

# PULL-BEHIND SPREADER

# **TRACTOR IMPLEMENTS**

**OWNER'S OPERATOR SERVICE MANUAL** 

For additional information, please see us at

www.badboycountry.com

# General Safety Regulations

In addition to the safety regulations given in this manual, it is imperative that the general rules for safety and hygiene at work be respected at all times, as well as the public highway code.

- Before operating machine it is necessary to become familiar with the operation of the controls and operating devices.
- Before switching on the tractor make sure that all the protection elements are correctly assembled.
- Do not handle the machine when the power take-up is rotating.
- Do not exceed the maximum load capacity of fertilizer recommended by the manufacturer.
- Do not use any equipment not recommended by the manufacturer, and do not modify the machine or its components.
- Before leaving the tractor make sure the spreader is lowered to the ground and switch off the tractor.

Read this manual carefully before operating the equipment.

# **Safety Decals**

Adhesives and plates with symbols on them are applied on the equipment. These safety symbols are to assist the operator in order to avoid possible risks of accidents during working, servicing and storage.

This manual will explain the following symbols:

Symbol	Description					
	Use protection gloves					
	Use safety eye glasses					

The following symbols are attached to the equipment:

Symbol	Description
	Consult the operator's and servicing manual
<u> </u>	Do not pass or stand near the equipment while in use
STOP	Danger for hands and/or feet

## Safety rules and prevention of accidents

Operation of the fertilizer spreader must be performed under favorable conditions with clear visibility. The operator must observe all safety precautions and be familiar with the machine's recommended usage. Failure to obey safety measures may result in harm to the operator or others.

#### The operator *must*:

- Assume responsibility for the safe and proper use of the machine.
- Maintain vigilance during use.
- Wear well-fitting, appropriate clothing, with no loose garments.
- Wear all recommended personal protective equipment
- Ensure all labels & safety materials are visible and functional.
- Ensure there are no foreign objects in the hopper.

### The operator must not:

- Operate under the influence of impairing drugs or alcohol.
- Neglect the proper service & maintenance of the machine.
- Make insufficient emergency repairs to continue use.
- Clean or oil the machine while in motion or use.
- Drop the fertilizer bag into the hopper.

#### After operation:

- Lower the fertilizer spreader to the ground.
- Ensure the tractor is shut off and parking brake is engaged.

All the necessary interventions must be carried out when the fertilizer spreader machine is turned off.

#### **RISK OF TIPPING:**

Always park the Salt Spreader EMPTY on level ground, ensuring the jockey leg is in the support position.

When wheeling the Salt Spreader manually, first ensure ALL of the salt has been discharged to ensure the Salt Spreader is not unbalanced and is as light as possible, keep the jockey leg as close to the ground as possible, do not tip the Salt Spreader backwards as it could violently tip backwards.

NEVER begin to fill with salt, unless spreader is correctly hitched to towing vehicle.

ALWAYS secure jockey leg to the drawbar in its travelling position immediately after securely hitching the Salt Spreader to the towing vehicle.

NEVER remove Salt Spreader from towing vehicle until salt is fully discharged. Loss of Limbs from rotating Salt Agitator and the Salt Spinner.

BEFORE CONNECTING THE SALT SPREADER TO THE TOWING VEHICLE:

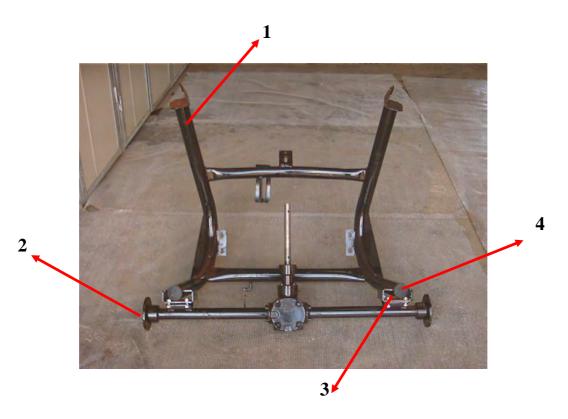
The Operator must wear protective clothing such as Gloves, Overalls, Safety Glasses.

DISENGAGE Salt Spinner. Only engage at the actual time of spreading. Disengage immediately after spreading is completed.

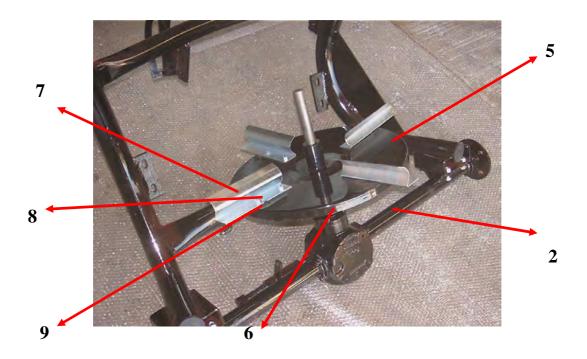
Ensure the Guard/Grid is securely bolted in place inside the hopper.

# **Assembling BBS300PB**

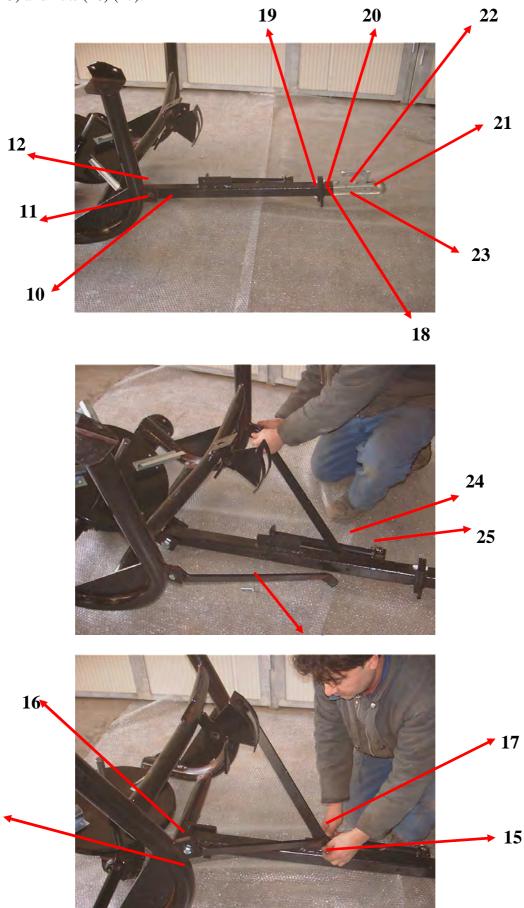
Assemble the gearbox (2) to the frame (1), by means of screws (3) and nuts (4) and tighten them.



Now insert the disc (5) on the gearbox (2) and fix it by means of pin (6) on the hole placed under the disc. Fix the fans (7) to the disc (5) by means of proper bolts (8) and nuts (9).

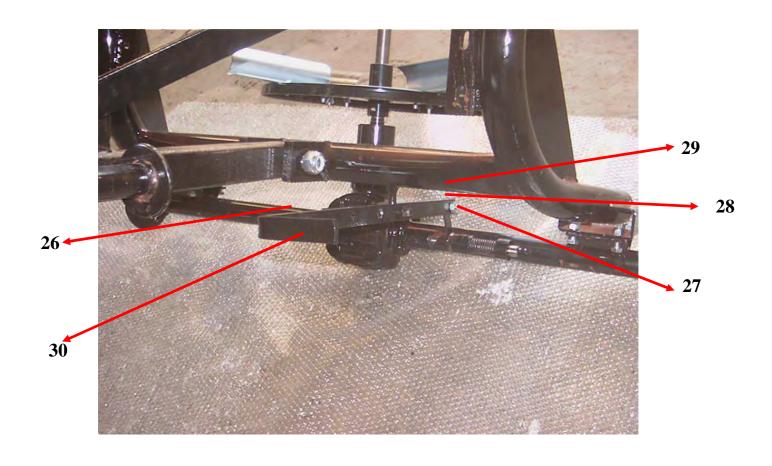


Assemble the beam (10) by means of the screw (11) and the self-locking nut (12). After this, assemble the holder linkage (18) by means of the relevant bolts (19) and nuts (20). If you have bought a machine with a caravan hitch, take the linkage (21), assemble it on item (18) by means of bolts (22) and nuts (23). Mount the standing (24) and stop it by adding the copper pin (25). So take the two connecting rods (13) and fix by means of bolts (14) (15) and nuts (16) (17).



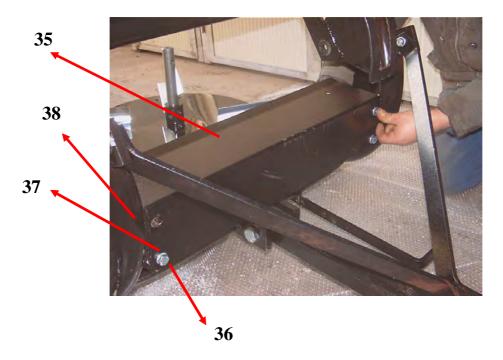
Next, assemble the disengaging lever (26) by means of the screw (27), the washer (28) and the self-locking nut (29) paying attention to keep loose the self-locking nut.

Connect the rubber handle (30) and the chain (31) by means of proper screw (32), nut (33) and "R" pin (34).

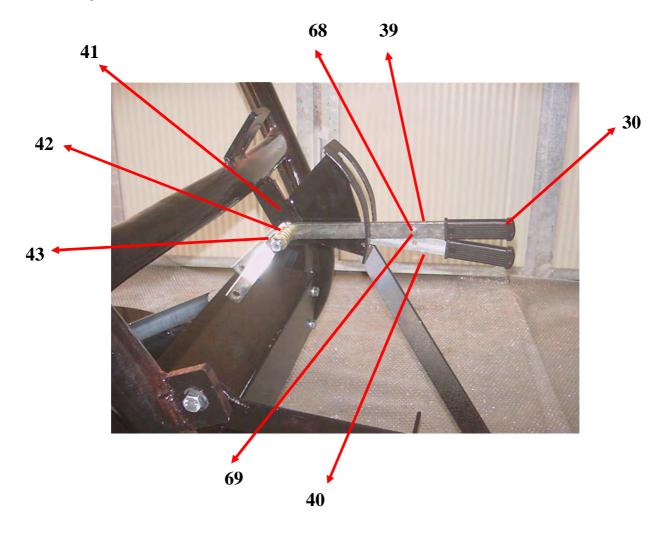




Fix the guard (35) to the machine by inserting the screws (36), the washers (37) and the nuts (38).

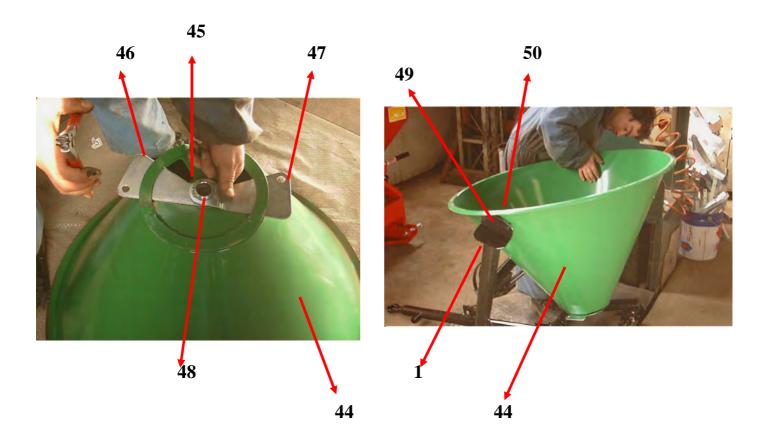


Connect the Right H. lever (39) and the Left H. one (40) to the frame by means of proper screw (41), insert the spring (42) in the screw and tighten the self- locking nut (43), then insert the rubber handles (30). Fix the two levels (39) (40) by means of screws (68) and nut (69)

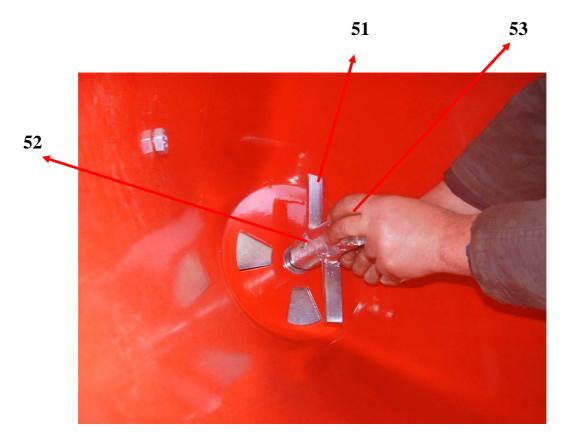


Take the hopper (44), insert the bushing (45), with the Left H. shutter (46) and the Right H. one (47), fix everything by means of seeger (48).

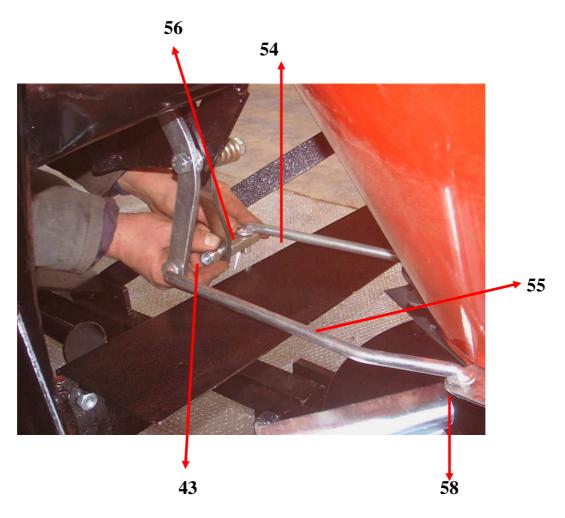
Set the hopper (44) on the frame (1) and fix by means of bolts (49) and nuts (50).



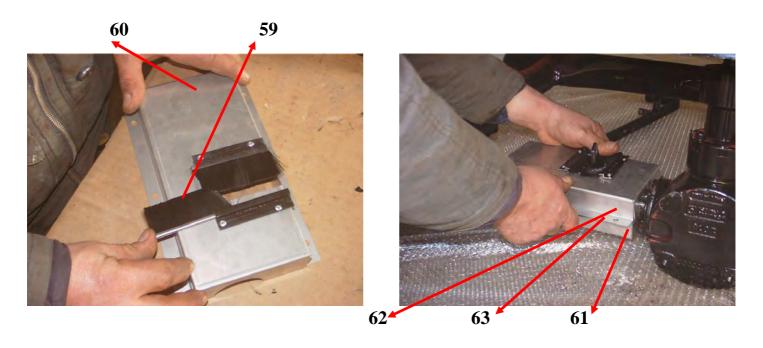
Put the agitator (51) into the gearbox shaft (2) and fix by means of the screw (52) and the self-locking nut (53).



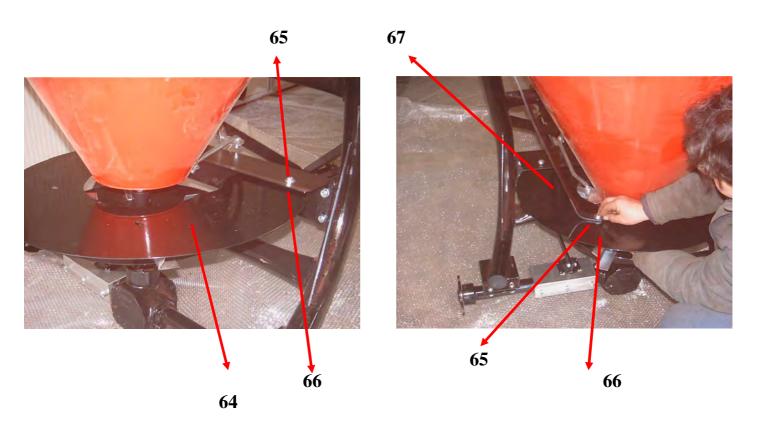
Assemble the short opening connecting rod (54) and the long one (55), then put the short connecting rod into the return (56) and tighten the self-locking nut (43). Next stop the connecting rods trough the split pins (58).



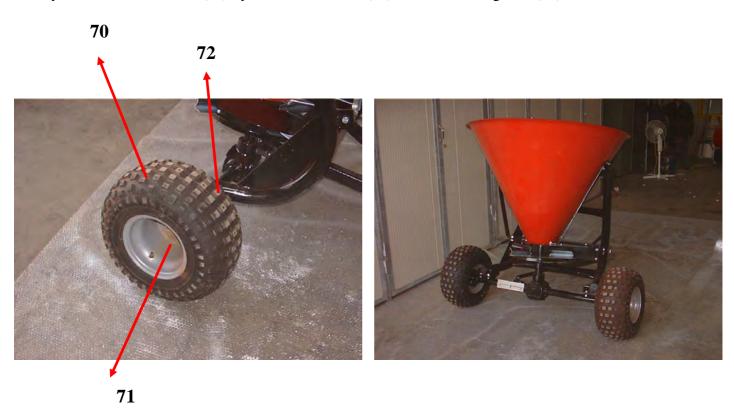
Place the brushes (59) in the upper side of disengagement box (60); next connect the lower disengagement box (61) and the upper one to the machine by tightening screws (62) and self-locking nuts (63).



Fix the guard (64) by means of bolts (65) and nuts (66); mount the arms (67) by fitting bolts (68) and nuts (69) while on the other side fix the guard to one of the screws which support the hopper.



Finally, assemble the wheels (70) by means of screws (71) and self-locking nuts (72).



# Regulating of the fertilizer spreading



As suggested in illustration C, to obtain the maximum fertilize and seed spreading, bring levers 1 and 2 to position of maximum opening. The above mentioned levers can be fixed by a screw.



To spread to the left (of the forward direction) remove the link screw and bring lever no. 1 to the maximum opening while no. 2 must be in the position "0" (illustration D)



To spread to the right (of the forward direction) lever no. 1 must stand at the position "0" and no. 2 at the maximum opening.

For a larger spreading distance you can act on fixed wings of the disc:

Slacken the bolt positioned near the center of the disc; Remove the external bolt which fixes the wing; Move the wing toward the more correct position; Reassemble the bolt screwing down it well; Tighten the other fixing bolt.



The same operation must be repeated with the other three wings. Remember to maintain the same order for all of them.

### **Maintenance**

The servicing of your spreader is very important and must be done carefully to lower operational cost and extend life of the equipment.

## **Service Requirements**

#### After use

- wash the machine with water
- dry all the metal parts carefully
- grease all the moving parts of the machine
- check and tighten all bolts

#### Periodical servicing

- change the oil and grease in the gear box after the first 30 working hours
- repeat every subsequent 250 hours of work
- turn the machine in such a way as to have the cap opening in the ideal position to fill up the gear box with about 0.55 lbs of new oil
- check the metal parts which are under great strain during working conditions and if necessary replace them

#### Replacement servicing

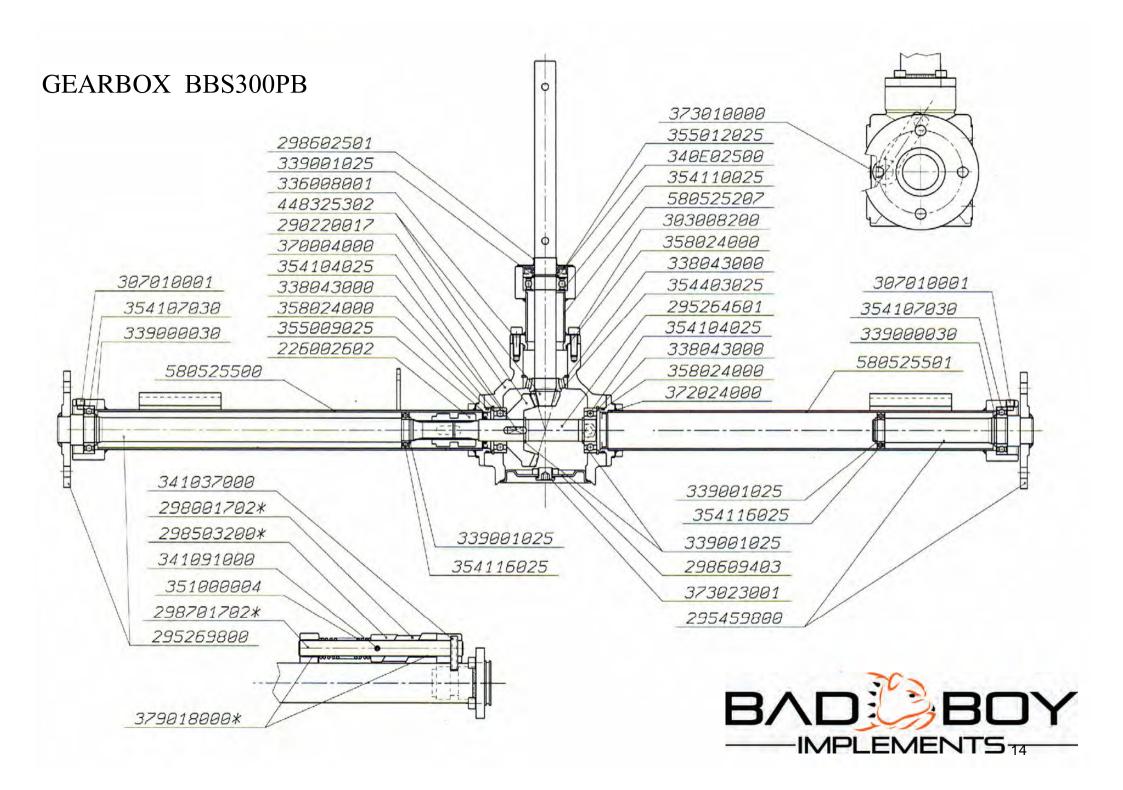
- wash the machine with water and sodium carbonate, taking care to dry the machine properly
- retouch the metal parts with paint if necessary. Lubricate the moving parts with grease and spray other parts with oil
- protect the machine by covering it with a nylon or canvas cover. Stow in a dry room and off the ground

## WARRANTY INFORMATION

Bad Boy Implements warrants to the original purchaser of any new Bad Boy Implement(s) that the equipment be free from defects in material and workmanship for a period of one (1) year from the date of retail sale.

#### WHAT THIS WARRANTY DOES NOT COVER

This warranty does not cover defects caused by depreciation or damage caused by wear, accidents, improper maintenance, improper use or abuse of the product, alterations, or failure to follow the instructions obtained in the Owner's Manual for operation and maintenance.

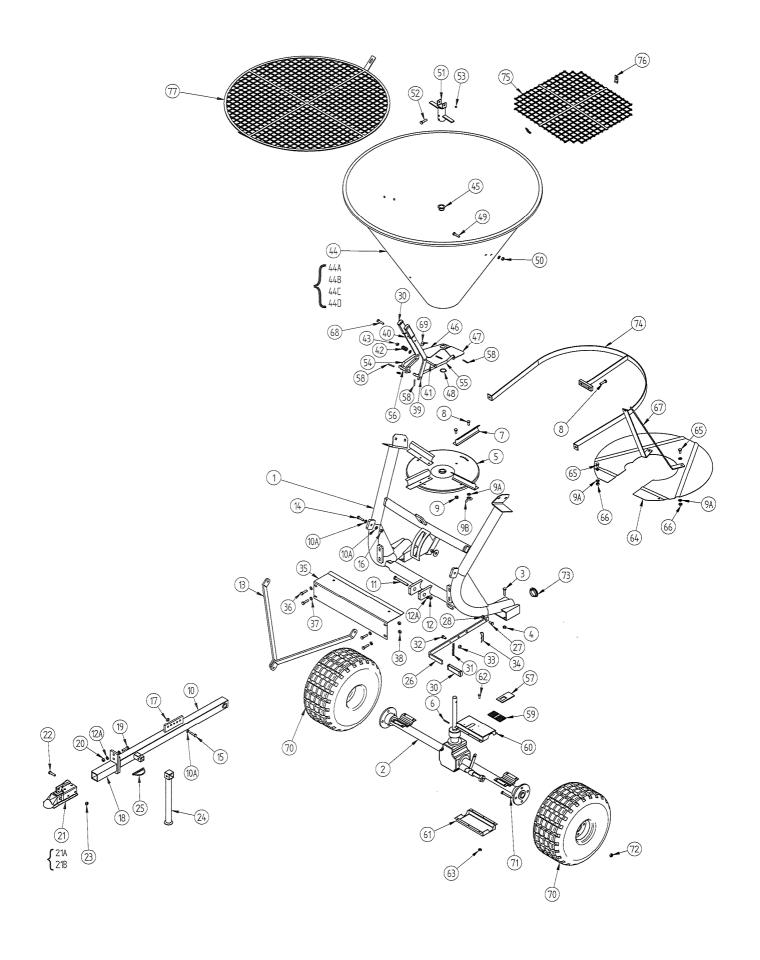


# BBS300PB GEARBOX GLOSSARY

CODE	DESCRIPTION	
226002602	DISENGAGING SLEEVE 22x19 DIN 5482	1
290220017	SPREADER BOX 2018 - G25	1
295264601	SHAFT XY 2018 "R" 22X19 DIN 5482 SPEC.	1
295269800	SHAFT WITH FLANGE L=459.5 2018	1
295459800	SHAFT WITH FLANGE L=186 2018	1
298001702	DISENGAGEMENT LEVER L=70 2018	1
298503200	FIXING DISENGAGING ROD COMPASS 2018	1
298602501	PROTECTION D.25X65X9.5	1
298609403	COVER D.94 WITH HOLE 3/8" GAS X 2018	1
298701702	DISENGAGING ROD 2018 D.18 INOX	1
299000400	GREASE NLGI 0-EP	0,01
303008200	SCREWS M 8X25X1,25 C 8,8 UNI5931	12
307010001	SREWS M 10X12X1.5 C12,9 UNI5925 P.CIL	2
336008001	WASHER SCHNORR S8	12
338043000	FLEXIBLE RING .I. 52X2,00 DIN472/1	3
339000030	FLEXIBLE RING . E. 30X2,00 DIN 471/2	2
339001025	FLEXIBLE RING . E. 25X2,00 DIN 471/2	5
340E02500	RINGS - THICKNESS .E.025	1
341037000	FLEXIBLE PIN 8X40 DIN1481	1
341091000	FLEXIBLE PIN 6X28 DIN1481	1
351000004	SPRING D.3 SPREADER DISENGAGEMENT	1
354104025	BEARING 6205 25X52X15 SF	2
354107030	BEARING 6006 2RS1 30X55X13 SF	2
354110025	BEARING 6205 2RS1 25X52X15 SF	1
354116025	BEARING 61905 RS1 25X42X9 SF. Q.I.	2
354403025	BEARING 30205 25X52X16,25 R.C.D.Q.	1
355009025	STABILITY RING 025X042X006	1
355012025	STABILITY RING 025X052X007	1
358024000	RING OR 3181 D. 45,69X2,62	3
370004000	TONGUE B 8X7X18 UNI 6604	1
372024000	LOCK CAP 42X7	1
373010000	PLUG 3/8"GAS CON. DIN906	1
373023001	PLUG 3/8"GAS CIL.+ ALUMINIUM SEAL	1
379018000	BUSHING D. 018X020 L=20 INAPAP1820P10	2
448325302	BEVEL TORQUE R=3,25X2018 SPREADER	1
580525207	COMPL. EXTEN. PIPE L=90 "Z" AXLE	1
580525500	COMPL. EXTEN. PIPE L=478.5 2018 DISENGAG	1
580525501	COMPL. EXTEN. PIPE L=478.5 2018	1

# List of parts BBS300PB

Item Pos.	Code	Description	Item Pos.	Code	Description
1	AS_001521	Main Frame	39	SM_001090	R.H. Lever
2	CT_001012	Gearbox TFS	40	SM_001091	L.H. Lever
3	CV_001009	Screw 10x25	41	CV_001078	Screw 12x80
4	CD_001092	Self-lock Nut M 10	42	CM_001016	Spring
5	AS_001019	Spreading Disc	43	CD_001093	Self-lock Nut M 12
6	CV_001411	Lock Pin 8x40	44	AS_001027	500 LT Hopper
7	SM_001117	Fans	44A	AS_001028	400 LT Hopper
8	CV_001002	Screw 8x20	44B	AS_001030	300 LT Hopper
9	CD_001091	Self-lock Nut M 8	44C	AS_001031	250 LT Hopper
9A	CG_001009	Washer M8	44D	CZ_001143	500 LT PVC Hopper
9B	CD_001050	Wing nut M8	45	CZ_001134	Shutter Bushing
10	AS_001073	Beam	46	SM_001122	L.H. Shutter
10A	CG_001010	Washer M10	47	SM_001123	R.H. Shutter
11	CV_001134	Screw 20x120	48	CV_001439	Seeger
12	CD_001097	Self-lock Nut M 20	49	CV_001010	Screw 10x30
12A	CG_001011	Washer M12	50	CD_001004	Nut M 10
13	SM_001064	Tie-rod	51	CZ_001150	Agitator
14	CV_001011	Screw 10x.35	52	CV_001054	Screw 8x55
15	CV_001013	Screw 10x45	53	CD_001091	Self-lock Nut M 8
16	CD_001004	Nut M 10	54	AS_001219	Short Tie-Rod
17	CD_001004	Nut M 10	55	AS_001256	Long Tie-Rod
18	AC_TFS10	Hitch Holder	56	CZ_001045	Return
19	CV_001017	Screw 12x40	57	CZ_001003	Rubber guard
20	CD_001093	Self-lock Nut 12	58	CV_001435	Split Pins 3x35
21	CZ_001391	Caravan hitch	59	GM_001243	Brushes
21A	AC_TFS08	Clevish	60	SM_001358	Upper Cover
21B	AC_TFS09	Round hitch	61	SM_001359	Lower Cover
22	CV_001065	Screw 10x70	62	CV_001711	Screw 6x15
23	CD_001092	Self-lock Nut M 10	63	CD_001090	Self-lock Nut M 6
24	AS_001072	Standing	64	AC_F10	Guard (Italy market)
25	CZ_001125	Pin	65	CV_001002	Screw 8x20
26	SM_001065	Disengaging Lever	66	CD_001003	Nut M 8
27	CV_001010	Screw 10x30	67	SM_003157	Arms Guard (Italy market)
28	CG_001010	Washer M 10	68	CV_001006	Screw 80x40
29	CD_001092	Self-lock Nut M 10	69	CD_001050	Vanes Nut M 8
30	CZ_001219	PVC Handle	70	CZ_001251 CZ_001452	Wheel 4.50x 10 or 18x9.50x8ATV
31	CZ_001922	Chain	71	CV_001016	Screw 12x 35
32	CV_001506	Screw 6x25	72	CD_001010	Self-lock Nut M 12
33	CD_001090	Self-lock Nut M 6	73	CZ_001440	Rubber plug
34	CV_001582	"R" Pin	74	AC_TFS11	Guard (EU market)
35	SM_001037	Guard	75	SM_003006	Standard net
36	CV_001010	Screw 10x30	76	SM_001032	Net holder
37	CG_001010	Washers M 10	77	SS_001377	
38	CD_001092		//	55_001377	Heavy net
30	CD_001094	Self-lock Nut M 10		]	



# Spreading Chart for Fertilizer Fertilizer Spreader Type BBS300PB

	Spreading width		Forward Speed				
Fertilizer	in Feet	Feed	In MPH (LBS/ACRE)				
			2	4	8	12	
			540	276	138	91	
KP NPK	49	3-5-8	1060	531	268	177	
			2141	1073	539	357	
			881	442	220	147	
UREA	33	3-5-8	1747	876	437	293	
			3490	1744	872	580	
CALC.			1513	757	378	252	
CYNAMIDE	46	3-5-8	3033	1517	758	505	
			6031	3015	1472	1005	
POTASSIUM			707	352	177	117	
SULPHATE	26	3-5-8	1423	712	357	237	
			2841	1419	710	473	
AMMONIUM			917	464	228	153	
SULPHATE	33	3-5-8	1820	911	455	303	
			3640	1825	910	600	
AMMONIUM			567	281	141	94	
NITRATE	39	3-5-8	1138	570	285	190	
			2288	1146	573	382	
CALCIUM			783	392	196	130	
NITRATE	46	3-5-8	1601	801	401	266	
			3190	1597	799	533	
THOMAS			330	170	85	58	
MEAL	26	3-5-8	647	326	161	108	
			1294	645	323	215	

This data is the average recommended amounts and speeds

# Spreading Chart for Seeds Fertilizer Spreader Type BBS300PB

Seeds	<b>Spreading width</b>	Feed	Forward Speed MPH				
	in Feet		(LBS/ACRE)				
			2	4	8	12	
			143	53	26	18	
WHEAT	52	3-5-8	1300	486	242	161	
			3371	1262	629	419	
			139	51	24	15	
VETCH	52	3-5-8	1320	495	228	165	
			3228	1189	593	395	
			148	54	25	18	
RYE	49	3-5-8	1392	520	261	175	
			3388	1270	633	423	
			116	43	21	12	
BARLEY	33	3-5-8	1820	682	340	226	
			4307	1616	806	539	
			388	152	73	51	
RED CLOVER	33	3-5-8	3254	1219	609	405	
			6656		1245	831	
THE PLOE		2.5.0	161	71	53	35	
HILL RICE	49	3-5-8	1318	504	259	178	
			3388	1280	647	436	
MILLED		250	406	152	76	50	
MILLET	26	3-5-8	3262	1224	700	407	
			6218		1163	776	
LUCERNE	22	3-5-8	379	142	70	46	
LUCERNE	23	3-3-8	3035	1138	567	379	
			7329	2748	1374 17	914	
OATS	30	3-5-8	81	30		9 216	
UAIS	30	3-3-0	1735	650 1793	325	598	
			4769 80	44	896 13	9	
SUGAR	26	3-5-8	1057	395	196	131	
BEET	20	3-3-0	2436	913	457	303	
DIE			2430	90	457	29	
FLAX	20	3-5-8	3921	1469	735	489	
	20		7584	3011	1485	1002	
WET			107	49	36	23	
RICE	52	3-5-8	522	335	164	123	
	32		2259	853	431	291	
L	1	l	4437	033	<b>TJ</b> 1	<b>4</b> /1	



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