Brake Pressure Gauge Instructions

- 1. The Leed Brakes pressure gauge is designed to be installed in place of the bleeder screw in both calipers and wheel cylinders. This will require removal of the wheel in most applications. The vehicle should never be driven with the gauge installed.
- 2. The kit is supplied with 6 of the most common size bleeder screw adapter fittings. Be careful to select the correct adapter for your application. Please keep in mind that it is possible the kit will not contain the correct size adapter for certain applications.
- Remove the bleeder screw and select the correct adapter fitting. Thread the adapter fitting into the caliper or wheel cylinder and thread the gauge into the adapter fitting. Brake fluid may drip from the caliper or wheel cylinder when the bleeder is removed.
 Do not push on the brake pedal until the gauge and adapter have been installed and tightened.
- 4. The gauge is a 1/8 NPT pipe thread. Teflon tape will help ensure a good seal and make removal of the gauge from the fitting easier. **Do not** use Teflon tape or any other sealant on the male end of the adapter fitting. The adapters seal at the tip where they contact the machined seat inside the caliper or wheel cylinder.
- 5. Before beginning pressure testing put on safety glasses or appropriate eye protection.
- 6. On power brake vehicles the engine should be running for testing on manual brake cars it's not necessary.
- 7. Have a helper push on the brake pedal and observe the pressure reading on the gauge. Make several applications to ensure a consistent reading and make sure the gauge returns to 0 PSI after each application. If the gauge does not return to 0 after several applications, there is residual pressure building up in the system which is likely being caused by incorrect push rod adjustment or a collapsed flexible brake hose.
- 8. When testing is completed remove the pressure gauge and adapter and reinstall the bleeder screw. Tighten the bleeder and check to be sure there are no leaks. Be sure to clean up any brake fluid from painted surfaces as it will soften and damage paint.
- The exact brake pressures you can expect to see will vary from vehicle to vehicle and can be impacted by many factors including master cylinder bore size, power booster size, engine vacuum reading, brake pedal ratio and proportioning valve configuration.
- 10. The pressures listed below are a general guideline of what you should expect to see in a properly functioning brake system in a maximum pressure panic stop situation.

 Front Disc Brakes 1000-1200 PSI
 Rear Disc Brakes 800-1000PSI

 Front Drum Brakes 600-800 PSI
 Rear Drum Brakes 600-800 PSI
- If your readings are significantly low for the type of brakes on your vehicle there are many factors to consider. Listed below are some helpful tips.
- A power brake booster requires a minimum of 16 In/Hg of engine vacuum at idle in gear to function correctly. Low engine vacuum will cause a hard pedal and low brake pressure. A problem with engine vacuum or a faulty power booster will never cause a spongy brake pedal.
- In general, a small power brake booster will provide less assist than a larger one.
 Running a small brake booster with a stock bore size master cylinder can cause a hard brake pedal and low pressure.
- A master cylinder with too large of a bore size will cause a hard pedal and low pressure. A master cylinder with too small of a bore size will make good pressure but have a spongy brake pedal. The proper bore size will depend weather your brakes are power or manual and what type of calipers or wheel cylinders you are using.

- Brake pedal ratio is the mechanical advantage created by the length of your brake pedal and the position of the pivot point and pushrod. In general power brakes use a pedal ratio around 3:1 and manual brakes use a ratio around 6:1. Too much pedal ration can cause spongy overly sensitive brake pedal and too little pedal ratio can cause a hard pedal and low pressure.
- 12. If you need further assistance diagnosing and correcting your brake system please contact our tech line at **(716) 852-2139**. Be sure to have as much information as possible available before calling.

Front Pressure:	
Rear Pressure:	
Front Brake Type:	
Rear Brake Type:	
Engine Vacuum Reading:	-
Master Cylinder Bore Size:	-
Power Booster Size:	-
Brake Pedal Ratio:	-



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