

Whenever the GenCon is not stopping the generator after a 2 to 4 hour run, the problem is typically the signal from the flywheel sensor is too low, or absent. The generator will start, but since the signal from the flywheel sensor is low or absent, the GenCon will have no indication that the generator is running and will attempt to start the generator again in about a minute and a half. In the continued absence of a flywheel sensor signal, the GenCon will decide after the second attempt that the generator can't be started and will give up until it is reset by a power-up reset. If the flywheel sensor is not putting out sufficient voltage, you should hear the starter motor engage again about a minute and a half after the generator has started.

A) Check the flywheel voltage. Start the generator and check the AC voltage across terminals E5 and E6. The voltage should be about 1 volt AC. Do not disconnect the wires from E5 and E6 when making the measurement. Make the measurement on the GenCon with the wires from the flywheel sensor connected. If the voltage is low, the flywheel sensor may need to be cleaned, or adjusted so that it is closer to the teeth of the flywheel.

B) Unscrew the flywheel sensor. Check to see that it is clean and not fouled with metal debris. The core of the sensor is a magnetic rod and can accumulate metal debris. Be certain that you have cleaned all metal shavings from the flywheel housing after drilling the mounting hole for the flywheel sensor. Having metal debris on the sensor renders it insensitive to the movement of the flywheel teeth.

C) Check the flywheel sensor with an ohm meter for an open condition. Normally the sensor will show a resistance of about 140 Ohms. If the flywheel sensor reads infinite resistance (open) you will need to replace the sensor.

Where can I find a wiring diagram for my GenCon?

GenCon Model 9232 Wiring Diagram: [View](#) or [Download](#) (90.3KB .PDF file)
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[View the GenCon Input/Output Connection Diagram page](#)

My coach batteries are charged and my coach is connected to shore-power. But the generator still starts itself. Why is this happening?

Check the AC wiring. A wiring mistake that occurs frequently is that the AC adapter which is used to measure shore-power voltage is taking its AC voltage measurement from the wrong location. There should be a duplex outlet wired **after the shore-power circuit breaker but before the first transfer switch**. Any other location

will not work. The AC power adapter must be installed so that it only senses AC power coming from the shore power connection. If the AC power adapter is installed in a location after the first transfer switch it will be sensing AC power from the coaches inverter or the generator itself. The AC adapter used to measure shore-power voltage plugs into jack J2 on the GenCon.

Why must I use the Radio Shack 273-1764 power adapter?

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GenCon's manufactured prior to 1998 were calibrated for Radio Shack AC adapter catalog number 273-1431a. Current GenCon's are calibrated for Radio Shack AC adapter catalog number 273-1764 with the Adapt-A-Plug (Radio Shack number 273-1708) attached so that the plug tip is positive.

When ordering a replacement GenCon, you must specify the model number of the power adapter you have and Westhaver Associates will provide a GenCon with the proper calibration for that particular power adapter.

Why does my GenCon have a blown capacitor at position C22?

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If capacitor C22 blows out, the cause is most likely an incorrect polarity on the 1/8" phone plug on the Radio Shack 273-1764 AC power adapter. A negative voltage on the plug tip will always blow out C22. The GenCon must be returned to Westhaver Associates for repair.

Why isn't my GenCon starting my generator on during a brownout?

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Using an incorrect AC adapter will set the wrong brownout threshold.

GenCon's manufactured prior to 1998 were calibrated for Radio Shack AC adapter catalog number 273-1431a. Current GenCon's are calibrated for Radio Shack AC adapter catalog number 273-1764 with the Adapt-A-Plug (Radio Shack number 273-1708) attached so that the plug tip is positive.

Why doesn't my GenCon work now that I've moved it to my new RV?

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Your GenCon is configured to work with a specific generator model. Unless your old RV and your new RV have the exact same generator installed, you may find that the GenCon won't work. This is due to having the wrong control program in the GenCon. The control program is set up for specific engines having a specific number of teeth on their flywheel running at 1800 rpm. Contact Westhaver Associates and we'll determine if the GenCon is compatible with your new generator. If it is compatible, you can purchase an updated control program chip from us at a nominal charge.

Why does my generator start, but then immediately shut down?

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This is due to having the wrong control program in the GenCon. The control program is set up for specific engines with a specific number of teeth on the flywheel running at 1800 rpm. To determine the number of teeth on the flywheel:

- A) If you have access to the flywheel you can count the teeth surrounding the outside diameter of the flywheel.
- B) If you do not have access to the flywheel you must start the engine and measure the frequency of the signal from the flywheel sensor (Fluke makes several hand-held meters that can measure frequency.) Measure the frequency across terminals E5 and E6. Assuming the engine is running at a speed of 1800 rpm, take the frequency and divide it by 30. This will give you the number of teeth on the flywheel.

How do I determine which control program is installed in my GenCon?

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There is a label affixed to the CPU which will have one of the following designations:
PTSCON.HEX: Initial firmware release. Monitors batteries and AC and has a two hour generator run time.

PTSCONR2.HEX: Same as PTSCON except it has a three hour run time.

PTSCON-2.HEX: Incorporates battery voltage, RPM, and brown-out monitoring. Has

a 2 hour run time.

PTSCONR3.HEX: Same as PTSCON-2 except it has a three hour run time.

PTSCON-5.HEX: Incorporates battery voltage, RPM, and brown-out monitoring. For use with PTS 10KW generator which has 98 teeth on flywheel. Has a 2 hour run time.

PTSCON-6.HEX: Incorporates battery voltage, RPM, and brown-out monitoring. Also, a switch to extend the brown out range when connected to shore power. Has a 2 hour run time.

PTSCON-7.HEX: Incorporates battery voltage, RPM, and brown-out monitoring. Also, a switch to extend the brown out range when connected to shore power. Same as PTSCON-6.HEX except for a three hour run time instead of two.

PTSCON-8.HEX: Incorporates battery voltage, RPM, and brown-out monitoring. Also, a switch to extend the brown out range when connected to shore power. same as PTSCON-7.HEX except it has a stop operation on boot-up. Has a 3 hour run time.

PTSCON-9.HEX: Incorporates battery voltage, RPM, and brown-out monitoring. Also, a switch to extend the brown out range when shore power is used. Same as PTSCON-6 except it has a stop operation on boot-up. Has a 2 hour run time.

PTSCON9A.HEX: Same as PTSCON-9 except there is a ten minute delay after the two hour generator run before going back to monitoring.

PTSCON9B.HEX: Same as PTSCON-9 except it Incorporates a generator stop function to kill the generator if the flywheel sensor fails.

PTS9ECN1.HEX: Same as PTSCON-9 except it has a ten minute delay after the generator shuts off, during which no monitoring occurs. Has a 2 hour run time.

PTSCON-A.HEX: Incorporates battery voltage, RPM and brown-out monitoring. Also, a switch to extend the brown out range when connected to shore power. Same as PTSCON-9 except it has a 4 hour run time.

PTSCON-B.HEX: Same as PTSCON-9 except it has a stop operation on boot-up, 10 second preheat and has the count timing of PTSCON-5. Used with PTS 10KW generator, which has 98 teeth on the flywheel, tach overflows at 2304 rpm. Used with PTS 12.5KW ISUZU powered generator, which has 108 teeth on the flywheel, tach overflows at 2066 RPM. Has a 2 hour run time.

PTS-ACON.HEX: Same as PTSCON-B except the pre-heat drops before cranking.

PTSCON-C.HEX: Incorporates battery voltage, RPM, and brown-out monitoring. Also a switch to extend the brown out range when shore power is used. Same as PTSCON-B except for 4 hour run time. Used with PTS 10KW generator, which has 98 teeth on the flywheel, tach overflows at 2304 RPM. Used with PTS 12.5KW ISUZU generator, which has 108 teeth on the flywheel, tach overflows at 2066 RPM.

PTSCON-D.HEX: Incorporates battery voltage, RPM, and brown-out monitoring. Also a switch to extend the brown out range when shore power is used. Same as PTSCON-9 except it has a stop operation on boot-up. Used with PTS 10KW generator, which has 98 teeth on the flywheel, tach overflows at 2304 RPM. Used with PTS 12.5KW ISUZU generator, which has 108 teeth on the flywheel, tach overflows at 2066 RPM.

PTSCON-E.HEX: Incorporates battery voltage, RPM and brown-out monitoring. Also a switch to extend the brown out range when shore power is used. Used with PTS 10KW generator, which has 98 teeth on the flywheel, tach overflows at 2304 RPM. Used with PTS 12.5KW ISUZU generator, which has 108 teeth on the flywheel, tach overflows at 2066 RPM. Same as PTSCON-D except the run time has been reduced to 30 minutes.

PTSCON-F.HEX: Incorporates battery voltage, RPM, and brown-out monitoring. Also a switch to extend the brown out range when shore power is used. Same as PTSCON-D except it has a stop operation on boot-up. Used with PTS 10KW generator, which has 98 teeth on the flywheel, tach overflows at 2304 RPM. Used with PTS 12.5KW ISUZU generator, which has 108 teeth on the flywheel, tach overflows at 2066 RPM. Used with PTS 15KW generator, which has 110 teeth on the flywheel, tach overflows at 2053 RPM. Also, invokes a "stop" operation after each failed attempt to start

generator (keeps the generator from running with a failed flywheel sensor.)

PTSCON-G.HEX: Same as PTSCON-T except pre-heat drops before cranking.

PTSCON-O.HEX: Incorporates battery voltage, RPM and brown-out monitoring. Also a switch to extend the brown out range when shore power is used. Same as PTSCON-C except it counts cycles from the generator to measure RPM. Used with ONAN 12.5KW generator tach will not overflow.

PTSCON-T.HEX: Same as PTSCON-9 except modified for use with a timer.

KOHL_YAN.HEX: (KOHLER/YANMAR combination) YANMAR engine has 387 flywheel teeth. incorporates battery voltage, RPM and brown-out monitoring. Also a switch to extend the brown out range when shore power is used.

TEN_DEL.HEX: Same as PTSCON-9 except it has a ten minute delay after the generator shuts off before resuming monitoring.

PTSCON.IDL: Special program done for BLUE BIRD WANDERLODGE to provide only monitoring functionality to a generator which already has self-start capability.

Is there a technical support number I can call for help with my GenCon?

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Yes. Call us at **443-538-7819** (9AM-6PM EST Monday thru Friday) for help with installing, configuring and trouble-shooting your GenCon.