



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.

Brake shoes - change without removing hubs - pre Girling only

- Ian Moorcraft

Removing the hubs to reline the brakes is a drag and really not necessary, especially risky if you have well fitted and leak free hubs.

I soon learnt that the recommended method of using a piece of wire, sometimes even fitted with a handle will at best waste a complete afternoon achieving nothing, or at worst cause a nasty injury.

I well remember using a piece of electrical cable to pull the spring into the hook on the brake shoe only to find the copper core cut through the plastic sheathing and two of my fingers, that was over 50 years ago and it still makes me wince.

Anything you make to pull the spring just pulls it away from the shoe, a second person is needed to push it in as you pull it over the hook.



If you make up this tool (pic 1) you will be pushing instead of pulling having much more control. You can fit a pair of relined shoes in five minutes.

The pictures should be self explanatory, however a little detail would be useful: you need a piece of 3/16" mild steel rod about 12" long, put a smooth kink 1 1/4" from the end and another 2" from the first one. Try to replicate the bends from pic 1, you will fine tune it later, form a loop on the end about 1 3/4" diameter. File away half the thickness of the rod back to the first bend, leaving the end 3/16" full diameter. Drill. 5/64" hole 5/32" deep in the end biased towards the flat as much as possible, do not drill right through. Dress with a fine file as much of the lump around the hole as you can without compromising strength. Finish off as in pic 2.



Do a trial fit (pics 3 & 4) to check the spring will go over the hook with the tool fitted, if tight remove metal from the tool not the hook.

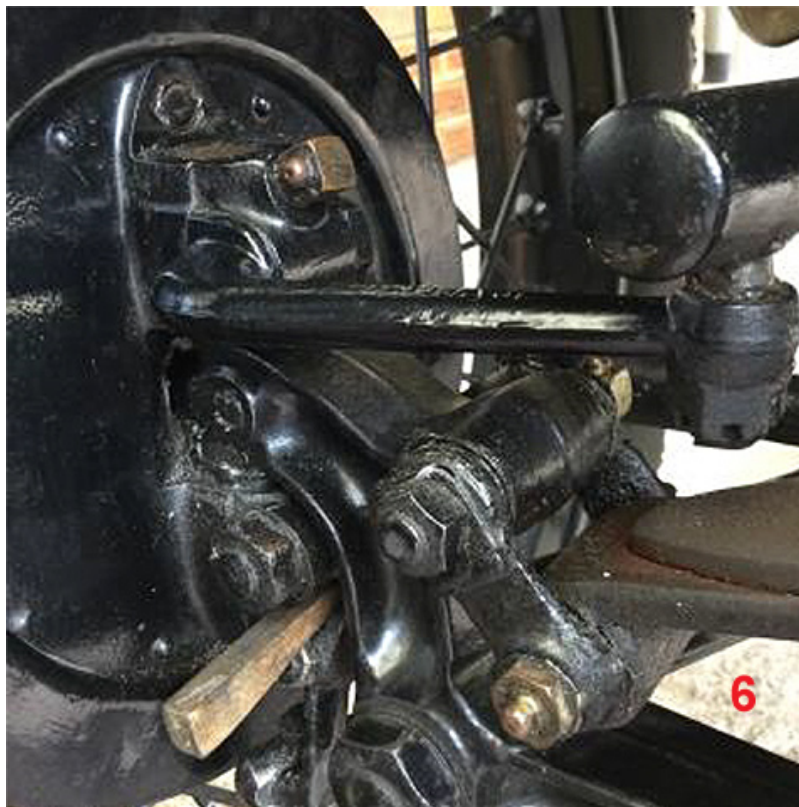
Rig up a pair of brake shoes as in pic 5, rework the bends so they rest on the shoe when the tool and spring are presenting level towards the shoe hook. Note there is a flat filed near the edge of the shoe to give extra clearance for the edge of the hub when fitting 1 1/4" shoes, 1" shoes have more room between hub and shoes.

See over for the pictures which should be self explanatory.





The first step for refitting shoes on the front is to push back the brake lever on the opposite side to that which you are working on, knock in a small wooden wedge as shown in picture 6 to jam the lever fully on. The reason for doing this is that the cable will be fully slack taking the pressure off the brake cam on the side you're working on.



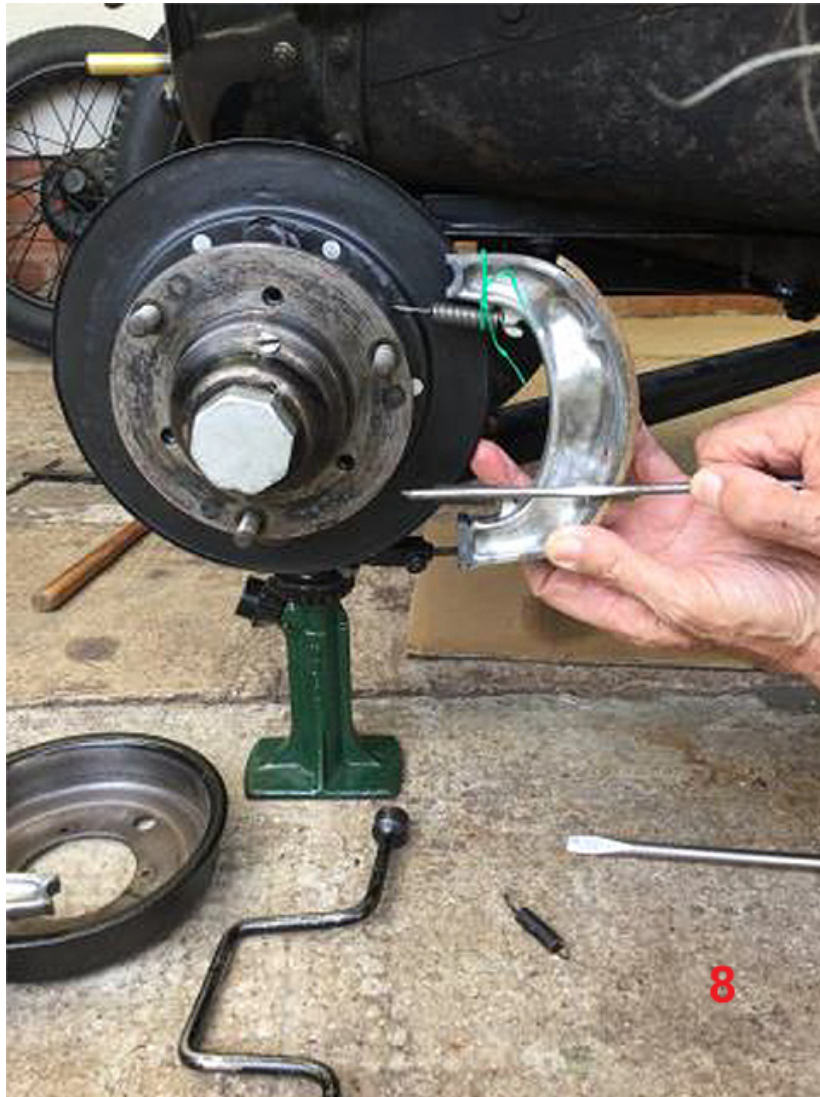


Next bind the top spring with a thin wire tie, or thin elastic bands, as shown in picture 7 making sure the long hook will be the one to be connected and is open side outwards; if you don't do this you will be fishing around for the spring as it will swing inwards out of sight.

Hook the bottom spring on to the bottom of the shoe, fit the tool on to the hook as shown in picture 8; keeping light pressure on the hook, slide the assembly into place until the shoe is fitted into the cam and post. Keeping the tool pressed against the hook will keep the shoe in place - picture 9. Slide the second shoe into position then hook the spring on to the shoe.

Note in pictures 8 & 9 the portion of the tool that is filed down for extra clearance on the edge of the hub that I mentioned earlier.

I have upgraded my car to 1 1/4" shoes, if the original 1" shoes were fitted the job is much easier as there is more space between the shoes and the hubs.





Now for the tricky bit - looking down from the top you should be able to see the end of the top spring hook, a torch is handy here to connect your tool to it (picture 10) hook it on to the shoe. Remove the wedge and the wire/elastic bands and the job is complete.

Fitting the rears is the same procedure other than you won't need the wedge as you won't be fighting the springs on the other side pulling the cams around.

A very light countersink for the hole in the end of the tool will make connection to the spring hook easier.

Once you've done this a couple of times you can remove and fit a pair of shoes in a couple of minutes.

See over for picture 10

