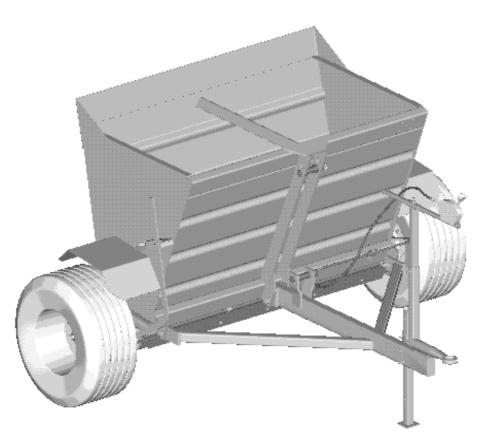


# **USER AND SERVICE INSTRUCTION**

# **MANUAL**

#### SPARE PART LIST

- Translation of the original instructions -



# SAND SPREADER

VS400RL-VS400SP - VS700RL-VS700SP

04/2017

Please read the following instructions carefully before operating the machine and refer to them as needed. If you do not understand a part of the user manual, please contact your MAJAR reseller or:

MAJAR 1 Route de Montréal - CS30074 11890 CARCASSONNE Cedex 9 FRANCE Phone 0033 / 4 68 25 38 16

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#### **FOREWORD**

Please read this user manual and the manual delivered with the cardan before operating your machine, the information allow you ensure quality work in complete safety. If the manual is not clear enough, please contact our technical service.

The security depends on the use of the machine with the limitations explained in this manual.

You have to know and to follow the safety regulations of this manual and of the tractor manual.

The machine you bought was carefully designed and manufactured in order to give you complete satisfaction. As any mechanical gear, it requires cleaning and maintenance. Lubricate as described. Follow the regulations and safety information given in this manual and on the security stickers of the machine and the tractor.

For maintenance your MAJAR reseller has the competency and the original pieces to respond your needs.

Enter below model and serial number of your machine for reference.

In line with the goals of continuous improvement MAJAR reserves the right to change the machines without changing the sold machines. The illustrations and characteristics of this manual may vary slightly on your due to production changes.

No part of this manual may be reproduced, copied or made public by whatever means without authorization of MAJAR.

Throughout the manual the terms "left" "right", "front" "rear/back" are given referring to the driver's position. The term IMPORTANT is used to indicate that a failure may cause damages for the machine. The terms WARNING and DANGER are used with safety alert symbols to indicate the degree of safety hazard.



This symbol means: attention, be careful, your safety is involved. It reminds the safety instructions or focuses your attention to dangerous practices which may cause injury or operational occurrence.



WARNING reminds the safety regulations: may cause injury if not observed



DANGER reminds the safety regulations: may cause irreparable, lasting injury or cause death if the good precautions are not taken.

#### TECHNICAL DATA SAND SPREADER 400 AND 700

Designation	Reference	Charakteristics	Working Width	Recom. power	Weight kg	Weight loaded
Spreader 400 liters	VS400RL	Hitched - drawbar eye Overall width 1.93 m	1 m	15 HP	290	1100 kg
Spreader 400 liters	VS400SP	Semi-mounted - 3 p linkage Cat 1 overall widh 1.93 m	1 m	20 HP	330	1100 kg
Spreader 700 liters		Hitched - drawbar eye overall width 2.43 m	1,5 m	20 HP	330	1500 kg
Spreader 700 liters		Semi-mounted - 3 p linkage Cat 1 Overall widh 2.43 m	1,5 m	25 HP	340	1500 kg
Hydraulic tilting	ВН	Double action hydraulic cylinder push-pull Ø 20.5 mm			11	

## INSPECTION CHECKLIST

The assembly, installation and commissioning of the machine is the MAJAR reseller's responsibility. Please read carefully the use and care manual and the safety regulations. Make sure that the indicated points of the checklist had been verified before delivery and on delivery and amended if necessary before delivering the machine to the owner.

#### INSPECTIONS BEFORE DELIVERY

Check that all the safety screens, grids and safety measures are in place and in good condition

Check that the hydraulic hoses are in place and in good condition. Make sure that there is no leaking

Check that all screws and bolts are tightened to the right torque value (see table)

Check the other lubrication points, apply new grease if necessary

Check that the machine is operating correctly

#### **VERIFICATIONS AT DELIVERY**

Show the client how to mount the machine and how to realize the tool adjustments

Explain the importance of lubrication and show him the lubrication points

Show him les safety devices, safety measures and options

Present the use and instruction manual to the client, ask to read it.

Explain to the client to use the adequate signage when driving on the road.

#### REGLES DE SECURITE



# WARNING

Some illustrations may show the machine without protective screen or shield. Never use the machine without these devices.

- \* Learn how to stop
- the machine in emergency situation. Read this manual and the tractor manual
- \* Never let anyone else use this machine if the person did not read and understand this manual
- \* Never let children use this machine
- \* Always wear protective equipment for head, ears, hands and feet using this machine
- \* Always wear close-fitting clothing to avoid to be snatched by the moving parts or to hang on
- \* Always work on daylight or with good artificial light.
- \* Make sure that the safety stickers are in place and in good condition
- \* Clean the grass and debris accumulations
- \* Make sure that the machine is in good working condition before using it
- \* Make sure that all the safety screens, grids and safety measures are in place and in good condition
- \* Make sure that nobody or anything is behind you while backing off
- \* Do not start or stop the engine abruptly on slopes
- \* Do not use the machine on too big slopes



# **DANGER**

The montage of the Sand spreader on a tractor changes its centre of gravity and reduces the capacity to use in slopes.

- \* Reduce speed in slopes and when turning narrow to avoid a loss of control.
- \*Be careful while driving along embankments or ditches
- \* Stop the motor, apply the handbrake and remove the key before all settings, adjustments, maintenance or disassembly
- \* Never let anyone else to the driver's cabin during adjustment interventions, maintenance or disassembly of the machine
- \*Check periodically tightening torques of all fasteners

- \* Never allow anybody to go under the Sand spreader when
- \* \* Never go or work under the Sand spreader or its accessories unless it is blocked and in a locked position with enough security
- \*While maneuvering on slope always work up and down, never across the slope
- \*Place the wheels according to the setting increase stability of the tractor
- \* Avoid unstable embankments, rocks and holes; this can be dangerous when moving
- \*Avoid aerial cables, high-voltage lines and obstacles. Contact with power lines causes electrocution and death
- \* Consider the length of the Sand spreader in turns
- \* Stop progressively the Sand spreader during lowering and raising movements
- \* Make sure that the Sand spreader is parked with extended parking supports
- \* Activate all the safety equipment
- \*Only operate the control panel when you are correctly seated in
- \*Check visually hydraulic leaks and missing or faulty parts. Repair when necessary before every manoeuvre.
- \* A jet of hydraulic fluid caused by leaking may penetrate the skin and cause fatal injury. If you are injured, consult a doctor.
- \* Do not change the adjustment of the pressure relief valve, it is set in factory. An adjustment change may cause a system fail.
- \* Make sure that the user of the Sand spreader read thoroughly and understood completely the manual to be informed of the safety instructions to follow during maneuvres.
- \* During maintenance or replacement if the axles on the exterior of the actuator, always use a bronze hammer to avoid injury by splintered metal fragments
- \*Before coupling the Sand spreader, make sure that the tractor and trailer together, when charged, does not exceed the permitted total weight by the tractor manufacturer, that the hydraulic lifting is able to bear the total weight of the ballasted Sand spreader.

# **SAFETY STICKERS**

# Replace immediately if worn or damaged

Move away from the machine Attention! Danger of crushing hands and feet MAJAR (€

Read carefully the instructions before using the machine

Identification and conformity plate

## INSTALLATION AND COMMISSIONING

The installation and commissioning of the tool are the responsibility of the MAJAR reseller. The machine must be delivered fully mounted, lubricated and adjusted to the normal operating conditions.

#### **COUPLING OF THE MACHINE**



# **WARNING**

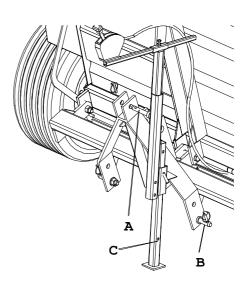
Keep your hands away from the linkage, Danger of crushing hands

Hitched model: - Linkage height: 40 - 50 cm from the ground

- Move back the tractor until the lower arms are at a few cm of the turning ring linkage. Stop the engine, shift the transmission to neutral, apply the handbrake and remove the key.
- Couple the Sand spreader to the tractor with a high diameter axle and a security pin. Lift the support stand: place the pin and the clamp, mount the support stand and place the clamp pin and the pin in the lowest hole of the stand (C)

#### **Semi-mounted:**

- Make sure that the tractor lift is able to lift the charged machine (see voir table characteristics).
- The Sand Spreader must be hitched to a agricultural tractor with a 3 point linkage Cat. I.
- Move back the tractor until the lower arms are at a few cm of the linkage (B).
- Stop the engine, shift the transmission to neutral, apply the handbrake and remove the key.
- Couple first the non adjustable lower arms. Couple next the variable part adjusting the length if necessary. Place next the push bar (D) adjusting the length on the sand spreader side with axle A and then on the tractor side.
- Lift the support stand: place the pin and clamp, mount the support stand and place the clamp pin and the pin in the lowest hole of the stand (C)

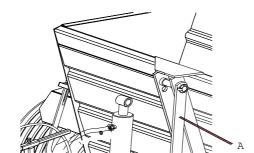


# **Hydraulic tilting:**

DANGER A jet of hydraulic fluid caused by leaking may penetrate the skin and cause fatal injury. If you are injured, consult immediately a doctor.

- Make sure that the cylinder is correctly placed on the spreader housing depending on the model hitched or semi-mounted (see illustration below)
- Actuate a several times the remote of the double-acting control valve to release the pressure and disconnect the two hoses.





Hitched model: Fixation « Low »

Semi-mounted model: Fixation « High »



Check the tightening of the bolts at the tightening torque at the end of the manual.

The safety is a challenge that concerns the most while designing and manufacturing this tool. However, the efforts of the constructor may be shattered due to user carelessness.

The accident prevention depends on prudence and training of staff in charge of using and maintenance of the machine.

The best safety device is a careful and informed user; we ask you to be this user.

The user of this machine is responsible for the use and safety. The user has to be qualified and trained to the machine and he also has to know the tractor. Read all the safety instructions.



WARNING Never use the machine without having carried out all the operations discribed in chapter « daily maintenance ».

This machine is constructed to spread sand. It is not designed to perform other tasks, transport tools or material that may cause damage on the machine or cause injury. It should not be used to transport persons or material.



Never let children or unqualified persons use this machine.

Don't use the machine nearby other persons or objects that may be reached by the lateral movement of the tool.

Nobody else than the driver can be on the tractor.

Never pass your hand under moving parts, between discs or under the tool.

USE THE MACHINE PREFERABLY ON A DRY GROUND TO AVOID TRACES ON THE TERRAIN AND OBTAIN GOOD ADHESION OF THE DRIVE WHEEL.

THIS MACHINE IS CONSTRUCTED TO CONTAIN A CERTAIN QUANTITY OF SAND, DO NOT CHARGE ON THE FRONT CROSSMEMBER, DO NOT TRY TO INCREASE THE LOAD CAPACITY WHAT WOULD LEAD TO MACHINE BREAKAGE.

ALWAYS DISENGAGE THE ROLLER FOR THE TRANSPORT OUT OF WORKING AREA

MAKE SURE THAT THE SAND DOES NOT CONTAIN STONES BIGGER THAN 3 CM WHAT WOULD DETERIORAT THE ROLLER. The protection flap is retracted and lets small stones through.

## **Loading of the sand spreader**

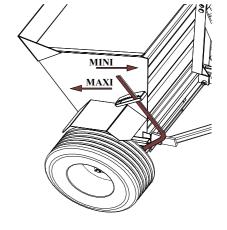
Disengage the roller and close the protection flap.

<u>Loading with bucket:</u> When you charge the sand spreader from above, empty shacking to avoid deterioration of the roller and the bearings. The sand level must not exceed the highest front part of the housing.

<u>Loading by tilting the case:</u> Tilt progressively the case actuating the double acting remote so that the effet afin que le rabot touche le sol. Move back slowly in the sand pile, lift the case and move forward. Repeat two or three times these operations until the correct filling of the case.

## **Spreading**

Adjustment of the flap opening: The quantity of spread sand depends on the flap opening and t de la fluidity of sand used. To obtain the spread sanding tonnage in hectare, open the flap 1/3 and spread all the sand of the case. The weight in tonnes necessary to cover 1 hectare ( $100m \times 100m$ ) would be approximately: 8000 divided by the driven distance in meters (if you drive 100 m to empty the entire case, the quantity on 1 hectare would be: 8000/100 = 80 tonnes). Adjust the lever position according to your needs.



#### Clutch: the clutch

operating control allows the activation of the roller. Always disengage the roller during transport out of working area even if the case is empty. Disengage the machine while it is off, to facilitate the maneuver of the remote lever. You can adjust the

remote box position sliding the horizontal tube and the vertical tube







# Uncoupling of the sans spreader

- Move back the tractor and the sand spreader on a flat ground for storage.
- Lower the support stands securing the axles with the pins.
- Put the sand spreader on the ground.
- Stop the motor, apply the handbrake and remove the key.
- press a several times the lever of the double acting control valve and uncouple the hydraulic hose.

# ! DANGER Un jet d'huile hydraulique dû à une fuite peut pénétrer sous la peau, ce qui provoque de graves blessures. Consultez immédiatement un médecin.

- Uncouple next the push bar (3 point) of the tractor lifting
- Uncouple next the adjustable support changing length if necessary
- Uncouple next the lower arm non adjustable
- Make sure that Sand spreader is in a stable position
- start the tractor and move forward

DANGER New

**DANGER** Never make adjustments or interventions on the machine when somebody is on

8

## MAINTENANCE BY USER



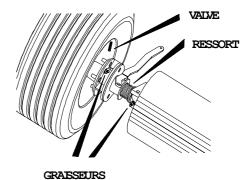
Before performing service or maintenance, stop the motor, apply the handbrake and remove the key before all settings, adjustments, maintenance or disassembly. Never let anyone else to the driver's cabin

# **DAILY MAINTENANCE BEFORE STARTING WORK**

•Lubrication: Do not leave excess grease on the pieces. Clean the grease gun and use the grease pump. Grease the wheel hubs and the two roller bearings.

• Tire pressure: 0.5 bar

• **Tightening torque of the fasteners:** make sure that the fasteners are properly tightened. The vibrations of the tractor tend to loosen the screws and nuts. Check especially the tightening of the two roller bearings.



## MAINTENANCE AFTER EVERY CAMPAIGN OR ONCE A YEAR

- Clean the machine completely from accumulations of materials or debris that reduce the yield or hide leak or faillure
- After cleaning with water, grease the bearings, hubs, springs and clutch mechanism
- Check the tightening torque specified on the table below
- Eliminate the rust and touch up paint if necessary
- Check the wear of the rubbers.

# **TIGHTENING TORQUE**

Screw diameter (mm)	Wrench size (mm)	Torque setting (daN.m)
8	13	2.5
10	16/17	5
12	18/19	8.5
14	21/22	13
16	24	21.5
20	30	43.5

# **DECLARATION OF CONFORMITY**

The letters **CE** on the identification plate of this machine certify that it is conforming to EC machine directive 2006/42/CE.

MAJAR SA.  11850 CARCASSONNE TEL: 04 68 25 38 16	
TYPE :	
N°de SERIE:  Année de construction	
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The Director, Jean-Luc Checa

#### **GUARANTEE**

Each new manufactured by MAJAR SA is guaranteed as follows below, warranted against defects of construction and assembly and/or of the materials when used appropriately during 1 year.

- 1° This guarantee is limited to 1 year to the replacement of pieces mounted and recognized as faulty by MAJAR.
- 2° All pieces requested on guarantee must be returned to MAJAR for inspection, reparation or replacement prepaid postage with proof of purchase of the machine, serial number and carefully packed for protection.
- 3° The machine must not be damaged, repaired or maintained without authorization from MAJAR. The machine must not have had an accident, been misused, abused or used acting not conform instructions and specifications contained in this manual

This guarantee does not oblige MAJAR or representative to reimburse labor costs or transport costs of the machine for reparation.

NO GUARANTEE WILL BE APPLIED TO THIS EXCEPT THE LEGAL WARANTY FOR HIDDEN DEFECT

MAJAR CANNOT BE HELD RESPONSIBLE FOR DAMAGES OR COSTS INCURRED BY THE MACHINE FOR PAR EXAMPLE:

1 RENTAL FEES FOR MATERIAL

2 LOST OF SALE

3 EXECUTION OF WORK CARRIED OUT NORMALLY BY THE MACHINE

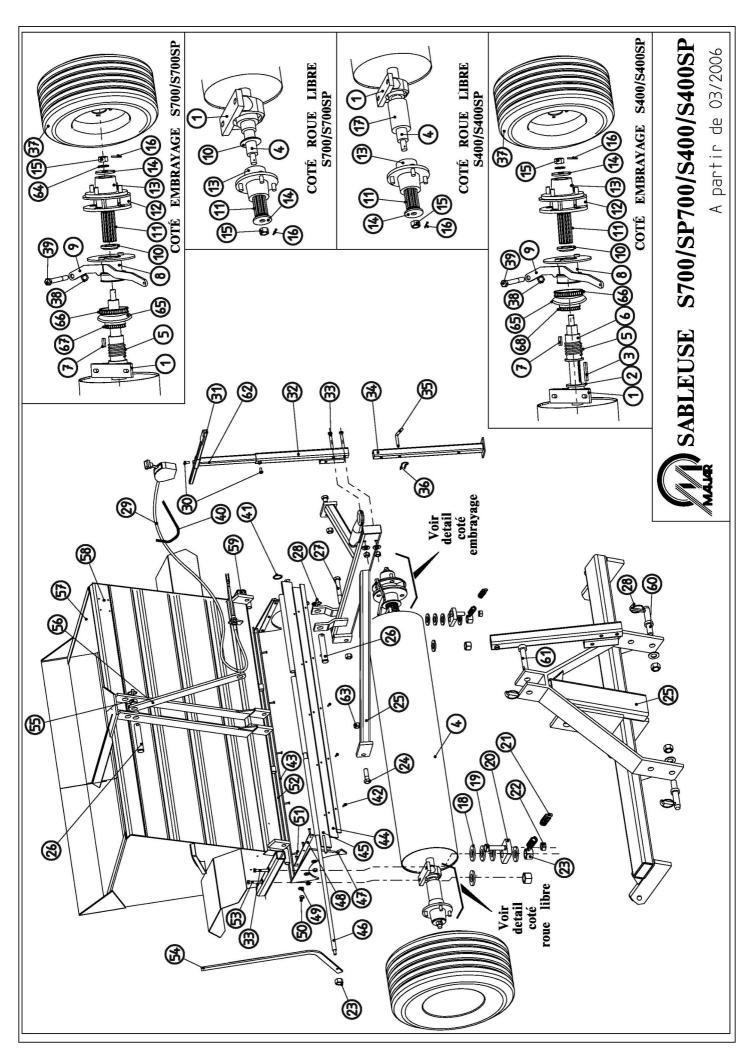
MAJAR ASSUMES NO OBLIGATION AND DOES NOT ALLOW ANYBODY TO ASSUME ANY OTHER OBLIGATION THAN THEM IN THE 3 PREVIOUS PARAGRAPHES.

To obtain the name of resseller, contact:

MAJAR S.A 1 Route de Montréal CS30074 11890 CARCASSONNE Cedex 9 FRANCE

### SPARE PART LIST

According to Article L.111-3 of the Consumer Code and of the Decree implementing the Code N°2014-1482 of 9th of December 2014, the availability duration of indispensable spare parts for use of MAJAR material is 7 years.



	SUPPORT BEQUILLE	081847	1	081847	1	89	1	COLLIER ABA Ø58×75	1	-	082286	082286	
	SUPPORT COMMANDE	081849	081849	081849	081849	64	1	COLLIER Ø70-90	082608	082608	I	1	
	VIS H10x20	9962013	9962013	9962013	9962013	99	1	COLLIER Ø80-100	082604	082604	082604	082604	
l	COMMANDE A CABLE	082423	082423	082423	082423	9	-	SOUFFLET UNIVERSEL	082603	082603	082603	082603	
1	GOUPILLE CLIPSØ10	541001	541001	541001	541001	79	2	RONDELLE MN20	9908020	9908020	9908020	9908020	
	VIS H20x140	9961945	9961945	9961945	9961945	63	m	ECROU FREIN HZO	9900550	9900550	9900550	9900550	
1	AXE	084617	084617	084617	084617	62	-	SUPPORT COMMANDE	081848	081848	081848	081848	
	ATTELAGE	081846	081916	081859	081915	61	-	AXE SUPERIEUR		144101		144101	
	VIS HM20x65	9961942	9961942	9961942	9961942	09	2	AXE DE BIELLE INFERIEURE		6080307		6080307	
1	ECROU FREIN H12	9900542	9900542	9900542	9900542	59	4	BOUCHON PLASTIQUE			082450	082450	
	ECROU FREIN H8	9900508	9900508	9050066	9000208	28	-	PLAQUE CE					
1	RESSORT	192010	192010	192010	192010	55	-	CAISSE	081840	081840	081852	081852	
1	SUPPORT RESSORT	084592	084592	084592	084592	95	-	RAIDISSEUR	084626	084626	084626	084626	
1	VIS H8x30	9962099	9962099	9962099	9962099	55	2	BAGUE	084618	084618	084618	084618	
	RONDELLE M12	9908012	9908012	9908012	9908012	54	-	LEVIER DE REGLAGE	081850	081850	081850	081850	
1	ENTRETOISE ROUE			084593	084593	23	2	VIS H12 x90/30	9961978	9961978	9961978	9961978	
ı	GOUPILLE V 4/45	9907005	9907005	9907005	9907005	52	1	BANDE 40X6	084630	084630	084645	084645	
1	ECROU CRENELE 20	9900551	9900551	9900551	9900551	51	11	VIS H6x25	6002966	6007966	6002966	9962009	
I	RONDELLE Ø20	9908019	9908019	9908019	9908019	S <sub>C</sub>	9	ECROU FREIN H6	9050066	9050066	9050066	9050066	
1	MOYEU COMPLET	082420	082420	082420	082420	67	9	RONDELLE MV6	9908021	9908021	9908021	9908021	
	DEMI-ENCLANCH.FEMELLE	081844	081844	081844	081844	87	2	PLAT DE BAVETTE	084632	084632	084632	084632	
	ROULEMENT DE MOYEU	Non dé	détaillé, compris	s avec moyeu Rep. 13	Rep. 13	44	2	BAVETTE	185053	185053	084628	084628	
1	ENTRETOISE EPAULEE	084601 x2	084601 x2	084601 x1	084601 x1	46	-	AXE DE VOLET	084611	084611	084644	084644	
ı	ВІЕСЕТТЕ	084602	084602	084602	084602	45	1	VOLET	081845	081845	081853	081853	
l	DEMI-ENCL.MALE NOUV.MODELE	582245	582245	582245	582245	77	-	BANDE 50x6	084688	084688	084687	084687	
ı	CLAVETTE 10x8 Lg.36	082551	082551	082551	082551	43	2	PLAT DE BANDE	084631	084631	084646	979780	
ı	TUBE ENTRETOISE			084596	084596	42	5	VIS POELIER M6x20	9962023	9962023	9962023	9962023	
	RESSORT	082421	082421	082421	082421	41	1	CIRCLIPS Ø20	9970114	9970114	9970114	9970114	
I	ROULEAU	582091	582091	081851	081851	07	С	COLLIER COLSON	082484	082484	082484	082484	
	CLAVETTE 10x8 Lg.70			082552	082552	39	1	VIS H16x110	9961985	9961985	9961985	9961985	
	RONDELLE MN40			9908040	9908040	38	_	ECROU FREIN H16	9450066	950066	9900246	9900246	
	PAL IER 0	082554 (Ø55)	082554 (Ø55)	082554 (Ø55) 082125 (Ø40) 082125 (Ø40)	082125 (Ø40)	37	2	ROUE LARG.310	082419	082419	082419	082419	
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