# NRE®

# ELECTRONIC ENGINE GOVERNOR ACTUATOR

*MOVING FORWARD*

## SPECIFICATIONS

—————  **NRE PART NO.: 922-0001-000**

**Interface Ports (3):**
- 1 isolated RS-232; real time data and maintenance
- 1 isolated CAN bus; default configured for SAE J1939
- 1 standard legacy compatible plug; for A, B, C, D solenoid drive signals for stand-alone operation

**Main Processing Platform:**  TI TMS320F2812 DSP

**Main Operating System:**  TI DSP-BIOS

**Operating Temperature:**  -40°F to 212°F (-40°C to 100°C)

**Operating Voltage:**  25VDC to 93VDC (74VDC nominal)

## OPERATIONS & BENEFITS

The NRE Actuator is intended for use as a replacement for the mechanical hydraulic Woodward PGR governor. It takes commands from either the standard engine control signals (AV, BV, CV, and DV) or via SAE J1939 over CAN bus. Engine speed control is provided by adjusting the fuel control rack.

**Benefits include:**
- Oil free operation
- Elimination of the load regulator assembly (rheostat and vane motor)
- Single module design, can directly replace PGR governor on a standalone basis or be further integrated using communications to a modern onboard locomotive control system such as the NRE NFORCE, allowing greater flexibility in engine speed control.
- Integrated diagnostics and test capability for troubleshooting and rack calibration

- Onboard, in-the-field programmable and configurable; stock one governor part number for all of your engine needs, no need to stock pre-calibrated governors for differing rack settings with the NRE Actuators powerful and flexible software.
- Universal design; stock one part number and configure at point of use easily and quickly in software, eliminating the costly need to stock many different pre-configured governors for your fleet

**Installation**
The NRE Actuator mounts in the engine compartment using the existing mechanical actuator mounting position. Please refer to NRE document A-922-T-001 for complete installation details.

Installation of the system takes approximately 2-3 hours.