CORMIDI

MINIDUMPER

Original Instructions

C6X-650 SERIES

IT

MUM.C6X-650 -Rev.01 – 2025

Ed. 1

serie C6X-650

Minidumper

USER AND MAINTENANCE MANUAL

This manual must always be available so that the operator can consult it immediately, and it must be kept for the entire lifespan of the machine.

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The drafting of the texts, illustrations, and layout was carried out by *Cormidi s.r.l.* The technical information and data were provided, checked, and validated by the Cormidi Technical Department.
The illustrations and technical data contained in this manual are not binding: the manufacturer therefore reserves the right to make any changes to the product without prior notice.

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INTRODUCTION

Dear Customer,

Thank you for placing your trust in us by purchasing a CORMIDI Mini Dumper. This product has been designed and built to be durable and to be used in complete safety.

It is essential, however, to read this manual carefully, as it describes the procedures for the optimal use of the machine. Improper use could result in damage to the machine and may cause injuries and/or health hazards.

Therefore, always keep this manual within easy reach, so that you can consult it at any time—before, during, and after operating the machine. In the event of resale, do not forget to hand over this manual to the new owner along with the mini dumper, as it includes the CE Declaration of Conformity.

Please also note that the illustrations in this manual mostly refer to the base model. Our machines are regularly improved and upgraded to ensure our customers benefit from the latest technological innovations. As a result, the features and information in this manual may have recently changed.

Should you experience any difficulties, we kindly ask you to contact us. For additional information, you can always rely on your dealer/distributor, or contact us directly by phone or email at ***info@cormidi.com****. When in doubt, it's better to ask than to proceed on your own.*

With that, we invite you to read the manual and enjoy using your machine.

Sincerely,
The CORMIDI Srl Team

1 GENERAL INFORMATION

1.1 GENERAL INFORMATION

Your machine is covered by a warranty for a period of **24 months** from the date of delivery. This warranty includes the replacement of components that, at the sole discretion of our Technical Department, are found to have manufacturing defects.

WARRANTY EXCLUSIONS

The warranty does not cover:

- Components not directly manufactured by the Manufacturer.
- Wear parts in contact with the ground.
- Failures caused by incompetence, negligence, or improper use.
- Consumable materials, labor, and travel expenses.

The engine is covered exclusively by the warranty provided by the engine manufacturer, under the terms and conditions defined by them.

WARRANTY VOID CONDITIONS.

The warranty will be immediately void in the following cases:

1. Use of the machine for purposes or applications other than those intended by the Manufacturer.
2. Damage caused by the installation of unauthorized accessories.
3. Repairs carried out using non-original or unsuitable spare parts.
4. Failure to carry out the mandatory maintenance services as indicated in the schedule and relevant section of this manual.
    - **All services must be performed and certified exclusively by Cormidi authorized service centers.**
5. Failure to register the machine with the manufacturer within **5 days** from commissioning.
    - If registration is not completed, the **sales document** will be used to determine the warranty start date.

IMPORTANT:

Failure to comply with any of the above-mentioned points will result in the immediate voiding of the warranty, releasing Cormidi from any legal obligation regarding repairs or replacements.

A Warranty Certificate has been provided with the machine, outlining the terms

and conditions that govern warranty service. We strongly recommend that you read the warranty form carefully, in order to fully understand your rights and any applicable responsibilities.

Please cooperate with your dealer in completing the warranty form, and ensure that it is filled out correctly. The date, the contents of the form, and other required formalities (such as timely submission, etc.) constitute the legal basis for claiming warranty rights on the machine.

1.2 PURPOSE OF THE MANUAL

This manual has been prepared by the Manufacturer and forms an integral part of the machine. It has been written in Italian, the original language of the manufacturer, in accordance with section 1.7.4 of Directive 2006/42/EC.

The information contained herein is intended for the experienced operator, with specific competence in the relevant field of use. The manual defines the intended purpose for which the machine has been designed and built.

To avoid improper operation that may lead to accidents, it is important to read this manual carefully, especially before the first use, in order to become familiar with the main controls and functions.

Strict adherence to the information provided ensures operator safety, cost-effective operation, and a longer service life of the machine.

To highlight the most important passages, certain parts of the text are printed in bold and preceded by the symbols illustrated and defined below:

READ CAREFULLY: Indicates that the manual should be read thoroughly and carefully before carrying out the described operations.

DANGER: Indicates an imminent hazardous situation that, if not avoided, will result in serious injury or death. On the machine, potential hazards are marked with a symbol featuring a yellow triangle with a black border, containing a pictogram representing the specific danger.

WARNING: Indicates a potentially hazardous situation that could result in serious injury or death if the instructions are not followed. On the machine, warnings are marked with symbols featuring a yellow triangle with a black border and an exclamation mark.

CAUTION: Indicates a potentially hazardous situation that may cause injury or

damage to the machine if the instructions are not followed. Precautionary procedures are indicated by symbols featuring a blue circle containing the relevant pictogram.

PROHIBITION: Prohibitions that must be observed by all persons who interact directly and/or indirectly with the machine, in order to minimize risks.

1.3 MACHINE DESCRIPTION

The C6X-650 series Mini Dumpers are compact tracked self-dumping machines equipped with a skip, designed and built exclusively for the transportation of inert materials.

To meet different market requirements, the machine can be equipped with engines of similar power but from different manufacturers and with varying specifications.

READ CAREFULLY: Accurately identify the type of engine installed on your machine and refer to the attached manual for detailed information.

1.4 SAFETY INFORMATION

READ CAREFULLY: This section contains essential information for your safety and that of those working with you!

Every effort has been made in the design and construction of this machine to make your work as safe as possible. However, caution is indispensable: there is no better rule to prevent accidents.

WARNING: The machine must always be operated by a competent and well-trained operator.

- Carefully read the information before using the machine or performing maintenance and/or repair operations.
- A few minutes spent reading this manual will save you time and effort later.
- Carefully read the warnings and information on the labels applied to the machine and immediately replace any lost or illegible labels. Comply with all the regulations indicated on them.
- The machine has been designed exclusively for the transportation of inert materials. Any other use is prohibited.

PROHIBITION: It is strictly prohibited to use this machine for the transportation of people and/or animals.

PROHIBITION: It is strictly forbidden to use this machine to tow other machines, vehicles, and/or devices, not even temporarily or in emergency situations.

☞ The machine is a work tool: always comply with all national regulations, especially those related to workplace safety.

OBLIGATION: Always diligently wear appropriate work clothing and, above all, suitable footwear. Always use hearing protection devices.

AVVERTENZA: Never wear loose or flowing clothing (scarves, ties) that can easily get caught in moving parts.

- It is always advisable to have a first aid kit readily available.
- Before starting the engine, always ensure that there are no people, animals, or objects obstructing the work area.

DANGER: Never operate the engine indoors, as the exhaust gases are lethal.

OBLIGATION: Dispose of mineral oils and harmful products in compliance with environmental regulations and current legislation.

☞ Any cleaning, adjustment, and/or maintenance work must be carried out in appropriate environmental conditions and adequate lighting, always with the engine turned off.

DANGER: Never refuel the vehicle with the engine running or hot, near open flames, or while smoking. Always keep the machine clean from lubricant and/or fuel residues.

☞ Pay particular attention to avoid contact with hot engine parts.

DIVIETO: It is strictly forbidden to remove the guards and safety devices installed on the machine.

☞ Avoid operating the machine when physically unfit or very tired: instead, stop work.

DANGER: While operating the machine, always ensure that the ground is

sufficiently stable. Avoid working near the edge of embankments or ravines, or on excessively steep or uneven terrain..

☞ When storing the machine, take all necessary precautions to ensure it **cannot be moved or started** by unqualified or unauthorized individuals.

CAUTION: Never leave the machine unattended while the engine is running, not even temporarily. When stepping away, turn off the engine and engage the parking brake.

DANGER: Never allow children to play with the machine, even when it is turned off!

1.5 MANUFACTURER AND MACHINE IDENTIFICATION

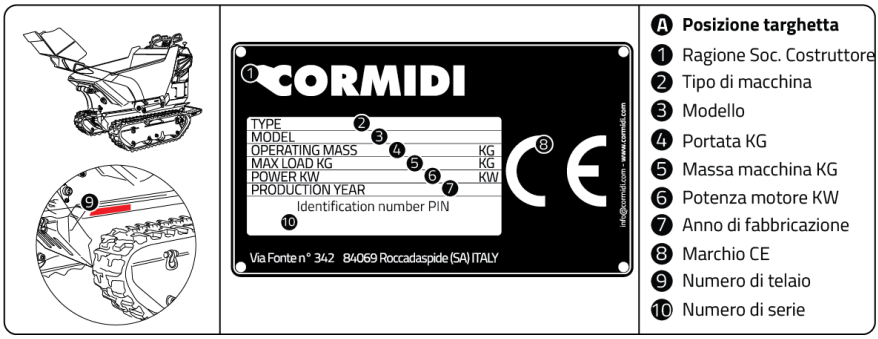


fig.1 – Identification plate

The manufacturer and machine identification data are shown on the summary aluminum plate fixed to the machine's dashboard, while the chassis number is stamped on the left rear strut (see Fig. 1).

1.6 STANDARD ACCESSORIES

READ CAREFULLY the instructions and usage guidelines for any accessories installed on your machine. Always refer to the manual provided with each accessory.

The machine is supplied with a set of tools to allow standard maintenance operations to be carried out.

2 SAFETY

2.1 SAFETY LABELS

READ CAREFULLY : During the design phase, every effort was made to prevent potential accidents. However, where it was not technically possible to eliminate risks, specific pictograms have been used to highlight potential and imminent dangers.
Special stickers featuring symbols and explanatory text were created to give greater emphasis to possible hazards, in accordance with UNI Standard 9244-95 (E) (see Fig. 2.1).

PROHIBITION: It is strictly forbidden to remove the safety labels and plates affixed to the machine. Any damaged and/or illegible labels must be replaced immediately.

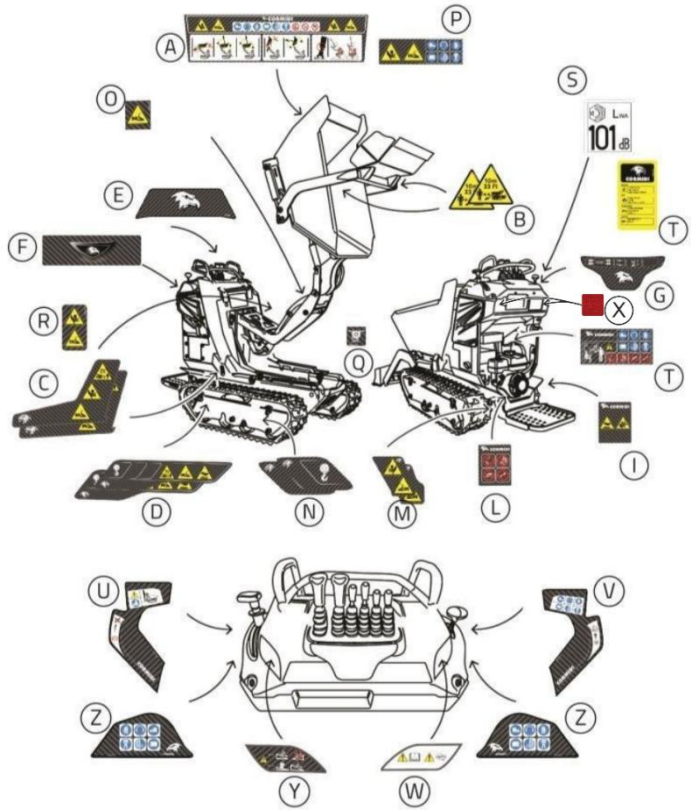


fig. 2.1 – Location of safety labels

2.1.1 Warnings for the HAC Version

Label requiring the operator to exercise caution when using the arm and high-discharge lifter.
Possible collisions between the arm and the skip.

2.1.2 Safety Distance

Label warning of the serious danger of approaching or remaining within the machine's operating range, due to an imminent risk of injury.

2.1.3 Control Panel

These pictograms indicate how to operate and control all parts of the machine, such as travel, tipping, arm, and skip lift (depending on the version).

2.1.4 Crushing Hazard

Label indicating a potential crushing hazard, which may result in serious injury or death.

2.1.5 Shearing Hazard

Label indicating a potential shearing hazard, which may result in serious injury or death.

2.1.6 Caution Procedures

This caution label reminds operators to follow all injury-prevention measures, especially regarding the use of personal protective equipment (PPE). The meaning of the pictograms is as follows:

- Read the manual before starting the machine for the first time, whenever the operator changes, and whenever there is any doubt about its operation.
- Wear hearing protection or other prescribed protective devices.
- Wear protective gloves as specified.
- Wear safety footwear as specified.

2.1.7 Fan and Overheating Hazards

Fan: Potential risk of contact with fans and/or rotating parts that may cause serious limb injuries. Do not touch the area near this pictogram.

Overheating: Hot or boiling parts may cause serious and irreversible injuries. Do not touch the area near this pictogram.

2.1.8 dB Label

Indicates the machine's noise emission level.

2.1.9 Oil Specification Label

This label provides all information regarding the types of oil suitable for use with the C6X-650 series.

2.1.10 Read the Operating and Maintenance Manuals

A label on the machine dashboard indicates that the operating and maintenance manuals must be read.

2.1.11 Battery Disconnect Switch

The label on the side indicates the possibility to disconnect the battery from the machine's electrical circuit; the battery disconnect switch is located near this label.

2.1.12 Reflectors

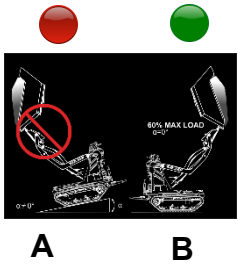
These are retro-reflective devices designed to indicate the presence of the machine without a driver in low-visibility conditions.

2.1.13 Dumping for HI and HAC versions

WARNING This label indicates that:

A: High dumping (in the HI and HAC versions) is strictly prohibited when the machine is on a slope (both longitudinal and transverse).

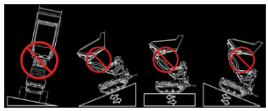
B: High dumping on flat, horizontal ground is allowed only with a load up to 60% of the maximum capacity.



Strictly comply with the instructions in §4.7.

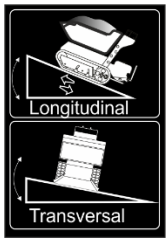
2.1.14 Driving and Slope Handling for HI and HAC versions.

WARNING This label indicates that for the HI and HAC versions it is strictly prohibited to drive on flat or sloped terrain with the skip raised, to avoid serious consequences for the operator and the machine, as there is a potential risk of tipping over.



2.1.15 Maximum Safe Slopes with STD (standard) load

Avoid working on terrain with longitudinal and transverse slopes exceeding those indicated in Table 1 (see §4.5.5) to prevent the risk of overturning, which could cause serious injury to the operator. Strictly observe the limit values indicated in Table 1, using the dedicated INCLINOMETER (see §4.8). In any case, but especially on slopes, it is important that the ground is solid and stable.



2.1.16 Incli-Tech Inclinometer

Measuring instrument used to determine the angle of inclination of the machine relative to the vertical and/or horizontal.

Measurement reading:

1. Must be taken with the MACHINE STOPPED and ENGINE OFF to avoid inaccuracies caused by uneven terrain and vibration effects. In the case of a machine without a battery, the reading should be taken with the ENGINE IDLING to minimize the effects of vibrations (see §4.8 - INCLINOMETER).

Table 1 – Maximum Allowable Slopes

Machine	Honda Engine	
	Longitudinal	Transversal
C6X-650 RI	16°	20°
C6X-650 AC	15°	20°
C6X-650 RIA	13°	21°
C6X-650 HI*	16°	18°
C6X-650 HAC*	13°	18°

2. It must be strictly compared with the limit values indicated in Tables 1 and 2 (see Chapter 4 “Operating Rules”). EXCEEDING these limits is STRICTLY PROHIBITED.

Table 2 - Allowable Slopes for Hi-Tip Dumping					
Machine	**USE**		**LOAD**	**Honda Engine**	
				Longitudinal	**Transversal**
C6X-650 HI	HIGH DUMPING	On level ground(0°)	60%	0°	0°
		On slope	0%	**FORBIDDEN**	
C6X-650 HAC	HIGH DUMPING	On level ground (0°)	60%	0°	0°
		On slope	0%	**FORBIDDEN**	

* The values indicated in Table 1 refer ONLY and EXCLUSIVELY to the LOW DUMPING condition (see fig. 4.8 a - Chapter 4).
For the HIGH DUMPING condition (see fig. 4.8 b - Chapter 4), strictly follow the instructions given in §4.7 and in Table 2.

2.2 SAFETY DEVICES

PROHIBITION: It is absolutely forbidden to operate the machine with safety devices and protections removed, blocked, or otherwise made non-functional.

WARNING: Before starting work, check the functionality of the safety devices and immediately replace any parts that are worn and/or damaged..

2.2.1 Dump Body Lock

The machine is equipped with a device that locks the dump body in the raised position and prevents accidental lowering.
Before performing repair and/or maintenance work with the dump body raised, always lock the piston by following the procedure (see fig. 2.2):

1. Raise the dump body;
2. Turn off the engine;
3. Remove the safety device “2” fixed on the right frame rail by unscrewing the handwheel;
4. Insert the slots of the bar near the piston rod of the hydraulic jack;
5. Rotate the bar positioning it parallel to the piston rod;
6. Slowly lower the dump body with the engine off until the device locks into place.

2.2.2 Locking the Lift (“HI-TIP”) of the Dump Body and Self-Loading Mechanism

The lifting device of the dump body, for the high discharge (“Hi-Tip”), can be locked in the raised position to prevent accidental movement. Before performing repair and/or maintenance with the Hi-Tip raised, always lock the piston by following the procedure:

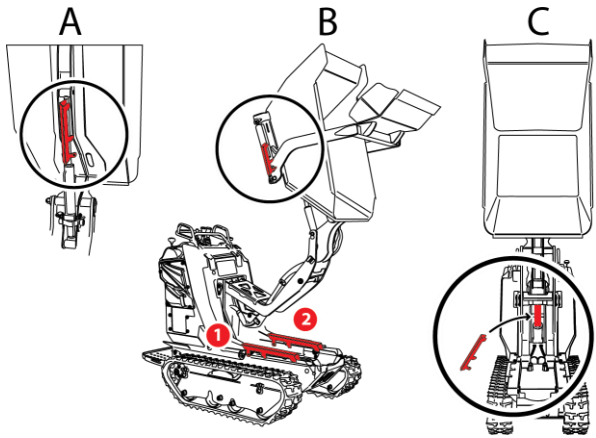


fig. 2.2 – Safety devices

Raise the Hi-Tip mechanism, the arm, and tilt the dump body;

1. Turn off the engine;
2. Remove the safety device “1,” fixed on the frame rail, by unscrewing the black handwheel;
3. Insert the slots of the bar near the piston rod of the hydraulic jack C;
4. Rotate the bar, positioning it parallel to the piston rod;
5. Slowly lower the mechanism with the engine off until the device locks into place;
6. The same procedure applies to locking both the dump body and the arm.

At the end of the operation, remove the device and place it back in its housing on the frame.

2.2.3 Platform Lock

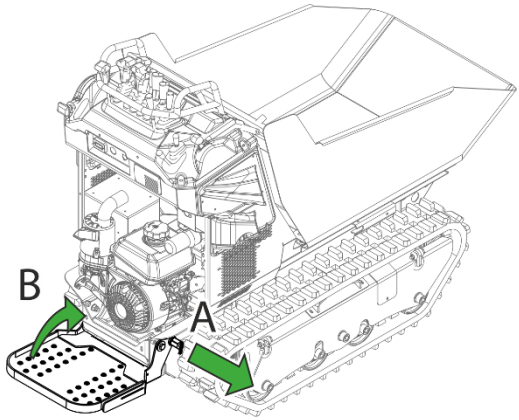


fig.2.3 – Platform Lock

The operator platform must always be locked in the open position during work, as shown in the image above; to prevent accidental movement, use the device on the right side of the platform, which consists of a spring safety pin "A" (see fig. 2.3).

- To lower the platform: pull the ring of the spring pin "A" outward and lower the platform, then release the ring; when lowering, the platform will automatically lock in the lowered position;
- To raise the platform: pull the ring of the spring pin "A" outward and raise the platform, then release the ring; when raising, the platform will automatically lock in the raised position.

WARNING: Always use the operator platform in the open position during work to prevent possible accidents. Close the platform only after finishing us.

2.3 Driving Position

During operation and work, always use the operator platform in the lowered position (see fig. 2.5-A) to prevent possible injuries. Close the platform only after finishing use (see fig. 2.5-C).

To use the platform, it must be positioned correctly (see fig. 2.5-A):

- Pull the spring safety pin that locks the platform.
- Rotate the platform until it is in the horizontal position.
- Once in position, it will be automatically locked by the spring pin.

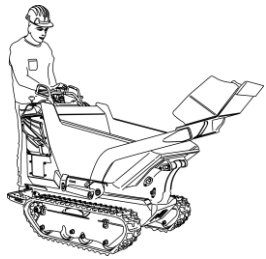


fig. 2.4 Driving Position

DANGER: Never operate with the platform unlocked; always check that the platform is locked and the safety pin is properly in place.

WARNING: When opening or closing the platform, be careful with your hands to avoid cuts or crushing injuries.

During operation, always firmly grip the handlebar with one hand while simultaneously operating both control levers with the other hand. Never release your grip on the handlebar to operate the levers with both hands.

DANGER: While driving the machine, the operator must always assume and maintain the prescribed driving position.

Proceed at a speed suitable for your pace to always maintain a safe control position over the controls.

2.4 Driving with Platform Open or Closed

The machine should be driven with the platform open and the operator on board only when the skip is loaded and the ground is SOLID and COMPACT. In this way, the weight inside the skip ensures stable driving with the operator on board (fig. 2.5-A).

If the skip is empty and the machine is going uphill or downhill, i.e., on uneven ground (figs. 2.5-B and 2.5-C), drive the machine with the platform closed and the operator on the ground.

DANGER: Do not drive the C6X-650 with the platform open when the skip is empty. Risk of overturning!

DANGER: It is STRICTLY FORBIDDEN to operate the machine with the platform lowered without the operator on board. Always close the platform when maneuvering the machine from the ground. Failure to comply with this rule may cause serious consequences for the operator.

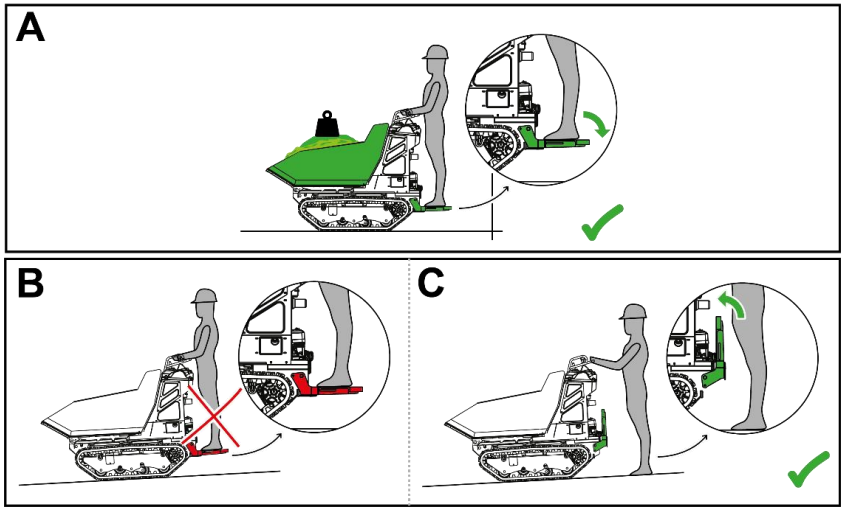


fig.2.5 – Driving with Platform Open or Closed

2.5 STOPPING AND PARKING

WARNING: If you leave the machine unattended, always engage the parking brake and ensure that unauthorized persons cannot start or move it.

Before stopping the machine, position it preferably on a flat paved surface or, in any case, on stable, compact, and level ground.

- Use the throttle lever to reduce the engine speed to idle.
- Engage the parking brake.
- Turn off the engine.
- Close the fuel valve (on engines equipped with one).
- Use of the Parking Brake

The machine is equipped with a safety device called the "parking brake," which prevents the machine from moving even when the driving controls are engaged. This device is designed to prevent accidental movement of the machine in the

absence of the operator; it also functions as an emergency stop if the operator needs to immediately halt the machine during work.

PROHIBITION: It is strictly forbidden to use the parking brake to stop the machine while it is in motion, except in emergencies.

- **Engaging:** Pull the lever toward you while first lifting the ring under the knob with two fingers: the brake is engaged.
- **Releasing:** Push the lever in the opposite direction: the brake is released.

WARNING – If the lever resists significantly when trying to release the brake, do not force the mechanism, as the wheel is locked. Before releasing the brake, slightly move the machine forward or backward until the device unlocks.

Emergency Brake: The parking brake also acts as an emergency brake. To perform an emergency stop, pull the lever slightly toward you, move it to the left to release it from the slot, then release it: the brake will engage automatically.

DANGER: If you need to use the emergency brake, be aware that this causes an immediate lock of the drive mechanism, which may result in loss of machine control.

WARNING: After using the emergency brake, have the device inspected for integrity and functionality. Continuing to operate the machine with a faulty brake could be dangerous for your safety and that of others.

2.6 TRASPORT

WARNING: During transport, always position the machine on a level surface to avoid oil or other liquid spills.

If the machine needs to be transported, proceed correctly to avoid risks to people and/or damage to the machine. If equipped, keep the bucket fully lowered during transport. Due to the machine's weight, manual handling is not possible; appropriate lifting equipment must be used to load the machine onto the transport vehicle. The machine is equipped with 4 lifting hooks, each with a capacity of 7,000 N (approximately 700 kg), for a total of 28,000 N (approximately 2,800 kg).

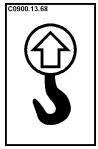


fig.2.6 – Lifting Point

The position of each hook is indicated by a plate as shown in fig. 2.6 (C0900.13.66).

For safe operation, it is recommended to use 4 ropes equipped with CE-approved hooks as lifting means. The front and rear ropes can be of equal length, about 170 cm. To perform the lifting, proceed as follows:

- Empty the fuel tank and close the fuel valve.
- Attach the lifting equipment exclusively to the anchoring points provided by the manufacturer (fig. 2.7).

WARNING Lift the machine by hooking exclusively to the designated lifting eyes; anchoring at other points may cause breakage, resulting in the machine falling and potentially causing serious injury to people.

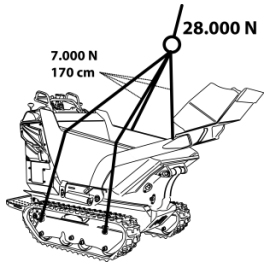


fig. 2.7 – Lifting Anchor Points

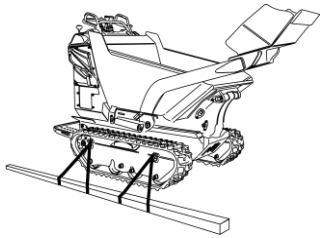


fig. 2.8 – Transport Anchor Points

- Secure it firmly to the transport vehicle's platform using strong CE-approved tie-down straps, always attaching them to the designated points as shown in figure 2.8

2.7 TOWING

The machine is equipped with a towing hook located on the lower front part of the undercarriage (see fig. 2.9); if it becomes necessary to tow the machine, make sure to empty the skip.
Each towing anchor point is marked by a plate showing the symbol in fig. 2.10 and

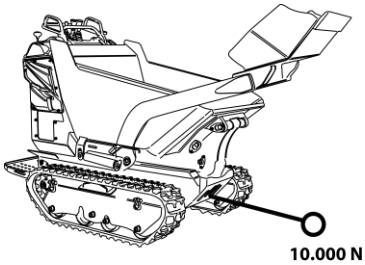


fig. 2.9 – Towing Anchor Points

can withstand a traction force of approximately 10,000 N (1,000 kg).

2.8 STORAGE

If the machine will remain unused for several months, it is necessary to perform proper storage procedures to ensure it is in perfect condition when put back into operation.

Perform the storage following all instructions:

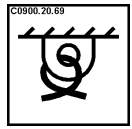


fig. 2.10 – Towing Point

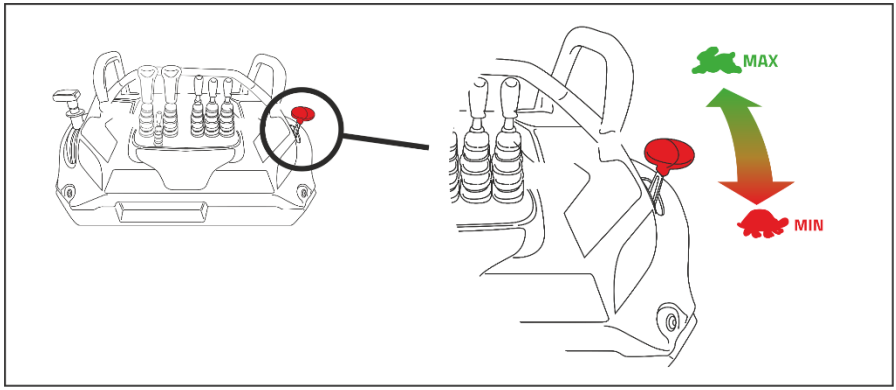
- Carry out all necessary repairs;
- Disconnect the battery by operating the battery disconnect device;
- Completely empty the fuel tank;
- Thoroughly clean the machine, removing all mud and/or organic residues;
- Perform all engine-related operations as described in the engine manual;
- Grease all points specified in the relevant chapter;
- Store the machine protected from weather elements, in stable conditions, and on a flat surface;
- If the machine has a battery, disconnect the terminals and lubricate them with appropriate grease;
- Periodically recharge the battery approximately every two months;
- If the engine has an ignition key, remove it and keep it in a safe place.

When putting the machine back into service:

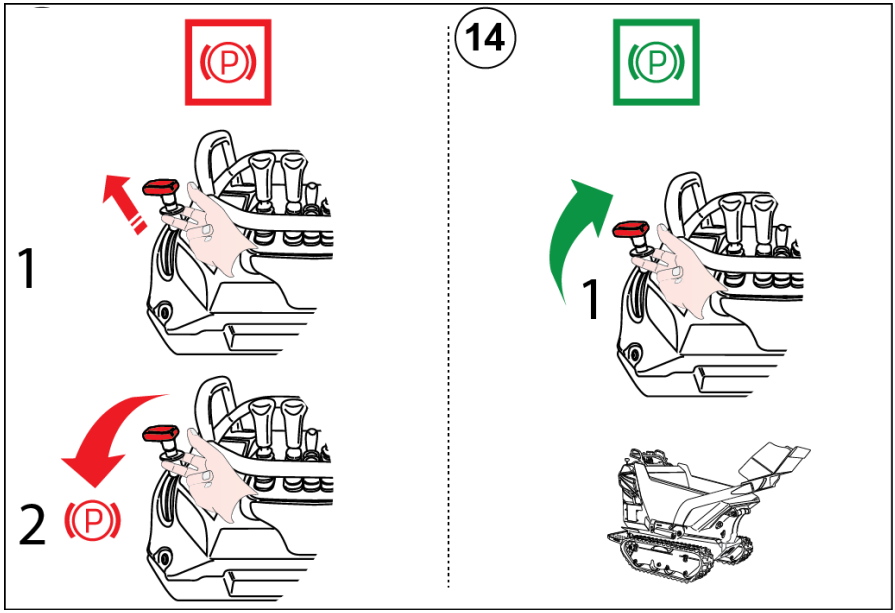
- Re-grease all points as specified in the relevant chapter;
- Carry out any engine-related procedures described in the engine manual;
- Check the oil level and refill if necessary.

3 CONTROLS

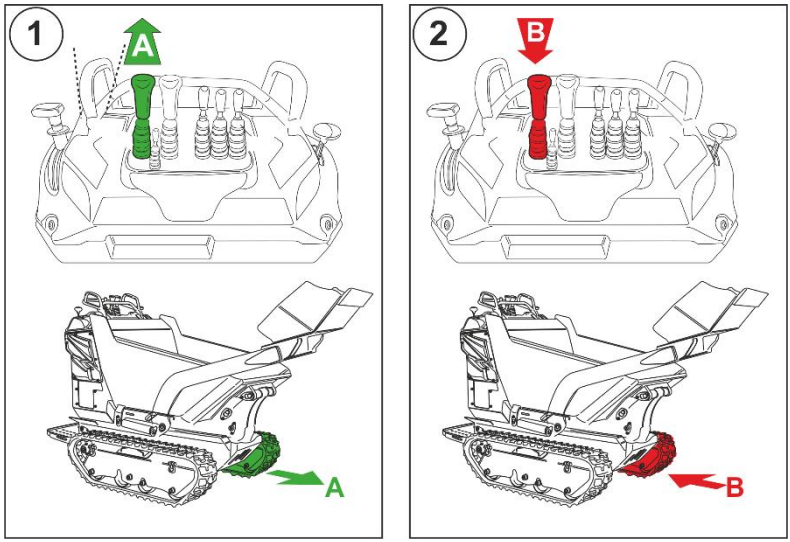
3.1 ACCELERATOR



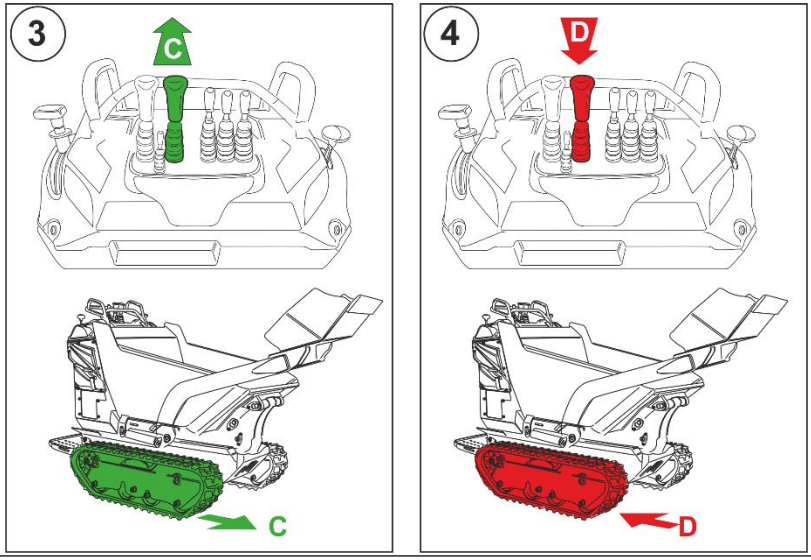
3.2 PARKING BRAKE



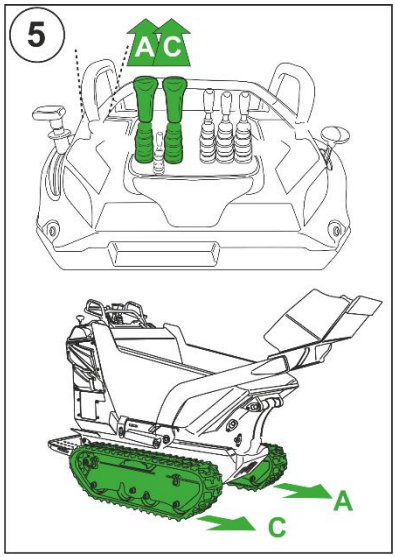
3.3 TURN RIGHT (Move left track)

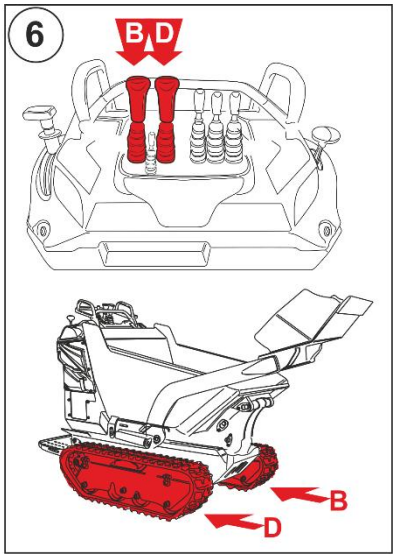


3.4 TURN LEFT (Move right track)

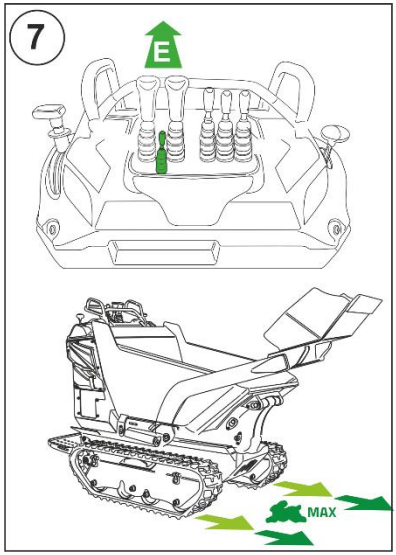


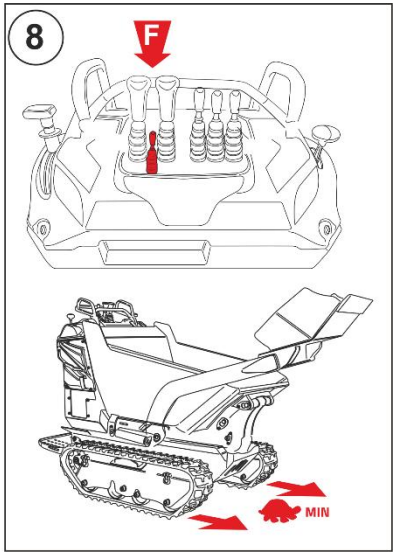
3.5 MOVE MACHINE FORWARD AND BACKWARD



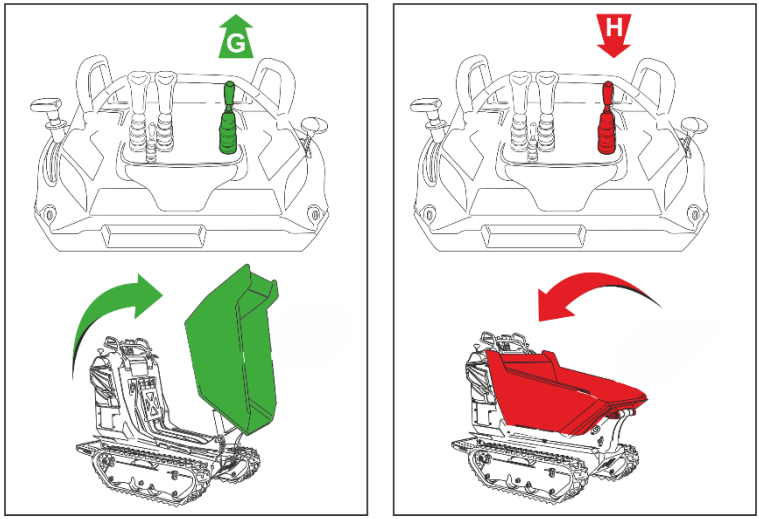


3.6 DOUBLE SPEED (All versions)

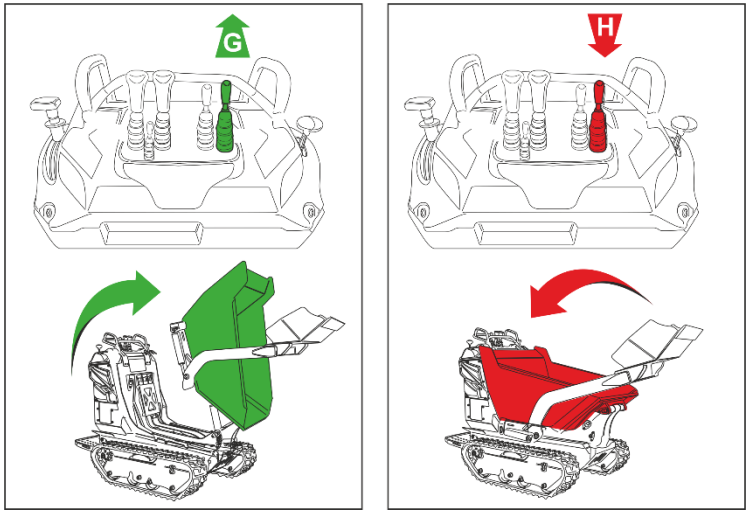




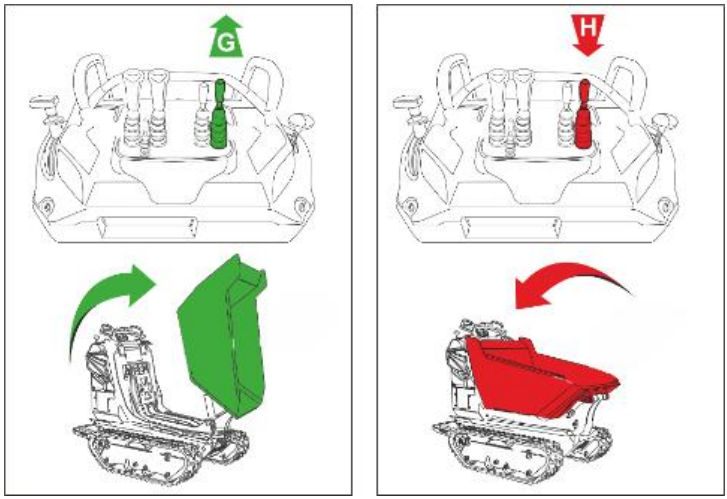
3.7 DUMP LEVER (Versions RI-RIA)



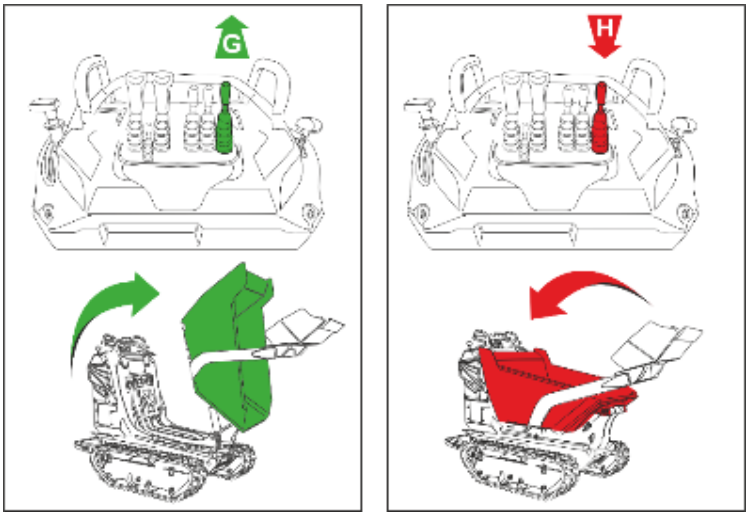
3.8 DUMP LEVER (Version AC)



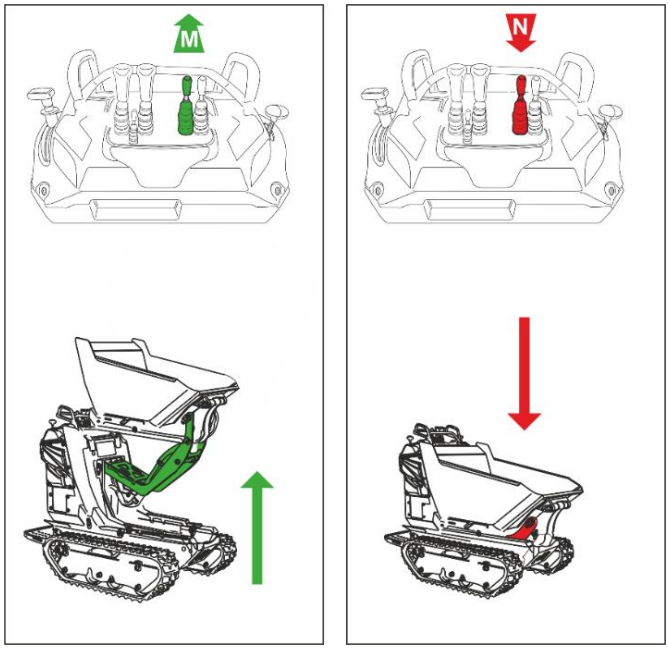
3.9 DUMP LEVER (Version HI)



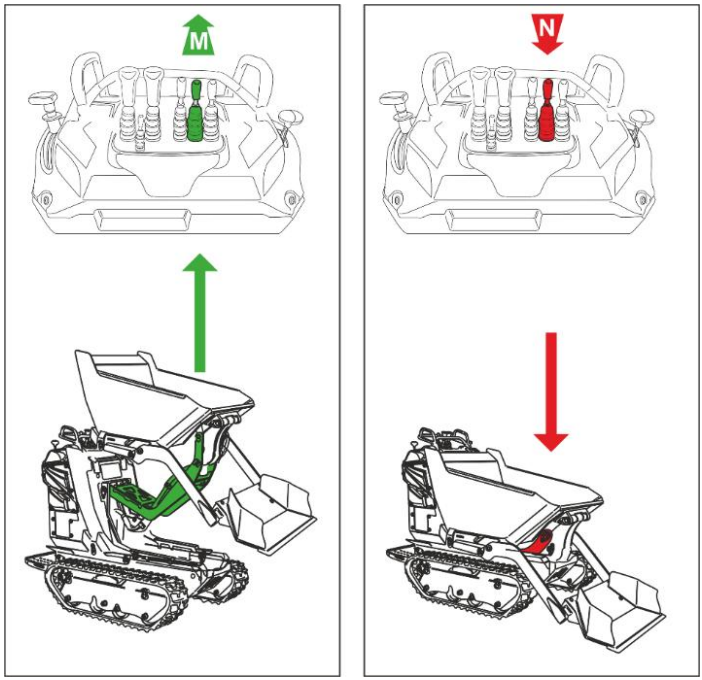
3.10 DUMP LEVER (Version HIAC)



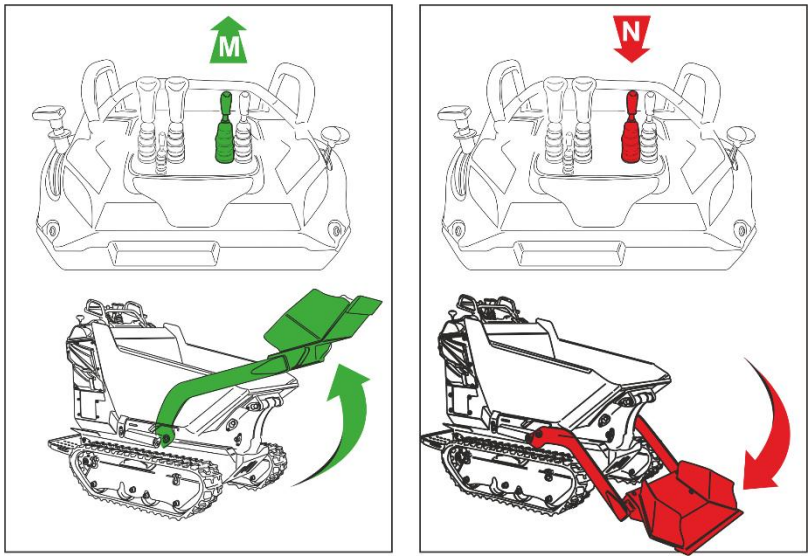
3.11 HIGH DUMP LEVER (VERSION HI)



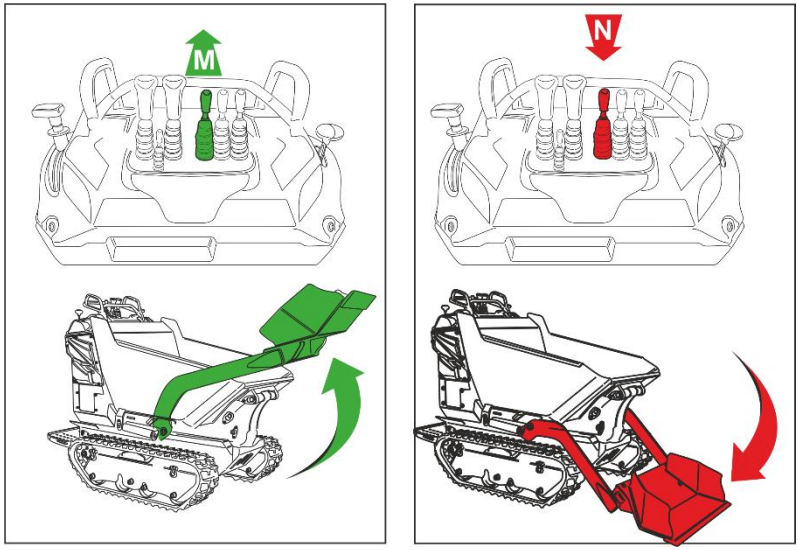
3.12 HIGH DUMP LEVER (Version HIAC)



3.13 SELF-LOADING LEVER (Version AC)



3.14 SELF-LOADING LEVER (Version HIAC)



3.15 BATTERY DISCONNECT SWITCH

The toggle switch located inside the dashboard (see adjacent figure) controls the disconnection of the battery from the machine's electrical circuit.

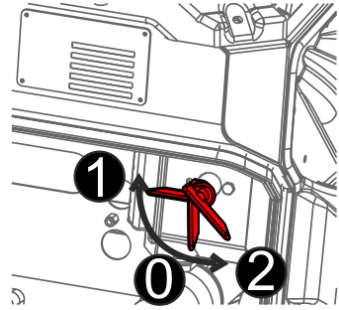


fig. 3.1 – Battery Disconnect Switch

Use the battery disconnect switch to cut off power to the electrical system, especially during extended periods of inactivity. In such cases, the lever can be removed to prevent battery discharge.

- **0. FIXED POSITION – Battery Disconnected**
- **1. FIXED POSITION – Battery Connected**
- **2. FIXED POSITION – Battery Disconnected, Lever Removable**

3.16 IGNITION PANEL – PETROL ENGINE

The ignition panel is located on the right side of the engine.
Turn the key to the **START** position and hold it there until the engine starts.
If the engine does not start within 5 seconds, release the key and wait at least 10 seconds before attempting to start the engine again.

DANGER: Operating the starter motor for more than 5 seconds at a time may cause it to overheat and become damaged.

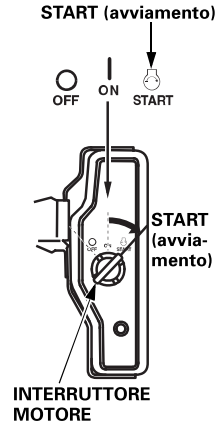


fig. 3.2 – Gasoline Ignition Panel

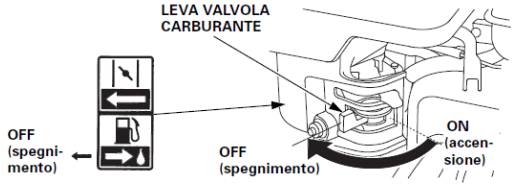


fig. 3.3 – Fuel Valve Lever

Once the engine has started, release the key to allow it to return to the ON position.
To stop the engine, either turn the ignition switch to the OFF position or move the fuel valve lever to the OFF position.

4 OPERATING INSTRUCTIONS

4.1 FIRST USE

READ CAREFULLY: Before operating the machine, you must thoroughly read all the instructions in this manual, as well as the engine's user and maintenance manual supplied with your machine. The engine manual must always remain attached and available for consultation.

The operator's manual and the engine manual must be kept readily accessible at all times and stored in the cylindrical document holder mounted on the machine (see fig. 4.1).

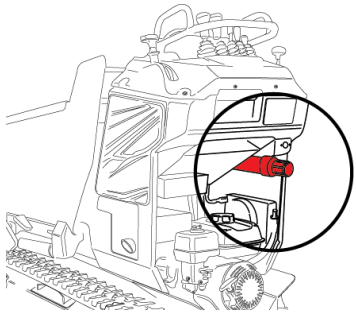


fig. 4.1 - Document holder

The machine is typically delivered fully assembled and ready for operation, with the fuel tank **empty**.

Fill the fuel tank, open the fuel valve, and follow the startup procedure.

4.2 BREAK-IN PERIOD

The construction technology used for your machine does **not** require a formal break-in period. However, certain precautions must be observed during initial use:

- For the first 50 hours, avoid operating the engine at more than 70% of full load capacity.

READ CAREFULLY the engine user and maintenance manual, and follow all break-in instructions provided by the engine manufacturer.

- After the first 20 hours of operation, check the hydraulic oil level in the reservoirs.
- During the initial hours of use, the tracks will settle, so after the first 50 hours, it is necessary to check and adjust track tension accordingly.

4.3 ENGINE START-UP

Each time you start the engine, always follow the steps below carefully:

- Always start the engine outdoors and ensure that there are no people near the machine and/or other obstructions.
- Check the fuel level in the tank and, if necessary, refill it.
- Engage the parking brake before starting the engine

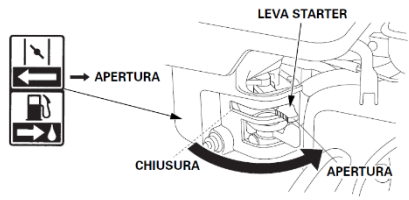


fig.4.2 – Air control

WARNING: Always engage the parking brake before starting the engine to prevent any unintended movement of the machine, which could pose a safety risk to the operator.

- Follow the specific start-up procedure provided by the engine manufacturer, as described in the attached engine manual.
- When the engine is warm, avoid using the choke.

4.4 REFUELING

DANGER: Refueling must always be performed with the engine turned off! Do not smoke while refueling or handling fuel to avoid the risk of fire!

Fuel filling and/or fuel transfer must always be carried out outdoors, away from open flames or heat sources. Always ensure that the fuel type matches the specifications required for your engine.

DANGER: Position the machine on a level, solid, and compact surface before refueling.

For model C6X-650:

- Unscrew the chrome-colored cap on the fuel tank.
- Insert a suitable funnel and slowly pour in the gasoline.
- Tighten the cap securely after refueling.

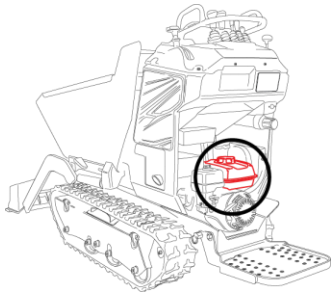


fig.4.3 – Fuel cap

DANGER - Immediately clean up any spilled fuel.

WARNING – Do not refuel a hot machine.
Wait at least 2 hours after engine shutdown before refueling.

WARNING – Start the engine only after ensuring that no fuel has been accidentally spilled.

WARNING – Fuel must be stored in compliance with applicable regulations, in appropriate locations, away from heat sources, and in suitable, clean, and tightly sealed containers!

MANDATORY - Do not dispose of fuel or fuel containers in the environment.

4.5 MACHINE OPERATION

DANGER: Always avoid loading the machine beyond the specified limits: during maneuvers, overloading can cause unexpected changes in balance and lead to tipping, resulting in serious risks to personal safety.

WARNING: Whenever possible, try to avoid driving on rocky, gravelly terrain, rails, and logs, as these can damage the tracks and reduce their lifespan. Also, avoid passing over materials that could damage the tracks, such as sharp objects, iron rods, etc., which might get caught in the tracks and cause them to break.

At engine start-up, adjust the engine speed to the desired level by operating the throttle lever, depending on the required power output. (When the machine is fully loaded, the lever should be moved beyond the halfway point between idle and maximum.)

Under certain conditions—especially when the machine is loaded or operating uphill—a loss of engine torque may occur due to engine overload, which can potentially cause the engine to shut down.
In such cases, slowly release the travel control levers, adjusting the speed to a level that no longer overloads the engine.

Since the machine is equipped with a hydrostatic transmission, it is not necessary to run the engine at maximum RPM for travel.
Running the engine at full throttle does not improve machine performance, but it significantly increases fuel consumption unnecessarily.
Therefore, it is recommended to increase engine speed only when strictly necessary (e.g. to reach maximum travel speed, or to climb steep inclines under full load).

4.5.1 Forward Travel

To move the machine forward, push both travel control levers forward simultaneously.

Avoid descending slopes while driving forward.
Refer to the section titled "Travel on Slopes" for proper procedures.

4.5.2 Reverse Travel

To move the machine in reverse, pull both travel control levers backward simultaneously.

Avoid climbing slopes while operating in reverse, especially when the machine is loaded.
Follow the instructions provided in the section "Travel on Slopes."

DANGER: Always check for obstacles and/or people nearby when reversing. Never operate the machine on slopes that exceed the maximum allowable incline, as this may lead to tipping, with potentially serious consequences for operator safety.

4.5.3 Turning Maneuvers

To steer the machine, release the travel lever on the side toward which you wish to turn:

- To turn right, release the right travel lever.
- To turn left, release the left travel lever.

Turning is achieved by reducing the speed of one track relative to the other. As a result, the turning radius and speed are proportional to how much pressure is applied or released on each lever.

Counter-Rotation

WARNING: Avoid performing counter-rotation, especially when the machine is under load.

The machine can rotate around its own axis (pivot turn). However, counter-rotation is not recommended, as it can cause excessive wear to the tracks and undercarriage. Instead of rotating around its central axis, it's preferable to enlarge the turning radius, allowing the tracks to slide gently on the ground, and avoiding abrupt direction reversals using counter-rotation.

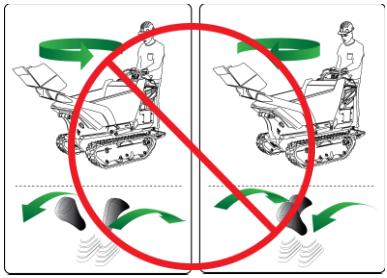


fig. 4.4.a – Counter-anticlockwise rotation

fig. 4.4.b – Counterclockwise rotation

- Clockwise counter-rotation (in the direction of clock hands)
- Counterclockwise counter-rotation (opposite to the direction of clock hands)

4.5.4 Safe Operating Slopes

With standard (STD) load during travel operation

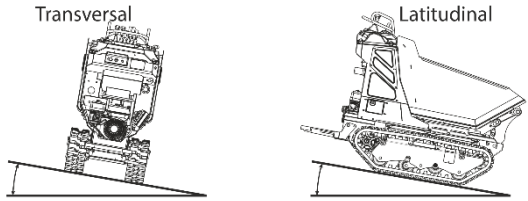


fig. 4.5 – Slopes

Table 1 – Maximum Allowable Slopes		
Machine	**Honda Engine**	
	Longitudinal	Transversal
C6X-650 RI	16°	20°
C6X-650 AC	15°	20°
C6X-650 RIA	13°	21°
C6X-650 HI*	16°	18°
C6X-650 HIAC*	13°	18°

The values indicated in Table 1 refer ONLY and EXCLUSIVELY to the LOW DUMP condition (see Fig. 4.8 a).
For the HIGH DUMP condition (see Fig. 4.8 b), strictly adhere to the instructions given in §4.7 and in Table 2.

With reduced load and high dump.

WARNING:

Table 2 - Allowable Slopes for Hi-Tip Dumping					
Machine	**USE**		**LOAD**	**Honda Engine**	
				Longitudinal	**Transversal**
C6X-650 HI	HI-TIP DUMPING	On flat ground (0°)	60%	0°	0°
		On slope	0%	**FORBIDDEN**	
C6X-650 HAC	HI-TIP DUMPING	On flat ground (0°)	60%	0°	0°
		On slope	0%	**FORBIDDEN**	

Table 1 shows the maximum allowable transverse and longitudinal terrain slopes on which safe operation is possible. These limits must never be exceeded to avoid the risk of machine rollover and potential damage to the combustion engine.

Additionally, it is essential to ensure that the ground is solid and stable, especially on slopes.
Working on unstable or loose terrain increases the risk of accidents and compromises operational safety.

DANGER: Always check for obstacles and/or people nearby when reversing.

4.5.5 Operating on Slopes

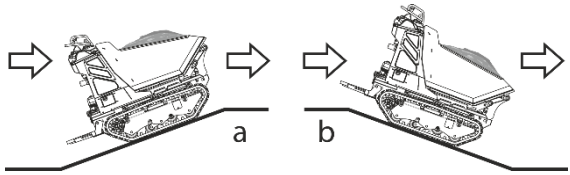


fig. 4.6 – a) Uphill driving; b) Downhill driving

DANGER: It is absolutely essential to avoid operating on terrain with transverse and longitudinal slopes exceeding the values specified in Table 1. Exceeding these limits may cause the machine to overturn, posing serious risks to operator safety..

To ensure maximum safety, it is essential to:

1. Carefully consult the user and maintenance manual to understand:
   - The maximum allowable slopes.
   - The correct procedures to reduce load according to the machine and operating conditions.

Adhering to the specified instructions and limits is mandatory to prevent accidents and ensure safe machine operation.

4.6 LOAD TRANSPORT

PROHIBITION: It is strictly forbidden to exceed the load capacity limits indicated in the technical data table.

4.6.1 Construction-Site Skip (Dumper Body)

The standard machine is equipped with a "dumper"-type skip, designed for the transport of solid inert materials.
It is primarily intended for use in construction-type operations.

4.6.2 "Agricultural" Type Body

Upon request, your machine can be fitted—in place of the dumper body—with a flatbed body equipped with fold-down side panels, suitable for agricultural transport.

Opening the side panels increases the loading surface, allowing the transport of bulky items.
To extend the loading platform, perform the following operations on one side at a time (see Fig. 4.7):

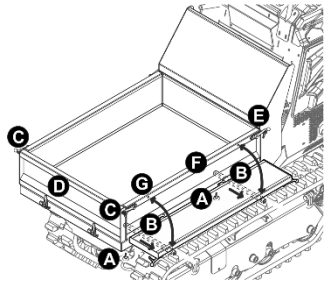


fig. 4.7 – Agricultural Skip

1. Open the two front latches "C", lower the front panel "D", and remove it.
2. Loosen the two knobs "A" located under the loading bed.
3. Remove the two support arms "B" from their housings.
4. Open the rear latch "E" and lower the side panel "F", aligning the support pins with the holes "G".
5. Repeat the procedure on the opposite side.
6. Ensure that all side panels are securely locked, and position the load so that it cannot fall out; if possible, secure it with straps or ties.

4.7 MATERIAL UNLOADING

4.7.1 Tipping the Body

WARNING – Before unloading, make sure the ground is flat, solid, and compact.

Perform the tipping operation slowly and smoothly. Do not move the machine forward during the tipping phase..

Your machine is equipped with a hydraulic tipping system for material discharge.

To perform the tipping operation:

- Position the machine on a flat, solid, and compact surface.
- If the machine is equipped with an agricultural-type body, remove the front panel.
- Push the lever forward to tilt the body and discharge the material.
- Pull the lever back until the body returns to the travel position, then release the lever.

CAUTION: During unloading, if the body strikes an obstacle, do not move the machine forward — this may damage the body mounting points.

PROHIBITION: It is strictly forbidden to operate the machine if the body is not in the fully lowered (rest) position.

4.8

4.8.1 Tipping the Body

WARNING – Before performing the unloading operation, make sure the ground is flat, solid, and compact. Execute the tipping movement slowly and evenly. Do not move the machine forward during the tipping phase.

Your machine is equipped with a **hydraulic tipping system** for unloading material.

To perform the tipping operation:

- Position the machine on level, firm, and compact ground;
- If the machine is equipped with an agricultural-type body, remove the front panel;
- Push the lever forward to tilt the body and unload the material;
- Pull the lever back until the body returns to its travel position, then release the lever.

PRUDENZA: During unloading, if the body hits an obstacle, do not move the machine forward — this may cause damage to the body mounting points.

PROHIBITION: It is strictly forbidden to operate the machine if the body is not in the fully lowered (rest) position.

4.8.2 Using the Self-Loading Arm

WARNING – Before using the arm, ensure that the ground is level, solid, and compact. Perform the operation slowly and smoothly.

ATTENZIONE: During travel, the self-loading device must remain lifted off the ground to avoid hitting the surface, and positioned so as not to obstruct visibility.

Your machine is equipped with a hydraulic device that allows the use of a loading bucket to fill the body with material.

To perform the self-loading operation (see Fig. 4.8):

To perform the self-loading operation (see Fig. 4.8):

- Position the machine on flat, firm, and compact ground;
- Push the lever forward to lower the bucket and move forward until the bucket is full;
- Pull the lever backward to raise the arm completely—the material will slide out of the bucket and into the body;
- Repeat the operation as needed to fill the body.

PRUDENZA: When using the loading arm, ensure it does not collide with surrounding objects.

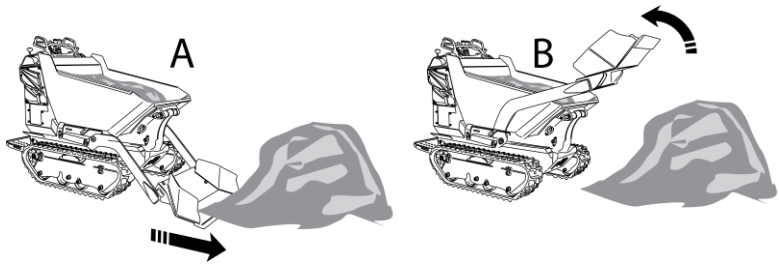


fig.4.8 - Use of the Self-Loading Arm

Always check that the operating range is clear of any obstacles.

4.8.3 Body Lifting ("HI" and "HAC" Models)

Upon request, the machine can be equipped with a hydraulic lifting device that raises the body during unloading, allowing discharge into high-sided containers or bins, commonly referred to as "Hi-Tip" (see Fig. 4.9.b).

The system is equipped with a safety valve, which prevents the accidental lowering of the assembly even in the event of hydraulic hose failure.

To unload material normally, operate the standard tipping lever as described in the previous section.

To perform a high-tip unloading operation, proceed as follows:

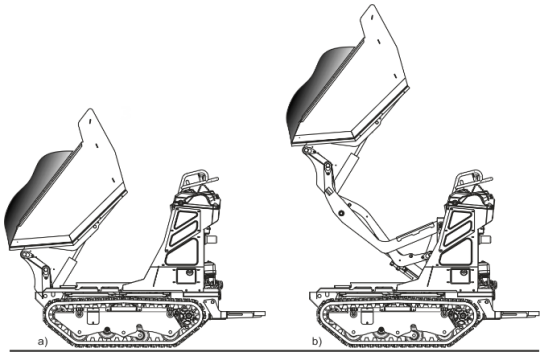


fig.4.9 a) Low Dump – b) High Dump

HI-TIP UNLOADING

Low Dump (see Fig. 4.9.a):

1. If the machine is on a slope, strictly comply with the maximum slope limits specified in Table 1 – §4.5.5.
2. Stop the machine on a solid, compact, and level surface.
3. Push the tipping lever forward to unload the material.

High Dump (see Fig. 4.9.b):

1. REDUCE THE LOAD TO 60% OF THE MAXIMUM CAPACITY.
2. Stop the machine on a flat, level, solid, and compact surface.

3. WITH THE MACHINE STOPPED, raise the body to the desired height by pushing the lift lever forward (□ – see Fig. 4.10).

4. Push the tipping lever forward to discharge the material.

IT IS STRICTLY FORBIDDEN to reverse or move forward on flat ground or on slopes when the body is in the high-dump (Hi-Tip) position.

HIGH DUMPING IS STRICTLY FORBIDDEN when the machine is on a slope.

DANGER: Never operate the lifting lever while the machine is in motion — this may cause the machine to overturn.

DANGER: Never raise the body unless the machine is fully stopped on a flat, solid, and compact surface.

DISCHARGE (HAC):

Low Dump (see Fig. 4.9.a):

1. If the machine is on a slope, strictly comply with the maximum slope limits specified in Table 1 – §4.5.5.
2. Stop the machine on a solid and compact surface.
3. Pull back the self-loading lever fully to raise the bucket (– see Fig. 4.10).
4. Push the tipping lever forward to allow the material to be discharged.

High Dump (see Fig. 4.9.b):

1. Reduce the load to 60% of the maximum rated capacity.
2. Stop the machine on a flat, level, solid, and compact surface.
3. Pull back the self-loading lever fully to raise the bucket (– see Fig. 4.10).
4. Raise the body to the desired height by pushing the lift lever forward (– see Fig. 4.10).
5. Push the tipping lever forward to discharge the material.

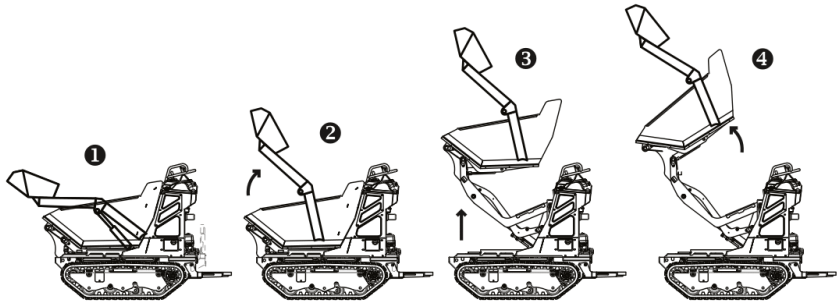


fig. 4.10 – Position for High Dump (HAC)

To return the dump body to the correct travel position, proceed as follows:

- Pull back the tipping lever to bring the body back to a horizontal position;

- Release the tipping lever;
- Pull back the body lift lever until the body reaches the standard travel position;
- Release the lift lever.

DANGER: Under no circumstances should you operate the body lift lever while the machine is in motion, as this may cause the machine to overturn.

IT IS STRICTLY FORBIDDEN to drive forward or reverse, on flat ground or on slopes, when the body is in the raised (Hi-Tip) position.

HIGH DUMPING IS STRICTLY PROHIBITED when the machine is positioned on a slope.

DANGER: Never raise the dump body without first stopping the machine on a flat, solid, and compact surface.

4.9 INCLINOMETER

4.9.1 Instructions for Use.

IMPORTANT INFORMATION:

The inclinometer measures the lateral and longitudinal tilt of the machine and is an essential tool to ensure safety and efficiency when working on terrains with varying slopes. To obtain an accurate and reliable reading, it is crucial to follow these instructions:

CORRECT WAY TO USE

1. Machine Conditions
   - Measurement must be taken with the machine stationary and the engine off, or at idle if the machine lacks a battery.
   - This precaution prevents interference caused by engine vibrations or unwanted movements that could affect the accuracy of the reading.

2. Measurement Procedure
   - Before starting work, measure the inclination at various points on the terrain where the machine will operate.

- The obtained values must be compared with the parameters shown in Table 1 of §4.5.5 in the user manual and on the sticker placed on the machine.
- Ensure that the inclination falls within the established safety limits.

USE WHILE MOVING

- In this mode, readings can be affected by sudden inclination spikes and vibrations, compromising their reliability.
- The use of the inclinometer while moving is strongly discouraged for precision measurements, as the data may be inaccurate.

By carefully following these instructions, correct use of the inclinometer is ensured, improving operator safety and the effectiveness of work operations.

It is essential that the operator uses common sense and strictly adheres to the operational limits indicated:

- In Table 1 of §4.5.5 of the manual.
- On the safety stickers applied to the machine.

DANGER: Compliance with the longitudinal and transverse slope limits is mandatory. Failure to respect these limits results in direct responsibility for the operator and can cause serious risks, including:

- Machine rollover.
- Damage to people, property, or the machine itself.

Fig. 4.11 - Inclinometer

When tackling slopes, especially with a loaded machine, the following special driving technique must be observed:
Φ Always ascend and descend slopes in forward gear;
The machine is equipped with an automatic anti-cavitation speed control system.

DANGER: It is forbidden to use the machine on slopes with uneven ground. Use the machine only on solid ground free of stones.

4.9.2 Product Introduction

Cormidi Inclitech is a precision inclinometer designed specifically for tracked dumpers. Equipped with an integrated multi-axis gyroscope, it accurately monitors pitch and roll angles in real time, helping operators assess working conditions more safely and effectively.
The built-in slope alarm provides timely warnings when inclination angles exceed safety limits, significantly enhancing operational safety.

4.9.3 Main Functions

Display of the dumper track inclination angle: Real-time measurement of the dumper track's pitch angle during operation, within a range of -40° to +40° between the front and rear parts.

Display of the dumper track roll angle: Real-time measurement of the dumper's roll angle during operation, within a range of -40° to +40° between the left and right sides.

Mode selection:

It is possible to select either standard mode or off-road mode.

Display voltage:

Real-time measurement of the tracked dumper battery output voltage, along with a digital hiding function that allows users to hide the angle display data on the screen when not needed, reducing distraction and improving focus during operation.

Adjustable safety alarm:

When the pitch or roll angle of the tracked dumper exceeds the preset alarm value, the device emits a safety alarm beep.

Hidden functions:

Allows users to hide the angular display data on the screen when not needed, reducing distraction and improving concentration during operation.

Five-level filter adjustment:

Supports five levels of filter sensitivity adjustment, helping to smooth out angle fluctuations according to working conditions for more stable readings.

4.9.4 Main Features

Fully automatic monitoring of the dumper's driving conditions.

Manual adjustment of the display brightness.

Use of a high-resolution LCD display.

ABS material resistant to high temperatures.

Powers on with the dumper and automatically shuts off once parked.

4.9.5 Technical Parameters

Power Supply:

DC 10V ~ 30V

Voltage Measurement Range:

DC 10V ~ 30V

Operating Temperature:

-40°C ~ +80°C

Voltage Measurement Accuracy:

0.5V

Pitch and Roll Angle Range:

-40° ~ +40°

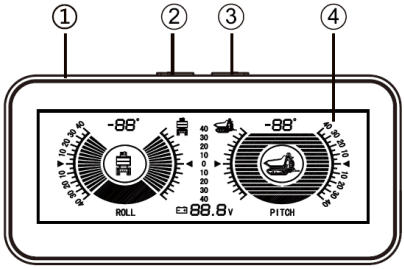
Product Dimensions:

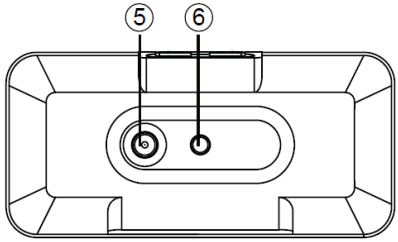
127 x 25 x 60 mm

Weight:

230 g

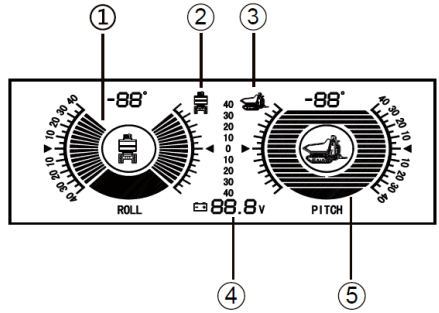
Device Structure.



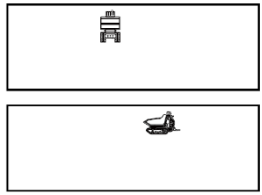


1. ABS Housing
2. Left Button
3. Right Button
4. HD LCD Display
5. DC 12V Power Supply
6. Mounting Bracket

4.9.6 Interface Description



1. Roll Angle
2. Off-Road Mode
3. Standard Mode
4. Voltage
5. Pitch Angle
6. Settaggio delle funzioni

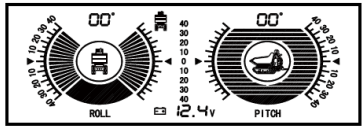


Mode Change:

Press and hold the left button for 5 seconds to access the mode selection interface (Standard or Off-Road), then press and hold for another 5 seconds to save the settings.

Resetting the Slope Value:

Briefly press the right button to reset the roll and pitch angles.



Brightness Adjustment:

Briefly press the right button to adjust the display brightness.

Filter Adjustment:

Press and hold the button for about 3 seconds to enter filter adjustment mode, then briefly press the button to select the desired filter level.

Hide/Show Data:

Press and hold the left button for about 7 seconds to enter the hide/show data mode. Then, briefly press the right button to toggle between hiding or displaying the angular data on the screen.

4.10 BATTERY

The battery of the C6X-650 is housed in a compartment on the right side of the dashboard. To access it, it is necessary to remove the plastic cover Ⓐ from the dashboard (see fig. 4.12).

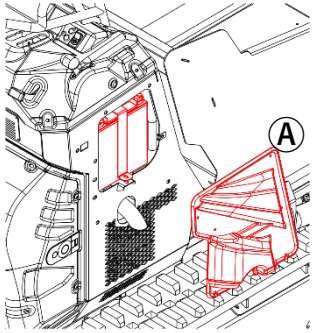


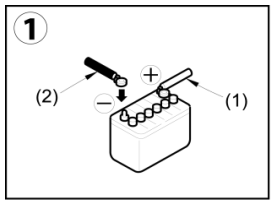
fig.4.12 – Battery Compartment

4.11 IF THE BATTERY IS DISCHARGED

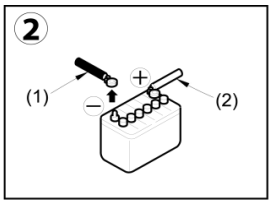
4.11.1 Precautions for Connecting Jump Leads.

WARNING:

- When starting the engine using jump leads, wear protective goggles.
- If starting the engine by drawing power from another machine, ensure the two machines do not come into contact.
- When connecting the jump leads, start with the positive terminal; when disconnecting, start with the negative terminal (ground).
- If a tool comes into contact with the positive terminal of the machine, there is a risk of sparks.
- Do not connect the terminals in reverse; never connect the negative terminal of one machine to the positive terminal of the other, and never connect the positive terminal of one machine to the negative terminal of the other.
- The capacity of the cables and the size of the clamps must be suitable for the size of the batteries.
- Check that the cables and clamps are intact and undamaged.
- The batteries of the machines must have the same capacity



To connect, start with the positive terminal (1).

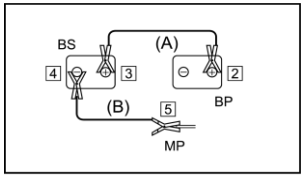


To disconnect, start with the negative terminal (1).

4.11.2 Connecting the Cables

7. Set the starter switches to OFF.
8. Connect the clamp of the red cable (A) to the positive terminal of the machine with the dead battery.
9. Connect the other end of the red cable to the positive terminal of the donor machine.

10. Connect the negative cable clamp to the negative terminal of the donor machine.
11. Connect the other end of the black clamp to the engine block of the machine with the dead battery.



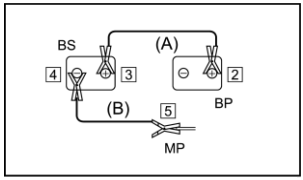
BS=backupbattery
BP=batterybrokendown
MP=machineenginebrokendown

4.11.3 Engine Starting

1. Check that all cables are securely connected to the battery terminals.
2. Start the engine on the donor machine and bring it to maximum engine speed.
3. On the machine with the dead battery, turn the ignition key to START to start the engine; if the engine does not start, wait at least two minutes before trying again. Do not turn off the donor machine's engine, keeping it at full throttle.

4.11.4 Disconnecting the Jump Leads

After starting the engine of the machine with the dead battery, disconnect the cables in the reverse order of the connection procedure.



BS = Backup Battery
BP = Battery Failure
MP = Machine Engine Failure

1. Remove the black cable clamp from the engine block of the machine with the dead battery.
2. Remove the black cable clamp from the negative battery terminal on the donor machine.
3. Remove the red cable clamp (A) from the battery terminal on the donor machine.
4. Remove the red cable clamp (A) from the machine with the dead battery.

4.11.5 Battery Charging

- Remove the cables from the negative and positive battery terminals before adjusting the battery. Otherwise, abnormal voltage may reach the alternator, causing damage.

• When the battery is charging, remove all connections

• If the battery overheats (the electrolyte temperature exceeds 45°C), stop the operation

• Stop the charging process as soon as the battery reaches the correct charge; continuing may cause the following problems:

• Overcharging of the battery

• Reduction of the battery electrolyte

• Battery failure

• Never connect the jumper cables with reversed polarity. For example: do not connect the cable to the negative terminal on one machine and the positive terminal on the other; the ends of the same cable must always be connected to the same type of terminal. A polarity reversal can damage the alternator

• The battery must be handled only after the cables have been disconnected (except for electrolyte inspection))

5 MAINTENANCE

DANGER: Always perform all maintenance operations with the engine off and the ignition key removed.

Proper maintenance is essential and is the key to achieving low operating costs and prolonging the life of your machine, keeping it always in full efficiency. In addition to regular maintenance on mechanical and hydraulic components, it is good practice to periodically wash the machine and carry out thorough cleaning to remove all mud residues. After each wash, it is necessary to lubricate all parts subject to friction, as specified in the "Lubrication" paragraph.

5.1 MAINTENANCE INTERVALS

To maintain the highest level of efficiency, maintenance must be carried out at regular and scheduled intervals. The following table summarizes the maintenance operations to be performed periodically.

5.1.1 Maintenance and Adjustment Table

Work Frequency	**Description**	**Check**	**Greasing**	**Cleaning**	**Adjstument**	**Replacement**
Every 8 hours	Machine			✓		
	Drive levers			✓		
	Control levers			✓		
	Skip (Dumper body)		✓			
	Air filter (1)(2)	✓		✓		
	Hi-Tip" lifter		✓			
	Hydraulic oil	✓				
	Engine oil (1)	✓				
Every 50 hours	Tracks				✓	
At 50 hours	Engine oil (1st change)					✓
Every 100 hours	Track rollers		✓			
Every 150 hours	Parking brake				✓	
Every year	Hydraulic oil					✓
	Service hydraulic oil filter					✓
	Traction hydraulic oil filter					✓
	Dry air filter (1)(2)					✓
	Engine oil (1)					✓
(Check the attached engine manual (2) In dusty areas, increase the frequency						

5.2 ENGINE

READ CAREFULLY the engine instructions and operating procedures provided in the specific attached manual.

The machine delivered to you may be originally equipped with different engine types, depending on specific needs and/or market requirements. Proper maintenance is the best way to keep your machine's engine in optimal working condition and to maintain low operating costs. For all engine maintenance procedures, strictly follow the dedicated manual provided with your machine.

MANDATORY: When changing the engine oil, always use a proper extractor to remove the used oil.
MANDATORY: Never dispose of used oil or filters into the environment. Ensure their disposal complies with environmental regulations and applicable laws.

5.2.1 Checking the Engine Oil Level – Petrol Engine

- Ensure the engine is positioned horizontally.
  • Remove the dipstick "A" and clean it with a damp cloth.
  • Fully reinsert the dipstick without screwing it in.
  • Check that the oil has reached the **Max "B"** mark on the dipstick.

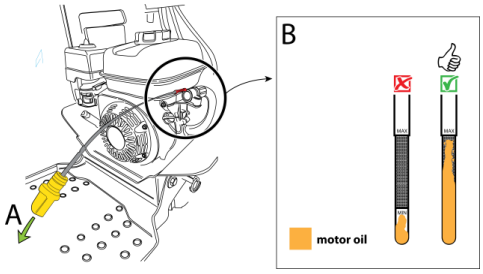


fig. 5.1 – Engine Oil Level

5.2.2 Adding Engine Oil

• Add the specified quantity of oil to the engine (see Chapter 6 – Capacity Table).
• Wait one minute and check the oil level.
• Add more oil if necessary.
• Fully reinsert the oil filler cap/dipstick (1) and tighten it **by hand**. Over-tightening the oil cap/dipstick may cause damage.

5.2.3 Air Filter (Petrol Engine)

The C6X-650 machine equipped with a Honda engine is fitted with a special high-efficiency air filter (see fig. 5.2).

The air filter requires regular maintenance to ensure proper machine operation. It is easily accessible.

To clean the air filter, follow these simple steps:

- Unscrew the plastic screw (1)
- Lift the plastic cover (2)
- Remove the filter cartridge (3) from its housing and thoroughly clean it by blowing it with compressed air

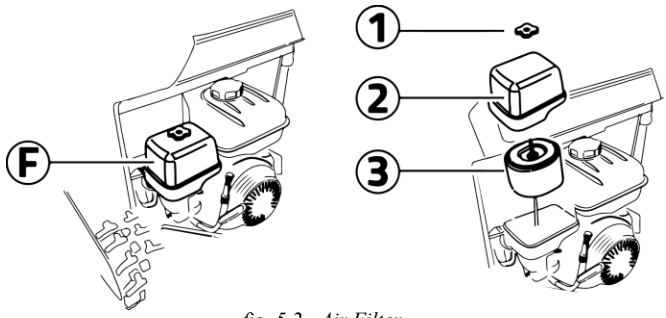


fig. 5.2 - Air Filter

5.3 HYDRAULIC CIRCUIT

5.3.1 Hydraulic Oil

MANDATORY: Do not dispose of oil in the environment. Dispose of it in compliance with environmental regulations and applicable laws.

Oil Level Check

Before checking the correct level of hydraulic oil, place the machine on a flat, solid surface.

The correct level is when, with the oil cold, it does not exceed the mark on the dipstick (approximately ¾ of the tank) and does not fall more than 1 cm below the mark (see fig. 5.3).

Restoring the Level

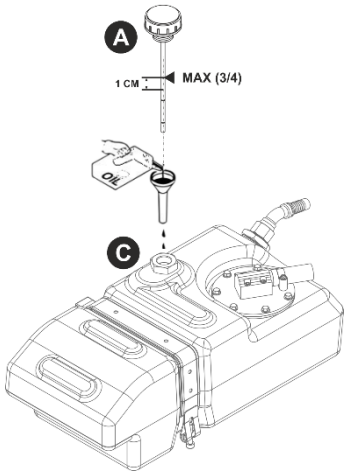


fig. 5.3 – Oil Level

- Unscrew the breather cap on the tank;
- Restore the oil level by adding the specified oil through the filler opening;
- Screw the breather cap back on, ensuring the gasket is correctly positioned;
- Start the engine following the correct procedure; briefly operate the drive and control levers.
- Stop the engine and check again that the oil level on the dipstick is correct. If necessary, repeat the operation.

Replacement

To replace the hydraulic oil, use a suitable suction pump and a thermometer to check the temperature.

DANGER: Hydraulic oil can reach high temperatures. Before draining the tank, make sure the oil is not hot to avoid the risk of burns.

DANGER: Always perform the draining operation with the engine turned off and the skip locked with the appropriate safety bar.

First, drain the tank:
• Unscrew the breather cap "A" on the tank (see fig. 5.3), and extract the oil using a suitable suction pump;
• Refill the tank through the "C" filler/breather opening until the oil reaches the upper line of the level indicator;
• Screw the breather cap "A" back on and start the engine;
• Briefly operate the drive and control levers;
• Stop the engine and check that the oil level reaches the correct mark—top it up if necessary;
• After 8 hours of operation, check the level again.

5.3.2 Hydraulic Oil Filters

Your machine is equipped with filters on the hydraulic oil circuit, located in the lower part of the frame, underneath the skip.

The filters are of the immersion type and are screwed directly into the hydraulic oil tank. They are easily accessible by lifting the machine's skip.

DANGER: Always replace the filters with the engine turned off and the skip locked with the appropriate safety bar.

REQUIREMENT: Dispose of oil and filters in compliance with environmental regulations and applicable laws.

To replace the filters, follow the instructions below, referring to fig. 5.4.

Replacement:

1. Drain the oil tank following the previously described procedure;
2. Unscrew the fastening bolts of the filter flange "M" from the oil tank;
3. First, replace filter "H", which is mounted from the outside of the tank and secured with a retaining ring from the inside;
4. Unscrew the retaining ring "G";
5. Replace filter "H" after inserting the retaining washer and O-ring "I";
6. To replace filter "E", simply unscrew it from the filter flange "M";
7. Screw in the new filter and reassemble the filter flange "M" to the tank;

Refill the tank and check the oil level as previously described (see oil table at the end of Chapter 5)

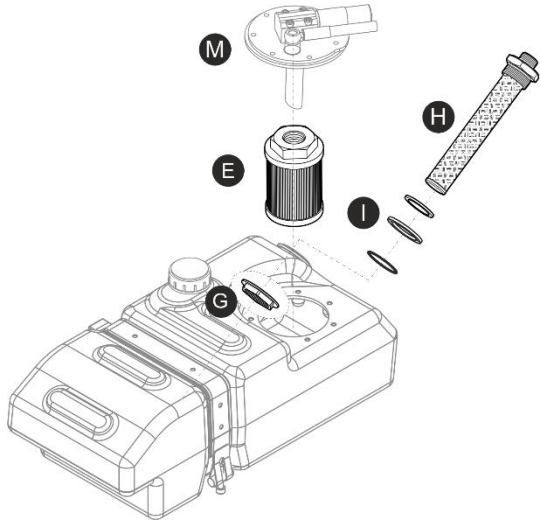


fig. 5.4 – Oil and Filter Replacement

5.4 TRACKS

5.4.1 Inspection and Adjustment

The correct tension of the tracks is important to ensure their durability and your safety: to check it, apply a force of 5 kg on the track and verify that the deflection is about 15 mm. To properly adjust the track tension:

• Remove cover "B" by unscrewing the two screws "A";

• Adjust the tension by turning the tensioner "C" with a wrench;

• Verify that the deflection is 15 mm near the front or rear midpoint relative to the central guide "S" of the track (see fig. 5.5);

• Reinstall the cover;

• Repeat the same steps for the other track.

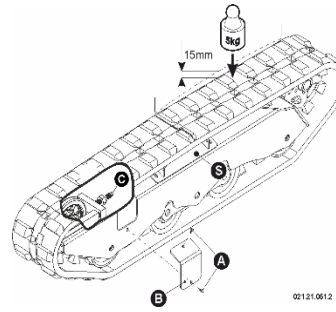


fig. 5.5 - Track Tension Adjustment

5.4.2 Replacement

To replace the tracks, proceed as follows:

• Lift the side of the machine you want to work on using hydraulic jacks or a crane;

• Place the machine on suitable stands, ensuring its stability;

• Remove cover “B” by unscrewing the two screws “A”;

• Using a wrench, fully unscrew the tensioner “C” to completely loosen the track;

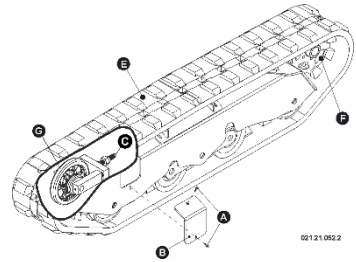


fig. 5.6 – Track Replacement

• Remove the track “E” starting from the front part;

• Install the new track by fitting it onto the teeth of the drive sprocket “F”;

• Engage the front part of the track onto the idler wheel “G”;

• Adjust the tension by acting on the tensioner “C”;

• Verify that the deflection is 15 mm near the front or rear midpoint relative to the central guide “S” of the track (see fig. 5.5);

- Reinstall the cover.

DANGER: Never work with the machine lifted on jacks or suspended; always place it on appropriate stands capable of supporting the machine's weight before starting any work.

5.5 GREASING

5.5.1 Greasing Points

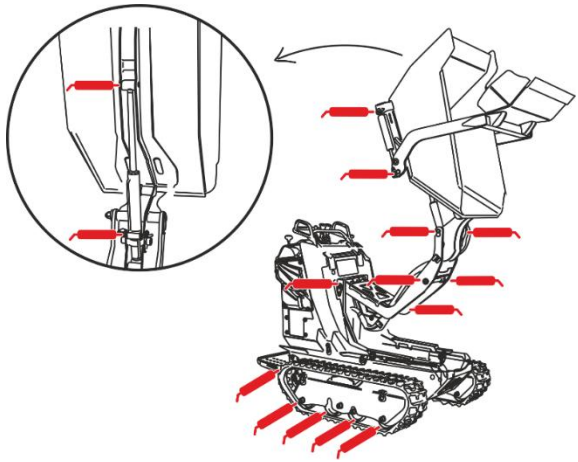


fig. 5.7 – Greasing Points

Grease all the designated greasing points using a proper grease gun. Additionally, grease the control levers using a spray-type grease can.

5.6 RECOMMENDED LUBRICANTS

Lubricant	Type	Quantity
Engine Oil	• **SAE 10W - 40W** • **API SN/CF** • **ACEA A3/B4**	**0,6 L**
Hydraulic Oil	• **HYD 32 HVI** • **DIN 51524-3 HVLP** • **ISO 11158 HV**	**18 L**
Grease	**MR Filante**	

DANGER: Before lubricating the machine, make sure the engine is turned off, the parking brake is engaged, and the machine is positioned on a flat, stable, and solid surface.

OBLIGATION: Avoid releasing grease and oil into the environment and dispose of them in accordance with environmental regulations and current laws. Do not pollute.

6 TECHNICAL DATA

6.1 DATA TABLE

	C6X-600	C6X-650
Engine		
Brand - Model	Kohler CH270	Honda GX 200
Fuel Type	Petrol	
Number of Cylinders	1	
Displacement (cm^3)	208 cm^3	196 cm^3
Power	5,2 Hp@3600 rpm	5,8 Hp@3600 rpm
Cooling	Air	
Starting System	Recolil	Electrict
Emissions	Stage V - Epa Tier 4	
Trasmission		
Gear Pump	n° 3 (33,2 lt/min 210 bar)	
Heavy Duty Hydraulic Motors	Heavy Duty for Tough Use	
HYD System		
Gear Pump STD Flow	n° 1 x (9 lt/min 130 bar)	
Undercarriage		
Track Width	180 mm	
Track Type	Cormidi Long Life	
Track Tensioning	Spring + Adjustment Screw	
Rollers	Oscillating with Permanent Lubrication	
Equipment		
Automatic Speed Control on Slopes **"CVD System"**	Standard	
Foldable and Shock-Absorbed Operator Platform	Standard	
Hour Meter	Standard	
HYD Oil Cooler with Automatic Electric Fan	Standard	
Inclitech Cockipit **(Inclination Monitoring System) Display LCD**	Standard	
Machine Lifting Hooks **"Lifting and Transport Anchoring"**	Standard	
Parking Brake	Standard	
Safety Jack Supports	Standard	
Special Anti-Acid Stickers	Standard	
Special Long Life Track Zero Vibrations **"TVL System"**	Standard	
Warranty up to 3 years (see terms in the dedicated document)	Standard	
Wheels and Rollers in Special Alloy Casting **"Tempered"**	Standard	
Performance		
Speed (2 Speed)	0 - 3,2 Km/h	
Load Capacity	600 Kg	650 Kg
Maximum Climbable Gradient Forward (unloaded)	69%----(40°)	
Maximum Allowable Side Slope (unloaded)	64%----(37°)	
Ground Pressure (unloaded)	0,17 kg/cm^2	
Maximum Climbable Gradient Forward (loaded)*	29%----(16°)	
Maximum Allowable Side Slope (loaded)*	37%----(21°)	
Ground Pressure (loaded)	0,44 kg/cm^2	
Operating Weight RI	432 Kg	
Operating Weight RIA	442 Kg	
Operating Weight AC	502 Kg	
Operating Weight HI	528 Kg	
Operating Weight HAC	596 Kg	

***To obtain the exact value of your machine, consult the user manual supplied and verify the exact match of the model. The values shown in this table, under load conditions, are reduced by 25% as an additional safety coefficient.**

6.2 VIBRATION LEVEL

Hand/arm transmitted vibration level	**aw=**	**2,5m/s²**
Whole-body transmitted vibration level (platform)	**aw=**	**1m/s²**

6.3 GROUND PRESSURES

Ground Pressure			
Machine	Version	Ground pressure (unladen)	Ground pressure (with max load)
		kg/cm²	kg/cm²
C6X-650	RI	0,167	0,450
	AC	0,194	0,477
	RIA	0,171	0,454
	HI	0,204	0,487
	HAC	0,230	0,514
*Load capacity + Operator weight 85 kg			

6.4 SOUND LEVEL TABLE

Commercial Name	**Engine Model**	**Power (kW)**	**Speed (rpm)**	**Measured Sound Power (dB)**	**Guaranteed Sound Power (dB)**	**Permitted Sound Power Level (dB)**
C6X-650	HONDA GX200	4,3	3600	96	99	101

6.5 CAPACITY TABLE

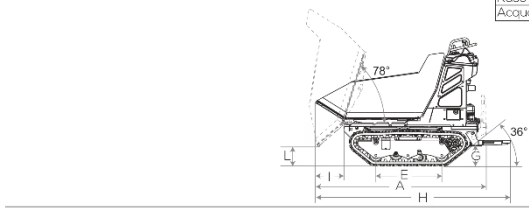
Model	**Version**	**Engine**	**Type**	**Capacity**
C6X-650	Tutte	HONDA GX200	Fuel Tank	3,1 L
			Hydraulic Circuit	18 L
			Max Engine Oil	0,6 L

6.6 DIMENSIONS

RI

	m³
Colmo SAE	0.28
Colmo CECE	0.26
Raso	0.22
Acqua	0.09

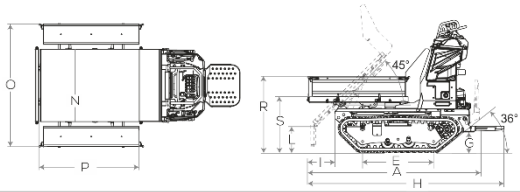
	mm	in
A	1760	69.3
B	1388	54.6
C	716	28.2
D	690	27.7
E	720	28.3
F	140	5.5
G	200	7.9
H	1964	77.3
I	245	9.6
L	226	8.9



RIA

	m³
Colmo SAE	0.21
Colmo CECE	0.18
Raso	0.13

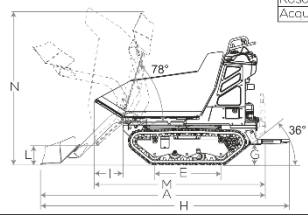
	mm	in
A	1751	68.9
B	1388	54.6
C	716	28.2
D	780	30.7
E	720	28.3
F	140	5.5
G	200	7.9
H	1995	78.5
I	280	11.0
L	315	12.4
N	716	28.2
O	1213	47.8
P	980	38.6
R	772	30.4
S	571	22.5

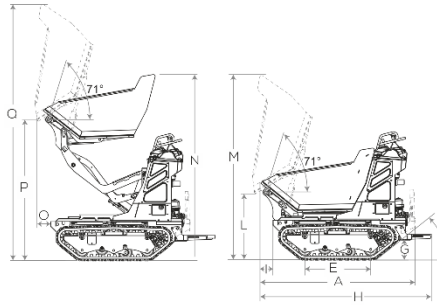


AC

	m³
Colmo SAE	0.28
Colmo CECE	0.26
Raso	0.22
Acqua	0.09

	mm	in
A	2250	88.6
B	1388	54.6
C	716	28.2
D	762	30.0
E	720	28.3
F	140	5.5
G	200	7.9
H	2454	96.6
I	245	9.6
L	226	8.9
M	1760	69.3
N	1602	63.1

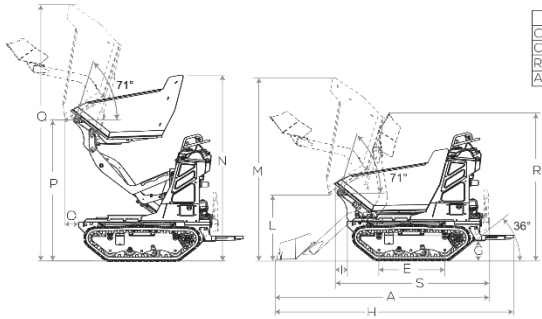




	m³
Colmo SAE	0.30
Colmo CECE	0.28
Raso	0.23
Acqua	0.15

HI

	mm	in
A	1675	65.9
B	1388	54.6
C	716	28.2
D	690	27.7
E	720	28.3
F	140	5.5
G	200	7.9
H	1898	74.7
I	130	5.1
L	696	27.4
M	1935	76.2
N	1980	78.0
O	130	5.1
P	1483	58.4
Q	2720	107.1



	m³
Colmo SAE	0.30
Colmo CECE	0.28
Raso	0.23
Acqua	0.15

HAC

	mm	in
A	2152	84.7
B	1388	54.6
C	716	28.2
D	762	30.0
E	720	28.3
F	140	5.5
G	200	7.9
H	2367	93.2
I	130	5.1
L	696	27.4
M	1935	76.2
N	1980	78.0
O	130	5.1
P	1483	58.4
Q	2720	107.1
R	1607	63.3
S	1675	65.9

7 MALFUNCTIONS AND FAILURES

7.1 Table of Malfunctions and Faults

MALFUNCTION	CAUSE	REMEDY
Hydraulic oil is leaking from the breather	Excessive oil level	Restore the correct level
	Oil overheating	Stop work and allow to cool down
	Hydraulic circuit	Have the machine inspected by a specialized workshop
Oil leakage	Excessive oil level	Restore the correct level
	Hydraulic circuit or seal failure	Have the machine inspected by a specialized workshop
The hydraulic controls are not responding correctly	Insufficient oil level	Restore the correct level
	Hydraulic circuit failure	Have the machine inspected by a specialized workshop
The dumper body moves slowly	Oil overheating	Stop work and allow to cool down
	Engine lacks power	Have the engine inspected by a specialized mechanical workshop
High oil temperature	Insufficient oil level	Restore the correct level
	Overheating	Stop work and allow to cool down
The parking brake does not release	Brake cable is broken	Have the cable replaced by a mechanical workshop
	Brake is stuck	Move the machine slightly forward and/or backward and try again
The machine does not move	Parking brake is engaged	Release the brake
	Lack of oil in hydraulic circuit	Restore the correct oil level
	Tracks are broken	Replace the tracks
	Hydraulic component failure	Have the machine inspected by a specialized workshop
Excessive track noise while moving	Incorrect track tension	Restore the correct tension
	Broken or worn tracks	Replace the tracks
	Bearing or roller failure	Have the machine repaired by a mechanical workshop
Excessive noise from the skip	Lack of grease	Grease
	Bearing failure	Have the machine repaired by a mechanical workshop
The accelerator does not respond	Throttle cable is broken	Have the cable replaced by a mechanical workshop
The engine is not operating properly or the noise level is excessive	Miscellaneous	Have the engine inspected by a specialized mechanical workshop
The engine does not develop power	Air filter is clogged	Replace the air filter
	Miscellaneous	Have the engine inspected by a specialized mechanical workshop
The engine does not start	Fuel is missing	Refuel the machine
	Starting procedure is incorrect	Follow the correct starting procedure
	Battery is discharged	Recharge or replace the battery

Summary

CORMIDI S.R.L.
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84069 - ROCCADASPIDE –SALERNO
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DICHIARAZIONE CE DI CONFORMITA'
EC DECLARATION OF CONFORMITY

La presente dichiarazione di conformità è rilasciata sotto la responsabilità esclusiva del fabbricante che:

Dichiara la macchina oggetto della presente dichiarazione conforme alle direttive seguenti:

This Declaration of Conformity is issued under the sole responsibility of the manufacturer who:

Declares the machine subject to this declaration complies with the following directives:

1. 2006/42/CE "MACCHINE/ MACHINERY"

1.1. NORME EUROPEE ARMONIZZATE NEL CUI RISPETTO LA CONFORMITÀ È DICHIARATA:
EUROPEAN HARMONISED STANDARDS UNDER WHICH CONFORMITY IS DECLARED:

EN 474-1:2022 EN 474-3: 2022 EN 474-6: 2022

	SI/YES	NO
1.2. PRINCIPALI COMPONENTI DI SICUREZZA MONTATI E FORNITI CON LA MACCHINA MAIN SAFETY COMPONENTS INSTALLED AND SUPPLIED WITH THE MACHINE		
1.2.1. VARIANTE PER LA MOVIMENTAZIONE DEI CARICHI SOSPESI OBJECT HANDLING APPLICATION KIT (EN 474-5 PUNTI 4.1.7 – 4.1.)	☐	☒

2. 2000/14/CE "EMISSIONE ACUSTICA/NOISE EMISSION" (D.LGS 262/2002)

2.1. PROCEDURA DI VALUTAZIONE DELLA CONFORMITÀ SEGUITA CONFORMITY ASSESSMENT PROCEDURE FOLLOWED	ALLEGATO VI (ART. 6/1)
2.2. NOME ED INDIRIZZO DELL'ORGANISMO NOTIFICATO COINVOLTO NAME AND ADDRESS OF THE NOTIFIED BODY INVOLVED	VERICERT SRL – CERTIFICAZIONI E VERIFICHE ORGANISMO NOTIFICATO EUROPEO N. 1878 VIA L. MASOTTI 5 – 48124 – FORNACE ZARATTINI RAVENNA
2.3. LIVELLO DI POTENZA SONORA MISURATO LWA (R MEASURED SOUND POWER LEVEL LWA (REF. 1	98 dB (A)
2.4. LIVELLO DI POTENZA SONORA GARANTITO LWA GUARANTEED SOUND POWER LEVEL LWA (REF. 1	101 dB (A)
2.5. POTENZA NETTA MOTORE INSTALLATA ENGINE NET INSTALLED POWER	4,3 kW

3. 2014/30/UE "COMPATIBILITÀ ELETTR… NICA/ELECTROMAGNETIC COMPATIBILITY"

3.1. NORME EUROPEE ARMONIZZATE … UI RISPETTO … ONFORMITÀ È DICHIARATA
EUROPEAN HARMONISED STAND… …NDER WHI… …NFORMITY IS DECLARED — EN ISO 14982:2009

4. ALTRE DIRETTIVE APPLICABILI / …APPLICABLE… …E/S: 2011/65/CE_ROHS

5. FABBRICANTE/MANUFACTURER: …MI… VIA FONTE 342 – 84069 – ROCCADASPIDE – SALERNO

6. MACCHINA / MA… — AUTORIBALTABILE A CINGOLO COMPATTA — MACCHINA ALL. 1 NUM. 18(DIR. 2000/14/CE): MINI DUMPER — CINGOLATO/ CRAWLER

7. TIPO/TYPE:	C6X_H1_	**8. MATRICOLA N°/ SERIAL N°**	CRMC6XH1….
9. ANNO DI COSTRUZIONE CONSTRUCTION YEAR	2025		

10. PERSONA AUTORIZZATA A COSTITUIRE IL FASCICOLO TECNICO
PERSON AUTHORISED TO COMPILE THE RELEVANT TECHNICAL DOCUMENTATION

LEGALE RAPPRESENTANTE
ARMANDO CORMIDI
VIA FONTE, 342 – 84069 ROCCADASPIDE (SA)

ROCCADASPIDE 2025 DICHIARAZIONE N° /25

FAC-SIMILE

CORMIDI C6X-650 SERIES