INSTRUCTIONS

AIRGUIDE MARINE TACHOMETERS

Airguide marine tachometers are manufactured in two basic circuits. These are designed to serve motors with MAGNETO IGNITION and motors with BATTERY IGNITION. Model 653, which is made for motors with magneto ignition will not work with battery ignition. Likewise, Models 651 and 654, designed for use with battery ignition will not work with magneto ignition.

Transmitters and meters are carefully matched in the manufacturing process at the Airguide factory. For this reason, extremely accurate operation is obtained. This care also results in matched units which should not be separated in testing, or use. If you will examine the backs of the components in this carton, you will find the transmitter and the meter bear matching serial numbers. This insures the fact you have a factory-matched unit.

General Uses for a Tachometer

Listed briefly, some of the many benefits of tachometer use with your motor are: Insurance against operating the motor at more than the manufacturer's recommended RPM. Helps you get the maximum efficiency from your motor. Provides evidence while tuning your motor. Helps you select the proper motor-boat-propeller combination. Helps you determine the proper tilt angle and running depth for your motor.

All of these benefits and more may be gained through the proper use of your tachometer. An Airguide speedometer, working alongside your tachometer will provide additional information to increase your boating pleasure.

Location of the Meter

Your meter or tachometer indicator should, of course, be located where you can easily read it when the boat is in operation. Flush mount Models 651A, 653A, and 654A have the transmitter attached to the meter at the factory. For this reason you must remember to allow sufficient space directly behind the meter location for the entire assembly.

Surface mount Models 651B, 653B and 654B are separate from their respective transmitters. About the only restriction on its location is that it should not be within 24" of your compass. This restriction also applies to the flush mount meter. Their installation closer to your compass may seriously affect its accuracy.

Meters should be kept away from radio transmitters and any wiring associated with your radio transmission. Wires between tachometer meter and tachometer transmitter near radio transmitter or antenna lead can cause tachometer error when radio transmitter is in use.

Ordinary care should also be used to locate the meter where it will not be exposed to rain or heavy spray.

Installing the Meter

Use the enclosed template to mark the location of holes and screw locations for securing the meter to your boat. Secure meter in position by means of the (3) #2 x ⅝" oval head wood screws provided.

Installing the Meter Light

Your meter's light is in place. The socket now contains a red 12-volt bulb. If you need to select and purchase a replacement bulb for your boat's electrical system, here is a list of the more prevalent voltages in use and the bulbs for them:

Voltage	*Bulb No.*
1.3	351 Spec.
2.5	43
3.2	45
6	51
12	53
28	313

THE DARK GRAY WIRE MUST ATTACH TO A GROUND in the electrical system. Attach the light gray wire to the same side of your light switch the running light wires occupy.

Installing the Transmitter

The transmitter for the flush mount meter is, of course, attached to the meter. It, therefore, presents no problem once you have provided ample space for it.

Transmitter for the surface mount meters should be placed in some out-of-the-way location. Keep in mind the fact that you will need to run some leads to the meter from this transmitter's location, and other leads to the motor's ignition system. Diagrams of this wiring are provided on pages 4 and 6 of this sheet. Select a suitable location protected from spray and rain. Using the transmitter as a template, mark the indicated mounting hole locations. Drill (2) 3/32" diameter holes and secure transmitter in position by means of the (2) #6 x ⅝" round head wood screws provided.

Connecting the Transmitter

TWO NOTES OF CAUTION!!!

1. **Do NOT connect wires from magneto or distributor breaker points to transmitter terminals marked: "Indicator +, or –." See wiring diagrams.**

2. **On some auto and truck ignition systems, the positive or + terminal of the battery is grounded. When this is the situation, reverse the connections indicated for the yellow and the black transmitter leads.**

When used with the 3-cylinder 1961 (or later) Flying Scott motor: Attach the yellow transmitter lead to the small wire which connects the distributor to the spark coil. There is a patented connector about mid length of this wire, providing an ideal place to complete the splice. The splice should be taped carefully to protect it from excess moisture.

Some motors now are manufactured with tachometer leads as a part of the ignition loom. Where these leads are provided, attach the yellow transmitter lead to the loom at the point marked "TACH." The black transmitter lead is then connected to "GND."

Ordinary rubber or plastic-covered, two-wire conductor such as lamp cord may be used to connect the transmitter to the indicator or to ignition. Following are diagrams which indicate the proper methods to complete the wiring of Airguide Marine Tachometers.

Splicing the inter-connecting leads has been simplified by means of the (4) insulated connectors provided. Strip ¼" of the insulation from the leads to be joined, insert them into the connector together and then screw connector down securely, in a clock-wise direction.

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

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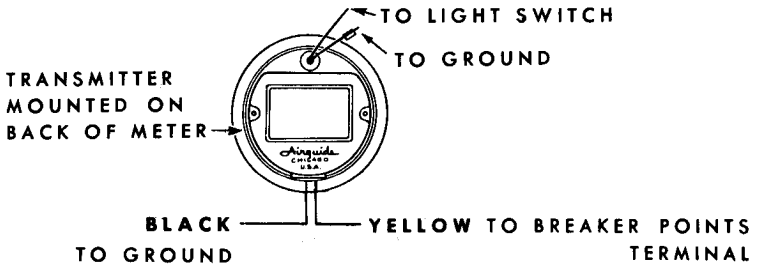
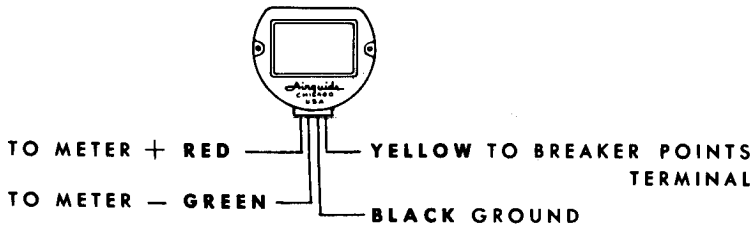
WIRING DIAGRAMS

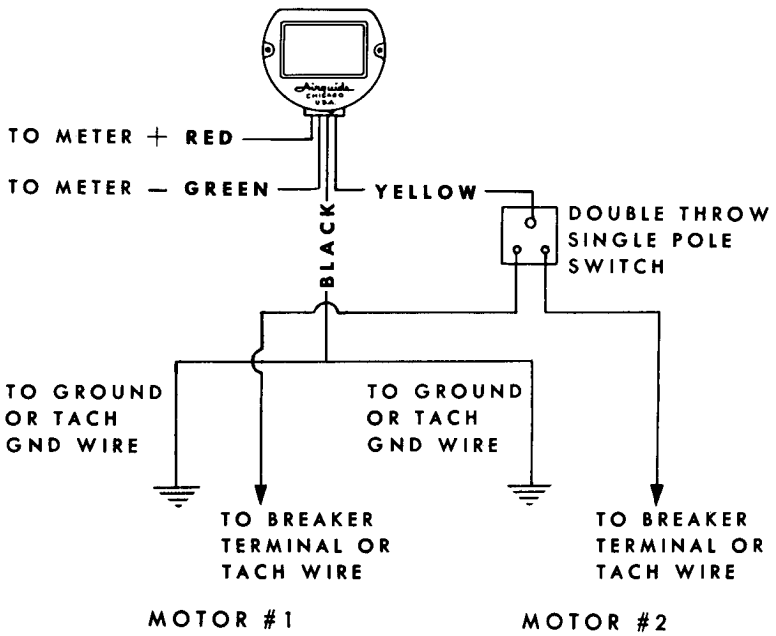
Models 651A & 654A



Models 651B & 654B



DUAL MOTOR INSTALLATION



WIRING DIAGRAMS

Model 653A