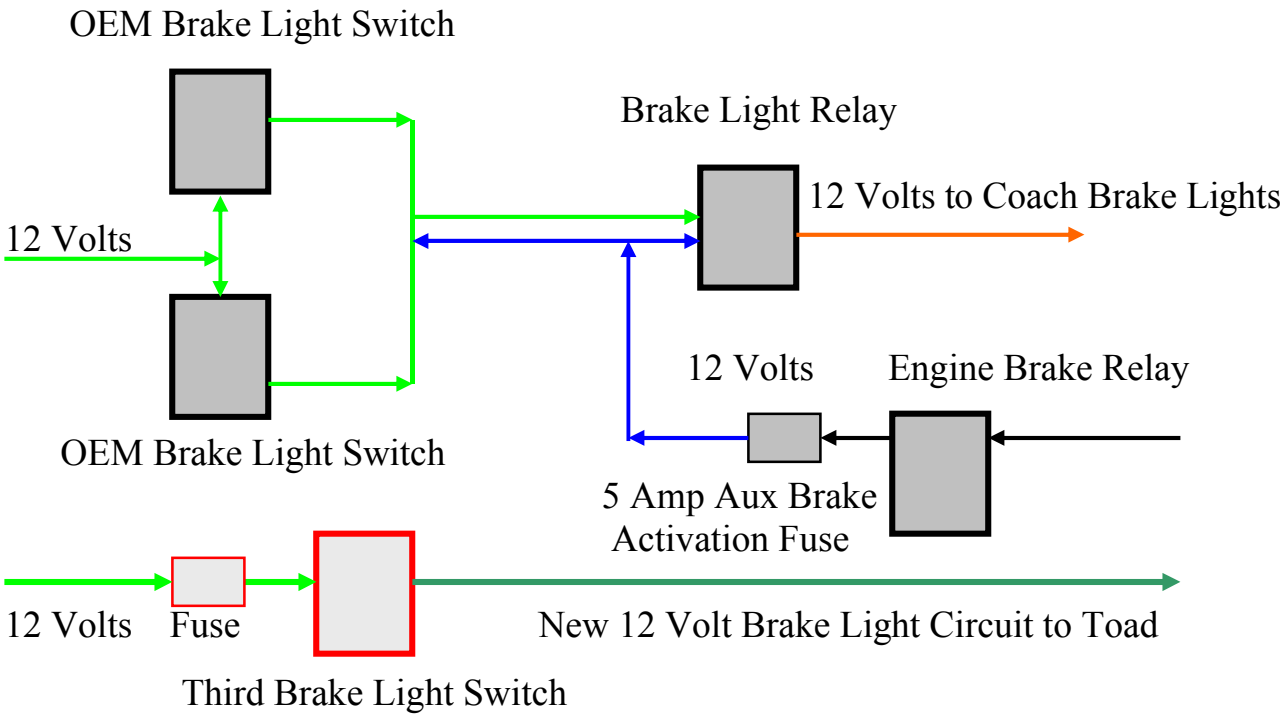
Spartan Bypass Supplemental Braking Circuit - 2

This modified circuit is in response to a request on how to install an isolated brake light circuit for activating the toad supplemental braking circuit on a **Spartan chassis coach**. Spartan uses the electrical output of the dual pneumatic brake light switches to operate the coil on the brake light relay. Spartan also uses the output of the engine brake circuit to power the same brake light relay coil. The output of the brake light relay is used to power the brake lights on the rear of the coach. This is a dual input single output circuit. Either one (or both) input(s) will produce the same output.

Some toad supplemental braking systems REQUIRE voltage from the coach to activate the toad supplemental braking system. Some systems use the output from the coach brake lights to power this supplemental braking system. That is OK, if you NEVER use a Spartan coach's engine or exhaust braking circuit. Because when you do use the circuit, the toad supplemental braking system is activated CONTINUOUSLY while the engine or exhaust brake system is operational. In most cases the result is damaged toad brakes and a possible brake fire.

Below is a simple electrical circuit to bypass the above problem.



In this modification a third brake light switch is installed. One of the original brake light switches is removed a "T" fitting is installed. The new brake light switch and the removed brake light switch are installed on the "T" fitting. Three air activated brake light switches are installed, two original switches without modification and a third which is also activated when the brake pedal is depressed. A 12 volt wire is connected through a fuse to one terminal of the third brake light switch. Attach a wire to the second terminal of the third switch and route the wire to the Toad's supplemental braking device. The new toad supplemental braking circuit will have power when the coach service brake is applied.