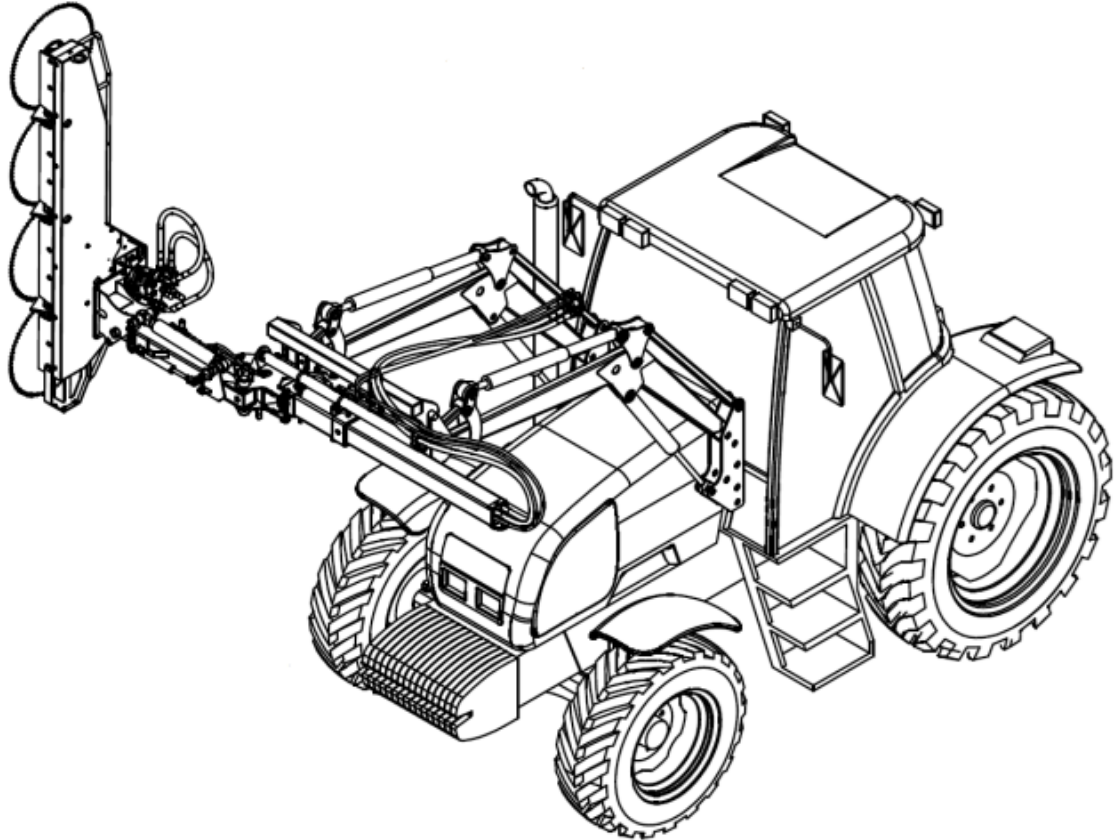




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OPERATOR'S MANUAL



CARRIER WITH HYDRAULIC EXTENSION FISHER

Serial number:

IN0937USA001
2016.04.13
EDITION NO. 1

Translation of the original manual



DO NOT
OPERATE THE MACHINE WHEN
ANY UNAUTHORIZED PERSONNEL
IS WITHIN 170' / 50M FROM THE
MACHINE.

NOTE

Keep this manual for future use.

Vocabulary:

- ✓ Fisher – extension arm, tooling carrier.
- ✓ Cooperating device – mowing head, attachment type: PT3-190, PT4-250, PG 150, PG 200.
- ✓ Vehicle – machine other than tractor, at which the Fisher machine is mounted (e.g. telescopic loader).

Well-proven design with thousands of machines in regular use in many countries and quality materials used ensure high durability and reliability of SaMASZ machines.

We congratulate you on the purchase of your new SaMASZ machine and wish you much pleasure and the very best work results through the years to come.

Contents	page
1. IDENTIFYING THE MACHINE.....	2
2. INTRODUCTION.....	2
3. INTENDED USE	3
3.1. Technical data.....	3
3.2. Design and working principle	4
3.2.1. Mounting work heads	5
3.3. Equipment and spare parts.....	5
4. SAFETY PRECAUTIONS	5
4.1. General safety rules and regulations.....	5
4.2. Transport.....	7
4.2.1. Moving machine onto another vehicle for transport.....	7
4.3. Residual risk	8
4.3.1. Residual risk assessment.....	9
4.4. Operator's qualifications	10
4.5. Safety labels and their meaning.....	10
5. OPERATION	11
5.1. Attaching the carrier to the vehicle	11
5.2. Attaching work head to the carrier	13
5.3. Preparing the machine for transport	14
5.4. Moving the extension arm with mowing head from transport to working position.....	14
5.4.1. Side position	15
5.4.2. Central position.....	16
5.5. Operation	17
5.5.1. Operating control panel	18
5.6. Operating hydraulics	18
5.7. Maintenance and service	18
5.7.1. Daily maintenance	18
5.7.2. After-season maintenance.....	19
5.7.3. Storage	19
6. LUBRICATION.....	19
7. MAINTENANCE AND SERVICE	20
8. MALFUNCTIONS AND THEIR REPAIR.....	20
9. REPAIR AND WITHDRAWAL FROM USE.....	21
10. WARRANTY CARD	21
11. WARRANTY TERMS	22
11.1. Warranty claim procedure.....	22
11.2. Warranty repairs record	23

1. IDENTIFYING THE MACHINE

Data plate is attached on the extension arm's beam and the mowing head as shown in Fig. 1.

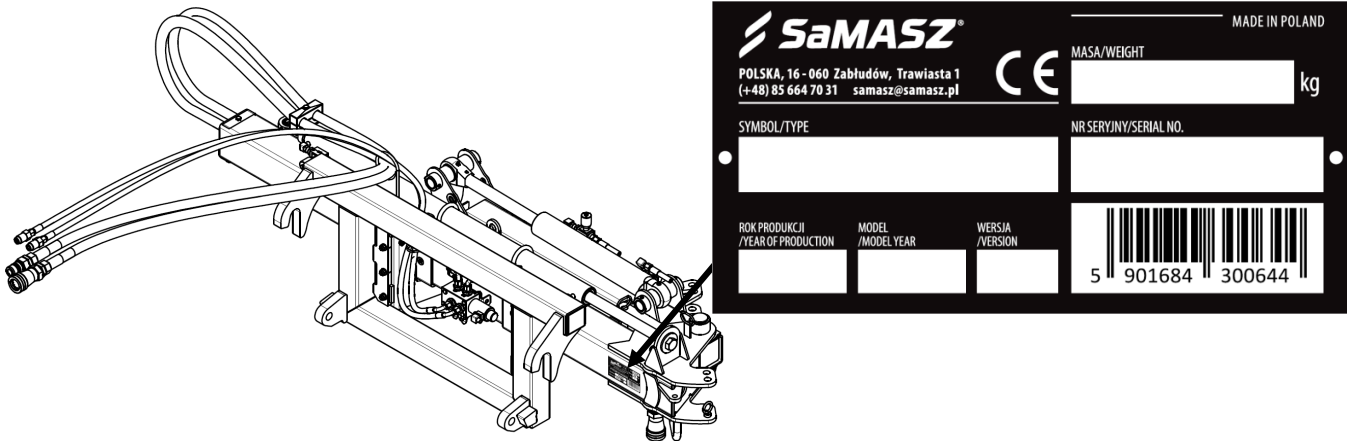


Fig. 1. Data plate location

Data plate includes:

- name and address of the manufacturer,
- CE marking means, that the produce conforms to 2006/42/EC Directive and harmonized standards,
- machine symbol,
- date of manufacture,
- model year,
- version number,
- machine weight,
- id number,
- barcode.

NOTE:

Should the contents of the herein manual be unclear, ask the manufacturer or your dealer for more detailed information on the machine.

2. INTRODUCTION

- This operator's manual should be considered as the machine's basic equipment. If the machine is handed over to another user, it should be in working condition, and include this operator's manual, EC declaration of conformity and its basic equipment.
- This operator's manual is essential for safe and proper use of this machine and should be read before anyone operates this machine.
- The machine is manufactured according to international safety rules.
- Respecting recommendations herein shall ensure use safety.
- Please contact the manufacturer if you have any queries relating to the operation and service of the machine.
- This operator's manual remains an integral part of the machine's equipment.



GENERAL PRECAUTION

When operating the machine always respect warnings and safety rules marked with this sign.



WARNING!

The machine must not be operated by persons who have not familiarized themselves with contents of this manual as well as by personnel not holding the required authorizations to operate tractors and telescopic loaders, children in particular.



WARNING!

Shifting the extension arm with mounted support feet may damage the feet!

3. INTENDED USE

The FISHER carrier enables aggregation of work heads such as PG 150, PG 200, PT3-190 and PT4-250 with front loaders on tractors and loaders. Application of the carrier allows for performing simple municipal works such as branch, hedge trimming, etc. with no need of using an extension arm.



WARNING!

Do not use the machine for purposes other than those listed in this manual. Otherwise it will be classified as misuse and could release the manufacturer from responsibility for any damages. The machine should be used, serviced and repaired only by personnel familiar with its characteristics and with safety regulations. Tampering with the machine may release the manufacturer from responsibility for any resulting malfunctions or damages.

3.1. Technical data

The SaMASZ manufactured carrier features the following parameters (Tab. 1):

Tab. 1. General specification

	FISHER
Minimum transport dimensions	
Length [ft in / mm]	2' 6" / 760
Width [ft in / mm]	7' 3" / 2,200
Height [ft in / mm]	3' 1" / 940 (2' / 620 – without feet)
Parking feet	2 pcs
Control	Vehicle's hydraulics / operator's panel
Required hydraulic connectors	2 pairs (4 hoses), I pair - double acting - to control the side shift and turn cylinders; II pair - single acting - header operation (PT saw - return hose with case drain);
Hydraulic pressure [bar]	210
Required electric connectors	12V (lighter outlet)
Working range from inside loader [ft in / mm]	
PT	5' 9"-9' 3" / 1,750 - 2,810
PG	5' 6"-8' 11" / 1,670 - 2,730
Movement range	
Work head rotation [°]	100
Side shift [ft in / mm]	3' 6" / 1,060
Weight with mounting frame [lbs / kg]	551 / 250
Max. oil flow capacity for head feeding [L/min]	100

3.2. Design and working principle

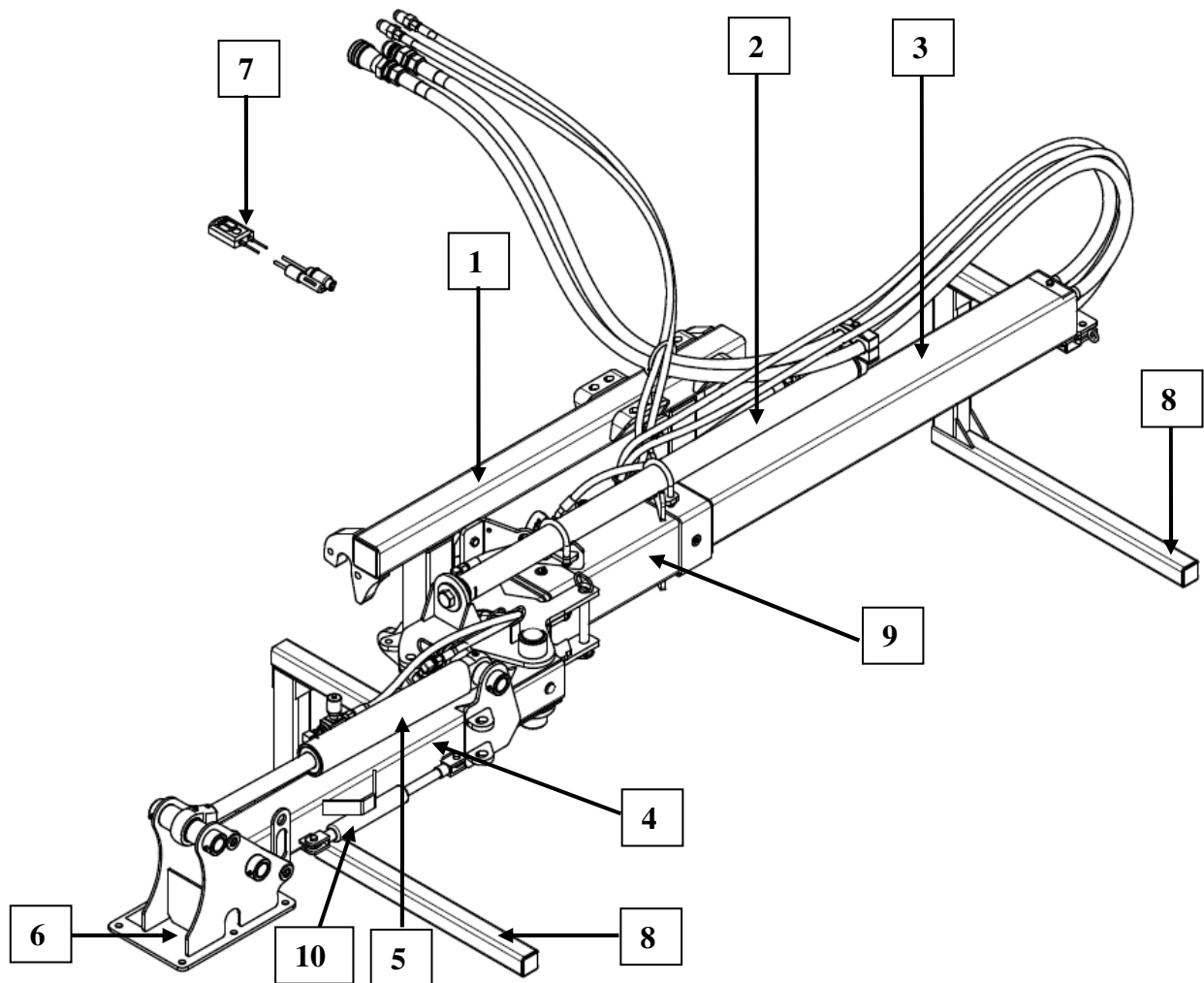


Fig. 2. Parts of

The carrier consists of the following basic assemblies:

- | | |
|-------------------------|---------------------------------|
| 1 – Hitch, | 6 – Holder with mounting plate, |
| 2 – Extension cylinder, | 7 – Control panel, |
| 3 – Extension arm, | 8 – Support feet, |
| 4 – Rotary arm, | 9 – Linkage frame, |
| 5 – Rotation cylinder, | 10 – Safety breakaway device. |

The carrier is equipped with removable hitch (1), therefore enabling the machine to be aggregated with various vehicles. Extension arm (3) mounted in linkage frame (9) enables tooling movement over the distance of 1.06m, and holder with mounting plate (6) rotates the attached tooling by 100°.

Demountable support feet (8) facilitate removal of the carrier with the mounted work head. The Fisher machine is equipped with safety breakaway device (10) to reduce damages to a minimum on contact with solid obstacles when operating. Control panel (7) enables selection of hydraulic parts to be fed from the vehicle.

3.2.1. Mounting work heads

To mount a work head on the FISHER carrier, use mounting plate shown in **Fig. 3**.

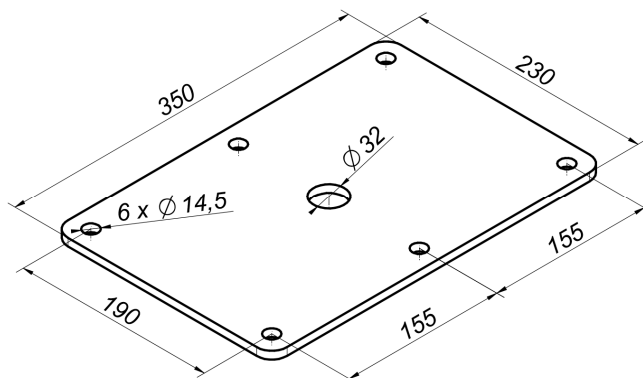


Fig. 3. Work head mounting plate

3.3. Equipment and spare parts

The FISHER carrier is sold with the following standard equipment:

- Warranty card,
- Operator's manual with list of spare parts,
- Spray paint (150ml).

Optional extra equipment:

- Counterweight for EURO II hitch,
- Lock for EURO II hitch,
- Hitch frames.

4. SAFETY PRECAUTIONS

4.1. General safety rules and regulations

- The carrier should be controlled only from the operator's station. Do not leave the controls before the machine operation is over.
- Before leaving the operator's station, lock the controls to prevent any unexpected machine movements.
- Please make sure that no unauthorized personnel remains within the danger area of at least 164 ft (50m). Keep particular caution when operating near roads and in stony areas.
- Perform any maintenance and adjustment work only when the drive is disconnected and rotor has stopped completely.
- When driving on public roads always comply with local traffic regulations, especially on the warning lights.



CAUTION!

Make sure to perform any service and repair operations with the tractor drive shut off and after all rotating parts have stopped completely.



WARNING!

Keep children away from the machine when operating and idle.

- Any time when performing repairs on the machine lifted with front loader's or loader's arms, be certain to secure it against falling with a support.
- When operating the machine, make sure the tractor is always equipped with the operator's cabin.
- Never start the machine if persons or animals are present around the machine.

- ❑ Respect safety labels regarding hazards, and warning signs placed on the machine.
- ❑ Before you start the vehicle, the Fisher carrier is aggregated with, make sure that all drives are turned off and the levers that turn the hydraulics are in neutral position.
- ❑ Never leave the vehicle's engine running without supervision. Before you leave the vehicle, turn off the engine and remove the key from its ignition.
- ❑ Never operate the machine when driving backwards.
- ❑ Never get onto the machine.
- ❑ Permissible inclination of the machine on a slope when working and during transport is 8°. Exceeding this incline can result in machine overturn.
- ❑ Never stand between vehicle and machine unless the aggregation is secured against moving by the vehicle's brake.
- ❑ When the parts of the machine need replacement, use only original spare parts as described in the spare parts list.
- ❑ Hydraulic hoses should be periodically checked and if any damage to the hoses have occurred or if they have been used more than the required period, replace with new ones. Replace only with hoses conforming to the manufacturer's specifications.
- ❑ Period of use of hydraulic hoses should not exceed 5 years (including storage time).
- ❑ Before any service works on the hydraulics, stop the vehicle's engine and take the ignition key out.
- ❑ Do not drain oil onto the ground, to the sewerage system, into rivers or lakes. For temporal storage of used oils use tight tanks only.
- ❑ Used oils contain substances harmful for the natural environment and should be delivered to a proper used oil treatment plant.
- ❑ Never use scotch tape to repair hydraulic hoses.
- ❑ When connecting hydraulic hoses to the vehicle's hydraulic connectors, make sure that there is no pressure in both the vehicle's and the machine's hydraulic system.
- ❑ Check, and if needed adjust, tightness of hydraulic connectors, as they can become loose during the operation, what may lead to damaging the engine and the hydraulic pump.
- ❑ When operating the hydraulics, always wear protective glasses and gloves. Hydraulic oil leaking under pressure (16MPa) may penetrate the skin and cause its infection thereafter. If this occurred, immediately visit a doctor.
- ❑ The machine should be stored under a roof and in a way as to not be hazardous both to people or animals.
- ❑ Mount and dismount the machine on even and paved surface while keeping particular attention.
- ❑ Before moving, make sure whether there are no unauthorized personnel directly nearby the machine, give an acoustic signal.
- ❑ For any break in the machinery operation turn off the drive.
- ❑ Periodically check bolts and other fasteners. Do not operate with damaged or worn fasteners.
- ❑ Do not operate the machine after dusk.
- ❑ Do not leave the aggregate on slopes without any protection.
- ❑ Do not leave the tractor's cabin or loader when driving.
- ❑ In the event of a serious failure, stop the machine's drive, turn off the vehicle's engine and take out the ignition key. Then call for technical service, and if an accident (in this case: road accident) occurs, respect first aid rules and contact responsible authorities.
- ❑ Do not transport any persons on the machine.

4.2. Transport

- ❑ Have all persons (children in particular) not involved in the actual work with the machine move away from the area and limit the zone where the operations are to be carried out.
- ❑ For transport convert the machine to transport position (it. 5.3).
- ❑ Before the vehicle mounted machine is set in its transport position, make sure that all rotating parts have come to a complete standstill.
- ❑ Do not drive over 16 mph / 25 km/h.
- ❑ Drive slower if road conditions are poor, especially on irregular surfaces or steep slopes.

4.2.1. Moving machine onto another vehicle for transport

The driver and the carrier are responsible for the machine's transport safety. Any equipment and parts must be secured for transport. To put the machine onto another vehicle in a safe way, please obey the following rules:

- ❑ Grab machine by any lifting devices only in places indicated by hook sign (**Fig. 5**),
- ❑ For machine lifting, use only lifting devices with hoisting capacity larger than machine's weight shown in data plate. This also applies to ropes and chains used for lifting,
- ❑ Do not lift if transport belts, belt suspensions, ropes are damaged. Whenever damage to these parts occurs, replace with new ones,
- ❑ When mounting slings, chains, handles etc., always set the machine's center of gravity properly (**Fig. 4**),
- ❑ To safely support the machine, use belts of adequate length so that the angle between them is no greater than 120° , and the angle between the strand and the vertical is no greater than 60° ,
- ❑ Collapsible parts should be blocked in transport position,
- ❑ No one should be within the range of action of the machine lifting when any transporting operations are being carried out,
- ❑ The machine should be protected from shifting on the vehicle's trailer,
- ❑ Before transporting in the given position (**Fig. 5**), check whether the rotary arm is secured with pin (S).

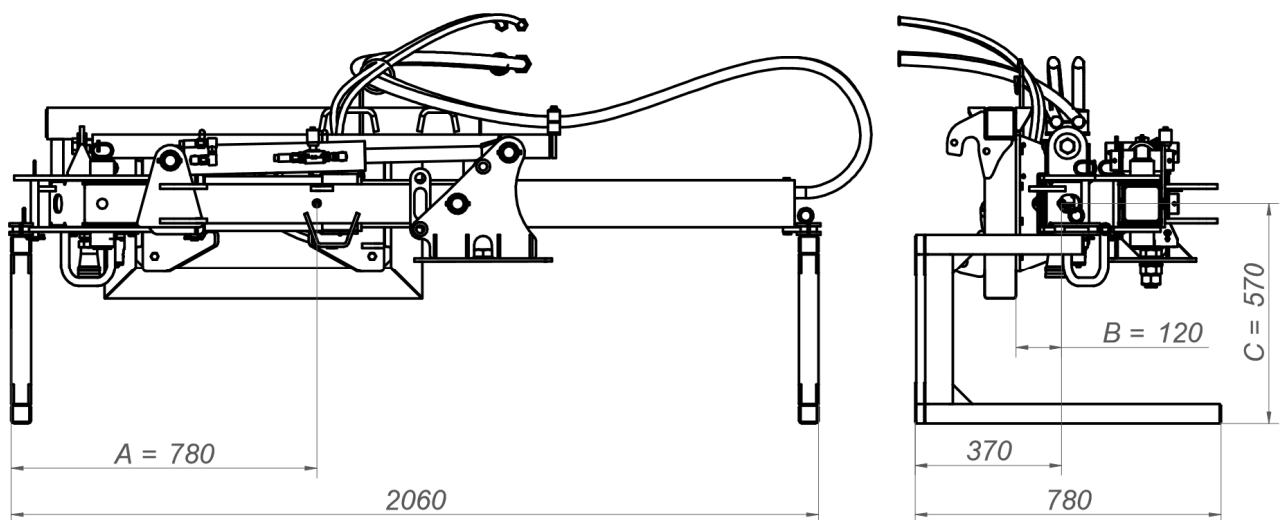


Fig. 4. Location of center of gravity

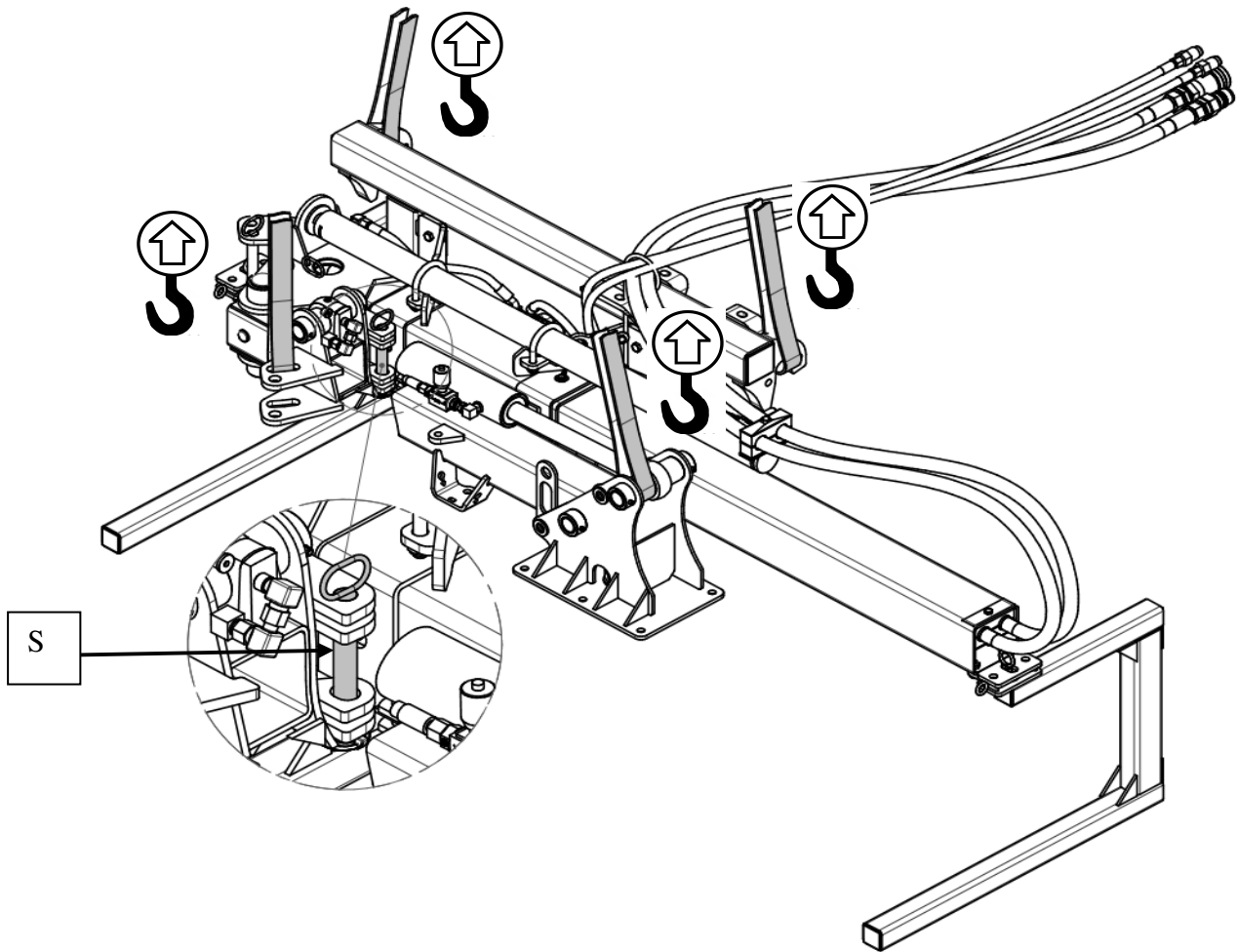


Fig. 5. Moving machine onto another vehicle



WARNING!

Securing the maneuver area and providing safety for operation performed is the responsibility of the person in charge of moving of the machine.

4.3. Residual risk

Despite the fact, that SaMASZ Sp. z o.o. Białystok company – the manufacturer of the machine takes the responsibility for the machine design and manufacturing, in order to eliminate hazard, certain risk when operating the machine is unavoidable.

Major source of risk results from the following operations:

- operation of machine by minors and operators not being familiarized with operator's manual,
- operation of machine by personnel under influence of alcohol or other abusive substances,
- failure to keep caution while transporting and moving the machine during operation,
- transport of personnel on the machine,
- presence of personnel and animals within the machine operating range,
- service and adjustment operations with engine running.

1. Risk of being caught or pulled in

This risk occurs when (1) changing position of the machine, (2) operating near rotating parts, and (3) working without safety guards.

During operation, maintenance and adjustment, always wear protective gloves, shoes and clothing without loose elements, belts, etc. Always respect warnings on safety labels attached to the machine.

2. Risk of cutting injury

This risk is present when replacing working parts with sharp edges. During any maintenance and repair works, always wear safety gloves.

3. Risk of injury from liquid ejection out of hydraulic system

When connecting hydraulic hoses to and from both the vehicle's and the tooling carrier's hydraulic connectors, make sure that there is no pressure in both the vehicle's and the machine's hydraulic system.

When operating the hydraulics, always wear protective glasses and gloves. Regularly check hydraulic hoses for leaks.

NOTE:

Present residual risk results mainly from erroneous actions of the machine's operator and failure to follow the instruction manual.

4. Forbidden actions

During machine's operation, do not do the following:

- never unblock the machine, make any regulations or repairs of the machine while it is in motion,
- never change order of operation and maintenance activities described in operator's manual,
- never operate the machine when it is not in working order or has damaged safety guards,
- never get your hands and legs close to rotating parts of the machine,
- during repair and maintenance of the machine, always comply with descriptions included in operator's manual; always do these activities when the vehicle's drive is off,
- before any works, focus your attention solely on the tasks to do,
- never operate the machine under influence of alcohol, drugs, or strong medicines that impair your attention,
- do not wear clothes or jewelry that are too loose or too tight. Too loose clothing or jewelry may be pulled in by the rotating parts of the machine,
- the machine should not be operated by children or by handicapped people.

When describing residual risk, the work head complies with the state of the art in technology on the date it was manufactured.

NOTE:

Despite following the specified instructions and prohibitions, residual risk is still present.

4.3.1. Residual risk assessment

Such risk can be minimized by doing the following:

- thorough familiarizing yourself with operator's manual,
- allow no persons within the machine operation range,
- adjust, maintain and lubricate the machine with the engine off,
- only skilled persons should perform repairs of the machine,
- operate the machine after having learned the operator's manual,
- protect the machine against access of children and any unauthorized personnel,



When the risk of exposure to noise cannot be avoided or eliminated by any protective means or organization of work, the employer must:

- 1) provide the operator with individual means of noise protection if the noise level in work place exceeds 80 dB.
- 2) provide the operator with individual means of noise protection and supervise the correctness of its usage, if the noise level in work place reaches or exceeds 85 dB.

4.4. Operator's qualifications

The machine and tractor's operator should hold license to drive a tractor, i.e. of the following categories: B or C (C1) or D (D1). Holding a license to drive a tractor with a trailer is also acceptable; this applies to categories: T or B+E or C+E or D+E. To operate the machine no special medical certificates, or additional qualifications are required. It is sufficient to receive instructions given by the SaMASZ personnel at the machine commissioning.

4.5. Safety labels and their meaning



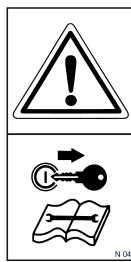
IMPORTANT

- All warning labels should be clean and legible,
- Lost or damaged labels must be replaced,
- New labels can be ordered at the Manufacturer.



N-03

Read the operator's manual before use



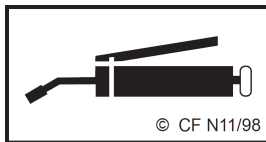
N-04

Before any service or repair disconnect the power supply



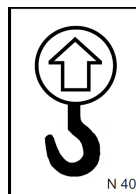
N-07

Do not operate the if any personnel remains within 164 ft (50m) from the machine



N-11

Lubrication points



N-40

Transport holder for machine handling



N-50

Do not remain in the machine swinging area



N-52

Wear protective gloves



N-117

Avoid contact with liquid coming out under pressure

NOTE:

Any spare part used for repair of the machine should have all safety labels provided by the manufacturer.

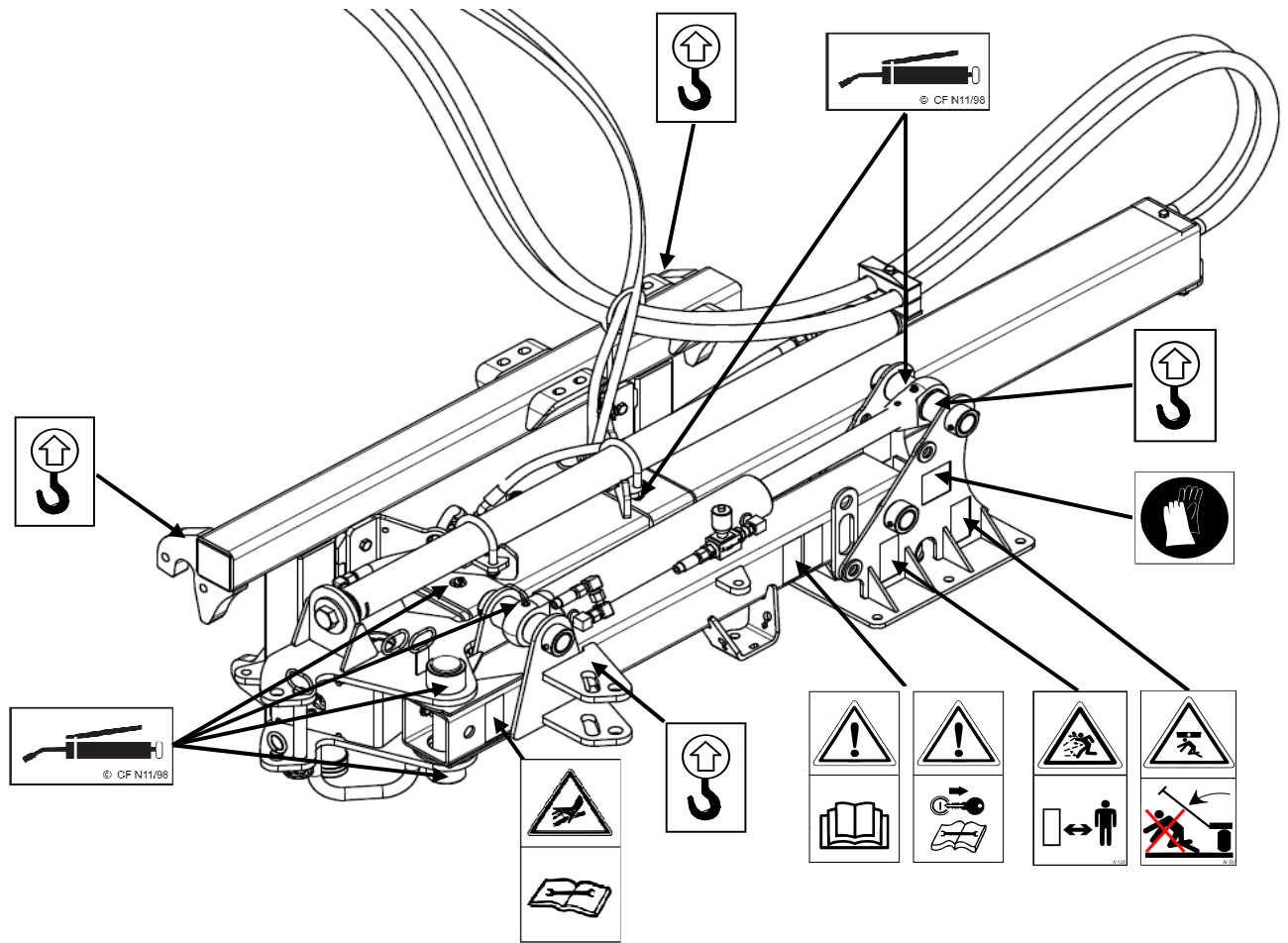


Fig. 6. Location of safety labels on the machine

5. OPERATION

NOTE:

For the machine storing period, cylinder rods are lubricated at SaMASZ with protective grease in order to protect them against weather conditions that can shorten their service life. Before any operation with the machine remove excess grease coming out of cylinder rods.

5.1. Attaching the carrier to the vehicle

Mount the carrier on front loader's or loader-excavator's holder (Fig. 7) and secure as recommended by the holder's manufacturer.

Due to hitch interchangeability, the Fisher carrier can be aggregated with various vehicles (Fig. 8). Ask manufacturer or your dealer on hitch availability.

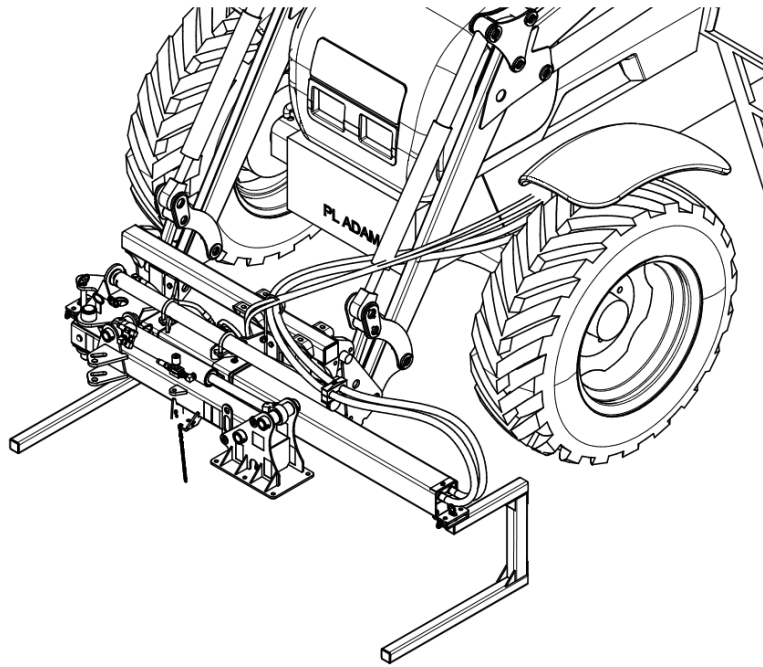


Fig. 7. Attaching carrier to front loader

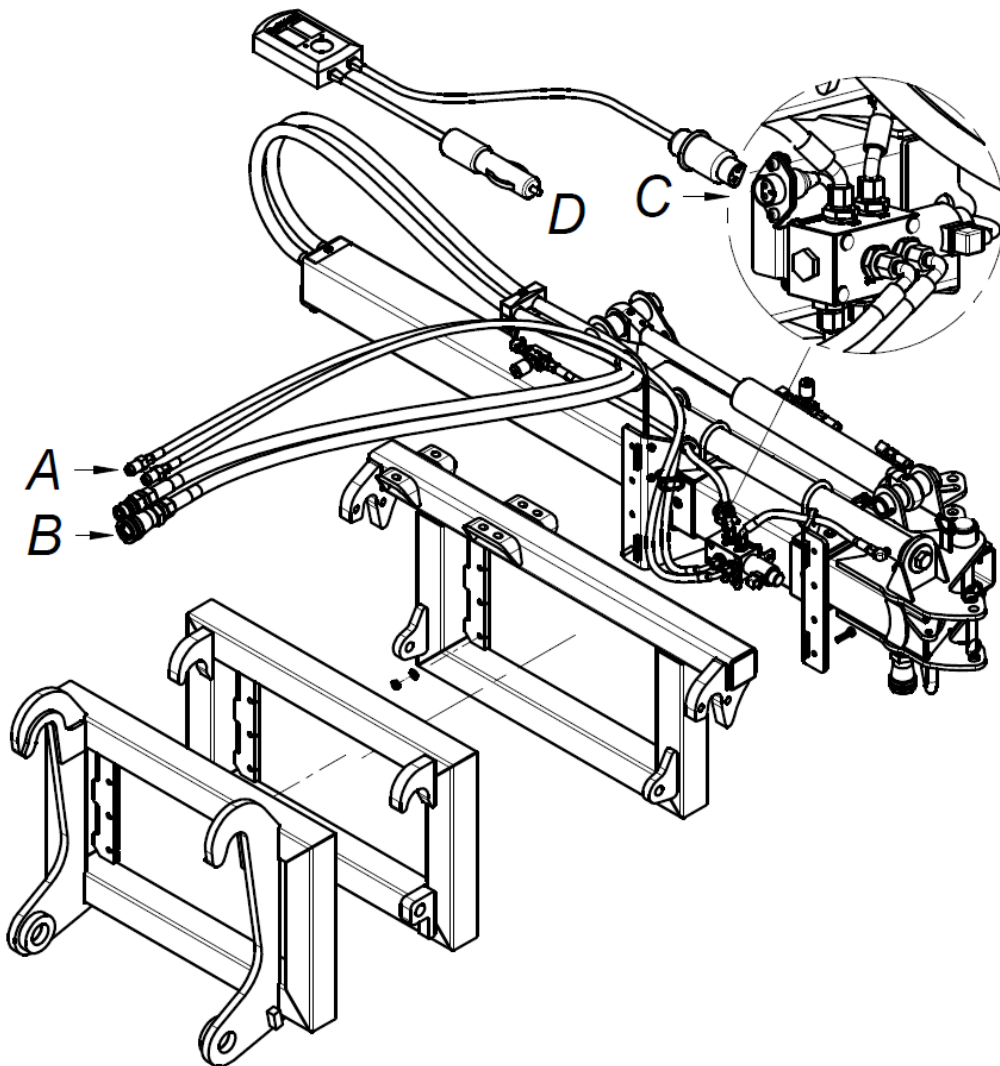


Fig. 8. The Fisher carrier connections

After having mounted the carrier, connect hydraulic hoses (A) for side shift and tooling rotation supply and hoses (B) for work head supply (PT circular saw, PG branch grinder) (Fig. 8). Remember to adjust oil flow rate [L/min] to work head's demand – see Tab. 1.

**WARNING!**

If Fisher is aggregated with PT circular saw, the motor of which has no third oil separation pipe, then the return hose (B - female connector) must be connected to a connector on a vehicle with pressure-less return line. Otherwise hydraulic motor can be damaged.

If the vehicle has no hydraulic connector with pressure-less return line, refer to the instruction manual, or consult the vehicle's manufacturer where pressure-less return line can be connected to the tank.

Depending on the type of vehicle, with which the carrier is aggregated, it is allowable to replace connectors or extend hydraulic hoses on the user's own. If the oil flow rate is not adequate, SaMASZ offers ZH hydraulic power pack to be mounted on the rear 3-point linkage, Cat. II with maximum flow of 130L/min – pressure 200bar.

**WARNING!**

Extending or using too thin hydraulic hoses for work head supply can lead to overheating the pack, improper operation of the tooling attached or its damage.

Connect 3-pin controller plug (C) to corresponding socket on the machine, and lighter outlet (D) to 12V cigarette outlet.

**WARNING!**

When connecting hydraulic hoses and electric cables to front loader's arms, in machine rotation points, provide and leave some allowance, so that during the operation they are not damaged.

5.2. Attaching work head to the carrier

The Fisher carrier enables aggregation of the following work heads: PG 150, PG 200, PT3-190, PT4-250. To attach a work head to the carrier:

- position the vehicle and the carrier set, so that the holder with mounting plate (Fig. 2, item 6) overlaps the head's plate;
- using six M14 bolt connections (B) joint the two plates together. Tighten the bolts with torque corresponding to their property classes (Tab. 2). Central M30 bolt connection (C) is not required, however it facilitates the head rotation by 180°, if needed;
- connect hydraulic connectors (D) and secure the hoses by clipping them with chain (E) (Fig. 9).

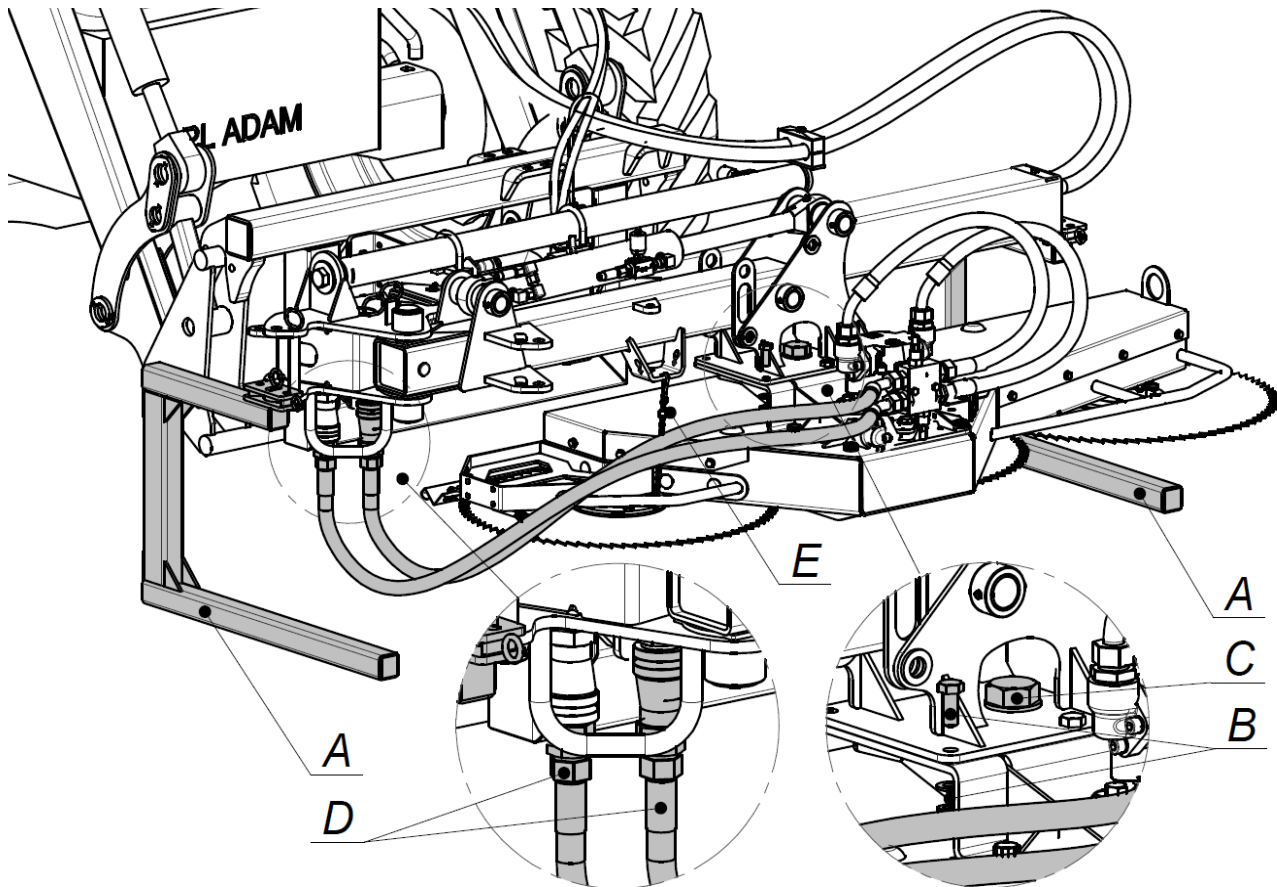


Fig. 9. Attaching work head to the carrier

To detach a work head, follow the same steps, position the machine on an even ground and turn the vehicle's drive on. Then disconnect the push-in fittings and loosen bolts in mounting holder.

NOTE:

The carrier is equipped with a set of hydraulic push-in fittings for quick work head mounting and demounting.

5.3. Preparing the machine for transport

To prepare the machine for transport do the following:

- ❑ lift the machine approx. 0.2m above the ground;
- ❑ remove support feet (A) (**Fig. 9**);
- ❑ check whether rotary arm is secured with pin (S) (**Fig. 5**), otherwise – secure the arm with pin;
- ❑ if the carrier has circular saw or branch trimmer mounted on, protect the sharp edges.

5.4. Moving the extension arm with mowing head from transport to working position

The Fisher carrier enables operation in side and central position.

5.4.1. Side position

To set the machine in side position, do the following (Fig. 10):

- ❑ In order to improve safety lower the machine as low as possible and set it in such way that axis of rotation (P) of the arm is vertical;
- ❑ Unlock and remove pin (S), turn the arm by 180° and secure again with pin (S) – longitudinal opening;
- ❑ Install safety breakaway device (D) by joining the rotary arm with the extension arm.

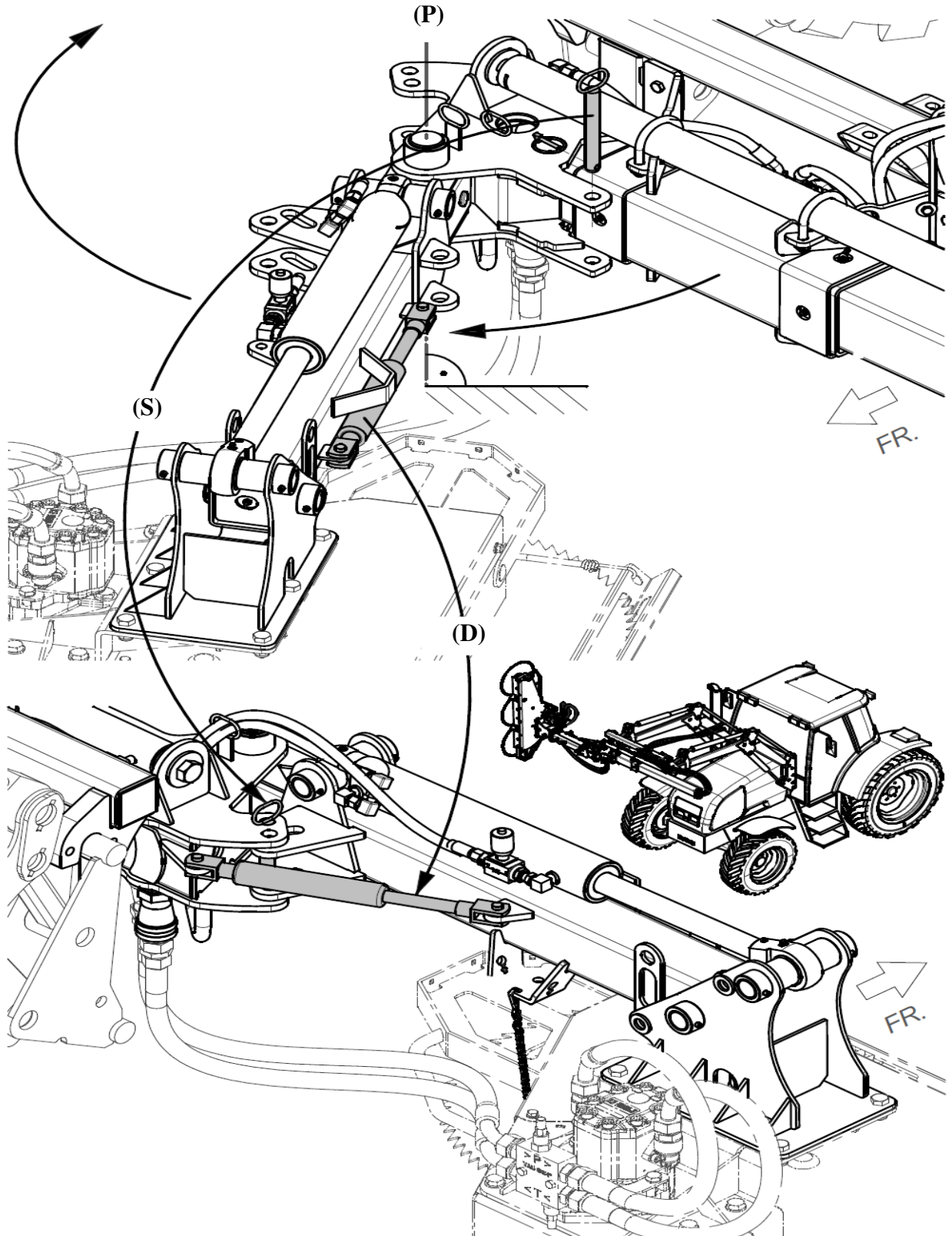


Fig. 10. Setting carrier in side working position

5.4.2. Central position

To set the machine in central position, do the following (Fig. 11):

- ❑ In order to improve safety lower the machine as low as possible and set it in such way that axis of rotation (P) of the arm is vertical;
- ❑ Unlock and remove pin (S), and then deflect the arm;
- ❑ Install safety breakaway device (D) in the place shown by joining the rotary arm with the suspension frame.

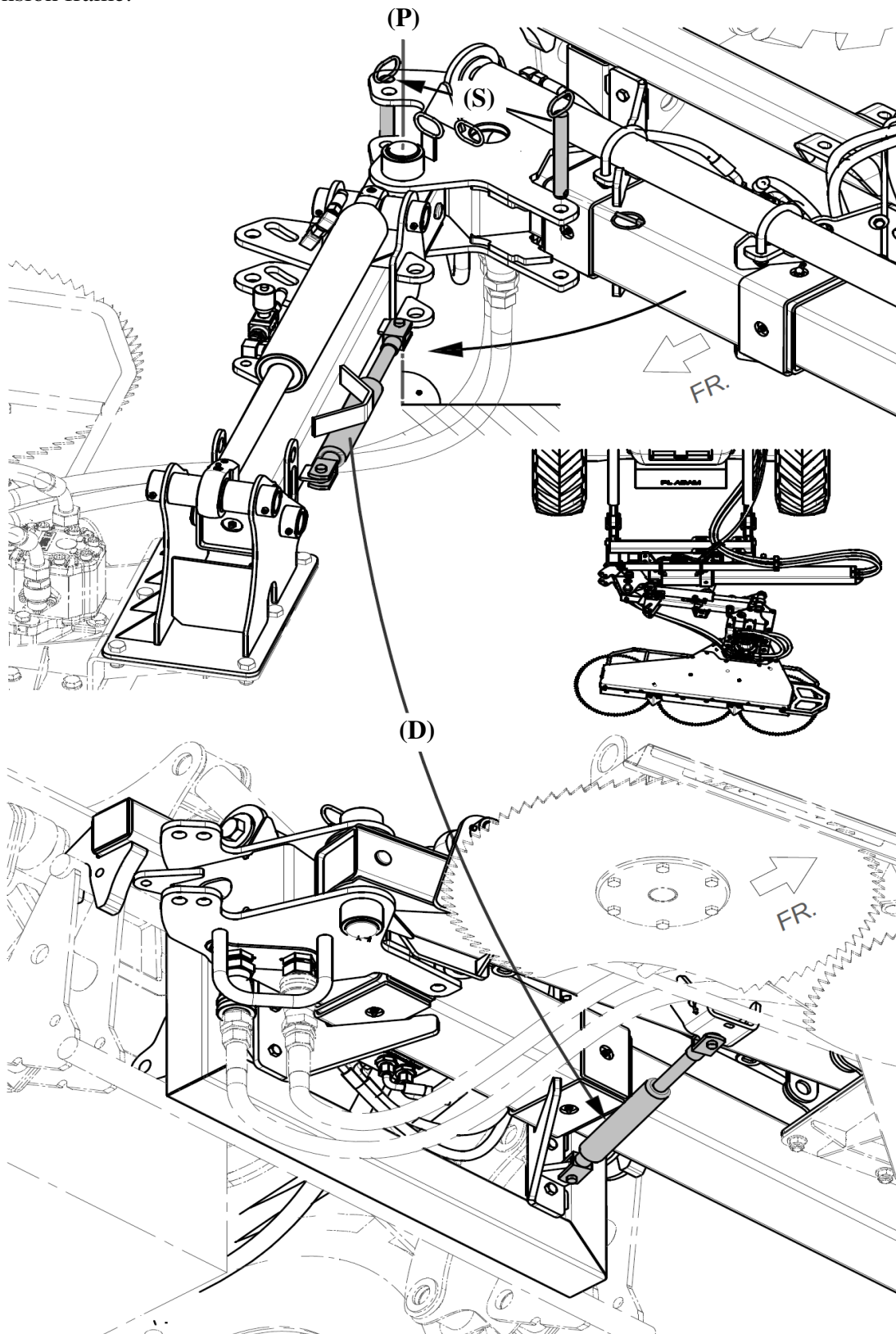


Fig. 11. Setting carrier in central working position

5.5. Operation

**WARNING!**

Before operating learn the operator's manual for the attached work head.

Please note that in working position, and with the arm extended to its maximum in particular, the centre of gravity is shifted. To improve the vehicle's stability it is recommended that with EURO type hitch – lock (A) counterweight (B) are used (Fig. 12).

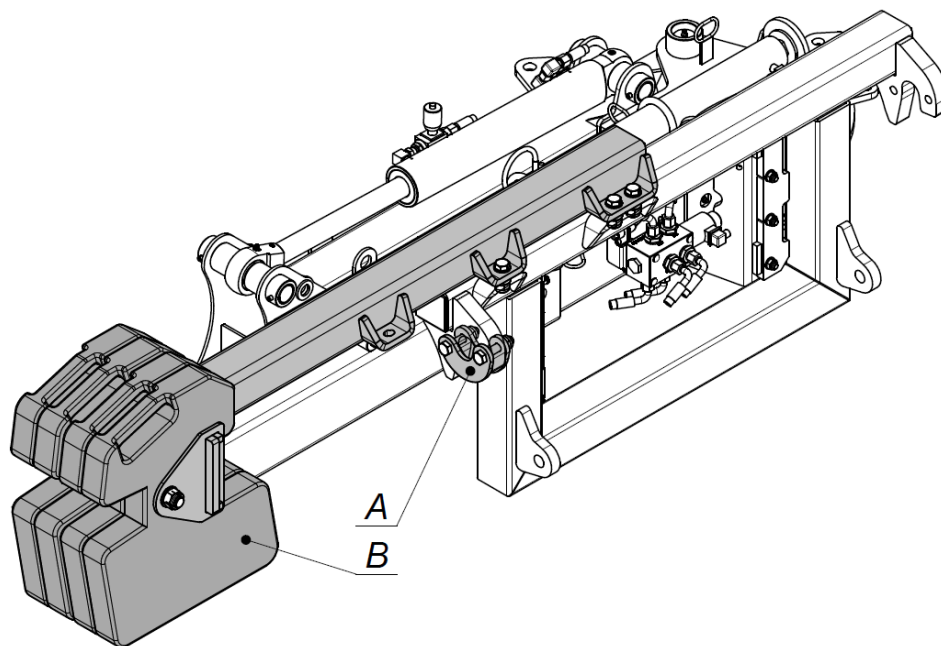


Fig. 12. Counterweight on Fisher carrier

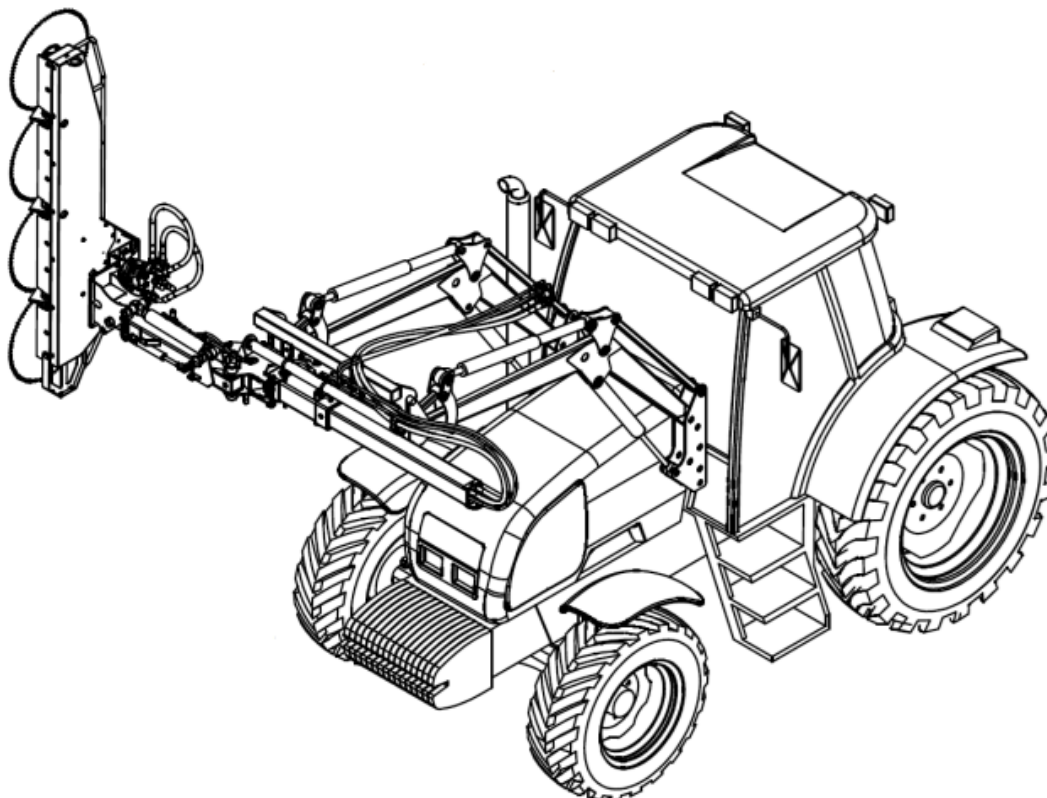


Fig. 13. Working position

5.5.1. Operating control panel

The panel is used to choose a cylinder (either shift or rotation) to be operated with the vehicle's hydraulics. For panel installation description, see section 5.1 herein (**Fig. 8**).

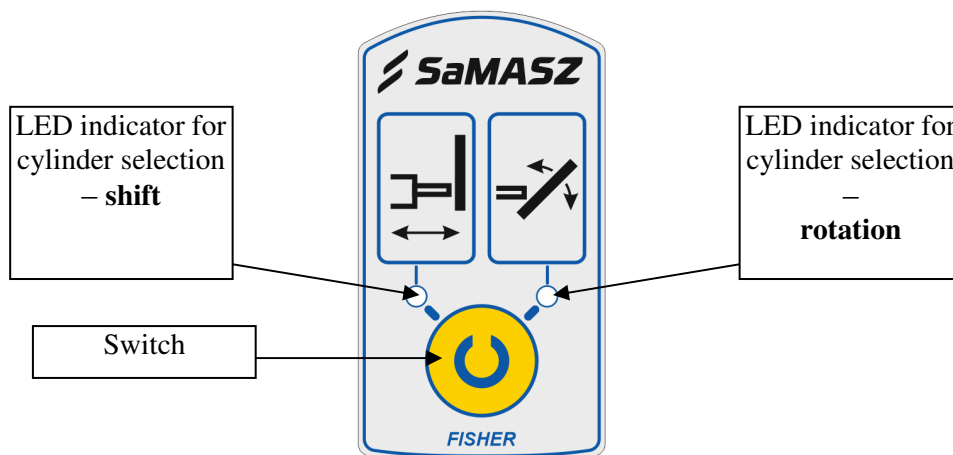


Fig. 14. Control panel

5.6. Operating hydraulics

Periodically check the condition of hydraulic hoses and fittings, and if damaged, replace them with new ones. Irrespective of the above replace hydraulic hoses every 5 years including their storage time. In the winter period it is recommended to store the machine in a dry, well ventilated room, paying attention that hydraulic hoses are not deflected.

NOTE:

Oil used in hydraulic circuits is toxic. Before any servicing, oil replacement, the operator should wear protective clothing.

Strictly follow the valid regulation on hazardous waste. Used oils should be drained to special containers and taken to a specialized used oil treatment plant.

5.7. Maintenance and service

5.7.1. Daily maintenance

When you finish each day of operation carry out the following maintenance:

- ❑ remove any grass, mud, etc. from the machine,
- ❑ inspect all visible parts and components and their connections; tighten all loose bolts and nuts and replace all damaged and/or worn parts,
- ❑ lubricate all pins and cylinder joints,
- ❑ visually check technical condition of the hydraulics: fasteners for tightness. When any malfunctions are found, tighten the fasteners and replace seals.
- ❑ check technical condition of connections between the machine and the vehicle.

5.7.2. After-season maintenance

At the end of the season clean, wash and dry the machine. Carefully grease unpainted surfaces and 3-point linkage pins.

Moreover:

- ❑ examine the paintwork condition. If necessary, clean and paint any damaged points,
- ❑ examine technical condition of the hydraulics as on daily maintenance. Moreover carefully check the condition of hydraulic hoses. If necessary, replace them with new ones as required by the manufacturer,
- ❑ examine the technical condition of the machine's moving parts. If any clearance on pins is found, replace them together with sliding bushings and tighten,
- ❑ protect working parts (pins, joints, cylinder rods, etc.) against corrosion by applying a thin film of solid grease on their surfaces.

5.7.3. Storage

Disconnect the machine and set it on support feet. It is recommended to store the aggregate on a paved ground, preferably in roofed places, inaccessible to unauthorized personnel and animals.

After storing for winter period, before operating the machine, check its technical condition while paying special attention to the hydraulics. Touch up the paintwork, lubricate and check the condition of hydraulic hoses.

6. LUBRICATION

For machine lubrication use grease STP. Do not use any plant or animals based grease. Before applying the grease, clean grease nipples and lubrication points.

Lubrication points are shown in (Fig. 15).

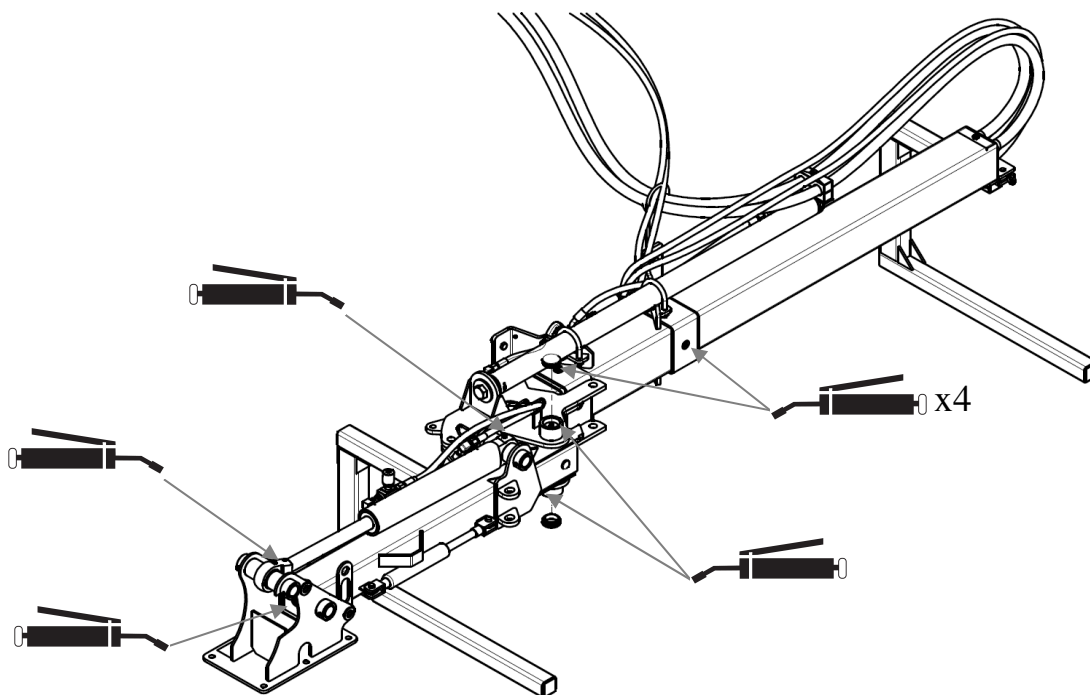


Fig. 15. Lubrication points on Fisher carrier

7. MAINTENANCE AND SERVICE

Tab. 2. Torque values for bolts

A	6.8		8.8		10.9		12.9	
	Maximum torque							
	Ib-ft	Nm	Ib-ft	Nm	Ib-ft	Nm	Ib-ft	Nm
M4	1.5	2.2	2	3.0	3	4.4	4	5.1
M5	3.5	4.5	4.5	5.9	6.5	8.7	7.5	10
M6	5.5	7.6	7.5	10	11	15	13	18
M8	13	18	18	25	26	36	33	43
M10	27	37	37	49	55	72	63	84
M12	47	64	63	85	97	125	111	145
M14	74	100	103	135	151	200	177	235
M16	118	160	159	210	232	310	273	365
M18	162	220	225	300	321	430	376	500
M20	229	310	321	425	457	610	535	710
M22	314	425	435	580	620	820	726	960
M24	395	535	553	730	789	1050	926	1220

8. MALFUNCTIONS AND THEIR REPAIR

In the event of a malfunction, immediately stop the machine and after the cutting assembly has come to a complete stop, turn off the engine. Before disconnecting any of the hydraulic hoses, check whether there is no pressure in the hydraulics and remember to cut-off the oil feed from the tank to the machine's hydraulics. Hot or/and pressurized oil leak may cause serious bodily injuries. For the machine's operator safety, stop the machine on an even ground. All hydraulic cylinders and moving elements must be completely locked.

Defect	Reason	Repair
Shift cylinder cannot be operated.	Hydraulic connectors are not connected to one pair of feed connectors.	Connect hydraulic connectors correctly.
	Hydraulic connectors are not compatible with hydraulic connectors on the vehicle.	Replace the connectors for correct ones.
	Closed choke valve on the cylinder (speed adjustment).	Adjust choke valve.
Rotation cylinder cannot be operated, although extension cylinder works correctly.	Control panel not connected.	Check if after the controller activation the LED indicators are lit, check lighter outlet and 3-pin plug at the machine. Make sure that electric cables are not cut.
	Damaged solenoid.	Check if coil on the valve operates correctly. Otherwise, replace the coil. Replace the solenoid.
Vibrations and noises when extending the arm.	No lubrication.	Lubricate the slides in suspension frame.
Rotary arm is lifting too often.	Damaged safety breakaway device.	Replace safety breakaway device if force applied to the head, at which the arm is lifted is less than 8000N.

9. REPAIR AND WITHDRAWAL FROM USE

Before any repair works, possibly related to admitting it for use, clean the machine thoroughly and remove any grass, dirt or mud.

After having inspected all bolt connections and pins for clearance, assess whether the machine is in proper operating condition. If after having replaced some worn parts, the machine can be operated further, replace all remaining damaged parts with new ones. Also replace fasteners (bolts, nuts, cotters, etc.) with new ones.

If the machine cannot be repaired any more, it should be withdrawn from use. To do so, drain oil from hydraulic hoses (to special tight tanks) and deliver it to a proper waste treatment company. Clean the machine parts, dismantle and properly dispose of all plastic parts. Deliver it to a proper waste treatment company for reuse. Remaining metal parts should be delivered to a breaker's yard. After that, the machine can be scrapped.

When dismantling the aggregate and during disconnection of assemblies and parts in particular, follow all safety precautions. Perform dismantling works wearing protective gloves. Withdrawal of dismantled parts should conform with valid environment protection provisions.

10. WARRANTY CARD

CARRIER WITH HYDRAULIC EXTENSION:

Serial number
Manufacture date
Warrantor's stamp
Controller's signature

Date of sale
Seller's stamp
Seller's signature

This product has been checked and deemed fully serviceable and cleared for use.

NOTE:

Warranty card – if not filled in, corrected or illegible – **is not valid.**

11. WARRANTY TERMS

11.1. Warranty claim procedure

1. The manufacturer warrants good quality and defect-free operation of the machine under this warranty if the machine is operated in accordance with the operator's manual.
2. Faults or damages to the machine found within 12-month period from the date of purchase shall be removed free of charge at the purchaser's or the manufacturer's.
3. Faults or damages should be submitted personally, in writing or by telephone. Repairs shall be carried out within 14 days. Any repairs under the warranty should be carried out by authorized SaMASZ service facilities.
4. Warranty claims regarding the product replacement or repayment are considered within 14 days by the manufacturer.
5. The following conditions are not covered by warranty:
 - a) **use for any other purpose than those described in the operator's manual,**
 - b) **fortuitous events or other (see item 1), for which the manufacturer does not bear any responsibility,**
 - c) **natural wear of parts such as sliding bushings and plates. These repairs may be done only at Purchaser's cost:**
 - d) **damaged frame.**
6. The Purchaser bears the costs of technical evaluation – if the Manufacturer finds that a claimed product is free of defects and this is confirmed by technical report.
7. The Manufacturer has the right to cancel the warranty in the following cases:
 - a) **hampering with the machine, modifications to its mechanical design or intentional damages.**
 - b) **vast damage caused by random events or others, for which the Manufacturer does not bear any responsibility,**
 - c) **lack of required records in the warranty card or filling in the warranty card independently,**
 - d) **use of the machine for any purpose other than described in the operator's manual.**
8. The Manufacturer can break the service agreement with immediate effect when the user does not pay the invoice according to that agreement in a timely manner and the delay in payment is longer than 30 days from maturity date. Breaking the service agreement by the Contractor due to causes dependent on the user shall lead to termination of the warranty given for the particular machine.
9. The Manufacturer shall not bear any compensation responsibility for the loss caused by the machine breakdown during its operation.

NOTE:

Please ask your dealer to complete and return the warranty card with date and place of purchase, and dealer's stamp and signature. Otherwise you may lose your warranty rights.

NOTE:

The Manufacturer reserves the right to introduce design changes.

NOTE:

The SaMASZ company is constantly working on the development of all of its machine types and models. Therefore, any modifications of our machinery due to their form, equipment and technology are likely. No claims can arise from data, drawings and descriptions included herein as well as the spare parts list.

SaMASZ is not responsible for printing errors.

11.2. Warranty repairs record

Repair scope and spare parts replaced:

Date, stamp and signature of repair shop.

Date, stamp and signature of repair shop.

Date, stamp and signature of repair shop.
