

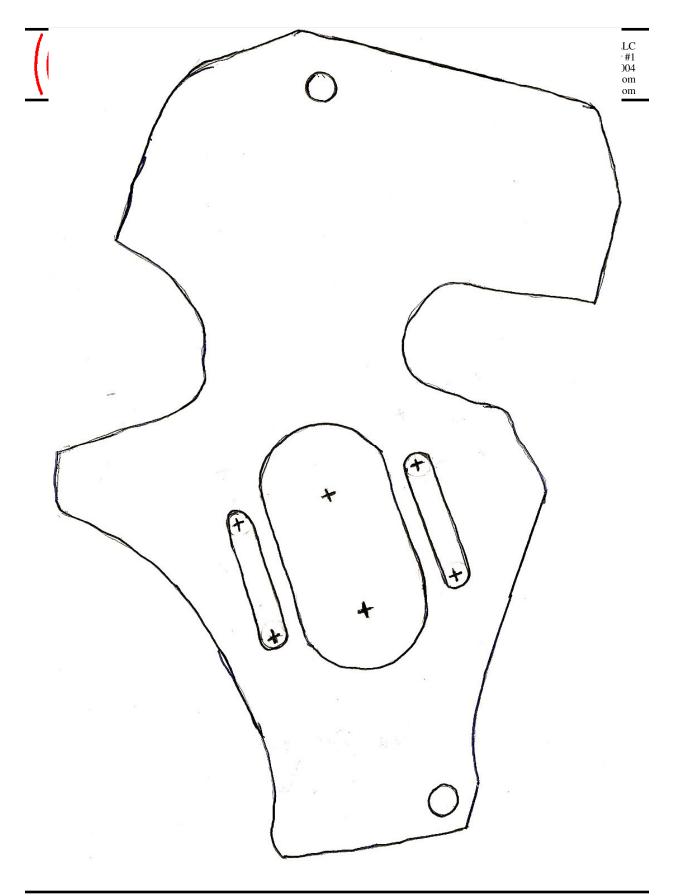


Porsche 924T/931 Clutch Master Cylinder and Firewall repair



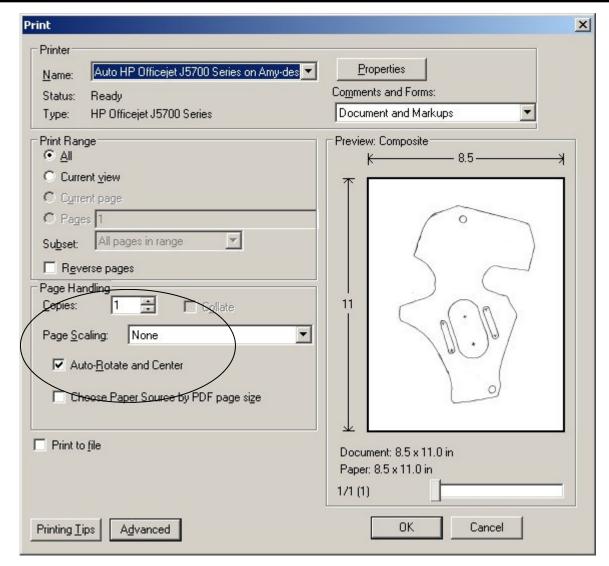


Intro: On 931's the clutch master cylinder is mounted to the firewall with two studs attached to a plate with a large hole in the center. The master cylinder passes through this large center hole and the firewall into the inside of the car. The section of firewall the master cylinder mounts to is weak and tends to flex over time. Also, if the master cylinder fails or leaks, brake fluid will leak on the firewall and cause the metal to corrode. It may eventually deteriorate until the clutch can no longer be adjusted back into proper operation. If this happens we have come up with a panel that will replace this section of firewall and allow the clutch master cylinder to be mounted solidly back into place. This panel was quite difficult to come up with and took a total of 5 attempts to get it just right. We made ours out of 1/4 in aluminum plate but steel would also work. Our panel was bolted into place but it could also be welded. Be aware that the firewall sheet metal is quite thin and may be difficult to weld on. Shown on the following page is 1:1 trace of the panel we used. Just print it out making sure the printer does not do any scaling. Cut it out and trace it on to the material you wish to use.



UnwiredTools, LLC 2200 East Cedar #1 Flagstaff, AZ 860004 www.unwiredtools.com info@unwiredtools.com





A sample printer page showing no page scaling.

UnwiredTools, LLC 2200 East Cedar #1 Flagstaff, AZ 860004 www.unwiredtools.com info@unwiredtools.com

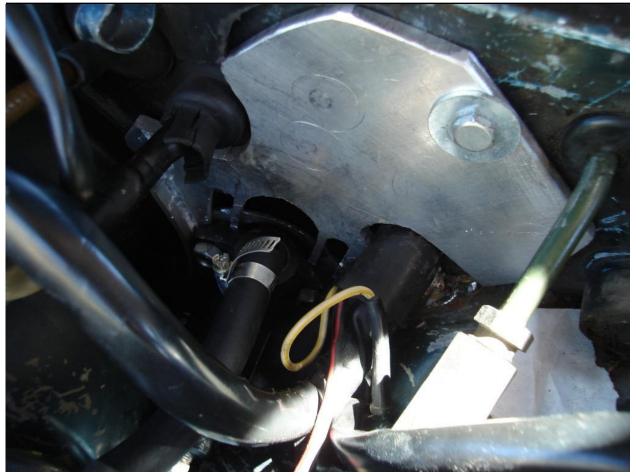




This photo is not to scale. The completed plate is ready for install. I brazed in the ribs on the side to add some extra strength using some dura-fix aluminum brazing rods. The lower bolt is also brazed in making it easier to tighten the nut on the other side. Not shown is the hole on top. It may be easier to mark your own whole once the plate is installed.



UnwiredTools, LLC 2200 East Cedar #1 Flagstaff, AZ 860004 www.unwiredtools.com info@unwiredtools.com



Completed install. If the original clutch plate with the two mounting studs is still in good shape clean it up and use it to clamp the master cylinder to the new plate. If it is not in good shape just use two bolts with large fender washers and nuts to mount the master cylinder. Some expanding foam should be used to seal up any remaining gaps in the firewall.