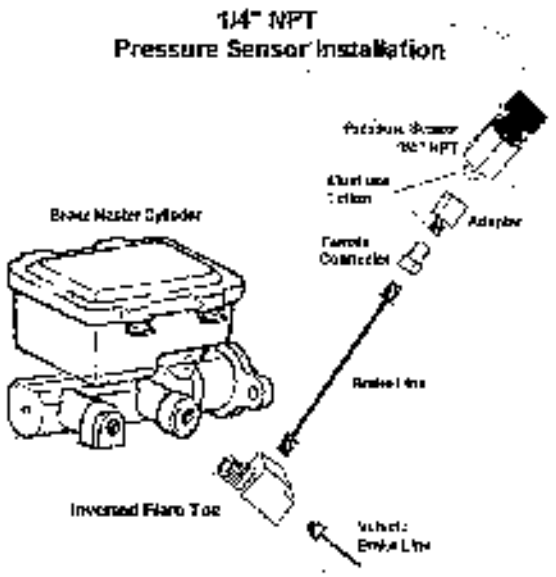
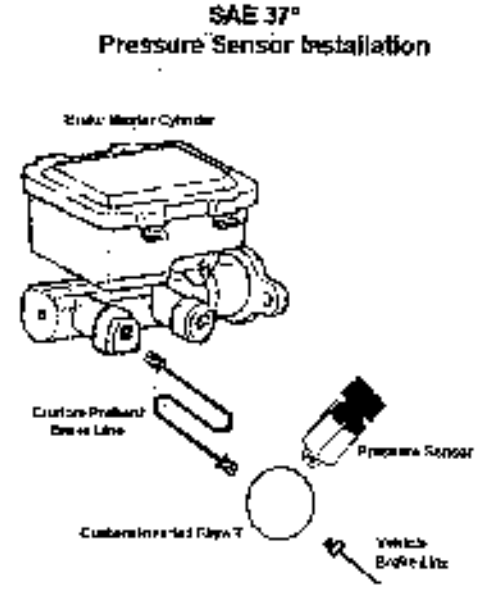
Hydraulic Installation Instructions

1. Hydraulic Pressure Sensor Installation

Note: Do not contaminate the brake system by allowing moisture or debris to enter.

1. Park vehicle on level, flat ground. Turn off engine. Ensure that vehicle will not move.
2. Locate brake master cylinder. (See vehicle owner's manual) and always use proper tools.
3. Carefully disconnect brake line from brake master cylinder. (Front or back port)
4. Note: Different vehicles have different hydraulic fittings. Connect the hydraulic parts as shown on the appropriate figure for your vehicle. You may need to gently bend the brake lines to better fit your application. Be careful to prevent damage to your brake system.
5. Reconnect the vehicle brake line to the Tee adapter.
6. Attach the supplied pressure sensor to the remaining port on the Tee adapter.
7. Bleed air out at the pressure sensor. (see bleeding instructions)
8. Connect sensor cable and feed sensor cable through vehicle firewall. Caution: Do not pinch, crush, or damage the sensor cable.
9. Connect sensor cable to MaxBrake brake controller.
10. You will need to calibrate MaxBrake one time for your vehicle, unless you change the pressure sensor. If you have trouble, please contact MaxBrake at 1 (337) 542 4050.





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MaxBrake
Brake Controller

Hydraulic Installation Instructions

2. Bleeding the Sensor

Note: Always safely handle, secure, and collect any brake fluid. Recycle or dispose using approved procedures in your area.

1 Turn off engine and allow to cool. Ensure that vehicle will not roll or move.
2 Raise vehicle hood and have assistant take foot completely off the brake pedal. Note: Do not twist cable at the back of the pressure sensor. Unplug the pressure sensor cable.
3 Loosen the pressure sensor with a slight 1/4" turn. Be ready to collect brake fluid.
4 Have assistant very slowly begin to press brake pedal. Instruct the assistant in advance not to release the brakes until instructed to do so.
5 Look for brake fluid to begin escaping at the threads of the pressure sensor. As soon as brake fluid is observed, have assistant hold brake pedal steady.
6 Close the pressure sensor by tightening it. Plug in the pressure sensor cable.
7 Instruct the assistant to release the brakes. Note: Do NOT release the brake pedal while the pressure sensor is open (not tightened), as this will suck air back into the system.
8 Be sure to check the brake fluid level in the reservoir after bleeding the pressure sensor. Add fluid as necessary to keep the level above the fill line. Do not contaminate system.
9 Be sure to inspect the pressure sensor and other fittings for signs of leakage. Do not operate a leaking or malfunctioning brake system. Correct leaks as necessary.
10 Collect all tools and materials. Do not leave anything in the engine compartment.

3. Calibration

1. Make sure vehicle is at a complete stop.
2. Vehicle engine must be running.
3. Take foot completely off of brake pedal.
4. Press and hold the Cal button until message says release Cal button. (See front & rear illustration for location of Cal button)
5. You will see a message "Cal Mode".
6. Look at center of screen for the number next to "T".
7. Slowly apply pressure to brake pedal until the "T" number is between 40 and 45.
8. Take foot completely off of brake pedal.
9. Press and hold the Cal button until message says release Cal button.
10. MaxBrake is now trained. Test to ensure that MaxBrake tracks with the brake pedal.

NOTES: If the brake pedal is not pressed, MaxBrake should show 0 at the top left corner. If this is not the case, please recalibrate. You may adjust the gain setting knob at any time to your preference. We

recommend an initial gain setting of "G 40". The gain is adjustable from 0 to 100. Most customers use "G 35 to G 45" for all cargo loads. No trailer is necessary for calibration. Different trailers do not need calibration. Different cargo loads do not need calibration. Calibration "trains" the pressure sensor, not the trailer.

FAQ's

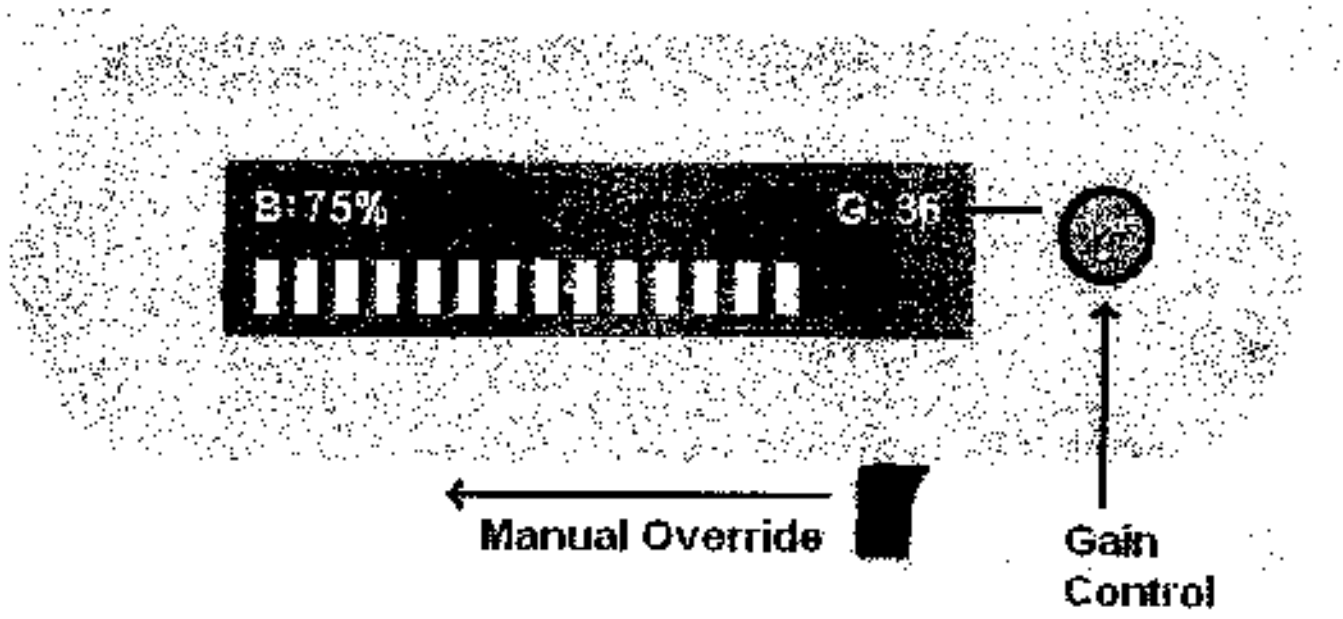
How do I change the gain?
The gain is changed by using the CVBC knob on the right front of the MaxBrake brake controller.

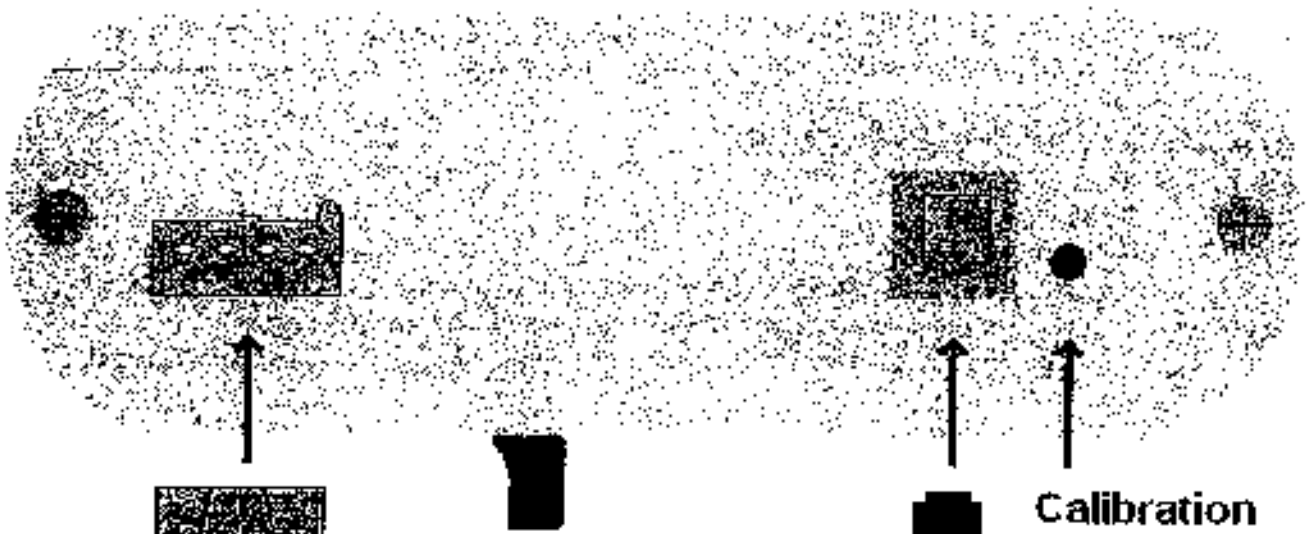
What does the CVBC knob actually do?
It allows the driver to adjust how hard or soft the trailer brakes respond (Gain). Adjust as needed.

Do I have to reset/calibrate for each trailer?
No. Once MaxBrake is calibrated it will work with any trailer. Recalibration is required if the number at the top left of the display is not 0 when the brake pedal is NOT pressed

What does the LCD display actually show me?
Top Left - Trailer brake output level 0-999.
Top Middle - MaxBrake logo.
Top Right - Gain setting 0-100.
Bottom - Error messages (Trailer Unplugged, Check Trailer Wiring, Sensor Unplugged, High Current, Dead Short). When a good trailer is connected the bar graph will track with your pedal.
Bottom Right - Indicates how much current the trailer is drawing in Amps (+/- 1 Amp in most cases).

MaxBrake Front & Rear View





Power Connector

- BLK +12V
- RED Brake Pedal Switch
- WHT - Ground
- BLU Trailer Brake Coils

Signal Cable

MaxBrake Legal Information

1/02/2008

MaxBrake Limited 5 Year Warranty

Mac's Classic Muscle Cars, LLC (hereafter referred to as "Mac's") warrants the MaxBrake brake controller to be free of defects in material and workmanship, under normal use, for a period of five (5) years from the original consumer purchase date. At Mac's sole option, Mac's will repair or replace the defective product with a like product. Replacement product or parts may include remanufactured or refurbished parts or components. This warranty applies only to the first consumer purchaser, is nontransferable, and is limited to components supplied with the MaxBrake brake controller product. The purchase or use of the MaxBrake brake controller constitutes acceptance of the conditions stated in this document. Mac's makes no guarantee, warranty, or representation regarding the suitability or legality of this product. It is the consumer's responsibility to ensure regulatory compliance before purchasing or using this product. The consumer agrees to operate this product in keeping with all laws governing its use. Under no conditions will Mac's Classic Muscle Cars, LLC be responsible for anything other than the repair or replacement of the original product.

Limitation of Liability and Warranty Exclusions

Mac's liability is limited to the cost of repair or replacement of the MaxBrake brake controller. This limited warranty excludes, but is not limited to, damage, deterioration, or malfunction due to negligence, abuse, accident, improper use, misuse, improper installation, failure to follow supplied instructions, alteration, modification, unauthorized repair or attempted repair, external causes, normal wear and tear, or any other cause which does not relate to a product defect. This limited warranty also excludes any incidental, consequential, or other claims, damages, or losses, even if advised of the possibility of such, including against the consumer by any other party. There are no other warranties, express or implied, including implied warranty of merchantability and fitness for a particular purpose. All disputes will be handled through neutral arbitration.

For assistance with your MaxBrake brake controller, please call 1 (337) 542-4050.
For more information about MaxBrake, please visit our website at www.MaxBrake.com

Trailer Unplugged / Check Trailer Wiring Explained

This is our #1 customer topic. By popular demand, here is some more information about this error message. If you see this message, it means that the wiring between the brake controller and the trailer brakes may not be making a complete circuit or that the wiring connections are weak or corroded. The five most common causes for the Trailer Unplugged / Check Trailer Wiring error message are:

1. No trailer connected. The trailer must be connected with trailer brake wires connected properly.
2. Corrosion at the trailer plug on the bumper. Reseat connector, clean / replace if necessary.
3. Wrong wiring pinout. Make sure all wiring and adapters are the correct type and pinout.
4. A poor ground such as frame / ball ground. A dedicated ground return wire is recommended.
5. Broken / frayed wires or damaged electrical contact pins. Correct and repair as needed.

The MaxBrake brake controller is able to sense when the electric current loop is completed through the vehicle body wiring, the trailer connector plug, the trailer wiring, and the trailer brakes. If any part of this loop is broken, weak, or intermittent then the error message will alert the driver on the MaxBrake display screen. MaxBrake cannot tell you exactly where the problem is, but can alert you to potential problems that may limit your trailer brakes. If you see the Trailer Unplugged / Check Trailer Wiring error message, you may need a qualified electrician or service technician to troubleshoot and find the actual wiring problem in your vehicle or trailer. Even with this error message displayed, MaxBrake will still make every attempt to operate the trailer brakes, but no brake controller can operate a trailer brake system that is disconnected or inoperative. This means the current loop is complete, but it may be weak. Sometimes, other wires may be connected to the trailer brake wires by mistake. 99.9% of the time, the problem is not the MaxBrake brake controller. Try a different "known good" trailer if possible to determine if it's the truck or trailer at fault. Because there are various parts to this system, it can be difficult to pinpoint the exact cause of a wiring problem, but it can be fixed by eliminating the most common causes.

After spending your hard earned money, it is very frustrating to have problems, but we have actually seen brand new trucks, brand new trailers, and brand new wiring adapters that plug in, but do not work correctly with any brake controller. Most quality trucks, trailers, and wiring adapters work great without any problems. If you do the wiring yourself, be sure to take pride and care in your work. Proper wiring connections make a big difference. Trailer manufacturers may use different wiring methods and you cannot always rely on all color codes to use the same colors between all different trailers. Electricity does not care what color the wires are, just that a reliable electrical loop is completed to the right places. Remember that vehicle batteries and wiring are "live" and can cause more damage if not handled carefully. Other brake controllers may indicate that there is no problem, but they might miss wiring problems that MaxBrake detects. Our goal is to provide you with a quality product that works well, gives you a lifetime of service, and detects faults early for your safety.

Note: After a few minutes of inactivity, the MaxBrake display will turn off to save power. MaxBrake is always on and ready when you need maximum braking power. Even with the display lit up, MaxBrake only uses a trickle of only 0.05 Amps with the brakes off / inactive. With the display off, MaxBrake draws about 0.02 Amps, so there is very little chance of draining your battery flat.

We are constantly improving our product and documentation based on your feedback.
Please visit our website at www.maxbrake.com to contact us with your suggestions.