



Safety, Operation, Parts & Maintenance Manual

RANSOMES HR 3300T Snow Blade Kit LMAC268

JACOBSEN® HR 3300T Snow Blade Kit LMAC268

Prior to fitting this kit the machine should be fitted with the
Auxiliary Hydraulic Services Kit LMAC307.

For use on Product codes: RHR33001 & JHR33001



WARNING: If incorrectly used this machine can cause severe injury. Those who use and maintain this machine should be trained in its proper use, warned of its dangers and should read the entire manual before attempting to set up, operate, adjust or service the machine.

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2.1 IMPORTANT

IMPORTANT: This is a precision machine and the service obtained from it depends on the way it is operated and maintained.

This SAFETY AND OPERATORS MANUAL should be regarded as part of the machine. Suppliers of both new and second-hand machines are advised to retain documentary evidence that this manual was provided with the machine.

This manual should be used in conjunction with the HR3300T Safety, Operators & Maintenance Manual.

This STENSBALLE Snow Blade is designed for clearing snow from asphalt roads, paths, paved and other firm surfaces. Use in any other way is considered as contrary to the intended use. Compliance with and strict adherence to the conditions of operation, service and repair as specified by the manufacturer, also constitute essential elements of the intended use.

Before attempting to operate the Snow Blade, **ALL** operators **MUST** read through this manual and make themselves thoroughly conversant with Safety Instructions, mounting, controls, lubrication and maintenance.

Accident prevention regulations, all other generally recognized regulations on safety and occupational medicine, and all road traffic regulations shall be observed at all times.

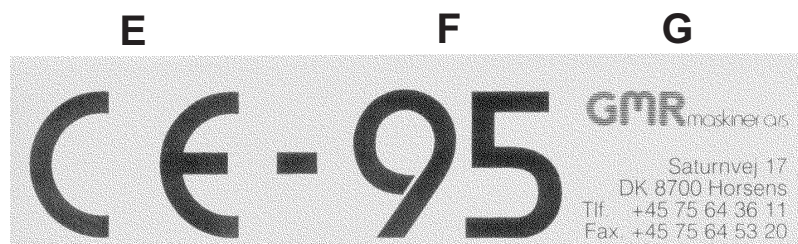
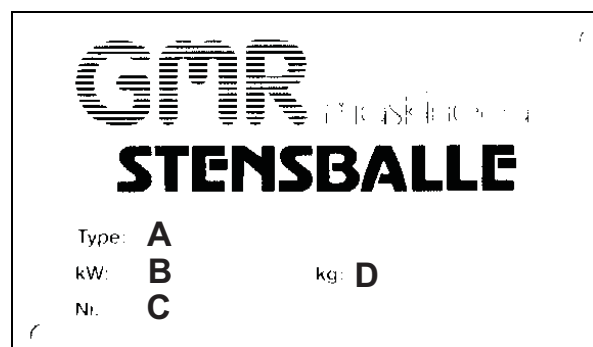
Any arbitrary modifications carried out on this machine may relieve the manufacturer of liability for any resulting damage or injury.

It is important that during the life of the machine wearing and replaceable parts are disposed of in an environmentally responsible way using the resources available in the country where it is used. There are guidelines in this manual for the eventual decommissioning of the Snow Blade once it has no further use.

This manual includes an illustrated list of spare parts. Please read before order spare parts and use only **Ransomes Jacobsen Genuine** spare parts to ensure the control of EC compliance.

2.2 PRODUCT IDENTIFICATION

- A Machine Name
- B Power
- C Serial Number
- D Weight
- E CE Marking
- F Year of manufacture
- G Manufacturers Name & Address



2.3 GUIDELINES FOR THE DISPOSAL OF SCRAP PRODUCTS

2.3.1 DURING SERVICE LIFE

Used oil, oil filters and engine coolant are hazardous materials and should be handled in a safe and environmentally responsible way.

In the event of a fluid leak, contain the spill to prevent it entering the ground or drainage system. Local legislation will dictate how such spills are to be treated.

Following the maintenance procedures laid out in this manual will ensure that the impact the machine has on the local environment is controlled.

When it has been identified that the Snow Blade has no further functional value and requires disposal, the following actions should be taken.

2.3.2 END OF SERVICE LIFE

These guidelines should be used in conjunction with applicable Health, Safety and Environmental legislation and use of approved local facilities for waste disposal and recycling.

- Position the machine in a suitable location for any necessary lifting equipment to be used.
- Use appropriate tools and Personal Protective Equipment (PPE) and take guidance from the technical manuals applicable to the machine.
- Remove and store appropriately:
 1. Batteries
 2. Fuel residue
 3. Engine coolant
 4. Oils
- Disassemble the structure of the machine referring to the technical manuals where appropriate. Special attention should be made for dealing with 'stored energy' within pressurised elements of the machine or tensioned springs.
- Any items that still have a useful service life as second hand components or can be re-serviced should be separated and returned to the relevant centre.
- Other worn out items should be separated into material groups for recycling and disposal consistent with available facilities. More common separation types are as follows:
 - Steel
 - Non ferrous metals
 - Aluminium
 - Brass
 - Copper
 - Plastics
 - Identifiable
 - Recyclable
 - Non recyclable
 - Not identified
 - Rubber
 - Electrical & Electronic Components
- Items that cannot be separated economically into different material groups should be added to the 'General waste' area.
- Do not incinerate waste.

Finally update machinery records to indicate that the machine has been taken out of service and scrapped. Provide this serial number to Ranmsomes Jacobsen Warranty department to close off relevant records.

Operator Manual - STENSBALLE snow blade type FS**GMR maskiner a/s**

Please complete the 3 coupons below with serial number, type of machine and date of delivery.

The upper coupon goes to the purchaser together with the manual.

The middle coupon is retained by the dealer.

The lower coupon please send to

**GMR maskiner a/s
Saturnvej 17
DK-8700 Horsens**

1 month from date of delivery at the latest

-----cut-----

Coupon to purchaser

Serial number:

Type of machine:

Time of delivery:

Purchaser:

Dealer:

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Coupon to dealer

Serial number:

Type of machine:

Time of delivery:

Purchaser:

Dealer:

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Coupon to GMR maskiner a/s

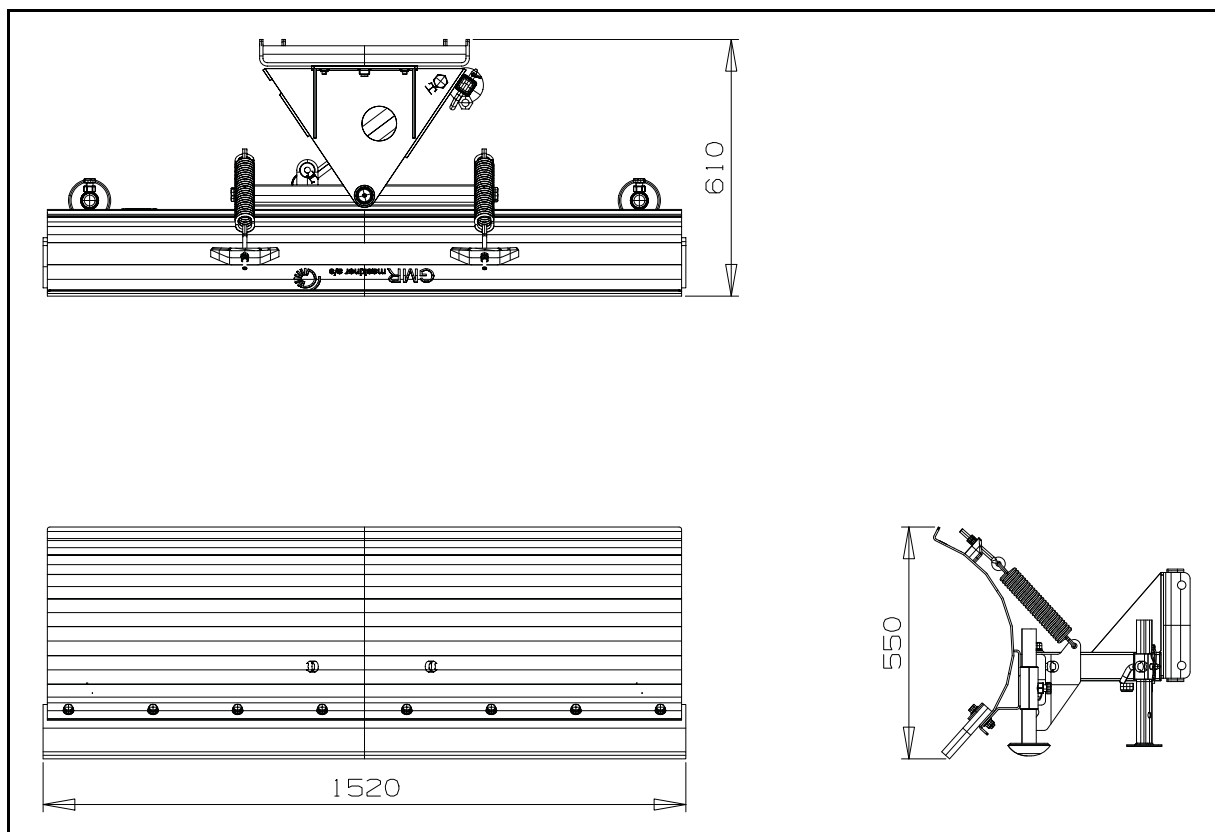
Serial number:

Type of machine:

Time of delivery:

Purchaser:

Dealer:

2.4 SPECIFICATION**2.5 OPERATOR EAR LEVEL NOISE**

83 dB(A) Leq (98/37/EC)

2.6 VIBRATION LEVEL

When the machine was tested for hand/arm vibration levels, the operator was seated in the normal operating position with both hands on the steering mechanism. The engine was running and the brush was rotating with the machine stationary.

The Machinery Safety Directive 98/37/EC

By compliance to:

The Lawnmower Standard EN836:1997

Referenced to Hand/Arm: EN1033:1996

Information Supplied for Physical Agents Directive 2002/44/EC

By reference to:

Hand/Arm Standards: BS EN ISO 5349-1 (2001)

BS EN ISO 5349-2 (2001)

Ransomes HR3300T Series FR Jacobsen HR3300T Series FY Hand / Arm Acceleration Level	Max. LH or RH Accelerations m/s ²
	Mean Value of X, Y, Z Aeq
	0.78

When the machine was tested for Whole Body vibration levels, the operator was seated in the normal operating position with both hands on the steering mechanism. The brush was rotating with the machine driven in a straight line at 6 Km/hr on a level hard surface.

The Machinery Safety Directive 98/37/EC

By compliance to:

Whole Body EN1032:2003

Information Supplied for Physical Agents Directive 2002/44/EC

By reference to:

Whole Body Standards BS EN ISO 2631-1 (1997)

Ransomes HR3300T Series FR Jacobsen HR3300T Series FY Whole Body Acceleration Level	Max. Seat Accelerations m/s ²
	Mean Value of X, Y, Z Aeq
	0.52

Ransomes HR3300T Series FR Jacobsen HR3300T Series FY Whole Body Acceleration Level	Max. LH or RH Foot Accelerations m/s ²
	Mean Value of X, Y, Z Aeq
	0.83



This safety symbol indicates important safety messages in this manual. When you see this symbol, be alert to the possibility of injury, carefully read the message that follows, and inform other operators.

3.1 OPERATING INSTRUCTIONS

- Ensure that the instructions in this book are read and fully understood.
- No person should be allowed to operate this machine unless they are fully acquainted with all the controls and the safety procedures.
- Never allow children or people unfamiliar with these instructions to use this machine. Local regulations may restrict the age of the operator.

3.2 SAFETY SIGNS

- It is essential all safety and identification labels are kept legible, if they are missing or illegible they must be replaced. If any part of the machine is replaced and it originally carried a safety label, a new label must be affixed to the replacement part. New safety labels are obtainable from Ransomes dealers.

3.3 STARTING THE ENGINE

- Before starting the engine check that the brakes are applied, drives are in neutral, guards are in position and intact, and bystanders are clear of the machine.
- Do not run the engine in a building without adequate ventilation.

3.4 DRIVING THE MACHINE

- Before moving the machine, check to ensure that all parts are in good working order, paying particular attention to brakes, tyres, steering and the security of moving parts such as the blade.
- Replace faulty silencers, use machine only in daylight or good artificial light
- Always observe the Highway Code both on and off the roads. Keep alert and aware at all times. Watch out for traffic when crossing or near roadways.
- Ensure that no-one is inside the working area

when operating the machine

- Remember that some people are deaf or blind and that children and animals can be unpredictable.
- Keep travelling speeds low enough for an emergency stop to be effective and safe at all times, in any conditions.
- Remove or avoid obstructions in the area to be cleared, thus reducing the possibility of injury to yourself and/or bystanders.
- When reversing, take special care to ensure that the area behind is clear of obstructions and/or bystanders. DO NOT carry passengers.
- Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people or their property.
- When the machine is to be parked, stored or left unattended, lower the Snow Blade.
- While using the Snow Blade, always wear substantial footwear and long trousers. Do not operate the equipment when barefoot or wearing open sandals.
- After striking a foreign object Inspect the Snow Blade for damage and make repairs before restarting and operating the equipment.
- If the machine starts to vibrate abnormally, check immediately.

3.5 TRANSPORTING

- Drive the machine with due consideration of road and surface conditions, inclines and local undulations.
- Sudden decelerating or braking can cause the rear wheels to lift.
- Remember that the stability of the rear of the machine is reduced as the fuel is used.

3.6 LEAVING THE DRIVING POSITION

- Park the machine on level ground.
- Before leaving the driving position, stop the engine and make sure all moving parts are stationary. Apply brakes and disengage all drives. Remove the starter key.

3.7 SLOPES**TAKE EXTRA CARE WHEN WORKING ON SLOPES**

- Local undulations and sinkage will change the general slope. Avoid ground conditions which can cause the machine to slide.
- Keep machine speeds low on slopes and during tight turns.
- Sudden decelerating or braking can cause the rear wheels to lift. Remember there is no such thing as a “safe” slope.
- Travel on grass slopes requires particular care.

IMPORTANT: When working on any slope select weight transfer, Adjust to provide adequate traction.

3.8 ADJUSTMENTS, LUBRICATION, MAINTENANCE & CLEANING

- After the first 10 hours operation check that all bolts, screws and nuts are tight
- Stop the engine and make sure all moving parts are stationary.
- Apply brakes and disengage all drives.
- Read all the appropriate servicing instructions.
- Use only the replacement parts supplied by the original manufacturer.
- To reduce the fire hazard, keep the engine, silencer and battery compartments free of grass, leaves or excessive grease.
- Replace worn or damaged parts for safety.
- When working underneath lifted parts or machines, make sure adequate support is provided.
- Do not dismantle the machine without releasing or restraining forces which can cause parts to move suddenly.
- Do not alter engine speed above maximum quoted in Engine Specification. Do not change the engine governor settings or overspeed the engine. Operating the engine at excessive speed may increase the hazard of personal injury.
- When refuelling, STOP THE ENGINE, DO NOT SMOKE. Add fuel before starting the engine, never add fuel while the engine is running.
- Use a funnel when pouring fuel from a can into the tank.
- Do not fill the fuel tank beyond the bottom of the filler neck.
- Replace all fuel tank and container caps securely.
- Store fuel in containers specifically designed for

this purpose.

- Refuel outdoors only and do not smoke while refuelling.
- If fuel is spilled, do not attempt to start the engine but move the machine away from the area of spillage and avoid creating any source of ignition until fuel vapours have dissipated.
- Allow the engine to cool before storing in any enclosure.
- Never store the equipment with fuel in the tank inside a building where fumes may reach an open flame or spark.
- If the fuel tank has to be drained, this should be done outdoors.
- Do not spill fuel onto hot components.
- When servicing batteries, DO NOT SMOKE, and keep naked lights away.
- Do not place any metal objects across the terminals.
- When Pressure Washing the Rotary Mower. Turn the engine off and remove the starter key. If the engine has been running, it should be allowed to cool sufficiently to prevent damage to the block and exhaust manifold. Never force water into any electrical components, the air cleaner or exhaust muffler as water could enter the engine cylinder and cause damage.
- Do not use a pressure washer to clean the Snow Blade.

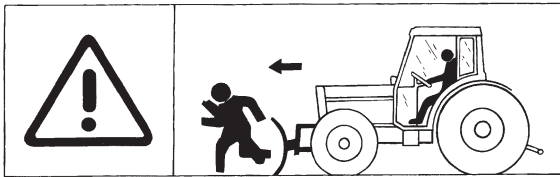
3.9 HANDLING

- The supplied storage stand should always be used when the Snow Blade is not attached to the machine.
- If lifting the Snow Blade by crane use a strap around the mounting frame and ensure that all personnel are at least 2m away.
- To prevent damage to the blade never lift the Snow Blade with a crane without the storage stand fitted.

3.10 SAFETY DECALS



A



B



C

- A. 009034910 Read Operator's Manual.
- B. GMR09100008 Do not stand in front of the Snow Blade during operation.
- C. GMR09200012 Do not use pressure washer on Snow Blade.

DANGER:

Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.

WARNING:

Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.

CAUTION:

Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury and property damage. It may also be used to alert against unsafe practices.

NOTE:

Indicates an operating procedure or technique which is considered essential so is emphasised.

IMPORTANT:

Transport speed is for highway use only. Never select transport speed on grass areas or uneven or unsurfaced roads or tracks.



California Proposition 65
Engine Exhaust, some of its
constituents, and certain vehicle
components contain or emit chemicals
known to the state of California to cause
cancer and birth defects or other
reproductive harm.



Ear Protection Should be Worn
When Operating Machines with
Operator Ear Noise Levels above
85dB(A)Leq.

 WARNING

To prevent serious injury from hot, high pressure oil, never use your hands to check for oil leaks, use paper or cardboard.

Hydraulic fluid escaping under pressure can have sufficient force to penetrate skin. If fluid is injected into the skin it must be surgically removed within a few hours by a doctor familiar with this form of injury or gangrene may result.

 WARNING

This machine must not be used for towing.

 WARNING

To prevent serious crushing injury at no time should any person stand in between the blade and the machine while the machine is running

 WARNING

When the machine is being used off road, whether cutting grass or not, the seat belt should only be worn when a ROPS frame is in place and deployed.

This rationale is based on the fact that a seat belt must be worn with a ROPS to comply with The Machinery Directive 98/37/EC sections 3.2.2, Seating & 3.4.3, Rollover.

Ransomes Jacobsen Limited recommends that a local risk assessment is completed by the owner/user of the machine to determine any exceptions to this seat belt wearing rule. e.g. use of the machine next to water or on the highway.

 CAUTION

Be aware of stored energy in the blade supporting springs

 CAUTION

When carrying out any welding on the machine the battery and controller must be disconnected before starting. Under no circumstances should the controller be opened as this will invalidate all warranties and could result in a malfunction.

 WARNING

Batteries produce explosive gases and contain corrosive acid and supply levels of electrical current high enough to cause burns.

4.1 PREPARATION

CAUTION: Read the rotary mower's manual and become familiar with the rotary mower, the controls and proper use of the equipment.

Stay alert for potential hazards and follow all safety precautions. Read all instructions completely and make sure you understand them before proceeding with the assembly

1. Park the rotary mower on a flat and level surface, fully lower the implements to the ground, engage parking brake, stop the engine and remove key from ignition switch.
2. Wait for all movement to stop before making any adjustments or modifications.
3. Take this opportunity to thoroughly inspect the equipment and perform other maintenance.

The "Right" and "Left", "Front" and "Rear" of the machine are referenced from the operator's right and left when seated in the operator's seat facing the direction of forward travel.

4.2 DESCRIPTION

The following instruction details the process of installing the Snow Blade Kit LMAC268 to the HR3300T machine. Prior to fitting this kit the machine should be fitted with the Auxiliary Hydraulic Services Kit LMAC307.

When the machine is shipped from the factory the joystick is configured to operate in 2 directions (single Axis) A & B, for use with a rotary cutter deck.

The Auxiliary Hydraulic Services Kit LMAC307 activates functions C & D (double Axis) of the control joystick, enabling the ability to 'slew' an attachment fitted to the machine in a clockwise or anticlockwise direction (viewed from above), for example when a rotary brush or snow blade is fitted.

A One touch lowers the lift arms.

B Raise the lift arms.
(Needs to be held at position B for lifting arms into transport position).

C Used to slew the rotary brush or snow blade in a clockwise direction.

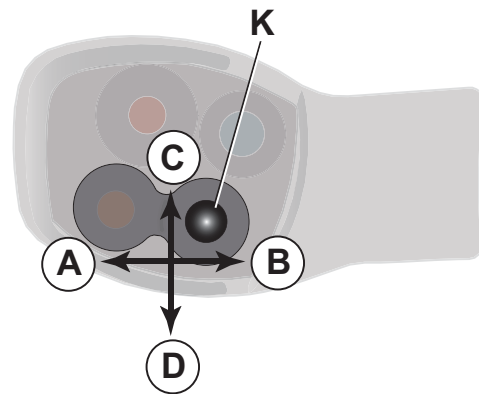
D Used to slew the rotary brush or snow blade in an anticlockwise direction.

K Joystick

When the joystick is moved to position C oil flows to port B on the valve, and when the joystick is moved to position D it flows to port A.

Maximum flow available : 9 l/min

Maximum pressure available : 125 bar (1800 psi)



4.3 MACHINE PREPARATION

1. Remove any attachments (for example a deck) from the front of the machine.
2. Remove the plastic pad from the top of the left hand lift arm. Retain the pad and fixings for future use (Fig. 1).
3. Attach the turnbuckle mounting bracket assembly to the left hand lift arm (Fig. 2).

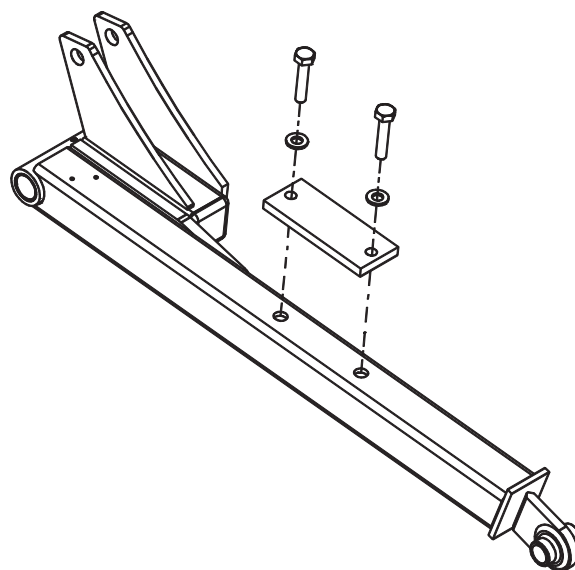


Fig. 1

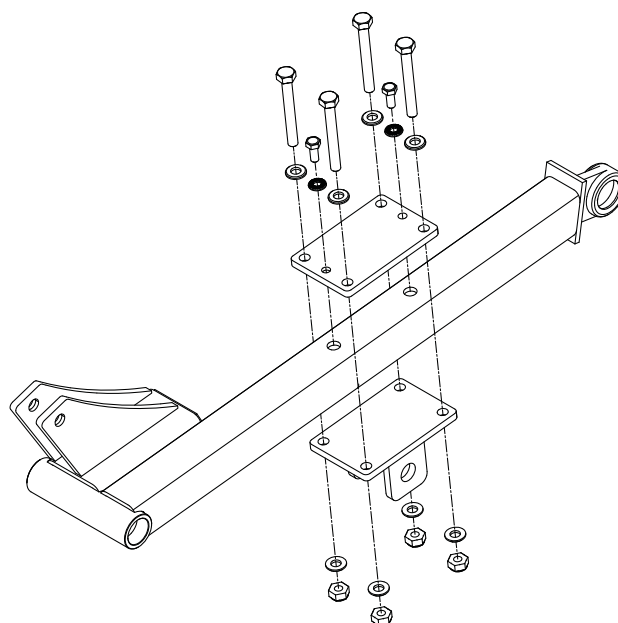


Fig. 2

4.4 SNOW BLADE ATTACHMENT

1. Ensure the Snow Blade and machine are on a firm, level surface.
2. Manoeuvre the machine and blade as necessary so that the lift arms can be attached to the top mounting holes on either side using the lynch pins and snap pins supplied in the kit (A on Fig. 3).

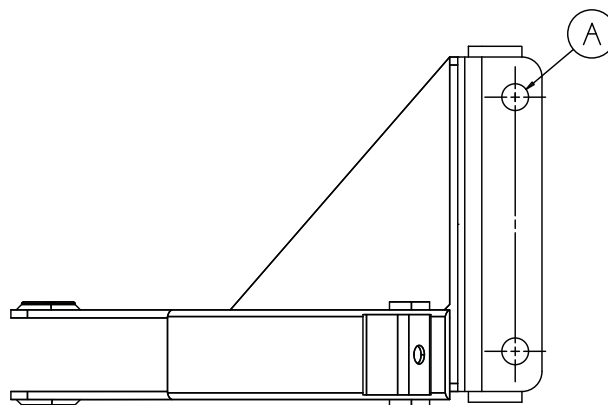


Fig. 3

3. Attach the turnbuckle between the bracket attached to the left hand lift arm **C** and the lower mounting hole **B** on the blade using the lynch pins and snap pins supplied in the kit (Fig. 4).

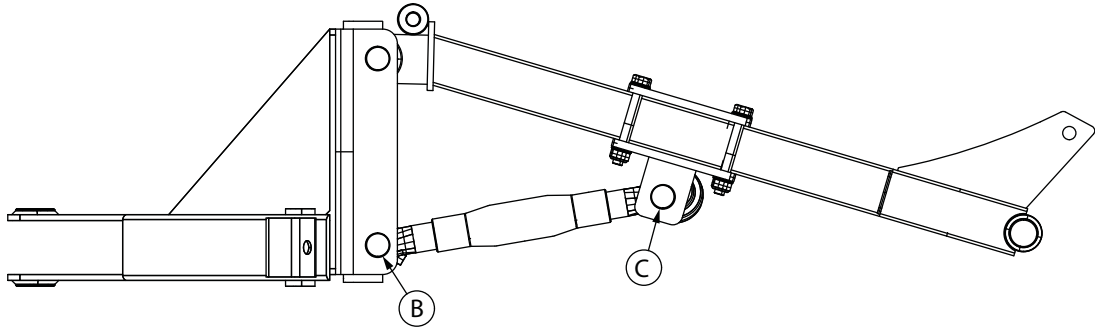


Fig. 4

4. Attach the two hoses to the ports on the Auxiliary Hydraulic Services valve fitted underneath the operators platform (Fig. 5).



Ensure that any hydraulic hoses are routed so that they will not be crushed when the rotary brush is lifted or slewed.

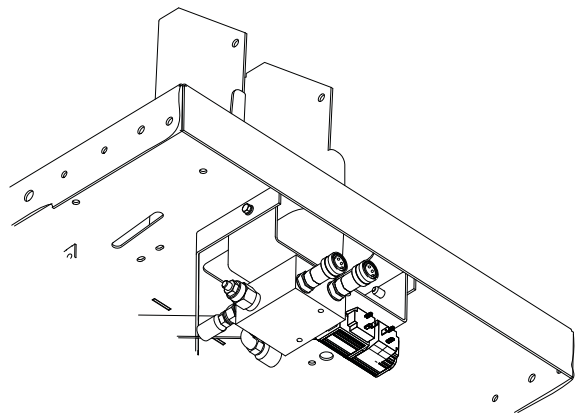


Fig. 5

5. Remove the pin from the storage stand, move it to its upper stowage position and then replace the pin (**E** on Fig. 6).
6. Test the slew function to ensure that the brush turns in the correct direction when the joystick is operated.
7. The blade is now ready for adjustment.

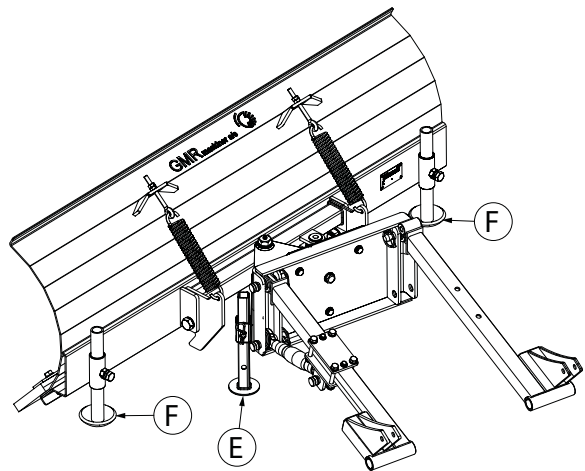


Fig. 6

5.1 ADJUSTMENTS

After the snow blade has been mounted to the machine it should be adjusted so that it gives the best possible finish and avoids uneven wear on the rubber blade 'skirt'.

1. Adjust the length of the turnbuckle so that the mounting frame **D** is vertical when the blade is in contact with the ground, and so that the blade remains parallel to the ground when it slews to the left or right (Fig. 1). This will ensure that the blade scrapes and wears evenly.

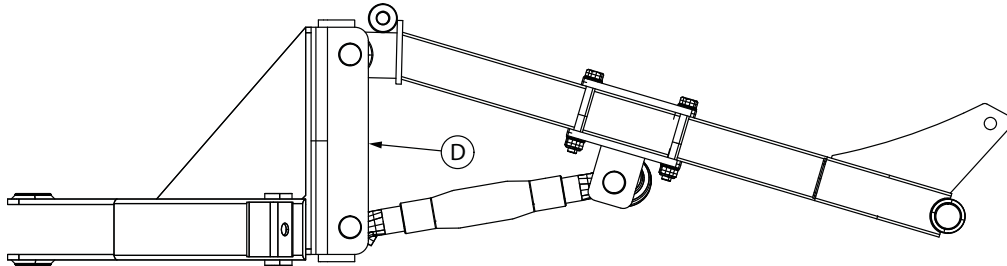


Fig. 1

2. The vertical legs immediately behind the blade are skids designed to set the height at which the blade works. They are designed to run along the ground and should be set so that the bottom edge of the blade is not in full contact with the ground.

The distance required between the ground and the blade will depend upon the conditions the blade is working in, however is best set so that the rubber skirt is almost, but not quite, touching the ground.

A suggested procedure for setting the height is as follows -

- a) Ensure the machine and blade are on a firm level surface.
- b) Set the blade slew position to the centre of travel (i.e. so that the blade is perpendicular to the machine) and lift the blade clear of the ground.
- c) Place a packer piece that has a thickness equivalent to the desired height (such as a piece of wood) on the ground at either end of the blade and rest the blade on them.
- d) Slacken the clamp bolt holding each leg in place and move the legs so that they are in good contact with the ground. Re-tighten the bolts.
- e) Test the machine to see if the desired finish is achieved. If not adjust the height of the skids accordingly.

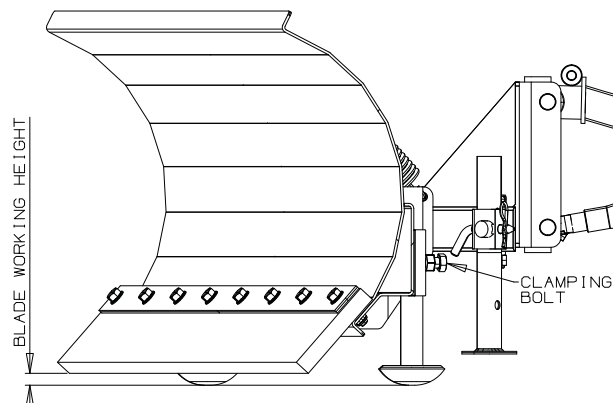


Fig. 2

6.1 DAILY INSPECTION**CAUTION**

THE DAILY INSPECTION SHOULD BE PERFORMED ONLY WHEN THE ENGINE IS OFF AND ALL FLUIDS ARE COLD. LOWER IMPLEMENTS TO THE GROUND, ENGAGE PARKING BRAKE, STOP ENGINE AND REMOVE IGNITION KEY.

1. Perform a visual inspection of the entire unit, look for signs of wear, loose hardware and missing or damaged components. Check for fuel and oil leaks to ensure connections are tight and hoses and tubes are in good condition.

6.2 OPERATING PROCEDURE**CAUTION**

To help prevent injury, always wear safety glasses, leather work shoes or boots, a hard hat and ear protection

1. Under no circumstances should the engine be started without the operator seated on the tractor.
2. Do not operate tractor or attachment with loose, damaged or missing components.
3. First operate the machine in a test area to become thoroughly familiar with the operation of the tractor and all controls.

**CAUTION**

Enter a new area cautiously. Always operate at speeds that allow you to have complete control of the machine

4. Study the area to determine the best and safest operating procedure. Consider the type of terrain and condition of the surface. Each condition will require certain adjustments or precautions.
5. In order to prevent collision check any unfamiliar areas before clearing to make sure that there are not any items, for example man-hole covers, hidden under the snow.
6. Never allow anyone near the machine while in operation. The owner/operator is responsible for injuries inflicted to bystanders and/or damage to their property.
7. Stop and inspect the equipment for damage immediately after striking an obstruction or if the machine begins to vibrate abnormally. Have the equipment repaired before resuming operation.
8. The snow blade is equipped with a spring coupling mechanism that will release if the blade strikes a solid object or becomes overloaded. At the moment that the blade tilts forward the tractor must be stopped so as to prevent any permanent damage to the blade. Check to see if the overload has been caused by a solid object or simply too much snow building up in front of the blade.

NOTE - Only the bottom edge of the blade is sprung loaded in this way. If the upper edge of the blade strikes a solid object it could result in permanent damage to the blade.

**CAUTION**

Before you clean, adjust, or repair this equipment, always disengage all drives, lower implements to the ground, engage parking brake, stop engine and remove key from ignition switch to prevent injuries.

9. Under no circumstances should the engine be started without the operator seated on the tractor.
10. Do not operate tractor or attachments with loose, damaged or missing components.

6.3 OPERATION OF THE MACHINE



Read the Safety Instructions.

BEFORE OPERATING FOR THE FIRST TIME

- Check and adjust tyre pressure, if necessary, see section 4.2 Specification of the HR3300T Safety, Operators & Maintenance Manual.
- Add diesel fuel to tank if necessary.
- Check engine oil and top-up, if necessary.
- Check radiator coolant and top-up, if necessary (50% antifreeze solution).
- Make sure you understand the information contained in the previous sections.

6.4 OPERATING THE SNOW BLADE

1. Lower the Snow Blade with the joystick.
2. Ensure the speed limiter is in mow position (Refer to the HR3300T Safety, Operators & Maintenance Manual for details).

NOTE - The forward speed of the machine required when clearing snow will depend largely upon the quantity being swept and also the terrain. It is recommended however that when operating the snow blade the speed selector is set to 'mow' mode therefore limiting the forward speed to a maximum of 18km/h.

3. Release the parking brake and begin driving forward.

NOTE: Always set the throttle to full engine revs. for snow clearing. When the engine is labouring, reduce forward speed by easing back on the FWD/REV foot pedal.

4. Use the slew function to turn the blade to the LH or RH side to direct the discharge as desired. This will help when clearing particularly deep snow as it will discharge material to the side instead of it building up in front of the blade.

7.1 MAINTENANCE

The environment that the snow blade will be used in makes it important that it is maintained regularly.

AFTER FIRST 10 HOURS USE -

- Check that all bolts, screws and nuts are tight.

AFTER EVERY 50 HOURS OF USE -

- Grease the following areas -

A - Main pivot pin

B - Cylinder

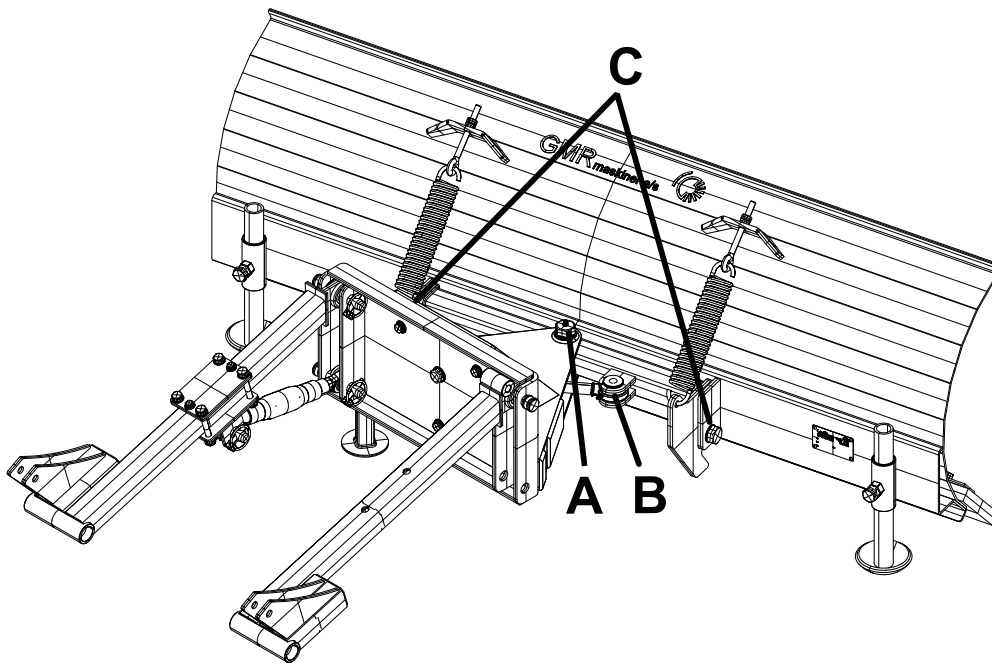
C - Blade pivot



CAUTION



Contact with grease can damage your skin. Use gloves when working with grease. If you come in contact with grease, wash it off immediately.



- Check the hydraulic hoses for signs of wear and/or damage and replace as necessary.



WARNING



To prevent serious injury from hot, high pressure oil, never use your hands to check for oil leaks, use paper or cardboard.

Hydraulic fluid escaping under pressure can have sufficient force to penetrate skin. If fluid is injected into the skin it must be surgically removed within a few hours by a doctor familiar with this form of injury or gangrene may result.

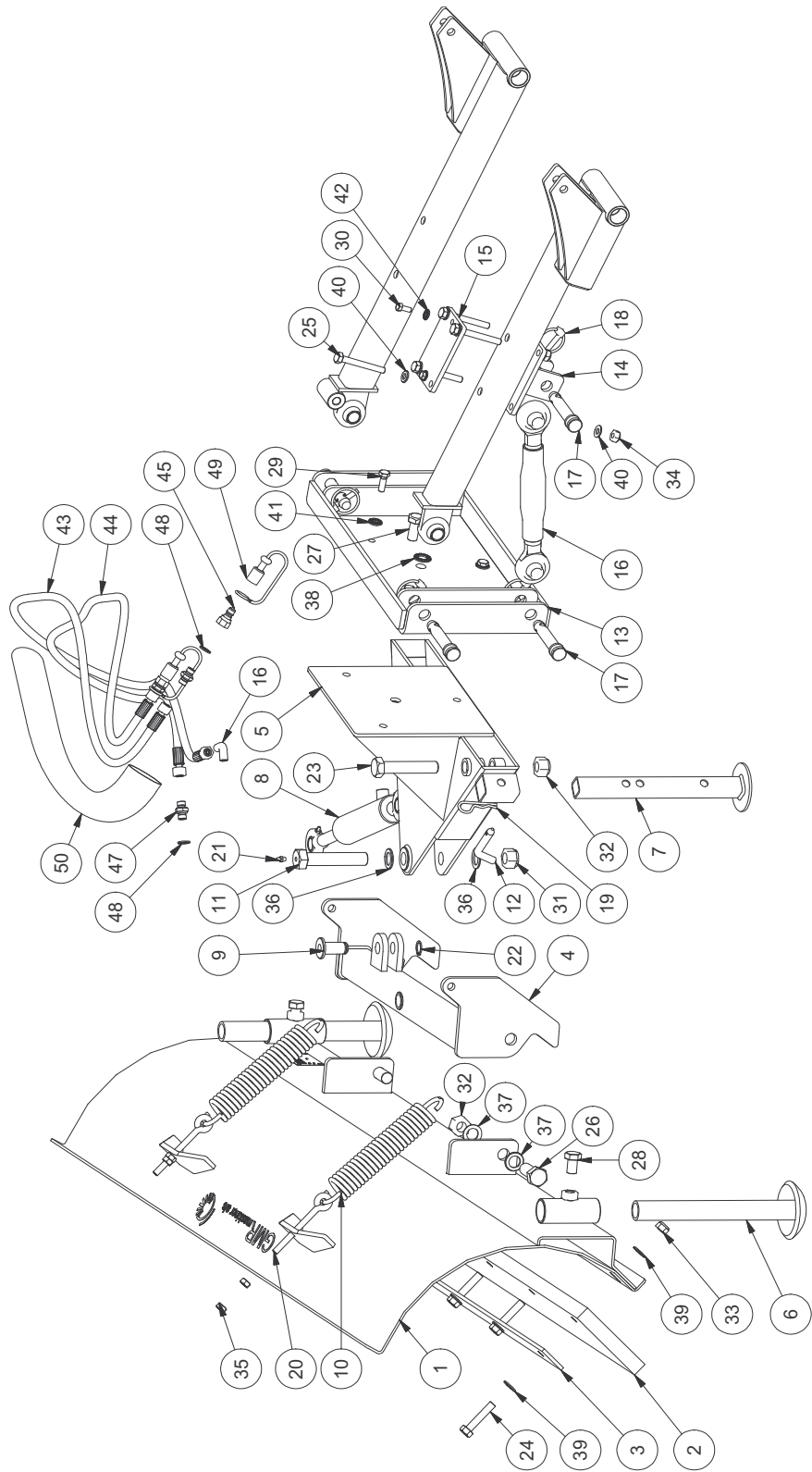
7.2 STORAGE

To prolong it's life, when not in use the Snow Blade should be sheltered away from rain and snow. Also if the Snow Blade is not to be used for a period of time it should be cleaned before being stored.

NOTE - Do not use a pressure washer to clean the Snow Blade.

LMAC268 KIT-SNOW BLADE

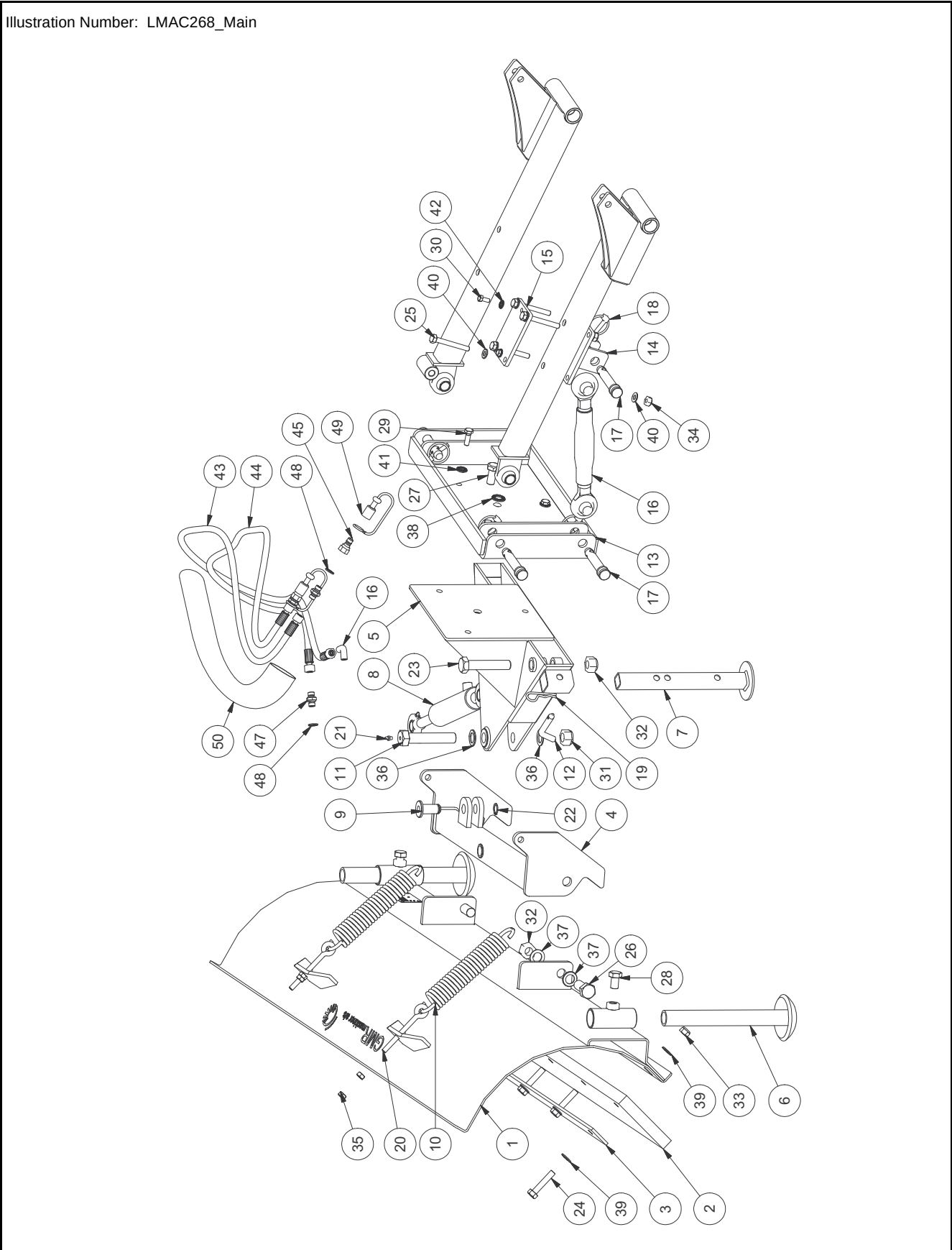
Illustration Number: LMAC268_Main



LMAC268 KIT-SNOW BLADE

ITEM	PART NO.	DESCRIPTION	QTY.	
1	GMR84115100	Blade	1	84-115-100
2	GMR80215006	Rubber plate	1	80-215-006
3	GMR84010112	Adapter for rubber plate	1	84-010-112
4	GMR88008020	Tilt adapter	1	88-008-020
5	GMR89311150	Swivel adapter	1	89-311-150
6	GMR84010500	Skid pan	2	84-010-500
7	GMR84010600	Supporter leg	1	84-010-600
8	GMR01440106	Cylinder	1	01-440-106
9	GMR88001025	Pin for cylinder	1	88-008-025
10	GMR61386532	Spring	2	61-386-532
11	GMR80213001	Pivot bolt	1	80-213-001
12	GMR13000004	Pin bolt	1	13-000-004
13	GMR77707230	Adapter	1	77-707-230
14	GMR77707220	Top link assembly	1	77-707-220
15	GMR77707201	Top plate	1	77-707-201
16	GMR59290717	Top link	1	59-290-717
17	GMR47019065	Pin	4	47-019-065
18	3004894	Snap pin	4	38-000-008
19	GMR38204075	R-clip	1	38-204-075
20	GMR30910100	Ring bolt	2	30-910-100
21	GMR57000008	M8 Grease nipple	1	57-000-008
22	GMR20101020	Circlip-Ext 20 x 1.75	1	20-101-020
23	450098	Bolt-Hex M20 x 100	1	28-120-100
24	450052	Bolt-Hex M12 x 60	8	28-112-060
25	450039	Bolt-Hex M10 x 85	4	28-110-085
26	450300	Screw-Hex M20 x 50	2	29-120-050
27	450269	Screw-Hex M16 x 35	1	29-116-035
28	450267	Screw-Hex M16 x 25	2	29-116-025
29	450215	Screw-Hex M10 x 30	3	29-110-030
30	450191	Screw-Hex M8 x 20	2	29-108-020
31	GMR31101020	Nut-Hex M22 Nyloc	1	31-101-022
32	450383	Nut-Hex M20 Nyloc	3	31-101-020
33	450380	Nut-Hex M12 Nyloc	8	31-101-012
34	450379	Nut-Hex M10 Nyloc	4	31-101-010
35	450325	Nut-Hex M10	4	31-001-010
36	GMR36300022	Washer-M22	2	36-300-022
37	450394	Washer-M20 x 37 x 3.3	4	36-300-020
38	450393	Washer-M16 x 30 x 3.3	1	35-200-016
39	450392	Washer-M12 x 24 x 2.7	16	36-300-012
40	450391	Washer-M10 x 21 x 2.2	8	36-300-010

LMAC268 KIT-SNOW BLADE



LMAC268 KIT-SNOW BLADE

ITEM	PART NO.	DESCRIPTION	QTY.	
41	GMR35200010	Riplock Washer M10	3	35-200-010
42	GMR35200008	Riplock Washer M8	2	35-200-008
43	GMR03112130	Hose no. 1	1	03-112-130
44	GMR03112120	Hose no. 2	1	03-112-120
45	GMRE202	Quick coupling 1/4" male	2	E202
47	GMR01BP04	Nipple	3	01BP04
48	002591040	Bonded seal	3	42-000-014
49	GMR39004002	Protection for 1/4" male	2	39-004-002
50	GMRPuma - HG28100	Protection for hose	1	Puma HG28-100



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