

NOTE:
A "ground" from either an A/C trinary switch OR from any external switch will over-ride the FC-10 setting to force the fan motor to operate.

ADJUSTMENT

1. Turn the FC-10 temperature knob fully "counter clockwise. (fig 3)
2. Warm your engine to operating temperature where you desire your fan to come "ON".
3. **SLOWLY** advance the knob clockwise until the **RED LED** comes "ON" then back-off very slightly This is approximately the final engine temperature. NOTE: there is a small time lag between the "ON" and "OFF" time to keep your fan from cycling.
4. Continue to adjust the knob slightly until you are satisfied with the engine temperature.

The **FC-10** Fan Control is a computer controlled unit which connects to your electronic temperature gauge to receive both **POWER** and **TEMPERATURE SIGNAL**. These connections are available at your gauge or, if needed, from your fuse panel and your gauge sender unit itself.

The **FC-10** has a built-in 40 ampere relay to operate your fan. Your fan, in conjunction with your engine thermostat and temperature gauge, regulates the engine temperature. The relay is essentially an electronically controlled switch. When operated by the **FC-10**, the relay connects the “**COM**” relay terminal to the “**NO**” terminal. This supplies power to your fan motor. The **FC-10 RED LED** indicates power going to your fan motor while the **GREEN LED** shows power at the box.

FC-10 power normally comes from your temperature gauge; however, it can come from your fuse panel if necessary.

There is approximately 6 degrees difference between where the fan comes “**ON**” to where the fan goes “**OFF**” to keep the fan from over-cycling. This varies by the gauge manufacturer.

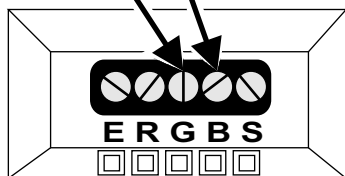
INSTALLATION

1. Wire the terminal strip (fig 2) to your gauge as shown. Terminal “**E**” is optional for A/C or over-ride switches. Each wire is stripped back 1/4” then inserted into the wire opening and screwed down (CW) tight. Use the **SPADE TERMINALS** provided at the relay posts.
2. Using heavy 12 gauge wire, connect the relay terminals **COM** and **NO** as shown. Make certain that the spade terminals fit securely to the relay terminal posts.
3. Apply power to the **FC-10** via your temperature gauge OR externally via your fuse panel. The **GREEN** led will come “**ON**”

SHEET #2

BATTERY (+)

CHASSIS



APPLY POWER TO UNIT #1

NO

DOES THE **GREEN** LED COME ON?

YES

This over-rides the FC-10 internal operation to operate the relay

"GROUND" THE "E" TERMINAL

USE A VOLTMETER OR TEST PROBE TO VERIFY THAT THE FC-10 TERMINAL STRIP HAS POWER.

THE "G" TERMINAL IS "GROUND" (CHASSIS) WHILE THE "B" IS BATTERY (+) VOLTAGE. THIS VOLTAGE MUST BE 12 VOLTS (MINIMUM)

DOES THE **RED** LED COME ON?

YES

NO

CHECK THE POWER AND GROUND **AT** THE FAN

CONFIRM THAT THERE IS BATTERY VOLTAGE ON THE RELAY "COM" SPADE TERMINAL

CHECK GROUND

NOTE: THE CONNECTIONS AT THE RELAY TERMINALS "NO" AND "COM" MAYBE LOOSE. POWER COMES IN "COM" AND GOES OUT "NO". VERIFY YOUR FAN WIRE GROUND IS FIRMLY IN PLACE

IS THE VOLTAGE CORRECT ?

NO

YES

CHECK YOUR POWER FUSE AND WIRING

CONTACT FACTORY
(610) 754-0740

NOTE: THE RED LED WILL **NOT** COME "ON" WITHOUT VOLTAGE AT THE RELAY "COM" SPADE TERMINAL!

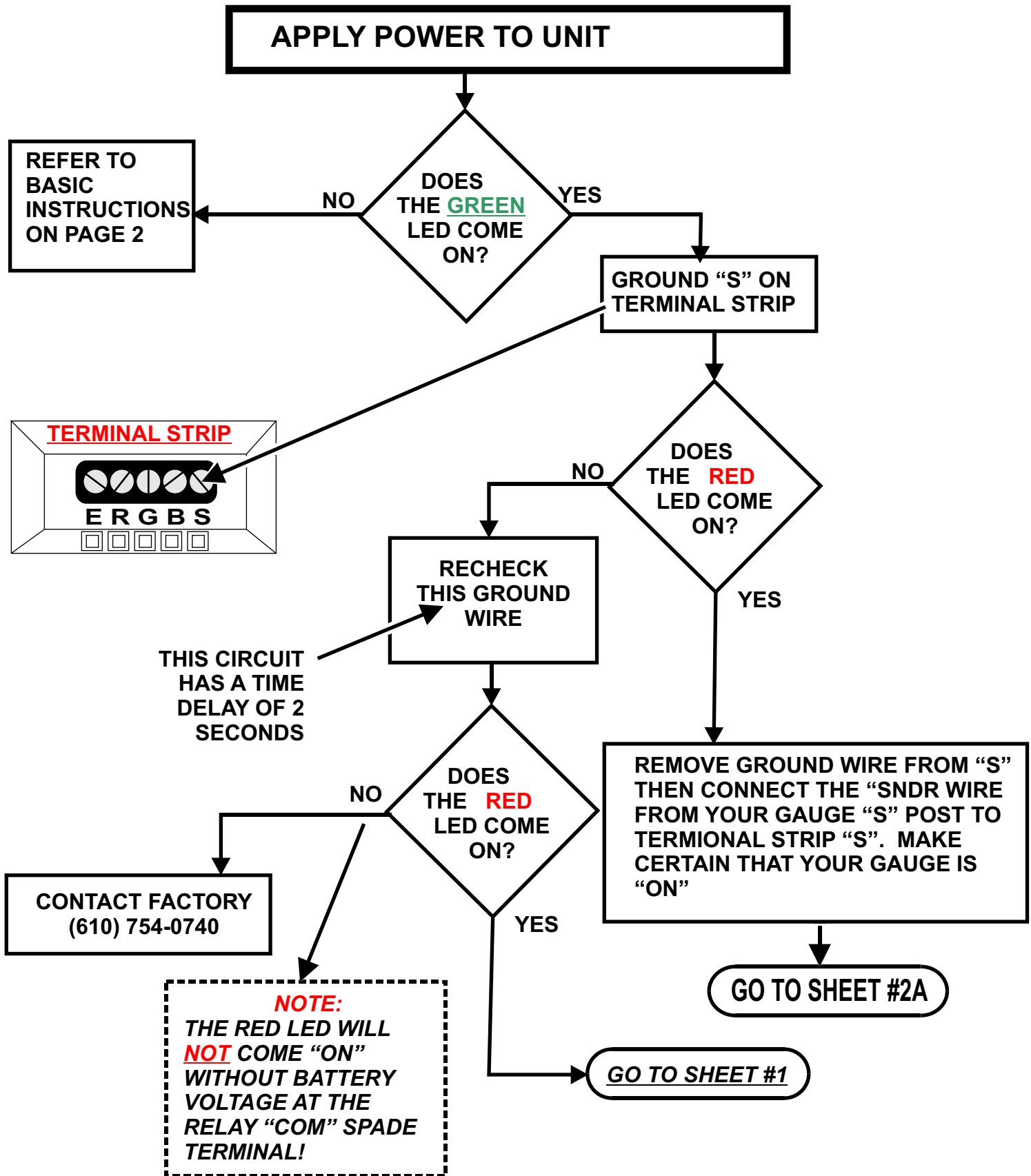
DO YOU HEAR THE RELAY "CLICK ON"?

NO

YES

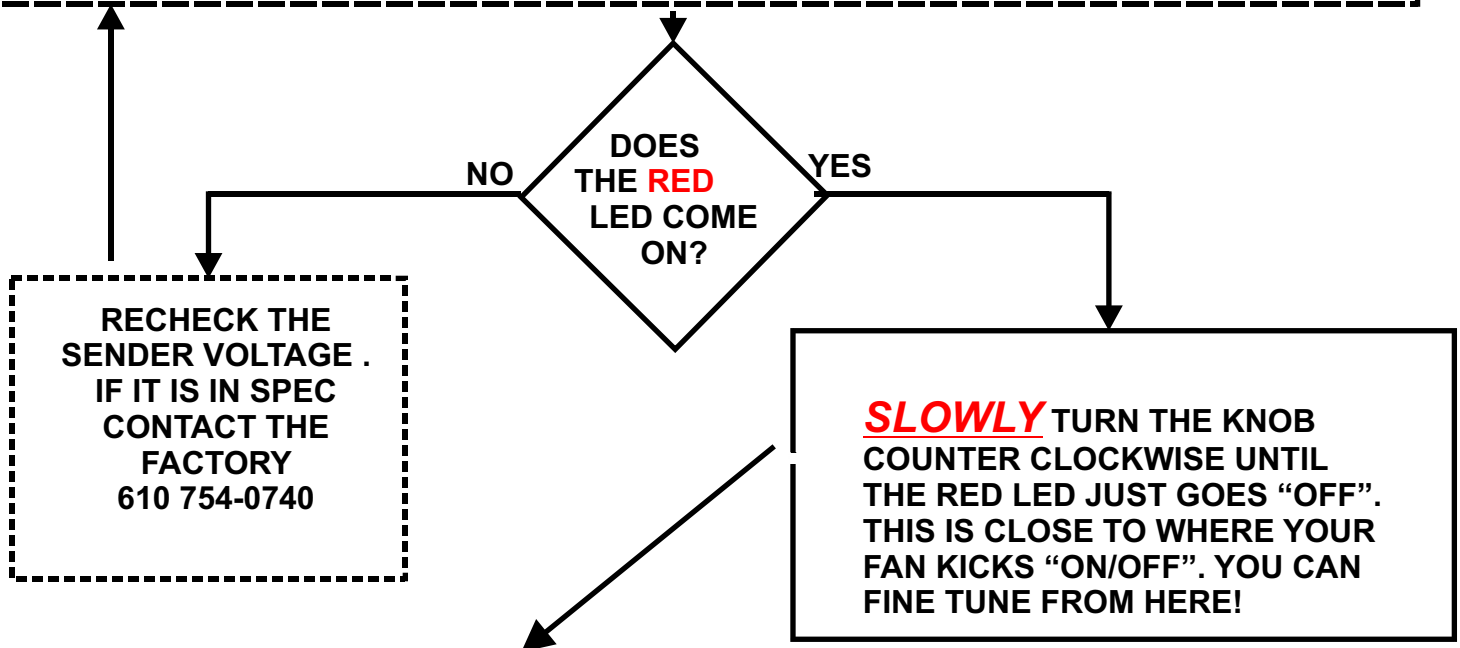
CHECK THE POWER AND GROUND **AT** THE FAN

SHEET #1



SHEET 2A

1. CONNECT THE "S" POST OF YOUR GAUGE TO THE "S" TERMINAL OF THE TERMINAL STRIP.
2. MAKE CERTAIN THAT YOUR GAUGE IS POWERED. AND OPERATING.
3. ALLOW THE GAUGE TEMPERATURE TO RISE TO A POINT WHERE YOU EXPECT THE FAN TO KICK "ON"
4. MEASURE THE VOLTAGE AT THE TERMINAL STRIP "S". YOU CAN MEASURE ACROSS THE "G" AND THE "S" TERMINALS.
5. THIS SENDER VOLTAGE MUST BE BETWEEN 1.5v AND 9.5V WITH THE ENGINE RUNNING AND THE BATTERY VOLTAGE AT 14v OR GREATER.
6. TURN THE TEMPERATURE CONTROL KNOB FULLY CLOCKWISE.



NOTE

There is a 2 second delay during adjustment.

Additionally, there is approximately 6 degrees between where the fan comes "ON" to where the fan quits. That's determined and varies by your temperature gauge. This is used to keep the fan from constantly cycling .

Position the FC-10 temperature control above your thermostat temperature to assure proper operation.

Internally, there is an adjustment to modify the difference of "ON/OFF" temperature.

Call (610) 754-0740 for guidance.