge and ALAS Fuel Sender Kit

#### Fuel Level Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
301 733	Fuel Gauge, Use with 10-184 Ohm Sender	ALAS
301 740	Fuel Gauge, Use with 240-33 Ohm Sender	ALAS

#### Voltmeters, 2 1/16" (52mm) Dia

Catalog Number	Description
332 702	8-16V Voltmeter



Cockpit Royale shown in 240 211 Billet Panel

### Series 1



Series 1 instruments provide the traditional styling of the '50's and 60's, while backed modern technology. Brilliant stepped chrome bezel and white pointer with offset classic black bezel

and white graphics. Traditional robust metal housing and studtype connectors complete the 'retro-look'.

#### Ford Instrument Kits

Catalog Number	Description
600 9351	5 Gauge Kit for Ford with 160 MPH 3 3/8" Speedometer
600 9251	5 Gauge Kit for Ford with 3 % "120 mph Speedometer
600 92516	6 Gauge Kit for Ford with 3 %" 120 MPH Speedometer and 7K Tachometer
600 93516	6 Gauge Kit for Ford with 3 3/8" 160 MPH Speedometer and 7K Tachometer

#### **GM Instrument Kits**

Catalog Number	Description
600 925	5 Gauge Kit for GM with 3 3/8" 120 MPH Speedometer
600 935	5 Gauge Kit for GM with 3 % 160 MPH Speedometer
600 9256	6 Gauge Kit for GM with 3 3/8" 120 MPH Speedometer and 7K Tachometer
600 9356	6 Gauge Kit for GM with 3 % a" 160 MPH Speedometer and 7K Tachometer

#### **GPS Instrument Kits**

VDO instrument kits include everything needed for installation. Kits include VDO GPS speed sender and require NO SPEEDOMETER PROGRAMMING! Colored LED bulb kits available separately to change illumination color.

Catalog Number	Description
600 925 GPS	5 Gauge Kit with GPS Speed Sender and 3 3/8" 120 MPH Speedometer

#### Instrument Kit Contents

- 120 or 160 MPH Electronic Speedometer
- 80 PSI Oil Pressure Gauge, Electrical
- 250°F Temperature Gauge, Electrical
- Fuel Gauge
- 8-16V Voltmeter
- 250°F Temperature Sender
- 80 PSI Pressure Sender

- GM, Ford or GPS Sender
- 6"-23" Adjustable Length Fuel Sender
- $\bullet$  1/8x27 NPT x1/4", 3/8" and 1/2" adapter kit for pressure sender
- 1/2" Adapter for Temperature Sender

6 Gauge Kits include matching 7,000 RPM Tachometer See page 65 for complete wire harness assembly

#### Programmable Speedometers with Autocalibration & Resettable LCD Tripodometer

Speedometers features push button odometer and trip odometer clearly displayed in the LCD window. Unique auto-calibration feature allows for easy adjustment and can be used with Hall Effect and inductive senders or most electronic controlled transmission outputs

Catalog Number	Description
437 353	120 MPH 3 3/8" Electronic Speedometer with Autocalibration
437 354	160 MPH 3 % Electronic Speedometer with Autocalibration

#### Programmable Tachometers with LCD Hourmeter

Programmable for use with most electronic controlled ignitions with tachometer output terminal, standard coil ignition, alternator signal and 12V square wave applications. Engine hour meter is displayed in LCD window.

Catalog Number	Description
333 363	4,000 RPM 3 3/8" Tachometer, with Hourmeter, 12/24V

#### **Pedestal Tachometer**

For use on 4,5,6 & 8 cylinder application engines with standard coil ignitions, most square wave electronic control ignitions with tachometer output terminal and alternators with "w" tachometer terminal.

Catalog Number	Description
333 9355	7,000 RPM Tachometer and Mounting Cup Kit

#### Programmable Tachometers

For use on 4,5,6 & 8 cylinder application engines with standard coil ignitions, most square wave electronic control ignitions with tachometer output terminal and alternators with "w" tachometer terminal.

Catalog Number	Description
333 353	4,000 RPM 3 3/8" Tachometer
333 355	7,000 RPM 3 %" Tachometer

#### Fluid Temperature Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
310 3042	250°F Water Temperature Gauge with VDO Sender and Metric Thread Adapters	
310 3041	250°F Water Temperature Gauge with VDO Sender and US Thread Adapters	
310 304	250°F Water Temperature Gauge, Use with VDO Sender	А
310 312	300°F Temperature Gauge, Use with VDO Sender	В
310 3052	300°F Temperature Gauge, with VDO Sender and Metric Thread Adapters	
310 3051	300°F Temperature Gauge, with VDO Sender and US Thread Adapters	
310 3032	400°F Transmission Temperature Gauge with VDO Sender and Metric Thread Adapters	
310 3031	400°F Transmission Temperature Gauge with VDO Sender and US Thread Adapters	
310 303	400°F Transmission Temperature Gauge, Use with VDO Sender	С

#### Fluid Temperature Gauges, Mechanical, 2 1/16" (52mm) Dia

Catalog Number	Description
180 302	265°F Water Temperature Gauge with 144" Capillary
180 308	265°F Water Temperature Gauge with 288" Capillary
180 310	265°F Water Temperature Gauge with 48" Capillary
180 301	265°F Water Temperature Gauge with 72" Capillary
180 317	340°F Oil Temperature Gauge with 144" Capillary
180 315	340°F Oil Temperature Gauge with 72" Capillary

#### Oil Pressure Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
350 3062	100 PSI Oil Pressure Gauge with VDO Sender and Metric Thread Adapters	
350 3061	100 PSI Oil Pressure Gauge with VDO Sender and US Thread Adapters	
350 306	100 PSI Oil Pressure Gauge, Use with VDO Sender	3
350 3032	80 PSI Oil Pressure Gauge with VDO Sender and Metric Thread Adapters	
350 3031	80 PSI Oil Pressure Gauge with VDO Sender and US Thread Adapters	
350 303	80 PSI Oil Pressure Gauge, Use with VDO Sender	1

## Series 1

#### Oil Pressure Gauges, Mechanical, 2 1/16" (52mm) Dia

Catalog Number	Description
150 330	100 PSI Mechanical Oil Pressure Gauge
150 3302	100 PSI Mechanical Oil Pressure Gauge with Tubing Kit and Metric Thread Adapters
150 3301	100 PSI Mechanical Oil Pressure Gauge with Tubing Kit and US Thread Adapters
150 306	150 PSI Mechanical Oil Pressure Gauge
150 3062	150 PSI Mechanical Oil Pressure Gauge with Tubing Kit and Metric Thread Adapters
150 3061	150 PSI Mechanical Oil Pressure Gauge with Tubing Kit and US Thread Adapters

#### Air Pressure Gauges, Mechanical, 2 1/16" (52mm) Dia

Catalog Number	Description
150 307	150 PSI Mechanical Air Pressure Gauge

#### Turbo & Boost Gauges, Mechanical, 2 1/16" (52mm) Dia

Catalog Number	Description
150 361	30" HG-15 PSI Mechanical Turbo Gauge
150 3611	30" HG-15 PSI Mechanical Turbo Gauge with Tubing Kit and Metric Thread Adapters
150 3611	30" HG-15 PSI Mechanical Turbo Gauge with Tubing Kit and US Thread Adapters

#### Fuel Level Gauge and Sender Kits, 2 1/16" (52mm) Dia

Catalog Number	Description
301 301K	Fuel Gauge and ALAS Fuel Sender Kit

#### Fuel Level Gauges, Electrical, 2 1/16" (52mm) Dia

Catalog Number	Description	See Sender Table
301 303	Fuel Gauge, Use with 0-90 Ohm Sender or Dual Station with 10-180 Ohm Sender	ALAS
301 301	Fuel Gauge, Use with 10-184 Ohm Sender	ALAS
301 302	Fuel Gauge, Use with 240-33 Ohm Sender	ALAS

#### Voltmeters, 2 1/16" (52mm) Dia

Catalog Number	Description
332 341	8-16V Voltmeter
332 342	8-16V Voltmeter, with Colorband

#### Vacuum Gauges, Mechanical, 2 1/16" (52mm) Dia

Catalog Number	Description
150 301	30" HG Vacuum Gauge
150 302	30" HG Vacuum Gauge with Tubing Kit



Series 1 shown in 240 213 Billet Panel

### Instrument Panels

Complete your dash installation with our line of billet panels designed and manufactured to perfectly fit our gauges.



#### 240 213

Bead Blasted 5 Hole Rectangle Panel Dash Panel. Dimensions: 15.25"x5.0"



#### 240 210

Fully Polished 5 Hole Universal Billet Dash Panel. Dimensions: 16.5"x5.0"



#### 240 211

Bead Blasted 6 Hole Universal Billet Dash Panel. Dimensions: 21.0"x5.0



#### 240 215

Bead Blasted 6 Hole Universal Billed Dash Panel. For Flush/Back Mounted Viewline Gauges Only. Dimensions: 21.0"x5.0"



#### 240 214

Bead Blasted 5 Hole "Hot Rod" Billet Dash Panel. Dimensions: 16.5"x5.5



#### 240 212

Bead Blasted 5 Hole Billet Dash Panel for '33-'34 Ford

# Direct Mount Pressure Gauges



VDO 1 ½" direct mount pressure gauges feature standard ½"-27NPT thread connection, precision machined brass movements, built in restrictors and polished stainless steel housings. Can be used to monitor air or liquid pressure on a vehicle.

#### Direct Mount Pressure Gauges, 1 1/2" (38mm) Dia

Catalog Number	Max Range Outer Scale	Dial Color	Bezel Color	Pointer Color	
153 008	60 PSI	Black	Chrome	Red	
153 005	60 PSI	White	Chrome	Red	
153-111	60 PSI	Silver	Chrome	Black	
153 002	15 PSI	White	Chrome	Red	
153-110	15 PSI	Silver	Chrome	Black	
153 006	15 PSI	Black	Chrome	Red	
153 003	100 PSI	White	Chrome	Red	
153-112	100 PSI	Silver	Chrome	Black	
153 009	100 PSI	Black	Chrome	Red	



## VDO Pressure & Temperature Senders

Using our expertise in offering specialized solutions for many of the world's auto manufacturer's, we offer a large portfolio of pressure and temperature senders for the aftermarket. Unlike many companies today, we manufacture our senders in our own ISO and TSO registered facilities, using the same quality materials and engineering processes, to meet the same quality standards as our OE products.

With optional features such as floating ground, warning contact point to control warning lights and/ or warning alarms and dual station (twin gauge) capability, VDO senders offer more choices to meet your specific needs

With VDO senders, you can count on the performance that you would expect from one of the largest automotive suppliers in the world. Designed to meet the challenges of some of the most demanding OE applications, VDO pressure and temperature senders are designed to deliver maximum performance for years of trouble free service.



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### Pressure Senders & Switches

Note: All Pressure senders are designed to work with VDO gauges only, unless otherwise noted. Senders are matched to gauges according to maximum reading on dial face. All senders are standard ground (sender case to common ground)

Please note: VDO senders have tapered threads and DO NOT require the use of Teflon tape or pipe sealant. This will interfere with grounding causing incorrect instrument readings.

#### Pressure Sender & Adapter Kits

VDO universal sender kits include  $\frac{1}{2}$ -27NPT common ground pressure sender, spade connector and US thread adapter kit for  $\frac{1}{2}$ -18,  $\frac{1}{2}$ -18 and  $\frac{1}{2}$ -14 NPT threads.

Catalog Number	Description
360 905	150 PSI/10 bar with US Thread Adapters
360 900	80 PSI/5 bar with US Thread Adapters



Pressure Sender Kits

Table 1: 80PSI / 5 bar (10-1800hm) Pressure Senders					
Thread	Warning Contact Point	Ground	Component Reference #	Connection	Catalog #
1/4-18NPTF	8 PSI	Standard	30/20	Knurled Nut	360 019
1/ <sub>4</sub> -18NPTF		Standard	29/8	Knurled Nut	360 005
1/8-27NPTF		Standard	29/4	Knurled Nut	360 003
1/8-27NPTF		Standard	3/1	.250" Spade	362 033
1/8-27NPTF		Floating	1/1	.250" Spade	362 001
1/8-27NPTF		Floating	32/1	Knurled Nut	360 410
M10x1.0		Standard	29/1	Knurled Nut	360 001
M12x1.5		Standard	29/85	Knurled Nut	360 002
M10x1.0	12 PSI	Standard	30/4	Knurled Nut	360 034
1/8-27NPTF		Standard	30/23	Knurled Nut	360 009
M10x1.0	7 PSI	Standard	30/2	Knurled Nut	360 006
M14x1.5	7 PSI	Standard	30/28	Knurled Nut	360 028
M12x1.5	8.5 PSI	Standard	30/6	Knurled Nut	360 007



Standard Ground: sender case to common ground; and Dual Station Standard Ground

Table 2: 80PSI	/ 5 bar (240-330hm)	Pressure Send	lers				
Thread	Warning Contact Point	Ground	Component Reference #	Connection	Catalog #		
1/8-27NPTF		Standard	AT84200	10-32 Stud	360 801		
Table 3: 100PS	Table 3: 100PSI / 7 bar (10-1800hm) Pressure Senders						
Thread	Warning	Ground	Component	Connection	Catalog #		

Reference #

655

10-32 Stud

360 086



Floating Ground: isolated terminal to common ground; and Dual Station Floating Ground

Table 4: 100PS	Table 4: 100PSI / 7 bar (240-330hm) Pressure Senders						
Thread	Warning Contact Point	Ground	Component Reference #	Connection	Catalog #		
1/8-27NPTF		Standard	734	10-32 Stud	360 811		

Standard



Standard Ground with Warning Contact

Table 5: 150PSI	10 bar (10-1800h	m) Pressure Senders

**Contact Point** 

1/8-27NPTF

	.,	,			
Thread	Warning Contact Point	Ground	Component Reference #	Connection	Catalog #
<b>1/4-</b> 18NPTF		Standard	29/20	Knurled Nut	360 021
1/8-27NPTF		Standard	29/12	Knurled Nut	360 004
1/ <sub>8</sub> -27NPTF		Standard	3/2	Knurled Nut	362 034
1/8-27NPTF		Floating	1/2	.250" Spade	362 002
1/8-28BSP		Standard	29/62	Knurled Nut	360 081
1/8-27NPTF		Standard	32/14	Knurled Nut	360 430
M10x1.0		Standard	29/10	Knurled Nut	360 015
1/8-27NPTF	11.4 PSI	Standard	30/15	Knurled Nut	360 025
M10x1.0	29.6 PSI	Standard	30/41	Knurled Nut	360 033
M10x1.0	7 PSI	Standard	30/9	Knurled Nut	360 023
M12x1.5	7 PSI	Standard	30/22	Knurled Nut	360 024

## Pressure Senders & Switches



Pressure Sender

Table 6: 350 PSI / 25 bar (10-1800hm) Pressure Senders						
Thread	Warning Contact Point	Ground	Component Reference #	Connection	Catalog #	
1/8-27NPTF		Standard	4/1	.250" Spade	362 035	
1/8-27NPTF		Floating	2/1	.250" Spade	362 003	
3/8-18NPTF		Standard	38/2	.250" Spade	360 432	
1/8-27NPTF		Standard	38/3	M4 Stud	360 431	
M14x1.5		Standard	38/1	M4 Stud	360 442	

Table 7: 400PS	Table 7: 400PSI / 28 bar (10-1800hm) Pressure Senders						
Thread	Warning Contact Point	Ground	Component Reference #	Connection	Catalog #		
1/8-27NPTF		Floating	2/3	Knurled Nut	362 004		
1/8-27NPTF		Floating	38/8	Knurled Nut	360 406		

Table 8: 30PSI / 2 bar (10-180Ohm) Pressure Senders						
Thread	Warning Contact Point	Ground	Component Reference #	Connection	Catalog #	
1/8-27NPTF		Floating	32/25	.250" Spade	360 043	

Table 9: 100PSI / 7 bar (0-900hm) Pressure Senders						
Thread	Warning Contact Point	Ground	Component Reference #	Connection	Catalog #	
1/8-27NPTF		Standard		10-32 Stud	360 802	



Pressure Switch

Pressure Switches: Single Circuit, Normally Closed, Insulated Ground					
Warning Contact Point	Thread	Connection	Circuit	Catalog #	
15PSI	1/8-27NPTF	#8-32	Normally Closed	230 515	
4PSI	1/8-27NPTF	#8-32	Normally Closed	230 504	
60PSI	1/8-27NPTF	#8-32	Normally Closed	230 560	

Pressure Switches: Single Circuit, Normally Open, Insulated Ground					
Warning Contact Point	Thread	Connection	Circuit	Catalog #	
15PSI	1/8-27NPTF	#8-32	Normally Open	230 415	
4PSI	1/8-27NPTF	#8-32	Normally Open	230 404	
60PSI	1/8-27NPTF	#8-32	Normally Open	230 460	

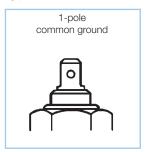
Pressure Switches: Dual Circuit, Normally Open/Normally Closed, Insulated Ground					
Warning Contact Point	Thread	Connection	Circuit	Catalog #	
15PSI	1/8-27NPTF	#8-32	Normally Open/Normally Closed	230 615	
4PSI	1/8-27NPTF	#8-32	Normally Open/Normally Closed	230 604	
60PSI	1/8-27NPTF	#8-32	Normally Open/Normally Closed	230 660	

Warning Notice: VDO pressure senders are not to be used with any type of fuel application. VDO pressure senders may not be used in automotive braking systems.

VDO pressure senders are not suitable for use in aircraft.

# Temperature Senders

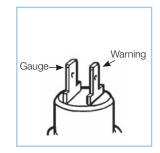
#### Types of senders



Standard Ground: sender case to common ground



Floating Ground: isolated terminal to common ground



Standard Ground with Warning Contact

#### Temperature Sender & Adapter Kits

VDO universal sender kits include  $\frac{1}{6}$ -27NPT common ground temperature sender, spade connector and US thread adapter kit for  $\frac{1}{4}$ -18,  $\frac{1}{6}$ -18 and  $\frac{1}{2}$ -14 NPT threads.

Catalog Number Description		Description
	323 900	250°F/120°C with US Thread Adapters
	323 905	300°F/150°C with US Thread Adapters



Universal Sender Kits

able A: 250°F	/ 120°C Temperature	Senders			
Thread	Warning Contact Point	Ground	Component Reference #	Connection	Catalog #
<sup>5</sup> / <sub>8</sub> -18 UNF		Standard	801/1/8	.250" Spade	323 422
M10x1.0		Standard	801/17/1	.250" Spade	323 088
1/2-14NPTF		Standard	801/1/10	.250" Spade	323 093
1/ <sub>2</sub> -14NPTF		Standard	801/1/16	Knurled Nut	323 419
1/ <sub>4</sub> -18NPTF		Standard	801/1/9	.250" Spade	323 420
1/8-27NPTF		Standard	801/5/1	.250" Spade	323 095
3/8-18NPTF		Standard	801/1/38	Knurled Nut	323 421
3/8-18NPTF		Standard	801/1/7	.250" Spade	323 094
1/ <sub>4</sub> -18NPTF		Floating	805/3/1	.250" Spade	325 002
3/ <sub>8</sub> -18NPTF		Floating	805/3/3	.250" Spade	325 007
1/ <sub>2</sub> -14NPTF		Floating	805/1/4	.250" Spade	323 478
3/8-18NPTF		Floating	805/1/5	.250" Spade	323 479
<sup>5</sup> /8-18 UNF		Floating	805/1/2	.250" Spade	323 483
M14x1.5		Floating	805/1/1	.250" Spade	323 425
M14x1.5		Standard	801/1⁄26	Knurled Nut	323 416
M16x1.5		Standard	801/1/29	Knurled Nut	323 417
M18x1.5		Standard	801/1/22	.250" Spade	323 418
1/2-14NPTF	205°F	Standard	803/1/19	.250 & .187 Spade	323 098
M14x1.5	205°F	Standard	803/1/6	.250 & .187 Spade	323 102
<sup>5</sup> / <sub>8</sub> -18 UNF	209°F	Standard	803/1/2	.250 & .187 Spade	323 026
1/2-14NPTF	217°F	Standard	803/1/25	.250 & .187 Spade	323 099
1/2-14NPTF	230°F	Standard	803/1/32	.250 & .187 Spade	323 100
M16x1.5	230°F	Standard	803/1/7	.250 & .187 Spade	323 028

Note: All Temperature senders are designed to work with VDO gauges only. Senders are matched to gauges according to maximum reading on dial face. All senders are standard ground (sender case to common ground). Please note: VDO senders have tapered threads and DO NOT require the use of Teflon tape or pipe sealant. This will interfere with grounding causing incorrect instrument readings.

# Temperature Senders



Table B: 300°F	Table B: 300°F / 150°C Temperature Senders						
Thread	Warning Contact Point	Ground	Component Reference #	Connection	Catalog #		
1/2-14NPTF		Standard	801/4/6	M4 Stud	323 060		
1/ <sub>4</sub> -18NPTF		Standard	801/4/17	Knurled Nut	323 058		
1/8-27NPTF		Standard	801/9/1	.250" Spade	323 057		
3/ <sub>8</sub> -18NPTF		Standard	801/4/15	.250" Spade	323 059		
1/4-18NPTF		Floating	805/3/2	.250" Spade	323 485		
M10x1.0		Standard	801/9/3	.250" Spade	323 423		
M12x1.5		Standard	801/10/3	.250" Spade	323 092		
M14x1.5		Standard	801/12/2	.250" Spade at 90°	323 055		
M16x1.5		Standard	801/12/1	.250" Spade at 90°	323 056		
M18x1.5		Standard	801/12/3	.250" Spade at 90°	323 064		
1/2-14NPTF	250°F	Standard	803/2/15	.250 & .187 Spade	323 120		
M14x1.5		Standard	803/2/7	.250 & .187 Spade	323 121		

Table C: 400°F / 200°C Temperature Senders						
Thread	Warning Contact Point	Ground	Component Reference #	Connection	Catalog #	
1/8-27NPTF		Standard	801/13/1	.250" Spade	323 050	
1/8-27NPTF		Standard	801/18/1	.250" Spade	323 086	
M10x1.5		Standard	801/3/1	.250" Spade	323 091	

Table D: Air, Cylinder and Exhaust Temperature Senders					
Description	Range	Thread	Connection	Catalog #	
Pyrometer Sender, for Ocean Line, Severe Duty and Viewline	1650°F	1/ <sub>4</sub> -18NPTF	#6 Ring Terminal	326 001	
Pyrometer Thermocouple	1650°F	1/ <sub>4</sub> -18NPTF	#6 Ring Terminal	323 892	
Pyrometer Thermocouple and Weld-on Adapter	1650°F	1/ <sub>4</sub> -18NPTF	#6 Ring Terminal	323 903	
Temperature Sender 600F Cylinder Head 14MM, Includes 15ft Wire Harness	600°F		14mm Ring Terminal	323 701	
Outside Air, for Viewline	185°F		Unterminated Wire Lead	323-112	
Outside Air, for Vision Gauges	120°F	M10x1.0	M4 Stud	323 087	

Table E: Replacement US Range Coolant and Oil Temperature Senders					
Description	Range	Thread	Connection	Catalog #	
Temperature Sender 240°F 1/8-27NPTF	240F	1/8-27NPTF	#8-32	323 500	
Temperature Sender 280°F 1/8-27NPTF	280F	1/8-27NPTF	#8-32	323 501	
Temperature Sender 320°F 1/8-27NPTF	320F	1/8-27NPTF	#8-32	323 502	

# Temperature Senders & Switches

#### Types of switches







Connection: M4 Stud



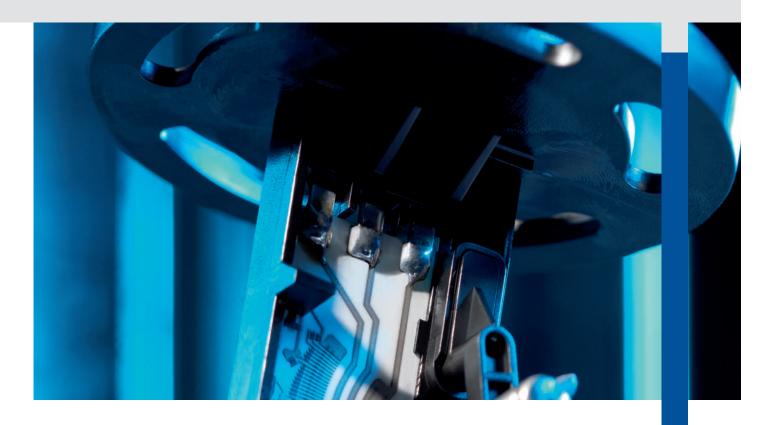
Connection: .187"

Temperature Switch	es			
Warning Contact Point	Thread	Connection	Circuit	Catalog #
221°F	3/ <sub>8</sub> -18NPTF	.187 Spade	Normally Open	232 019
221°F	1/2-14NPTF	.250" Spade	Normally Open	232 005
230°F	M14x1.5	.250" Spade	Normally Open	232 011
203°F	1/2-14NPTF	.250" Spade	Normally Open	232 012
158°F	M14x1.5	.250" Spade	Normally Open	232 013
217°F	1/2-14NPTF	.250" Spade	Normally Open	232 015
217°F	3/ <sub>8</sub> -18NPTF	.250" Spade	Normally Open	232 017
248°F	3/ <sub>4</sub> -16UNF	.250" Spade	Normally Open	232 018
248°F	1/2-14NPTF	M4 Screw	Normally Open	232 010
194°F	M10x1.5	M4 Stud	Normally Open	232 001
338°F	M10x1.5	M4 Stud	Normally Open	232 002
302°F	M10x1.5	M4 Stud	Normally Open	232 006
205°F	1/8-27NPTF	M4 Stud	Normally Open	232 007
230°F	M10x1.0	M4 Stud	Normally Open	232 009
383°F	M10x1.5	M4 Stud	Normally Open	232 020
275°F	M10x1.5	M4 Stud	Normally Open	232 021

# Speedometer Senders

Speed Senders	
	Catalog #
Standard GM <sup>7</sup> / <sub>8</sub> -18 Thread, Aluminum body	340 011
Standard GM <sup>7</sup> / <sub>8</sub> -18, Heavy Duty	340 011E
Hall Effect Sender for Ford Transmission	340 013
GPS Speed Sender	340 786





### **VDO Fuel Senders**

Today more than ever, due to tank configurations, you need choices when it comes to designing new systems. VDO gives you those choices, from simple economical solutions to ones which give you integrated delivery and return tubes.

Our original ALAS design, which has been often copied in the industry but never duplicated in its quality or durability is now joined by two new designs, ALAS I & ALAS II. On the following pages you can see the features of each design and decide for yourself which best meet your requirements.

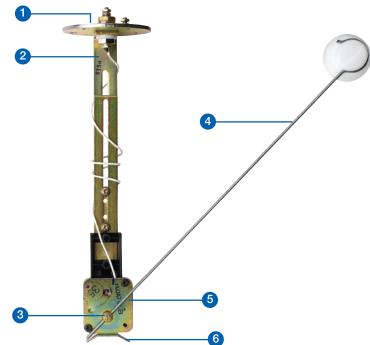
- ALAS (adjustable length arm sender)
- ALAS I (adjustable length arm sender with low warning contact)
- ALAS II (adjustable length arm sender with low warning contact, draw & return tubes)

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# VDO ALAS Plated Steel 12/24V Adjustable Swing Arm Sender

Designed for severe duty use, each of these senders contains an SAE standard five hole metal mounting flange and body components which can be adjusted from 6" to 23" tank depth. Adaptable to right hand or left hand swing arm. Each contains thick film resistor technology for greater resistance to wear associated with standard wire wound units. Each kit contains neoprene mounting gasket and mounting screws. For tanks without flange mounting holes our optional tank mounting kit may be used.

- 1. SAE 5-hole mounting flange can rotate to position sender for right or left hand swing.
- 2. Body constructed of plated steel to eliminate damage caused by fuel slosh.
- 3. Swing arm pivot uses oversized bearings for long life.
- Adjustable for tank depths from 152mm to 584mm.
- Wiper and thick film resistor are shielded from fuel slosh for maximum durability.
- Float arm stops ensure wiper remains in contact with resistor board when tank is full or low.



ALAS Fuel Senders			
Description	Component Reference	Mounting Diameter	Catalog #
ALAS Adjustable Fuel Sender 6 3/4-23", 0-90 Ohm (most GM)	1-551-004-161D	54mm	226 008
ALAS Adjustable Fuel Sender 6 3/4-23", 10-184 Ohm	1-551-004-082B	54mm	226 001
ALAS Adjustable Fuel Sender 6 3/4-23", 10-184 Ohm, with Tank Flange	1-551-004-082B	54mm	226 002
ALAS Adjustable Fuel Sender 6 3/4-23", 240-33 Ohm	1-551-004-123D	54mm	226 007
ALAS Adjustable Fuel Sender 6 3/4-23", 73-10 Ohm		54mm	226 003
Lever Arm Fuel Sender for Classic VW beetle 10-65 Ohm	1-551-001-481	54mm	221 012

### VDO ALAS I 12/24V Fuel Senders

# An economical and practical solution for fuel monitoring for tank depths from 140mm to 400mm

Engineered with a redundant dual wiper system, our unique VDO 'quiet arm' and thick film technology, VDO ALAS I leads the field in reliability and durability. In fact, this family of senders has the ability to withstand over one million swing arm cycles without failure. ALAS I senders feature our unique slotted SAE five-hole flange mount, an industry first that gives you the utmost in versatility for sender mounting positions.

Three resistance values are available, 10-180 ohm, 240-33 ohm & 90-0 ohm. ALAS I senders are available with an optional low fuel warning contact circuit found in no other universal type sender.

Upon request, we can supply senders fully assembled to your specifications.

- 1. Available with low fuel warning contact.
- 2. Redundant ground connection.
- **3.** Unique SAE 5-hole slotted mounting plate allows for positioning sender for left or right hand applications.
- **4.** Stainless steel float arm and pivot adjusts from 140mm to 400mm.
- 5. "No sink" solid float.
- **6.** Steel reinforced mounting hardware (included with single packed senders).
- 7. VDO thick film element with 39-step resolution.
- 8. Redundant dual wiper system.
- 9. 'Quiet arm' minimizes float movement.





ALAS I Fuel Senders				
Description	Warning contact	Component Reference	Mounting Diameter	Catalog #
ALAS I Adjustable Fuel Sender, 6-15 3/4", 0-90 Ohm, with Low Fuel Warning Contact	Yes	A2C59510164	54mm	226 164
ALAS I Adjustable Fuel Sender, 6-15 3/4", 240-33 Ohm, with Low Fuel Warning Contact	Yes	A2C59510163	54mm	226 163
ALAS LAdjustable Fuel Sender, 6-15 3/4", 3-180 Ohm, with Low Fuel Warning Contact	Yes	A2C59510162	54mm	226 162

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ALAS II 12/24V Fuel Senders with Draw / Return Tubes

Again, VDO is first to market with the only adjustable fuel sender featuring interchangeable draw / return tubes, plus optional low fuel warning contact. Just pick the length and diameter of the draw / return tubes based on your gas or diesel application, set the float length and you're ready for installation.

If you have several tank configurations, inventory is minimized with our 'one size fits all' design, without compromising the durability or integrity of the sender. These units are fully adjustable from 140mm to 400mm.

Engineered with a redundant dual wiper system, the unique VDO 'quiet arm' and thick film technology, ALAS II leads the field in reliability and durability. In fact, this family of senders has the ability to withstand over one million swing arm cycles without failure. VDO ALAS II senders feature our unique slotted SAE 5-hole flange mount, an industry first that gives you the utmost in versatility for sender mounting positions.

Three resistance values are available, 10-180 ohm, 240-33 ohm and 90-0 ohm. ALAS II senders are available with an optional low fuel warning contact circuit that is not offered in other universal type senders.

Upon request, we can supply senders fully assembled to your specifications.

Each draw / return tube has 360° of positioning capability within the flange to meet your specific application.

Draw / return tubes available in four different diameters (6.5mm, 8mm, 10 and 12mm), accommodating tank depths up to 400mm.

Where return tubes are not required, a port plug is available.



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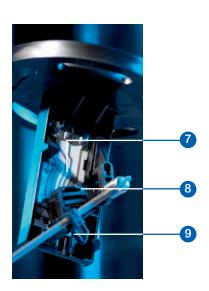
ALAS II Fuel Sender Kits				
Description	Warning contact	Component Reference	Mounting Diameter	Catalog #
ALAS II Fuel Sender Kit with 10mm (%)") Draw and Return Tubes and Wire Harness. 0-90 Ohm Range	Yes	A2C53278251	80mm	226-975K
ALAS II Fuel Sender Kit with 10mm (%)") Draw and Return Tubes and Wire Harness. 10-180 Ohm Range	Yes	A2C53278239	80mm	226-946K
ALAS II Fuel Sender Kit with 10mm (%)") Draw and Return Tubes and Wire Harness. 240-33 Ohm Range	Yes	A2C53278250	80mm	226-973K

ALAS II Fuel Senders				
Description	Warning contact	Component Reference	Mounting Diameter	Catalog #
ALAS II Adjustable Fuel Sender, 5 1/2-15 3/4", 0-90 Ohm, with Low Fuel Warning Contact	Yes	A2C53278251	80mm	226 975
ALAS II Adjustable Fuel Sender, 5 1/2-15 3/4", 240-33 Ohm, with Low Fuel Warning Contact	Yes	A2C53278250	80mm	226 973
ALAS II Adjustable Fuel Sender, 5 1/2-15 3/4", 3-180 Ohm, with Low Fuel Warning Contact	Yes	A2C53278239	80mm	226 946

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#### ALAS II Platform:

- Composite construction.
- Available factory set to customer specifications.
- Available in 10-180 ohm, 240-33 ohm, 90-0 ohm range.
- 1. Steel reinforced mounting hardware.
- 2. Available with low fuel warning contact.
- **3.** Redundant ground connection.
- **4.** Unique SAE 5-hole slotted mounting plate allows for positioning sender for left or right hand applications.
- 5. Stainless steel float arm and pivot adjusts from 140mm to 400mm.
- 6. 'No sink' solid float.
- 7. VDO thick film element with 39-step resolution.
- 8. Redundant dual wiper system.
- 9. 'Quiet arm' minimizes float movement.





ALAS II Fuel Sender Installation Kit and	Drow & Boturn Tuboo	
ALAS II Fuel Seriuel Installation Kit and	Diaw & neturn rubes	
Step 1: Required installation kit	Installation Kit	226 985
Step 2: Select draw tube	Tube inside diameter	Single
	6.5mm	226 955
	8.0mm	226 953
	10.0mm	226 951
	12.0mm	226 949
Step 3: Select return tube	Tube inside diameter	Single
Step 3: Select return tube	Tube inside diameter 6.5mm	Single 226 956
Step 3: Select return tube		·
Step 3: Select return tube	6.5mm	226 956
Step 3: Select return tube	6.5mm 8.0mm	226 956 226 954
Step 3: Select return tube  Step 4: (optional - if 1 or both tubes are not required)	6.5mm 8.0mm 10.0mm	226 956 226 954 226 952



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#### Steel Mounting Bracket

240 027	1 Gauge Mounting Bracket - for 2 <sup>1</sup> / <sub>16</sub> " Gauges - Black
240 034	1 Gauge Mounting Bracket - for 2 <sup>1</sup> / <sub>16</sub> " Gauges - Chrome
240 028	2 Gauge Mounting Bracket - for 2 1/16" Gauges - Black
240 035	2 Gauge Mounting Bracket - for 2 1/16" Gauges - Chrome
240 029	3 Gauge Mounting Bracket - for 2 1/16" Gauges - Black
240 036	3 Gauge Mounting Bracket - for 2 1/16" Gauges - Chrome

#### Steel Mounting Cup

240 016	Steel Mounting Cup Kit for 2 1/16" Gauges - Black
240 017	Steel Mounting Cup Kit for 2 1/16" Gauges - Chrome
240 018	Steel Mounting Cup Kit for 3 3/8" Gauges - Black
240 019	Steel Mounting Cup Kit for 3 % "Gauges - Chrome

#### **Mounting Cup**

240 101	Plastic Mounting Cup for 2 1/16" Gauges - Black
240 102	Plastic Mounting Cup for 3 1/8" Gauges - Black

#### **Rubber Mounting Brackets**

240 802	1 Gauge Rubber Mounting Bracket for 2 1/16" Gauges
240 803	2 Gauge Rubber Mounting Bracket for 2 1/16" Gauges
240 804	3 Gauge Rubber Mounting Bracket for 2 1/18" Gauges

#### Anti-Glare Rings

	-
240 005	Anti-Glare Ring for 2 1/16" Gauges - Pair

#### Stud Mounting Kits

	<u> </u>
600 402	Stud Mount Conversion Kit for 2 1/16" Vision and Cockpit Series Gauges
600 401	Stud Mount Conversion Kit for 3 1/8" and 3 3/8" Vision and Cockpit Series Gauges

#### Spin-Lok™ Mounting Rings (Replacement)

	9 - (
600 404	2 1/16" (52mm) for All VDO Instruments
600 405	3 1/8" (80mm) for Vision and Cockpit Series Instruments
600 415	3 3/8" (85mm) for Viewline
600 406	3 %" (85mm) for Vision, Cockpit and Series 1 Instruments
600 416	4 3/8" (110mm) for Viewline
600 403	4" (100MM) for Vision and Cockpit Series Instruments

#### Flush Mounting Kits

600 413	Back Mount Bracket and Gasket for 1 Viewline Instrument
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#### Reducer Rings

600 851	Reducing Ring 2 3/8" to 2 1/16"
600 885	Reducing Ring 3 3/8" to 3 1/8"

#### Instrument Panel Hole Covers

240 864	Instrument Panel Hole Cover, 2 1/16"	
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Mounting Brackets



Adjustable Mounting Cups



Mounting Cups



Spin-Lok<sup>™</sup> Mounting Rings



600 402

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240 022



240 023



Nylon Tubing Kit



Anti-glare Rings

#### **Tubing Kits**

150 855	0-150 PSI Nylon Tubing Kit, 16ft
150 851	0-150 PSI Nylon Tubing Kit, 6ft
150 856	0-400 PSI Copper Tubing Kit, 16ft

#### Complete Wiring Harnesses for Viewline

240 037	Instrument Wiring "Speed Harness" for 5 or 6 Viewline Gauges
---------	--

#### Wiring Harness & Accessories for Viewline

240 099	14 Pole Connector and Pins for 1 Viewline Instrument. Does Not Include Wire Lead
240 098	8 Pole Connector and Pins for 1 Viewline Instrument. Does Not Include Wire Lead
240 097	8 Pole Retrofit Harness. Use When Upgrading To Viewline From a Non-Viewline Instrument
240 048	Connection Pins for Viewline Connectors
240 202	Optional 8 Pole Harness with 500mm Leads for 1 Viewline Voltmeter, Hourmeter or Clock
240 204	Replacement 14 Pole Harness with 500mm Leads for 1 Viewline Speedometer or Tachometer
A2C53422790-S	Replacement 14 Pole Harness with 500mm Leads for 1 Viewline Speedometer or Tachometer with 5 Telltales
240 201	Replacement 8 Pole Harness with 500mm Leads for 1 Viewline Instrument
240 203	Replacement 8 Pole Harness with Leads for 1 Viewline Ammeter and Shunt

#### Programming & Mode Button for Viewline

240-046	Programming & Mode Button for Viewline Speedometer or Tachometer250" Spade Connector. Black with Chrome Surround
240 205	Programming & Mode Button for Viewline Speedometer or Tachometer - 1/8" Spade Connector. Black with Black Surround

#### Complete Wiring Harness for Vision & Cockpit Gauges

		1	
Ī	240 038	Instrument Wiring Harness for 5 or 6 Vis	sion and Cockpit Gauges
	240 030	Instrument Wiring Harness for 5 or 6 Vis	sion or Cockpit Gauges, Speed/Tach Centered
240 031	240 031	Instrument Wiring Harness for 5 or 6 Vis	sion or Cockpit Gauges, Speed/Tach Off-Centered

#### Complete Wiring Harnesses for Series 1

240 033 Instrument Wiring Harness for 5 or 6 Series 1 Old School Gauges, Speed	beed/Tach Centered
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#### Single Gauge Wiring Harness for Vision, Cockpit and Series 1

240 023	1 Gauge Universal Wiring Kit (Except Viewline)

#### Wiring Harness & Accessories for Vision, Cockpit and Series 1 Instruments

240 025	3 prong Connector for Vision & Cockpit Series
240 026	3 prong Connector with Terminals
240 053	6 Pole Connector for Vision, Cockpit and Series 1 Speedometers and Tachometers without LCD
240 024	8 pole Connector for Vision, Cockpit and Series 1 Speedometers and Tachometers with LCD
240 045	M4 Stud to .250" Blade Terminal Adapter

#### Universal Ammeter Wiring Kit (Except Viewline)

240 021	1 Gauge Universal Ammeter Wiring Kit (Except Viewline)	
240 021	i Gaude Universal Ammeter Winno Kil (Except Viewline)	

#### **Pyrometer Cables**

326 002	Pyrometer Cable for Viewline & Ocean Line/Severe Duty, 13ft
240 092	Pyrometer Extension Cable, 30ft

#### Adapters & Fittings

- 144 p - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	
180 066	Adapter for Mechanical Temp. Gauge Probe 5/8-18UNF to 1/2 14NPTF
180 067	Adapter for Mechanical Temp. Gauge Probe 5/8-18UNF to 3/8 18NPTF
240 828	Angle Adanter 1/8-27NPTE male X 1/8-27NPTE female

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#### Adapters & Fittings

•	<u> </u>
240 903	Brass Adapters, includes $^{1/8}$ -27NPTF to $^{1/4}$ -18, $^{3/8}$ -18 and $^{1/2}$ -14
240 904	Brass Adapters, includes 1/8-27NPTF to: M16x1.5, M14x1.5, M12x1.5,M10x1 and 1/8-28BSP
240 855	Brass T Adapter 1/8-27NPTF
240 850	Brass T Adapter M10 X 1
240 863	Weld on Threaded nut for Mounting Pyrometer Sender

#### Air, Cylinder and Exhaust Temperature Sender Parts

240 701	Cylinder Head Temperature Sender Harness, 15ft
240 702	Pyrometer Cable for Vision & Cockpit International, 12ft

#### Drive Keys for generator senders

340 065	Drive Key .104"
340 060	Drive Key .152"
340 061	Drive Key .187"
340 064	Drive Key .2"
340 062	Drive Key .203"

#### **Fuel Sender Service Parts**

226 985	ALAS II Fuel Sender Installation Kit
600 408	Bolt on Flange Kit for Lever Arm Type Fuel Senders
226 902	Fuel Sender Adapter Flange for Fords 1935-1956
226 479	Replacement Float Arm with Float
600 601	Replacement Float for ALAS Fuel Senders
226 053	Replacement Neoprene Fuel Sender Gasket - SAE 5 Hole
226 451	SAE 5 Hole Mounting Flange Kit

#### Makepoint Switch

A2C59510886-S	Makepoint Switch for Viewline Warning Light - 1 req. p	er Instrument	
Panel Mount L	.ED Warning Lights	Lighting Color	Voltage
600 844 B LED	Blinking Red LED Warning Light with Socket & Pigtail	Red	12V
600 847 LED	Blue LED Warning Light with Socket & Pigtail	Blue	12V
600 845 LED	Green LED Warning Light with Socket & Pigtail	Green	12V
600 844 LED	Red LED Warning Light with Socket & Pigtail	Red	12V
600 846 LED	Yellow LED Warning Light with Socket & Pigtail	Yellow	12V

Original Replacement Bulbs		Voltage
600 802	Type A 9/32" (7mm) Metal Base Bulb, 12V, 2W, 4 Pack	12V
600 804	Type B 11/32" (9mm) Metal Base Bulb, 12V, 2W, 4 Pack	12V
600 820	Type C 3/8" (10mm) Metal Base Bulb, 12V, 2W, 4 Pack	12V
600 809	Type D Wedge Based Peanut Bulb, 12V. 1.2W, 4 Pack	12V
600 824	Type D Wedge Based Peanut Bulb, red, 12V. 1.2W, 4 Pack	12V
600 815	Type E Wedge Based Bulb, 12V 3.4W, 4 Pack	12V



Adapters & Fittings



Warning Lights









LED Replacement Bulbs

















600 813

600 819

600 823





600 840 600 816





600 821

600 818



Light Diffusers

#### Replacement Bulb Sockets

600 817	Type A Brass Bulb Socket
600 813	Type A Plastic Bulb Socket
600 816	Type A Steel Bulb Socket
600 819	Type B Plastic Bulb Socket
600 818	Type B Steel Bulb Socket
600 840	Type E Plastic Bulb Socket

Upgrade Replacement Bulbs		Lighting Color
600 881	Amber LED Wedge Type Bulb (Type E) Upgrade	Amber
600 876	Amber LED Wedge Type Bulb (Type E) Upgrade Kit for 5 Gauge Kits	Amber
600 877	Amber LED Wedge Type Bulb (Type E) Upgrade Kit for 6 Gauge Kits	Amber
600 880	Blue LED Wedge Type Bulb (Type E) Upgrade	Blue
600 874	Blue LED Wedge Type Bulb (Type E) Upgrade Kit for 5 Gauge Kits	Blue
600 875	Blue LED Wedge Type Bulb (Type E) Upgrade Kit for 6 Gauge Kits	Blue
600 879	Green LED Wedge Type Bulb (Type E) Upgrade	Green
600 872	Green LED Wedge Type Bulb (Type E) Upgrade Kit for 5 Gauge Kits	Green
600 873	Green LED Wedge Type Bulb (Type E) Upgrade Kit for 6 Gauge Kits	Green
600 882	HID White LED Wedge Type Bulb (Type E) Upgrade Kit for 5 Gauge Kits	White
600 883	HID White LED Wedge Type Bulb (Type E) Upgrade Kit for 6 Gauge Kits	White
600 886	HID White LED Wedge Type Bulb (Type E) Upgrade	White
600 870	Red LED Wedge Type Bulb (Type E) Upgrade Kit for 5 Gauge Kits	Red
600 878	Red LED Wedge Type Bulb (Type E) Upgrade	Red
600 871	Red LED Wedge Type Bulb (Type E) Upgrade Kit for 6 Gauge Kits	Red

#### Light Diffusers

600 864 Am	mber Light Diffusers for Type C and E Wedge Bulbs - 4pack
7411	3 7
600 863 Blu	ue Light Diffusers for Type C and E Wedge Bulbs - 4pack
600 856 Gre	reen Light Diffusers for Type A Bulb - 4 pack
600 862 Gre	reen Light Diffusers for Type C and E Wedge Bulbs - 4pack
600 860 Gre	reen Light Diffusers for Type D Peanut Bulb - 4 pack
600 853 Rec	ed Light Diffusers for Type A Bulb, 4 Pack
600 857 Red	ed Light Diffusers for Type B Bulb, 4 Pack
600 861 Red	ed Light Diffusers for Type C and E Wedge Bulbs, 4 Pack
600 859MP Red	ed Light Diffusers for Type D Peanut Bulb
600 859 Rec	ed Light Diffusers for Type D Peanut Bulb, 4 Pack

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