アメリカ

MAKITA LIMITED ONE YEAR WARRANTY

Warranty Policy

Every Makita tool is thoroughly inspected and tested before leaving the factory. It is warranted to be free of defects from workmanship and materials for the period of ONE YEAR from the date of original purchase. Should any trouble develop during this one-year period, return the COMPLETE tool, freight prepaid, to one of Makita's Factory or Authorized Service Centers. If inspection shows the trouble is caused by defective workmanship or material, Makita will repair (or at our option, replace) without charge.

This Warranty does not apply where:
- repairs have been made or attempted by others;
- there is evidence of normal wear and tear;
- The tool has been abused, misused or improperly maintained;
- alterations have been made to the tool.

Defects are due to the use of parts, accessories or attachments which are not Makita genuine products, specifically recommended for use with this tool. Damage may be caused in transit. (This must be the responsibility of the carrier.) Claims arise from regulations such as for noise levels, exhaust gas emissions, etc. This product has been operated for racing purposes or other competitive activities. This product has been employed for powering equipment that is operated on, in or near water or explosive atmospheres.

The following parts are expendable (not durable), so warranty does not apply: Expendable parts including, but not limited to:
Spark plugs, packings, gaskets, rubber materials, washers, nuts, V-belt, engine oil, grease, paper elements and brushes.

IN NO EVENT SHALL MAKITA BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES FROM THE SALE OR USE OF THE PRODUCT. THIS DISCLAIMER APPLIES BOTH DURING AND AFTER THE TERM OF THIS WARRANTY.

MAKITA DISCLAIMS LIABILITY FOR ANY IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF "MERCHANTABILITY" AND "FITNESS FOR A SPECIFIC PURPOSE," AFTER THE ONE-YEAR TERM OF THIS WARRANTY.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow the exclusion of limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

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3-11-8, Sumiyoshi-cho
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PRINTED IN JAPAN

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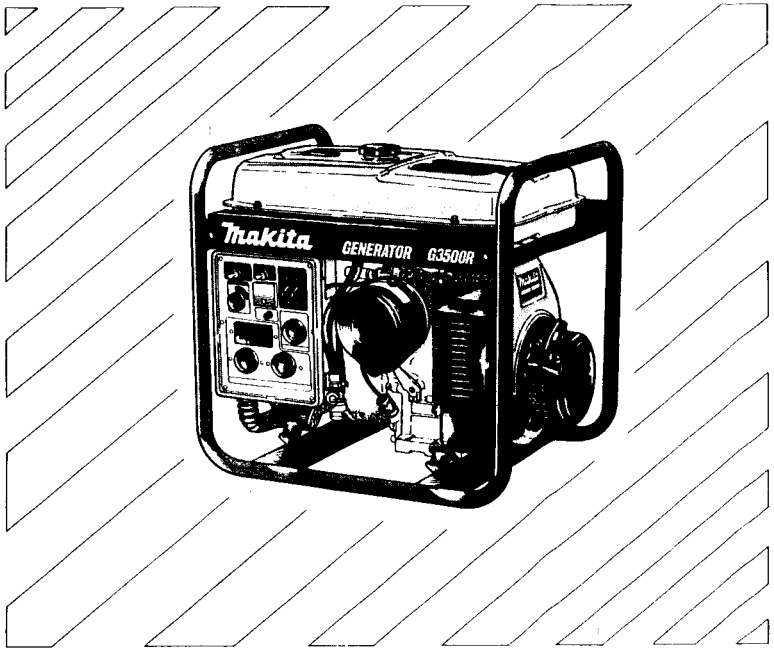
Makita

GENERATOR

MODEL : G2400R
G3500R
G3501R
G5500R
G5501R

INSTRUCTION MANUAL



ISSUE EMD-GU0733

3ZZ 9020026

Thank you for purchasing a Makita generator.

This manual covers operation and maintenance of the Makita generators. All information in this publication is based on the latest production information available at the time of approval for printing.

Pay special attention to statements preceded by the following words:

⚠ WARNING

Indicates a strong possibility of severe personal injury, loss of life and equipment damage if instructions are not followed.

[CAUTION]

Indicates a possibility of personal injury or equipment damage if instructions are not followed.

NOTE:

Gives helpful information.

If a problem should arise, or if you have any questions about the generator, consult an authorized dealer or factory service center.

⚠ WARNING

- **The generator is designed to give safe and dependable service if operated according to instructions.**
- **Do not operate the generator before you have read and understood the instructions. Failure to do so could result in death, personal injury or equipment damage.**

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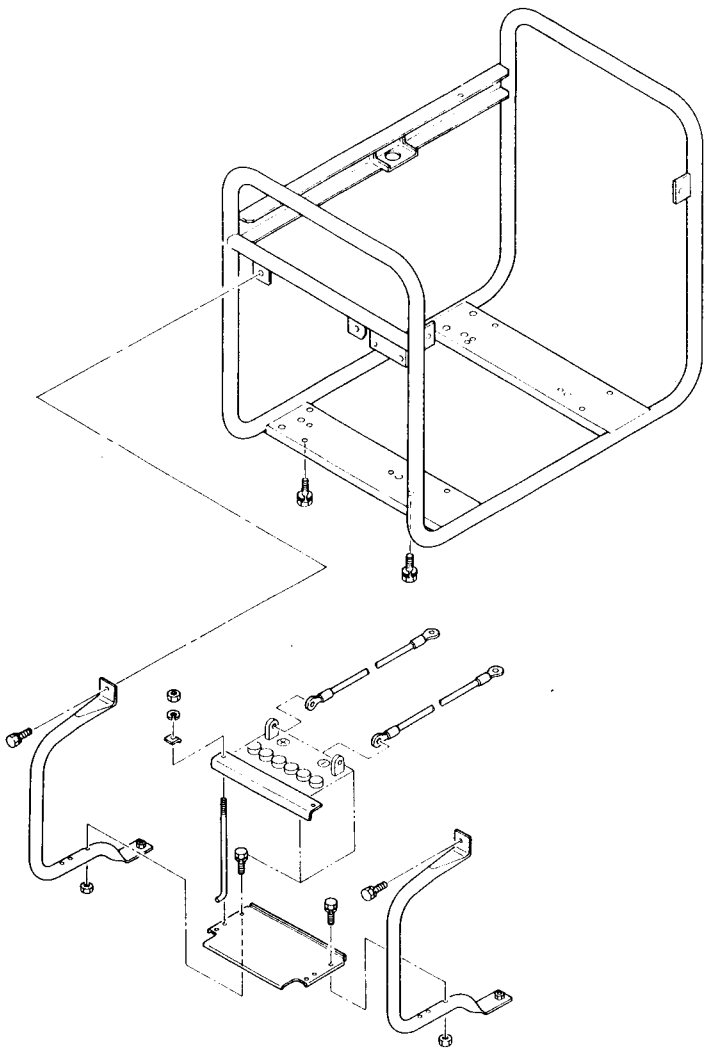
2. "HOW TO" INSTALL THE BATTERY



12. ELECTRIC STARTER (G3501R, G5501R)

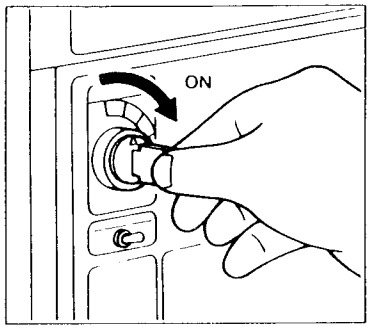
1. ELECTRIC STARTER (G3501R, G5501R)

(1) BATTERY

Recommended Battery	
SAE Type No.	UIR-160 or UIR-200
Capacity	12V-24AH
Dimensions (Maximum) L x W x H	7.8" x 5.2" x 7.4"

[CAUTION]
- Do not use a smaller battery which would be overcharged in usual operation.

(2) STARTING PROCEDURES



- Switch AC breaker OFF.
- Turn the "Auto Idle Switch" off.
- Open the fuel cock.
- Choke if engine is cold.
- Insert key into key slot and turn it fully clockwise. Starting motor will turn to start the engine.
  Release key, and it will automatically returns to "RUN" position.

[CAUTIONS]
- Do not run the starting motor over 5 seconds.
  If you failed to start, return key to "STOP" position and wait about 30 seconds, then repeat starting.
- Do not turn the key switch to "START" position while the engine is running.

(3) STOPPING THE ENGINE

- Switch AC breaker OFF.
- Turn the key switch to "STOP" position.

1. SAFETY PRECAUTIONS

⚠ Do not operate the generator near gasoline or gaseous fuel because of the potential danger of explosion or fire.
Do not fill the fuel tank with fuel while the engine is running. Do not smoke or use open flame near the fuel tank. Be careful not to spill fuel during refueling. If fuel is spilt, wipe it off and let dry before starting the engine.

⚠ Do not place inflammables near the generator.
Be careful not to place fuel, matches, gunpowder, oily cloths, straw, trash, or any other inflammables near the generator.

⚠ Do not operate the generator inside a room, cave, tunnel, or other insufficiently ventilated area. Always operate it in a well-ventilated area, otherwise the engine may become overheated, and the poisonous carbon monoxide gas contained in the exhaust gases will endanger human lives. Keep the generator at least 1 meter (3 feet) away from any structure or building during use.
If the generator must be used indoors, the area must be well-ventilated and extreme caution must be taken regarding the discharge of exhaust gases.

⚠ Do not enclose the generator nor cover it with a box.
The generator has a built-in forced air cooling system, and may become overheated if it is enclosed. If generator has been covered to protect it from the weather during non-use, be sure to remove it and keep it well away from the area during generator use.

⚠ Operate the generator on a level surface.
It is not necessary to prepare a special foundation for the generator. However, the generator will vibrate on an irregular surface, so choose a level place without surface irregularities.
If the generator is tilted or moved during operation, fuel may spill and/or the generator may tip over, causing a hazardous situation.
Proper lubrication cannot be expected if the generator is operated on a steep incline or slope. In such a case, piston seizure may occur even if the oil is above the upper level.

⚠ Pay attention to the wiring or extension cords from the generator to the connected device.
If the wire is under the generator or in contact with a vibrating part, it may break and possibly cause a fire, generator burnout, or electric shock hazard.
Replace damaged or worn cords immediately.

⚠ Do not operate in rain, in wet or damp conditions, or with wet hands.
The operator may suffer severe electric shock if the generator is wet due to rain or snow.

⚠ If wet, wipe and dry it well before starting.
Do not pour water directly over the generator, nor wash it with water.

⚠ Be extremely careful that all necessary electrical grounding procedures are followed during each and every use. Failure to do so can be fatal.

⚠ Do not contact the generator to a commercial power line. Connection to a commercial power line may short circuit the generator and ruin it or cause electric shock hazard. Use the transfer switch for connecting to domestic circuit.

⚠ No smoking while handling the battery.
The battery emits flammable hydrogen gas, which can explode if exposed to electric arcing or open flame.
Keep the area well-ventilated and keep open flames/sparks away when handling the battery.

⚠ Engine becomes extremely hot during and for some time after operation. Keep combustible materials well away from generator area.
Be very careful not to touch any parts of the hot engine especially the muffler area or serious burns may result.

⚠ Keep children and all bystanders at a safe distance from work areas.

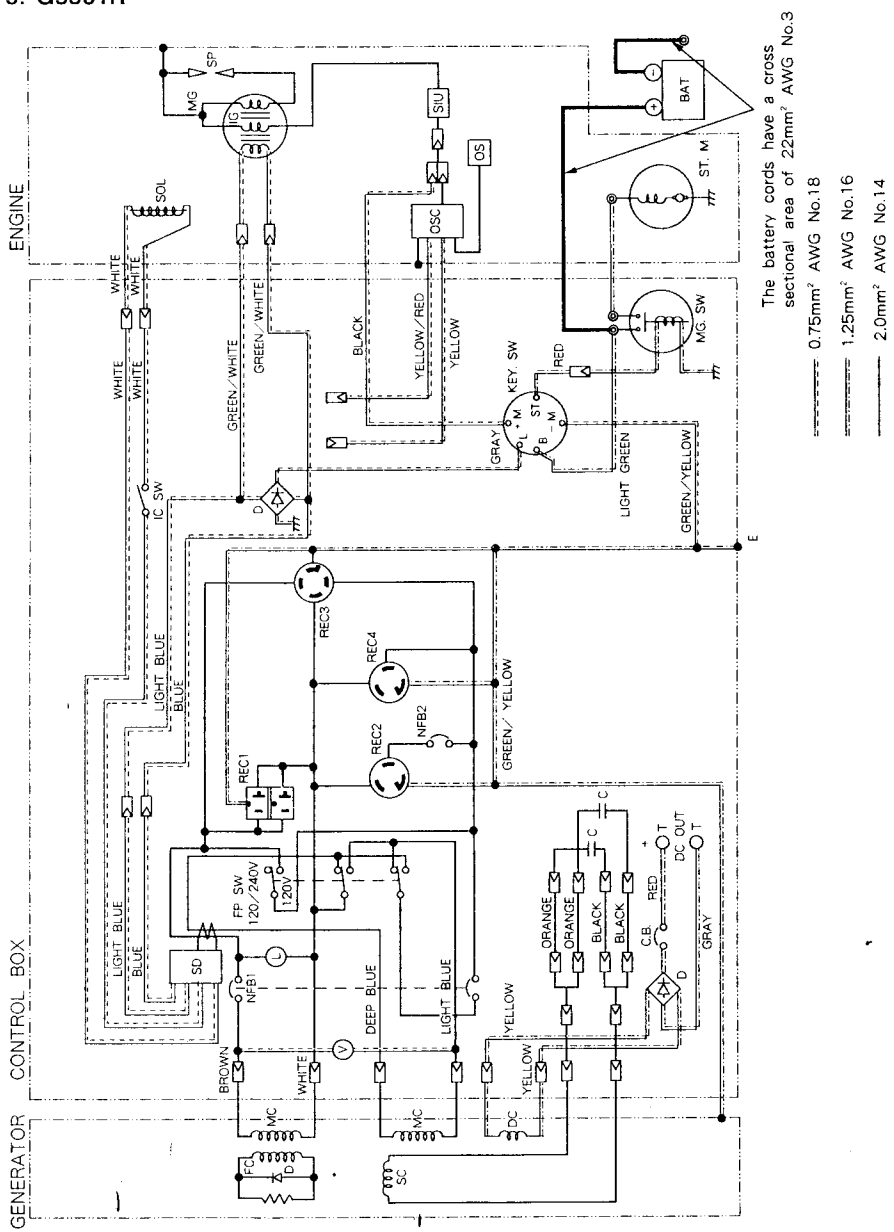
⚠ It is absolutely essential that you know the safe and proper use of the power tool or appliance that you intend to use. All operators must read, understand and follow the tool/appliance owners manual. Tool and appliance applications and limitations must be understood. Follow all directions given on labels and warnings. Keep all instruction manuals and literature in a safe place for future reference.

⚠ Use only "LISTED" extension cords.
When a tool or appliance is used outdoors, use only extension cords marked "For Outdoor Use." Extension cords, when not in use should be stored in a dry and well ventilated area.

⚠ Always switch off generator's AC breaker and disconnect tools or appliances when not in use, before servicing, adjusting, or installing accessories and attachments.

Symbols	Part Name
MC	AC Winding
SC	Auxiliary Winding
DC	DC Winding
FC	Field Winding
C	Condenser
SD	Idle Control Unit
D	Diode Stack Assy
L	Pilot Lamp
T	DC Output Terminal
F	Fuse
C.B.	AC Breaker
NFB1	AC Breaker
NFB2	AC Breaker
FP SW	Full Power Switch
S SW	Engine Stop Switch
IC SW	Auto Idle Switch
OS	Oil Sensor
OSC	Oil Sensor Controller
SIU	Solid State Ignition
SP	Spark Plug
MG	Magneto
IG	Ignition Coil
MG, SW	Magnetic Switch
E	Earth Terminal (Ground Terminal)
ST. M	Starting Motor
SOL	Solenoid
KEY SW	Key Switch
BAT	Battery
V	Voltmeter
REC1	AC Output Receptacle (120V-20A) GFCI NEMA No. 5-20R
REC2	AC Output Receptacle (120V-30A) NEMA No. L5-30R
REC3	AC Output Receptacle (120V/240V-20A) NEMA No. L14-20R
REC4	AC Output Receptacle (120V-20A) NEMA No. L5-20R

5. G5501R

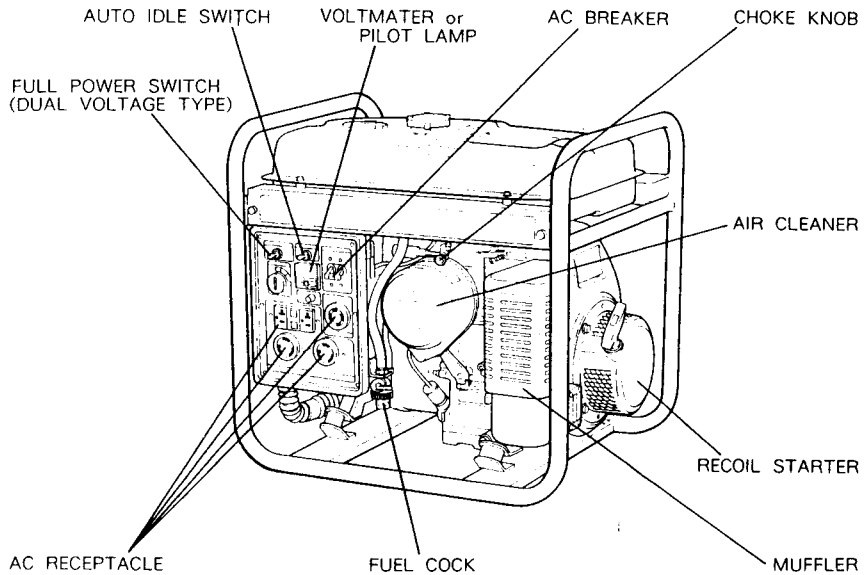


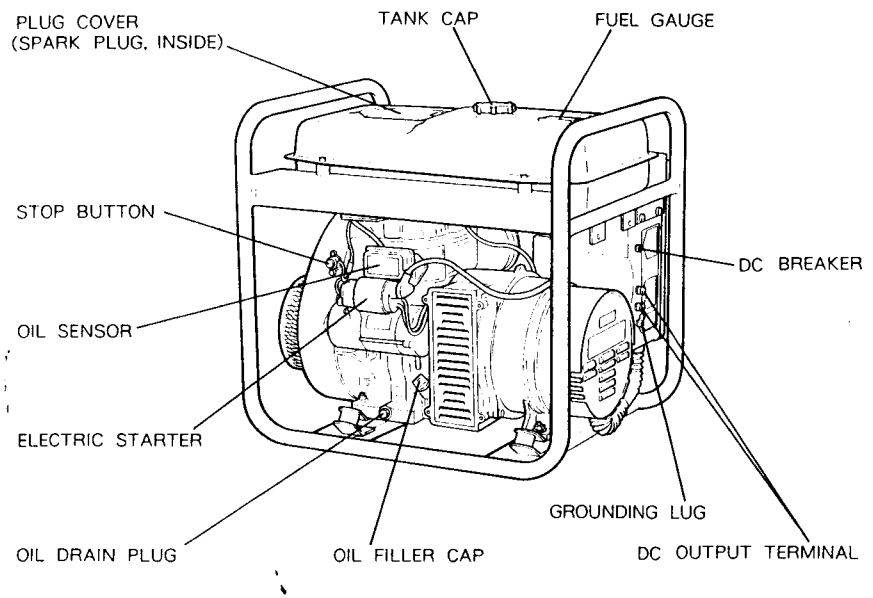
2. SPECIFICATIONS

	MODEL	G2400R	G3500R	G3501R	G5500R	G5501R
ALTERNATOR	Type	Brushless, Self-exciting, 2-pole, Single phase				
	AC Voltage	60Hz-120V	60Hz-120V/240V			
	Maximum AC Output	2,400W 20A	3500W 29.2A/14.6A		5,500W 45.8A/22.9A	
	Rated AC Output	2,000W 16.7A	3,000W 25A/12.5A		4,800W 40A/20A	
	DC Voltage	12V – 8.3A				
	Condenser Voltage Regulator	Standard				
	Power Factor	1.0				
	Full Power Switch	N.A.	Standard			
	AC Breakers	Standard				
	Full Roll Frame	Standard				
ENGINE	Type	Robin EY20D	Robin EY28D		Robin EY40D	
	Displacement	183 cc	273 cc		388 cc	
	Maximum HP/3600 r.p.m.	4.6	7.2		10.0	
	Fuel	Automobile gasoline				
	Tank Capacity	2.64 gal.	3.43 gal.		4.09 gal.	
	Rated Continuous Operation	7.4 hours	6.1 hours		5.0 hours	
	Easy Start Recoil	Standard				
	Electric Start	N.A.	N.A.	Standard	N.A.	Standard
	Oil Sensor	Standard				
	Auto Idle	N.A.	Standard			
	Muffler	USDA approved Spark Arrester Muffler				
Dimensions L × W × H		21.7 × 14.8 × 19.0″	21.7 × 16.3 × 20.5″	28.6 × 17.5 × 20.5″	25.0 × 17.6 × 23.5″	31.9 × 17.6 × 23.5″
Dry Weight		100 lbs.	124 lbs.	135 lbs.	168 lbs.	188 lbs.

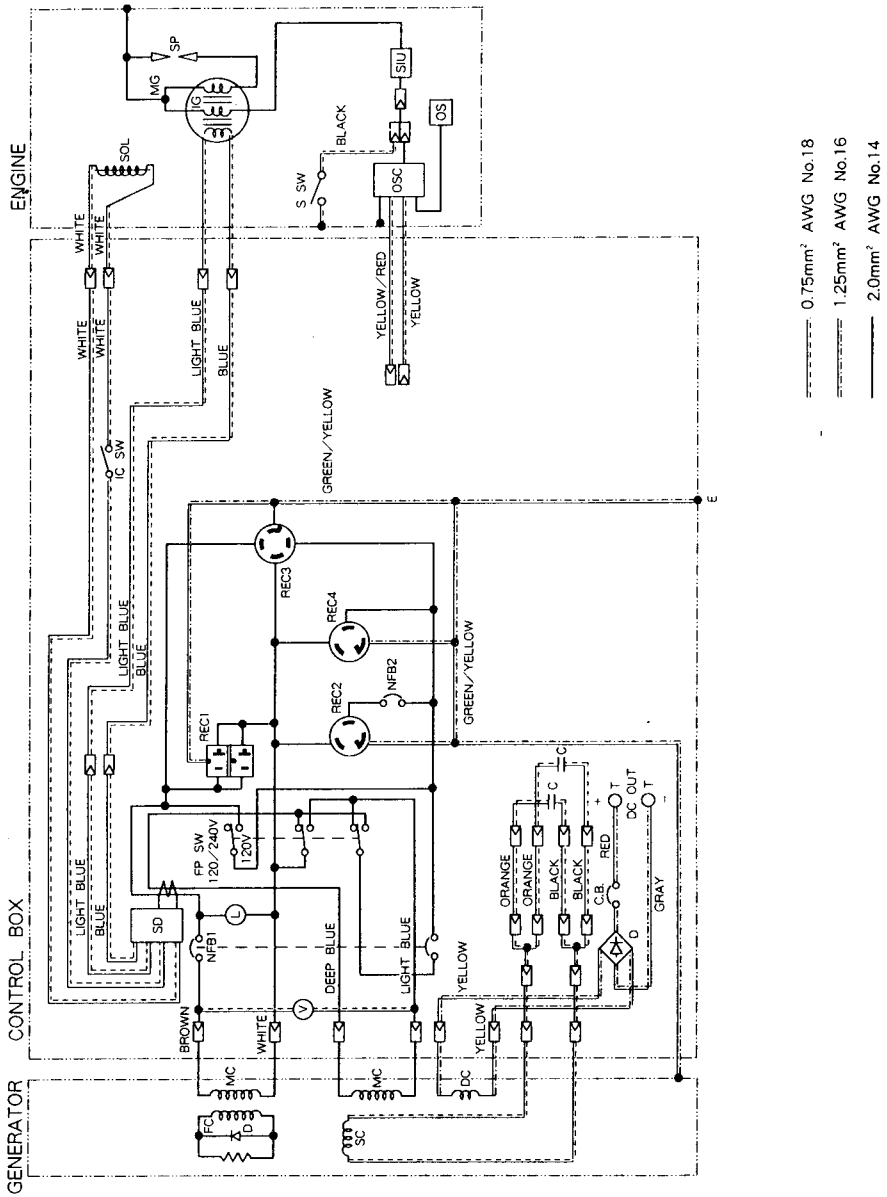
* Manufacturer reserves the right to change specifications of psrts and accessories without notice.
* Note : Specifications of parts and accessories may differ from country to country.

3. COMPONENTS

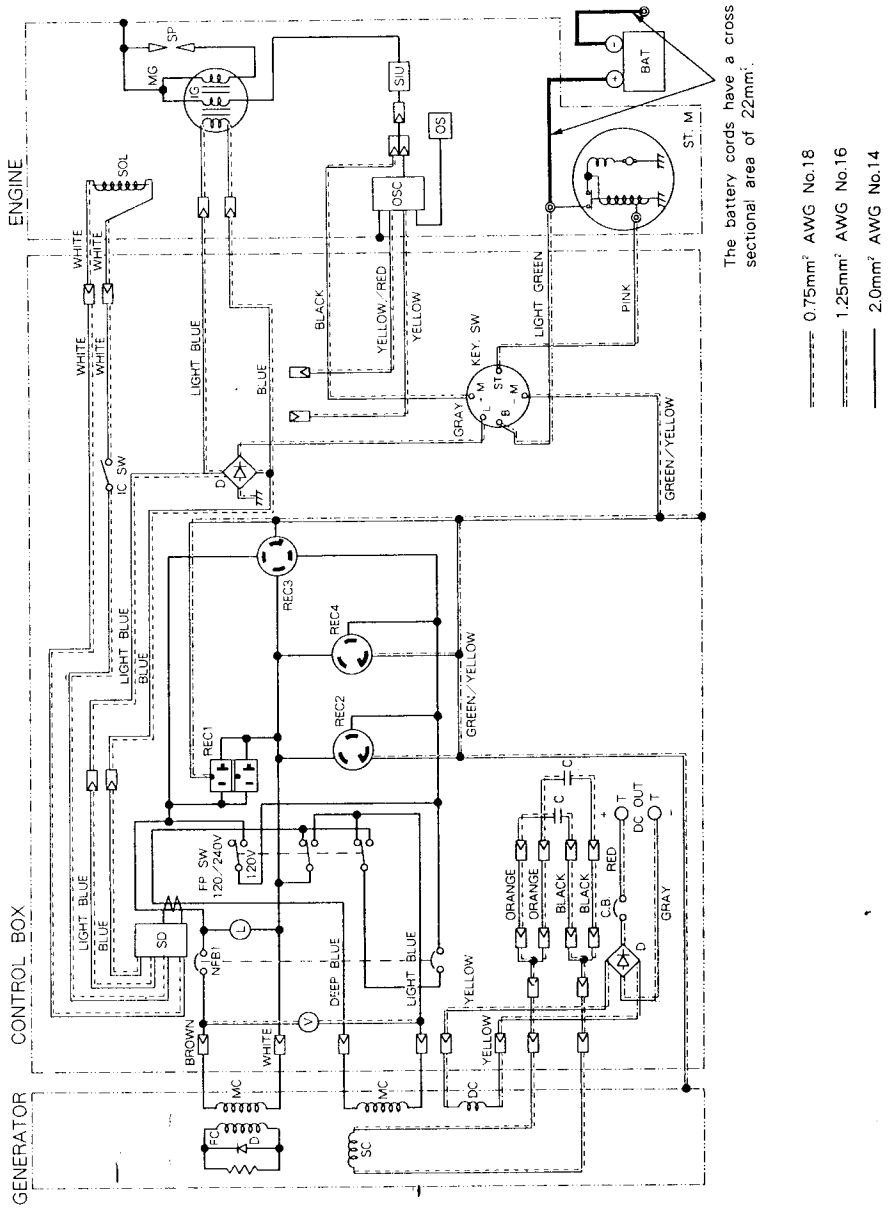




4. G5500R

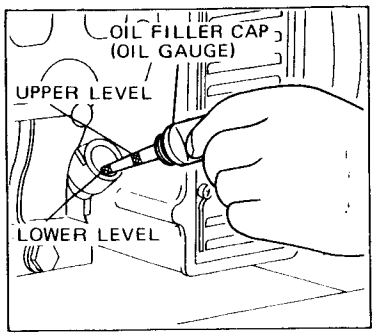


3. G3501R



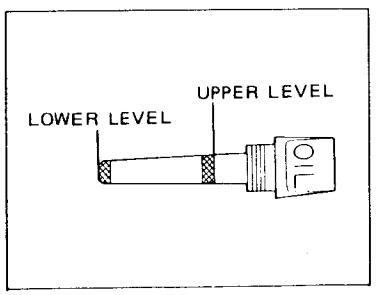
4. PRE-OPERATION CHECKS

CHECK ENGINE OIL.



Before checking or refilling oil, be sure generator is located on stable and level surface with engine stopped.

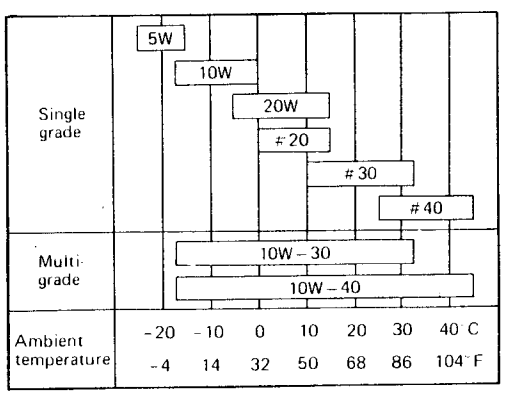
- Remove oil filler cap and check the engine oil level.
- If oil level is below the lower level line, refill with suitable oil (see table) to upper level line. Do not screw in the oil filler cap when checking oil level.
- Change oil if contaminated. (See "How-To" Maintenance.)
- **Oil capacity**



Model	Upper level
G2400R	0.6 liter (1.27 pints)
G3500R, G3501R . . .	0.85 liter (1.8 pints)
G5500R, G5501R . . .	1.2 liter (2.54 pints)

- **Recommended engine oil:**

Use class SC (API classification) oil or a higher grade oil according to the table below. SAE 10W-30 or 10W-40 is recommended for general, all-termperature use. If single viscosity oil is used, select the appropriate viscosity for the average temperature in your area.

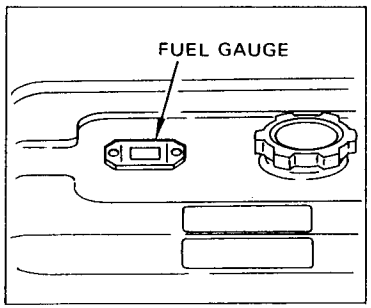


CHECK ENGINE FUEL.

⚠ WARNING

Do not refuel while smoking or near open flame or other such potential fire hazards. Otherwise fire accident may occur.

- Check fuel level at fuel level gauge.
- If fuel level is low, refill with unleaded automotive gasoline.

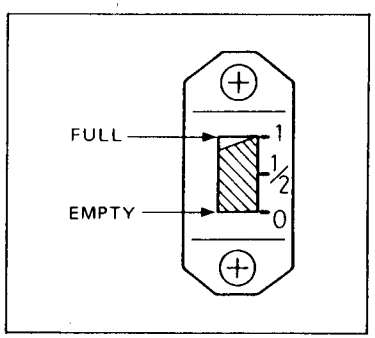


- **Fuel tank capacity:**

G2400R . . . . . 10 liter (2.64 gal.)

G3500R, G3501R . . . . 13 liter (3.43 gal.)

G5500R, G5501R . . . . 15.5 liter(4.09 gal.)

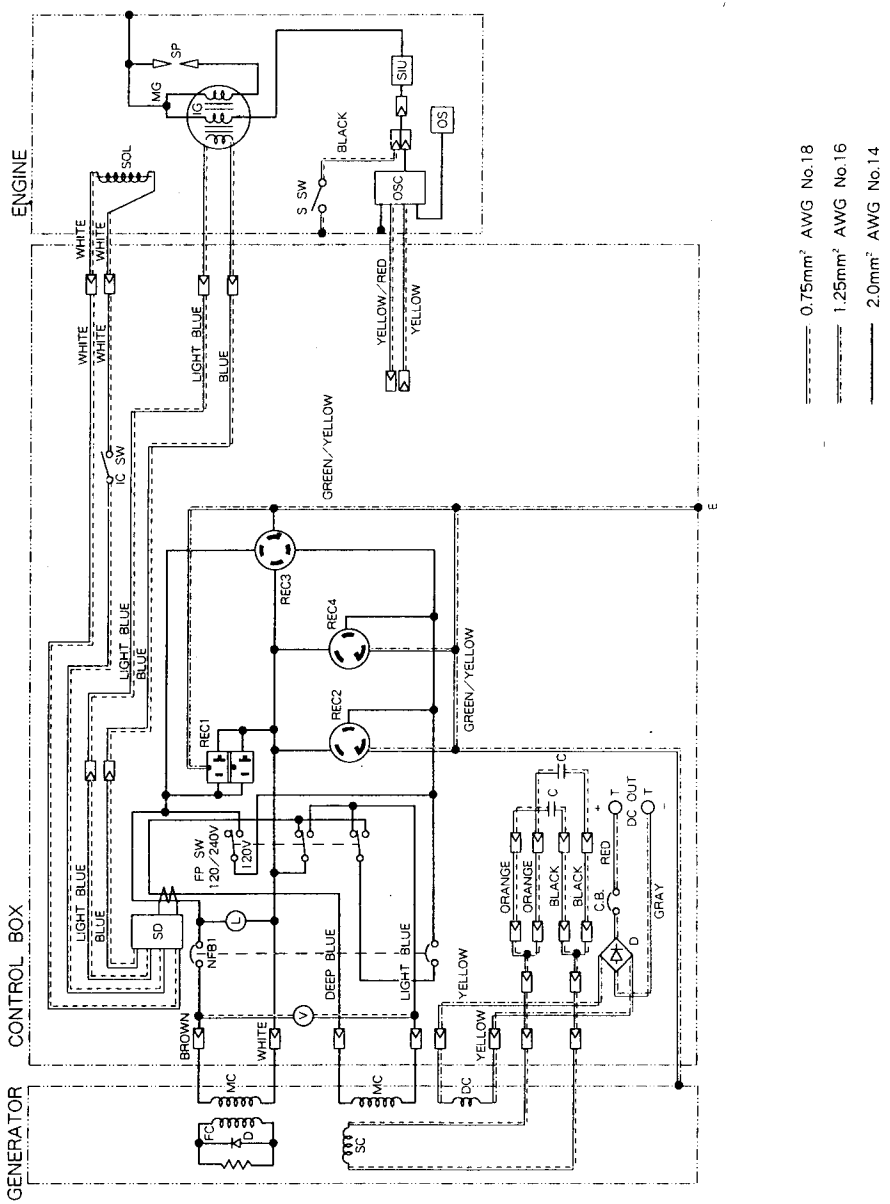


⚠ WARNING

Make sure you review each warning in order to prevent fire hazard.

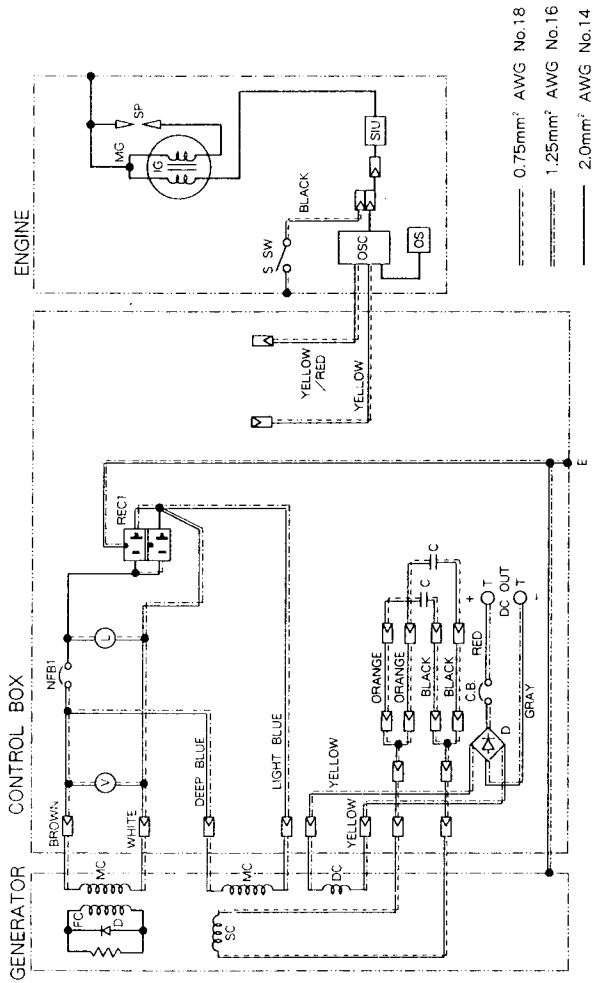
- **Do not refill tank while engine is running or hot.**
- **Close fuel cock before refueling with fuel.**
- **Be careful not to admit dust, dirt, water or other foreign objects into fuel.**
- **Wipe off spilt fuel thoroughly before starting engine.**
- **Keep open flames away.**

2. G3500R



11. WIRING DIAGRAM

1. G2400R



CHECKING COMPONENTS

Check following items before starting engine:

- Fuel leakage from fuel hose, etc.
- Bolts and nuts for looseness.
- Components for damage or breakage.
- Generator not resting on or against any adjacent wiring

CHECK GENERATOR SURROUNDINGS.

⚠ WARNING

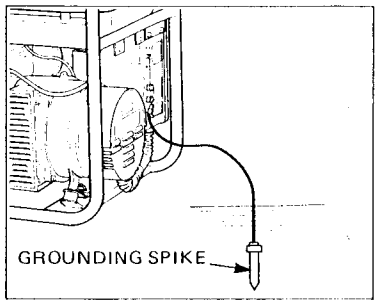
Make sure you review each warning in order to prevent fire hazard.

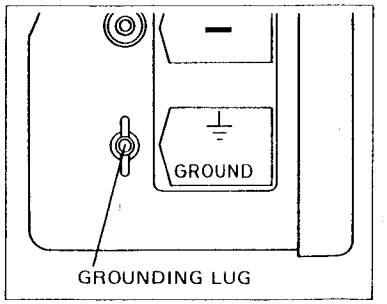
- **Keep area clear of inflammables or other hazardous materials.**
- **Keep generator at least 3 feet (1 meter) away from buildings or other structures.**
- **Only operate generator in a dry, well ventilated area.**
- **Keep exhaust pipe clear of foreign objects.**
- **Keep generator away from open flame. No smoking!**
- **Keep generator on a stable and level surface.**
- **Do not block generator air vents with paper or other material.**

2. GROUNDING THE GENERATOR

- To ground the generator to the earth, connect the grounding lug of the generator to the grounding spike driven into the earth or to the conductor which has been already grounded to the earth.

- If such grounding conductor or grounding electrode is unavailable, connect the grounding lug of the generator to the grounding terminal of the using electric tool or appliance.





NOTE:

The National Electrical Code (NEC) requires that all separately derived AC systems be grounded per Article 250-26. Manufacturer has added a grounding lug type terminal per Article 250-26 (a) from the noncurrent-carrying metal parts to the conductor to be grounded. Manufacturer does not supply the required grounding conductor or grounding electrode because it would be impossible to cover every exception and all local code requirements. See your local codes and the NEC manual for the proper grounding for your application.

10. TROUBLE SHOOTING

When generator engine fails to start after several attempts, or if no ele
at the output socket, check the following chart.

If your generator still fails to start or generate electricity, contact yo
factory or authorized service center for further information or correctiv

When Engine Fails to Start:

Gheck if choke knob is in its proper position.	Set the choke knob to ' tion.
Check if fuel cock is open.	If closed, open fuel coc
Check fuel level.	If empty, refill fuel tan not to overfill.
Check to make sure generator is not connected to an appliance.	If connected, turn off t switch on the connecte and unplug.
Check spark plug for loose spark plug cap.	If loose, push spark plu into place.
Check spark plug for contamination.	Remove spark plug and

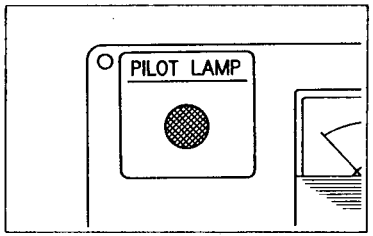
When No Electricity Is Generated at Receptacle:

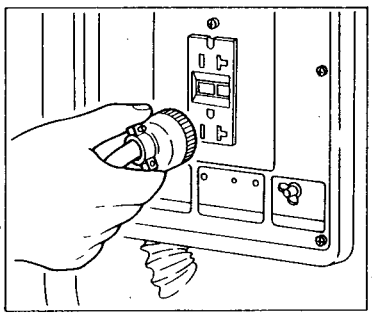
Check to make sure circuit breaker or no-fuse breaker is in the ON position.	After making sure that of the electrical applian missible limits and ther in the appliance, turn th to the "ON" position. I tinue to actuate, consul servicing dealer.
Check AC plug for loose connection.	Secure connection if ne
Check to see if engine starting was attempted with appliances already connected to generator and AC breaker was in the ON position.	Turn off switch on the AC breaker OFF, and d cable from receptacle. Reconnect after genera started properly.

2. USING ELECTRIC POWER

(1) AC APPLICATION

A	Single Voltage Type	G2400R





(a) Check the pilot lamp for proper voltage.
- This generator is thoroughly tested and adjusted in the factory. If the generator does not produce the specified voltage, consult your nearest Makita factory or authorized service center.

(b) Turn off the switch(es) of the electrical appliance(s) before connecting to the generator.

(c) Insert the plug(s) of the electrical appliance(s) into the appropriate receptacle.

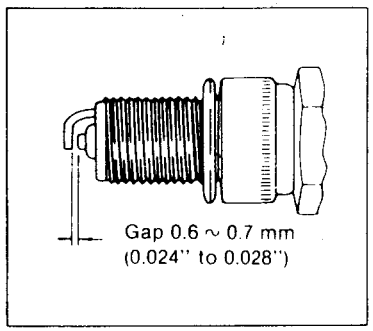
(d) Switch on AC Breaker.

- Check the amperage of the receptacles used referring to TABLE 1, and be sure not to use a tool requiring a current exceeding the specified amperage in the TABLE.
- Be sure that the total wattage of all appliances does not exceed the rated output of the generator.

Style	Ampere	Receptacle	AC plug	Description
	up to 20A	NEMA 5-20R	NEMA 5-20P	GFCI (Ground Fault Circuit Interrupter) Receptacle, duplex
	up to 20A	NEMA L14-20R	NEMA L14-20P	Locking Receptacle
	up to 30A	NEMA L5-30R	NEMA L5-30P	Locking Receptacle
	up to 20A	NEMA L5-20R	NEMA L5-20P	Locking Receptacle

TABLE 1

3. CLEANING AND ADJUSTING SPARK PLUG

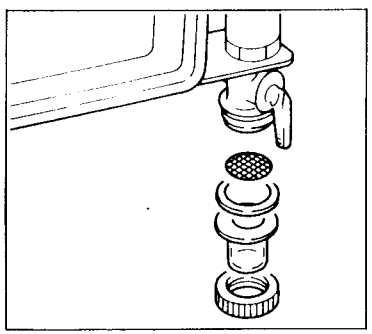


(a) If the plug is contaminated with carbon, remove it using a plug cleaner or wire brush.

(b) Adjust the electrode gap to 0.6 ~ 0.7 mm (0.024" ~ 0.028").

MODEL	SPARK PLUG
G2400R	NGK BR6HS
G3500R, G3501R	NGK BPR6HS
G5500R, G5501R	NGK BPR4HS

4. CLEANING FUEL STRAINER



Dirt and water in the fuel are removed by the fuel strainer.

(a) Remove the strainer cup and throw away water and dirt.

(b) Clean the screen and strainer cup with gasoline.

(c) Tightly fasten the cup to main body, making sure to avoid fuel leak.

8. "HOW-TO" MAINTENANCE

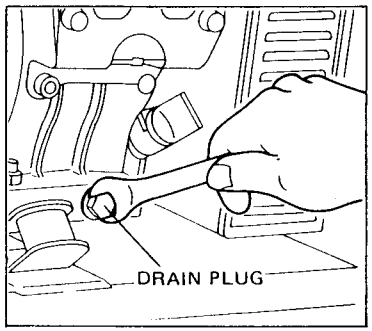
1. ENGINE OIL CHANGE

Change engine oil every 100 hours.
(for new engine, change oil after 20 hours.)

(a) Drain oil by removing the drain plug and the oil filler cap while the engine is warm.

(b) Reinstall the drain plug and fill the engine with oil until it reaches the upper level on the oil filler cap.

- Use fresh and high quality lubricating oil to the specified level as directed on page 5. If contaminated or deteriorated oil is used or the quantity of the engine oil is not sufficient, the engine damage will result and its life will be greatly shortened.

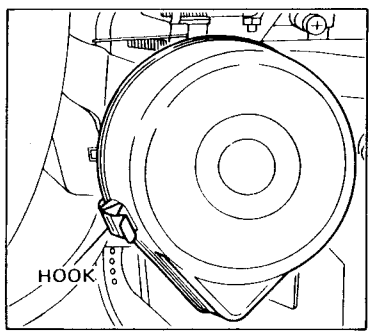


2. SERVICING THE AIR CLEANER

Maintaining an air cleaner in proper condition is very important. Dirt induced through improperly installed, improperly serviced or inadequate elements damages and wears out engines. Keep the element clean according to the chart on page 21.

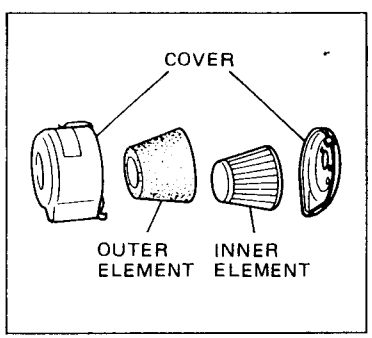
PROCEDURE:

(a) Unlock the cover and remove the cleaner element.



(b) Inner element: Wash the element with kerosene, then soak it in mixed oil (Kerosene (3 parts): Engine oil (1 part).
Drain the mixed oil.

(c) Outer element: Wash the element with kerosene, then dip it into the mixed oil (Kerosene (3 parts):Engine oil (1 part)).
Squeeze out the mixed oil. (Do not twist.)



⚠ WARNING

- **Be sure to ground the generator if the connected electrical equipment is grounded as instructed on page 7.**
- **If tool or appliance to be operated is grounded type (3 prong plug), be sure to use only extension cords that are also 3 wire, grounded type.**

NOTE:
When the AC breaker turns off during operation, the generator has been overloaded or the appliance is defective.
Stop the generator immediately, check the appliance and/or generator for overloading or defect and have repaired as necessary by Makita factory or authorized service center.

[CAUTION]
The duplex 120V receptacle is protected by a GFCI (Ground Fault Circuit Interrupter). GFCI shuts off the output current from the duplex 120V receptacle when a ground fault occurs in the generator or the appliance.

⚠ WARNING

- **Please note that other receptacles are NOT protected by GFCI.**

PRECAUTIONS FOR USING THE GFCI RECEPTACLES

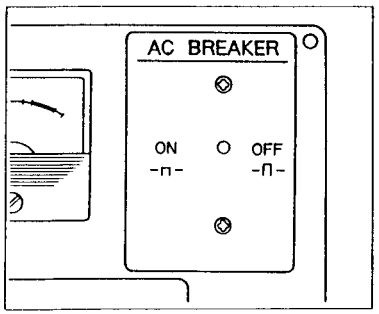
After starting the engine, check the GFCI for proper functioning by the following test procedure.

- Push TEST button. The RESET button will pop out exposing the word TRIP. Power is now off at the outlets protected by the GFCI, indicating that the device is functioning properly.
- If TRIP does not appear when testing, do not use the generator. Call a qualified electrician or have generator repaired at Makita factory or authorized service center.
- To restore power, push RESET button.

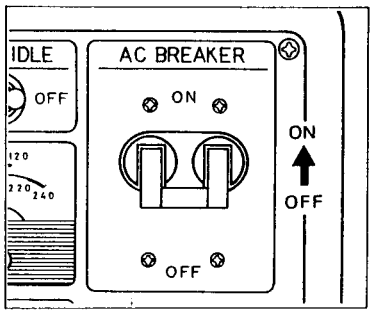
⚠WARNING

If the RESET button pops out during operation, stop the generator immediately and call a qualified electrician to check generator and the appliances. Failure to do so may result in electric shock hazard or loss of life.

(d) Check the AC breaker is "ON."
If the breaker is "OFF," set the breaker "ON."



G2400R

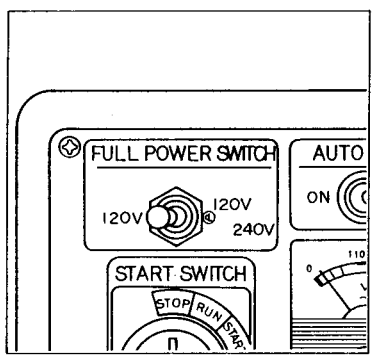


G3500R
G3501R

B	Dual Voltage Type	G3500R, G3501R G5500R, G5501R

(a) Select the voltage using the FULL POWER SWITCH in accordance with the electrical appliance. Refer to TABLE 2.

(b) Operate in the same way as step (a) through step (d) of single voltage type.



7. MAINTENANCE SCHEDULE

Daily	• Check oil level. • Check all components according to "PRE-OPERATION CHECKS."
50 HOURS	• Wash cleaner element. - more often if used in dirty or dusty environments. • Check spark plug, clean if necessary.
100 HOURS	• Change engine oil. Change more often if used in dusty or dirty environments.
200 HOURS	• Adjust spark plug gap. • Clean fuel strainer.
500 HOURS (12 months)	• Replace spark plug and cleaner element. • Clean and adjust carburetor, valve clearance, and valve seat along with cylinder head.
1,000 HOURS (24 months)	• Inspect control panel parts. • Check rotor and stator. • Replace engine mount rubber. • Overhaul engine. • Change fuel lines.

Initial oil change should be performed after first twenty (20) hours of use.
Thereafter change oil every 100 hours.
Before changing the oil, check for a suitable way to dispose of the old oil. Do not pour it down sewage drains, onto garden soil or into open streams. Your local zoning or environmental regulations will give you more detailed instructions on proper disposal.

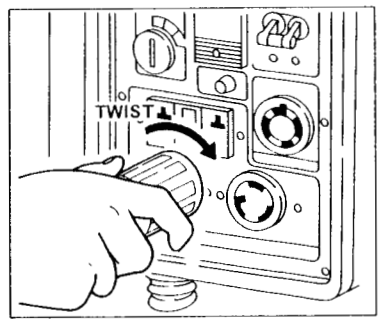
E:
neter always indicates the lower voltage whichever the FULL POWER SWITCH is

Switch	Lower Voltage Receptacle	Higher Voltage Receptacle
120V	full rated output is available	unavailable
120/240V	half of rated output watts is available	full rated output is available

TABLE 2

WARNING

- **To utilize power from TWIST LOCK receptacle, insert the plug into receptacle and turn clockwise to lock it.**
- **Be sure to ground the generator if the connected electrical equipment is grounded as instructed on page 7.**
- **If tool or appliance to be operated is grounded type (3 prong plug), be sure to use only extension cords that are also 3 wire, grounded type.**



E:
n the AC breaker turns off during operation, the generator has been overloaded or
ppliance is defective.
the generator immediately, check the appliance and/or generator for overloading or
ct and have necessary repairs made by Makita factory or authorized service center.

CONNECTING TO DOMESTIC CIRCUITS (HOUSE WIRING)

WARNING

Makita generators are a neutral ungrounded type.
a generator is to be connected to residential or commercial power lines, such as a nd-by power source during power outage, all connections must be made by a ensed electrician.
ilure in connection may result in death, personal injury, damage to generator, nage to appliances, damage to the building's wiring or fire.