

# TRACKFORCE

## INSTRUMENTS

TRACKTESTED & ENDORSED  
BY THE STEWART-WARNER  
TRACKFORCE...



Johnny  
Rutherford



Bill  
Elliott

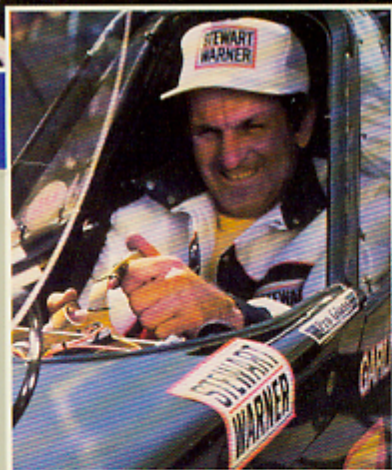
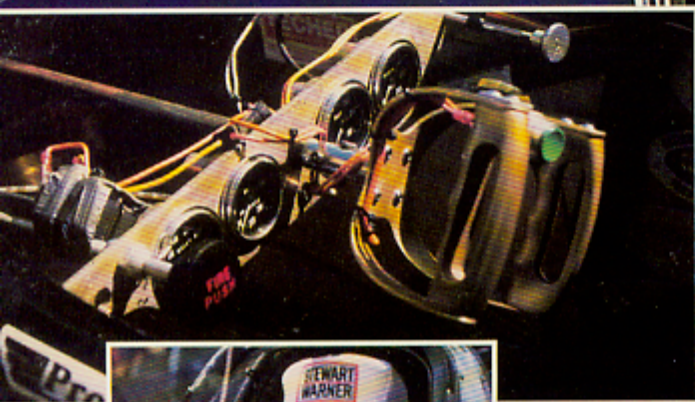
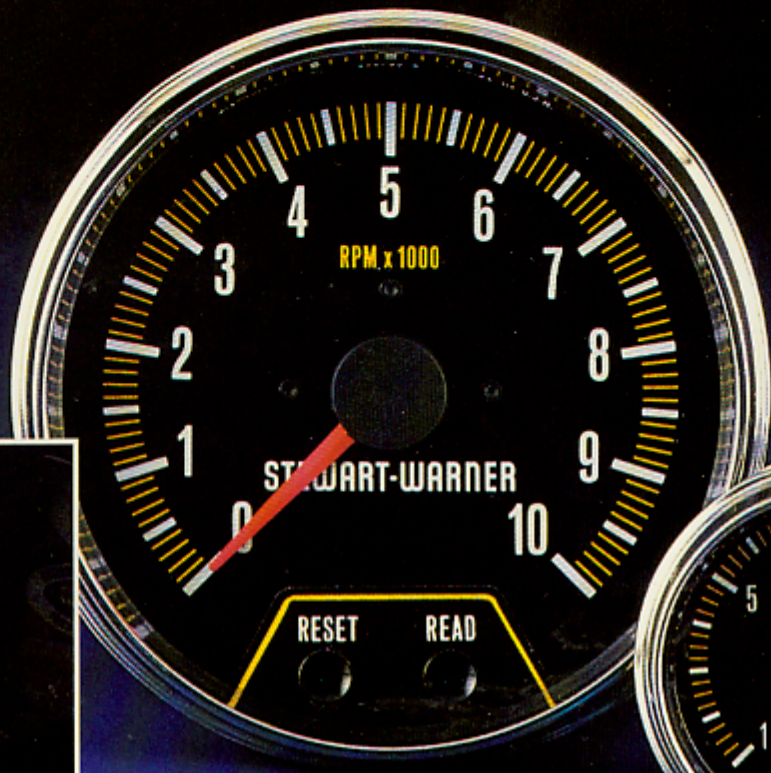


Don  
Garlits



\$200

# Number 1 with Racers... *From Daytona to Pomona!*



# STEWART-WARNER

# TRACKFORCE

## INSTRUMENTS



### How To Use This Catalog:

1. Product application listings begin on Page 10. For easy reference products are listed by name and part number.
2. Specific product features are outlined in the section labeled "Features", which is found at the beginning of each product listing.
3. Gauges are illustrated at the top of the page in lifesize or near lifesize photos. The gauge face and sweep is shown to help you select the style you want. For brevity, only one bezel finish is illustrated, but additional bezel finishes are listed along with their part numbers for easy ordering.
4. The right-hand column of each product listing table carries specific application information on the additional items you need (if any) for installation. For maximum instrument life and to protect your Stewart-Warner Limited Warranty, *only genuine* Stewart-Warner components must be used. These are available from your dealer.
5. Applications for our popular mounting panels appear at the bottom right-hand page of each section, with additional details on page 23. Choose correct panels by checking the case size of your instrument(s) (2<sup>5</sup>/<sub>8</sub>" or 2<sup>1</sup>/<sub>16</sub>" dia.) and the number of instruments you wish to mount in a single panel. Specific part numbers are shown for each size and surface finish.
6. This catalog is arranged to make gauge and tach selection fast, easy and most of all, correct for your vehicle's needs. Should you encounter any problems, or if you'd like to have more information on our products you can contact us by writing to: Stewart-Warner Corp., Marketing-Sales Dept., TF, 1826 Diversey Parkway, Chicago, IL 60614.

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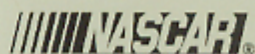
# STEWART-WARNER

# TRACKFORCE

## INSTRUMENTS

## Racing Programs

### A Major Commitment to Racing Support!



Stewart-Warner instruments are the official instruments of NASCAR

#### STEWART-WARNER TRACKFORCE AWARD:

\$25,000 contingent to Winston Cup driver compiling the most NASCAR Winston Cup racing miles in any season.

#### NASCAR WINSTON CUP SERIES:

All events



All events



All NHRA Major Events  
and WWCS Events

#### INDIANAPOLIS 500:

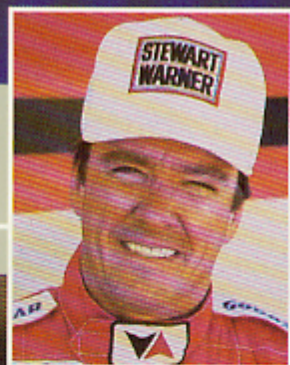


Stewart-Warner instruments  
are the official instruments  
of IROC.

*Our Track Record speaks for itself.*

## Introducing Stewart-Warner TrackForce...

Stewart-Warner's TrackForce panel is comprised of three of racing's most respected drivers... Bill Elliott, Johnny Rutherford and Don Garlits. These three top racers provide our design and engineering staff with actual on-track evaluation and input for Stewart-Warner performance instruments. Gauges, tachometers, speedometers, installation kits and accessories, Stewart-Warner has everything you need in finest quality instrumentation. From Pomona to Daytona, the No. 1 choice of winners is Stewart-Warner.



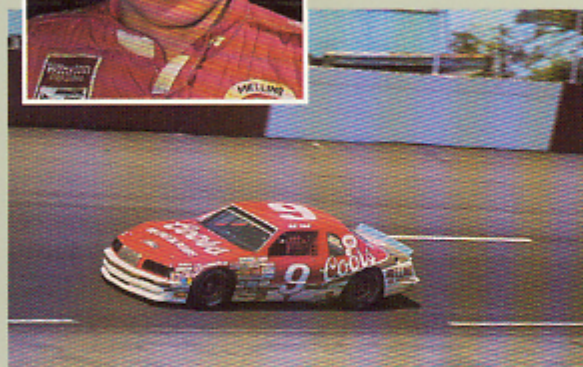
### Johnny Rutherford

TrackForce Member

"Today's Indy Car chassis demand the most reliable and accurate gauges you can get, and they've got to fit into a very tight space. Stewart-Warner's new TrackForce instruments offer exactly the things I need!"



**Bill Elliott**  
TrackForce Member



"In NASCAR racing we run side-by-side at 200 MPH, drafting in and out of traffic and sometimes three-wide. With that kind of racing you can't take chances on instruments. Over the years I've found that Stewart-Warner gauges are accurate and built to last. I just wouldn't have anything else!"



**Don Garlits**  
TrackForce Member



"I've tried just about everything I could to go faster and quicker, but in more than 30 years of racing the one thing I know I can count on are the Stewart-Warner gauges I install in my Top Fuel Dragsters."

**QUESTION:**  
**Why have users recognized  
Stewart-Warner as the number  
one instrument company for  
over 75 years?**

**ANSWER:**  
**Quality!**

We've seen instrument companies come and go because they just couldn't match the quality of genuine Stewart-Warner products. You can pay less for a gauge or tachometer, but you get a lot less quality when you do.

That's why the majority of sportsmen and professional drivers, crew chiefs, mechanics and car builders demand Stewart-Warner more than any other instrument brand.

At Stewart-Warner we build all of our instruments in the same careful way, whether they're for 200 MPH racing or a quiet drive to work. We do this because we know our reputation is on the line and maybe the fate of your engine as well.

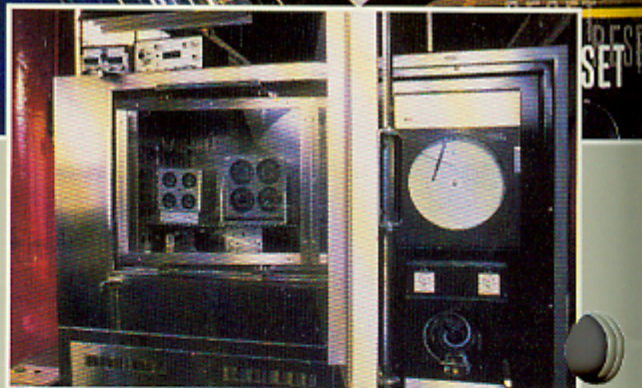
Regardless of the application, you can't buy better than Stewart-Warner.



**Made in America with  
a commitment to  
quality.**

Stewart-Warner instruments are designed and manufactured by the world's most experienced staff of engineers and specialists to bring you products of outstanding quality and exceptional value.

Our people take tremendous pride in producing the finest, most accurate instruments you can buy. Each gauge or tachometer is hand assembled, individually calibrated, tested and then re-tested to insure that you receive an instrument that upholds our reputation and our pride. Stewart-Warner's people won't settle for anything less, and neither should you.



Environmental and Humidity Chamber simulates operating conditions ranging from dry desert, to hot jungle humidity, to frozen arctic and verifies the electronic integrity of all gauges and tachometers.



Gauges and tachometers are statistically selected from production lines and inspected for accuracy during thousands of test cycles.

# STEWART-WARNER

# TRACKFORCE

## INSTRUMENTS

Banged, bounced, rattled, shook, doused, shocked and slammed, all to make sure that the Stewart-Warner instruments you buy are the finest available.

But, laboratory testing programs are only part of the story. The real testing begins when we install one of our gauges or tachs in a race car.

600 miles at Charlotte... a full season in NASCAR... round and round at Indy... across the superheated desert... down a thundering, shaking drag strip... the ultimate testing that Stewart-Warner TrackForce instruments undergo is on the race tracks across the nation. And one thing's for certain, if it's Stewart-Warner, no matter what the type of racing or form of punishment, you can count on performance unmatched by any other brand of instruments.



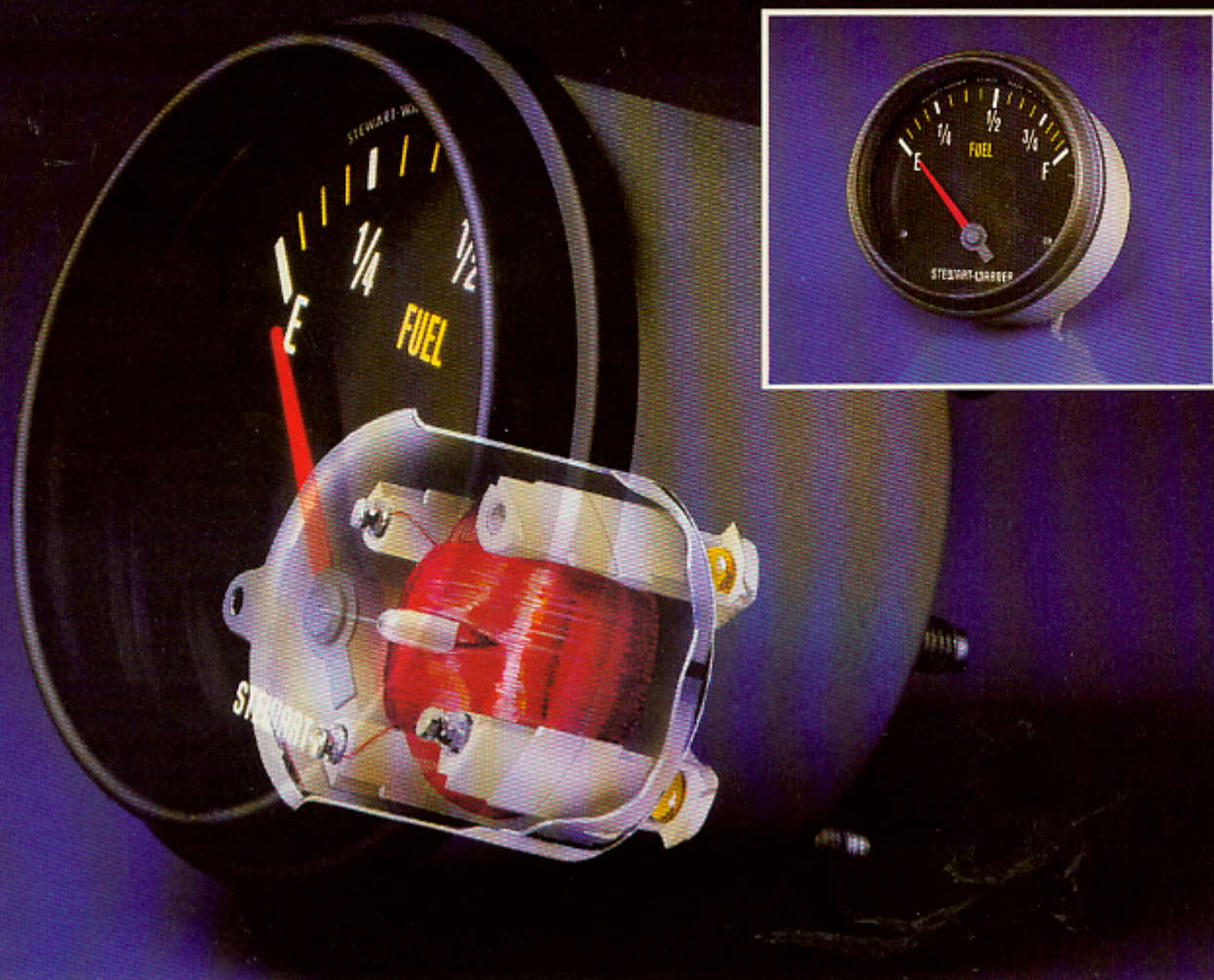
This Vibration Testing Center torture-tests our tachs and gauges, simulating extreme conditions found in even the roughest racing or off-road abuse.



Our design engineers utilize the latest technology in computer assisted programs to develop tomorrow's instrument advances.



Electronic circuits must pass extensive transient level voltage tests to protect against conditions found in even the roughest racing or off-road abuse.

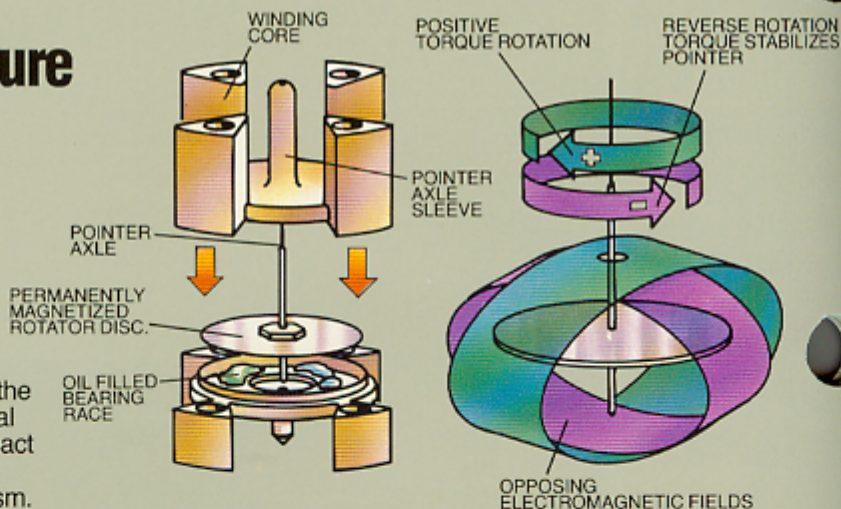


## Track-Force Gauges Feature the Unique Bi-Torque<sup>®</sup> Mechanism for Rugged Dependability and Accuracy.

Stewart-Warner TrackForce electric instruments offer the rugged dependability and accuracy found in mechanical gauges, with the additional feature of being more compact and less complex to install. And only Stewart-Warner gauges feature the unique Bi-Torque internal mechanism.

Conventional gauges use a coil-wound armature that turns within a stationary magnetic field. Stewart-Warner Bi-Torque gauges feature a permanent magnet that turns within a stationary coil, for more accurate readings.

Stewart-Warner gauges' Bi-Torque mechanisms also have no hairspring to return the pointer to zero. Instead, force is applied to both directions as needed, by the coil windings. This type of gauge is also easy to identify because when the gauge is shut off, the pointer returns to a random position.



Bi-Torque gauges also use oil-filled plastic bearings and are extremely rugged to resist the typical vibration and shocks encountered by race cars or street machines.

For maximum pointer sweep Bi-Torque gauges use three coil windings. Two windings act together to create one torque, and a third creates a second torque. The resulting pointer sweep is usually about 90°, much larger than most other electrical gauges.

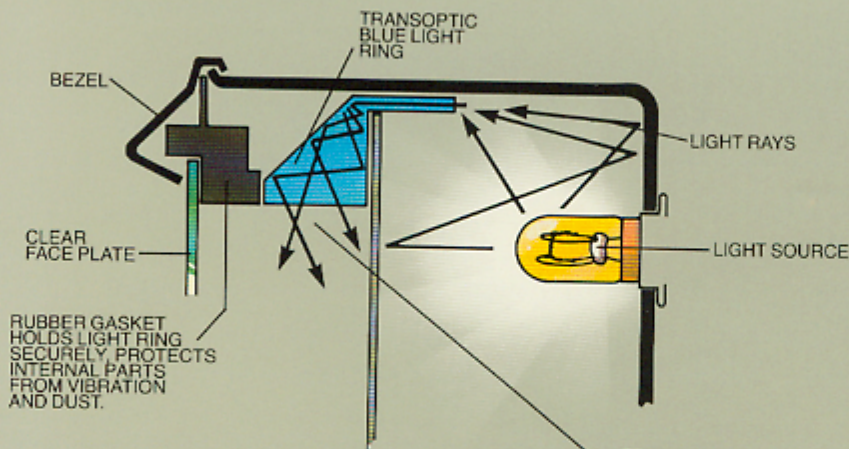
Finally, the Bi-Torque mechanism's outstanding ability to produce accurate, reliable, steady pointer readings eliminates the necessity to dampen the effects of rough usage with "liquid filled" designs. Stewart-Warner gauges are designed, engineered, and manufactured right the first time, to perform and last.





## TransOptic III® Lighting for Instant Readability, Even at Night!

Stewart-Warner TrackForce instruments feature the unique TransOptic III® Lighting System for instant gauge readability even in low-light or nighttime driving conditions.



TransOptic III delivers filtered blue light from a fully enclosed bulb. Light enters an optical light ring, is bent 90° and spread across the face dial a full 360°. This means no "hot spots" or distracting glare, but a pleasing, highly illuminated dial that is easy to read, even at a glance!

TransOptic III is available only in Stewart-Warner instruments.





P-82825



P-82826



P-82827



P-82828



P-82829

### FEATURES:

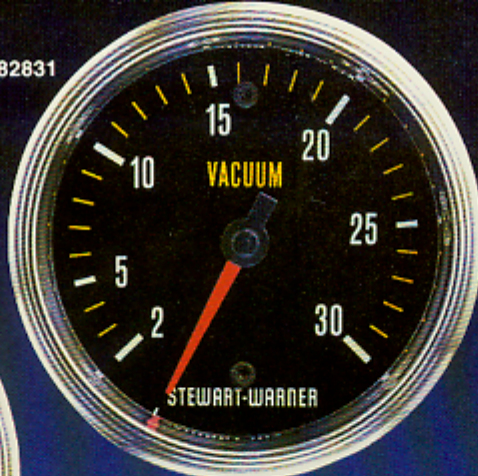
2 $\frac{5}{8}$ " cases with bold new high visibility graphics and fire orange pointers. TrackForce gauges feature TransOptic III lighting. Choice of flat black or polished stainless steel bezels.

## 2 $\frac{5}{8}$ " DIA. GAUGES

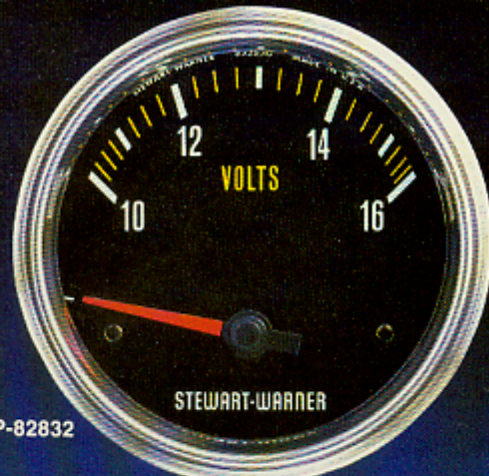
GAUGE	DIAL RANGE	PART NUMBERS		Installation Kits/Senders/Adapters
		FLAT BLACK BEZEL	POLISHED S.S. BEZEL	
AMMETERS	60-0-60 amps.	P-82805	P-82825	None required
FUEL PRESSURE	1-15 p.s.i.	P-82806	P-82826	Tubing Kit No. F-82553; includes 6' of nylon tubing with fittings, 1/8" PT connection with 1/4" adapter. Also No. F-366HM for rear engine cars. For import adapters see page 24. Pressure switches and warning lights available—see page 25.
OIL PRESSURE	5-100 p.s.i.	P-82807	P-82827	
	10-200 p.s.i.	P-82808	P-82828	
WATER TEMPERATURE	100°-265°F.	P-82809	P-82829	Gauge supplied with 1/2" PT adapter 72" or 144" capillary tube lengths available. Adapter nuts: F-72446; 3/8" PT (STEEL), F-412208; 1/2" PT (BRASS) F-428819; 1/4" PT (STEEL) Also see page 24.
OIL TEMPERATURE	140°-325°F	P-82810	P-82830	



P-82830



P-82831



P-82832



P-82833



P-82834

# TRACKFORCE

GAUGE	DIAL RANGE	PART NUMBERS		Installation Kits/Senders/Adapters
		FLAT BLACK BEZEL	POLISHED S.S. BEZEL	
VACUUM	0"-30" Hg.	P-82811	P-82831	Tubing kit No. F-82553 (includes 6' of nylon tubing with fittings, 1/8" PT connection with 1/4" adapter.) Also No. F-366 HM for rear engine cars. For import adapters see page 24. Also available No. F-82562 rubber vacuum hose kit—see page 25.
PRESSURE-VACUUM TURBO	0"-30" Hg. 0-15 p.s.i.	P-82814	P-82834	
VOLMETERS	10-16 V.	P-82812	P-82832	12 Volt negative ground. No installation kit required.
FUEL LEVEL	E-F	P-82813	P-82833	Sender unit F-385-B for 6"-12" tank depth (LH arm), F-385-C for 6"-12" depth (RH arm), F-391-A for 10"-15" depth (LH arm), F-391-B for 10"-15" depth (RH arm). No. 366-LP installation kit (flange, screws, gaskets, etc.). For specific application information see page 24.

GAUGE MOUNTING PANELS See page 23 for additional information.

F-811659 for 1 gauge  
Bright Chrome

F-813877 for 2 gauges  
Bright Chrome

F-813642 for 3 gauges  
Bright Chrome

F-366 MP for 1 gauge,  
Cup mounting kit, black krinkle finish



P-82876



P-82877



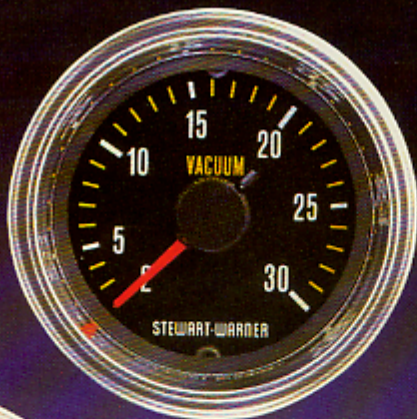
P-82878

## FEATURES:

2 1/16" cases with bold new high visibility graphics and fire orange pointers. TrackForce gauges feature TransOptic III lighting, 260° sweep. Choice of flat black or polished stainless steel bezels.

# 2 1/16" DIA. MECHANICAL GAUGES

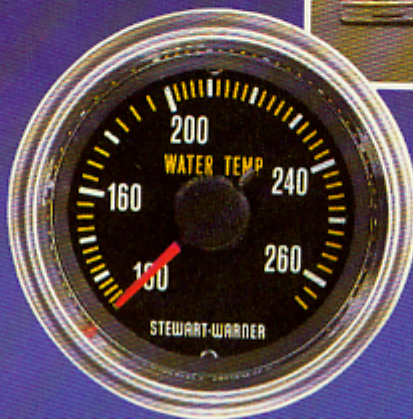
GAUGE	DIAL RANGE	PART NUMBERS		Installation Kits/Senders/Adapters
		FLAT BLACK BEZEL	POLISHED S.S. BEZEL	
FUEL PRESSURE	1-16 p.s.i.	P-82856	P-82876	All gauges require tubing kit F-82553, includes 6' of nylon tubing with fittings, 1/8" PT connection with 1/4" adapter. Also 366 HM for rear engine cars. For import adapters see page 24.
OIL PRESSURE	5-100 p.s.i.	P-82857	P-82877	
	10-200 p.s.i.	P-82858	P-82878	
VACUUM	0-30" Hg.	P-82861	P-82881	
PRESSURE/ VACUUM TURBO	0-30" Hg./ 0-15 p.s.i.	P-82864	P-82884	



P-82881



P-82884



P-82879



P-82880



# TRACKFORCE

GAUGE	DIAL RANGE	PART NUMBERS		Installation Kits/Senders/Adapters
		FLAT BLACK BEZEL	POLISHED S.S. BEZEL	
WATER TEMPERATURE	100°-265°F	P-82859	P-82879	Gauge is supplied with 1/2" PT adapter 36", 72" or 144" capillary tube lengths available. Adapter nuts for above: F-72446; 3/8" PT (STEEL), F-412208; 1/2" PT (BRASS), F-428819; 1/4" PT (STEEL). Also see page 24.
OIL TEMPERATURE	140°-325°F	P-82860	P-82880	

GAUGE MOUNTING PANELS See page 23 for additional information.

F-817825 for 1 gauge  
Bright Chrome

F-814143 for 2 gauges  
Bright Chrome

F-811653 for 3 gauges  
Bright Chrome

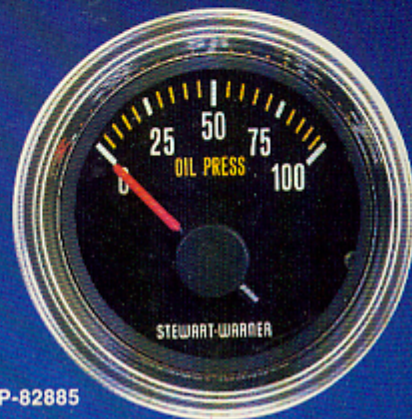
F-813878 for 4 gauges  
Bright Chrome



P-82883



P-82875



P-82885

## FEATURES:

2 1/16" cases feature the unique Stewart-Warner Bi-Torque mechanism for absolute accuracy and durability. TransOptic III lighting, full 90° sweep, bold new high visibility graphics and fire orange pointers. Choice of flat black or polished stainless steel bezels.

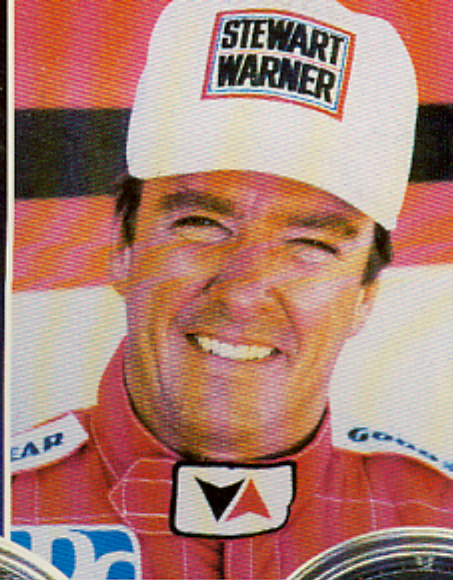
# 2 1/16" DIA. ELECTRICAL GAUGES

GAUGE	DIAL RANGE	PART NUMBERS		Installation Kits/Senders/Adapters
		FLAT BLACK BEZEL	POLISHED S.S. BEZEL	
FUEL LEVEL	E-F	P-82863	P-82883	Must use Stewart-Warner tank sender units. No. F-385-B for 6"-12" tank depth (LH arm), No. F-385-C for 6"-12" tank depth (RH arm), No. F-391-A for 10"-15" tank depth (LH arm), No. F-391-B for 10"-15" tank depth (RH arm). Installation Kit Part No. 366-LP (kit includes flange, screws, gaskets, etc.). For specific application information see page 24.
		P-82869	P-82889	For use with standard GM tank sender (90 ohm).
		P-82870	P-82890	For use with standard Ford and Chrysler tank senders (73 ohm).

**Note:** Installation wire and terminals, not included, are required for all electrical gauges and panel-mount tachometers.



P-82887



P-82886



P-82882



P-82888

# TRACK FORCE

GAUGE	DIAL RANGE	PART NUMBERS		Installation Kits/Senders/Adapters
		FLAT BLACK BEZEL	POLISHED S.S. BEZEL	
AMMETERS	0-60-0 Amps	P-82855	P-82875	No installation kit required.
OIL PRESSURE	0-100 p.s.i.	P-82865	P-82885	12 volt negative ground. Requires pressure sender F-279-B. Pressure switches and warning lights available. See page 25.
WATER TEMPERATURE	100°-280°F	P-82866	P-82886	Electrical temperature senders F-280-ED (universal), F-82510 (universal metric) See page 24.
OIL TEMPERATURE	140°-320°F	P-82867	P-82887	Electrical temperature sender F-280-EE, Drain plug F-280-EH. See page 24.
VOLTMETERS	10-16 V	P-82862	P-82882	12 volt negative ground. No installation kit required.
FUEL PRESSURE	0-16 p.s.i.	P-82868	P-82888	Electrical pressure sender F-82504. Pressure switches and warning lights available, see page 25.

GAUGE MOUNTING PANELS See page 23 for additional information.

F-817825 for 1 gauge  
Bright Chrome

F-814143 for 2 gauges  
Bright Chrome

F-811653 for 3 gauges  
Bright Chrome

F-813878 for 4 gauges  
Bright Chrome

# Introducing Today's State of the Art Tachometer!

**Solid-State,  
Micro Chip  
Controlled.**

**Instant  
Response.**

**Tell-tale  
Feature.**

**Track Tested.**



P-82800

## 5" DIA. ELECTRONIC TACHOMETERS



Stewart-Warner TrackForce 5" Electronic Tachometers utilize today's latest microchip technology with all the features and dependability that only Stewart-Warner delivers. The Stewart-Warner Tell-tale feature recalls the highest RPM reached on any drag strip run or oval track lap to enable you to gear your engine to the precise RPM where it makes maximum horsepower and usable torque. Accurate to within 2% of the full scale, and maintains recall for hours. Every tachometer is internally protected against voltage surges in the electrical system. They are also temperature compensated to provide unequalled performance and accuracy under varying operating conditions. These tachometers have undergone extensive field testing and perform exceptionally well in racing applications where electronic interference causes inaccurate readings with tachometers manufactured by other companies. 0 to 10,000 RPM, 12 volt negative ground. Bold new high visibility graphics with yellow and white graduations, white numerals and fire orange sweep pointer. Flat black or polished stainless steel bezels. TransOptic III lighting and Bi-Torque mechanism for instant response and accuracy. Can be used with most high output racing ignitions without interference.



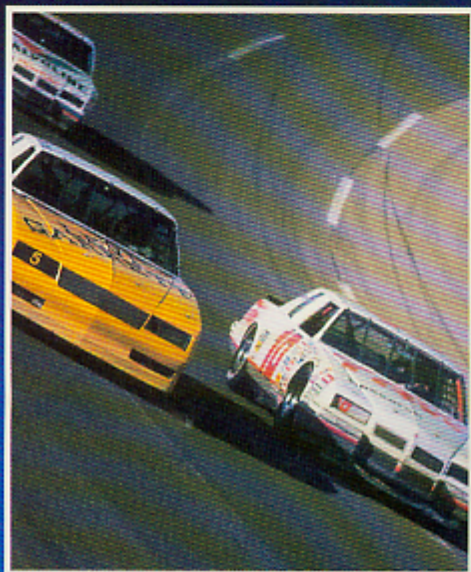


P-82820

# TRACK FORCE

PART NUMBER	DIAL RANGE	DESCRIPTION
P-82800 Flat Black Bezel	0-10,000 RPM	Accuracy $\pm 2\%$ of full scale. Tell-tale recalls highest RPM reached. 12 volt negative ground. High Visibility Graphics: Yellow and white Graduations with white numerals, fire orange sweep pointer, TransOptic III Lighting, Bi-Torque Mechanism. Can be used with most high output racing ignitions without interference. For optional pedestal mount housing order part no. F-289-H
P-82820 Polished Stainless Steel Bezel	0-10,000 RPM	

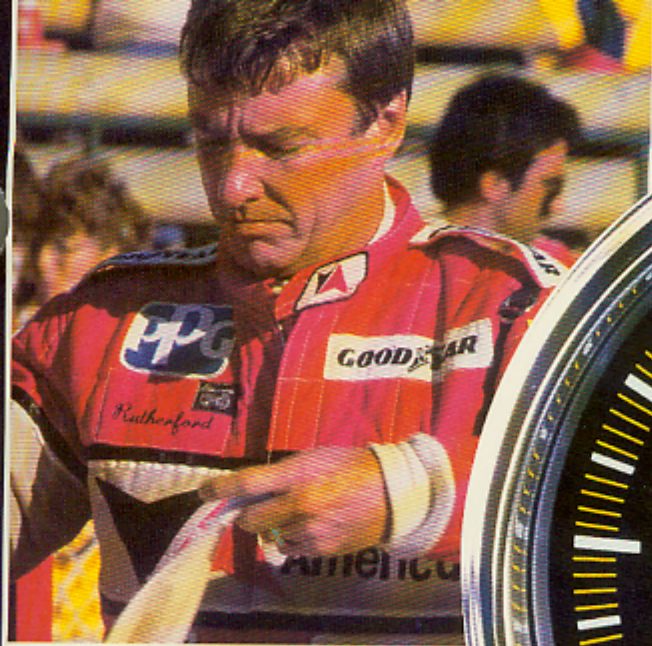
# Today's State of the Art in Mechanical Tachometers.



## 5" DIA. MECHANICAL TACHOMETERS

Our TrackForce 5" Mechanical Tachometers offer all the rugged dependability that a cable-driven, mechanical tachometer is favored for, plus the added bonus of Stewart-Warner's famous reputation for quality and engineering. TrackForce mechanical tachs feature big 5" faces and full-sweep, for instant readability, even when you've got your hands full driving. 0-10,000 RPM range, 2:1 calibration, TransOptic III lighting, white and yellow graduations with white numerals and fire orange sweep pointer.  $\frac{5}{8}$ "-18 connection with .105" square hole. Uses flexible shaft Part Number 446900-1X-42" or -72". Flat black or polished stainless steel bezels. A tough, no-nonsense tach that you can count on for long life and consistent, accurate readings under even the most adverse conditions. The most economically priced 5" tachometer available.





P-82821

# TRACKFORCE

PART NUMBER	DESCRIPTION
P-82801, Black Bezel	0-10,000 RPM Range, Cable Driven, 2:1 Calibration, Uses Flexible Shaft Part Number 446900-1X-42" or - 72". Features TransOptic III Lighting For Even, Glare-Free Lighting. For specific flexible shaft information see page 26.
P-82821, Polished Stainless Steel Bezel	Same Great Features As Part Number P-82801 But With Polished Stainless Steel Bezel.



P-82850



P-82873

## 3<sup>3</sup>/<sub>8</sub>" & MINI SPORT TACHS

Stewart-Warner TrackForce 3<sup>3</sup>/<sub>8</sub>" and Mini tachometers share common engineering and design with our 5" racing tachs, but in a more compact size that's easier to install. All Stewart-Warner tachs have features you insist on in a racing tach with the unmistakable Stewart-Warner reputation for quality and accuracy.

### TRACKFORCE 3<sup>3</sup>/<sub>8</sub>" ELECTRONIC TACHOMETERS

**Part No. P-82850**

Black Bezel

**Part No. P-82873**

Polished Stainless Steel Bezel

Adjustable shift pointer indicates shift RPM, 0-10,000 RPM range, bold new high visibility graphics, fire orange pointer. TransOptic III lighting, 12 volt negative ground, operates with all original equipment ignition systems and most high output racing ignitions without interference.



P-82854



P-82853

## TRACKFORCE

### TRACKFORCE 3<sup>3</sup>/<sub>8</sub>" MECHANICAL TACHOMETERS

Part No. P-82851

Black Bezel

Part No. P-82871

Polished Stainless Steel Bezel

Adjustable shift pointer indicates shift RPM, 0-10,000 RPM range, bold new high visibility graphics, 2:1 calibration, 5/8" -18 connection with .105" square hole. Uses flexible shaft Part No. 446900-1X-42" or -72", fire orange sweep pointer, TransOptic III lighting. Flat black bezel. For specific flexible shaft information see page 26.

### TRACKFORCE 3<sup>3</sup>/<sub>8</sub>" PEDESTAL MOUNT ELECTRONIC TACHOMETERS

Part No. P-82853

Black Bezel

Same quality and engineering features as P-82850 and P-82873 3<sup>3</sup>/<sub>8</sub>" electronic tachometers. Specially designed, high impact plastic, one piece pedestal housing for extra secure dash or console mounting.

### TRACKFORCE MINI TACHOMETERS

Part No. P-82854

Black Bezel

Compact size (Just 3<sup>1</sup>/<sub>2</sub>" high) allows easy mounting anywhere you choose. 0-8,000 RPM range, bold new graphics, TransOptic III lighting, Bi-Torque mechanism, 12 volt negative ground, one-piece pedestal housing. Operates on all original equipment ignition systems and most aftermarket high output systems as well.

# STEWART-WARNER

# TRACKFORCE

## INSTRUMENTS



## SPEEDOMETERS

For the kit car builder, endurance racing participant or any enthusiast who wants the advantages and accuracy of a truly reliable 160 MPH speedometer, this is for you! Proven Stewart-Warner quality and reliability throughout.

**Part No. P-82852**

Black Bezel

**Part No. P-82872**

Polished Stainless Steel Bezel

0-160 MPH range, 3 $\frac{3}{8}$ " diameter case, mechanically operated via standard  $\frac{5}{8}$ "-18 connection, .105" square hole, TransOptic III lighting for high visibility nighttime readability. Panel mounted with 260° sweep face.



## MOUNTING PANELS

Nothing equals the appearance of a set of fine quality Stewart-Warner TrackForce gauges set in one of our equally fine quality mounting panels. For any installation...drag racing, stock cars or your favorite street machine, these are the genuine Stewart-Warner mounting panels that you want!

Part No.	Gauge Size	No. Gauges	Finish
F-811659	2 <sup>5</sup> / <sub>8</sub> " Case	1	Bright Chrome
F-813877	2 <sup>5</sup> / <sub>8</sub> " Case	2	Bright Chrome
F-813642	2 <sup>5</sup> / <sub>8</sub> " Case	3	Bright Chrome
F-817825	2 <sup>1</sup> / <sub>16</sub> " Case	1	Bright Chrome
F-814143	2 <sup>1</sup> / <sub>16</sub> " Case	2	Bright Chrome
F-811653	2 <sup>1</sup> / <sub>16</sub> " Case	3	Bright Chrome
F-813878	2 <sup>1</sup> / <sub>16</sub> " Case	4	Bright Chrome

### SINGLE GAUGE HOUSINGS-MOUNTINGS

Part No. F-366-MP Cup Mounting Kit. Black krinkle finish. For mounting 2-<sup>5</sup>/<sub>8</sub>" case gauges on console or dash. Holds a single gauge of your choice. Kit includes cup, base, clamp, strap and hardware.

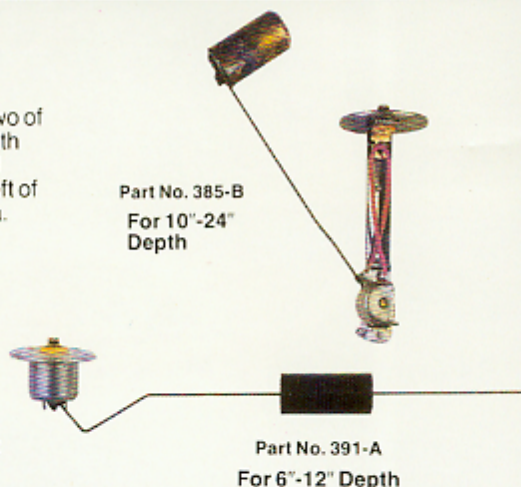
## SENDERS FOR FUEL LEVEL GAUGES

### Choosing Fuel Level Senders

Holes in the tank unit bracket plate are not evenly spaced. The distance between two of the holes is greater than between any other two. When viewing the bracket plate with the widely-separated holes nearest you, the float arm will swing left if it is a lefthand tank unit or right if it is a righthand tank unit. If there is more room in the tank to the left of the tank unit mounting location, use a tank unit that swings to the left and vice versa.

Part No. (12v)	Description
F-385-B	6"-12" depth, LH arm
F-385-C	6"-12" depth, RH arm
F-391-A	10"-15" depth, LH arm
F-391-B	10"-15" depth, RH arm

**Part No. F-366-LP** Order fuel level sender (tank unit) installation kit separately. Kit contains flange 93310, screws, gasket 72030, and washers.



## ELECTRIC TEMPERATURE SENDERS

Gauge Number	Range Type	Universal: 1/4, 3/4, 1/2" PT	Drain Plug 1/2 - 20	Universal Metric
P-82866	100-280 Water	F-280-ED		F-82510
P-82867	140-320 Oil	F-280-EE	F-280-EH	
P-82886	100-280 Water	F-280-ED		F-82510
P-82887	140-320 Oil	F-280-EE	F-280-EH	

Order by Part Number at Left



## TEMPERATURE GAUGE SENDER ADAPTER NUTS FOR MECHANICAL GAUGES

Outside Thread	Min ID	Part No.
1/4" PT*	.3860"	F-428819 (steel)
3/8" PT	.4375"	F-72446 (steel)
1/2" PT	.5000"	F-412208 (brass)



Part No. F-72446

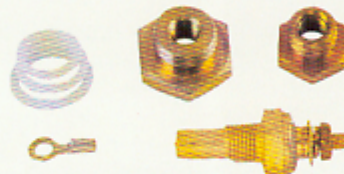
\*For tubing less than 120" in length.

## INSTALLATION KITS, TUBING KITS, SENDERS, AND ADAPTERS

### METRIC ELECTRIC TEMPERATURE SENDING KIT

For use with P-82866 and P-82886 100°-280°F water temperature gauges. Kit includes 12v electric sender with 10mm threads and adapters for 14mm, 16mm, and 18mm threads. Used on Alfa-Romeo, Audi, BMW, Datsun, Fiat, Mazda, Mercedes-Benz, Opel, Peugeot, Toyota, Volkswagen, Volvo, and others.

Part No. F-82510



### METRIC PRESSURE ADAPTER KIT

For use with piping kits, F-82553 or F-366-HM or electric (12v) pressure senders series 279. Kit includes adapter nuts to convert threads on domestic kits or sender to M10x1K, M12x1.5, and M14x1.5 threads. Used on Alfa Romeo, Audi, BMW, Fiat, Mercedes-Benz, Opel, Peugeot, Porsche, Renault, Volkswagen, Volvo and all others.

Part No. F-366-ST



### JAPANESE PRESSURE ADAPTER KIT

For use with F-82553 tubing kit or electric (12v) 279 series pressure senders. Kit includes adapter nuts to convert threads on standard tubing kits or senders to 1/8"-28 BSP male threads. Also contains 1/8"-28 BSP female adapter for applications requiring a tee fitting. Used on Chevy LUV, Datsun, Subaru, Toyota, and others using 1/8"-28 BSP threads.

Part No. F-82561





## SENDERS FOR ELECTRIC PRESSURE GAUGES

Dial Scale	Voltage	Part No.
0-16	12v	F-82504
0-100	12v	F-279-B



Part No. F-279-B

## TUBING KITS FOR PRESSURE GAUGES

Install mechanical vacuum and oil pressure gauges with tubing kit F-82553. Kit includes 6' nylon tubing with Fittings, 1/8" PT connection with 1/4" adapter and instructions. Part No. F-366-FM includes 16' of tubing for rear engine cars.

Part No. F-366-FM

Part No. F-82553



## RUBBER TUBING KIT FOR VACUUM GAUGES

Part No. F-82562 for installing any S-W vacuum gauge in most applications. Kit contains 6' of rubber vacuum tubing, "T" fitting connector, gauge vacuum hose fitting.



Part No. F-82562

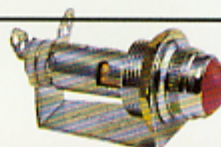
## TEMPERATURE SWITCHES FOR WARNING LIGHTS

Temperature	Thread	1/4"	3/8"	1/2"
225°		F-363-AM	—	F-363-G
250°			—	F-363-W

Part No. F-363-G



## SIGNAL LIGHT Use with any pressure or temperature switch F-420125 for 12v systems.



Part No. F-420125

# TRACKFORCE

## PRESSURE SWITCHES FOR WARNING LIGHTS

	6 lb	15 lb
1/8"	F-364-L	F-364-K



Part No. F-364-K

## REPLACEMENT LIGHTING KITS

Size	Individual Mount	
	Metal Panel	Non-Metallic Panel
2 5/8"	F-366-FK	F-366-FK
2 1/16"	F-366-FK	F-366-FK



Part No. F-366-FK

## FLEXIBLE SHAFTS FOR TACHOMETERS

PART NO. D-446900-1X-42"  
D-446900-1X-72"

Drive tips available. One required for each shaft.

Size	Distributor	Part No.
.104 sq.	Accel, Delco, Mallory	F-818749
.152 tang	Mopar, Mallory	F-818750
.187 tang	Mallory, Vertex	F-817769



## RIGHT ANGLE ADAPTERS

Attached to connection on back of tachometer to change direction of shaft connection. 1:1 ratio. Drive end: .102" sq. tip. Driven end: .105" sq. hole. Part No. F-407010 Direct Rotation



Part No. F-407010

## Installation Tips

### How to Make Installing Your Stewart-Warner TrackForce Instruments Fast and Easy.

Before you begin your installation take a minute to plan out your job.

Stewart-Warner instruments are usually referred to by their case size. This can be 2 $\frac{1}{16}$ " or 2 $\frac{5}{8}$ " diameter for gauges, 3 $\frac{3}{8}$ " or 5" diameter for tachometers. Knowing the housing diameter beforehand will allow you to buy the size instruments or to cut the right size holes to fit.



### Some Points to Consider

**Visibility:** Will the instruments obstruct your view of the road or track? Will the mounting location allow you enough time to read the instruments without removing your eyes from the road for long?

**Wiring and Mounting:** Check behind the panel *before* you drill. Will any wiring be visible? Is there enough room for required wires, cables, tubing or hoses?

**Clearance:** Is there interference with any other existing instruments? How about clearance for steering wheel, dash accessory switches, etc.?

**Safety:** Is it possible that the instrument housings or panels will be a potential safety hazard to driver or passengers in the event of an accident?

**Existing Blind Covers:** Many vehicles were designed for optional factory instruments. You may be able to install your Stewart-Warner instruments in these locations for a "factory" look.

### Installation Tips from the Pro's

Before you attempt installing any instrument, **READ THE INSTRUCTIONS** provided. These instructions were written to help put you on the right track before you run into problems.

Use solderless terminals, splices and connectors for a neater, safer job. Complete kits, including crimping pliers are available at auto parts or large department stores.

Never drill holes in your firewall unless absolutely necessary. You can usually find other factory holes or openings to route wires, tubes, etc.

To locate "hot" wiring take-off points, check at the ignition switch or fuse box terminals. Before you begin looking for live wires it's best to obtain an inexpensive circuit tester or disconnect the battery. You can then re-connect the battery terminals and avoid a possible short circuit.

Good ground contact is a must for any electrical connection. Many a "defective" instrument has been traced back to nothing more than a bad ground.

To make your project easier, we suggest you obtain a factory shop manual that will diagram your car's electrical system for reference.

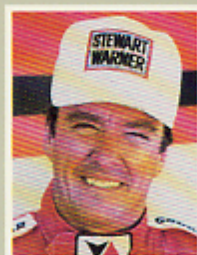
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**Note:** Installation wire and terminals, not included, are required for all electrical gauges and panel-mount tachometers.

**TRACKTESTED & ENDORSED  
BY THE STEWART-WARNER**

**TRACKFORCE...**



**Johnny  
Rutherford**



**Bill  
Elliott**



**Don  
Garlits**



INDIANAPOLIS  
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