



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.

Gas and Ignition plate - advance and retard plates - (Control Bracket)
- Ian Moorcraft

I was always mystified why two of my spare original advance and retard plates (Austins call them 'Control Brackets') had larger holes than the others.

I have two originals with 5/8" holes part no. XL988 and the other 1A 6051. I also have a 9/16" hole one with the same part no 1A 6051 (the pair in the photo).

I found out the answer a while ago when I noticed a bush BM40 'thin copper' listed with the control tube in one of my illustrated parts list. I immediately realised why I have seen so many broken control brackets that have been over tightened and why so many cars have them revolving with the levers obviously missing that crucial bush (probably a split bush). This bush is first listed in parts list 353f for 1925 but the control bracket part number BM6 is the same as the earlier cars that don't have the bush listed, but looking at my XL one that has a 5/8" hole I guess they also used the bush.

The strange thing is the November 29 parts list show a new control bracket number BM128 with the bush changed to 'brass' numbered BM142 and listed up to the 32/33 box saloons with the Bakelite cover.

I am of the opinion that the control brackets were changed to 9/16" holes in 1929 when the new part number BM128 was announced, and the bush discontinued. The lists seem not to have been updated as most originals you find have 9/16" holes.

The moral of the story if you are lucky enough to find an original bracket check before you fit as the control tubes are always 9/16" diameter.



	Control bracket tube	...	1	BM46
	Socket	...	1	BM47
	Nut	...	1	BM48
	Bush (thin copper)	...	1	BM40

ADDENDUM on Gas and Ignition Plate (Control Bracket)

My hypothesis on the two sizes of control bracket plates has been blown out of the water because there 'are' in fact two different sizes of control tubes !

It appears that early cars had 5/8" control tubes so that would explain the 5/8" hole Control Brackets.

The thin copper bush that first appeared in the 1925 parts list may not have been needed to pack out the 5/8" Control bracket to fit the lighter 9/16" tube.

This raises the question of when, and why, did they reduce the wall thickness of the control tube, and what was the thin copper bush used for ?

I can't find any definitive answers in the parts lists or index cards. Longbridge often kept the same part numbers on parts that had been altered so this doesn't help the search (5/8" and 9/16" hole control brackets both part number 1A 6051 for example).

In conclusion the advice as in the original article is that if your original (5/8") control bracket is a loose fit, check out why. You may need to bush it if you have a 9/16" tube, or get a repro 9/16" control bracket. If you have a 5/8" control tube you will need to get an original 5/8" control bracket or bore out a repro 9/16" one. I have not seen two sizes advertised, nor for that matter, have I seen two sizes of control tubes advertised! Makes me think not many cars were made before reducing the size of the control tube.

In the section above we were analysing the reasons for a loose Gas and Ignition plate.

Below, we study the same problem but where the cause is for a different reason. It's the complete control bracket tube that is rotating in the steering box.

Check to see if the big nut on the bottom of the steering box is moving when you turn the control bracket.

Picture (1) shows the brass socket that is soft soldered on to the steering box end of the control tube. This assembly is the first thing that is fitted when building up the box. It was fitted at the factory and staked with four deep punch marks to keep it in place picture (2). It should never need removing for the life of the box. The box can be completely stripped and rebuilt with the control tube and socket still in place.

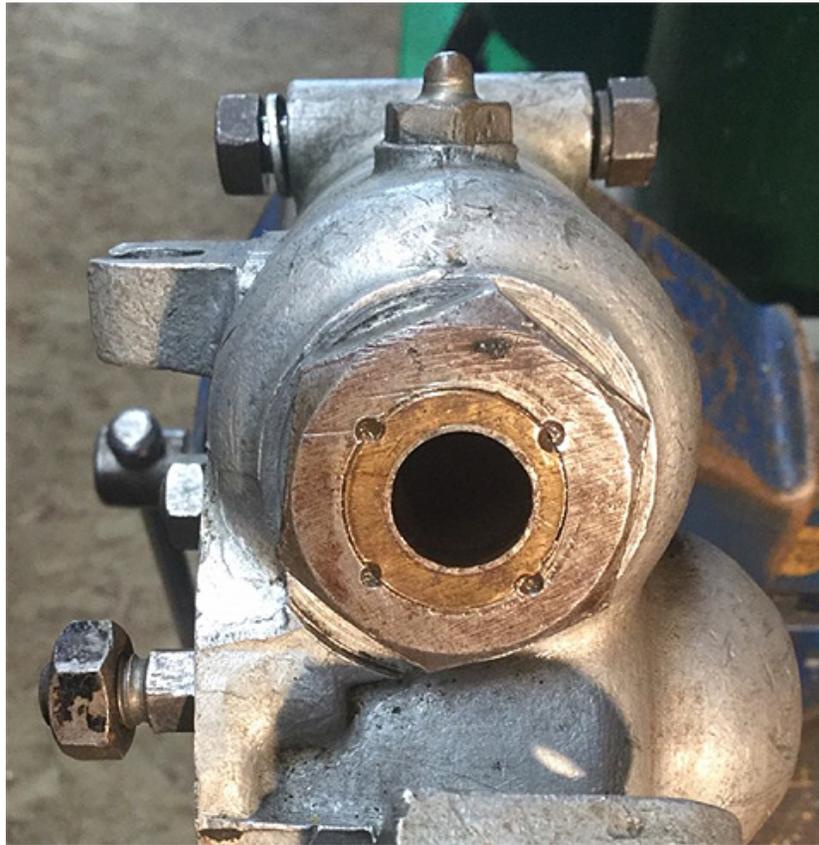
These punch marks are where the problem begins when someone tries to remove the nut for reasons known only to them. The nut jams on the punch marks and the socket rotates and will not tighten back up.

The safest way to proceed without causing further problems is to release the outer steering column from the dashboard clip, loosen the 5/16" pinch bolt on the top of the steering box itself. There is a 1/4" locking peg bolt that picks up in one of the castellations in the outer column socket to lock the adjustment.

It's shown in picture (3). Remove it (not easy with the box in the car!) Mark the position of the outer column in relation to the steering box casing. Using your toolkit 'C' spanner tighten down the outer column as far as it will go (this should only be a couple of castellations at most).



Picture 1

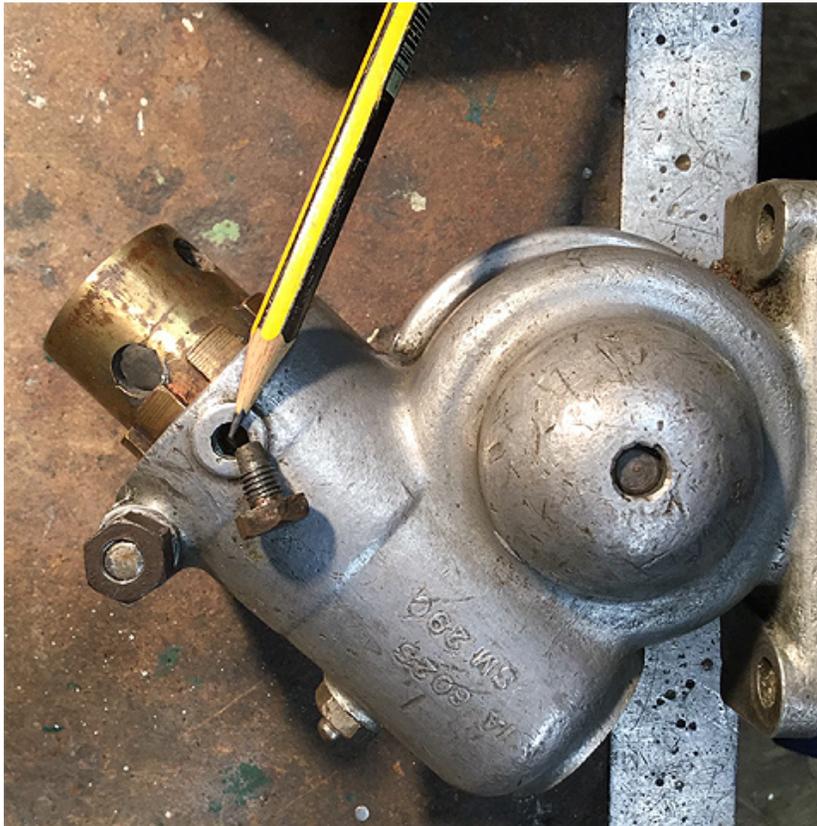


Picture 2

The loose socket will be locked tight inside the box and you should then be able to tighten the large nut at the bottom of the box. Loosen the outer column until your marks line up then check for up and down play in the steering wheel.

If you do have some play tighten down the column a little without creating any stiffness when the steering wheel is turned lock to lock, refit the locking peg bolt. Note: later boxes other than the early one shown have two holes side by side for a finer adjustment of the locking peg bolt so choose the best position to suit your adjustment (it's even harder putting the peg bolt back than removing it!) refit the dashboard clip.

Finally a third reason for the control bracket rotating, is if the tube is rotating but the big nut at the bottom of the box is tight which means the solder on the brass socket has failed. No easy fix for this one other than remove the steering box and completely strip it down, clean up the socket and control tube and re-solder.



Picture 3