

# Transmission Controller Systems Model APC70/EGS70



***SPICER OFF-HIGHWAY PRODUCTS***

# APC70 / EGS70 TRANSMISSION CONTROLLER SYSTEMS

The **APC70** and **EGS70** are the two controller system options for the electronically controlled Spicer® T16000 transmission.

The **EGS70** is a stand-alone intelligent shift lever with the transmission controller module housed internally. **APC70** unit depends upon an external shift lever for input commands, and has a two-digit display to indicate either the gear range selected or trouble codes when the on-board diagnostics feature is activated. In T16000 applications, these controllers electronically modulate direction clutches and handle range shifting either manually or automatically.

Although required to control the T16000 series transmission, the **APC70** and **EGS70** controller platforms can also be used as optional packages to control other non-ECM Spicer® transmissions; thus, making drivetrain protection and load-sensed automatic shifting available across the line.

The FLASH memory in these platforms records pertinent statistical information related to the vehicle's operating conditions and makes it available for later consulting by a service engineer. Shift points and other operating parameters can be optimised by the customer by means of a user-friendly, PC-based, graphical parameter editor. The optimised programs can be permanently saved in the controller's memory.

In addition, the **EGS70** and **APC70** support customer specific CAN 2.0A protocols facilitating vehicle networking. Integration with other compatible on-board systems keeps the system cost low through elimination of redundancy and by reducing the amount of copper required to implement the system. Customized CAN-bus implementations allow seamless integration with the central vehicle display, providing a common user interface to all vehicle functions, including the transmission controller.

The optimised, vehicle specific parameter-sets can be established and maintained on the PC for later use and/or end of production line customisation of the control system.

## Controller Systems Capabilities Matrix

Function / Feature	EGS50	APC50	EGS70	APC70	APC160	APC200
Drive Train Protection	✓	✓	✓	✓	✓	✓
Speed Sensed Automatic Shift	✓	✓	✓	✓	✓	✓
Load Sensed Automatic Shift			✓	✓	✓	✓
Electronically Controlled Clutches			✓	✓		✓
Electronic Inching						✓
Hydrostatic Pump & Motor Control				✓	✓	✓
Electronically Controlled Braking					✓	✓
Engine Servo Control					✓	✓
Seeering Axle Control		✓			✓	✓
Diagnostics	✓	✓	✓	✓	✓	✓
End-User Parameter Tuning	✓	✓	✓	✓	✓	✓
Integrated Shift Lever	✓		✓			
Display	8 LED	2 Digit	8 LED	2 Digit	4 Digit	4 Digit
Analog Control			✓	✓	✓	✓
CAN Network Integration			2.0A	2.0A	2.0B	2.0B
ASAE J/1939 Compliant					✓	✓
Sealing	IP66	IP65	IP66	IP65/66	IP66	IP66

### APPLICATION POLICY

Capability ratings, features and specifications vary depending upon the model type of service. Application approvals must be obtained from Spicer Off-Highway Products Division. We reserve the right to change or modify our product specifications, configurations, or dimensions at any time without notice.



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