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# AEROFLOW PERFORMANCE LAUNCH CONTROL LINE LOCK KIT

### WARNING!

THIS PRODUCT REQUIRES DETAILED KNOWLEDGE OF AUTOMOTIVE SYSTEMS. WE RECOMMEND THAT THIS INSTALLATION BE CARRIED OUT BY A QUALIFIED AUTOMOTIVE TECHNICIAN.

WARNING! These instructions must be read and fully understood before beginning the installation. Failure to follow these instructions may result in poor performance, vehicle damage, personal injury or death. If these instructions are not fully understood, installation should not be attempted.

The unit can be used in either for the front wheel side or the rear wheel side of the brake system of a passenger car. If you choose to use the launch control in the rear side of the brake system it may be used only for hill hold brake system on the street.

The Aeroflow launch control is a standard design with one connection form the master cylinder and one connection to the brakes.

WARNING! The Aeroflow launch control is designed primarily for use on high performance vehicles used in drag racing. IT IS

INTENDED FOR SHORT DURATION USE (MAXIMUM 60 SECONDS) to lock the front wheels while staging the vehicle for Drag

Racing. IT IS NOT INTENDED FOR BURNOUT COMPETITIONS and or to be used as a long-term brake holding device or in place of
a driver depressing the brake pedal. It should only be used on passenger cars and light trucks, for example 750kgs or ¾" tonne or
less using a standard hydraulic brake system that is in good safe operating condition.

IMPORTANT: We strongly recommend that you have the launch control installed by a qualified or certified automotive mechanic. Do not use copper tubing. Use a tube bender when bending tube to avoid kinking or crushing the tube. Preassembled steel braided Brake hoses may be an acceptable substitute for steel lines in high performance applications.

#### **INTRODUCTION**

Congratulations on your purchase of Aeroflow Performance line lock kit. Aeroflow Performance products cannot and will not be responsible for any damage, or other conditions resulting from misapplication of the parts described herein. However, it is our intention to provide the best possible products for our customer, products that perform properly and satisfy your expectations. Should you have any questions? Please call technical support at +61 2 8825 1900 and have the product part number on hand when calling.

Aeroflow's launch control kit (also known as Roll/Stage/Brake Control. Line Lock, Roll Stop and Anti-Roll). This 12-volt, 2 port launch control is designed to be installed into the vehicles existing brake system and can be used on either the front or the rear brakes (not for split or diagonal brakes). In and Out ports are 1/8" NPT. Intended as brake locking devices for Drag or Off-Road use.

Note: System is only designed to be active for short periods of time (30 seconds or less). Should not be used as parking brake activation, when power is lost, solenoid will open.

#### INSTALLATION INSTRUCTIONS

There are a number of ways that the launch control solenoid can be installed on your race car. See our diagrams showing installation on two general types of braking systems. If you are not 100% sure of how to install this unit, see your fabrication shop or the person that installed your brake system on your car and have them install this system for you.

- 1. Disconnect the negative battery cable.
- 2. Use the cable ties and/or double-sided tape to mount the momentary push-button switch on the shifter stick, or at any other convenient location you choose.
- 3. Run a length of 18 AWG wire from the end of the switch cable to the solenoid valve(s). At the solenoid valve(s) splice the newly installed wire to one lead of the solenoid(s), and ground the other solenoid lead(s)
- 4. Connect one end of the fuse holder to a switched ignition terminal. Run a length of 18 AWG wire from the other end of the fuse holder to the other wire of the switch cable. Splice this wire at both ends.
  - I. Wire as per diagram supplied.
  - II. All wiring connections should be soldered and covered with heat shrink sleeving.
- 5. Connect the battery. The solenoid valve(s) should operate when the push button is depressed. If the fuse blows out there is a short circuit. Check all of the splices and connections to be sure they are insulated and that there are no short circuits.
- 6. Carefully choose and solidly mount the solenoid to the car away from the headers or excessive heat. Each end of the solenoid has a 1/8" NPT female port, the hex side is "IN" and the other side is "OUT". Use Aeroflow AF375-02 to connect 3/16" line to 1/8" NPT
  - I. IN: This end should be placed towards to master cylinder (hex side)
  - II. OUT: This end should be placed towards the brakes (round brass side)
- 7. Connect brake lines using appropriate brake lines and fittings, see WWW.AEROFLOWPERFORMANCE.COM for an online catalogue.
- 8. Close any unused opening in pressure differential and block with the appropriate tubing plug.
- 9. Bleed air from system and check for any leaks. Now double check all threads are tight!
- 10. Apply the brakes hard, push and hold the launch control button and release the brakes. Have someone check to see if the brake lights remain on. If the lights go out it will be necessary to add an additional hydraulic brake light switch. The switch should be installed on the brake side of the solenoid valve. The two terminals of the new brake light switch should be wired in parallel with the existing brake light switch.

#### **OPERATION**

NOTE: IT IS INTENDED FOR SHORT DURATION USE (MAXIMUM 60 SECONDS) ONLY

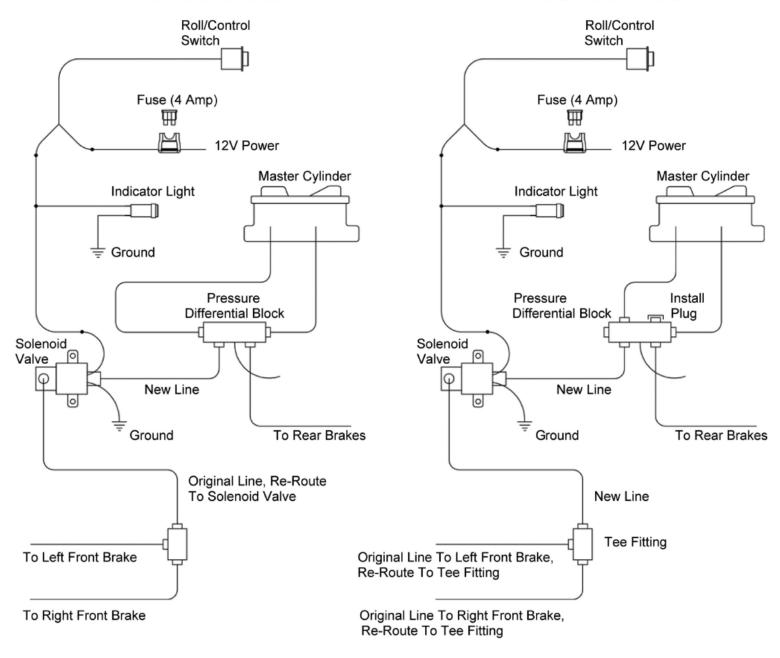
Pressing and holding the launch control push button switch energizes the solenoid valve. When the brake pedal is pushed, hydraulic pressure is applied to all four brakes.

When the brake pedal is released, the solenoid valve maintains brake pressure at the wheels that it controls, while brake pressure is released at the other wheels. When the push button is released, the brake pressure that was maintained by the solenoid valve is released and the vehicle can accelerate.



## TYPICAL 4 PORT DIFFERENTIAL BLOCK INSTALLATION

## TYPICAL 5 PORT DIFERENTIAL BLOCK INSTALLATION



For more information or technical enquires

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