Tow Lighting for my 2009 Lincoln MKX

We have been towing our 2009 Lincoln MKX for about nine months and everything seemed to be going along without a hitch. However in the past month or so when I turned on a turn signal either left or right it did not matter the rhythm of the flasher seemed to gallop at times and have a steady rhythm at other times. I had noted on previous vehicles a faster flash rate was usually an indication of a blown bulb in the turn signal circuit, either in the front or rear fixture. After checking all of the bulbs and finding them good, while researching the problem I also found when my foot was depressing the brake pedal the rhythm was always smooth and no gallop. I finally concluded my use of diodes to add the tow lighting package was probably the cause. The MKX electronics was not seeing the proper load (bulb filament) versus the inline diode located before the bulb filament. So a couple of days ago, I went in search of a couple of bulb sockets and a couple of 1157 bulbs, I found what I wanted, for less then \$ 20.00. I already had the tow wiring and a four pin receptacle in place so no expense there. I first purchased the parts then went about testing my theory regarding the proper load on the flasher. I took the diodes out of the circuit and everything worked as it normally would, no gallop in the turn signal flash rate.



I had decided if the diode was the cause to add a socket to each of the rear tail light/turn signal fixtures.

After taking measurements to make sure both light bulbs would have clearance inside the fixture. I got out my battery powered drill installed a 1" hole saw, then proceeded to drill a hole in each of the light fixtures. The new sockets had three keyways which when used enables turning the socket and locks the socket in the new hole. After drilling, cutting the three keyways in each hole with a file I installed a bulb and socket in each fixture.



After wiring the new sockets to my already in place tow wiring. I reinstalled each of the rear tail light turn signal fixtures.

Today I connected my coach and MKX with the towing cord then tested my new tow lighting system. Everything worked as designed the first time. **Lesson learned**, today's new vehicle electronics are not always diode friendly when it comes to tow lighting. Fortunately the MKX has not suffered any damage and I was able to figure out the problem (diodes causing the galloping turn signal flash rate) and correct the problem. I am sharing my experience in hopes my experience may prevent you from having the same tow vehicle lighting problem.