

# EMAIL



## Looking for bright ideas

History; When I bought my '56 Legere one of the car's very many problems was the generator which had seized bearings for so long that the belt had worn down the aluminum pulley. The generator was taken in to an auto parts store which sent it out to be repaired. When it came back I know that the bearings had been replaced and a new set of brushes had been installed. I do not know if any other work was done. Eventually I found a replacement pulley although it has a slightly larger diameter and therefore the Gen. turns a bit slower.

After this, the charging system worked, but the output could not quite keep in the + if the high beam headlights were on, so I changed from the original regulator to an American unit. This one worked much better, but when Dennis Bayer told me what regulator he used, it was a slightly different model, so I changed to the same one he used with good results.

Then I bought a 6V to 12V inverter and installed a 12v radio which has worked fine for some years now. The only problem was sometimes IF the radio was turned on when the car was being started the voltage drop due to the starter working (and maybe the battery being a little low) would "starve" the inverter and the radio would lose voltage and the station pre-sets would be lost. I learned to always turn the radio off before stopping the engine. Small problem. and easy enough to deal with it. Last summer we took a 100 mile trip on which we listened to the radio and all seemed normal. The last 500 meters was on a VERY bumpy road, at the end of which we stopped and had our picnic. We drove on the same bumpy road on the way out. About 5 or 10 miles later, while on the highway with the radio on I noticed that the ammeter needle was jumping around in the discharge, coming up to 0 but never going into charge. Unsure about when the problem had started, I pulled off the highway, turned the radio off and noticed that the needle stopped jumping but stayed in discharge. Turning the radio on I saw that the louder the volume and the higher the bass, the more the needle jumped into deep discharge. After trying a few

things it was clear that the generator was not putting out any current, so with the radio off, and using hand signals instead of the flashers, we made it home before it got dark enough to need headlights.

Took the generator and regulator into a commercial rebuilder. They said they could bench test and repair the generator but their equipment for testing 6V regulators was broken. I left the generator, and at first they said the armature and field both tested fine, but when assembled it didn't work. Next they said they found a fault in the armature and rewound it. After that it still didn't work on the bench, and on further examination a problem with the field was found and fixed, or so they told me. Back on the car it worked just as it had before, at least for a while, and the needle would jump in the charge mode if the radio was at high volume, just as it did in discharge. Then, I'd be driving along. Happy as a lark and the generator would stop generating, but then it would resume all on its own!! I checked connections and continuity of the wires from the Gen. to the regulator and they seemed o.k.. I kept driving until finally one day it stopped generating and did not "repair itself." After a few more days of trying, it stayed 'dead' so I took it off and brought it back to the shop that rebuilt it, certain that as it was no longer "intermittent," that they could find the problem. They tested it and said it was fine.

A few days ago it went back on the car (Thanks to Dennis) and the heaviest of the 3 wires to the regulator (from the armature I think) was changed. It charged normally. The next day I drove it for a mile or 2 and it was fine, but on the following day after about 5 miles it stopped charging again. That afternoon I decided to change the other 2 wires (ground and field, I think). While loosening the nut on the generator the wire broke off at the connector, making me think that there may have been a bad connection after all. Both old original wires were removed and new ones of a heavier gauge were prepared, but not installed as it got dark. The next morning (Sunday) the 2 new wires are installed and, YES, it worked very nicely and the needle seems to be steadier, even with the radio on. With a

confident heart, I take off on a 5 mile trip to visit Josh and his 15/6H (with the radio on, of course) and it stops charging again! Damn Damn Damn.

Tomorrow I will do the following:

- 1) start the car and see if it charges. If it Doesn't charge then
- 2) I'll disconnect the wires, let it sit for a few minutes, reconnect them and try it again. IF this causes it to charge, or if it DOES charge from the very start, I'll drive it around with the radio off, even though I cannot imagine how the inverter could cause any problems, and see what happens.
- 3) install the other "American" style regulator.

HELP! Anybody out there have any ideas about how to trouble shoot this? It makes me very nervous with a car that where the ONLY fuses are for the inverter and the radio and it makes long trips or night driving a bad idea. Thanks, david r.

p.s. We DID polarize the generator as per the instructions in the Regulator box. I think we touched the "Batt" to the "ARM," just long enough to get a spark.

Dear David

On the generator there are 2 threaded post terminals and a threaded hole for the ground. The two posts have different diameters Which one, thick or thin is for the Field? IF these two were hooked up backwards what would happen??

The thin one is the field terminal. If hooked up backwards it wont work alternatively generator/ regulator will be ruined.

Peter L

Peter,  
thanks for confirming what I thought. These wires have not been hooked up backwards since I have owned the car. Now, all we need to do is cure the problem. It seems almost as if disconnecting the wires is the action that restores charging, kind of like re-booting the computer when windows freezes up. Of course this makes little sense for a system as simple as the TA charging system. Thanks again, David

# EMAIL

## Gossip

Hello all;

Went out this morning to experiment.

1) started car and observed that it still did NOT charge at all.

2) Removed the wire to the field for about 10 seconds and re-attached it

3) Started the car. After a second's hesitation it stated to charge strongly!!!

My guess is that something in the regulator is getting stuck.

All of the above was done with the radio off.

David

Dear David

All I can say is that generators are tricky devices sometimes.

Some time ago I was working on a Traction with generator problems.

It wouldn't charge at all.

I put in a new regulator - didn't work.

Opened the regulator and manually pressed the contactor, then it started to charge.

After engine has been stopped it wouldn't work again when engine was started, but if the regulator was forced it started charging. It was as though the field needed to be "jump started".

So I made a temporary jump start circuit for the regulator and so the owner had to open the bonnet and jumpstart the regulator every time he was using the car.

After a few months it wouldn't work at all.

I then lent him a generator that was in good working order. He fitted the generator himself and hooked it up according to instructions and it didn't work at all. He tested some other regulators with no success.

I thought that the generator he borrowed from me was destroyed somehow.

I talked him into buying a new 6v alternator and he came by my place to have it installed.

That worked very well. I got my generator back and I tested it and it worked just as good as it ever did. The strange thing was it wouldn't work on that car. I still don't know why and it bothers me when I can't find an answer to why things don't work. It is frustrating.....

But sometimes this is how things are...

Peter L

## Don't you think that owning 60 Cits is just a little obsessive

The October issue of Classic and Sports Cars has a two page article with a picture about a fellow named Richard Bonfond and his Citroens. The picture shows him in front of his house with six of his sixty Cits! Yes, he owns 60 Citroens according to the article. He lives in Sacramento, California. Any of you west coasties know Richard?

Richard was at the Northfield Rendezvous this year (and most years, I guess). He's been passionately involved with Citroens his whole life. His father Albert was in charge of parts and service operations at Citroën Cars Corporation in Los Angeles from the mid-fifties 'til the end in the early seventies. Richard is working hard on the west coast end of ICCCR organisation, and is involved in the museum presentation at that event. I've heard he's working on a book about Citroën in the US.

