

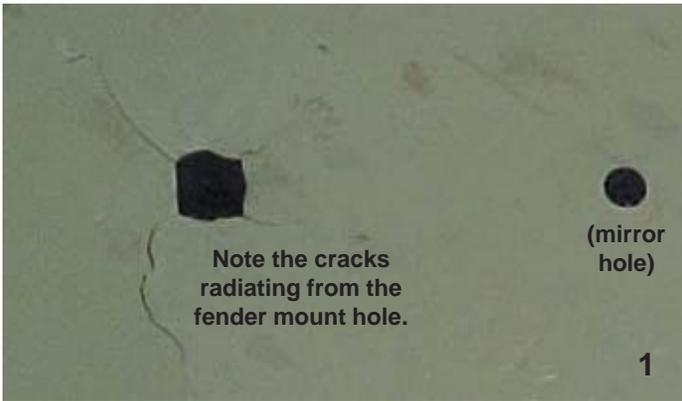
Fender Cracking

Moggie Mechanic

Modifications to the Morgan Fender to Stop Cracking

I've been talking about a lot of simple things recently, but here is something for the more mechanically inclined. If you're not a "do it yourselfer" just take this article to a shop and get it done.

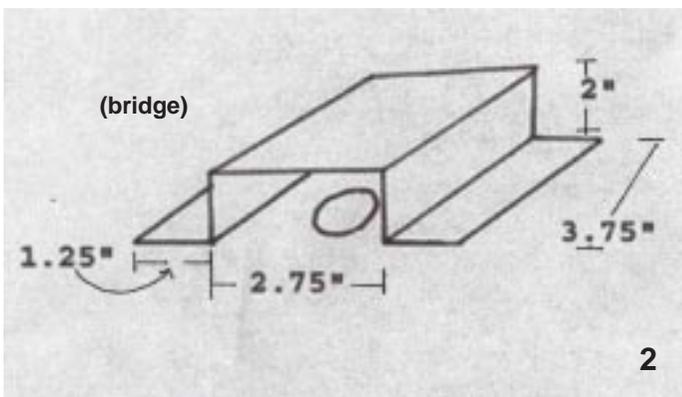
The design of the Morgan has a problem where the fender support attaches to the sidelights on the front fenders. After years of use, tiny cracks start to radiate out from beneath the sidelights in a star pattern (see figure 1). This can eventually lead to complete failure and the support becoming detached.



Many times this is repaired by simply repairing the cracks and welding a plate on the bottom side of the fender. Unfortunately, after a few years the cracks may reappear and you have to repair it again. Recently I saw a novel way of repairing the fender and am assured that after many miles it will still hold up. This is the way the modification was explained to me.

Step 1: Repair the cracks by welding and fill the hole with welding material.

Step 2: Weld a reinforcement plate (4" x 4" piece of 3/32" or 1/8" steel) to the underside of the fender. It should completely cover the hole and repaired cracks (see figure 3).



Step 3: Weld a bridge structure (see figure 2) to the reinforcement so that the hole is under the bridge and more or less centred. The bridge is applied as in figures 3 and 4 and is located perpendicular to the side of the car (see figure 3).

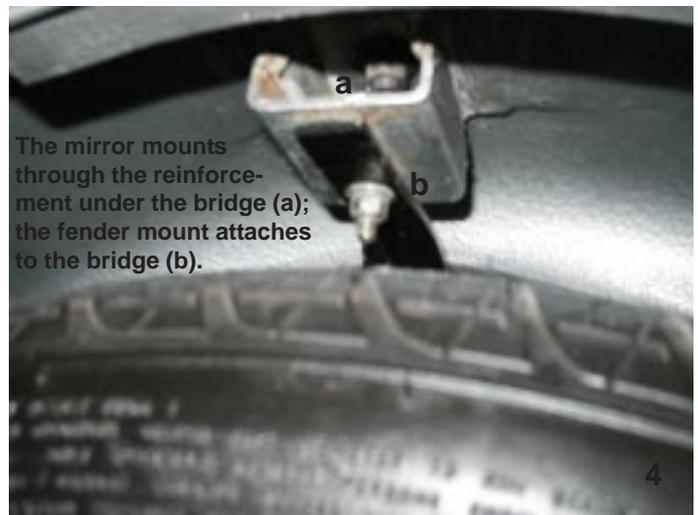
Step 4: Identify the correct location for the light and drill a hole through the repaired fender and the reinforcement plate (not through the bridge).



Step 5: Remove the fender support brace (the curved piece of flat steel that supports the fender), cut about two inches out of its height, and reweld it together so that when put back on the car it sits just under the new bridge structure. Adjust the length of the fender support so that the top of the fender is level when viewed from the front. If you cut off a little too much, add a few washers to adjust the top of the fender so that it is correct.

Step 6: Drill a hole in the bridge the same size as the hole in the fender support bracket.

Step 7: Bolt the fender support brace to the bridge (all you have to have is nimble fingers and a ratchet wrench). The light bolts through the hole in the top of the fender ("a" in figure 4) and is held on with the nut shaped device that was used



originally. The stem of the light no longer supports the fender as it did previously. The fender support is bolted to the lower level of the bridge with a grade 8 bolt.

The fender is now supported by the bridge and the fender reinforcement and the stress on the fender is well distributed over a much larger area (see figure 4). With the stress so widely distributed, the fender should not crack in the future. Unfortunately this process cannot be done without damaging the paint on the fender so is best done whilst you are repainting the fenders.

Thanks to Ken Miles and Steve Sillett of PanelCraft for help with this article.

Happy Motoring, MM