

MGF and MGTF Stop Light Issues

The following issue has emerged on my 2002 MGTF 120 Auto and needs to be addressed. Due to my age (76) and physical condition. I am unable to access the driver foot well to fix it. However I've been able to photograph the pedal box area at various conditions of brake pedal position.

Observations from drivers following me on club road trips indicate that my stop lights are intermittently flashing, note that I left foot brake – and have done so on both auto cars on the road and manual cars when racing in club events.

Unless I have developed a lazy trailing left foot – which I believe I have not done, I have researched various MG and MG – Rover web and social media sites with the result that there are many instances of MGF and MGTF owners experiencing the same intermittent stop light flicker.

My investigations show that there are two main types of switch used in the MGF and MGTF cars, these are listed on the Rimmer web site at:-

<https://rimmerbros.com/Item--i-GRID018978>

XKB10003 – Model-**MGF** VIN YD514326 on & **MG TF** – shown at Figure 6

XKB100080 - Model-**MGF** to VIN YD514325 – shown at Figure 7

Note that in Figure 1, the switch is shown as having three wiring tails whilst in Figure 6, only two connectors are shown; this is because the 12v power is piggybacked with a 12v power out to the reversing lamp switch in order to use the same fuse.

Note also that the MGTF Workshop Manual dated 2002 shows the XKB100080 switch being used. This is incorrect and the fitment and adjustment instructions shown therein should NOT be used.

Apart from Figure 7, the remainder of this article addresses the MGTF with the XKB 10003 switch although a separate noted paragraph addresses referenced data on the MGF XKB100080 switch.

Firstly look at the following figures 1 through 6 to understand the operation.

The switch which has normally closed contacts is screwed into a bracket connected to the pedal box. With the pedal fully up, the switch plunger is hard up against the blue nylon pad which is mounted on a bracket connected to the brake pedal shaft. The fully depressed plunger results in the switch contacts to be open – and the stop lights off.

When the brake pedal is depressed the pedal shaft rotates moving the bracket and nylon pad away from the switch plunger. This causes the plunger to emerge from the switch body making the electrical contact and thus illuminating the stop lights.

It is not know what the tolerances are for the plunger position to the contacts. It appears that even a small movement of the plunger out from the switch body can result in electrical connectivity. However an adjustment will show how much this is.

The adjustment developed by MGTF users consists of backing off the backnut as shown in Figure 6 and then screwing in the switch about one to one and a half turns (first disconnect the switch cable) this, measured by the screw tread appears to be about 1 to 1.5mm. Thereafter owners advise minor further

adjustments so that light pressure on the brake pedal such as brake “covering” does not release the plunger to make electrical contact.

This means that significant pedal pressure (and shaft rotation) is needed to activate the stop lights – a preferred option.

The MG – Rover web site has advised that in older cars scoring of the blue pad can result in a depression of approx 1 to 1.5mm, thus confirming the owners’ experience that a 1 to 1.5 turn adjustment will overcome the pad depression – see Figures 4 and 5.

As far a flicker is concerned, this is either the result of small tolerances between on and off, the depression in the nylon pad, or, as MG River advises, either shards of disturbed nylon from the pad being caught between the plunger and the switch body, or a lip in the worn depression catching the plunger tip..

To be on the safe side my recommendation is that the nylon pad be cleaned up and with the brake pedal fully depressed, using 80 grit “wet and dry sandpaper” lubricated with WD40 the nylon pad body is sanded smooth so that the depression is reduced as far as possible and has no lip(s) that might “catch” the plunger tip. Then using a fine wire brush, brush the end of the plunger and the switch body to remove any nylon shards. This should restore the pad and plunger to a point where the adjustment can be effected.

Note that it is likely that the nylon pad cannot be removed from its captive mounting and – as I can find non record of spate parts, removal by destruction will result further problems.

The Early MGF cars using the XKB100080 stop switch.

This switch is shown at Figure 7 and readers should see the referenced article below to get installation, removal and adjustment procedures.

<http://www.aptony.co.uk/Servicing/BrakeSwitch.html>

Together with the referenced Technical Bulletins – TB0008.pdf page 1 and TB0008.pdf page 2

This article advises that:-

“The switch is found up against the bulkhead next to the brake pedal itself. To remove it, you must rotate the switch body about 90 degrees, until the slots line up, and then pull it down out of the bracket.

The remedy is to remove the switch and forcibly pull the plunger back out. Then replace the switch. Don't allow the pedal to fly back up to its rest position, as would happen if your foot slipped of the pedal when you were braking. This will cause the problem to happen again because the pedal overshoots and pushes the plunger in too far.”

Subsequent to repair and / or adjustment. The car should be road tested with the driver effecting light pressure on and off the brake pedal without resultant flickering stop light flickering.

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Written by Rick Foster, Registered Professional Engineer – Queensland

rafoster@bigpond.net.au

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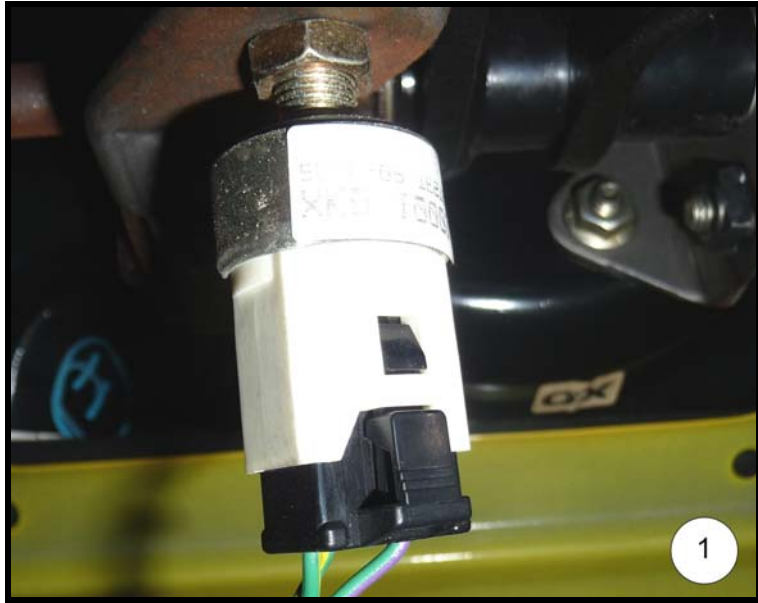


Figure 1 XKB10003 stop light switch

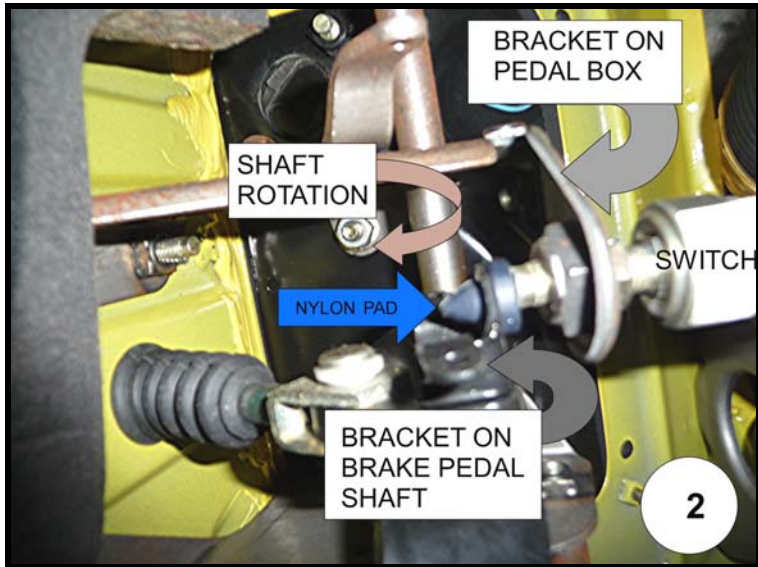


Figure 2 Pedal Box Arrangement

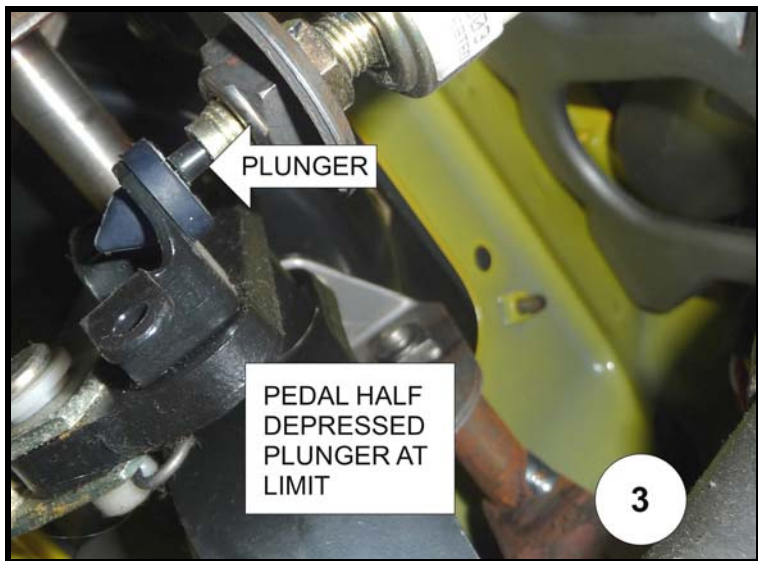


Figure 3 Plunger Extended

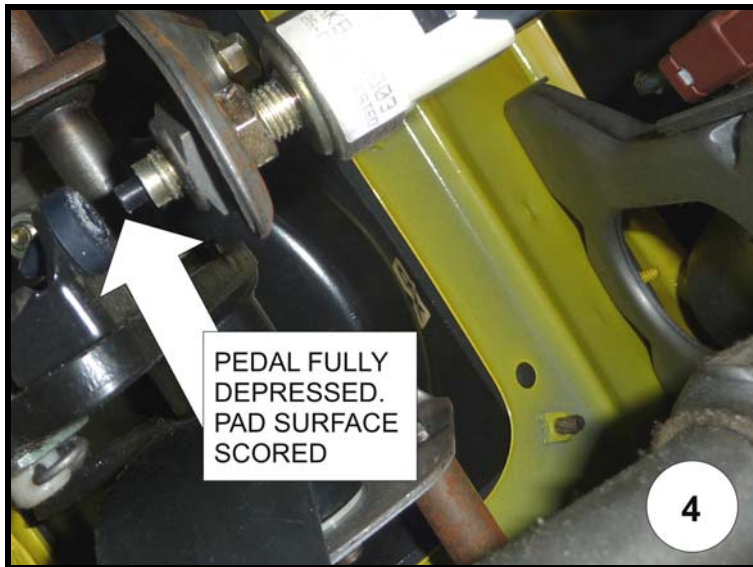


Figure 4 Plunger Fully Extended

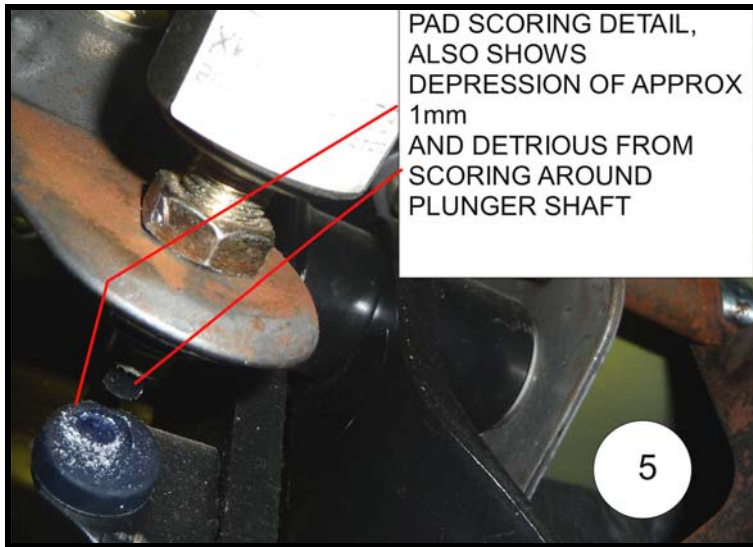


Figure 5 Pad Scoring

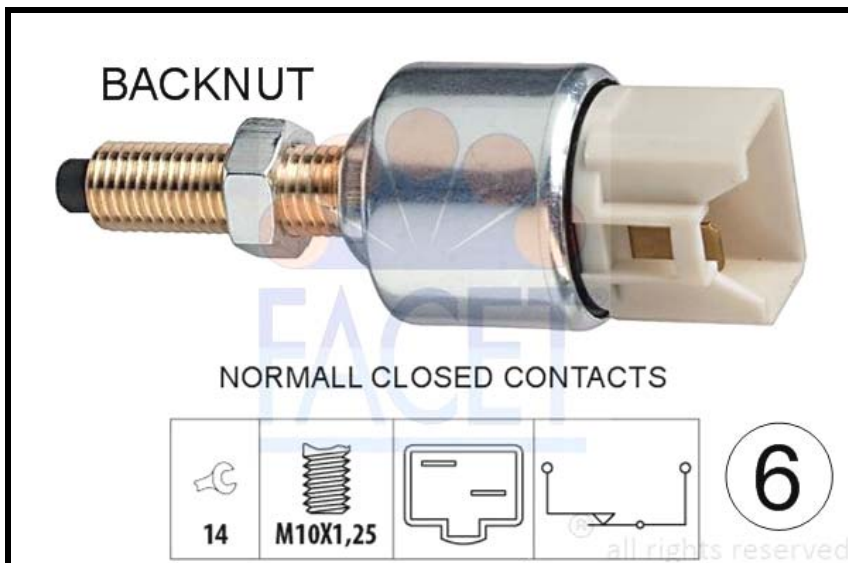


Figure 6 – XKB 10003 switch



. Figure 7 – XKB 100080 switch