## Exhaust leak?

Hot tech tip: Ever thought you had an exhaust leak, but wasn't sure? With the car running it is sometimes hard to tell if and where it is. Take your halloween fog machine, which typically fit right inside the rear exhaust tip, and pump in the fog (with the engine off). Take a flash light and track down that leak. It works VERY well. Not only will you find that leak, you can also determine how bad it is.

The Millers

"British Car Nuts"

This entry was posted in Engine on May 9, 2014 [http://www.austin-healey-stc.org/techarticles/engine] by rick.

## **REMOVING EXHAUST MANIFOLD STUDS**

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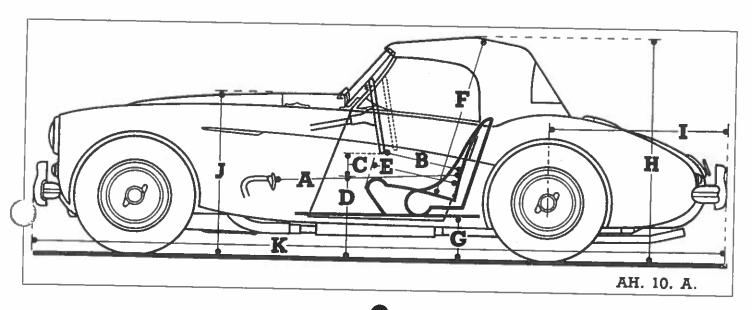
he best method for removing a stubborn exhaust manifold stud was taught to me some years ago by a good friend and British car restorer. I've since used this technique very successfully on all six manifold-to-downpipe studs, and two of the long intake-to-exhaust anifold bolts, all of which had broken off when removing them.

All eight very rusty and frozen studs came out without damaging any of the threads. However, in every case there was enough of the broken bolt or stud extending from the manifold to grab with a pair of needle nose locking pliers. With two of the bolts this amounted to only 3/16 inch or less! If the stud is broken off flush, you'll need to carefully weld an extension on to it, which is easier said than done.

In any case, the simple trick is to heat just the stud or bolt, and not the surrounding metal, to cherry red and then immediately quench the area with a cold water-soaked rag. You will need to use an oxyacetylene torch to get sufficient heat to the area. I then spray a quality penetrating solvent such as "PB Blaster" or "Kroil" onto the area. With a quality pair of needle nose locking pliers, very tightly clamp onto what is remaining of the stud, and like I mentioned, I've done this with very little of the stud sticking out.

Now very carefully rock the stud back and forth, maybe only a degree or so, instead of just trying to unscrew it. Don't force it! If you get any back and forth movement whatsoever, you are in business, but be patient, and spray some more penetrating solvent in as you rock back and forth. Then go back and repeat the process of heating and then "shock cooling" the stud as many times as required until the stud gets progressively looser. Be patient!

I've had to repeat the process four or five times before the offending stud finally came out, but this technique hasn't failed me yet. Then chase the treads with a quality tap and install the new stud or bolt with anti-seize compound.



## FITTING INSTRUCTIONS FOR CARBURETOR HEAT SHIELD ASSEMBLY - AH309

Place cement sheet/rivet assembly over the painted steel plate and push rivets through. Place the remaining AC sheet over the protruding rivets and fit a washer over each one. Lever out the legs of each rivet, using a large screwdriver or cold chisel. Finish off with Carefully turn unit over onto a suitable flat surface, supporting the heads of the rivets. a hammer, gently tapping the legs down horizontal.

