The majority of these tips have appeared in club newsletters over the years. Please note that you use them at your own risk as neither the Bristol Austin 7 Club nor the authors can be responsible for the results of trying to follow the instructions given.

Petrol tap - ethanol resistant - an alternative to the brass taps

- Alastair Gill

Some brass taps have an inner cone. The surface of this cone is attacked by the ethanol that is in modern day petrol. The result is that the petrol tap starts to leak. The remedy is to dismantle the tap and with care and a smear of an abrasive paste, such as brasso, the inner cone can be lapped back into the body of the tap. The surface of the cone and the receiving surface within the body of the petrol tap can be restored to the point that the tap does not leak. A piece of regular maintenance multiple times throughout the year with which, I guess, many of us are familiar. But, of course, as one repeats this process the petrol way holes within the tap start to fall out of alignment. Of course the hole can be filed to regain alignment, but ultimately a new tap has to be fitted.

Tired of this regular maintenance every year which always took ages because of the knock on consequences, I started to look around for a solution.

So, I bought a nickel ball valve tap with PTFE seals in September 2020. A petrol tap that is resistant to ethanol. BSP ends of 1/8” x 1/4”. Overall the tap occupies exactly the same space as the brass taps I’ve had in the past.

The tap can be sourced from various places including C. Wylde & Sons Ltd at www.cwylde.co.uk

Since fitting the tap, not only has the tap always operated beautifully smoothly, it also has not leaked !

Inevitably the tap has to be modified slightly in order to fit to an Austin 7 :

1. remove the arm of the lever arm. To help with this an Allen or Hex key can be inserted in the end of the arm to unscrew the arm from the hub of the lever. In some instances a thread lock may have been used in assembling the lever arm to the spindle/axle that operates the ball valve. I understand that Acetone can be used to release items that have had thread lock applied. The lever arm and handle can be submerged in Acetone. I would not submerge any more of the tap than the lever arm.

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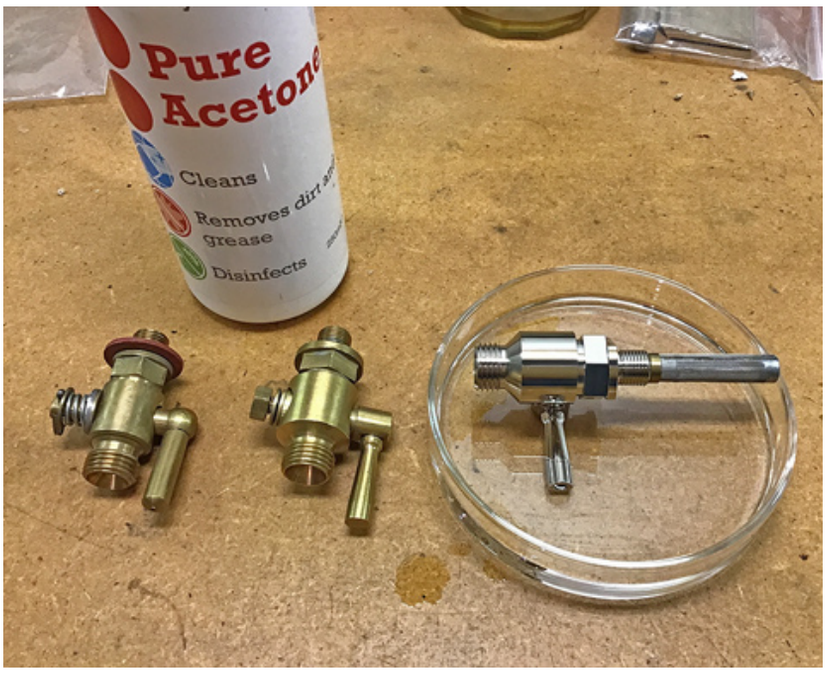

2. remove the stainless steel mesh filter. This is a push in friction fit. Careful holding of the filter and then wiggling of the tap while at the same time pulling will extract the filter from the tap.

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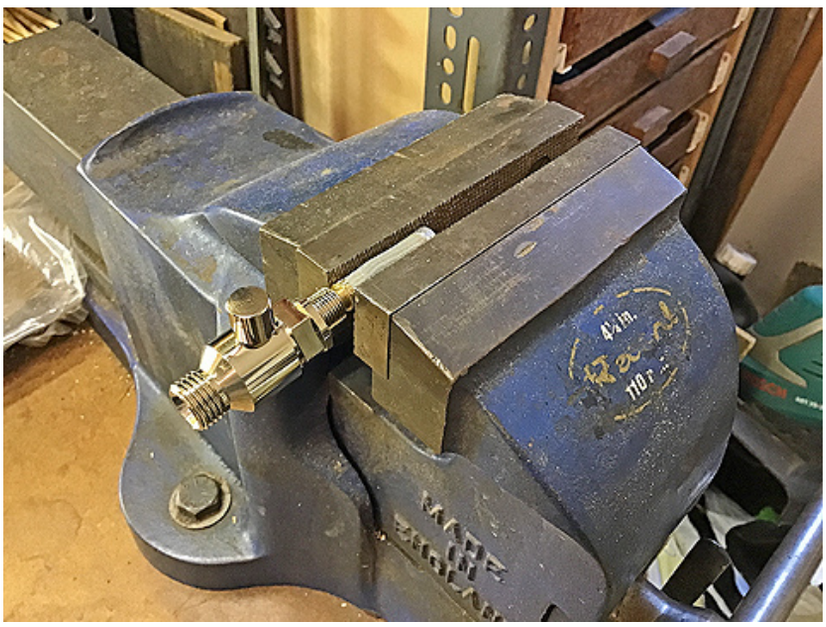

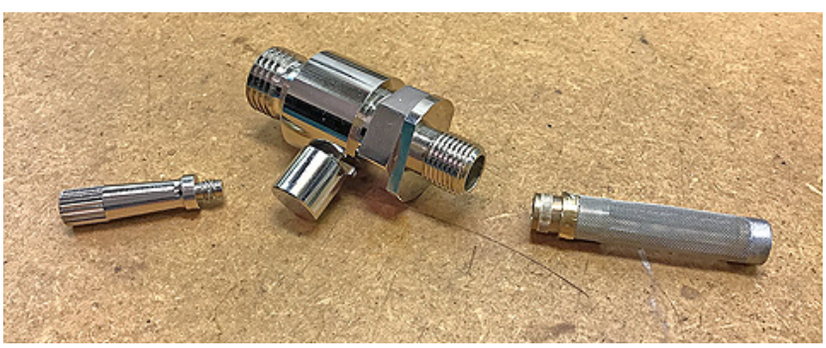

3. remove the hub of the leaver arm. Extreme care is needed to avoid bending the shaft that drives the ball valve inside the tap. Firstly, part open the tap so that the raised “stop” runs longitudinally with the tap itself. Cover the nickel with masking tape to prevent it from being damaged while removing the hub of the lever arm. Important to lever the hub away from the tap ensuring that it is pulled absolutely parallel to the shaft itself. I used two discarded Stanley knife blades for this task. Lifting up equally the two Stanley Knife blades serves to gradually pull the hub off the shaft without bending the shaft. Spacers, in my case cocktail sticks, can be added as the hub is gradually withdrawn.

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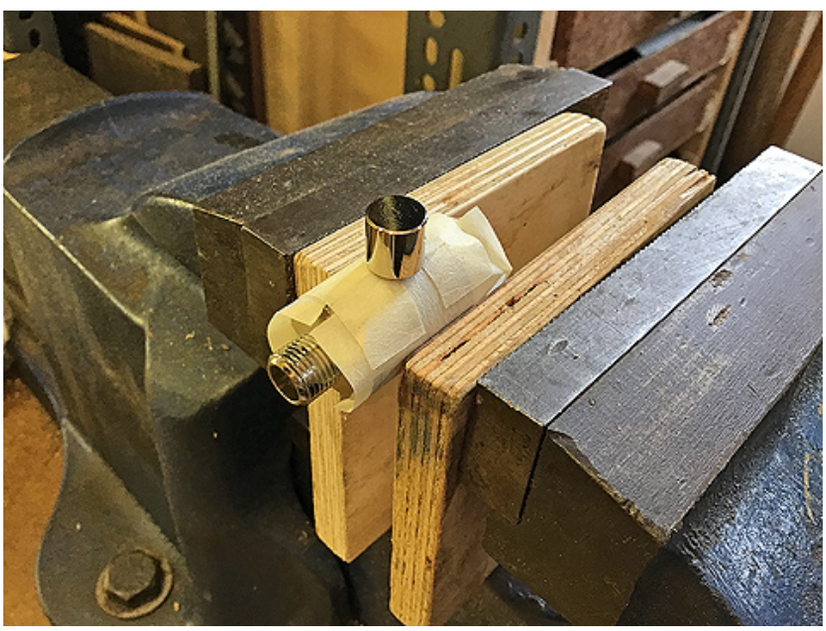

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4. the drive shaft of the ball valve needs to be carefully filed back about 1mm to allow the petrol tap to be screwed into the petrol tank without it fouling the bulk head of the car.

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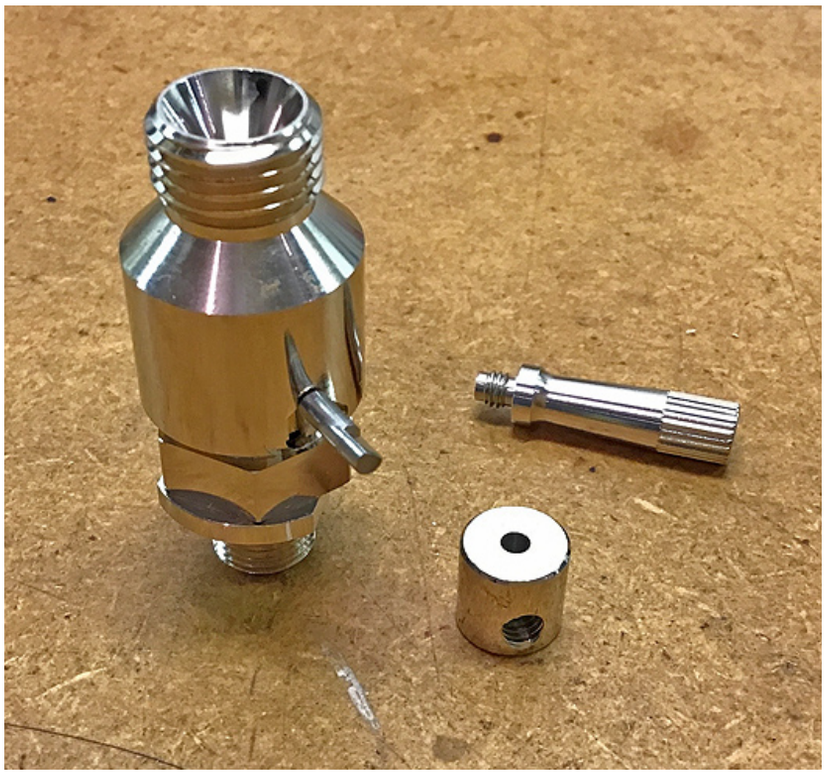

5. once the tap is screwed into the petrol tank the lever hub and lever arm can be fitted ensuring that the arm of the lever bears down on the flat section of the D - cross section shaft.