K2x Actuators and CAN Bus Controls

All-Terrain Vehicles

A leading all-terrain vehicle manufacturer needed reliable actuators to raise and lower a dump box, combined with CAN Bus capable controllers that would allow the actuator control to be integrated into the vehicle’s overall system monitoring and provide feedback displayed on an on-board digital screen.

Since its origins in the automotive industry, CAN Bus technology has begun migrating into all types of vehicles including ATVs and heavy-duty, off-highway equipment. The CAN Bus communication protocol has many advantages over traditional wiring harnesses including the elimination of vast amounts of wiring, reduced weight and simplified installation and servicing. The digital technology eliminates all mechanical and analog functions.

To meet the application requirements, Warner Linear engineers developed a completely new digital CAN actuator control that is compatible with the customer’s Bus communication network. The microprocessor-based controller mounts directly to the back of the actuator’s motor and provides feedback on load levels and more. The controllers feature Zener diode suppression on the input and output for protection from electrical noise and an operational temperature range of -30°F to 140°F (-34ºC to 60ºC).

Warner Linear K2 actuators were selected for this ATV dump box application based on their exceptional performance over competitive models as demonstrated in life cycle and washdown tests. Units feature superior design characteristics, quality manufacturing methods and higher quality materials including the wrap spring brake assembly, needle bearing thrust washers, synthetic lubricant, shaft ball bearings and end seals.