



E-381

Description

The E-381 is a robust controller with multiple configuration possibilities. This device can be used in gas or diesel applications and 12 or 24 volt systems. The controller has up to 2 speed sets as well as overspeed protection. These speed sets can be enabled by setting the respective pins "high" (12V/24V). Engine configuration can be done using simple gain and speed set pots. EMI shielded versions of the controller are also available. This controller is conformally coated and mounted in a rugged enclosure.

Features

High impact plastic case

Diesel or gas control

Power supply 12/24VDC

Speed band +/- 0.3% at ambient temp

Temperature stability +/-1.5%

Speed range 3:1

2 Speed Sets

Gain, derivative, and integral adjustments

Speed input (mag pickup, ignition, transformer)

Optional overspeed protection

Optional EMI protection

Mounting attitude: any
(Vertical recommended)

Functionally tested

Specifications

Mechanical

| | |
|----------------|-------------------------------|
| Operating Temp | -30 to 85° C -22 to 185° F |
| Weight | 1lb |

Power

| | |
|------------------------|------------|
| Supply Voltage | 12V or 24V |
| Power Consumption | 5W |
| External Fuse Required | 7.5A |

Speed Sensor

| | |
|---------------|-------------|
| Mag Frequency | up to 10kHz |
| DIS Frequency | up to 4Hz |
| Voltage | 100V |

Governor

| | |
|-------------|----|
| Max Current | 4A |
|-------------|----|

Speed Set

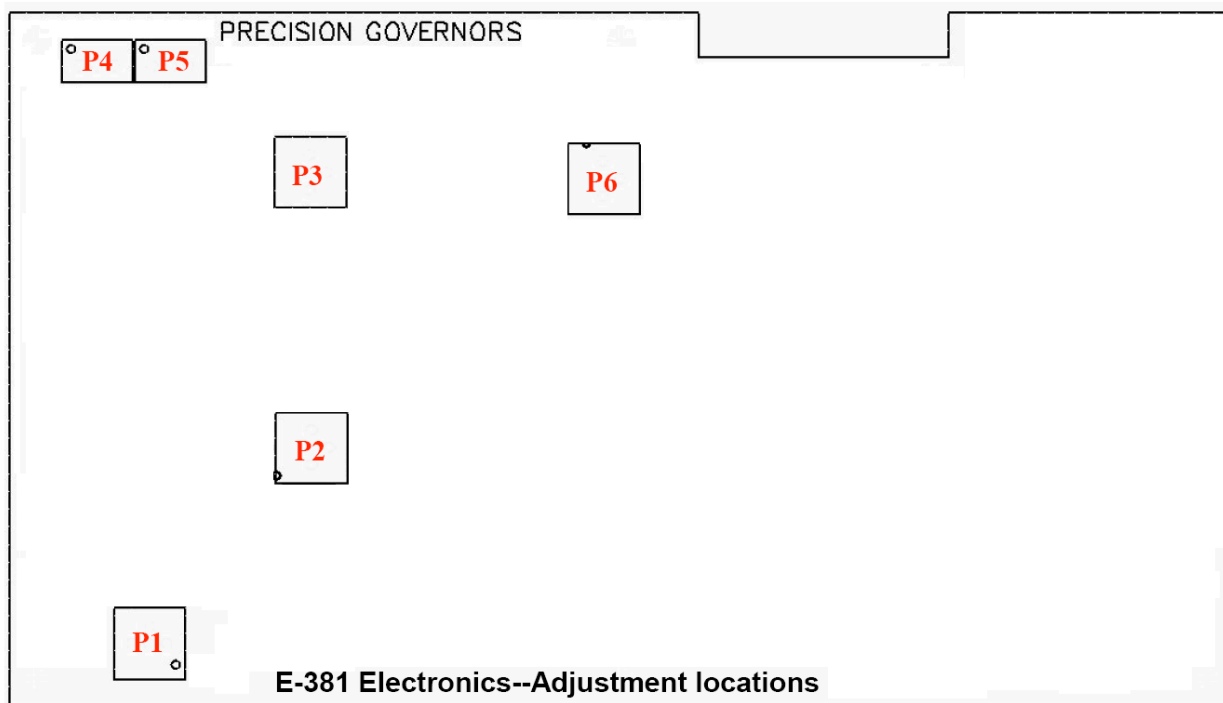
| | |
|-----------|----|
| Threshold | 8V |
|-----------|----|

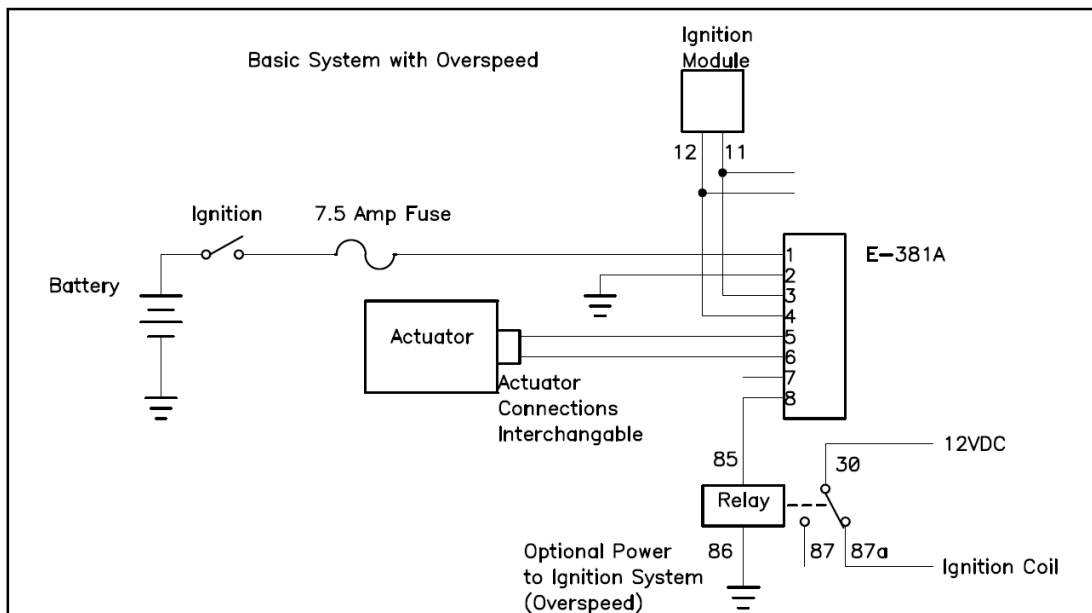
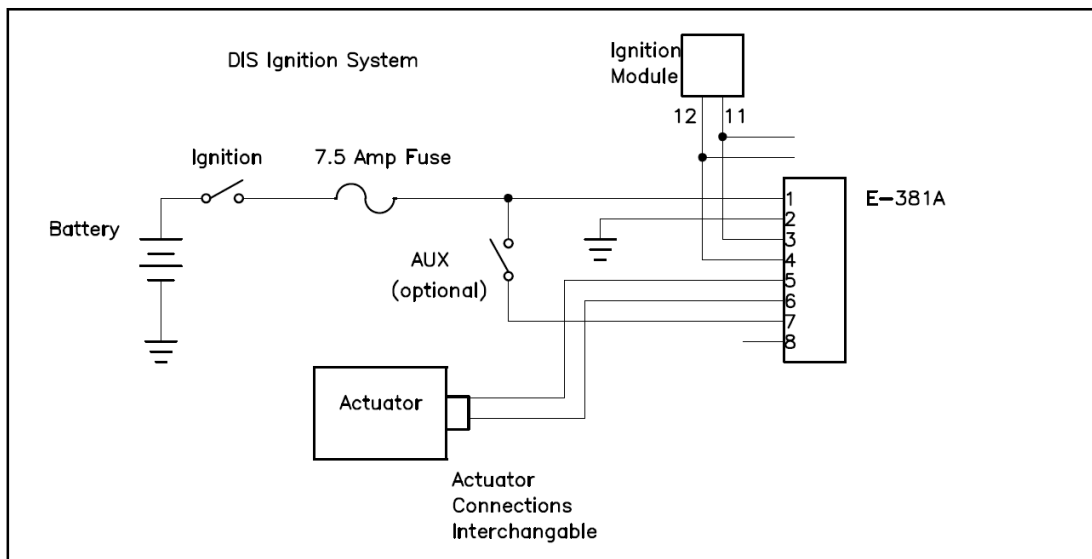
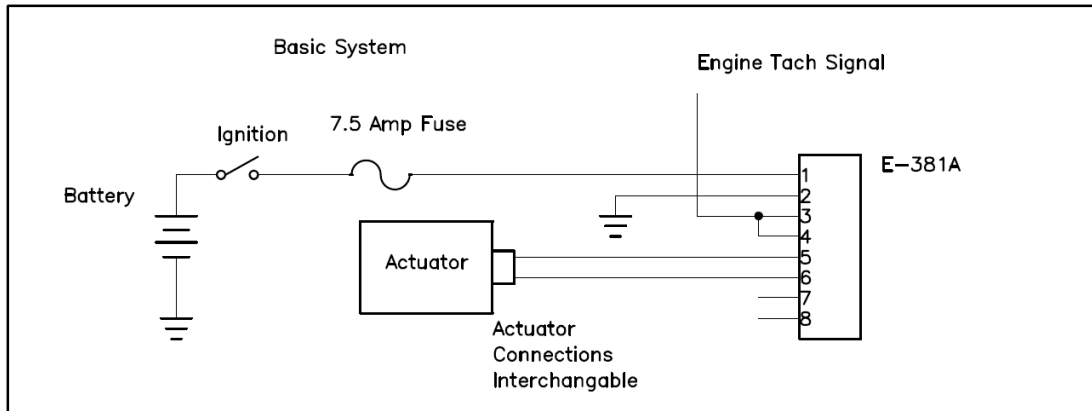
Wiring

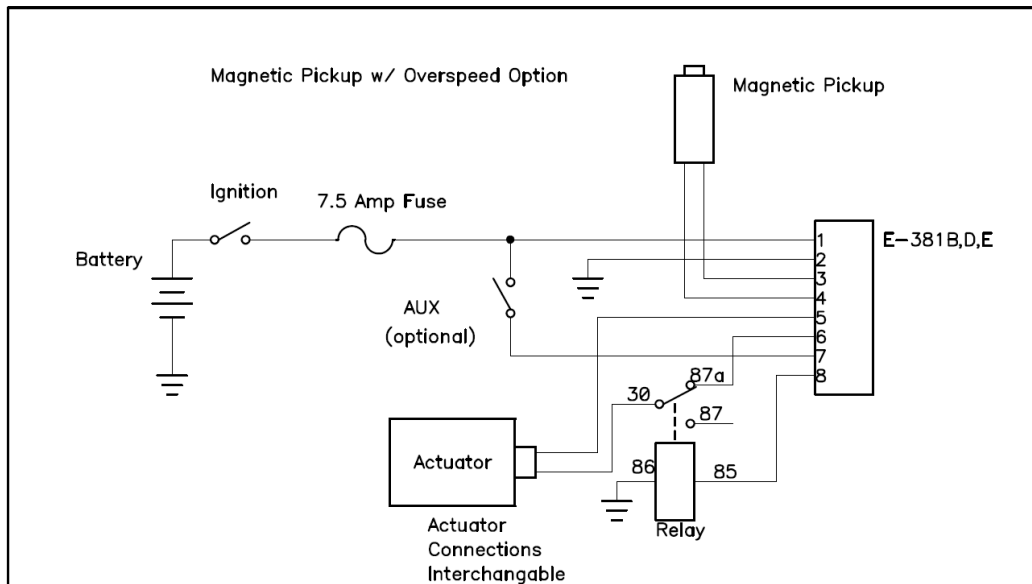
| Pin | Description |
|-----|---------------------------------|
| 1 | +12/24V Power |
| 2 | Ground |
| 3 | Speed Sensor + |
| 4 | Speed Sensor - |
| 5 | Governor (polarity insensitive) |
| 6 | Governor (polarity insensitive) |
| 7 | Speed set |
| 8 | Overspeed / Ignition |

E-381 Electronics--Adjustment locations

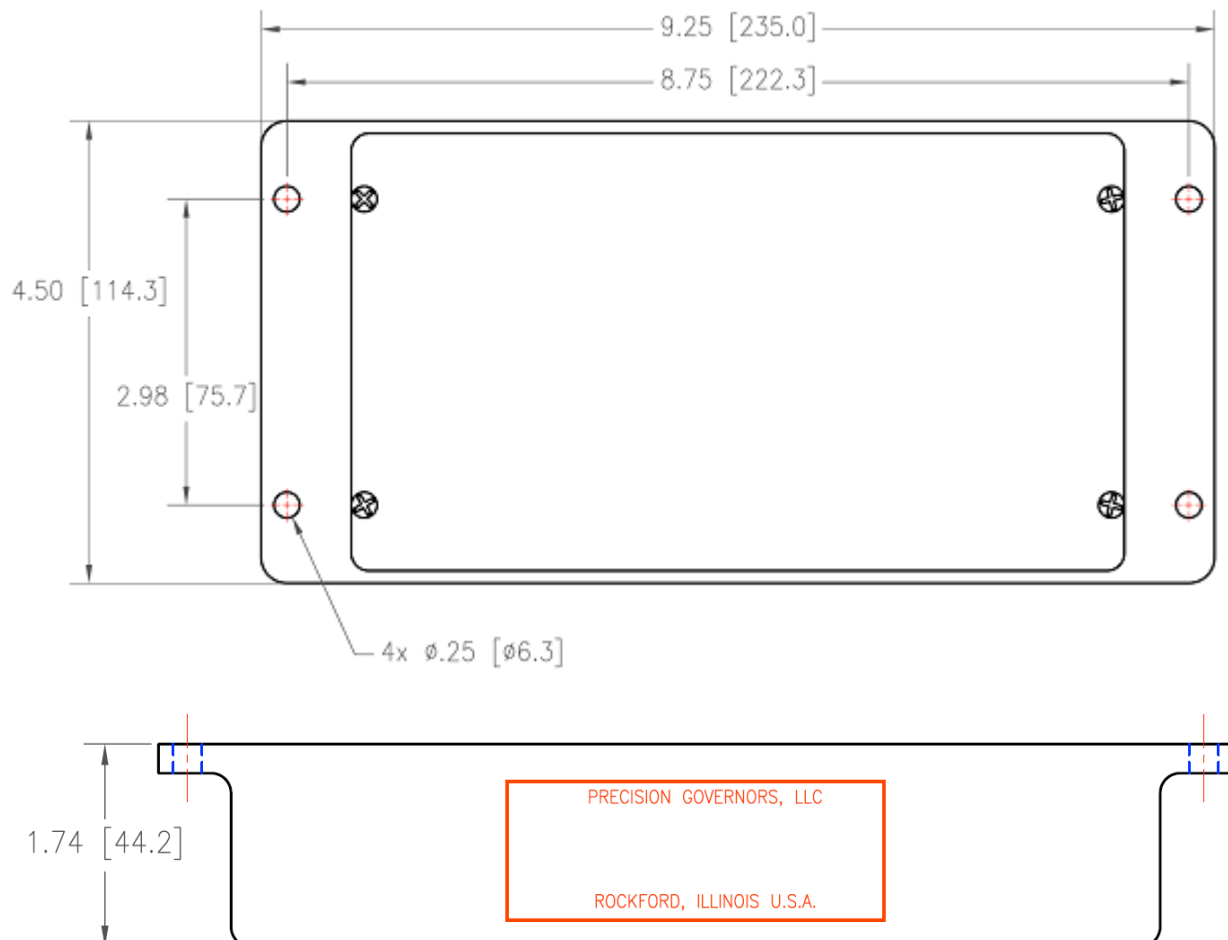
- P1. Aux-speed
- P2. Gain
- P3. Integral
- P4. Speed-set
- P5. Overspeed
- P6. Derivative







Dimensions





Reference

| Model | Part # | Description |
|-------|--------|---|
| A | 9362 | Distributor or 4 cylinder DIS input |
| B | 9334 | Magnetic Pickup, gas or diesel |
| C | 9337 | 50/60 Hz transformer input |
| D | 9456 | EMI shielded, diesel ONLY, magnetic pickup genset 24 Volts |
| E | 9469 | Magnetic pickup, diesel only, Optimized performance for diesel engine control |