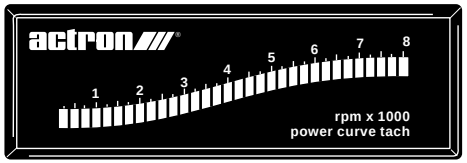
actron® CP8098

ELECTRONIC POWER CURVE TACHOMETER INSTRUCTIONS



GENERAL INFORMATION

Please read this instruction manual and review the installation procedures and kit contents carefully **before** attempting installation.

TOOLS REQUIRED

Wire and terminal crimping, stripping and cutting tool

Small open end wrench set: 1/4" to 7/8"

Electric Drill

Drill bits: 7/64" to 5/16"

Number 2 Phillips screwdriver

Slip joint pliers

PACKAGE CONTENTS

1 - Electronic Power Curve Tachometer with mounting bracket and two (2) knurled thumb screws

2 - Number 6 x 1/2" self-tapping Phillips head screws

4 - Nylon tie wraps

3 - Splice clip terminals

1 - Ring terminal

1 - Slip-on terminal

NOTE

The wire lengths supplied cover the majority of installations. If additional wire is required, use #18 or 20 AWG stranded automotive primary wire.

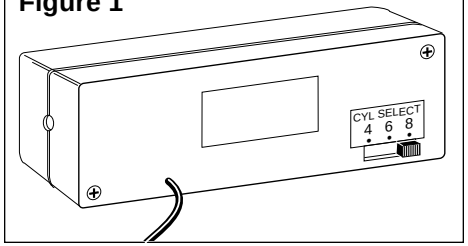
CAUTION

This unit is designed for use on twelve (12) volt, negative (-) ground four (4) cycle automotive type engines. It is not designed for use on positive (+) ground electrical systems, two (2) cycle engines, aircraft or boats. It is not compatible with distributorless ignition systems.

CYLINDER SELECTION

This tachometer should be checked for cylinder setting before installation. Note the switch on the rear of the tachometer (Figure 1) marked "4 cyl, 6 cyl, 8 cyl." Slide this switch to the position which matches the number of cylinders in your engine.

Figure 1



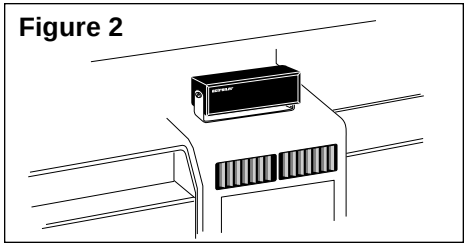
MOUNTING INSTRUCTIONS

The tachometer may be mounted on top of the dashboard or console or under the dashboard. Note that the supplied mounting bracket is "scored" in two locations and the center section can be snapped away leaving two short "L" brackets. This allows increased mounting versatility. Select a mounting position that provides a clear view of the instrument and does not obstruct controls or your view of other dashboard instruments or the road.

CAUTION

Position the instrument in the specific mounting location and determine wire routing and connection locations **before** drilling holes.

Figure 2



TOP OF DASH MOUNTING

Select an area that will permit the mounting holes and cable hole to be drilled without interfering with the equipment and wiring below the dash. Hold the instrument mounting bracket in the mounting position selected and mark the mounting hole locations.

Mark another hole location through which to pass the cable. Drill the base mounting holes with a 7/64" drill when using the supplied self-tapping screws. If you decide to use machine screws and nuts, use 6-32 hardware, and drill the mounting holes with a 9/64" drill. Drill the cable hole with a 5/16" drill. Assemble the instrument to the bracket, swivel it to the best viewing angle, and tighten the knurled thumb screws.

UNDER DASH MOUNTING

Hold the instrument mounting bracket in the position selected and mark the mounting hole locations. Drill these holes with a 7/64" drill when using the supplied self-tapping screws. If you decide to use machine screws and nuts, use 6-32 hardware and drill the mounting holes with a 9/64" drill. Assemble the instrument to the bracket, swivel it to the best viewing angle and tighten the knurled thumb screws.

ELECTRICAL CONNECTIONS

Refer to Figures 3 through 13 while performing the following.

CAUTION

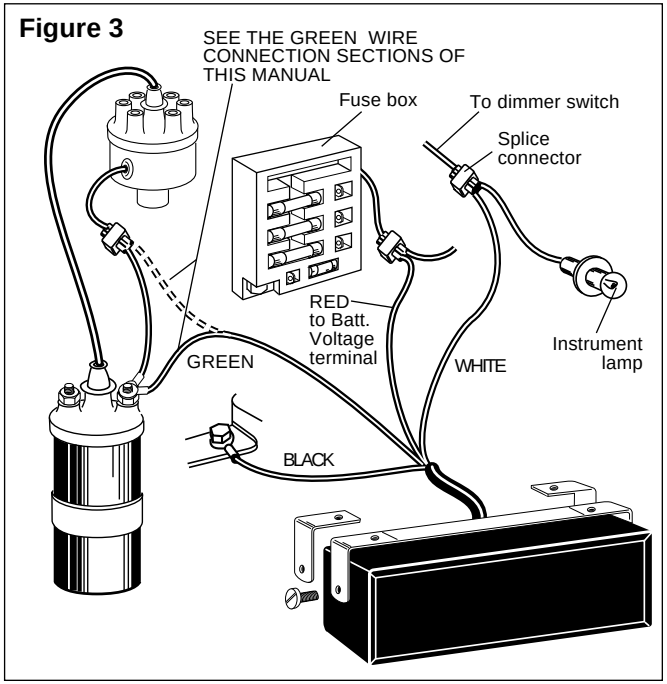
For your own personal safety, and to prevent possible damage to the electrical system during installation, disconnect the negative (-) battery cable. Reconnect this cable after installation is complete.

BLACK, RED AND WHITE WIRE CONNECTIONS – ALL SYSTEMS

Route all wires carefully and secure them with the enclosed nylon tie wraps. Do not route them along or against sharp edges which could cut the insulation. Do not route them along hot engine surfaces such as the exhaust manifold where high temperature could melt the insulation.

1. Connect the BLACK wire to the negative (-) battery terminal using the ring terminal provided or other suitable means.

Figure 3



NOTE

Although electrical ground (BLACK wire connection) is available under the dash-board, grounding the instrument near or under the dash may cause it to operate erratically as **any ground connection other than the negative (-) battery terminal may be "electrically noisy".**

Figure 4

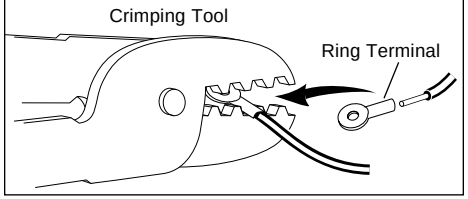
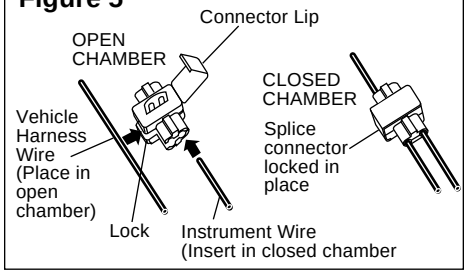


Figure 5



NOTE

Make the RED and WHITE wire connections with the three (3) splice connectors provided. See Figure 5.

Position wires in splice connector with care.

Instrument wire must butt against chamber stop.

Use pliers to press metal clip into chamber.

Close and squeeze connector lip until lock snaps.

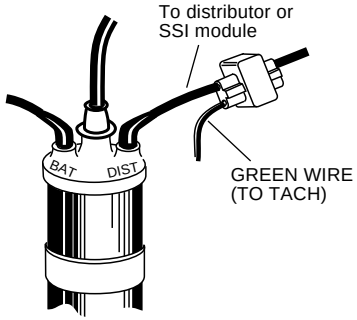
2. Connect the RED wire to any lead which is energized with battery voltage **only** when the ignition switch is in the ON (RUN) position.
3. Connect the WHITE wire to the instrument panel lighting circuit or any lead that is controlled by the dimmer control.

NOTE

Some vehicles (typically imported) wire the dimmer control into the ground side of the instrument panel lighting circuit as opposed to the more conventional "hot" or twelve (12) volt side. In vehicles which use this arrangement, connect the WHITE wire directly to a circuit which is energized by the headlamp switch.

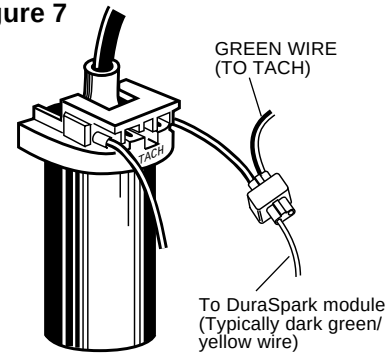
4. Connect the GREEN wire to the negative (-) side of the ignition coil. This terminal may also be referred to as the TACH, TACH TEST, DEC, DIST or ECU terminal. See the figure below which matches your vehicle's ignition system or Figure 3.

Figure 6



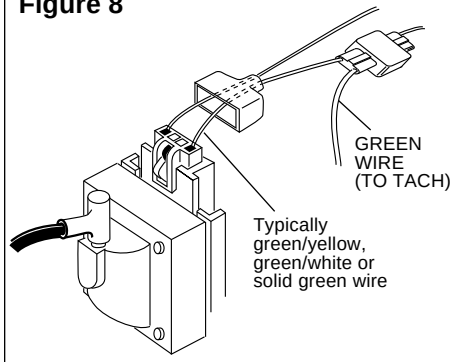
1974 and Earlier Ford Electronic and All breaker Point Ignition Systems

Figure 7



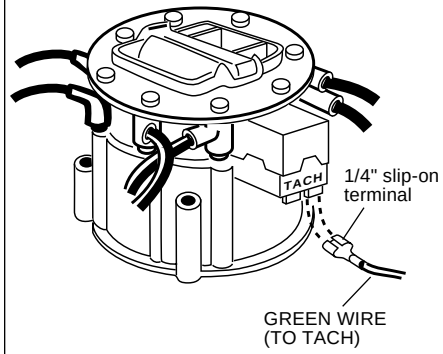
Ford 1975 and Later Solid State & DuraSpark Systems

Figure 8



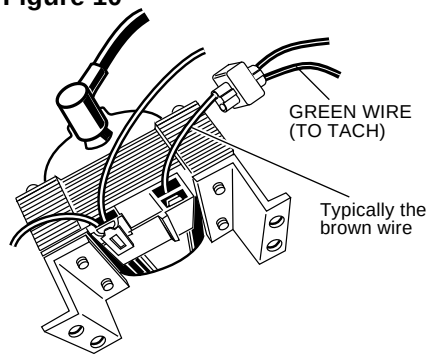
Ford 1980 and Later TFI Systems

Figure 9



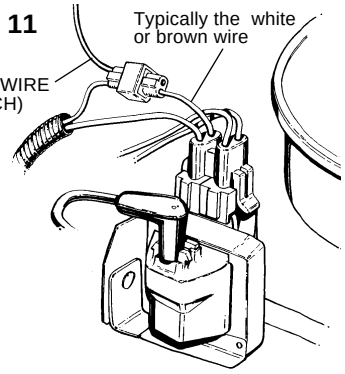
General Motors Integral Coil HEI

Figure 10



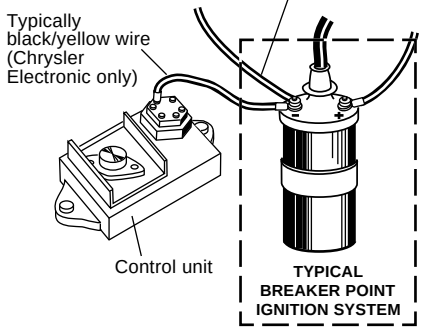
General Motors External Coil HEI 1985 and Earlier

Figure 11



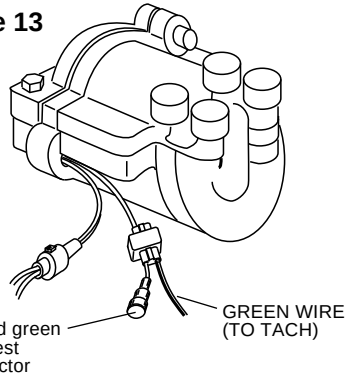
General Motors External Coil HEI 1986 and Later

Figure 12



Chrysler Electronic Ignition and Breaker Point Ignition

Figure 13



Toyota IIA (Integrated Ignition Assembly)

INTERNAL LAMP REPLACEMENT

The instrument has two (2) cylindrical lamps soldered on the unit's printed circuit board. Some basic experience with electronic assemblies is required to replace these lamps. Should you require assistance, your local electronic repair shop should be able to help, or you can return the unit to the factory for this service. The replacement lamps are available from Actron. Call or write for further information.

FULL ONE (1) YEAR WARRANTY

Actron Manufacturing Company, 9999 Walford Avenue, Cleveland, Ohio 44102, warrants to the user that this unit will be free from defects in materials and workmanship for a period of one (1) year from the date of original purchase. Any unit that fails within this period will be repaired or replaced at Actron's option and without charge when returned to the Factory. Actron requests that a copy of the original, dated sales receipt be returned with the unit to determine if the warranty period is still in effect. This warranty does not apply to damages caused by accident, alterations, or improper or unreasonable use. Expendable items, such as batteries, fuses, lamp bulbs, flash tubes are also excluded from this warranty. ACTRON MANUFACTURING COMPANY DISCLAIMS ANY LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY WRITTEN WARRANTY ON THE UNIT. Some states do not allow the disclaimer of liability for incidental or consequential damages, so the above disclaimer may or may not apply to you. This warranty gives specific legal rights, and you may also have rights which vary from state to state.

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2-184501

Customer Service

For product information or customer service please call 1-800-ACTRON-7 (1-800-228-7667) Monday through Friday, between 8:30 a.m. and 4:30 p.m. Eastern time or fax anytime at (216) 651-2388.

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