

Installation Instructions for 63003

Stage Control Kit

Important Information:

- Carefully read these instructions before installing your JEGS Stage Control Kit. If you are not qualified or experienced at performing this type of installation, it is highly recommended that you have the JEGS Stage Control Kit installed by a qualified automotive mechanic. These instructions contain warnings that must be observed otherwise your vehicle could be rendered unsafe and as a result possible serious injury to you and your car could occur.
- The JEGS Stage Control Kit solenoid valve is designed to be installed in the front brake system for racing and can also be used in the rear brake system for momentary (*maximum of 60 seconds*) hill holding. In these conditions, the solenoid valve should not interfere with normal brake operation.
- All fittings and brake lines may be purchased from your local parts store, and only SAE approved seamless steel brake lines with double flared ends should be used. **Do not use copper tubing.** Brake lines are available in a variety of lengths and come pre-assembled with tube nuts. Use only brake lines that are of the correct size and length. **Do not cut or alter tubing.** We strongly recommend the JEGS Universal Stage Control Installation Kit 555-63005 (*Galvanized*) or 555-63006 (*Stainless*).
- Use Teflon tape on threaded fittings. **If you use Teflon thread sealer, take extra care not to get any inside the lines otherwise contamination can and will occur.**
- To be street legal, the rear brake lights must operate when the brake system is under pressure. Therefore, a pressure-operated switch must be installed if the JEGS Stage Control Kit defeats the purpose/function of the stock rear brake light switch. See section # 7 of **Electrical Installation** before proceeding. (*Not required for off-road use and NHRA drag racing venues*).

Safety Precautions:

- The JEGS Stage Control Kit is designed primarily for high performance racecars to momentarily (*maximum of 60 seconds*) keep the front brakes engaged while staging for a drag race. It will not safely function as a long-term brake holding device. It should only be used on domestic cars and light duty (*no more than 3/4 ton rated*) trucks using a standard hydraulic braking system that is in a safe, operable condition. It should never be used as a temporary brake holding device in place of a parking brake or as a replacement for a driver depressing the brake pedal. JEGS Stage Control Kit is not recommended for vehicles with anti-lock or split diagonal brake systems. However it can be made to work in racing conditions only.
- JEGS Stage Control Kit solenoid valve must be securely mounted to prevent flexing of brake lines. Unsecured mounting can cause premature failure.
- The solenoid must be mounted away from areas like suspension components, steering components, headers, and exhaust pipes. An area such as the firewall is suggested, and a line-fitting wrench is always recommended on all line fittings while installing the brake lines.
- When working on your brake system it is always important not to allow contaminants (*dirt or foreign matter*) to get into the lines or fluid. This may cause improper operation and failure.
- Use a tube bender to avoid kinking or crushing if bending lines is necessary: **there must be no leakage!**

Installation Instructions:

1. Determine the fittings that will have to be measured.
2. Install male fittings in the valve inlet port (*top port closest to heat sinks*) and in selected outlet ports of the solenoid valve. Elbow fittings may be used where necessary. Non-used outlet ports must be sealed with 1/8" NPT plugs.

CAUTION: *Do not clamp JEGS Stage Control Kit in vise or damage can and will occur to motor and magnet. Do not over tighten fittings.*

3. Mount JEGS Stage Control Kit solenoid valve close to the brake lines (*away from headers, exhaust pipes, steering and suspension components*), which you will be using for connecting the JEGS Stage Control Kit system. Valve may be mounted in any position (*vertical-horizontal, etc.*). Using a 3/16" or # 13 drill bit, drill holes for mounting and fasten with supplied 1/4" screws. Secure the black ground wire under one of the mounting screws. Use a solderless/crimp connector terminal on this wire. If this is not a good electrical ground, run an auxiliary wire to the engine block or negative (-) terminal of the battery.



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4. Install new steel brake lines if necessary.
5. Additional brake lines may be connected to existing lines by using appropriate size inverted flare union fittings. Any one of the outlet ports on the valve body can be used for installing a pressure gauge if so desired. It is recommended that this be done at this time.
6. Be sure to use a top quality factory recommended, heavy-duty brake fluid that meets DOT 3 or DOT 4 specifications.

Electrical Installation:

- The JEGS Stage Control Kit is designed for 8 to 16 Volt DC operations only.
- To assure good electrical connections use # 18 gauge standard insulated automotive wire or equivalent and solder all splices together. Always wrap each splice/connection with a good grade of electrical tape.

CAUTION: Wires should never be stretched to make a connection. Always confirm you have proper lengths.

1. Disconnect negative (-) cable from battery.
2. Mount JEGS Stage Control Kit Activation Switch in a comfortable and easy to reach position.
3. Mount indicator lamp in convenient location under dash, or drill an 11/16" diameter hole in instrument panel if so desired for in-dash mounting. Use caution when drilling. Check for obstructions behind instrument panel before drilling any holes. Mount indicator lamp and splice lamp wire to end of JEGS Stage Control Kit switch wire. Be sure that indicator lamp bracket is grounded.
4. A three (3) way splice must now be made using the wire from the lamp, # 2 wire from the JEGS Stage Control Kit switch, and # 4 wire from solenoid valve.
5. Using a length of # 18 gauge wire, splice one end to the # 3 wire of the JEGS Stage Control Kit switch and connect the other end to a switched positive terminal so that the JEGS Stage Control Kit is only operable with the ignition turned on. A Snap-Lok fuse holder with 5-amp fuse is provided and should be incorporated into this wire. The fuse will protect your electrical system in the event of a short circuit.
6. Reconnect battery and turn ignition switch on. Depress the switch several times and check fuse. If fuse is burned, check all electrical connections for a short.
7. Turn ignition switch on. Apply the brakes and depress the JEGS Stage Control Kit switch button. While still holding JEGS Stage Control Kit switch, release brake pedal. **Your brake lights must operate when the hydraulic system is under pressure and JEGS Stage Control Kit solenoid valve is engaged.** If not, connect a hydraulic brake light switch to one of the outlet ports of the solenoid valve (we recommend JEGS #555-63070). Electrical hook-up should be a parallel hook-up to existing pedal brake switch wiring.

After installation, bleed all air out of the system. Follow vehicle manufacturers' brake bleeding procedures. Bleed air at wheel cylinders starting with wheel furthest from master cylinder and ending with closest. Be sure to check all connections for leakage under pressure.

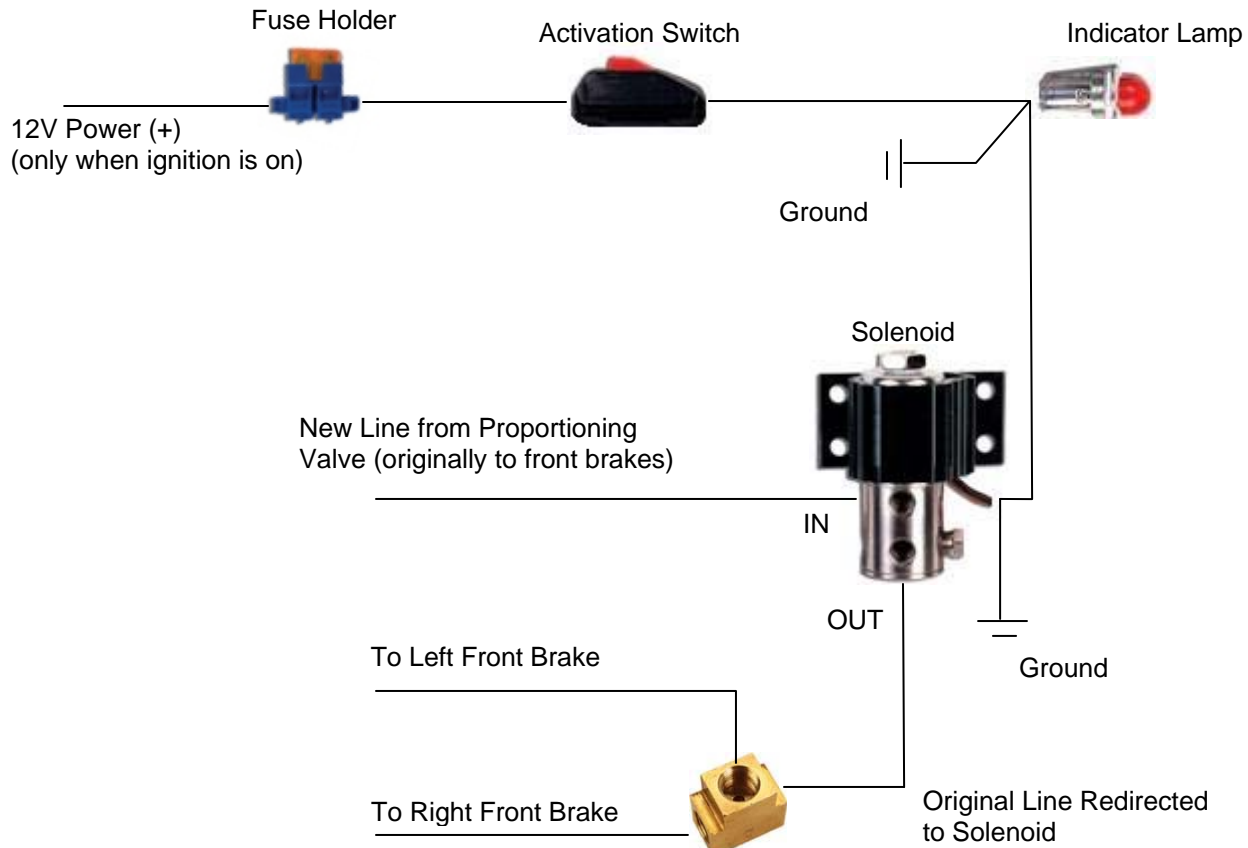
Caution: Before driving vehicle, completely check the brake system for proper operation. Check all connections under pressure for leaks and be sure that you have a good solid brake pedal. Test the JEGS Stage Control Kit system several times to be sure that it operates correctly. Be sure that the proper two wheels have the brakes engaged when the JEGS Stage Control Kit is actuated and that all four wheels are free when the JEGS Stage Control Kit switch is released.

Operating Instructions:

- With ignition switch in the "on" position, fully depress brake pedal to firmly engage brakes, and then depress the JEGS Stage Control Kit switch button. The JEGS Stage Control Kit indicator lamp should light up when switch button is depressed indicating that the solenoid valve is actuated. The operation of the JEGS Stage Control Kit will now allow you to release the brake pedal and maintain an engaged front brake system for racing applications. This will allow you to preload the drive train without roll out.
- To disengage the JEGS Stage Control Kit, release the switch button.
- **Warning: While vehicle is in motion, never depress switch button when applying brakes.**



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JEGS Tee Fitting: (sold separately)

- Alone as part # 555-63083
- or included in kit:
- 555-63005 (Galvanized)
- 555-63006 (Stainless)