

# Service Bulletin

## Checking Low Voltage to Liftgate Charging Nosebox Systems

### Excessive Voltage Drop Troubleshooting

When troubleshooting a liftgate charging system and there is a solid green LED on both the source and lift battery lights, and those lights switch to flashing orange lights and back to solid green, this means there is a voltage drop going into the Purkeys liftgate battery charging system (LGCS) from the truck.



One possible cause is a bad or undersized circuit breaker.

To repair this, inspect circuits inside the 7-way box for excessive electrical resistance caused by overheating, corrosion, loose/poor connections, or undersized wiring.

Check to see if the 7-way is equipped with circuit breakers (see Figure 1 and Figure 2), as the problem may be a failing circuit breaker. Connect the blue wire from the LGCS nosebox to the unprotected side of the circuit breaker. In this case, circuit protection for the charging system will be covered by the 30-amp fuses in the LGCS nosebox.

Ensure that the 7-way or stinger cord has a tight fit and good electrical contact in both the tractor and trailer receptacles.



Figure 1



Figure 2

Please contact Purkeys' Technical Services Department if you have any questions.  
Phone: 479-419-4800 | [www.purkeys.net/contact/](http://www.purkeys.net/contact/)