

# **Installing Three HD6's Into a MkII BT7**

## **By Simon Lachlan**

**I decided to put three HD6s on my 62 BT7 late last year. Reasons - I wasn't getting on very well with the HS4s, not having enough elbow joints. (It seems that HS carbs are adjusted from underneath while HDs are approached from above). Also, I hoped that these three will be easier to keep balanced/in tune and I wanted a bit more power etc. etc. (And I like to have one project per winter!!).**

**People asked me if I'd let the list know how I progressed. I didn't do that...in fact the feedback was the other way around. However, here is a roundup of what I did and of problems encountered and solved (???) along the way.**

**First off I wanted the result to look as much like the original as possible.**

**Second, I wanted to keep all the old original bits intact in case I bodged the whole thing or simply decided to return to the old setup.**

**Thirdly, and gravely at odds with all above, I wanted to keep the costs down.**

### **Stage One**

**I needed to find three carbs and then three inlet manifolds which could be let out to 1<sup>3</sup>/<sub>4</sub>". (I wanted to keep my own manifolds per the original spec).**

**The carbs were easy to find, coming from a local Jaguar restorer. Actually they are off of Daimler V8s, but no matter. I opted for three identical units, all with the bowl on the LHS as you look into the air intake.**

**I bought restoration kits from Midel in Australia and I do think that the carbs are now as new. I'd say that none of the carbs had had much use; there was no slop in any of the movements. Yes, they were filthy but they'd been sitting round in a workshop for +/- 40 years.**

**Linkage- I bought a box of bits from the Jag place. (They replaced all carbs with injection). The inlet manifolds came, plus a lot of help and advice from Mr. Tricarb himself - Bill Bolton.**

### **Stage Two**

**When the inlets arrived they had to be offered up to the head and the ports matched up to the work previously undertaken on the head, by Denis Welch. This was very easy once I discovered "Flap wheels" which will shape and ream out very accurately and frighteningly quickly. You must be careful as 1<sup>3/4</sup>" is as far as you can go. Flap wheels and a good gauge...patience and no rushing.**

**\*\*\*The inlet manifolds are horribly coarse and rough inside - I still have the originals, so I compared. I really think that it would pay anyone who strips down his tricarb engine to run a flap wheel over the interior of his inlet manifolds and to polish out all the bumps and lumps.\*\*\***

**I had the heat shield machined out locally, i.e. from 1<sup>1/2</sup>" holes to 1<sup>3/4</sup>". Although it was very cheap, it was so simple that I'd do it myself next time. I have a stainless exhaust system married up to the original cast headers. I had heard that one can get good results by cleaning out all the right angles etc. etc. in the cast outlets. When I blew them out and looked closely inside, it became obvious to me that one could hardly fail to gain by smoothing it all out in there. Anyhow, I reamed away like a good 'un and shifted quite a lot of metal. (Not as quick as the inlets but still easy enough).**

### **Stage Three**

**Stick it all back together with new gaskets, etc. etc. No great problems if you put things together in the right order, otherwise you need the extra elbow.....**

### **Stage Four**

**I had made up the linkage on the bench and found that it went in pretty easily. (\*\*I don't know, but I'd GUESS that this whole operation is much easier if you start with a genuine tricarb in the first place\*\*). So, on to making it run.....I set the carbs per the book and put the chokes on with elastic bands. Actually it started first time, but then ran like a rocket - I just couldn't adjust the revs down at all. Then I noticed that I'd not reconnected the servo to balance pipe hose so the engine was getting**

**all the air it could handle and more. Thereafter, it was simply a book and screw driver job to get it all set up.**

### **Stage Five**

**Two problems, one self-inflicted. In my desire to keep costs down I had not noticed that Daimler V8 carbs choke levers work on a different plane to ours. Hard to explain.....as I see the Healey diagrams, the choke levers' motion is parallel to the block. The Daimler carbs' choke levers are at right angles to the block....from the engine towards the air filters?? Linking two carbs together would be possible but tricky and the one set up that I fabricated looked ghastly. In the end, I got the little plates that go between carb and filter on BJ8s' HD8s. I made up threaded stainless rods and extended them from the lever to under the plates by the filters. This enabled me to get a straight up and down pull on the cables for the front two carbs. (Two out of three is fine). I used the choke linkage per the tricarb...the single cable coming in from the cockpit which actuates the other cables that go down to the carbs.**

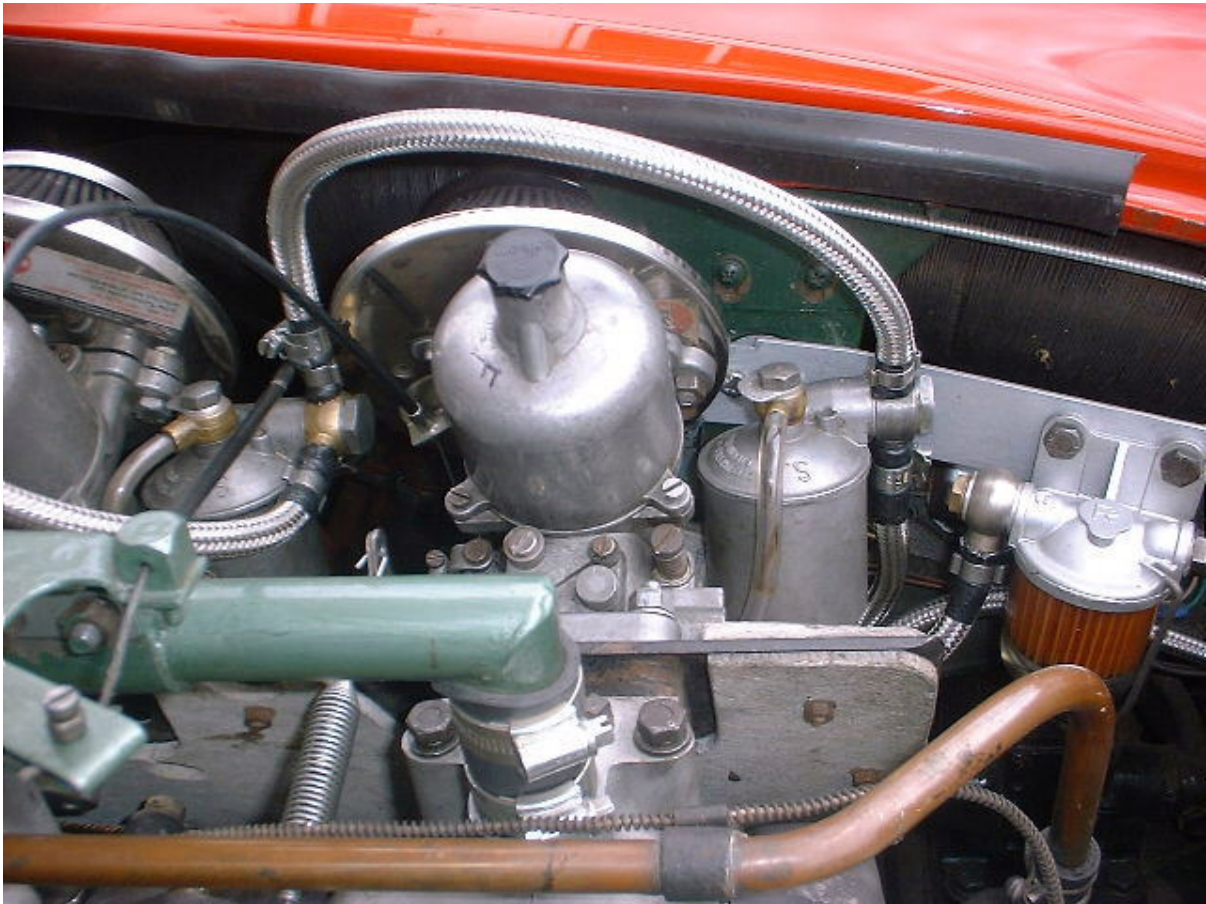
**The other problem was the air filters. With the correct distance pieces, there was no way I could get pancakes on. No way. I very much wanted to run with air filters as I primarily run the brute in summer and it can get dusty between the rains.....**

**It was the front filter which was the problem. The shroud support didn't allow enough room. I moved the LHS horn over to the RHS of the engine compartment, per BJ8s. I measured everything up accurately up and nearly went for a made up filter....sort of like a cold box. It would have looked OK...stainless backing plate and K&N type flat front....one big flat filter for all three carbs. In the end, I had an idea. I already had French made K&N lookalike filters.....very similar to K&Ns but about half the price. I simply got the back plate of one and "Moved the hole" sideways. The front filter now sits well off square but it's on the carb and I can't see that it matters one iota. The rear filter has the breather from the block; it is mounted to the back plate using a 1/2" brass plumbing connector.**

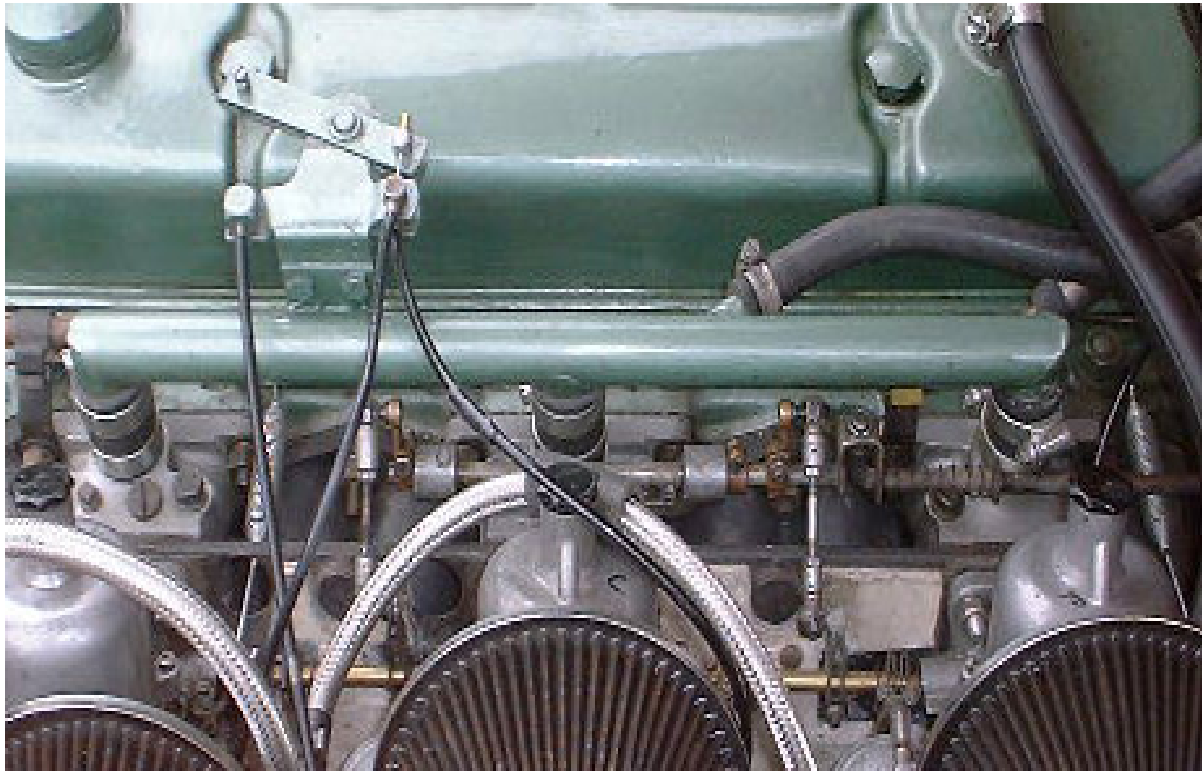
**I reckon it's finished now.....it looks fine. You'd need to be Gary or Roger - sorry about that - to notice the changes at first glance.**

**Performance...well that's a big question. I've had it out on the road a fair bit now. I got the initial impression that it pulled like a train, but the first**

**drive in a few months is always a bit different. But my gut feeling now is that it does go much better. Now the weather has improved, I'll muck around a bit more and see if I've got the right needles and springs etc. etc. (In the end, and after some longish trial runs, I settled on Green springs, and CV needles. It seems the ideal combination and that's where I'm sticking!)**



**Offset front air filter. Fuel filter location....to right of front carb, mounted off shroud support approx in place of the LHS horn.**



**HD6s view one. Carbs are connected by locally purchased brass rod and SU linkage “concertinas” from the Jag place.**



**HD6s view two. Only two chokes are actually connected!**

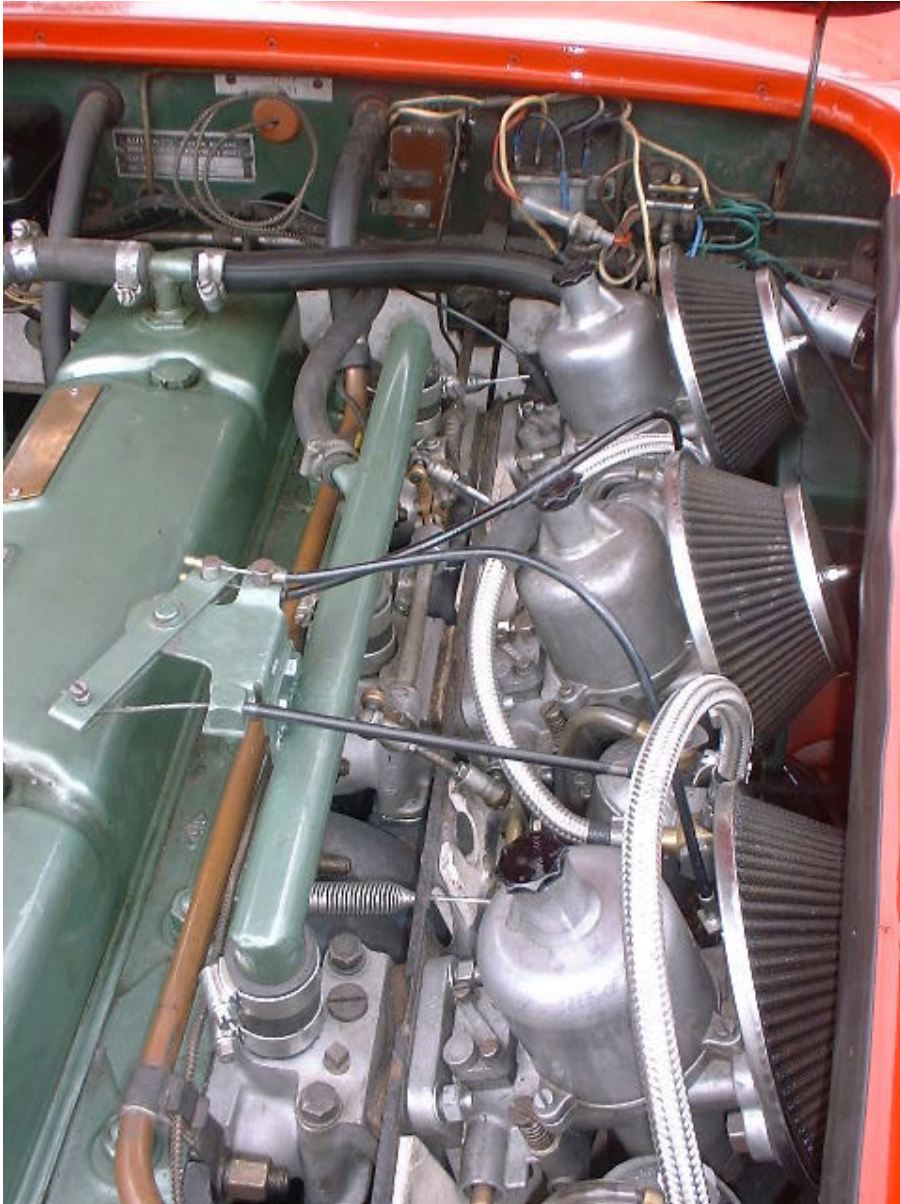


**HD6s view three**



**HD6s view four.**





**HD6s view 5**