OPERATOR'S MANUAL FOR
GEN-3000-iMM0
GENERATOR

CAUTION

RISK OF INJURY! READ ENTIRE MANUAL BEFORE OPERATING! THIS MANUAL IS AN IMPORTANT PART OF THE GENERATOR AND MUST REMAIN WITH THIS UNIT!

37-1367-E/F/S-033116

Introduction

THANK YOU for purchasing a Mi-T-M product.

READ THIS MANUAL carefully to learn how to operate and service your machine correctly. Failure to do so could result in personal injury or equipment damage.

THIS MANUAL SHOULD BE CONSIDERED a permanent part of your machine and should remain with the machine when you sell it.

MEASUREMENTS in this manual are given in both metric and customary U.S. unit equivalents. Use only correct replacement parts and fasteners. Metric and inch fasteners may require a specific metric or inch wrench.

RIGHT HAND AND LEFT HAND sides are determined by facing the control panel end of the machine.

The SERIAL NUMBER is located in the Specification or Identification Numbers section. Accurately record all the numbers to help in tracing the machine should it be stolen. Your dealer also needs these numbers when you order parts. File the identification numbers in a secure place off the machine.

WARRANTY is provided from your dealer for customers who operate and maintain their equipment as described in this manual. The warranty is explained on the warranty certificate shown in this manual.

This warranty provides you the assurance that your dealer will back products where defects appear within the warranty period. Should the equipment be abused, or modified to change its performance beyond the original factory specifications, the warranty will become void.

⚠WARNING

Warning: This product contains lead, a chemical known to the State of California to cause birth defects or other reproductive harm.
Wash your hands after handling this product.

⚠ WARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

⚠WARNING

This product contains one or more chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

NOTICE

FEDERAL EMISSION COMPONENT DEFECT WARRANTY and CALIFORNIA EMISSION CONTROL WARRANTY are applicable to only those engines / generators complied with EPA (Environmental Protection Agency) and CARB (California Air Resources Board) emission regulations in the U.S.A.

NOTICE

To the engines / generators exported to and used in the countries other than the U.S.A., warranty service shall be performed by the distributor in each country in accordance with the standard Robin engine / generator warranty policy as applicable.

AIR INDEX

To show compliance with California emission regulations, a hang tag has been provided displaying the Air Index level and durability period of this engine.

The Air Index level defines how clean an engine's exhaust is over a period of time. A bar graph scaled from "0" (most clean) to "10" (least clean) is used to show an engine's Air Index level. A lower Air Index level represents cleaner exhaust from an engine.

The period of time (in hours) that the Air Index level is measured is known as the durability period. Depending on the size of the engine, a selection of time periods can be used to measure the Air Index level (see below).

Descriptive Term	**Applicable to Emissions Durability Period**
Moderate:	50 hours (engine from 0 to 65 cc)
	125 hours (engine greater than 65 cc)
Intermediate:	125 hours (engine from 0 to 65 cc)
	250 hours (engine greater than 65 cc)
Extended:	300 hours (engine from 0 to 65 cc)
	500 hours (engine greater than 65 cc)

Notice: This hang tag must remain on the engine or piece of equipment, and only be removed by the ultimate purchaser before operation.

Contents

All information, illustrations and specifications in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.

Safety

RECOGNIZE SAFETY INFORMATION

This is the safety alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating practices.

UNDERSTAND SIGNAL WORDS

A signal word--DANGER, WARNING or CAUTION--is used with the safety-alert symbol. DANGER identifies the most serious hazards.

DANGER or WARNING safety signs are located near specific hazards. General precautions are listed on CAUTION safety signs. CAUTION also calls attention to safety messages in this manual.

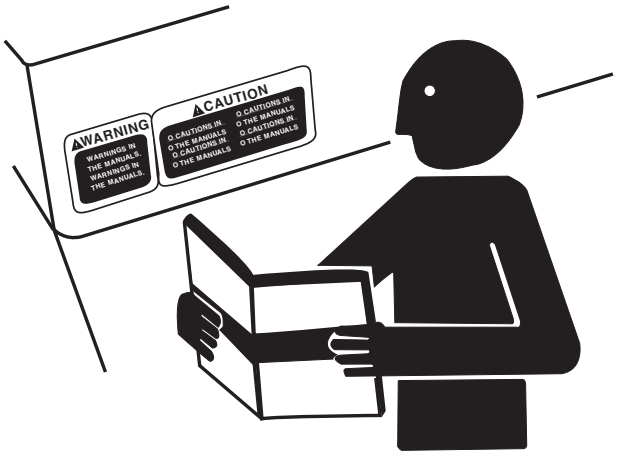
FOLLOW SAFETY INSTRUCTIONS

Carefully read all safety messages in this manual and safety signs on your machine. Keep safety signs in good condition. Replace missing or damaged safety signs. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs are available from your Mi-T-M Customer Service Representative.

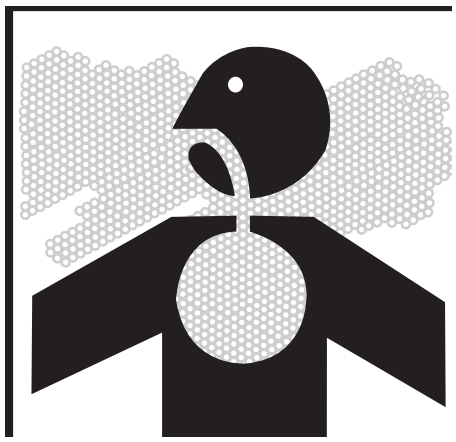
Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.

Keep your machine in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

If you do not understand any part of this manual and need assistance, contact your Mi-T-M Customer Service Representative.



CARBON MONOXIDE - POISONOUS GAS



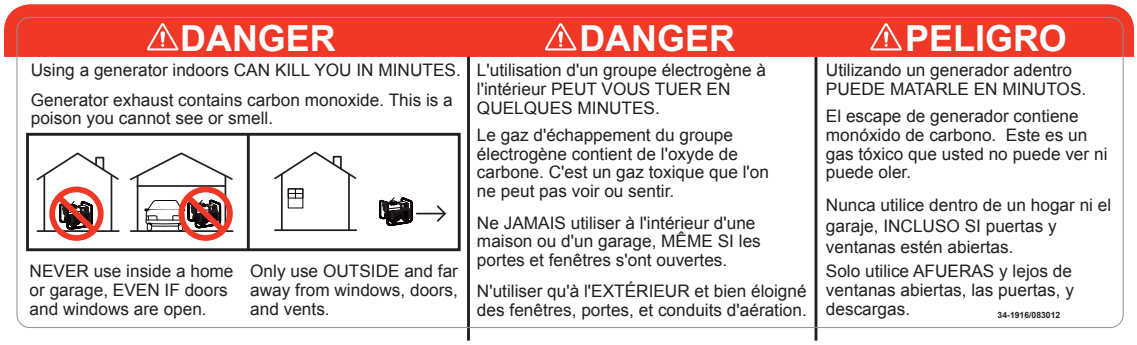
Use generator outdoors, away from open windows, vents, or doors. Keep generator at least 1 meter (3 feet) away from any structure or building during use.

Generator exhaust contains carbon monoxide - a poisonous gas that can kill you. You CAN NOT smell or see this gas.

Never use a generator in enclosed or partially-enclosed spaces. Generators can produce high levels of carbon monoxide very quickly. When you use a portable generator, remember that you cannot smell or see carbon monoxide. Even if you can't smell exhaust fumes, you may still be exposed to carbon monoxide.

If you start to feel sick, dizzy, or weak while using a generator, get to fresh air RIGHT AWAY. DO NOT DELAY. The carbon monoxide from generators can rapidly lead to full incapacitation and death.

If you experience serious symptoms, get medical attention immediately. Inform medical staff that carbon monoxide poisoning is suspected. If you experienced symptoms while indoors, have someone call the fire department to determine when it is safe to re-enter the building.



NEVER operate the generator in an explosive atmosphere, near combustible materials or where ventilation is not sufficient to carry away exhaust fumes. **Exhaust fumes can cause serious injury or death.**

NEVER use a generator indoors, including in homes, garages, basements, crawl spaces, and other enclosed or partially-enclosed areas, even with ventilation. Opening doors and windows or using fans will not prevent carbon monoxide build-up in the home.

Follow the instructions that come with your generator. Locate the unit outdoors and away from doors, windows, and vents that could allow the carbon monoxide gas to come indoors.

ONLY run generator outdoors and away from air intakes.

NEVER run generator inside homes, garages, sheds, or other semi-enclosed spaces. These spaces can trap poisonous gases EVEN IF you run a fan or open doors and windows.

If you start to feel sick, dizzy, or weak while using the generator, shut if off and get fresh air RIGHT AWAY. See a doctor. You may have carbon monoxide poisoning.

Install battery-operated carbon monoxide alarms or plug-in carbon monoxide alarms with battery back-up in your home, according to the manufacturer's installation instructions. The carbon monoxide alarms should be certified to the requirements of the latest safety standards for carbon monoxide alarms. (UL 2034, IAS 6-96, or CSA 6.19.01).

Test your carbon monoxide alarm frequently and replace dead batteries.

SAFETY WARNING WHEN REFUELING

Gasoline is extremely flammable and its vapors can explode if ignited.

Observe all safety regulations for the safe handling of fuel. Handle fuel in safety containers. If the container does not have a spout, use a funnel.

Do not overfill the fuel tank, leave room for the fuel to expand.

Do not refill fuel tank while the engine is running. Before refueling the generator, turn it off and let it cool down. Gasoline spilled on hot engine parts could ignite.

Fill the tank only on an area of bare ground. While fueling the tank, keep heat, sparks and open flame away. Carefully clean up any spilled fuel before starting engine.

Always fill fuel tank in an area with plenty of ventilation to avoid inhaling dangerous fumes.

NEVER store fuel for your generator in the home. Gasoline, propane, kerosene, and other flammable liquids should be stored outside of living areas in properly-labeled, non-glass safety containers. Do not store them near a fuel-burning appliance, such as a natural gas water heater in a garage. If the fuel is spilled or the container is not sealed properly, invisible vapors from the fuel can travel along the ground and can be ignited by the appliance's pilot light or by arcs from electric switches in the appliance.

ELECTRICAL HAZARDS

This product must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock.

DANGER - IMPROPER CONNECTION OF THE EQUIPMENT-GROUNDING CONDUCTOR CAN RESULT IN A RISK OF ELECTROCUTION. CHECK WITH A QUALIFIED ELECTRICIAN OR SERVICE PERSON IF YOU ARE IN DOUBT AS TO WHETHER THE UNIT IS PROPERLY GROUNDED.

This generator is equipped with a grounding terminal for your protection. Always complete the ground path from the generator to an external ground source as instructed in the section labeled “Grounding Instructions” in the Preparation section of this manual.

The generator is a potential source of electrical shock if not kept dry. Keep the generator dry and do not use in rain or wet conditions. To protect from moisture, operate it on a dry surface under an open, canopy-like structure. Dry your hands if wet before touching the generator.

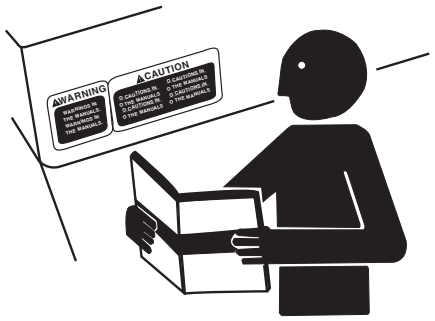
Plug appliances directly into the generator. Or, use a heavy duty, outdoor-rated extension cord that is rated (in watts or amps) at least equal to the sum of the connected appliance loads. Check that the entire cord is free of cuts or tears and that the plug has all three prongs, especially a grounding pin.

NEVER try to power the house wiring by plugging the generator into a wall outlet, a practice known as “back feeding”. This is an extremely dangerous practice that presents an electrocution risk to utility workers and neighbors served by the same utility transformer. It also bypasses some of the built-in household circuit protection devices.

If you must connect the generator to the house wiring to power appliances, have a qualified electrician install the appropriate equipment in accordance with local electrical codes. Or, check with your utility company to see if it can install an appropriate power transfer switch.

For power outages, permanently installed stationary generators are better suited for providing backup power to the home. Even a properly connected portable generator can become overloaded. This may result in overheating or stressing the generator components, possibly leading to a generator failure.

IMPORTANT SAFETY INSTRUCTIONS



WARNING: To reduce the risk of injury, read this operator's manual completely before using. When using this product, the following basic precautions should always be followed:

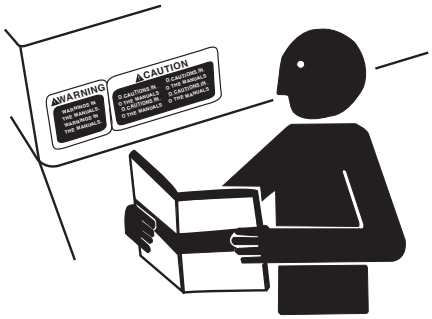
1. Read all the instructions before using the product.
2. Do not enclose the generator nor cover it with a box. The generator has a built-in forced air cooling system, and may become overheated if it is enclosed. If generator has been covered to protect if from the weather during non use, be sure to remove it and keep it well away from the area during generator use.
3. 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.
4. 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.
5. 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.
6. If wet, wipe and dry it well before starting. Do not pour water directly over the generator, nor wash it with water.
7. Be extremely careful that all necessary electrical grounding procedures are followed during each and every use. Failure to do so can be fatal.
8. NEVER try to power the house wiring by plugging the generator into a wall outlet, a practice known as "back feeding". This is an extremely dangerous practice that presents an electrocution risk to utility workers and neighbors served by the same utility transformer. It also bypasses some of the built-in household circuit protection devices.

   If you must connect the generator to the house wiring to power appliances, have a qualified electrician install the appropriate equipment in accordance with local electrical codes. Or, check with your utility company to see if it can install an appropriate power transfer switch.
9. No smoking while charging a 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 charging a battery.

IMPORTANT SAFETY INSTRUCTIONS



10. 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.
11. Keep children and all bystanders at a safe distance from work area.
12. 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.
13. 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.
14. Always disconnect tools or appliances when not in use, before servicing, adjusting, or installing accessories and attachments.

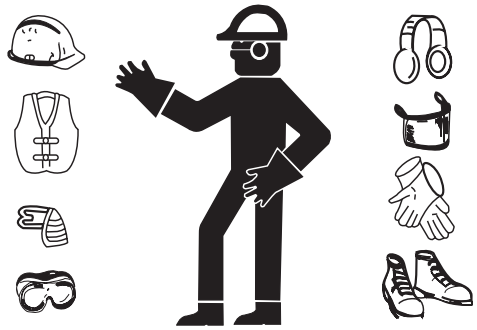
SAVE THESE INSTRUCTIONS

WEAR PROTECTIVE CLOTHING

Wear close fitting clothing and safety equipment appropriate to the job.

Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable loud noises.

Operating equipment safely requires the full attention of the operator. Do not wear radio or music headphones while operating machine.

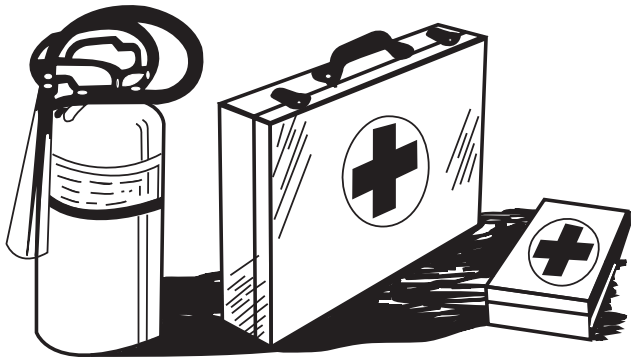


PREPARE FOR EMERGENCIES

Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance service, hospital and fire department near your telephone.

Be prepared if a fire starts.



INSPECT GENERATOR

Be sure all covers, guards and shields are tight and in place.

Locate all operating controls and safety labels.

Inspect power cord for damage before using. There is a hazard of electrical shock from crushing, cutting or heat damage.

SERVICE GENERATOR SAFELY

Before servicing the generator, disconnect all equipment and allow unit to cool down.

Service generator in a clean dry flat area.

Make sure the engine is stopped before starting any maintenance servicing or repair.

SAFETY SIGNS

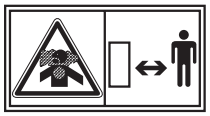
In accordance with the European requirements (eec Directives), the specified symbols as shown in the following table are used for the products and this instructions manual.

Read the operator's instruction manual.

Fire, open light and smoking prohibited.

Stay clear of the hot surface.

Caution, risk of electric shock.



Exhaust gas is poisonous.
Do not operate in an unventilated room.

Do not connect the generator to the commercial power lines.

Stop the engine before refueling.

HOT, avoid touching the hot areas.

ON
(power and Engine)

IN-position of a bistable push control

Engine start (Electric start)

OFF
(power and Engine)

Protective earth (ground)

Engine stop

Alternating current

Fuse

Diesel fuel

Direct current

Engine oil

Fast

Plus ;
positive polarity

Add oil

Slow

Minus ;
negative polarity

Battery charging condition

Run

OUT-position of a bistable push control

Choke ;
cold starting aid

Stop

P_r	*Rated power (kW)*	*COP*	*Continuous power*	$COS\Phi_r$	*Rated power factor*
f_r	*Rated frequency (Hz)*	U_r	*Rated voltage (V)*	I_r	*Rated current (A)*
H_{max}	*Maximum site altitude above sea-level (m)*	T_{max}	*Maximum ambient temperature (℃)*	m	*Mass (kg)*

⚠WARNING / ADVERTENCIA / AVERTISSEMENT

SHOCK
A generator is a potential shock hazard which can result in serious injury or death.
- Generator must be kept dry.
- Do NOT operate unit with wet hands.
- Generator MUST be grounded before use. See operators manual for specific instructions.
- Use extreme caution when refueling unit.
- Always keep generator four (4) feet from any structure.
- Always remove refueling gas can from generator area.

DESCARGA
Un generador es un potencial riesgo de descarga que puede resultar en lesiones graves o muerte.
- Generadores tienen que mantener secos.
- No opere esta unidad con manos mojados.
- Generador TIENE que sea conectado a tierra antes de uso. Vea manual de operador para instrucciones específicos.
- Use caución extremo cuando rellenando esta unidad.
- Siempre mantenga el generador cuatro (4) pisos de alga estructura.
- Siempre quite lata de gasolina de rellenando de area de generador.

DÉCHARGE
Un générateur pose un danger de décharge électrique qui peut entraîner des blessures graves ou la mort.
- Le générateur doit être maintenu au sec.
- Ne PAS utiliser le générateur avec les mains mouillées.
- Le générateur doit être mis à la terre avant de l'utiliser. Consulter le manuel de l'utilisateur pour des instructions spécifiques.
- Soyez extrêmement prudent lors du ravitaillement en carburant de cet appareil.
- Placer toujours le générateur à une distance d'au moins quatre pieds (1m 22) de toute structure.
- Enlever toujours le bidon de ravitaillement en essence de l'endroit où se trouve le générateur.

EXPLOSIVE FUEL
Gasoline is extremely flammable and its vapors can explode if ignited causing serious injury or death.
- Store gasoline only in approved containers, in well-ventilated, unoccupied areas away from sparks and flames.
- Always stop unit and allow unit to cool before refueling.
- Do NOT fill fuel tank while engine is hot or running.
- Do NOT overfill fuel tank.
- Never use gasoline as a cleaning agent. Wipe up any spills immediately.

CARBURANT EXPLOSIF
L'essence est extrêmement inflammable et ses vapeurs peuvent exploser si on l'enflamme qui peut entraîner des blessures graves ou la mort.
- N'entreposer l'essence que dans des conteneurs homologués, dans des endroits bien aérés et inoccupés loin de toute étincelle et flamme.
- Arrêter toujours l'appareil et lui permettre de refroidir avant de le ravitailler en carburant.
- Ne JAMAIS remplir le réservoir d'essence lorsque le moteur est chaud ou marche.
- Ne PAS trop remplir le réservoir d'essence.
- Ne JAMAIS utiliser l'essence comme nettoyant. Essuyer immédiatement tout débordement.

COMESTIBLE EXPLOSIVO
Gasolina es inflammable sumamente y sus vapors pueden explotar si inflamarse que puede resultar en lesiones graves o muerte.
- Mantenga gasoline solo en envases autorizadors, areas con buen ventilación y desocupadas afuera de chispas y llamas.
- Siempre pare la unidad y permite enfriarse de unidad antes de rellenar.
- No llene el tanque de comestible cuando el motor está calor o funcionando.
- No derrame el tanque de comestible.
- Nunca use gasolina como un agente de limpiando. Limpie algunas astillas inmediateamente.

34-3397/020216

34-3397

⚠DANGER

Using a generator indoors CAN KILL YOU IN MINUTES.

Generator exhaust contains carbon monoxide. This is a poison you cannot see or smell.

NEVER use inside a home or garage, EVEN IF doors and windows are open.

Only use OUTSIDE and far away from windows, doors, and vents.

⚠DANGER

L'utilisation d'un groupe électrogène à l'intérieur PEUT VOUS TUER EN QUELQUES MINUTES.

Le gaz d'échappement du groupe électrogène contient de l'oxyde de carbone. C'est un gaz toxique que l'on ne peut pas voir ou sentir.

Ne JAMAIS utiliser à l'intérieur d'une maison ou d'un garage, MÊME SI les portes et fenêtres s'ont ouvertes.

N'utiliser qu'à l'EXTÉRIEUR et bien éloigné des fenêtres, portes, et conduits d'aération.

⚠PELIGRO

Utilizando un generador adentro PUEDE MATARLE EN MINUTOS.

El escape de generador contiene monóxido de carbono. Este es un gas tóxico que usted no puede ver ni puede oler.

Nunca utilice dentro de un hogar ni el garaje, INCLUSO SI puertas y ventanas estén abiertas.

Solo utilice AFUERAS y lejos de ventanas abiertas, las puertas, y descargas.

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HANDLE RELEASE

TURN TO UNLOCK

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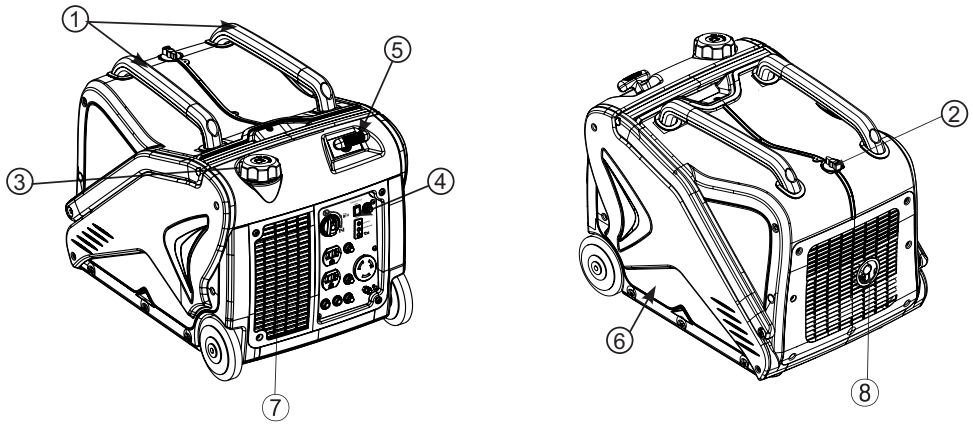
34-3406

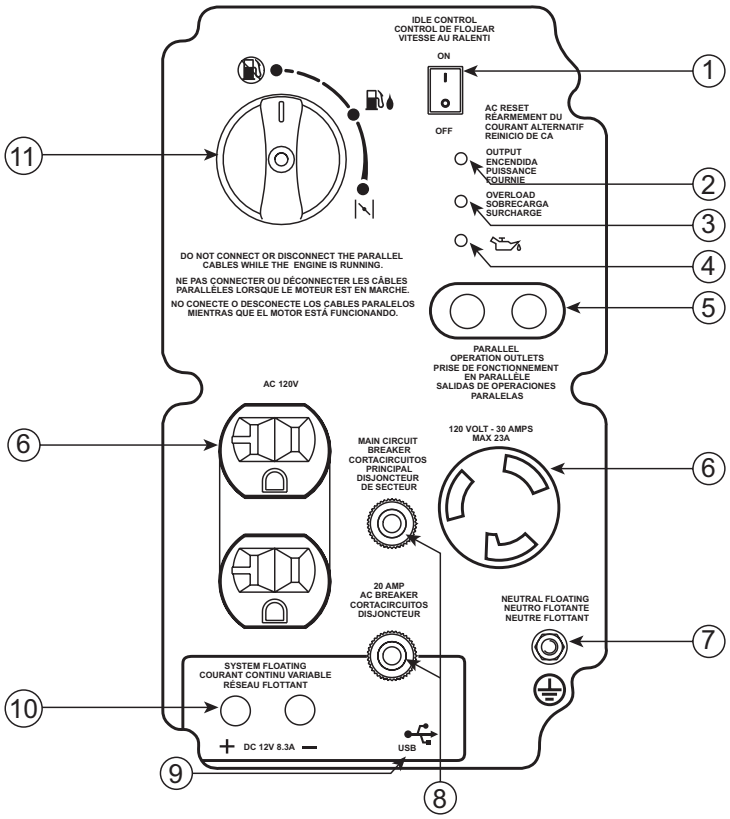
Controls

FEATURES



1. Carrying handle
2. Knob
3. Fuel tank cap
4. Control panel
5. Recoil starter
6. Oil filler cap
7. Air intake
8. Muffler

CONTROL PANEL



1. Idle control
2. Output light
3. Overload light
4. Oil warning light
5. Parallel connection
6. AC receptacle
7. Ground
8. AC breaker
9. USB port
10. DC receptacle
11. 3 in 1 switch knob

CONTROLS

ENGINE SWITCH: (Fig. 1)
The engine switch is designed for easy operation with the interlocking mechanism between the fuel valve and the choke.

OUTPUT LAMP AND OVERLOAD LAMP: (Fig. 1)
These lamps are turned on in the following conditions:

Output Lamp (Green) --- The lamp is turned on while generating properly.

Overload Lamp (Red) --- The lamp is turned on in the overload condition.

If the lamp is turned on, stop and start the engine again to resume the operation.

OIL SENSOR LAMP: (Fig. 1)
When the level of the engine oil falls below the prescribed value, the alarm lamp lights up and the engine stops automatically. When the engine stops due to oil shortage, it can not be started anymore even by pulling the start knob (just the alarm lamp flickers). In such a case, replenish engine oil. See “Pre-Operation; Engine Oil” on page 21.

PARALLEL CONNECTIONS: (Fig 1)
The parallel connection function allows two units to be connected in parallel to boost output. The Parallel connection cord is sold separately and includes operation and safety instructions for use.

AUTO POWER SAVE SWITCH: (Fig. 1)
With the switch in the “ON“ position, the engine speed is reduced automatically when no load is applied, while the engine speed is automatically increased when the load is applied.

When using in the heavy load condition, set the switch into the “OFF“ position to maintain the engine RPM at the rated setting.

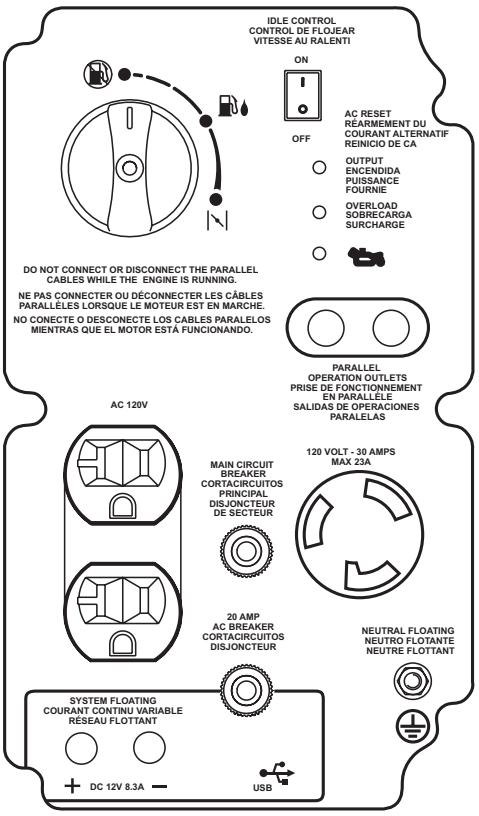
When using DC power, turn the switch into the “OFF” position.

AC RECEPTACLES: (Fig. 2)
AC electric power is available through this receptacle. Use a grounding type plug as shown on page 26, Table 1.

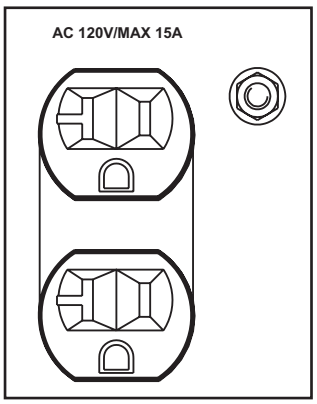
WARNING: DO NOT PUT FOREIGN OBJECTS INTO THE PLUG RECEPTACLE.

CAUTION: DO NOT PLUG MORE THAN TWO APPLIANCES INTO THE GENERATOR AT A TIME.

ENGINE SWITCHES	
CHOKE 	To start the engine, turn the knob to the position. (Choke valve is closed.)
RUN 	Keep the knob in this position after the engine starts. (The engine can be started with the knob at the position when the engine is warm.
STOP 	To stop the engine, return the knob to the position. (The fuel cock is closed as well.)



(Fig. 1)



(Fig. 2)

CONTROLS

DC TERMINALS: (Fig. 3)
DC electric power for battery charging is available.
- Red is positive (+) terminal.
- Black is negative (-) terminal.

DC CIRCUIT BREAKER: (Fig. 3)
DC circuit breaker shuts off electric current when the current exceeds its limit or a malfunction occurs in the connected appliance.
Check for excessive current consumption or defects in the appliance. After making sure everything is in order, push the button to the “ON” position.

CAUTION: IF CIRCUIT BREAKER CONTINUES TO TRIP, CHECK APPLIANCE FOR DEFECT. IF GENERATOR IS MALFUNCTIONING, SEE YOUR AUTHORIZED MI-T-M SERVICE CENTER.

NEVER INTERFERE WITH THE OPERATION OF THE CIRCUIT BREAKER KNOB OR KEEP PUSHING IT IN THE “ON” POSITION.

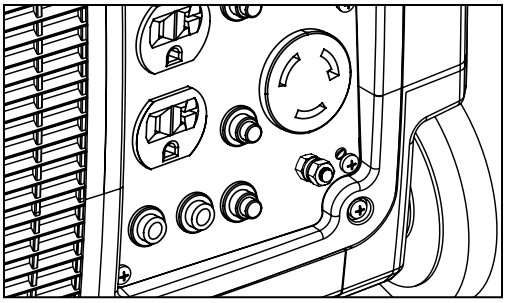
GROUND TERMINAL: (Fig. 3)
Terminal for grounding the generator.

RECOIL STARTER: (Fig. 4)
Pull this handle to start the generator.

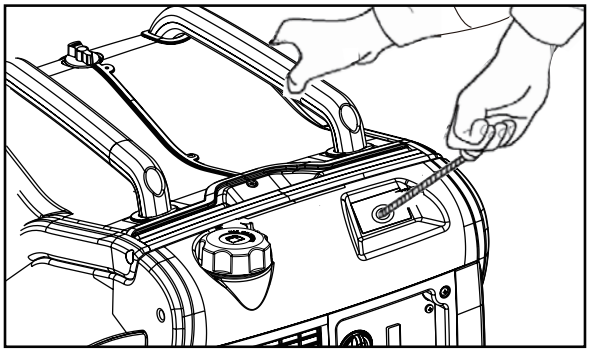
FUEL TANK CAP: (Fig. 5)
The fuel tank cap is located under the cover. To open the cover, lift up and towards the muffler end as shown in the illustration. Remove the fuel tank cap by turning counterclockwise.

SIDE COVER: (Fig. 6)
To access the following items for servicing, take the applicable side cover out by removing the screw with a screwdriver.

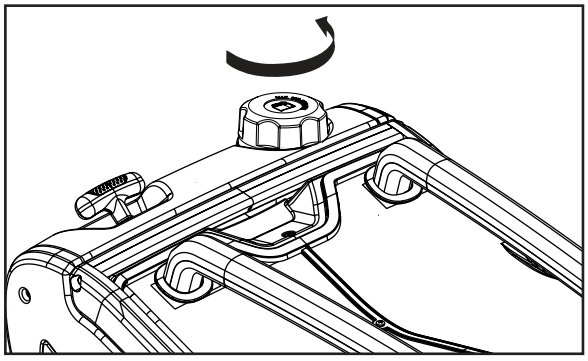
LH-Side Cover - Air cleaner, etc.
RH-Side Cover - Oil level gauge, Ignition Coil etc.



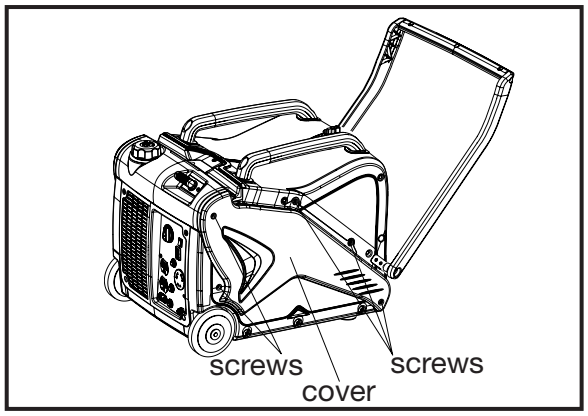
(Fig. 3)



(Fig. 4)



(Fig. 5)



(Fig. 6)

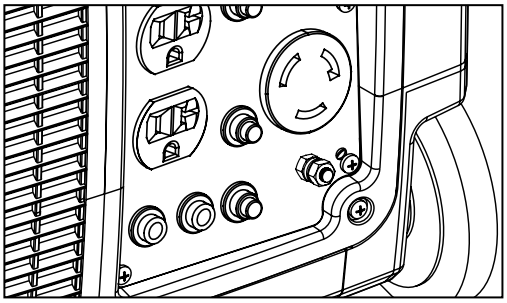
Preparing the Generator

GROUNDING INSTRUCTIONS

This product must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock.

DANGER - IMPROPER CONNECTION OF THE EQUIPMENT-GROUNDING CONDUCTOR CAN RESULT IN A RISK OF ELECTROCUTION. CHECK WITH A QUALIFIED ELECTRICIAN OR SERVICE PERSON IF YOU ARE IN DOUBT AS TO WHETHER THE UNIT IS PROPERLY GROUNDED.

The ground terminal on the frame must always be used to connect the generator to a suitable ground source. The ground path should be made with #8 size wire. Connect the grounding wire securely to the ground terminal. Connect the other end of the wire securely to a suitable ground source. (Fig. 7)



(Fig. 7)

The National Electric Code contains several practical ways in which to establish a good ground source. Examples given below illustrate a few of the ways in which a good ground source may be established.

A metal underground water pipe in direct contact with the earth for at least 10 feet can be used as a grounding source. If an pipe is unavailable, an 8 foot length of pipe or rod may be used as the ground source. The pipe should be 3/4 inch trade size or larger and the outer surface must be noncorrosive. If a steel or iron rod is used it should be at least 5/8 inch diameter and if a nonferrous rod is used it should be at least 1/2 inch diameter and be listed as material for grounding. Drive the rod or pipe to a depth of 8 feet. If a rock bottom is encountered less than 4 feet down, bury the rod or pipe in a trench. All electrical tools and appliances operated from this generator, must be properly grounded by use of a third wire or be “Double Insulated”.

It is recommended to:
1. Use electrical devices with 3 prong power cords.
2. Use an extension cord with a 3 hole receptacle and a 3 prong plug at the opposite ends to ensure continuity of the ground protection from the generator to appliance.

We strongly recommend that all applicable federal, state and local regulations relating to grounding specifications be checked and followed.

CAUTION:

1. If the words “NEUTRAL BONDED TO FRAME “is displayed on the control panel of inverter generator. For inverter generator provided with a neutral bonded to the frame or with GFCI function, please pay attention to following words:

THERE IS A PERMANENT CONDUCTOR BETWEEN THE GENERATOR (STATOR WINDING) AND THE FRAME"

2. If the words "NEUTRAL FLOATING" is displayed on the control panel of inverter generator. For inverter generator provided with a floating neutral, please pay attention to following words:

i) THE GENERATOR (STATOR WINDING) IS ISOLATED FROM THE FRAME AND FROM THE AC RECEPTACLE GROUND PIN;

ii) ELECTRICAL DEVICES THAT REQUIRE A GROUNDED RECEPTACLE PIN CONNECTION WILL NOT FUNCTION IF THE RECEPTACLE GROUND PIN IS NOT FUNCTIONAL

LINE TRANSFER SWITCH

If this generator is used for standby service, it must have a transfer switch between the utility power service and the generator. The transfer switch not only prevents the utility power form feeding into the generator, but is also prevents the generator form feeding out into the utility company's lines. This is intended to protect the serviceman who may be working on a damaged line.

THIS INSTALLATION MUST BE DONE BY A LICENSED ELECTRICIAN AND ALL LOCAL CODES MUST BE FOLLOWED.

ENGINE OIL:

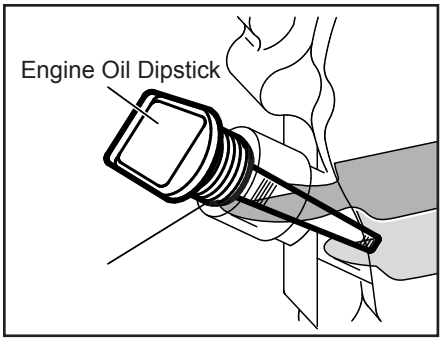
Before checking or refilling oil, be sure generator is located on stable and level surface with engine stopped.

1. Remove oil dipstick and check the engine oil level. (Fig. 8)
2. If oil level is below the lower level line, refill with suitable oil to upper level line. Do not screw in the oil dipstick when checking oil level. (Fig. 9)
3. Change oil if contaminated. (See "Maintenance Schedule; Changing Engine Oil" page 30.)

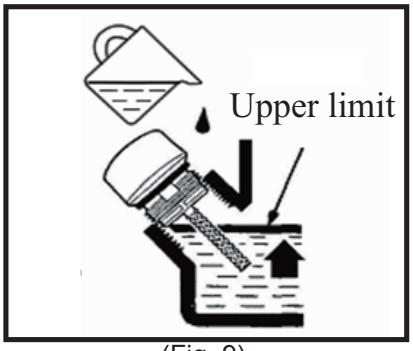
Oil Capacity ..... 16.9 oz. / 0.5 liters

Recommended Oil..... SAE SJ Low-40

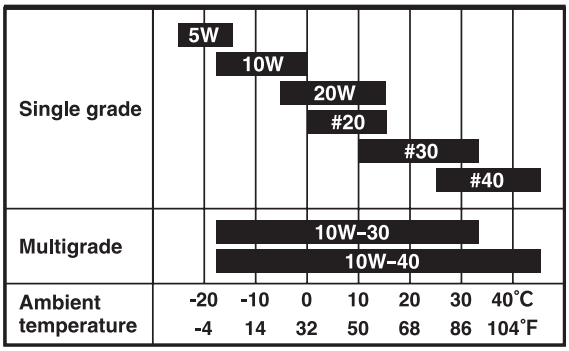
Recommended engine oil:
Use 4-stroke automotive detergent oil of API service class SE or higher grade (SG, SH or SJ is recommended). If single viscosity oil is used, select the appropriate viscosity for the average temperature in your area. (Fig. 10)



(Fig. 8)



(Fig. 9)



(Fig. 10)

PRE-OPERATION

FUELING:

WARNING: WARNING: EXPLOSIVE FUEL! GASOLINE IS EXTREMELY FLAMMABLE AND ITS VAPORS CAN EXPLODE IF IGNITED.

STORE GASOLINE ONLY IN APPROVED CONTAINERS, IN WELL VENTILATED, UNOCCUPIED BUILDINGS AND AWAY FROM SPARKS OR FLAMES.

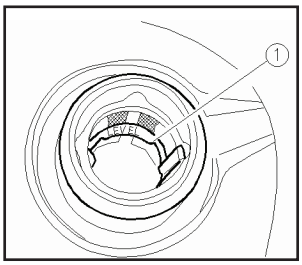
DO NOT FILL THE FUEL TANK WHILE THE ENGINE IS HOT OR RUNNING, SINCE SPILLED FUEL COULD IGNITE IF IT COMES IN CONTACT WITH HOT PARTS OR SPARKS FROM IGNITION. DO NOT START THE ENGINE NEAR SPILLED FUEL.

NEVER USE GASOLINE AS A CLEANING AGENT.

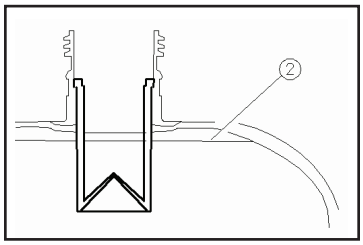
WARNING: DO NOT OVERFILL THE FUEL TANK, LEAVE ROOM FOR THE FUEL TO EXPAND.

1. If fuel level is low, refill with unleaded automotive gasoline.
2. Fuel level should never go over the RED marking (1) at the inlet portion. (Fig. 11)
3. Be sure to use the fuel filter screen on the fuel filter neck (2). (Fig. 12)

   Fuel Tank Capacity ..... 1.89 gal. / 7 liters
4. When using the generator for the first time or stopping due to the fuel running out, pull the recoil handle several times after filling the fuel up to the RED marking at the inlet portion of the fuel tank.



(Fig. 11)



(Fig. 12)

WARNING: MAKE SURE YOU REVIEW EACH WARNING IN ORDER TO PREVENT FIRE HAZARD.

DO NOT REFILL TANK WHILE ENGINE IS RUNNING OR HOT.

BEFORE FILLING FUEL, TURN THE ENGINE SWITCH TO " " (STOP) POSITION.

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.

PRE-OPERATION

FUELING (continued):

General Recommendations

- Purchase gasoline in small quantities and store in clean, approved containers.
- To minimize gum deposits in your fuel system and to insure easy starting, do not use gasoline left over from the previous season.
- Do not add oil to the gasoline.

Fuel Type

- For best results use only clean, fresh, unleaded gasoline with a pump sticker octane rating of 87 or higher.

GASOLINE/ALCOHOL BLENDS:
Gasohol (up to 10% ethyl alcohol, 90% unleaded gasoline by volume) is approved, as a fuel. Other gasoline/alcohol blends are not approved.
GASOLINE/ETHER BLENDS:
Methyl Tertiary Butyl Ether (MTBE) and unleaded gasoline blends (up to a maximum of 15% MTBE by volume) are approved as a fuel. Other gasoline/ether blends are not approved.

HIGH ALTITUDE KIT REPLACEMENT FOR EPAIII ENGINES 3000FT TO 6000FT OR 6000FT TO 8000FT OF ELEVATION

The fuel system on this Engine or Equipment may be influenced by operation at higher altitudes. Proper operation can be ensured by installing an altitude kit when required. See the table below to determine when an altitude kit is required. Operating this engine or equipment without the proper altitude kit installed may increase the engine's emissions and decrease fuel economy and performance. Kits may be obtained from any Dealer, and should be installed by a qualified individual.

Equipment *	Fuel	Altitude Range**	Kit Part Number
Equipment with engines above 80cc	Gasoline	0 – 3000 ft	Not Required
		3000 – 6000 ft	Altitude kit 1#
		6000 – 8000 ft	Altitude kit 2#

* Generator Set, Pressure Washer, Lawnmower, Compressor, Pump, Tiller etc.
** Elevation above sea level.

This high altitude jet is to be used at elevations above 3000 feet. At elevations above 8000 feet, the engine may experience decreased performance, even with the high altitude kit.
If a carburetor is replaced, the proper high altitude kit jet will need to be installed into the replacement carburetor.

WARNING! TO PREVENT SERIOUS INJURY FROM FIRE: FOLLOW THE KIT PROCEDURES IN A WELL-VENTILATED AREA AWAY FROM IGNITION SOURCES. IF THE ENGINE IS HOT FROM USE, SHUT THE ENGINE OFF AND WAIT FOR IT TO COOL BEFORE PROCEEDING.

NOTICE: THE WARRANTY MAY BE VOID IF NECESSARY ADJUSTMENTS ARE NOT MADE FOR HIGH ALTITUDE USE.

PRE-OPERATION

CHECK COMPONENT PARTS:
Check following items before starting engine:
1. Fuel leakage from fuel hose, etc.

2. Bolts and nuts for looseness.

3. Components for damage or breakage.

4. Generator not resting on or against any adjacent wiring.

CHECK GENERATOR SURROUNDINGS:
When listening to the radio near the generator, the radio sound may be disturbed on account of the radio wave condition and the radio performance.

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

WARNING: KEEP AREA CLEAR OF FLAMMABLES 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.

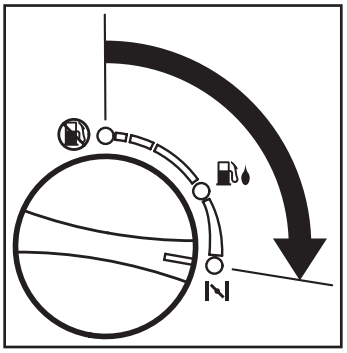
DO NOT BLOCK GENERATOR AIR VENTS WITH PAPER OR OTHER MATERIAL.

OPERATION

STARTING THE GENERATOR:

CAUTION: CHECK THE OIL LEVEL BEFORE EACH OPERATION AS OUTLINED ON PAGE 18.

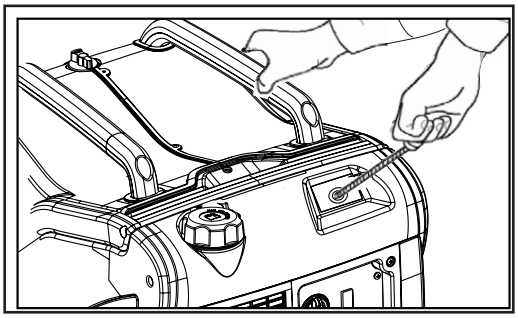
1. Make sure all appliances are disconnected from the generator.
2. Turn engine switch to the " " (CHOKE) position (Fig. 13). (When the engine is warm or temperature is high, start engine with the switch at " " (RUN) position).


(Fig. 13)

CAUTION: DO NOT CONNECT APPLIANCES WITH DEFECTIVE LINES AND/OR PLUGS.

BE SURE APPLIANCES ARE NOT CONNECTED TO GENERATOR WHEN STARTING UP. STARTING THE GENERATOR WITH AN APPLIANCE CONNECTED COULD RESULT IN DAMAGE TO THE GENERATOR AND/OR APPLIANCE AND PERSONAL INJURY.

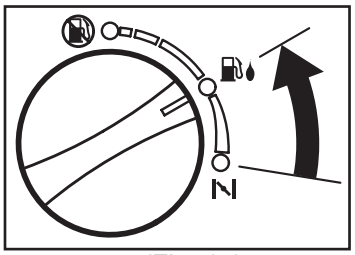
3. Pull the recoil starter handle slowly until passing the compression point (resistance will be felt), then return the handle to its original position and pull briskly. (Fig. 14)


(Fig. 14)

4. After starting, allow the recoil starter handle to return to its original position with the handle still in your hand.

NOTE: *If the engine fails to start after several attempts, repeat the starting procedures mentioned above with the engine switch placed at " " (RUN) position.*

5. After 20 to 30 seconds of warm-up is completed, turn the engine switch to " " (RUN) position. (Fig. 15)


(Fig. 15)

6. Make sure the output lamp is on. This indicates that the generator is properly operating.

NOTE: *Please consult with an authorized Mi-T-M Customer Service Representative if the output lamp is off during the proper operation.*

OPERATION

USING ELECTRIC POWER:

WARNING: MAKE SURE THAT THE APPLIANCE IS SWITCHED OFF BEFORE CONNECTING IT TO THE GENERATOR.

DO NOT MOVE THE GENERATOR WHILE IT IS RUNNING.

BE SURE TO GROUND THE GENERATOR. FAILURE TO GROUND UNIT MAY LEAD TO ELECTRICAL SHOCK.

AC APPLICATION:

1. Make sure the output lamp is turned on.
2. Turn off the switch(es) of the electrical appliance(s) before connecting to the generator.
3. Insert the plug(s) of the electrical appliance(s) into the receptacle.

   • Using Table 1, check appliance plug for compatibility with the generator receptacle.

   • Be sure that the total wattage of all connected appliances does not exceed the rated output of the generator, see specifications on page 34.

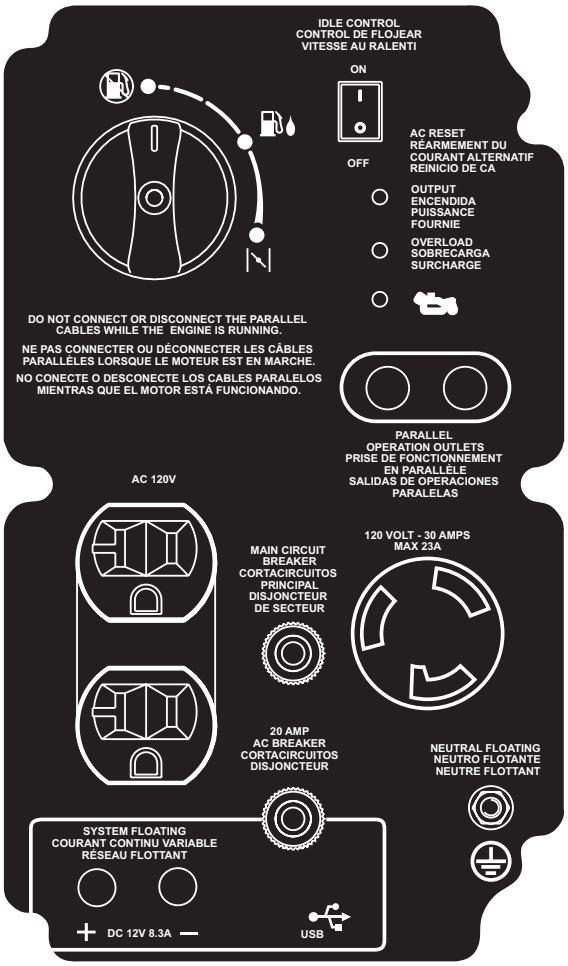
WARNING: BE SURE TO GROUND THE GENERATOR IF THE CONNECTED ELECTRICAL DEVICE IS GROUNDED.

NOTE: *The generator is equipped with an overload. If the generator shuts off during operation, the generator may be overloaded or the appliance may be defective.*

Stop the generator immediately, check the appliance and/or generator for overloading, and have repaired as necessary by an authorized Mi-T-M Customer Service Center.

4. Turn on the switch of the appliance.

CONTROL PANEL



Style	Receptacle	AC plug		Description
	NEMA 5-20R	NEMA 5-15P 	NEMA 5-20P 	Receptacle, duplex

Table 1

OPERATION

DC APPLICATION:
The DC terminal is used only for charging 12 volt batteries. It provides up to 12V - 8.3A (100W) of maximum power. (Fig. 16)

CONNECTION OF CABLE:
Connect positive terminal (red) on generator to positive (+) terminal on battery.

Connect negative terminal (black) on generator to negative (-) terminal on battery.

Both AC and DC output can be used at the same time if the total output is within rated output of the generator.

SAFETY PRECAUTIONS WHILE CHARGING:

WARNING: AN EXPLOSIVE HYDROGEN GAS IS DISCHARGED THROUGH VENT HOLES IN THE BATTERY DURING THE CHARGING PROCESS. DO NOT ALLOW SPARK OR OPEN FLAME AROUND THE GENERATOR OR BATTERY DURING THE CHARGING PROCESS.

ELECTROLYTE FLUID CAN BURN EYES AND CLOTHING. BE EXTREMELY CAREFUL TO AVOID CONTACT. IF INJURED, WASH THE AFFECTED AREA IMMEDIATELY WITH LARGE QUANTITIES OF WATER AND CONSULT A DOCTOR FOR TREATMENT.

When charging a large capacity battery or totally discharged battery, excessive current may force the DC breaker to turn off.

Battery defects may cause the DC breaker to trip. Check the battery before resetting the DC breaker.

STOPPING THE GENERATOR:
1. Turn off the power switch of the electric equipment and unplug the cord from receptacle of the generator.
2. Allow the engine about 3 minutes to cool down at no load before stopping.
3. Turn the engine switch to the position "⛽" (STOP). (See Fig. 17)

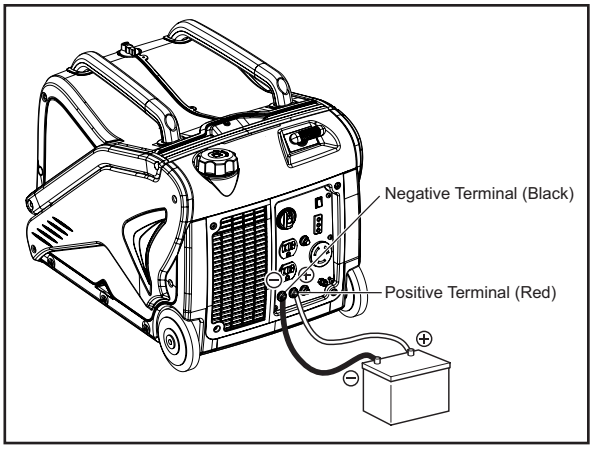
OIL SENSOR:
The oil sensor detects the fall in oil level in the crankcase and automatically stops the engine when the oil level falls below a predetermined level.

When the engine has stopped automatically, turn off the generator, and check the oil level. Refill engine oil to the upper level as instructed on page 21 and restart the engine.

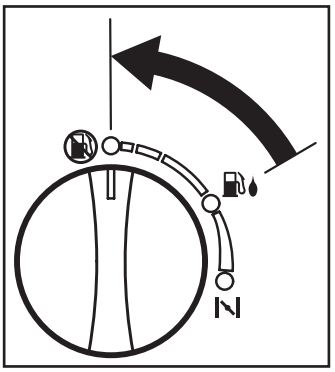
If the engine dose not start by usual starting procedures, check the oil level.

CAUTION: DO NOT REMOVE OIL SENSOR PROBE WHEN REFILLING WITH OIL.

REMOVE OIL FILLER CAP ON THE OPPOSITE SIDE OF CARBURETOR.



(Fig. 16)



(Fig. 17)

OPERATION

WATTAGE INFORMATION:

Some appliances need a “surge” of energy when starting. This means that the amount of electrical power needed to start the appliance may exceed the amount needed to maintain its use.

Electrical appliances and tools normally come with a label indicating voltage, cycles / Hz, amperage (amps) and electrical power needed to run the appliance or tool.

Check with your nearest dealer or service center with questions regarding power surge of certain appliances or power tools.

- Electrical loads such as incandescent lamps and hot plates require the same wattage to start as is needed to maintain use.
- Loads such as fluorescent lamps require 1.2 to 2 times the indicated wattage during start-up.
- Loads for mercury lamps require 2 to 3 times the indicated wattage during start-up.
- Electrical motors require a large starting current. Power requirements depend on the type of motor and its use. Once enough “surge” is attained to start the motor, the appliance will require only 30% to 50% of the wattage to continue running.
- Most electrical tools require 1.2 to 3 times their wattage for running under load during use.
- Loads such as submersible pumps and air compressors require a very large force to start. They need 3 to 5 times the normal running wattage in order to start.

NOTE: *The following wattage chart is general guide only. Refer to your specific appliance for correct wattage.*

To determine the total wattage required to run a particular electrical appliance or tool, multiply the voltage figure of the appliance / tool by the amperage (amps) figure of same. The voltage and amperage (amps) information can be found on a name plate which is normally attached to electrical appliances and tools.

CAUTION: IF AN ELECTRIC MOTOR FAILS TO START OR REACH RUNNING SPEED, TURN OFF THE APPLIANCE OR TOOL IMMEDIATELY TO AVOID EQUIPMENT DAMAGE. ALWAYS CHECK THE REQUIREMENTS OF THE TOOL OR APPLIANCE BEING USED COMPARED TO THE RATED OUTPUT OF THE GENERATOR.

Applications	Applicable Wattage (W) 60 Hz
Incandescent Lamp, Heater	approx. 1350
Fluorescent Lamp, Electric Tool	approx. 700
Mercury Lamp	approx. 400
Compressor Pump	approx. 300

OPERATION

CABLE SIZE:

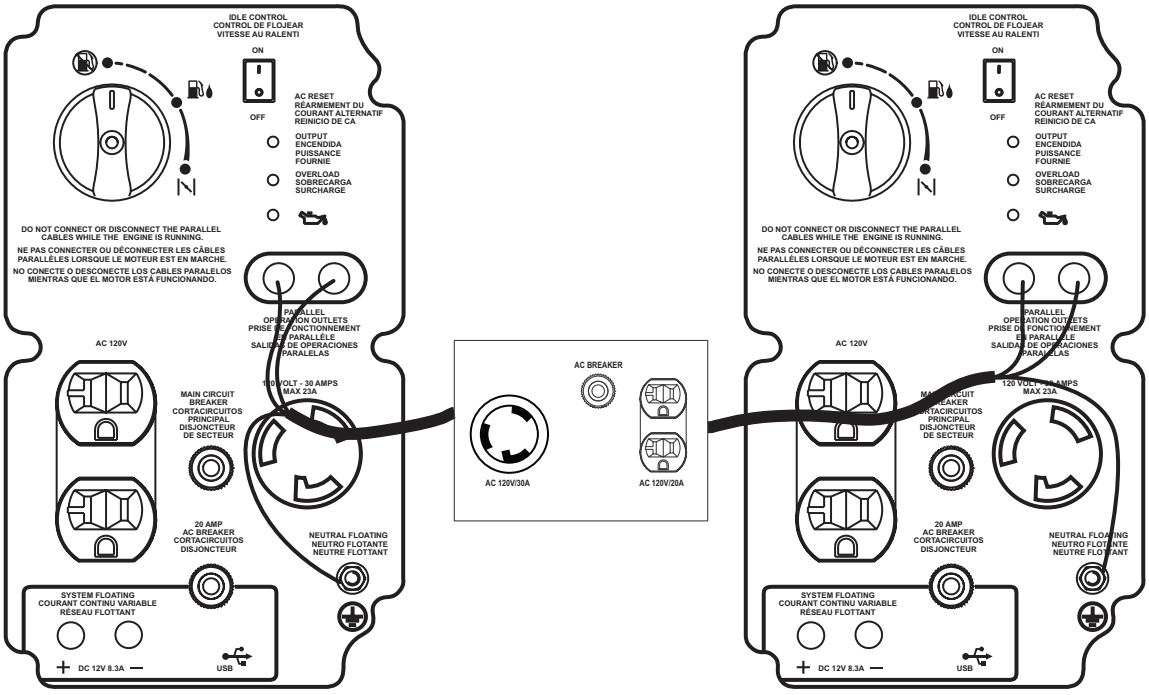
When a long electric extension cord is used to connect an appliance or tool to the generator, a certain amount of voltage drop or loss occurs in the extension cord which reduces the effective voltage available for the appliance or tool. The chart below has been prepared to illustrate the approximate voltage loss when an extension cord of 300 feet (approx. 100 meters) is used to connect an appliance or tool to the generator.
Equipment damage can result from low voltage. Therefore, to prevent excessive voltage drop between the generator and the equipment, the cable should be of adequate gauge for the length used. The cable selection chart gives the maximum cable lengths for various gauges of wire which can adequately carry the loads shown.

CURRENT	LOAD IN WATTS		MAXIMUM CABLE LENGTH (FEET)				
IN AMPS	120 VOLTS	240 VOLTS	#8 WIRE	#10 WIRE	#12 WIRE	#14 WIRE	#16 WIRE
2.5	300	600		1000	600	375	250
5	600	1200		500	300	200	125
7.5	900	1800		350	200	125	100
10	1200	2400		250	150	100	50
15	1800	3600		150	100	65	
20	2400	4800	175	125	75	50	
25	3000	6000	150	100	60		
30	3600	7200	125	65			
40	4800	9600	90				

PARALLEL CONNECTION:

First, connect the 2 inverters with 2 parallel cables as per the drawing below. Then start the inverters one at a time. At this time, the total rated power will be 3000W. The parallel cables must be connected to parallel outlet with the same color for each inverter.

Note: Ensure the cables are connected to the inverters correctly. If they are connected incorrectly, the inverters will not output any power and will need to be switched off and then on again after they are correctly connected. DO NOT connect or disconnect the parallel cables while the engine is running.



OPERATION

SPARK ARRESTER:
In a dry or wooded area, it is recommended to use the product with a spark arrester. Some areas require the use of a spark arrester. Please check your local laws and regulations before operating your product.

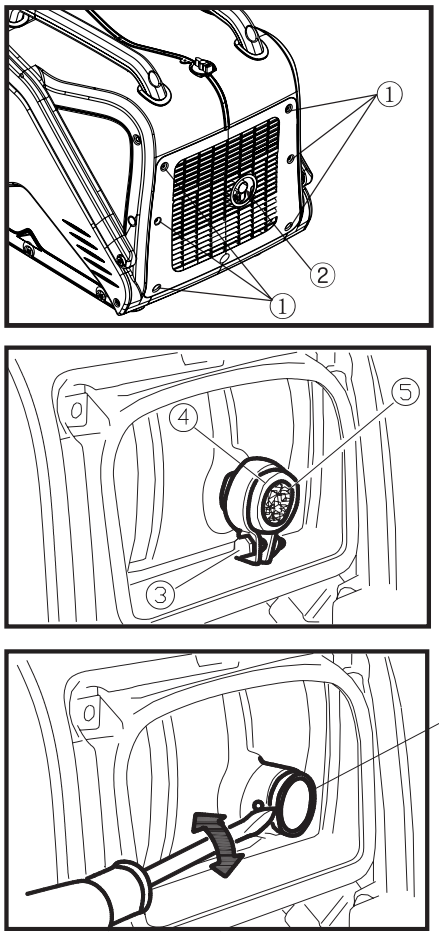
The spark arrester must be cleaned regularly to keep it functioning as designed.

A clogged spark arrester :
- Prevents the flow of exhaust gas
- Reduces engine output
- Increases fuel consumption
- Makes starting difficult

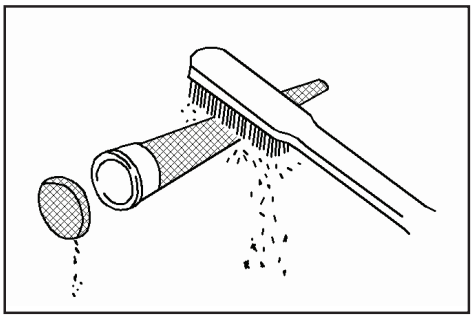
CAUTION: IF THE ENGINE HAS BEEN RUNNING, THE MUFFLER AND THE SPARK ARRESTER WILL BE VERY HOT. ALLOW THE MUFFLER TO COOL BEFORE CLEANING THE SPARK ARRESTER.

How to remove the spark arrester (Fig. 18):
1. Remove the flange bolts (1) from the muffler cover and remove the muffler cover (2).
2. Remove the bolt (3), muffler cap (4) and muffler screen (5) from the spark arrester and remove the spark arrester (6) from the muffler.

Clean the spark arrester screen (Fig. 19):
1. Use a brush to remove carbon deposits from the spark arrester screen. Be careful to avoid damaging the screen.
2. The spark arrester must be free of breaks and holes. Replace the spark arrester if it is damaged.
3. Install the spark arrester, and muffler protector in the reverse order of disassembly.



(Fig. 18)



(Fig. 19)

Troubleshooting

When generator engine fails to start after several attempts, or if no electricity is available at the output socket, check the following chart. If your generator still fails to start or generate electricity, contact your nearest Mi-T-M Customer Service Representative or service shop for further information or corrective procedures.

Symptom	Problem	Solution
Engine will not start.	Check if engine switch is off.	Turn engine switch to the "  " (CHOKE) position.
	Fuel Tank empty.	Fill tank making sure not to overfill.
	Check to make sure generator is not connected to an appliance.	If connected, turn off the power switch on the connected appliance and unplug.
	Check spark plug for loose spark plug cap.	If loose, push spark plug cap back into place.
	Check spark plug for contamination.	Remove spark plug and clean electrode.
	Check engine oil level.	If the engine oil level is low, add oil per "Pre-Operation; Engine Oil" on page 18.
Generator has no output. (Output Lamp is ON)	Check the AC and DC breakers. Check if the DC circuit breaker is turned off.	Depress the circuit breaker into the ON position, after making sure the electric power level is proper and the electric appliance (s) are in the normal condition.
Generator has no output. (Overload Lamp is ON)	Generator has no output.	Turn off the appliance, and disconnect cable from receptacle. Turn off unit and restart. Check to make sure overload lamp is not on. Reconnect appliance.
Generator has no output. (Output Lamp is OFF)	Check to see if the engine was started with appliances already connected to the generator.	Turn off the appliance, and disconnect cable from receptacle. Reconnect after the generator has been started properly.
		Contact an authorized Mi-T-M Customer Service Representative.

MAINTENANCE SCHEDULE

Maintenance, replacement or repair of the emission control devices and systems must be performed by an authorized Mi-T-M Customer Service Center.

DAILY INSPECTION:
Before running the generator, check the following service items:

- Leakage of gasoline and engine oil.
- AC receptacle and DC terminal for damage.
- Excessive vibration, noise.
- Loose or broken bolts, nuts or shields.
- Clean air element.

PERIODIC MAINTENANCE:
Periodic maintenance is vital to safe and efficient operation of your generator.

Check the Periodic Maintenance Table for periodic maintenance intervals.

NOTE: *REPLACEMENT, REPAIR AND ADJUSTMENT OF THESE COMPONENTS MUST BE PERFORMED BY AN AUTHORIZED Mi-T-M SERVICE CENTER.*

The emission control system consists of the following parts:

- Carburetor and internal parts
- Cold start enrichment system, if applicable
- Intake manifold, if applicable
- Air cleaner element
- Spark plug
- Magneto or electronic ignition system
- Spark advance / retard system, if applicable
- Exhaust manifold, if applicable
- Hoses, belts, connectors, and assemblies

MAINTENANCE SCHEDULE

PERIODIC MAINTENANCE TABLE:
The maintenance schedule indicated in the table is based on the normal generator operation. Should the generator be operated in extremely dusty condition or in heavier loading condition, the maintenance intervals must be shortened depending on the contamination of oil, clogging of filter elements, wear of parts, and so on.

Maintenance Item	Every 8 hours (Daily)	Every 20 hours (first month)	Every 50 hours (3 months)	Every 100 hours (yearly)
Check And Refill Engine Oil.	•			
Change Engine Oil.		•	•	
Check Reduction Gear Oil (If Equipped).	•			
Replace Reduction Gear Oil (If Equipped).		•	•	
Check Air Element.	•			
Clean Air Element.		•		
Replace Air Element.			•	
Clean Deposit Cup (If Equipped).				•
Check-Adjust Spark Plug.				•
Replace Spark Plug.		Every year or 250 hours of operation		
Clean Spark Arrester			•	
Check-Adjust Idling (If Equipped).*				•
Check-Adjust Valve Clearance*				•
Clean Fuel Tank and Fuel Filter				•
Check Fuel Line		Every 2 years (replace if necessary)		
Clean Up Carbon Cylinder head.*		<255cc, Every 125 hours; >255cc, Every 250 hours		

**NOTE: As to the procedures for these items, contact your authorized Mi-T-M Customer Service Representative.*

MAINTENANCE SCHEDULE

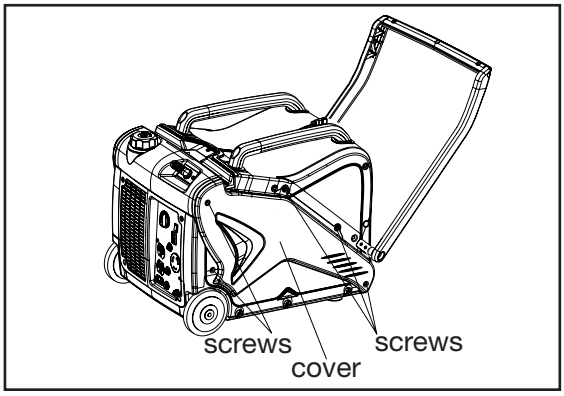
CHANGING ENGINE OIL:
Avoid draining the engine oil immediately after stopping the engine. The oil is hot and should be handled with care to avoid burns.

1. Place the generator on a level surface and warm up the engine for several minutes. The stop the engine and turn the 3 in 1 switch knob, fuel tank cap air vent knob to “OFF”.
2. Remove the screws and then remove the cover (Fig. 20).
3. Remove the oil filler cap (Fig. 21).
4. Place an oil pan under the engine. Tilt the generator to drain the oil completely.
5. Replace the generator on a level surface.
6. Add engine oil to the upper level (Fig 22).

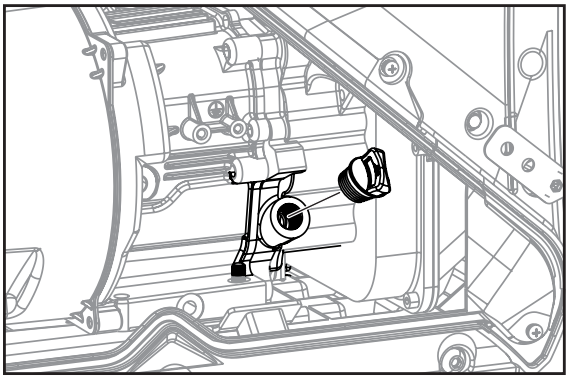
Note: Do not tilt the generator when adding engine oil. This could result in overfilling and damage to the engine.

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. Always keep the element clean.

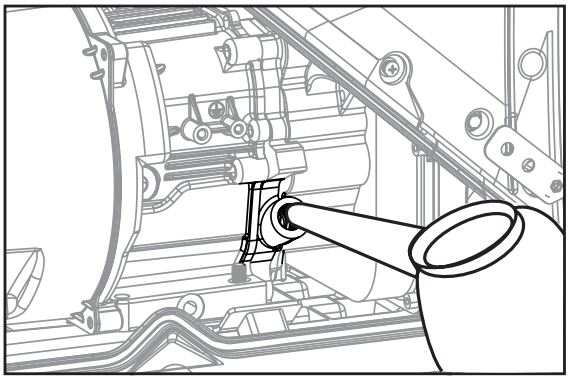
1. Remove the screws, and then remove the cover (Fig. 20).
2. Remove the screw and then remove the air filter case cover (Fig. 23).
3. Remove the foam element.
4. Wash the foam element in solvent and dry it.
5. Oil the foam element and squeeze out excess oil. The foam element should be wet but not dripping.



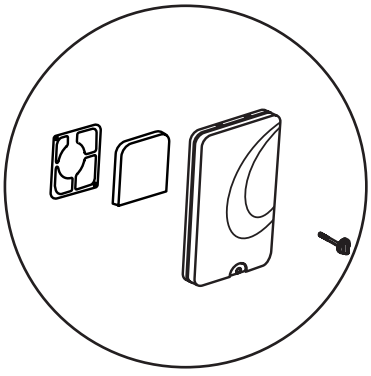
(Fig. 20)

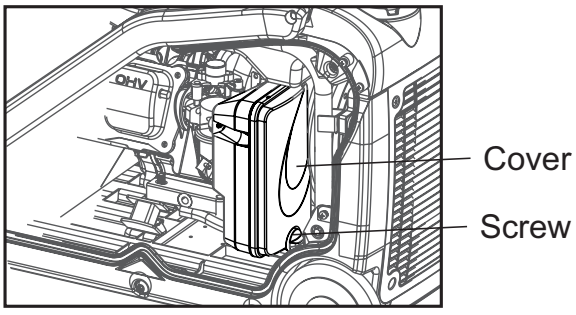


(Fig. 21)



(Fig. 22)





(Fig. 23)

MAINTENANCE SCHEDULE

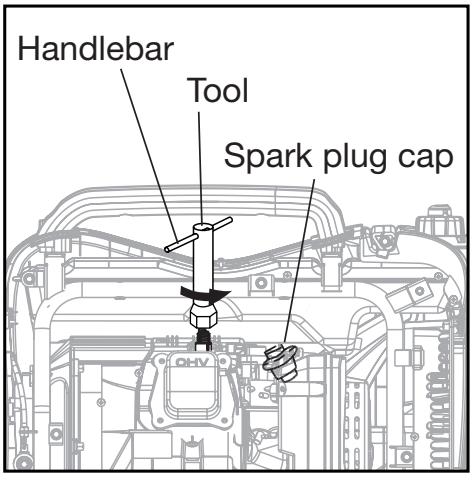
CLEANING AND GAPPING SPARK PLUG:
If the plug is contaminated with carbon, remove the carbon using a plug cleaner or wire brush. (Fig. 24)

Adjust the electrode gap to 0.7 to 0.8 mm (0.028 to 0.031 in). (Fig. 25)

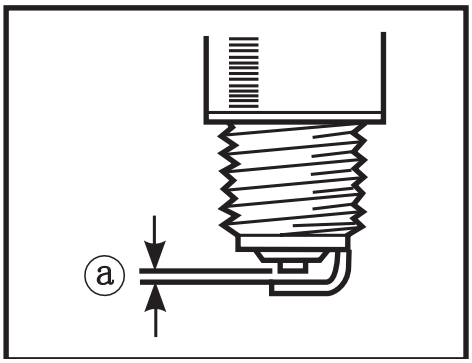
Torque: 28 N*m, (2.85 kgf*m, 18lbf*ft)

Recommended Spark Plug:

NGK PART#	NGK STOCK #
BP6ES	7131



(Fig. 24)



(Fig. 25)

Storage

PREPARATION FOR STORAGE

The following procedures should be followed prior to storage of your generator for periods of 6 months or longer.

1. Drain fuel from fuel tank carefully by disconnecting the fuel line. Gasoline left in the fuel tank will eventually deteriorate making engine-starting difficult.
2. When draining fuel from the fuel tank, it is best use a hand pump and set it into the refilling port. Do not tip unit over to empty fuel.
3. Remove the drain screw of the carburetor.
4. Change engine oil.
5. Check for loose bolts and screws, tighten them if necessary.
6. Clean generator thoroughly with clean cloth. **NEVER USE WATER TO CLEAN GENERATOR!**
7. Pull recoil starter handle until resistance is felt, leaving handle in that position.
8. Store generator in a well ventilated, low humidity area.

Specifications

SPECIFICATIONS

ITEM	SPECIFICATION
ALTERNATOR	Multipole, Revolving Field, Self Exciting, Inverter type
Frequency	60 Hz
Rated voltage	AC 120V
Rated output	2800 VA
Rated Amperage	23.3 A
Rated power factor	1.0
DC output	12V @ 8.3A
Over current protector	Circuit Breaker
GROUND SYSTEM	Neutral Ground
ENGINE	Forced air-cooled, 4-cycle, OHV Gasoline Engine
Displacement	212 cc
Fuel	Automotive Unleaded Gasoline
Fuel tank capacity (gal./L)	1.89 / 7.0
Rated continuous operation	5 hours @ 100% Load
Starting system	Recoil starter
DIMENSION	Length: 23.8 in (605 mm) Width: 17.0 in (432 mm) Height: 19.4 in (493 mm)
DRY WEIGHT	81.6 lb. (37kg)
EMISSIONS DURABILITY PERIOD (California Only)	125 hours

RECORD SERIAL NUMBER

Write you model number, machine serial number (see serial number tag in illustration) and date of purchase in the spaces provided below. Your dealer needs this information when ordering parts.

Model No. _____

Machine Serial No. _____

_____

Date of Purchase _____
(To be filled in by purchaser)

Gasoline generator set / Groupes électrogènes essence

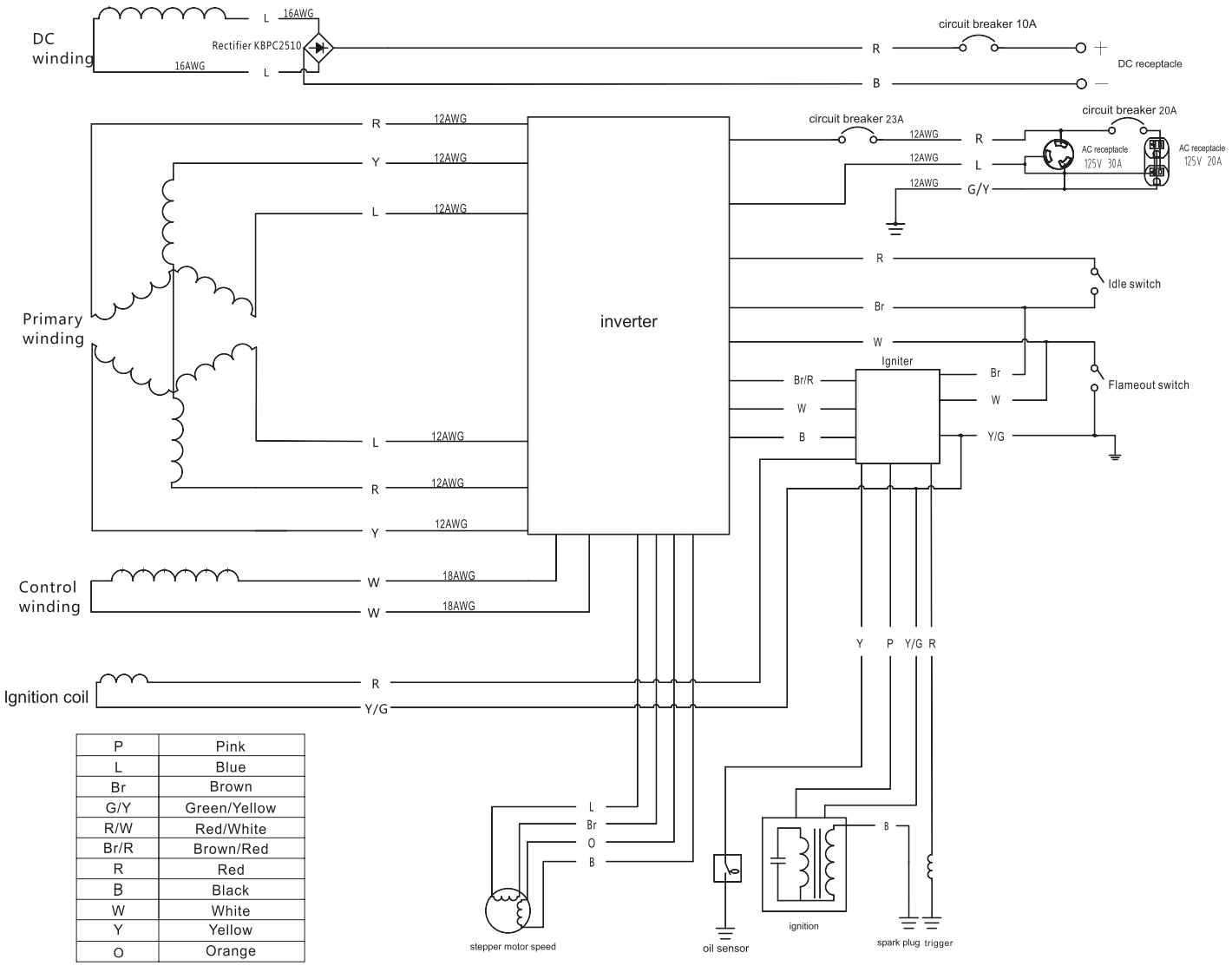
Model / Modéle:	GEN-3000-iMM0/R3000iSPB	Time Rating /	
Serial Number/Numéro De Sér:	XXXXXXXXXX	Rated power / Puissance nominale:	2.8kW
AC voltage / Tension C.A.:	120V	Insulation Class/Classes Insullation:	F
Current / Courant:	23A	Rated load speed/Tours par minute:	3600RPM
Frequency / Frequénce :	60Hz	Power factor / Facteur de puissance:	1
Phase/Phase:	Single/Seul	DC Output / Tension Inténsite CC:	12V 8.3A

Maximum ambient temperature / Température maximale: 40 C°
Date of manufacture / Date de fabrication: 2016- 1 2 3 4 5 6 7 8 9 10 11 12

For electrical equipment only / Pour matreriel electrique seulement
For use in a weather protected area only/
Employez uniquement dans un emplacement a l'abri des intemperies
Do not use AC and DC at the same time / Ne pas utiliser CA et CC en meme temps

248323

Wire Diagram



P	Pink
L	Blue
Br	Brown
G/Y	Green/Yellow
R/W	Red/White
Br/R	Brown/Red
R	Red
B	Black
W	White
Y	Yellow
O	Orange

STATEMENT OF WARRANTY

Mi-T-M warrants all parts, (except those referred to below), of your new generator to be free from defects in materials and workmanship during the following periods:

For One (1) Years from the date of original purchase.

Defective parts not subject to normal wear and tear will be repaired or replaced at our option during the warranty period. In any event, reimbursement is limited to the purchase price paid.

EXCLUSIONS

1. Engine/Motor and Generator are covered under separate warranty by its respective manufacturer and is subject to the terms set forth therein.
2. This warranty does not cover parts damaged due to normal wear, misapplication, misuse, operation at other than recommended . Failure to follow recommended operating and maintenance procedures also voids warranty.
3. The use of other than genuine manufacturer repair parts will void warranty.
4. Parts returned, prepaid to our factory or to an Authorized Mi-T-M Service Center will be inspected and replaced free of charge if found to be defective and subject to warranty. There are no warranties which extend beyond the description of the face hereof. Under no circumstances shall the manufacturer bear any responsibility for loss of use of the unit, loss of time or rental, inconvenience, commercial loss or consequential damages.

For Service or Warranty Consideration, contact
Mi-T-M® Corporation, 50 Mi-T-M Drive, Peosta, IA 52068
563-556-7484 / 800-553-9053 / Fax 563-556-1235
Monday - Friday 8:00 a.m. - 5:00 p.m. CST

CALIFORNIA EMISSIONS CONTROL WARRANTY STATEMENT
YOUR WARRANTY RIGHTS AND OBLIGATIONS

The California Air Resources Board and Mi-T-M are pleased to explain the emission control system warranty on your 2016 small off-road engine/equipment (SORE). In California, new SOREs must be designed, built and equipped to meet the State's stringent anti-smog standards. Mi-T-M must warrant the evaporative emissions control system (EECS) on your SOREs for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your SOREs.

Your EECS may include parts such as the carburetor, fuel-injection system, the ignition system, catalytic converter, fuel tanks, fuel lines, fuel caps, valves, canisters, filters, vapor hoses, clamps, connectors, belts and other associated emission-related components. Where a warrantable condition exist, Mi-T-M will repair your small off-road engine at no cost to you including diagnosis, parts and labor.

MANUFACTURER'S WARRANTY COVERAGE:

This EECS is warranted for two years. If any evaporative emissions-related part on your small off-road engine/equipment is defective, the part will be repaired or replaced by Mi-T-M.

OWNER'S WARRANTY RESPONSIBILITIES:

-As the SORE owner, you are responsible for performance of the required maintenance listed in your owner's manual. Mi-T-M recommends that you retain all receipts covering maintenance on your SORE , but Mi-T-M cannot deny warranty solely for the lack of receipts.

-As the SORE owner, you should however be aware that Mi-T-M may deny you warranty coverage if your SORE or a part has failed due to abuse, neglect, or improper maintenance or unapproved modifications.

-You are responsible for presenting your SORE to distribution center or service center authorized by Mi-T-M Corporation, 50 Mi-T-M Drive, Peosta, IA 52068 (herein Mi-T-M) as soon as the problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.

If you have a question regarding your warranty coverage, you should contact Mi-T-M Customer Service Department at 1-800-553-9053 or by emailing us at corp@mitm.com.

GENERAL EMISSIONS WARRANTY COVERAGE
- CALIFORNIA ONLY -

Mi-T-M warrants to the ultimate purchaser and each subsequent purchaser that the SORE (1) has been designed, built and equipped so as to conform with all applicable regulations; and (2) is free from defects in materials and workmanship that cause the failure of a warranted part to conform with those regulations as may be applicable to the terms and conditions stated below.

(a) The warranty period begins on the date the engine is delivered to an ultimate purchaser or first placed into service. The warranty period is two years.

(b) Subject to certain conditions and exclusions as stated below, the warranty on emissions related parts is as follows:

(1) Any warranted part that is not scheduled for replacement as required maintenance in your owner's manual is warranted for the warranty period stated above. If the part fails during the period of warranty coverage, the part will be repaired or replaced by Mi-T-M according to subsection (4) below. Any such part repaired or replaced under warranty will be warranted for the remainder of the period.

(2) Any warranted part that is scheduled only for regular inspection in your owner's manual is warranted for the warranty period stated above. Any such part repaired or replaced under warranty will be warranted for the remaining warranty period.

(3) Any warranted part that is scheduled for replacement as required maintenance in your owner's manual is warranted for the period of time before the first scheduled replacement date for that part. If the part fails before the first scheduled replacement, the part will be repaired or replaced by Mi-T-M according to subsection (4) below. Any such part repaired or replaced under warranty will be warranted for the remainder of the period prior to the first scheduled replacement point for the part.

(4) Repair or replacement of any warranted part under the warranty provisions herein must be performed at a warranty station at no charge to the owner.

(5) Not withstanding the provisions herein, warranty services or repair will be provided at all of our distribution centers that are franchised to service the subject engines.

(6) The owner must not be charged for diagnostic labor that leads to the determination that a warranted part is in fact defective, provided that such diagnostic work is performed at a warranty station.

(7) Mi-T-M is liable for damages to other engine components proximity caused by a failure under warranty of any warranted part.

(8) Throughout the engine warranty period stated above, Mi-T-M will maintain a supply of warranted parts sufficient to meet the

expected demand for such parts.

(9) Any replacement part may be used in the performance of any warranty maintenance or repairs and must be provided without charge to the owner. Such use will not reduce the warranty obligations of Mi-T-M.

(10) Add-on or modified parts that are not exempted by the Air Resources Board may not be used. The use of any non-exempted add-on or modified parts by the ultimate purchaser will be grounds for disallowing a warranty claims. Mi-T-M will not be liable to warrant failures of warranted parts caused by the use of a non-exempted add-on or modified part.

(c) WARRANTED PARTS:

The repair or replacement of any warranted part otherwise eligible for warranty coverage may be excluded from such warranty coverage if Mi-T-M demonstrates that the engine has been abused, neglected, or improperly maintained, and that such abuse , neglect ,or improper maintenance was the direct cause of the need for repair or replacement of the part. That notwithstanding, any adjustment of a component that has a factory installed, and properly operating, adjustment limiting device is still eligible for warranty coverage. The following emissions warranty parts list are covered.

(1) Fuel Metering System
- (A) Carburetor and internal parts (and/or pressure regulator or fuel injection system).
- (B) Air/fuel ratio feedback and control system, if applicable.
- (C) Cold start enrichment system, if applicable.
- (D) Regulator assy (gaseous fuel, if applicable)

(2) Air Induction System
- (A) Intake manifold, if applicable
- (B) Air filter.
- (C) Controlled hot air intake system.

(3) Ignition System
- (A) Spark plugs.
- (B) Magneto or electronic ignition system.
- (C) Spark advance/retard system, if applicable.

(4) Exhaust manifold, if applicable

(5) Evaporation System
- (A) Fuel line
- (B) Fuel line fittings
- (C) Fuel Tank and Cap
- (D) Carbon Canisters and Mounting Brackets

(6) Exhaust Gas Recirculation (EGR) System
- (A) EGR valve body, and carburetor spacer if applicable.
- (B) EGR rate feedback and control system.

(7) Air Injection System
- (A) Air pump or pulse valve.
- (B) Valves affecting distribution of flow.
- (C) Distribution manifold.

(8) Catalyst or Thermal Reactor System
- (A) Catalytic converter.
- (B) Thermal reactor.
- (C) Exhaust manifold.

(9) Particulate Controls
- (A) Traps, filters, precipitators, and any other device used to capture particulate emissions.

(10) Miscellaneous Items Used in Above Systems
- (A) Electronic controls.
- (B) Vacuum, temperature, and time sensitive valves and switches.
- (C) Hoses, belts, connectors, and assemblies.