

OWNERS MANUAL

Model ETM20 Electronic Throttle Module for Ford 7.3 Liter Diesel Truck Engines



Introduction

The Model ETM20 Electronic Throttle Module is designed to provide *Charge Protect* mode for engine rpm control on trucks that use Ford 7.3 liter turbo diesel engines. This mode of operation will vary engine idle speed to maintain the charge on the battery. Note that the Ford 6.0 liter engines use the InPower Model ETM20-1 Electronic Throttle Module.

Standard Features

- Charge Protect mode of operation
- Direct interface to engine controller
- Licensed Ford patented technology assures compatibility and reliability
- Encapsulated electronics for maximum environmental protection
- Reads sensor information directly from engine controller
- Eliminates connections to sensors
- LED status indicators

Operation

When the vehicle is parked and *Chassis Conditions for Proper Operation* are satisfied, the engine idle speed will be controlled to maintain a 14 volt charge on the battery. Normally, this mode is always enabled. If desired, the mode may be disabled by interrupting DC power to the +12 volt terminal on the ETM20.

Chassis Conditions for Proper Operation

1. Parking brake is set.
2. For automatic transmission, gear shift lever is in "PARK."
3. For manual transmission, foot is off clutch pedal.
4. Foot is off service brake.
5. Foot is off accelerator pedal.
6. Vehicle is stationary.
7. Engine is started and idling.

Status Indicators

A five segment LED provides status and problem detection information. Refer to the following table for coding of these functions.

<u>LED</u>	<u>Status</u>	<u>Indication</u>
ON/OFF	On Solid	Module ON and functioning
ON/OFF	Flashing	Module ON, but a problem was detected
*GEAR	On Solid	Vehicle Gear = Park, Park Brake set
*GEAR	Flashing	Park Brake not set or Foot Brake on
CHRG	On Solid	CHRG terminal grounded, engine at High Idle
CHRG	Flashing	CHRG terminal grounded, engine at Low Idle

* Note that "GEAR" LED indications are NOT VALID on units identified as ETM20-B

Installation

The ETM20 is usually mounted inside the cab under the dashboard. A five ft. Cable is supplied that connects to the Ford wiring harness' four-pin connector. If required, an Enable/Disable switch may be installed in series with the +12 volt supply (from the Ford harness to the +12VDC Faston terminal on the ETM20 unit.

Setup and Calibration

No calibration required.

Specifications

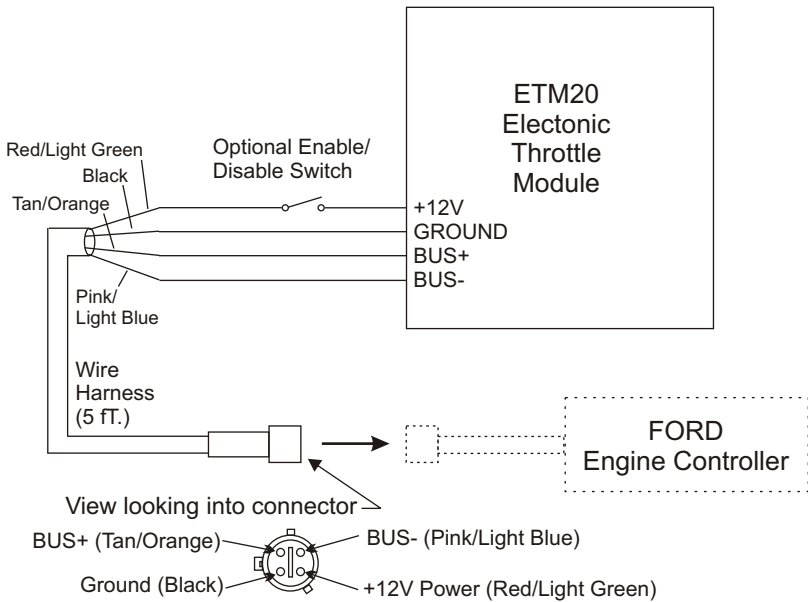
Electrical

Input Voltage (+12V Terminal):	8 to 16 volts
Input Current (+12V Terminal):	37 mA
Standby Current:	28 mA
Input Current (on/off terminal):	1 mA
Control Current:	1 mA

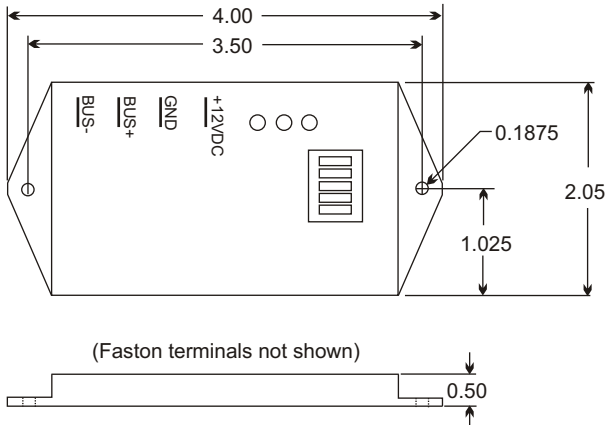
Mechanical

Weight:	0.164 lbs
Connections:	Faston 0.25 inch terminals
Case Material:	Cyolac thermoplastic (UL 94VO)
Encapsulation Material:	Epoxy potting compound, resistant to most fuels, oils, acids, and cleaning agents.

Wiring Diagram



Mechanical Drawing



All dimensions in inches. Not to scale.

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Customer Evaluation

InPower wants to ensure total customer satisfaction. Please download a product evaluation form at www.InPowerDirect.com/customer_evaluation.htm or call us toll free at 866-548-0965 to be sent a form by mail.