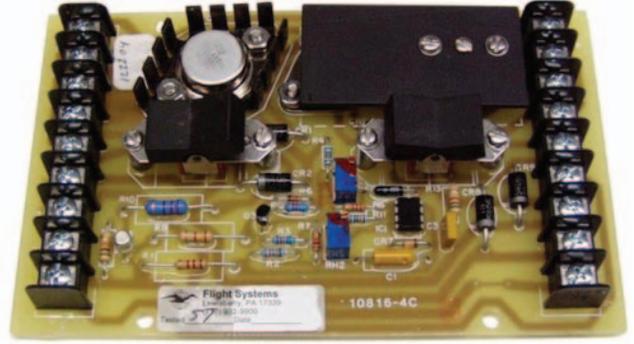


# PRODUCT INFORMATION

## Replacement for Onan® P/N 300-C859 RV-Marine Gen Set Controller (FS P/N 56-C859-00)



### LIST OF FEATURES:

- Avoid costly relay conversion with this replacement board.
- Mounting footprint and terminals identical to original board. No modification required to install.
- Heavy conformal coating applied for moisture and vibration resistance. (*Corrosion was a major problem with the original board.*)
- Upgraded components used throughout the board.
- Rugged barrier strips and heavy duty rocker switches used.
- Our design offers improved heat dissipation.
- Two-Year Warranty. Board is fully rebuildable. (*See reverse for Warranty & other details*)

### TROUBLESHOOTING PROCEDURE:

#### **(Use to determine if Control Board Needs Replaced)**

#### **SYMPTOM: Engine does not crank.**

1. Check battery & battery cables.
2. Check P.C. board adaptor (If equipped).
3. Check In-Line 9 AMP Fuse (If equipped).
4. Check start solenoid.
5. Check A1 Switch.
6. If above checks are OK, replace Control Board.

#### **SYMPTOM: Engine cranks but does not start.**

1. Check A1 Switch.
2. Check fuel solenoid.
3. Check fuel shut-off solenoid (If equipped).
4. Check intake manifold vacuum switch (If equipped).
5. Check oil level & low oil pressure switch.
6. Check high water temp. switch (If equipped).
7. Check high engine temp. switch.
8. Check ignition system.
9. If above checks are OK, replace Control Board.

#### **SYMPTOM: Battery loses water.**

1. Check battery voltage after generator has run for 30 min.  
If Voltage 15-16 volts or higher, replace Control Board.

#### **SYMPTOM: Engine starts but stops when the start switch is released.**

1. Check for generator D.C. output voltage on Pin 8 of Control Board when engine is cranked (If voltage is not present, check G1 R11)
2. Check for voltage on Pin 6 after engine starts and the start switch is released. (If voltage is not present, replace Control Board.)

#### **SYMPTOM: Engine runs and then stops.**

1. Check for a safety shutdown (Low oil, high water temp. or high engine temp.)
2. Check resistor G1 R11.
3. If above checks are OK, replace Control Board.

#### **SYMPTOM: Low battery - No high charge rate.**

1. Check for charging current at terminal 5 on Control Board. (Remove wire from terminal 5 and insert an Ammeter from wire to terminal 5. Reading should be 3 AMPS or higher.)
2. Check battery voltage (14 volts or higher).
3. Check charge resistor G1 R1.
4. If above checks are OK, replace Control Board.



**FLIGHT SYSTEMS**

207Hempt Rd, Mechanicsburg PA 17050

[www.flightsystems.com](http://www.flightsystems.com)

**Technical Support:**

**717-590-7330 (8-4:30 ET, M-F)**

**Fax: 717-590-7327**

# WARRANTY POLICY

## Replacement Onan® Controls Manufactured by FLIGHT SYSTEMS

*Note: Always Refer to the Specific Generator Set Manual when Troubleshooting Problems.*

This Flight Systems manufactured replacement generator control is warranted to be free from defects in materials and workmanship for a period of two years from the date it was sold. *(This date appears on unit label)*

Flight Systems' Limited Warranty covers the repair or replacement of defective product within the warranty period. It does not cover the cost of installation, or removal costs incurred, or possible damage to other equipment (including the generator or parts thereof) as a result of this product.

Flight Systems (or its authorized agent) shall reserve the right to determine the cause of malfunction. *In the case if we determine that it was due to abuse, misuse, improper installation, acts of nature (such as storms), failure to perform recommended gen set maintenance procedure or problems elsewhere in the gen set, the warranty claim shall be disallowed and established repair rates shall apply. Ship defective units directly to:*

**Flight Systems, 207 Hempt Rd. Mechanicsburg, PA 17050 - Attention: Warranty Repair**

*Please prepay all freight charges and note the nature of the failure, if known.*

**Return Policy:** Unwanted items may only be returned within 30 days of original purchase date. Refund/credit issued shall be less a 25% per item restocking/re-test fee as long as unit is in new, undamaged condition. *Shipping charges are not refundable.*

## REBUILDING SERVICE

If this product suffers a failure when out of warranty, it can be rebuilt. As with all Generator Controls Rebuilt by Flight Systems, a One-Year Warranty will be issued. Please contact us for current rebuild pricing. *Ship units to:*

**Flight Systems, 207 Hempt Rd. Mechanicsburg, PA 17050 - Attn. Repair Dept.**

*Please prepay all freight charges and note the nature of the failure, if known.*

## TECHNICAL SUPPORT

*Technical support is available by phone, fax or the internet for all Flight Systems products.*

**Phone: 717-590-7330 (8:00am - 4:30pm ET, M-F)**

**Fax: 717-590-7327 Web: [http://www.flightsystems.com/tech\\_sppt.htm](http://www.flightsystems.com/tech_sppt.htm)**

*We offer improved replacements for the following Onan® Controls*

<u>OEM Part #</u>	<u>Description</u>
ONAN® 300-C859	GEN SET CONTROL
ONAN® 300-0679, 0680	ENGINE CONT. MNTR.
ONAN® 300-0681, 0682	ENGINE CONT. MNTR.
ONAN® 300-0921/922, 300-1188	TIME DELAY MODULE
ONAN® 300-B1073, B944	RV GEN SET CONTROL
ONAN® 300-1006, 1404, 1540	YD REGULATOR
ONAN® 300-2604, 2605	ENGINE MONITOR (12 - 24V)
ONAN® 300-2784, 2943	RV GEN SET CONTROL
ONAN® 300-2880	VOLTAGE REGULATOR
ONAN® 300-3056, 3687	RV GEN SET CONTROL
ONAN® 300-3763, 3764	RV GEN SET CONTROL
ONAN® 300-4296, 4297	RV GEN SET CONTROL
ONAN® 300-4320, 4923	ENGINE MONITOR (12 - 24V)
ONAN® 300-4901, 4902	RV GEN SET CONTROL
ONAN® 305-0782, 0809-01, 0851	RV GEN SET CONTROL
305-0826, 305-0897, 305-0911	VOLTAGE REGULATOR
ONAN® 332-1268, 332-1956, 2045	(RV & Mobile Commercial) VR21 REGULATOR

### Controls Rebuilding Service

Flight Systems rebuilds over 200 different Onan®, Kohler®, Generac®, Basler®, ASCO®, Kato®, GE-Zenith® and other Generator & ATS Controls. Rebuilt-Exchange Service is often available.

We also rebuild Cruisair®, Kwickee® and other Marine & RV controls. Please call or see our website for a complete list.

**Order Desk: 800-403-3728  
(8-5:00 ET, M-F)**

**[www.flightsystems.com](http://www.flightsystems.com)**

### *Other Generator Controls, Test and Monitoring Equipment:*

See our website or call about our Model 540 Standby Controller, Model 325 Generator Exercise Monitor, "G-Man" & "Point-Man" RV Gen Set Service Tools or our line of replacements for Basler, Newage, Marathon & other regulators.