



ARC2-A Air/Fuel Ratio Calibrator

Installation Instructions

These instructions are specific to applications where the ARC2 is used to replace air flow meters with mass air flow (MAF) sensors.

- 1) Find a suitable location to mount the ARC2. It may be mounted in a hidden location if it is going to be adjusted one time or occasionally. Most installations call for the ARC2 to be accessible while driving.
- 2) Secure it in place after routing the wires behind the dashboard. There are threaded mounting holes and 3/16" screws on either side of the ARC2. L brackets are provided for mounting.
- ☞ **WARNING!** Disconnect the negative terminal of the battery before connecting the **RED** and **BLACK** leads. Be sure you know the code if you have an anti-theft radio before disconnecting the battery.
- 3) Use solder and heat shrink for the best electrical connections. Crimp connections can be used temporarily to verify the wiring.
- 4) Connect the **BLACK** wire to the sensor ground for the MAF sensor. The **BLACK** wire provides the power ground for the ARC2.
- 5) Locate a suitable fused +12V connection for the **RED** wire. Good locations are on the fuse block or the +12V line to the glove box light. Be sure to connect the **RED** wire to a switched +12V line, otherwise it will drain the battery. The **RED** wire provides the +12V power to run the ARC2.
- 6) Connect the **GREEN** wire to the signal output of the MAF sensor. This is the primary input signal to the ARC2.
- 7) Connect the **BROWN** wire to the signal ground of the MAF sensor. The **BROWN** wire provides a signal ground reference for the MAF sensor.
- 8) A separate switched +12V and power ground are generally required to complete the 4 connections that are typical for MAF sensors.
- 9) Connect the **VIOLET** wire to the air flow meter signal input of the ECU. The **VIOLET** wire carries the output of the ARC2.
- 10) Connect the **GRAY** wire to the air flow meter temp signal input of the ECU. This provides proper temperature compensation. Use a dedicated IAT sensor like the Split Second IAT1 instead of the **GRAY** wire for improved performance in cold start.
- 11) Connect the **YELLOW** wire to the throttle position sensor (TPS) switch which outputs ground at idle and jumps to +5V when the throttle is opened. Some cars have a variable output potentiometer type TPS. The **YELLOW** wire may be connected to this line.
- 12) Connect the **WHITE** wire to the dashboard panel lights. A convenient location can often be found at a dash light or the ash tray light. The **WHITE** wire should be connected to the wire that goes from 0V to +12V when the lights are turned on. This signal is used to dim the ARC2 display at night.
- 13) Reconnect the negative terminal of the battery.

If you have any difficulty with installation, please call us at (949)863-1359 for assistance. We hope you enjoy the precise, filtered operation of your new ARC2 air/fuel ratio calibrator. Keep us in mind when your needs call for an oxygen sensor or air/fuel ratio meter.

THANK YOU FOR CHOOSING SPLIT SECOND