Technical Bulletin

Purkeys P1020-K Converter Assembly

Converter Change and 4-pin Deutsch Connector Removal

Beginning in Q4 2021, there will be a change of converter on the P1020-K charge plate assembly. This will be a running change and customers may receive either version for a short time to eliminate supply issues.

The most significant difference between the two converters is the gray 4-pin Deutsch connector (see Figure 1). The current converter, which is now obsolete (see Figure 1), has the connector and the new unit (see Figure 2) has eliminated this connector.

The connector has had corrosion and thermal issues in the past, and the new unit eliminates these issues.

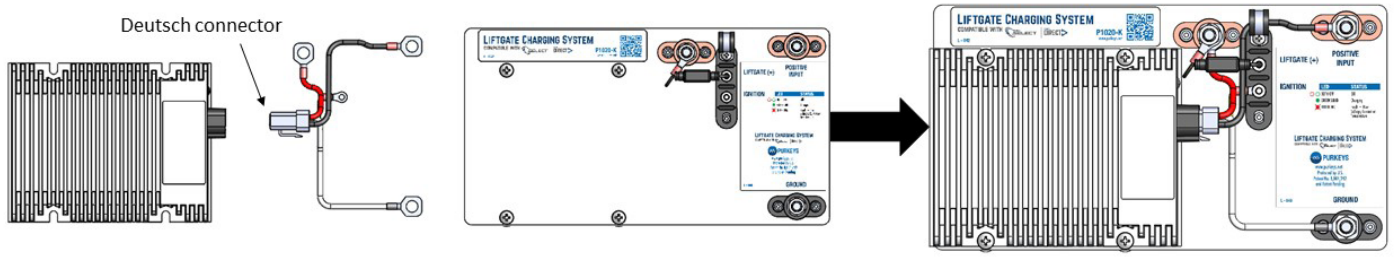


Figure 1: Current P1020-K Plate*

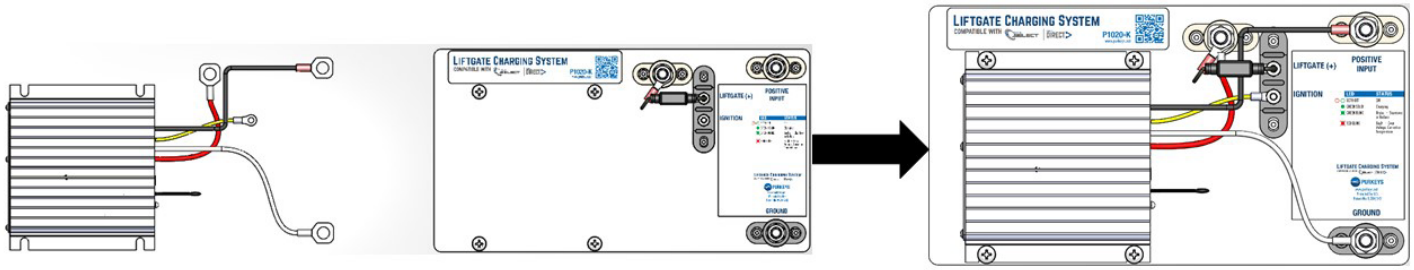
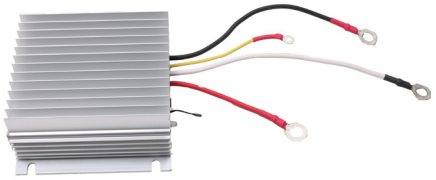


Figure 2: New P1020-K Plate*

*Note: Visually there is little noticeable difference from the current revision to the new revision of the P1020-K.

DC/DC Converter Part Numbers

Current (old) Purkeys Part Number: 11020C00 or 11020C11



New Purkeys Part Number: 900-38

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

Technical Bulletin

Purkeys P1020-K Converter Assembly

LED Colors and Indications

The new DC/DC converter has one Red/Green LED for system indication. The table below explains the LED colors and indications:

LED	LED Action	State/Indication/Notes
Green	Slow Blink (0.5 sec/0.5 sec)	CHARGING OFF: Device has input power and is ready to operate. There is no output current on or available.
Green	Solid	CHARGING ON: Device is providing output power. Note: If Green is "Fast Blink," then VOUT (Vload) needs voltage to open the output protection circuit.
Red	Slow Blink (0.5 sec/0.5 sec)	INPUT UNDER VOLTAGE FAULT: Device will remain in this state if IGN signal is high, but input voltage is less than 10 V.
Red	Solid	INPUT OVER VOLTAGE FAULT: Device will remain in this state if IGN signal is high, but input voltage is above 16 V.
Orange	Slow Blink (0.5 sec/0.5 sec)	OVER TEMPERATURE FAULT: Device will remain in this state until the internal device temperature falls below 110 degrees C. Note: 115 degrees C is the shutdown temperature.

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