

ASK AN EXPERT

Independent mechanics who have worked on Alfas for decades, plus automotive engineers who maintain their Alfas answer questions regarding Alfas. The topics concern items they are often asked and problems seen too often.

Q. *The cooling fan on my 164 quit. The circuit appears to be dead, but the fuse is okay.*

A. You might be surprised learn how many 164 models visit the shop with home-rigged ‘fixes’ and switches cobbled under the dash. The culprit is almost always an inline fuse on the firewall. The repair, with photos and a simplified wiring diagram, will be a future tech article in *Alfa Owner*.

Q. *Two types of replacement door check straps are available for my spider. Which should I choose?*

A. From years of seeing both types, the more durable door check strap (from Alfa Romeo) is also much more expensive, but the rubber replacement offered by most

aftermarket sources is prone to failing in a short time. The straps install from inside the door, so the door panels need to be removed to replace them.

Q. *Twice the points have quickly failed on my 1600 Giulia Super, leaving me stranded. The rubbing block collapses or wears away quickly. What is going on?*

A. Without even examining the components it is impossible to know for certain, but this type of failure is a common consequence of some owners trying to save a buck by purchasing off-brand points, condensers, rotors and distributor caps. One inexpensive Italian aftermarket brand especially comes to mind, because the points are of a poor design and caps never fit tightly. This is an area where simply using only the correct Bosch or Magneti Marelli components could avoid a lot of grief and cursing.

Q. *I realize that body repair is not your specialty, but seeing so many Alfas, maybe you know what went wrong. I recently had the body of my Duetto spider restored by at a shop with an excellent reputation for doing good quality work. After I getting home, I noticed that the door gaps are now wider at the top than at the bottom. I have noticed a few other Duettos with the same problem.*

A. As you have already noticed, you are not alone. One difference between a good body shop and a good body shop that



Door Check Strap fixture on door jamb

works on a lot of Alfas is knowing the quirks of each model. When repairing rocker panels, the standard practice is to do both sides at once (saves time and money). Cars with longer wheelbases need support of the area under the doors so that the car will not sag in the middle when the panels removed. Duettos have large overhangs and the opposite problem: when both rockers are removed, the middle of the car bows upward, not down. For that reason, a Duetto needs to have its rocker panels replaced by the slower method of one side at a time, running counter to the instincts of many efficient shops.

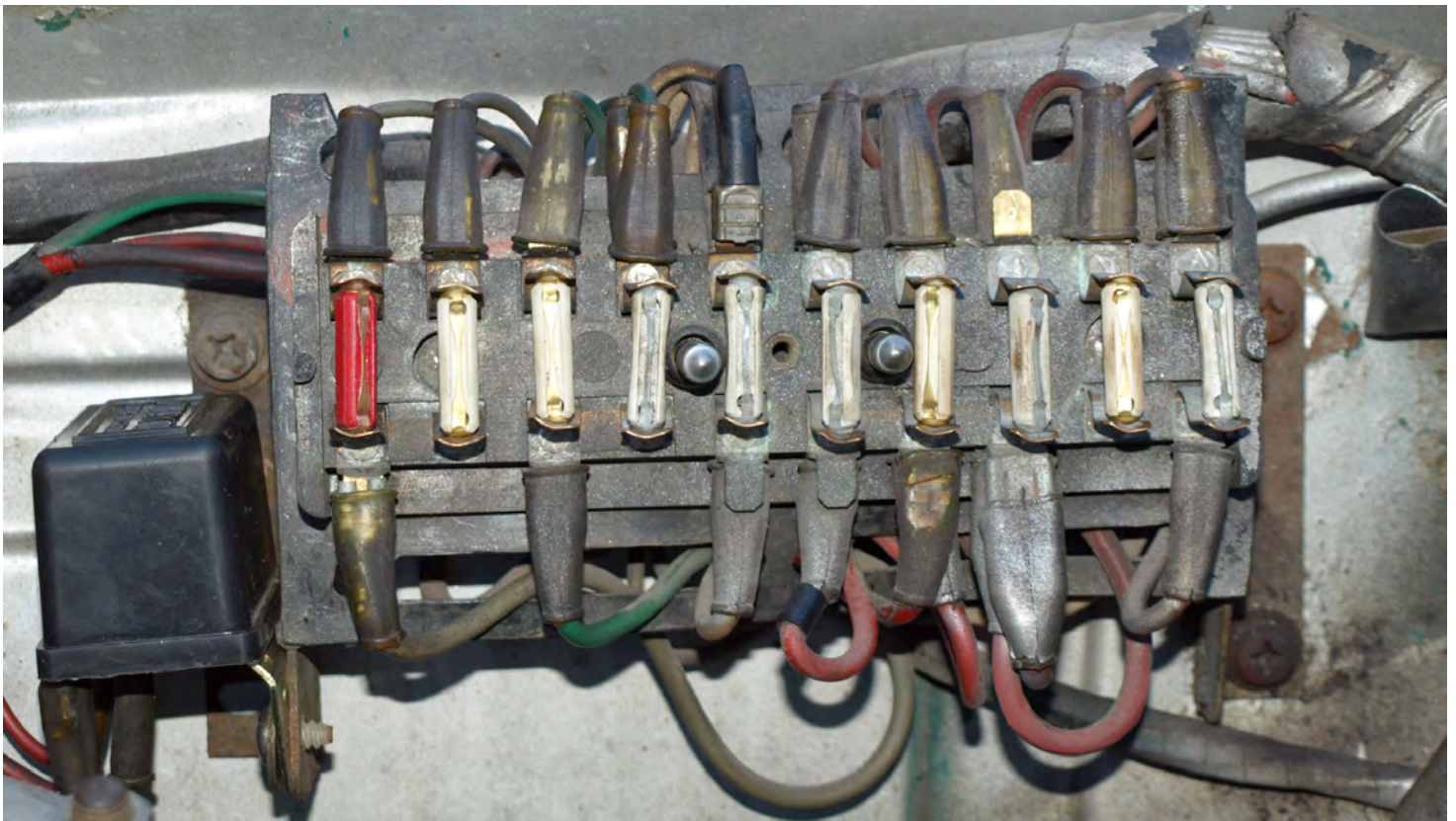


components will work better and more consistently with swapping to an alternator. More on that in a future column.

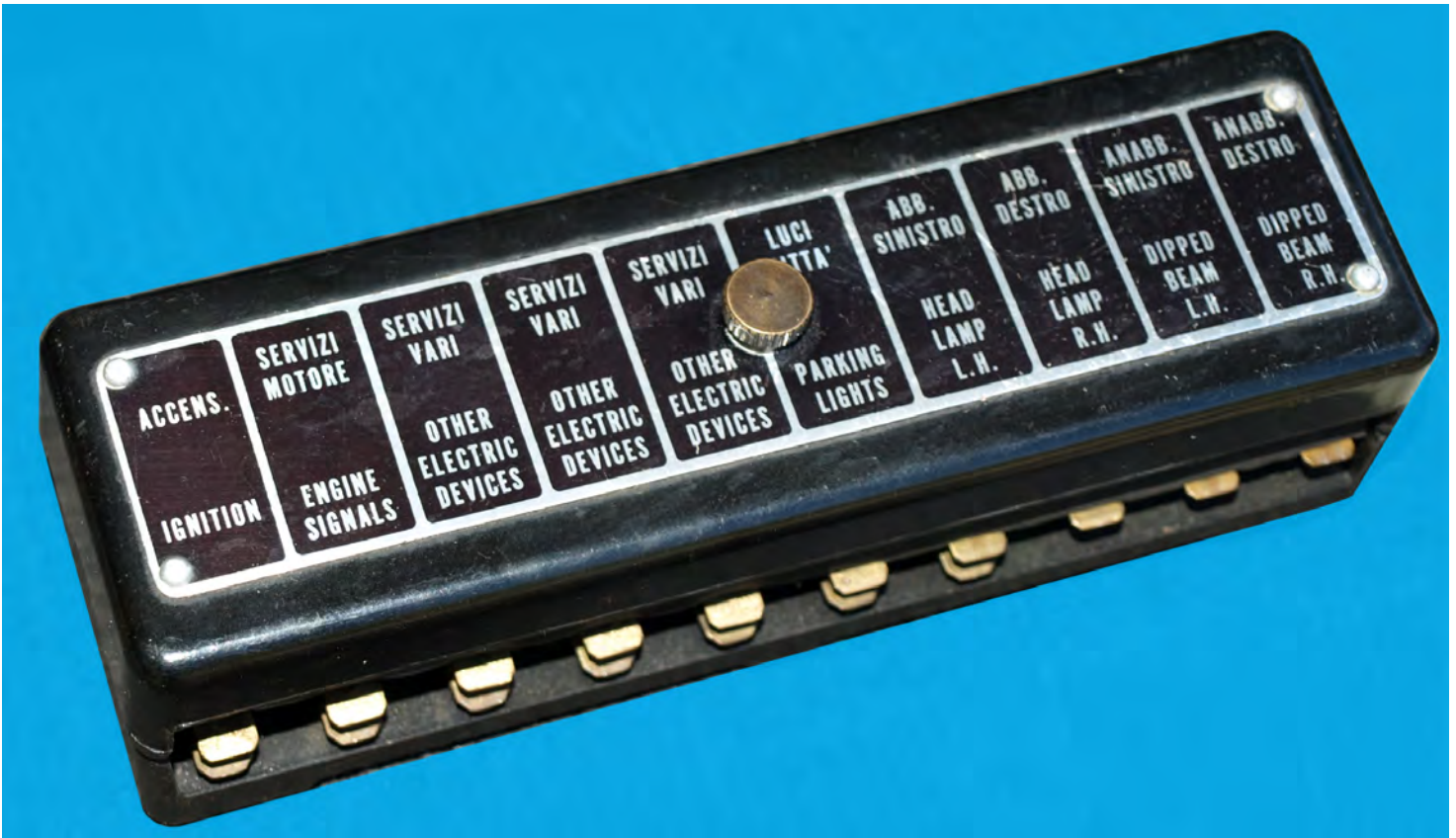
Q. *What is your opinion of switching my Giulia from a generator to using an alternator? Is it worth the hassle?*

A. Unless your primary objective is a trailer queen, the lights, wipers and most other

Q. *The fuse box under the hood of my 1967 Alfa is missing the cover. I cannot find a replacement part and have seen them only on concours cars.*



Fairly typical fuse box without cover on a 'driver' Alfa of the late-1960s



The original fuse box cover is relatively fragile, so many have been broken and discarded over the years. No replicas are known to exist.

A. The original covers were made of a Bakelite-type material that is fragile. The covers cracked or chipped and owners threw them away. The most recent NOS fuse box I saw cost \$125, so the typical owner simply makes do without because the cover offer only minimal protection. It is much less expensive and more important to keep an extra set of fuses in the glove box.

Q. *I cannot find a gasket for the transmission case halves for my 1965 Spider. It leaks a bit of oil, but no one seems to have a gasket.*

A. And no one will. Alfa built transmissions with a metal-to-metal fit, no gasket. Yes, they do often leak enough oil to make the case dirty, but nothing more than that. If it bothers you, the only ‘gasket’ available

will have to come out of a tube.

Q. *Does my Giulietta need a lead substitute added to the fuel?*

A. The short answer is to use premium lead-free fuel without any lead substitutes. The topic requires an explanation too long for this format, so we asked John Hoard to write a tech article on the topic that appears elsewhere in this issue.

This has been the first of what is hoped to be many columns providing **quick answers to simple but common problems** regarding maintenance of Alfas. The idea is to make this a regular feature in *Alfa Owner*, but first we need some questions to get the series going.

Send your question(s) for “Ask An Expert” to motorcityalfa@aol.com and we will try to get a short but helpful answer from one of the column's panel members. - *Dave & Andy Hammond*

GET THE LEAD OUT

Do Not Use Lead Fuel Substitutes In Alfas

By John Hoard

Alfas built after WW II have valve seat inserts made of hard steel. They do NOT need lead or lead substitutes.



When lead is removed, the only problems mentioned in technical literature regarding the topic are:

- 1. Knock due to low octane.** Your Alfa needs premium fuel. 93 or 94 pump octane is adequate unless the engine is highly modified. Knock occurs most at high load, low engine speed. If you own a highly modified engine that knocks on lead free premium, then you need racing fuel. Since these are very high in aromatics, they can cause early failure of fuel lines and increase emissions of air toxics (carcinogens and things you really don't want to breathe), so use racing fuel if only you really need it.
- 2. Valve seat recession.** It occurs ONLY in some cars with cast iron heads and native valve seats (i.e., no inserts) AND valve rotators. Oldsmobile was the poster child for this scenario. All post-1971 US cast-iron head engines have induction hardened valve seats, and all aluminum heads have inserts, so valve seat recession is not a problem.

On the other hand, lead causes many problems:

1. It is poisonous, and the lead in the fuel can end up inside you or in your child's bloodstream.
2. Lead destroys all automotive catalysts and thus increases emissions of air toxics by more than a factor of ten.
3. Lead forms deposits on combustion chambers; these increase octane requirement and can lead to pre-ignition engine damage
4. Lead deposits on spark plug insulators can turn conductive at about 700 degrees celsius (a typical high-load plug temperature), resulting in high speed misfires and early death of spark plugs
5. Lead contributes to chemical corrosion of many metals. It reduces spark plug electrode life, makes holes in exhaust pipes and mufflers, etc.

So, removing lead is an absolute benefit. Unless you own one of a very small number of vehicles with cast iron heads and native (unhardened) valve seats, there is no downside and lead substitutes are not needed.

I have run only lead-free premium in my GTA 1300 Junior and 1750 Spider Veloce since it came on the market in the early '70s with no problems at all.

