



### Faulty piston on a rear wheel brake cylinder

During a recent annual service of an MGBGT V8 and a brake fluid change one of the pistons on a rear brake wheel cylinder assembly was found to be faulty. The rubber seal (or boot) is a tight fit and the brake fluid leak mixed with corrosion muck had not been visible from outside.



Part of the service was changing the brake fluid, an essential maintenance task typically needed every 24–36 months (or 24,000–30,000 miles) to prevent corrosion and maintain braking performance. The process involves flushing old, moisture-contaminated brake fluid from the lines—usually in the order of furthest to closest wheel from the master cylinder and then replacing it with fresh brake fluid.

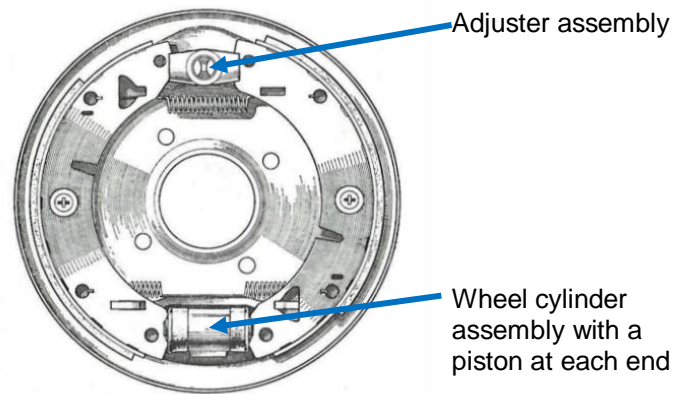
There are **two pistons in each rear brake wheel cylinder** assembly – one operating the leading brake shoe

and the other operating the trailing shoe. During the fluid change the mechanic made a careful inspection of each rear brake wheel cylinder assembly and carefully lifted the rubber seals at each end. When the seal was lifted on one cylinder assembly a brake fluid leak was spotted mixed with corrosion muck (see alongside). It had not been visible from outside the seal and reduced braking was not detected during a recent MOT test because a reduced braking effect would not have been recorded as significant if at all when the car was on the resistance rollers in the MOT test bay.

Both rear wheel brake cylinders were replaced and the brake fluid change was completed.

### Rear brake wheel cylinder and adjuster

The rear brakes on the MGBGT & V8 are of the leading and trailing shoe type, giving the advantage of equal braking action whether the car is travelling forwards or backwards.

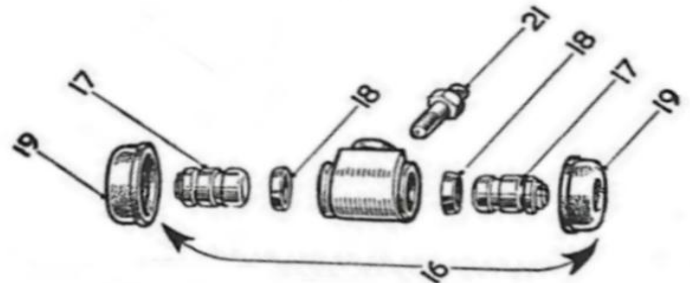


When the brake pedal is depressed by the driver's foot the master cylinder piston applies pressure to the brake fluid thereby causing the pistons in the wheel cylinder assembly to operate on the leading and trailing shoes. When the pressure on the brake pedal is released the brake shoe springs return the shoes, thrust the pistons back into the wheel cylinder assemblies and the brake fluid passes back to the master cylinder.

Details of dismantling the rear brake assembly, replacing parts and reassembly are described in Section M.9 in the MGB Workshop Manual AKD3259.

### Rear wheel cylinder assembly

It has two pistons (17) each moving to operate on either the leading or trailing brake shoe and rubber seals (boots) (19).



## Seals or Dust Shields

Catalogues and manuals often refer to a rubber seal as a "dust shield". It is recommended that to avoid future corrosion issues the void behind the dust shield is packed with red rubber grease or silicone grease to avoid water ingress and corrosion. This is particularly important in the case of an MGB, GT or V8 where the cylinder is at the bottom of the drum and susceptible to water penetration when the car is wading through deep water.

## Different wheel cylinder bores

For anyone carrying out maintenance work on the rear brakes it's appropriate to point out that different wheel cylinder bores are specified for different models of MGB to compensate for variations in rear axle weights. Looking at the parts listed in the MGB Parts Catalogue AKM0039 you

can see below on page 3 the brake cylinder assembly is listed for the MGBGTV8 in the copy below of the two pages in the parts catalogue listing and illustrating the rear brakes for the tubes axle on the MGB, GT and V8.

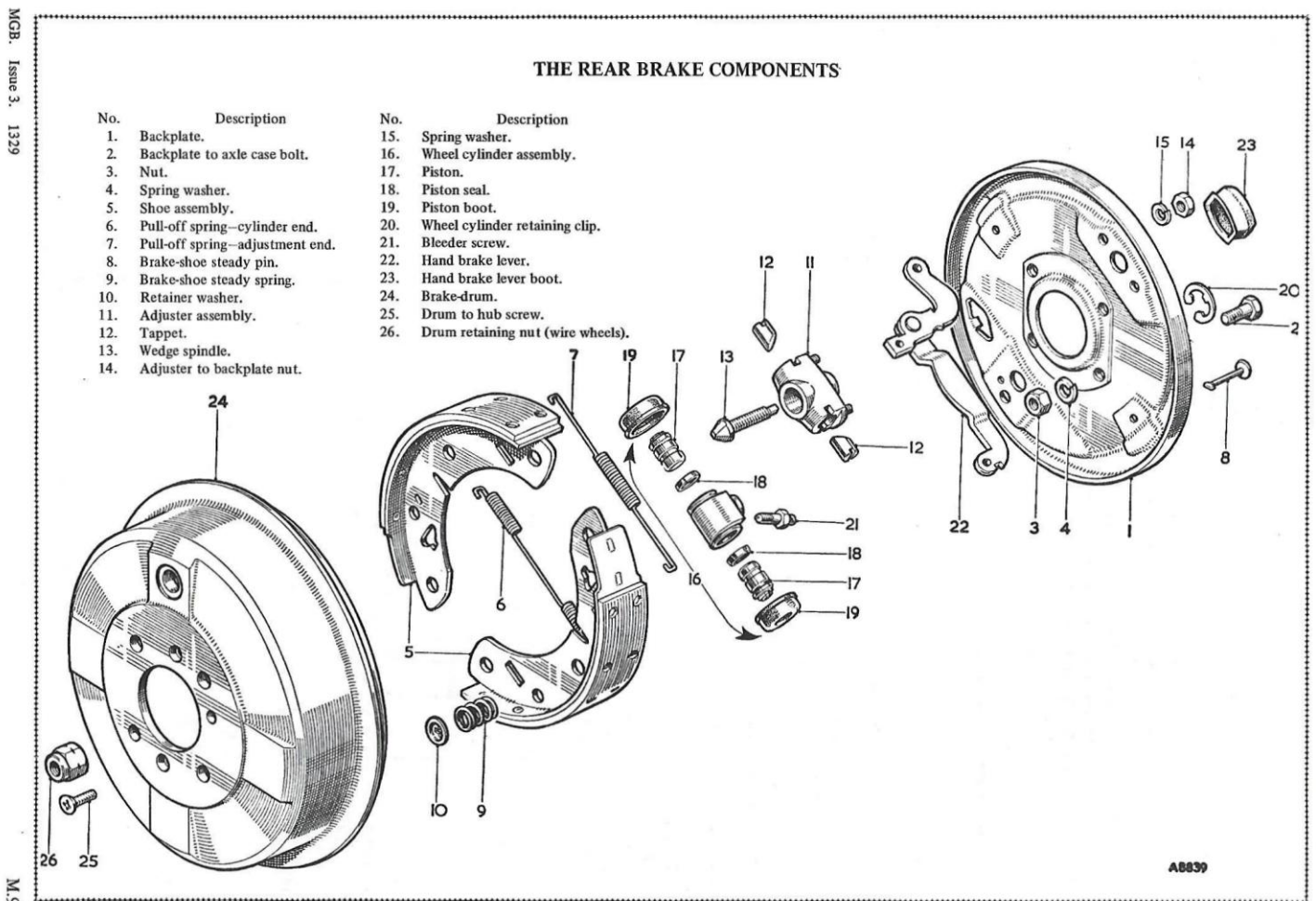
## What to do if you see a brake fluid leakage?

If a brake fluid leakage is apparent the shoes should be checked for contamination and replaced if necessary.

## Clean and lubricate the adjuster assembly

Another worthwhile addition while the drum is removed is to clean and lubricate the adjuster screw and tappets followed by the pivots and contact points in the handbrake linkage. The rear brakes are an important safety feature of the car and their condition is often overlooked.

Victor Smith



Source  
MGB Workshop Manual, Page M9  
AKD 3259 15th Edition

Parts list: rear brakes – tubed axle

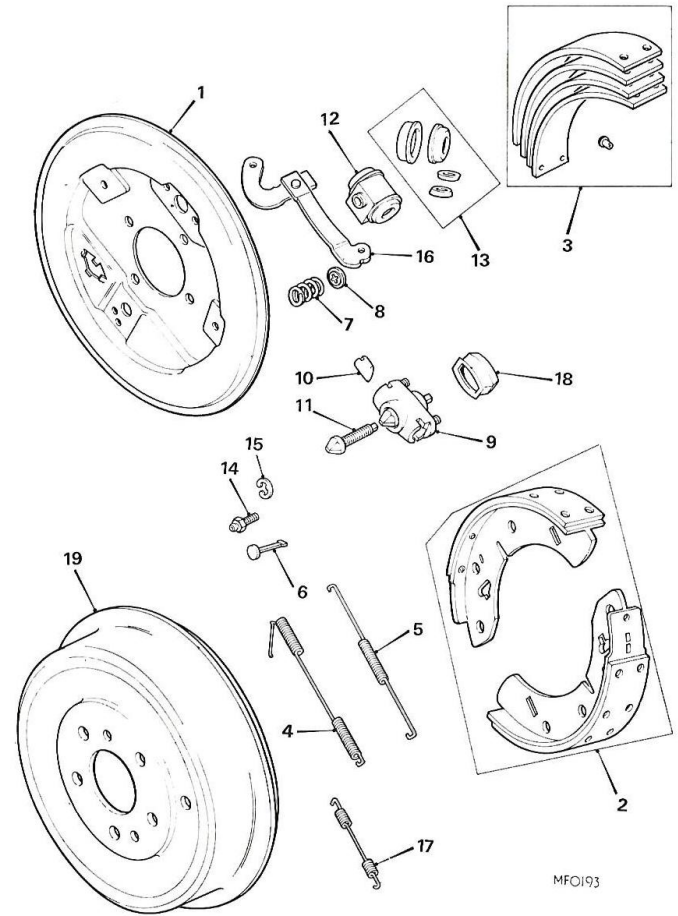
MGB-TOURER,GT AND V8-UP TO SEPTEMBER 1976

Ill. No.	Part No.	DESCRIPTION	Qty.	Change Point	REMARKS
<b>REAR BRAKES-TUBED AXLE</b>					
1	27H 6476	Plate-brake RH	1	See(1)foot of page	GT,Not V8
	27H 6477	Plate-brake-LH	1		
1	37H 2309	Plate-brake-RH \$	1		
	37H 2310	Plate-brake-LH \$	1		
				(C)G-HD4-148083 Disc wheels, 142735 Wire wheels (except USA)ON (C)G-HD4-138401 (USA)ON (C)G-D2D1-101 ON	V8
1	27H 6476	Plate-brake-RH	1	Use prior to GBS 595.	Not V8
	27H 6477	Plate-brake-LH	1		
	HBZ 616	Bolt	8	See(2)foot of page	V8
	LNZ 406	Nut	8		
2	GBS 520	SHOE ASSEMBLY-BRAKE	2STS	See(2)foot of page	Not V8
	18G 8333	Lining	NLA		
2	GBS 595	SHOE ASSEMBLY-BRAKE \$	2STS	(C)G-D2D1-101 ON	V8
	18G 8346	Lining \$	1BOX		
2	GBS 602	SHOE ASSEMBLY-BRAKE \$	2STS	(C)G-D2D1-101 ON	V8
	18G 9083	Lining \$	2STS		
4	17H 7994	Spring-pull-off-cylinder end- RH \$	1		
4	17H 7995	Spring-pull-off-cylinder end- LH \$	1		
5	27H 6478	Spring-pull-off-adjuster end \$	4		
6	17H 7993	Pin-brake shoe steady \$	4		
7	17H 7969	Spring-pin \$	4		
8	17H 7971	Washer-spring-retaining \$	4		
9	17H 7974	ADJUSTER ASSEMBLY \$	2		
10	27H 6472	Tappet \$	4		
11	27H 2203	Wedge \$	2		
	FNZ 104	Nut	2		
	LWN 204	Washer-spring	4		

CHANGE POINTS.

- (1),(C)G-HN3-132916.Disc wheels,132923 Wire wheels to 138400.(C)G-HD3-71933TO 138400.
- (C)G-HN4-138401 ON.
- (2),(C)G-HN4-148833 Disc wheels,147573 Wire wheels(except USA)ON.
- (C)G-HD4-148083 Disc wheels,142735 Wire wheels(except USA)ON.
- (C)G-HN4,G-HD4-138401(USA)ON.

\$ This item is subject to safety regulations



MFC193

MGB TOURER AND GT

Ill. No.	Part No.	DESCRIPTION	Qty.	Change Point	REMARKS
<b>REAR BRAKES-TUBED AXLE-continued</b>					
12	GWC 1103	CYLINDER ASSEMBLY-WHEEL \$	2	(C)G-HN3-132916 (C)G-HD3-71933 TO 138400	
13	8G 9674	KIT-REPAIR-WHEEL CYLINDER \$	2STS		
14	17H 7623	Screw-bleed \$	2		
				(C)G-HN4-138401 ON (C)G-HD4-138401 TO 148082 Disc wheels, 142734 Wire wheels (except USA)	
12	GWC 1122	CYLINDER ASSEMBLY-WHEEL \$	2	(C)G-HD4-148083 Disc wheel, on 142735 Wire wheel (ON(except USA) (C)G-HD4-138401 (USA)ON (C)G-D2D1-101 ON	Was 37H 2311; GT Not V8
13	8G 8741	KIT-REPAIR-WHEEL CYLINDER \$	2STS		
14	17H 7623	Screw-bleed	2		
12	GWC 1103	CYLINDER ASSEMBLY-WHEEL \$	2	(C)G-HD3-71933 TO 125373 Disc wheels (+ Wire wheels (C)G-HD3-125374 Disc wheels, (+ Wire wheels TO 138400 (C)G-HN3-132463 Disc wheels TO 138400 (C)G-HN4,G-HD4- 138401 ON (C)G-D2D1-101 ON See(1)foot of page	V8
13	8G 9674	Kit-repair \$	2		
15	17H 7949	Clip-spring-wheel cylinder- retaining \$	2		
16	17H 6787	Lever-hand brake-RH	1		
	17H 6788	Lever-hand brake-LH	1		
16	17H 2005	Lever-hand brake-RH \$	1		
	37H 2006	Lever-hand brake-LH \$	1		
17	27H 6479	Spring-pull-off-hand brake lever \$	2		
18	17H 8057	Boot-hand brake lever \$	2		
19	BTB 706	Drum-brake \$	2		
	CMZ 410	Screw	4		

CHANGE POINTS.

- (1) (C)G-HN3-132916 Disc wheels,132923 Wire wheels,TO 138400.
- (C)G-HD3-71933 TO 138400.
- (C)G-HN4-138401 TO 148832 Disc wheels,147573 Wire wheels(except USA).
- (C)G-HD4-138401 TO 148082 Disc wheels,142734 Wire wheels(except USA).

\$ This item is subject to safety regulations.(+) Change point not available.

Source  
MGB Roadster, GT and V8  
Up to September 1976  
Parts Catalogue AKM 0039  
February 1977 1<sup>st</sup> Edition