

Date: March 16, 2017

Federal Communications Commission
7435 Oakland Mills Road
Columbia MD 21046

Subject: Class 2 Permissive Change

FCC ID: YGP5000-01

To Whom It May Concern:

We are requesting a Class 2 Permissive Change to FCC ID YGP5000-01. Changes have been made since the original submittal to improve the system electrical noise immunity and manufacturability.

RFID board

1. The transmit section has not changed since last the last submittal.
2. The receive side has changed several resistor values to help with reverse power detection.

Control board

3. The board had power supply pads that were not populated so these were removed.
4. A jumper wire for input power was removed and input protection circuitry was added to allow for protection against voltage spikes and wiring errors.
5. CAN circuitry was changed to allow less loading on the CAN communication lines.
6. Circuitry was added to be able to drive confidence tags separately of either antenna.
7. Connection to frame capacitor was removed to help reduce truck noise effecting diagnostics.

Antenna

8. Antenna material was changed to a Rodgers 4835 from a Rodgers 3035 to allow for easier manufacturing.
9. Patch size was changed slightly to allow for the difference in dielectric constant of the new material.
10. An additional resistor was added to help with impedance matching to RFID radio board with the new material.
11. Two capacitors were added to help with antenna tuning with the new material.
12. Two sides of the antenna case were changed to allow for better communication with the passive RFID tags internal to the antenna.

Confidence tag

13. Confidence tag ground plane was connected to truck frame to allow for more consistent reading of the confidence tag in presence of truck electrical noise generated by the electrical system.

Best Regards



Ron Ziegler
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Crown Equipment Corporation
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