

Re: OT Coleman PowerMate PROBLEM FOUND

Source: <http://sci.tech--archive.net/Archive/sci.electronics.design/2008-06/msg02008.html>

- *From:* RFI-EMI-GUY <Rhyolite@xxxxxxxxxxxxx>
 - *Date:* Wed, 11 Jun 2008 22:51:50 -0400
-

amdx wrote:

"Jim Yanik" <jyanik@xxxxxxxxx> wrote in message
news:Xns9ABA6D6D86960jyanikkuanet@xxxxxxxxxxxxxxx

"amdx" <amdx@xxxxxxxxxxxxx> wrote in
[news:b557a\\$484fc081\\$18d6b40c\\$27712@xxxxxxxxxxxxxx](mailto:news:b557a$484fc081$18d6b40c$27712@xxxxxxxxxxxxxx):

>Coleman powermate generator quit working 1 hr 15 min
after
>>working
properly. (Pro-Gen 5000)

A few minutes ago I pulled the cover and found a 19 turn
coil in the
stator burned (overheated, no insulation left on copper). The
unit
has a pcb with 8 diodes and a capacitor, a foil on the pcb has
overheated and opened. The foil goes to a 470uf 200v
capacitor. The
only connection to that part of the open foil is the capacitor.
Leading me to think the cap is shorted, but at this time and
temperature, the cap shows very high resistance (over 2 meg)
and
deflects the meter both ways if I charge the cap and reverse
the
leads. (deflects? I'm using a digital meter, but you know
what I
mean). The diodes all check good.
I don't know if I'll attempt repair at this point. It looks like
the
19
turn coil could be replaced fairly easy, it's pretty loose in the
slot. The motor was not dipped in varnish.
Later, Mike

Re: OT Coleman PowerMate PROBLEM FOUND

GREAT!

I'd use my ESR meter on the cap to check it.

Can you –rewind– that 19T coil with new wire?

Ok pulled the cap and checked it on a capacitance tester, it's BAD.

I have removed the burned coil and installed a new one. I have some motor varnish and have brushed and dripped it into all the crevasses

as well as I can. It's in the oven as I write.

It will probably be a week or so before I can get a new capacitor.

Anyone have recommendation about ordering a replacement cap.

The original is a Nichicon CE 85 degree C LS(M) additional letters on case 0508 PET.

I have to tear this cap apart, if I shake it, it rattles. If there's anything unusual I'll post it.

Mike

Double check your diode bridge. With damage like this its surprising there would be any "survivors".

—

Joe Leikhim K4SAT

"The RFI-EMI-GUY"©

"Treason doth never prosper: what's the reason?

For if it prosper, none dare call it treason."

"Follow The Money" ;-P

.