

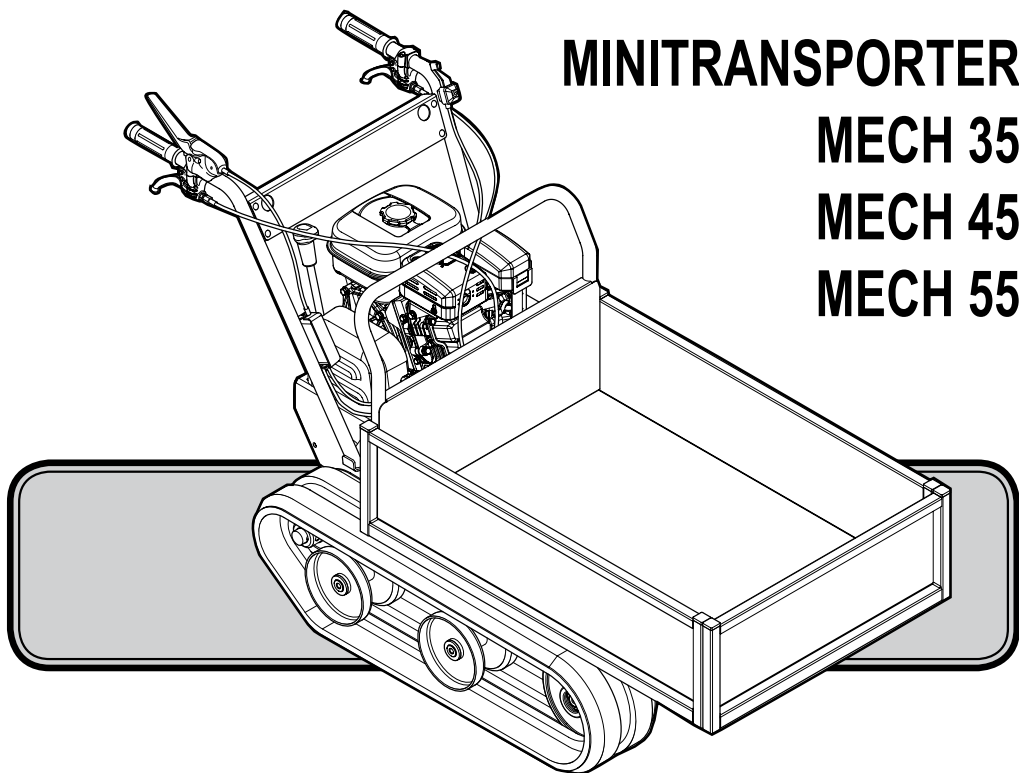
FORT®

MINITRANSPORTER

MECH 35

MECH 45

MECH 55



IT ISTRUZIONI PER L'USO E MANUTENZIONE

EN USE AND MAINTENANCE INSTRUCTIONS

FR INSTRUCTIONS POUR L'EMPLOI ET L'ENTRETIEN

DE BEDIENUNGS- UND WARTUNGSANLEITUNG



Prima di iniziare ad operare con la macchina,
leggere attentamente le istruzioni per l'uso.

*Before starting to work with the machine, care-
fully read the instructions for use.*

Avant le démarrage de la machine, lire avec
attention les instructions pour l'emploi.

*Vor dem Gebrauch der Maschine lesen Sie
ausführlich die Bedienungsanleitung*



ISTRUZIONI ORIGINALI
con traduzioni delle istruzioni originali
Rev. 1/2017



FORT Srl Unipersonale
36040 SOSSANO (Vicenza) Italia
Via Seccalegno, 29

DICHIARAZIONE CE DI CONFORMITÀ - MINITRANSPORTER

La ditta FORT Srl Unipersonale, via Saccalegno, 29 - SOSSANO (VI) - ITALIA, dichiara sotto la propria responsabilità, che la macchina DUMPER sottoindicata alla quale si riferisce, è conforme alle seguenti disposizioni legislative: Direttiva 2006/42/CE, Direttiva 2004/108/CE, Direttiva 2000/14/CE (definizione all. I punto 18).

Valutazione della conformità secondo all. VI della 2000/14/CE a cura di: ORGANISMO NOTIFICATO n° 0426, ITALCERT Srl viale Sarca, 336 - Milano - ITALIA.

Riferimenti normativi utilizzati: UNI EN ISO 12100-1, EN ISO 13857, EN ISO 3746.

EC CERTIFICATE OF CONFORMITÀ - MINITRANSPORTER

The company FORT Srl Unipersonale, via Seccalegno, 29, SOSSANO (VI) - ITALIA, declares on its own responsibility, that the machine DUMPER below listed, which this declaration refers to, complies with following regulations: Regulation 2006/42/CE, Regulation 2004/108/CE, Regulation 2000/14/CE (Definition enclosure I point 18).

Compliance evaluation according enclosure VI regulation 2000/14/CE by: NOTIFIED BODY n° 0426, ITALCERT Srl viale Sarca, 336 - Milano - ITALIA.

The following standards were complied with: UNI EN ISO 12100-1, EN ISO 13857, EN ISO 3746.

DÉCLARATION DE CONFORMITÉ POUR LA CEE - MINITRANSPORTER

La société FORT Srl Unipersonale, via Seccalegno n. 29, SOSSANO (VI) - ITALIA, déclare sous sa propre responsabilité, que la machine DUMPER sous indiquée à laquelle cette déclaration se réfère, est conforme aux dispositions législatives: Directive 2006/42/CE, Directive 2004/108/CE, Directive 2000/14/CE (Définition Annexe. I point 18).

Evaluation de conformité selon annexe VI directive 2000/14/CE par: ORGANISME NOTIFIÉ n° 0426, ITALCERT Srl viale Sarca, 336 - Milano - ITALIA.

Les suivants documents normatives ont été utilisés: UNI EN ISO 12100-1, EN ISO 13857, EN ISO 3746.

EG - KONFORMITÄTSERKLÄRUNG - MINITRANSPORTER

Die Firma Fort Srl Unipersonale, erklärt aus eigener und alleinige Verantwortung, daß die unten genannte Maschine mit der Bezeichnung DUMPER, die Gegenstand dieser Erklärung ist, mit den folgenden gesetzlichen Bestimmungen übereinstimmt: Richtlinie 2006/42/CE, Richtlinie 2004/108/CE, Richtlinie 2000/14/CE (Erklärung Anlage. I Punkt 18).

Einschätzung der Übereinstimmung gemäß Anlage VI Richtlinie 2004/14/CE von: Zustelleinrichtung n° 0426, ITALCERT Srl viale Sarca, 336 - Milano - ITALIA.

Es wurden die folgenden normativen Unterlagen verwendet: UNI EN ISO 12100-1, EN ISO 13857, EN ISO 3746.

MECH 35	Engines	Lwa	Lwag	LpA	Matr.
<input type="checkbox"/>	F40B	93	96	82	
<input type="checkbox"/>	SP17	93	96	82	
<input type="checkbox"/>	GP160	96	99	83	
MECH 45	Engines	Lwa	Lwag	LpA	Matr.
<input type="checkbox"/>	F40B	93	96	82	
<input type="checkbox"/>	SP17	93	96	82	
MECH 55	Engines	Lwa	Lwag	LpA	Matr.
<input type="checkbox"/>	F65B	97	100	86	
<input type="checkbox"/>	GX160	97	100	86	

Sossano (VI):

Custode e detentore del Fascicolo Tecnico
Guardian and keeper of the Technical
Aufbewahrer und Inhaber der technischen Akte
Luigi MOLINARO c/o Fort S.r.l. Unipersonale
Responsabile Tecnico
Technical manager
Technischer Leiter

Rappresentante legale
Legal representative
Rechtlicher Verteter
Fort S.r.l. Unipersonale
Amministratore Delegato
Chief Executive Officer
Delegierte Verwalter

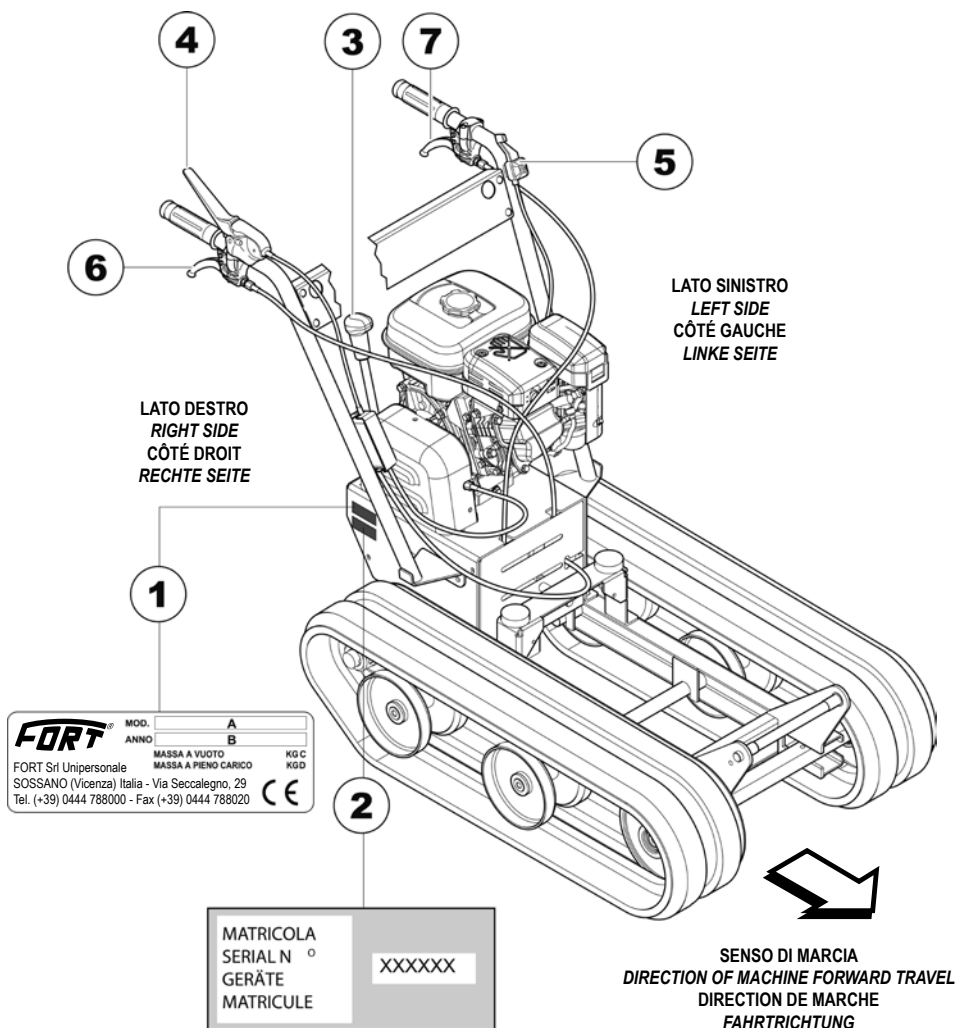


Fig. 1

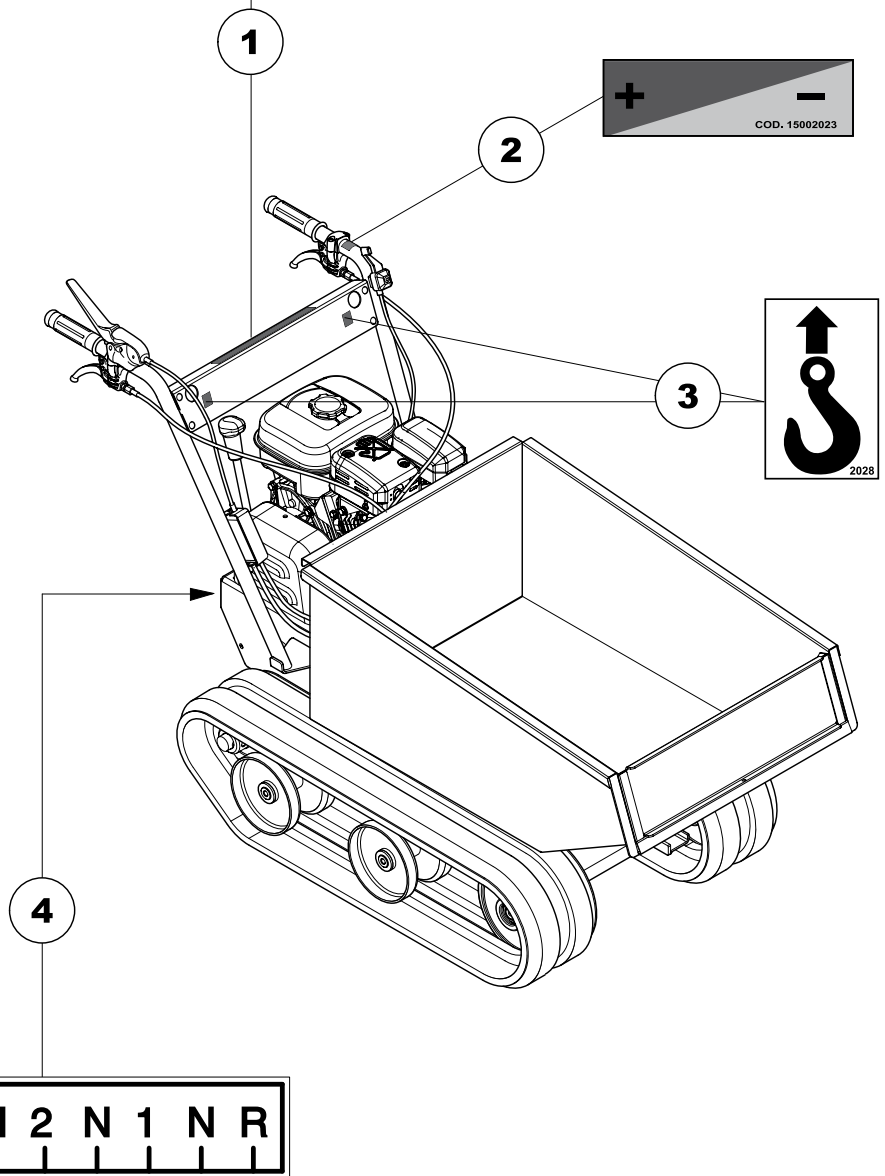
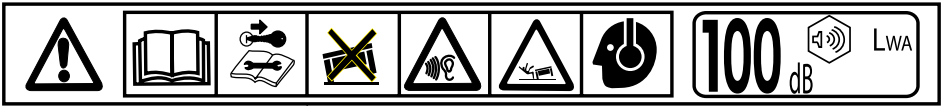


Fig. 2

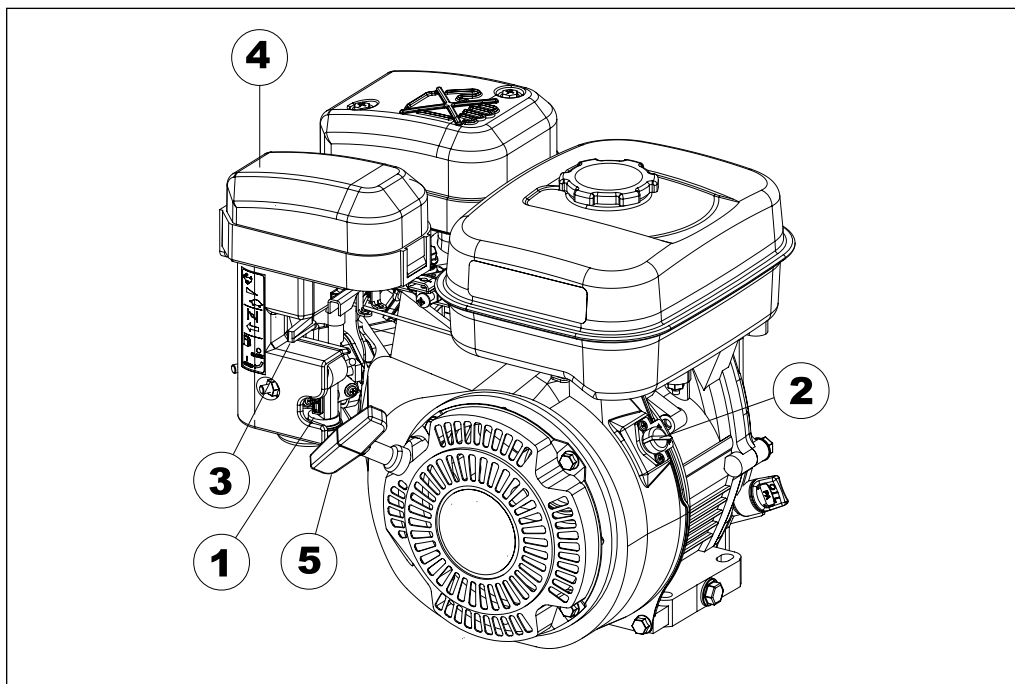


Fig. 3

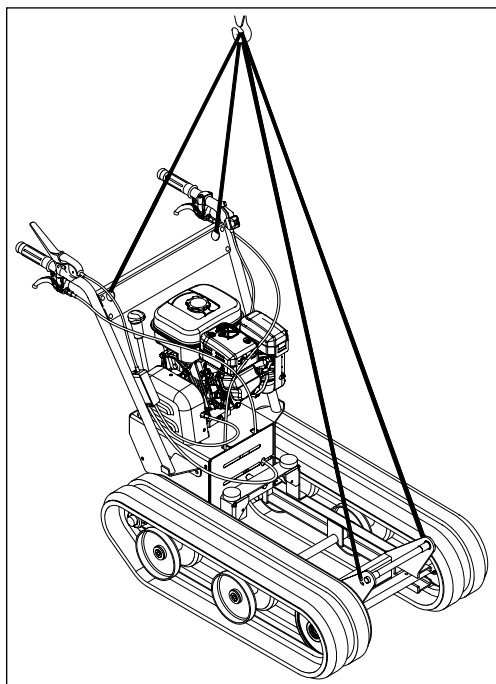


Fig. 4

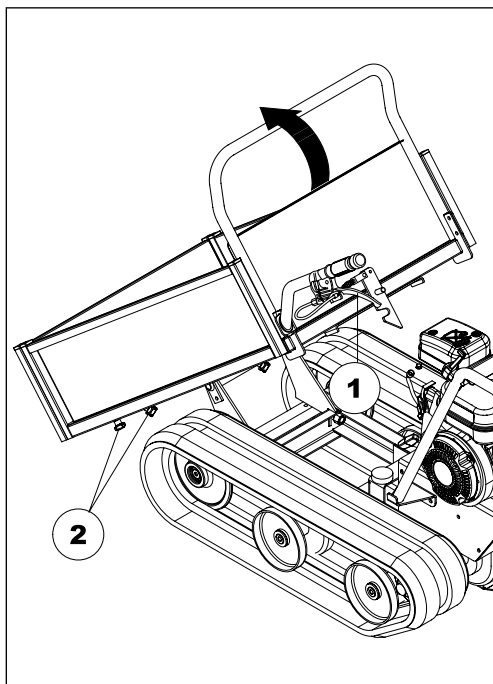


Fig. 5

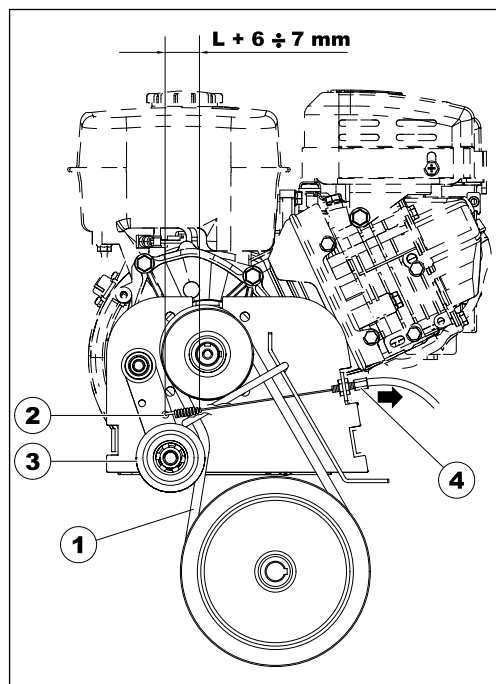


Fig. 6

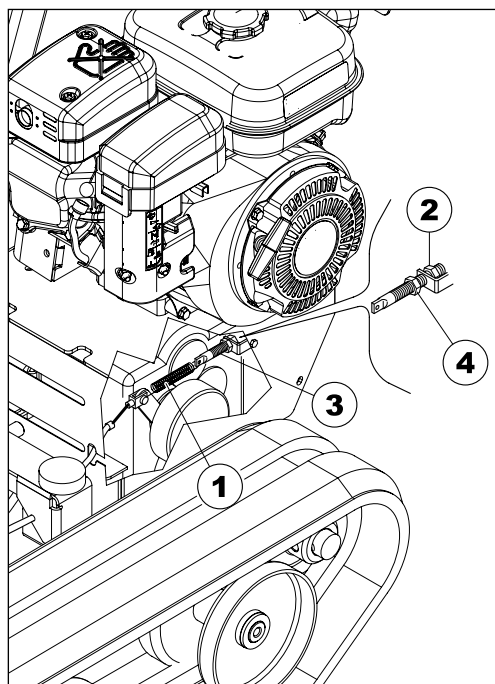


Fig. 7

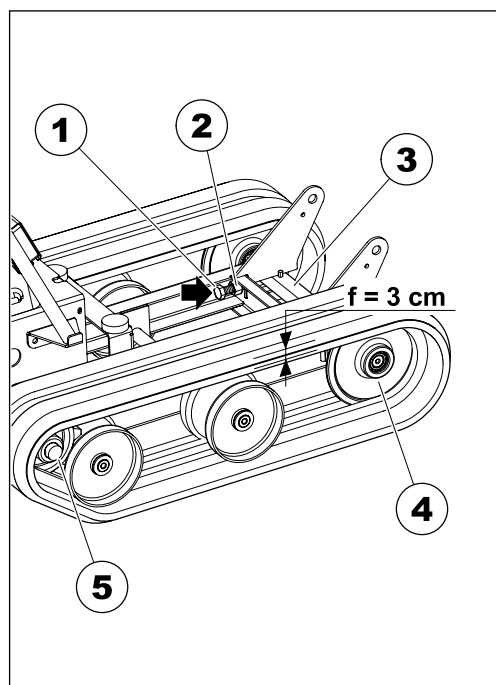


Fig. 8

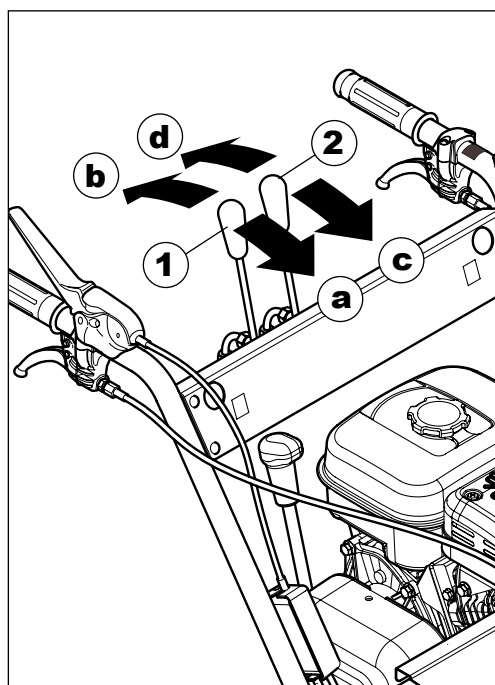


Fig. 9

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SECTION 1

Description and specifications of the machine

1.1 FOREWORD

This manual lists the information, the instructions, and what it is thought necessary for the knowledge, the correct use, and the ordinary maintenance of the Minitransporter, model "MECH 35 - MECH 45 - MECH 55", hereinafter also called machine or vehicle, manufactured by "FORT S.r.l Unipersonale" from Sossano (Vicenza), Italy, hereinafter also referred to as Manufacturer. What is herewith written is neither a complete description of the several members nor a detailed explanation of their operation, but the user may find what is normally useful to know for a safe use and a correct storage of the machine. The ordinary operation, the life and the operational economics of the machine itself depend on the compliance with what is written in this manual.



WARNING

Failure to comply with what is described in this manual, the operational carelessness, the improper use of the machine and the performing of unauthorized modifications, cause the voidance of the machine warranty by the Manufacturer.

The Manufacturer also declines and shall not be held responsible for direct and indirect damages caused by the above-mentioned reasons and by the non-fulfillment of what is written in this manual.

In case of repairs or overhauls involving particularly difficult operations, you must contact the authorized Service Centers that employ skilled personnel or directly the Manufacturer who is, anyway, at your complete disposal in order to grant an immediate and careful technical service and everything necessary for restoring the machine full efficiency.



DANGER

This manual is an integral part of the machine and must always be attached to it in case of transfer or sale. It shall be kept in a safe place known by the authorized personnel. The personnel shall keep it integrally so to be able to consult it during the whole life of the machine itself.

In case it is damaged or lost, you must require a copy of it to the Manufacturer immediately.

1.2 WARRANTY

The Manufacturer warrants his new manufactured products for a period of twelve (12) months from the date of purchase.

The engine is warranted in compliance with the terms and conditions established by the Manufacturer himself.

We suggest checking the integrity of the machine when you receive it.

Any claim shall be made in writing within 8 (eight) days after receiving the machine itself.

The warranty includes only the repair or the replacement free of charge of those parts which, after a careful examination by the Manufacturer, are found faulty (the electrical parts and tools are not included).

Any return shall be previously agreed about with the Manufacturer and shall be shipped ex works. The replacements or the repairs of the parts under warranty shall not, however, extend the terms of the warranty itself.

The transport costs, the lubricants, the VAT and the customs duties, if any, shall be to the charge of the purchaser.

The purchaser shall, anyhow, enforce his claims only if he has complied with the additional terms concerning the validity of the warranty listed also in the supply contract. In case both parties do not intend to submit the disputes arising out of the supply contract to the arbitrators' judgment, or in any other case, when the judgment of a body of the ordinary Court is required, only the Court of Vicenza shall be the competent court.

1.2.1 NO WARRANTY

The warranty shall not be valid (besides what is mentioned in the supply contract):

- in case a handling mistake and/or crash attributable to the operator takes place;
- in case the max. permissible power limit it is exceeded;
- in case the damage is attributable to a poor maintenance;
- in case, further to repairs carried out by the user without the Manufacturer's permission or in case, due to the assembly of non-genuine spare parts, the machine undergoes changes and the damage is attributable to such changes:

- in case the instructions listed in this manual are not complied with;
- exceptional events.

Moreover, the warranty does not include the damages resulting from negligence, carelessness, bad use and misuse of the machine.



WARNING

The tampering of the safety devices on the machine shall automatically void the warranty and the Manufacturer's responsibility.

1.3 IDENTIFICATION OF THE MACHINE

ENGINE. To identify the engine it is necessary to consult the instructions manual of the specific engine, by comparing the data on the nameplate of the engine Manufacturer.

MACHINE. Each machine has an identification plate (1 Fig. 1), listing:

- Name and address of the **Manufacturer**;
- **"EC"** marking;
- **A)** Model;
- **B)** Year of manufacture;
- **C)** Mass in Kg.
- **D)** Mass at full load in Kg.

The data reported on the identification plate identifying the machine shall always be mentioned in case spare parts and/or service are required.

There is also an identification plate with the mini carrier serial numbers (2 Fig.1) which must be mentioned in case of spare parts order or service request.

The machine in the standard version (carrier bed or dumper with manual dumping) **is equipped with:**

- Instructions manual for operating and maintaining the machine
- Instructions manual for operating and maintaining the engine;
- **"EC"** declaration of conformity;

Kit including:

- 10-13 Allen wrench;
- 13-17 Allen wrench;
- Screwdriver,
- Wrench for engine spark plug.

Both above mentioned manuals are to be considered an integral part of the machine and they must be carefully read before carrying out any intervention or before using it (even before unpacking it).

1.4 DESCRIPTION OF THE MACHINE AND AUTHORIZED USE

The Minitransporter is a machine **"EC"** marked in compliance with the regulations of the European Union listed in the Directive 2006/42/EC, 2004/108/EC and 2000/14/EC, as described in the declaration of conformity attached to each machine.

1.4.1 AUTHORIZED USE OF THE MACHINE

The Minitransporter described in this manual is a machine that was specially designed for transport operations in the agricultural, gardening, building and transport of miscellaneous materials field.



DANGER

The operator shall be skilled and able to read and understand what is written in this manual.

The operator, moreover, shall use the machine by keeping in mind the regulations in force for the accident prevention, the conditions of use and the specifications of the machine itself.

1.4.2 UNAUTHORIZED USE OF THE MACHINE



DANGER

- **THE MACHINE SHALL NOT BE USED IN ENVIRONMENTS WHERE VAPORS OR EXPLOSIVE FLAMMABLE GAS MIXTURES MAY DEVELOP**
- **IT SHALL NOT BE USED IN CLOSED OR POORLY VENTILATED ROOMS**
- **IT IS ABSOLUTELY FORBIDDEN TO USE THE MACHINE IN FLAMMABLE OR EXPLOSIVE ATMOSPHERE AND/OR WITHIN CLOSED ENVIRONMENTS**

The machine was not designed to be used on public roads. Besides, it is not equipped with headlights for using it during nighttime. Therefore it is absolutely forbidden to use the machine in such conditions.



DANGER

IT IS ABSOLUTELY FORBIDDEN TO TRANSPORT PEOPLE ON THE MACHINE. THE MANUFACTURER SHALL NOT BE HELD RESPONSIBLE FOR DAMAGES TO PERSONS, ANIMALS OR THINGS DERIVING FROM A USE OF THE MACHINE DIFFERENT FROM THE ONE MENTIONED IN THIS MANUAL.

1.4.3 CONTROL AND DRIVING POSITION

The Minitransporter control and driving position described in this Manual is with both hands placed on the handlebar.

1.5 PROTECTIONS AND SAFETY DEVICES



DANGER

The machine was designed in order to be safely used by protecting the movable parts with fixed guards, with movable guards and with safety devices.

The Manufacturer, therefore, declines any responsibility in case of damages resulting from the tampering of the protections and safety devices

1.5.1 NOISE HAZARD

The noise level (airborne noise) was recorded with the engine running at full rpm and idling by a skilled laboratory in compliance with the EN ISO 3746/1996 Standard and the recorded levels were the following:

Model	Engines	Sound pressure level at the driver's seat LpA (dB)	Guaranteed sound pressure LwA (dB) level in compliance with the directive 2000/14/CE
MECH 35	F40B	82	93
	SP17	88	97
	GP160	83	96
MECH 45	F40B	82	93
	SP17	88	97
MECH 55	F65B	89	97
	GX160	91	97

The recording of the sound pressure emitted by the machine was made in compliance with the Directive 2000/14/EC.

The values listed in this manual are referred to the machine equipped with the noisiest accessory

1.5.2 VIBRATIONS LEVEL

The vibrations level was recorded with the engine running at the max rpm. and is equal to:

Model	Engines	While running m/sec ²	At standstill m/sec ²
MECH 35	F40B	10,5	10,2
	SP17	8,2	8,0
	GP160	7,9	7,7
MECH 45	F40B	9,8	9,3
	SP17	8,1	7,8
MECH 55	F65B	10,1	9,8
	GX160	8,3	7,9

1.6 TECHNICAL SPECIFICATIONS

TECHNICAL DATA

MODEL		MECH 35	MECH 45	MECH 55
ENGINE	Type	F40B or EX16 4 strokes gasoline	F40B or EX16, 4 strokes gasoline	GX160 or F65B, 4 strokes gasoline
	Cooling	Forced air	Forced air	Forced air
	Displacement (cubic centimeters)	130 - 169	130 - 169	160 - 196
	Output (HP/kW at 3600 rpm)	3,3 kW/4,5 HP	3,3 kW/4,5 HP	4,1 - 4,8 kW/5,5 - 6,5 HP
	Starting	Recoil starter	Recoil starter	Recoil starter
	Tank capacity	2 liters	2 liters	3 liters
TRANSMISSION	Type:	mechanical transmission, 3 forward speeds + reverse speed	mechanical transmission, 3 forward speeds + reverse speed	mechanical transmission, 3 forward speeds + reverse speed
	Max speed: Forward	1st: 1,4 Km/h	1st: 1,4 Km/h	1st: 1,4 Km/h
	Forward	2nd: 2,7 Km/h	2nd: 2,7 Km/h	2nd: 2,7 Km/h
	Forward	3rd: 3,3 Km/h	3rd: 3,3 Km/h	3rd: 3,3 Km/h
	Rearward	1,1 Km/h	1,1 Km/h	1,1 Km/h
	Automatic parking brake when the feed control lever is released			
DIMENSIONS	Max. height	990 mm	995 mm	995 mm
	Max. width	650 mm	690 mm	750 mm (with carried bed)
	Max. length	1655 mm (with carried bed)	1640 mm (with carried bed)	1700 mm (with carried bed)
	Crawlers dimensions	180 x 60 x 34 mm	180 x 60 x 34 mm	180 x 60 x 38 mm
	Track	470 mm	510 mm	510 mm
	Crawler width	180 mm	180 mm	180 mm
	Carrier bed board length	950 mm	950 mm	1000 mm
	Carrier bed board width (adjustable)	650 - 950 mm	650 - 950 mm	750 - 1050 mm
	Side plates height	200 mm	350 mm	350 mm
CARRYING CAPACITY	Max. loading on level ground	350 Kg	450 Kg	550 Kg
	Max. loading on 30% slope	250 Kg	350 Kg	400 Kg
	Weight with no load	165 Kg (with carried bed)	175 Kg (with carried bed)	220 Kg (with carried bed)

SECTION 2

Safety and accident prevention

2.1 SAFETY

The personnel shall be instructed on the risks resulting from accidents on the devices arranged for the operator's safety and on the general accident prevention regulations provided for by the legislation of the Country where the machine is being used.

While designing the machine, all the potential dangerous situations were foreseen and consequently the proper protections were adopted. Anyhow, the level of accidents caused by the careless and improper use of the machine is still high.

The carelessness, the irresponsibility and the too much familiarity are too often the cause of accidents as well as

tiredness and sleepiness.

You shall read this manual very carefully and in particular the section concerning the safety regulations.



ANGER

The Manufacturer shall not be held responsible for the non-compliance with the safety and accident prevention regulations provided for by the laws and for the non-compliance with what is provided for in this manual. Pay attention to this symbol in the instructions manual. It shows a possible hazard.

2.1.1 WORDS USED

Words of people and of specific situations that may involve directly the machine an/or the persons in contact with the machine itself are here below listed.

- **USER:** The user is the person, the body or the company who has purchased or rented the machine and who intends to use it for the designed purposes. He shall be responsible for the machine and for the training of all those working with it.
- **DANGEROUS AREA:** Any area within and/or near the machine where the presence of an exposed person implies a hazard for the safety and the health of the same.
- **EXPOSED PERSON:** Any person who is completely or in part near a dangerous area.
- **OPERATOR:** A person who is able to operate, to carry out the maintenance, to clean and to transport the machine.
- **AUTHORIZED SERVICE CENTER:** The authorized service center is the structure legally authorized by the Manufacturer that has skilled personnel able to perform all the service, maintenance and repair operations, also the most difficult ones, which are necessary for perfectly maintaining the machine

2.1.2 GENERAL SAFETY REGULATIONS



WARNING

The non-compliance with what is written in “Section 2 – Safety and accident prevention” and the tampering of the safety devices, if any, relieve the Manufacturer from any responsibility in case of accidents or malfunctions of the machine.

General warning:

- The user commits himself to leave the machine only with personnel that have been trained and qualified to this purpose
- The user shall take all the precautionary measures so that unauthorized personnel do not use the machine.
- The user commits himself to properly instruct his own personnel on the application and the compliance with the safety requirements
- The user shall inform the Manufacturer in case he finds defects or malfunctions of the accident prevention systems, as well as of any situation of alleged hazard.
- The operator shall always use the personal protection devices provided for by the laws and he shall perform what is mentioned in this manual.

- The operator shall comply with the instructions as regards danger and warning pointed out on the machine
- The operator shall not perform on his own initiative operations or interventions that are not up to him.
- The machine has been tested only with the supplied accessories. The assembly of equipment of other brands or any repair may alter the specifications of the machine and therefore compromises the operative safety
- The machine shall not be operated with the guards that are disassembled or partly damaged.

2.2 SAFETY SIGNALS

The machine was designed by adopting all possible solutions for the safeguard and safety of the operator.

Notwithstanding this, the machine may show some residual hazards; that is those hazards that were not possible to eliminate completely under certain conditions of use. These potential hazards are indicated on the machined with adhesives (pictograms) that briefly point out the several unsafe and dangerous situations.



WARNING

Keep the adhesive signs clean and replace them immediately when they are detached or damaged.

By referring to fig. 2, carefully read what is here below described and memorize their meaning

- 1) - **Before starting to operate the machine** carefully read the instructions for use.
 - **Noise hazard:** while working, we suggest to use sound proofing devices
 - **Before performing any maintenance operation,** stop the machine and read the instructions manual.
 - **Limbs squashing hazard.** In case of maintenance, remove the guard belt casing only after shutting the engine off in order to avoid squashing your hands.
 - **Burns hazard.** Do not touch and get near the engine hot parts.
 - **Overturning hazard.** Pay the utmost attention when working on steep slopes.
 - **Plate showing the guaranteed sound power emitted by the machine.**
- 2) Plate showing the throttle rating.
- 3) Plate showing the position of the harnessing points.
- 4) Plate showing the gear engaged.

2.3 SAFETY WHILE OPERATING AND MAINTAINING THE MACHINE



WARNING

- Use suitable clothes. Do not wear large or loose clothes: they may get entangled in the rotating parts. Long hair must be tied. Moreover, the operator shall not carry out sharp tools in his pockets.
- During the maintenance and repair operations, the operator shall wear protective clothes, cut proof gloves, non slip and anti-crash shoes.
- Comply with the laws of the Country where the machine is being used, concerning the use and the disposal of the products employed for cleaning and maintenance. Dispose all waste, if any, through the special companies authorized to this purpose with the issuing of the receipt for the goods disposal.
- It is absolutely forbidden to operate or have the machine operated by someone who has not read and understood what is written in this manual, or by unskilled personnel or by personnel in poor psychophysical conditions and, anyhow, by persons less than 18 years old.
- Before starting the machine, check that the safety devices are perfectly intact.
- Before starting to work for the first time, know and be familiar with the control devices and their functions.
- The area where the machine is used is to be considered "dangerous area", above all for the people that are not trained to use the machine itself. Before starting the machine, make sure that all around the working area there are not persons or animals or impediments of any kind.
- When a person is exposed, that is within the "dangerous area", the operator shall immediately intervene and stop the machine to send away the above person.
- Never leave the machine while it is running.
- Periodically check the integrity of the machine on the whole and the protection devices.
- Before carrying out any repair or maintenance operation on the machine, stop the machine and shut the engine off.
- In case the guards were removed, make sure to fix them in place before using the machine again.
- Comply with the suggested oils. Keep the lubricants away from children. Carefully read the warnings and the precautions listed in the lubricant containers. After using them, wash your hands thoroughly. Dispose of the used lubricants according to the antipollution regulations.
- At the end of the maintenance and repair operations, make sure that all operations are completed, that the safety devices and the guards are back in place before starting the machine again.
- The spare parts must correspond to the needs established by the Manufacturer. Use only genuine spare parts
- **When working on yielding grounds, near slopes, ditches or steep grounds, operate with the utmost care at low speed to prevent the machine from over-turning; it is moreover suggested, in these cases, to arrange the load as further down as possible to give the machine more balance**
- **In case the machine is meant to work on raised grounds or near precipices, before starting to work, it is compulsory to suitably put barriers around all tracts that may involve the fall of the machine from above due to a possible wrong maneuver by the operator.**
- It is forbidden to transport loads weighing higher than the machine max. carrying capacity.
- It is absolutely forbidden to touch the running parts or to come between them. (in particular the crawlers) by keeping at a safety distance.
- It is absolutely forbidden to have foreign persons stand within the machine working area.
- Avoid parking the machine on a slope. If necessary, block the machine with logs or suitable stones to be placed between the ground and the crawlers.
- During the maintenance operations, do not operate the machine in poorly ventilated rooms: the exhaust gases are harmful to the health.
- Periodically check the tightening of the screws, nuts and couplings, if any.
- It is absolutely forbidden to remove or tamper the safety devices.
- The maintenance of the machine shall be performed by skilled personnel only after shutting the engine off, by following the instructions of this manual and of the engine manual
- Before refueling or topping up with oil, stop the engine and to let it cool down.
While refueling, do not smoke and do not get near free flames. Be sure to thoroughly wipe the spilled gasoline before starting the engine.

SECTION 3

Transport

3.1 TRANSPORT

In case it is necessary to transport the machine on a long route, this may be loaded onto trucks or other suitable means of transport.

In order to load the machine onto the means of transport, it is necessary to have two special loading ramps. These ramps shall have a capacity of at least Kg. 250 each, a width of at least cm 30, the edges about cm 5 high and such a length so that the inclination does not exceed the 15°/20° with respect to the horizon line; they must be also equipped with a hooking system to the means of transport.



WARNING

The loading operations may be very dangerous if they are not performed with the utmost care.

Before loading, therefore, send away the unauthorized personnel; clear and limit the transfer area and check the integrity and the suitability of the means of transport.

Besides, check the correct positioning of the ramps (external width mm 750x800).

You must make sure that this area is clear and that there is a sufficient "escape area", that is a free and safe area where it is possible to move quickly in case the load falls. Before loading, make sure that the body of the means of transport is large enough to transport the machine



WARNING

The area where you intend to load the machine shall be a firm level surface to avoid load shift, if any.

- **The means of transport shall have the engine shut off, the gear and the parking brake on.**
- **The loading and the unloading shall be always performed with an empty machine (with no load).**
- **Load the machine by walking at a low travel speed (1st speed and reverse), by being careful to correctly enter the ramps and to walk on the ramps safely.**

Once the machine is loaded onto the means of transport, make sure it is well locked in its position.

Tighten securely the machine onto the platform with ropes or well-tightened chains to prevent it from moving,

After transporting it and before untying the machine, check that the shape and the position of the machine are not a hazard.

Then remove all ropes and chains and unload it with the same means and procedures used for loading.

3.2 LIFTING

In case it is necessary to lift the machine with cranes or similar devices, use suitable ropes or chains and harness the machine as shown in fig. 4. We suggest removing the implement before lifting the machine, in order to avoid crushing the side plates.



WARNING

When lifting the machine, the engine shall be shut off.

During the lifting/setting down operations, make sure that the area near the machine, which may be dangerous in case of an unexpected fall, is clear.

SECTION 4

Use

4.1 BEFORE USING IT



WARNING

Before setting the machine at work, the operator shall read and understand all parts of this manual (as well as the engine manual) and in particular what is written in "Section" (Safety).

Moreover, before starting the machine, check that the machine is in good working conditions and that all parts subject to wear are fully efficient.

4.2 STARTING

Before operating the machine and starting to work, always check that:

- the engine oil is at level (make reference to the engine instructions manual)
- the engine air filter is clean
- the tank has enough fuel (4 Fig.3).

As for the fuel type, make reference to the engine instructions manual by checking the identification data reported on the engine identification plate.



WARNING

Do not refuel the machine near sparks, lighted cigarettes or whatsoever fires. Always shut the engine off before removing the tank cap and wait till it is cool enough. Before restarting the machine, check that there are no oil or fuel leaks; otherwise, clean them thoroughly and wipe them. If some gasoline is spilled on the machine parts, wipe it immediately. The fuel tank shall not be filled up to the full capacity of the tank to prevent overflow.

After sending away bystanders within the machine working range, if any, start the machine according to the following procedure:

- Make sure that the fuel cock below the engine air filter is open (1 fig.3)
- Shift the throttle lever to the intermediate position (5 fig. 1) and check that the "ON/OFF switch (2 fig.3) for those engines having it, is in the "ON" position.

Actuate the "choke lever" (3 fig. 3) placed below the engine air filter, especially when the engine is cold.

- Take the engine recoil rope (5 Fig.3) and slowly pull it till you feel its stop. Then, pull the rope strongly and rapidly.

The engines are equipped with recoil starter that allows pulling the rope but that when the engine starts, it disconnects so to avoid pulls and kicks back for the operator.

- Release the rope while it rewinds. In case the engine does not start, repeat the operation.

After starting the engine (5 Fig. 1), set the accelerator lever to half stroke and let the engine run for a few minutes to warm up.

During the first minutes of running, do not use the machine at its max capacity. Do not exploit the engine too much.

4.3 GEARS SELECTION

The machine is equipped with an automatic parking brake. It is released when the feed control lever is pressed down (4 fig. 1) and it is actuated when this is released.

Before any operation, select the required gear by shifting the gear lever (3 fig. 1) to the right or to the left, according to the required speed. The mechanical gearshift has 3 forward gears, 1 reverse gears and 3 neutral positions. In case a noise is heard in the gearshift by shifting the gear lever, in order to avoid the early wear of the gears, lightly actuate the feed control lever for a short time. In this way undesired noises will be avoided by facilitating the engagement of the gear completely and safely.



WARNING

Do not force the engagement of the gears so as to avoid the wear of the inside gears; if necessary, we suggest actuating the feed control lever.

4.3.1 MACHINE STEERING

It is possible to steer the machine by operating the levers (6 & 7 fig 1). These levers are equipped with a dead man's lever and if released, they go back to their original position; to turn right, operate the lever 6 and to turn left operate the lever 7. By pulling the two levers to the end of stroke simultaneously, the machine will stop.

4.3.2 DURING OPERATION

- When you cross slippery or sinking grounds, drive slowly in first gear speed



WARNING

- **Do not cross yielding grounds where the machine might overturn; run at minimum speed in reverse by**

paying attention not to stumble on obstacles; if this happens, immediately release the control devices and the machine will stop automatically.

The capacity of the vehicle is kg 350 on flat grounds and kg 250 on 30% slopes; such carrying capacity values must never be exceeded, for whatever reason. In case the load moves unbalancing the machine, it is necessary to fasten it.

The load must never exceed in height thus obstructing the driver's visibility

- The obstacles must be passed at reduced speed and any driving reaction must be controlled.
- Engage the reverse gear, when running on steep slopes.
- Do not start the machine abruptly
- Do not drive the machine standing on the carrier bed or on the dumper.
- Do not transport persons or animals in the machine.
- Engage the reverse gear, when running on steep slopes.

4.3.3 USE OF THE MACHINES ON SLOPES

Engage only the first gear when running on steep grounds. Do not cross upward/downward slopes exceeding 30%; do not ride for long tracts on steep side slopes; we remind you that the maximum side slope on which you are allowed to operate depends on the height of the load: with a load not higher than the carrier bed/dumper side plate the maximum side slope you may work safely is 20%; anyway you should limit the load by properly arranging it on the carrier bed and by fastening it in order to prevent it from moving. Avoid abrupt steering on slopes; the machine may overturn. Pay the maximum attention when passing obstacles on sloping roads, because the moving of the center of gravity from one side to the other of the obstacle may cause the machine to jerk, thus compromising its balance.



DANGER

Do not unload the load on slopes, because its moving may cause instability and the machine overturning.

4.3.4 PARKING

The machine is equipped with a mechanical parking brake acting on the gearshift and therefore on the driving wheels of the crawlers. It is engaged automatically when the feed control lever is released (4 fig. 1). Each time the machine is parked, make sure that the gear is engaged and then shut the engine off.

On the contrary, before starting the engine, make sure that the gear lever is on the neutral position (N).



WARNING

Do not park the machine near yielding grounds, near slopes, ditches or steep grounds

4.4 MANUAL DUMPING OF THE CARRIER BED OR OF THE DUMPER

For dumping the carrier bed or the dumper, actuate the implement release lever (1 fig. 5) and pull the accessory upwards.



DANGER

It is forbidden to leave the carrier bed or the dumper lifted, because it may suddenly fall and cause damages or injuries to persons or things. When the carrier bed/dumper is lifted, do not go near the machine, because it may accidentally fall.

4.4.1 WIDENING OF CARRIER BED SIDE PLATES

It is possible to increase the loading capacity of the carrier bed: by unscrewing the knobs on the bottom of the carrier bed (2 fig. 5) it is possible to pull to the outside the side plates increasing the capacity. In case it is necessary to have a fully open carrier bed, it is possible to completely remove the side plates or put them upside down. In this way there is enough space for a huge load (provided that it does not exceed the permissible load). In this case, the load must be secured and tied to the carrier bed.

4.4.2 HYDRAULIC DUMPING OF THE CARRIER BED OR OF THE DUMPER (Only Model 550)

(The numbers in the following text refer to Fig. 9).

If the Minitransporter is equipped with a hydraulic system, the dumping is performed with hydraulic pump and cylinder.

- Pushing the lever (1a) of the hydraulic distributor upward, the carrier bed or the dumper lifts and dump the load; by pushing the lever backwards (1b), it lowers and goes back to its original position.
Before dumping the carrier bed, open the front plate.
- The lever (2), if present, is used only to move the loader.



DANGER

It is forbidden to leave the carrier bed or the dumper lifted, because it may suddenly fall and cause damages or injuries to persons or things.

In case of repairs, the carrier bed or the dumper may be a hindrance; if this is the case, remove it from the machine.

This operation, anyhow, must be performed by skilled personnel possibly at an authorized FORT Service Center. With the lever (1), it is possible, moreover, to partially lift/lower the carrier bed/dumper. In fact, you just have to release the lever (1) when the carrier bed/dumper reaches the required position.



ANGER

When the carrier bed/dumper is lifted, do not go near the machine, because it may accidentally fall. During the dumping, both manual and hydraulic one, constantly check that there are non-foreign persons nearby, because the unloaded material might hit them.

4.4.3 HYDRAULIC LOADER (if present)

This section describes the hydraulic loader that can be hitched to the minitransporter. This implement is used for loading loose material into the dumper and is operated by a hydraulic cylinder.

4.4.4 MATERIAL LOADING (Fig. 9)

In order to correctly load the material, do as follows:

- Lower the loader (2c) by pushing the spool valve lever forwards until the required level has been reached.
- Move the machine slowly forward, so that the material enters the bucket.
- Raise the loader by pulling the spool valve lever towards you (2d) until the material drops into the dumper.
- Repeat those operations until the dumper is full, or until the material has been completely loaded.
- Lift the loading bucket in order to move the machine.

4.4.5 MATERIAL UNLOADING



ANGER

Avoid dumping the load onto slopes, because the shifting of the same one may cause instability and overturn the machine.

In order to correctly unload the material, operate in the following way:

- Drive the machine where you should unload the material.
- Make sure that the loader is fully raised. To do this, pull

the lever (2d) towards you until the two cylinders reach end of stroke.

- Release the lever (2) and push the spool valve lever (1a). The dumper will now lift and unload.
- Pull the spool valve lever (1b) once the operation has terminated. The dumper will now lower and return to the loading position.



ANGER

It is absolutely forbidden to leave the machine with the loading bucket or dumper in the lifted position, because they may accidentally lower and cause damages to persons or things.

4.5 ENGINE SHUT-OFF

In order to shut the engine off, shift the throttle lever to the idling position and shift the ON/OFF (2 fig. 3) lever to the "OFF" position. You must anyhow shut the engine off on a flat ground and not on yielding grounds, near slopes, ditches or steep grounds.



ARNING

The machine with the engine shut off is blocked in this position; we suggest, therefore, to shut the engine off after parking the machine in such a position so that it is possible to easily reach the knob of the engine recoil starter and have enough space to start it again in case of need.

4.6 AFTER USE

After using the machine, park it on a flat ground inside and clean it thoroughly. A clean and well-maintained machine will always work at its max. capacity.

SECTION 5

Ordinary maintenance

5.1 GENERAL INFORMATION

As it was designed, the machine does not need special maintenance. Anyhow, in order to have the machine work at its max. capacity and in order to constantly have a perfectly efficient machine, some precautions must be followed.

We here below list some operations of ordinary maintenance. It is important to keep in mind that lower operating cost and the utmost durability of the machine depend on the procedure and constant compliance with these rules.

For whatever problem or explanation, contact the area dealer of the Manufacturer's technical department.



DANGER

The several maintenance and adjustment operations shall be performed with the engine shut off and with the machine well locked on a firm level ground.

5.2 ENGINE MAINTENANCE

As for the engine maintenance, make reference to the specific engine instructions manual. Approximately, **every 8 working hours**: check and top the engine oil level up, if necessary. Check, moreover, the engine air filter and clean it if necessary.

Every 50 working hours, replace the engine oil.

5.3 MACHINE MAINTENANCE

Periodically wash the machine and clean thoroughly each part. If a high pressure washing system is used, check that the fuel does not get wet and that no part is damaged. After each washing, it is necessary to lubricate all parts subject to friction.

Replace the oil of the mechanical gearshift every 500 hours of use.

Only a specialized mechanics or dealer shall do this.

5.3.1 PRIMARY TRANSMISSION

The primary transmission is the belt transmission transmitting motion to the mechanical gearshift (references fig. 6).

In time the belt 1 adapts to the pulleys and it slightly slackens. In order to obtain a good transmission, the belt shall have a load provided by spring 2 pulling the tensioning unit/guide pulley 3.

This load is correct when the spring has a 6-7 mm flexure.

Measure the length of the spring without any load and press down the feed control lever (4 fig. 1); the spring length shall increase by 6 – 7 mm. Now we get the exact tension load on the belt. To correctly adjust the belt tension, act on the fastening screw 4.

5.3.2 PARKING BRAKE TRANSMISSION

The parking brake transmission is the transmission controlling the braking force applied to the gearshift drum (references fig. 7)

The gearshift brake is kept tightened by the spring 1 and it is released only when the feed control lever is pressed down (4 fig. 1). In case in time the machine does not stop the crawlers sufficiently, tighten nut 2 to increase the load of spring 1; afterwards, tighten with nut 4.

5.3.3 STEERING TRANSMISSION

If the transmissions of the crawler steering levers (6 & 7 fig. 1) have such a clearance that does not allow a good crawler braking during the steering, there is a register on the lever that may adjust this clearance. This operation shall be performed only by a skilled person so as not to compromise the machine operation.



WARNING

If the transmissions are wrongly adjusted with the consequent break of the gearshift components, the manufacturer voids the warranty of the damaged parts.

In case of any doubts or information, please contact an authorized dealer.



WARNING

The belt on the machine is a "special" belt; therefore we suggest using only original belts in case of replacement.

5.3.4 CRAWLERS TENSIONING

To restore the tracks to their correct tension if they have lengthened after many hours of service, unscrew the nuts (2 fig. 6) and then tighten the track-tightening screws until the right track tension has been obtained (they must be

able to swing about 3 cm as shown in the figure 8). Once this condition has been obtained, lock the nuts 2 fig. 6 to prevent the screws from working loose.

5.3.5 CRAWLERS REPLACEMENT

(Reference to Fig. 8).

This operation shall be performed when the crawlers are too much worn



WARNING

To replace the crawlers, it is necessary to make sure that the engine is shut-off, and have the machine rest on the inner part of the crawlers on a raised firm ground and perform the following instructions:

Unloose the nuts 2 and the screws 1 until the support 3 and the track tightening wheels 4 retract and rest on the chassis.

Remove the tracks from the driving wheel 5 and then from the machine

Insert the new tracks so that they fit on the driving wheels 5 and on the track tightening wheels 4 (make sure that the teeth match the central pitches inside the tracks) so that once they are tightened they remain taut.

Tighten the track by screwing in track tightening screws and once the correct tension has been obtained, lock the screws in place with the nuts.

5.4 EXTRAORDINARY MAINTENANCE

The operations of extraordinary maintenance are not mentioned in this manual: however, they shall be performed only by the Manufacturer or by skilled personnel authorized by the Manufacturer himself.

5.5 MACHINE DISMANTLING

In case you decide to dismantle the machine, you shall separate its components in equal parts which must be disposed one by one in compliance with the local regulations concerning waste disposal.

Dispose the exhausted lubricants and the several detergents, according to their different structure.



WARNING

For the disposal of the several components, contact exclusively legally authorized companies that may issue a regular receipt of the disposal.

5.6 SPARE PARTS

The spare parts of the engine unit must be directly requested to the engine manufacturer or its dealer.

In order to request the spare parts of the machine, contact the local Dealer of the Manufacturer.

We finally remind you that the Manufacturer is always at your disposal in case you need after-sale service and/or spare parts.