GE 2500 FAMILY GE 3200 H FAMILY

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ENGLISH



THE INTERNATIONAL CERTIFICATION NETWORK *ERTIFICATE* CISQ/ICIM MOSA Divisione della BCS S.p.A. Viale Europa, 59 1-20090 CUSAGO (MI) for the following field of activities Design, production and servicing of engine driven welders and generating sets. Quality Management System which fulfills the requirements of the following standard ISO 9001:2000 Issued on: 2003-03-06 Validity date: 2006-03-05 Registration Number: IT-3722 1162 roununs Saul Fabio Roversi President of IQNet President of CISQ alianual Belgelow - APCER Bernapal - CISQ Budy - CQC Clima nominel. ELOT Girevo: FCAN Breath FONDONORMA Hom-na IQA Alpain KLMA Neberlolinde. KFQ Kover MSET Ho-toria FCDK Federal FSB Certification Suppoper - QM Genada is 285 Swarteshand SRM. Emustal. IEEE SE Federalsage Ro-AENOR, Spanst AI AQ France, Alli-Vingolia I CQM Cona. CQS Carch Republic DQS Generacy HEQAA Hong Rong (CONTEC Colombia: IRAM id-Semble Certification Novemy NSAI Ireland OQ: SAI GSbal Antarulus SSF Findand SI I Grand SIQ IQNet is represented in the USA by the following partners. Al





UNI EN ISO 9001: 2000

MOSA has certified its quality system according to UNI EN ISO 9001:2000 to ensure a constant, high quality of its products. This certification covers the design, production and servicing of engine driven welders and generating sets.

The certifying institute, ICIM, which is a member of the International Certification Network IQNet, awarded the official approval to MOSA after an examination of its operations at the head office and plant in Cusago (MI), Italy.

This certification is not a point of arrival but a pledge on the part of the entire company to maintain a level of quality of both its products and services which will continue to satisfy the needs of its clients, as well as to improve the transparency and the communications regarding all the company's actives in accordance with the official procedures and in harmony with the MOSA Manual of Quality.

The advantages for MOSA clients are:

- Constant quality of products and services at the high level which the client expects;
- Continuous efforts to improve the products and their performance at competitive conditions;
- Competent support in the solution of problems;
- Information and training in the correct application and use of the products to assure the security of the operator and protect the environment;
- Regular inspections by ICIM to confirm that the requirements of the company's quality system and ISO 9001 are being respected.

All these advantages are guaranteed by the CERTIFICATE OF QUALITY SYSTEM No.0192/3 issued by ICIM S.p.A. - Milano (Italy) - www.icim.it



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M 1.01	COPYRIGHT
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ATTENTION

This use and maintenance manual is an important part of the machines in question.

The assistance and maintenance personel must keep said manual at disposal, as well as that for the engine and alternator (if the machine is synchronous) and all other documentation about the machine.

We advise you to pay attention to the pages concerning the security (see page M1.1).

MOSA

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INFORMATION

Dear Customer, We wish to thank you for having bought from MOSA a high quality set.

Our sections for Technical Service and Spare Parts will work at best to help you if it were necessary.

To this purpose we advise you, for all control and overhaul operations, to turn to the nearest authorized Service Centre, where you will obtain a prompt and specialized intervention.

- In case you do not profit on these Services and some parts are replaced, please ask and be sure that are used exclusively original MOSA parts; this to guarantee that the performances and the initial safety prescribed by the norms in force are re-established.
- The use of **non original spare parts will cancel immediately** any guarantee and Technical Service obligation from MOSA.

NOTES ABOUT THE MANUAL

Before actioning the machine please read this manual attentively. Follow the instructions contained in it, in this way you will avoid inconveniences due to negligence, mistakes or incorrect maintenance. The manual is for qualified personnel, who knows the rules: about safety and health, installation and use of sets movable as well as fixed.

You must remember that, in case you have difficulties for use or installation or others, our Technical Service is always at your disposal for explanations or interventions.

The manual for Use Maintenance and Spare Parts is an integrant part of the product. It must be kept with care during all the life of the product.

In case the machine and/or the set should be yielded to another user, this manual must also given to him.

Do not damage it, do not take parts away, do not tear pages and keep it in places protected from dampness and heat.

You must take into account that some figures contained in it want only to identify the described parts and therefore might not correspond to the machine in your possession.

INFORMATION OF GENERAL TYPE

In the envelope given together with the machine and/or set you will find: the manual for Use Maintenance and Spare Parts, the manual for use of the engine and the tools (if included in the equipment), the guarantee (in the countries where it is prescribed by law).

Our products have been designed for the use of generation for welding, electric and hydraulic system; ANY OTHER DIFFERENT USE NOT INCLUDED IN THE ONE INDICATED, relieves MOSA from the risks which could happen or, anyway, from that which was agreed when selling the machine; MOSA excludes any responsibility for damages to the machine, to the things or to persons in this case.

Our products are made in conformity with the safety norms in force, for which it is advisable to use all these devices or information so that the use does not bring damage to persons or things.

While working it is advisable to keep to the personal safety norms in force in the countries to which the product is destined (clothing, work tools, etc.).

Do not modify for any motive parts of the machine (fastenings, holes, electric or mechanical devices, others..) if not duly authorized in writing by MOSA: the responsibility coming from any potential intervention will fall on the executioner as in fact he becomes maker of the machine.

who keeps the faculty, apart the essential characteristics of the model here described and illustrated, to bring betterments and modifications to parts and accessories, without putting this manual uptodate immediately.





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Divisione della BCS S.p.A. V.le Europa 59 - 20090 Cusago (Mi) - Italia

DICHIARAZIONE DI CONFORMITA'



Déclaration de Conformité – Declaration of Conformity – Konformitätserklärung Conformiteitsverklaring – Declaración de Conformidad

MOSA dichiara sotto la	propria roca	oneabilità che l	a macchir	ia.			
MOSA déclare, sous sa							
MOSA declares, under		onsibility, that ti	ne machir	e:			
MOSA erklärt, daß die							
MOSA verklaard, onder	haar eigen	verantwoordelij	kheid, dat	de machine:			
MOSA declara bajo su	responsabilio	dad que la mág	uina:				
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Benso Marelli

Direttore Generale



The CE mark (European Community) certifies that the product complies with the essential safety requirements provided by the applicable COMMUNITY DIRECTIVES. In the Conformity Declaration are reported the HARMONIZED NORMS and not, used for the checking.

SYMBOLS IN THIS MANUAL

 The symbols used in this manual are designed to call your attention to important aspects of the operation of the machine as well as potential hazards and dangers for persons and things.

IMPORTANT ADVICE

- Advice to the User about the safety:
- N.B.: The information contained in the manual can be changed without notice. Potential damages caused in relation to the use of

Potential damages caused in relation to the use of these instructions will not be considered because these are only indicative.

these are only indicative.

Remember that the non observance of the indications reported by us might cause damage to persons or things.

It is understood, that local dispositions and/or laws must be respected.

WARNING



Situations of danger - no harm to persons or things

Do not use without protective devices provided

Removing or disabling protective devices on the machine is prohibited.

Do not use the machine if it is not in good technical condition

The machine must be in good working order before being used. Defects, especially those which regard the safety of the machine, must be repaired before using the machine.

SAFETY PRECAUTIONS



DANGEROUS

This heading warns of an <u>immediate</u> danger for persons as well for things. Not following the advice can result in serious injury or death.



WARNING

This heading warns of situations which could result in injury for persons or damage to things.



CAUTION

To this advice can appear a danger for persons as well as for things, for which can appear situations bringing material damage to things.



IMPORTANT



NOTE



ATTENTION

These headings refer to information which will assis you in the correct use of the machine and/or accessories.



(B) SYMBOLS AND SAFETY PRECAUTIONS

GE 2500 FAMILY GE 3200 H FAMILY

M 2.1

1.0-11/00 **(F)**

SYMBOLS AND CURRENT DEFINITIONS







VARIOUS







down (oil)

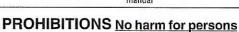


Users manual

Information Maintenance Time

STOP

STOP - Read absolutely and be duly attentive.







Read and take due attention.





GENERAL ADVICE - If the advice is not respected damage can happen to persons or things.



HIGH VOLTAGE - Attention High Voltage. There can be parts in voltage, dangerous to touch. The non observance of the advice implies life danger.



FIRE - Danger of flame or fire. If the advice is not respected fires can happen.



HEAT - Hot surfaces. If the advice is not respected burns or damage to things can be caused.



WATER - Danger of shortcircuit. If the advice is not respected fires or damage to persons can be caused.



SMOKING - Cigarettes can cause fire or explosion. If the advice is not respected fires or explosions can be caused.



ACIDS - Danger of corrosion. If the advice is not respected the acids can cause corrosions with damage to persons or things.



WRENCH - Use of the tools. If the advice is not respected damage can be caused to things and even to persons.

Use only with safety clothing -



It is compulsory to use the personal protection means given as equipment.

Use with only safety material -



It is prohibited to use water to estinguish fires on the electric machines

Use only with non inserted voltage -



It is prohibited to make interventions before having disinserted the voltage

No smoking -



It is prohibited to smoke while filling the tank with fuel.

ADVICE No harm for persons and things

Use only with safety tools, adapted to the specific

It is advisable to use tools adapted to the various maintenance works.

Use only with safety protections -



It is advisable to use protections suitable for the different daily checking works

Use only with safety protections -



It is advisable to use all protections while shifting the machine.

Use only with safety protections -



It is advisable to use safety protections suitable for the several Daily checks a/o maintenance











(B) INSTALLATION AND ADVICE BEFORE USE

GE_, MS_, TS_

M 2-5

The installation and the general advice concerning the operations, are finalized to the correct use of the machine, in the place where it is used as generator group and/or welder.

	Stop engine when fueling		Do not touch electric devices if you
	Do not smoke, avoid flames, sparks or electric tools when fueling.		are barefoot or with wet clothes.
	Unscrew the cap slowly to let out the fuel vapours.	&	Always keep off leaning surfaces
¥	Slowly unscrew the cooling liquid tap if the liquid must be topped up.	BOA	during work operations
ENGIN	The vapor and the heated cooling liquid under pressure can burn face, eyes, skin.	KING	Static electricity can demage the parts on the circuit.
	Do not fill tank completely.		
	Wipe up spilled fuel before starting engine.	ᄀᇴ	
	Shut off fuel of tank when moving machine (where it is assembled).		An electric shock can kill
	Avoid spilling fuel on hot engine.		
	Sparks may cause the explosion of battery vapours		



FIRST AID. In case the operator shold be sprayed by accident, from corrosive liquids a/o hot toxic gas or whatever event which may cause serious injuries or death, predispose the first aid in accordance with the ruling labour accident standards or of local instructions.

	Land to the second seco
Skin contact	Wash with water and soap
Eyes contact	Irrigate with plenty of water, if the irritation persists contact a specialist
Ingestion	Do not induce vomit as to avoid the intake of vomit into the lungs, send for a doctor
	If you suppose that vomit has entered the lungs (as in case of spontaneous vomit) take the
lungs	subject to the hospital with the utmost urgency
Inhalation	In case of exposure to high concentration of vapours take immediately to a non polluted zone
	the person involved



FIRE PREVENTION. In case the working zone, for whatsoever cause goes on fire with flames liable to cause severe wounds or death, follow the first aid as described by the ruling norms or local ones.

PROMINE II SAMORE VIS. (C)	EXTINCTION MEANS			
Appropriated	Carbonate anhydride (or carbon dioxyde) powder, foam, nebulized water			
Not to be used	Avoid the use of water jets			
Other indications	Cover eventual shedding not on fire with foam or sand, use water jets to cool off the surfaces close to the fire			
Particular protection	Wear an autorespiratory mask when heavy smoke is present			
Useful warnings	Avoid, by appropriate means to have oil sprays over metallic hot surfaces or over electric contacts (switches,plugs,etc.). In case of oil sprinkling from pressure circuits, keep in mind that the inflamability point is very low.			

				⚠ C	AUTION	SNO	
						 DANGER	
-+			Con Constitution of the Co				7



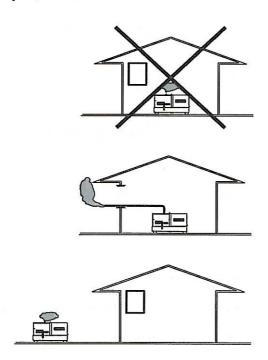
THE MACHINE <u>MUST NOT BE USED</u> IN AREAS WITH EXPLOSIVE ATMOSPHERE





ENGINE

■ Use in open space, air swept or vent exhaust gases, which contain the deathly carbone oxyde, far from the work area.

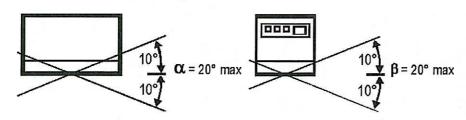


POSITION

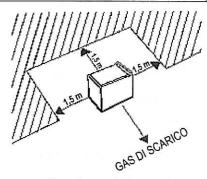
Place the machine on a level surface at a distance of at least 1,5 m from buildings or other plants.



Maximum leaning of the machine (in case of the floor is out of level).



Check that the air jets changed completely and the hot air sent out does not come back inside the set so as to cause a dangerous temperature increase.



Make sure that the machine does not move during the work: block it possibly with tools and/ or devices made to this purpose.

MOVES OF THE MACHINE

At any move check that the engine is off, that there are no connections with cables which impede the moves.

PLACE OF THE MACHINE

In spots where it often rains and/or there are flooded areas, do not put the machine:



- in the bad weather
- in flooded places.

Protect all the electric parts at risk, because water infiltrations could cause short circuits with damages at persons and/or things.

The protection degree of the machine is put on the data plate and in this manual at page "Technical Data

When the generator is in operation keep away children and pets

If not used correctly the generator is a good potential source of electric shocks, do not touch it with humid hands.



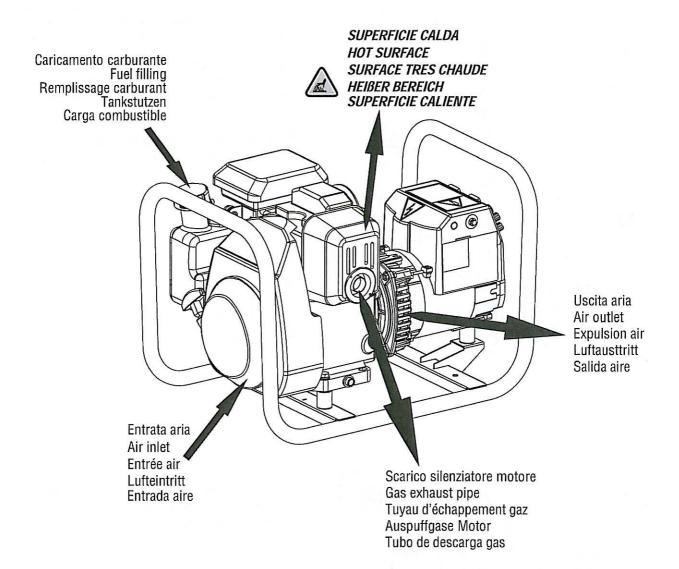
(B) Installation

(E) Instalación

GE 2500 FAMILY GE 3200 H FAMILY

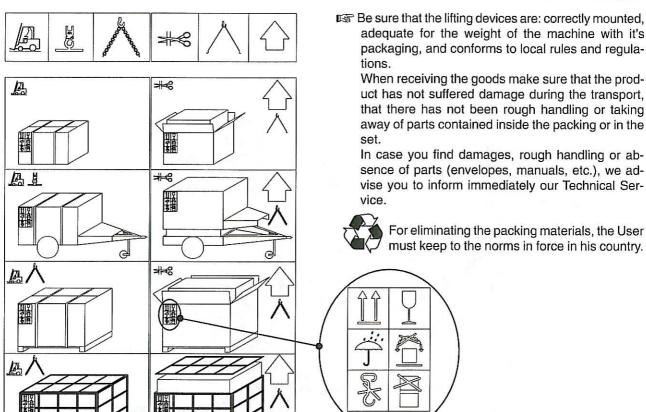
M 2.7

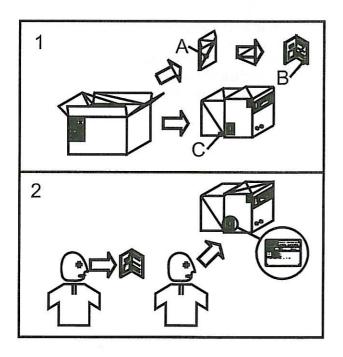
GE 2500 FAMILY -GE 3200 H FAMILY





NOTE





- 1) Take the machine (C) out of the shipment packing. Take out of the envelope (A) the user's manual (B).
- 2) Read: the user's manual (B), the plates fixed on the machine, the data plate.







NOTE

In case you should transport or move the machine, keep to the instructions as per the figures.

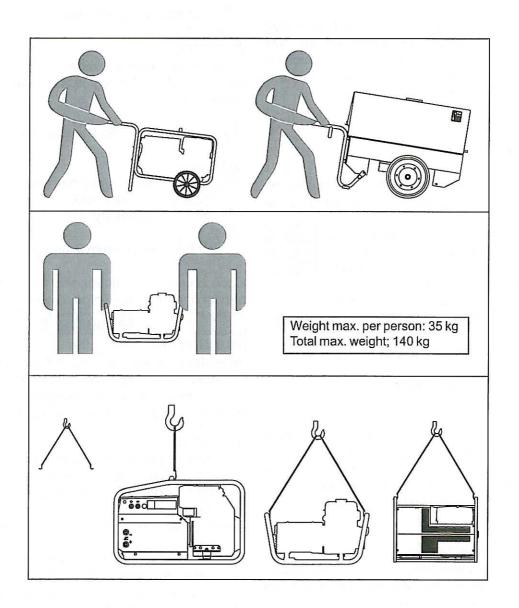
Make the transportation when the machine has no petrol in its tank, no oil in the engine and and electrolyte in the

Be sure that the lifting devices are: correctly mounted, adequate for the weight of the machine with it's packaging, and conform to local rules and regulations.

Only authorized persons involved in the transport of the machine should be in the area of movement.

DO NOT LOAD OTHER PARTS WHICH CAN MODIFY WEIGHT AND BARICENTER POSITION. IT IS STRICTLY FORBIDDEN TO DRAG THE MACHINE MANUALLY OR TOW IT BY ANY VEHICLE (model with no CTM accessory).

If you did not keep to the instructions, you could damage the structure of the machine.











M 🗖 互 🏔 🇃 SETTING-UP - STARTING - STOPPING



UBRICANT



Check the level of the engine oil using the oil dipstick: the level should be appropriate between the minimum and maximum marks.

If necessary, add more oil through the appropriate inlet.

OIL RECOMMENDED

MOSA advises to choose AGIP for the type of oil. Please keep to the label put on the engine for the recommended products.



NOTE: Before starting and switching off, see instructions in the engine owner's manual herewith attached.



Check the level of fuel in the tank and, if necessary, add more standard gasoline of any type you can buy (e.g. 84-96 ON).

If during the filling of the tank some gasoline is accidentally spilled around the engine chassis, clean it immediately before starting up the engine.

- ⇒Use only automotive fuel new and clean.
- ⇒Do not use oil-petrol mixture or contaminated petrol.
- ⇒Avoid any dirt or water to enter the fuel tank.

After refuelling close tightly the fuel inlet plug.

OIL ALERT

The OIL ALERT device will stop the engine in case of no oil or insufficient amount of oil in the engine. When the engine with the oil level under the minimum mark is started, the warning light will flash and the device will not allow the start of the engine.



EARTH TERMINAL

It is obligatory to connect the ground connection point (12) by means of a sure efficient cable (please follow the installation local rules and/or regulations in force) in order to integrate or ensure the working of various electric protection devices referring to the several distribution systems TT/ TN/IT.

Notice: the group is not fitted with differential switch. the available current sockets are to be used exclusively to make a safe connection to the distribution panel provided with all the necessary protections foreseen by ruling laws.

The unit can be started only when the above operations have been correctly performed.

www Warning: do not start the engine if not fitted with the air filter, contaminating dust particles or filth may enter the engine through the carburettor thus damaging the engine itself.



Move the accelerator lever to the Position I. Use the starter if the engine is cold and the tempe-



Hold the starting handle firmly.



Pull the rope hard and fast. Pull it all the way out. Use two hands if necessary.



Then return it slowly.

Once the engine is started, with the starter off, let it turn for a few minutes before drawing the load.

△ IMPORTANT

RUNNING-IN During the first 50 hours of operation, do not use more than 60% of the maximum output power of the unit and check the oil level frequently, in any case please stick to the rules given in the engine use manual.

STOPPING

- Before stopping the engine it is compulsory to effect the following operations:
 - stop to draw single-phase current from the auxiliary sockets.
- Make sure that the machine is not delivering any

Wait for a few minutes to allow the machine to cool off, take however into consideration the prescriptions given in the engine use manual. Move the accelerator lever to the Position O.





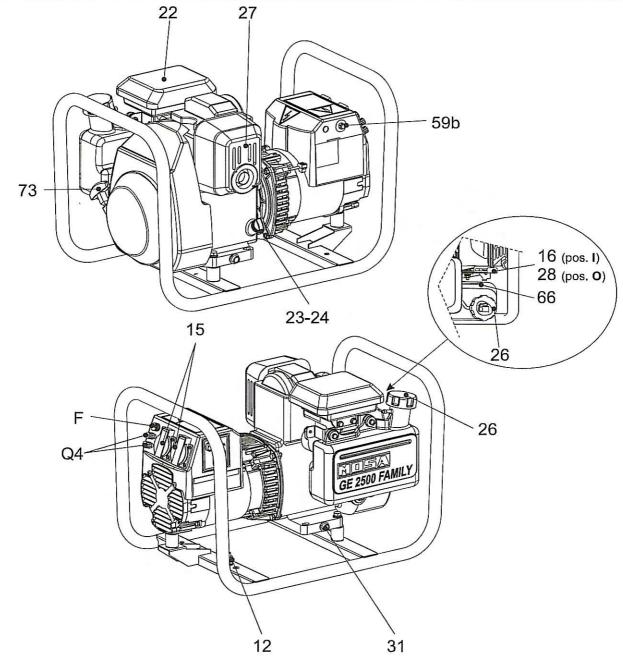




Bedienelemente

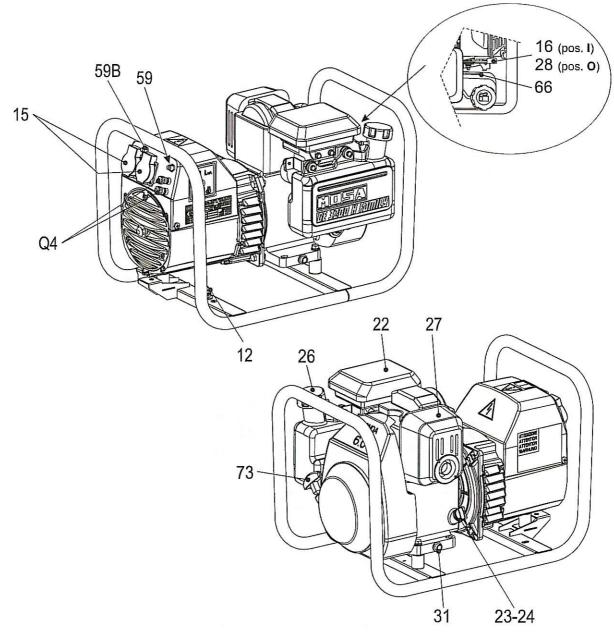
GE 2500 FAMILY

M 31



	25			
Pos.	Descrizione	Description	Description	Referenzliste
12	Presa di messa a terra	Earth terminal	Prise de mise à terre	Erdanschluss
15	Presa di corrente in c.a.	A.C. socket	Prises de courant en c.a.	Steckdose AC
16	Comando acceleratore	Accelerator lever	Commande accél./bouton marche	Beschleuniger (Gashebel/Gaszug)
22	Filtro aria motore	Engine air filter	Filtre air moteur	Luftfilter Motor
23	Asta livello olio motore	Oil level dipstick	Jauge niveau huile moteur	Ölmess-Stab
24	Tappo caricamento olio motore	Engine oil reservoir cap	Bouchon remplissage huile moteur	Füllverschluss Motoröl
26	Tappo serbatoio	Fuel tank cap	Bouchon réservoir	Füllverschluss Kraftstofftank
27	Silenziatore di scarico	Muffler	Silencieux d'échappement	Auspufftopf
28	Comando stop	Stop control	Commande stop	Stop-Hebel
31	Tappo scarico olio motore	Oil drain tap	Bouchon décharge huile moteur	Ablassöffnung Motoröl
59B	Protezione termica corrente aux	Aux current thermal switch	Protection thermique courant aux.	Thermoschutz Hilfsstrom
66	Comando Choke	Choke control	Commande Choke	Choke-Hebel
73	Comando manuale avviamento	Starting push button	Commande manuelle démarrage	Taste start
87	Rubinetto carnurante	Fuel valve	Robinet de l'essence	Kraftstoffventil
F	Fusubile	Fuse	Fusible	Sicherung
Q4	Prese carica batteria	Battery charge sockets	Prises charge batterie	Steckdose Batterielader

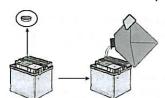




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59	Protezione termica c.b	Battery charger thermal switch		Thermoschutz Batterielader
59B	Protezione termica corrente aux	Aux current thermal switch	Protection thermique courant aux.	Thermoschutz Hilfsstrom
66	Comando Choke	Choke control	Commande Choke	Choke-Hebel
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Q4	Prese carica batteria	Battery charge sockets	Prises charge batterie	Steckdose Batterielader

PROCEDURE FOR RECHARGING A BATTERY

Take off the breather caps of the battery.



Check the electrolyte level in all the elements of the battery.

If necessary, add up distilled water to have the liquid at the recommended level.

Put back the breather caps of the battery.



WARNING



Sulfuric acid is corrosive. Protect hands, eyes and clothes.

Take the battery out of the machine for filling. Warranty **VOIDED** for damages due to spilled acid.

Use a densimeter to determine the charge state of the battery.

SPECIFIC WEIGHT	CHARGE PERCENTAGE
1.265	100%
1.230	75%
1.200	50%
1.170	25%

WARNING

- Do not try to start the engine, of a motor car, when the generator is still connected to the battery.
- · The generator may be damaged.
- Connect the positive terminal of the battery to the positive re-charge cable.

Do not invert the cables otherwise severe damages may occur to either the generator or the battery.

When the battery is out of the machine (the car) take the following steps. A spark close to the battery might cause an explosion.

To reduce this risk:

- Check the polarity of the battery.
 The positive pole (Pos +) of the battery has usually a diameter larger than that of the negative (Neg -).
- 2. Connect an insulated cable having a section of 13 sq.mm. and a minimum length of 600 mm. to the negative pole (Neg-).

- 3. Connect the positive (Red) re-charge cable to the positive pole of the battery (Pos +).
- 4. Go away as far as possible from the battery with the final free cable, then connect the negative (Black) to the terminal of the free cable.
- 5. Do not stay in front of the battery when making the final connection.
- 6. Connect the re-charge cables in the appropriate place of the generator.
- 7. Start the engine.
- When disconnecting the re-charge cables, operate always in the opposite sequence of the connecting procedure and eliminate the first connection staying at a fairly reasonable distance from the battery.

SUGGESTION FOR THE USE

The terminal in C.C. can be used to charge 12V car type batteries only.



CAUTION

- It is dangerous to work near a lead battery.
- The batteries produce explosive gas; sparks, flames, cigarettes, are to be kept far from them.
 Make sure that when they are being recharged there is adequate ventilation around the battery.
- It is not allowed to supply a low voltage electric system.
- It is not allowed to charge dry batteries.

To reduce the risk of battery explosions follow the following instructions and those appearing on the label applied onto the battery.

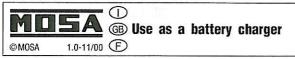
The battery contains sulphuric acid (electrolyte). The contact with eyes and skin may cause severe lesions. Wear protective garments and eye protections.

- If the electrolyte comes in contact with the skin, wash with plenty of water.
- If the electrolyte comes in contact with the skin,wash with plenty of water. If it comes in contact with the eyes wash with fluent water for at least 15 minutes and rush for a doctor.

The electrolyte is poisonous.

 if swallowed drink plenty of water or milk, then milk of magnesia or vegetable oil and call for a doctor.

Keep away from children.



GE 2500 FAMILY GE 3200 H FAMILY M 36.1

IMPORTANT

- Never position the generator directly above or under the battery being charged; gas or liquids of the battery may corrode and damage the generator. Position the generator as far as possible from the battery, considering the length of the cc. cables.
- Consider all precautions evidenced by the battery manufacturer such as remove or not the cells breather caps, and the recommended voltages while the battery is being recharged.
- NOTE: An overload of cc. current on the circuit will disconnect the safety switch of the cc. circuit

(the reset button will stick out a little) If this happens, look for a possible short circuit and the connections. Wait for some minutes before pushing back the safety switch button (to restore the function).

- 1. Do not stay in front of the battery when making the first connection.
- 2. Connect the recharge cables to the proper area of the generator.
- 3. Start the engine.
- 4. When disconnecting the recharge cables act always in a sequence contrary to that followed when the connection has been made and eliminate the first connection keeping yourself at a convenient distance. When the battery is mounted on a motorcar follow these instructions:
 - 1. Make sure that all accessories of the machine are disconnected to avoid generation of sparks.
 - 2. Position the cc. cables, in such a way as to reduce the risk of damages, from doors, bonnet and motor moving parts.
 - 3. Do not touch fans, belts, pulleys and other parts liable to hurt the operator.
 - Check the polarity of the battery poles .The positive pole (Pos +) has, normally, a diameter larger than the negative one (Neg -).
 - Determine which battery pole is connected to the chassis. If it is the negative one (as in most of the cars) go to point 6.
 If it is connected with the positive pole
 - 6. For the vehicles having the negative

refer to point 7.

connected to the chassis, connect the positive cable (Red) to the positive pole (Pos +).

Then connect the negative one (Black) to the chassis or to the motorblock, far from the battery.

Do not connect the cable to the carburettor, to fuel hoses or to the metallic parts of the chassis or to the engine block.



CAUTION

- To avoid sparks generation close to the battery, first connect the cable to the battery and then to the generator. Disconnect the cable from the generator first.
 - 7. For vehicles having the positive connected with the chassis, connect the negative cable (Black) of the recharge, to the negative pole of the battery (Neg N).

 Connect then the positive cable (Bed) to
 - Connect then the positive cable (Red) to the chassis or to the engine block, far from the battery. Do not connect the cable to the carburettor, to fuel hoses or to metallic parts of the car connect to a heavy part of the chassis or to the engine block.
 - 8. Connect the recharge cables to the proper parts of the generator.
 - 9. Start the engine.
 - 10. When disconnecting the recharge cable, remove the socket from the generator, remove the cables from the chassis and then from the terminals of the battery.



CAUTION

- Before connecting the recharge cables of a battery installed on a motor car, disconnect the earth cables of the motorcar battery.
- Reconnect the earth cable of the battery after having removed the recharge cables.
- By this procedure you will avoid the possibility of a short circuit as well as sparks in case there is an accidental contact between one terminal of the battery and the chassis or the body of the car.

GE 2500 FAMILY GE 3200 H FAMILY M 37

ATTENTION

It is strictly forbidden to connect the group to the public mains a/o to another source of electric power.

In case such connection is made there may be a return of current, from the generator to the line being used thus causing electric shocks to workers of the electric company, or whoever else working on the line during a temporary stop.



WARNING

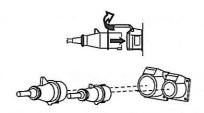
Sockets are not **self-locked**: tension is avaible immediately after starting also with no plug.



WARNING

Keep out from exhaust system: temperature is **very** high and it may burn.

Load connections have to be made by qualified personel respecting electric safety rules.



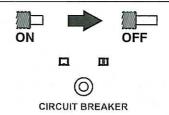
Make sure the unit is properly grounded (12) - See page M 25 -.

Connect up the machine, using proper plugs and cables in good condition to the AC socket (15) to draw single-phase power.

THERMOPROTECTION

If you overload the genset the thermoprotection will automatically switch off.

If the thermoprotection is released, disconnect all the connected loads.



Avoid to hold the central pole of the thermoprotection pressed for a long time. Otherwise, in case of trouble, it will not click, **damaging** the generating set.



Reset the thermoprotection pressing the central pole.

When reset, connect the loads again. In case the protection should act furtherly, check: the connections, the wires or others, and if necessary call the Assistance Service.

CAUTION

- ⇒ Starting power of electric motors is higher than nominal.
- ⇒ Not overload the sockets.
- ⇒ Do not connect genset to domestic lines: you may damage genset and domestic tools.
- ⇒ Do not modify or use genset for improper use.
- ⇒ Do not connect genset in between.
- ⇒ If necessary to extend the length of cables, use IEC 245 or equivalent.
- ⇒ Follow data plate specifications before connecting genset to load.



ATTENTION Have qualified personnel do maintenance troubleshooting work. Stop the engine before doing any work inside the machine. If for any reason the machine must be operated while working inside, pay attention to rotating parts and hot surfaces which may be unprotected when the machine is open (exhaust, etc). Use suitable tools and clothes. Do not modify the components if not authorized. MOVING **HOT** surface - See pag. M 1.1 -**PARTS** can can injure hurt you

MAINTENANCE

By maintenance at care of the utilizer we intend all the operatios concerning the verification of mechanical parts, electrical parts and of the fluids subject to use or consumption during the normal operation of the machine.

For what concerns the fluids we must consider as maintenance even the periodical change and or the refills eventually necessary.

Among the activities related to maintenance are not to be considered the repairs (or the occasional substitution of worn-out parts and the substitution of electrical or mechanical parts subject to wear during the normal use) made by Authorized Assistance Centers.

Use only original MOSA spare parts.

Make checks and repairs only by MOSA authorized Assistance Centers.

Among the maintenance operations are instead included also the cleaning of the machine if effected out of the normal working cycle.

Verify, daily, the oil level in the engine oil pan. Make sure there are no obstructions (rags, leaves, or other) inside the air inlet and exhaust hoses, of the alternator or of the engine.

ALTERNATOR

No other further periodical maintenance is necessary, as the alternator has no brushes or slip tings, and the output regulation is entirely electronic.

Stick to the recommendations contained in the alternator instruction book.

ENGINE

Stick to the engine instruction book.

N.B.: all warning and decals should be checked once a year and replaced if missing or unreadable.

Check periodically the condition of the cables and tighten the connections.

In case the machine should not be used for more than 30 days, make sure that the room in which it is stored presents a suitable shelter from heat sources, weather changes or anything which can cause rust, corrosion or damages to the machine.

See page. M45.

STORAGE

In case the machine should not be used for more than 30 days, make sure that the room in which it is stored presents a suitable shelter from heat sources, weather changes or anything which can cause rust, corrosion or damages to the machine.

ENGINE

Empty the tank: then start the engine until it will stop for total lack of fuel.

Drain the oil from the engine sump and fill it with new oil

Pour about 10 cc of oil into the spark plug hole and screw the spark plug, after having rotated the crankshaft several times.

Rotate the crankshaft slowly until you feel a certain compression, then leave it.

Clean the covers and all the other parts of the machine carefully.

Protect the machine with a plastic hood and store it in a dry place.

In case of necessity for first aid and of fire prevention, see page. M2.5.

A

IMPORTANT



In the storage and/or cust off operations avoid that polluting substances, liquids, exhausted oils, etc. bring damage to people or things

or can cause negative effects to surroundings, health or safety respecting completely the laws and/or dispositions in force in the place.

CUST OFF

As cust off we intend all operations to be made, at utilizer's care, at the end of the use of the machine.

This comprises the dismantling of the machine, the subdivision of the several components for a further reutilization or for getting rid of them, the eventual packing and transportation of the eliminated parts up to their delivery to the store, or to the bureau encharged to the cust off or to the storage office, etc.

The several operations concerning the cust off, involve the manipulation of fluids potentially dangerous such as: lubricating oil and fuel.

The dismantling of metallic parts liable to cause injuries or wounds, must be made wearing heavy gloves and using suitable tools.

The getting rid of the various components of the machine must be made accordingly to rules in force of law a/o local rules.

Particular attention must be paid when getting rid of lubricating oils and inflamable liquids such as fuel.

The machine user is responsible for the observance of the norms concerning the environment conditions with regard to the elimination of the machine being cust off and of all its components.

In case the machine should be cust off without any previous disassembly it is however compulsory to remove:

- -fuel tank
- -engine lubricating oil

NOTE: MOSA is involved with custing off the machine only for the second hand ones, when not reparable.

The generating set GE 2500 is a unit which transforms the mechanical energy, generated by endothermic engine, into electric energy, through an alternator.

Is meant for semi-professional use, powered by an endothermic engine and composed of various main parts such as: engine, alternator, electric and electronic controls, the fairing or a protective structure.

The assembling is made on a steel structure, on which are provided elastic supports which must damp the vibrations and also eliminate sounds which would produce noise.

GE 2500 FAMILY
2.3 kVA / 230 V / 10 A 2 kVA / 230 V / 8.7 A 50 Hz 1
self-excited, self-regulated, brushless
synchronous, single-phase H
HONDA GC 160 4-Stroke 160 cm ³ 1 3.3 kW (4.5 HP) 3000 rpm 313 g/kWh Air 0.6 I
gasoline
12 V - 10A 2 I 2.6 h IP 21 555x370x390 29 Kg 97 LWA (72 dB(A) - 7 m)

OUTPUT

Declared powers at the following ambient conditions: temperature 20°C, relative humidity 30% altitude 100 m above sea level. In an **approximative** way one reduces: of 1% every 100 m altitude and of 2.5% for every 5°C above 25°C.

For possible modifications or changes to be brought on the engines, with climate conditions different from those above mentioned, please call our Assistance Authorized Centers.

ACOUSTIC POWER LEVEL

The machine respects the noise limits, expressed in sound power, given in the a.m. directives.

These limits can be used to judge the sound level produced on site.

For example: the sound power level of 100 LWA.

The sound pressure (noise produced) at 7 meters distance is about 75dBA (the limit value less 25).

To calculate the sound level at other distances use this formula:

$$dBA_X = dBA_y + 10 \log \frac{ry^2}{rx^2}$$

At 4 meters the noise level becomes:

$$75 \text{ dBA} + 10 \log \frac{7^2}{4^2} = 80 \text{ dBA}$$

The generating set GE 3200 is a unit which transforms the mechanical energy, generated by endothermic engine, into electric energy, through an alternator.

Is meant for semi-professional use, powered by an endothermic engine and composed of various main parts such as: engine, alternator, electric and electronic controls, the fairing or a protective structure.

The assembling is made on a steel structure, on which are provided elastic supports which must damp the vibrations and also eliminate sounds which would produce noise.

Technical data	GE 3200 H FAMILY
GENERATOR	
Single-phase generation Frequency Power factor (cos φ)	2.8 kVA (2.4 kW) / 230 V / 12.2 A 50 Hz 0.8
ALTERNATOR	self-excited, self-regulated, brushless
Type Insulating class	synchronous, single-phase H
ENGINE	
Mark Model Type Displacement Cylinders Output Speed Fuel consumption Cooling system Engine oil capacity Starter Fuel	HONDA GC 190 4-Stroke 187 cm³ 1 3.7 kW (5 HP) 3000 rpm 313 g/kWh Air 0.6 I recoil gasoline
GENERAL SPECIFICATION	3
Battery charge Tank capacity Running time (75%) Protection Dimensions / max. Lxwxh (mm) * Weight (dry) * Noise level	12 V - 10A 2 I 2.5 h IP 23 555x370x390 35 Kg 98 LWA (73 dB(A) - 7 m)

OUTPUT

Declared powers at the following ambient conditions: temperature 20°C, relative humidity 30% altitude 100 m above sea level. In an approximative way one reduces: of 1% every 100 m altitude and of 2.5% for every 5°C above 25°C.

For possible modifications or changes to be brought on the engines, with climate conditions different from those above mentioned, please call our Assistance Authorized Centers.

ACOUSTIC POWER LEVEL

The machine respects the noise limits, expressed in sound power, given in the a.m. directives.

These limits can be used to judge the sound level produced on site.

For example: the sound power level of 100 LWA.

The sound pressure (noise produced) at 7 meters distance is about 75dBA (the limit value less 25).

To calculate the sound level at other distances use this formula:

$$dBA_X = dBA_Y + 10 \log \frac{ry^2}{rx^2}$$

At 4 meters the noise level becomes:

$$75 \text{ dBA} + 10 \log \frac{7^2}{4^2} = 80 \text{ dBA}$$



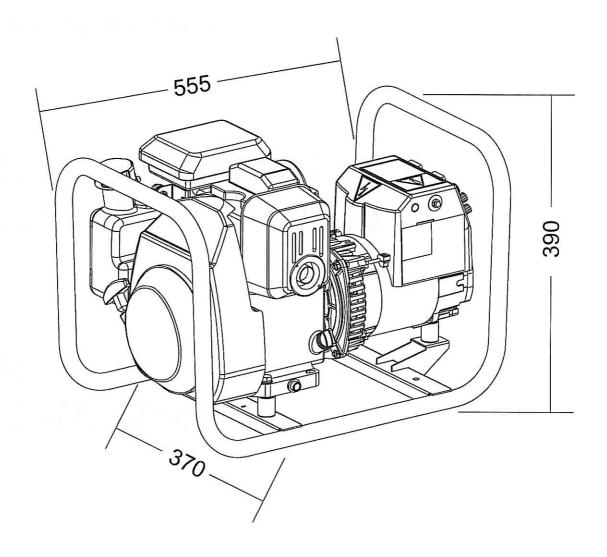
DIMENSIONS DIMENSIONS

SCHEMI ELETTRICI ELECTRICAL SYSTEM

RICAMBI SPARE PARTS

MUSA (B) Dimensions	D Abmessungen	GE 2500 FAMILY GE 3500 H FAMILY	M 53
© MOSA 1.1-01/05 F Dimensions		de 3000 n FAMILI	99

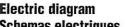
GE 2500 FAMILY GE 3200 H FAMILY

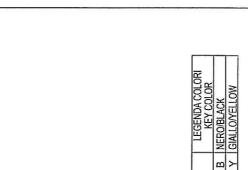


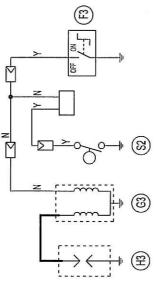
Stromlaufplan

AVVIAMENTO A STRAPPO MANUAL RECOIL STARTER

MOTORI HONDA HONDA ENGINES







LEGENDA / LEGEND / LEGENDE / REFERENZLISTE S2: Trasmettitore livello olio / Oil level transmitter /

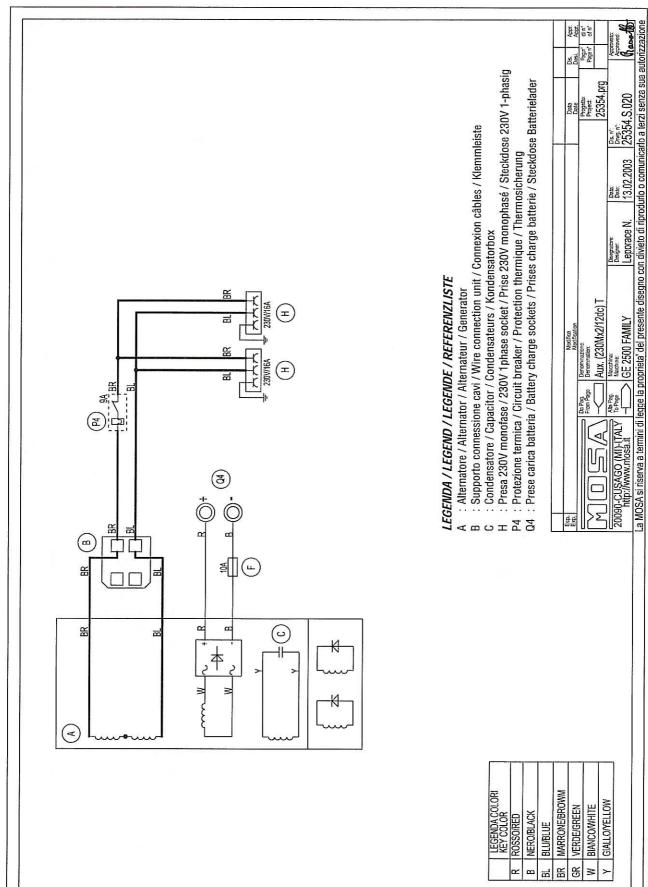
F3: Pulsante stop / Stop push-button / Bouton stop Transmetteur niveau huile / Ölstandssensor

Taste Stopp

G3: Bobina accensione / Ignition coil / Bobine allumage / Zündspule

H3: Candela accensione / Spark plug / Bougie allumage Zündkerze

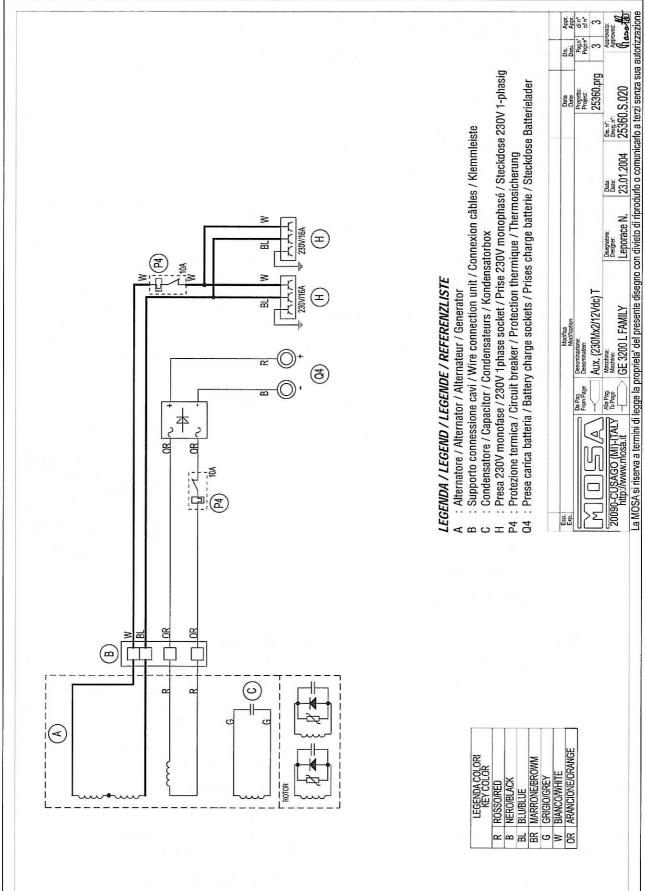
Disn: 23212.S.010 Data: 20/12/2000 Engine Honda (manual recoil starter-oil alert) Leporace N.



@ MOSA

(B) Electric diagram 1.0-04/04 F Schemas electriques

E



La MOSA è in grado di soddisfare ogni richiesta di pezzi di ricambio.

Se si desidera mantenere in efficienza la macchina, sempre nel caso di riparazione che comportino sostituzioni di pezzi MOSA, si deve pretendere che vengano usati solo parti di ricambio originali.

MOSA guarantees that any request for spare parts will be satisfied.

To keep the machine in full working order, when replacement of MOSA spare parts is required, always ask for genuine parts only.

MOSA est en mesure de satisfaire toute demande de pièces de rechange.

Si l'ont veut garder l'appareil en bonne condition de fonctionnement, dans le cas de réparations qui comportent le replacement de pièces, on doit exiger que soient employées des pièces d'origine MOSA.

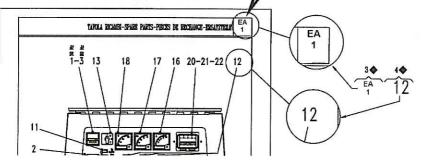
MOSA kann jedes Verlangen von Ersatzteilen befriedigen.

Wenn man die Maschine arbeitsfaehig halten will, im Falle von Reparaturen, die den Ersatz von MOSA-Teilen benoetigen, muss man immer originale MOSA Ersatzteile fordern.

Per ordinare le parti di ricambio indicare -When ordering the spare parts, it is recommended to indicate:

Pour commander les pièces de rechange, indiquer: Zur Bestellung der Teile muss man:

- 1) * n. di matricola / serial number / matricule de la machine / Seriennummer
- 2) ** tipo motosaldatrice e/o gruppo elettrogeno / model of welder and/or generating set / type de motosoudeuse et/ou groupe électrogène / Typ des Schweissgeraets und/oder Stromerzeugers
- 3) ♦ n. tavola / n. table / n. table / taflenummer
- 4) ◆ n. posizione / n. position / n. position / positionnummer
- 5) quantitativo / quantity / quantité / Menge



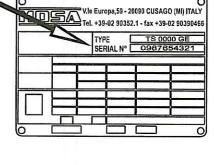
Il dati richiesti si trovano sulla targa dati situata sulla struttura della macchina ben visibile e di facile consultazione.

 ★

☐ The requested data are to be found on the data plate located on the machine structure, quite visible and easy to consult. ■

Les données demandées se trouvent sur la plaque des données, située sur la structure de la machine, bien visible et facile à consulter. *

Die verlangten Daten sind auf der Datenplatte, die sichtbar und leicht zu verstehen an der Maschinestruktur gehoert. **



LEGENDA NOTE:

- (EV) Specificare all'ordine il tipo di motorizzazione e le tensioni ausiliarie
- (ER) Solo motore con avviamento a strappo
- (ES) Solo motore con avviamento elettrico
- (VE) Solo versione E.A.S.
- (QM) Specificare all'ordine la quantità in m
- (VS) Solo versioni speciali
- (SR) Solo a richiesta

ABBREVIATIONS AND SYMBOLS:

- (EV) When ordering, specify the engine type and the auxiliary voltage
- (ER) Engine with recoil starter only
- (ES) Engine with electric starter only
- (VE) E.A.S version only.
- (QM) When ordering, specify the length in meters
- (VS) Special version only
- (SR) By request only

LEGENDE DES NOTES:

- (EV) Type de moteur et/ou tensions auxiliaires doivent être spécifiés à la commande
- (ER) Moteur avec démarrage à cordelette seulement
- (ES) Moteur avec démarrage électrique seulement
- (VE) Version E.A.S. seulement
- (QM) A la commande spécifier la longueur en mètres
- (VS) Versions spéciales seulement
- (SR) Sur demande seulement

NOTENERKLAERUNG:

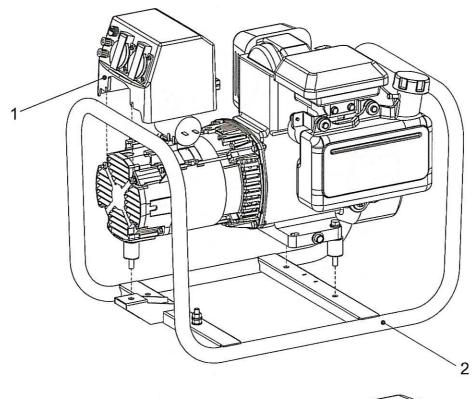
- (EV) Motortyp und Hilfspannungen beim Auftrag angeben
- (ER) Nur bei Motor mit Reversierstart
- (ES) Nur bei Motor mit Elektrostart
- (VE) Nur bei E.A.S Ausfuehrung
- (QM) Beim Auftrag die Laenge in Metern angeben
- (VS) Nur bei Sonderausfuehrungen
- (SR) Nur auf Wunsch

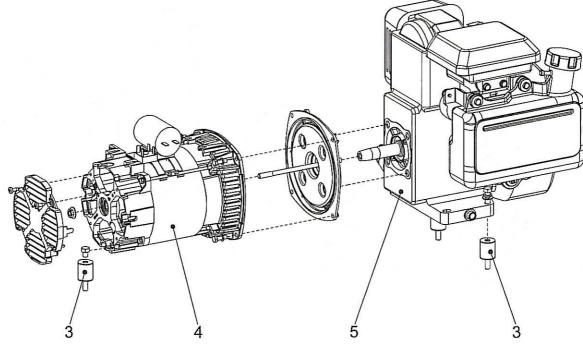


Ersatzteile Tabla de recambios

GE 2500 FAMILY

GS 5





Pos.	Rev. Cod.	Descr.	Descr.	
1	253543097	CUFFIA SUP. ALTERNATORE	FRONT PANEL FOR ALTERNATOR	
2	253541050	BARELLA	PROTECTIVE FRAME	
3	256651035	ANTIVIBRANTE	VIBRATION DAMPER	
4	253543100	ALTERNATORE	ALTERNATOR	
5	253542200	MOTORE HONDA GC160	HONDA ENGINE GC 160	



Ricambi

B Spare parts

1.2-01/05 Piéces de rechange

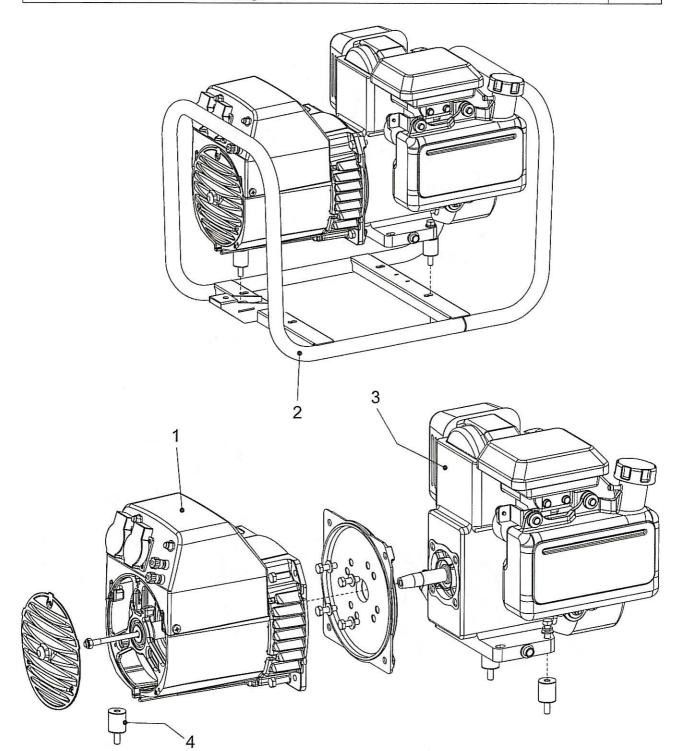
(D) Ersatzteile

(N)

(E) Tabla de recambios

GE 3200 H FAMILY

GS 10



Pos.	Rev. Cod.	Descr.	
1	253603100	ALTERNATORE	
2	253541050	BARELLA	
3	253602200	MOTORE HONDA GC 190	
4	256651035	ANTIVIBRANTE D25x30	

Descr.
ALTERNATOR
PROTECTIVE FRAME
HONDA ENGINE GC 190
VIBRATION DAMPER

R

1.1

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odello mo atricola n ICAMBI Al	notore / engine modentore / engine services	RONO / SYNCHION model:	RONOUS	des	NATO.	R SPAR	/or ta	RTS:		q.t	y

