



1963-1980 MGB

HYDRAULIC CLUTCH

THREE MAIN COMPONENTS.

A. MASTER CYLINDER CLUTCH.

B. SLAVE CYLINDER.

C. HYDRAULIC HOSE AND STEEL LINES.

A: Rebuilding the clutch master cylinder can be done in the car.

First put some plastic on the floor of the car, then put some newspaper to catch the remaining fluid after you have drained the system by opening the bleed screw on the slave cylinder and pumping the clutch pedal many times until there is no more fluid coming out of the cylinder.

Remove the screws from the pedal box and remove the cover to gain access to the linkage. Pull back the boot so that you can remove the snap ring from the cylinder bore after the clevis pin has been removed from the push rod. Now it's time to remove the piston and the spring from the cylinder. This may need the use of a small tool like a dentist pick. Then, with a light, check the bore for scoring. A small cylinder hone can be used for this if badly scored. If lightly scored, you can use a very fine 400 grit sand paper for this job. After honing you must thoroughly wash out the cylinder and all parts before rebuilding the unit. When cleaned and checked, start to rebuild with genuine parts. First lubricate the bore, the new piston cup, piston and spring, insert the push rod and reinstall the snap ring, then apply some rubber lubricant on the boot, then check the clevis pin for wear, replace if necessary. Lubricate linking and reinstall pedal box cover.

B. Rebuild the slave cylinder next. Clean off any muck around the slave cylinder, crack loose the hydraulic hose from the cylinder, then remove the cylinder. Do not lose the copper washer. Dismantle the cylinder by removing the boot, retaining ring, piston and cup. Again inspect the bore for scoring, hone if necessary, clean and reassemble with genuine parts making sure everything is lubricated.

Note, you can get the piston out of the slave cylinder by tapping it on a piece of wood or by applying some air pressure through the bleed screw hole.

C. Hydraulic hose, check for cracks, especially when you straighten it out, look for bulging, and being non-flexible. When in doubt replace. Also check the steel lines and if they look rusty, replace them.

There are two ways to bleed the system. You need two people for both methods.

First method. Fill the master cylinder with new brake fluid and reinstall the cap. The person under the car opens the bleeder screw on the slave cylinder and lightly puts a finger on the top of the bleeder screw, with a little pressure.

The person on top pumps the clutch pedal a couple of times and then keeps the pedal down on the floor while the person under the car allows fluid and air to escape from the bleeder screw.

When there is no more fluid or air coming out of the bleeder screw, close the screw.

The person on top lets the pedal up and pauses for a few seconds, which allows fluid to circulate in the system. Repeat this several times, keeping an eye on the fluid level. Finally after bleeding the system a few times and topping up the fluid level, one travel of the clutch pedal should move the slave cylinder push rod about 1 to 1 ½ inches travel.

Second method. The person on top does the same as in the first method, but under the car is a little different. First the person under the car needs to get a plastic or glass container that you can see through, then get a small piece of plastic hose that can fit onto the bleeder screw fairly tightly. It must also be long enough to go from the bleeder screw to inside the container. The container must have enough fluid so that the hose end is below the fluid level. Note; do not put too much fluid in the container because as you bleed the system the fluid will rise. Doing it this way, the person under the car closes the bleeder screw when the pedal has been pumped and when the pedal is held on the floor, then the screw is opened to let the air out. When this happens you will see bubbles coming out of the hose. Once you see the bubbles stop, close the screw and repeat the process many times until there are no more bubbles. Make sure that the pedal is still on the floor when the bleeder screw is closed, then repeat the bleeding.

It is a good idea to throw the old fluid away after bleeding the system. The completion of this bleeding procedure is the same as the first method.

I like this method best, because you can see the air coming out of the system. By the way, this method is the same as bleeding the brake system.

A friendly reminder, when you take your gem out of storage, go through the maintenance check list with lots of TLC for the up-coming driving season.

SAFETY FAST,