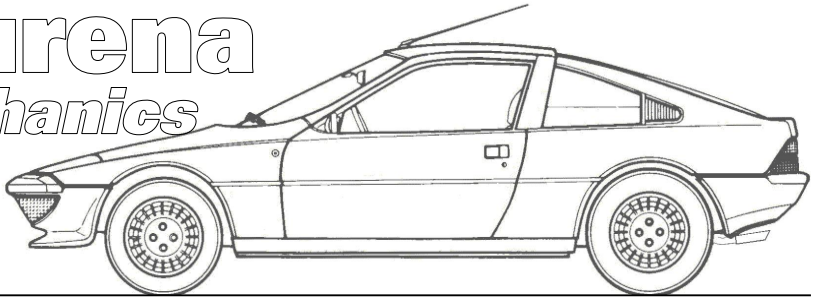
Murena mechanics



Roy Gillard

Murena Hydraulic Clutch

Please note that both the **master** and slave cylinders on 1.6 and 2.2 have different bore sizes, so although the master cylinders look the same you must use the correct one. If you have a car that hasn't been used for a long while, the chances are that after you start using it again, the clutch master cylinder will start to leak. It seeps back and drips on to the carpet behind the pedal so at first you might not notice it.

Since all seal kits are available, provided the bores are not damaged, you can remove and overhaul any of the cylinders. However, the tricky part is refitting and getting the clutch plastic pipe to seal. This applies to either master or slave end of the pipe. If you don't carry out the following modification it will be almost impossible to bleed the system. This is due to the particular way Matra connected the plastic tubing to the cylinders.

When hydraulic tubing was metal, the ends were flared, and when you secured the tubing in the cylinder the cone faces would seal easily. This method cannot be used with plastic tubing, so the alternative method they devised uses a rubber sleeve and metal washer. The flare nut presses down on the washer which compresses the rubber sleeve. This then grips and seals the tubing in to the master or slave cylinder.

However, when the tubing has been in a long time, the plastic becomes hard and is permanently shaped with a narrow waisted shape near the end. This cannot be re-used, and if you try, you will simply end up with air being continually drawn in and you will find it impossible to bleed the system.

You **must** get rid of the narrow section of plastic tube near the end (*see above*). First remove the inner metal bush that stops the tube from collapsing, cut the damaged section off and then re-insert the support bush up to its flange. Next, slip the flare nut, washer and new rubber sleeve (in seal kit) over the end of the tube, and insert it into the cylinder. Carefully tighten the flare nut whilst holding the tube fully into the cylinder until it is secure. You can now bleed the system, and no air will be drawn in around the plastic tubing.

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