



Disclaimer: use this document at your own risk. I am not electrical engineer. I have not tested this circuit.

Explanation:

This diagram represents an entirely “under the hood” solution for fog lights that come on with the low beam headlights and off when the high beams are activated. If the power tap is used in the fuse box as the main power input to the fog lights, then the fogs will only come on when the car is in Ready Mode.

The solution requires two SPDT relays rated at about 20 amps. One relay will be wired using the Normally Open contacts (NO) and one using the Normally Closed (NC) contacts. Relay example:

<http://www.wiringproducts.com/contents/en-us/p3982.html>

The general idea is that once the headlights (low beam) wire is energized, power flows through the normally closed relay, triggers the normally open relay (which closes) and allows power from the battery to light the fog lights.

Should the high beam wire become energized, the normally closed relay will open thus cutting the power to the normally open relay which opens the circuit thus powering down the fog lights.

I added an optional switch in the diagram which would allow the owner to shut down the fog lights at any time. The switch would be in the cab of the car. It could be wired as shown in the diagram or even prior to the trigger (+) of the normally open relay (as an interrupt). The latter would be preferable since smaller wires would be needed.

As far as the tapping into one set of the head lights (one high beam and one low beam), that can be done with a T-Tap or even just mating with an exposed surface of the headlight connectors would suffice. The relays will draw very little power so these connections don't have to be robust.

The positive power wire to both the Low Beam (first picture) and the High Beam (second picture) wires



were colored purple

