



OPERATOR'S MANUAL FOR

GEN-3000-1MKO

GEN-3000-1MHO

GEN-3000/4000-0MHO

GEN-4000/5000-0MSO

GEN-5000-0MKO

GEN-5000-0MHO

PORTABLE GENERATORS



201473



CAUTION

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

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 motor 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.

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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.

Contents

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.

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.

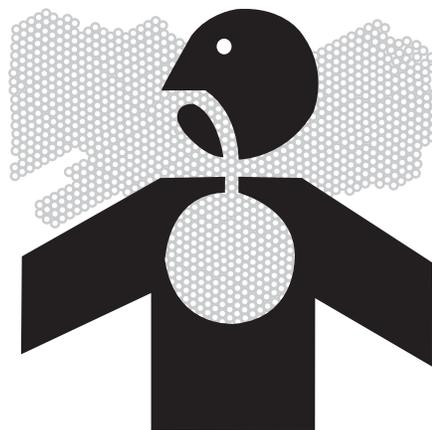
ONLY run generator outdoors and away from air intakes.

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.

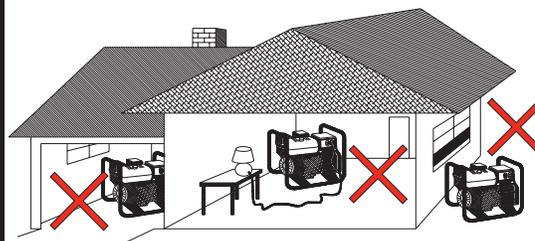
If you start to feel sick, dizzy, or weak while using the generator, shut it off and get fresh air **RIGHT AWAY**. See a doctor. You may have carbon monoxide poisoning.

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.



DANGER / PELIGRO



• DO NOT USE INDOORS OR OUTSIDE OPEN WINDOWS FUMES CAN KILL YOU!
• NE PAS UTILISER À L'INTÉRIEUR OU À L'EXTÉRIEUR DES FENÊTRES OUVERTES. LES VAPEURS DE GAZ PEUVENT VOUS TUER!
• ¡NO USE ADENTRO O AFUERA DE VENTANAS ABIERTAS LOS GASES PUEDEN MATARLE!

34-1563-E/F/S-062104-ENG.



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.

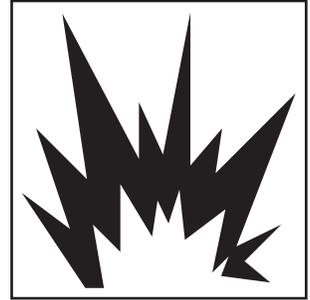
Do not overfill the fuel tank, leave room for the fuel to expand.

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.



GROUND FAULT CIRCUIT INTERRUPTER PROTECTION

These generators are equipped with two GFCI (Ground Fault Circuit Interrupters) 120V duplex receptacles for protection against the hazards of electrical shock from defective attachments such as, tools, cords, and cables.



WARNING: The GFCIs may not function unless the generator is properly grounded. Follow the correct procedure specified in the section labeled "GROUNDING INSTRUCTIONS"

A GFCI is a device that interrupts electricity from either the utility or generator by means of a special type of circuit breaker if a fault current flow to the ground occurs.



WARNING: Only the 120V Duplex Receptacles are protected by the GFCI.

A GFCI can be used only with generators that have the neutral wire internally bonded to the frame, and the frame properly grounded to the earth. A GFCI will not work on generators that do not have the neutral wire bonded to the frame, or on generators which have not been properly grounded. All Mi-T-M generators have internally bonded ground wires. A GFCI will not work if the unit is not properly grounded.

A GFCI may be required by OSHA regulations, the National Electric Code and/or local and federal codes when operating a generator.

For additional protections against shock hazards due to defective equipment attached to the twist-lock receptacles, consider the use of a GFCI on each of these receptacles as well.

GFCIs and GFCI protected cord sets and cables may be purchased from local electrical supply houses.



ELECTRICAL HAZARDS

This product must be grounded. It has permanent conductor between the generator (stator winding) and the frame. 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.

Risk of electric shock if you operate this generator with a faulty GFCI (Ground Fault Circuit Interrupter). Test GFCI before each use, see Operations Instructions for further information. If GFCI fails test, DO NOT use your generator. Contact your Mi-T-M Customer Service Representative.

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.

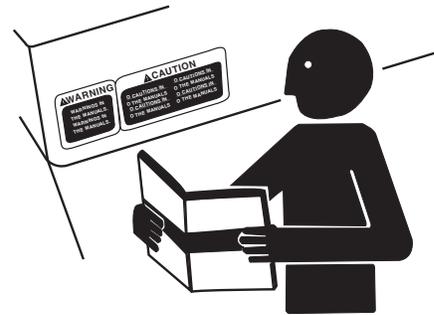




IMPORTANT SAFETY INSTRUCTIONS

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:

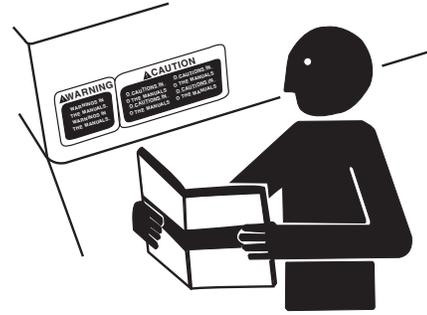
1. Read all the instructions before using the product.
2. This product is equipped with a Ground Fault Circuit Interrupter (GFCI) in the power cord to reduce the risk of electrical shock. If replacement of the plug or cord is needed, use only identical replacement parts.
3. Do not allow children or untrained persons to operate the generator.
4. Do not operate the generator when fatigued or under the influence of drugs or chemicals. Stay alert. Watch what you are doing.
5. Follow the maintenance instructions specified in this manual.
6. When starting the generator, using recoil starter grip, be sure that nothing is in a position to be hit by the operator's hand or arm.
7. Be sure the switch on electric power tools is in the "OFF" position before plugging them into the generator.
8. Keep the immediate area free of all bystanders.
9. Be sure each person who operates this generator is properly instructed in its safe operation.





IMPORTANT SAFETY INSTRUCTIONS

10. Do not operate the generator or any electrical tool in any area where water or similar materials constitute an electrical hazard to the operator. **Do not operate on wet surfaces, in rain or in snow.**
11. Always be sure that the generator is on secure footing so that it cannot slide or shift around, endangering workers.
12. Avoid contacting the hot exhaust manifold, muffler or cylinder(s). Keep clear of all rotating parts.
13. Unless the tool or appliance is double insulated, it must be grounded through a properly grounded receptacle. (See Preparing the Generator, Grounding Instructions). Tools and appliances which have 3 prong plugs must be plugged into extension cords and electrical receptacles with 3 holes. Before operating any electrical item, be sure it is in good repair.
14. Follow instructions in this manual when testing Ground Fault Circuit Interrupter to insure reliable operation.
15. **Beware of using this equipment in confined spaces.** Confined spaces, without sufficient fresh air ventilation, can contain dangerous gases. Running gasoline engines in such environments can lead to deadly explosions and/or asphyxiation.
16. If your generator comes equipped with a transport dolly, make sure this unit is secure during operation and when transporting to prevent unexpected movement or rolling.
17. Use extreme caution when lifting this generator. Do not use dolly handles to lift this generator, use only designated lifting hook to lift this generator. This generator is heavy so proper lifting techniques should be used.



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.

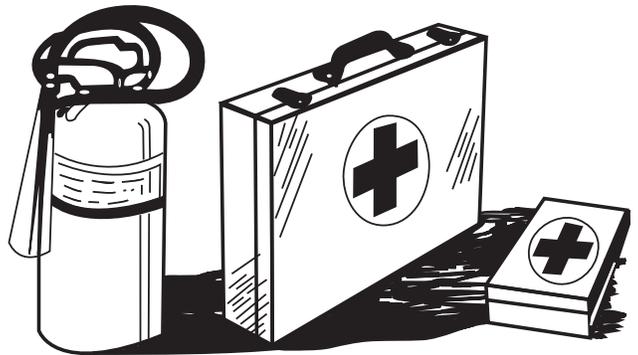


PREPARE FOR EMERGENCIES

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 battery (if equipped) and allow unit to cool down.

Service generator in a clean dry flat area.



SAFETY SIGNS FOR GEN-3000-0MH0



34-0889
Location: Frame Assembly

OPERATION	D'UTILISATION	OPERACIÓN
<p>Read Operator's Manual carefully before operating this unit. Always make sure unit is level and properly grounded. Check engine oil before starting.</p> <p>START-UP:</p> <ol style="list-style-type: none"> 1. Open fuel valve. 2. Move choke lever to full choke. 3. Turn engine ignition switch to ON position. 4. Pull recoil to start engine. 5. Once engine has started, slowly move choke lever to no choke. 6. Allow unit to run two (2) minutes to warm-up. 7. Loads can now be applied to unit. <p>SHUT-DOWN:</p> <ol style="list-style-type: none"> 1. Remove all load by turning off electrical appliances and unplugging electric cords. 2. Allow engine to run at idle speed to cool two (2) minutes. Not allowing engine to cool may result in damage to unit. 3. Turn off engine ignition switch. 4. Close fuel valve. <p>TEST GFCI RECEPTACLE(S) BEFORE EACH USE. SEE OPERATORS MANUAL FOR INSTRUCTIONS.</p>	<p>Lire soigneusement le manuel de l'utilisateur avant de se servir de l'appareil. S'assurer toujours que l'appareil est sur une surface plane et qu'il est correctement relié à la terre. Vérifier le niveau d'huile du moteur avant le démarrage.</p> <p>DEMARRAGE:</p> <ol style="list-style-type: none"> 1. Ouvrir la soupape de carburant de l'appareil ou du moteur. 2. Placer la manette du starter en position maximum. 3. Mettre le contact du moteur en position de marche (ON). 4. Tirer le lanceur à rappel pour démarrer le moteur. 5. Lorsque le moteur a démarré, ramener doucement la manette du starter en position fermée. 6. Permettre à l'appareil de tourner pendant deux (2) minutes pour qu'il se réchauffe. 7. L'appareil peut maintenant prendre des charges. <p>ARRÊT:</p> <ol style="list-style-type: none"> 1. Supprimer les charges en éteignant les appareils électriques et débranchant les raccords électriques. 2. Laisser le moteur tourner au ralenti pendant deux (2) minutes pour qu'il refroidisse. L'appareil peut être endommagé si on ne permet pas au moteur de refroidir. 3. Fermer le contact du moteur. 4. Fermer la soupape de carburant sur l'appareil ou le moteur. <p>TESTER LA (LES) PRISE (S) GFCI AVANT CHAQUE UTILISATION. VOIR LE MANUEL DE L'UTILISATEUR POUR LES INSTRUCTIONS À SUIVRE.</p>	<p>Lea manual de operador antes de operar esta unidad. Siempre asegúrese que unidad sea plana y conecte a tierra correcto. Revise el aceite de motor antes de empezando.</p> <p>OPERACIÓN:</p> <ol style="list-style-type: none"> 1. Abra válvula de combustible en unidad o motor. 2. Mueva palanca de choke a choke completo. 3. Doble interruptor de ignición de motor a posición de ON. 4. Tire retroceso para empezar el motor. 5. Cuando motor empieza, mueva muy despacio la palanca de choke a no choke. 6. Permita la unidad a opere por dos (2) minutos para precalentamiento. 7. Ahora cargas pueden aplicar a la unidad. <p>APAGADO:</p> <ol style="list-style-type: none"> 1. Quite todas cargas como apagando aparatos eléctricos y desconecten cordones eléctricos. 2. Permita el motor a operar a velocidad de flojea para enfriarse por dos (2) minutos. No permitiendo enfriarse del motor puede resultar en daño a la unidad. 3. Apague interruptor de ignición de motor. 4. Cierre válvula de combustible en unidad o motor. <p>EXAMINE GFCI RECIPIENTES ANTES DE CADA USO. VEA MANUAL DE OPERADOR PARA INSTRUCCIONES.</p>

34-1681
Location: Control Panel

⚠ DANGER	⚠ DANGER	⚠ PELIGRO
 <p>Using a generator indoors CAN KILL YOU IN MINUTES.</p> <p>Generator exhaust contains carbon monoxide. This is a poison you cannot see or smell.</p> <p>NEVER use inside a home or garage, EVEN IF doors and windows are open.</p> <p>Only use OUTSIDE and far away from windows, doors, and vents.</p>	<p>L'utilisation d'un groupe électrogène à l'intérieur PEUT VOUS TUER EN QUELQUES MINUTES.</p> <p>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.</p> <p>Ne JAMAIS utiliser à l'intérieur d'une maison ou d'un garage, MÊME SI les portes et fenêtres s'ont ouvertes.</p> <p>N'utiliser qu'à l'EXTÉRIEUR et bien éloigné des fenêtres, portes, et conduits d'aération.</p>	<p>Utilizando un generador adentro PUEDE MATARLE EN MINUTOS.</p> <p>El escape de generador contiene monóxido de carbono. Este es un gas tóxico que usted no puede ver ni puede oler.</p> <p>Nunca utilice dentro de un hogar ni el garaje, INCLUSO SI puertas y ventanas estén abiertas.</p> <p>Solo utilice AFUERAS y lejos de ventanas abiertas, las puertas, y descargas.</p>
 <p>EXPLOSIVE FUEL</p> <p>Gasoline is extremely flammable and its vapors can explode if ignited causing serious injury or death.</p> <ul style="list-style-type: none"> • 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. <p>• Do NOT overfill fuel tank.</p> <p>• Never use gasoline as a cleaning agent. Wipe up any spills immediately.</p>	<p>CARBURANT EXPLOSIF</p> <p>L'essence est extrêmement inflammable et ses vapeurs peuvent exploser si on l'enflamme qui peut entraîner des blessures graves ou la mort.</p> <ul style="list-style-type: none"> • N'entreposer l'essence que dans des contenants 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. 	<p>COMESTIBLE EXPLOSIVO</p> <p>Gasolina es inflamable sumamente y sus vapores pueden explotar si inflamarse que puede resultar en lesiones graves o muerte.</p> <ul style="list-style-type: none"> • Mantenga gasolina solo en envases autorizados, áreas 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 inmediatamente.
 <p>SHOCK</p> <p>A generator is a potential shock hazard which can result in serious injury or death.</p> <ul style="list-style-type: none"> • 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. • GFCI receptacles must be tested before each use. See operators manual. <p>• Always keep generator four (4) feet from any structure.</p> <p>• Always remove refueling gas can from generator area.</p>	<p>DÉCHARGE</p> <p>Un générateur pose un danger de décharge électrique qui peut entraîner des blessures graves ou la mort.</p> <ul style="list-style-type: none"> • 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. • Les prises GFCI doivent être testées avant chaque utilisation. Voir le manuel de l'utilisateur. • 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. 	<p>DESCARGA</p> <p>Un generador es un potencial riesgo de descarga que puede resultar en lesiones graves o muerte.</p> <ul style="list-style-type: none"> • Generadores tienen que mantener secos. • No opere esta unidad con manos mojadas. • Generador TIENE que sea conectado a tierra antes de uso. Vea manual de operador para instrucciones específicas. • Use caución extremo cuando rellenando esta unidad. • GFCI recipientes tienen que tener un examen antes de cada uso. Vea manual de operador. • Siempre mantenga el generador cuatro (4) pisos de alta estructura. • Siempre quite lata de gasolina de rellenando de area de generador.

34-1576
Location: Top Cover



SAFETY SIGNS FOR GEN-3000-1MH0, GEN-4000-0MS0, GEN-4000-0MH0, GEN-5000-0MS0, GEN-5000-0MK0



34-0889
Location: Frame Assembly

▲WARNING		▲AVERTISSEMENT		▲ADVERTENCIA													
	POISONOUS GAS The potential gas of carbon monoxide, a colorless gas that can kill you. You CANNOT smell it or taste it. Stay away from air intake. NEVER run generator inside homes, garages, sheds, or other semi-enclosed spaces. These spaces can trap poisonous gases. NEVER run a fan or open doors and windows. If you start to feel sick, dizzy or weak while using the generator, shut it off and get fresh air RIGHT AWAY. See a doctor. You may have carbon monoxide poisoning.		EXPLOSIVE FUEL Gasoline is extremely flammable and its vapors can explode if ignited causing serious risk of death. Only in approved containers. Do NOT refuel or fill with fuel before generator. NEVER use approved refueling stations. See operator manual for specific instructions. • 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 oily spills immediately.		SHOCK A generator is a potential shock hazard which can result in serious injury or death. • Do NOT touch live parts. • Do NOT operate unit with wet hands. • Always keep generator four (4) feet from any structure. • Always remove refueling gas can from generator area.		UN TONIQUE Ce produit est une flammable de carbone, un gaz incolore et sans odeur. Vous ne pouvez pas le sentir, ni voir, ni le goûter. Restez loin de l'admission d'air. NE JAMAIS utiliser le générateur à l'intérieur de maisons, garages, remises, ou autres espaces partiellement fermés. Ces espaces peuvent retenir des gaz toxiques même si vous utilisez un ventilateur ou si vous ouvrez des portes et fenêtres. Si vous commencez à vous sentir malade, étourdi, vertige ou perdre l'équilibre ou à vomir, il est temps d'arrêter le générateur. Voir un médecin immédiatement. Voir l'étiquette d'avertissement sur le récipient de carburant. • NE JAMAIS utiliser le générateur à l'intérieur de maisons, garages, remises, ou autres espaces partiellement fermés. Ces espaces peuvent retenir des gaz toxiques même si vous utilisez un ventilateur ou si vous ouvrez des portes et fenêtres. Si vous commencez à vous sentir malade, étourdi, vertige ou perdre l'équilibre ou à vomir, il est temps d'arrêter le générateur. Voir un médecin immédiatement. Voir l'étiquette d'avertissement sur le récipient de carburant.		CARBURANT EXPLOSIF Le carbone est extrêmement inflammable et ses vapeurs peuvent exploser si elles sont allumées par une étincelle ou une flamme. Vous ne pouvez pas le sentir, ni voir, ni le goûter. Restez loin de l'admission d'air. NE JAMAIS utiliser le générateur à l'intérieur de maisons, garages, remises, ou autres espaces partiellement fermés. Ces espaces peuvent retenir des gaz toxiques même si vous utilisez un ventilateur ou si vous ouvrez des portes et fenêtres. Si vous commencez à vous sentir malade, étourdi, vertige ou perdre l'équilibre ou à vomir, il est temps d'arrêter le générateur. Voir un médecin immédiatement. Voir l'étiquette d'avertissement sur le récipient de carburant.		ÉLECTRICITÉ Le générateur pose un danger de décharge électrique. Un choc électrique peut causer des blessures graves ou la mort. • Le générateur doit être maintenu à l'écart. • Ne JAMAIS utiliser le générateur avec les mains mouillées. • Le générateur doit être mis à la terre avant de l'utiliser. Consultez le manuel de l'utilisateur pour des détails supplémentaires. • NE JAMAIS utiliser le générateur à l'intérieur de maisons, garages, remises, ou autres espaces partiellement fermés. Ces espaces peuvent retenir des gaz toxiques même si vous utilisez un ventilateur ou si vous ouvrez des portes et fenêtres. Si vous commencez à vous sentir malade, étourdi, vertige ou perdre l'équilibre ou à vomir, il est temps d'arrêter le générateur. Voir un médecin immédiatement. Voir l'étiquette d'avertissement sur le récipient de carburant.		GASES VENENOSOS Este producto genera monóxido de carbono, un gas incoloro que puede matarlo. No puede verlo, verlo o probarlo. • No JAMAIS utilizar el generador en áreas y lugares de ingreso de aire. • NUNCA opere generador adentro de casas, garajes, cobertizos, o otros espacios parcialmente cerrados. Estos espacios pueden retener gases venenosos AUNQUE SI opera un ventilador o abra puertas y ventanas. • Si empieza a sentir enfermo, mareo, o dolor de cabeza, vomitar, o perder el equilibrio, o a vomitar, es hora de PARAR. Vea a un doctor. Puede tener síntomas de monóxido de carbono.		COMBUSTIBLE EXPLOSIVO Gasolina es extremadamente inflamable y sus vapores pueden explotar si se encienden que pueden resultar en lesiones graves o la muerte. • Nunca opere el generador en áreas de entrada de aire. • Siempre pare la unidad y permítale enfriarse de unidad antes de volver a llenarla. • No llene el tanque de combustible cuando el motor está caliente o funcionando. • No derrame el líquido de combustible. • Nunca use gasolina como agente de limpieza. Limpie el área de los derrames inmediatamente.		DESCARGA Un generador es un potencial riesgo de descarga que puede resultar en lesiones graves o la muerte. • Generadores siempre que mantener secos. • No opere esta unidad con manos húmedas. • Generador NUNCA que sea conectado a tierra antes de ser. • Ver manual de operador para instrucciones específicas. • No opere generador cuando diferentes esta unidad. • GFCI recopieren sentir que tener un ocharan antes de conectar. Ver manual de operador. • Siempre mantenga el generador cuatro (4) pies de altura estructura. • Siempre que bits de gasolina de refinando de área de generador.

34-1677 or 34-1764
Location: Side Panel

OPERATION	D'UTILISATION	OPERACIÓN
<p>Read Operator's Manual carefully before operating unit. Always make sure unit is level and properly grounded. Check engine oil before starting.</p> <p>START-UP:</p> <ol style="list-style-type: none"> 1. Open fuel valve. 2. Move choke lever to full choke. 3. Turn engine ignition switch to ON position. 4. Pull recoil to start engine. 5. Once engine has started, slowly move choke lever to no choke. 6. Allow unit to run two (2) minutes to warm-up. 7. Loads can now be applied to unit. 8. Move Full Power Switch to 120V position to direct all power to 120V-30A receptacle on unit. This will disable all other receptacles. When Full Power Switch is in 120V/240V position, all receptacles are usable except 120V-30A receptacle. <p>SHUT-DOWN:</p> <ol style="list-style-type: none"> 1. Remove all load by turning off electrical appliances and unplugging electric cords. 2. Allow engine to run at idle speed to cool for two (2) minutes. Not allowing engine to cool may result in damage to unit. 3. Turn off engine ignition switch. 4. Close fuel valve. 	<p>Lire soigneusement le manuel de l'utilisateur avant de se servir de l'appareil. S'assurer toujours que l'appareil est sur une surface plane et qu'il est correctement relié à la terre. Vérifier le niveau d'huile du moteur avant le démarrage.</p> <p>DEMARRAGE:</p> <ol style="list-style-type: none"> 1. Ouvrir la soupape de carburant. 2. Placer la manette du starter en position maximum. 3. Mettre le contact du moteur en position de marche (ON). 4. Tirer le lanceur à rappel pour démarrer le moteur. 5. Lorsque le moteur a démarré, ramener doucement la manette du starter en position fermée. 6. Permettre à l'appareil de tourner pendant deux (2) minutes pour qu'il se réchauffe. 7. L'appareil peut maintenant prendre des charges. 8. Placer le commutateur pleine puissance en position 120V de façon à diriger tout le courant vers la prise de courant femelle 120V/30A de l'appareil. Toutes les autres prises de courant seront alors désactivées. Lorsque le commutateur pleine puissance est en position 120V/240V, toutes les prises de courant sont utilisables à part la prise de courant 120V/30A. <p>ARRÊT:</p> <ol style="list-style-type: none"> 1. Supprimer les charges en éteignant les appareils électriques et en débranchant les raccords électriques. 2. Laisser le moteur tourner au ralenti pendant deux (2) minutes pour qu'il refroidisse. L'appareil peut être endommagé si on ne permet pas au moteur de refroidir. 3. Fermer le contact du moteur. 4. Fermer la soupape de carburant. 	<p>Lea manual de operador antes de operar esta unidad. Siempre asegúrese que unidad sea plana y conecte a tierra correcto. Revise el aceite de motor antes de empezando.</p> <p>OPERACION:</p> <ol style="list-style-type: none"> 1. Abra válvula de combustible. 2. Mueva palanca de choke a choke completo. 3. Doble interruptor de ignición de motor a posición de ON. 4. Tire retroceso para empezar el motor. 5. Cuando motor empieza, mueva muy despacio la palanca de choke a no choke. 6. Permite la unidad a opere por dos (2) minutos para precalentamiento. 7. Ahora cargas pueden aplicar a la unidad. 8. Mueva interruptor de alta potencia a posición de 120V para dirigir toda potencia a recipiente 120V/30A en la unidad. Este inutilizará todos otros. Cuando el interruptor de alta potencia está en posición de 120V/240V, todos recipientes son usables con excepción de recipiente 120V/30A recipientes. <p>APAGADO:</p> <ol style="list-style-type: none"> 1. Quite todas cargas como apagando aparatos eléctricos y desconecten cordones eléctricos. 2. Permite el motor a operar a velocidad de flojeo para enfriarse por dos (2) minutos. No permitiendo enfriarse del motor puede resultar en daño a la unidad. 3. Apague interruptor de ignición de motor. 4. Cierre válvula de combustible.

34-1680 or 34-1762
Location: Control Panel

Controls

CONTROLS FOR GEN-3000 AND GEN-4000



A -- Fuel Tank
B -- Control Panel
C -- Oil Drain Plug

D -- Oil Dipstick
E -- Fuel Gauge
F -- Fuel Cap

G -- Roll Over Valve
H -- Spark Arrestor
I -- Muffler

CONTROLS FOR GEN-5000



A -- Fuel Tank
B-- Fuel Cap
C -- Control Panel

D -- Oil Drain Plug
E -- Oil Dipstick
F-- Fuel Gauge

G-- Roll Over Valve
H-- Spark Arrestor
I-- Muffler

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 wing nut and 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 terminal of the ground wire between the two star washers and wing nut then tighten the wing nut fully. Connect the other end of the wire securely to a suitable ground source.

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:

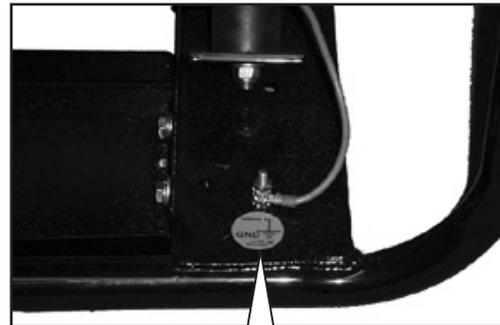
1. Use electrical devices with 3 prong power cords.
2. Use an extension cord with a 3 hole receptacle and a 3 prong plug at the opposite ends to ensure continuity of the ground protection from the generator to appliance.

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

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 from feeding into the generator, but is also prevents the generator from 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

Use oil viscosity based on the expected air temperature range during the period between oil changes.

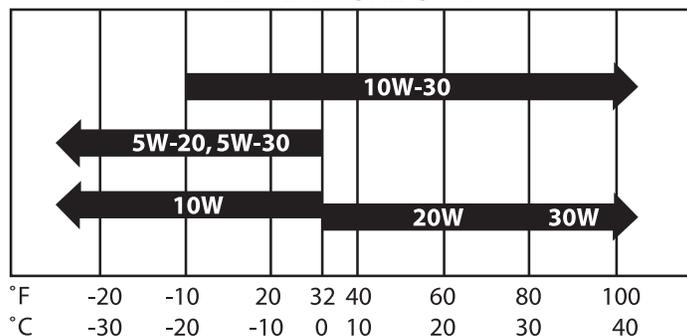
Use a high quality detergent oil with API classifications of SJ or higher.

Check oil level before each operation and ensure that it is maintained.



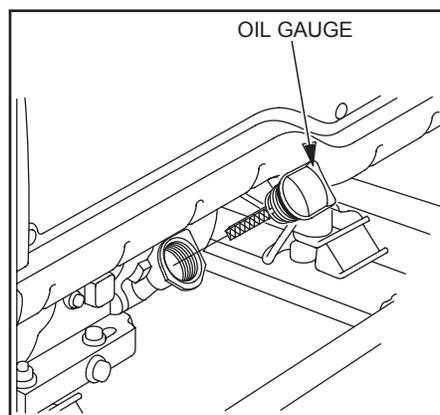
CAUTION: THIS ENGINE CRANKCASE IS NOT FILLED WITH OIL AT THE FACTORY, SO BE SURE TO FILL IT BEFORE OPERATING THE ENGINE.

TEMPERATURE CHART



ENGINE OIL CAPACITY

MODEL #	Liters	Quart	Ounces
GEN-3000-0MH0	0.6	0.61	20.3
GEN-3000-1MK0	0.6	0.63	20.3
GEN-3000-1MH0	0.6	0.61	20.3
GEN-4000-0MS0	0.6	0.63	20.3
GEN-4000-0MH0	1.1	1.16	37.2
GEN-5000-0MS0	1.0	1.06	33.8
GEN-5000-0MK0	1.3	1.4	44.8
GEN-5000-0MH0	1.1	1.16	37.2



(Fig. 1)

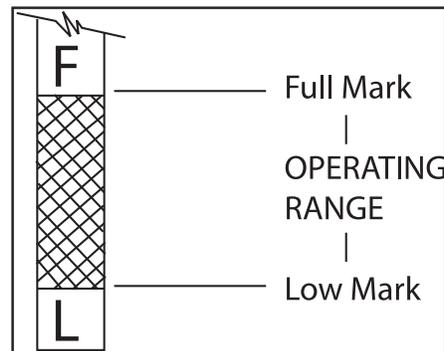
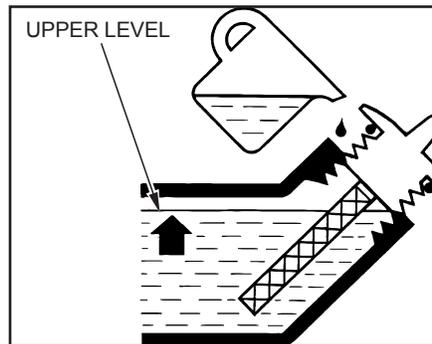
NOTE: These engines are equipped with a “Low Oil” shut-off system for engine protection. If the engine fails to start, check engine crankcase for oil.

To fill with oil:

1. Level the engine to ensure accurate inspection and to prevent overfilling.
2. Unscrew the oil gauge (Fig. 1), wipe the dipstick dry. Reinsert the oil gauge back into the oil fill gauge opening. Remove the oil gauge and check the oil level.
3. The oil level should be between the full and low marks on the dipstick. (Fig. 2)

NOTE: When checking the oil be sure the engine is level.

4. Fill with oil as required through the oil fill gauge opening.
5. Replace the oil gauge and screw in firmly.
6. Wipe up any spilled oil.



(Fig. 2)

FUELING



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.

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.
- Unleaded gasoline is recommended as it leaves less combustion chamber deposits.

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

At high altitude, the standard carburetor air/fuel mixture will be too rich. Performance will decrease, and fuel consumption will increase. A very rich mixture will also foul the spark plug and cause hard starting. Operation at an altitude that differs from that at which this engine was certified, for extended periods of time, may increase emissions.

High altitude performance can be improved by specific modifications to the carburetor. If you always operate your generator at altitudes above 5,000 feet (1,500 meters), have your dealer perform this carburetor modification. This engine, when operated at high altitude with the carburetor modifications for high altitude use, will meet each emission standard throughout its useful life.

Even with carburetor modification, engine horsepower will decrease about 3.5% for each 1,000-foot (300-meter) increase in altitude. The effect of altitude on horsepower will be greater than this if no carburetor modification is made.

NOTE: *When the carburetor has been modified for high altitude operation, the air/fuel mixture will be too lean for low altitude use. Operation at altitudes below 5,000 feet (1,500 meters) with a modified carburetor may cause the engine to overheat and result in serious engine damage.*

For use at low altitudes, have your servicing dealer return the carburetor to original factory specifications.

Operation

OPERATION

Recoil Start

NOTE: Read Operator's Manual carefully before operating this unit. Always make sure the unit is level and properly grounded. Check engine oil before starting.

1. Open fuel valve on unit or engine. (See Fig. 3)
2. Move choke lever to full choke. If re-starting a warm engine, the choke should be left in the off position. (See Fig. 4)
3. Turn the engine ignition switch to the ON position.
4. Pull recoil to start engine.
5. Once engine has started, slowly move choke lever to no choke.

NOTE: When engine fails to start after several attempts, repeat the starting procedures mentioned above with the choke lever in the off position.

6. Allow the unit to run for two (2) minute warm-up.
7. Make sure the generator is grounded. See Preparing the Generator; Grounding Instructions.
8. Test the GFCI receptacle(s) on the unit. Push the test button. The reset button should pop out and there should be no power at the receptacle. Apply a test load or lamp to each receptacle to verify. IF THE RESET BUTTON DOES NOT POP OUT, DO NOT USE THE RECEPTACLES(S). SEE DEALER FOR SERVICE IMMEDIATELY.
9. If GFCI receptacle(s) test correctly, firmly push the reset button to restore power. A distinctive click should be heard or felt when this is complete. IF THE RECEPTACLE(S) DO NOT RESET PROPERLY, DO NOT USE THE RECEPTACLE(S). SEE DEALER FOR SERVICE IMMEDIATELY.
10. Loads can now be applied to the unit.

11. If unit is equipped with a Full Power Switch, move the Full Power Switch to the 120V position to direct all power to the 120V/30A receptacle on the unit (See Fig. 5). This will disable all other receptacles.

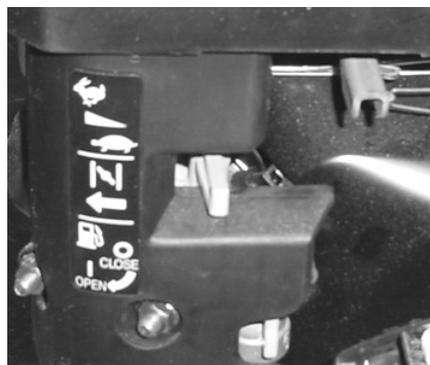
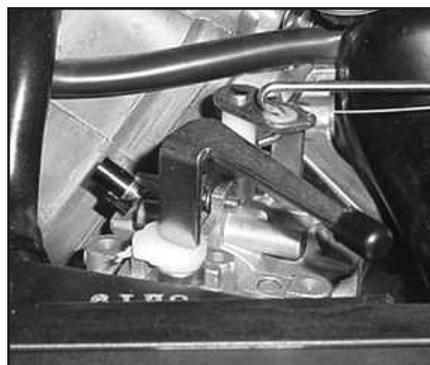
When the Full Power Switch is in the 120V/240V position, all receptacles are usable except the 120V/30A receptacle.

CAUTION: Ensure all breakers are in the off position before moving the full power switch.

NOTE: This engine is equipped with a "Low Oil" shutdown system for engine protection. The engine stops when the oil level gets too low. The engine will not restart without adding oil. Refer to Preparing the Generator; Engine Fuel Capacity for instructions on adding oil.



(Fig. 3)
(Subaru Shown)



(Fig. 4)
(Subaru Shown)



(Fig. 5)
(Subaru Shown)

SHUTDOWN

1. Remove all load by turning off electrical appliances and unplugging electric cords.
2. Allow engine to run at idle speed (3000), or at no load condition (3000-1MH0, 4000, 5000) to cool for two (2) minutes.

NOTE: *Failure to allow the engine to cool for two (2) minutes may result in damage to the generator.*

3. Turn engine key or ignition switch off.
4. Close fuel valve on unit or engine.

CONTROLS

CONTROL PANEL:

The generators are equipped with the following items:

3000 w units:

- Circuit Breaker
- One 125 Volt, 20 Amp, GFCI protected receptacles.

4000 w and 5000 w units:

- Full Power Switch
- Circuit Breakers
- Two 125 Volt, 20 Amp, Duplex (2 outlets), GFCI protected receptacles.
- One 125 Volt, 30 Amp, Locking Type Receptacle.
- One 125/250 Volt, 20 Amp, Locking Type Receptacle.

NOTE: *The 125 Volt, 30 Amp locking receptacles ARE NOT GROUND FAULT PROTECTED. If ground fault protection on these receptacles is necessary or desired, external protection devices must be used. Refer to the section on "Ground Fault Interrupter" for more information.*



WARNING: NEVER EXCEED THE RATING OF A RECEPTACLE. THESE RECEPTACLES ARE PROTECTED AGAINST OVERLOADS BY RESETTING MAGNETIC TYPE CIRCUIT BREAKERS. IF A CIRCUIT BREAKER TRIPS, THE CAUSE SHOULD BE DETERMINED AND CORRECTED PRIOR TO CONTINUING USE.

CONTROLS

OIL WARNING DEVICE:

NOTE: *This engine is equipped with a “Low Oil” shutdown system for engine protection. The engine stops when the oil level gets too low. The engine will not restart without adding oil. If the unit is tilted too much during operation, it may suddenly stop even though the oil level is not low.*

Check the engine oil before restarting the engine. If the unit is tilted, level the engine, then check the oil before restarting the engine.

FULL POWER SWITCH:

The Full Power Switch allows the unit to supply power directly to the 120V-30A receptacle on the unit. This will disable all other receptacles.

When the Full Power Switch is in the 120V/240V position, all receptacles are usable except the 120V-30A receptacle.

Do not use switch to add/remove load.

CONTROLS

CABLE SIZE:

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 IN AMPS	LOAD IN WATTS		MAXIMUM CABLE LENGTH (FEET)				
	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				

ELECTRIC MOTOR LOADS:

It is characteristic of common electric motors in normal operation to draw up to six times their running current while starting. This table may be used to estimate the watts required to start "CODE G" electric motors.



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.

MOTOR (H.P.)	RUNNING WATTS	WATTS REQUIRED TO START MOTOR		
		REPULSION INDUCTION	CAPACITOR	SPLIT PHASE
1/8	275	600	850	1200
1/6	275	600	850	2050
1/4	400	850	1050	2400
1/3	450	975	1350	2700
1/2	600	1300	1800	3600
3/4	850	1900	2600	
1	1100	2500	3300	

Troubleshooting

SYMPTOM

Engine will not start.

PROBLEM

Engine switch is off.
Fuel Tank empty.
Fuel Valve is off.
Inadequate engine oil.

No spark at spark plug.

SOLUTION

Turn engine switch to the ON position.
Fill tank per instructions in this manual.
Turn Fuel Valve on.
Check oil level. This engine is equipped with a low oil sensor. The engine cannot be started unless the oil level is above the prescribed lower limit.

Remove the spark plug cap. Clean any dirt from around the plug base, then remove the spark plug. Install the spark plug in the plug cap. Turn the engine switch on.

Grounding the electrode to any engine ground, pull the recoil starter to see if sparks jump across the gap. If there is no spark, replace the plug.

Reinstall the plug and start engine according to instructions in this manual.

Consult Mi-T-M Customer Service.

Reset circuit breakers.

Check cord sets or extension cords capabilities in section Controls; Cable Size in this manual.
Consult Mi-T-M Customer Service.

Generator has no output.

Circuit breakers tripped.
Inadequate cord sets or extension cords.

Service

MAINTENANCE

Keep all air vents clear.
Keep the generator clean. DO NOT spray with water.
Periodically check all fasteners and tighten, see the periodic maintenance chart.

GFCI TEST RECORDS:

As with any other safety devices, the GFCIs supplied with these generators must be checked every month to insure that they are functioning properly. To test the GFCIs, follow the instructions and then enter the date of the test below.

1. With the generator running and the idle control switch in the "START" position, push the "TEST" button. The "RESET" button should pop out. This should result in the power being off at both outlets of the duplex receptacle. Verify this by plugging a test lamp into each outlet.



WARNING: IF THE RESET BUTTON DOES NOT POP OUT, DO NOT USE THE RECEPTACLE(S). SEE AUTHORIZED Mi-T-M CUSTOMER SERVICE REPRESENTATIVE FOR SERVICE IMMEDIATELY.

2. If the GFCI test correctly, restore power by FIRMLY pushing the "RESET" button back in until you hear or feel a distinctive "click". IF THE GFCI FAILS TO RESET PROPERLY, DO NOT USE EITHER OUTLET OF THE DUPLEX RECEPTACLE. Have the unit serviced by an authorized Mi-T-M Customer Service Representative immediately.
3. High vibration or severe mechanical shock loads may cause the GFCIs to trip. IF EITHER GFCI TRIPS BY ITSELF AT ANY TIME, reset it and perform test procedures 1 and 2.
4. Repeat steps 1-3 for the second GFCI.



WARNING: ALTHOUGH THE ABOVE TEST PROCEDURES WILL INDICATE PROPER GFCI OPERATION ON AN UNGROUNDED OR IMPROPERLY GROUNDED GENERATOR, THE GENERATOR MUST STILL BE GROUNDED PER THE GROUNDING INSTRUCTIONS LISTED ON PAGE 16 FOR THE GFCI TO FUNCTION PROPERLY AND PROTECT THE USER FROM ELECTRICAL FAULTS.

Year	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.

NOTE: Situations exist where a GFCI will not afford any protection against the hazards of electrical shock. *EXAMPLE: if a person touches two or more conductors from a damaged cord set and is not in direct contact with the ground, he or she may receive a shock. Since there is no path to ground for a ground fault current to flow through, the GFCI will not operate and serious injury may result.*

The GFCI are merely an added safety feature. There are no substitutes for good safety precautions, correct electrical practices and proper maintenance of cords, equipment and connections.

MAINTENANCE

EVAPORATIVE EMISSION COMPONENTS:

The unit you have purchased includes the following components that are in compliance with California Air Resources Board Evaporative Emission Standards;

1. Fuel Hose
2. Fuel Hose Fittings
3. Fuel Tank and Cap
4. Carbon Canister and Mounting Brackets

These components should be inspected on a daily basis for cracks, leaks, and abnormal wear. If cracking, leaks or abnormal wear has occurred, the components should be replaced immediately.

ENGINE:

The engine for this generator is governed to operate at speeds close to 3600 RPM (60Hz) throughout the operating load range. The no load speed (before a load is applied) will be just a bit higher than the load speed and is normally set to 3750 RPM.



WARNING: DO NOT TAMPER WITH THE GOVERNOR MECHANISM, CHANGE THE SETTING EXPERIMENTALLY, OR PUSH THE THROTTLE OPEN IN AN ATTEMPT TO GENERATE MORE ELECTRICAL CURRENT; EQUIPMENT DAMAGE OR PERSONAL INJURY MAY RESULT.

GOVERNOR SPEED ADJUSTMENT SHOULD BE MADE ONLY BY A MI-T-M CUSTOMER SERVICE REPRESENTATIVE.

CHECKING ENGINE OIL:

Check oil level before each operation and ensure that it is maintained per Preparing the Generator; Engine Oil Capacity section.

CHANGING ENGINE OIL:

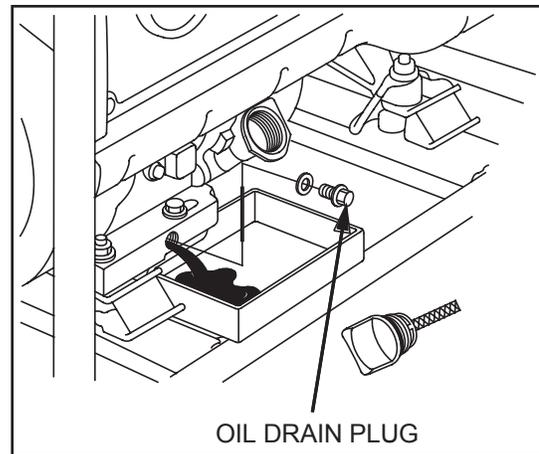
Change oil after the first 20 hours of operation. Thereafter it should be changed every 100 hours.

1. Make sure the unit is on level ground. Run the engine to warm the oil.
2. Stop the engine.
3. Remove the oil drain plug. (See Fig. 6)



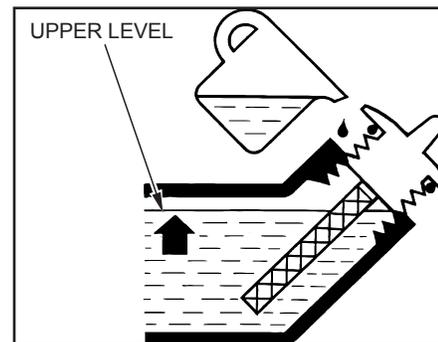
CAUTION: OIL BEING DRAINED MAY BE HOT. TO REDUCE THE RISK OF BURN INJURY, HANDLE WITH CARE. DISPOSE OF USED OIL PROPERLY.

4. Drain oil while engine is warm, into a suitable container.
5. Reinstall the oil drain plug.
6. Remove oil gauge and refill with new oil. (Fig. 7)
7. Check the oil level as instructed in Preparing the Generator; Engine Oil Capacity section.
8. Wipe up any spilled oil.



OIL DRAIN PLUG

(Fig. 6)



(Fig. 7)

MAINTENANCE

AIR CLEANER:



WARNING: RISK OF FIRE OR EXPLOSION. DO NOT USE GASOLINE OR LOW FLASH-POINT SOLVENTS TO CLEAN THE ELEMENT. CLEAN THE ELEMENT IN A WELL VENTILATED AREA. ENSURE THAT NO SPARKS OR FLAMES ARE NEAR THE WORKING AREA, THIS INCLUDES ANY APPLIANCE WITH A PILOT LIGHT.



CAUTION: NEVER RUN THE ENGINE WITHOUT THE AIR FILTER, SERIOUS DANGER CAN RESULT.

Check the air cleaner daily or before starting the engine. Check for and correct heavy buildup of dirt and debris along with loose or damaged components. (See Fig. 8)

1. Unsnap the air cleaner cover and remove the elements.
2. Clean the elements:

FOAM PRE-CLEANER ELEMENT: Wash the foam pre-cleaner element in warm water with detergent. Rinse the foam pre-cleaner element thoroughly until all traces of detergent are eliminated. Squeeze out excess water, but do not wring. Allow the foam pre-cleaner element to air dry.

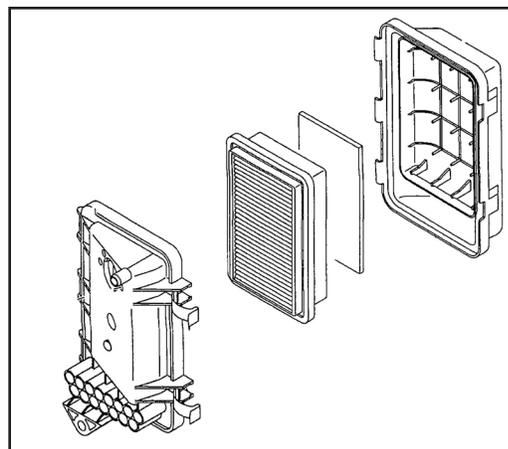
Saturate the foam pre-cleaner element with new engine oil. Squeeze out all excess oil. **DO NOT** put engine oil on the foam damper.

NOTE: *Clean the foam pre-cleaner element every 25 hours of operation (more often under extremely dusty or dirty condition)*

PAPER AIR CLEANER ELEMENT: Do not wash the paper element or use pressurized air, as this will damage the element. Clean by gently tapping the element to remove dust. Replace the element if damaged, bent or extremely dirty. Handle new element carefully; do not use if the sealing surfaces are bent or damaged.

NOTE: *Replace the paper element every 100 hours (more often under extremely dusty conditions.)*

Reinstall the foam pre-cleaner element and the paper air cleaner element. Close air cleaner cover and clasp shut.



(Fig. 8)

MAINTENANCE

CLEANING AND GAPPING SPARK PLUG:

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

Check the spark plug gap and reset it if necessary. The spark plug gaps are listed below. To change the gap, bend the side-electrode only, using a spark plug tool. (Fig. 9)

Install and tighten the spark plug. Connect the spark plug lead.

Recommended Spark Plug:

Engine	Subaru	Honda	Kohler
Spark Plug	NGK BR-6HS	NGK BPR6ES	NGK BKR5E
Spark Plug Gap	0.6 - 0.7 mm (0.02-0.03 in.)	0.7 - 0.8 mm (0.03 in.)	
Torque - New	8.7-10.9 ft-lb		10 ft-lb
Torque - Retighten	16.6-19.5 ft-lb		14 ft-lb

SPARK ARRESTOR:

If the generator has been running, the muffler will be very hot. Allow it to cool before proceeding.

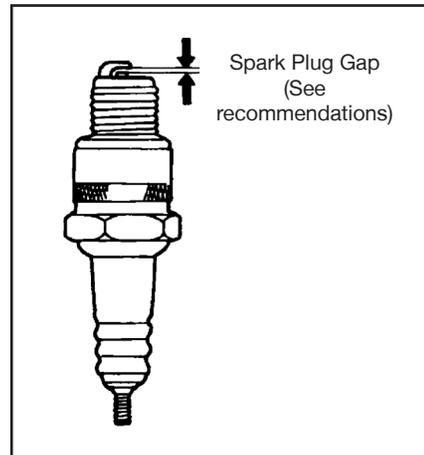
NOTE: Remove and clean spark arrester every 100 hours or as necessary.

NOTE: Product users on United States forest service land, and in some states, must comply with fire prevention regulations.

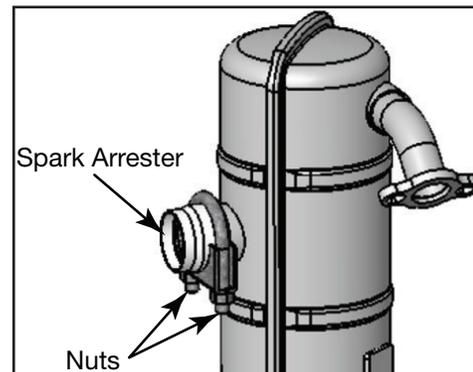
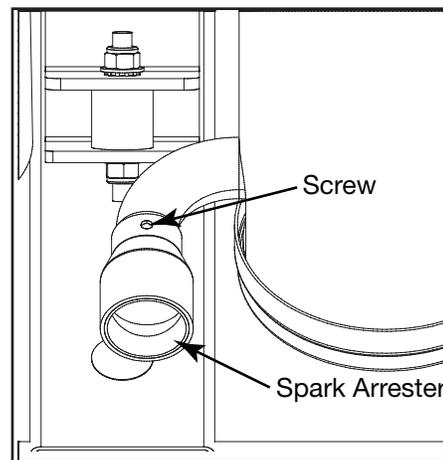
Clean the spark arrester as follows: (Fig. 10A,B and 11)

1. Loosen the screw by the exhaust port of the muffler and remove the spark arrester.
2. Use a brush to remove carbon deposits from the spark arrester screen. Inspect the screen for breaks or tears and replace it if necessary.
3. Install the spark arrester in the reverse order of removal.

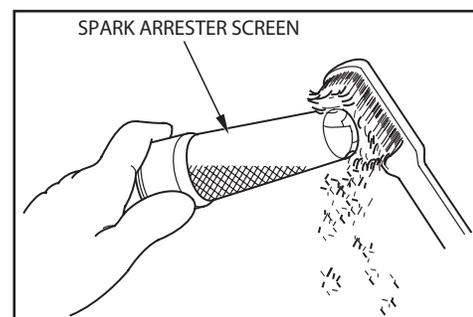
Spark arrestors are available from your local Mi-T-M Customer Service. Other user requirements may apply, check with your Federal, State or local authorities.



(Fig. 9)



(Fig. 10A and B)



(Fig. 11)

MAINTENANCE

PERIODIC MAINTENANCE CHART:

To ensure satisfactory operation over an extended period of time, an engine requires normal maintenance at regular intervals. The Periodic Maintenance Chart below shows periodic inspection and maintenance items and suitable intervals. The bullet mark designates that the corresponding item should be performed at that interval.

NOTE: Some adjustments require the use of special tools or other equipment. An electronic tachometer will facilitate setting idle and running speeds.

	Daily	Every 25hrs.	Every 100 hrs.	Every 200 hrs.	Before Storage
Check fuel	•				
Check engine oil	•				
Check for loose or lost nuts and bolts	•				
Check for leaks	•				
Check cylinder and head fins for dust and dirt	•				
Check battery electrolyte level	•				
Check fuel lines (replace if necessary)	•				
Clean air cleaner foam element (**)		•			
Tighten nuts and bolts (*)			•		
Change engine oil (*)			•		
Clean fuel filter			•		
Replace air cleaner paper element (**)			•		
Clean dust and dirt from cylinder and cylinder head fins (**)			•		
Clean and regap spark plug				•	
Add fuel stabilizer					•
Run unit dry					•

* Perform these operations after the first 5 hours of use, then at the recommended intervals.

** Service more frequently under dusty conditions.

NOTE: These items must be performed with the proper tools. See your Mi-T-M Customer Service Representative for service, unless you have the proper equipment and mechanical proficiency.

Storage

STORING GENERATOR

SHORT TERM (1-6 months):

1. Add gasoline conditioner and stabilizer at the specified concentration.
2. Run the unit for two (2) minutes to ensure the mixed fuel is in the entire fuel system. Close the fuel valve and run the unit until it stops.
3. Remove the spark plug, pour 1-2 teaspoons (5-10cc) of engine oil into the cylinder, slowly pull the starter handle 2 or 3 times, reinstall the spark plug and tighten securely.
4. Clean the exterior surface of the generator and apply a rust inhibitor.
5. Store the generator in a dry, well ventilated place.

LONG TERM (More than 6 months):

1. Add gasoline conditioner and stabilizer at the specified concentration.
2. Run the generator until the fuel tank and carburetor are dry. As the engine is beginning to die, move the choke lever to the choke position.

NOTE: Turn off the idle control to decrease the run time.

3. Remove the spark plug, pour 1-2 teaspoons (5-10cc) of engine oil into the cylinder, slowly pull the starter handle 2 or 3 times, reinstall the spark plug and tighten securely.
4. Clean the exterior surface of the generator and apply a rust inhibitor.
5. Store the generator in a dry, well ventilated place.



WARNING: FUEL SHOULD BE DRAINED IN A WELL VENTILATED AREA AND STORED IN A CONTAINER APPROVED FOR GASOLINE.

Specifications

SPECIFICATIONS

	GEN-3000-0MH0	GEN-3000-1MK0 GEN-3000-1MH0	GEN-4000-0MS0 GEN-4000-0MH0	GEN-5000-0MS0 GEN-5000-0MK0 GEN-5000-0MH0
Engine	Honda	Kohler/ Honda	Subaru/ Honda	Subaru/ Kohler/Honda
Watts (AC) Rated	3000 watts	3000 watts	4000 watts	5000 watts
Watts (AC) Max.	2450 watts	2450 watts	3500 watts	4400 watts
Rated Voltage (AC)	120V	120V	120/240V	120/240V
Max. Amperage	25.0	25.0	33.3/16.7	41.7/20.8
Cont. Amperage	20.4	20.4	29.2/14.6	36.7/18.3
Frequency	60	60	60	60
Fuel Tank Capacity	.66 gal.	2.6 gal.	5.68 gal.	5.68 gal.
Run Time Hours / Tank of Fuel*	2.7 hrs.	7.0 hrs.	9.3 hrs.	6.8 hrs.
* Rated at Full Load				

NOTE: Unit ratings are established based on operation at standard conditions of 60° F and at sea level. The performance of the generator must be de-rated for temperature and altitude by 1% for every 10° F above 60° F and 3.5% for every 1000 feet above sea level. Due to the operational characteristics of the thermal type circuit breaker, the power available from the generator will decrease slightly with a corresponding increase in ambient temperature.

Due to continuing product improvements, specifications are subject to change without notice.

RECORD SERIAL NUMBER

Write you model number, machine serial number 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)

GENERATOR

MODEL NO. SERIAL NO.

CONTINUOUS OUTPUT, W DATE CODE

VOLT, V INSULATION CLASS

AMP, A RATED RPM

FREQUENCY, Hz MAX. AMBIENT TEMP., °C


 FOR ELECTRICAL EQUIPMENT ONLY
 POUR MATERIEL ELECTRIQUE SEULEMENT

201473 Made in U.S.A. 34-0075-100300-ENG.

Accessories

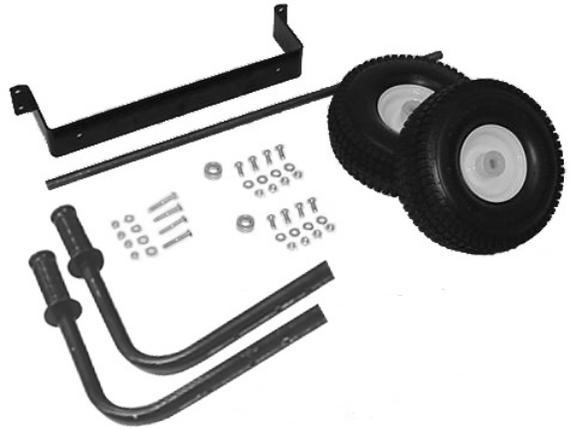
LIFTING HOOK KIT: AW-5090-0003
(GEN-4000-0MS0, GEN-4000-0MH0,
GEN-5000-0MS0, GEN-5000-0MK0, GEN-5000-0MH0)

Used for lifting the generator safely. The Lifting Hook Kit includes the lifting hook, hardware and instructions needed to assemble the lifting hook to the generator.



WHEEL AND HANDLE KIT: AW-5740-0003
(GEN-4000-0MS0, GEN-4000-0MH0,
GEN-5000-0MS0, GEN-5000-0MK0)

Allows easier portability of the generator. The Wheel and Handle Kit includes the wheels, handles, hardware and instructions needed to assemble the kit to the generator.





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 Two (2) 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 2017 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) Notwithstanding 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.