

## INSTALLATION INSTRUCTIONS FOR:

C9WY-13A366-AR Sequential flasher kit for 1969-1973 Cougars, 1969-1971 T-Birds,  
and 1969-1970 Shelby Mustangs

## INTRODUCTION:

The C9WY-13A366-AR sequential flasher kit is an electronic replacement for the sequential flasher used in 1969-1973 Cougars, 1969-1971 T-Birds, and 1969-1970 Shelby Mustangs. Parts included in this kit are: Sequential control unit with pre-soldered connectors, typical application schematic, and a troubleshooting guide.

## INSTALLATION:

1. Locate the original sequential flasher hanging in the fender well under the trunk mat on the driver's side on Cougars and Shelby Mustangs or mounted up behind the rear seat on the driver's side on T-Birds. The sequential flasher is the unit that has a black plastic case with two connectors. 1970 and later cars also have a set of four relays taped to the outside of the box. Disconnect the black and red connectors and remove the original unit from the car. **NOTE: If this sequencer is to be installed in a 1971 Cougar with a hard plastic grey connector (built from 2/1/71 to 5/1/71), the original wiring and grey connectors must be removed and soldered onto the new unit. The 4 relays are not used and must be removed.**
2. Using a small flat-blade screwdriver, carefully pry apart the two halves of the sequencer case. Remove the old circuit board and replace using the C9WY-13A366-AR circuit board. Snap the two halves of the case back together. If the tabs have broken off, use a small amount of model glue to hold the case together. Replace the sequencer back in the original location.
3. Locate the sequential trigger (red or green flasher can, marked 4 Lamp sequential trigger). On 1969-1970 Cougars and Shelby Mustangs it is snapped into a clip mounted behind the dash to the right of the radio. On later Cougars and all T-Birds it is located behind a panel that is inside the top of the glovebox.  
  
Verify that the flasher is the correct unit and if it still works correctly, reuse it. If not, replace it with a D0WY-13350-AR electronic flasher (not included, but available from your dealer). This is a special long-cycle time heavy-duty electronic flasher. **Do not use a 552 flasher with the new sequencer – it will not work correctly.**
4. Test the operation of both turn signals and the brake lights before operating the vehicle. Make sure that the vehicle battery is fully charged and that the vehicle is running before testing. A low battery may cause the system to fail to sequence properly. If problems occur, check all bulbs, sockets, and connectors in the system.

## WARRANTY:

The C9WY-13A366-AR unit is covered by a limited warranty for two years after purchase. Should the unit fail during this warranty period, it will be repaired or replaced upon prepaid return to your dealer. This limited warranty does not include repair of damage to the unit resulting from accident, disaster, misuse, abuse, unauthorized modifications or any use beyond normal operating conditions. This warranty excludes any coverage for incidental or consequential damages.



**All lights on but not flashing:**

This usually means that the turn signal flasher can is bad. This is a special unit designed specifically for the Ford sequencer and is no longer available from Ford. An electronic replacement is available. Note: If any lights are bad, flashing will stop because the flasher can is calibrated for 4 lights (3 rear, 1 front). Also, if the alternator/battery output is weak, there will not be sufficient current to flash the lights.

**All lights flash together:**

The special turn signal flasher can has probably been replaced with a standard unit. The original flasher can (red or green, labeled "4 lamp sequential trigger") is a special unit designed specifically for the Ford sequencer and is no longer available from Ford. An electronic replacement, DOWY-13350-AR, is available from your parts dealer. If this occurs on a 1970 and up model when headlights or parking lights are on, the off duration of the flasher is too short. Replace the thermal flasher with an electronic flasher from your parts dealer.

**One or more lights not flashing:**

If all bulbs are OK, the trouble is most likely in the sequential flasher unit in the trunk. Ford has obsoleted this part but an electronic replacement is available from your parts dealer.

**One side flashing only:**

If only one side flashes, the turn signal switch in the column is most likely bad.

**Front lights only flashing:**

If only the front turn signal lights flash, the turn signal switch in the column is most likely bad.

**Inner lights only flashing:**

If only the inner-most rear lights flash (and the front lights), use a tester to determine whether there is power available at the red harness connector on the Green-White (left turn signal on) and on the White-Blue (right turn signal on) wires. If both signals are OK, the sequential flasher unit in the trunk is most likely bad. Otherwise, the turn signal switch in the column is bad.

**Outer light on both sides not flashing or flashing very dim:**

If the inner and center lights are flashing correctly and the outer light is not flashing or flashing very dim (especially with the parking or headlights on), the flasher can (located under the dash) is turning off and on too fast. The lights should all stay on about .3 to .4 seconds. Replace the flasher can with a slower unit that will allow enough time for the outer light to turn on brightly.

**No brake lights:**

For the brake lights to work, you *must* have power on three wires at the sequential flasher connectors in the trunk:

- Green-Orange (LH Inner light)
- Orange-Blue (RH Inner light)
- Green (Brake signal from brake light switch under the dash)

If there is no power on the Green wire, check the brake light switch under the dash attached to the brake pedal. If there is no power on the Green-Orange or Orange-Blue wire, check the turn signal switch connector under the dash. Make sure all the pins are seated into the connector shells and the both connectors are fully seated together. If the connector is ok, the turn signal switch is probably bad.

**No brake lights on either the Right or the Left side:**

Check the turn signal switch connector under the dash - see previous section for details. If the brake light switch tests ok, then the turn signal switch is most likely bad.

## Troubleshooting 1969-1973 Sequential Turn Signals

This guide covers troubleshooting 1969-1973 Mercury Cougar, 1969-1971 Thunderbird, and 1969-1970 Shelby Mustang sequential turn signals.

The turn signal system has four parts: the turn signal switch, (located in the steering column), a turn signal flasher can (located under the dash), an emergency (also located under the dash), and a turn signal sequencer (a black plastic case located in the driver's side fender well under the trunk mat in Cougars and Shelby Mustangs and behind the backseat in T-Birds). The most failure prone parts are the turn signal switch, the turn signal flasher can and the sequencer.

Basically, the system works as follows: when the directional lever on the turn signal switch is depressed, it completes circuits that select and feed power to the corresponding bank of lights. Power for the lights is fed through the flasher can to the sequencer and to the inner tail lights. The sequencer has electronic switches corresponding to the center, and outboard tail lights. When the turn signal switch and the brakes are applied simultaneously, the sequencer causes the turn signal to override the brake lights for the side chosen. Normally, applying the brake causes all the rear tail lights to come on at the same time. Pulling the emergency switch causes all the rear tail lights and the front indicator lights to flash together.

Now that you understand a little about how your turn signal system works, you can start troubleshooting. You will need a VOM (Volt-Ohm-Meter) and the circuit diagram for your year car. The most common complaints are: no turn signals, one or more lights on but not flashing, all lights flash together, and one or more lights flashing. Obviously, the first place to check is the fuse under the dash in the fuse box. The next item is to check all bulbs and their sockets. If these are all good, then now the real sleuthing must begin!

### No turn signals:

When the turn signal lever is depressed, no lights come on anywhere. Start by depressing the emergency switch, if the emergency flashers work, the turn signal switch is most likely bad. Disconnect the turn signal switch from the harness under the dash next to the steering column and check it according to Table 1. The table shows wire pairs that should be shorted together when the switch is in the position indicated. If any of the connections are open, replace the switch. Usually the switch has failed when the plastic around the riveted contacts in the area around the emergency button appears to be burnt or melted. The switch has failed when one of the rivets has raised up about 1/16 of an inch from flush. This can only be seen with the steering wheel removed.

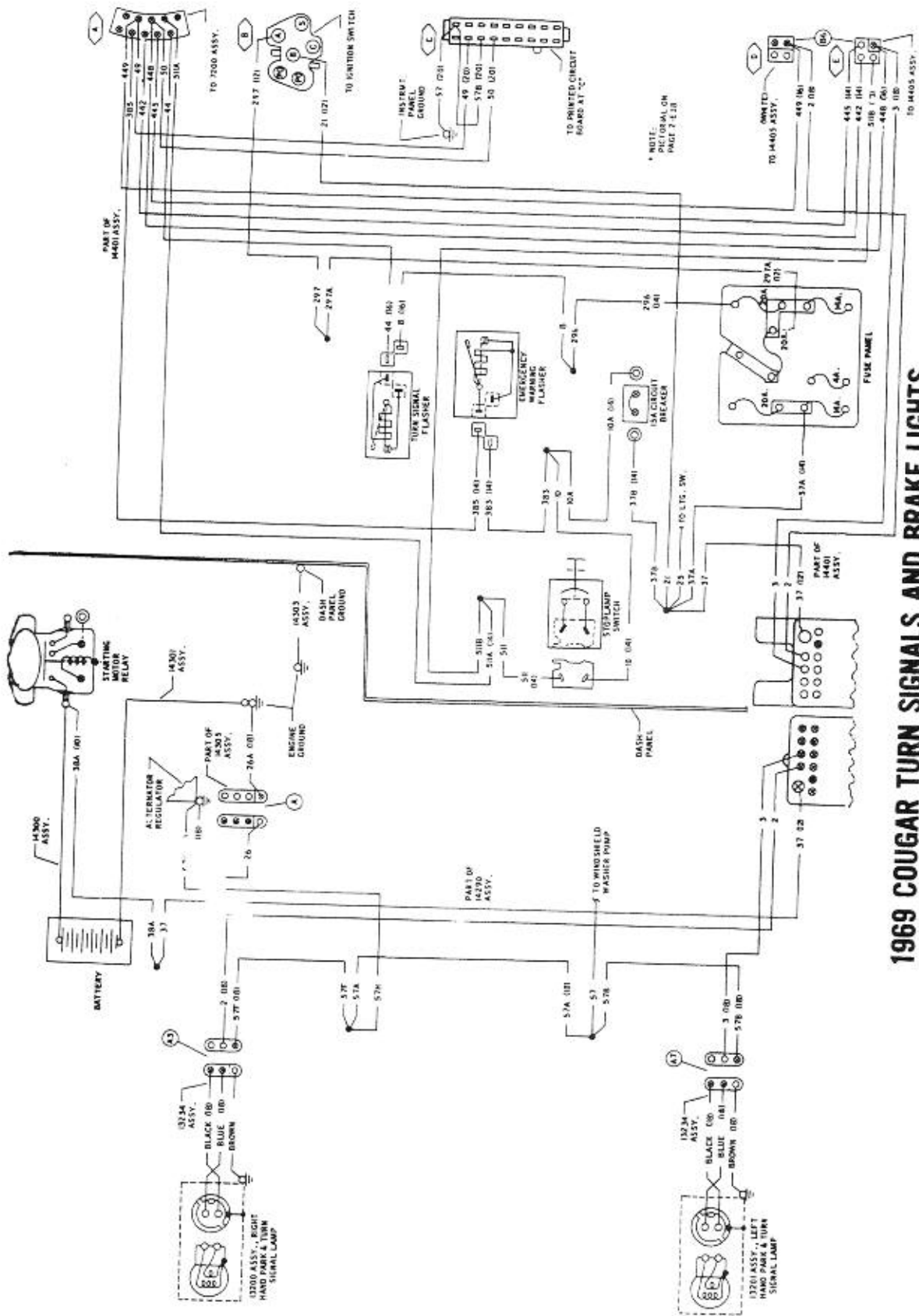
**For the turn signals to work, you *must* have power as follows** at the sequential flasher connectors in the trunk:

**Left turn signal operation:** Green-Orange (LH Inner light) *AND* Green-White (LH Front)

**Right turn signal operation:** Orange-Blue (RH Inner light) *AND* White-Blue (RH Front)

CENTER POSITION	LEFT TURN	RIGHT TURN
Green, Orange-Blue	Blue, Green-White	Blue, Orange-Blue
Green, Green-Orange	Blue, Green-Orange	Blue, White-Blue
Blue, Red	Blue, Red	Blue, Red
	Green, Orange-Blue	Green, Green-Orange

Table 1. Turn signal switch connections



**1969 COUGAR TURN SIGNALS AND BRAKE LIGHTS**

