

'Semi Girling' and 'Girling' brakes on Austin Sevens

Up to August 1936 - Austin Sevens were equipped with brakes of Austin design featuring back-plates that were riveted in-place.

From August 1936 - More powerful so called '**Semi-Girling**' brakes were fitted, featuring -

- Detachable back-plates that were bolted in place
- Longer cam operating levers and more travel on the brake pedal
- Stronger - cast iron brake drums (actually from May 1936)
- Re-designed concentric chassis brake cross tubes aiming to automatically compensate front/rear braking (Footbrake operates the outer tube and the handbrake, the inner)
- A more efficient operating cam mechanism that moves plungers in a housing that in-turn expand the brake shoes
- A better adjustment system (an adjuster at each wheel) allowing brake adjustment without jacking-up the car (so long as it was on level ground with the handbrake off)
- Stronger, steel brake shoes replacing the earlier alloy ones

They are termed 'Semi Girling' because they shared some features with brakes made by the Girling Company for other cars in the Thirties. The difference was that because of the transverse front spring, Austin could not easily accommodate the more usual Girling brake shoe operating mechanism based on an expander cam being pulled by a rod. So, lever operated paddles and cables were retained.

From July 1938 - Improved '**Girling**' brakes were introduced on the A7 (better in the sense that at the rear - cables were eliminated and more efficient 'pull cams' were introduced)

- Sometimes referred to as 'Full Girling' but they weren't really, because the front brakes (cables and lever operated paddles) remained unchanged from the 'Semi Girling' arrangement
- However, the rear brakes were indeed 'Full Girling' - being operated by a fore/aft steel rod (just to the off side of the longitudinal chassis centerline) operated from a much shorter brake cross-shaft mounted on the off side of the chassis
- The fore & aft rod operated a crank lever mounted on the off-side of the differential housing that in-turn operated rods to give a pull action (as per Girling design) to the shoe operating cams in each rear brake

So, strictly speaking, the Austin Seven never enjoyed full Girling brakes, but they did become a feature of the Austin Big Seven.

Interestingly, 'Semi Girling' and 'Girling' back-plates and brakes can be fitted to earlier A7s but the front stub axles either have to be machined and tapped to suit or (more easily) replaced with the later short king pin type. Similarly the rear axle casings also need machining or replacing with later items Eddie Loader