

## INSTRUCTIONS

*Airguide*<sup>TM</sup>

### SEA-SPEED® MARINE TACHOMETERS

MODELS 685-A and 685-B

Capacitor Discharge Ignition With Breaker Points  
or

Conventional 12 Volt Battery and Coil Ignition

This Airguide Tachometer is designed to operate on motors with 12 volt battery powered breaker point type ignition systems. It will operate on Capacitor Discharge ignition systems *with breaker points*.

It will also operate satisfactorily on conventional 12 volt battery and coil ignition engines. It is *not* designed for Capacitor Discharge ignition outboards *without* points, or for magneto ignition motors.

This tachometer is easy to install. However, these instructions should be read carefully and understood completely for proper installation and operation.

#### GENERAL USES FOR A TACHOMETER

Many benefits are gained by the use of an accurate tachometer with your inboard or outboard marine engine. Increased economy, performance and longer engine life can be obtained by operating your motor within the R.P.M. ranges suggested by the manufacturer. Improvements in propeller selection, motor positioning, boat trim and engine tune are immediately apparent. Airguide Marine Tachometers are ruggedly designed and beautifully styled to give long and accurate service and to add to your boating pleasure.

#### LOCATION OF THE INDICATOR

Locate the tachometer indicator in a position where it may be easily seen from the helm. Remember to check the area behind the mounting position to be sure it is accessible for the attachment of wires.

In the case of flush mounting models, allow sufficient clearance for the case back which extends approximately 1 inch behind the instrument bezel ring.

Airguide Tachometers use a special meter movement having a low external magnetic field to minimize compass interference. But it is advisable that at least 10 inches be allowed between the indicator and the compass, to prevent possible compass errors. The indicator and wires connecting the indicator to the transmitter should be kept away from a radio transmitter and its associated wiring to prevent tachometer error or damage when the radio is in use. Consideration should be given to the possibility of the addition of other matching Airguide Marine instruments such as a speedometer and compass.

#### **INSTALLING THE INDICATOR**

Use the enclosed template to mark the location of holes necessary to mount the indicator. Drill or cut the holes to the sizes indicated and secure the meter by the means of the oval head screws provided.

#### **INSTALLING THE TRANSMITTER**

Location of the transmitter is completely flexible. An out of the way position behind the dash board is fine. Use the transmitter as a template to locate the mounting holes. Drill two  $3/32$ " holes and secure the transmitter with the #6 round head wood screws provided.

#### **CONNECTING THE TRANSMITTER TO THE METER**

**IMPORTANT NOTICE:** Remove the wire jumper clip which is inserted across the terminals on the back of the meter to protect it during production and shipping.

Following the appropriate wiring diagram, connect the Red transmitter lead to the positive (+) terminal of the meter. Connect the Green transmitter lead to the negative (-) terminal of the meter.

Should these wires, or any others be too short, extend them with insulated stranded wire such as plastic coated lamp cord.

**IMPORTANT NOTICE:**

**FOR 3 OR 6 CYLINDER (2 or 4 cycle) ENGINES:** Tape Brown transmitter lead securely to insulate it. It is not used. (See diagram No. 1.)

**FOR 4 CYLINDER, 2 CYCLE or 8 CYLINDER, 4 CYCLE ENGINES:** Connect the Brown transmitter lead to the Green transmitter lead as shown in diagram No. 2.

**CONNECTING THE TRANSMITTER LEADS TO THE IGNITION SYSTEM**

**AT THE ENGINE:** Route the wires to the engine area, extending them as needed with polarity marked insulated stranded wire, such as lamp cord. Remove the engine cover and locate the distributor. Follow the wire from the ignition coil to the points terminal on the distributor (not the heavy gauge high tension lead).

Attach the Yellow transmitter lead to the distributor points terminal. Attach the Black transmitter lead to a good ground on the engine block.

Secure the wires so that they are not pulled loose when the engine turns to any extreme. Fasten the wires leading to the tachometer in such a manner that they are protected from chafing and damage.

**TO TACH LEADS IN THE WIRING HARNESS:** Examine the back of the ignition switch area. In the harness leading from the motor to the switch, you will see a lead tagged "TACH LEAD." Another similar wire is tagged "TACH GROUND." Strip about  $\frac{1}{4}$ " of insulation from each lead.

Using the solderless connectors provided, attach the yellow transmitter lead to the wire "TACH LEAD." Then attach the black transmitter lead to the wire marked "TACH GROUND."

**WIRING DIAGRAMS**

**Airguide Marine Tachometers  
Models 685-A and 685-B  
For Engines With  
Capacitor Discharge Ignition With Breaker Points  
or  
Conventional 12 Volt Battery and Coil Ignition**

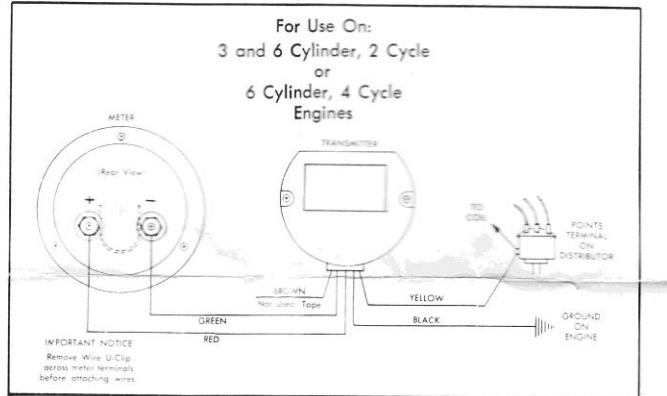


Diagram No. 1

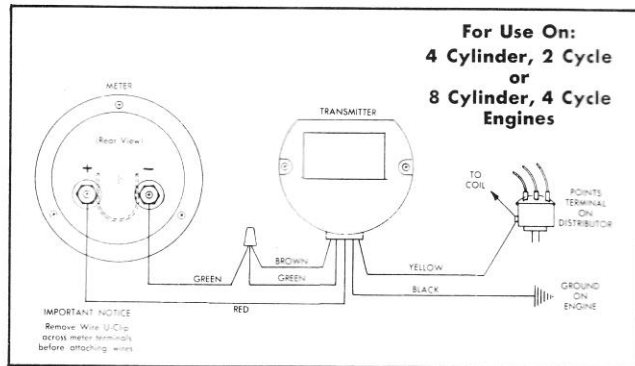
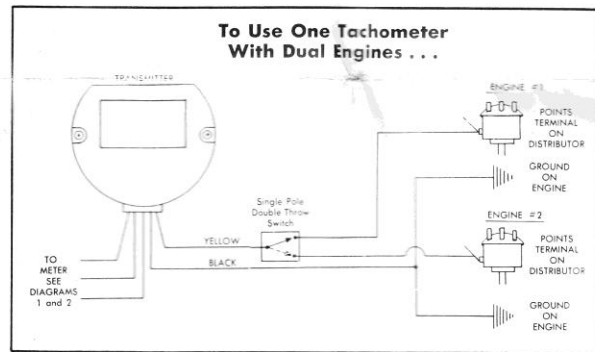
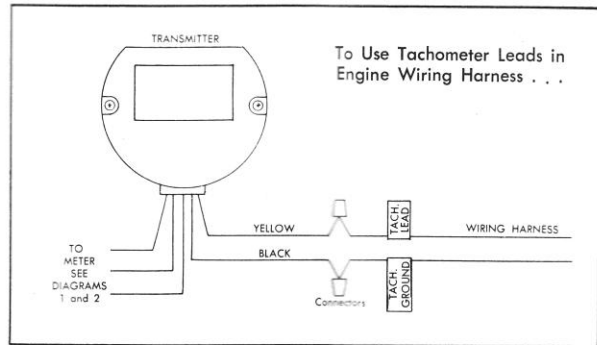


Diagram No. 2

**AUXILIARY WIRING DIAGRAMS**



**GUARANTEE**

We guarantee this Airguide Instrument to be free from defects of workmanship or material and to remain accurate in normal use. If within one year of purchase date this instrument fails to give satisfactory service, it will be repaired or replaced without charge. This guarantee does not cover breakage through accident or misuse. Replacement will be made if this instrument is returned postpaid to

**AIRGUIDE INSTRUMENT COMPANY**  
2210 Wabansia Avenue  
Chicago, Illinois 60647