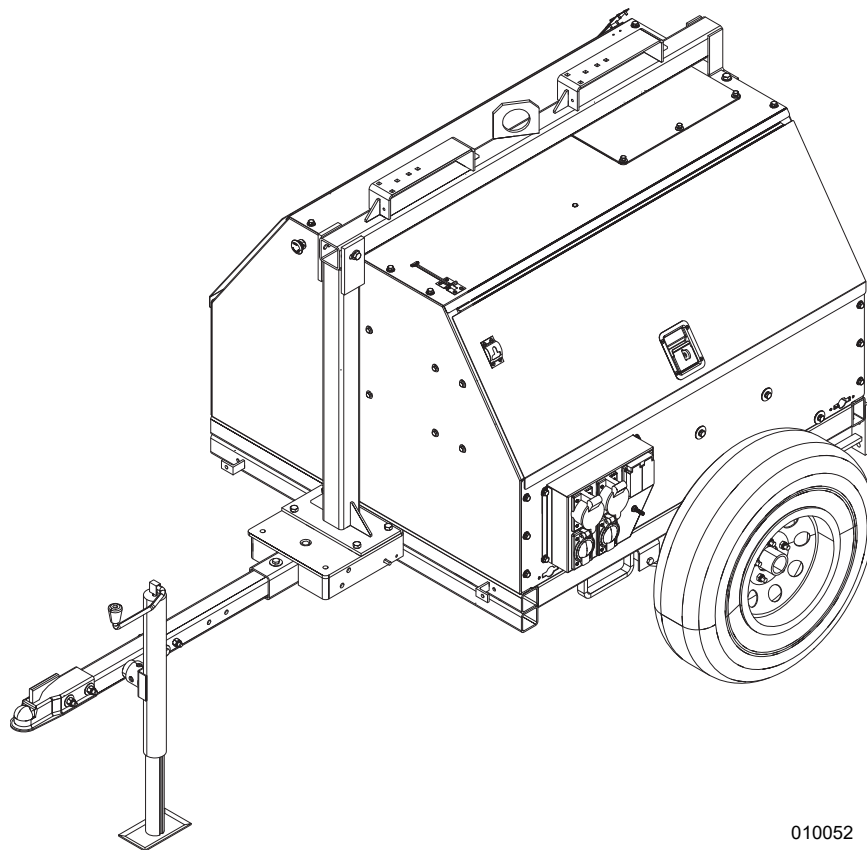


Owner's Manual

For
Diesel Generator
MLG15

SN 3004595385 and above



010052

For technical assistance contact:
www.generacmobileproducts.com
Technical Support
1-800-926-9768

SAVE THIS MANUAL FOR FUTURE REFERENCE

Use this page to record important information about your unit

Unit Model No.	
Unit Serial No.	
Engine Model No.	
Engine Serial No.	
Generator Model No.	
Generator Serial No.	
Date Purchased	

Record the information found on your unit data label on this page. See Unit Serial Number Locations.

Engine and generator serial numbers are located on data plates affixed to the engine and generator, respectively. When contacting a Generac Mobile Authorized Service Dealer (GMASD) about parts and service, always provide the unit model and serial number.

Operation and Maintenance: Proper maintenance and care of the unit ensures a minimum number of problems and keeps operating expenses at a minimum. It is the operator's responsibility to perform all safety checks, to verify that all maintenance for safe operation is performed promptly, and to have the equipment checked periodically by a GMASD. Normal maintenance, service, and replacement of parts are the responsibility of the owner/operator and, as such, are not considered defects in materials or workmanship within the terms of the warranty. Individual operating habits and usage may contribute to the need for additional maintenance or service.

 **WARNING**

CANCER AND REPRODUCTIVE HARM

www.P65Warnings.ca.gov

(000393a)

 **WARNING**

Breathing diesel engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

- Always start and operate the engine in a well-ventilated area.
- If in an enclosed area, vent the exhaust to the outside.
- Do not modify or tamper with the exhaust system.
- Do not idle the engine except as necessary.

For more information go to

www.P65Warnings.ca.gov/diesel

(000394)

Table of Contents

Section 1: Introduction and Safety

Introduction	1
Read This Manual Thoroughly	1
How to Obtain Service	1
Safety Rules	1
Safety Symbols and Meanings	1
General Hazards	2
Trailer Hazards	2
Electrical Hazards	3
Explosion and Fire Hazards	3
Battery Hazards	4
Fuel Hazards	4
Engine Safety	4
Operating Safety	5
Positioning the Unit	5
Towing Safety	5
Hitch and Coupling	5
Safe Towing Techniques	5
Reporting Trailer Safety Defects	5
Operating and Safety Decals	6

Section 2: General Information

Specifications	9
Unit Dimensions	10
Component Locations	11
Exterior	11
Interior	12
Control Panel	13
Unit and Serial Number Locations	14
Engine Oil Recommendations	14
Coolant Recommendation	14

Section 3: Operation

Prestart Checklist	15
Starting the Unit	15
Emergency Stop Switch	16
Automatic Shutdown	16
Voltage Regulator	16
Derating for Altitude	16
Wet Stacking	17
Receptacle Panel	17
Shutting Down the Unit	17
Towing the Unit	17
Lifting the Unit	18

Section 4: Maintenance

Emissions Information	19
Daily Walk Around Inspection	19
General Maintenance	19
Basic Maintenance Schedule	20
Jacks	21
Side-Wind Models	21
Top-Wind Models	21
Trailer Wheel Bearings	21
Lower Radiator Hose Heater (If Equipped)	21

Section 5: Troubleshooting

General Troubleshooting	23
--------------------------------------	-----------

Section 6: Wiring Diagrams

AC Wiring (Three 30A Outlets, One 50A Outlet)	25
AC Wiring—Options (If Equipped)	26
DC Wiring	27
Trailer Harness	28
Service Log	29

This page intentionally left blank.

Section 1: Introduction and Safety

Introduction

Thank you for purchasing a Generac Mobile product. This unit has been designed to provide high-performance, efficient operation, and years of use when maintained properly.

The information in this manual is accurate based on products produced at the time of publication. The manufacturer reserves the right to make technical updates, corrections, and product revisions at any time without notice.

Read This Manual Thoroughly



⚠ WARNING

Consult Manual. Read and understand manual completely before using product. Failure to completely understand manual and product could result in death or serious injury. (000100a)

If any section of the manual is not understood, contact your nearest GMA SD, or contact Generac Mobile customer service at 1-800-926-9768, or www.generacmobileproducts.com with any questions or concerns.

The owner is responsible for proper maintenance and safe use of the equipment. Comply with regulations the Occupational Safety and Health Administration (OSHA) has established, or with equivalent standards. Also, verify that the unit is applied, used, and maintained in accordance with the manufacturer's instructions and recommendations. Do nothing that might alter safe application/usage and render the unit in noncompliance with the aforementioned codes, standards, laws, and regulations.

Save these instructions for future reference. This manual contains important instructions for the unit that should be followed during setup, operation and maintenance of the unit and battery. ALWAYS supply this manual to any individual who uses this machine.

How to Obtain Service

When the unit requires servicing or repairs, contact a GMP ASD for assistance. Service technicians are factory-trained and are capable of handling all service needs. For assistance locating a dealer, go to <https://www.generacmobileproducts.com/parts-service/find-service>.

When contacting a GMP ASD about parts and service, always supply the complete model and serial number of the unit as given on the data decal located on the unit. Record the model and serial numbers in the spaces provided on the front cover of this manual.

Safety Rules

The manufacturer cannot anticipate every possible circumstance that might involve a hazard. The warnings in this manual, and on tags and decals affixed to the unit are, therefore, not all inclusive. If using a procedure, work method or operating technique that the manufacturer does not specifically recommend, verify that it is safe for others. Also make sure the procedure, work method or operating technique utilized does not render the equipment unsafe.

Safety Symbols and Meanings

Throughout this publication, and on tags and decals affixed to the unit, DANGER, WARNING, CAUTION and NOTE blocks are used to alert personnel to special instructions about a particular operation that may be hazardous if performed incorrectly or carelessly. Observe them carefully. Their definitions are as follows:

⚠ DANGER

Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

(000001)

⚠ WARNING

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

(000002)

⚠ CAUTION

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

(000003)

NOTE: Notes contain additional information important to a procedure and will be found within the regular text of this manual.

These safety warnings cannot eliminate the hazards that they indicate. Common sense and strict compliance with the special instructions while performing the action or service are essential to preventing accidents.

General Hazards



⚠ DANGER

Asphyxiation. Running engines produce carbon monoxide, a colorless, odorless, poisonous gas. Carbon monoxide, if not avoided, will result in death or serious injury.

(000103)



⚠ DANGER

Asphyxiation. Do not operate unit without a properly functioning exhaust system. Doing so will result in death or serious injury.

(000340)



⚠ WARNING

Loss of life. This product is not intended to be used in a critical life support application. Failure to adhere to this warning could result in death or serious injury.

(000209b)



⚠ WARNING

Hearing Loss. Hearing protection is recommended when using this machine. Failure to wear hearing protection could result in permanent hearing loss.

(000107)



⚠ WARNING

Moving Parts. Keep clothing, hair, and appendages away from moving parts. Failure to do so could result in death or serious injury.

(000111)



⚠ WARNING

Vision loss. Eye protection is required when operating unit. Failure to wear appropriate eye protection could result in vision loss or serious injury.

(000407)



⚠ WARNING

Hot Surfaces. When operating machine, do not touch hot surfaces. Keep machine away from combustibles during use. Hot surfaces could result in severe burns or fire.

(000108)

⚠ WARNING

Personal injury. Press the emergency stop button to stop the engine immediately in case of an emergency. Failure to do so could result in death or serious injury.

(000298a)

⚠ WARNING

Equipment damage. Do not attempt to start or operate a unit in need of repair or scheduled maintenance. Doing so could result in serious injury, death, or equipment failure or damage.

(000291)

⚠ WARNING

Risk of injury. Do not operate or service this machine if not fully alert. Fatigue can impair the ability to service this equipment and could result in death or serious injury.

(000215)

⚠ WARNING

Equipment damage. Only qualified service personnel may install, operate, and maintain this equipment. Failure to follow proper installation requirements could result in death, serious injury, and equipment or property damage.

(000182a)

⚠ CAUTION

Equipment or property damage. Do not block air intake or restrict proper air flow. Doing so could result in unsafe operation or damage to unit.

(000229)

Trailer Hazards

⚠ WARNING

Personal injury. Trailer must be securely coupled to the hitch with the chains correctly attached. Uncoupled or unchained towing could result in death or serious injury.

(000233a)

⚠ WARNING

Personal injury. Do not operate unit during transport. Doing so could result in death, serious injury, or property damage.

(000231a)

⚠ WARNING

Crushing hazard. Verify unit is properly secured and on level ground. An unsecured unit can suddenly roll or move, causing death or serious injury.

(000234a)

⚠ WARNING

Property or Equipment Damage. Tighten wheel lug nuts after first 50 miles to factory specifications. Failure to do so could result in death, serious injury, property or equipment damage.

(000235)

Electrical Hazards



⚠ DANGER

Electrocution. In the event of electrical accident, immediately shut power OFF. Use non-conductive implements to free victim from live conductor. Apply first aid and get medical help. Failure to do so will result in death or serious injury. (000145)



⚠ DANGER

Electrocution. Water contact with a power source, if not avoided, will result in death or serious injury.

(000104)



⚠ DANGER

Electrocution. Contact with bare wires, terminals, and connections while generator is running will result in death or serious injury.

(000144)



⚠ DANGER

Electrocution. Verify electrical system is properly grounded before applying power. Failure to do so will result in death or serious injury.

(000152)



⚠ DANGER

Electrocution. Turn utility supply OFF before working on utility connections of the transfer switch. Failure to do so will result in death or serious injury.

(000123)



⚠ DANGER

Electrocution. Never connect this unit to the electrical system of any building unless a licensed electrician has installed an approved transfer switch. Failure to do so will result in death or serious injury.

(000150)



⚠ WARNING

Explosion. Batteries emit explosive gases. Always disconnect negative battery cable first to avoid spark. Failure to do so could result in death or serious injury.

(000238)

Lifting Hazards



⚠ WARNING

Personal injury. Failure to properly connect lifting cables, chains, or straps could result in death, serious injury, or property damage.

(000346)

⚠ WARNING

Personal Injury. Do not use lifting eye if there are signs of damage or corrosion. Doing so could result in death, serious injury, or property damage.

(000433)

⚠ WARNING

Personal Injury. Do not use lifting eye other than as directed. Doing so could result in death, serious injury, or property damage.

(000434)

⚠ WARNING

Personal Injury. Verify all fasteners are properly tightened prior to lifting unit. Failure to do so could result in death, serious injury, or property damage.

(000351)

Explosion and Fire Hazards



⚠ DANGER

Explosion and Fire. Fuel and vapors are extremely flammable and explosive. Add fuel in a well ventilated area. Keep fire and spark away. Failure to do so will result in death or serious injury.

(000105)



⚠ WARNING

Fire risk. Fuel and vapors are extremely flammable. Do not operate indoors. Doing so could result in death, serious injury, or property or equipment damage.

(000281)



⚠ WARNING

Risk of Fire. Unit must be positioned in a manner that prevents combustible material accumulation underneath. Failure to do so could result in death or serious injury.

(000147)

Battery Hazards



⚠ DANGER

Electrocution. Do not wear jewelry while working on this equipment. Doing so will result in death or serious injury.

(000188)



⚠ WARNING

Explosion. Batteries emit explosive gases while charging. Keep fire and spark away. Wear protective gear when working with batteries. Failure to do so could result in death or serious injury.

(000137a)



⚠ WARNING

Explosion. Do not dispose of batteries in a fire. Batteries are explosive. Electrolyte solution can cause burns and blindness. If electrolyte contacts skin or eyes, flush with water and seek immediate medical attention.

(000162)



⚠ WARNING

Risk of burn. Do not open or mutilate batteries. Batteries contain electrolyte solution which can cause burns and blindness. If electrolyte contacts skin or eyes, flush with water and seek immediate medical attention.

(000163a)

⚠ WARNING

Environmental Hazard. Always recycle batteries at an official recycling center in accordance with all local laws and regulations. Failure to do so could result in environmental damage, death, or serious injury.

(000228)

Always recycle batteries in accordance with local laws and regulations. Contact your local solid waste collection site or recycling facility to obtain information on local recycling processes. For more information on battery recycling, visit the Battery Council International website at: <http://batteryCouncil.org>

Fuel Hazards



⚠ DANGER

Explosion and fire. Fuel and vapors are extremely flammable and explosive. No leakage of fuel is permitted. Keep fire and spark away. Failure to do so will result in death or serious injury.

(000192)



⚠ DANGER

Risk of fire. Allow fuel spills to completely dry before starting engine. Failure to do so will result in death or serious injury.

(000174)

- **DO NOT** fill fuel tank near an open flame, while smoking, or while engine is running. **DO NOT** fill tank in an enclosed area with poor ventilation.
- **DO NOT** operate with the fuel tank cap loose or missing.

Engine Safety

Internal combustion engines present special hazards during operation and fueling. Failure to follow the safety guidelines described below could result in severe injury or death. Read and follow all safety alerts described in the engine operator's manual. A copy of this manual was supplied with the unit when it was shipped from the factory.

- **DO NOT** run engine indoors or in an area with poor ventilation. Verify engine exhaust cannot seep into closed rooms or ventilation equipment.
- **DO NOT** clean air filter with gasoline or other types of low flash point solvents.
- **DO NOT** operate the unit without a functional exhaust system.
- Shut the engine down if any of the following conditions exist during operation:
 - Abnormal change in engine speed.
 - Loss of electrical output.
 - Equipment connected to the unit overheats.
 - Sparking occurs.
 - Engine misfires or there is excessive engine/generator vibration.
 - Protective covers are loose or missing.
 - Ambient air temperature is above 120°F (49°C).

Operating Safety

Positioning the Unit



Crushing hazard. Verify unit is properly secured and on level ground. An unsecured unit can suddenly roll or move, causing death or serious injury.

(000234a)

- The area immediately surrounding the unit should be dry, clean, and free of debris.
- If the unit is equipped with a frame grounding stud, follow any local, state, and National Electrical Code (NEC) guidelines when connecting.

Towing Safety

Towing a trailer requires care. Both the trailer and vehicle must be in good condition and securely fastened to each other to reduce the possibility of an accident. Some states require that large trailers be registered and licensed. Contact your local Department of Transportation office to check on license requirements for your particular unit.

Hitch and Coupling

- Verify the hitch and coupling on the towing vehicle are rated equal to, or greater than, the trailer's Gross Vehicle Weight Rating (GVWR).
- Verify the trailer hitch and the coupling are compatible. Verify the coupling is securely fastened to the vehicle.
- **DO NOT** tow trailer using defective parts. Inspect the hitch and coupling for wear or damage.
- Connect safety chains in a crossing pattern under the tongue.
- Before towing the trailer, verify the weight of the trailer is equal across all tires. On trailers with adjustable height hitches, adjust the angle of the trailer tongue to keep the trailer as level as possible.

Safe Towing Techniques

- Practice turning, stopping and backing up in an area away from heavy traffic prior to transporting the unit.
- Maximum recommended speed for highway towing is 45 mph (72 km/h). Recommended off-road towing speed is 10 mph (16 km/h) or less, depending on terrain.
- When towing, maintain extra space between vehicles and avoid soft shoulders, curbs and sudden lane changes.

Reporting Trailer Safety Defects

If you believe your trailer has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Generac Mobile Products LLC.

If NHTSA receives similar complaints, it may open an investigation; and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in an individual problem between you, your GMASD, or Generac Mobile Products LLC.

To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1-888-327-4236 (TTY:1-800-424-9153), go to <http://www.safercar.gov>; or write to:

Administrator
NHTSA
1200 New Jersey Avenue S.E.
Washington, DC 20590

You can also obtain other information about motor vehicle safety from <http://www.safercar.gov>.

Operating and Safety Decals

This unit features numerous safety and operating decals, which provide important operating instructions and warn of dangers and hazards. This section illustrates decal locations and their contents.

Replace missing or hard-to-read decals. For decal part numbers, see the parts manual at www.generacmobileproducts.com.

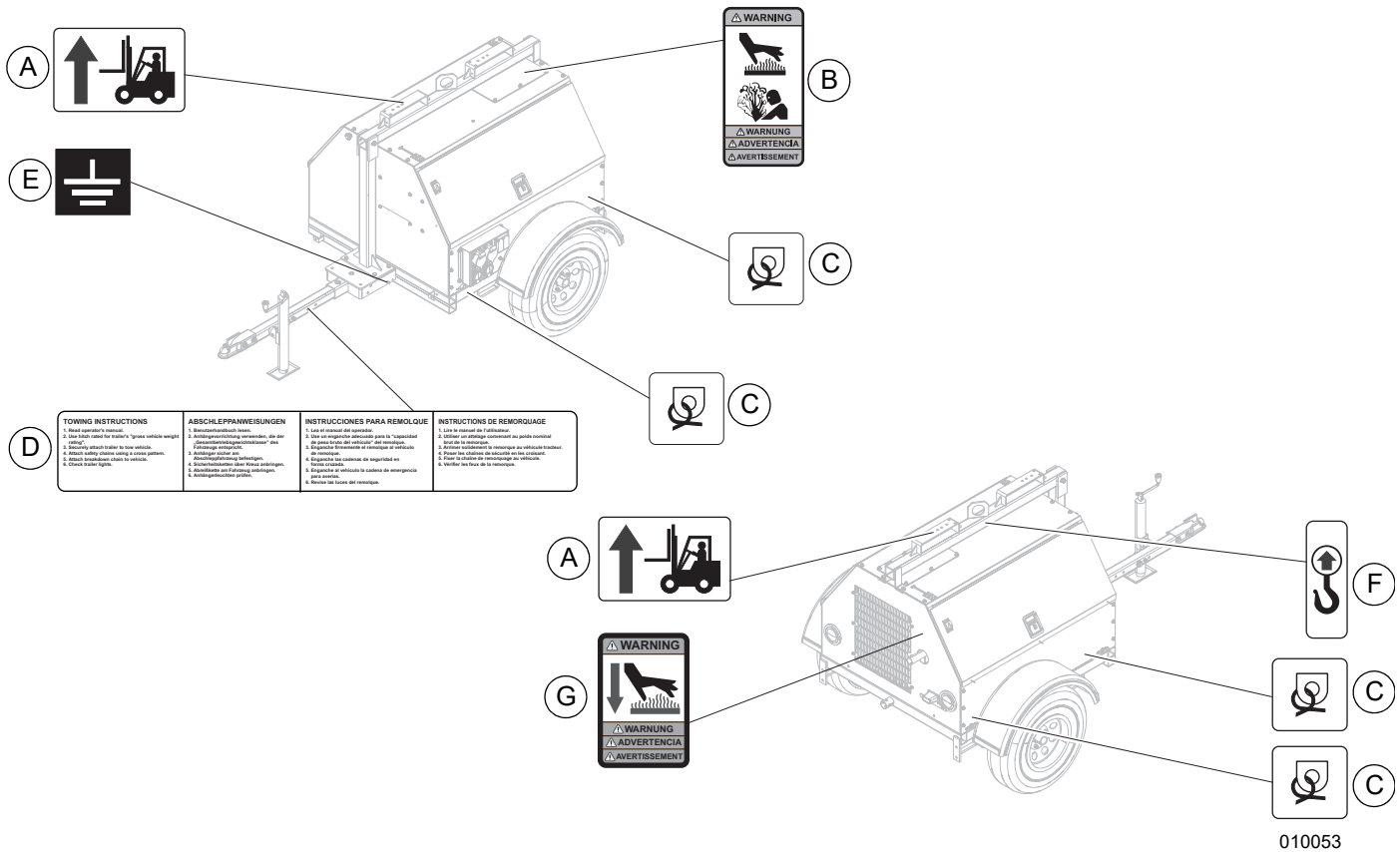


Figure 1-1. Exterior Decals

- A Forklift pocket
- B Warning: Hot surface, fire, and explosion
- C Tie-down point
- D Towing instructions
- E Grounding stud
- F Single point lift location
- G Warning: Hot surface

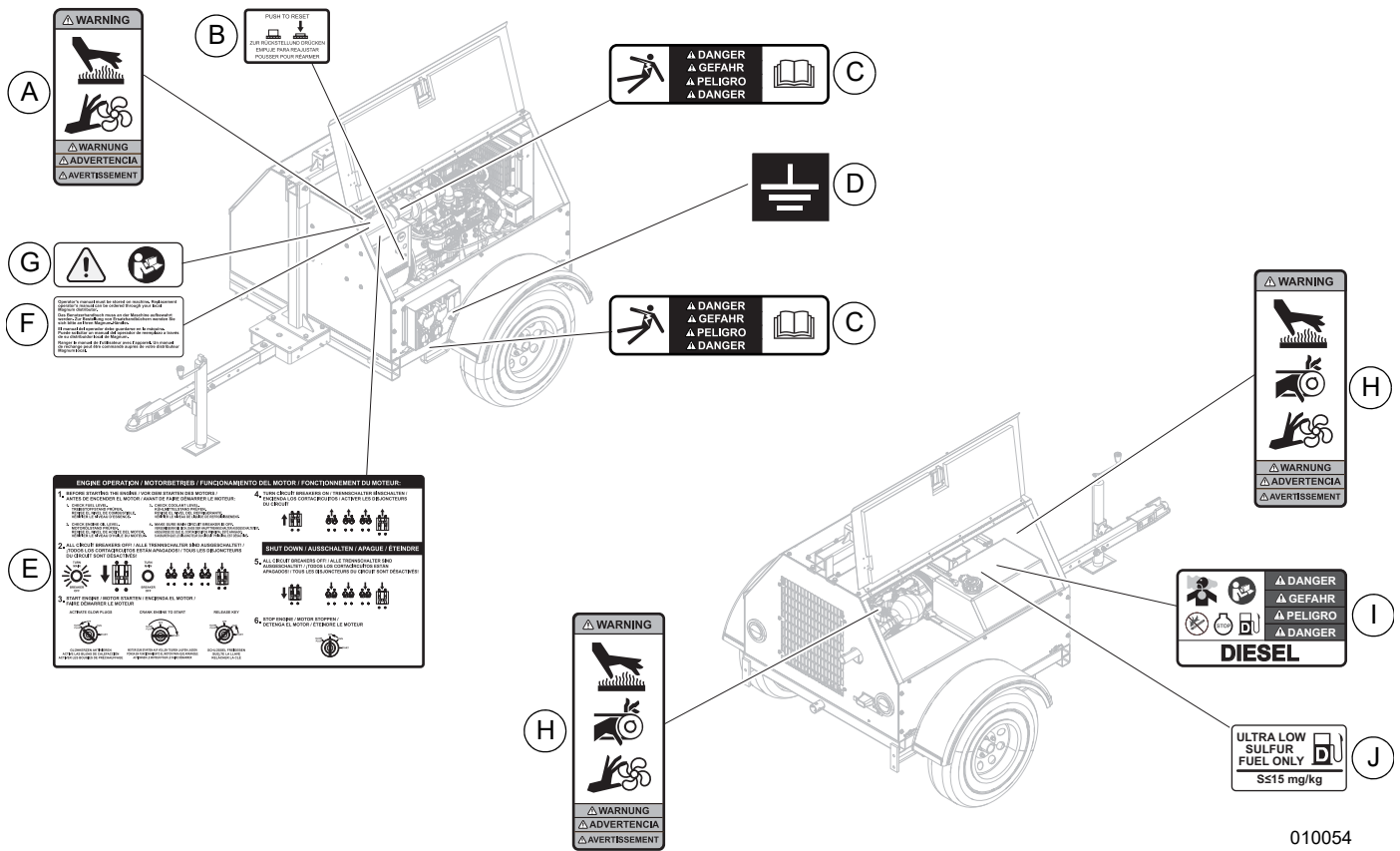


Figure 1-2. Interior Decals

- A Warning: Hot surface, moving parts
- B Push to reset
- C Danger: Electrocution
- D Grounding stud
- E Engine operation procedure

- F Operator's manual must be stored on machine
- G Operator's manual must be stored on machine
- H Warning: Hot surface, moving parts
- I Danger: Diesel fuel, asphyxiation, no open flame
- J Ultra low sulfur fuel only

010054

This page intentionally left blank.

Section 2: General Information

Specifications

Description	Unit of Measure	MLG15
Engine		
Make (Model)	—	Mitsubishi® (MVS4L2-W464ML)
Cylinders	qty	4
Displacement	in ³ (L)	107 (1.8)
Horsepower—Prime	hp (kW)	22.4 (16.7)
Horsepower—Standby	hp (kW)	24.2 (18.05)
Operating Speed	rpm	1,800
Fuel Consumption—Full Load	gph (Lph)	1.3 (4.92)
EPA Certification	Tier	4 Final
Battery—Group Number	—	24
Battery—Voltage (Quantity Of Batteries)	VDC (qty)	12 (1)
Battery—Rating	CCA	720
Capacities		
Fuel Tank—Total	gal (L)	56 (212)
Fuel Tank—Usable	gal (L)	56 (212)
Coolant (Incl. engine)	gal (L)	3.57 (13.51)
Oil (Incl. Filter)	gal (L)	1.58 (6)
Max. Run Time—100% Load	hr	43
Generator		
Make (Model)	—	Marathon® (333CSA3024)
Type, Insulation	—	Brushless, H
Output	kW (kVA)	13 (13)
Output—Voltage	V	120/240, single phase
Output—Amperes— 120 V (240 V)	A	108 (58)
Frequency	Hz	60
Power Factor	—	1 (1Ø)
AC Distribution		
Main Circuit Breaker Size	A	70
Voltage Regulation	—	±1% with Marathon SE350
Voltages Available (1Ø)	V	120, 240
Trailer		
Axle Rating	lb (kg)	2,000 (998)
Hitch	size, type	2 in, ball
Tire Size	in (cm)	15 (38.1)
Maximum Tire Pressure	psi (kPA)	50 (350)
Unit Weight		
Dry	lb (kg)	1,470 (667)
Operating	lb (kg)	1,845 (837)

Specifications are subject to change without notice.

Unit Dimensions

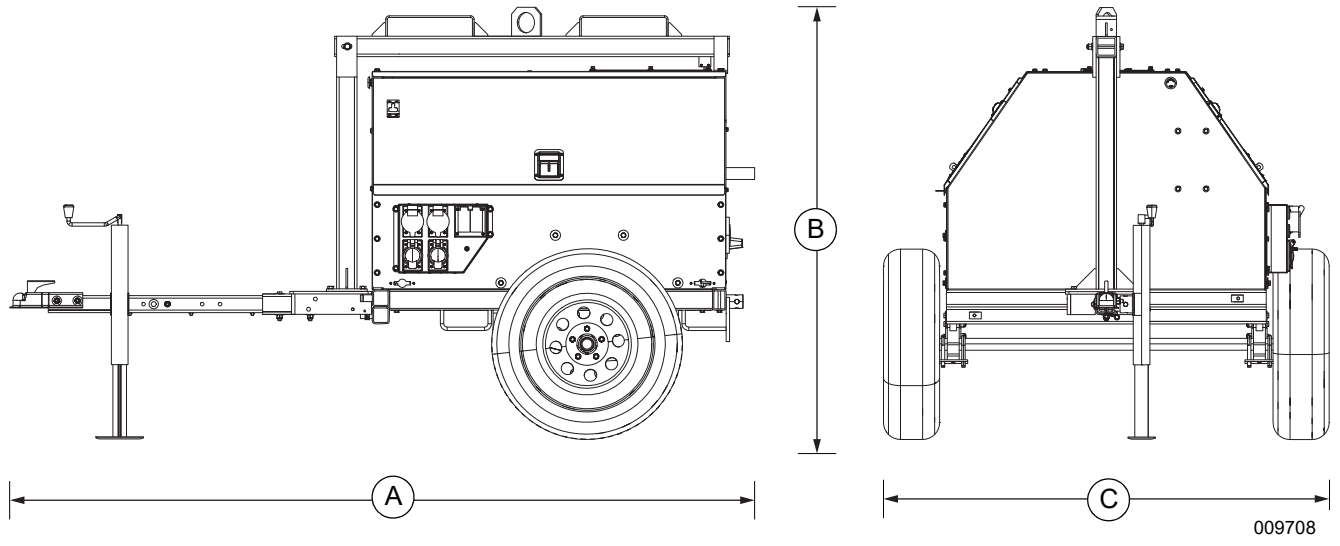
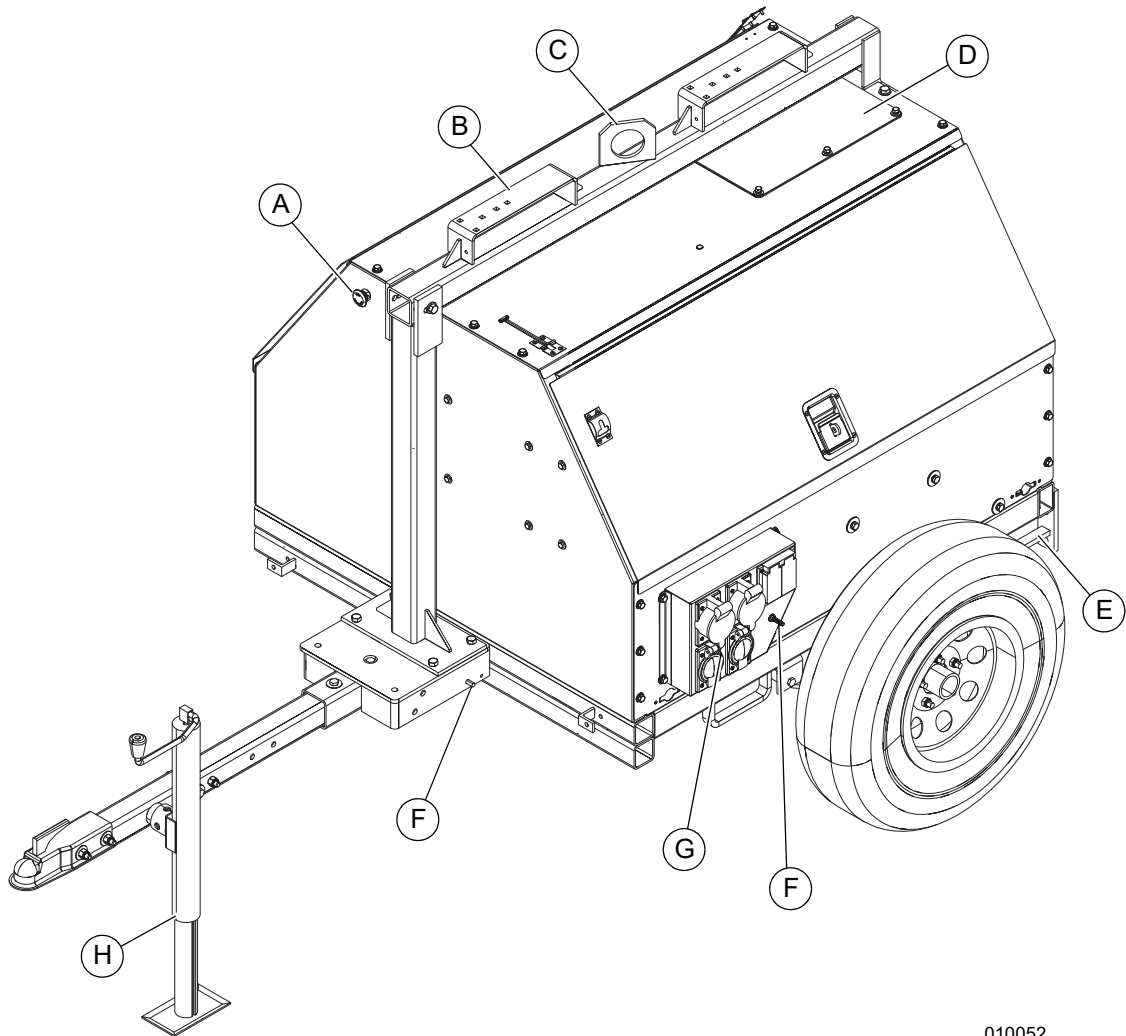


Figure 2-1. Unit Dimensions

A	B	C
105 in (2.68 m)	68 in (1.73 m)	56 in (1.42 m)

Component Locations

Exterior

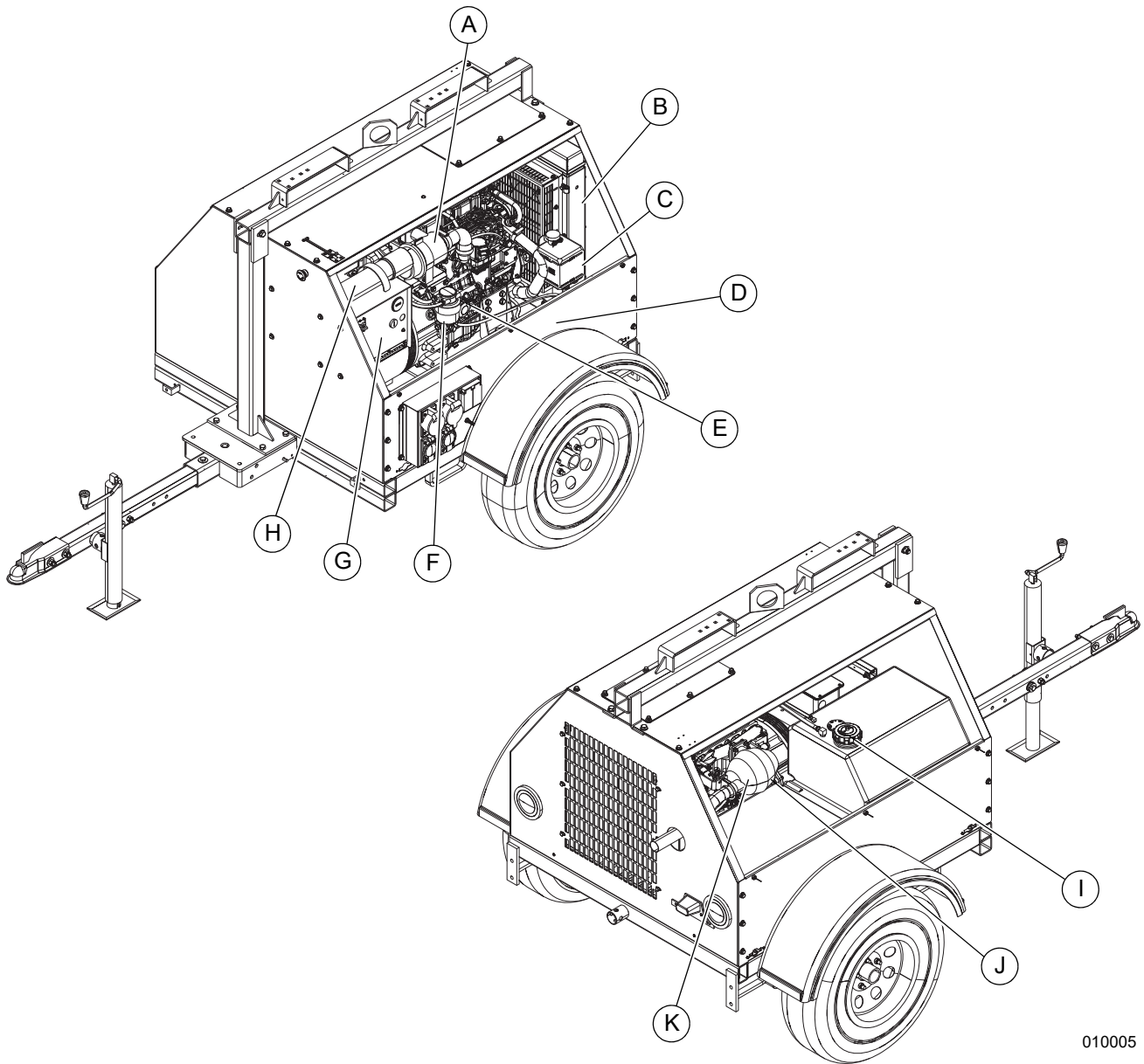


010052

Figure 2-2. Components—Exterior

- | | |
|--|--|
| A Emergency stop switch | E Lower forklift pocket (2 locations) |
| B Upper forklift pocket (2 locations) | F Ground stud |
| C Central lifting point | G Receptacle panel |
| D Radiator access panel | H Tongue jack |

Interior



010005

Figure 2-3. Components—Interior

- | | |
|---|--|
| A Air filter | G Control box |
| B Radiator | H Document holder |
| C Coolant overflow jug | I Fuel fill |
| D Battery (behind panel) | J Starter (below muffler—on engine) |
| E Oil level indicator (dipstick) | K Muffler |
| F Fuel filter | |

Control Panel

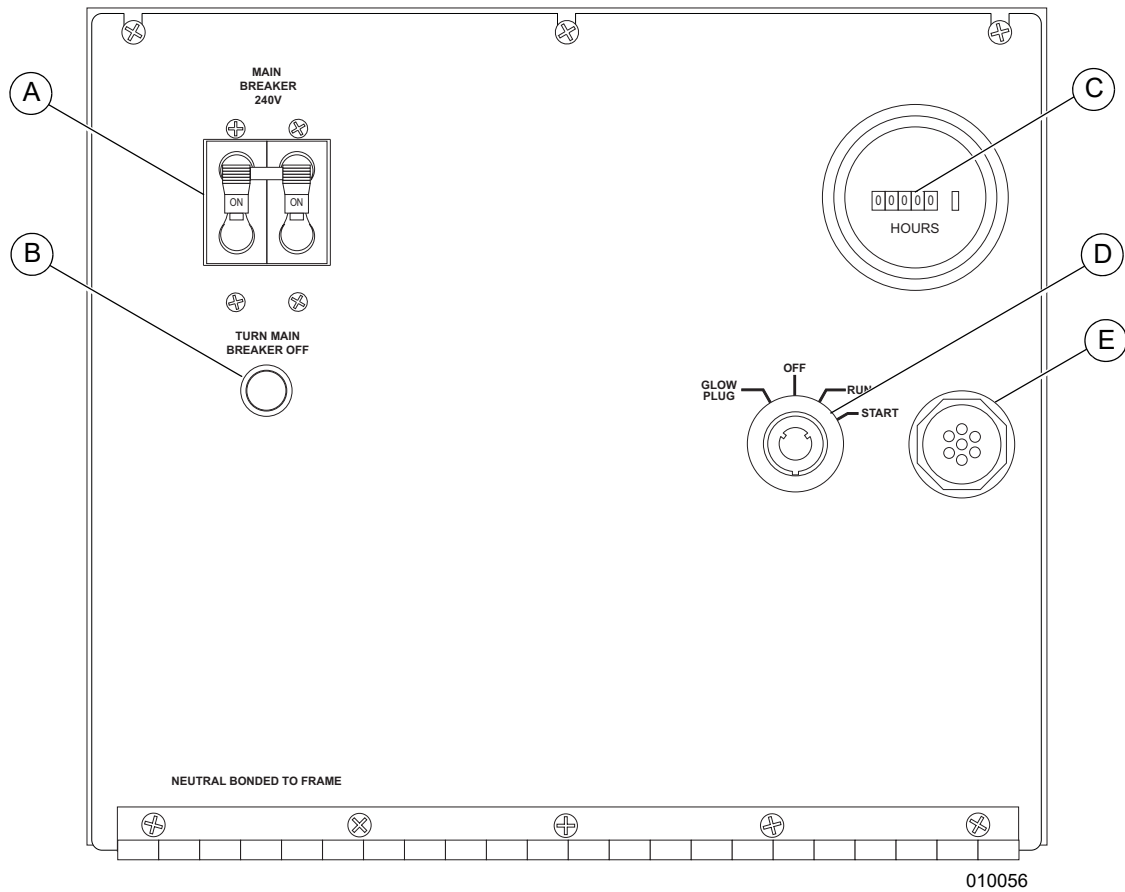


Figure 2-4. Components—Control Panel

- | | |
|---|--|
| <p>A Main circuit breaker</p> <p>B Circuit breaker indicator light
<i>When lit, main circuit breaker must be opened (switched off) before starting engine.</i></p> <p>C Engine hours meter</p> | <p>D Engine ignition switch (key activated)</p> <p>E Glow plug indicator
<i>When lit, engine glow plugs are operational.</i></p> |
|---|--|

Unit and Serial Number Locations

See **Figure 2-5** to locate the unit ID tag (A) and Vehicle Identification Number (VIN) tag (B). Important information, such as the unit model number, serial number, VIN and tire loading information is found on these tags. Record the information from these tags so it is available if the tags are lost or damaged. When ordering parts or requesting assistance, you may be asked to provide this information.

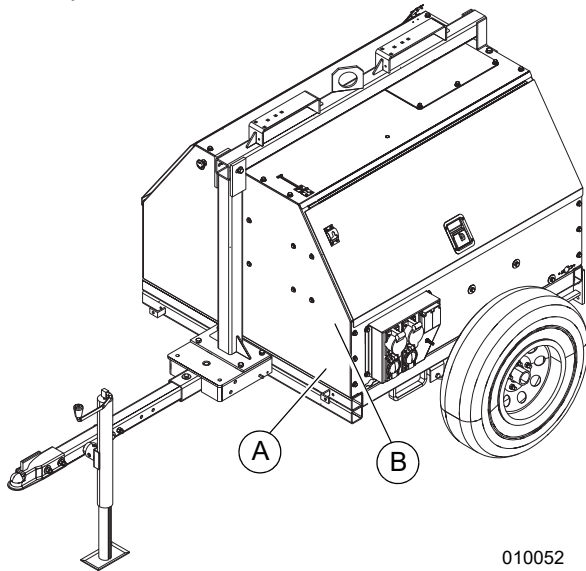


Figure 2-5. Unit and Serial Number Locations

Engine Oil Recommendations

To maintain the product warranty, the engine oil should be serviced in accordance with the recommendations of this manual.

The engine has been filled with factory engine oil of a grade recommended by the engine supplier.

Use a high quality detergent oil with an appropriate classification and viscosity for the engine type and ambient temperature conditions. Consult your GMASD or the applicable engine service manual for engine oil recommendations.

Coolant Recommendation



DANGER

Risk of poisoning. Do not use mouth to siphon coolant. Doing so will result in death or serious injury.

(000149)



WARNING

Risk of burns. Do not open coolant system until engine has completely cooled. Doing so could result in serious injury.

(000154)

CAUTION

Risk of overheating. Do not use any chromate base rust inhibitor with propylene glycol base antifreeze, boosters, or additives. Doing so will cause overheating and possible equipment damage.

(000165a)

Consult your GMASD or the applicable engine service manual for engine coolant recommendations. See table below for mixtures:

Freezing Point °F (°C)	-12 (-24)	-34 (-36)	-54 (-48)	-90 (-67)
Water: % Volume	60	50	40	30
Anitfreeze:% Volume	40	50	60	70*

* Maximum freeze protection is at 70%.

Section 3: Operation

Prestart Checklist

Before starting the unit, all items in the prestart checklist must be completed.



WARNING

Consult Manual. Read and understand manual completely before using product. Failure to completely understand manual and product could result in death or serious injury. (000100a)

- Verify all maintenance procedures are up to date. For more information, see [General Maintenance](#) and [Basic Maintenance Schedule](#).
- Verify the unit is level.
- Verify there is no water inside, on, or near the unit. Dry if needed.
- For grounding requirements, follow any local, state, or National Electrical Code (NEC) guidelines.
- Verify the key switch is OFF (O).
- Verify all circuit breakers are OFF (O).
- Inspect all electrical cords; repair or replace any that are cut, worn, or bare.
- Verify oil, coolant, and fuel levels are correct, per the engine manufacturer manual.
- Verify battery connections are secure.
- Turn the battery disconnect switch ON, if equipped.
- Inspect the engine fan belt tension and condition.
- Inspect the engine fan guard.
- Inspect the engine exhaust system for loose or rusted components.
- Verify the radiator and surrounding shroud are clear of debris.
- Verify all covers are in place and secure.
- Verify the emergency stop switch is pulled out.

Starting the Unit



DANGER

Asphyxiation. Running engines produce carbon monoxide, a colorless, odorless, poisonous gas. Carbon monoxide, if not avoided, will result in death or serious injury.

(000103)

CAUTION

Equipment Damage. Do not continuously crank engine for more than ten seconds. Doing so will lead to overdischarge of batteries and starter seizure.

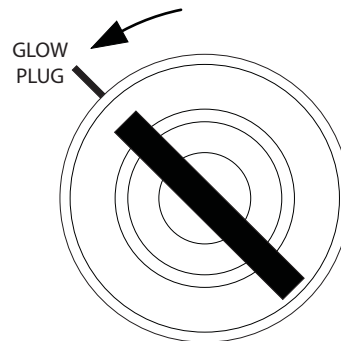
(000230)

NOTE: If the engine was run out of fuel or the fuel tank was drained, it may be necessary to bleed the fuel lines. See the engine operator's manual supplied with the unit.

1. Verify the main circuit breaker and individual circuit breakers for each of the receptacles are OFF (O).

NOTE: When the circuit breaker indicator light ([Figure 2-4](#)) is illuminated, the main circuit breaker must be turned to OFF (O).

2. See [Figure 3-1](#). Turn the key on the key switch to GLOW PLUG and hold for five seconds, or until the glow plug indicator turns red.

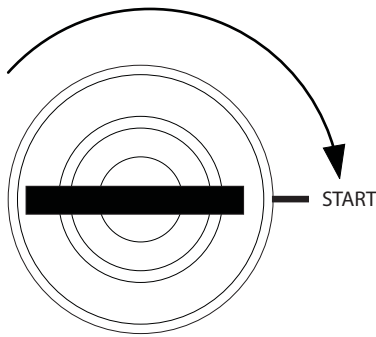


003552

Figure 3-1. Activate Glow Plug

NOTE: For glow plug interval in cold weather conditions, see engine manual.

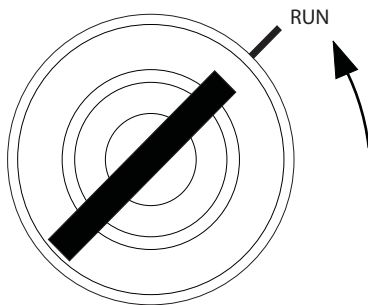
- See **Figure 3-2**. As soon as it is glowing, turn the key to START and hold it until the engine cranks and starts running.



003553

Figure 3-2. Crank Engine to Start

- See **Figure 3-3**. Release the key. The switch moves to RUN.



003554

Figure 3-3. Release Key

NOTE: If oil pressure is not obtained within 15 seconds after the key is switched to RUN, the low oil automatic shutdown will turn off the fuel supply, stopping the engine. Check the oil level and turn the key to OFF to reset the oil pressure timer before attempting to restart the engine.

- Once the engine is running, allow it to reach normal operating temperature before switching on any loads.

Emergency Stop Switch



Personal injury. Press the emergency stop button to stop the engine immediately in case of an emergency. Failure to do so could result in death or serious injury.

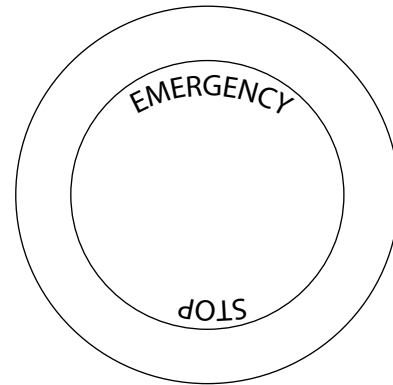
(000298a)



Equipment Damage. The emergency stop switch is not to be used to power down the unit under normal operating circumstances. Doing so could result in equipment damage.

(000246t)

The unit is equipped with an emergency stop switch. For location of the emergency stop switch, see **Component Locations**. The switch can be accessed and activated with all doors closed and locked.



002815

Figure 3-4. Emergency Stop Switch

Activate the emergency stop switch by pushing the button in until it locks down. This will trip the main circuit breaker which will open the contact, disconnecting the load to the connection lugs. This will also open the fuel circuit, shutting down the engine. The emergency stop fault will be displayed on the control panel. The switch will remain closed until it is pulled out.

Automatic Shutdown

This unit is equipped with a low oil pressure and high coolant temperature automatic shutdown system. This system will automatically shut off the fuel supply to stop the engine if oil pressure drops too low or the engine exceeds normal operating temperature. Return the switch to OFF to reset the unit after the cause of shutdown has been determined.

Voltage Regulator

This unit is equipped with an electronic voltage regulator. The voltage regulator controls the output of the generator by regulating the current into the exciter field. The regulator has three screwdriver adjustable potentiometers that may be adjusted for voltage, stability and voltage roll-off (U/F). The voltage regulator is adjusted before shipment from the factory. Contact Generac Mobile for additional information before attempting to adjust the voltage regulator.

Derating for Altitude

All units are subject to derating for altitude and temperature; this will reduce the available power for operating tools and accessories connected to the receptacles. Typical reductions in performance are 2-4% for every 1000 ft (305 m) of elevation and 1% per 10°F (5.6°C) increase in ambient air temperature over 72°F (22°C).

Wet Stacking

The unit is powered by a diesel engine. Diesel engines are susceptible to wet stacking if lightly loaded. Wet stacking occurs when an engine is run at less than 30% of its full load capacity, causing unburned fuel to accumulate in the exhaust system. Wet stacking can be detected by continuous black exhaust when the unit is under a constant load. It can also cause fouling of injectors and buildup on engine valves. Diesel engines operate properly when applied loads are between 30% and 100% capacity. Appropriate generator sizing is determined by the anticipated load. If the unit is in a wet stack condition, load the unit heavily for five hours or until the exhaust is clear.

Receptacle Panel

See [Figure 3-5](#). This unit is equipped with a receptacle panel for running accessories or tools from the generator. Power is supplied to the receptacles any time the engine is running and the main circuit breaker is switched to ON (I). Each receptacle has an individual circuit breaker, located inside the cabinet under a flip-up cover. Each circuit breaker corresponds with the receptacle located below it on the receptacle panel.

Should the main breaker, or any of the individual circuit breakers trip, remove some of the load to the receptacles before turning them back on.

NOTE: To ensure proper grounding, anytime the generator is providing power to any equipment or load panels that do not have a grounded plug, a ground wire must be added between the equipment and the grounding stud (A) on the receptacle panel per the National Electrical Code (NEC), state and local regulations.

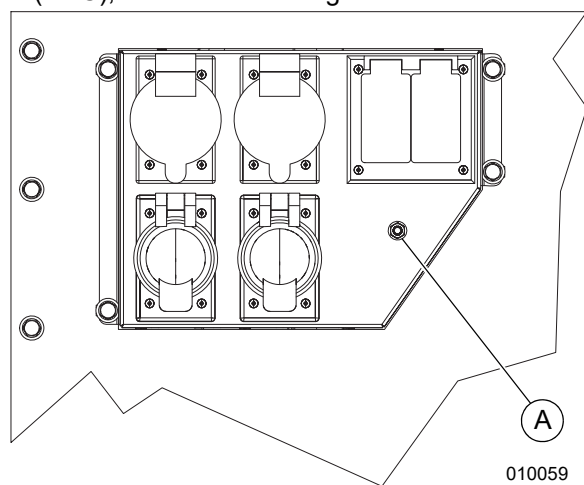


Figure 3-5. Receptacle Panel, Grounding Stud (A)

Shutting Down the Unit

Check with personnel using power supplied by the unit and let them know the power is going to be turned off. Verify the power shut down will not create any hazards by accidentally turning off equipment that needs to be kept

on (pumps, compressors, lights, etc.). When you have finished using the unit, proceed with shut down as follows:

1. Remove all loads from the receptacles.
2. Switch the individual circuit breakers for each receptacle to OFF (O).
3. Switch the main circuit breaker to OFF (O).
4. Turn the key switch to OFF.

NOTE: For extended storage time, disconnect the battery. For extended storage requirements, see the engine operator's manual.

Towing the Unit

Once the engine is shut down, follow these steps to prepare the unit for towing.

1. Verify the unit is OFF.
2. Use the jack to raise or lower the trailer onto the hitch of the towing vehicle. Lock the hitch coupling and attach the safety chains or cables to the vehicle. Raise the jack foot completely.
3. Connect any trailer wiring to the tow vehicle. Check for proper operation of the directional and brake lights.
4. Verify all doors are properly latched.
5. Check for proper inflation of the trailer tires. Proper inflation is specified on each tire.
6. Check the wheel lugs. Tighten or replace any lugs that are loose or missing. If a tire has been removed for axle service or replaced, tighten the lugs, in the order shown, to the following specifications:

- a. Start all lug nuts by hand.
- b. First pass tighten to 20-25 ft-lb (27-33 Nm).
- c. Second pass tighten to 50-60 ft-lb (67-81 Nm).
- d. Third pass tighten to 90-120 ft-lb (122-162 Nm).

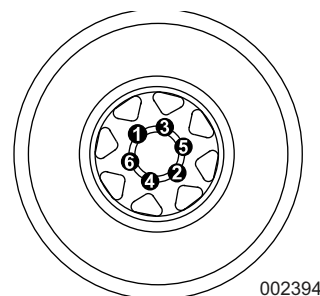


Figure 3-6. Lug Sequence

NOTE: After first road use, repeat tightening procedure.

Maximum recommended speed for highway towing is 45 mph (72 km/h). Recommended off-road towing speed is not to exceed 10 mph (16 km/h).

Lifting the Unit

WARNING

Personal injury. Excessive weight. Use only appropriate lifting eyes and lifting equipment to lift unit. Improper lifting techniques could result in equipment damage, death or serious injury. (000224)

See **Figure 3-7**. Unit is equipped with central lifting point (A), upper fork pockets (B), and lower fork pockets (C).

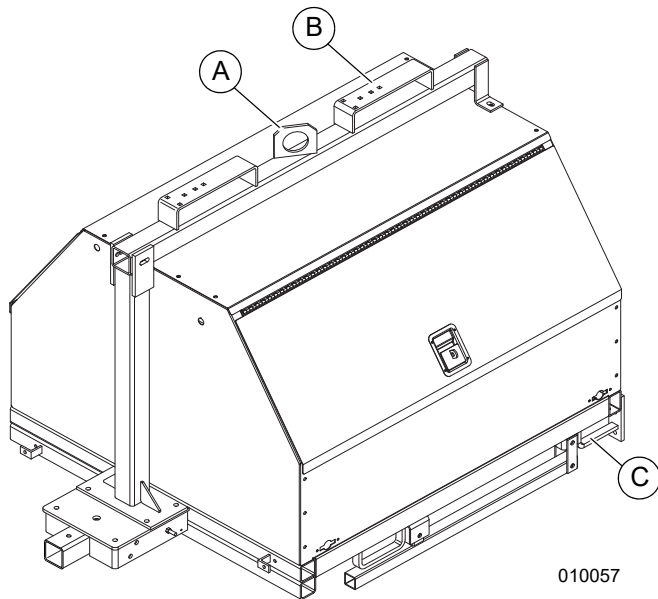


Figure 3-7. Lifting Points

The central lifting point (A) is designed for attachment of slings, chains, and hooks. Fork pockets are designed for forklift.

1. Verify equipment lifting unit possesses capacity to do so. For unit weight, see **Specifications**.
2. Before lifting unit, clear obstructions from forklift tines.

3. See **Figure 3-8**. Approach unit perpendicularly to avoid damaging the unit.

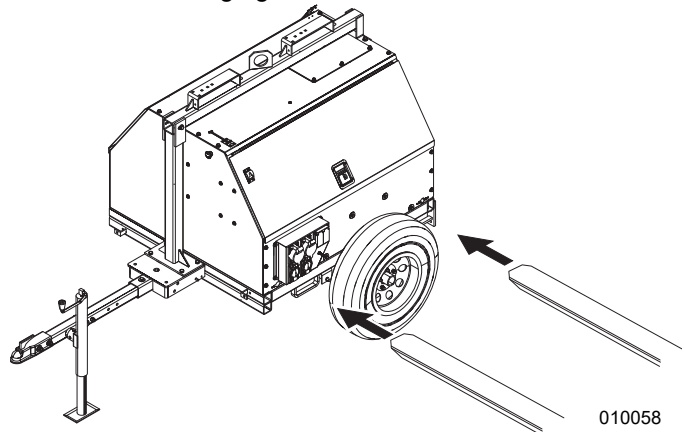


Figure 3-8. Perpendicular Approach

4. While moving unit, watch for people and objects around unit.

Section 4: Maintenance

Emissions Information

For emissions information, see the OEM engine manual.

Daily Walk Around Inspection



Equipment Damage. Failure to perform a daily inspection could result in damage to the unit.

(000306)

Look for conditions that could hinder performance or safety, such as (but not limited to) oil/coolant/fuel leakage, blocked vents, loose/missing hardware, and electrical connections.

Visually inspect the fan belt for cracks, fraying, stretching, and verify the belt is properly seated in the pulley grooves. Replace the belt according to the manufacturer's recommendations.

General Maintenance

Poorly maintained equipment can become a safety hazard. In order for the equipment to operate safely and properly over a long period of time, periodic maintenance and occasional repairs are necessary. Never perform routine service (oil/filter changes, cleaning, etc.) unless all electrical components are OFF. Before servicing the unit, always follow the instructions listed below.

- Verify the key is removed.
- Verify the circuit breakers are OFF (O).
- Activate (push in) the emergency stop switch.
- Disconnect the negative (-) terminal on the battery.
- Attach a "Do Not Start" sign to the control panel. This will notify everyone that the unit is being serviced and will reduce the chance of someone inadvertently trying to start the unit.
- Do not wash the unit with a high pressure hose or with any kind of power washer.
- Do not wash the engine block or fuel tank with a power washer or steam cleaner. Water may enter the cabinet and collect in the generator windings or other electrical parts, causing damage. Water will also pool on top of fuel tank and mix with any environmentally hazardous fluids that may be present, such as engine oil and coolant.
- If the unit is stored outside, check for water inside the cabinet and generator before each use. If wet, dry the unit thoroughly before starting.
- Inspect condition of electrical cords. Do not use the unit if insulation is cut or worn through.
- Verify the condition of the air filter by viewing the level of the vacuum draw on the filter minder gauge. Replace the air filter when the yellow center

bar reaches the red section on the gauge (20 in. H₂O).

- Check wheel lugs. see [Towing the Unit](#).
- Check coolant level daily. See the engine operator's manual for coolant recommendations and proper mixture.
 - Coolant is checked visually by inspecting the level in the coolant overflow jug located near the radiator.
 - Normal operating level is between the FULL and ADD markings on the overflow jug, also known as the normal range.
 - When engine is stopped and completely cool, coolant may be added directly to the coolant overflow jug.
- Check the oil level daily. See the engine operator's manual for the proper viscosity grade of oil, including special operating conditions such as a change in season or climate.
 - Do not start the unit if the engine oil level is below the ADD mark on the dipstick.
 - Normal operating level is in the cross-hatch pattern between the FULL and ADD markings on the dipstick.
 - Add oil only if the oil level is below the ADD mark on the bottom of the cross-hatch pattern on the dipstick.
 - Do not overfill the crankcase.
- Check the fuel level.

NOTE: During the first 100 hours of operation, avoid long periods of no load or sustained maximum load operation. If the unit is to run for longer than five minutes without a load, shut the engine OFF.

Basic Maintenance Schedule

See the original equipment manufacturer's operating manual for a complete list of maintenance requirements. Failure to comply with the procedures as described in the engine operator manual will nullify the warranty,

decrease performance and cause equipment damage or premature equipment failure. Maintenance records may be required to complete a warranty request.

Basic Maintenance Schedule

Item	As Required	First 50 Hours	Every 250 Hr	Every 500 Hr	Every 24 Months
Drain Water Separator	◆				
Check/Replace Air Cleaner Element	◆				
Replace Engine Oil and Filter*		◆	◆		
Inspect/Clean Solenoid Fuel Pump Filter		◆	◆		
Inspect/Adjust Belt			◆		
Check Radiator and Hose Clamps			◆		
Replace Fuel Filter				◆	
Inspect/Adjust Valve Clearance				◆	
Check/Clean Battery				◆	
Replace Engine Coolant					◆
Replace Radiator Hose Clamps					◆

**Actual oil life and change intervals should be determined through oil sampling and analysis in extreme conditions.*

Jacks

The following procedures should be performed annually.

Side-Wind Models

- The internal gearing and bushings of the jack must be kept lubricated. Apply a small amount of automotive grease to the internal gearing by removing the jack cover, or if equipped, use a needle nose applicator or standard grease gun on the lubrication point found on the side of the jack near the crank. Rotate the jack handle to distribute the grease evenly.
- A lightweight oil must be applied to the handle unit at both sides of the tube.
- If equipped, the axle bolt and nut assembly of the caster wheel must also be lubricated with the same lightweight oil.

Top-Wind Models

Apply a lightweight oil to the screw stem.

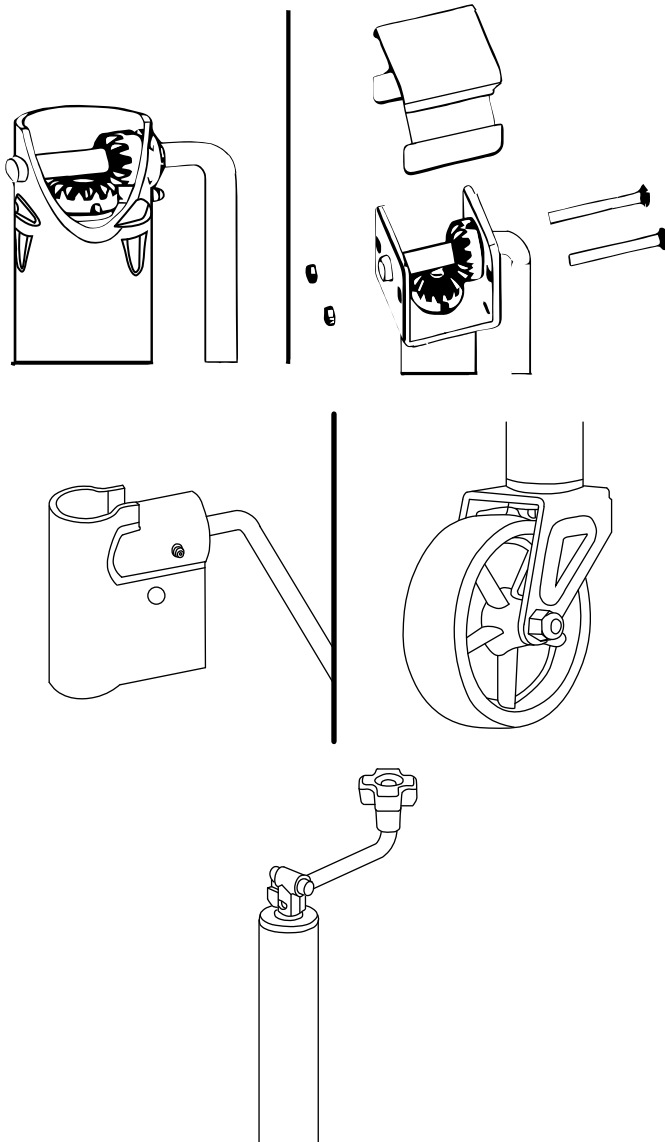


Figure 4-1. Lubrication Points

Trailer Wheel Bearings

The trailer axles are equipped with a grease fitting to allow lubrication of the wheel bearings without the need to disassemble the axle hub. To lubricate the axle bearings, remove the small rubber plug on the grease cap, attach a standard grease gun fitting to the grease fitting and pump grease into the fitting until new grease is visible around the nozzle of the grease gun. Use only a high quality grease made specifically for lubrication of wheel bearings. Wipe any excess grease from the hub with a clean cloth and replace the rubber plug when finished. The minimum recommended lubrication is every 12 months or 12,000 miles (19,312 km). More frequent lubrication may be required under extremely dusty or damp operating conditions.

Lower Radiator Hose Heater (If Equipped)

⚠ WARNING

Personal Injury. Do not modify the location of the lower radiator hose heater. Improper use of hose heater could result in personal injury or engine damage. (000339)

The following points should be followed when operating a unit equipped with a lower radiator hose heater.

- Verify the cooling system is full of the proper mixture of water and engine coolant before each heater use.
- The heater is designed for all-night operation, however, 2–5 hours of heating just prior to starting is usually sufficient for proper engine starting.
- The unit must be level to maintain proper orientation of the heater while it is in operation.
- Use only an undamaged, outdoor rated, three-prong grounded 120VAC extension cord with a minimum amperage rating of 10A. Connect the cord to a properly grounded 120VAC, GFCI receptacle.
- Before starting the engine, unplug the extension cord from the power, then unplug the heater cordset from the extension cord.

This page intentionally left blank.

Section 5: Troubleshooting

General Troubleshooting

This information is intended to be a check or verification for simple causes that can be located and fixed. It does not cover all types of problems. See the engine

operator's manual for additional troubleshooting information. Procedures that require in-depth knowledge or skills should be referred to a trained technician.

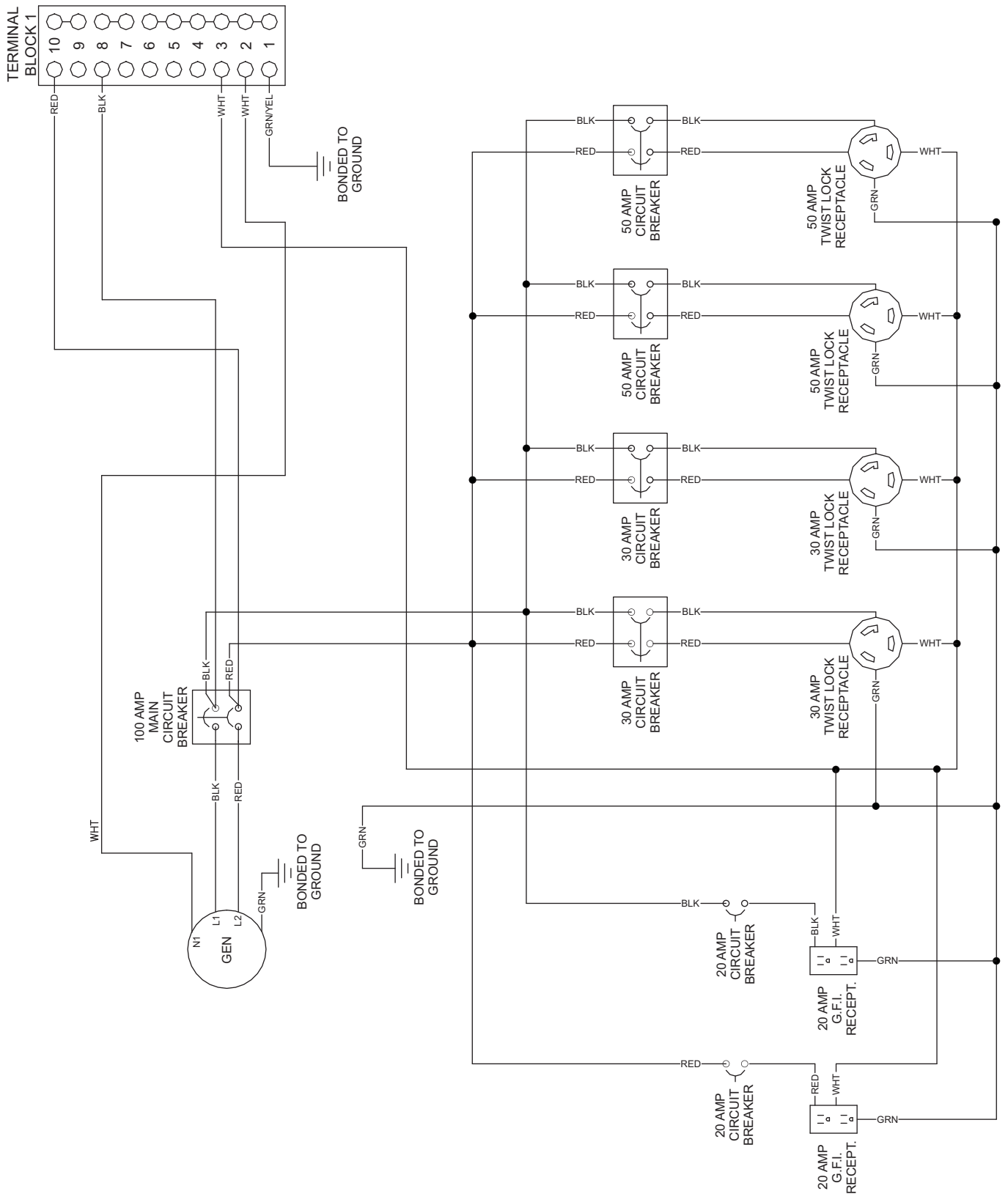
General Troubleshooting Guide

Problem	Possible Cause	Solution
Low Oil Pressure Shutdown	Low oil level	Check oil level on dipstick. Add oil if needed.
	Oil leaking from engine	Visually inspect the engine for leaks. Restart unit and verify loss of pressure. Shut down immediately if pressure does not reach 5 psi (34 kPa) within five seconds.
	Oil pressure sender	See engine operator's manual to identify corrective action.
High Coolant Temperature Shutdown	Low coolant level	Add coolant if needed. Allow engine to cool, then check coolant level in radiator. Restart engine and check coolant temperature (on controller). Stop engine immediately if coolant temperature is 210°F (99°C) or more.
	Blockage in radiator	Check radiator shroud and ducting for blockage and remove any foreign matter.
	Leakage in coolant hoses, engine block, or water pump	Inspect for visible leaks. Check tension of water pump serpentine drive belt. Remove load on generator and restart engine. Check coolant temperature and shut engine down immediately if it starts to overheat (230 degrees or higher). See the engine operator's manual for additional information on engine overheating.

This page intentionally left blank.

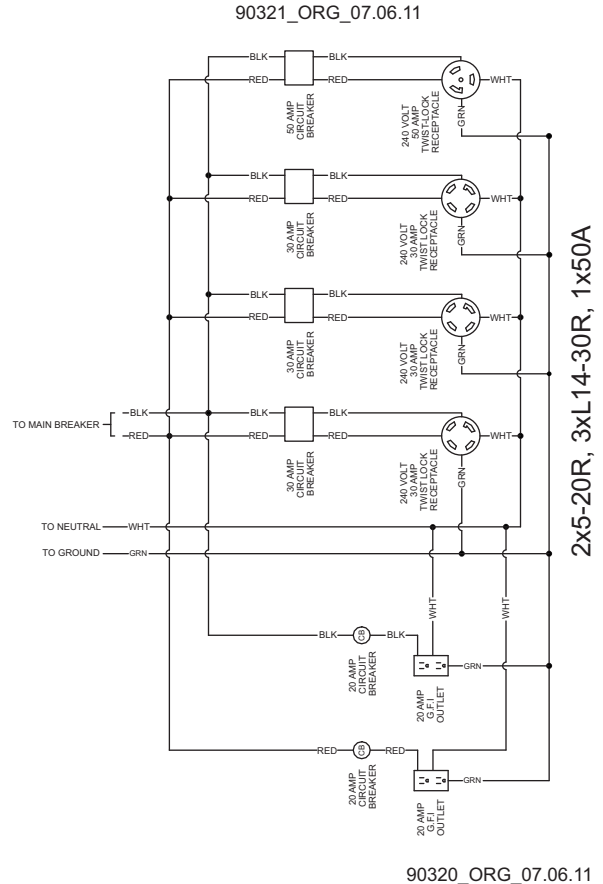
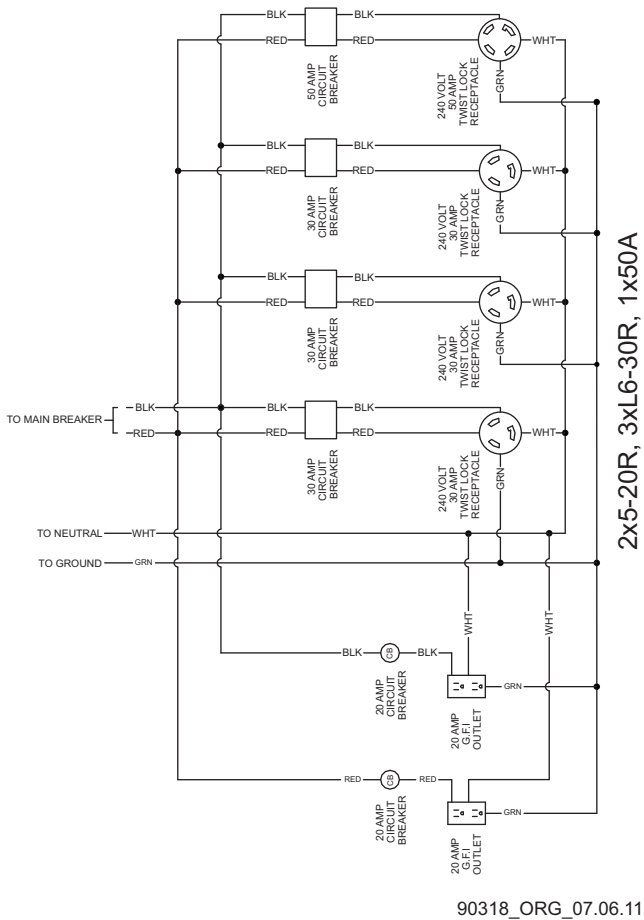
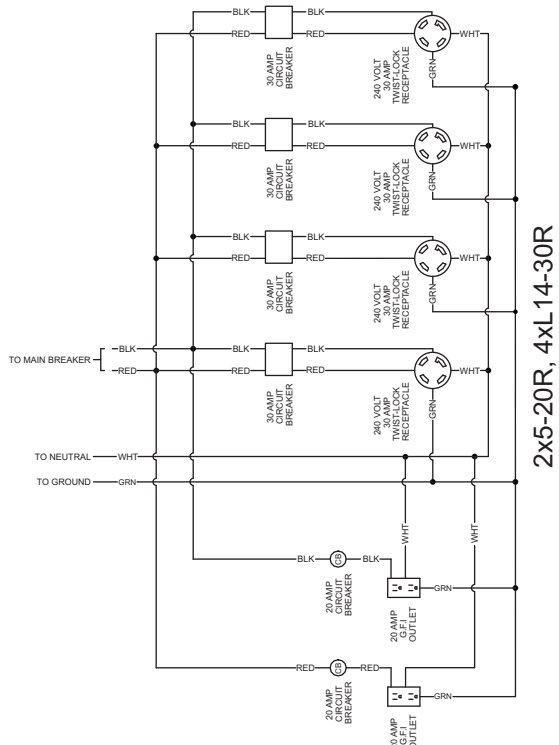
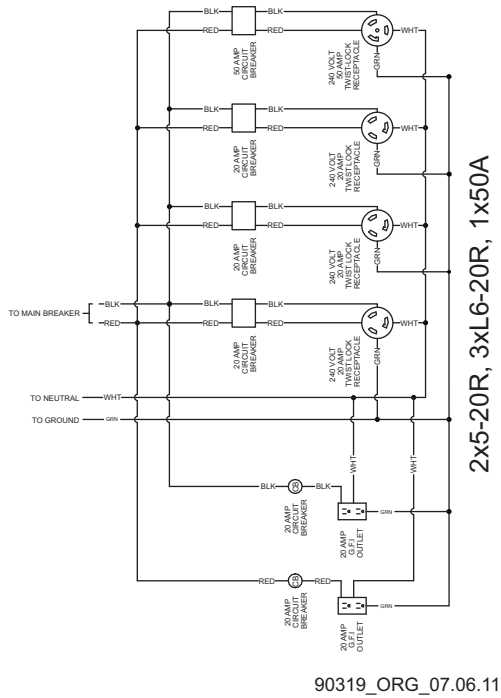
Section 6: Wiring Diagrams

AC Wiring (Three 30A Outlets, One 50A Outlet)

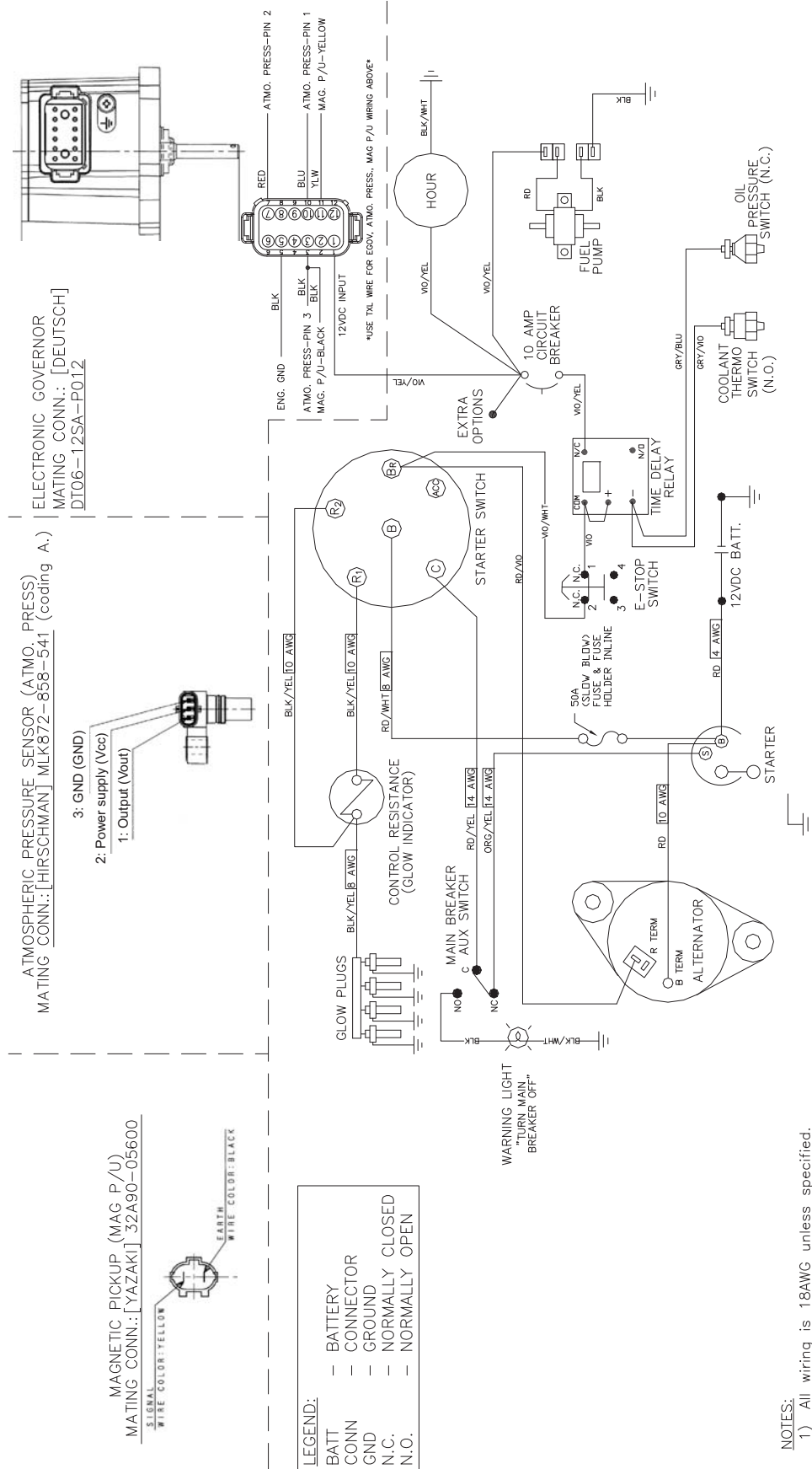


90212_A_08.27.12

AC Wiring—Options (If Equipped)

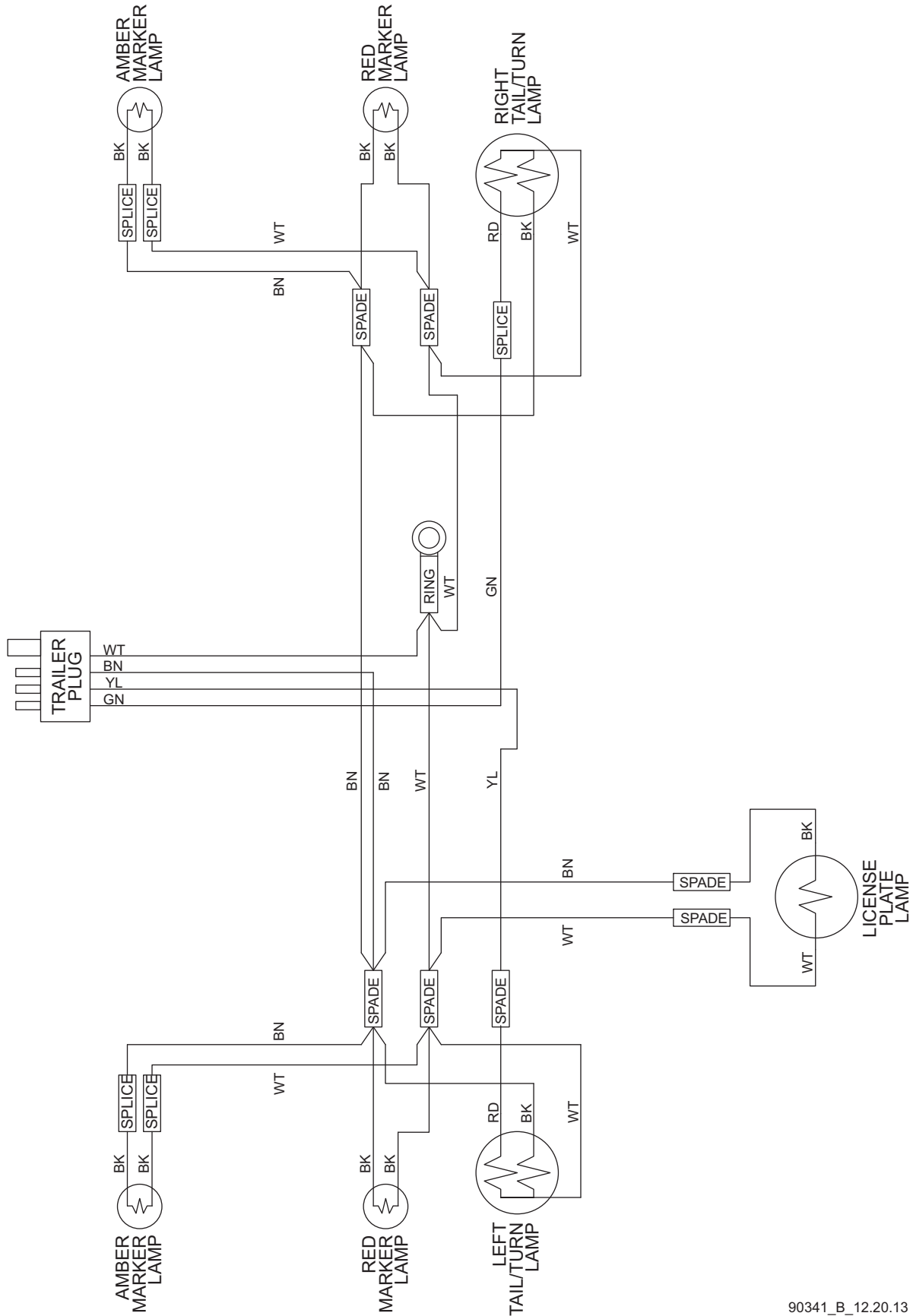


DC Wiring



A0000148644_A_03.06.19

Trailer Harness



90341_B_12.20.13

This page intentionally left blank.

Part No. A0000381158 Rev. A 09/10/2019

©2019 Generac Mobile Products, LLC

All rights reserved.

Specifications are subject to change without notice.

No reproduction allowed in any form without prior written consent from Generac Mobile Products, LLC.

GENERAC® | **MOBILE**

Generac Mobile Products, LLC
215 Power Drive, Berlin, WI 54923

GeneracMobileProducts.com | 800-926-9768 | 920-361-4442