## MG TD/TF GAS CAP

Lonnie Cook, rev 1-Nov-2023

Here's my vision of how the gas cap works: (Thanks to Bud Krueger for the photo that I used to create the image.)



The hinged gas cap is secured to the filler neck by a simple curved steel latch that snaps over a corresponding flat place on the edge of the filler neck ("Latch Striker"). About as simple as it gets.

When the lever of the hinged latch release is depressed, the upper side of the latch release pushes against the latch to move it away from the latch striker on the filler and release the gas cap. This is why the latch release can wiggle even if the gas cap is closed.

A stainless-steel cover is over the gas cap mechanism to make it look pretty.

The edge of the upper cup presses against the center of the cork gasket in the filler neck to seal it when the gas cap is closed. The upper cup can move up and down to maintain firm pressure on the cork gasket. The upper cup slides on a shaft and bushing that is attached to the gas cap. A strong coil spring is around the shaft between the gas cap and the upper cup. The gap between the shaft and the upper cup (or holes in the upper cup) allows air to pass between the tank and the atmosphere to prevent a vacuum in the tank as gas is used. The air exits around the gas cap.

The lower cup stops the downward movement of the upper cup and reduces gas splashing into the gap between the shaft and the upper cup. The lower cup is fixed and does not move.

The gas cap may not close securely if the latch cannot snap completely over the striker. This could be caused by a bent or weak latch or if the upper cup can't move up when sealing against the cork gasket. This could be caused by corrosion of the upper cup and shaft, or by an obstruction behind the upper cup.

Check the movement of the upper cup by wrapping your fingers across the top of the gas cap. Then press the upper cup firmly with your thumbs. The cup should move up.