## FOG LIGHT INSTALLATION HINTS By Jim Carlo (7/29/01) Version 1.0 (Use at Your Own Risk\*)

## 1. Fog Light Switch

I purchased a Fog Light Switch (00550-35976) from Toyota. I believe this switch is the same switch that is used for the Camry. The switch fits perfectly into the left driver's side dash push-out. The switch is shown installed in Figure 1. The switch has an amber light that shows when the fog lights are energized, and has three terminals. Wiring for the switch is shown Figure 2.

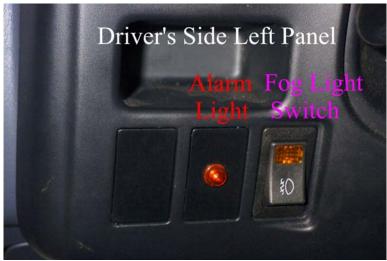


Figure 1 – Fog Switch

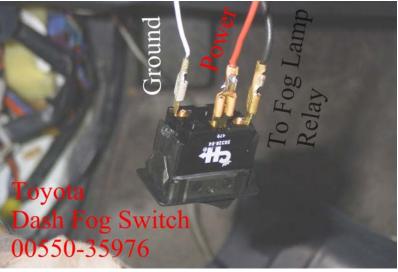


Figure 2 – Fog Switch Detail

The switch has three contacts:

1) I connected the Power Wire to the Positive (+) Parking Light Wire. As you can see in Figure 1, I also had an alarm connected (and the alarm used this Positive (+) Parking Light Wire so it was easy to find). Toyota actually uses a negative (-) Parking Light Wire at the Parking Light switch to energize a parking light relay (but - you need to attach on the contact side of the relay). To find a Positive (+) Parking Light Wire, find a wire that goes near the instrument panel lights and is +12V when the lights (parking, high beam, low beam) are on and not connected when the lights are off. Don't pick a wire that dims with the dimmer switch. Alternatively, you could use a wire that actually goes to the parking lights outside the passenger compartment, but then you have to figure out how to bring this wire into the passenger compartment.

2) The white wire, I connected to Ground (any connection screw to chassis should work here). This wire is internally connected to the switch amber light.

3) The black wire I connected to the Fog Lamp relay (coil side pin # 86). I ran this wire (24 AWG) through the same little hold that the alarm speaker ran through, into the engine compartment and to the Fog Lamp relay. This is the only connection needed between the engine compartment and the passenger compartment.

I note that with this connection, the Fog Lights will only turn on when either the parking lights, low beam or high beam lights are on. This way, I don't have to worry about turning the Fog Lights off when I leave the car, since they will turn off when I turn the parking lights off (and there is a beautiful chime to remind me). An added feature (note I have underlined feature) is that when the alarm blinks the parking lights (arm/disarm), the Fog Lights will also blink if the Fog Light switch is on. I could have wired this point to +12V ignition-on point, but felt the flashing Fog Lights would help me find the car in the dark (no comments needed).

I installed a new fuse for the fog lights as shown in Figure 3.



Figure 3 – Installation of Fog Lamp Fuse

I found that in R/B #2, there was a power connection (always on) that I could insert a wire terminal on, attached a small fuse block (from Radio Shack) and then ran the Power Output outside the R/B #2 to the Fog lamp relay (pin # 30). While the Fog Lamp installation instructions did not show a fuse, I felt more comfortable with it.

My fog lamps were 55W Hella Micro FF and I installed them on the Westin Safari Light Bar (see other WEB posts) available from Summit Racing. I followed the directions received in the kit. Figure 4 shows a full schematic.

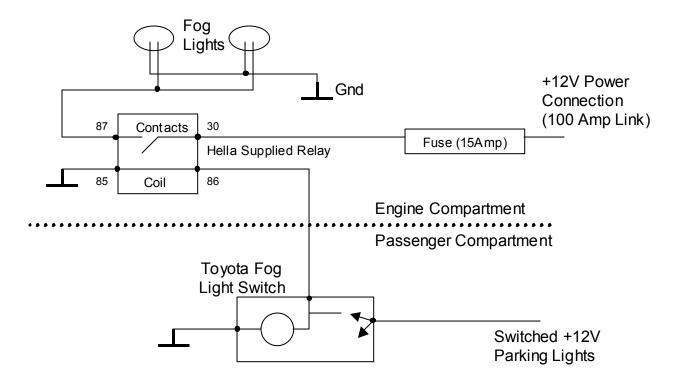


Figure 4 – Fog Light Wiring Diagram

\* - Please note that these hints and drawing are provided for use at your own risk. I am also not sure about various legal issues on running with Fog Lights, as this is US State dependent.