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
207 Hempt Rd, Mechanicsburg PA 17050
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:

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

We offer improved replacements for the following Onan® Controls

<table>
<thead>
<tr>
<th>OEM Part #</th>
<th>Description</th>
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<tbody>
<tr>
<td>Onan® 300-C859</td>
<td>GEN SET CONTROL</td>
</tr>
<tr>
<td>Onan® 300-0679, 0680</td>
<td>ENGINE CONT. MNTR.</td>
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<tr>
<td>Onan® 300-0681, 0682</td>
<td>ENGINE CONT. MNTR.</td>
</tr>
<tr>
<td>Onan® 300-0921/922, 300-1188</td>
<td>TIME DELAY MODULE</td>
</tr>
<tr>
<td>Onan® 300-B1073, B944</td>
<td>RV GEN SET CONTROL</td>
</tr>
<tr>
<td>Onan® 300-1006, 1404, 1540</td>
<td>YD REGULATOR</td>
</tr>
<tr>
<td>Onan® 300-2604, 2605</td>
<td>ENGINE MONITOR (12 - 24V)</td>
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<tr>
<td>Onan® 300-2784, 2943</td>
<td>RV GEN SET CONTROL</td>
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<tr>
<td>Onan® 300-2880</td>
<td>VOLTAGE REGULATOR</td>
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<tr>
<td>Onan® 300-3056, 3687</td>
<td>RV GEN SET CONTROL</td>
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<tr>
<td>Onan® 300-3763, 3764</td>
<td>VOLTAGE REGULATOR</td>
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<tr>
<td>Onan® 300-4296, 4297</td>
<td>RV GEN SET CONTROL</td>
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<tr>
<td>Onan® 300-4320, 4923</td>
<td>ENGINE MONITOR (12 - 24V)</td>
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<tr>
<td>Onan® 300-4901, 4902</td>
<td>RV GEN SET CONTROL</td>
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<tr>
<td>Onan® 305-0872, 0809-01, 0851</td>
<td>VOLTAGE REGULATOR</td>
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<tr>
<td>305-0826, 305-0897, 305-0911</td>
<td>(RV &amp; Mobile Commercial)</td>
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<tr>
<td>Onan® 332-1268, 332-1956, 2045</td>
<td>VR21 REGULATOR</td>
</tr>
</tbody>
</table>

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

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.