



# OPERATORS MANUAL

## UA195/340-UA300/620

ORIGINAL

ORIGINAL

### EY-VAATIMUSTENMUKAISUUSVAKUUTUS TUOTTEESTA

LLP Farm Machinery Group Oy vakuuttaa, että markkinoille saatettu kone täyttää direktiivin 2006/42/EY ja standardit SFS-EN ISO 12100 ja SFS-ISO 730:2020.

### FÖRSÄKRAN OM ÖVERENSSTÄMMELSE

LLP Farm Machinery Group Oy försäkrar härmed att följande maskin uppfyller maskindirektivet 2006/42/EY och standard SFS-EN ISO 12100 och SFS-ISO 730:2020.

### CERTIFICATE OF CONFORMITY FOR A PRODUCT

LLP Farm Machinery Group Oy certifies that the following machine, which has been brought into the market, conforms to directives 2006/42/EY and standards SFS-EN ISO 12100 and SFS-ISO 730:2020.

### SAMSVARSERKLÆRING FOR MASKIN

LLP Farm Machinery Group Oy bekrefter herved at følgende maskin, som er sendt ut på markedet, er i samsvar med direktivene 2006/42/EF, SFS-EN ISO 12100 og SFS-ISO 730:2020.

Tuote / Produkt / Product / Produkt: \_\_\_\_\_

Valmistusnumero / Tillverkningsnummer  
/ Serial number / Serienummer: \_\_\_\_\_

Teknisen tiedoston kokoaja / Teknisk  
dokumentation samlare / Technical file collector:

Valmistaja / Tillverkare / Manufacturer  
/ Produsent: LLP Farm Machinery Group Oy

Osoite / Adress / Address / Adresse: Levytie 4, FIN-74510 Iisalmi

Puhelin / Telefon / Telephone: +358 (0) 201 984 020

Paikka / Ort / Place / Sted: Iisalmi

Aika / Datum / Date / Dato: \_\_\_\_\_

Allekirjoitus / Underskrift / Signature  
/ Signatur:



Nimenselvennys / Namnförtydligande  
/ Clarification of signature  
/ Tydeliggjøring av signatur:

Jarkko Hyyrönmäki

## WARRANTY TERMS

All the products produced by LLP Farm Machinery Group Oy have twenty four (24) months warranty.

During the warranty period all the defects in material and in workmanship will be covered, in practical life FMG will replace defected parts with the new parts. Travelling expenses and freight of parts are not included in warranty.

Warranty will start in the beginning of usage of the product, if nothing else has been agreed.

Warranty is not covering damages due to misuse of product or use in the purposes where it has not been designed, lack of services or product has been modified without the permission of FMG.

Wearing of the normal usage is not covered by the warranty.

Losses in income, costs and loosen working hours caused by the defected part is not covered by the warranty.

Warranty repairs should be done by the FMG service dealer or service dealer appointed by the manufacturer.

In case the defects shown in reclamation is not valid or if case otherwise is not in the warranty area FMG has right to reject from the compensation.

Warranty reclamation should be done in written form by the FMG seller within one (1) month after notifying the defect.

In case of defect procedure is as follows:

- clarify the defect and defected area
- be prepared to deliver defected parts to the manufacturer
- contact FMG seller and make reclamation as follows:
  - type of the product and serial number
  - delivery date of the product (invoicing date)
  - date of the damage
  - description of the damage and pictures
  - description of the working conditions and the type of the base machine

## TO THE OPERATOR

The purpose of this manual is to provide support and instructions to U-plough users. Manual contains detailed instructions for driving, operating and maintaining the U-plough. Make sure that your new U-plough is always handled and maintained in the correct way in order to ensure reliability and economical operation for many years.

We recommend that you read the manual thoroughly. Follow the maintenance and service program carefully and include the daily maintenance in your normal routine. This is both you and your tractor interest.

Maintenance, repairs and adjustments which are not described in this Operator Manual require the use of special tools and exact technical data. In case of that kind need please contact your FMG seller or factory.

Use only genuine FMG spare parts for optimum performance from your tractor and U-plough. Spares will be sold through the FMG seller.

## TABLE OF CONTENTS

<b>TABLE OF CONTENTS</b> .....	<b>5</b>
<b>1. SAFETY INSTRUCTIONS</b> .....	<b>6</b>
<b>2. CONSTRUCTION</b> .....	<b>8</b>
<b>3. TECHNICAL SPECIFICATIONS</b> .....	<b>9</b>
<b>4. U-PLOUGH USE</b> .....	<b>9</b>
4.1. Using area .....	9
4.2. Instructions .....	9
4.3. U-plough use .....	10
<b>5. SERVICE</b> .....	<b>10</b>
5.1. Daily service .....	11
5.2. Weekly service .....	11
5.3. Service after 500 working hours.....	11
5.4. Annual service.....	11
5.5. Lubricating points .....	12
5.6. Screws to be tighten .....	13
<b>6. ELECTRIC VALVE AND SIDE LIGHTS CONNECTION</b> .....	<b>14</b>

## 1. SAFETY INSTRUCTIONS

This section summarizes the regulations that must always be followed when working with the U-plough. However, these regulations do not exempt the driver from statutory and other national regulations regarding traffic safety and occupational health and safety. Safety regulations that apply to different types of working sites and existing road traffic laws must always be observed. Tractor safety regulations accepted by the Finnish occupational safety and health administration have already been taken into account in the equipment design. The following section describes general safety precautions that must be observed regarding the use of the U-plough.



### IMPORTANT

**Do not use the U-plough for other purposes than it has been designed. Please read this manual carefully before using the implement.**



### IMPORTANT

**Before driving, make sure that all movements and functions work correctly.**



### DANGER

**When testing different movements, make sure that there is not anyone close to tractor. Safety distance 5 meters.**



### IMPORTANT

**Advise other users to use the implement and ask them to read the manual.**



### DANGER

**Do not operate with the damaged implement.**



### IMPORTANT

**Use the rotary beacon while working.**



**WARNING**

Observe Operators Manual instructions while working.



**WARNING**

Pay attention to other road users.



**IMPORTANT**

Lower implement always down to ground and stop the engine before leaving the cab.



**IMPORTANT**

Do not leave the implement resting on the hydraulics when serving or checking, use mechanical support. Always stop the engine for maintenance.



**WARNING**

Do not disconnect, connect or tighten hydraulic quick couplers when pressure is on.



**WARNING**

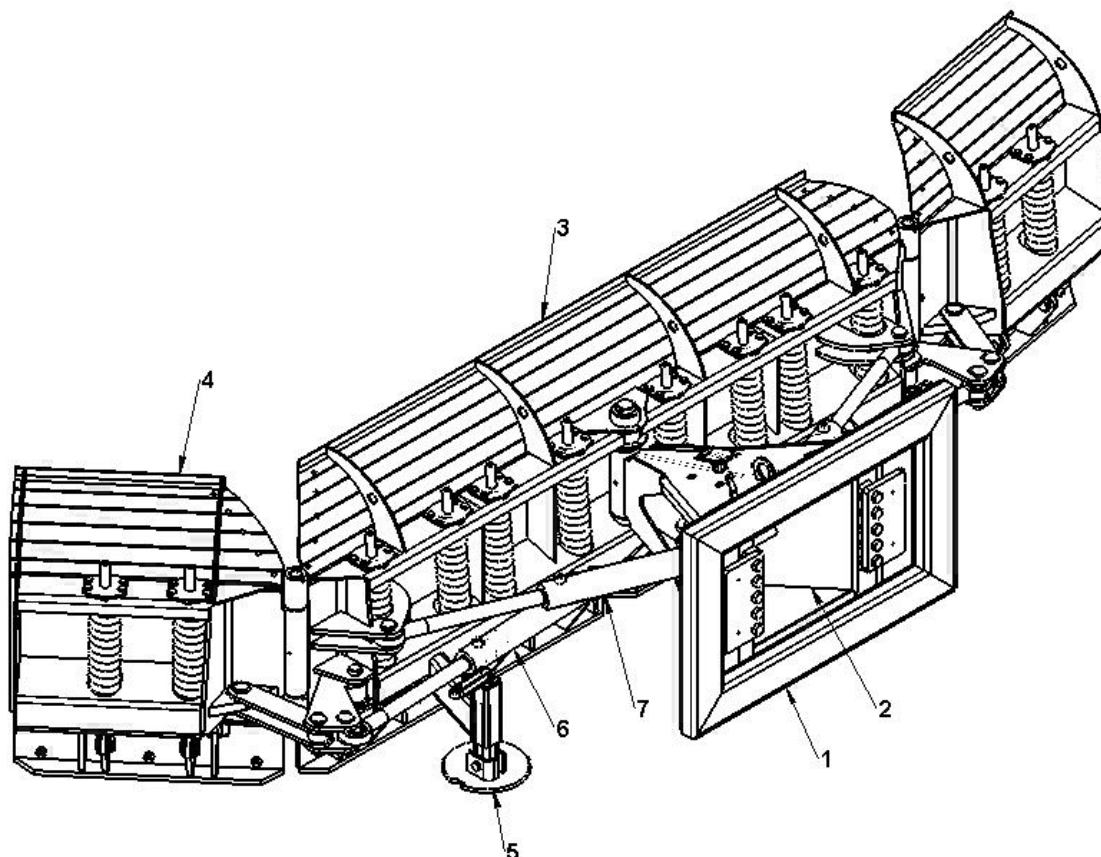
Do not inhale oil mist if a pressurized component becomes damaged. In case you have got oil in eyes wash eyes with running water and go to doctor if needed.



**DANGER**

Pay attention to the direction of the articulated plough in relation to the tractor. The plough attempts to steer the tractor.

## 2. CONSTRUCTION



- 1. Machine bracket (adapter)**
- 2. Joint frame**
- 3. Main wing**
- 4. Side wing**
- 5. Support leg**
- 6. Side wing cylinder**
- 7. Main wing cylinder**



### 3. TECHNICAL SPECIFICATIONS

Model	Working width (cm)	Height (cm)	Weight (kg)	Main wing turning angle	Side wing turning angle
UA195/340	187 – 357	95	900	+/- 37	+/- 175
UA195/370	187 – 382	95	950	+/- 37	+/- 175
UA245/410	248 – 418	95	1065	+/- 37	+/- 175
UA245/435	248 – 443	95	1115	+/- 37	+/- 175
UA300/460	309 – 479	95	1135	+/- 37	+/- 175
UA300/490	309 - 504	95	1185	+/- 37	+/- 175
UA300/620	300 - 620	136	2035	+/- 37	+/- 175

Sound level is less than 70 dB (A).

### 4. U-PLOUGH USE

#### 4.1. *Using area*

U-plough is designed to the road cleaning, snow collecting and ice removing. This plough is especially used in terminals, yards where snow must be removed and collected to the special place.

#### 4.2. *Instructions*

Before use check that U-plough is engaged properly to the working machine and all the locking's are well done.

Test drive working machine and U-plough combination to ensure that all have been engaged well. If U-plough is new or it have been modified ensure that air has been eliminated from the system. Air in hydraulic system could cause unexpected movements.

When using U-plough ensure that your sight is clear to the ploughing area and there is not anyone in the dancer zone.

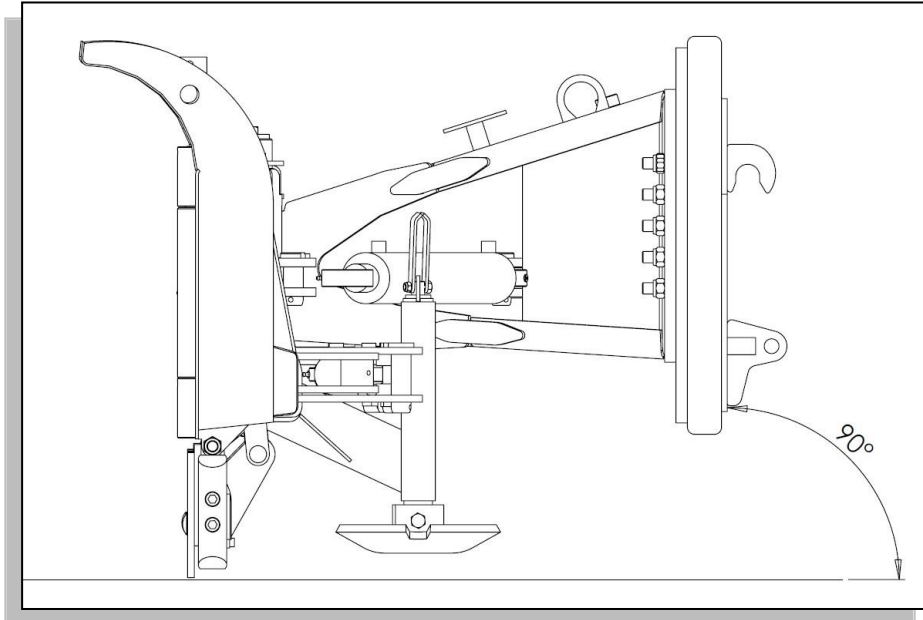
When disengage U-plough, put shields to the hydraulic hoses.

When disengage U-plough outside ensure that ground is balanced to help next engage. Wood blocks would be beneficial to balance the area.

If plough will stay longer period without usage, lubricate piston rods with CORRSHIELD VPCI-369 corrosion shield or with storage oil to avoid corrosion.

### 4.3. U-plough use

Working position of plough is correct when frame is in the upright position (Picture 1), especially when use side wings.



**Picture 1. Plough frame in the upright position**



#### **IMPORTANT**

When plough is new take care that air from hydraulic system will be eliminated by turning cylinders against to the limit stoppers couple of the time.

Adjust support legs in order to blade will get correct height from the surface.

In case of front loader application beam support are recommended.

## 5. SERVICE

The most important thing to get maximum reliability is good service in time. Service costs are smaller compared to the repairing's costs. Below mentioned service includes all the lubrications and adjustments.

### **5.1. Daily service**

- Check all the blades
- Check tightness of the fastening screws
- Test drive all the movements
- Clean the equipment in the end of the working day

### **5.2. Weekly service**

- Lubricate all the nipples
- Check that there are no leakages

### **5.3. Service after 500 working hours**

- Lubricate all the nipples
- Check that there are no leakages

### **5.4. Annual service**

All above mentioned. Lubricate all the lubrication points always when leaving equipment to the storage.



**NB!**

**When serving you should follow the service table also taking care of the previous services.**



**NB!**

**Tightness of the screws should be checked also after the first drive.**



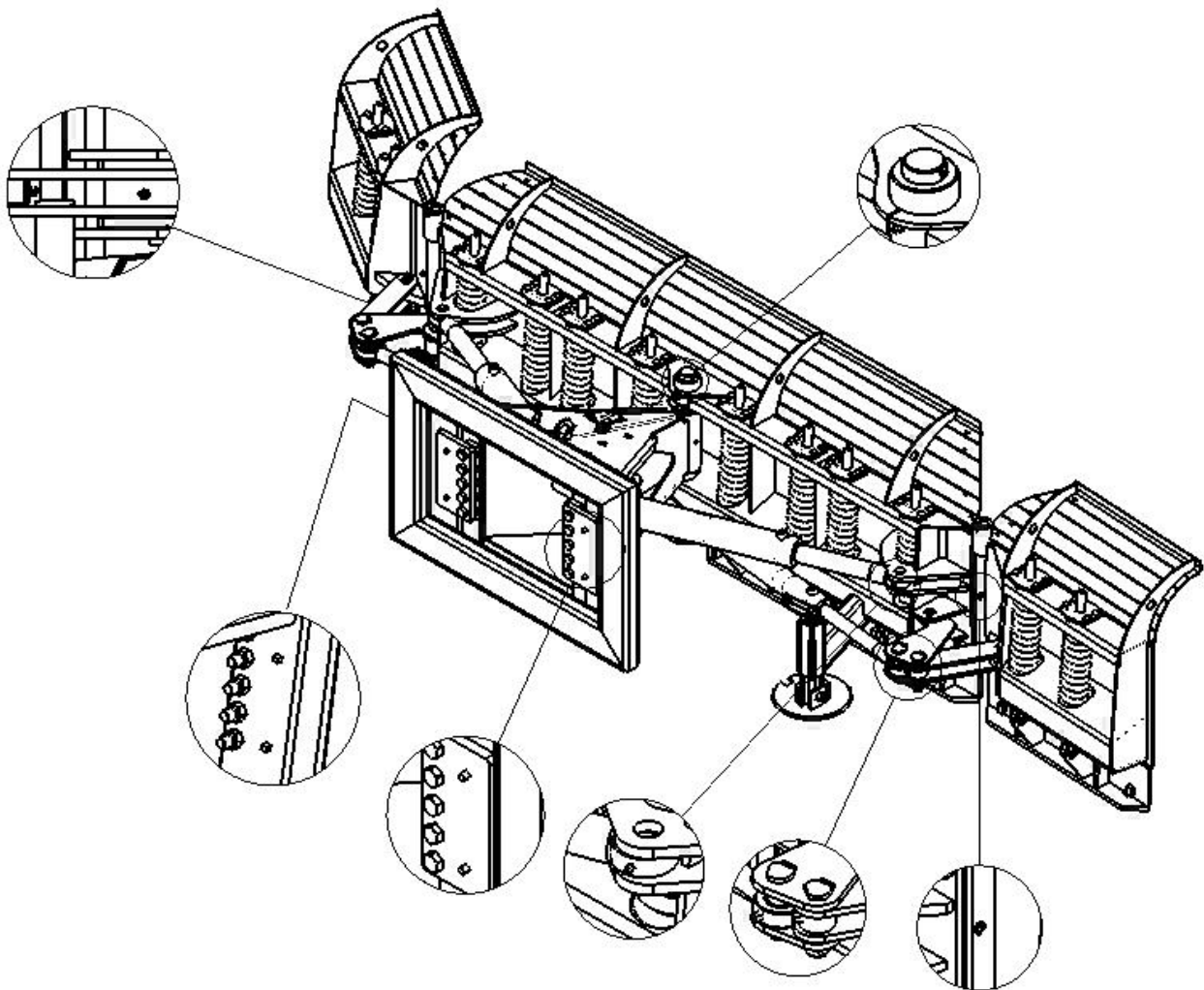
**NB!**

**Lubricate also piston rods when leaving equipment to the storage place.**

## 5.5. *Lubricating points*

Lubricate nipples shown in the picture. Clean the top of the nipple before lubrication.

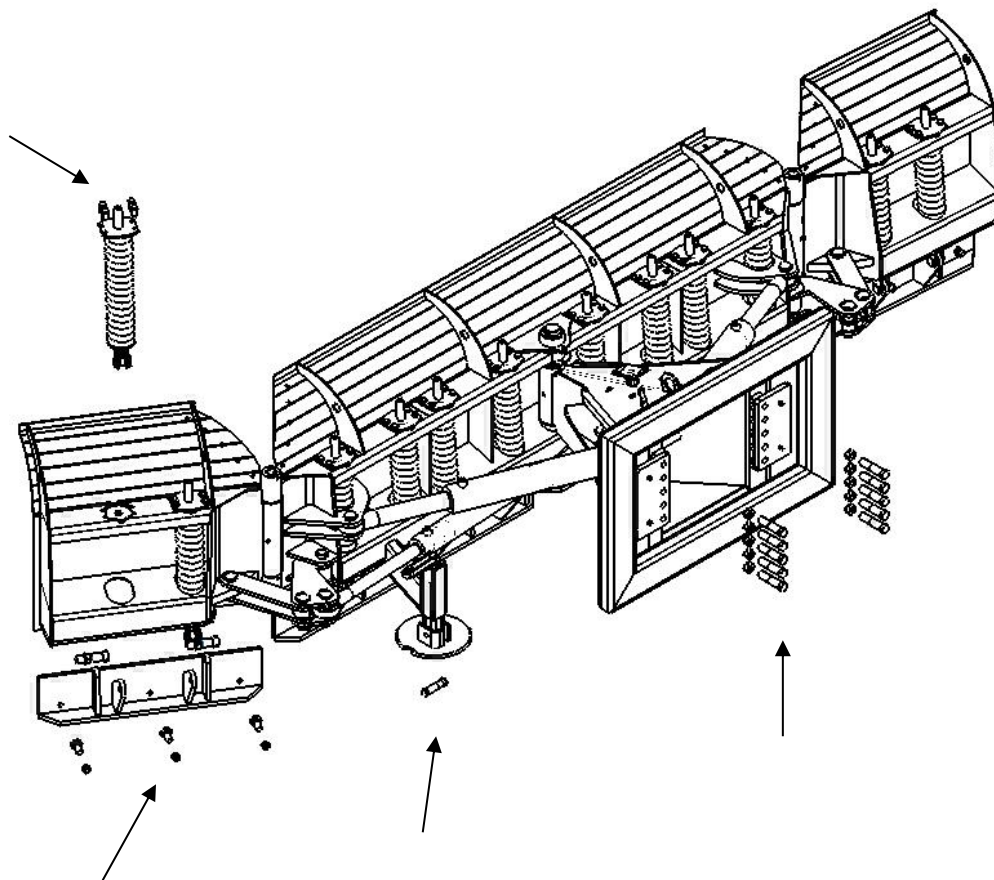
- **Central joint grease nipples (2)**
- **Cylinder grease nipples (8)**
- **Sliding frame and connecting frame grease nipples (8)**
- **Side wing joint grease nipples (8)**



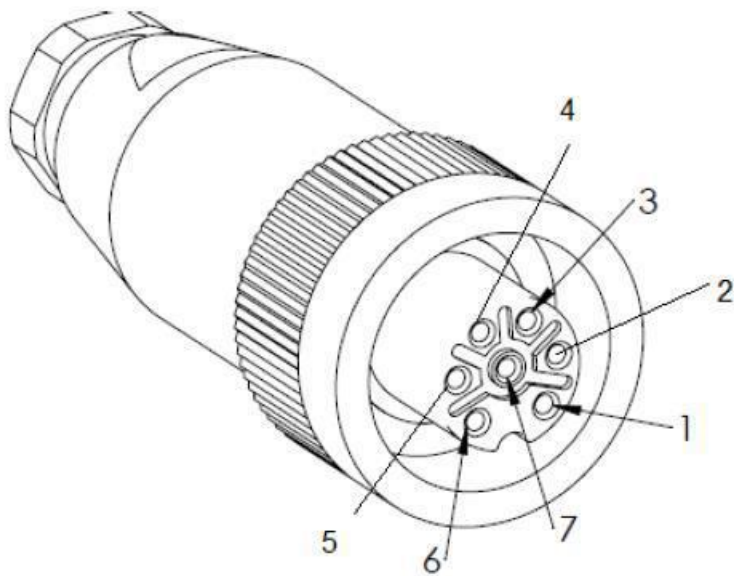
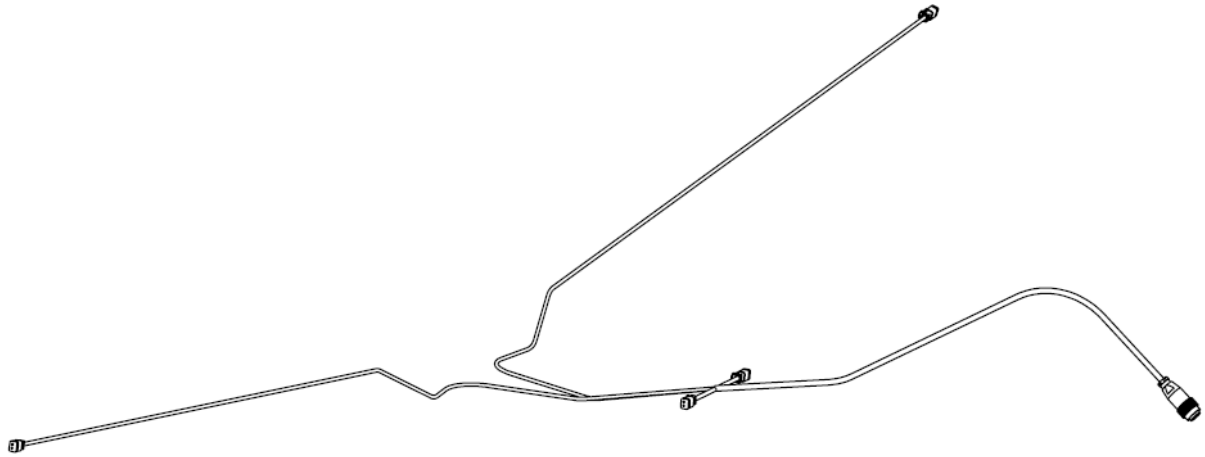
## 5.6. *Screws to be tighten*

Tighten all the screws after 10 hours' drive and after that between 500 working hours.

- **Attaching frame screws**
- **Tightening screw of the support legs**
- **Tightening screws and nuts of the blade frame and the spring**
- **All the blade screws**



## 6. ELECTRIC VALVE AND SIDE LIGHTS CONNECTION



- 1.Side lights
- 4.Valve 1
- 5.Valve 2
- 6.Ground
- 7.Ground



**LLP FARM MACHINERY GROUP OY**

LEVYTIE 4  
74510 IISALMI, FINLAND

PUH. +358 (0)20 1984 020  
FAX +358 (0)20 1984 029

[www.fmg.fi](http://www.fmg.fi)

