

## **Oily brake shoes**

Oil finding its way onto the brake linings, particularly the rear ones – is a common problem that is likely to affect most Austin Sevens at some time. The contamination in question is rear axle oil finding its way past the inner differential oil seals, along the halfshaft to finally enter the brake area via the wheel bearing and hub seal.

On rare occasions a faulty paper hub carrier seal can allow grease to foul the brake linings. When this happens it is usually because the joint faces are damaged or out-of-true or if the rear hub bearing is over greased. This can be easily corrected.

The trouble starts when the inner seal is worn. Unfortunately, unless the rear axle has been re-built (with new inner seals), then most Austin Sevens will suffer this problem at some stage. Given that we have no desire to remove and strip the rear axle unless absolutely necessary, then we must look at other ways to achieve oil free brake linings:

- Install a modern spring loaded oil seal in place of the felt seal at the hub ends of the rear axle. New seals are readily available from our suppliers. However, it is important to examine the area on the axle casing on which the seal will run. A damaged, ridged or rough surface will cause the new seal to have a drastically short life - although minor scuffing can be polished-out.
- If the casing is badly worn then an alternative is to fit a sealed hub bearing that has its own built-in oil seals. Fitting these together with a new hub bearing felt seal is an excellent idea that usually effective in preventing axle oil reaching the brake linings. For those members who are concerned about not being able to lubricate sealed bearings, then rest assured that they have a very long life – as nearly all modern cars use them extensively.
- If the differential seals and axle casings are in good condition, then correctly fitting the original felt seal followed by periodic checks can give a reasonably long life. One early method of preparing felt seals was to soak them in melted tallow, but lightly smearing the working faces with high melting point grease is perfectly effective. It should be noted that fitting felt seals without any lubrication will quickly result in overheating due to friction and this will destroy the felt's ability to effect a seal.

Finally, to be confident of keeping your brakes free of contamination, they should be examined at least twice a year. Any oil found on the backplates can be washed-off with a suitable solvent before it finds its way onto the brake linings.

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