



Service Manual

Cummins **Onan**

Performance you rely on.™



60 Hz Home Standby Generator Set

GSBA (Spec A)

Table of Contents

1. IMPORTANT SAFETY INSTRUCTIONS	1
1.1 Save These Instructions	1
1.2 General Precautions	1
1.3 Generator Voltage is Deadly	1
1.4 Engine Exhaust is Deadly	2
1.5 Fuel is Flammable and Explosive	2
1.6 Batteries Can Explode	2
1.7 Moving Parts Can Cause Severe Personal Injury or Death	3
1.8 The Hazards of Carbon Monoxide.....	3
2. INTRODUCTION.....	5
2.1 About this Manual.....	5
2.2 About the Generator Set.....	5
3. MAINTENANCE	9
3.1 Periodic Maintenance Schedule	9
3.2 Cleaning the Housing Top	9
3.3 Exercising the Generator Set	10
3.4 Complete System Test	10
3.5 Engine Oil Maintenance.....	10
3.6 Replacing the Air Filter Element	12
3.7 Battery Maintenance	13
3.8 Spark Plugs	14
3.9 Accessory Heater Kits	14
3.10 Maintenance Record	14
4. SERVICE	17
4.1 Placing the Generator Set Back in Service	17
4.2 Transfer Switch.....	17
4.3 Engine	17
4.4 Engine - Generator Assembly	17
4.5 Fuel System Components Testing.....	19
4.6 Control	24
4.7 Generator	26

4.8 Brush Block/Slip Ring Service	28
4.9 Stator Service	28
4.10 Rotor Service	28
4.11 Testing the Generator	29
5. OPERATION	31
5.1 3 Position Switch	31
5.2 Home Operator Panel	32
5.3 Typical Operation.....	33
5.4 To Enable/Disable Standby	38
5.5 To Manually Start/Stop Generator Set	38
5.6 Fault, Maintenance and New Event Screens	39
5.7 Ethernet Settings	41
5.8 Exercise Settings	42
5.9 Time Setup	43
5.10 Load Management.....	44
5.11 Genset Status	45
5.12 Display Setup and Software Info	46
5.13 Event Log.....	48
5.14 Fault Log.....	49
6. STARTUP AND CONFIGURATION.....	51
6.1 Installation Review	51
6.2 Startup	51
6.3 Generator Set Configuration	51
6.4 Generator Adjustments.....	54
6.5 Transfer Switch Configuration	54
6.6 Transfer Switch Parameter Adjustments	55
7. OPTIONAL INTERNET/EMAIL INTERFACE DESCRIPTIONS.....	59
7.1 Introduction	59
7.2 Screen Descriptions	60
8. ETHERNET CONNECTION INSTALLATION WORKSHEET.....	65
8.1 Network Connectivity Options.....	65
8.2 Material/Cable Routing	65
8.3 Network Information Needed For Setup.....	65
9. OPTIONAL INTERNET/EMAIL INTERFACE SETUP.....	67
9.1 Ethernet Connections (Optional)	67

9.2 In-Home Network Access to the Generator Set	68
9.3 Setting up E-mail Notification.....	70
9.4 Email Setup Parameters.....	71
9.5 Remote Internet Access to the Generator Set.....	73
9.6 Help Hotline	73
9.7 Frequently Asked Questions	74
10. TROUBLESHOOTING	77
10.1 Troubleshooting With the In-Home Operator Panel	77
10.2 Troubleshooting with the Flashing Indicator Light	77
10.3 Fault Code Blinking	77
10.4 Restoring Fault Code Blinking	78
10.5 Generator Set Starts or Stops Without Command - No Fault Code	78
10.6 No Response - Status Indicator Light Dead	79
10.7 Starting Battery Runs Down	80
10.8 Starter Engages - Disengages	80
10.9 No AC Power - Generator Set Running, Status LED On Steady or Flashing Rapidly	81
10.10 Generator Set Cranks But Does Not Start - No Fault Code	81
10.11 Genset Warning - Transfer Switch Failed to Transfer Back to Utility When Utility is Restored - No Fault Code	82
10.12 Low Oil Pressure Fault - Fault Code 2	82
10.13 Service Check Fault - Fault Code 3	82
10.14 Overcrank - Fault Code 4	83
10.15 Overvoltage - Fault Code 12	84
10.16 Undervoltage - Fault Code 13	85
10.17 Overfrequency - Fault Code 14	85
10.18 Underfrequency - Fault Code 15	87
10.19 Governor Actuator Shutdown- Fault Code 19	89
10.20 Governor Actuator Overload - Fault Code 22	89
10.21 Voltage Sense Lost - Fault Code 27	90
10.22 High Battery Voltage - Fault Code 29	91
10.23 Low Cranking Speed Sense - Fault Code 32	92
10.24 Control Card Failure - Fault Code 35	93
10.25 Generator Set Stopped Without Fault Condition - Fault Code 36	93
10.26 Invalid Set Configuration - Fault Code 37	95
10.27 Processor Fault - Fault Code 43	95
10.28 Speed Sense Fault - Fault Code 45	95

10.29 Generator Set Overload - Fault Code 46	96
10.30 Alternator Over Temp - Fault Code 76	97
10.31 Low Fuel Pressure - Fault Code 78	97
10.32 Failure To Transfer To Generator Set - Fault Code 79	98
11. COMMUNICATION TROUBLESHOOTING	101
11.1 In-Home Network Access to Generator Set Troubleshooting	101
11.2 Remote Internet Access to Generator Set Troubleshooting	102
11.3 Email Alert Troubleshooting	103
APPENDIX A. OUTLINE AND SYSTEM DRAWINGS.....	107

BUY NOW

**Then Instant Download
the Complete Manual
Thank you very much!**