

## J2 TECHNICAL ARTICLE

Number 265

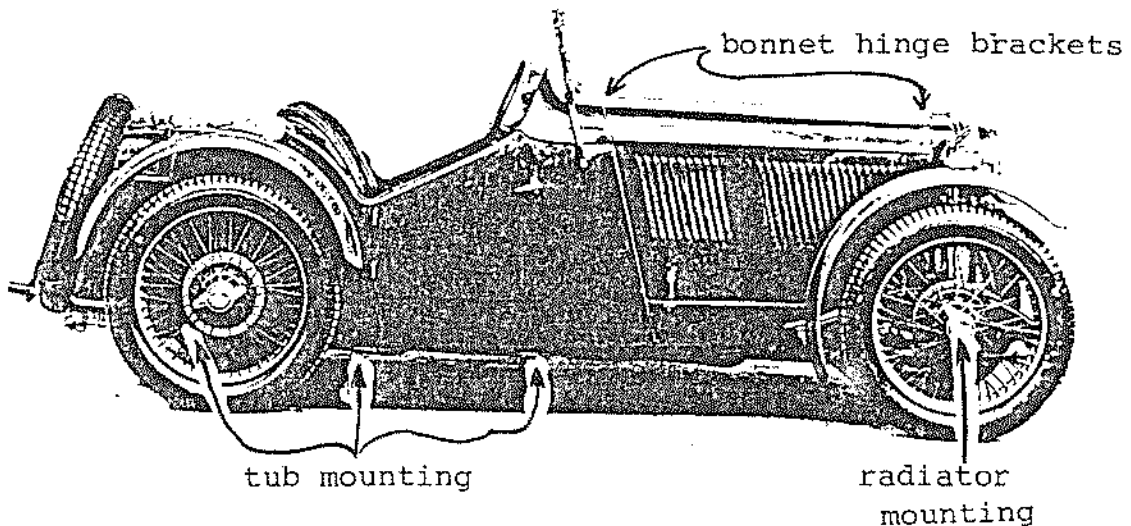
August 30, 1986

From Octagon Heaven

### BONNET ALIGNMENT AND FIT

In 1977 I restored my M.G.TC. It was my 4th restoration (MGA, & two TD's) so by that time I was comfortable in working with the M.G. When I got all done painting the parts and assembling the body with all the rubber parts, etc., the bonnet did not fit right on the sides of the tub. I tried everything that I could think but could not get it to move into the proper fit --of which it had before restoration! I ended up placing the blame on the new wood and schuttle and lived with it. Since that time I have seen several others with similar problems. It did not dawn on me until this last spring why that could happen. The reason I got so smart all of a sudden was because My J2 had been temporarily put back together to move in 1984 and when I got ready to work on it again, I noticed the same problem that I had had on the TC! This time I had not even started to work on the body (tub yet so it could not be the effects of reworking the tub! So let me see if I can explain the possible problems of which when it is all said and done, could be even a combination of the various problems.

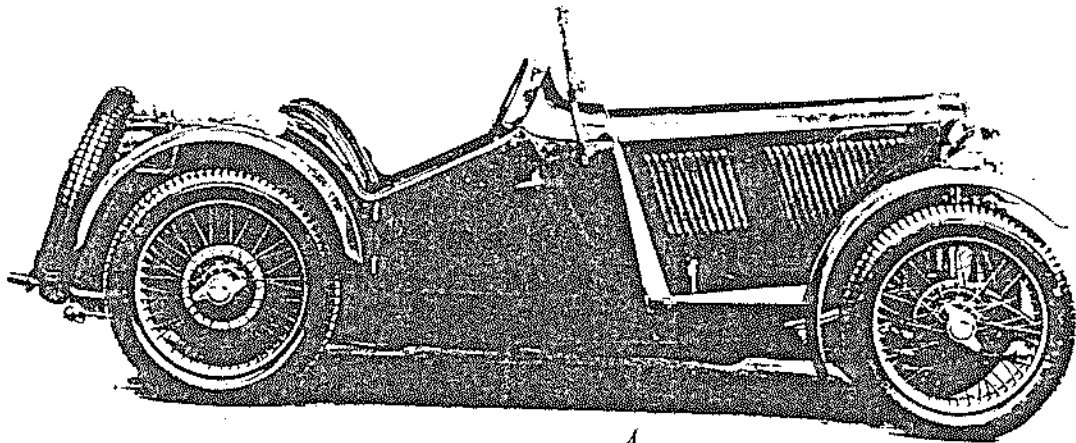
First the body (tub) is mounted to the chassis at three locations on the chassis on either side (six bolts). Secondly the radiator is mounted on the front motor mount which is fastened to a cross member on the chassis. From these two parts (tub & radiator) the bonnet is oriented. The center hinge of the bonnet is fastened to the tub and the other end to the radiator. These two places determines the orientation and position of the bonnet. (see below).



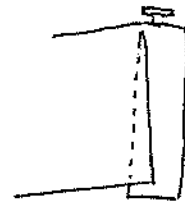
(CONTINUED BACK SIDE)

Everything depends on these two major parts being aligned properly with each other! The following are over done errors but that is so I can explain the various situations which can and will occur.

A. The Body or radiator is too high or low in respects to the other.

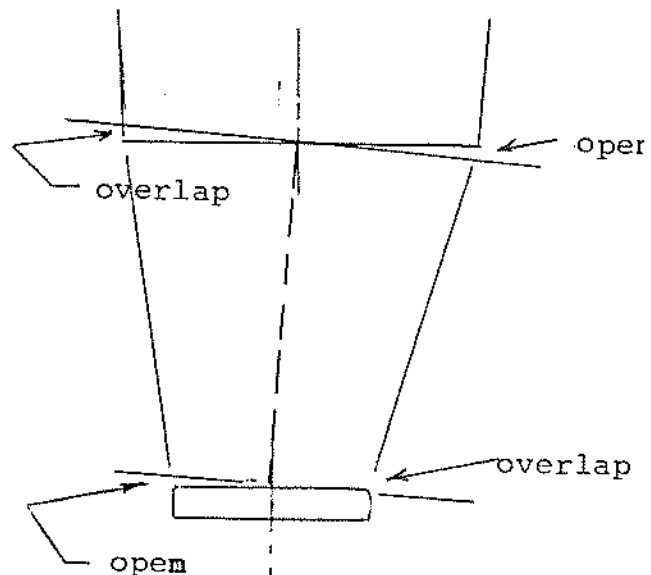
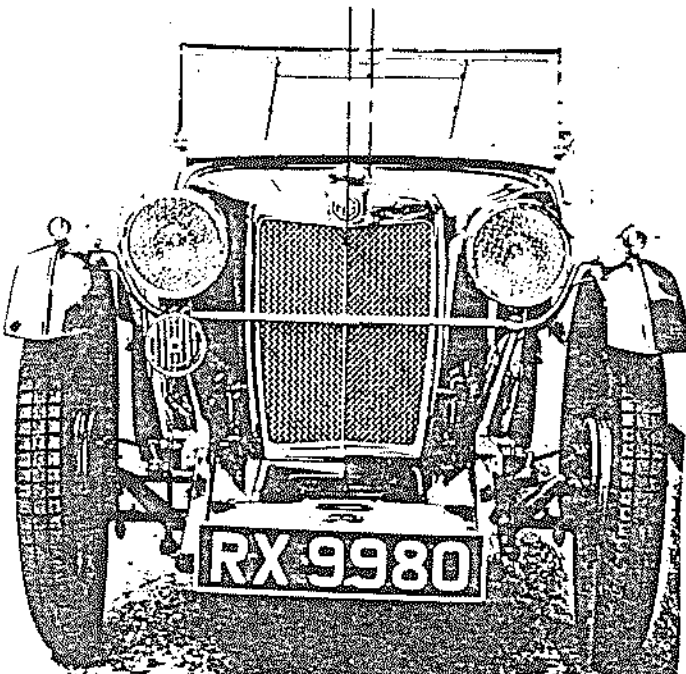


improper fit on sides and lower edge at valance.



improper fit on side of radiator

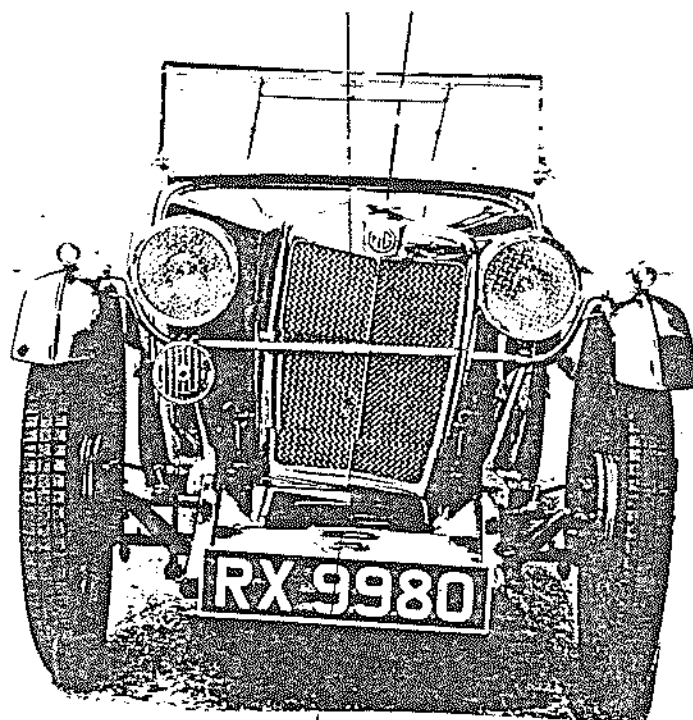
B. The center lines of the body and radiator are not the same center line (does not take much to create a misfit)



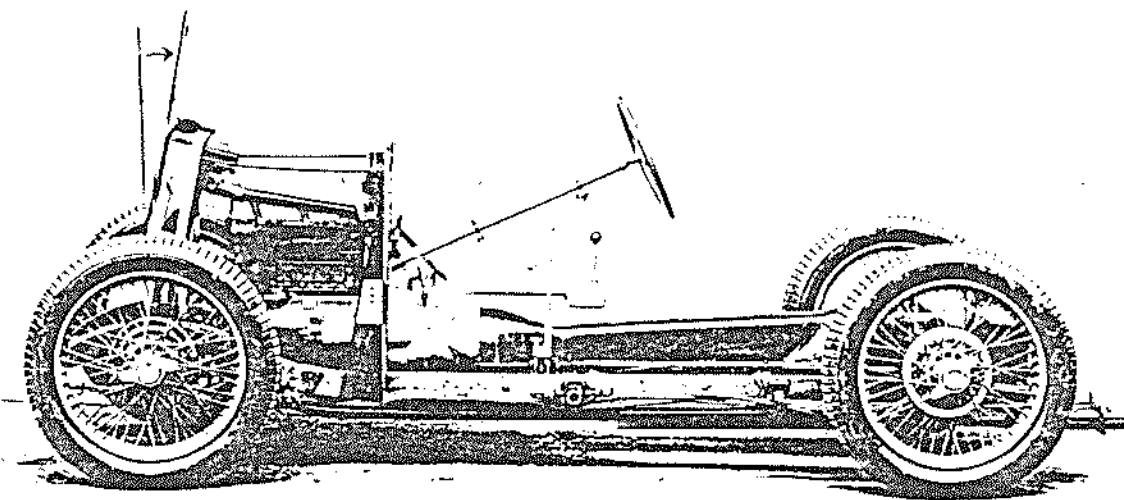
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- C. This is the one I just experienced. The verticle centerline of the two did not match. It was because a combined effect of the engine maybe not sitting the same on both rear motor mounts, (causeing the front motor mount to become cocked); the radiator not sitting straight on the front motor mount because one radiator hose wanted to push it up (had to loosen radiator to get hose on and did not get it back seated afterwards). Never the less, a small twist to the unit produced a centerline of the bonnet similar to that of item 'D'.

The picture here again is extreme to illustrate. Yet, just a few degrees off of verticle will put the centerline off and the bonket will not fit right.

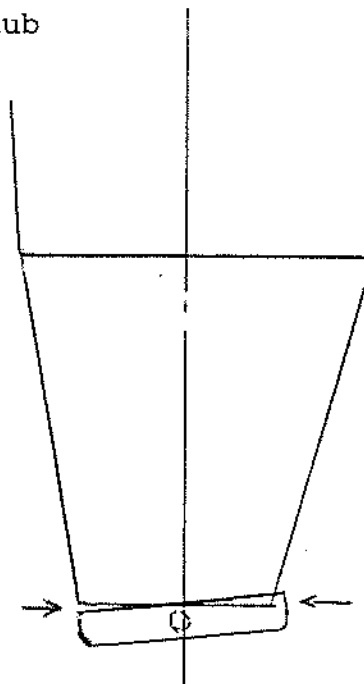


- D. This next one can happen if the body (tub) sets too far forward or is too far back and in order to get the bonnet hinge to reach, the radiator has to be moved (top) into an out of verticle position. In doing so the bonnet does not fit right along the sides of the radiator.



- E. The last one that I can think of is the one where the radiator gets mounted on a slight twist. This can happen because of the radiator hoses both being on the one side and trying to get them on can move the radiator if it is not snug. It can also happen if the support rod going back to the bulk head are not adjusted to the same length.

The bonnet will fit properly onto the tub but will not fit at the radiator.



- F. The for those of us who have to rebuild out complete tubs there is the possibility that when we get done with new wood and new skin, that it is not exactly like it was originally and then there is the fit problem. My fingers are crossed for I have not gotten that far yet!