

Tech Tips

April 2018 Edition

In the April edition of "Tech Tips", we will cover an item that often gets ignored – the **BATTERY SEPARATOR**. The separator does exactly what its name says, it separates (OR CONNECTS) the battery (banks). It connects at 13.2 volts, & disconnects at 12.8 volts.

LACK OF PREVENTATIVE MAINTENANCE CAUSUS SEPARATORS TO FAIL PREMATURELY. Keep connections tight & clean. There are 3 connection points on a battery separator, as seen below; two for cables, and one for a14 ga wire with a spade terminal. The striped green side goes to the green connector, & on to the truck battery bank. The other to both the Idle Free Batteries, & the 250 fuse directly above the separator. The 14 ga wire goes to the negative of the APU battery bank. The 14-gauge wire connection point is critical and can halt charging if not cared for. It completes the circuit & lets the control circuity know the voltage of both battery banks. Without it. nothing happens...





Another common misunderstaing is that just because you hear the separator 'click' does not mean current is flowing through it. From use, over-use, or age, the contacts may be so pitted that they no longer allow current to flow through them.

A separator should cycle 5-6 times/day. If a truck has an electrical problem in its charging circuit, that separator may closed & re-open dozens of times in a day. This can put **MANY** more days use on the separator in a single day, & cause premature failure. Over-use is the leading cause of a separator failing prematurely.

SO HOW DO YOU KNOW IF A SEPARATOR IS WORKING? Measure the voltage on both studs of the separator (USE THE SEPARATOR GROUND SPADE AS A GROUND. ZERO VOLTS ON BOTH POST = BAD GROUND (14 ga wire). Fix the ground if necessary, & recheck. Remember those values, & plug the truck into Shore Power. At ~13.2 volts, separator should click, & higher voltage should be seen on both posts. If not, the separator is defective.

REMEMBER, as always, Tech Support is just a phone call away.

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