



CE



## **USE AND MAINTENANCE MANUAL**

### **MINIDUMPERS**

T45 - T50 - T60 - T70 - T85 - T95 - T150

**EN**



# CONTENTS

INTRODUCTION	4
PRESENTATION	7
WARRANTY	7
DECLARATION OF CONFORMITY	9
MACHINE CE IDENTIFICATION PLATE	10
THE MANUAL	11
TECHNICAL DATA	12
PICTOGRAMS AND RESIDUAL RISKS	17
GENERAL SAFETY RULES	20
SAFETY DEVICES	23
MACHINE DESCRIPTION	28
CONTROLS AND INSTRUMENTS	31
INSTRUCTIONS FOR USE	45
DRIVING PRECAUTIONS	47
GENERAL MAINTENANCE	58
WASHING	63
DEMOLITION	63
DISPOSAL	63
TROUBLESHOOTING TABLE	64
MAINTENANCE LOG	65
CE MARKING	66
ANNEXES	66
AVAILABLE VERSIONS	67
QUICK ATTACH EQUIPMENT	70

# **1. INTRODUCTION**

Dear Customer,

Many thanks for the trust you have placed in us by purchasing a C&F Minidumper.

The product you have purchased is a working tool you can rely on with confidence, as long as you observe and comply with all the instructions in this use and maintenance manual.

***Read this manual carefully before using the machine.***

***Improper use of the machine may cause damage and personal injury.***

This manual must be kept in a safe place for easy reference whenever there are any doubts or concerns about use of the machine.

The images and figures in the manual may not be up to date and therefore may not fully correspond to the machine purchased, as the company policy is to constantly improve and update machines.

Do not hesitate to contact us by writing to ***info@cfequipments.com***, or calling ***+39 0832 243960*** for more detailed and updated information.

We hope you enjoy using our products!

The minidumper discussed in this manual shall hereinafter be referred to as the "machine".

***This manual on "Instructions for use and maintenance" is an integral part of the machine; it must always follow the machine to which it refers up until demolition of the machine itself.***

In case of sale, loan of use and/or rental of the machine, the manual must always be handed over as well.

### **CAUTION!!!**

ANY ADDITIONAL EQUIPMENT OR CHANGES TO THE MACHINE MUST BE APPROVED BY THE MANUFACTURER, WHO WILL EVALUATE THE DOCUMENTATION PRODUCED IN WRITING AND DECIDE AT HIS SOLE DISCRETION..

Any liability is excluded for accidents to persons or property resulting from tampering with the machine by third parties, maintenance or repair faults and applications not approved by the manufacturer.

## **INFORMATION AND GENERAL RULES**

This manual describes how operators must carry out the various work steps, intended as assembly, installation, use, maintenance and scrapping. It contains instructions for the machine in the various situations: use, assembly and disassembly of accessories, adjustments, maintenance, and control of safety systems.

It also contains: technical features, limits of use. Read the instructions carefully so as to ensure correct use and to always have the machine ready when needed.

Always keep this manual handy and store it in a convenient location, protected and kept intact for quick and safe consultation. Carefully comply with all the precautions indicated.

## ***LEGAL PROVISIONS***

Comply with the applicable accident prevention regulations during installation:

## ***Legislation and reference standards***

The following guidelines have been adopted for production of the machine and for the necessary documentation: **Machinery Directive 2006/42 EC, Noise Directive 2000/14/EC and subsequent amendments, Directive 2014/30 EMC and 2014/35 Low Voltag.**

## A – MACHINE IDENTIFICATION DATA

**Description:** MINIDUMPER      **manufacturing year:** .....

*Serial no.:* ..... *model:* .....

**B – PURCHASER IDENTIFICATION DATA** (to be filled in manually by the user)

Company name and address: .....

Machine installed at: .....

Note: any changes in the place of installation and/or transfer to third parties of the property and the location must be reported in the following spaces:

New installation at: .....

## C – MANUFACTURER IDENTIFICATION DATA

Company name: C&F srl - Viale Finlandia, 8 - 73100 Lecce (LE) - Italy

***Any liability is excluded for accidents to persons or property resulting from tampering with the machine by third parties, maintenance or repair faults and applications not approved by the manufacturer.***



## **CAUTION!!!**

**ANY ADDITIONAL EQUIPMENT OR CHANGES TO THE MACHINE MUST BE APPROVED IN WRITING BY THE MANUFACTURER, WHO WILL EVALUATE THE DOCUMENTATION PRODUCED AND DECIDE AT HIS SOLE DISCRETION.**

**CAUTION: UNINTENDED AND/OR IMPROPER AND/OR INCORRECT USES**

The use of the machine for purposes other than those described below is considered "IMPROPER USE". Any other use of the machine must be authorised in advance in writing by the manufacturer, otherwise it is considered "IMPROPER USE".

***The manufacturer declines all responsibility for any damage caused to property and persons and shall consider any type of warranty to be null and void.***

## **2. PRESENTATION**

This Manual serves as a reference for proper driving and quick identification of the machine in all its parts and versions. The drawings, tables and everything contained in this manual are of a confidential nature and, for this reason, no whole or partial information may be reproduced and may not be communicated to third parties without authorisation from the Manufacturer, who is the exclusive owner.

Do not remove, tamper with or damage the protections, labels and inscriptions, especially those imposed by law. This Use and Maintenance Manual reflects the state of the art at the time of marketing the machine and cannot be considered inadequate only on the basis of new experience.

The Manufacturer has the right to update the production and related manuals without the duty to revise manuals that have already been delivered, except in exceptional cases due to changes related to the safety of the machine. In the event of machine transfer, the Manufacturer invites you to indicate the address of the new owner in order to facilitate the transmission of any additions to the manual to the new user.

## **3. WARRANTY**

The manufacturer guarantees that its products are free from any defects and flaws in material, construction and assembly which could render them unsuitable for their intended use.

- The machine is guaranteed 2 years from the date of delivery.
- The warranty shall only apply if the report of the fault or defect is made promptly to the service centre. The report must detail the defects and non-conformities found.
- Warranty work must only be carried out at the manufacturer's and/or dealer's premises. The cost of transferring the machine to the authorised service centre for repair shall be borne by the customer.
- The warranty consists in restoring the efficiency, through replacement or repair free of charge, of parts that have been found to be inefficient or unusable due to ascertained manufacturing defects attributable to the manufacturer and recognised as such by the manufacturer or by those delegated by him.
- The warranty consists in repairing only the defective parts or replacing them with material of a quality and quantity equivalent to those found to be defective or not in conformity with what was agreed. Consumables such as oil, grease, lubricants, etc. are not covered under the warranty.
- It is at the manufacturer's discretion to decide for the replacement of parts or their repair. Repairs carried out under the warranty do not extend the duration of the warranty. The warranty for replaced or repaired materials follows that of the equipment.
- No refund will be given for the period of inactivity due to immobilisation of the machine for forced downtime due to the breakdown and subsequent repair.

### **Replacement of the product is however expressly excluded.**

#### ***The warranty shall be invalidated if one of the following conditions occurs:***

- If the product is used in a manner that does not comply with the manufacturer's conditions or instructions given in this use and maintenance manual.
- If the user makes use of the assistance and services of workshops not authorised by the manufacturer for repairs or modifications.
- If the minimum maintenance operations prescribed by the manufacturer and described in this use and maintenance manual are not carried out, and if these operations are not confirmed by means of a stamp and a legible signature by the person who performed the maintenance, to be affixed in the spaces provided for this purpose in the service and warranty booklet.
- If the product is subjected to modification or processing without prior written authorisation from the manufacturer.

- In the case of natural wear and tear, negligent treatment, improper use, road accidents, neglect, use of non-original parts or in any case parts not manufactured, supplied and tested and distributed by the manufacturer.
- If payment methods and terms are evaded or even just delayed.
- The manufacturer is also not liable for defects resulting from any type of modification made by the user, except in cases of express exception which the manufacturer shall formalise in advance.

Responsibilities exceeding those provided for in this chapter may only be assumed towards the user by the manufacturer's legal representative or by persons with specific written and authenticated delegation. Any concessions of non-compliance with the above shall not bind the manufacturer but only those who have granted them, with no possibility of recourse.

Once the warranty period has expired, usage by the user of non-original parts will relieve the manufacturer from any responsibility in the event of damage that use of the machine may cause to people and/or property.

The above expressly indicated represents the only warranty granted by C&F and replaces any other warranty provided by law for all intents and purposes. The right of the purchaser to request termination of the contract, replacement of the product, a refund of damages or a reduction of the price is therefore expressly excluded. Tampering with seals, all safety functions and safety valves relieves the manufacturer from any responsibility and warranty.

## 4. GUIDE TO CONSULTATION OF THE MANUAL

Symbols are used in this manual to indicate risks and dangers or to draw attention to them.



### **DANGER sign for safety at work**

This symbol is shown in the service instructions near warnings regarding operating conditions that present serious risks for the safety of persons. Always comply with these warnings, operating with the utmost care and caution. Non-compliance with the instructions or tampering with components can cause serious injury to persons.

All persons assigned to work with the machine must be familiar with these warnings and must however take into account all general safety rules.



### **CAUTION sign for safe system operation.**

All the safety rules indicated are important and as such must be strictly observed. Warnings alone do not eliminate the dangers. The attached diagrams are for the exclusive use of specialised technical personnel able to carry out special maintenance and checks. **Use of them to make changes to the machine is strictly prohibited.**

#### **Definition of "standard resting" positions**

Below are some illustrations showing the "standard resting position" of the Minidumper.



# 5. DECLARATION OF CONFORMITY

Facsimile of the document of conformity issued.



## DICHIARAZIONE DI CONFORMITA' CE EC - DECLARATION OF CONFORMITY

### La società:

The company:

**C&F srl** - Viale Finlandia, 8 - 73100 Lecce (LE) Italy - IT03619660750 - [www.cfequipments.com](http://www.cfequipments.com)

### DICHIARA:

DECLARES:

**DENOMINAZIONE** TRAKER  
NAME

**MODELLO** \_\_\_\_\_  
MODEL

**MATRICOLA** \_\_\_\_\_  
SERIAL N°

**ANNO** \_\_\_\_\_  
YEAR

é conforme ai requisiti essenziali di sicurezza e di tutela della salute di cui alle direttive  
in its delivered state complies with the basic safety and health to the following relevant provisions

**2006/42/CE  
2014/30/UE  
2014/35/UE**

La macchina è inoltre conforme alla direttiva  
Furthermore the machine complies with  
**2000/14/CE (D.lgs 262/2002)  
2005/88/CE**

procedura di valutazione della conformità seguita:  
conformity assessment procedure followed:

### Allegato VI - procedura 2

TIPO DI MACCHINA / 18 allegato 1  
TYPE OF EQUIPMENT  
Compact dumper / 18 all. 1

\_\_\_\_\_kW

POTENZA NETTA INSTALLATA  
NET INSTALLED POWER

LwA\_\_\_\_\_dB

POTENZA SONORA MISURATA  
MEASURED SOUND POWER LEVEL

LwA\_\_\_\_\_dB

POTENZA SONORA GARANTITA  
GRANTED SOUND POWER LEVEL

**0865**  
**ISET srl - Via Donatori di Sangue, 9  
46024 - Moglia (MN) - Italia**

**I/ISET 0865/\_\_\_\_\_**

Il responsabile della costituzione e gestione del fascicolo tecnico è la Sig.ra Silvia Capone c/o C&F srl - Viale Finlandia, 8 - 73100 Lecce (IT)  
The person authorized to compile the technical file is Miss Silvia Capone established c/o C&F srl - Viale Finlandia, 8 - 73100 Lecce (IT)

Se i prodotti di cui sopra sono stati modificati senza la nostra approvazione, questa dichiarazione perde la propria validità  
If the above mentioned series are technically modified without our approval, this declaration shall no longer be applicable.

La presente dichiarazione di conformità è rilasciata sotto la responsabilità esclusiva del fabbricante.  
This declaration of conformity is issued under the sole responsibility of the manufacturer.

Per la società / for the Company

Lecce: 19/06/2019

## 6. MACHINE CE IDENTIFICATION DATA PLATE

The machine is equipped with the following CE identification plate.

Fig. 1 - CE plate

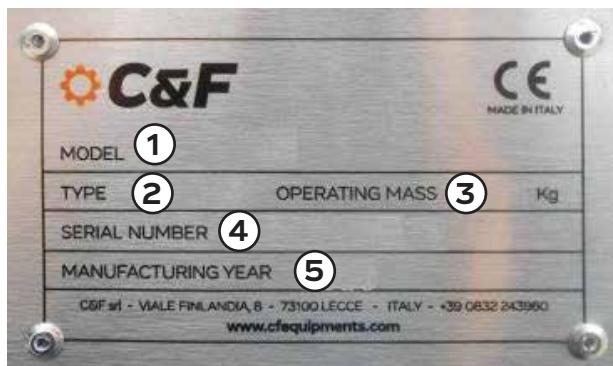
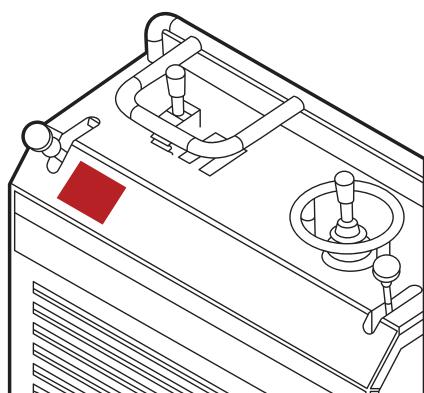


Fig. 2 - CE Plate Position



1. MODEL
2. TYPE
3. OPERATING MASS
4. SERIAL NUMBER
5. MANUFACTURING YEAR

The CE plate **must never be removed** and must be kept legible.

A duplicate must be requested in case of deterioration or damage.

**The machine may not be marketed without the CE plate.**

The data on the plate must be embossed with a punch or other indelible method.

### WEIGHT

The weight of the machine is provided in this manual and on the CE identification plate.

## 6.1 DOCUMENT HOLDERS (Use and Maintenance Manual)

The machine is equipped with a cylindrical document holder (to store the use and maintenance manual) located above the dashboard. Simply unscrew the plastic cap to access the document compartment.

See the following explanatory photos:



## 6.1 MASS

The operating mass of the machine is provided in this manual and on the CE plate.

## 7. THE MANUAL



All the information in this manual is mandatory and must be read carefully and understood before starting any operations on the machine. **Make sure that all users have fully understood the rules of use and the meaning of any symbols on the machine.**

Make sure that all users have fully understood the rules of use and the meaning of any symbols on the machine.

Therefore, the following standards of good conservation of the manual must be followed:

- The manual must be consulted taking care not to damage it. Do not remove pages, replace or delete information or modify its contents.
- It must be stored in a place protected from heat, humidity and corrosive agents.
- Possible accidents can be avoided by following the technical instructions in the manual. In any case, always comply with national safety regulations.

If it is impossible for the manufacturer to check the conditions of the machine and the operations carried out, it is the responsibility of the user to comply with the safety instructions described in this manual.

It is the employer's obligation to ensure that the operator meets the necessary requirements for correct use of the machine.

## 8. FEATURES AND TECHNICAL DATA

**1. CONTROL CONSOLE**

**2. HANDLE**

**3. DUMPER BED**

**4. EXTRA OVERBOARD**

**5. ROCKING ROLLERS**

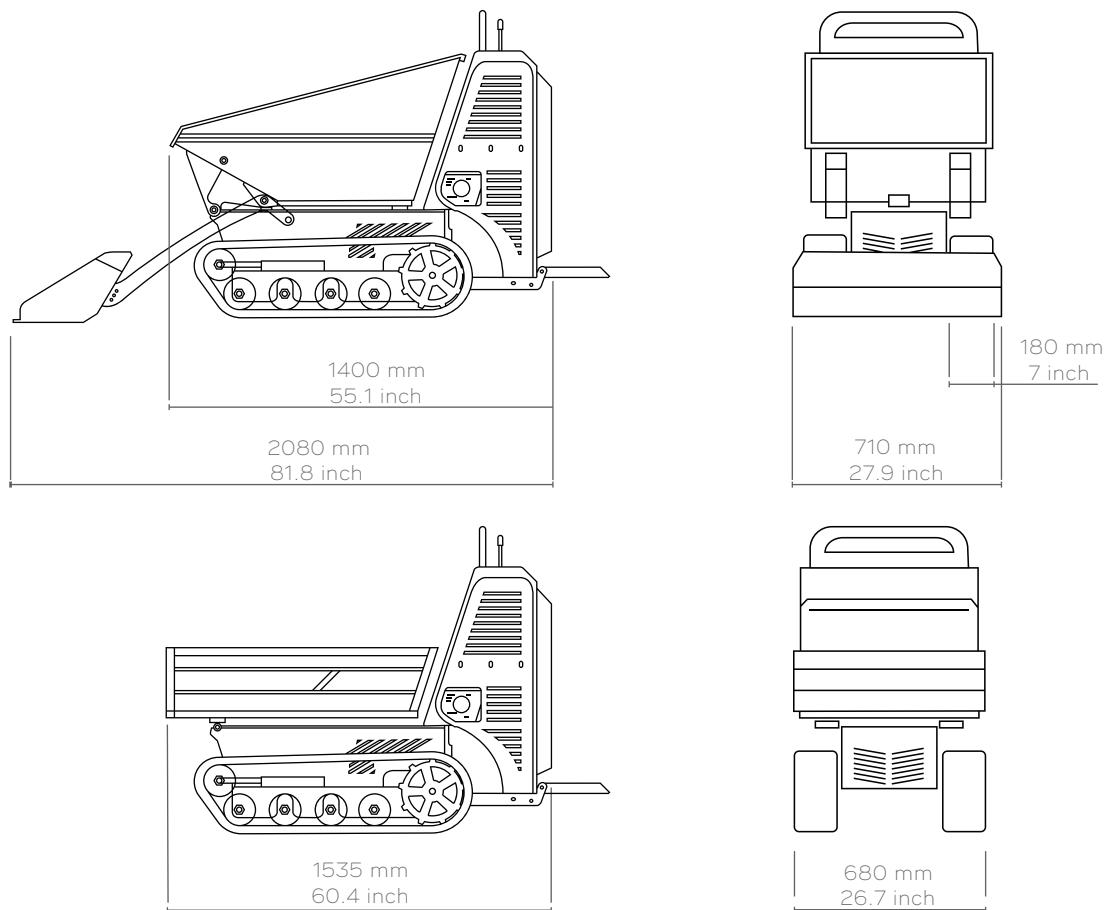
**6. OPERATOR PLATFORM**



## 8. TECHNICAL DATA

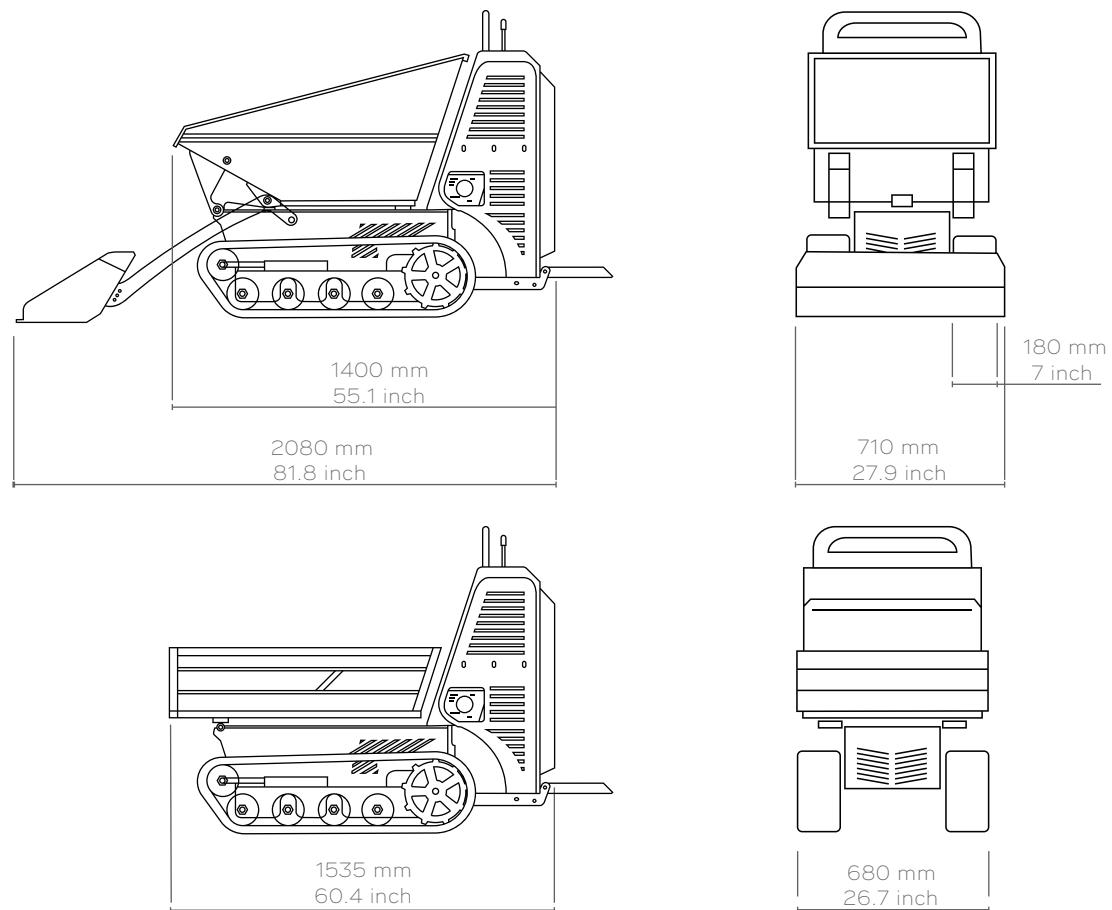
### MINIDUMPER **TRAKER T45**

Operating capacity	450 kg
Type of engine	Gasoline
Heat engine	HONDA GX200
Transmission	Hydrostatic
Pump flow rate	2 x 14 l/min
Maximum pressure	180 bar
Speed	2.5 km/h



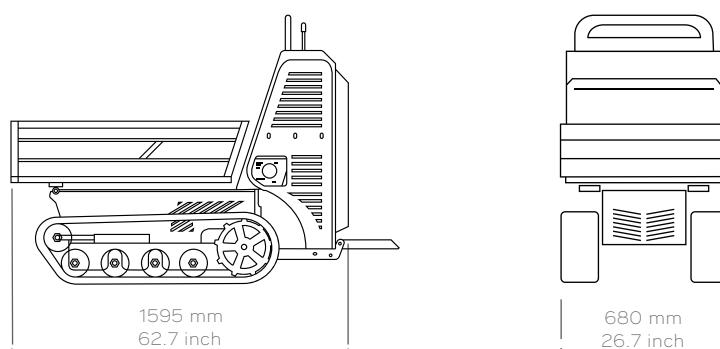
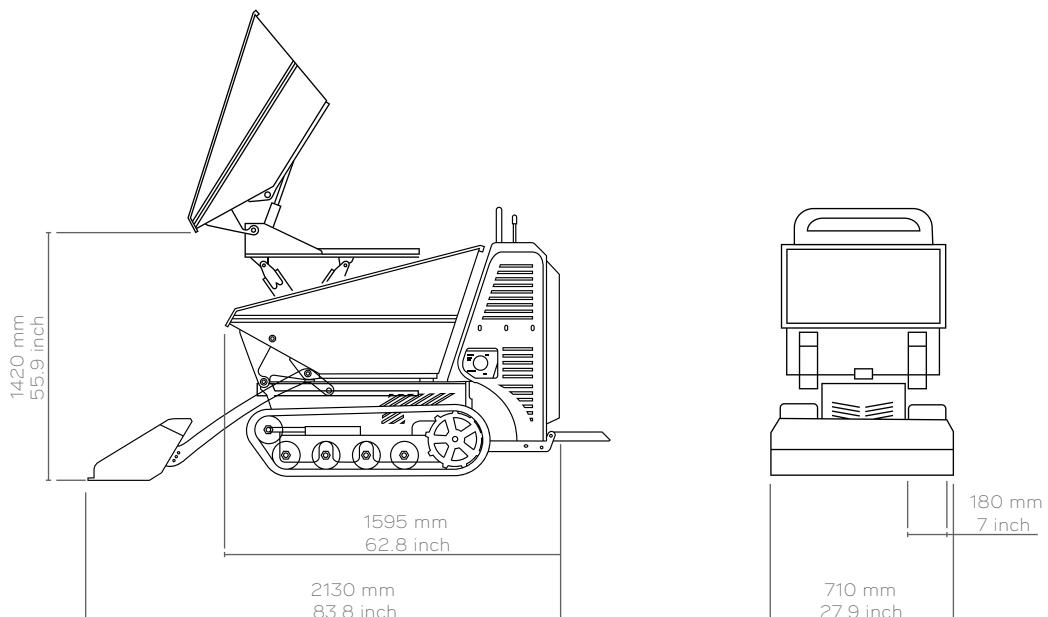
## MINIDUMPER TRAKER T50 - T60

Operating capacity	500 / 600 kg
Type of engine	Gasoline - Diesel (T60 only)
Heat engine	HONDA GX200/240/270 - YANMAR L70
Transmission	Hydrostatic
Pump flow rate	3 × 14 l/min
Maximum pressure	180 bar
Speed	2.5 km/h



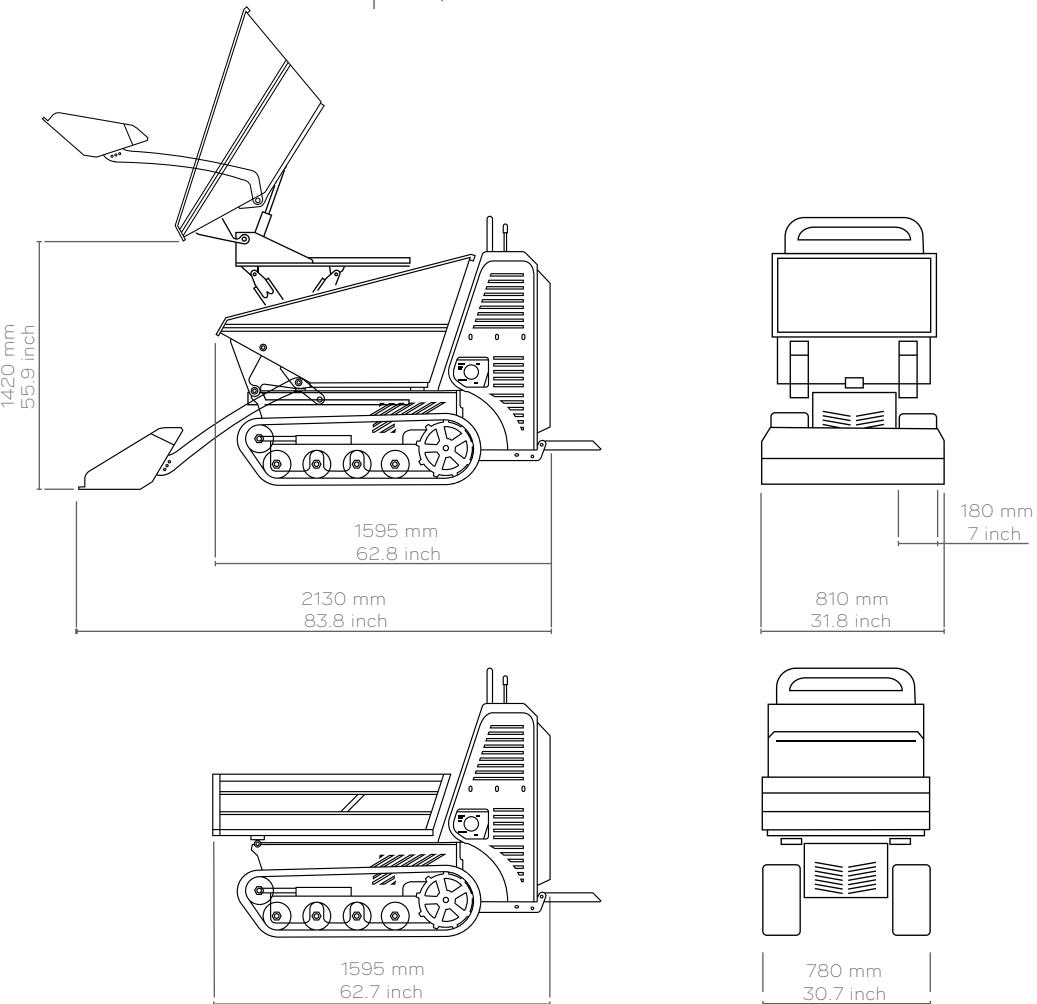
## MINIDUMPER TRAKER T70

Operating capacity	700 kg
Type of engine	Gasoline - Diesel
Heat engine	HONDA GX270 - YANMAR L70
Transmission	Hydrostatic
Pump flow rate	2 × 32 l/min + 1 gear pump
Maximum pressure	180 bar
Maximum speed	3 km/h



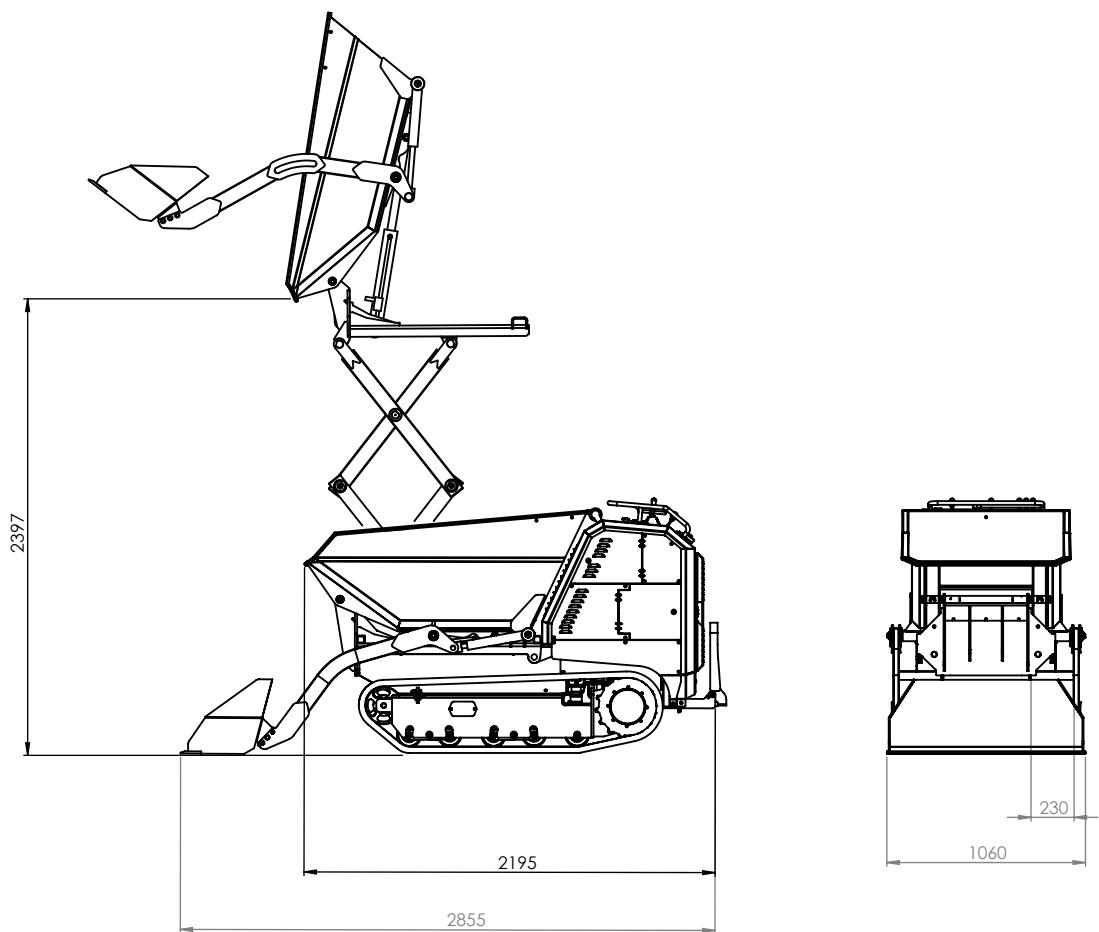
## MINIDUMPER TRAKER T85 - T95

Operating capacity	800 kg
Type of engine	Gasoline - Diesel
Heat engine	HONDA GX390 - YANMAR L100
Transmission	Hydrostatic
Pump flow rate	2 × 32 l/min + 1 gear pump
Maximum pressure	180 bar
Maximum speed	5 km/h



## MINIDUMPER TRAKER T150

Operating capacity	1500 kg
Type of engine	Diesel
Heat engine	YANMAR 3TNV-76 - 80
Transmission	Hydrostatic
Pump flow rate	2×56 l/min + 1 gear pump
Maximum pressure	180 bar
Maximum speed	6 km/h



## 9. PICTOGRAMS AND RESIDUAL RISKS

The machine is fitted with warnings about residual risks, prohibitions and prescriptions to be observed in order to operate in safe conditions. The warnings on the machine, in a visible area, must be kept clean to ensure that they can be read.

The following list shows the pictograms present on all versions of the machine.

Some of the pictograms shown below may not be present on some versions:



### WEAR PROTECTIVE GLOVES

The use of gloves is mandatory



### WEAR SAFETY SHOES

The use of safety shoes is mandatory



### READ THE MANUAL

Thorough reading of the manual operating instructions is mandatory



### WEAR HEARING PROTECTION

The use of hearing protection is mandatory



### DANGER AND PROHIBITION OF PEDESTRIAN TRANSIT

Danger zone with transit of operators prohibited in the vicinity of the machine



### SOUND POWER LEVEL

Indicates the sound power level guaranteed by the machine



### DANGER OF CRUSHING UPPER LIMBS

Indicates areas where there is a danger of crushing upper limbs



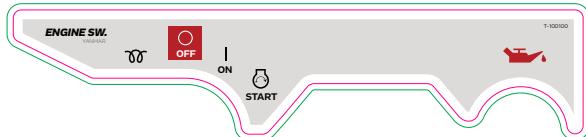
### HOT SURFACE

Indicates a hot surface not to touch



## LIFTING POINT

Indicates the points to be used to lift the machine



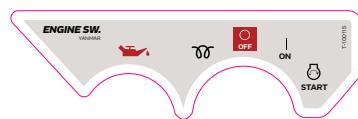
## START-UP INSTRUCTIONS (Diesel version T85)

Provides instructions for starting the machine correctly



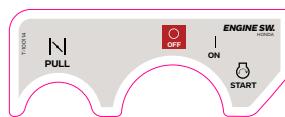
## START-UP INSTRUCTIONS (Diesel version T60)

Provides instructions for starting the machine correctly



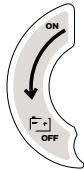
## START-UP INSTRUCTIONS (Diesel version T60)

Provides instructions for starting the machine correctly



## START-UP INSTRUCTIONS (Gasoline version T45/50/60)

Provides instructions for starting the machine correctly



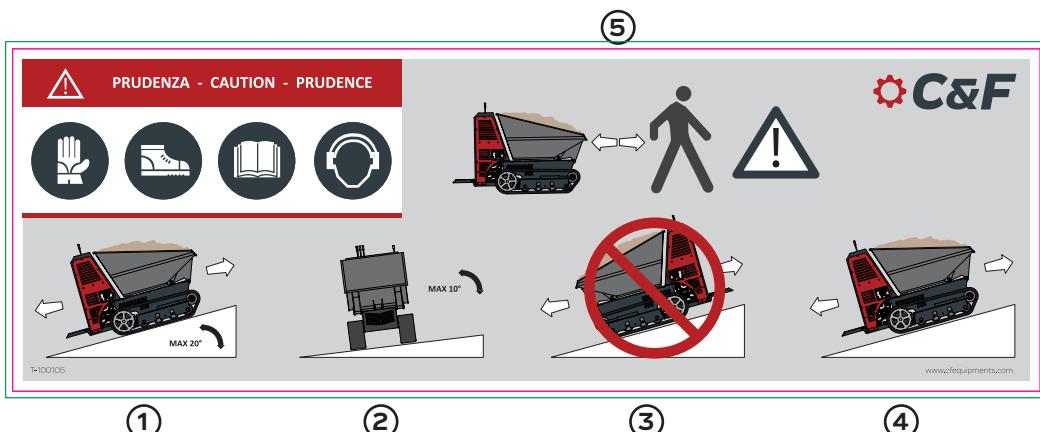
## BATTERY ISOLATOR

Indicates the On and Off positions

## MAXIMUM OPERATING SLOPE

Indicates the maximum operating slope on which the Minidumper can be operated.

Make sure the ground is stable before moving.



1. Do not exceed the maximum longitudinal inclination of 20°.
2. Do not exceed the maximum transverse inclination of 10°.
3. Do not go downhill or uphill with the tipper facing the lower part of the road.
4. It is correct to drive downhill or uphill with the tipper facing the highest part of the road.
5. Take care not to run people over during the movement.

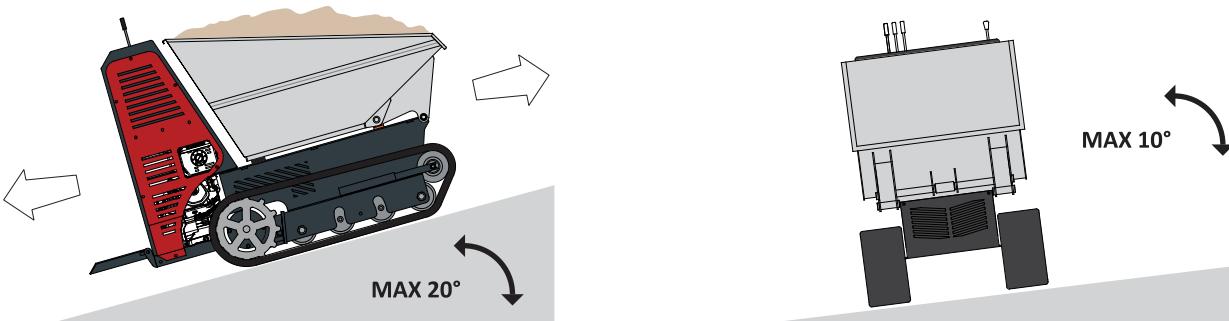
## MAXIMUM PERMITTED SLOPE

The machine can only move on slopes of 20° longitudinal and 10° transversal.

It cannot unload or lift the tipper. PROHIBITED.

The figure below shows the values of the maximum slopes that can be reached by the machine.

Exceeding these safety limits is prohibited.



Avoid driving on inclines with slopes greater than those permitted by the machine.

Move with extreme caution and always at minimum speed, paying attention to any changes in slope that could cause the machine to tip over.



Avoid driving on very soft ground that is not strong enough to hold the machine firmly.

Always make sure that there is no risk of overturning.



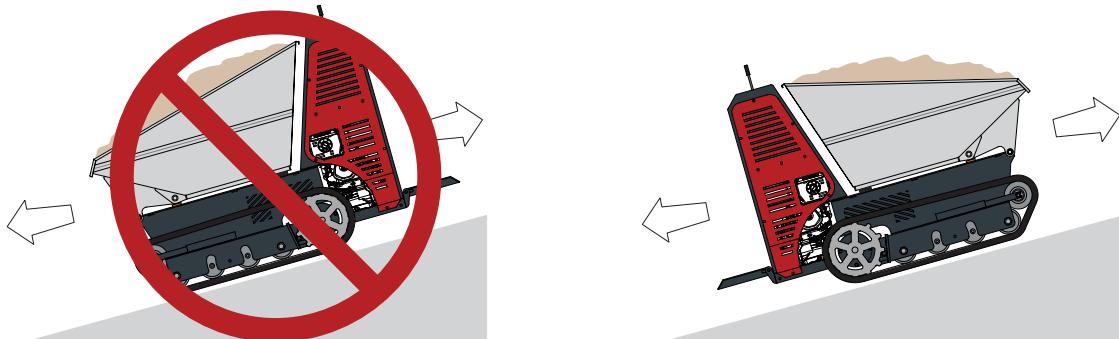
Avoid driving uphill or downhill along the slope or at an angle, but always with the axis of the machine aligned with the slope to avoid the risk of tipping over.

Avoid reversing with the machine uphill or downhill.



Always drive uphill in a forward gear. (see figure below)

Always reverse when driving downhill. (see figure below)



## 10. GENERAL SAFETY RULES

Definitions:

### **Qualified persons**

Operators, maintenance technicians or qualified persons, external technicians.

### **General operator**

Non-specialised machine operator, but trained and informed by reading this manual to work with this machine.

### **Mechanical maintenance technician**

Specialised personnel with at least 2 years of experience in machine servicing. He/she can also work on mechanical parts to make all necessary adjustments, perform maintenance and repairs. He/she is not authorised to work on live electrical systems. He/she can be designated by the manufacturer.

### **Electrical maintenance technician**

Qualified technician capable of carrying out all electrical, adjustment, maintenance and repair work.

Specialised personnel with at least 2 years of experience in machine servicing. He/she can be designated by the manufacturer.

### **External technician**

Qualified technician made available by the manufacturer or distributor of sophisticated commercial consumer components, capable of working on them for modifications, repairs or replacements.

### **Authorised workshop**

Workshop authorised to perform specific operations in agreement with the machine manufacturer.



Under no circumstances should the operator interfere with mechanical moving parts during working phases.

In accordance with the MACHINERY DIRECTIVE, it is deemed useful to highlight the meaning of some terms frequently used in this manual:

**"Danger zones"**: any zone within and/or around machinery in which a person is subject to a risk to his health or safety.

Keep out of the 4-5 metre range of the machine when it is in operation.

**"Exposed person"**: any person wholly or partially in a danger zone.

**"Operator"**: the person or persons installing, operating, adjusting, maintaining, cleaning, repairing or moving machinery.



### **Below are the safety rules to be observed before and during use of the machine.**

- Failure to comply with safety regulations and/or improper use of the machine may result in a risk of injury to yourself and other persons.
- Machine installation, commissioning and special maintenance must be carried out by qualified personnel.
- Machinery must be operated by a single person in order to avoid overlapping controls which would create dangerous conditions to one's own safety and that of others.
- Before using the machine, make sure that any conditions dangerous to safety have been suitable eliminated.
- During work, scrupulously heed the instructions in the manual and the signs and/or labels on the machine.
- Outsiders are forbidden from entering the working areas of the operating machinery. Stopping the machine in the event of dangerous situations that could endanger the physical safety of persons in the danger zone is strictly prohibited.
- If any third parties must be in the vicinity of the machine, the operator must ensure their safety and warn them of the dangers.
- Do not place hands, arms or any part of the body near moving parts.
- Do not insert foreign bodies into moving parts.
- Carrying out repair or adjustment work on moving parts is prohibited.
- After maintenance, remember to tighten every screw, bolt or fastening ring nut of every mechanical component that is being adjusted or tuned.



### **OPERATIONS THAT CANNOT BE PERFORMED**

- The machine must be used exclusively for the intended purposes of the design.
- Do not tamper with safety devices.
- Do not allow unauthorised personnel to operate the machine controls.



### **DO NOT DO ANYTHING THAT MAY EXPOSE PEOPLE TO SPECIAL RISKS. THE FOLLOWING ARE "STRICTLY PROHIBITED":**

- Making any changes to the machine or using it in unforeseen conditions.
- Performing tasks provided for control and routine maintenance without the use of appropriate personal protective equipment.
- Use, operation, maintenance or adjustment of the machine by untrained persons who have not been specifically authorised.
- Use of the machine in the presence of abnormal noise or vibrations.

# 11. SAFETY DEVICES

The following concepts regarding safety devices are made available to the operator to understand the behaviour of the machine and its working methodology. In this way, it will be possible to identify any damage with more certainty in order to provide more precise information to the service department.



The machine is equipped with safety devices to prevent situations dangerous for the user.

Before proceeding, the operator must ensure that these devices are operational and in perfect condition.



The failure of these safety devices, whether caused by a fault or by tampering, may result in serious damage to the machine and consequently in serious injury to the user. The manufacturer has built the safety devices to ensure maximum customer safety; therefore, the devices must be checked periodically to make sure they are in good condition.



Do not intervene on the safety devices yourself.

The manufacturer is not liable in the event of tampering and therefore declines all responsibility for any accidents attributable to these interventions.



The manufacturer is not liable for any damage caused by the machine to property and/or persons due to the above-mentioned failure to comply.

## ALARMS

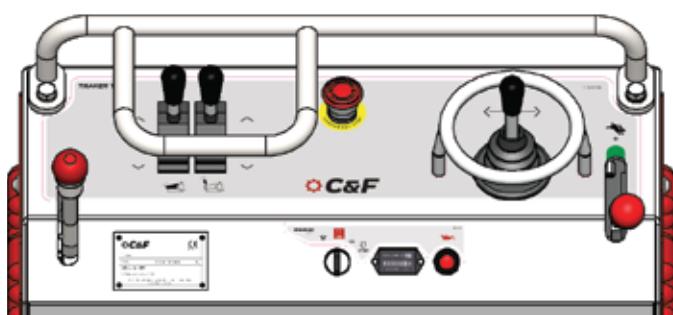
This paragraph describes the audio/visual signal system installed on the machine. The visual signals are the warning lights on the control console.

## FIXED GUARDS

Live parts, dangerous moving parts of the machine, transmission components and parts reaching dangerous temperatures on the Minidumper cannot be accessed and are insulated by means of fixed guards or guards that require special equipment to be removed. Operating the Minidumper machine with fixed guards removed from their housing is prohibited.

## EMERGENCY STOP

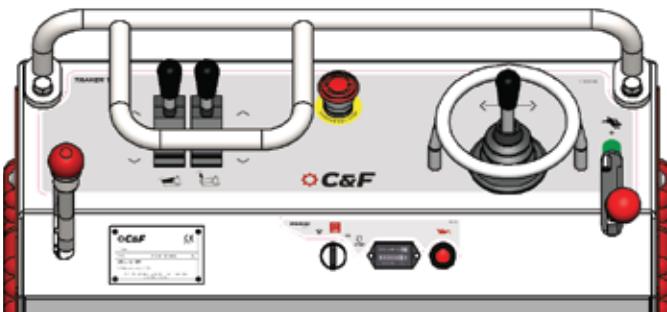
The emergency push-button on the machine lets the operator who is using it stop it in case of danger.



The emergency stop disconnects the Minidumper machine and stops the operation in progress. The moving load will be blocked but not dropped. Details on how to use this control are described in detail in the following paragraphs.

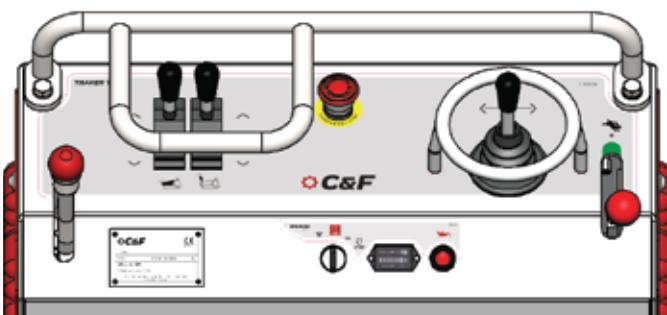
## **HORN (where applicable)**

To be operated in any situation, but especially in the presence of workers who are too close to the working area of the machine.



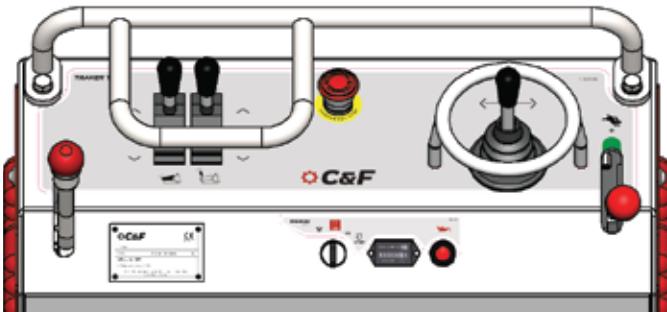
## **BUZZER (where applicable)**

This is a buzzer installed inside the machine which is activated automatically when the reverse gear of the minidumper is activated.



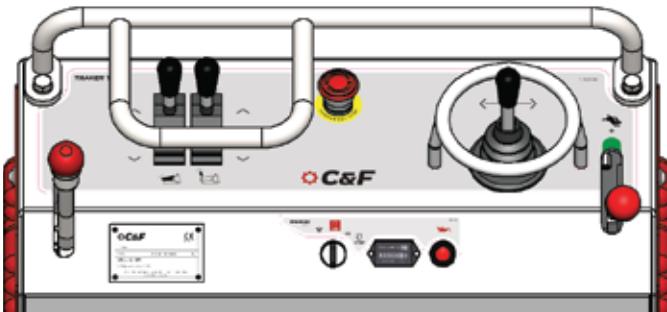
## **BAROMETRIC SENSOR (where applicable)**

The barometric sensor is a device that detects the external atmospheric pressure of the environment in which you are working for management of the engine.



## **HOUR METER (where applicable)**

The machine is equipped with an hour meter to facilitate maintenance. The hour meter records the actual working hours of the machine.



Gasoline version - T45/T85



Diesel version - T60/T85



Diesel version - T150

## TIPPER/PANTOGRAPH LOCKING

The machine is equipped with safety devices suitable for locking the tipper cylinders and the pantograph. They are positioned visibly on the side of the machine, where it is equipped only with a tipper, and under the tipper where it is also equipped with a pantograph. See Fig. 3).

To lock the machine with the tipper completely raised and to prevent accidental lowering, the tipper must be raised to maximum and the mechanical stop must be inserted to lock the cylinder stroke. To lock the machine with the pantograph completely raised and to prevent accidental lowering, the pantograph must be raised to maximum and the mechanical stop must be inserted to lock the cylinder stroke (see Fig. 4) and put the two accidental release cotter pins in the four holes on the protection shown in fig. 3).

Once maintenance has been completed, the red safety devices must be stored in the designated positions.

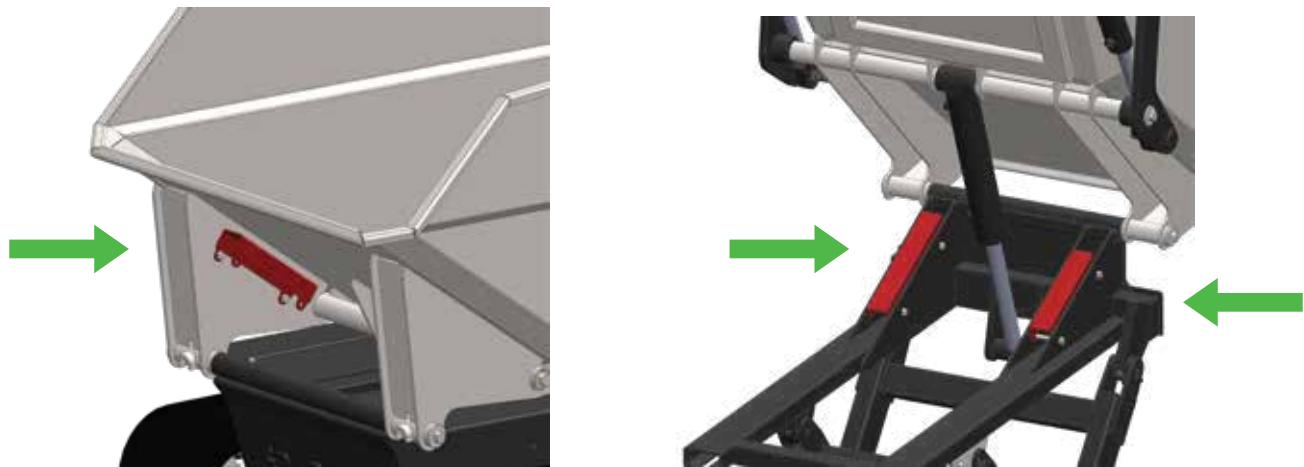
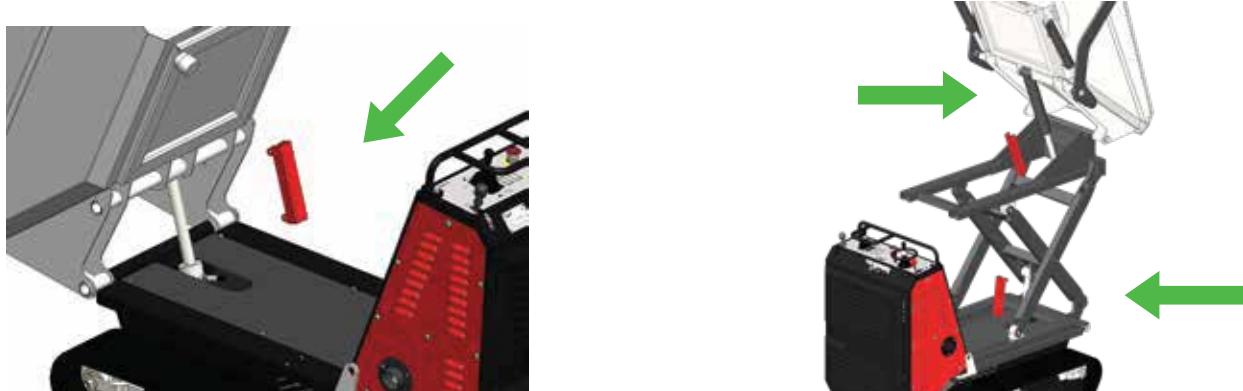


Fig. 3) Safety devices Fig. 4), positioning of safety devices



For safe locking:

- 1) Completely raise the tipper or the pantograph.
- 2) Engage the handbrake.
- 3) Remove the safety device on the side or underneath the tipper (Fig. 3), unscrewing the screws holding them in place.
- 4) Insert the mechanical stop in the cylinder stroke space (Fig. 4).
- 5) Insert the two accidental release cotter pins in the four holes on the protection (Fig. 3).
- 6) Slowly rest the tipper or pantograph on the safety device.
- 7) Switch off the machine engine.
- 8) After the various maintenance operations, remove the stop and reposition it on the side of the machine or under the tipper (Fig. 3).
- 9) Once maintenance has been completed, the red safety devices must be stored in the designated positions.



## MACHINE BONNET OPENING / CLOSING

All the machines are equipped with special keys for opening the Minidumper bonnet to access the machine engine.

To open / close the machine model bonnet, use the keys provided and proceed as follows:

- 1) To open the door, insert the key in the special lock, located on the black rear door and turn the key counter-clockwise; (Fig. 5c).
- 2) Press the button on the side of the key to release the lever (Fig. 5d).
- 3) Pull the lever towards you and open the door (Fig. 5e – 5f).
- 4) To close the door, follow the directions in reverse order starting from step -3-.

**1**



**2**



**3**



**4**



## BATTERY ISOLATOR LEVER

All the machines are equipped with a battery isolator lever, to be used in case of long Minidumper stops or periods of inactivity.



To operate the battery isolator lever, proceed with the utmost caution, trying to avoid coming into contact with the various moving and/or overheated components.

To activate the battery isolator lever:

- 1) Use the appropriate keys to open the car bonnet (Fig. 5).
- 2) Open the door (Fig. 6).
- 3) Access the engine bonnet; (Fig. 7).
- 4) Turn the lever to isolate the battery. (Fig. 8).



fig. 5



fig. 6



fig. 7



fig. 8

## 12. MACHINE DESCRIPTION

The machine is intended to be used by personnel trained for this task. Therefore, personnel qualified to handle and operate the machine must be competent and familiar with the technical and operating characteristics of the Minidumper and its controls.

The machine is used to transport inert material such as gravel, sand, cement, dirt or similar materials, taking care that it is only contained inside the tipper and that no material overflows from the tipper.

The minidumper transports inert material both during unloading and loading from all possible positions; therefore, the operator must take care to comply with the maximum lifting height before transporting loads.

The Minidumper has been designed in different sizes and load capacities, depending on the model summarised below:

- TRAKERT45 model, max load capacity not exceeding 450 kg (photo fig. 9)
- TRAKERT50 model, max load capacity not exceeding 500 kg (photo fig. 10)
- TRAKERT60 model, max load capacity not exceeding 600 kg (photo fig. 11)
- TRAKERT70 model, max load capacity not exceeding 700 Kg (photo fig. 12)
- TRAKERT85/95 model, max load capacity not exceeding 800/900 kg (photo fig. 12)
- TRAKERT150 model, max load capacity not exceeding 1500 kg (photo fig. 13)



fig. 9



fig. 10



fig. 11



fig. 12



fig. 13

When delivered to the customer, the machine arrives on pallets and is properly strapped and packed with clear nylon sheets, as shown in the following photo (fig. 13a):

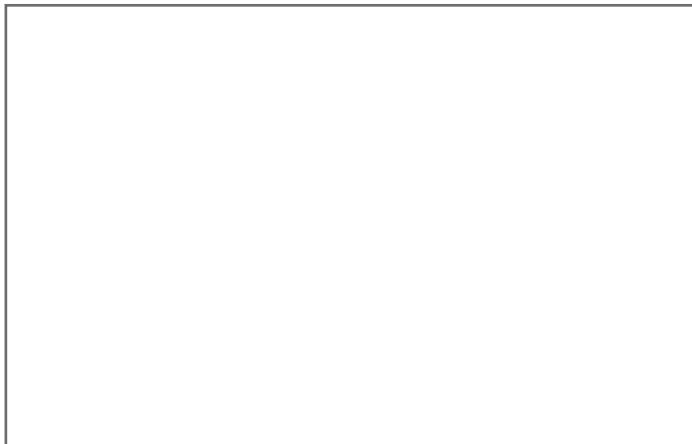


Fig. 13a) Packed machine



Fig. 13b) Wooden crate

In the case of long journeys in shipping containers or on cargo vessels, the machine can be protected by a wooden crate, on request and for a fee (Fig. 13b). Inside, it is always wrapped in clear nylon and fixed to the pallet with the appropriate straps.

## UNPACKING PROCEDURE

Wear the necessary PPE such as gloves, protective earphones and safety shoes.



### WEAR PROTECTIVE GLOVES

The use of gloves is mandatory

Protective gloves EN 388



### WEAR SAFETY SHOES

The use of safety shoes is mandatory

Safety shoes EN 345



### WEAR HEARING PROTECTION

The use of hearing protection is mandatory

Earplugs EN 352-2

To unpack the machine, follow the procedure below step by step:

- 1)** The Minidumper arrives on a wooden pallet inside a truck, protected by a crate in case of long journeys.  
A forklift is required to remove the pallet and the Minidumper from the truck (Fig. 15a).
- 2)** Equip yourself with the tools suitable to open the wooden crate (hammer, nail lever, crowbar, etc.) (fig. 15c).
- 3)** Use a utility knife to remove all the plastic wrapped around the machine (Fig. 15b).
- 4)** Unhook the supports with pliers or pincers (Fig.15d), passing on the right and left tracks of the machine (Fig. 16).
- 5)** Switch on the machine (see chapter 13) while keeping the accelerator lever at idle engine speed.
- 6)** Lay wooden beams or shims of at least 10 cm high with a slide function on the rear of the machine at about 30-40 cm from the pallet to allow the machine to reach the walking surface (Fig. 17).
- 7) CAUTION!!!** Proceed very slowly and in reverse to unload the machine from the pallet!!!

There is a risk of the machine tipping over if you proceed forward. Lower the machine, resting it on the ground with the platform in a vertical hooked position.



Fig. 15a

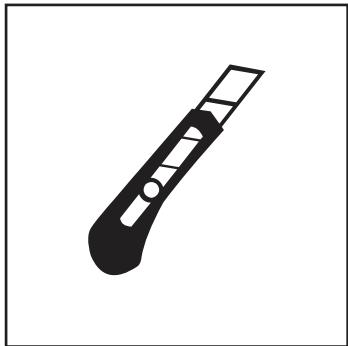


Fig. 15b

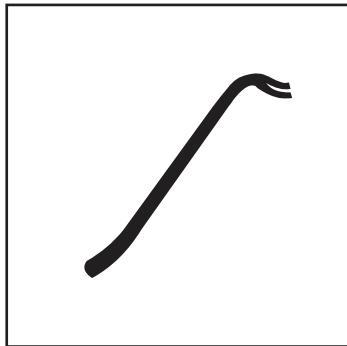


Fig. 15c

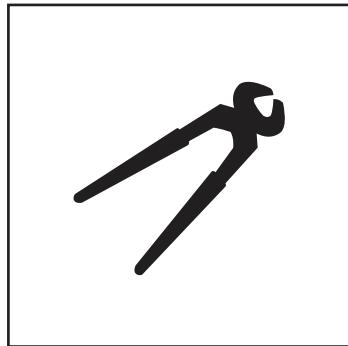


Fig. 15d

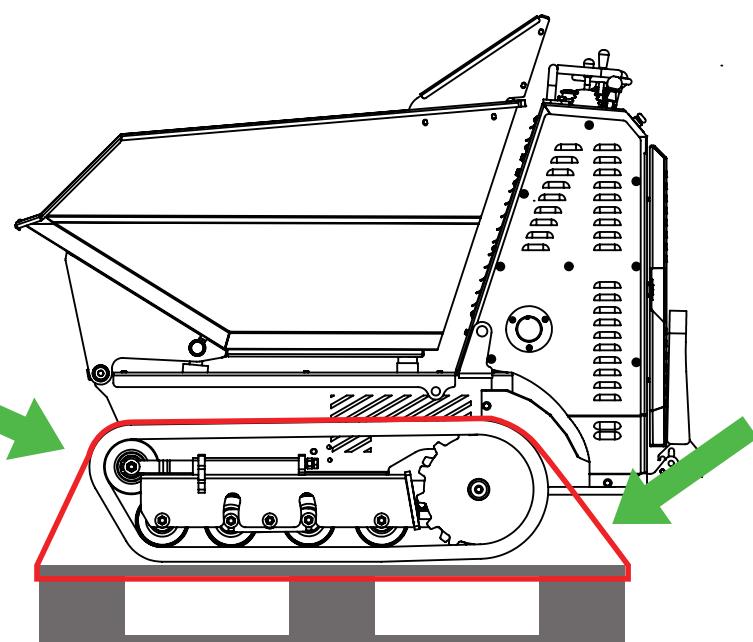


Fig. 16

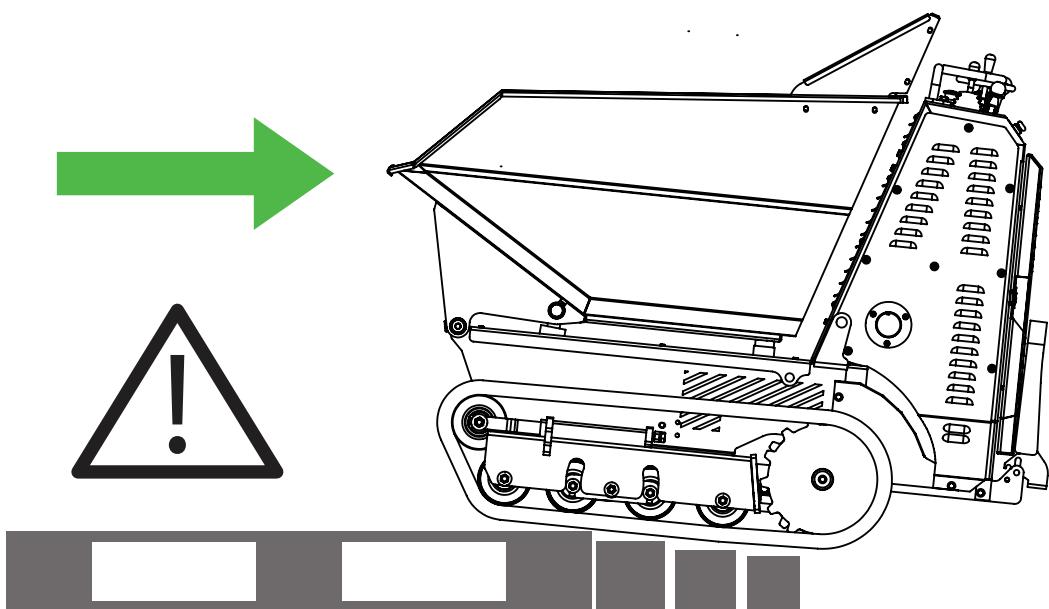


Fig. 17

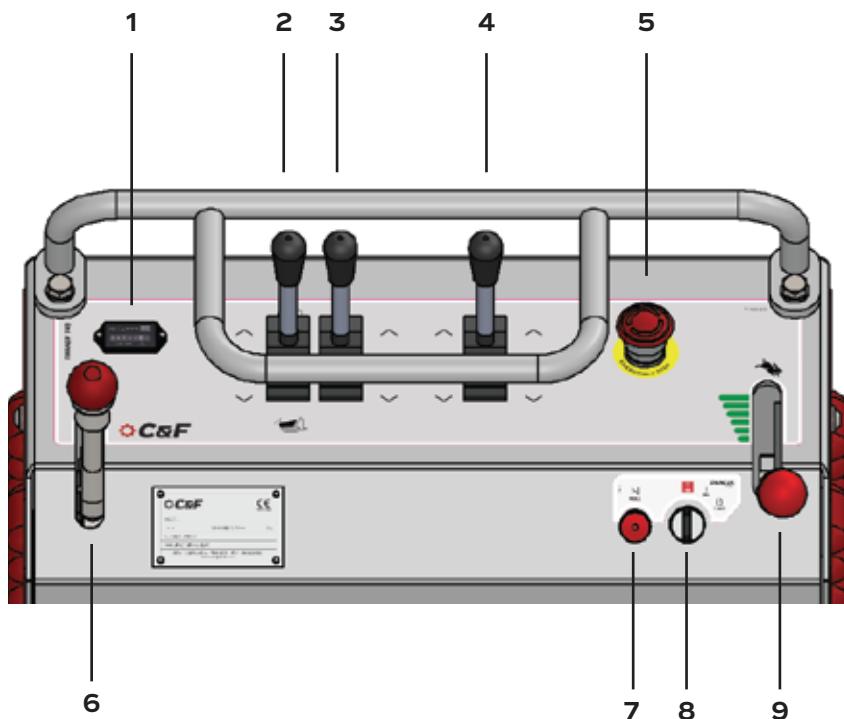
# 13. CONTROLS AND INSTRUMENTS

## POSITION OF CONTROLS

The operator must have read and fully understood all the instructions contained in this manual before using the machine. Below are the various devices, instruments and controls with their relative functions present on the machine.

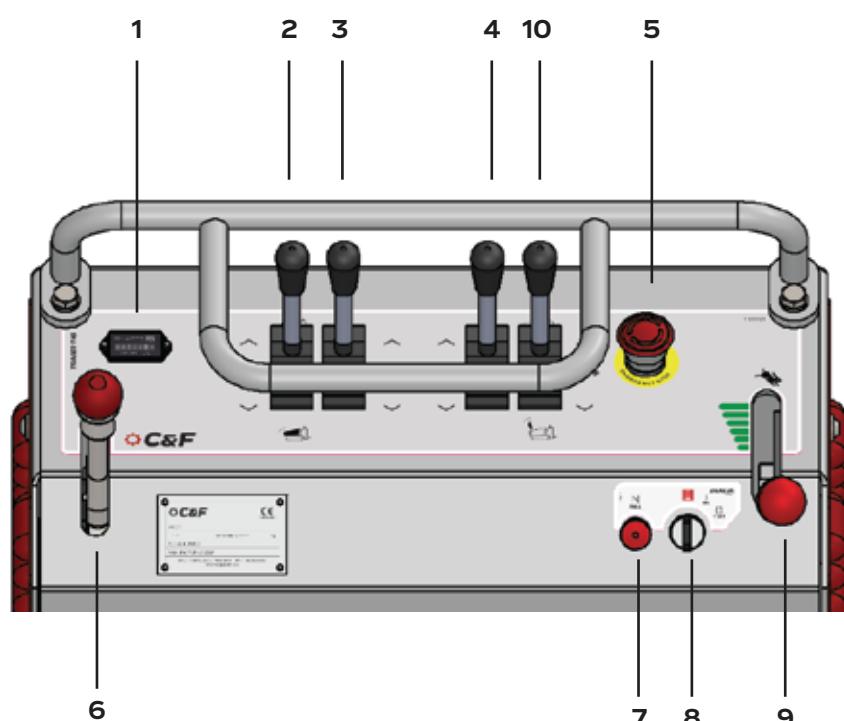
Each device is accompanied by a sticker, which briefly describes the operation of the instrument.

### TRAKER T45 DUMPER VERSION



- 1 HOUR METER
- 2 TIPPER CONTROL
- 3 LEFTTRACK CONTROL
- 4 RIGHTTRACK CONTROL
- 5 EMERGENCY PUSH-BUTTON
- 6 EMERGENCY BRAKE
- 7 "AIR" OPENING
- 8 IGNITION KEY
- 9 ACCELERATOR LEVER

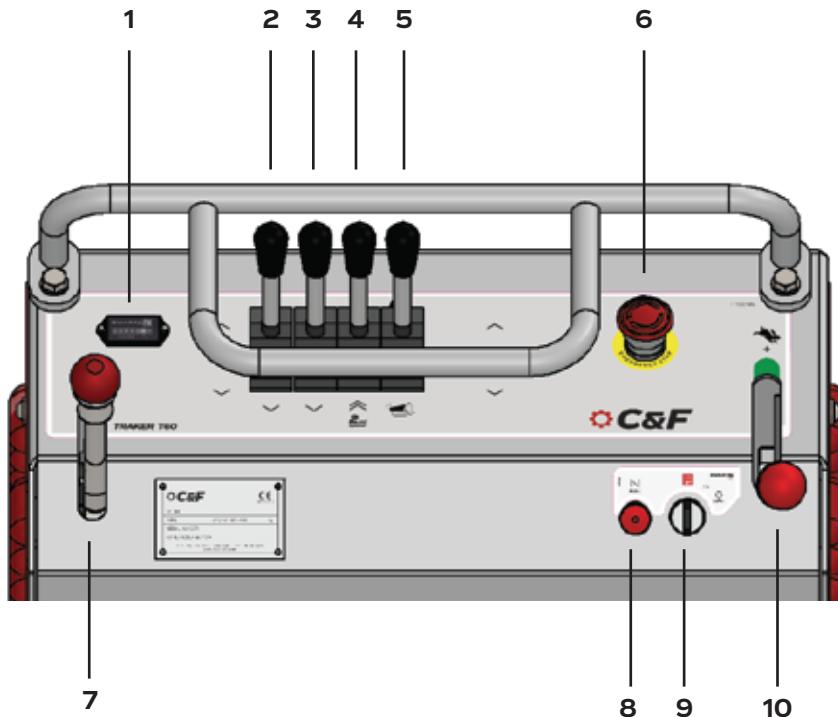
### TRAKER T45SL DUMPER + SELF-LOADER VERSION



- 1 HOUR METER
- 2 TIPPER CONTROL
- 3 LEFTTRACK CONTROL
- 4 RIGHTTRACK CONTROL
- 5 EMERGENCY PUSH-BUTTON
- 6 EMERGENCY BRAKE
- 7 "AIR" OPENING
- 8 IGNITION KEY
- 9 ACCELERATOR LEVER
- 10 SELF-LOADER CONTROL

## TRAKER T50 / T60

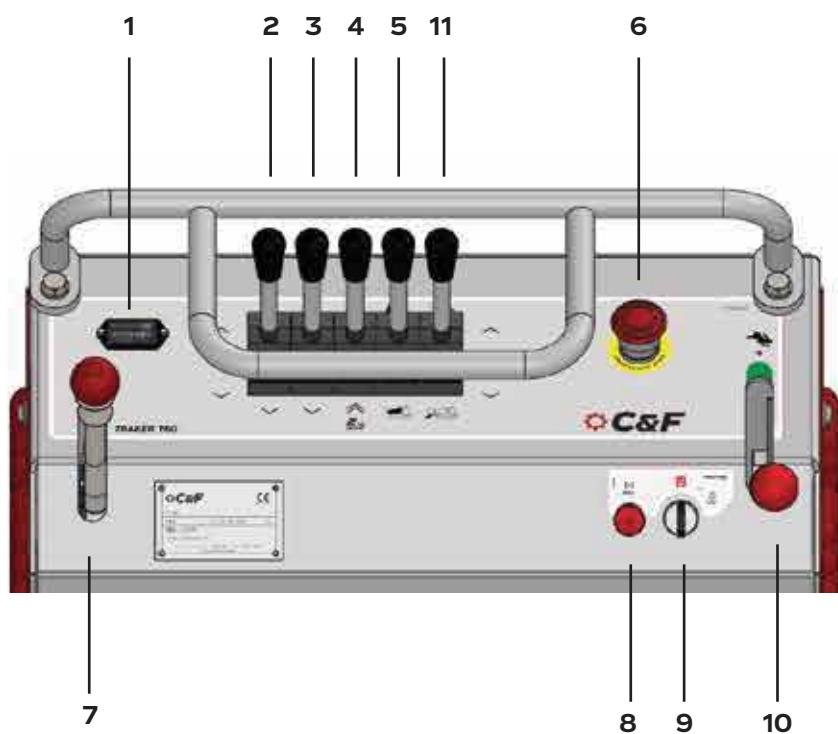
DUMPER VERSION



- 1 HOUR METER
- 2 LEFTTRACK CONTROL
- 3 RIGHT TRACK CONTROL
- 4 FAST SPEED ACTIVATION
- 5 TIPPER CONTROL
- 6 EMERGENCY PUSH-BUTTON
- 7 EMERGENCY BRAKE
- 8 "AIR" OPENING
- 9 IGNITION KEY
- 10 ACCELERATOR LEVER

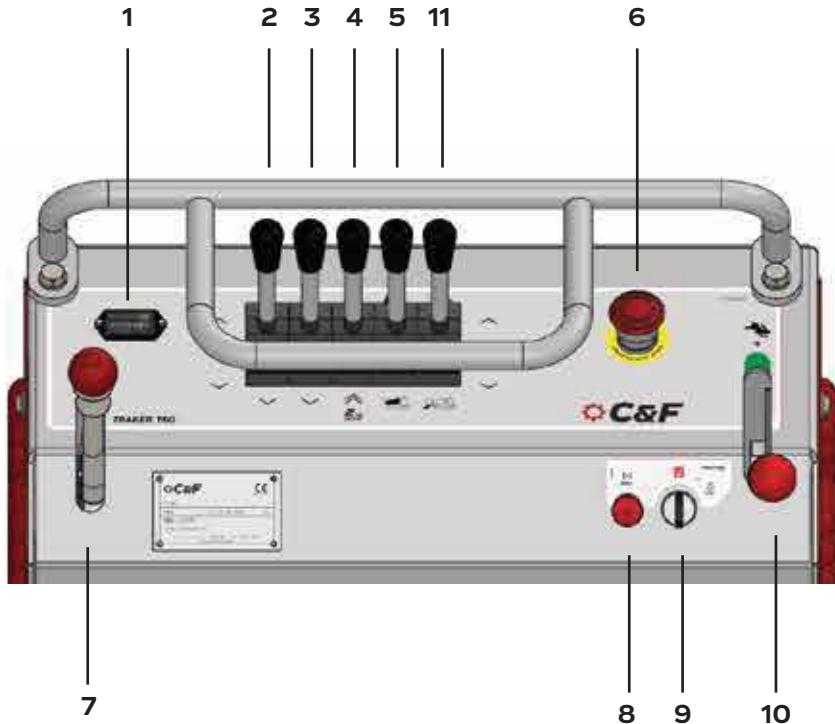
## TRAKER T50SL / T60SL

DUMPER + SELF-LOADER



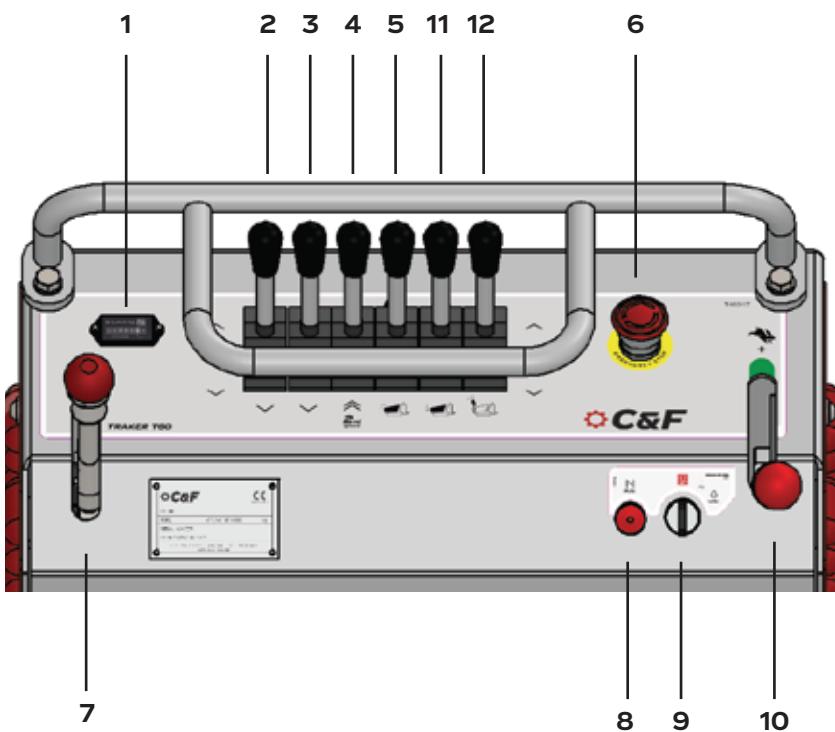
- 1 HOUR METER
- 2 LEFTTRACK CONTROL
- 3 RIGHTTRACK CONTROL
- 4 FAST SPEED ACTIVATION
- 5 TIPPER CONTROL
- 6 EMERGENCY PUSH-BUTTON
- 7 EMERGENCY BRAKE
- 8 "AIR" OPENING
- 9 IGNITION KEY
- 10 ACCELERATOR LEVER
- 11 SELF-LOADER CONTROL

**TRAKER T50HT / T60HT**  
**DUMPER + HIGH UNLOAD VERSION**



- 1 HOUR METER
- 2 LEFTTRACK CONTROL
- 3 RIGHTTRACK CONTROL
- 4 FAST SPEED ACTIVATION
- 5 TIPPER CONTROL
- 6 EMERGENCY PUSH-BUTTON
- 7 EMERGENCY BRAKE
- 8 "AIR" OPENING
- 9 IGNITION KEY
- 10 ACCELERATOR LEVER
- 11 HIGH UNLOAD CONTROL

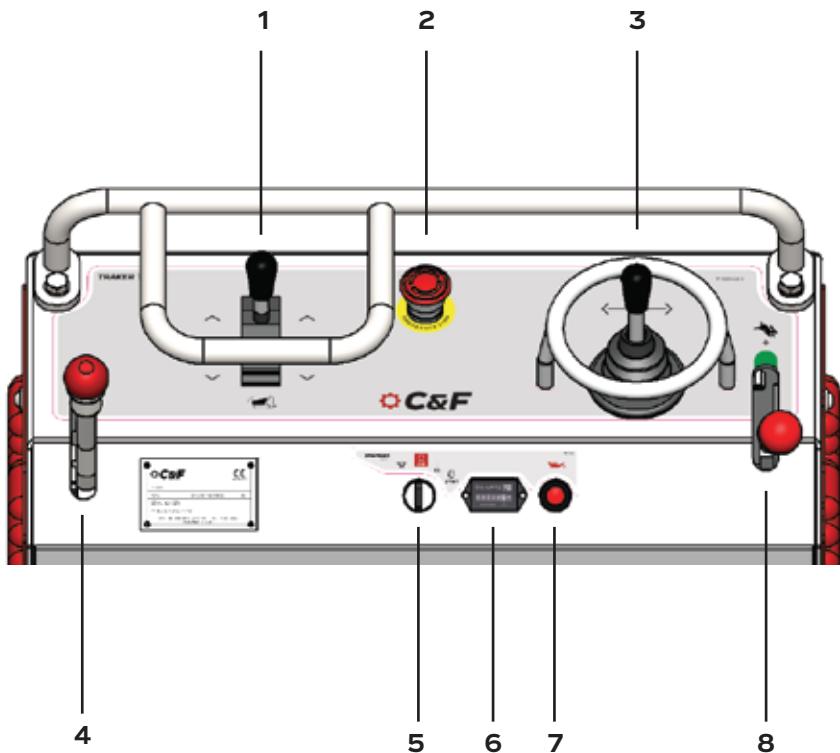
**TRAKER T60HTSL**  
**DUMPER + SELF-LOADER + HIGH UNLOAD VERSION**



- 1 HOUR METER
- 2 LEFTTRACK CONTROL
- 3 RIGHTTRACK CONTROL
- 4 FAST SPEED ACTIVATION
- 5 TIPPER CONTROL
- 6 EMERGENCY PUSH-BUTTON
- 7 EMERGENCY BRAKE
- 8 "AIR" OPENING
- 9 IGNITION KEY
- 10 ACCELERATOR LEVER
- 11 HIGH UNLOAD CONTROL
- 12 SELF-LOADER CONTROL

## TRAKER T70 - T85 - T95

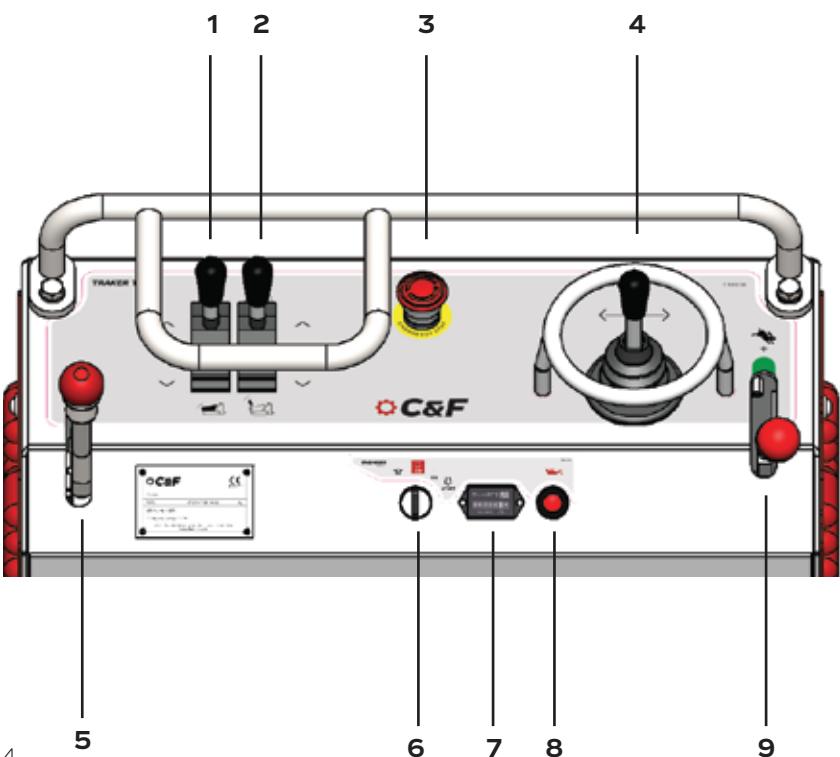
## **DUMPER VERSION**



- 1 TIPPER CONTROL
- 2 EMERGENCY PUSH-BUTTON
- 3 JOYSTICK
- 4 EMERGENCY BRAKE
- 5 IGNITION KEY
- 6 HOUR METER
- 7 "AIR" OPENING
- 8 ACCELERATOR LEVER

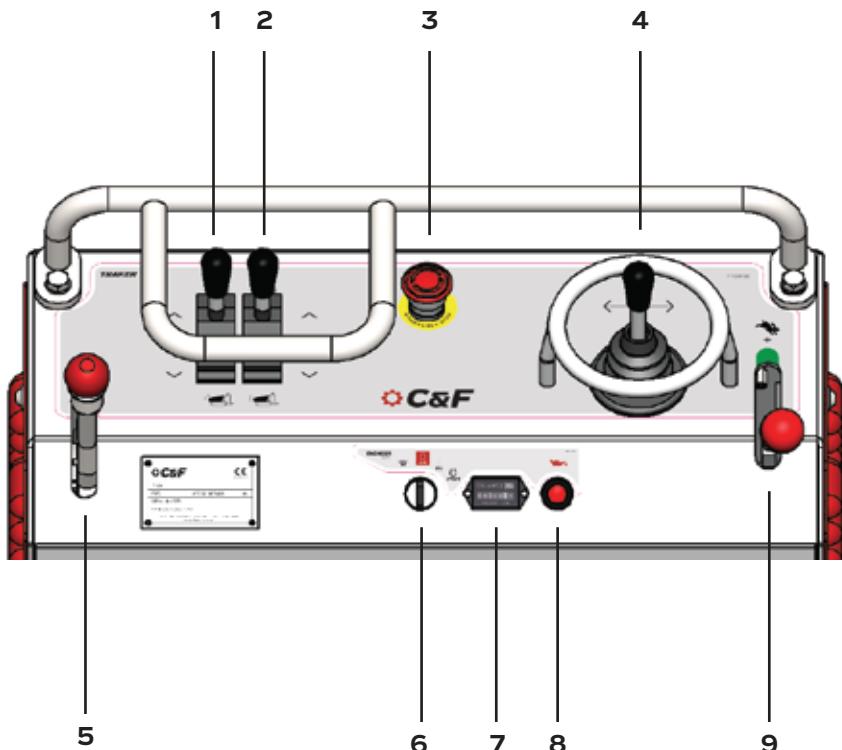
## **TRAKER T70SL - T85SL - T95SL**

## **DUMPER + SELF-LOADER VERSION**



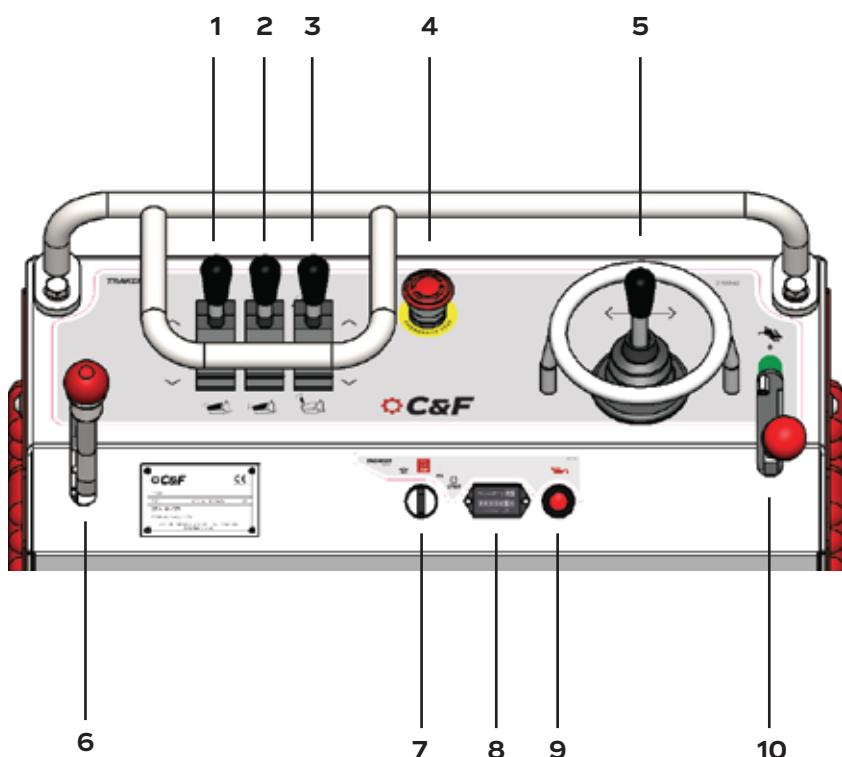
- 1 TIPPER CONTROL
- 2 SELF-LOADER CONTROL
- 3 EMERGENCY PUSH-BUTTON
- 4 JOYSTICK
- 5 EMERGENCY BRAKE
- 6 IGNITION KEY
- 7 HOUR METER
- 8 "AIR" OPENING
- 9 ACCELERATOR LEVER

**TRAKER T70 - T85HT - T95SL**  
**DUMPER + HIGH UNLOAD VERSION**



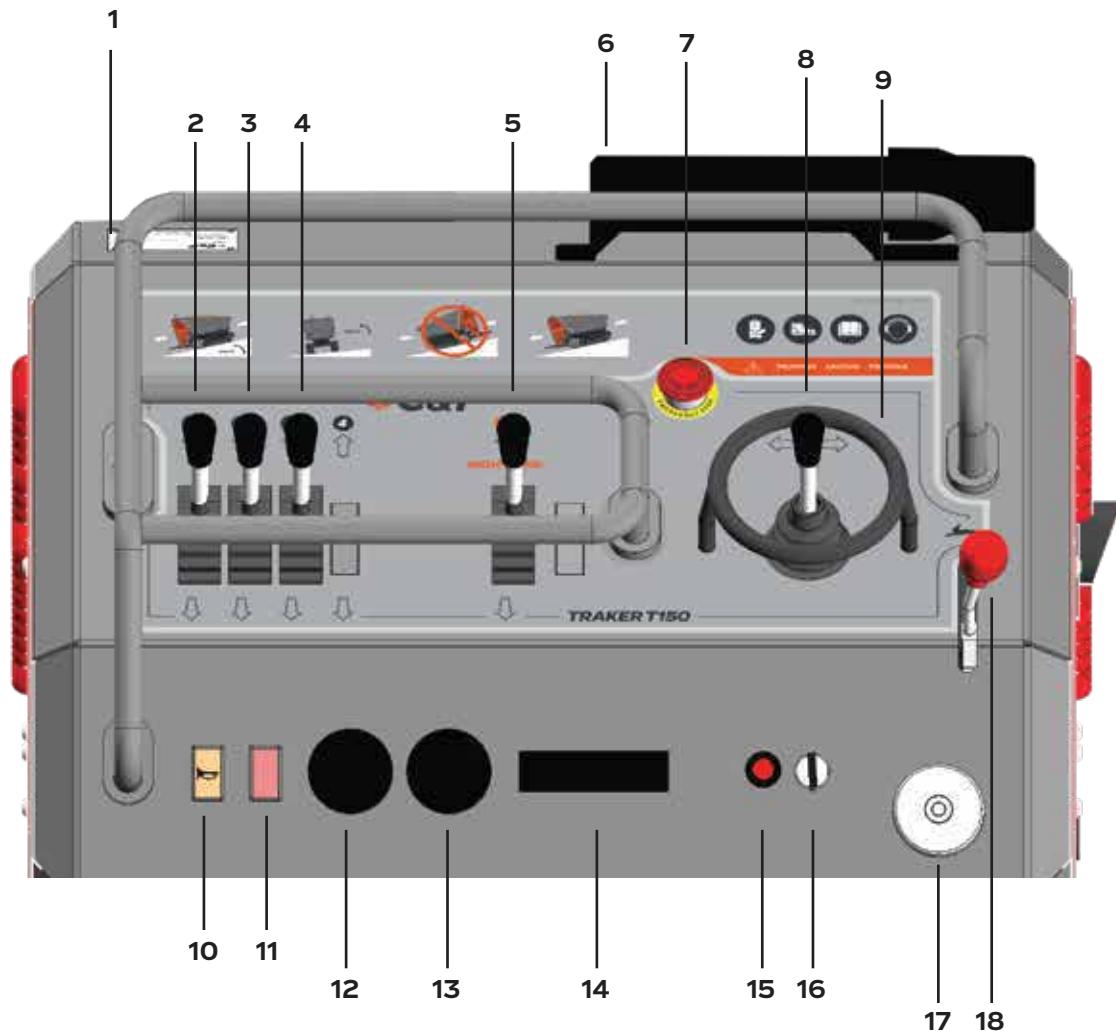
- 1 TIPPER CONTROL
- 2 HIGH UNLOAD CONTROL
- 3 EMERGENCY PUSH-BUTTON
- 4 JOYSTICK
- 5 EMERGENCY BRAKE
- 6 IGNITION KEY
- 7 HOUR METER
- 8 "AIR" OPENING
- 9 ACCELERATOR LEVER

**TRAKER T70HTSL - T85HTSL - T95HTSL**  
**DUMPER + SELF-LOADER VERSION**



- 1 TIPPER CONTROL
- 2 HIGH UNLOAD CONTROL
- 3 SELF-LOADER CONTROL
- 4 EMERGENCY PUSH-BUTTON
- 5 JOYSTICK
- 6 EMERGENCY BRAKE
- 7 IGNITION KEY
- 8 HOUR METER
- 9 "AIR" OPENING
- 10 ACCELERATOR LEVER

**TRAKER T150**  
**MULTI-TOOL VERSION**



<b>1</b>	IDENTIFICATION TAG	<b>10</b>	HORN BUTTON
<b>2</b>	FUNCTION 1 CONTROL	<b>11</b>	HANDBRAKE CONTROL
<b>3</b>	FUNCTION 2 CONTROL	<b>12</b>	HOUR METER
<b>4</b>	FUNCTION 3 CONTROL	<b>13</b>	FUEL LEVEL
<b>5</b>	HI-FLOW CONTROL	<b>14</b>	EMERGENCY WARNING LIGHTS
<b>6</b>	DOCUMENT HOLDER	<b>15</b>	BAROMETRIC SENSOR WARNING LIGHT
<b>7</b>	EMERGENCY PUSH-BUTTON	<b>16</b>	IGNITION KEY
<b>8</b>	JOYSTICK	<b>17</b>	FUEL CAP
<b>9</b>	JOYSTICK HANDLE	<b>18</b>	ACCELERATOR LEVER

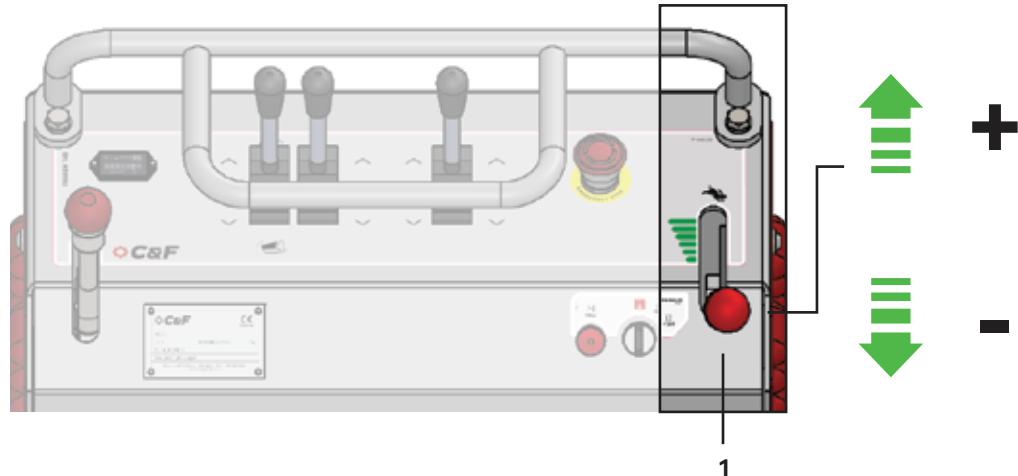
## FUNCTION OF CONTROLS



Do not work on the Minidumper handling devices if you are not familiar with all the controls for the various manoeuvres. All controls must be tested by the operator before starting work. Use of the machine by personnel who has not been thoroughly trained and informed is strictly prohibited.

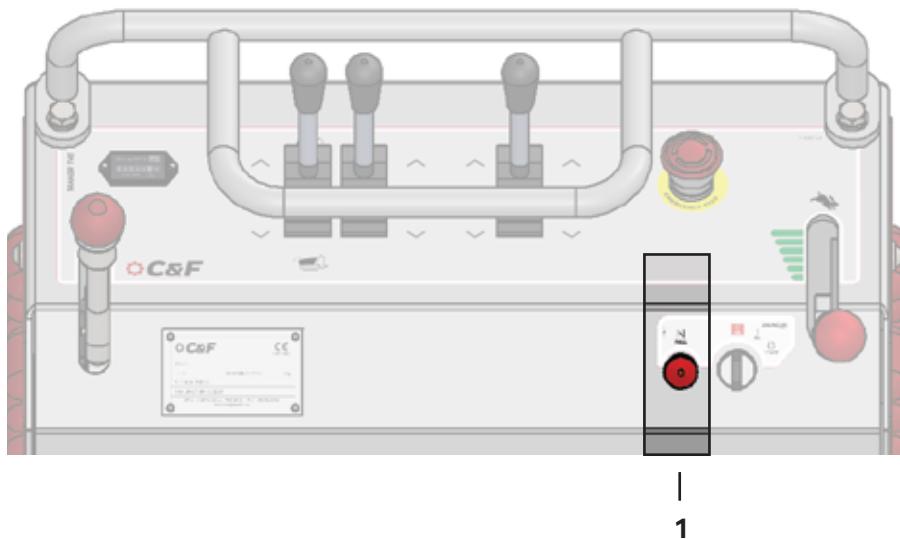
## FUNCTION OF CONTROLS

Move the lever (1) upwards to accelerate and move the lever downwards to slow down.



## CHOKE COMMAND (for gasoline versions only)

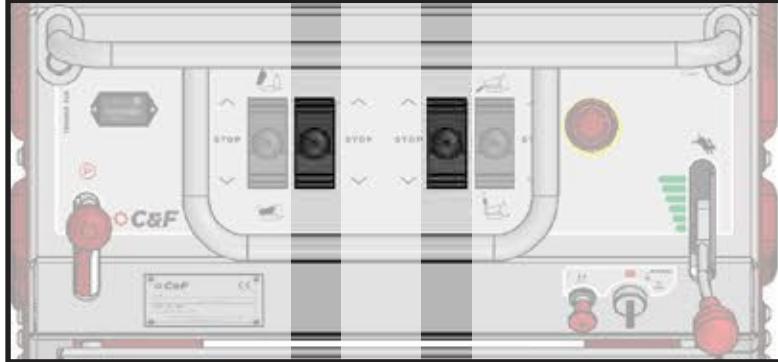
- 1) To close the engine air and allow it to start when the engine is cold, pull the lever (1) towards you. This control can be activated before start-up or during engine warm-up. The lever must be pushed when the engine is already running.



## FORWARD AND BACKWARD TRAVEL

Lower the standing platform until it clicks into place so that it is perfectly parallel to the support surface. Once the standing platform is in a safe position, the operator can get on board the Minidumper and move in complete safety and visibility in the manoeuvring area. Operate the levers or the forward joystick with the accelerator just above the minimum revs, because otherwise the machine may jolt and you can be thrown off the platform.

### TRAKER T45



To move the Minidumper forward, move both track levers forward.

To move the Minidumper backward, move both track levers backward.

### TRAKER T50/60



To move the Minidumper forward, move both track levers forward.

To move the Minidumper backward, move both track levers backward.

### TRAKER T70 - T85 - T95 - T150



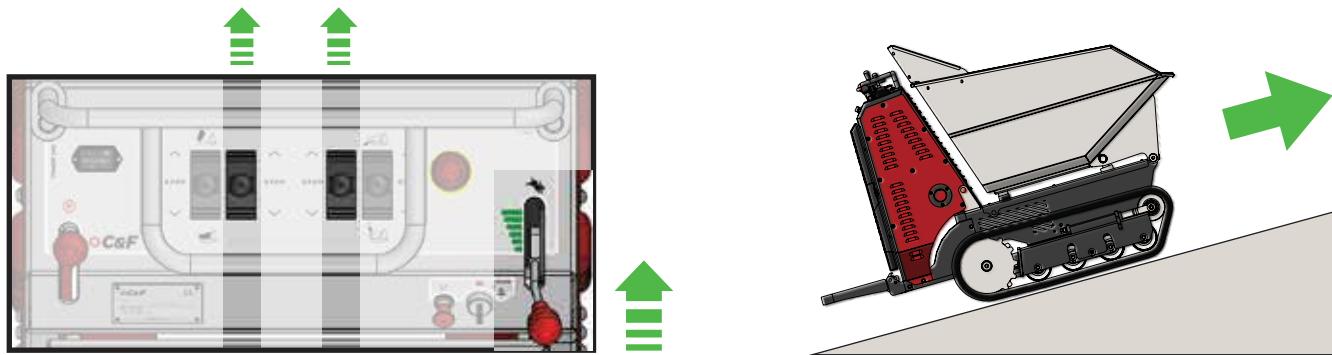
Use the joystick according to the direction of travel you want to move the Minidumper.

If you want to drive the machine forward, push the joystick forward, or push it backward to move in reverse.

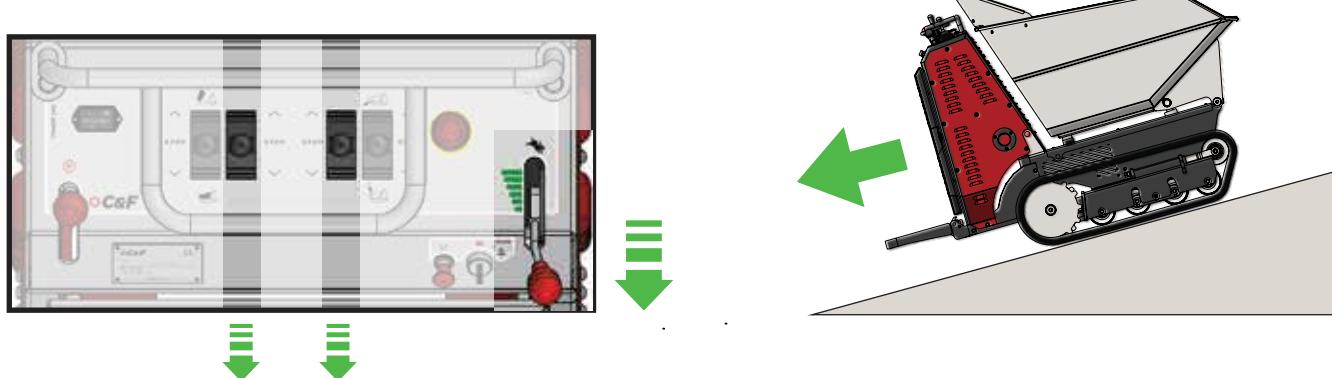
## DRIVING ON INCLINES

Lower the standing platform until it clicks into place so that it is perfectly parallel to the support surface. Once the standing platform is in a safe position, the operator can get on board the Minidumper and move in complete safety and visibility in the manoeuvring area. Operate the levers or the forward joystick with the accelerator just above the minimum revs, because otherwise the machine may jolt and you can be thrown off the platform.

### FORWARD TRAVEL



### BACKWARD TRAVEL



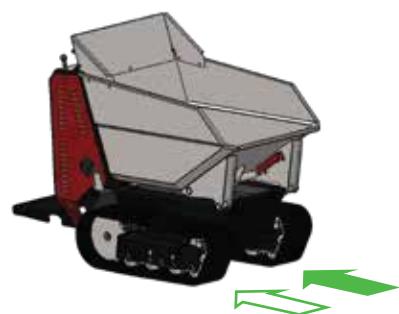
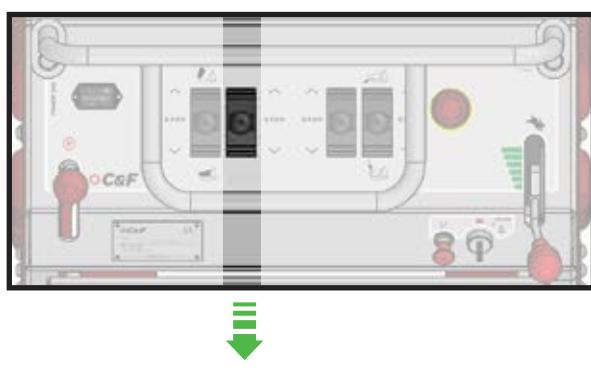
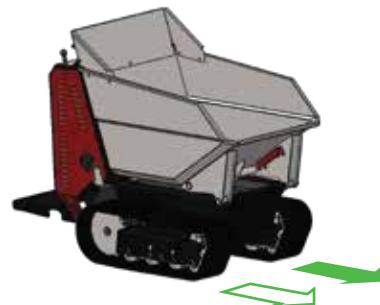
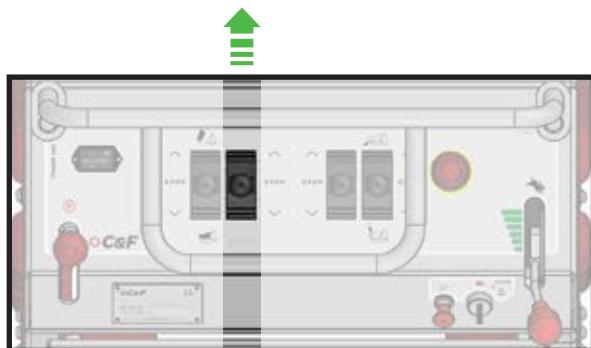
## RIGHT TURNS

### LEVER CONTROL - T45/T50/T60

To turn the Minidumper forward to the right, move the left track lever forward.

To turn the Minidumper backward to the right, move the left track lever backward.

Note: Do not make large radius turns while facing slopes, but only small corrections.



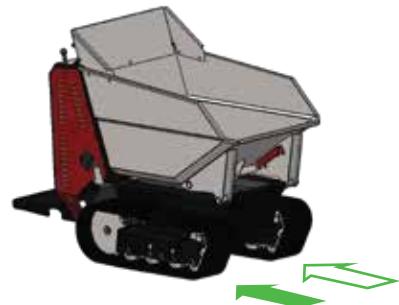
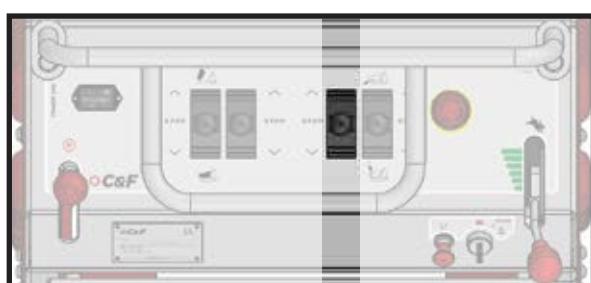
## LEFT TURNS

### LEVER CONTROL - T45/T50/T60

To turn the Minidumper forward to the left, move the right track lever forward.

To turn the Minidumper backward to the left, move the right track lever backward.

Note: Do not make large radius turns while facing slopes, but only small corrections.



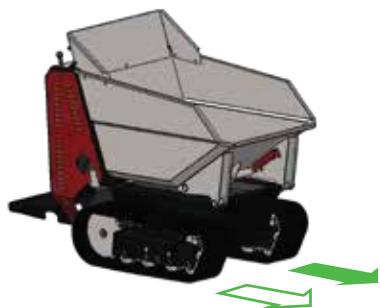
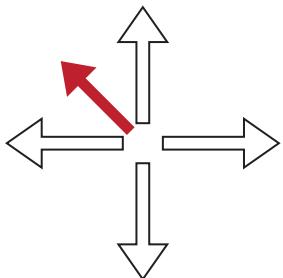
## RIGHT AND LEFT TURNS

### JOYSTICK CONTROL - T70 - T85 - T95 - T150

To turn the Minidumper forward to the left, move the joystick lever forward and to the left as shown in graphic 1.

To turn the Minidumper backward to the left, move the joystick lever back and to the left as shown in graphic 2.

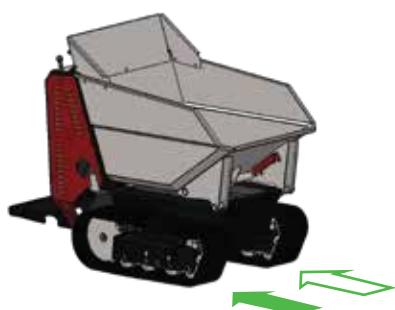
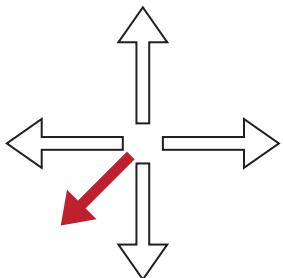
**Graphic 1**



Hold the joystick at an angle of about 45° for the Minidumper to perform wide radius turns. The wider the angle, the smoother the turning radius. This allows the machine not to manoeuvre too abruptly in muddy or sandy conditions and to avoid becoming bogged down.

The smaller the angle, the tighter the turning radius. Push the joystick all the way to the left to lock the left track, thus making the machine turn on itself.

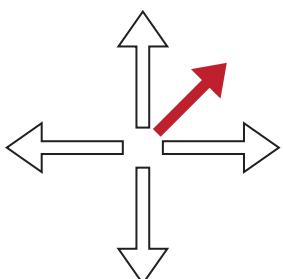
**Graphic 2**



To turn the Minidumper forward to the right, move the joystick lever forward and to the right as shown in graphic 3.

To turn the Minidumper backward to the right, move the joystick lever back and to the right as shown in graphic 4.

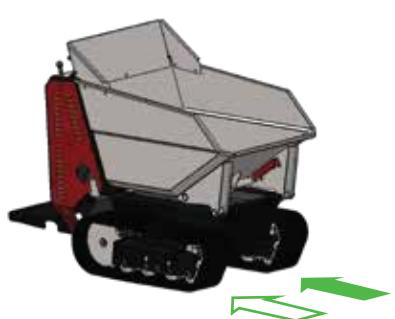
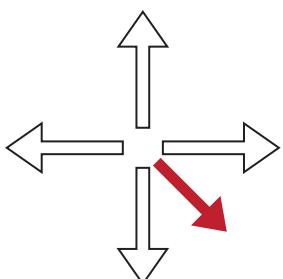
**Graphic 3**



Hold the joystick at an angle of about 45° for the Minidumper to perform wide radius turns. The wider the angle, the smoother the turning radius. This allows the machine not to manoeuvre too abruptly in muddy or sandy conditions and to avoid becoming bogged down.

The smaller the angle, the tighter the turning radius. Push the joystick all the way to the right to lock the right track, thus making the machine turn on itself.

**Graphic 4**



## CONTROLS - LOADING/UNLOADING/PANTOGRAPH

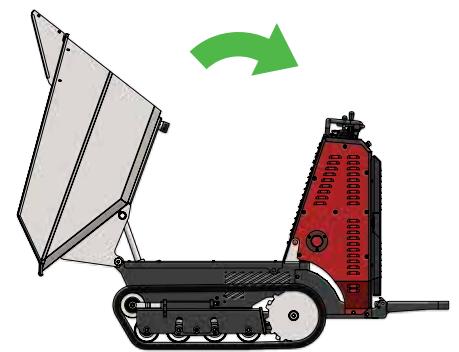
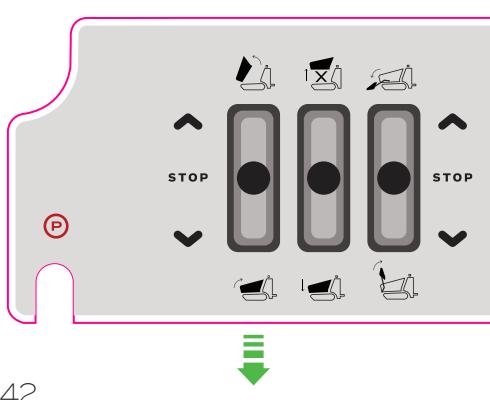
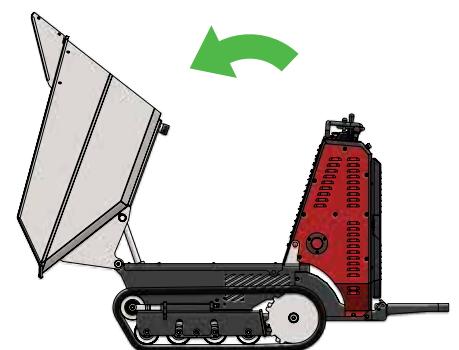
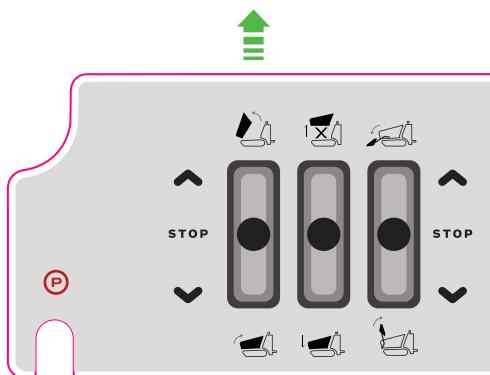
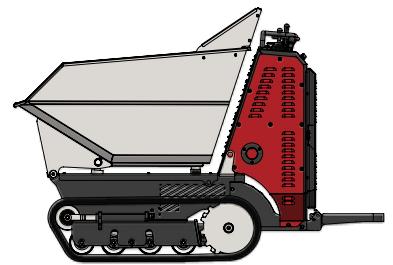
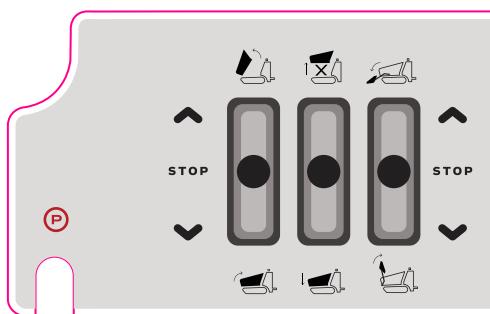
Before proceeding with any operation, make sure that the machine is on level and stable ground, away from cliffs or edges of excavations, as the ground could collapse or the machine could fall and overturn.

### Only load the machine when it is stationary and stable.

If you are working in extremely hot or extremely cold conditions, the material may stick to the tipper, thus causing the machine to tip over when unloading. Therefore, working at low speed, make sure that the material comes out completely when the tipper starts tipping. Then stop and wait for it to come out and then tilt the tipper again. Furthermore, if the dumper is with the loader bucket version, the bucket must be lifted up to the mechanical stop before unloading the inert material, otherwise it could hit the ground with the bucket or dump the material on it.

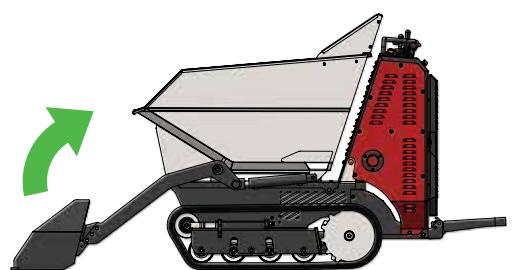
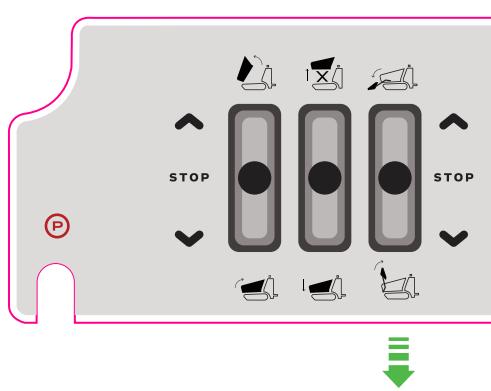
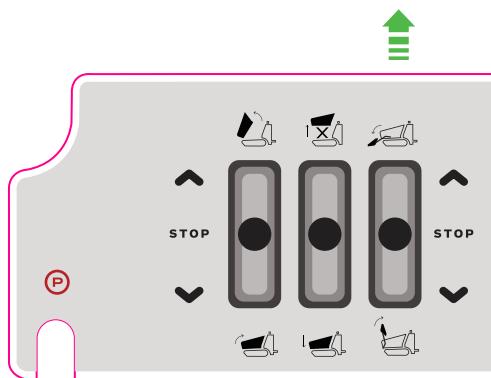
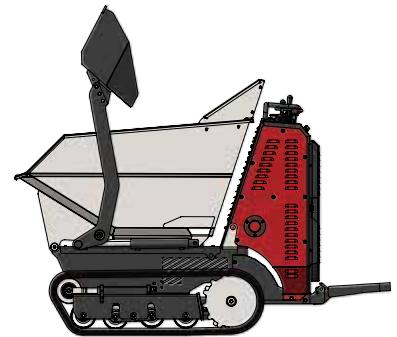
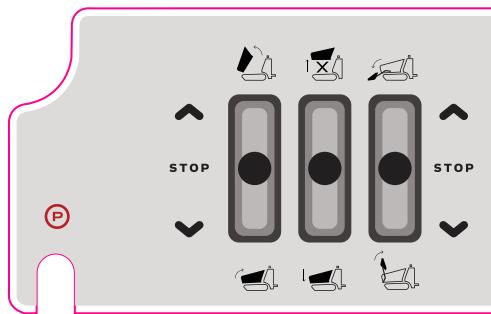
Push the lever upward to unload the contents of the tipper.

Push the lever downward to reposition the tipper in the loading position.



## SELF-LOADING BUCKET CONTROL

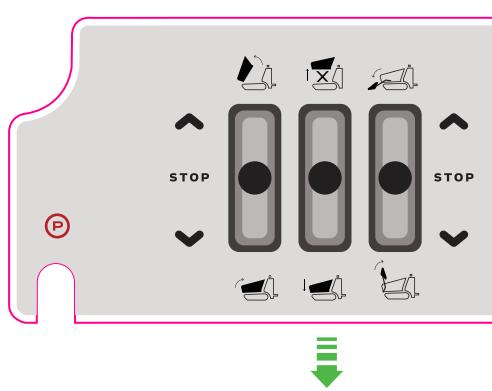
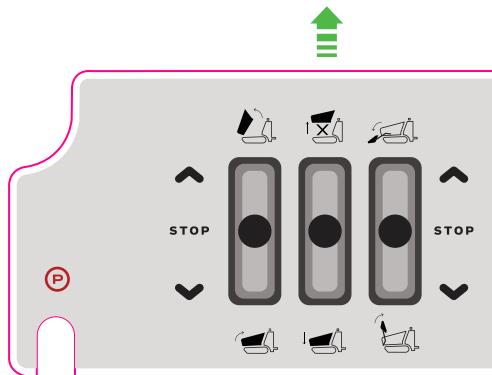
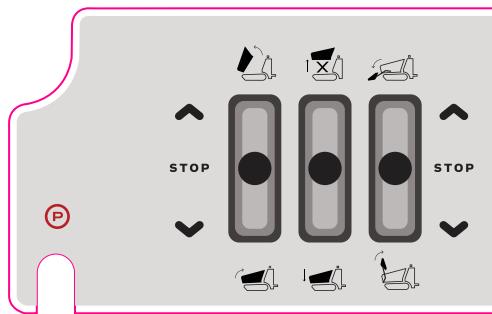
Push the lever upward to lower the self-loading bucket.  
Push the lever downward to lift the self-loading bucket.



## HIGH UNLOAD CONTROL

Push the lever upward to raise the pantograph.

Push the lever downward to lower the pantograph.



# 14. INSTRUCTIONS FOR USE

## BEFORE USE



### CAUTION!!

Check the general condition of the engine and read carefully all the instructions contained in this use and maintenance manual for the engine installed on your machine.

- 1) Before starting the engine, make sure that there are no oil or fuel leaks near the machine.
- 2) Remove any dirt or slag around the muffler.
- 3) Make sure that there is no damage to the machine.
- 4) Make sure that there is enough fuel to work.
- 5) Check the oil level.

## RUNNING-IN PERIOD



### CAUTION!!

The following requirements must be strictly observed during the first 50 hours of work:

- 1) Heat the machine at low speed.
- 2) Do not strain the machine engine to more than 70% of its power.
- 3) Check the oil level after the first 20 hours of work.
- 4) Do not strain the machine at higher loads than necessary.

## STARTING THE ENGINE



Before starting the engine, access the engine compartment and make sure that the fuel tap is open, then close the engine bonnet.



Before starting the engine, make sure that the handbrake is engaged to prevent accidental movements of the machine from affecting the safety of persons.



The use of ether or other fluids to start the engine is not permitted and could cause serious damage.



### CAUTION!!

Make sure that all machine components are in a suitable state of use.

Scrupulously perform the following checks before starting the Minidumper and avoid personal injury as a result:

- 1) Check that there are no persons in the vicinity of the machine.
- 2) Check that the machine rests properly on a flat surface.
- 3) Do not start the machine on inclined surfaces beyond the permitted slopes.
- 4) Do not switch the machine on indoors.
- 5) Keep hands and body away from moving parts.

## STARTING THE GASOLINE ENGINE

Make sure the engine bonnet is not open before starting the engine.

Opening or closing the engine bonnet during ignition is strictly prohibited.

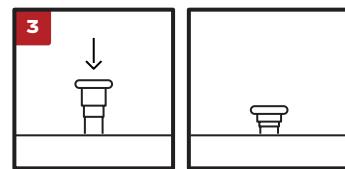
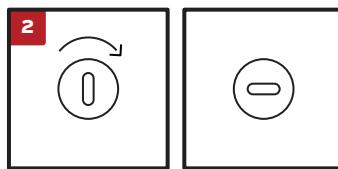
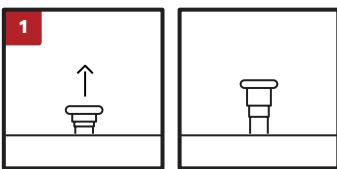
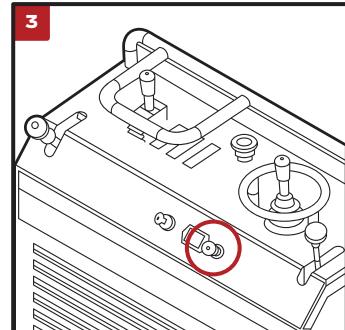
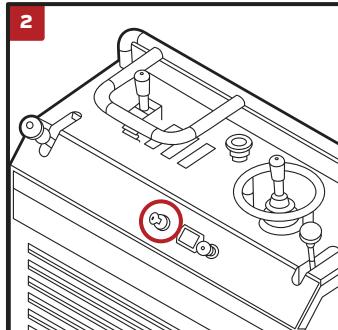
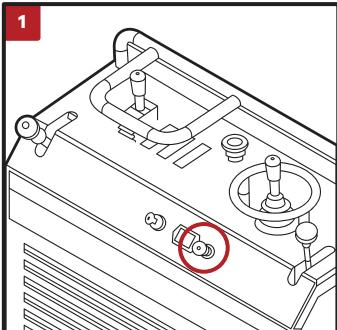
To start a cold engine, lift the air lever knob (choke control). (Fig. 1).

To start an engine that is already warm, the air knob must be kept down. (Fig. 3).

Pull the knob.

Turn the key clockwise and start the machine.

When the machine is started return the knob to "zero".



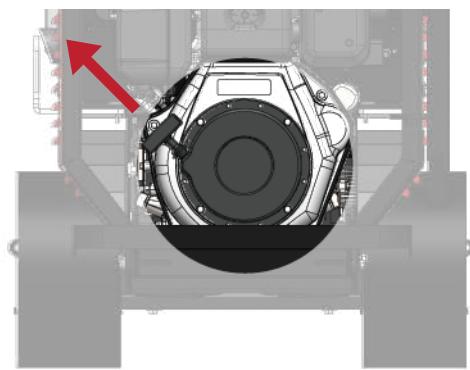
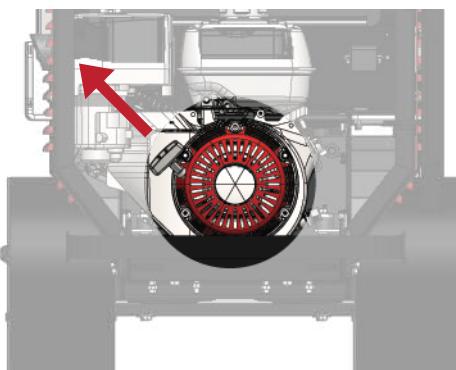
## ELECTRIC STARTER

Turn the key and release it until the engine starts. If the engine does not start within 5 seconds, release the key to prevent overheating and subsequent damage to the machine. If the ignition fails to start, proceed with the recoil start.

## RECOIL START

Access the engine compartment, grasp the "T" knob and pull gently until you feel a slight resistance. Then pull the "T" handle hard, trying to stay as parallel as possible to the direction of exit from the engine bonnet.

Once the engine has started, gently release the T-handle and return it to its housing.



## STOPPING THE ENGINE

To stop the engine, turn the key to the OFF position and remove it.



Once the engine has been stopped with the key, access the bonnet and close the gasoline tap, then close the engine bonnet.

## 15. DRIVING PRECAUTIONS

### DRIVER'S SEAT

Before driving the minidumper, the operator must make sure that he/she has lowered the standing platform to position himself over it (fig. 37a). After using the machine, close and return the standing platform to its original position. (fig. 37b).



When driving on a slope and/or downhill, the operator must drive the machine from the ground and at a minimum speed. Please follow the driving instructions in the chapter on DRIVING ON SLOPES.

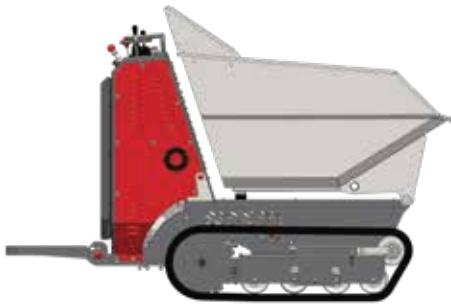


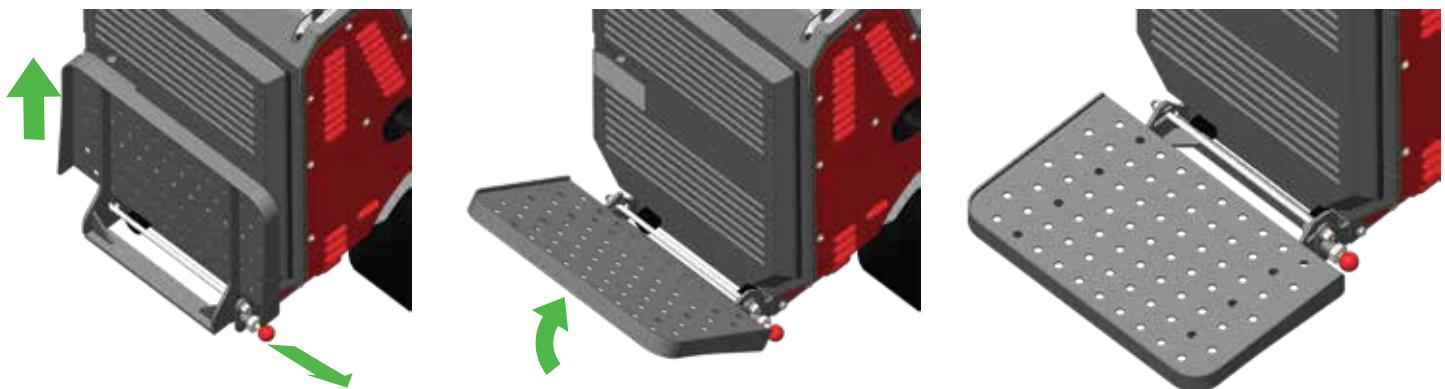
fig. 37a



fig. 37b

Proceed as follows when using the standing platform:

1. With one arm, pull the red knob outwards and hold it pulled, lift the platform up with the other arm to unlock it.
2. Lower the standing platform until it clicks into place and position it perfectly parallel to the work surface.
3. To close the platform, turn the it towards the bonnet and make sure that the shutter clicks into place and is inserted in its respective hole to prevent the platform from tipping over.





Driving without making sure that the platform is properly locked and safe is strictly prohibited.  
Take the utmost care when opening and closing the platform to prevent possible crushing.



Do not drive the tracked Minidumper on nets or steel cables where present. Danger of getting caught on the tracks.



Running the machine over electrical cables is strictly prohibited.



When the Minidumper is in motion, the operator must be positioned above the standing platform.



When the Minidumper is in motion, the operator must make sure to keep the tipper and/or the bucket down in order to have an unobstructed view and be able to drive safely.



Transporting people inside the tipper is strictly prohibited.



Climbing with the Minidumper over steps is strictly prohibited. You must use ramps that comply with the slopes imposed for the machine.



Using the Minidumper in muddy, snowy or icy conditions is strictly prohibited.

Always drive the Minidumper with the utmost caution.

When driving and starting the Minidumper, you must have a free hand to be used to operate the two forward or reverse levers simultaneously.

If the operator needs to leave the machine unattended, he/she must first lower the tipper and/or bucket and switch off the engine with the keys.

## DRIVING SETTINGS

- Set the accelerator lever to the correct speed according to the slope and load.
- Make sure that the various safety instructions are correctly applied.
- Check the ground conditions for the various manoeuvres.
- Check to see if the space available spaces is limited or if it is sufficient.

## DRIVING

- Simultaneously operate both forward levers, pushing them forward.
- Simultaneously operate both forward levers in reverse, pushing them backward.
- Release the forward levers to stop the machine.
- To increase speed, move the accelerator lever to its maximum position.

Drive carefully if driving on muddy or sloping terrain.

When reversing, always make sure that there are no obstacles and/or persons in the vicinity of the machine when manoeuvring.

## DRIVING ON SLOPES

### CAUTION



While successfully certified to operate on the maximum permissible slopes, it is advisable not to manoeuvre the minidumper on the maximum permissible slopes when fully loaded, because of the high risk of overturning due to the slope and the load.



Operating the tipper and/or raising the pantograph is strictly prohibited when driving on the maximum permissible slope due to the risk of overturning. The machine must always proceed with the tipper lowered to the maximum in the *standard resting position*.



The operator must drive the machine from the ground at minimum speed when driving on maximum permissible slopes.



Avoid working on slopes that exceed the following set limits when manoeuvring forward: 10° latitudinally and 20° longitudinally.



Overturning may occur with serious consequences of injury for the operator.



Always operate the machine at minimum speed on slopes.



Changing the slope may cause the machine to tip over, with serious consequences of injury to the operator.



When the Minidumper is in motion uphill, the operator must make sure to keep the tipper and/or the bucket down in order to have an unobstructed view and be able to drive safely.

Reversing is prohibited when driving uphill or downhill.

Extremely dangerous manoeuvre.



The following can therefore be deduced:

- To climb the slope, the Minidumper must be steered with the tipper facing upwards, so you have to put it in forward drive. (see fig. 38a)
- When you have reached the top, turn around completely to proceed to the next step.
- To descend the slope, the Minidumper must be directed with the tipper always facing the top, so descend by operating the reverse gear. (see fig. 38b)



Do not move on the platform with abrupt movements during upward and/or downward manoeuvres, as this may cause the machine to overturn.



Always make sure that there is no risk of overturning.

The machine is not equipped with a roll-over control system and has no roll-over protection structure.



Do not place your body weight on the handlebars of the machine as this could cause the Minidumper to overturn, with serious consequences for the safety of persons. (see fig. 39)

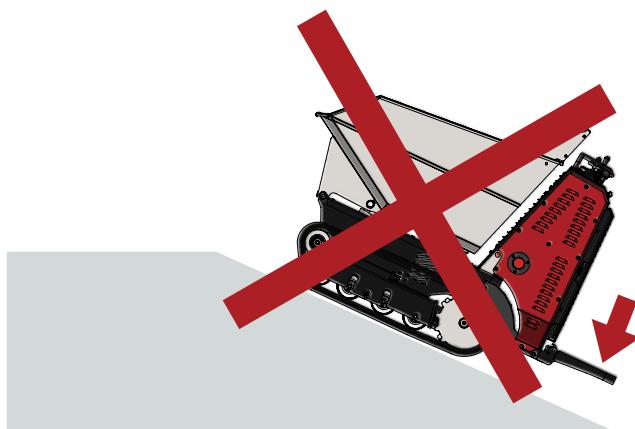


Fig. 39)

## **TIPPER OVERTURNING CONTROL**

To load the material inside the tipper, secure the machine on level and stable ground. Only load the machine when it is stationary and stable. If the machine is not equipped with a loader, load the material inside the tipper. It can be loaded by hand or with the excavator or other suitable means.



Make sure not to exceed the load capacity of the Minidumper, so as not to wear out all mechanical components prematurely.



Ensure that no persons stand in the immediate vicinity of the Minidumper.



Before unloading the material, make sure the ground is stable and solid.

Manoeuvre the Minidumper slowly and with extreme caution.



Do not transport liquid concrete, as doing so could cause permanent damage to the moving parts of the machine.

To unload the material from the tipper, operate the control lever by pushing it forward.

Pull back the lever to put the tipper back in position.

## TIPPER PANTOGRAPH SUPPORT CONTROL

Upon request, the machine can also be supplied with a pantograph support.

To load the material inside the tipper, secure the machine on level and stable ground.

Only load the machine when it is stationary and stable.

The following instructions must be applied when loading the tipper:

- Do not move the machine with the tipper lifted, as it may overturn.
- Do not lift the tipper if the ground is soft.
- Do not go up or down slopes with the tipper lifted.
- Do not allow persons to stand in close proximity to the machine.



Fig. 40

## BUCKET CONTROL



Only use the bucket if on stable ground, and make sure that when using the bucket there are no persons standing in the vicinity.



Only use the bucket to load material of a suitable size within the load capacity limits.



Only use the bucket only when you are sure that you are in a position where visibility is not obstructed.

Observe the following instructions when loading material with the bucket:

- Keep the accelerator to minimum and push the bucket lever forward until it touches the ground.
- Proceed near sand or gravel heaps at slow speed until the bucket is full.
- Load the material inside the tipper with the bucket, making sure that the tipper is not tilted and that it is in a horizontal position.
- Lift the bucket to the mechanical end stop and unload the inert material inside the tipper. (see fig. 41)
- To unload the material on the ground, proceed with the bucket fully lifted up to the mechanical stop, tilting the tipper completely. (see fig. 42)

Remember not to leave the bucket on the ground while unloading the material, otherwise you may dump the material on it. (fig. 43)

Fig. 41



Fig. 42



Fig. 43



## LOADING AND UNLOADING MATERIAL



Transporting any type of liquid is strictly prohibited, as this would cause swaying on the Minidumper, which would seriously jeopardise the stability of the vehicle and, consequently, the driver.



At any stage of work, all operators in the vicinity of the machine must keep a safe distance of at least 5 metres from the machine.

Follow the procedures illustrated during material loading and unloading operations.

The machine is used to transport **inert material such as gravel, sand, cement**, dirt or similar materials, taking care that it is only contained inside the tipper and that no material overflows from the tipper.

All versions of the Minidumper can be loaded manually by an operator equipped with a shovel or with excavator units.

Material is normally unloaded by activating the control dedicated to tipper overturning.

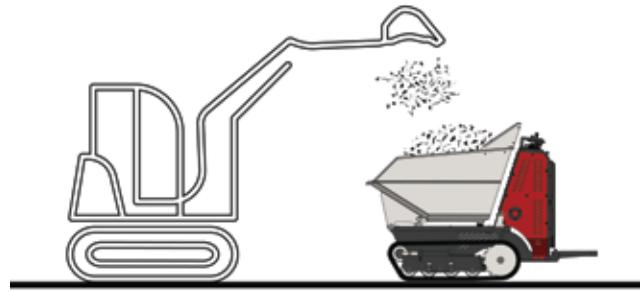
It is essential that material unloading **be carried out on flat, compact ground**, away from cliffs or edges of excavations, as the ground could collapse or the machine could fall and overturn. If you are working in extremely hot or extremely cold conditions, the material may stick to the tipper, thus causing the machine to tip over when unloading. Therefore, working at low speed, make sure that the material comes out completely when the tipper starts tipping. Then stop and wait for it to come out and then tilt the tipper again.

**On models equipped with a self-loading bucket, it must always be in the raised position when unloading.**

### LOADING MATERIAL

#### WITH OPERATING MACHINERY

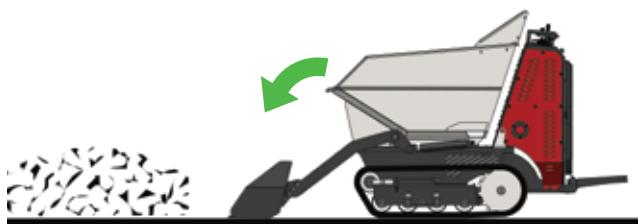
Position the minidumper within the working range of the operating machinery. Load the tipper, avoiding any accidental contact.



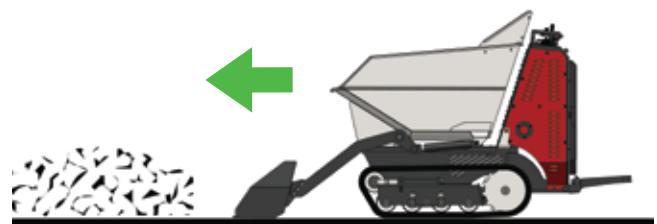
### LOADING MATERIAL

#### WITH A SELF-LOADING BUCKET

**1.** Push the bucket lever forward until it touches the ground.



**2.** Proceed near sand or gravel heaps at slow speed until the bucket is completely full.



**3.** Pull the lever towards the operator slowly so that the bucket moves up to the mechanical lock and unloads the contents of the bucket into the tipper.



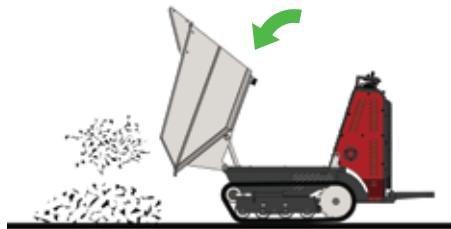
**4.** Reverse and re-position the Minidumper.

Lower the bucket again in the same way as in step 1 and repeat the operations until the tipper is filled with as much material is needed.



## UNLOADING MATERIAL

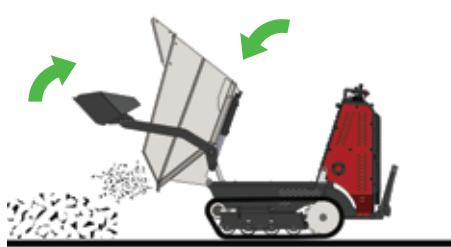
WITHOUT A SELF-LOADING BUCKET



1. Material is unloaded by activating the corresponding control. During inert material unloading, the operator driving the machine with the view of the raised tipper needs the aid of a second operator on the ground and at a suitable distance from the machine, who checks and verifies where the material is being unloaded.

## UNLOADING MATERIAL

WITH A SELF-LOADING BUCKET

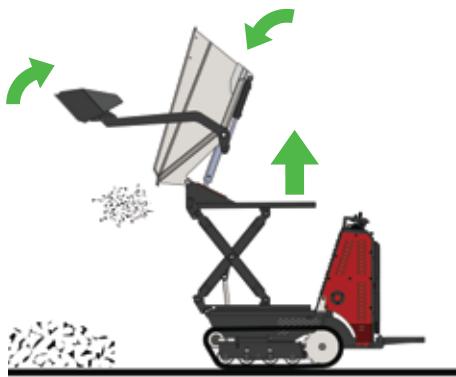


1. Material is unloaded by activating the corresponding control. The bucket must always be in the raised position when unloading. During inert material unloading, the operator driving the machine with the view of the raised tipper needs the aid of a second operator on the ground and at a suitable distance from the machine, who checks and verifies where the material is being unloaded.

## UNLOADING MATERIAL

WITH HIGH UNLOAD SYSTEM

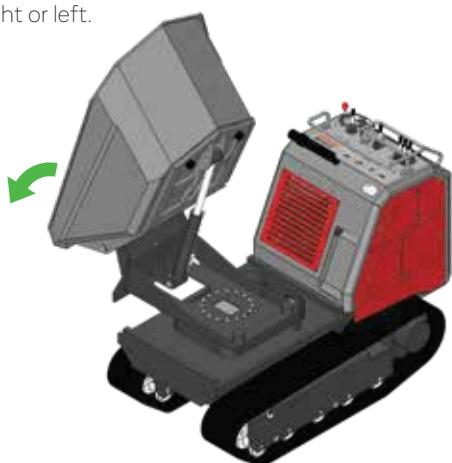
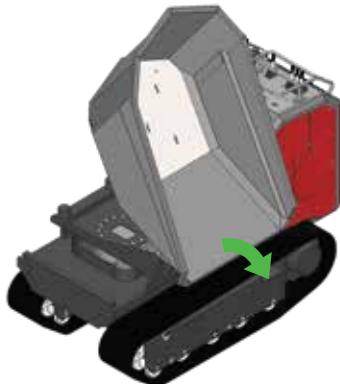
Material is unloaded by activating the corresponding control. The model equipped with pantograph can unload material from the lowest position (closed pantograph) to the highest position (fully open pantograph). If equipped with a bucket, the bucket must always be in the raised position during unloading. During inert material unloading, the operator driving the machine with the view of the raised tipper needs the aid of a second operator on the ground and at a suitable distance from the machine, who checks and verifies where the material is being unloaded.



## UNLOADING MATERIAL

WITH A SLEWING RING

Material is unloaded by activating the corresponding control. The model equipped with a slewing ring coupling can perform material unloading, maintaining the driving position, rotating the tipper 180° to the right or left.



## 15.9 LOAD TRANSPORT REQUIREMENTS



### CAUTION!!

Do not exceed the load capacity as doing so may cause overturning with damage to property and/or persons.  
Comply with the capacity limits indicated on the CE labels.



### CAUTION!!

The minidumper is used to transport inert material and nothing else.  
Make sure that the load is stable in the tipper.  
Always proceed at low speed when the machine is loaded.  
Always proceed with the tipper lowered so that visibility is not obstructed.  
Proceed with the load lowered and at minimum speed when driving on slopes and/or downhill.  
Comply with the prescribed slope limits for the machine.  
Use extreme caution when reversing.

## PARKING AND STOPPING



Be sure not to park the machine on slopes and/or downhill.

Set the machine on stable, level ground before stopping.

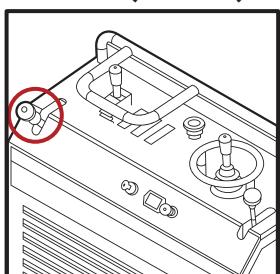
When parking the machine before switching it off, engage the handbrake as follows:

- 1) Use the accelerator to bring the engine to idle speed.
- 2) Engage the handbrake.
- 3) Switch off the engine, turning the key to the OFF position.
- 4) Close the fuel tap.

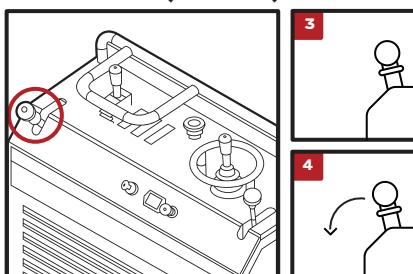
### Handbrake engagement and release

For all models except the T150, the handbrake lever must be pushed forward to engage the handbrake.  
On the T150 model, the parking brake is electronic and can be operated simply by pressing it.

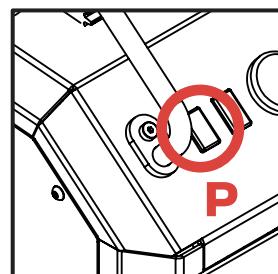
#### ENGAGING (all models)



#### DISENGAGING (all models)



#### DISENGAGING - T150



To engage the handbrake, lift the knob (1) and let the lever (2) move forward.

To disengage the handbrake, pull the lever (4) backwards.

## HYDRAULIC DAMPING DEVICE

The machine is equipped with a hydraulic damping device, consisting of block valves that allow fast, quick control of the tipper. (See fig. 45)

The system is located below the tipper with two hydraulic openings on both cylinders.



Fig. 45a



Fig. 45b

## ACCESSORIES

On the T150 versions, topping up is performed from the dashboard filler nozzle. On all other versions, you must open the dashboard compartment as shown in the images below.

The T45/T95 models are equipped with a fuel tank, necessary for topping up in case of lack of fuel during operation. (fig. 46) The tank is also equipped with a hose to facilitate the conveying of fuel inside the machine tank.

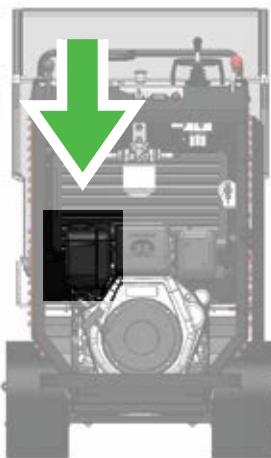


Fig. 47 - Diesel version

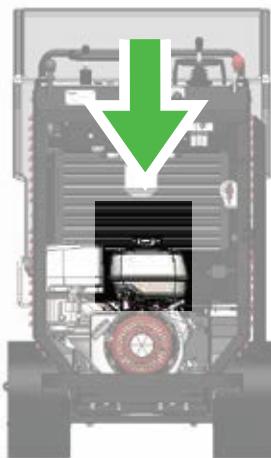


Fig. 48 - Gasoline version

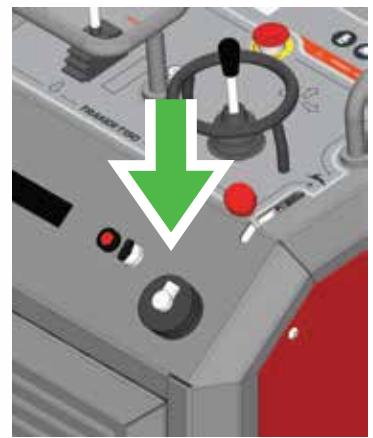


Fig. 49 - T150 version



Fig. 46 - Tank with conveying hose

Fuel is topped up via the tank hose, which must be inserted into the tank mouth, indicated by the arrows in the photos above (Figs. 47 and 48)

## TRANSPORTING AND UNLOADING THE MACHINE ON THE GROUND



Do not park and stop on a slope as it is very dangerous.  
Set up ramps to unload the machine from the truck, as in fig. 49.

Follow the instructions below:

- Make sure that the truck can withstand the carrying capacity for transport of the machine.
- Park on level, stable ground.
- Use suitable ramps for a slope equal to but not exceeding 15°.
- Make sure that the ramps have a sufficient capacity.
- Block the truck securely with wedges.

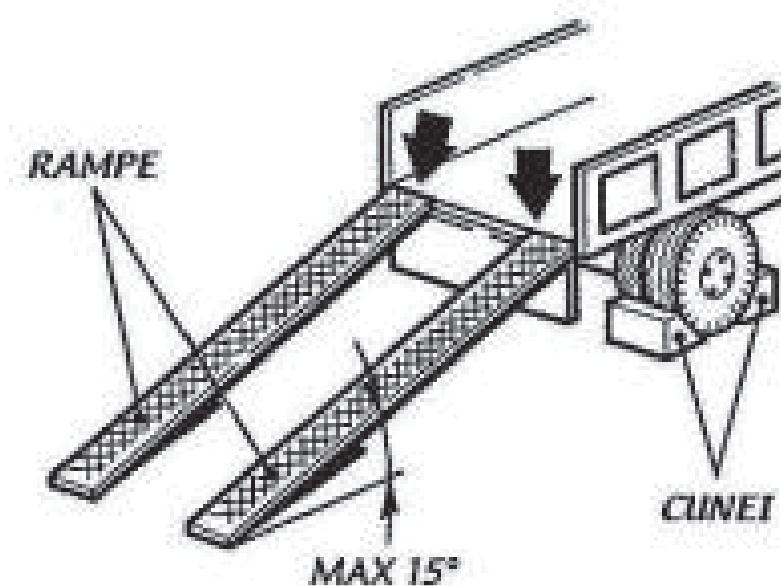


Fig. 49

Follow the instructions below (see Fig. 50):

- 1) Make sure that the ground stability is sufficient for the load.
- 2) If stopping on a slope, secure the machine's tracks with wedges.
- 3) Before attempting to climb a slope, make sure that the slope is within the permitted limits.

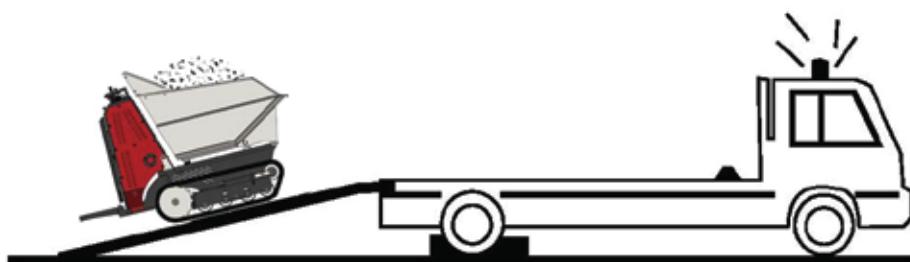


Fig. 50

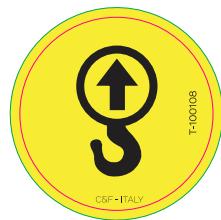


Fig. 51

When transporting by truck, make sure that the machine is properly fastened and secured to the truck chassis in front and behind. It is also possible to unload the machine from the truck without the aid of ramps, but instead by lifting it up with slings through the 4 attachment points marked on the machine, using the label visible in figs. 51 and 52. - Adjust the distance of the ramps according to the machine tracks.

## LIFTING POINTS

Fig. 52 - attachment points

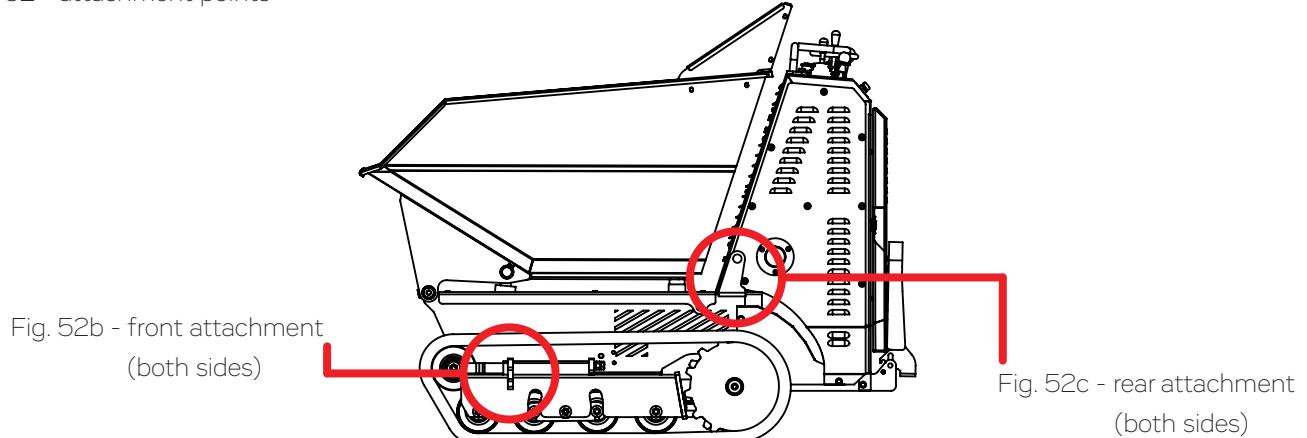


Fig. 53



The sling must pass through the 4 attachment points (fig. 52) marked on the machine and must be attached to the lifting structure (fig. 53).

Only use lifting equipment and lifting gear that can withstand the load capacity of the machine. (Fig. 53).

For proper lifting:

- Place the machine on a horizontal plane;
- Make sure that there are no obstacles to lifting or people in the vicinity.
- Use slings that are sufficiently resistant to lifting.
- Follow the regulations on lifting, cables and fastening systems.
- Get rid of any objects inside the machine tipper.

## 15.14 MACHINE TOWING



Towing the machine with any type of vehicle is prohibited.

Any attempt to tow could damage the Minidumper transmission.



The machine may be towed from hazardous areas (slopes, precipices, etc.) only in hazardous conditions.

### Removal and towing from hazardous areas

In case of machine failure in hazardous areas, remove it by lifting it through the lifting points as described in the previous section "Transporting and unloading the machine on the ground".

If lifting the machine is impossible, tow it just outside the danger zone by hooking it at the points indicated (fig. 52a), using a mass at least 2-3 times greater than that of the Minidumper for a small space, to avoid damaging the machine transmission.

# 16. GENERAL MAINTENANCE

The purpose of maintenance is to maintain the operational and safety characteristics established by the manufacturer during design. Therefore, routine maintenance and, especially, repairs must be carried out by specialised personnel delegated by the manufacturer using original spare parts. (EC Directive 2006/42).

Proper maintenance is required to keep operation costs as low as possible and the life of the machine as long as possible. In addition to regular mechanical and hydraulic maintenance, it is good practice to clean the machine periodically and perform a thorough cleaning to remove all traces of mud. Grease all parts subject to friction after each wash.



## WARNINGS

- Read the use and maintenance manual carefully.
- Always use PPE (protective goggles, gloves, safety shoes).
- Remove all metal objects when working on the electrical system.
- Always disconnect the batteries using the battery isolator before any work on the electrical system.
- Always relieve pressure before disconnecting the hydraulic hoses and tighten the fittings correctly before pressurising.
- All maintenance and repair work must be carried out by qualified personnel. Imperfect repairs or maintenance can cause serious danger to the user.
- The instructions, accident prevention rules and warnings contained in this manual must always be heeded.

Before any maintenance or repair work on the machine:

- Remove all components inside the tipper and bucket.
- Lower and/or close the tipper. If you need the tipper lifted/opened, secure the cylinders with the appropriate mechanical stops.
- Lower the bucket to the minimum level.
- Switch off the engine and remove the keys.
- Turn the battery isolator.

Once the maintenance and cleaning operations have been completed:

 Check that the restored parts are properly secured and lubricated if necessary, and that they do not create any obstructions to the safety of personnel. Before using the machine again, make sure that any guards, locks and safety devices that may have been removed have been carefully restored.

### Periodic servicing

These are special maintenance or adjustment operations carried out by qualified personnel and relate to replacements, repairs, adjustments and lubrication.

### After works

After carrying out all the servicing foreseen in the plan, all machine functions and working conditions must be restored.

### General overhaul

The theoretical life of the machine depends on the attention paid to all the warnings for its good functioning, on the checks, verifications and interventions prescribed by the standards and on the good practice and diligence with which all the work foreseen by the plans is carried out.

## TABLE OF MAINTENANCE INTERVALS

### 50H / 3 months

Air filter replacement
Oil filter replacement
Hydraulic oil change
Engine oil change
Track check

### 250H / 6 months

Air filter replacement
Oil filter replacement
Hydraulic oil check
Fuel filter replacement
Engine oil change
Track check

### 500H / 12 months

Air filter replacement
Oil filter replacement
Hydraulic oil check
Engine oil check
Fuel filter replacement
Fuel tank cleaning
Track check
Emergency button check
Nuts and bolts tightening check and restoring
Flexible hosing and hydraulic circuit check and verification

### 750H / 18 months

Air filter replacement
Oil filter replacement
Hydraulic oil check
Engine oil change
Track check

### 1000H / 24 months

Air filter replacement
Oil filter replacement
Hydraulic oil change
Engine oil change
Fuel filter replacement
Fuel tank cleaning
Track check

## ENGINE OIL – GASOLINE ENGINE

Use 4-stroke automotive engine cleaner oil that meets the requirements for API category SJ. Check the rating plate on the container and make sure it contains the letters SJ or equivalent categories. The use of SAE 10W-30 is recommended.

## FUEL – GASOLINE ENGINE

This engine is certified to run on unleaded gasoline with a pump octane number of at least 86 (RON octane number of at least 91). Never use old or contaminated gasoline or an oil/gasoline mixture. Do not allow dirt or water to enter the fuel tank.

## ENGINE OIL – DIESEL ENGINE

The engine oil must have characteristics higher than class CC (API). The type of engine oil must be changed according to the ambient temperature. If a type of oil other than those specified below is used, be sure to drain all the oil that was previously contained before topping up the new oil in the oil sump. When topping up or changing the engine oil, refer to the attached use and maintenance manual for the YANMAR engine fitted.

(See the "Engine oil" chapter.)

**> 25° C**

SAE30 / SAE10W-30 / SAE10W-40

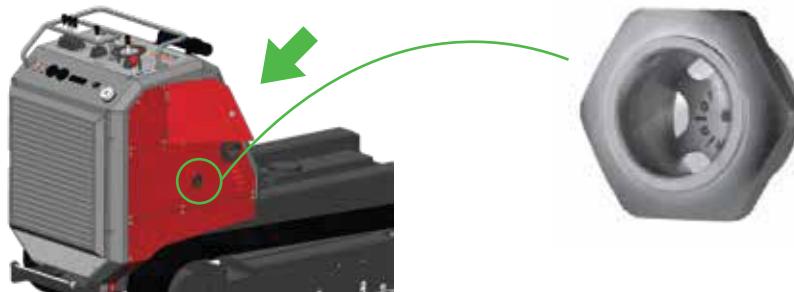
**Da 0° C fino a 25° C**

SAE20 / SAE10W-30 / SAE10W-40

**< 0° C**

SAE10W / SAE10W-30 / SAE10W-40

On the T70/95/150 models, the oil refill tank can be reached by opening the side door using the key provided, turning counter-clockwise. Fill the oil where indicated in the figure below, taking care not to exceed the limit indicated on the side of the Minidumper.



## FUEL – DIESEL ENGINE

Use low-volatility distillate °2-D diesel oil for industrial engines and heavy-duty vehicles (SAE J313 JUN87).

Light diesel quality according to ASTM D975. Only use liquid fuel; other types of fuel can damage the engine, as their quality is not known or is inferior. The grade of fuel quality varies depending on the outside temperature.



### WARNINGS

- Fuel is flammable and can be dangerous. Handle with extreme caution.
- Do not mix diesel fuel with gasoline or alcohol. This mixture can cause explosions.
- Take care not to spill fuel when refuelling. If this happens, wipe it up immediately as it may cause a fire.
- Never forget to stop the engine before refuelling.
- Be sure to stop the engine during daily and periodic maintenance, during refuelling and during repairs and cleaning.
- Do not smoke while working around the battery or when refuelling.
- In the event of fuel or lubricant spillage, refuel after the engine has cooled.
- Always clean up spilled fuel and lubricant.
- Only refuel in a well-ventilated area and do not allow fuel fumes to enter into contact with sparks or flames.
- Fuel is highly flammable and explosive and can cause burns or serious injury when refuelling.

## HYDRAULIC SYSTEM



### WARNINGS

Make sure that all residual pressures have been eliminated before working on the hydraulic system.

DESCRIPTION	OPERATIONS	FREQUENCY (H)
Hydraulic oil level check	Check	8
1st Hydraulic oil change	Change	50
Hydraulic oil change	Change	1000
Hydraulic oil filter check	Check	8
Hydraulic oil filter replacement	Replacement	250

## SPECIAL MAINTENANCE

Special maintenance is required in the event of breakdowns or breakage due to intensive use, unforeseeable accidents or inappropriate use of the machine. The situations that may arise are completely unpredictable and therefore it is not possible to describe precise intervention procedures.

If necessary, contact technical service to receive the appropriate instructions based in the situation.



**Before starting any special maintenance interventions, always contact the manufacturer to confirm the correctness of the planned servicing. All interventions must be performed by specialised personnel.**

## GREASING POINTS

Grease the points shown in the images below (if present on the version you need to grease) every 10 hours of work. Only use a grease gun with the recommended lubricants to protect the pins and connections from wear.

## ELECTRICAL MAINTENANCE



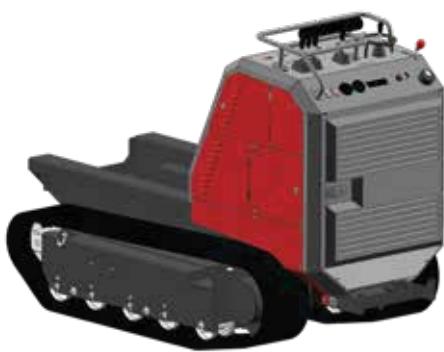
Before any electrical intervention or maintenance, turn the battery isolator lever (see chapter 11) to disconnect the machine from power.



All interventions must be carried out by specialised personnel (see chap.10 - general safety rules).



Some of the most frequent electrical interventions are the recharging/replacement of the battery and the replacement of fuses. To access the fuse compartment, open the corresponding door by inserting the supplied key and turn it in the To access the fuse compartment, open the corresponding door by inserting the supplied key and turn counter-clockwise.

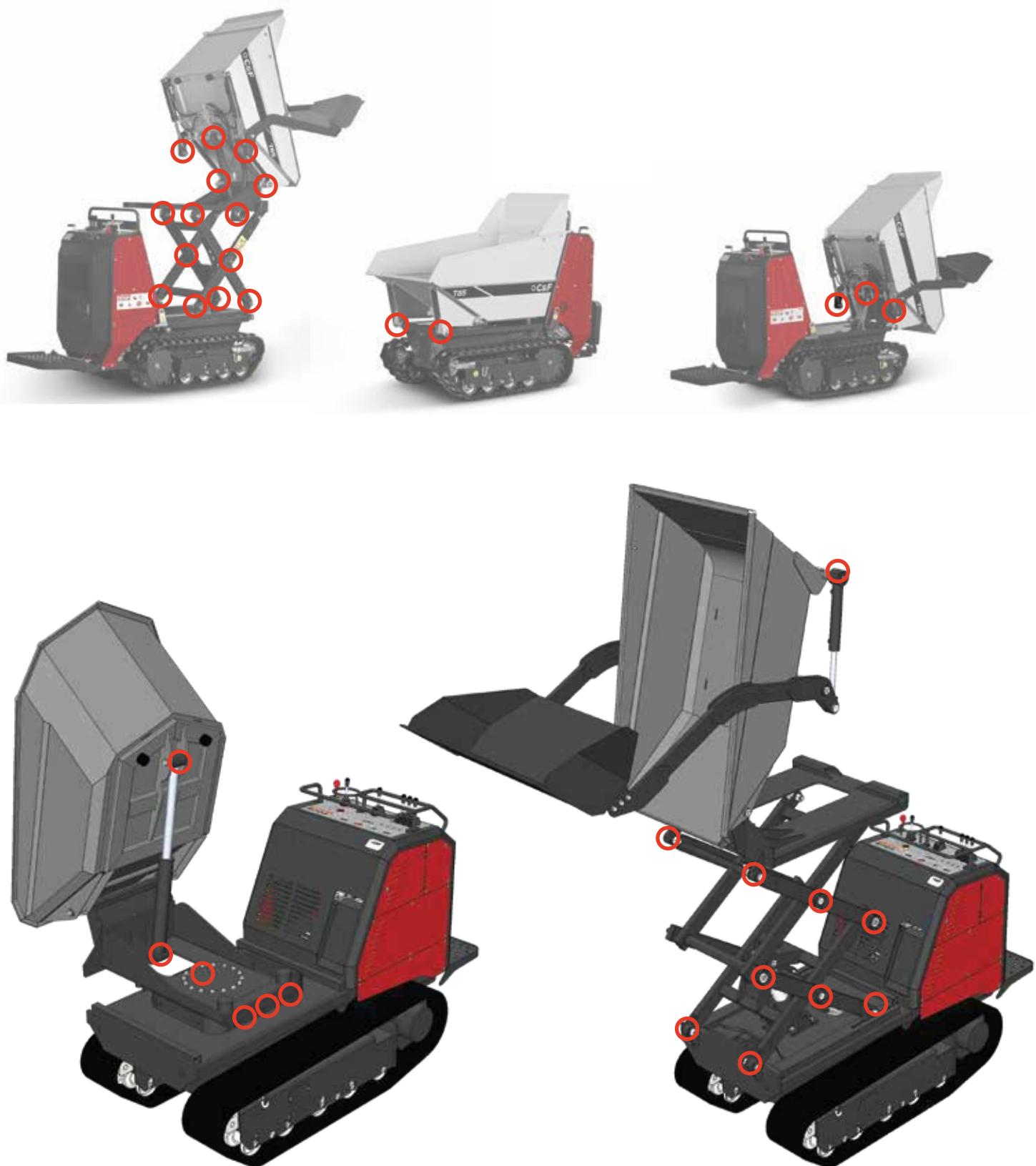


To replace or recharge the battery, remove the side cover to access the battery compartment.

## **GREASING POINTS**

**Grease the points shown** in the images below (if present on the version you need to grease) every 10 hours of work.

Only use a grease gun with the recommended lubricants to protect the pins and connections from wear.



## 17. WASHING

Before starting any washing operations, make sure that the handbrake is engaged and the engine is off, with no moving parts.



### To wash the machine:

- 1) Put the machine in conditions so that all of its parts can be cleaned.
- 2) Engage the handbrake.
- 3) Switch off the engine and remove the key from the ignition panel.
- 4) Close the fuel valve inside the engine bonnet.

For increased machine durability, carry out frequent and accurate washing using a medium pressure water jet. This simple operation prevents residues from the collected waste from fermenting, forming corrosive slurry that over time can affect both the protective treatments of the steel structures and the steel itself. Although the electrical system that supplies the equipment is perfectly watertight, it is important during this operation to pay sufficient attention to avoid directing jets of water under pressure on cables, junction boxes, push-button panels, solenoid valve coils and all electrical components in general.

During each washing operation, carefully observe the conditions and efficiency of the various equipment components and lubricate the equipment according to the diagram in chapter 15 "Greasing points".



### CAUTION!!

After washing, return the machine to a resting state, with the same attention as described in the warnings.

## 18. DEMOLITION

Dismantling and demolition operations must be carried out by qualified personnel.

- Disassemble the individual components of the machine, differentiating them according to their composition. The machine is essentially made up of steel and rubber components. It also contains hydraulic oil.
- Carefully observe the safety instructions in this manual at all stages of demolition.

## 19. DISPOSAL

Please remember that waste is any substance or object which the holder discards or has decided to or is required to discard. The possibility of reusing certain parts of the machine, both as mechanical units and as raw materials for other constructions, is subject to the full responsibility of the user.

All waste products and containers must be disposed of in accordance with the regulations in force.

The collection and disposal of all oils must comply with local laws.

Never pour used oil into drains, sewers or on the ground.

## 20. TROUBLESHOOTING

<b>Hydraulic oil leaks</b>	<ul style="list-style-type: none"> <li>-Excessive amount of oil</li> <li>-Oil temperature too high</li> <li>-Fault in the hydraulic system</li> </ul>	<ul style="list-style-type: none"> <li>-Correct the amount of oil.</li> <li>-Turn off the machine and wait for it to cool down.</li> <li>-Submit the machine to inspection by an authorised workshop.</li> </ul>
<b>Engine oil leaks</b>	<ul style="list-style-type: none"> <li>-Excessive amount of oil</li> <li>-Fault in the hydraulic system or washers</li> </ul>	<ul style="list-style-type: none"> <li>-Correct the amount of oil.</li> <li>-Submit the machine to inspection by an authorised workshop.</li> </ul>
<b>The hydraulic system controls do not respond correctly</b>	<ul style="list-style-type: none"> <li>-Insufficient amount of hydraulic oil</li> <li>-Fault in the hydraulic system</li> </ul>	<ul style="list-style-type: none"> <li>-Fill with the right amount of oil</li> <li>-Submit the machine to inspection by an authorised workshop.</li> </ul>
<b>Tipper, bucket and pantograph moving slowly</b>	<ul style="list-style-type: none"> <li>-Hydraulic oil overheating</li> <li>-The engine does not have enough power</li> </ul>	<ul style="list-style-type: none"> <li>-Interrupt all operations and let the oil cool down</li> <li>-Submit the machine to inspection by an authorised workshop.</li> </ul>
<b>Excessive oil temperature</b>	<ul style="list-style-type: none"> <li>-Insufficient amount of oil</li> <li>-Overheating</li> </ul>	<ul style="list-style-type: none"> <li>-Fill with the right amount of oil</li> <li>-Interrupt all operations and let the oil cool down</li> </ul>
<b>The parking brake does not disengage</b>	<ul style="list-style-type: none"> <li>-The brake cable is broken</li> <li>-The brake is blocked</li> </ul>	<ul style="list-style-type: none"> <li>-Have the brake cable replaced by a mechanic</li> <li>-Move the machine forward and backward slightly and try again</li> </ul>
<b>Oil temperature too high</b>	<ul style="list-style-type: none"> <li>-Defective pump, valve leakage</li> <li>-Oil level low</li> </ul>	<ul style="list-style-type: none"> <li>-Repair in workshop</li> <li>-Top up oil if necessary</li> </ul>
<b>The machine won't move</b>	<ul style="list-style-type: none"> <li>-The parking brake is engaged</li> <li>-Inadequate amount of hydraulic oil in the system</li> <li>-Tracks broken</li> <li>-Hydraulic component fault</li> </ul>	<ul style="list-style-type: none"> <li>-Disengage the parking brake</li> <li>-Fill with the right amount of oil</li> <li>-Replace tracks.</li> <li>-Submit the machine to inspection by an authorised workshop.</li> </ul>
<b>Excessive track noise during movement</b>	<ul style="list-style-type: none"> <li>-Low track tensioning</li> <li>-Tracks broken or deteriorating</li> <li>-Rollers or bearings broken</li> </ul>	<ul style="list-style-type: none"> <li>-Register track tension</li> <li>-Replace tracks</li> <li>-Submit the machine to inspection by an authorised workshop</li> </ul>
<b>The accelerator lever does not respond</b>	<ul style="list-style-type: none"> <li>-The accelerator cable is broken</li> </ul>	<ul style="list-style-type: none"> <li>-Have the brake cable replaced by a mechanical workshop</li> </ul>
<b>The engine is not working properly or is making too much noise</b>	<ul style="list-style-type: none"> <li>-Miscellaneous causes</li> </ul>	<ul style="list-style-type: none"> <li>-Submit the machine to inspection by an authorised workshop</li> </ul>
<b>The engine is not producing power</b>	<ul style="list-style-type: none"> <li>-The air filter is blocked</li> <li>-Miscellaneous causes</li> </ul>	<ul style="list-style-type: none"> <li>-Replace the air filter</li> <li>-Submit the machine to inspection by an authorised workshop</li> </ul>
<b>The engine will not start</b>	<ul style="list-style-type: none"> <li>-Not enough fuel</li> <li>-The start-up procedure was not carried out correctly</li> <li>-The battery is dead</li> </ul>	<ul style="list-style-type: none"> <li>-Refuel</li> <li>-Perform the correct start-up procedure</li> <li>-Recharge the battery or replace.</li> </ul>

## **21. MAINTENANCE LOG**

The user's maintenance manager is responsible for filling out this log.

Photocopy this page before filling it out and for the following maintenance.

**MODEL**..... **TYPE**..... **SERIAL NUMBER**.....

**NAME OF MANAGER**.....

## **22. CE MARKING**

This machine bears the CE mark. This means that the product complies on delivery with the basic health and safety directives relating to machinery, as set out in the Machinery Directive 2006/42/EC, and also conforms to other applicable directives in relation to it. A Declaration of Conformity is delivered together with the machine, specifying the applicable directives and supplements, as well as the harmonised standards and other applicable regulations.

## **23. ANNEXES**

The following annexes are available, depending to the machine model:

- "Minidumper traker – "T45" hydraulic system
- "Minidumper traker – "T45 SL" hydraulic system
- "Minidumper traker – "T50 / T60" hydraulic system
- "Minidumper traker – "T50 / T60 SL" hydraulic system
- "Minidumper traker – "T60 HT/HTSL" hydraulic system
- "Minidumper traker – "T70/85/95" hydraulic system
- "Minidumper traker – "T70/85/95 Joystick" hydraulic system
- "Minidumper traker – "T150" hydraulic system
- "Minidumper traker – "T150HT" hydraulic system
- "Minidumper traker – "T150SL" hydraulic system
- "Minidumper traker – "T150HTSL" hydraulic system
- "Minidumper traker – "T150SW" hydraulic system
- "Honda – GX engine" wiring diagram
- "Yanmar engine" wiring diagram
- "Honda – GX engine" use and maintenance manual
- "Yanmar engine" use and maintenance manual

The annexes are available upon request from the "C&F srl" headquarters

## 24. AVAILABLE VERSIONS

Below is a detailed list of all available versions of Minidumpers.

### TRAKER T45/T45A



### TRAKER T45SL



### TRAKER T50/T50A T60/T60A



### TRAKER T50SL T60SL / 60HT



## **TRAKER T70/85/95 - T70/85/95A**



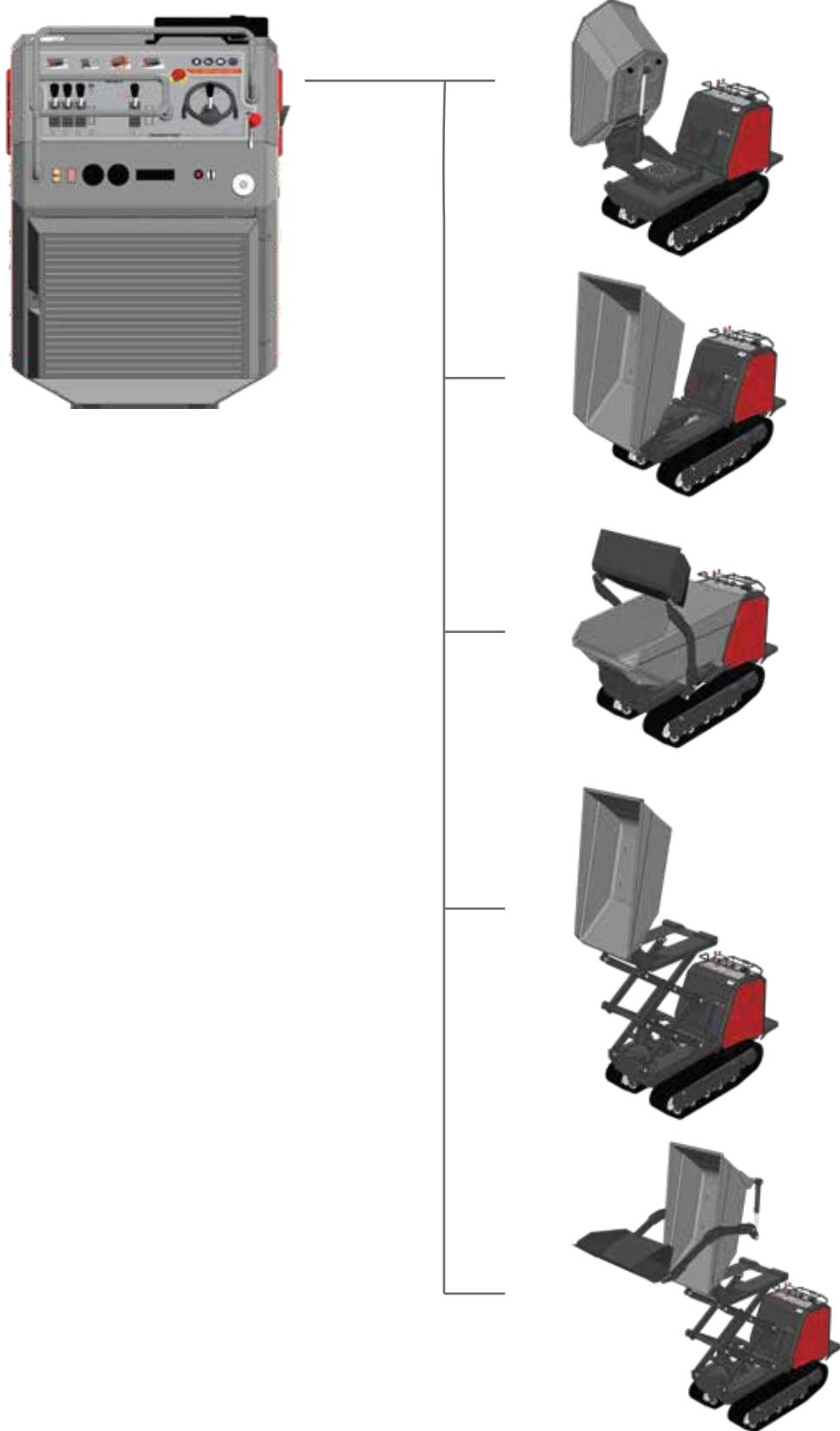
## **TRAKER T70/85/95SL T70/85/95HT**



## **TRAKER T70/85/95HTSL**



## TRAKER T150



## 25. QUICK ATTACH EQUIPMENT

The T150 minidumper is equipped with a "Quick Attach" system that allows the machine to change outfitting according to working requirements. Below is a list of the outfitting that is equipped with this system:

- Tipper
- Tipper + Self-loading bucket
- Tipper + Slewing Ring  $\pm 180^\circ$
- Tipper + High Unload
- Tipper + High Unload + Self-loader

You can remove the equipment by following specific steps.



### CAUTION

Before carrying out any dismantling or reassembly of the tipper from the carriage, set the machine in the standard resting position (see photo below) to avoid the risk of overturning:



### CAUTION

Dismantling and reassembly of the tipper must be carried out in a workshop, on a solid support surface and not on muddy or gravelly ground: danger of landslide or overturning.



### CAUTION

Always use the necessary PPE such as safety shoes, helmet, work gloves, protective goggles and specific workshop equipment when disassembling and reassembling the tipper.



#### WEAR PROTECTIVE GLOVES

The use of gloves is mandatory

Protective gloves EN 388



#### WEAR SAFETY SHOES

The use of safety shoes is mandatory

Safety shoes EN 345



#### WEAR HEARING PROTECTION

The use of hearing protection is mandatory

Earplugs EN 352-2

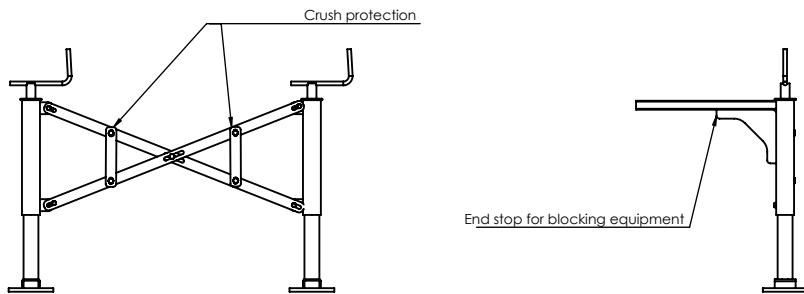


### CAUTION

At least two mechanical maintenance technicians are required to carry out the various tipper disassembly and reassembly operations.

C&F supplies the following components for equipment assembly:

- 4 feet for lifting the tipper
- 2 bracings for lifting feet support
- Bracing assembly bolts



**Follow the procedure indicated for disassembling the tipper:**

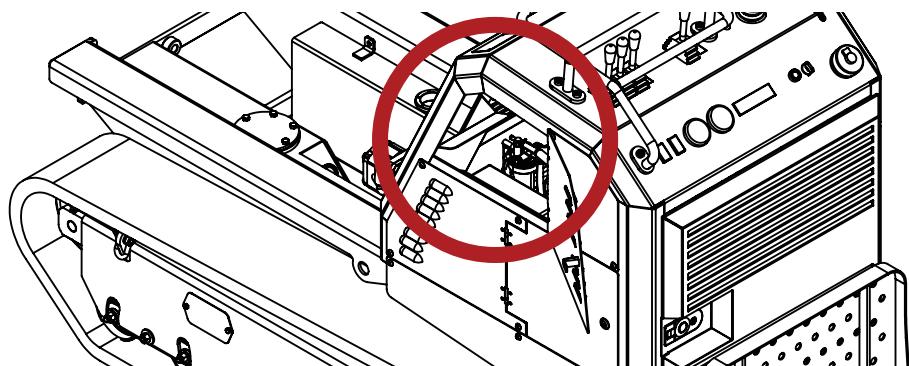
1. Make sure the machine is switched off and engage the parking brake.



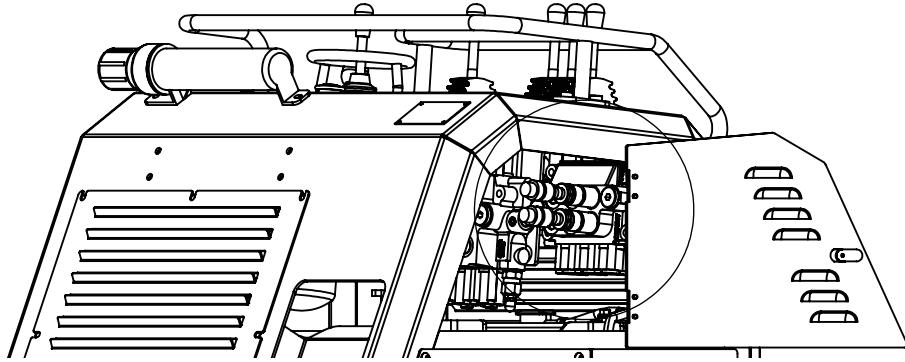
2. Release the pressure by moving the hydraulic control levers of the tipper.



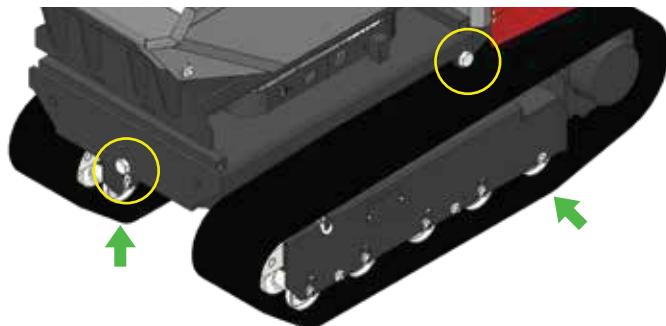
3. Open the side access door for quick couplings.



4. Before disconnecting the quick couplings, prepare a container in case of oil spillage. To disconnect the quick coupling, pull the ring nut and release it, pulling out the hose and placing it one by one in the container.



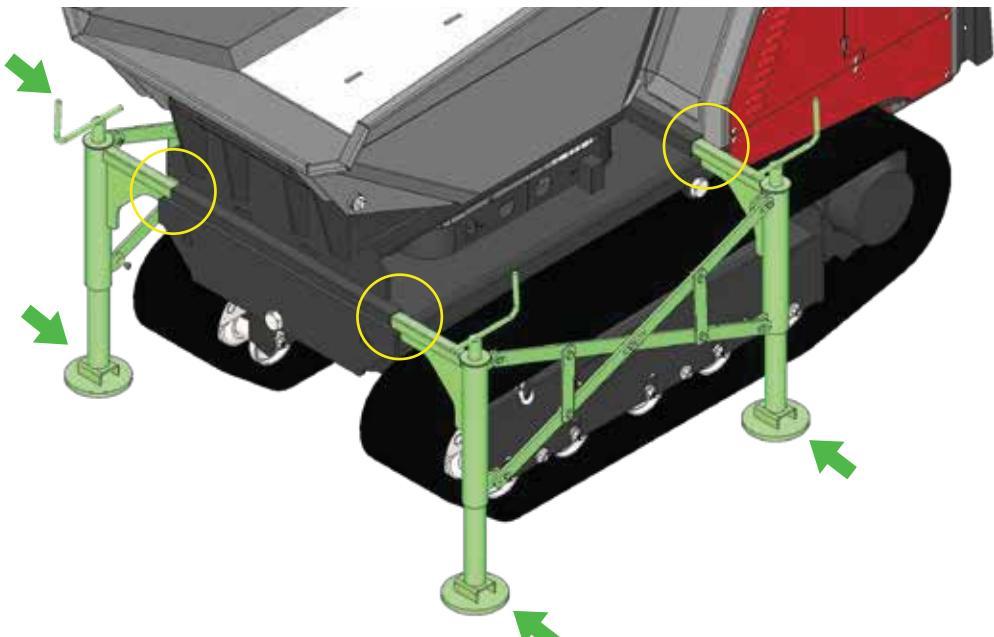
5. Unscrew the central bolt with a size 34 spanner or a pneumatic screwdriver, then the other two side bolts (Right-Left) with a size 27 spanner or a pneumatic screwdriver to allow tipper disassembly. If disassembly is difficult, use an extension for the 34 and/or 27 spanner.



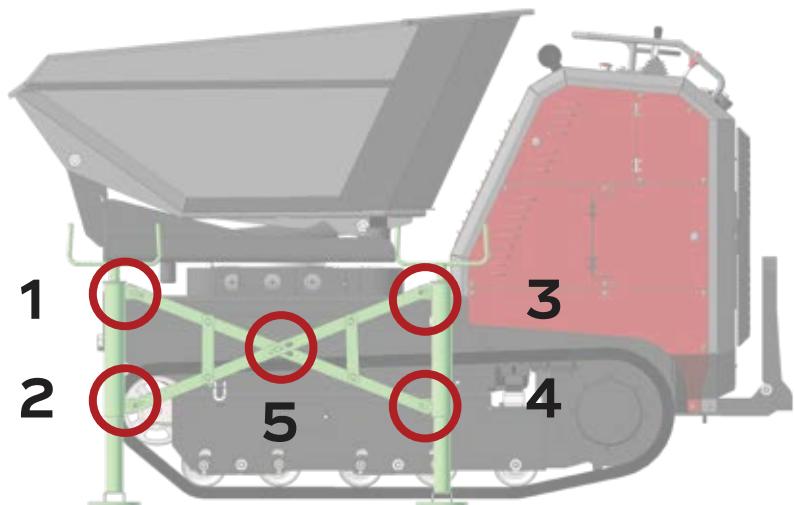
6. Insert the square section arm part of the support foot into the square hose on the tipper frame until the support foot stops against the end stop.

7. With one hand, hold the base of the foot stationary and, with the other hand, turn the support crank until the base of the foot rests on the floor.

8. Repeat steps 6 and 7 for all feet.



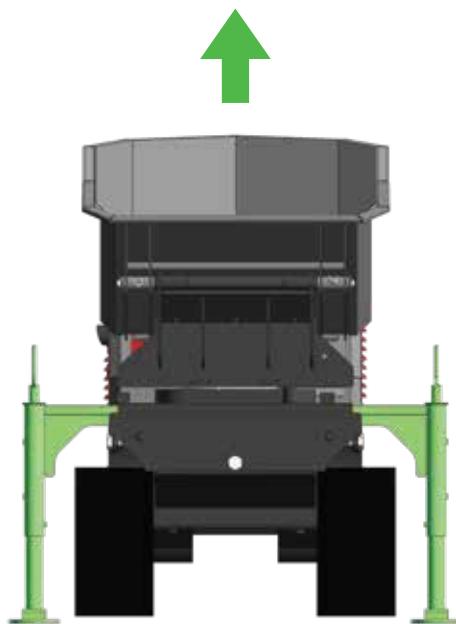
9. Position the bracings and insert the bolts at the four points indicated 1-2-3-4. Fasten the bolt 5.



10. Tighten bolts 1, 2, 3 and 4 to ensure that the equipment is held securely.

11. Repeat steps 8, 9 and 10 for the other bracing.

12. To lift the equipment tipper off the machine, turn the four foot cranks again.



13. Remove the machine from the tipper, reversing at minimum speed.



**Follow the procedure indicated for re-assembling the tipper:**

1. Proceed at minimum speed with the Minidumper towards the tipper and insert it between the legs of the equipment, trying to centre it as much as possible.

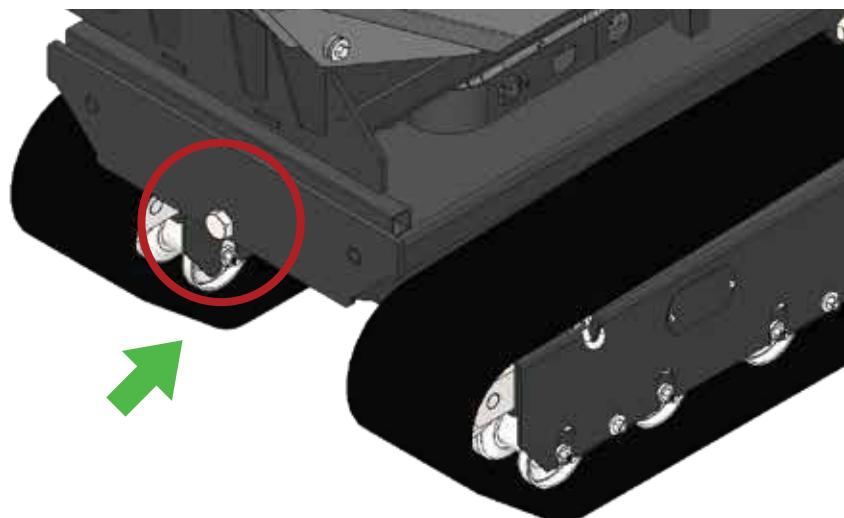


2. Re-connect the various quick couplings, taking care to connect them into their numbered connectors.

3. Slowly lower the tipper, turning the cranks of the supporting "Quick Attach" equipment and prepare to centre the tapered centring devices with the tipper on the minidumper.



4. Position the front hole with the centring device and make any adjustments between the Minidumper and the "Quick Attach" equipment until you find the optimal position to tighten the front bolt.



5. Centre the side holes so that the respective bolts can be tightened later.
6. Once centred, first tighten the side bolts and then the front tipper bolt.
7. Disconnect and unscrew the bracing bolts and remove the bracing between the "Quick Attach" legs.
8. Remove the equipment feet from the Minidumper.
9. Once all tipper disassembly and/or reassembly operations have been completed, store the equipment (feet, bracings, bolts, etc.) in a safe, dry place away from possible hazards.





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