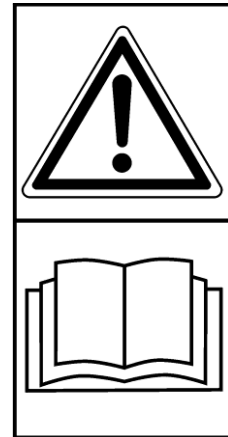


MULTIFOREST»

Instructions for Use and Maintenance

Forest trailer MF110

Caution! Carefully read the manual before using the machine.



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USER MANUAL WARNING SYMBOLS

- DANGER!** Refers to a situation where there is imminent danger that could result in serious injury or death.
- WARNING!** Refers to a situation where there is danger that could result in injury.
- ATTENTION!** Refers to a situation where there is danger or misuse possibility that could damage property.
- NOTE!** Refers to a situation where you must remember to check or carry out maintenance or repair.

INTRODUCTION

The given user manual includes information and maintenance instructions needed to use the device in the best possible way.

Although the device user could have a lot of experience in the area, it is required to read the user and maintenance instructions carefully as they contain information that ensures efficient and safe work. Regular maintenance of the device is the best guarantee for its effective and economical functioning.

- ATTENTION!** Each user shall be aware of all safety and operations instructions and shall adhere to them.

The trailer manufactured by Oniar LLC. is a tractor-coupling trailer meant for taking timber and energy wood material out of forest.

1. GENERAL SAFETY INSTRUCTIONS

1.1. GENERAL

The given service manual is intended for the ONIAR device operator, maintainer, or repairer.

Guidelines help:

- To use the device safely.
- To use the device properly and profitably.
- To spot, avoid, and prevent any possible situations that might cause danger.

The given service manual must be kept in the truck cabin, also it must always be available when using the device.

Each user must read the given user manual before using the device and adhere to it.

The device is of proper technical level and complies with the appropriate current safety regulations.

Using the device, in addition to the service manual, both laws and regulations imposed by local workplace safety and the workplace safety inspectorate as well as by the state should be followed.

Using the device in any way other than its intended purpose or exceeding its performance indicators is not the efficient use of the device. The manufacturer/supplier shall not be liable for any damages caused by such use.

In case any problems or issues arise that cannot or shall not be resolved by the user, please contact the dealer.

1.2. SAFETY

DANGER! Industrial accidents happen frequently in situations that are different from usual work patterns. Therefore, when operating the device, all the possible and probable situations that may arise from work patterns must be taken into account.

- The appliance must strictly comply with the requirements of workplace safety.
- The device risk zones must be known to the user; human presence in these zones is prohibited.
- The user is responsible for the whole risk zone of the working area while operating the device.
- The user must see the whole risk zone clearly. If necessary, use a signalman.
- Before each use, the device safety must be verified and the device must be repaired, if necessary.

- Before operating or using the device, it must be ensured that the device does not cause danger to other people or property.
- Exceeding the given performance characteristics is prohibited.
- The device cannot be used by ill individuals or by individuals under the influence of alcohol or drugs.
- All of the device safety and warning plates must be legible and intact. If necessary, they should be renewed.
- In case of any safety threats, the device must not be used unless the safety threats have been eliminated.
- If safety threats cannot be eliminated, the working process must be stopped.

1.3. MAINTENANCE

Without the manufacturer permission, it is prohibited to make changes in the design, configuration, and setup of the device. The electric and hydraulic system malfunctions shall be repaired and the supporting structures shall be welded only by certified professionals.

The manufacturer is not liable for damages caused by:

- Unauthorized changes;
- Use of any spare parts other than original;
- Natural wear and tear;
- Improper maintenance.

When maintaining the device:

- When the base vehicle engine is on, moving parts cannot be touched.
- Must be ensured that the device cannot be operated during maintenance.
- Maintenance instructions must be followed and special attention to the annual safety check must be paid.
- Lubrication is subject to the instructions provided in the user manual.

Safety devices should be set up back into their place immediately after the completion of maintenance works.

The points 10-11 of the user manual provide further information on the maintenance and lubrication.

1.4. HYDRAULIC SYSTEM SAFETY INSTRUCTIONS

Using the device, it must be verified that the device does not have any liquid leaks, and the appeared leaks should be removed before operating the device.

ATTENTION!

Hydraulic system works shall be undertaken by trained and experienced professionals. When repairing the hydraulic system:

- The reparable area should be cleaned. Solvents cannot be used when cleaning details.

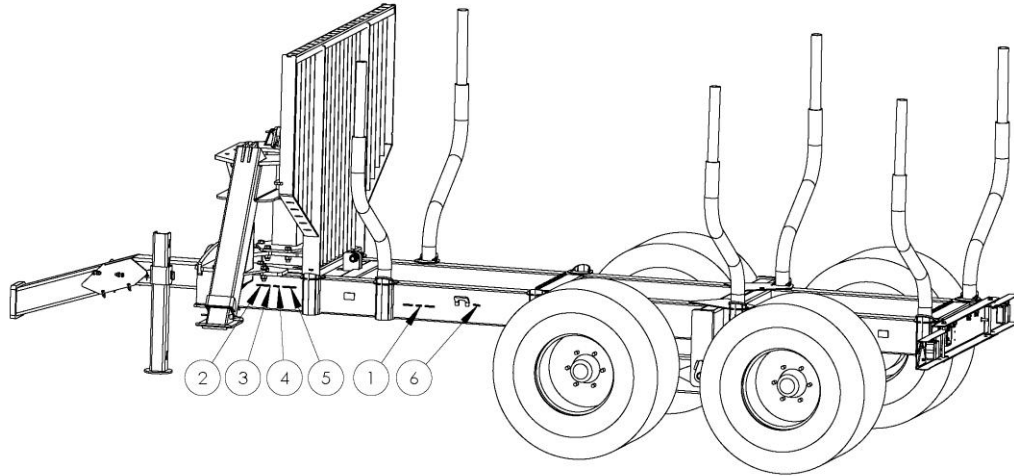
1. The device must be underset during maintenance and repair works. Neither the cylinders nor the valve block can be taken off until the device is well-underset.
2. The pressurized hydraulic system cannot be repaired.
3. When changing the hydraulics components and the hoses, original spare parts or the ones authorized by the manufacturer must be used. In particular must be followed the compliance of the pressure classes with the work pressures.
4. Oil should be stored in containers indoors. Oil should be poured from the container directly into the tank.
5. Stoppers, funnels, strainers, and filling holes must be clean.

In case oil gets into the eye, rinse immediately with plenty of water and seek immediate medical attention. Oil can be removed from the skin by washing or wiping. When working with oils and lubricants, protective equipment must be used.

Bio-oil should be used in ecologically fragile areas. It is necessary to prevent the hydraulic fluid from getting into the surrounding environment. Waste oil must always be collected into containers, they must not be left in a natural environment!

2. STICKERS AND TAGS

The trailer must have the following tags and stickers attached. Missing or faulty stickers should be renewed.



1. Trailer name
2. Product label
3. User manual
4. Hydraulics
5. Loading capacity
6. Lifting eye

Below, the meanings of the labels and stickers are shown and explained.

1. Trailer name –

The device name given by the manufacturer or the dealer.

MULTIFOREST»

2. Product label –

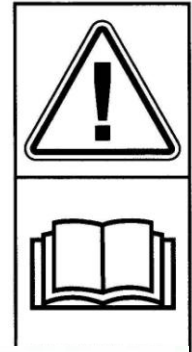
Contains information about the construction year and the serial number of the trailer, which is important for future identification of the trailer. It also includes data about the manufacturer and the dealer.

Hersteller/Producer Oniar OÜ Pargi 16, Märjamaa Estonia www.oniar.eu	Importeur/Importer:
Type:	
Serial nr: xxxxx	
Baujahr/year: 2010	

The trailer's serial number is also engraved into the side frame of the trailer, in addition to the product label.

3. User manual

The sticker reminds of the requirement of reading the instructions before appliance.



4. Hydraulics

Minor damages in the hydraulic system must be eliminated immediately. The system may explode due to the damage. The pressurized hydraulic system is dangerous.

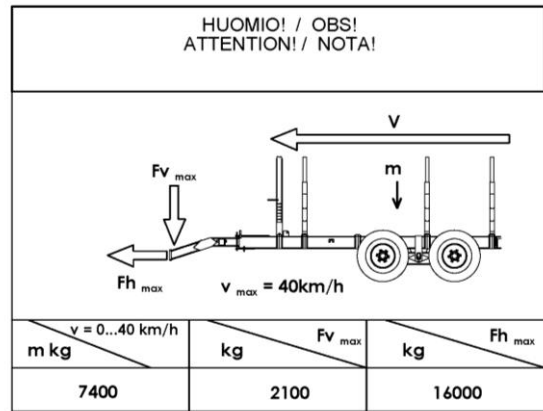


5. Loading capacity

The trailer cannot exceed the loading capacity indicated on the sticker.

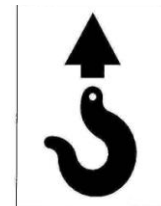
NB! In the current picture, the trailer loading capacity data are given for illustrative purposes only and may differ from the real loading capacity of a specific trailer.

The real loading capacity is reflected on the side frame sticker and in the attachment of the user manual.



6. Lifting eye

The bench marks of the lifting eye intended for lifting the trailer or undersetting the load.



3. LIFTING THE TRAILER

Before lifting the trailer, ensure that you use the lifting equipment and plugs of the appropriate type in accordance with the trailer weight.

Upon lifting, ensure that the equipment used functions normally; the equipment must be checked regularly.

Choosing the lifting equipment, be aware of the loading weight and do not exceed the loading capacity permitted by the manufacturer.

The trailer should be lifted using the appropriate lifting eyes. Lifting eyes can only be used for lifting the empty trailer. If the crane is attached to the trailer, the package must be lifted through the backside lifting eyes of the trailer and the three-point linkage of the support legs.

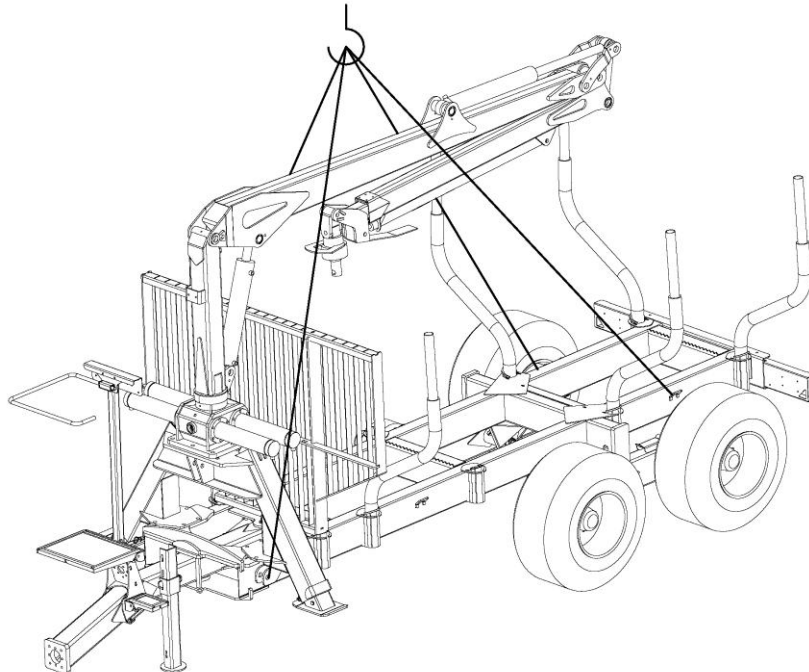
See the user manual attachment for the trailer and its additional equipment weights.

During the time of lifting, do not stand under the load. The tracking hoist must be chosen so that it does not cause danger.

Lifting the crane with the trailer

This section deals with lifting the crane only with the trailer produced by Oniar LLC. The crane may be lifted only with an empty, unloaded, trailer.

The weight of the package produced by Oniar LLC, including the trailer, is up to 3,600 kg. In order to lift the crane with the trailer, use appropriate lifting equipment and slings, which allows to lift a load of at least 4,000 kg.



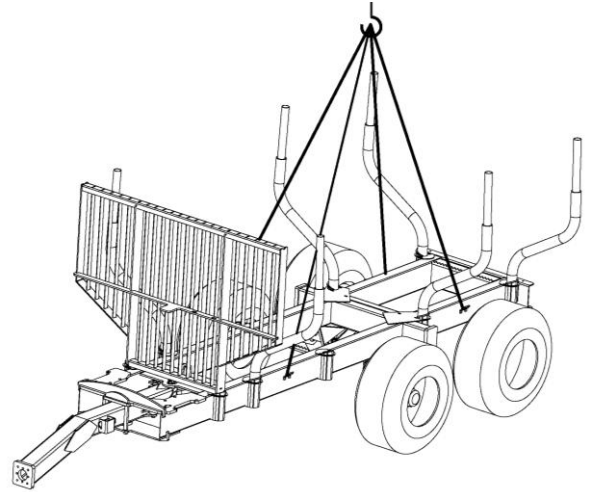
When lifting the crane with the trailer, the following should be taken into account:

1. Attach slings onto the backside lifting eyes of the trailer and the three-point linkage of the support legs.
2. Ensure that the slings are securely attached.
3. Adjusting the sling length, find the point where the crane is well-balanced.

Lifting the trailer

When lifting the trailer without crane and support legs, the following should be taken into account:

1. Attach slings to the lifting eyes on the sides of the trailer frame. Lifting eyes can only be used for lifting the empty trailer.
2. Ensure that the slings are securely attached.
3. Adjusting the sling length, find the point where the trailer is well-balanced.



The trailer weight with the package and additional equipment (without supporting legs) can be up to 1800 kg depending on the trailer type and accessories. Suitable lifting equipment and slings must be able to lift at least 2,000 kg.

4. TRAILER INSTALLATION

ATTENTION! Read the given user manual before installing the trailer.

Installation errors cause unsafe conditions when operating the trailer. Neglecting the manufacturer guidelines results in dangerous situations and the warranty becomes void.

DANGER! Connecting the base truck involves moving heavy equipment, thus, there is increased risk of being wedged inbetween.

Before connecting the trailer, ensure that the trailer is compatible with the base vehicle in terms of performance indicators. Learn about the trailer compatibility from the seller. The base vehicle tow should not exceed the permitted load carrying capacity.

Installation operations should be performed by a qualified and experienced crane professional only.

The trailer should be connected to the base truck in the following order:

1. Connect the trailer draw bar to the tractor tow and fix it.
2. Release the parking legs and adjust them into the upmost position.
3. Connect the trailer electrical plug with the tractor electrical plug adaptor.
4. Connect the drawbar and the brake hydraulics to the base vehicle.

Each installation must be checked before operating. Installation should be monitored for checking the following items:

- Ensure that the trailer has all the necessary labels and lights function in accordance with the current traffic regulations.
- Ensure that the drawbar is securely attached to the tractor tow and is not defective.
- Check the tire condition, the wheel nuts, and the tire pressure.
- Check the hydraulic connectors and ensure that they are firmly locked in position.

Checks must be carried out by a person familiar with the functions and the structure of the trailer.

Immediately after the installation, the base vehicle should be checked for sufficient stability in accordance with section 6.

ATTENTION!

After the first working day and the test run, the retention bolts should be re-tightened.

5. CONNECTING THE HYDRAULIC SYSTEM

Before connecting the hydraulic system, the trailer must be installed and fixed in accordance with section 4.

Before connecting the trailer and tractor hydraulics, check the compatibility of oils. The factory has filled the hydraulics with the MG46 oil, which meets the API SE, CD and API GL-4 requirements.

The tractor user manual provides information about the hydraulics pressure and the reflux.

Connecting the trailer and tractor hydraulics, the following should be noted:

1. During the connection, the tractor motor should not be working.
2. The connectors' ends must be clean so that dirt cannot be drawn into the system. Solvents should not be used to clean components.
3. Connect the drawbar turning cylinder hoses with the valve block section of the tractor.
4. The brake hose should be connected to the tractor brake system. If the tractor has no brake section extract, it may also be connected to the hydraulics. In this case, the brake section pressure must always be connected to the free stream before driving to prevent brake lock.
5. Connect the supporting legs' hoses with the crane or tractor valve block. Connect each support leg to the various sections.
6. All junctions must be properly locked.

6. STANDING STABILITY TEST

Information on your tractor performance indicators compatibility with trailer and crane is available from your device dealer.

Standing stability test is necessary to ensure that the trailer, crane and the base vehicle are compatible as well as that it is safe to work with the crane, taking into account its performance indicators. Standing stability test should be conducted by qualified and experienced professionals.

The base vehicle, crane and trailer complex is stable when lifting the maximum plus 10% of the maximum allowed lifting capacity, it does not result in more than one support point of the trailer raising above the ground. Lateral stability is improved by increasing ledge width and/ or adding rear axle weight, for example, wheel weight.

Example:

The base vehicle's normal condition during the test is without load, with the incline of 5° in the fall direction. The substrate must be capable of bearing the weight of wheels or other bigger loads coming from different support section.

The test is performed with the maximum operating range, with 10% overload. The test is performed under normal conditions, however, paying special attention. The 5° incline of the base vehicle can be reached by adding a lifting component to one of the rear wheels, which height is calculated as follows:

h = lifting component required height

z = width of the base vehicle from the tire centre to the middle.

$$h = 0,087 \times z$$

Example:

$$z = 120 \text{ cm}$$

$$h = 0,087 \times 120 \text{ cm} = 15 \text{ cm}$$

The given formulas and calculation examples in the given user manual are based on the SFS 4677 standard.

7. OPERATING THE TRAILER

7.1 GENERAL TERMS AND CONDITION

The user:

- The user must be at least 18 years old and have corresponding training to operate.
- Before operating the device, terms of use and the device functions must be thoroughly studied. The device should not be used until the user manual has been read, so that in emergency situations, proper action can be taken.
- One must become familiar with the device, its installations, the related constraints, and various effective working techniques.
- Before using the device, the user must study the functions of the features.

Risk zone:

- The trailer risk zone is 20 meters. The user must always see the risk zone clearly and when working, ensure that there are no unauthorized persons or obstacles in the way. If necessary, prevent unauthorized access to the risk zone.
- It is prohibited to walk or stand in the immediate vicinity of the working device.

DANGER!

Staying under a suspended load is strictly prohibited.

Assigned use:

- The trailer is intended for taking timber and energy wood material out of forest.
- The trailer should not be used for carrying people or living creatures.
- It also prohibited to use the trailer for winching or towing.

ATTENTION!

Trailer use:

There should be no shock loadings. The device controls must be handled with care, especially in cold conditions. Movements to utmost positions should not be at full speed.

- It is prohibited to use a defective device or the device unprepared for operation.
- Operating the device, ensure that:
 - The fitted warning and safety devices shall not be removed or altered, they shall be used properly.
 - Regular safety checks and related tests shall be run on the device.

Operating temperature:

- The trailer minimum recommended operating temperature is -25 ° C..
- In case of low temperatures, the higher user risk of the hydraulic system seals, hoses, and steel construction must be taken into account.

ATTENTION!

If work is started in colder conditions, oil must circulate freely through the valve block for a few minutes.

- The hydraulic oil maximum temperature is +75 °C.

It must be noted that the manufacturer is not liable for damages caused by:

- Faulty use, negligence, or misuse.
- User errors proceed from faulty use caused by untrained professionals.

When departing, ensure that accidental or unauthorized use of the device is impossible. When parking, ensure the support.

7.2 TEST RUN CHECK

Operating the trailer for the first time, learn about the device and complete a test run. Before the trailer test run, familiarise yourself with the functions and general use of the device.

Before the test run, ensure to do the following:

- Read section 4 regarding the installation check. The trailer should not be used unless the installation check has been done.
- Check the trailer and the base vehicle hydraulics for quantity of hydraulic oil.
- Learn the functions to move the cylinders.
- Check that the hoses can move freely. Remove possible transportation struts and connections.
- Check that the pins, fingers, cotter pins, bolts, and nuts are fixed and in place.
- Ensure that no unauthorized persons and obstacles are in the trailer risk zone.
- Check that the trailer test run area is flat and firm.

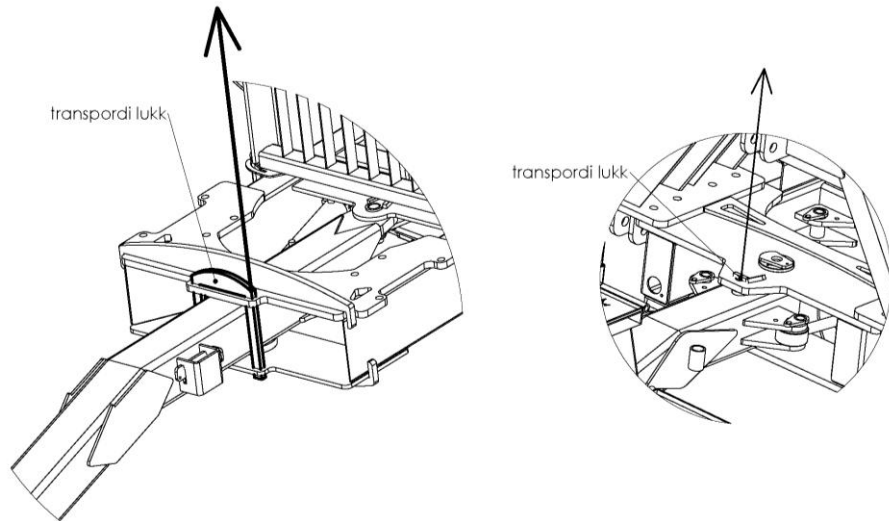
The trailer hydraulics should not be turned on unless the trailer hydraulic hoses are connected and fixed to the hydraulics of the base vehicle in accordance with section 5.

7.3 TEST RUN

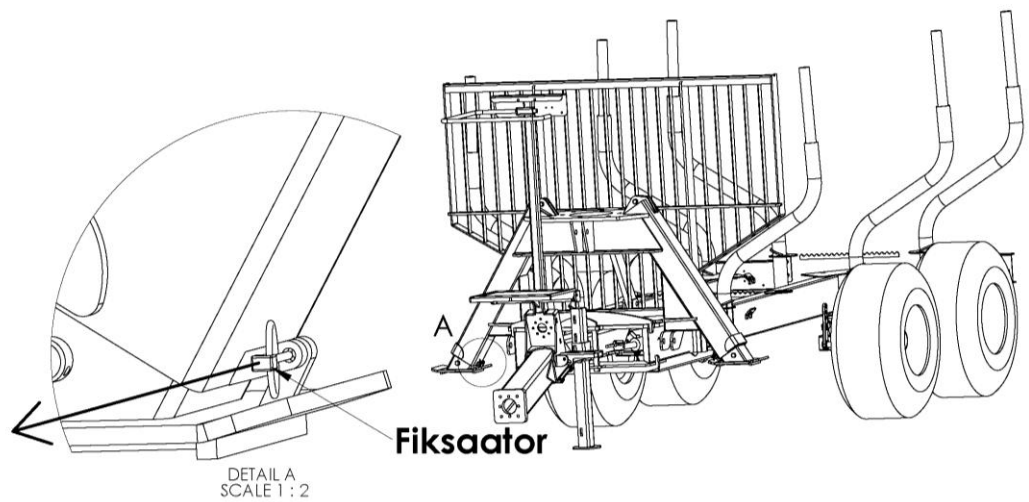
Prior to the trailer test run, its hydraulic system should be connected and fixed with the hydraulic system of the base vehicle. The trailer supporting legs must be in the upmost position, and the valve block joystics, in the middle position.

Before the test run ,ensure that the following has been accomplished:

1. Remove the transportation lock from the trailer drawbar. The presence and appearance of the trailer drawbar lock varies among different trailer types.



2. Remove the retainers from the supporting legs.



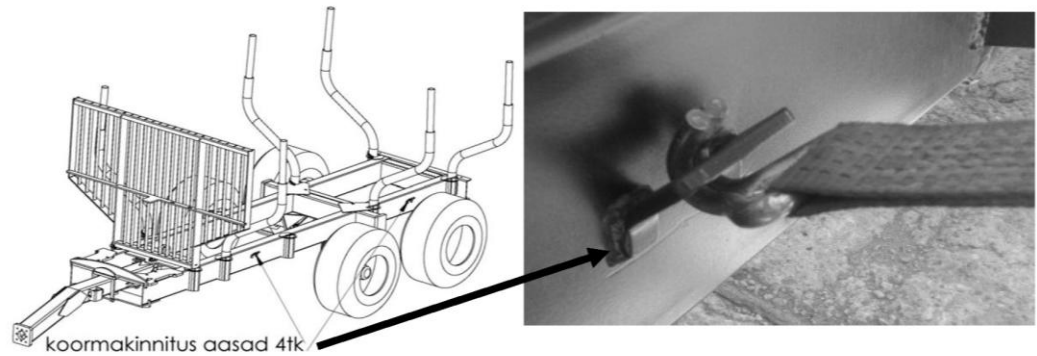
3. Test the brake system.
4. Check that the hoses can move freely so that they do not end up fixed in different positions, also do not rub against the sharp trailer edges.
5. Open the flow to the trailer. Let oil circulate through the valve block for a short period of time.
6. Lower the supporting legs.
7. Move the cylinders separately with caution from one utmost position into another until the movements become smooth.

ATTENTION!

If there is air in the cylinders, be very attentive! Remove the entrapped air from the cylinders with caution! If the cylinder goes in the utmost position with full force, the air pressure crashes the cylinder seals.

8. Move the empty trailer (with lifted supporting legs and removed mechanical retainer) through all the trailer routes, and pay attention to the positions, where the device may bump into barriers.

9. Once the material has been loaded, attach the loading strap firmly to the appropriate loop with the tow.



10. Move the loaded trailer slowly into various utmost positions and maneuver. Check the trailer on slopes and rugged terrain in learn different utmost positions.
11. After the test run, check and repair the leak connection points, if necessary.
12. Check and tighten the retention bolts, if necessary.
13. Check the hydraulic oil and add more, if necessary.

7.4. OPERATING THE TRAILER

Before moving the trailer, it must be ensured that the support legs are lifted in the upper position. Before operating the trailer, a test ride should be done, and the trailer brakes, tested.

To drive on the road, the draw bar and the supporting legs should be fixed mechanically with mechanical retainers. While driving on public roads, comply with the current traffic legislation.

Driving in the forest area:

- The mechanical retainer of the drawbar should be eased.
- When encountering hilly terrains, drive up the hill, thus decreasing the risk of a rollover.
- Rotating the drawbar helps maneuver in confined places.
- When driving up the hill, the centre of gravity of the carrying device moves backward. In such conditions, it is recommended to support the front side of the tractor or use additional weights in the front.
- The centre of gravity of the trailer when loaded is higher than the centre of gravity of the base vehicle. This means that the base vehicle is able to pass critical ground, but a loaded trailer is not.
- It is much harder to maneuver a loaded trailer rather than an empty one. It is therefore necessary to adjust the load size according to the soil type and skills.

7.5. WORKING WITH THE TAILER

ATTENTION! If an accident happens and the device turns out defective, the working process must be stopped immediately. Work can be resumed only after repair works.

- Ensure that when operating the trailer, there are no people in the risk zone and that the risk zone is clearly visible - the risk zone is 20 metres.
- Operating the trailer, the base vehicle as well as the trailer must be located on solid ground and have a stable position.

ATTENTION! While loading the trailer, it is obligatory to use the supporting legs. The legs are intended to support the trailer and crane additionally during loading and not raising the trailer and load above the ground.

ATTENTION! While loading, the base vehicles parking brakes must always be used. The trailer hub brakes or the hydro brakes are designed as driving brakes and are not intended to be used as parking brakes.

- The rollover risk is less probable when turning the trailer drawbar in the opposite direction to the crane movement.
- Even if the device has been supported with legs, there is always a risk of a rollover, thus, monitor stability. The empty device has a higher rollover risk.
- Avoid working in extreme conditions.
- The trailer loading capacity must not be exceeded.
- In extreme conditions or on a very bumpy surface, the trailer should not be loaded to the maximum.

NOTE! Different materials may weigh differently, although having similar appearance.
WARNING! Working on slopes, the trailer should not be loaded to the maximum capacity limit, and it is important to be exceptionally careful.

DANGER! When working near electrical wires, be careful. Keep the safety distance.

WARNING		
Nominal tension	Minimum distance from uninsulated wire	Minimum distance from insulated wire
U kv	m	m
U<1	2	0,5
1<U<45	3	1,5
U<110	5	

7.6. EMERGENCY

If the device is about to roll over, keep your hands firmly fixed on the wheel and stay in the cabin – the cab operator is best protected in the cabin. Do not try to exit the cabin.

Should the device be in connection with a power line, act as follows:

- In case of being outside the device, it is forbidden to touch its parts.
- Being in the base truck, you should jump out. Jump keeping your feet together, leaping at least 20 meters away.
- You should immediately call for help and ensure that no one enters the risk zone (20m).

8. TRAILER REMOVAL

Upon removal of the trailer from the base vehicle, the surface hardness and evenness under the trailer must be checked.

ATTENTION! Before the quick disconnection of the trailer from the base vehicle, the base truck pump should always be shut down.

WARNING! Removing the trailer from the base truck, there should be no unauthorized persons in the storage area or its immediate vicinity, equally important, there should be no threat to others.

Special attention should be paid to the hydraulic valve block storage area, so that it would be inaccessible to any third party, such as children.

Removing the trailer from the base truck:

1. Ensure there is sufficient support under the drawbar and blocks under the wheels to prevent trailer movement.
2. Turn off the tractor oil pump and shut down the engine.
3. Disjoin the hydraulic hoses and electrical cables from the base vehicle and cover the ends with caps in order to prevent dirt from entering the hoses.
4. Finally, relieve the trailer from base vehicle tow.

9. TRAILER STORAGE

For the long-term sustainable use of the trailer, the following must be followed when loading the trailer:

- Damaged paint surfaces should be cleaned and, if necessary, re-painted.
- The trailer should be lubricated carefully (see the user manual sections 14-15)
- Pressure should be removed from the cylinders.
- The visible parts of the cylinder and control valve spindles must be protected with grease.
- The trailer must be stored indoors or under shelter.

When operating the trailer again after storage period, the protection grease from cylinder plunger rods and the spindles of valve block must be removed.

10. MAINTENANCE

The trailer must be maintained regularly in order to ensure its safe and smooth functioning.

- Appropriate tools must be used for maintenance and repair works.
- Dismantled parts and repaired parts must be well-protected.
- Kerosene should be used for washing parts, but not fuel oil under any circumstances.
- The valve block regulation and repair must be done at the service shop.

The trailer maintenance scheme is shown in the table below; the trailer lubrication points, in attachment of current user manual.

MAINTAINED PART	OPERATION		
	Maintenance in working hours		
	10h or after the shift	50h or after the week	100h
1. General	Cylinder and hose leak check	Finger and lock check. Bolt tightening check.	Visual check of main constructions
2. Drawbar	Slider bearing lubrication. Plastic bearing lubrication.		Bolt tightening. Tow check.
3. Balance pirks	Slider bearing lubrication		Bolt tightening
4. Lights	Check		

Drawbar:

- The tow must be checked regularly - should a defect be found or should the tow wear out, it must be replaced.
- It is necessary to check and replace the plastic sliders with the new ones in case of wear.

Replacement of bearings:

- When installing sleeve bearings, a proper installation tower must be used.
- Grease lubrication should feed the greasing nipple.
- The greasing pockets in the bearings must be filled with grease.

Tire pressure depends on tire dimensions and weight that is implemented on the tire. Information about correct tire pressure can be obtained from dealer.

Different trailer bolt torques are as follows:

- M8 23Nm
- M10 48 Nm
- M12 83 Nm
- M16 200 Nm
- M18 250Nm
- M20 320 Nm

In case of any failure, the faulty location should be identified before repair works. Electric and hydraulic system malfunctions may be eliminated and the supporting structures welded by authorized professionals only.

In case of hydraulic system leakage, follow section 1.4 of the user manual.

Welding is permitted only in agreement with the manufacturer. If it is necessary to make a change or repair welding, the following must be taken into account:

- The welder must be qualified, the welding quality class 3, with no welding flaws allowed.
- The place to be welded should be free from paint and oil.
- The grounding wire must be securely attached to part of the welding, joints should not be inbetween.
- OK 48.00 or equivalent is the suitable welding electrode. The electrodes must be dry.

DANGER!

Amateur repair welding can cause construction breakage.

11. OILS AND LUBRICANTS

ATTENTION!

The smooth functioning of the device is a result of the proper use of lubricants and hydraulic oils.

- The trailer should be lubricated in accordance with section 10 of the maintenance scheme.
- Always use the oil and lubricants recommended by the manufacturer.
- In cold weather conditions, use appropriate oils and lubricants.
- Different liquids or oils should not be mixed.

11.1. OIL CHANGE

Oil should be changed in accordance with basic vehicle maintenance recommendations.

Trailer cylinders are factory-filled using the MG46 oil.

If the oil temperature does not rise above 70 °C in summer, winter oil can be used all year round. During oil change, the compatibility of various oils as well as the remaining quantity of oil must be taken into account.

11.2. OIL REQUIREMENTS

Pour point must be below -50 °C. Viscosity should not drop below 1.5 E°, +50 °C in displacement piston pumps and below 2.5 E°, +50 °C in gear pumps.

Hydraulic oil must include the necessary ingredients to improve the lubricity as well as to prevent corrosion and foaming.

11.3 TABLE OF APPROVED OILS AND LUBRICANTS

The table below shows recommended oils and lubricants produced by different companies.

OIL BRAND	HYDRAULIC SYSTEM		GREASE
	SUMMER	WINTER	
BP	ENERGOL SHF 46	ENERGOL SHF 32,22	ENERGREASE LS EP2, L21M
ESSO	UNIVIS N46	UNIVIS N 32,22	BEACON EP2, MULTIPURPOSE GR MOLY
MOBIL	DTE16	DTE 15,13	MOBILUX EP 2. MOBILUX EP 2 MOBIL GREASE MP, SPECIAL
SHELL	TELLUS OIL 746	TELLUS OIL T32,22	ALVANIA EP GREASE 2
TEBOIL	HYDRAULIC OIL 46	HYDRAULIC OIL 32,33	SOLID 2/ summer SOLID 0/ winter
UNION/ TEXACO	RANDO OIL HDZ 46	RANDO OIL HDZ 32., HYDRAULIC OIL HD 5W	MARFAK MULTI PURPOSE 2, MOLYTEX GREASE 2

Warranty- /assignment cartificate

- Warranty terms** - Valid between retailer (Trejon AB dealer) and machine purchaser.
- General about warranty** - In order to obtain valid warranty terms set forth below, and the specific warranty terms set by each provider. These are attached to the user manual for each machine, as appropriate.
- Validity of warranty** - The warranty is 12 months from date of purchase when used for personal use.
In some cases, the guarantee can be limited by running time.
- The warranty covers** - Damaged parts, which have broken down because of defective production operations of materials in course of **normal use of the machine**.
- Only the labor cost for replacement of defective warranted part.
- The warranty does not cover** - Transport costs applicable to the machine or the parts.
- Travel costs.
- Any resulting costs incurred as a result of damage to the machine.
- If the machine has been modified by the owner.
- Damage due to normal wear and tear of the machine – Not related to manufacturing defects, poor service, user inexperience or use of spare parts that are not original.
- Excessive or inappropriate use of the machine.
- The warranty is not applicable to parts which are subject to wear, for example hoses, sealing, oil, belts, batteries, chains, knives etc.
- The warranty period for replaced parts during the warranty period expires with the machine's warranty.
- Normal adjustments, maintenance or supervision
- Warranty procedures** - Contact place of purchase as soon as any damage or malfunction is detected.
Do not use the machine if the damage can be worse.
- Warranty repairs must be performed by Trejon AB approved workshop.

ATTENTION! The guarantee shall enter into force provided that the machine **WARRANTY/ ASSIGNMENT CERTIFICATE** has been fully completed and signed by both parties (seller, buyer), and a copy sent in to Trejon AB no later than 14 days from date of sale (the seller is responsible for this happening).

Assignment certificate:

Machine Buyer shall confirm with his signature that he had received manual containing operating instructions, and received information about the operating, security and maintenance requirements described in this and made the final inspection of the machine.

PLEASE FILL IN!



Product: _____ Serialno. _____

Salesman: _____ Company: _____

Signature of salesman: _____ Date of purchase: _____

Name of buyer: _____ Telephone: _____

Address: _____ Zipcode: _____

City: _____ Country: _____

Date: _____ Signature of buyer: _____

EC-Certificate of Conformity

Oniar LLC -
Pargi 16, Märjamaa, Estonia -

declares that the marketed device,

timber trailer
(mark)

.....
(serial number)

complies with the following directives: EU Machinery Directive 98/37/EU, EMC Directive 89/366/EU, and related amendments.

The device design complies with the following standards: EN292-2, EN294, EN982, EN60204 – 1.

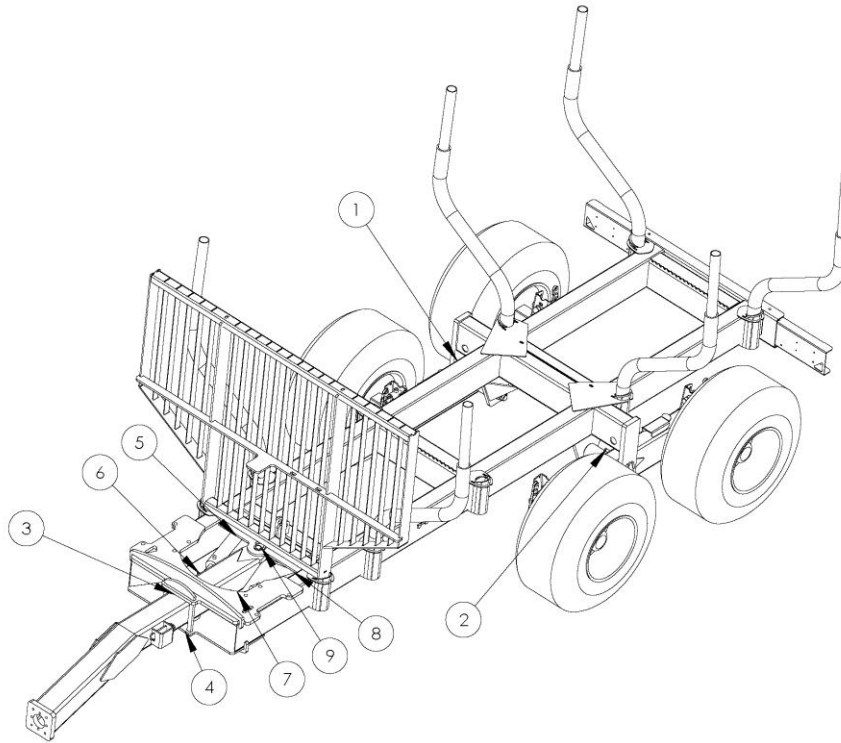
Rebuilding the device, the person in charge must ensure that the conversion is carried out in accordance with the above mentioned directives. After rebuilding, the person in charge must provide the product CE marking.

Märjamaa, June 29th, 2010



Mr Rein Loel
Chairman of the Board of Oniar LLC

Attachment 1. Trailer lubrication points scheme



Trailer lubrication points scheme:

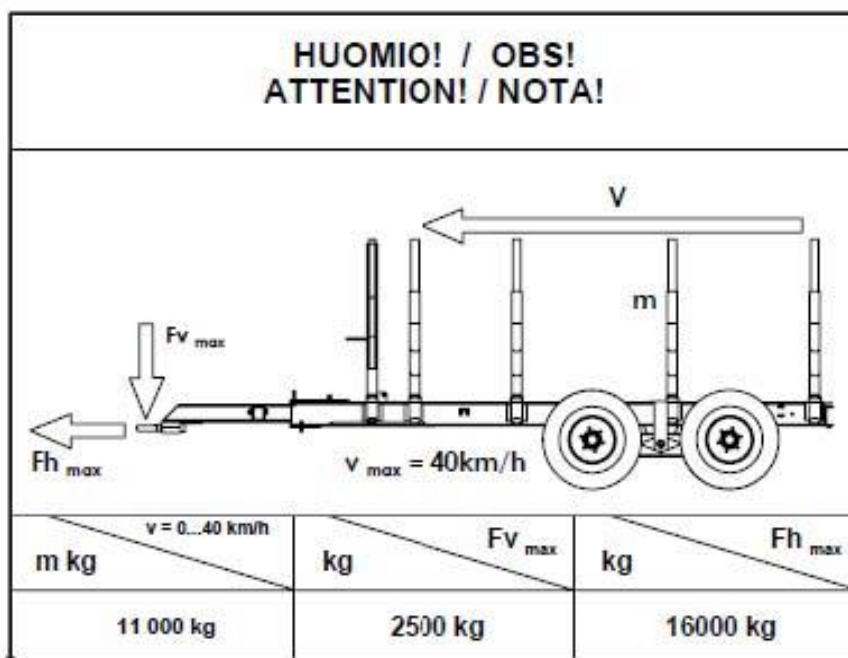
- 1. Right bogie bushing;
- 2. Left bogie bushing;
- 3. Drawbar upper slider;
- 4. Drawbar bottom slider;
- 5-8. Drawbar turning cylinder bearing eyes;
- 9. Drawbar bushing

Attachment 2. Trailer technical data

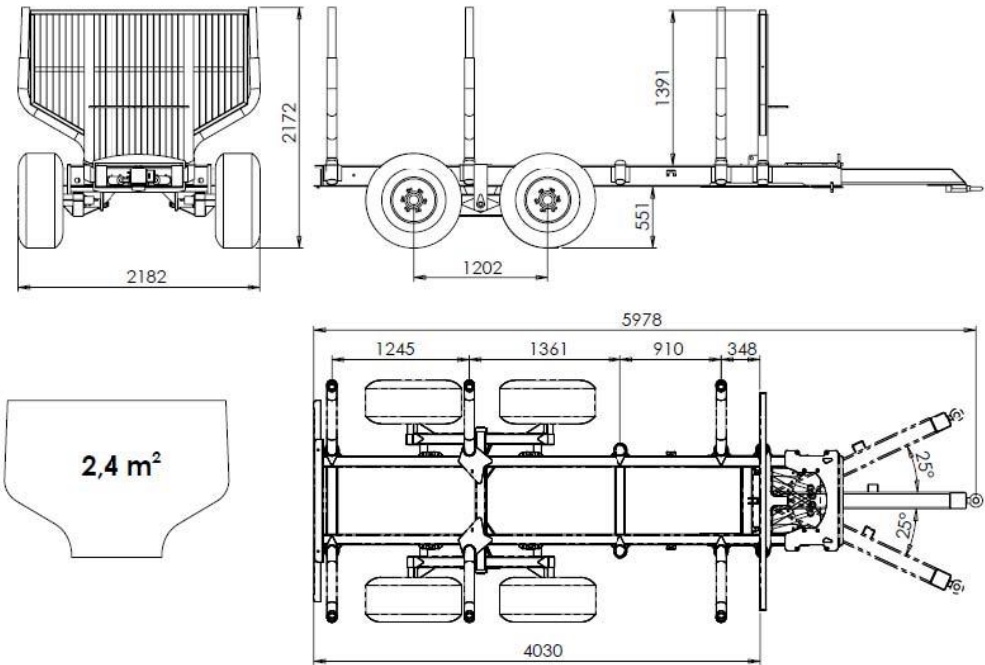
Trailer MF110:

- weight – 1400 kg
- loading capacity – 11 000 kg
- loading area – 2,4 m²
- trailer frame profile – 200x100x6 mm
- standard axles – 80x80 mm
- standard wheels – 400/60-15,5

Maximum weights allowed to use on the trailer:



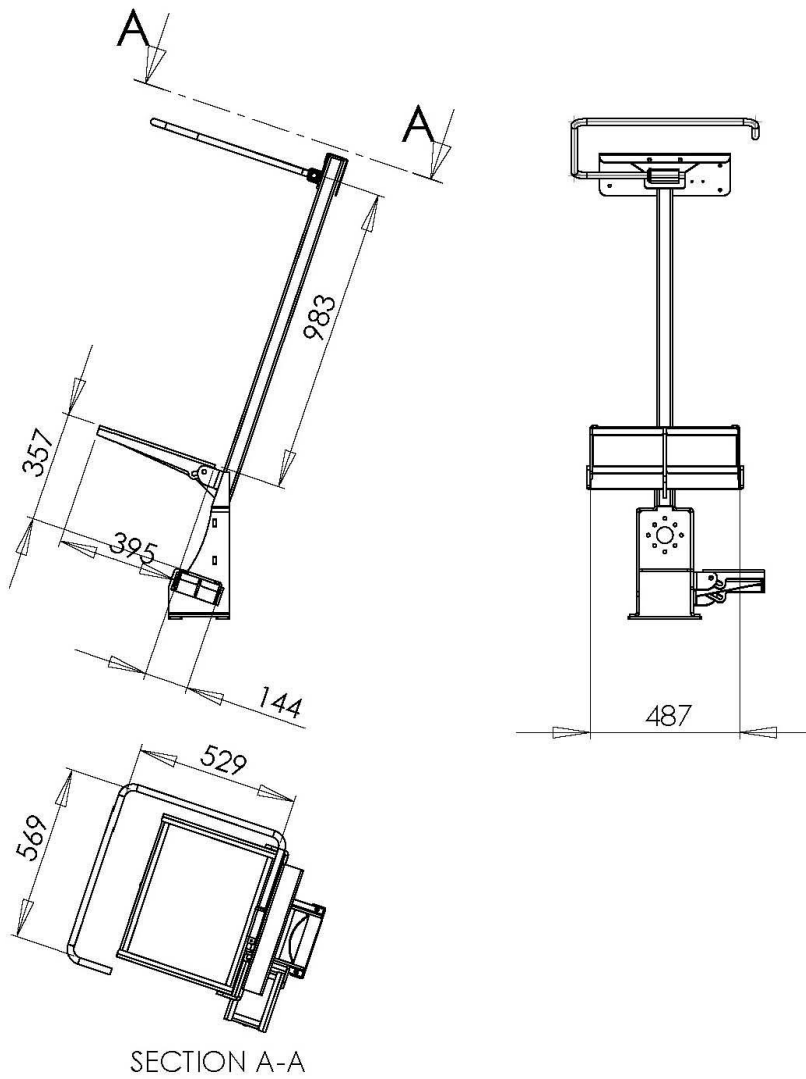
Trailer MF110 measures with straight drawbar nr 91344 and bogies nr 91353:



Attachment 3. Trailer attachments

Management platform for crane:

- weight – 40 kg
- fastening to 150x150 mm draw bar HUP profile.



Trailer MF110 extension:

- length of the protruding part from trailer frame – 635 mm
- weight – 60 kg

TREJON AB reserves the right to change or to improve shown models using technical or commercial reasons, without demands to carry out the same improvements on equipment already delivered. Pictures in the manual do not necessarily show the equipment as delivered.

Technical data, weights and measures are without obligation. With reservation for mistakes and errors.

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MULTIFOREST»

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