

## HOW TO DISABLE DRL FOR LANCER

**\*\*UPDATED:** Please note that Option 2 is obsolete and superseded by Option 3\*\*

This How-To is for those who would like to install an HID kit in a 2008 Lancer that comes equipped with factory Daytime Running [Lights](#) (DRL's).

The advantages of these solutions are:

- 1) They do NOT require splicing into the factory wiring at all, thus saving any warranty headaches
- 2) They eliminate the HID Flicker associated with the DRL's

Some background info:

The factory DRL's come on whenever the car is on, the parking brake is down and the [headlight](#) switch is in the off position (Position 1) or the middle position (Position 2).

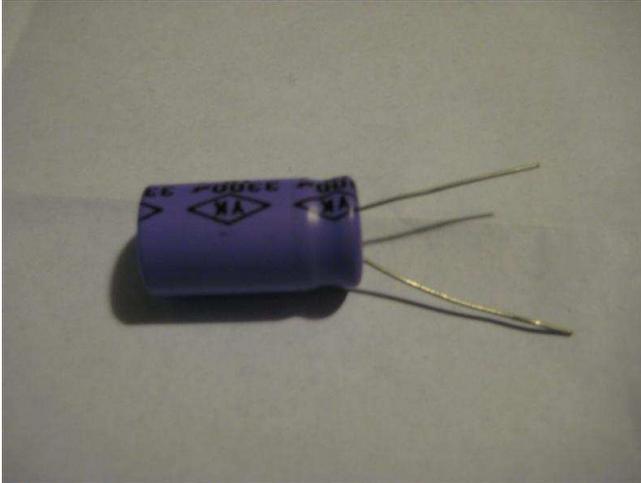
The DRL signal is NOT a constant DC (6V, 9V, etc.) but rather a square waveform peaking at 12VDC and a frequency of about 60Hz (this is [better](#) for the bulb longevity than running them at 6V).

It will be assumed that your HID kit has a remote turn-on lead and a relay (30 or 40A).

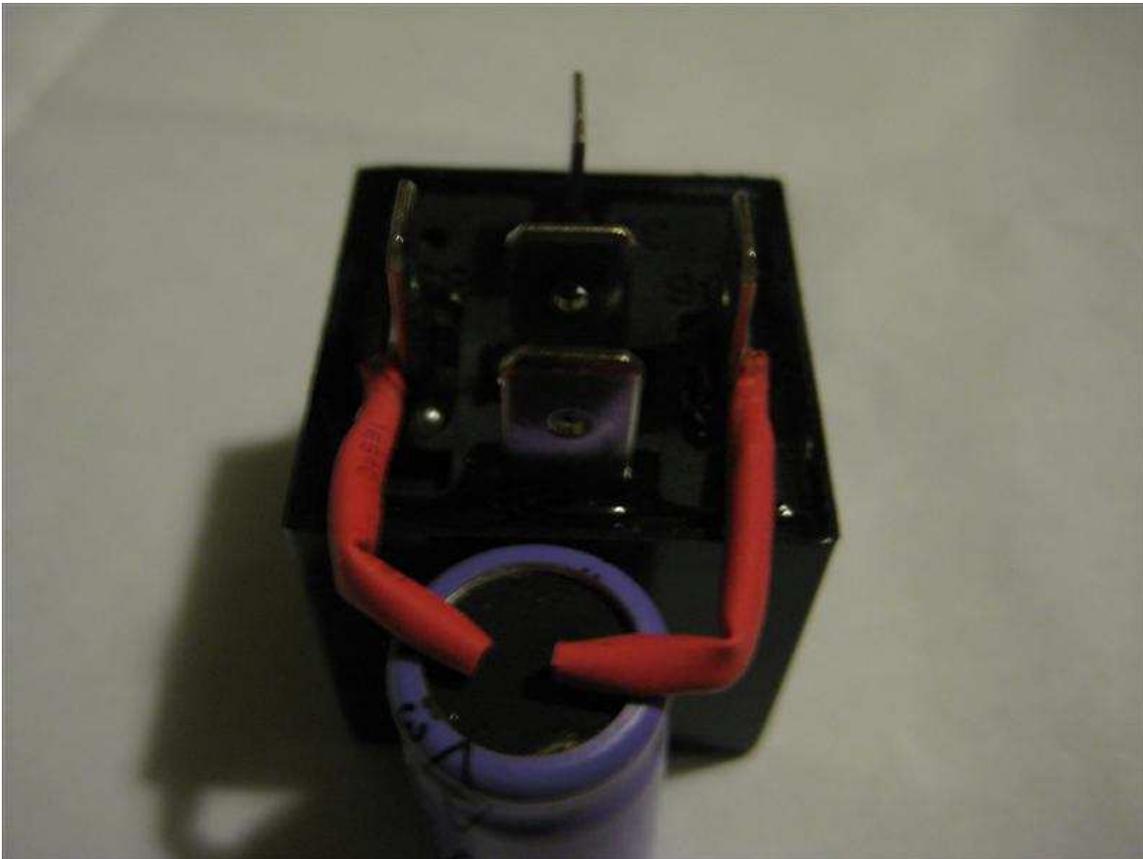
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Option 1: HID's are ON with switch in Position 1, 2 or 3 (no flicker)

- 1) Buy an HID kit that has a wiring harness AND relay (most of them nowadays do)
- 2) Install everything as normal in the HID kit including wiring the remote turn on lead to the factory 9006 bulb harness
- 3) Remove relay from socket and use a voltmeter to measure the polarity in the relay socket on pins 85 and 86 to see which is positive and which is negative (when the headlight switch is in the ON position) - for mine, terminal 86 was positive and terminal 85 was negative
- 4) Buy an Electrolytic, Polarized Capacitor at Radio Shack or local electronics/stereo store 25V (or higher) and 2000uF (or higher)



- 5) The capacitor has a marking down the side indicating which terminal is negative
- 6) Solder the negative lead to the relay lead you noted (in step 3) as negative and the positive lead to the relay lead you noted as positive
- 7) Insulate the exposed leads with electrical tape or shrink tubing so they don't short out



- 8) Put the relay back in the socket
- 9) Test it all out!

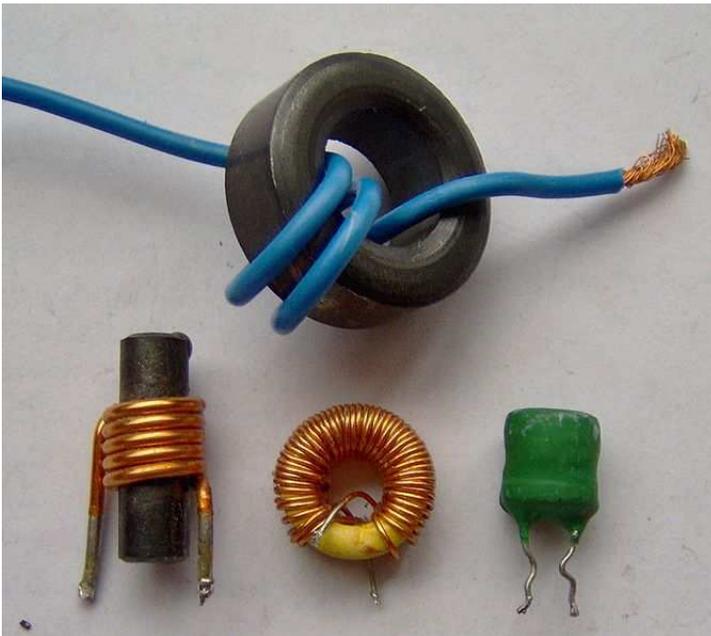
**\*\*If your HID kit came with an extra 9006 Socket cable extension (as mine did), you can solder the capacitor in parallel with this cable INSTEAD of directly to the relay, then install this cable from the factory 9006 harness to the HID remote turn-on lead:**

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Option 2 (**\*\*SUPERSEDED BY OPTION 3 BELOW**): HID's are OFF with switch in Position 1 or 2 and ON in Position 3

Before starting this option, note that it varies depending on your relay and you may need to use series resistors, etc. to compensate...Option #1 above is recommended.

- 1) Buy an HID kit that has a wiring harness, relay, and extra 9006 cable
- 2) Install everything as normal in the HID kit including wiring the remote turn on lead to the factory 9006 bulb harness
- 3) Remove relay from socket and use a voltmeter to measure the polarity in the relay socket on pins 85 and 86 to see which is positive and which is negative (when the headlight switch is in the ON position) - for mine, terminal 86 was positive and terminal 85 was negative
- 4) Buy an Electrolytic, Polarized Capacitor at Radio Shack or local electronics/stereo store 25V (or higher) and **\*\*100 or 200uF ONLY\*\***
- 5) The capacitor has a marking down the side indicating which terminal is negative
- 6) Also buy an inductor/choke with a [value](#) of 2 Henries or higher - here are some sample inductors:



- 7) Strip back some insulation from the extra 9006 cable and solder the capacitor in parallel with the two wires

8) Cut one of the cable leads and solder the inductor in Series with it

9) Wrap all the connections with electrical tape

10) Test it out!

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Option 3: HID's are OFF with switch in Position 1 or 2 and ON in Position 3

This variation has the same overall effect as Option 2 above, but is much more stable, works with all relay types and there is no guesswork about resistor/inductor values...

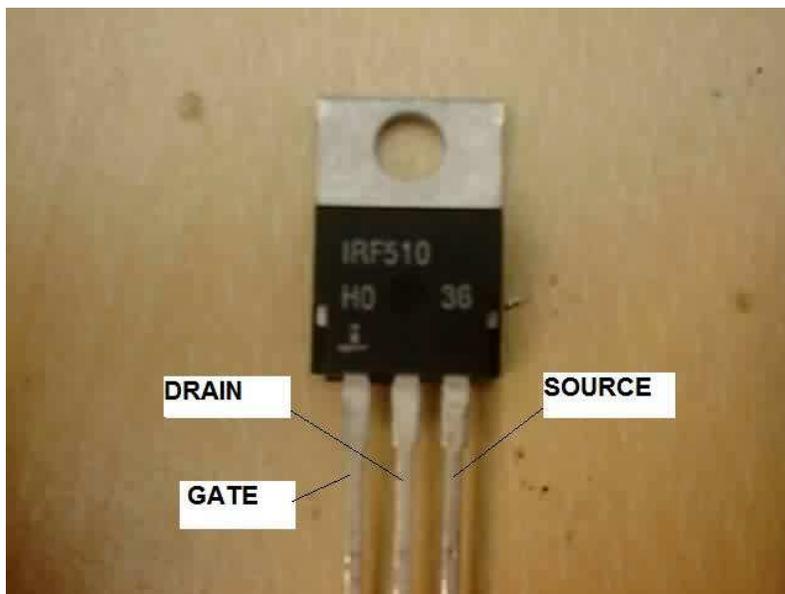
1) Buy an HID kit that has a wiring harness, relay AND extra 9006 cable

2) Install everything as normal in the HID kit

3) With the HID's on, use a voltmeter to determine which wire on the remote turn on lead is ground and which is [power](#) (in my case Blue was Power and Black was Ground)

4) Buy the following components from an electronics parts store: IRF510 MOSFET, 50kohm resistor, 28kohm resistor, 2.2uF (anywhere from 2uF to 10uF should work) 25V (or higher) Electrolytic Capacitor

5) The MOSFET has 3 Terminals (in order) - Gate, Drain and Source:



6) The capacitor has two terminals and a marking down the side indicating which terminal is negative

7) Resistors have 2 terminals (they are interchangeable)



8) Your 9006 cable has two ends, the female side plugs into the [car](#) 9006 harness and the male side plugs into the HID remote turn on lead - you can cut this cable in half so you have a female end with two wires and a male end with two wires - CONFIRM your polarity in Step 3 before continuing

9) Solder time! Be very careful to include ALL of the connections below:

- POSITIVE Terminal of Capacitor TO Gate of MOSFET
- NEGATIVE Terminal of Capacitor TO Source of MOSFET
- Drain of MOSFET TO Male 9006 Ground Wire
- Female 9006 POWER wire TO one end of 50kohm resistor AND TO Male 9006 Power wire
- Female 9006 Ground wire TO one end of 28kohm resistor AND TO Source of MOSFET (which also has the capacitor on it)
- JOIN the remaining two free ends of the resistors together and solder TO Gate of MOSFET (which also has the capacitor on it)

9) Isolate, insulate and wrap all the connections with electrical tape or shrink tubing

10) Test it out!