



CALIBRATION & WIRING FOR DYN1-10810 & DYN1-10840 CONTROLLERS

1.0 CALIBRATION PROCEDURE

- 1.1 Place SW1-1 in the "ADJUST 1" position.
- 1.2 Place SW1-2 to the desired generator frequency, 50 or 60 Hz.
- 1.3 Set SW1-3 to the correct number of engine cylinders.

— NOTE —

DYN1-10810 controller does not have SW1-3 switch.

- 1.4 SW2 is a rotary switch which rotates a continuous 360°, with "0" being MINIMUM and "F" being MAXIMUM GAIN. Set this switch at "4".
- 1.5 Place SW3-1 to the "P" position.
- 1.6 Place SW3-2 to the "I" position.
- 1.7 Place SW3-3 to the "D" position.

— CAUTION —

If SW1-3 is not set to the correct number of cylinders, overspeed may occur.

2.0 START THE ENGINE

- 2.1 With the engine running at the desired speed, slowly turn SW2 clockwise (CW) until the engine begins a quick audible hunt. Once the engine begins to hunt, turn SW2 counterclockwise (CCW) until stable. If the generator does not meet performance requirements, proceed through Step 3.

3.0 OPTIMIZE GOVERNOR PERFORMANCE

- 3.1 As in Step 2.1, turn SW2 clockwise (CW) until the engine begins to hunt.

3.1.1 Once the engine begins to hunt, determine the frequency at which the actuator is oscillating. If the actuator is oscillating at a rate greater than 7 Hz (a fast hunt), change SW3-3 to the "D/2" position. If changing this position does not affect the hunt, reposition SW3-3 to "D" and proceed to step 3.1.2.

3.1.2 If the actuator is oscillating at a rate between 3 to 6 Hz (a slower audible hunt), change SW3-1 to the "P/2" position. If the engine is now stable, proceed to step 3.1.3. If changing this position does not affect the hunt, reposition SW3-1 to the "P" position. Turn SW2 counterclockwise (CCW) until stable and proceed to step 3.3.

3.1.3 With SW3 switches positioned, continue to turn SW2 clockwise until the engine begins to hunt. Once hunting, turn SW2 counterclockwise (CCW) until stable.

3.2 Shut off the engine. While watching a frequency meter, start the engine. If the overshoot is greater than the specified limit, change SW3-1 to the "ON" (1/2) position and repeat step 3.2 to ensure best performance.

3.3 If the governor does not meet the control specification, place SW1-1 on "ADJUST 2" position and repeat steps 2 through 3.2.

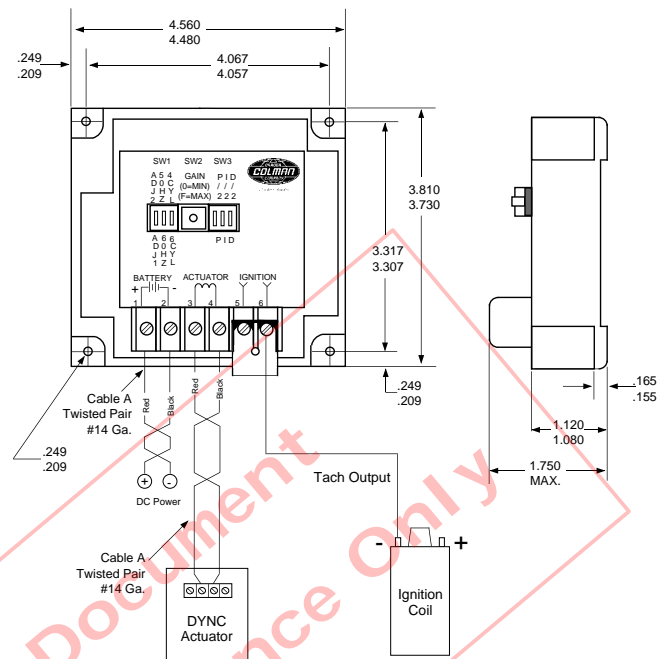
4.0 SPEED REFERENCE SIGNAL

Option I

Standard Coil Ignition — 1800 RPM

1. Jumper between terminals 5 & 6 must be in.
2. Terminal 6 should be connected to either tachometer output from coil or negative (-) terminal on coil. (Negative ignition pulse)

Wiring Diagrams — DYN1-10840



Option II

DIS (Distributorless) Ignition — 1800 RPM

1. Remove jumper between terminals 5 & 6.

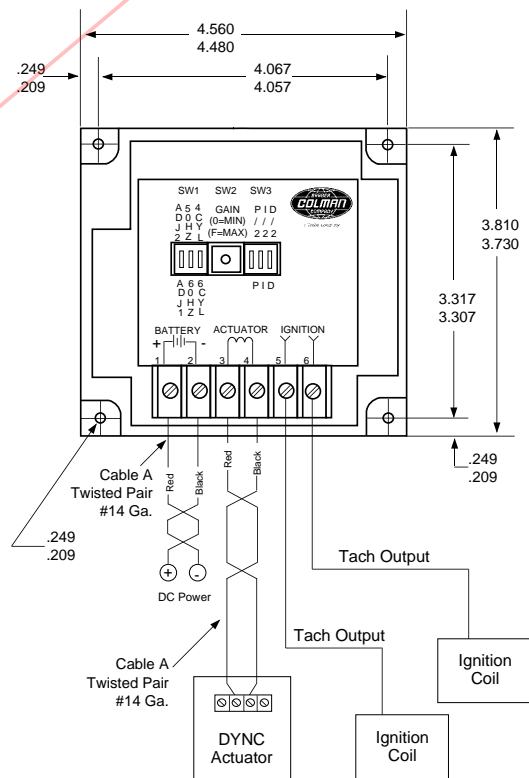
— Note —

If jumper is not removed, the ignition module will be damaged.

2. Terminal 5 should be connected to one side of the DIS tachometer output and terminal 6 to the other output for tachometer.

— Note —

Ford 1.1 liter and 1.3 liter: Tachometer leads are yellow/black and yellow/white routed to coil. There should be connectors coming off of these leads. Terminals 5 & 6 would be connected to these connectors. (Not polarity sensitive)



Option III

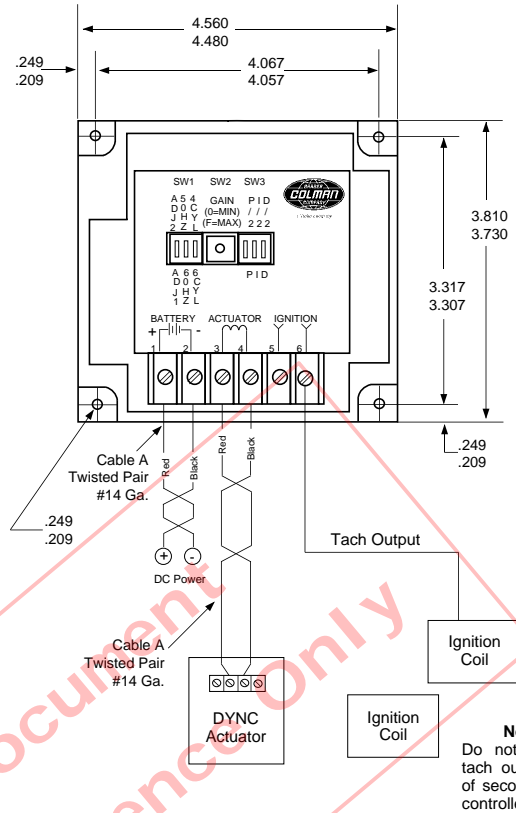
DIS (Distributorless) Ignition — 3600 RPM

1. Remove jumper between terminals 5 & 6.

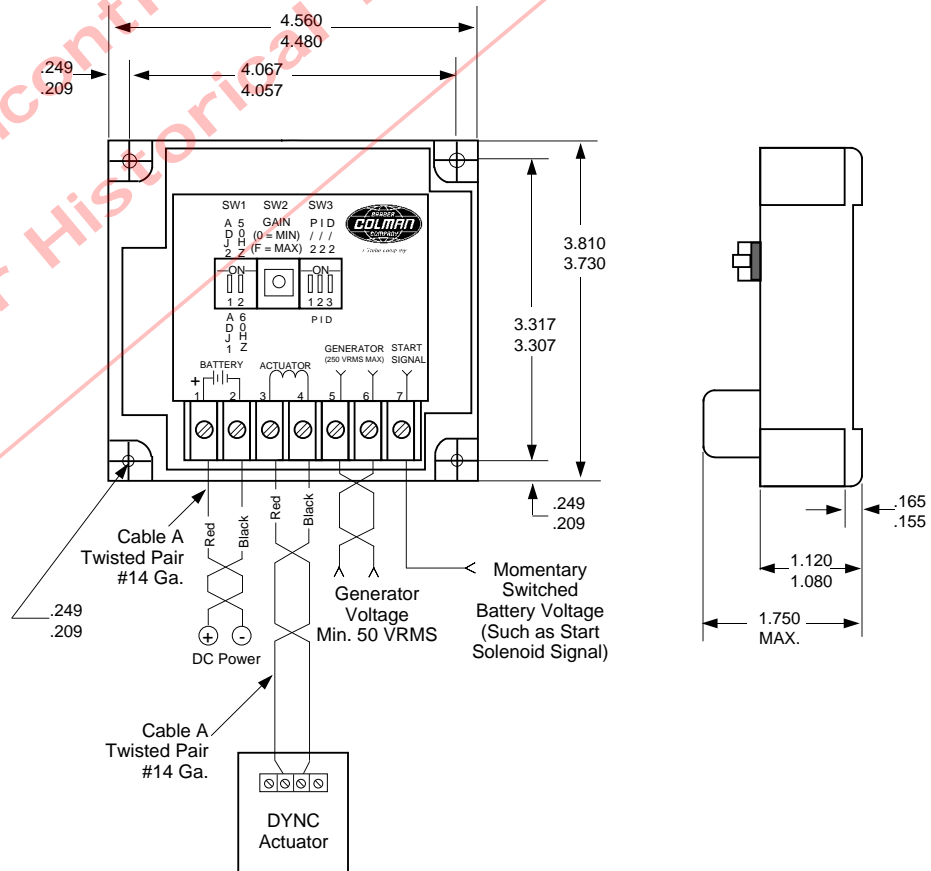
— Note —

If jumper is not removed, the ignition module will be damaged.

2. Terminal 6 should be connected to one side of the DIS tachometer output and terminal 5 should be left open.



Wiring Diagram — DYN1-10810



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CAUTION

As a safety measure, the engine should be equipped with an independent overspeed shutdown device in the event of failure which may render the governor inoperative.

NOTE

Barber-Colman believes that all information provided herein is correct and reliable and reserves the right to update at any time. Barber-Colman does not assume any responsibility for its use unless otherwise expressly undertaken.

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