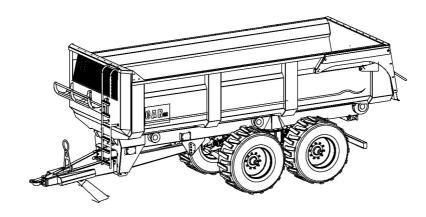


## BEARON



# CARGO

## agri trailer

## Manual

#### Peeters Landbouwmachines B.V.

Munnikenheiweg 47 4876 NE Etten-Leur The Netherlands

Tel: +31 (0)76- 5046666 Fax: +31 (0)76- 5046699 Date: 2001 Revision Nº 1

#### Included documents:

- Parts book
- P.t.o. manual (only when equipped





www.peecon.com

with optional p.t.o. pump)

#### **EEC** certificate of conformity for machines

(conforming to Directive 98/37/EEC)

Company: Peeters Landbouwmachines B.V.

Address : Munnikenheiweg 47

4876 NE Etten-Leur The Netherlands

Tel. : +31 (0)76- 5046666 Fax : +31 (0)76- 5046699

declares in sole responsibility that the product:

#### **PEECON Cargo**

Serial number: Year of building:

to which this statement relates, conforms to the following norms:

- o NEN-EN 292-1, June 24, 1992
- o NEN-EN 292-2, June 24, 1992
- o NEN-EN 294, August 25, 1993
- o NEN-EN 953, March 13, 1998
- o NEN-EN 982, October 15, 1996
- o NEN-EN 1050, October 23, 1997 NEN EN ISO 14121-1. 2007
- o EN 1553, April 15, 2000
- o NEN 5509

in accordance with the regulations of the machine directives (directive 98/37/EEC).

The Netherlands, Etten-Leur Date:

D.P.M. Peeters General manager







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Parts are subject to change at any time, without prior or direct notice to the consumer. The contents of this manual can as well be changed without prior notice. For information about adjustment, maintenance or repairing, which are not mentioned in this manual, you are advised to consult the technical support of your supplier.

This manual has been made with all possible effort, but Peeters Landbouwmachines B.V. cannot be responsible for possible mistakes in this manual, nor for the consequences.







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#### 1 Introduction

#### 1.1 General

Congratulations with your new

#### PEECON Cargo tipping trailer

With a PEECON you are assured of quality and performance. The PEECON Cargo series was produced after intensive research and tests. One of the main goals was to produce machines meeting the latest norms and prescriptions of the EEC in use, operation, safety, maintenance and lifetime.

Before you put your tipping trailer into use, we ask you to read this manual very carefully. You will get the most benefit from your investment when you follow the instructions in this manual for use and maintenance.

PEECON machines come in different types. The specifications of your machine are marked in chapter 2. Pay regard to your type in the manual.

Directional indications such as 'left', 'right', 'front' and 'rear' are te be interpreted when facing in direction of travel, with the tipping trailer attached to the rear of the tractor.

#### 1.1.1 Destination and intended use

 The tipping trailer is used for transporting and unloading of various loose materials by tipping.

Every other use than described above excludes your supplier from every responsibility.

#### 1.1.2 Customers

The customers this manual refers to, are supposed to be competent and technically skilled persons.

Competent persons are persons who:

- have obtained a certain knowledge by means of course/training (intern course specifically for the Cargo) and who
- are proficient in using the machine.

Technically skilled persons are persons who:

- are competent and who
- have obtained a certain technical knowledge by means of course/training and who
- are acquainted with the technique of the machine and who are aware of the possible dangers and risks (f.e. a service mechanic of Peeters Landbouwmachines B.V.)







With operating we mean:

adjusting the machine, working with the machine, cleaning and doing simple maintenance.

The goal / function of this manual is to create a safe and efficient interaction between human and machine.

#### 1.1.3 Used symbols

To focus on certain subjects or actions, the following symbols are used.



#### WARNING / DANGER OF LIFE

You can injure yourself if you don't execute the procedures carefully.



#### CAREFUL

The machine can be damaged if you don't execute the procedures carefully.



#### ATTENTION

A remark with additional information; warns you for possible problems.



#### TIP

Gives you suggestions and advises to make certain tasks easier or handier.

For questions or problems this manual doesn't answer, consult your dealer or Peeters Landbouwmachines B.V.

Peeters Landbouwmachines B.V. Munnikenheiweg 47 4879 NE Etten-Leur (The Netherlands) Tel. +31 (0) 76 504 6666 Fax + 31 (0) 76 504 6699 www.peecon.com







#### 1.2 Liability and warranty

- You may not deviate from the intended use mentioned above in any way, without written permission of the manufacturer. If you do, liability and warranty will expire.
- Original Peecon accessories can be installed afterwards, if done by the manufacturer or the dealer, in accordance with the assembly and control indications of the manufacturer.
- Modifying the machine is not allowed. All liability and responsibility of the manufacturer will expire. Resulting damage, also damage to third-party, are never covered by the guarantee.
- Before the product left the factory, a lot of care was taken to save you from material and/or manufactural defects. If these might still appear, PEECON will place all parts that show defects after normal use at your disposal, free of charge, until twelve months after delivery (with the exception of wear). This warranty will expire if the prescriptions in this manual are not completely or not correctly followed up.







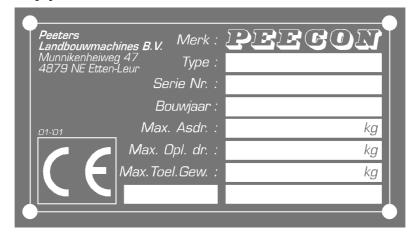
#### 2 Your machine

#### 2.1 Composition of your machine

(the marked specifications apply to your machine)

Type	<ul> <li>□ 14.000</li> <li>□ 16.000</li> <li>□ 18.000</li> <li>□ 21.000</li> <li>□ 25.000</li> <li>□ 16.000 Dumper trailer</li> <li>□ 20.000 Dumper trailer</li> <li>□ 25.000 Dumper trailer</li> </ul>
Weighing system	<ul> <li>None</li> <li>Electronic weighing system with 4 weighing bars</li> <li>Electronic weighing system with 6 weighing bars</li> <li>Printer</li> <li></li> </ul>
Axles	<ul> <li>Tracked steering with hydraulic blocking (standard for Cargo Tridem)</li> <li>2<sup>nd</sup> tracked steering with hydraulic blocking for Cargo Tridem</li> <li>Mechanically forced steering of the rear axle</li> <li>2 mechanically forced steering axles (for Cargo Tridem)</li> <li>Hydraulically forced steering of the rear axle</li> <li>2 hydraulically forced steering axles (for Cargo Tridem)</li> <li>Air-braked axles</li> </ul>
Tires	(fill in at delivery)
<b>O</b> ptional	<ul> <li>□ Support for the bin so you can dismount it</li> <li>□ Hydraulic supension / adjustable pole</li> <li>□ Rear panel with 2 hinging doors and 2 sliding grain unloading doors.</li> <li>□ P.t.o. pump 40 litres with p.t.o. shaft</li> <li>□ Double-acting slip-foot</li> <li>□ Other:</li> <li>□</li> </ul>

#### 2.1 Identity plate



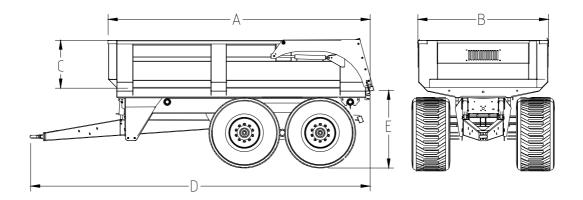






#### 3 Technical specifications

(The type of your machine is marked on page 4.)



Туре	Α	В	С	D	Thickness	Netto	Capacity
	(mm)	(mm)	(mm)	(mm)	of plate	machine	$(m^3)$
					(mm)	weight (kg)	
Cargo 14000	5000	2280	1200	6550	4	4500	14
Cargo 16000	5750	2280	1200	7300	4	5250	16
Cargo 18000	6500	2280	1200	8050	4	6000	18
Cargo 21000	7250	2280	1200	8800	4	7000	20
Cargo 25000	7250	2280	1200	8800	4	8500	20
Cargo 16000	5000	2280	600	6500	6	4900	7
Dumper trailer							
Cargo 20000	5000	2280	900	6550	6	5750	10.4
Dumper trailer							
Cargo 25000	5000	2550	1000	6550	8	6500	11.5
Dumper trailer							

#### Standard design Cargo

Universal painted chassis, air-suspended pole with low or high hitch (from Cargo 18000 and up: hydraulic suspension / adjusting), hydraulic jack, suspensioned 10-bolt axles hydraulically braked with tread 1900 mm, bin hydraulically tipping by means of the hydraulic system of the tractor, hydraulically operated rear door with grain flap, steel bottom and walls, thickness 4 mm, tires Cover 15x22.5

#### Standard design Cargo dumper trailer

Universal painted chassis, air-suspended pole with low or high hitch (from Cargo 20000 and up: hydraulic suspension / adjusting), hydraulic jack, 10-bolt swing-set axles hydraulically braked with tread 1900 mm, bin hydraulically tipping by means of the hydraulic system of the tractor, hydraulically operated rear door, steel bottom and walls, thickness 6 mm (model 25000: 8 mm), tires Cover 15x22.5







#### 4 Safety

#### 4.1 Safety instructions



#### DANGER OF LIFE

- Starting, working and testing may never occur in a closed space, in connection with the danger of inhaling the exhaust-gases!
- Look around the machine (and tractor) before driving away and before putting the machine into operation! Pay attention to children! Ensure you have sufficient sight!
- It is forbidden to stand on the machine during work and transport!
- Don't stand between the machine and the tractor, unless the vehicle is protected with a hand-brake and/or wheel blocks against rolling away!
- Don't come in the working and danger range of the machine.
- Stay away from the slewing area of the machine.
- Ensure the machine is attached well to the tow bar. Especially mind locking the pivot with f.e. a locking pin. In case of a forced control, perform the same inspection for the extra tension point.



#### WARNING

- Observe the specific indications of this user manual, but also the general applying prescriptions for safety and accident prevention!
- Become familiar with all systems and control elements and their functions, before working with them! During work it's too late for that!
- Before every use, check machine and tractor for safety of work and traffic!
- Read the manual of the p.t.o. carefully, before working with it!
- As a user, wear close-fitting clothing! Avoid loose clothes!
- Always adapt driving speed to the circumstances of surroundings and terrain!
- Don't make any sudden turns when driving up- or downhill or transverse on a slope.
- Never let the tipping trailer tip on a slope! The danger exists that it falls over.
- Carried or pulled machines, but also front-end weights influence the moving behaviour, steerability and braking performance! Ensure sufficient braking effect and manageability!
- When turning, take care of the larger width (turning circle) and/or bigger mass (slowness) of the machine!
- The machine may only be operated by one person at a time!
- Secure the machine before leaving the tractor! Shut down the motor and remove the ignition key. In case of electric control, always deactivate the gear functions and remove the plug.
- When working with the p.t.o., no one is allowed to stand in range of the spinning p.t.o. and the shaft!
- Attach the machine in accordance with the prescriptions and take care of a good connection!
- Take special care when attaching and detaching the machine!
- Do not operate a machine unless all protection is installed and in functional position!
- Immediately repair damage, before you work with the machine again!







Check hydraulic hoses for damage regularly. Damaged hoses have to be replaced immediately with hoses of prescribed quality (SAE 100 R2A in accordance with DIN 20022/2). Never attempt to stop a hydraulic leak with your fingers. High pressure hydraulic fluid easily penetrates skin and clothes, causing severe injuries and bloodpoisoning.



#### CAREFUL

- Verify the chosen rotating direction and the r.p.m. of the p.t.o., before the p.t.o. is switched on. If these are not in correspondance with the rotating direction and the r.p.m. required (look for the decals), change them!
- Never switch on the p.t.o. when the motor is switched off!
- Machines driven by a p.t.o. shaft, as well as the shaft itself, may only be cleaned, greased or adjusted, after the p.t.o. has been switched off, the motor has been shut down and the ignition key has been removed!



#### **ATTENTION**

- When driving, the driver's seat has to be taken by the driver at all times.
- Observe the legal prescriptions with relation to road transport. Also mind lights and (side) reflectors!
- Verify: the maximum admissible axle load of the tractor
  - the maximum admissible total weight
  - the maximum admissible transport dimensions
- Always switch off the p.t.o. when it's not used!
- Always mount front-end weights in accordance with the prescriptions, at the appropriate attachment points!







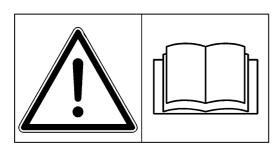
#### 4.2 Safety symbols

To contribute to injury prevention, there are placed some decals at your tipping trailer with safety and warning indications. These draw your attention to risks that are still present when working with the machine, in spite of the safe design. Before putting the machine into use, always read the manual. Always follow up all instructions from the manual.

Check if the decals are all present. If this is not the case, don't work with the machine, but contact the dealer.

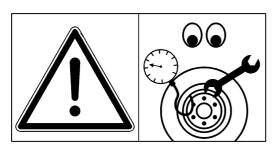
The decals consist of a picture that represents the danger (with the triangle) and a picture that makes clear how to avoid it. The decals always have to be clean and clearly legible. When damaged, always replace the decal. These are obtainable from your dealer.

#### 4.2.1 Explanation of used safety symbols



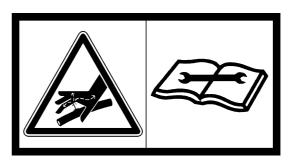
Warning

Before putting the machine into use, always read and observe the manual and the safety instructions.



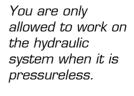
Warning

After the first operating hour and then every 25 operating hours, tighten the wheel nuts and check the tire pressure.



Warning Defect hoses can cause physical damage and

environment pollution.





Warning

When tipping on a slope, the tipping trailer can fall over.

Never let the tipping trailer tip on a slope.









#### Warning

By driving along on the tipping trailer, you can fall between the tractor and the tipping trailer. Never stand on the tipping trailer when it's moving.

#### 4.2.2 Safety symbols on the machine

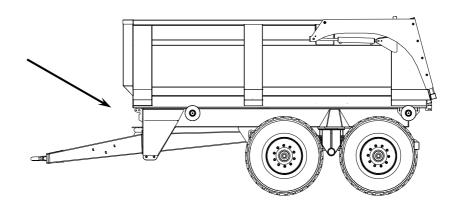


















#### 5 Introduction of the tipping trailer

#### 5.1 Attaching the machine to the tractor

- **Step 1** The towing eye of the tipping trailer has to be approached up to  $\pm$  20 cm by the tow bar of the tractor.
  - The tipping trailer and the tractor have to be secured from driving away by means of the hand-brake or wheel blocks.
- **Step 2** Connect the hydraulic connector with the hydraulic system of the tractor.
  - Open the spherical plug.
  - Shove the jack in or out with the tractor, so that the towing eye comes a little higher than the tow bar of the tractor.
  - Close the spherical plug.
- Step 3 Move the tractor backwards and put the pivot in.
  - Cotter it with the split pin.
- Step 4 Open the spherical plug.
  - Open the concerning valve, so that the oil is carried off.
  - Retract the jack completely.
  - Remove the lock pin.
  - Fold in the jack.
  - Apply the lock pin again.
- Step 5 Connect the lighting and check if it works.

Explanation of the connection pins and wires					
L	Yellow	Direction sign left			
54 G	Blue	Consistent current			
31	White	Mass			
R	Green	Direction sign right			
58 R	Brown	Lights right			
54	Red	Brake light			
58 L	Black	Lights left			

**Step 6** - Shut down the engine and remove the ignition key.





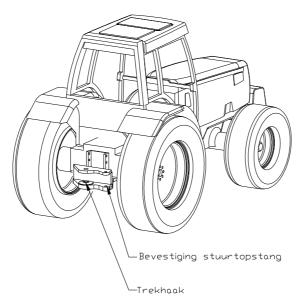


- If you have a tipping trailer with forced steering axle, an additional mounting construction has to be made for the attachment of the bar (picture 5.1). The place of this mounting construction is 20-24 cm on the right of the midpoint of the tow bar, at the same height and depth as the tow bar.

#### DANGER OF LIFE

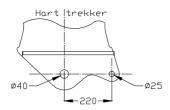
The construction of the additional attachment point has to be sufficiently solid, and the attachment of the bar has to be locked. When the bar dislodges, the tipping trailer can become uncontrollable.

#### When doubting, consult Peeters Landbouwmachines B.V. !



LET  $\Box P$  ! Bevestiging stuurtopstang op dezelfde hoogte en dezelfde diepte als trekhaak !

Bovenaanzicht trekhaak



picture 5.1: tow bar

- The tractor and the trailer have to stand in one line.
- Mount the bar (picture 6.3) to the additional construction.
- Cotter it with a split pin (if necessary you can adjust the length of the bar. Lock it again afterwards by tightening the contra nut)









#### **ATTENTION**

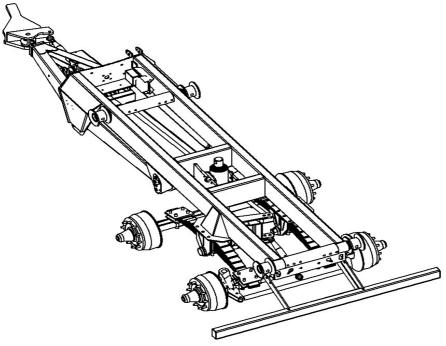
Ensure the hydraulic system of the tractor and the machine are pressureless when you want to (dis)connect the hydraulic hoses.



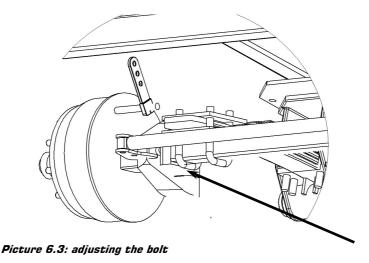
#### ATTENTION

Ensure the free-return hose is connected right to avoid pressure raise in the return pipe.

**Step 8** - Connect the hydraulic system of the tipping trailer.



When the right adjustment is found, the bolt of the maximum steered wheel (when the rear wheel of the tractor touches the pole) has to be screwed in or out till it hits the axle.

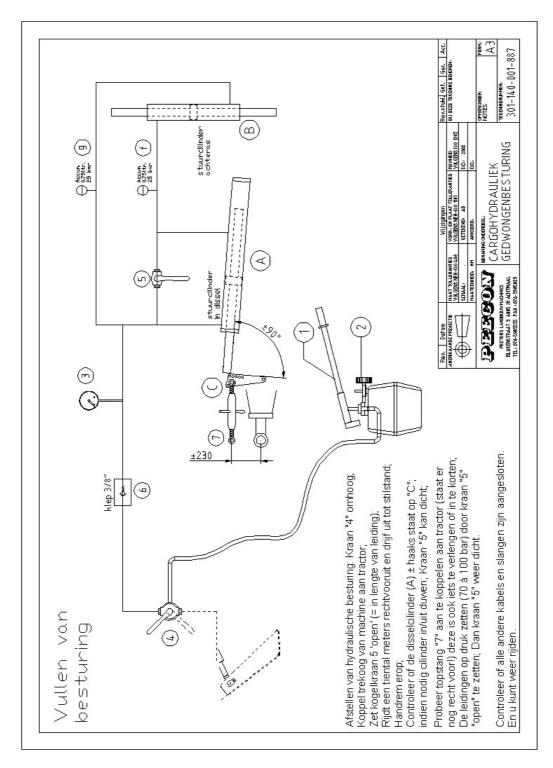








#### 5.2 Adjusting the turning circle (mechanical steering)



Picture 6.2: adjusting the turning circle (mechanical steering)







#### 6 Working with the machine



#### WARNING

Observe the important safety instructions! (chapter 4)



#### ATTENTION

Never let the tipping trailer tip on a slope. It might fall over.



#### ATTENTION

The loaded mass may not be more than the indicated type. (chapter 2 and 3)



#### TIP

During loading it is sensible to set the telescopical cylinder to pressureless return, to prevent a wrong load of the tipping trailer.

You can operate the single-acting telescopical cylinder with the tractor to tip the bin.

For types with a p.t.o. pump the tipping is done by switching on the p.t.o. You can drop the bin with the hand-operated lever that can possibly be provided of a cord.







#### 7 Optional weighing system

This chapter only has importance if your Cargo has a weighing system.

For adjusting and operating your weighing system, look in the included manual. The construction of the built-in weighing bars (also called "loadcells") has been designed so that the tank or bin is continuously weighed.

#### 7.1 General



TIP

All mechanical connections between chassis and (tipping) bin or tank, have to be avoided. The telescopic cylinder under the bin has to be pressureless at all times: the cylinder has to be able to shove in and out freely when the bin is resting on it.

The weighing indicator (display) has been designed particularly for Peecon. This also applies to the optional printer.

The entire system works on 12 volt, standard provided of a cigarette lighter plug.

#### 7.2 Certified weighing system

If you have a certified weighing system, an angle compensator is mounted next to the junction box at the inner side of the chasis. This iron box contains a chip which compensates the horizontal deviation up to 5° left and 5° right. This applies to both length and depth directions. This box may not be moved or removed.

If you have a certified weighing system, the tipping bin also has to be provided with a cylinder that pulls the pen out of the telescopic cylinder. This happens automatically after you have dropped the telescopic cylinder. Besides, the weighing display doesn't get any power until then. The telescopic cylinder only receives oil when the attaching pin of the bin is completely out. An electric switch takes care of opening the hydraulic valve, so the bin can go up. The schematic overview of these switches can be found in the enclosure.

The certified system has been calibrated and sealed by the Dutch Measuring Institute (NMI). Braking the seal or making changes is not allowed.





#### 7.3 Schematic overview

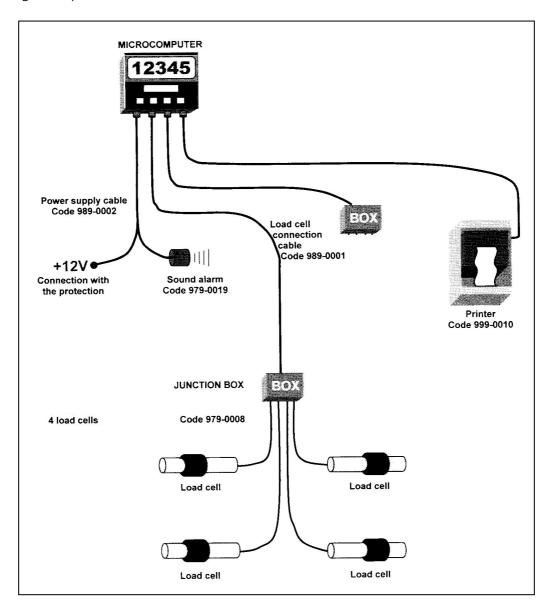
#### 7.3.1 **General**

Weighing system consists of:

- 4 or 6 weighing bars
- display/indicator
- power cable (12V)
- junction box

#### optional:

- printer
- sound alarm
- angle compensator box





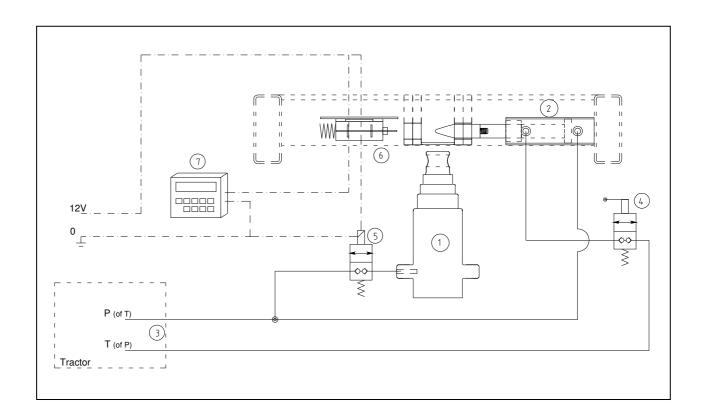




#### 7.3.2 Certified weighing system

with automatic disconnection of pin and power interruption of display. This is done by means of the following parts:

- 1) telescopic cylinder
- 2) unlocking cylinder
- 3) double-acting connection of tractor
- 4) mechanical flap: ("open" as soon as bin is down)
- 5) electrically operated flap with large oil passage.
- 6) electrical end-switch: make/break-contact for respectively electric flap, power interruption weighing system.
- 7) display/indicator, with 12V feeding.









#### 8 Maintenance and lubrication

#### 8.1 General instructions



#### WARNING

Installing, doing periodical maintenance and performing repairs, may only be done by technically skilled persons, unless indicated differently (chapter 1.1.2)



#### WARNING

When repairing, maintaining, cleaning or fixing problems: always shut down the motor, remove the ignition key and carefully observe the instructions of the manual.



#### WARNING

When mounting or dismounting, always use the right tools and wear gloves. When working on a hoisted machine, always take care of decent support.



#### ATTENTION

Damage, including damage caused by insufficient greasing, is not covered by the guarantee.



#### ATTENTION

When maintaining, no fluid (f.e. finished oil) may run off to prevent environmental pollution. Carry off the oil in accordance with the legal environment prescriptions.



#### ATTENTION

Observe the maintaining prescriptions from the manual for the optional p.t.o.

> After the first working-day, tighten the wheel nuts. From then, every 25 operating hours.







#### 8.2 Every 25 operating hours

- Grease all grease nipples.
- Check the hydraulic hoses and hydraulic cylinder for wear, leakage and damage. Replace if necessary.
- Check the wheel nuts and tighten them.
- Verify if all bolts and nuts are still tight. Tighten if necessary.

Tightening moments (of bolts quality 8.8)				
Nominal dimension	Spanner width (mm)	Tightening moment (Nm)		
M 8	13	24		
M 10	16	48		
M 12	18	85		
M 14	21	135		
M 16	24	210		
M 18	27	290		
M 20	30	400		
M 22	34	550		
M 24	36	700		

- Check wheel bearings, if necessary let your dealer or Peeters Landbouwmachines B.V. adjust them.
- Check tire pressure
- Check the oil level of the optional p.t.o. pump, if necessary refill it with hydraulic oil.
- Maintenance of the p.t.o. in accordance with the p.t.o. manual.
- For safety, replace the hydraulic hoses 7 years after date of building.

#### 8.3 Longer than 1 month out of use

- Clean the machine carefully and dry.
- Check all moving parts and protections of the machine. If necessary, replace the damaged parts.
- Check if the nuts and bolts are well tightened.
- Protect and lubricate the blank parts.



TIP

When the machine is out of use, it is better to stable it in a covered and closed place.







#### 9 Troubleshooting

Problem	Cause	Measure / solution	
Hydraulic system doesn't respond.	Hydraulic pressure hose is connected wrong	- Reconnect	
Hydraulic system doesn't function well	Hydraulic pressure hose is connected wrong	- Reconnect (return has to be free!)	
	Output of tractor pump is too small. (max 200 bar!)	- Minimum output ca. 30 litres/min - Check oil supply	
	Leakage hydraulic hoses and/or pipes	- Locate the problem and repair	

For questions or problems this manual doesn't answer, consult your dealer or Peeters Landbouwmachines B.V.

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#### 10 Parts

Instructions for ordering parts.

Your parts order has to contain the following information:

- Machine type
- Serial number
- Year of building of the machine
- Name, number and quantity of the part (look in the parts list)

For parts from which you can't find the number with certainty with the illustrated parts list, you can – to avoid a wrong delivery – send us the original part.

These parts are available from your dealer or from Peeters Landbouwmachines B.V.

Peeters Landbouwmachines BV Munnikenheiweg 47 4879 NE Etten-Leur (The Netherlands) Tel. +31 (0) 76 504 6666 Fax + 31 (0) 76 504 6699 www.peecon.com







#### 11 Hydraulicschematics

#### Drawings

