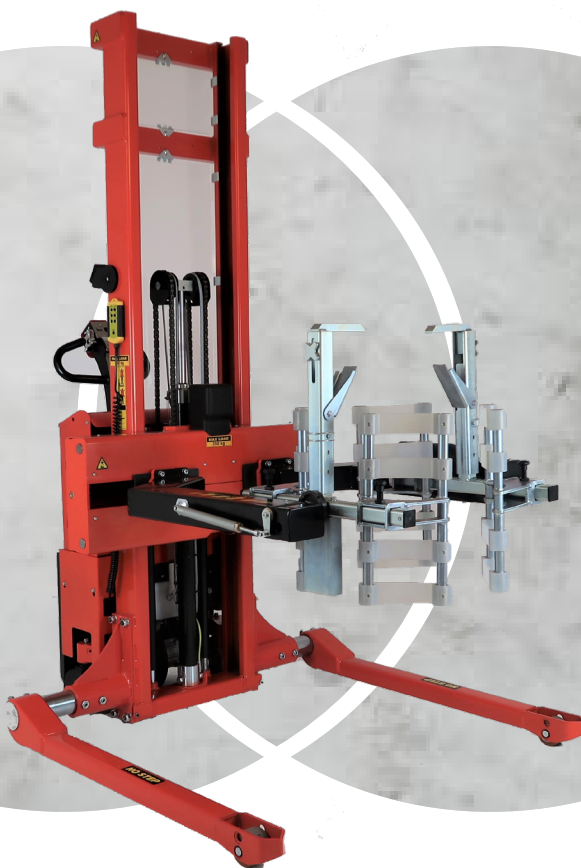




S1057

MULTI DRUM TURNER SELFMDT - SELF SMDT



EU DECLARATION OF CONFORMITY

Manufacturer: Logitrans A/S
Address: Hillerupvej 35
6760 Ribe
Danmark

hereby declares that:

machine: Product group: **Multi Drum Turner**

Type: SELFMDT1003 /
SELFMDT1003

Production year /
Serial no.:

- a) has been manufactured in conformance with the stipulations of the:
- **Directive no. 2006/42/EC**
 - **Directive no. 2014/30/EC**
 - **Directive no. 2014/35/EC**
- b) has been manufactured in conformance with the stipulations of the standard:
- **EN ISO 3691-1**

Responsible for the technical dossier:

Name: **Gitte Kirkegaard**
Address: **Hillerupvej 35, DK-6760 Ribe**

Signature:



Gitte Kirkegaard, CEO, Logitrans A/S

Ribe, 25.03.2021

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1.0 Before the first lift

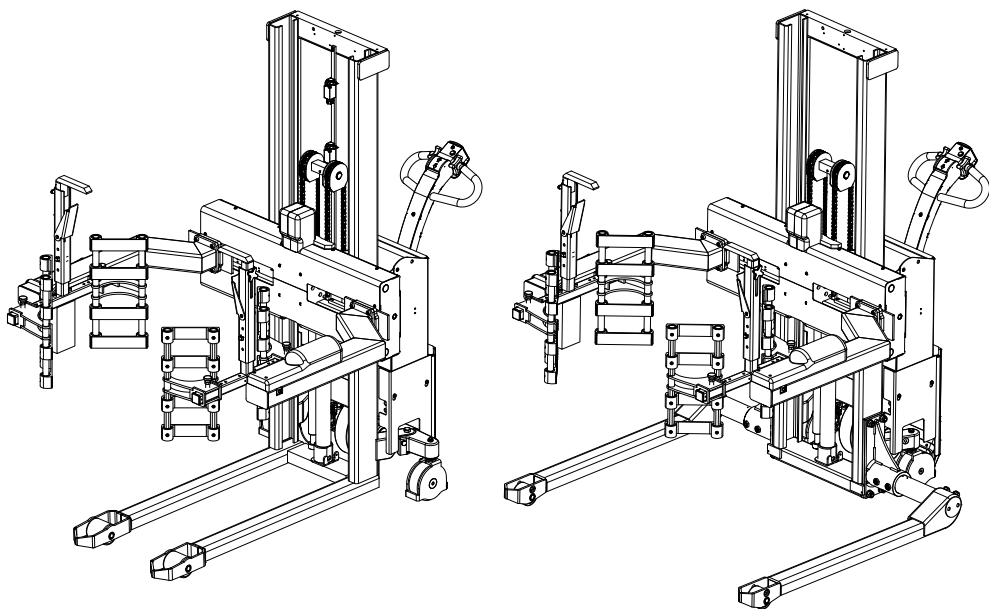
The **Multi Drum Turner** is manufactured in accordance with the applicable safety directives.

This **Instruction manual** contains information regarding:



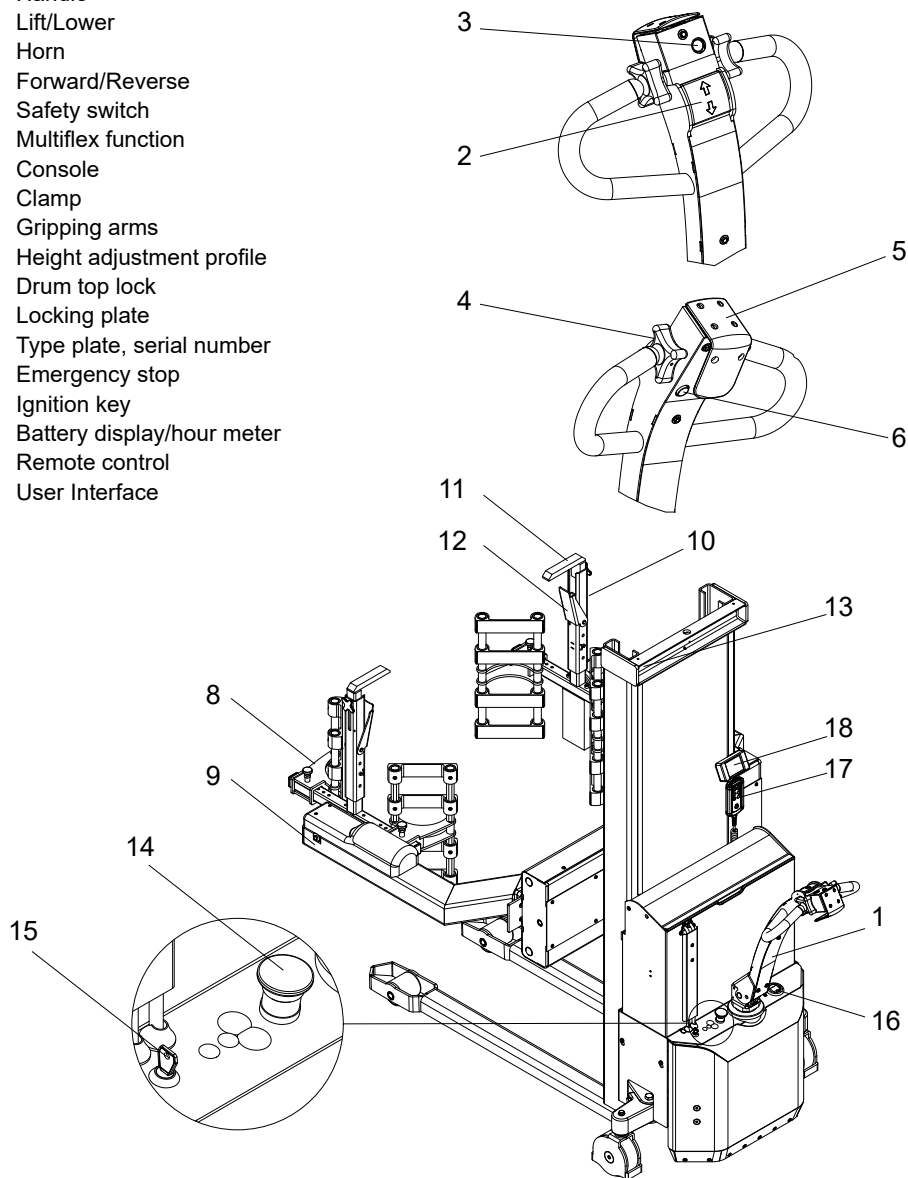
- Proper application
- Physical limitations of the product
- Risks associated with misuse

Therefore, read this instruction manual carefully.



2.0 Functions and identification

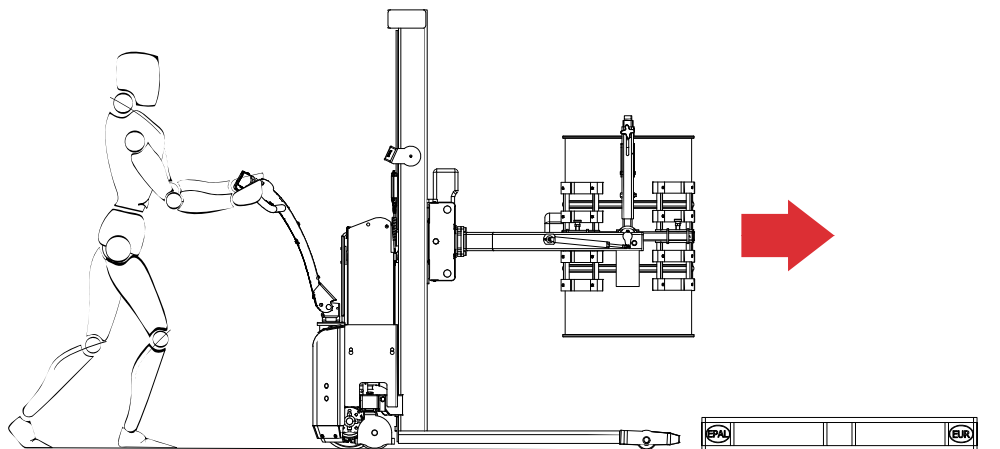
1. Handle
2. Lift/Lower
3. Horn
4. Forward/Reverse
5. Safety switch
6. Multiflex function
7. Console
8. Clamp
9. Gripping arms
10. Height adjustment profile
11. Drum top lock
12. Locking plate
13. Type plate, serial number
14. Emergency stop
15. Ignition key
16. Battery display/hour meter
17. Remote control
18. User Interface



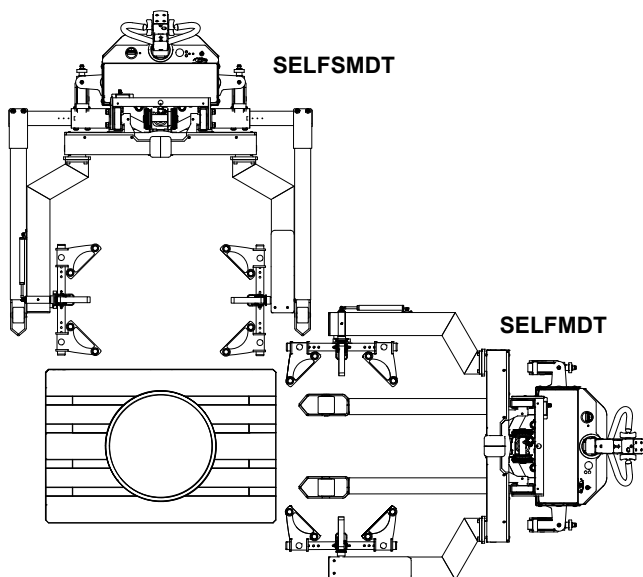
3.0 How to operate the Multi Drum Turner

3.1 Handling of drums

The correct operating position is behind the handle.



When handling drums on closed pallets, use the Multi Drum Turner with straddle legs.

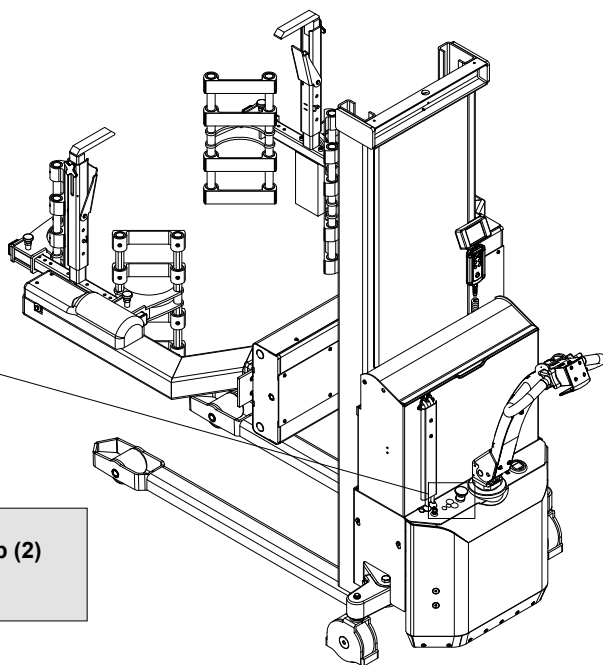
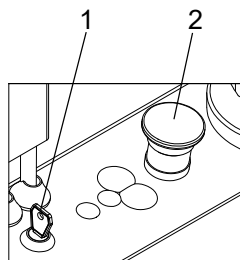


3.0 How to operate the Multi Drum Turner

3.2 Use of the Multi Drum Turner

Conditions for rotation: The center of the gripping arms must be raised > 430 mm.
The load can be rotated 360°.

Insert the ignition key (1) and turn it clockwise to activate the control circuit, so the machine functions are enabled.



Note: The Emergency Stop (2) must not be activated.

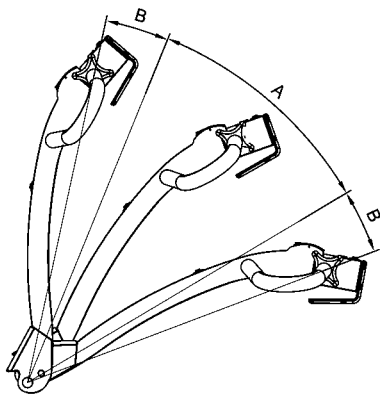
3.0 How to operate the Multi Drum Turner

3.3 Handle functions

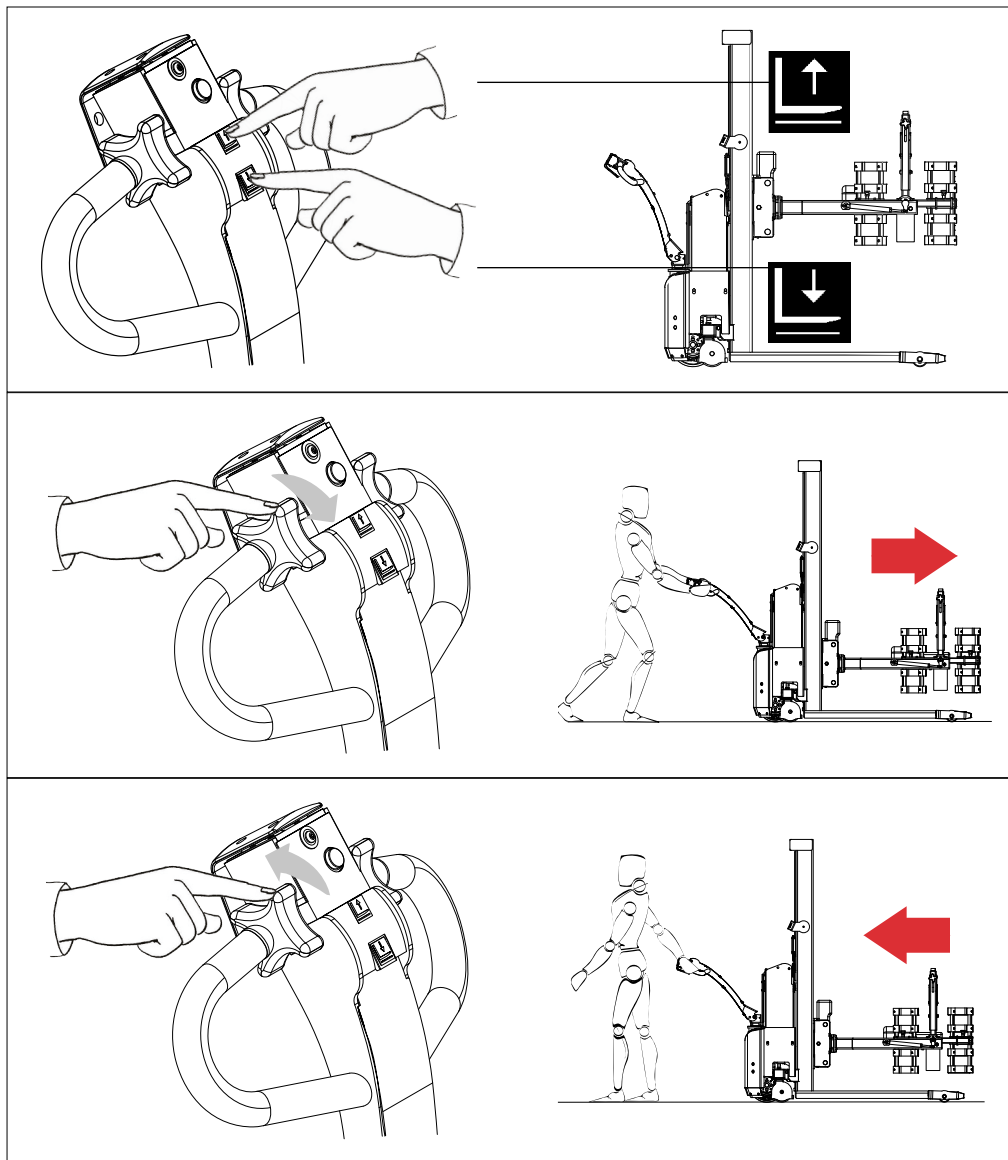
The control functions of the Multi Drum Turner are located in the handle. The functions depend on the position of the handle.

Position A: **Drive position**
Drive current is on
Brake deactivated

Position B: **Stop / brake / emergency stop**
Drive current is off
Brake activated

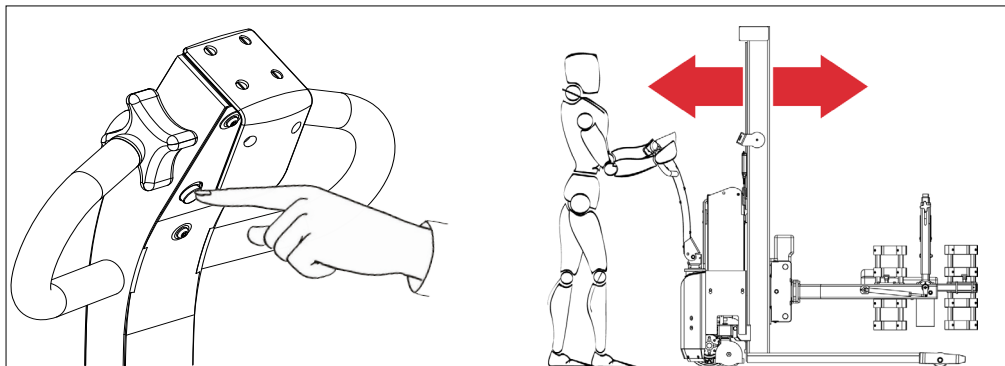


3.0 How to operate the Multi Drum Turner



3.0 How to operate the Multi Drum Turner

3.3.1 Multiflex-function



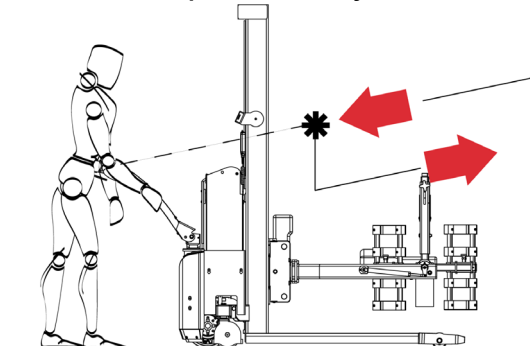
Multiflex function

- This function allows the operator to drive the Multi Drum Turner even when the handle is in its upright, braked position B. *See section 3.3 Handle functions*
- The function requires two-handed operation and must be carried out deliberately.
- The function enables manoeuvring in confined areas.

3.3.2 The safety switch

The safety switch at the end of the handle ensures that the operator cannot be trapped when the Multi Drum Turner is reversed.

When the safety switch is activated, the Multi Drum Turner changes direction, moves forwards and stops automatically.

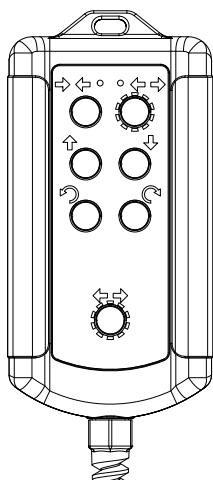


3.0 How to operate the Multi Drum Turner

3.4 Remote control

The remote control is used to:

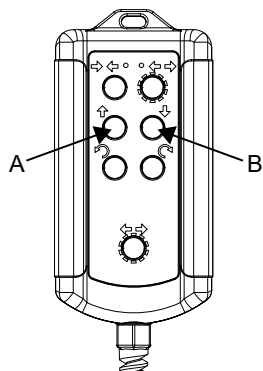
- Lifting and lowering
- Rotating the clamp
- Clamping the load to hold it
- Releasing the load (via bypass function)
- Adjusting the gripping arms



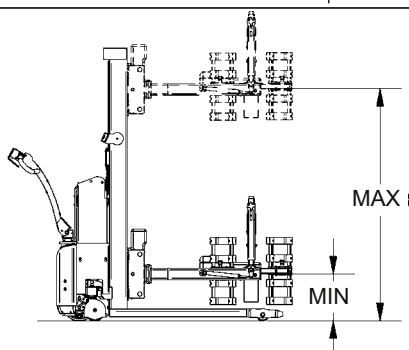
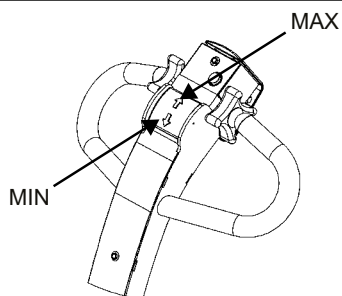
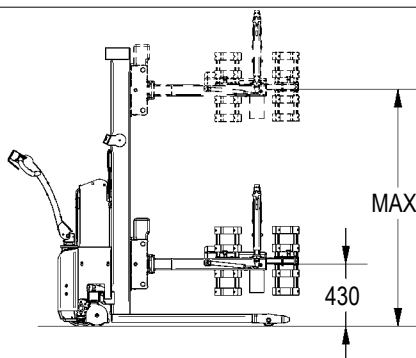
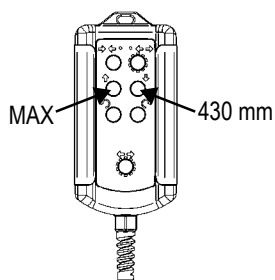
3.0 How to operate the Multi Drum Turner

3.4.1 Remote control for lifting, lowering and rotation

Lift / Lower

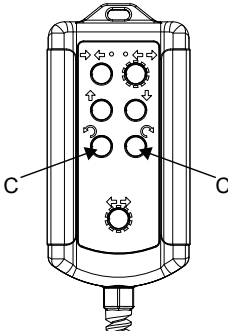


Press **(A)** to lift.
Press **(B)** to lower.



3.0 How to operate the Multi Drum Turner

Rotation:



Press **(C)** for rotation in the direction of the arrow
From the factory, the rotation is set to continuous rotation.
The load can be rotated 360°.

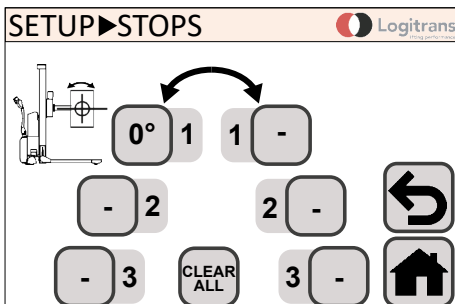


NOTE

Make sure the load is positioned at the centre of gravity and securely locked before rotation.

3.4.2 Setting of stop positions

From the factory, the machine is set for continuous rotation. When the clamps have rotated 360°, the rotation stops automatically. To continue rotation, release and press the rotation button again. It is possible to set up to three stop positions for rotation in both directions. If the machine is set with one or more stop positions, it cannot rotate beyond the last set stop position.



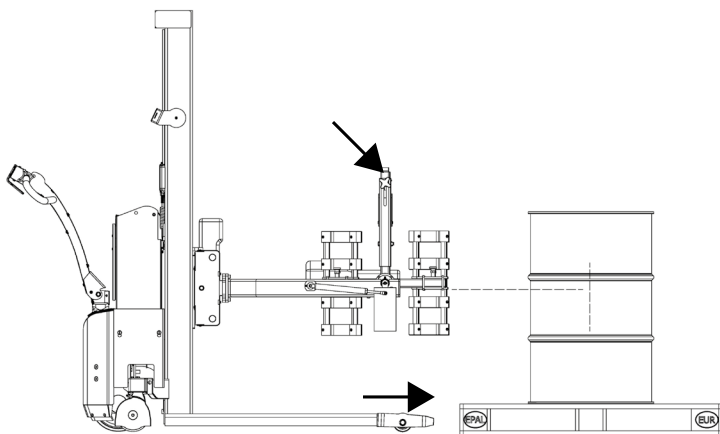
On the home screen, press **SETUP**, then **STOPS**, after which this window is displayed

3.0 How to operate the Multi Drum Turner

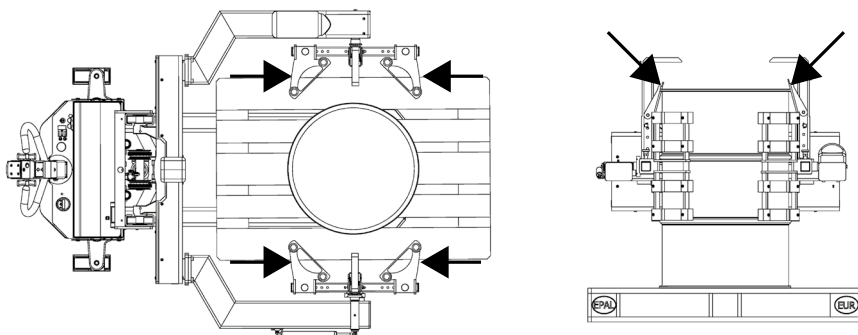
3.4.3 Remote control - clamping of drums

See section 2.0 Functions and identification for reference numbers

The Multi Drum Turner is designed for transporting, lifting, and rotating most standard industrial steel and plastic drums. The drums must have a rigid structure and a stable rolled top edge (chime) or an equivalent molded top ring suitable for drum lifting clamps.



Adjust the height so that the clamps **(8)** are placed approximately 5 cm above the center of the drum, and move the drum top lock **(11)** to the upper position.

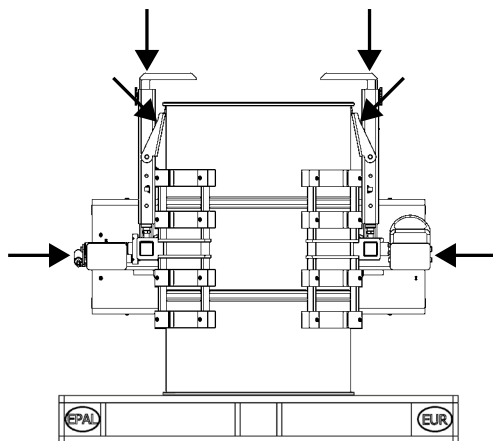


Adjust the clamps to the drum diameter.

The height adjustment profile **(10)** should be set so that the locking plate **(12)** is positioned slightly above the top edge of the drum.

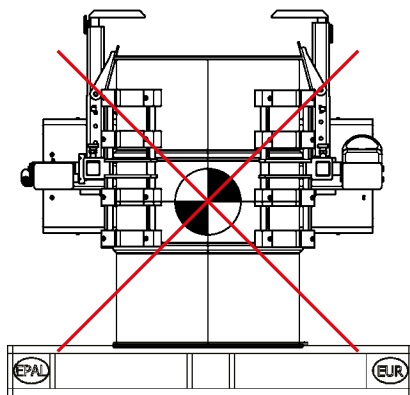
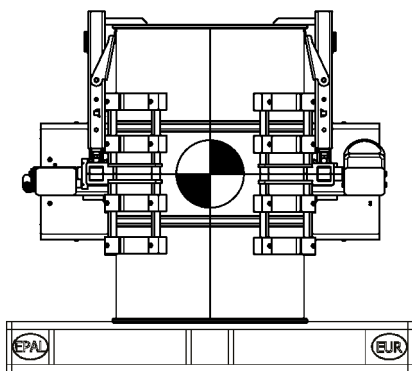
3.0 How to operate the Multi Drum Turner

See section 2.0 Functions and identification for reference numbers



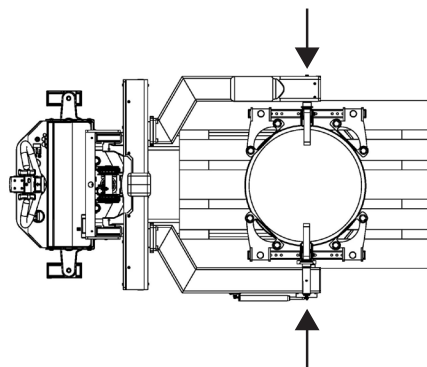
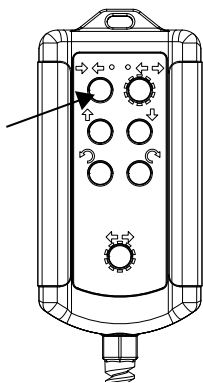
Tighten the drum top lock **(11)** against the top of the drum.

Be sure to position the gripping arms **(9)** in level with drum/contents Center of Mass to ensure safe, functional and stable handling.

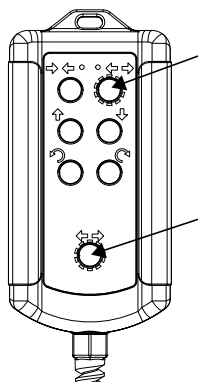


3.0 How to operate the Multi Drum Turner

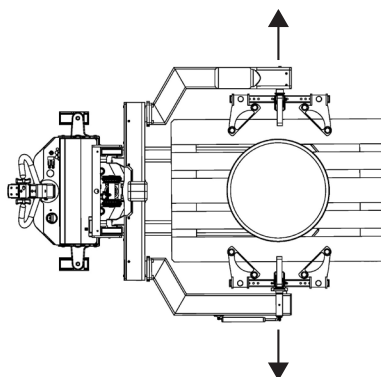
Lower the gripping arms (9) until the locking plate (12) locks on the top edge of the drum.
 Close the gripping arms to clamp the drum fully and safely.



When handling **soft drums** that must be emptied after rotation, remove the lid before clamping to avoid pressure build-up when opening.



Press the **Release**
 and **Lock**
 simultaneously to
 open the gripping
 arms.



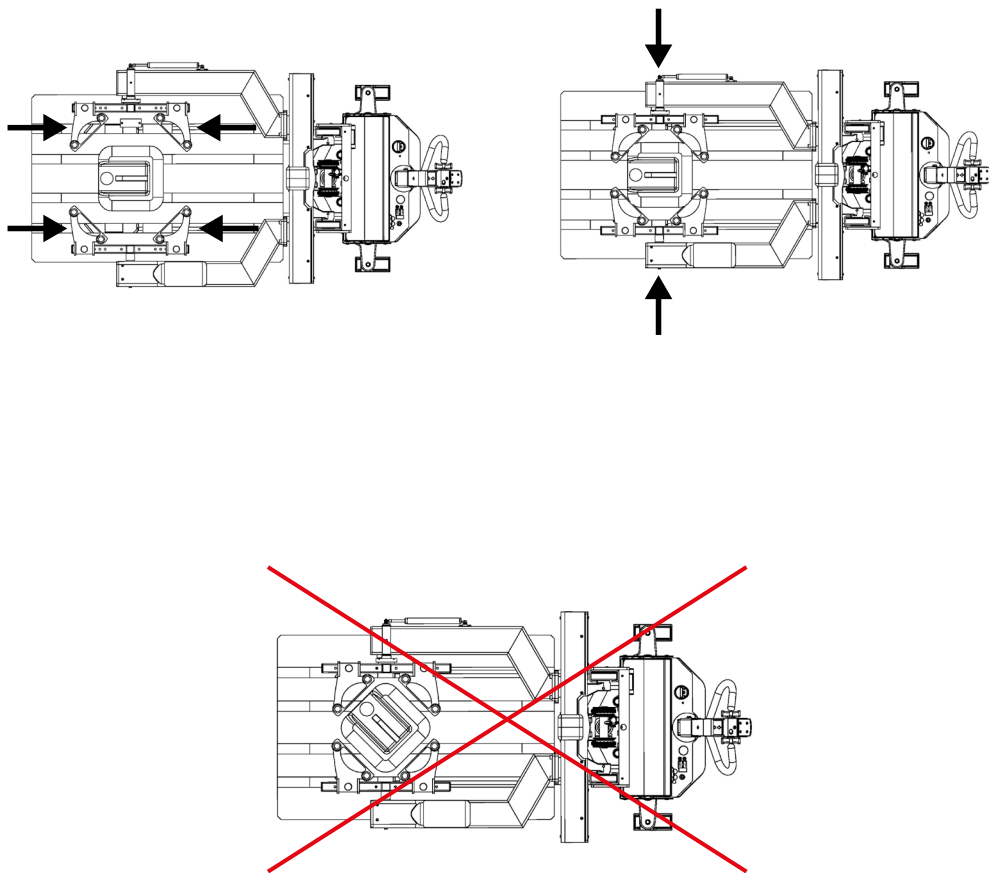
3.0 How to operate the Multi Drum Turner

3.4.4 Remote control - Clamping of small drums and cans

See section 2.0 Functions and identification for reference numbers

The gripping arms (9) are placed in open position around the drum/can.

The clamps (8) are adjusted to the diameter of the drum/can and clamp around the drum or can.



3.0 How to operate the Multi Drum Turner

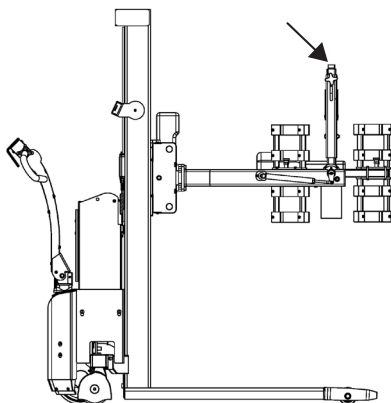


Larger drums **MUST** be secured with the drum top lock (11).
Smaller drums **SHOULD** be secured with the drum top lock.
Small drums and cans are **NOT** secured with the drum top lock.

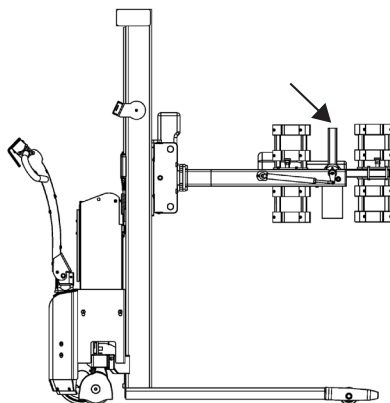


When handling small drums and cans, the drum top lock and the height adjustment profile (10) can advantageously be removed.

If using larger drums



If using smaller drums and cans

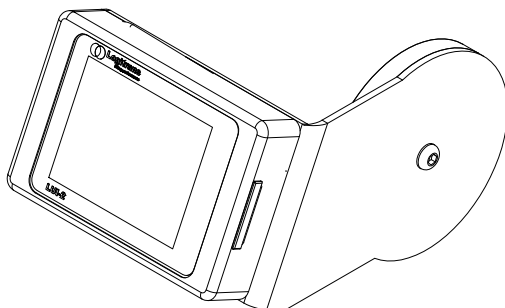


3.0 How to operate the Multi Drum Turner

3.5 User Interface

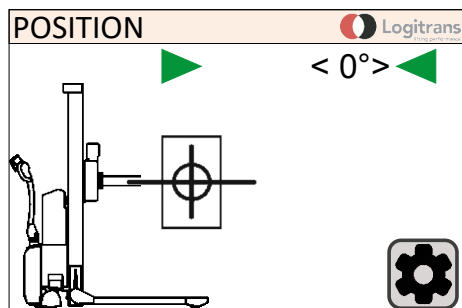
The LUI-2 user interface is used to:

- Adjusting rotation speed - **SPEED**
- Set up to 3 stop positions in both directions of rotation - **STOPS**
- Set end stops for gripping arms (inner/outer) - **LIMIT**
- Adjusting clamp force - **CLAMP**



3.5.1 Start screen - POSITION

When the machine is powered on and the emergency stop is released, the start screen is shown on the display.



GREEN ARROWS: Indicate the starting position of the rotation.

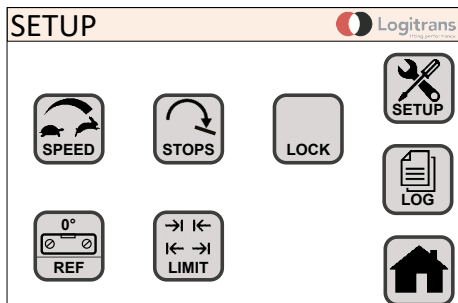
REF: The arrows disappear when rotation begins

GEAR ICON: SETUP

3.0 How to operate the Multi Drum Turner

3.5.2 Settings - SETUP

From the home screen, press **GEAR ICON** to access the settings - **SETUP**.



SPEED: Adjustment of rotation speed

STOPS: Setting stop positions

LOCK: Code to lock the rotation

REF: Home position

LIMIT: Setting end stop

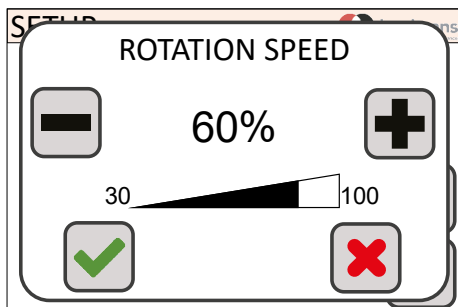
SETUP: Service menu (for service technicians only)

LOG: Usage data

HOME: Return home screen

3.5.3 Setting of rotation speed

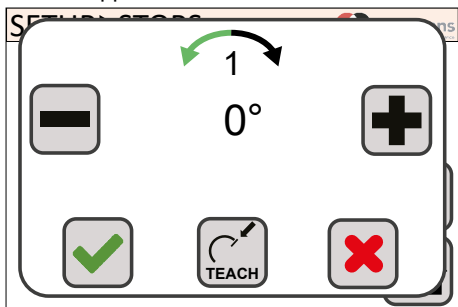
On the **SETUP** page, press **SPEED** to adjust the rotation speed - **ROTATION SPEED**



- Use **+** and **-** to adjust the speed.
- Use **✓** or **✗** to accept or cancel the selection and return to **SETUP**.

3.0 How to operate the Multi Drum Turner

In the **STOPS** menu, press on the first stop in the desired direction of the rotation, after which this window appears.



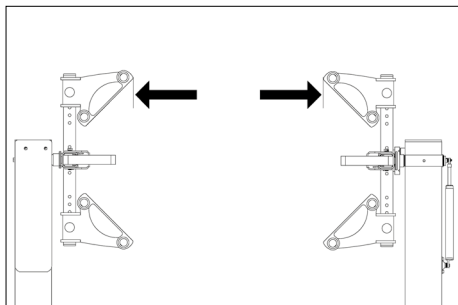
- Use **+** and **-** to select the position or use **TEACH** to select the current position.
- Use **✓** or **✗** to accept or cancel the selection and return to **STOPS**
- In **STOPS**, the next stop position is selected and the procedure is repeated.

3.5.4 Deleting stop positions

In **STOPS**, press **CLEAR ALL** to delete all set stop positions.

3.5.5 Setting the end stop for gripper arms (Inner/Outer)

If there is a need to limit the movement range of the gripper arms, a maximum or minimum gripper arm distance can be set.

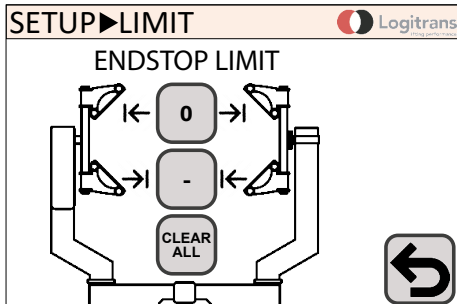


The value for the end stop is the distance between the grippers measured in mm.

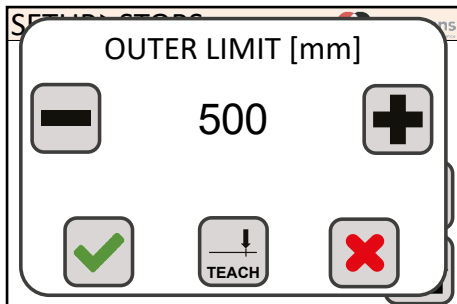
Example: The minimum gripper arm distance or **Inner End Stop (LIMIT)** can be useful when handling plastic drums or barrels. It helps avoid unnecessary deformation and ensures consistent repeatability when gripping the same type of drums or barrels.

3.0 How to operate the Multi Drum Turner

From the start screen, press **SETUP** and then press **LIMIT**, after which this window is displayed.



Set the end stop in both inner og outer positions.



- Use **+** and **-** to select the value or use **TEACH** to select the current position.
- Use **✓** or **✗** to accept/cancel the selection and return to **LIMIT**.
- In **LIMIT**, the next end stop position is selected, or you can return to the start screen.

3.5.6 Deleting end stop positions

In the **LIMIT** menu, press **CLEAR ALL** to delete all end stop positions.

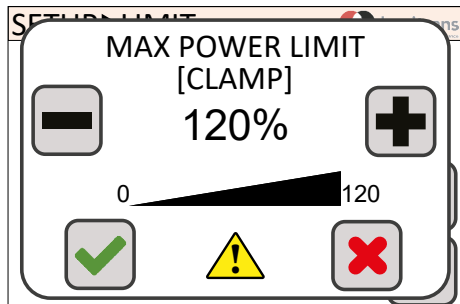
3.0 How to operate the Multi Drum Turner - CLAMP

3.6 Adjustment clamp force - CLAMP

From the start screen, press **SETUP** and enter the PIN code provided by Logitrans.

The clamp force can be set between 0–120 %

The clamping force is factory set to 80% (approximately 250 kg).



- Press **POWER**.
- Press **CLAMP**.
- Use **+** and **-** to set the desired limit (0–120 %).
- Confirm with **✓**

The clamp force adjustment is activated immediately.

**Note:**

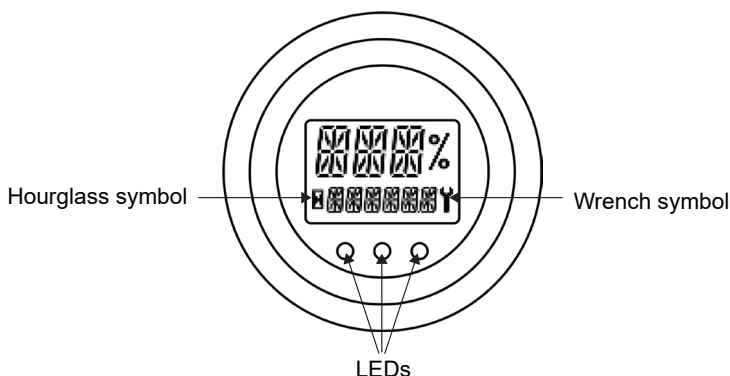
If the clamp force is set above 100%, a warning will be displayed.
Adjustment beyond the standard setting is at your own responsibility.

3.0 How to operate the Multi Drum Turner

3.7 Battery display

The display can show the following information:

- Battery charge level (SOC), battery level
- Operating hours
- Error codes/warnings
- Status LEDs



3.7.1 SOC

The current battery capacity is shown as a percentage in the upper display field.

If SOC is below 30 %, a **LOBATT** warning (low charge level/battery level) is shown in the lower display field.

3.7.2 Operating hours

The system registers three types of operating hours:

- **TOTAL** hours - total number of hours the machine is powered on.
- **TRAC** hours - drive motor operating time.
- **PUMP** hours - hours the hydraulic pump has been in operation.

During normal operation, the total number of hours the machine is powered on **TOTAL** is shown in the lower display field.

If the forward/reverse control is briefly activated, the operating hours for the drive motor **TRAC** are shown.

If the lift/lower control is briefly activated, the operating hours for the hydraulic pump **PUMP** are shown.

3.0 How to operate the Multi Drum Turner

3.7.3 Status LEDs

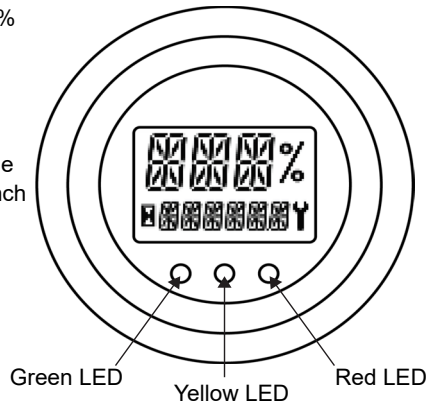
The LEDs indicate the operating status:

- Green - Normal operation
- Yellow - Warning state, low battery level - below 30%
- Red - Warning state, low battery level - below 15%
- Flashing red - Fault or critical low battery level

3.7.4 Fault messages

In case of a fault, the red LED will light up and display the message **FAULT** in the lower display field, and the Wrench symbol will flash. Fault codes are shown in the upper display field.

See section 8.1 Fault codes



3.8 Intended use

The Multi Drum Turner is designed for transporting, lifting, and rotating most standard industrial steel and plastic drums. The drums must have a rigid structure and a stable rolled top edge (chime) or an equivalent molded top ring suitable for drum lifting clamps.

It is only designed for the general handling of drums.

Drums containing liquid, powder or solid materials can be handled. If the contents need to be emptied, it is the responsibility of the user to ensure that the work is carried out so that the contents do not suddenly spill out.

It is recommended to keep the lifting height at a minimum until the user is familiar with the machine.

If unwanted material becomes stuck, the machine must be stopped and the ignition key removed, after which the unwanted material is removed.

Any other use is considered incorrect use.

Logitrans A/S is not liable for damage resulting from such use. The risk is borne solely by the user.

3.0 How to operate the Multi Drum Turner

3.9 Foreseeable misuse



Never use the machine without mounted safety and protective devices.

Never use the machine as a crane, lift or work platform.

Never use the machine with defective grippers, bushings or bolts. If a protection device is defective, it must be replaced immediately.

Never use the machine for purposes other than those described in this instruction manual. Do **not** use the machine to handle other items than drums.

The machine must **never** be used as a toy.



Pay special attention during cleaning of material residues, as the area contains moving parts. Safety goggles must be used where possible, and suitable tools must be used to remove unwanted material, avoiding direct contact with fingers and hands.

3.10 Permitted Operating Conditions

Operational safety of the supplied machine can only be guaranteed when used in accordance with the intended use as described in this instruction manual.

The limit values specified in the data sheet must never be exceeded.

The machine must not be used as a crane or stacking platform, and may only be used for the purposes described in this manual.



Minor adjustments of the gripper angle must be carried out before the drum is lifted.

Do not stand in front of the drum opening, as material may splash or fall out. If liquid or powder is spilled on the machine, it should be cleaned off.



The gripper can freely rotate a drum 360°. If the clamping or rotation function is blocked, stop the machine, remove the ignition key and activate the emergency stop. Use safety goggles and heavy-duty gloves, and remove the unwanted jammed material.

3.0 How to operate the Multi Drum Turner

Safety instructions for maintenance and inspection

- The user must ensure that maintenance, inspection, and assembly are carried out by authorised and qualified personnel, who, after careful reading of this instruction manual, have sufficient knowledge.
- Work must only be carried out when the machine is switched off. The stopping procedure described in this Instruction Manual must be followed precisely.
- When performing maintenance with the raised carriage or equipment raised, secure it with suitable support elements.
- Use only suitable tools and wear gloves, safety shoes, helmets and glasses.
- Dispose of oil and grease properly.
- Immediately after work is completed, all safety and protective devices must be fitted and refitted and reactivated.

Safety instructions for responsible operator/user:

- The user must be familiar with equipment, control elements and functions before starting work. When the work has started, it is too late.
- The clothing of the user must be sealed (avoid loose clothes). Check the working area before starting.
- Ensure a clear view of the working area.
- Sitting or standing on the machine during transport or operation is not permitted.
- Before leaving the machine, lower the carriage or equipment and remove the ignition key (if applicable).
- The brake must be engaged.

4.0 Battery and charging

The electric truck can be used with three different types of batteries:

- **AGM & GEL:** Sealed, maintenance-free lead-acid battery.
- **WET:** Open, traditional lead-acid battery, requires periodic maintenance.
- **Lithium:** Maintenance-free (LiFePO₄) battery, tolerates opportunity charging, such as LogiBatt 2460.

The battery charger, corresponding charging curve, and connection method may vary depending on battery type. Always follow this instruction for safe and correct charging.

4.1 General safety procedure during charging

1. Switch off the truck before charging begins.
2. Disconnect the truck's power cable (Anderson 120A) from the battery.
3. Connect the power cable (Anderson 120A) from the battery charger to the battery.
4. Connect the battery charger to the mains supply according to its rating label.
5. Charging starts – the battery charger display or separate indicator shows the charging status.
6. When charging is completed, disconnect the battery charger from the mains supply.
7. Disconnect the battery charger's power cable, and reconnect the truck's power cable.

Items 2, 3 and 7 apply only when using an **External** battery charger or a **Build-in*** battery charger located in the battery box.

4.2 Battery charger type in relation to battery type

Ensure that the battery charger has the correct charging curve for the specific battery type.

4.2.1 AGM, GEL and Lithium batteries

Logitrans charger type: **Internal** battery charger or **Build-in*** battery charger installed in the battery box.

Connection:

- **AGM & GEL:** Red Anderson 120A connector
- **Lithium:** Grey Anderson 120A connector

4.2.2 WET batteries

Logitrans charger type: **External** battery charger – must not be placed in the battery compartment.

Connection: Red Anderson 120A connector

**As in Panther Maxi PM1802, with Built-in battery charger on shelf setup in the battery box*

4.0 Battery and charging



Important!

Never use a battery charger with an incorrect charging curve for the battery type. (If in doubt, contact your dealer.) – It is recommended that the user familiarizes themselves with the battery charger's display and the truck's display of the battery's charge level, which is updated during operation. Be aware of standby consumption, and that deep discharge will permanently damage the batteries.



Info!

For further details, refer to the battery and charger user manual, which is supplied with the product or available via the [Logitrans Documentation Hub](#).

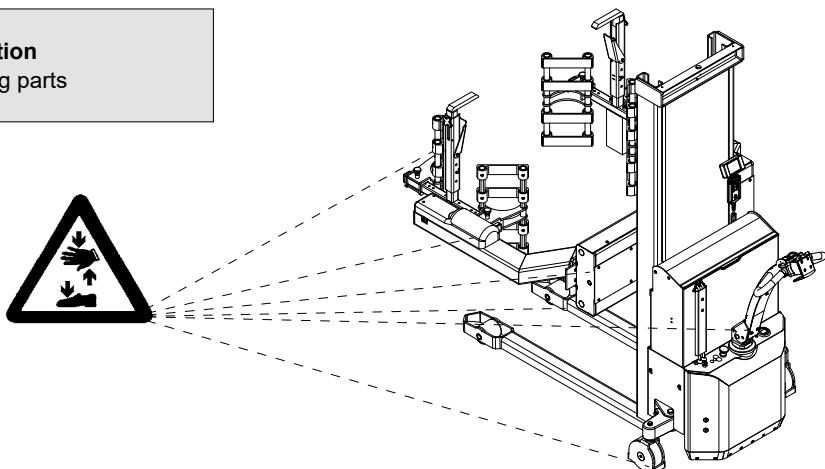
Please note that after opening the Documentation Hub, you must manually navigate to the **Battery and Charger** section.

5.0 Optimal safety

The safety instructions in the instruction manual, the applicable national accident prevention regulations and internal working, operating and safety regulations, if any, must be observed.



Attention
Moving parts



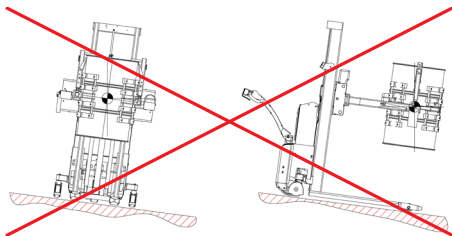
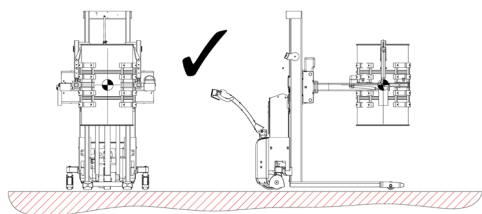
5.1 Safety regulations

- Never walk under a raised load.
- Never stand between the gripping arms.
- Before lowering the carriage, make certain that no foreign elements can hinder the free lowering of the carriage.
- The Multi Drum Turner is designed for use on an even and level floor.
- Do not exceed the permitted capacity of the product.
- During transport the carriage shall be raised as little as possible.
- Transport with raised carriage should be made over the shortest possible distances and at low speed.
- Check that the chains lift equally. They shall be equally tight when the carriage is loaded.
- Chains and chain bolts must not be damaged. Chains that have become permanently stretched (max. 2 % of the original length) must be scrapped.



5.0 Optimal safety

5.2 Driving with load



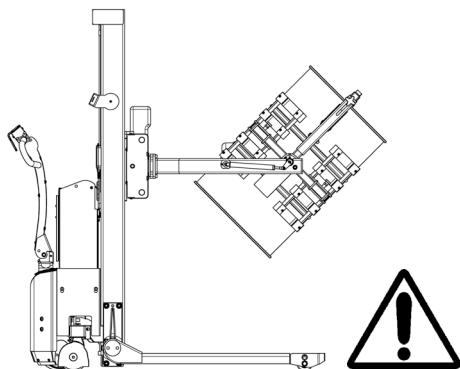
The load centre must never exceed the centre line of the wheels. During transport with load, the carriage shall be raised as little as possible. Transport should be carried out over the shortest possible distances at low speed.



When driving with liquids be aware that the load center can move during braking.

5.3 Rotation with load

NOTE! Rotation is only allowed if the machine is placed on an even surface.



When rotating, the operator must have a full view of the entire working area to ensure that the rotation can be stopped before the load touches the floor, objects, or persons within the area.

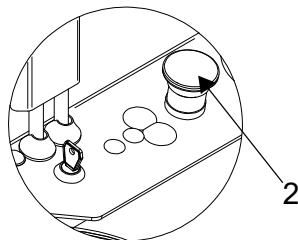


NOTE: Check that the load is placed at the load center and is properly locked before rotating.

5.0 Optimal safety

5.4 Emergency stop

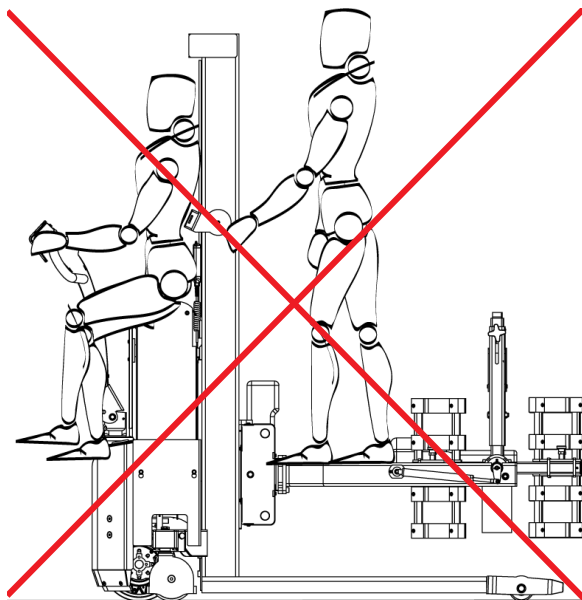
The product has an emergency stop (2). When activating the emergency stop, the main current supply is switched off.



- The movement of the carriage stops immediately.
- Driving with the machine stops immediately.
- The emergency stop is deactivated by turning the switch to the right.

5.5 Personal safety

Transporting or lifting persons by means of the Multi Drum Turner **is not allowed**.

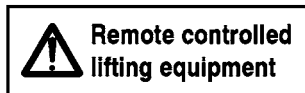


5.0 Optimal safety

5.6 Safety markings



Do not stand on or under the carriage, forks or equipment



Remote control on this machine.



Clamping risk for hands and feet.



The maximum allowed load appears from the label on the machine. Do not exceed this capacity.



Do not step on here.

5.0 Optimal safety

5.7 Additional safety advice

Training:

The user must be competent and fully able to operate the machine in a safe and efficient way.

Safety equipment:

Required: Wear the following safety equipment when working:



Safety shoes.

Please note the following risks:

- The user can get stuck when clamping a drum.
- The user can be stuck or caught by moving parts, e.g. gripping arms or spindle.
- The user can be hit by falling material or machine parts in case of machine damage.
- Accident due to collision with other machines or loose items.

Always do the following:

- Make sure that the user has read this instruction manual and received instructions in the use of the machine.
- Make sure that all covers are fitted.
- Before leaving the machine, make sure that the gripping arms are lowered to the lowest position and the handbrake is activated.
- Check the working area and remove dangerous items, before starting to operate.
- Check that all warning labels are visible and that none of them is missing or unreadable.
- Follow the instructions of the manufacturer for correct operation.

Never do the following:

- Allow an inexperienced person to operate the machine unattended.
- Use the machine if the electrical or hydraulic system shows signs of damage
- Perform any maintenance or adjustment without lowering the gripping arms.
- Do not position yourself in the working area of the machine (risk of injury).
- Use the machine for purposes other than those described in this instruction manual.

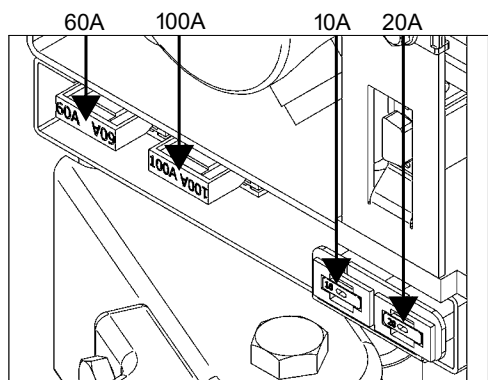
6.0 There must be a power supply

6.1 Fuses - replacement

There are four fuses in the electrical circuit, located behind the plate with this pictogram.



- 60 Amp fuse for rotation
- 100 Amp fuse in the main supply from battery
- 10 Amp fuse in the control circuit
- 20 Amp fuse for built-in charger

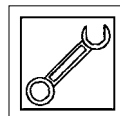


Replacement:

The old fuse is to be removed and replaced by a new one of the same size.

Find out why the fuse blew.

6.2 Wiring connections



Many operational disturbances are caused by bad connections in the electrical circuit. Make sure that the connections are in order.

Check connections regularly for damage at insulating caps or bad connections at plugs etc. Verdigris must be removed from cable connectors. Keep all screw/nut connections tightened.

7.0 Long live the Multi Drum Turner

Regular inspection and replacement of worn or defective parts in good time will prolong the life of the Multi Drum Turner. "Prevention is better than repair", therefore ensure:

- That the battery is fully charged every time
- Correct usage
- Regular cleaning
- Periodic safety and service inspection

Due to safety reasons, the below points have to be checked every 3 months:

- Loose screws and nuts have to be tightened up.
- Breaches, cracks or deformations are not allowed on the load-bearing parts.
- Wearing parts, such as brakes, wheels and bearings, are to be adjusted or changed continuously

7.1 Lubrication and hydraulic oil



Normal operation:

Under normal operating conditions, the Multi Drum Turner requires no lubrication.

Bearings and moving parts:

- All ball bearings are sealed and lifetime-lubricated.
- Moving parts have self-lubricating bearings or are pre-treated with grease.

Hydraulic system:

- Filled with hydraulic oil of viscosity ISO VG 15.
- The oil contains an additive that reduces friction and wear, and protects against corrosion.
- Pre-mixed hydraulic oil with additive can be purchased from your dealer.

Temperature range:

- The standard oil is suitable for use between -10 °C and +50 °C.
- At temperatures below -10 °C, thinner oil is recommended (contact your dealer for advice).

7.0 Long live the Multi Drum Turner

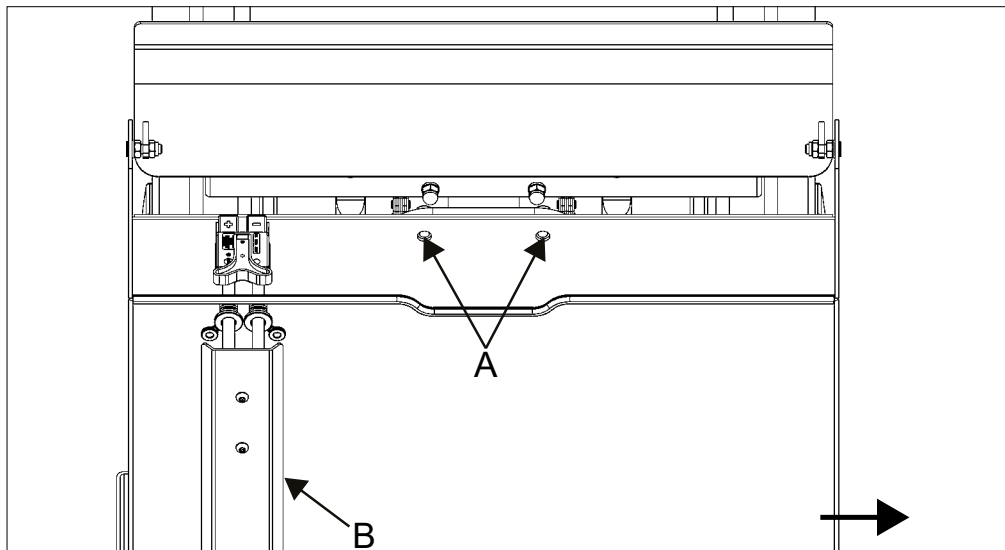
7.2 Oil change

Draining the oil:

1. Bring the unloaded carriage down to the lowest position.
2. Most of the oil can be drained by loosening the hydraulic hose union in the bottom of the cylinder. Activate the hydraulic pump by pressing the switch. The oil will run out.
3. Take off the side plates.
4. Take off the cables of the battery. Remove from the battery box: cables, two mounting bolts **(A)**, and the cable holder **(B)**, and push the battery box to the right.
5. The remaining oil is emptied from the oil tank by sucking up the oil.
6. Place the hydraulic hose again.
7. Oil is filled by removing the oil filler cap from the tank.
8. Oil quantity:

SELFMDT 1800 / SELFMDT 1800	approx. 3,5 liters
SELFMDT 2100 / SELFMDT 2100	approx. 3,5 liters

9. Place the oil filler cap again and bleed the system *See section 7.3 Hydraulic pump and gear motor*



7.0 Long live the Multi Drum Turner

7.3 Hydraulic pump and gear motor

The hydraulic pump has a S3 "periodic intermittent duty" of 10%. This means that the pump in total is allowed to operate 1 minute for a period of 10 minutes at maximum load.

NOTE! If the pump operates more than 10%, the motor will be damaged due to overheating.

Bleeding the hydraulic system

With a load of 50-100 kg, the carriage must be raised and lowered to top and bottom position 2-3 times.

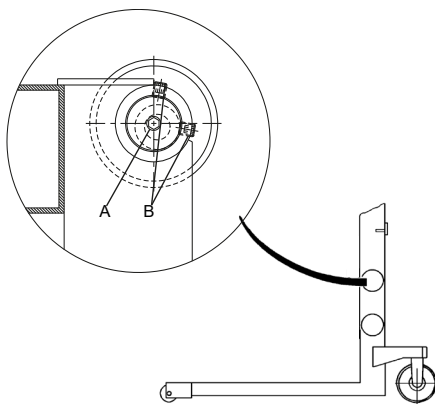
The gear motor has a "short-time operation under constant load" of 10 minutes (S2 = 10 minutes). This means that the motor is allowed to operate with the maximum load for 10 minutes. Hereafter it has to be cooled down to normal temperature.

NOTE! The motor will be damaged by superheating, if it operates for a longer time or if it is not cooled down.

7.4 Console adjustment

Two of the rollers on the carriage are mounted on eccentric pins, so that they can be adjusted. The adjustable rollers are at the top.

- Loosen screw **(B)** (key width 5 mm).
- Eccentric pins **(A)** (key width 8 mm) can now be turned to give the necessary carriage adjustment.
- Adjustments must be made on both sides to ensure uniform loading of the rollers.



7.0 Long live the Multi Drum Turner

7.5 Adjustment of the lifting chain

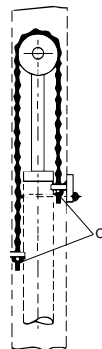
The chains shall be adjusted so that:

- They lift equally
- They are equally tight
- The lifting movement must stop in the cylinder, before the mast rolls touch the top stop.

After having adjusted the chains:

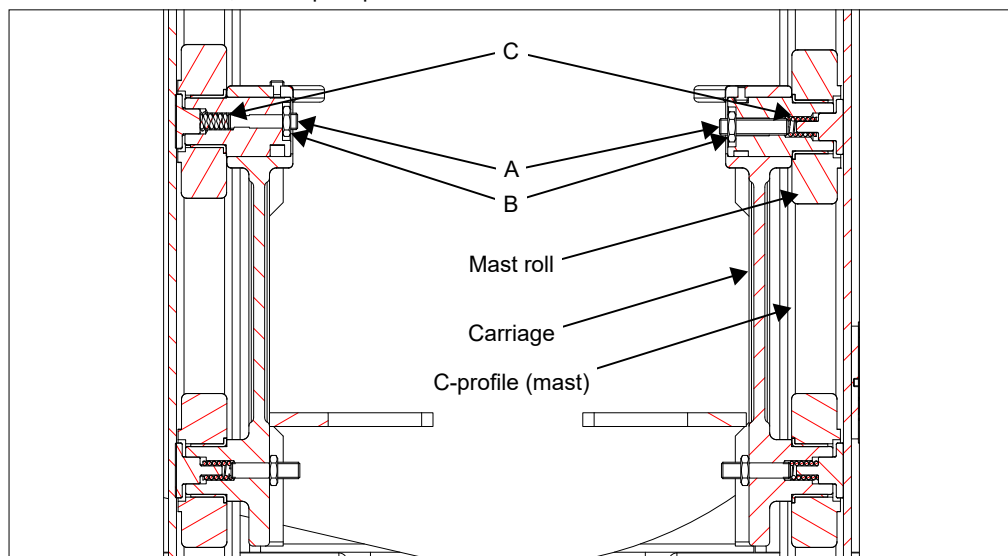
- Check that the carriage is placed horizontally.

The nuts **(C)** are to be adjusted (nut M12, key width 19 mm).



7.6 Adjustment of side play

1. Screw **(A)** is loosened counter-clockwise until resistance disappears.
2. Turn the screw clockwise, until resistance appears. The following 1.5 to 2.5 turns of the screw will be a tightening of the spring **(C)**.
3. When a larger resistance appears, make 0.25 turn counter-clockwise, and the counter nut **(B)** will be tightened.
4. Lift the *carriage* all the way to the top, and when lowering, it must be able to slide all the way to the bottom. If this is not the case, loosen screw **(A)** and turn it approx. 0.5 rotation counterclockwise, then repeat point 4.



7.0 Long live the Multi Drum Turner

7.7 Cleaning



When cleaning the Multi Drum Turner, do not direct the jet onto bearings and seals. Otherwise the grease will be washed out and the life of the equipment shortened. Avoid spraying directly with liquids on the handle and other electrical components.

Cleaning of the plastic screen (polycarbonate)

The screen is to be washed with slightly warm water with a neutral cleaning material, and afterwards washed with clean water. Use a soft sponge, a woollen cloth, or a wash leather.



Never use sharp objects or solvent cleaners when cleaning.

8.0 Fault codes / Troubleshooting key

8.1 Fault codes

Code	Description	Solution
17 23	Battery voltage too low Power supply missing	Charge battery Check fuses
16 22	Controller overheated	Contact the dealer
39	Error main relay	Contact the dealer

For other error codes, contact your dealer.

8.0 Fault codes/Fault location key

8.2 Fault location key

When the Multi Drum Turner is used every day, adjustments and the replacement of worn parts might be necessary.

Adjustments and minor repair can easily be made on the spot. Major repairs should, however, be carried through by the dealer who has a well-trained staff and the necessary special tools.



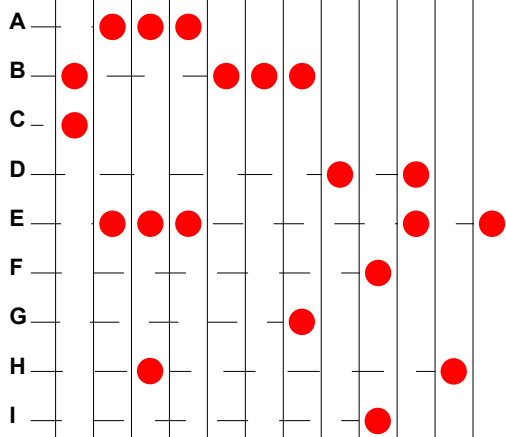
**Before asking the dealer for assistance,
try the fault location key.**

SYMPTOMS AND OBSERVATIONS

- A** Pump does not run when **UP** button is pressed _____
- B** Multi drum turner does not lift when the **UP** button is pressed _____
- C** Multi drum turner does not lift to max. height _____
- D** Carriage falls after being raised _____
- E** Carriage does not sink when **DOWN** is pressed _____
- F** Carriage cannot be lowered fully _____
- G** Multi Drum Turner is unable to lift the max. load _____
- H** Multi Drum Turner lifts slowly _____
- I** Carriage does not lift horizontally _____

Cause**Remedy**

Oil deficiency	See section 7.1 / 7.2
Battery discharged	See separate instruction
Fuse below 10 Amp or 100 Amp	See section 6.1
Cables defective	See section 6.2
The maximum load has been exceeded	See section 5.1
Air in the hydraulic system	See section 7.3
Pressure relief valve incorrectly adjusted	Contact the dealer
Leakage in hydraulic system - visible oil leakage	Contact the dealer
Carriage needs adjustment	See section 7.4 - 7.6
Solenoid or check valve defective	Contact the dealer
Defective valves in pump	Contact the dealer
Solenoid valve defective	Contact the dealer



If the problem cannot be solved by using the fault location key, please contact your dealer.

9.0 Good service after purchase

9.1 Ordering spare parts

The correct spare parts are obtainable from your dealer.

When ordering spare parts, always state:

- Serial number of the product.
- Type and width/length of the product.
- Spare part no. Please find the spare part no. on www.logitrans.com

9.2 Warranty / Reimbursement

Spare parts delivered during the warranty period will be invoiced. A credit note will be sent immediately after we have received and tested the defective parts and confirmed that the warranty conditions have been met.

9.3 Service and repair

You should be able to make adjustments and perform minor repairs on the spot. However, major repairs should be left to the dealer, who has well-trained personnel and the necessary special tools.

9.4 Warranty conditions

The warranty covers material and assembly defects which, subject to inspection by us or our representative, are deemed to be faults or deficiencies that prevent normal use of the parts concerned. Such affected parts shall be sent to your Logitrans dealer carriage paid within the warranty period in force at the time in question, together with a copy of the documentation for the service performed (B0284). The warranty does not cover normal wear and adjustments. The warranty period is based on single-shift working.

The warranty shall no longer apply if:

- the product has been used incorrectly,
- the product is used in environments for which it was not designed,
- the product has been overloaded,
- replacements of parts have been made incorrectly or original parts have not been used, and consequential damages have arisen,
- if the product is changed or accessories, not being approved by Logitrans, are used.
- it can not be proved that a qualified technician has performed the service check according to the requirements stated in the instruction manual.

9.5 Disclaimer

The manufacturer accepts no responsibility for personal injury or material damage arising from deficiencies, defects or improper usage. The manufacturer accepts no responsibility for lost earnings, operating losses, lost time, lost profits or similar indirect losses incurred by the purchaser or a third party.

Periodic service and safety inspection

Periodic service inspection

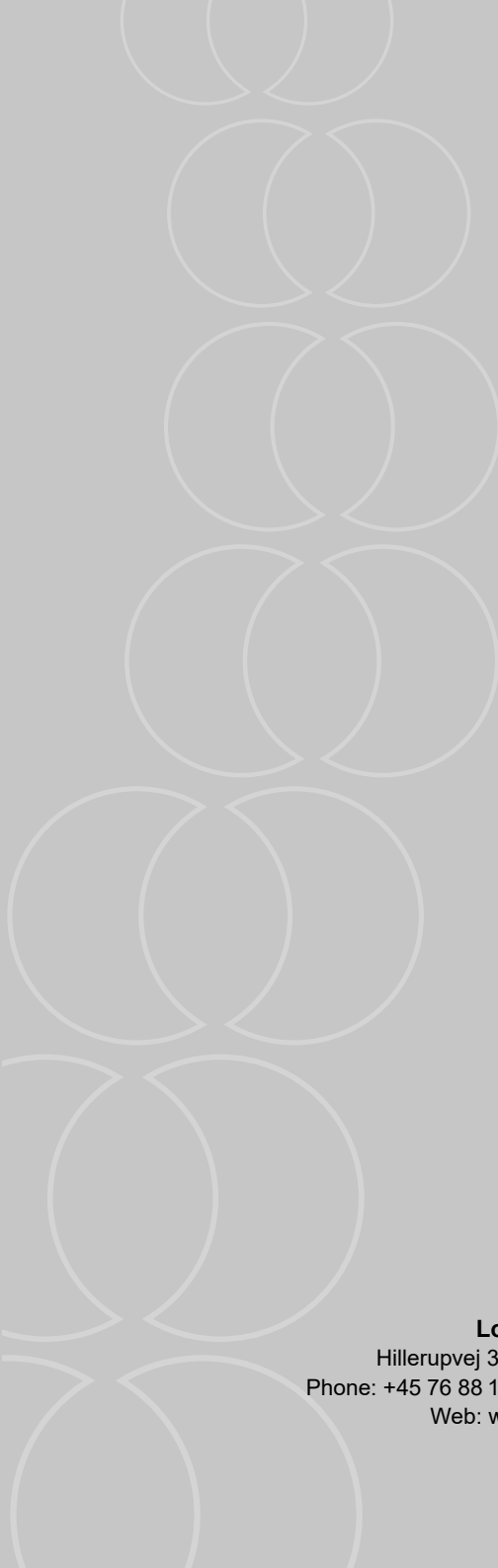
Service inspection is required once each year, or at least every 500 hours of operation.

Periodic safety inspection

Safety inspection should be performed by the dealer or other qualified persons at least once each year, unless local regulations state otherwise.

The inspection is to be performed on the basis of form no. B0367, and recorded on form no. B0284.

Forms and instructions for the inspection are available at your Logitrans dealer.



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