



# BLEEDING On a bench

## GET THE AIR OUT!

By Saul Vargas

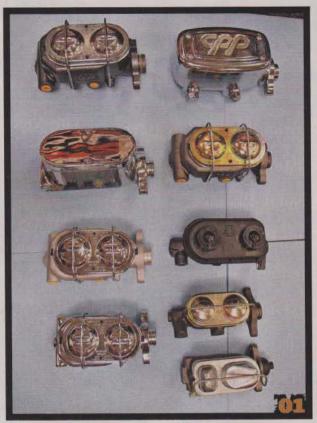
hen the time comes to install a new master cylinder the number one most common problem is that owners simply DO NOT follow instructions. Most DIY guys simply take the master cylinder out of the box and bolt it directly up to the brake booster thinking that they can bleed the system from all four corners and this is a big NO-NO-and also the main reason why many people return their master cylinders thinking that their faulty.

The best and most efficient way to bleed your master cylinder is by doing what's called a blench bleed. Bleeding the master cylinder outside of the vehicle does this process and it's the best way to rid your system of the air, which gets caught in the internal chambers of the master cylinder.

By bench bleeding, you avoid having to suck air out of the brake lines and it makes life that much easier. It is also Important to mention that once you have your master cylinder fitted snug into a vice you want to take great caution into making sure that the master cylinder is level and that you are working in a clean environment. If the master cylinder is not level it will be difficult to get all the air out and contaminants on your fittings or inside your reservoir are sure to void your warranty while also causing potential failure or poorly performing products.



Classic Performance Products 378 E. Orangethorpe Ave. Placentia CA 92870 (866) 593-2631 www.classicperform.com











#### TECH PROJECT

- 1. As you can see there are several choices when adding a newer style master cylinder for your choice of braking system.
- 2. The universal master cylinder was ready to be bled the proper way.
- 3. This is what you do when you bench bleed your master cylinder. You need to make sure that it is level so all of the air can be removed properly. If it is not level then you can cause the air to get stuck in a chamber.
- 4. The cap was removed so we could access the bleeders.
- **5.** The Teflon plugs where installed and tightened to make sure that there wasn't any air suction going into the booster.





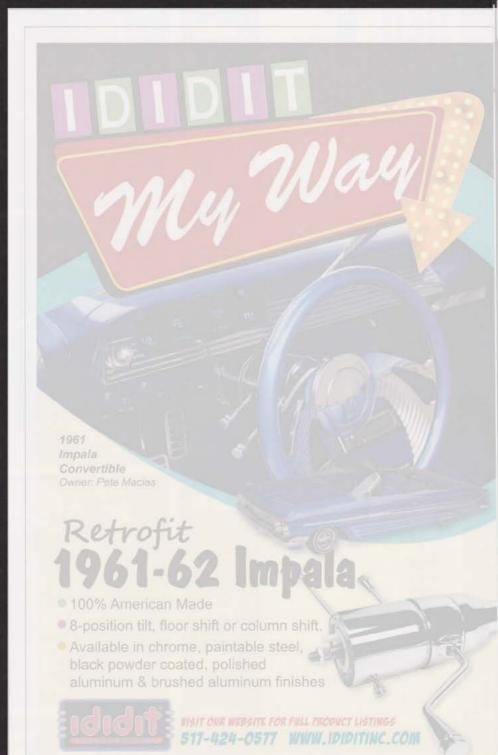






#### TECH PROJECT

- **6.** The bleeding kit will come with two clips and all of the hoses needed.
- 7. The hoses where connected to return the fluid back into the master cylinder.
- **8.** CPP recommended that we use DOT 3 brake fluid for the braking system on our vehicle.
- **9.** When you add fluid, you should fill it half way, as there is no need to top it off until the booster is in the vehicle.
- 10. Rob took the syringe and vacuumed up some brake fluid so it could be pushed through the reservoir lines.



#### TECH PROJECT





















#### TECH PROJECT

- 11. The syringe was put into the rear porthole of the cylinder and Rob started pushing the fluid through.
- **12.** You could see how the air starts to get worked out of the system.
- **13.** Once they were done bleeding the rear chamber/reservoir they moved onto the front part of the brake reservoir.
- 14. To make sure that there was no air in the master cylinder it was back bled through the same hose that kept the fluid from splashing out of the fluid reservoir.
- **15.** The master cylinder was now bench bled and ready to be installed. Once installed you can finish bleeding the brake system starting with the wheel farthest away from the MC. In most instances you go from Right Rear, Left Rear, Right Front, Left Front.
- **16.** The lines where pinched so it could be looped back into the master cylinder.
- 17. With the line being looped back, it will help keep the fluid from leaking all over the place as you install into your car.
- 18. We had a chance to see the exploded view of the master cylinder. Most all cylinders are similar and work the same way.
- 19. As you can see, the syringe allows you to get way into the chamber and help fill the reservoir quickly.



### CLASSIC PERFORMANCE PRODUCTS, INC.

downloaded for free on our website.

(866) 593-2631 | (714) 522-2000 | Fax: (714) 522-2500 www.classicperform.com VISIT OUR NEW LOCATION! 378 E. Orangethorpe Avenue | Placentia, CA 92870

Tune up your chassis with some of our best upgrades for a great price!