

## Keep your towing combination street legal with the Brake-Lite Relay

If you're installing a supplemental braking system, chances are you'll need a Brake-Lite Relay. It enables the towed vehicle's brake lights and turn signals to illuminate in conjunction with the motorhome's, which is required by law.

But under what circumstances do you know you need one? Getting into the nuances of that question can be as complicated as explaining the theory of relativity. So we won't delve into all the ramifications of towed vehicle electrics — just what you need to know if you're not a professional installer.

If the following three ducks are lined up in a row, you need a Brake-Lite Relay:

- If you use the towed vehicle's brake light as both the brake signal and the turn signal for towing
- A supplemental braking system that either pushes or pulls on the brake pedal has been installed.
- With the ignition off, the towed vehicle's brake lights illuminate when the brake pedal is depressed.

Confused? Understandable.

Here's what typically happens: The simplest way wire a towed vehicle for lighting is to use the brake light on the towed vehicle as BOTH the brake and the turn signal. Without a supplemental braking system this is fine — when the motorhome brakes, the towed vehicle's brake lights illuminate. And when one of the motorhome turn signals is activated, it causes the towed vehicle's brake lights to flash on and off, just like you (and the ever-vigilant highway patrol) would want for a turn signal.

So far, so good.

But if you have a supplemental braking system that pushes or pulls on the brake pedal it will interfere with the signal coming from the motorhome. Here's why: in most towed vehicles, when the brake pedal is depressed it sends a "braking" signal to the brake lights — even if the engine isn't running. But if the motorhome is turning *and* braking at the same time, the towed vehicle's brake lights can't flash because the towed vehicle's brake signal is overriding the turn signal from the motorhome.

The Brake-Lite Relay is installed in line with the towed vehicle's brake lights. It only allows the towed vehicle's current to flow to the brake lights if the vehicle is actually running. So the brake lights can't override the motorhome's turn signals while it's being towed.

As it turns out, this relay must be installed in the majority of towed vehicles with supplemental brakes. But far too many dealers are unaware of this concern. Accordingly, far too many customers are towing down the road without flashing turn signals when the motorhome brakes. We believe ROADMASTER is the only towing products manufacturer to provide this accessory to assure proper, safe and legal lighting.