Flyin' Miata INSTALLATION INSTRUCTIONS

DRL KIT, 90-15
28-39610

**Shown with switchback style LEDs - sold separately*

Thanks for purchasing this DRL kit. We hope you enjoy the added safety and style this kit adds to your Miata. If you have any questions during installation or suggestions for improvement to the product or the instructions - please don't hesitate to call or email.

WARNING: Not everyone can perform every installation. It is critical that you be honest with yourself in regards to your ability. We're more than happy to help, but there are only so many things we can do from the other end of a phone / computer. If in doubt, discuss the install with us before you dive in. Improper installation could cause injury and / or death!

Required tools:

- **Wire cutter/crimper/stripper tool**
- **Heat gun**

There are two distinct methods for installing this kit based on what front turn signal bulbs you are using. Depending on the installation, the module in this kit will illuminate one of the two circuits, either the park lights or the turn signals.

Option 1: have the PARK LIGHTS illuminated as the DRLs:

- **This option is required when using incandescent (stock) bulbs on NBs and NCs.** There is risk that the bulb housings could melt if the turn signal circuit is illuminated for prolonged periods of time. Since the light output of the park lights is pretty dim, especially during the day, we do recommend upgrading to LED bulbs.
- This option is recommended when using switchbacks LED bulbs (M28-10000). With switchbacks, the park light illuminates white, which closely resembles modern car DRLs. The switchbacks have equally bright park and turn signal light output. They rely on the change in color to distinguish between the two functions.
- This option is recommended for NC1 (2006-2008) owners who want to have a white DRL. (NC1s are unique in that the park and turn signal lights are separate bulbs)

Option 2: have the TURN SIGNAL LIGHTS illuminated as the DRLs:

- This option is recommended when using standard LED bulbs. Non-switchback LEDs have a dim park light and bright turn signal, like the stock bulbs.
- This option is recommended when using incandescent (stock) bulbs on NAs. Canadian cars illuminate the turn signal circuit for their DRLs proving the housings can withstand the heat.

Note: The DRL module is weather resistant, but it is not water tight so be sure to position the module with the wires coming out at the bottom and avoid mounting it in an area where it could get splashed. We include a 3D-printed bracket (28-39618) to allow for easy mounting of the module. There is an optional groove added to the bracket to allow for a zip-tie to be added for additional grip if necessary. Do not overtighten the ziptie around the module as it could result in damage to the module or compromise the seal allowing for moisture to get inside.

ALL NC installs: The wire colors called out in these instructions are from the harness side of the main 6-pin connector for each headlight. The small sub-harness per headlight will have wire colors that vary. If wiring into the sub-harness, be sure to very wire colors from the main plug.

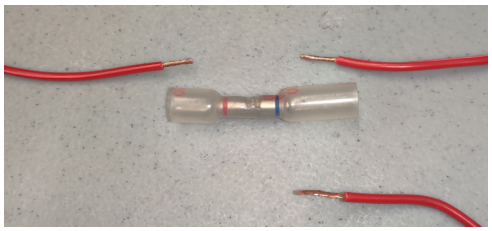
Installation with the park lights illuminated as the DRLs
(Option 1)

***NC1 installations** require some deviations from the standard instructions to prevent the park lights from flashing along with the turn signals. Note that these deviations will also result in:*

- *the DRL (park light) remaining illuminated while the turn signal is active.*
- *the inability to use synchronized mode (see page 7 for details).*

1. Use the diagram on page 4 as reference for the following steps. **NC1s refer to the diagram on page 8 instead.**

2. Locate the wires for the driver side turn/parking light. On NA/NBs, the wiring is accessible from the engine bay, where on the NC it is accessible from within the front wheel wells, visible once the forward fender liner is removed. Make the following connections between them and the DRL module:



3. Using a 3-way butt connector, join the green wire from the module to the ground (black) wire. A sample of a 3-way butt connector shown.

4. Using a 3-way butt connector, join the pink wire from the module to the turn signal wire (NA8 = green/orange, NA6/NB/NC = green/black). **NC1s, skip this step**.

5. Using a pink butt connector, connect the violet wire from the module to the bulb side of the park light wire (NA/NB = red/black, NC = black/green). The harness side of the park light wire does not get used and needs to be taped up.

6. Using pink butt connectors, connect the red and brown wires from the module to the red and black extension wires provided (red to red, brown to black). Route the lengthened wires over to the passenger side of the car.

7. Locate the wires for the passenger side turn/parking light and make the following connections between them and the DRL module:

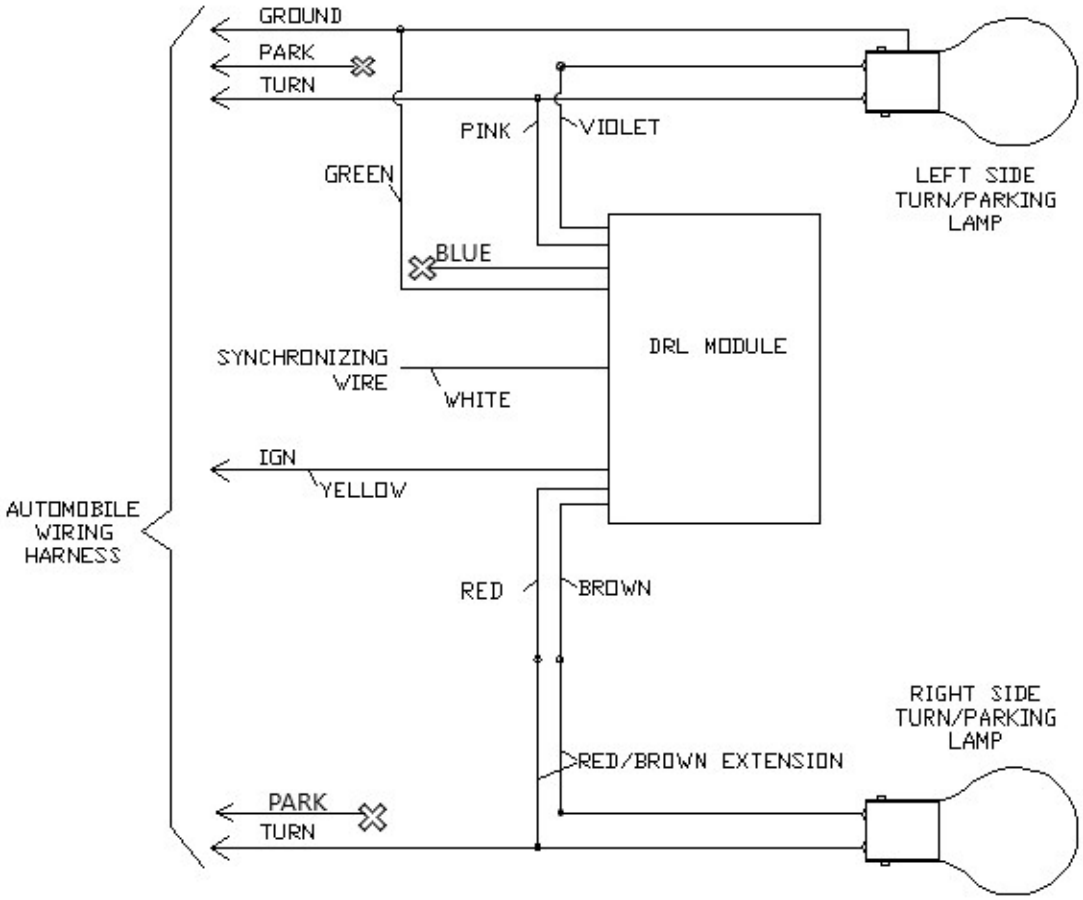
8. Using a 3-way butt connector, join the red extension wire to the turn signal wire (NA8= green/yellow, NA6/NB/NC = green/white). **NC1s, skip this step.**

9. Using a pink butt connector, connect the black extension wire to the bulb side of the park light wire (NA/NB = red/black, NC = black/green). The harness side of the park light wire does not get used and needs to be taped up.

10. The yellow wire coming from the module needs to be connected to a switched power source. On NA/NBs, we recommend using the wire feeding the evap purge solenoid (white/red). On NCs, we recommend teeing into the black/white wire under the “engine” fuse within the engine bay fuse box. Just be sure the circuit that is used is only energized with the ignition on and is fused for at least 15 amps. An additional length of yellow wire is included in order to extend this wire.

11. At this point, you should have some unused wires. The blue wire is not used and should be taped up. The white wire is the synchronizing wire. The description on page 7 describes the function and how to wire it in if desired. **NC1s will also need to tape up the unused pink and red wires.**

Option 1 wiring diagram



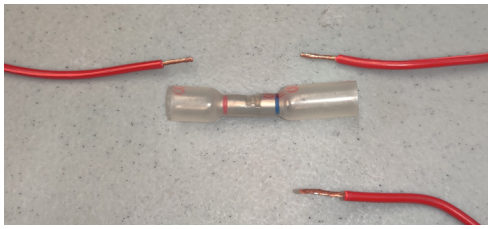
Installation with the turn signals illuminated as the DRLs

(Option 2)

1. Use the diagram on page 5 as reference for the following steps.

2. Locate the wires for the driver side turn/parking light. On NA/NBs, the wiring is accessible from the engine bay, where on the NC it is accessible from within the front wheel wells, visible once the forward fender liner is removed. Make the following connections between them and the DRL module:

3. Using a 3-way butt connector, join the green wire from the module to the ground (black) wire. A sample of a 3-way butt connector show below.



4. Using a pink butt connector, connect the pink wire from the module to the harness side of the turn signal wire (NA = green/orange, NB/NC = green/black).

5. Using a pink butt connector, connect the violet wire from the module to the bulb side of the turn signal wire (NA = green/orange, NB/NC = green/black).

6. Using a 3-way butt connector, join the blue wire from the module to the park light wire (NA/NB = red/black, NC = black/green).

7. Using pink butt connectors, connect the red and brown wires from the module to the red and black extension wires provided (red to red, brown to black). Route the lengthened wires over to the passenger side of the car.

8. Locate the wires for the passenger side turn/parking light and make the following connections between them and the DRL module:

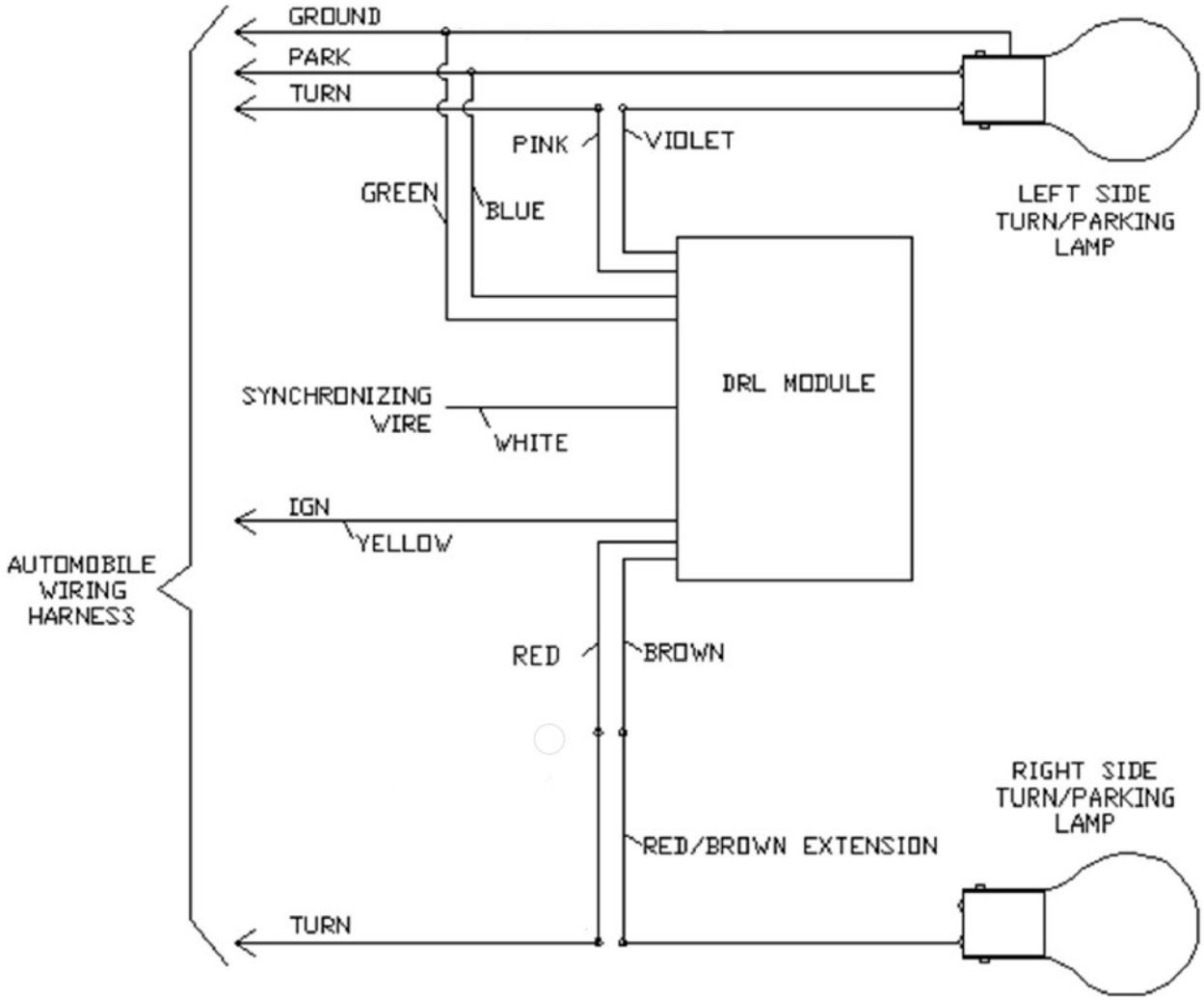
9. Using a pink butt connector, connect the red extension wire to the harness side of the turn signal wire (NA = green/yellow, NB/NC = green/white).

10. Using a pink butt connector, connect the black extension wire to the bulb side of the turn signal wire (NA = green/yellow, NB/NC = green/white).

11. The yellow wire coming from the module needs to be connected to a switched power source. On NA/NBs, we recommend using the wire feeding the evap purge solenoid (white/red). On NCs, we recommend teeing into the black/white wire under the “engine” fuse within the engine bay fuse box. Just be sure the circuit that is used is only energized with the ignition on and is fused for at least 15 amps. An additional length of yellow wire is included in order to extend this wire.

12. At this point you should have one unused wire. The white wire is the synchronizing wire; its function is described on page 7 of these instructions.

Option 2 wiring diagram



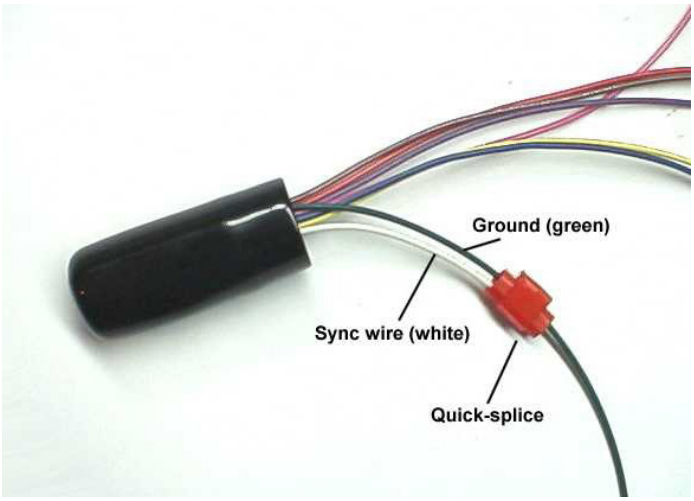
The Synchronizing Wire

1. In the default “non-synchronized” mode, only the DRL lamp of the same side shuts off when a turn signal is in use, and the opposite DRL lamp stays illuminated. This is the way turn signal DRLs operate on today’s automobiles.

2. The DRL module can be wired to synchronize both left and right lamps. If you turn on a signal, both DRL lamps will turn off. After the signal is complete, both DRL lamps will turn back on.

3. If you want the unit to operate in synchronized mode, use a quick-splice to connect the white wire to the green module wire. This is not a permanent setting. If you later wish to go back to non-synchronized mode, simply disconnect the two wires.

Please note that the option 1 steps specified for NC1s will not allow the use of synchronized mode.



Testing

The exact function of the DRL setup will vary depending on your installation option and choice of bulbs. You should verify that the running lights are on when the ignition is on and that the lights cancel when each turn signal is activated.

Option 1 NC1 alternative installation diagram