

IDENTIFICATION

Owner:

Address.....
.....N°

Phone

City..... State

Zip Code -

Machine Model

Serial Number.....

Year of Manufacture

Invoice N°

Date / /

Authorized Distributor

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WARRANTY CERTIFICATE

1. **JUSTINO DE MORAES, IRMÃO S/A – JUMIL**, guarantees that the agricultural instruments and their respective parts, manufactured by **JUMIL** itself, herein simply referred to as **PRODUCT**, are free of manufacturing or material quality defects.

2. The issues pertaining to the granting of Warranty shall be ruled by the following principles:

2.1. The warranty contained in this Certificate will be valid:

a) For the period of 6 (six) months, as of effective delivery of the **PRODUCT** to the farmer;

b) Only for a brand new **PRODUCT** directly purchased by the farmer from an Authorized Dealer or **JUMIL**, with the exception of what is defined in item 2.3.

2.2. With the exception of the following subitem, the Warranty granted to the farmer will be provided through an Authorized **JUMIL** Dealer.

2.3. If the **PRODUCT** is sold to the farmer by a dealer that is not an Authorized **JUMIL** Dealer, the Warranty right shall subsist, and therefore be directly claimed before **JUMIL**, pursuant to the terms of this Certificate.

2.4. The Warranty shall not be granted in the event of any damage to the **PRODUCT** or its performance caused by:

a) Operator negligence, imprudence or lack of skill;

b) Failure to obey use and maintenance instructions and recommendations contained in the Instructions Manual.

2.5. Likewise, the Warranty shall not be granted if the **PRODUCT**, after sold, undergoes any transformation or modification, or is used for any purposes other than the ones for which the **PRODUCT** is originally intended.

2.6. The **PRODUCT**, when changed or replaced under this Warranty shall be of the property of **JUMIL**, and must be surrendered, upon fulfillment of the applicable legal requirements.

2.7. In the fulfillment of its policy toward permanent evolution, **JUMIL** subjects its products to constant improvements or modifications, without such fact constituting in **JUMIL's** obligation to extend said improvements / modifications to previously sold products or models.

2.8. **JUMIL** will not be held liable to pay indemnities of any kind due to harvest losses resulting from the inadequate setting of devices comprising the product in relation to the distribution of seeds or fertilizer.

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1 - INTRODUCTION

Congratulations, you have purchased an implement manufactured with the latest technology and efficiency available in the market, guaranteed by the renowned brand **JUMIL**.

The purpose of this manual is to guide you in the correct operation of this product, allowing you to obtain the best performance and benefits from the equipment. It is for this reason that we recommend you read this manual carefully before starting to use it.

Keep this manual in a secure location for easy consultation.

JUMIL and its dealer network will always be ready to provide you with the required technical clarifications and orientations needed for your equipment.

Phone: (16)3660-1000

Fax: (16)3660-1116

www.jumil.com.br

2- PRODUCT PRESENTATION

JM CBHD 5.0 is an equipment made of steel plates, which make it resistant and robust, indicated for transport of various types of loads, by just adapting its modulated sides.

Unloading: Hydraulic tilting system. Rear cover with regulation of opening to spread coffee and cereals on the yard for pre-drying. Wheel axle can be fixed to the chassis in two positions.

3 – SAFETY NORMS

Incorrect use of this equipment may result in serious or even fatal accidents. Before putting the implement into operation, carefully read this manual as well as the tractor's manual. Ensure that the person responsible for the operation has been instructed on the correct, safe use of the implement, having read and understood this machine's manual. In special, use all EPI's [Individual Protection Equipment] required for your safety.

Important notes

- General:

1) All machinery and/or equipment should be solely used for their original purposes, according to the technical specifications in the manual;

2) The manuals of machines, equipment and implements should be kept in the establishment and the employer should inform operators of its content and provide them whenever required;

3) Do not run the equipment in closed, non-ventilated places. Gases released from the tractor engine are highly hazardous;

4) Only skilled and qualified operators should operate agricultural machinery and equipment. Under no circumstance allow minors to operate them;

5) Never carry out repair or maintenance under the machine while suspended by the hydraulic system only. Ensure that it is perfectly wedged and stationary;

6) It is prohibited to carry out cleaning, lubrication, refueling and maintenance with the machinery, equipment and implements in operation, except when such operation is essential to said activities, ensuring that special protection and signaling measures are taken to prevent accidents;

7) It is prohibited, under any circumstance, to carry people on motorized machinery and equipment and on attached implements;

8) Do not wear loose or very slack clothes in order to prevent them

9) On coupling and decoupling the equipment, use adequate IPE(s) (protection gloves);

10) When placing equipment in motion after each repair, ensure that the parts are well fastened and that all machine parts are moving properly, especially those repaired. Ensure also that no one is close to the equipment and that no tools were forgotten under, on or inside it;

11) Keep children, animals and watchers at a safe distance. Never allow anyone to walk behind, beside or in front of the moving equipment;

12) Use speed that suits the land conditions or paths to be taken. Be careful with uneven terrains and reduce the speed at curves;

13) Carefully check the transport width in narrow places;

14) When circulating with the machine on roads, observe the laws/norms of the State – consult the Road Traffic Authority or State/Federal Highway Police Department;

15) Have full knowledge of the terrain before beginning the work. Demarcate dangerous places or places with obstacles;

16) On raising and lowering the equipment, check if there are no people or animals near;

17) Whenever decoupling the equipment, use the proper IPE(s) on a plane and firm site. Ensure that it is duly wedged.

- Specific:

1) Caution when coupling the hydraulic hoses, ensure that the connection was actually made, through the characteristic noise (click);

2) Never operate the equipment with hydraulic hoses in bad state of preservation;

3) It is prohibited, under any circumstance, to carry people on motorized machinery and equipment and on attached implements;

4) On tilting the cart, ensure that it is not under electrical networks, or places with height incompatible with the lifted equipment, also ensure that there are no people or animals near the equipment, especially at the back of the equipment;

5) Never try to remove the sides all by yourself;

6) Do not perform repairs on the equipment while it is lifted by the hydraulic system only, use wedges;

Individual Protection Equipment:

The rural employer or similar, according to the needs of each activity, should provide workers with the following individual protection equipment free of charge:

1) Head, eyes and facial protection: hat or other protection from sunlight, rain and sprinkles;

2) Safety Goggles against injuries due to the impact of particles and intense light radiations

3) Ear plugs for activities with harmful noise levels;

4) Gas masks for activities with chemical products, such as fertilizer, inconvenient dust, etc;

5) Upper limb protection with gloves for equipment coupling and decoupling activities, as well as for handling grazing or vegetable, abrasive, cutting or perforating objects;

6) Protection of lower limbs:

a) Impermeable and anti-slipping boots for jobs in humid, muddy and wet terrain;

b) Boots with reinforced toecap for jobs involving risk of heavy materials and objects dropping;

c) Long boots or boots with gaiters for activities involving risk of poisonous animal attacks;

The Worker should wear the Individual Protection Equipment indicated for the respective tasks in order to protect them.

NOTE: All IPEs purchased must come with Approval Certificate issued by the Brazilian Ministry of Labor and Employment with effective validity.

Transport on Truck/Wagon

1) Transport over long distance must be on truck, wagon, etc... according to these safety instructions:

a) Use suitable hoists or ramps to load and offload the machine. Do not load in steep banks due to risk of serious accidents;

b) Wedge the equipment properly;

c) Use ties (cables, chains, ropes, etc) in enough quantity to render the equipment immobile during transport;

d) Check the cargo's conditions after the first 8 to 10 kilometers, and then check if the ties are not becoming loose after every 80 to 100 kilometers. Check the cargo with more frequency on roads that are not tarred or full of holes;

e) Be attentive always. Be carefully with the transport height, especially under the electric power network, viaducts, etc;

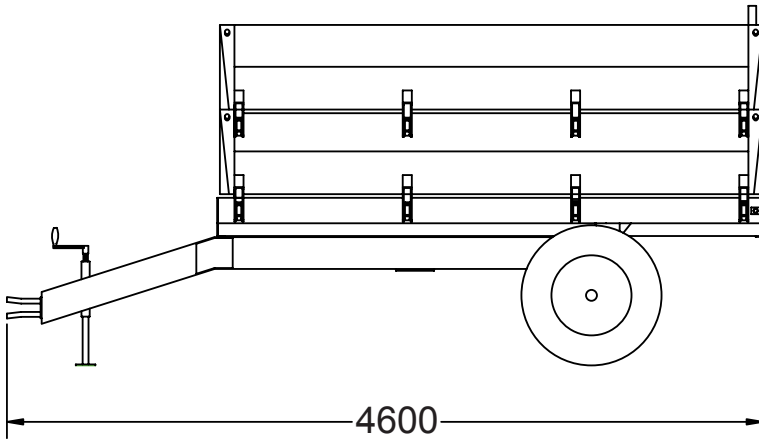
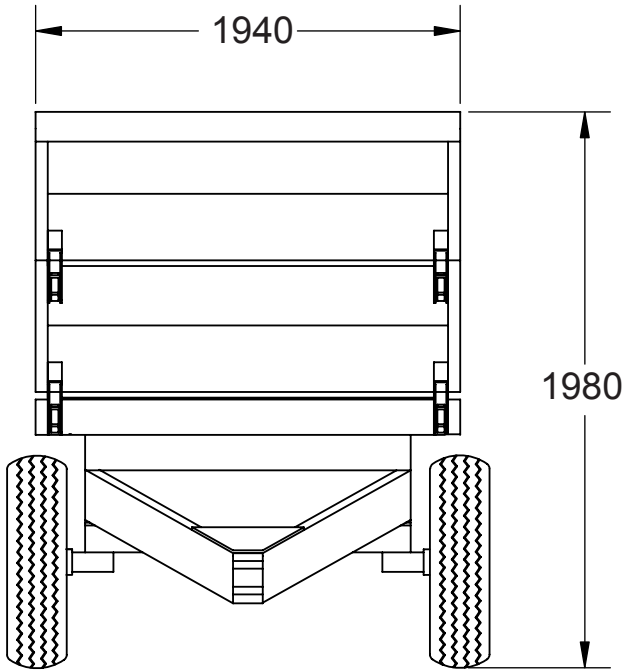
f) Always check the effective legislation on the height and cargo width limits. If necessary, use flags, lights and reflectors to warn other drivers.

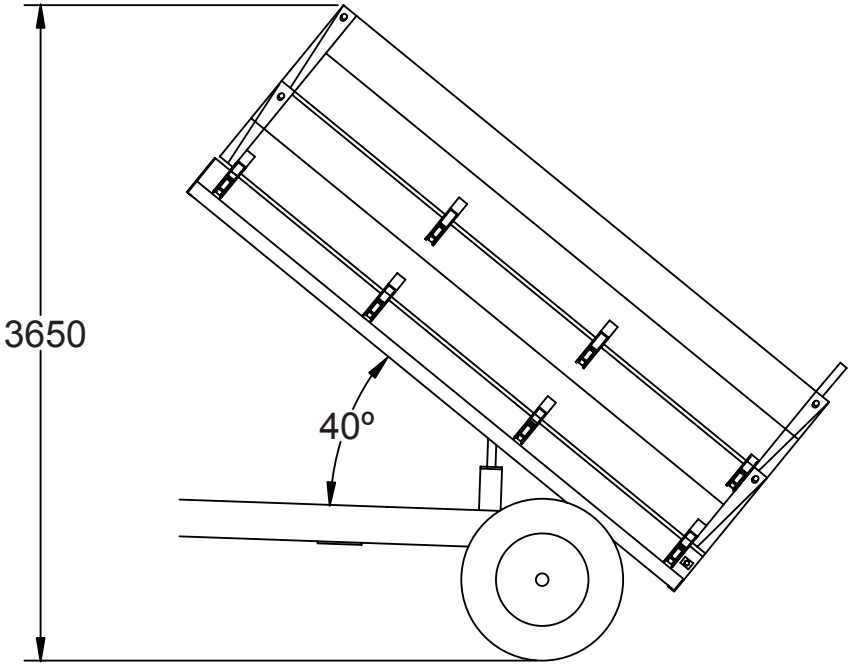
ATTENTION MR. OWNER

Check and fulfill **NR 31 – Regulatory Norm of Safety and Health at Work in Agriculture, Livestock, Forestry, Forest Exploration and Aquiculture** (Executive Ruling N°. 86, 03/03/05 – Federal Official Gazette of 03/04/05), which is aimed at establishing the precepts to be followed in the organization and in the work environment in order to match planning and development of agriculture, livestock, forestry, forest exploration and aquiculture with safety and health and the work environment.

4 – TECHNICAL SPECIFICATIONS

MODEL	JM CBHD 5.0
Load Volume	4,8 m ³
Maximum Load Capacity	5.000 kg
Rear Opening	Automatic
Number of Wheels/Tires	4 Double
Tire	7.50-16 10 L
Gauge	1780 mm
Tilt	Hydraulic
Bucket inner dimensions	
Length	2.970
Width	1.760
Height	930
Bucket outer dimensions	
Length	4.600
Width	1.940
Height	1.980
Approximate Weight	960 kg





5 – OPTIONAL ITEMS

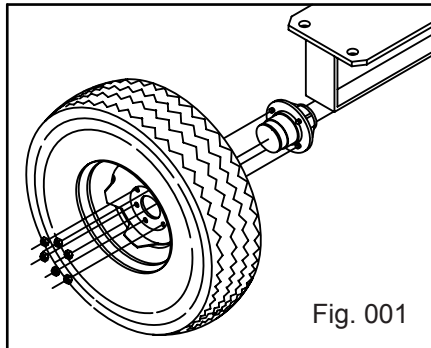
CODE	DESCRIPTION	QTY
27.31.964	Tire Assembly 7.50-16 10L	4 (Simple Wheel Assemb)
	Hollow Floor	
	Deflector	
	Conductor	
	High Rear Cover	
	Low Rear Cover	

6- PRODUCT ASSEMBLY

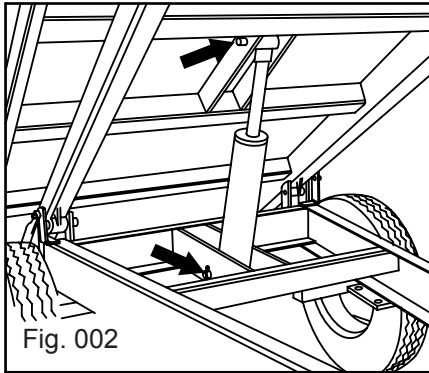
The **JM-CBHD** Coffee Hydraulic Tilting cart can be supplied fully assembled, or disassembled, facilitating transport logistics and cost. Below are the Cart’s assembly instructions, in case you choose to receive it fully or partially disassembled.

6.1 – Tire Assembling

To assemble the tires, just fit the Hexagonal Bolt of Wheel MB 16 x 50 in the orifice of the Wheel hub (Fig. 001). Right after, mount the wheel in the wheel hub and tighten the MB-16 Conical Hex. Nuts.

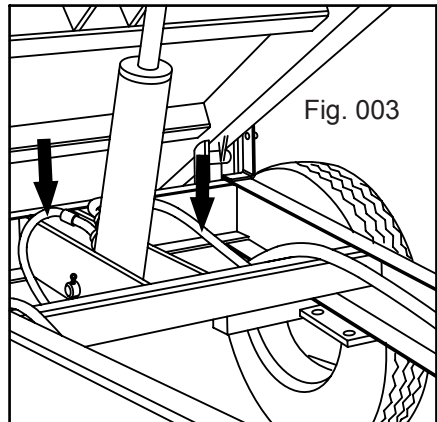


6.2 – Lift Assembling (Hydraulic cylinder)



To assemble the Hydraulic Cylinder in the JM-CBHD, fit in the supports of the lower and upper chassis and then place the fast pins, adjusting washers and lock with the cotter pins (fig. 002).

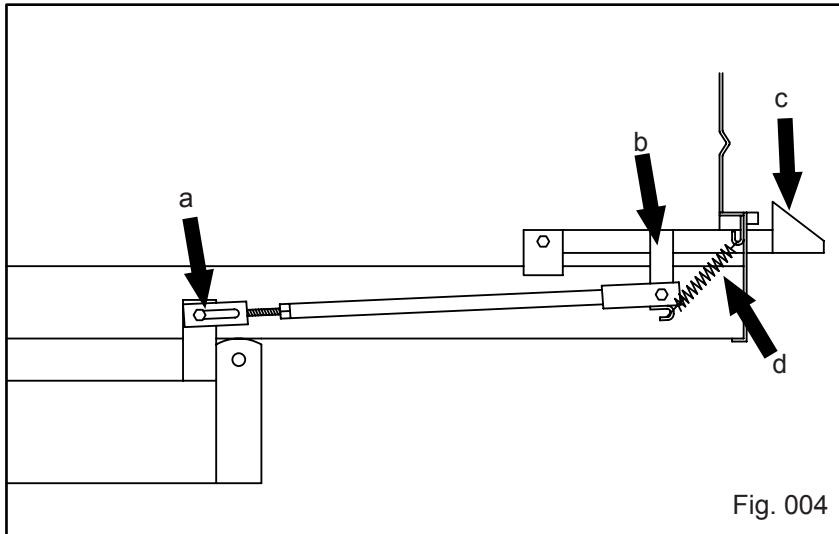
After assembling the Hydraulic Cylinder, it is necessary to assemble the connection adapters (nipple) and hydraulic hoses with diameter of 3/8" X 4.70 m in length (fig. 003).



6.3 – Actuation Bar Assembling

To assemble the actuation bar, you must first assemble the bar in the adjusting shaft (“a” fig. 004), then assemble it in the chassis’ guide pin (“b” fig. 004), and lastly, assemble the rear cover lock (“c” fig. 004) and disarm spring (“d” fig. 004).

The final assembly should be as in (fig. 004).



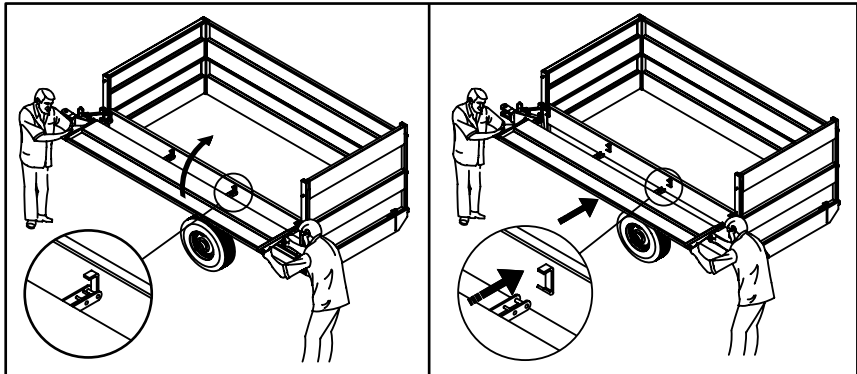
ATTENTION

After assembling the actuation bar, you must adjust it such that there is synchronism of the rear cover opening, as shown in this manual in the item adjustment.

6.4 – Assembly of the lateral, front and rear covers

This cart's covers are self-adjusting, easy to assemble and disassemble. To assemble them, proceed according to the scheme below:

NOTE: The Rear Cover is larger than the other covers so that the product drains freely when the cart tilts.



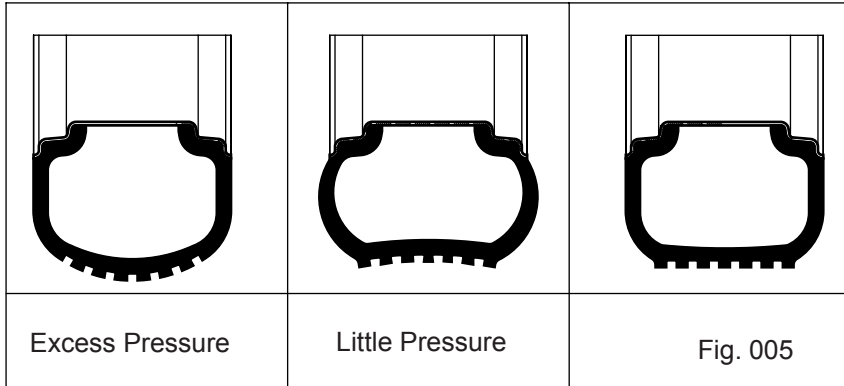
7 – PREPARATION FOR USE

7.1 – Tire Precautions

To ensure long tire life of your implement, the following precautions should be taken:

The conditions of culture remains have a significant effect on the service life of tires so avoid leaving plantation remains high enough to hinder the rolling of tires.

Tire Inflation Table			
Dimensions	Tread Capacity	Maximum Pressure	
		Kg/cm ²	lb/in ²
Diagonal Tire 7.50 – 16 E	10	4,9	70



ATTENTION

Inflate tires with the proper pressure. Shortage or excess of pressure causes premature tire wear and affect job precision.

7.2 – Preparing the Tractor

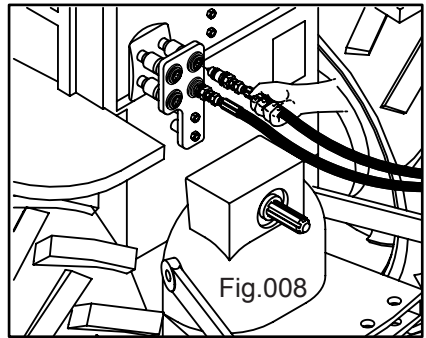
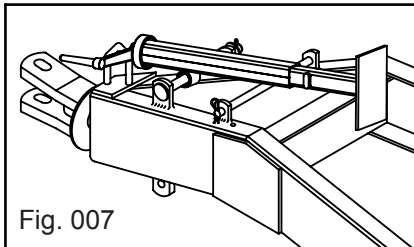
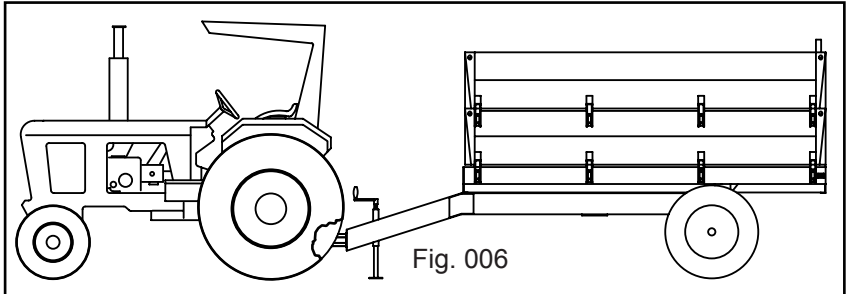
Check if the tractor's hydraulic system is working correctly and if the pump is in good conditions (flows, commands, quick coupling of the pressure hoses, etc). To tilt the cart, the hydraulic system of the tractor must be in good conditions.

7.3 – Coupling the Cart to the Tractor

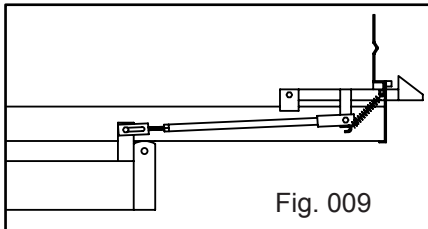
Use the mechanic lift to level the **JM-CBHD** and facilitate coupling to the tractor. Couple the header in the tractor's tow bar (fig. 006), using the coupling pin, remove the mechanical lift from machine header, turning the handle until the base of the mechanical lift is suspended on the ground, place it in rest position, in the header center, near the coupling (Fig. 007).

After coupling the **JM-CBHD** to the tractor's tow bar, couple the hose to the tractor's hydraulic command (fig. 008).

To decouple the **JM-CBHD**, reverse the steps.



7.4 – Adjusting the Rear Cover Lock



Before tilting the **JMCBHD** for the first time, check the adjustment of the rear cover lock. Both locks must have the same adjustment and unlock freely (fig. 009).

Also check adjustment of the opening, the limiter chains must be in the same position (fig. 010).

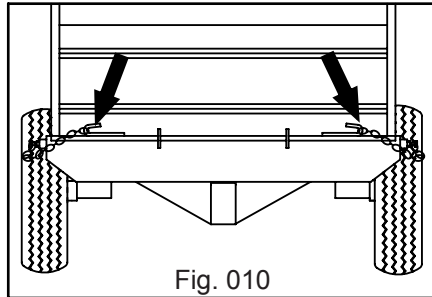


Fig. 010

ATTENTION

It must be adjusted so that there is synchronism of the rear cover opening, otherwise it can suffer damages on tilting.

7.5 – Wheel axle working position

JM-CBHD has two positions to fix the wheel axle (fig. 010). If necessary and depending on the type of product to be tilted, you can change the axle fastening position for easy tilting of the product and transport.

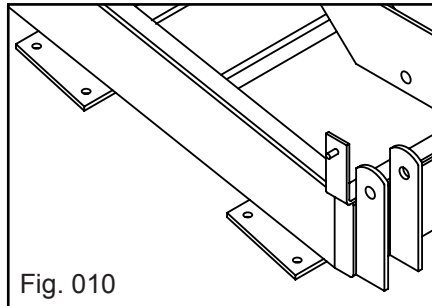


Fig. 010

ATTENTION

Use this feature in extreme cases, if the product is very dense (heavy), and the cart has difficulty in tilting and traveling.

8 - LUBRICATION

The running efficiency of any machine relies much on the suitable lubrication and it is therefore fundamental to ensure proper and quality lubrication is made to prevent reduction in the equipment's efficiency, leading also to premature wear of parts.

In heavy-duty conditions, we recommend reducing the lubrication intervals indicated in the figures.

ATTENTION

Before beginning lubrication, clean the grease fittings and replace the damaged ones.

8.1 - Lubrication Symbols



Lubricate with lithium soap based grease, consistence of NGLI-2.

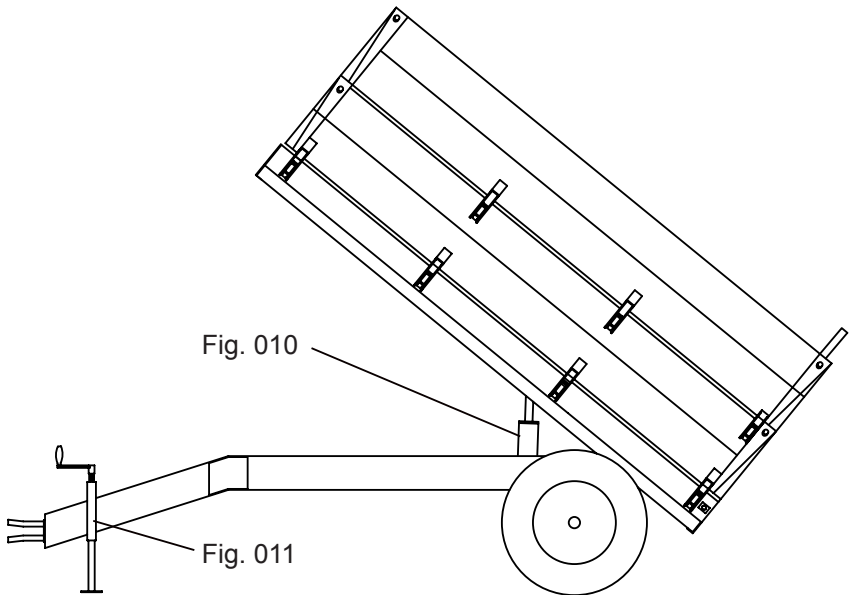


Lubrication intervals in worked hours

8.2 – Lubrication Table

RECOMM. LUBR.	EQUIVALENCE									
	PETROBRAS	BARDAHL	SHELL	TEXACO	IPIRANGA	CASTROL	ESSO	MOBIL OIL	VALVOLINE	
LITHIUM SOAP-BASED GREASE NLGI-2	LUBRAX GMA-2	MAXLUB APG-2EP	ALVANIA 2	MARFAK MP-2	IPIFLEX 2	LM 2	ESSO MULTIH	MOBIL GREASE MP	VALVOLINE PALLADIUM MP 2	

8.3 – Lubrication Points



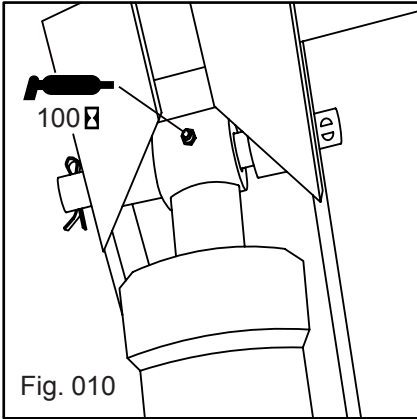


Fig. 010

Hydraulic Cylinder

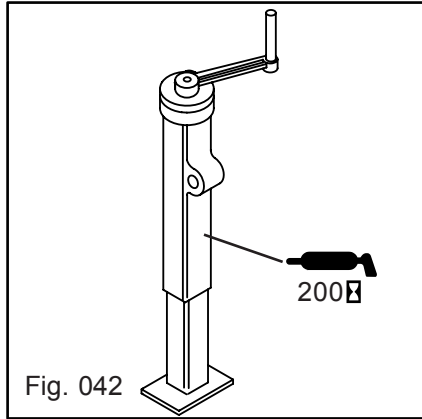


Fig. 042

Mechanical Lift
Location: Threaded Axle

NOTES