

PRODUCT INFORMATION

Replacement for
Onan® P/N 300-0681, 300-0682
Engine Control Monitor 12/24V
FS P/N 56-0681-82



FEATURES and INSTRUCTIONS

1. This product is designed to replace Onan part numbers 300-0681 (12-volt systems) and 300-0682 (24-volt systems). *It will adapt to either voltage automatically.*
2. Older Onan boards allow reset of the alarm functions and a lamp test by pressing the pushbutton on the circuit board. Later Onan boards provide a lamp test only, without a reset. This style board must be reset by turning off the RUN/STOP switch. Either mode of operation is possible with the Flight Systems product. Before installing the board, determine the desired mode of operation and set the position of switch JP1 accordingly. This switch is located directly behind the pushbutton switch (S1) and has its positions clearly marked. NOTE: When the mode is set to LAMP TEST ONLY, pressing the pushbutton will *also test the alarm* and cause it to latch on, along with OS and HET. Cycle the RUN/STOP switch to reset the alarm. On generators without pre-alarm, J1-21 MUST be grounded for unit to shut down on LOP and HET faults.
3. The keying slots in the circuit board allow it to be plugged into 12-volt or 24-volt systems and also prevent improper insertion into the connector. Take care to align the slots and then press the board down until it is fully seated into the connector.
4. Older Onan boards allow adjustment of the OVERCRANK alarm time delay while later ones do not. An adjustment range of 20 to 75 seconds is possible with the Flight Systems product. Adjust the OVERCRANK DELAY (R1) as needed, turning clockwise to increase the delay. The adjustment is clearly marked.
5. Older Onan boards allow adjustment of the LOW OIL PRESSURE alarm time delay while later ones do not. An adjustment range of 8 to 30 seconds is possible with the Flight Systems product. Adjust the LO OIL P. DELAY (R5) as needed, turning clockwise to increase the delay. The adjustment is clearly marked. Keeping the delay as short as possible without false tripping will result in maximum engine protection.
6. The IGN/FUEL output (pin 19) is rated at 3 Amps and the ALARM output (pin 20) is rated at 2 Amps regardless of system voltage. Overloads on these circuits can cause damage to the relay contacts and circuit board traces on original Onan boards. Severe damage to traces renders the circuit board non-repairable. The Flight Systems product has a special fusible link that acts as a fuse in case of an overload. This feature helps to prevent damage and allows the board to be repaired instead of discarded.
7. All sensor inputs have filters to improve noise immunity and help prevent false alarms.
8. Older Onan boards have tin-plated contact fingers on one side only. Later Onan boards have gold plated contacts on both sides of the board which ensures a more reliable connection. The Flight Systems product also has gold plated contacts on both sides.

(See reverse for Warranty and other details)



FLIGHT SYSTEMS

505 Fishing Creek Road • Lewisberry, PA 17339

www.flightsystems.com

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Technical Support:

717-932-9900 (7:30-4 ET, M-F)

Fax: 717-932-9925

E-Mail: GCtechnical@flightsystems.com

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, 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, 505 Fishing Creek Road, Lewisberry, PA 17339 - Attention: Warranty Repair

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

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, 505 Fishing Creek Road, Lewisberry, PA 17339 - Attention 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 e-mail for all Flight Systems products.

Phone: 717-932-9900 (7:30am - 4:00pm ET, M-F)

Fax: 717-932-9925 E-Mail: GCtechnical@flightsystems.com

OTHER PRODUCTS & SERVICES

We offer improved replacements for the following Onan® Controls

<u>OEM Part #</u>	<u>Description</u>
ONAN® 300-C859	GEN SET CONTROL
ONAN® 300-0679/80	ENGINE CONT. MNTR.
ONAN® 300-0681/82	ENGINE CONT. MNTR.
ONAN® 300-B1073, B944	RV GEN SET CONTROL
ONAN® 300-1006/1404/1540	YD REGULATOR
ALSO: WESTERBEKE® 21799	YD REGULATOR
ONAN® 300-2604, 2605	ENGINE MONITOR
ONAN® 300-2784, 2943	RV GEN SET CONTROL
ONAN® 300-3056, 3687, 3950	RV GEN SET CONTROL
ONAN® 300-3763, 5268	RV GEN SET CONTROL
ONAN® 300-3764, 5342	RV GEN SET CONTROL
ONAN® 332-1268	VR21 REGULATOR
ONAN® 332-1956	VR21 REGULATOR

Controls Rebuilding Service

Flight Systems rebuilds over 200 different Onan®, Kohler®, Generac®, Basler®, ASCO® and other Generator & ATS Controls. Rebuilt-Exchange Service is available on all Part Numbers we have cores for. Please call or see our website for a complete list.

Order Desk: 800-403-3728

(8-5:30 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, Model 360 "G-Man" RV Gen Set Service Tool or our line of Diesel Controls, featuring the famous Engine Saver®.