Turn Signal Kit Installation Instructions

for

Model A Fords & Other Antique Vehicles

Logo Lites®

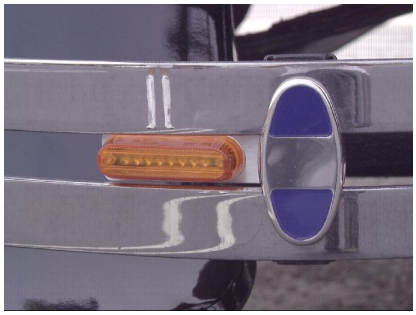
Lifetime Technical Support
support@logolites.com
770-476-7322

www.logolites.com

Manual 100-0005N

Thank you for purchasing a Logo Lites® Turn Signal Kit!

Logo Lites Turn Signal Kit Overview



- Works with 6V and 12V automotive electrical systems.
- Automatically works with Positive and Negative chassis ground polarities without wiring changes.
- Requires no permanent modifications to your vehicle.
- Will not discharge your vehicle battery when not in use (less than 0.000005 Amp current draw when off).
- Pulls less than 1 Amp when signaling for low generator loading.
- Emits mixed audio frequency "cricket chirp" when signaling.
- Easy push-on push-off button interface.
- Includes hazard function.
- Control box has thermal and overload safeties.
- Complete kit for Model A Fords and can be used on other antique vehicles.

Safety Information

- Read the instructions completely before starting the installation.
- Never attempt automobile wiring without first disconnecting the battery.
- Ensure you know where wiring, fuel, brake, and other critical systems are located in the vehicle.
- When using power tools such as a drill, be sure to use the proper safety equipment (eye protection, etc.). Always follow manufacturer's recommendations when using power and hand tools.
- **The installation discussed is for reference only and does not indicate that any particular configuration will be safe for all vehicles. A safe and secure installation is solely the responsibility of the installer!!**

Tools & Supplies Needed

Logo Lites Turn Signals install with simple hand tools found in the average home mechanic's toolbox. Required tools are different for every installation, but a wire crimp tool is required unless you plan to solder your connectors. Some installations will need a drill and 9/64" drill bit. It may be helpful to have tie wraps to suspend wires for a complete installation. A multimeter is helpful to locate power and chassis connections, and to troubleshoot any connection issues.

Operation

There are two switches on the front of the controller. The left switch controls the left turn signals, and the right one controls the right turn signals. When you press one of the switches, you alternate the signals between on or off. For example, press and release the left switch to turn the left turn signals on, then press and release the switch again to turn them off. For hazard signals, simply turn on both left and right turn signals. To turn off the hazards, press and release both switches.

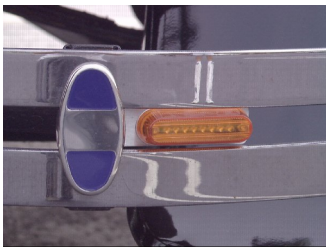
Left and right turn signals will automatically turn off after 4 minutes. Press the button to turn the signal back on if you still need it.

Hazard signals start with a long tone to indicate they have been turned on. Hazard signals do not automatically turn off. The long hazard tone plays every 5 minutes to remind the driver that hazard lights continue to flash.

The signal controller mounts to a metal surface with a very strong magnet. On a Model A, the controller mounts to the gas tank to the left of the steering wheel and the wires are routed from the controller, behind the kick panel area, and out to the four corners of the car.

The controller works on 6 or 12 Volt vehicles with positive or negative ground. The controller "senses" the polarity and voltage, so there is no wiring to reverse or switches to flip.

The Turn Signal control box connects to any of the Logo Lites Type 23 Signal Lights. The most popular design is the Model A bumper bracket signal which mounts between the bumpers under the bumper clamps. Another model mounts to "Duolamp" type Model A brake light buckets. Universal mounts are also available which mount to custom brackets or to holes drilled in the vehicle. The controller cannot drive conventional bulbs without the help of an add-on product called "Bulb Extender."



Installation on Vehicles Other than Model A Fords

If your vehicle is not a Model A Ford, then this manual serves as an installation guide. Over the years, Logo Lites Turn Signals have been installed on Pontiacs, Lasalles, Buicks, Model T Fords, Jeeps, Huppmobiles, custom bikes, and many others. For your antique vehicle, follow the directions as best as you can, knowing in advance that they will differ somewhat for your vehicle. Remember, the benefits of adding turn signals is well worth the effort.

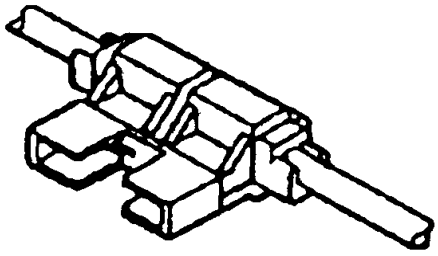
Do Not Remove Magnet Cover

The black magnet cover helps to protect your vehicle's paint from scratches from the magnet. Do not remove this cover. It will not reduce the magnet's ability to hold on to your vehicle.

Prepare the Controller Connector

Before proceeding to the A-Plate™ or Conventional instructions below, unscrew the six screws in the ***Controller Connector*** several turns counter clockwise so that there is enough room for stripped wires to be inserted into the small clamps. The ***Controller Connector*** color may vary from the one pictured to the right. Do NOT insert the ***Controller Connector*** into the controller at this time.

Using the Fuse Holder



Installation on vehicles without an A-Plate™ requires the use of the included fuse holder. To install it, put the fuse holder in your hand with the two metal pieces at the top and facing you. The fuse holder is an insulation displacement type, which means you should not cut the installation off of the wire before you crimp the fuse holder to the wire. The wires go into the fuse holder at the bottom, through the holes from the left and from the right. Push one wire into the right side until it hits the middle stop. It may help to twist the wire to get it to go into the hole. Then take the piece on the top right (with the metal in it) and fold it toward the wire until it contacts the wire. Use pliers to squeeze it down until the latch catches. Repeat this for the wire on the other side. This creates an inline fuse holder.

Installation

Step 1 – Attach Controller

- ☐ **Disconnect vehicle battery.**
- ☐ Decide where you want to install the turn signal controller and attach it with the magnet. The location should be convenient to operate while driving. On a Model A Ford, the controller should mount to the gas tank, behind the dash rail, concealing most of the controller and wiring, similar to the picture.

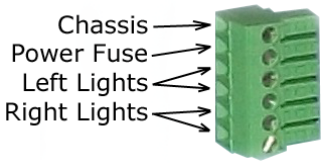
- ☐ Prepare to run wires to the controller by removing panels for access. In a Model A Ford, remove the dash rail, and kick panel.

Step 2 – Attach Signal Lights

- ☐ Attach four signal lights to the vehicle by following the separate instruction manual for the kind of Logo Lites Type 23 Signal Lights you are installing.
- ☐ If you have not already done so, crimp a male bullet connector onto the signal light wire. It is okay to leave the wires hanging in an unfinished manner for now.

Step 3 – Connect Wires

In this step, wires are connected to the chassis, power, and to the four signal lights installed earlier. Instructions are separated into groups, below. Regardless of which installation type you use, the wiring to the ***Controller Connector*** is shown to the right. After wiring is complete, the ***Controller Connector*** plugs into the controller.



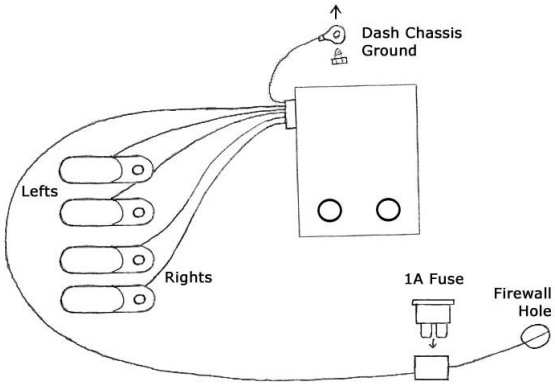
Chassis & Power Wiring for all vehicles equipped *with* a Logo Lites A-Plate™:

- ☐ **Disconnect vehicle battery.**
- ☐ Cut a piece of black wire to connect the controller to one of the A-Plate's chassis terminals in the lower right corner of the fuse block area. On a Model A Ford, the chassis wire will go from the connector, in behind the cowl panel area, out from the cowl panel near the firewall, through the nylon hoop in the A-Plate, and down to one of the convenient chassis terminals.
- ☐ Cut a piece of red wire to connect the controller to an available fuse terminal on the A-Plate. The red wire will follow the same path you chose for the black wire.
- ☐ Strip approximately 1/4" of insulation off both ends of the red and black wires.
- ☐ Crimp red, insulated, 1/4" quick disconnect terminal onto one end of the red wire.
- ☐ Crimp uninsulated 1/4" quick disconnect terminal onto one end of the black wire.
- ☐ Run wires from controller to the A-Plate.
- ☐ Insert exposed end of black wire into Chassis terminal of the ***Controller Connector*** and tighten the screw.
- ☐ Insert exposed end of red wire into Power Fuse terminal of the ***Controller Connector*** and tighten the screw.
- ☐ Push female 1/4" quick disconnect terminal of black wire onto unused male chassis terminal on fuse block.
- ☐ Push red 1/4" quick disconnect terminal of red wire onto the available fuse terminal you chose earlier.
- ☐ Insert 1 Amp ATO fuse into the fuse slot for the terminal you chose earlier.

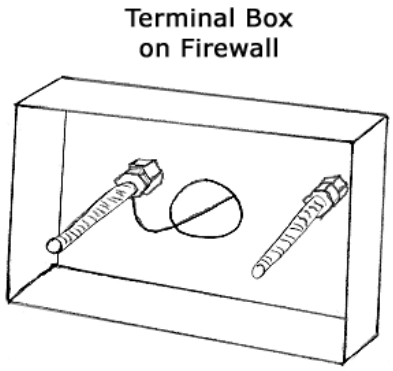
Proceed with Signal Light wiring, below.

Chassis & Power Wiring for Model A Fords *without* a Logo Lites A-Plate:

- ☐ **Disconnect vehicle battery.**
- ☐ Locate a nearby gas tank bolt to use for a chassis ground connection. There should be a gas tank bolt just above the controller on the gas tank, behind the dash rail.
- ☐ Remove this gas tank bolt (and nut on early models).
- ☐ Cut a piece of black wire to go from the controller to the gas tank bolt hole location. This is typically about 6" long.
- ☐ Strip approximately 1/4" of insulation off of both ends of the black wire.
- ☐ Crimp large ring terminal on one end of the short black wire.
- ☐ Insert opposite end of short black wire into Chassis terminal of the ***Controller Connector*** and tighten the screw.



- ☐ Insert gas tank bolt through large ring terminal.
- ☐ Re-install gas tank bolt to complete chassis electrical connection.
- ☐ Cut about 6" of wire off of the included red wire.
- ☐ Strip approximately 1/4" off *one* end of the 6" red wire.
- ☐ Crimp small, insulated #10 ring terminal on exposed end of the 6" fuse wire.
- ☐ Crimp both pieces of red wire into the fuse holder, one on each side (see "Using the Fuse Holder", above).
- ☐ With fuse holder inside the cab, insert ring terminal through terminal box hole in the firewall and into the terminal box.
- ☐ Connect ring terminal to the terminal block post that the ignition coil is not connected to. **Caution: Do NOT connect to ignition switch terminals.**



- ☐ Run the long red wire from fuse holder, routing it behind kick panel area, and up to the controller.
- ☐ Trim the red wire to length, if necessary.
- ☐ Strip approximately 1/4" of insulation off of the end of the red wire.
- ☐ Insert red, power wire into second hole of the ***Controller Connector*** and tighten the screw.
- ☐ Insert 1 Amp ATO fuse into the fuse holder.

Proceed with Signal Light wiring, below.

Chassis & Power Wiring for other vehicles *without* a Logo Lites A-Plate:

- ☐ **Disconnect vehicle battery.**
- ☐ Choose an available power source for your turn signals. The power source should be an "always on" type that has voltage even when the vehicle engine is switched off. Antique cars may have a stud or screw available to connect to with a ring terminal. Some fuse panels have a quick connect terminal labeled BAT for this purpose. *We will call the connector you choose for this purpose the* ***"Power Connector."***

Note – This kit is complete for Model A Ford and many other antique vehicles, but you may need to purchase additional electrical connectors for your vehicle's power and chassis needs. Your local auto parts store should have taps, splices, ring terminals, or other electrical connectors if you need them.

- ☐ Choose an electrical connection location for the a chassis wire. The chassis connection should be to a metal, wire, dash, frame, or body location that electrically connects back to the battery. A common chassis ground point may be available under the dash, or an existing screw may provide a chassis connection. Another option is to drill a hole and use an included #8 self tapping screw, tooth washer, and ring terminal to provide the chassis connection. *We will call the connector you choose for this purpose the* ***"Chassis Connector."***
- ☐ If necessary, drill a hole to connect the ***Chassis Connector***.

- ☐ Cut black wire to length to reach from the ***Chassis Connector*** to the ***Controller Connector***.
- ☐ Cut red wire to length to reach from the ***Power Connector*** to the ***Controller Connector***.
- ☐ Choose a location for the fuse holder. It may be installed anywhere in the red wire but should be located as close to the ***Power Connector*** as possible (6" or less).
- ☐ Cut red wire into two pieces where you want to install the fuse holder.
- ☐ Crimp both pieces of red wire into the fuse holder, one on each side (see "Using the Fuse Holder", above).
- ☐ Strip 1/4" of insulation off of both ends of the red and black wires.
- ☐ Crimp the ***Chassis Connector*** onto the black wire. Your ***Chassis Connector*** may be a non-insulated #8 ring terminal with tooth washer and self tapping screw, female quick disconnect terminal, or other connector you chose for your chassis ground connection earlier.
- ☐ Connect the ***Chassis Connector*** to your vehicle in the chosen location.
- ☐ Run the black wire from the ***Chassis Connector*** to the ***Controller Connector***.
- ☐ Crimp insulated #10 ring terminal, insulated female quick disconnect terminal, or other connector you chose for your ***Power Connector*** onto the red wire.
- ☐ Connect ***Power Connector*** to your vehicle in the chosen location.
- ☐ Run the red wire from the ***Power Connector*** to the ***Controller Connector***.
- ☐ Insert stripped end of black wire into Chassis terminal of the ***Controller Connector*** and tighten screw.
- ☐ Insert stripped end of red wire into Power Fuse terminal of the ***Controller Connector*** and tighten screw.
- ☐ Insert 1 Amp ATO fuse into the fuse holder.

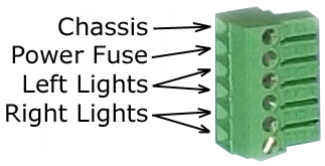
Proceed with Signal Light wiring, below.

Signal Light Wiring:

- ☐ Run a separate wire from ***Controller Connector*** out to the male bullet of each turn signal light. Remember to leave enough extra wire on ***Controller Connector*** end so it can be connected to the controller when you are finished. On a Model A Ford, run the wires behind the cowl panel. Look closely for a hole where the floor, cowl, and firewall meet. This is where the harness for cowl light equipped cars transitions from the frame into the passenger compartment. It is a perfect place for the four signal light wires to exit the interior of the vehicle. An alternate method is to run the wires through the steering column grommet.

TIP – As the wires are run, put a small piece of tape around the controller end of the left hand wires to identify lefts from rights when inserting into the Controller Connector later.

- ☐ Strip approximately 1/4" of insulation off the turn signal end of each of the black wires you just ran.
- ☐ Crimp a female bullet connector to each of the wires and insert turn signal male bullet into female bullet to connect each turn signal wire.
- ☐ Working from turn signal lights back to the controller, suspend wires from vehicle frame or existing harness securely with black tie wraps, a few layers of black tape, or your own preferred method, removing the slack as you go. Trim the wire at the ***Controller Connector*** end as necessary.
- ☐ Strip 1/4" of insulation off of all four black signal wires.
- ☐ Insert the two left turn signal wires into the middle two holes as shown in the picture to the right, and tighten screws. Front and rear are not important. One signal light wire goes into each hole.
- ☐ Like the lefts, insert right turn signal wires into the bottom two holes, and tighten screws.
- ☐ Insert ***Controller Connector*** into controller.
- ☐ Replace any panels you removed earlier for access.
- ☐ Re-connect vehicle battery.



Troubleshooting

If the fuse is blown:

- E-mail or call Tech Support (see front of manual) *before* installing a replacement fuse. In this case, a blown fuse indicates a problem with the vehicle's electrical system.

If turn signal controller does not work:

- Make sure battery is charged and connected.
- Make sure ***Controller Connector*** is fully inserted into controller
- Make sure chassis and power fuse screws are tight.
- Use a multimeter and touch the probes to the chassis and power fuse screws and make sure there is voltage to the unit.
- Make sure the 1 Amp fuse is installed and not blown.
- Check if there is power available to the fuse by touching the probes to the ***Power Connector*** and the ***Chassis Connector*** and fix as necessary.

If turn signal controller works, but one or more signals do not:

- The power wiring to the controller is good! This means the problem is either in the wire going to the nonfunctional signal, or in the chassis-return from the signal. Remember: *electrical circuits have two wires. The black wire going to the signal light is one, and the chassis is the other*.
- Make sure the wire is fully inserted and the screw is tight in the ***Controller Connector***.
- Make sure the wires are securely crimped in both the female and male bullet connectors.
- Make sure the male is fully inserted into the female bullet.
- Make sure there is not a break in the wire between the ***Controller Connector*** and the turn signal light.
- Turn on left & right signals (hazard light function). You may need a friend to help with this test. Strip both ends of a long scrap piece of electrical wire. Touch one end of the wire to the stainless steel bracket of the non-working light, and other end to a working light's stainless steel bracket, the ***Chassis Connector***, or the battery's chassis terminal. If the light now works, the problem is with the chassis connection to the signal light that did not work. Both paint and corrosion will prevent the turn signal from making electrical contact to the bumper bracket. Create a bright metal connection for the chassis connection.
- Swap the wire with another light on the ***Controller Connector***. If light still does not come on, the wire going to the light is shorted to the chassis, there is a poor connection in the bullet connector, or the turn signal assembly has a poor connection to the chassis. If the other light that previously did work now does not work in the same position as the first light that did not work, you either have a bad ***Controller Connector*** or a bad controller. Contact Creative Connections for help.

Parts List

Quantity	Description	Quantity	Description
1	Controller	50’	Black wire
1	Male 6 pin plug-in connector	5’	Red wire
1	Screw #8 x ½” self tapping	1	Female quick disconnect non-insulated terminal
1	5/16” ring non-insulated terminal	1	Female quick disconnect red insulated terminal
1	#10 ring insulated terminal	1	Tooth washer #8
1	#8 ring non-insulated terminal	4	Female bullet connector
1	Logo Lites screwdriver	1	Blade fuse holder
1	Hex key (wrench)	2	1 Amp ATO fuse

Warranty

Creative Connections, Inc. (hereinafter “CCI”) warrants to the Purchaser of this unit that this unit will be free of defects in workmanship and materials for a period of one (1) year from the date of purchase. “Defects” as used herein, refer only to those imperfections which impair the utility of the product. Defective units reported or returned to CCI within one (1) year from date of purchase will be exchanged or repaired without charge at the option of CCI.

This warranty is limited to the repair or exchange of the product and does not cover and CCI will not pay nor provide any other benefit or service including labor or materials which may be necessary to remove or replace a defective unit. CCI shall not be liable for any injury, loss or damage, direct or consequential, arising out of the use or failure of this product. It is the user’s responsibility to determine the suitability of this product for its intended use. User assumes any and all risk or liability in connection with the installation and use of this product. This warranty does not apply to any defects resulting from abuse, negligence, intentional damage, modification, improper installation, unreasonable use, exposure to elements, or over-tightening of fasteners.

Defective units should be reported directly to CCI and not to your retailer. Contact CCI by telephone or write to the address shown in this manual. Identify the Logo Lites product purchased, the date and location of purchase, and the nature of the alleged defect. Do not ship your product back to CCI unless and until specifically directed to do so. Shipping instructions will be provided to you at the appropriate time. Shipping to CCI is the responsibility of the purchaser. All defective products returned must be accompanied by proof of purchase.

This warranty is not transferable and applies only to products sold within the United States of America, the District of Columbia, the Commonwealth of Puerto Rico, territories of the United States, and Canada.

This limited warranty is in lieu of all other express warranties. CCI shall not be liable to any special, incidental or consequential damages. Any implied warranty of fitness for a particular purpose, merchantability or otherwise, applicable to this product, shall be limited in duration to the duration of this limited warranty. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Creative Connections, Inc.
3407 Duluth Highway 120
Duluth, GA 30096, USA