INTRODUCTION AND PREPARATION

Introduction

Thank you for purchasing a Logo Lites® Model A Turn Signal Kit. Your turn signal kit was built to high quality standards to provide you with years of reliable service. This manual should serve as a guide for installing a turn signal kit on your vehicle. Although this guide is thorough, each installation is different, so it can not cover all applications. Most installations take less than three hours.

You can install the turn signal kit yourself IF:

1. you have the right tools,
2. you have a reasonable mechanical and electrical aptitude or experience,
3. you have the knowledge or diagrams of where wiring, fuel lines, brake lines (non-original Model A), etc. are located in the vehicle,
4. and you read and follow the instructions very carefully.

Safety Information

- Read the instructions completely before starting the installation of your turn signal kit.
- Never attempt automobile wiring without first disconnecting the battery.
- 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

- 3/4" wrench
- Wire crimp tool
- Wire cutter
- Wire stripper
- 1/4" Flat blade (common) screwdriver
- Ratchet with 1/2" socket
- Pliers
- Black Tie Wraps (Zip Ties)

OVERVIEW

This kit provides all the necessary parts to install a Logo Lites Turn Signal Kit on a Model A Ford. The two main parts of the kit are the controller (Illustration 1) and the four turn signal assemblies. The turn signal assemblies are mounted on the bumper under the bumper clamps, and the controller is mounted on the gas tank to the left of the steering wheel with a very strong magnet. The controller is mounted such that the turn signal switches are at the bottom as shown in Illustration 1. Generally, 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 cars with positive or negative ground. The controller "senses" the polarity and voltage, so there is no wiring to reverse or switches to flip.

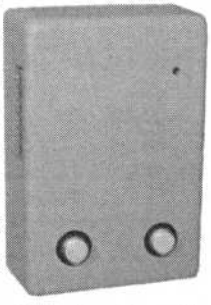


Illustration 1

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 corresponding 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. If you want hazard flashers, simply turn on both left and right turn signals. To turn off the hazard lights, press and release both switches.

HARDWARE COMPONENTS

Review all the parts shown in the list below. We strive to make quality products, so no parts should be missing or damaged. However, if a part is missing or damaged, contact Creative Connections, Inc. about your Logo Lites product at the Consumer Hot Line phone number listed on the front page of this manual for immediate response.

Qty	Item	Qty	Item	Qty	Item
1	Controller	4	Turn Signal Assemblies	1	Male, 6 Pin Connector
1	Small Screwdriver	4	Female Bullet Connectors	4	Male Bullet Connectors
50'	Black Wire	1	Small Ring Terminal	1	Fuse Holder
5'	Red Wire	1	Large Ring Terminal	1	1 Amp Fuse

INSTALLATION

STEP 1: ATTACH TURN SIGNAL ASSEMBLIES

1. Disconnect battery.
2. There are four turn signal assemblies. On each of the assemblies, strip the end of the wire approximately 1/4" and crimp one MALE bullet connector to the turn signal assembly wire.
3. Using 3/4" wrench, remove bumper clamp nut from back of bumper clamp.
4. Remove bumper clamp backing plate.
5. Slide 1 turn signal assembly over the stud with lens assembly towards outside of car.
6. Re-assemble with turn signal assembly between bumper clamp backing plate and bumper bracket and tighten firmly.
7. Repeat for other 3 turn signal assemblies.

TIP: Tie wrap the wires to the bottom of the bumper brackets with black tie wraps to hide the black wire.

STEP 2: RUN WIRES

1. Unscrew the six screws in the green connector several turns so that there is enough room for stripped wires to be inserted under the tiny clamps.
2. Cut a 6" length of black wire and strip both ends approximately 1/4".
3. Crimp large ring terminal on one end of the short black wire.
4. Insert opposite end of short black wire into top most pin of green connector in "Chassis" position of Illustration 2: Connector and tighten screw.
5. Remove driver's side kick panel.

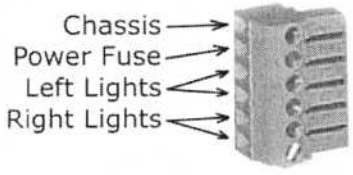


Illustration 2: Connector

TIP: In closed cars, remove dash panel for easiest access.

6. Run a separate wire from dash through kick panel area out to each turn signal assembly. Leave enough extra wire at the dash end to connect to the controller when it is mounted on the gas tank.

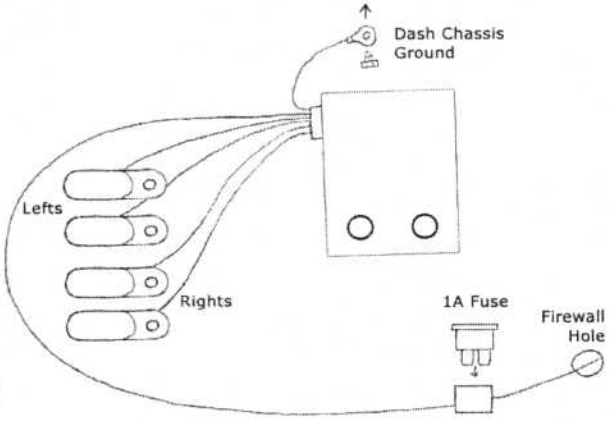
TIP: Run the 4 black wires through steering column grommet.

TIP: Tie wrap rear wires to original rear going wire harness.

TIP: Run rear wire across with right brake light wire, if equipped.

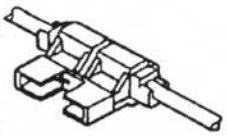
TIP: Put a small piece of tape around the dash end of the left hand wires when you run them to keep track of them for inserting into the 6 pin connector.

7. At each corner of the car, crimp a FEMALE bullet connector to the wire.



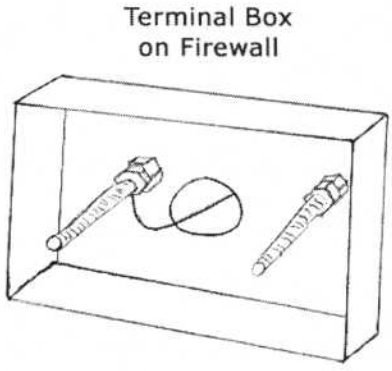
Drawing 1: Wiring Diagram

8. Insert turn signal assembly MALE bullet connector into FEMALE bullet connector to connect turn signal to wire.
9. Remove left most gas tank bolt with 1/2" socket wrench.
10. Insert gas tank bolt through large ring terminal on short black wire attached to green connector.
11. Re-install gas tank bolt to complete chassis connection.
12. The fuse holder must now be installed in the 5' red wire. Start by cutting about 6" of red wire off of the 5' piece.
13. Strip approximately 1/4" off *one* end of the 6" red wire.
14. Crimp small, insulated #10 ring terminal on exposed end of the 6" fuse wire.
15. Crimp opposite end of the 6" wire to blue fuse holder.



Drawing 2: Fuse Holder

TIP: If you are not familiar with this type of fuse holder, then hold it 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 do not need to 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, you may have to twist the wire to get it to go into the hole. Now take the piece on the top right (with the metal in it) and fold it towards the wire until it contacts the wire. Next take a pair of pliers and press it the rest of the way down until the latch catches. Repeat this for the wire on the left side.



Drawing 3: Terminal Box

16. Crimp remaining red wire to the opposite side of the fuse holder.
17. With fuse holder inside the cab, insert ring terminal through terminal box hole in firewall and into the terminal box.
18. Connect ring terminal to the terminal block post that the ignition coil is not connected too. **Caution: Do NOT connect to ignition switch terminals.**
19. Run the long red wire from fuse holder, routing it behind kick panel area, and up to the dash.
20. Strip approximately 1/4" of insulation off of the end of the red wire and the 4 black wires now located near dash area.
21. Insert red, power wire into second hole of green connector like Illustration 2: Connector, and tighten screw.
22. Insert left turn signal (two) wires into the next two holes like Illustration 2: Connector, and tighten screws. Front and rear are not important. Just make sure the left signals are in these two holes.
23. Insert right turn signal wires into the bottom two holes as seen in Illustration 2: Connector, and tighten screws. Again, front and rear are not important as long as the right signals are in the bottom holes.
24. Replace kick panel.

Step 3: Attach Controller

1. Fully insert green connector into controller jack.
2. Allow magnet to attach the controller to the gas tank similar to Illustration 3.
3. Install 1 Amp safety fuse into fuse holder.
4. Re-connect battery.

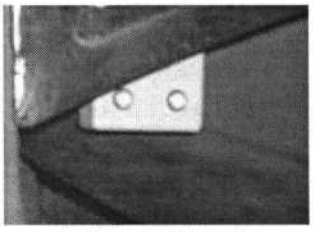


Illustration 3

TROUBLESHOOTING

Symptom	Test/Solution
Turn Signals Do Not Work:	1. Make sure battery is charged and connected. 2. Make sure green connector is fully inserted and power wire is tight. 3. Make sure chassis wire is tight in green connector and is tightly connected to chassis at the ring terminal. 4. Touch test light to second screw of green connector. If it does not light, the fuse may be blown, the power connection may not be good at the terminal block post, or the screw may not be tight enough. **Unit can safely use 1, 2, or 3 Amp fuse.**
One Signal Light Does Not Work	1. Turn on left & right signals. Strip both ends of a long scrap piece of electrical wire. Touch one end of wire to stainless steel bracket of left light, and other end to right stainless steel bracket at the same time. If both lights now work, the problem is with the chassis connection to the light that did not work. Either paint or corrosion will prevent the turn signal from making electrical contact to the bumper bracket. 2. Swap the wire with another light on the green 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 green connector or a bad controller. Contact Creative Connections at the Consumer Hot Line on the front of this manual for help.

LIMITED 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 through the Consumer Hot Line through the telephone number shown on the front of this manual or write to the address shown on the front of the 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. 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.