Instruction Sheet Oil Warmer Installation

Thank you for purchasing this home standby accessory. When installed in accordance with the instructions that follow, this oil warmer will provide years of dependable service

Once installed, it operates automatically on 240V AC utility power and consumes 25 watts. It will turn on when ambient temperature falls to $18^{\circ}F$ (- $8^{\circ}C$) and turn off at $32^{\circ}F$ ($0^{\circ}C$).

These items are needed to install the oil warmer:

- 9/16 in. six- or twelve-point socket
- 11/16 in. open end wrench (horizontal shaft engines)
- 11/16 in. open end crowfoot wrench (vertical shaft engines)
- Phillips screwdriver #2
- Oil collection container
- Oil rags
- Recommended engine oil

Installation

This accessory is suitable for use on all Briggs & Stratton air-cooled home generator systems.

SAVE THESE INSTRUCTIONS - This sheet contains important instructions that should be followed during installation and maintenance of the equipment.

▲ WARNING Certain components in this product and related accessories contain chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm. Wash hands after handling.

NOTICE Only qualified electricians should attempt installation of this equipment, which must strictly comply with applicable codes, standards and regulations.

A WARNING Generator produces hazardous voltage.



Failure to properly ground generator could result in electrocution.

- Failure to isolate generator from utility power could result in death or serious injury to electric utility workers due to backfeed of electrical energy.
- When using generator for backup power, notify utility company.
- DO NOT touch bare wires or bare receptacles.
- DO NOT use generator with electrical cords which are worn, frayed, bare or otherwise damaged.
- DO NOT handle generator or electrical cords while standing in water, while barefoot, or while hands or feet are wet.
- If you must work around a unit while it is operating, stand on an insulated dry surface to reduce the risk of a shock hazard.
- DO NOT allow unqualified persons or children to operate or service generator.
- In case of an accident caused by electrical shock, immediately shut down the source of electrical power and contact the local authorities. **Avoid direct contact with the victim**.
- Despite the safe design of the generator, operating this equipment imprudently, neglecting its maintenance or being careless can cause possible injury or death.
- Remain alert at all times while working on this equipment. Never work on the equipment when you are physically or mentally fatigued.
- Before performing any maintenance on the generator, disconnect the battery cable indicated by a NEGATIVE, NEG or (-) first. When finished, reconnect that cable last.
- After your system is installed, the generator may crank and start without warning any time there is a power failure. To prevent possible injury, always set the generator's system switch to **OFF**, remove the service disconnect from the disconnect box AND remove the 15 Amp fuse BEFORE working on the equipment.

Disconnect Power

- 1. Set generator's circuit breaker to its **OFF** position.
- 2. Set control panel system switch to OFF.
- 3. Remove 15 Amp fuse from control panel.
- 4. Utility voltage is present at generator control panel. Disconnect power before servicing control panel by removing the fuses from the transfer switch.

▲ CAUTION With the system switch set to AUTO, the engine could crank and start at any time without warning, resulting in minor or moderate injury.

- To prevent possible injury that may be caused by such sudden starts, always set the system switch to **OFF** if performing maintenance on the system.
- Remove the 15 Amp fuse before working on or around the generator or transfer switch.

Disassembly

Access Panels

To gain access to the generator's control panel, battery, and oil warmer installation location, open or remove all access doors as described in generator operator's manual.

Oil Warmer Installation Location

Compare engine on generator with the illustrations below to determine the oil warmer location (\mathbf{A}) .

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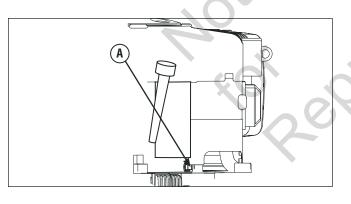
Vertical Shaft Engines

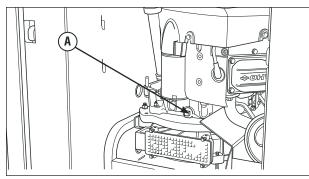


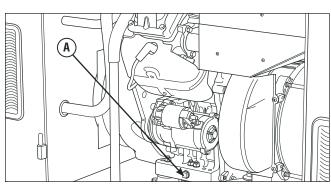
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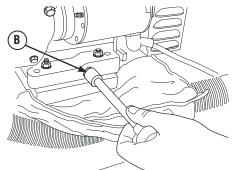




Install Oil Warmer

- 1. Drain oil from engine as described in *Maintenance* in operator's manual.
- Position rags to collect residual oil from crankcase. Remove crankcase block plug (B) from engine and discard plug.

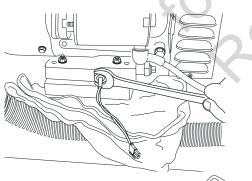
NOTICE Illustrations are representative. Installed parts may look different from those shown.



3. Hand thread oil warmer into engine block. Do not use thread sealant or teflon tape as oil warmer is coated with sealant.

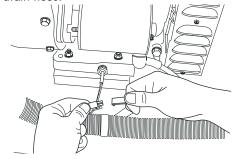


4. Using 11/16 in. wrench, tighten oil warmer 1/4 turn past snug.



For vertical shaft engine, use crowfoot wrench to tighten oil warmer 1/4 turn past snug.

- 5. If secured, remove tie wrap securing wiring harness 2 pin connector labeled "240 Volts".
- 6. Connect oil warmer 2 pin connector into wiring harness 2 pin connector. On vertical shaft units, make sure wiring harness connection does not interfere with oil drain hose.



7. Fill engine with recommended oil following oil fill instructions given in *Maintenance* in operator's manual.

NOTICE Any attempt to crank or start the engine before it has been properly serviced with the recommended oil will result in equipment failure.

- Refer to *Maintenance* in operator's manual for oil fill information.
- Damage to equipment resulting from failure to follow this instruction will void engine and generator warranty.
- 8. Inspect for oil leaks in area around oil warmer.

Restore Power and Test Unit

- 1. After all servicing has been completed, replace fuses in transfer switch, replace 15 Amp fuse in control panel, set system switch and circuit breaker **ON** and reset exercise timer. See *Setting Exercise Timer*.
- 2. Manually start generator and inspect for oil leaks in area around oil warmer. Turn off engine, allow unit to cool, and repair any observed leaks.
- 3. For vertical shaft units, reassemble unit panels in reverse order of disassembly. Do not exceed 15-35 in/lb (17-40 Newton/meter) torque on all fasteners.

For horizontal shaft units, reinstall or close door(s).

This completes installation of the oil warmer accessory. Should any questions arise during this procedure, call Technical Support at **(800) 743-4115** weekdays between 8:00 AM and 5:00 PM CT.

BRIGGS & STRATTON POWER PRODUCTS GROUP, LLC ACCESSORY WARRANTY POLICY

Effective March 1, 2011; replaces all undated Warranties and all Warranties dated before March 1, 2011.

LIMITED WARRANTY

Briggs & Stratton Power Products Group, LLC will repair or replace, free of charge, any part(s) of the accessory that is defective in material or workmanship or both. Transportation charges on product submitted for repair or replacement under this warranty must be borne by purchaser. This warranty is effective for the time periods and subject to the conditions stated below. For warranty service, find the nearest Authorized Service Dealer in our service center locator at BRIGGSandSTRATTON.COM.

THERE IS NO OTHER EXPRESS WARRANTY. IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO ONE YEAR FROM PURCHASE, OR TO THE EXTENT PERMITTED BY LAW. ANY IMPLIED WARRANTIES ARE EXCLUDED. LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES ARE EXCLUDED TO THE EXTENT EXCLUSION IS PERMITTED BY LAW. Some states or countries do not allow limitations on how long an implied warranty lasts, and some states or countries do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation and exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state or country.

WARRANTY PERIOD

Consumer Use	1 Year
Commercial Use	None

The warranty period begins on the date of purchase by the first retail end user, and continues for the period of time stated above. "Consumer use" means personal residential household use by a retail consumer. No other use is warranted.

NO WARRANTY REGISTRATION IS NECESSARY TO OBTAIN WARRANTY ON BRIGGS & STRATTON PRODUCTS. SAVE YOUR PROOF OF PURCHASE RECEIPT. IF YOU DO NOT PROVIDE PROOF OF THE INITIAL PURCHASE DATE AT THE TIME WARRANTY SERVICE IS REQUESTED, THE MANUFACTURING DATE OF THE PRODUCT WILL BE USED TO DETERMINE THE WARRANTY PERIOD.

ABOUT YOUR WARRANTY

We welcome warranty repair and apologize to you for being inconvenienced. Any Authorized Service Dealer may perform warranty repairs. Most warranty repairs are handled routinely, but sometimes requests for warranty service may not be appropriate. For example, warranty service would not apply if equipment damage occurred because of misuse, lack of routine maintenance, shipping, handling, warehousing or improper installation. Similarly, the warranty is void if the manufacturing date or the serial number on the accessory has been removed or the equipment has been altered or modified. During the warranty period, the Authorized Service Dealer, at its option, will repair or replace any part that, upon examination, is found to be defective under normal use and service. This warranty will not cover the following repairs and equipment:

- Normal Wear: Outdoor Power Equipment, like all mechanical devices, needs periodic parts and service to perform well. This warranty does not cover normal maintenance such as adjustments and cleaning.
- Installation and Maintenance: This warranty does not apply to equipment or parts that have been subjected to improper or unauthorized installation or alteration and modification, misuse, negligence, accident, overloading, improper maintenance, repair or storage so as, in our judgment, to adversely affect its performance and reliability.
- **Other Exclusions:** This warranty excludes wear items such as connectors, seals, batteries, or damage or malfunctions resulting from accidents, abuse, modifications, alterations, or improper servicing or freezing or chemical deterioration. This warranty excludes used, reconditioned, and demonstration equipment and failures due to acts of God and other force majeure events beyond the manufacturers control. 314878E, Rev -, 03/01/2011

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