PRO-CONTROL
MODEL 5301, 5302, 5304, 5305, 5306, 5307, 5308, 5309

INSTALLATION INSTRUCTIONS

IMPORTANT
WEAR SAFETY GLASSES

PRO-CONTROL
Instr. No. 2650-238J

ABOUT YOUR PRO-CONTROL

Pro-Control can be used for any single rpm-related function, such as a rev-limiter, shift light activator, or nitrous oxide trigger. When used as a rev-limiter, Pro-Control guards against over-revving by allowing the engine to run with 100% power until it reaches the preset rpm level. Models WITHOUT RESET BUTTON will automatically interrupt ignition power for a fraction of a second and then restore it for continued racing power. Models WITH RESET BUTTON are for super-charged (blown) engines. Reset unit shuts off ignition completely to prevent engine damage. Reset button must be pushed to restart engine. Models with By-Pass Delay can be used in conjunction with a 12 volt signal from Line Lok and/or Trans-Brake to deactivate the Pro-control. This will prevent shifting during burnouts. The adjustable delay feature can be set between .1 to 1 second to control deactivation time. This will prevent short shifting after Line Lok and/or Trans-Brake is released.

Without Reset Button
5301 For Standard/Electronic Ignitions
5302 For Vertex Magneto OAC Ignitions
5304 For Standard/Electronic Ignitions
5305 For Vertex Magneto OAC Ignitions
5306 For Vertex Mag OXC or Super Mag Ignitions

With By-Pass Delay
5307 For Standard/Electronic Ignitions
5308 For Vertex Magneto OAC Ignitions
5309 For Vertex Mag OXC or Super Mag Ignitions

For Reset Models (5304, 5305, 5306)
The reset function locks the Pro-Control in the tripped mode once the set RPM is reached. The reset button must be pushed to reset the Pro-Control.
PRO-CONTROL WIRING

Rev-Limiting

Model 5301
Standard Ignition
(Single or Dual Points)

*On GM and some Ford cars, wire between coil (+) and ignition switch is a resistor wire. Do not add additional ballast resistor.

Rev-Limiting

Model 5301 Most Electronic Ignitions
Connect trigger to coil (-) on most electronic ignitions or tach terminal if available.

**NOTE:** Not for use with MSD 6 Series boxes.

Rev-Limiting

Model 5301 MSD Ignitions

**WARNING**
Warranty will be void if connected to coil on MSD ignitions. Attach to tach terminal.
Rev-Limiting
Model 5306 Super Magneto
Battery power must be switched on to Pro-Control before starting engine or a no start will result.

IMPORTANT
Inductive Triggered instrument must use its own pick-up. (Part Number 5210)

NOTE: When a tachometer is used, a second inductive trigger should be installed here.

Rev-Limiting
Model 5306 Super Magneto Vertex OXC

IMPORTANT
Inductive Triggered instrument must use its own pick-up. (Part Number 5210)

Installing Inductive Trigger
The Inductive Trigger should be connected to the magneto primary wire as shown here. Be sure to secure the Inductive Trigger with the nylon wire tie to prevent strain on magneto primary wires.

For Air Shifter Or Shift Lamp
Model 5301 & 5302 or 5307 & 5308
This hookup supplies 12 volts to lamp when set RPM is reached.

CONNECT TO:
— coil on Standard and Electronic Ign.
— Tach Terminal on MSD Ign.
— Inductive Trigger on Super Mag. (see illustration above)
— Mag. Pri. Terminal on Vertex Magneto. (see illustration above)
See "Rev-Limiting" wiring diagram for your trigger wiring application.
Override & Delay Functions For Air Shifter  Model 5307, 5308 & 5309

Your Pro-Control can be deactivated to prevent shifting during burnout and short shifting at launch. This is accomplished by supplying 12V power to the delay lead-blue terminal(s).

To prevent automatic air shifting during burnout, connect delay lead to line lock switch. For timed deactivation on launch, connect delay lead to the trans brake, or use a clutch switch. When the switch is opened, time delay will begin. This allows RPM to rise above the shift point briefly without activating the automatic shifter and causing a short shift.

The delay timer can be set to reactivate from .1 to 1.0 seconds after the delay switch is turned off. To adjust timer, remove plug at end of Pro-Control. Insert screwdriver and carefully turn adjuster. Do not force. See illustration at right. Two delay leads are provided to allow simultaneous connections of a line lock, trans, brake and/or clutch switch without causing interaction between the two systems. If a single lead were used, electrical feedback to the unused component would occur. For example, during burnout the line lock power would activate the trans. brake through the delay warning.

Installion Tips

1. Mount Pro-Control base firmly to reduce excess vibration wear and tear.
2. A 12V power source MUST be used to power the Pro-Control. A 12V motorcycle battery or gel cell is a good alternative for cars without batteries. A battery with a 5 amp hour minimum rating is recommended.
3. If you are using high current or prefer extra protection, use a fuse in the relay circuit to prevent accidental damage because of shorts or grounds.
4. Wherever possible solder wire connections and avoid crimp-type connectors. This will minimize loose connections that could cause problems later. Protect connections from tugging or vibrational damage by adding strain reliefs at all connections.
5. Make sure you have a good ground to engine and battery negative terminal.
6. Wire installations should be neat and tied down to prevent tugging and fraying of wires at connections.

Trouble Shooting

2. Did you select the correct cylinder range?
3. Are all electrical connections correct and tight?
4. Is the Inductive Trigger installed correctly? (Models 5306 & 5309)
5. If problems persist try Pro-Control on another vehicle with the same ignition.
6. If you cannot resolve the problem call Auto Meter Customer Service: (815) 895-8141