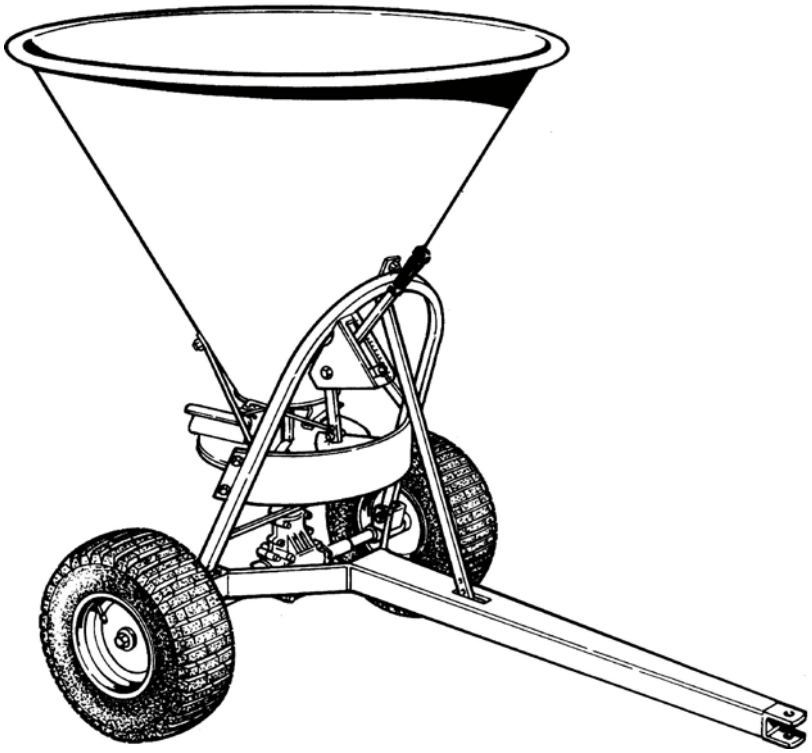
OPTIMA

CROPLANDS



CE

SITREX FSP 100/150 SPREADER

1 -FOREWORD

This manual is an integral part of the machine and contains information necessary for its operation and maintenance. Operators and maintenance staff are advised to read the manual before using the machine or carrying out any maintenance.

This guide, or a copy of it, must always be kept in a convenient place for reference. It is strictly forbidden to change its content and tear off pages. Additional illustrative leaflets relative to new accessories or changes, and every updating of this guide must be attached herewith.

The user's guide must be kept for the entire working life of the spreader and must be handed to all other users and future owners.

We recommend to contact the manufacturer for any further information about spare parts and accessories.

Take care when you see this symbol: it indicates the operations which are dangerous.

2 - IDENTIFICATION LABELS

The identification label of the machine carrying all identification details is positioned on the protective casing. ***Fig.1.***

The labels in ***fig.2 are*** applied to the hopper, frame and casing as shown in ***fig.3***

1 -Warning: before carrying out any maintenance, remove the ignition key from the tractor and read the instruction and maintenance manual.

2 -Warning, remain at a distance to avoid anger from scattered product.

3 -Warning: read the instruction and maintenance manual carefully.

4 -Always use protective goggles and wear protective gloves.

5 -Warning: keep hands away from rotating parts while the machine is operating.

6 -This indicates the rotation speed in rpm.

Both the labels and the danger symbols must always be clean and in good condition; if necessary, replace with other originals available on request from the manufacturer.

3 - WARRANTY

The manufacturer warrants new machinery to be free from defects in material and workmanship at the time of delivery to the original purchaser if correctly set up and operated according to this Operator's Handbook.

The manufacturer undertakes to repair or replace free of charge any defective part which should be returned by the purchaser (freight prepaid) and found to be defective on inspection authorised by the manufacturer during the warranty period.

This warranty shall be valid for 12 (twelve) months from the delivery of the goods to the original purchaser.

If the customer is unable to return the defective part to the manufacturer, the manufacturer cannot be held responsible for any cost due for repair or replacement of any part of the machine. He shall only supply the part(s) required for such repair and/or replacement.

The warranty shall be considered null and void when it is evident that the machine has been improperly used or at least repaired without authorisation.

The manufacturer shall not be held responsible for any obligation or agreement reached by any manufacturer employers, agents or dealers who do not comply with the above warranty. The manufacturer cannot be held responsible for the subsequent damages. This warranty replaces any other warranty, either explicit or implied, as well as any other obligation of the manufacturer.

4 - DESCRIPTION OF THE MACHINE

This is a spreader with centrifugal action for dry or damp granular or non - granular materials, to be towed by a tractor or self - propelled vehicle. The centrifugal action is generated by the rotation of a disc with four blades positioned on the circumference.

The machine is composed of: ***(fig.4)***:

1 spreading disc equipped with blades

2 frame with drawbar

3 loading hopper

5 - ACCIDENT PREVENTION REGULATIONS *(how to avoid accidents)*

- To avoid accidents, pay close attention to the warning notices affixed on the machine and read this guide carefully.
- The use of the spreader is restricted to the functions, for which it has been designed and which are described in the present guide. The manufacturer will not be held responsible for any damages to things or injuries to people caused by a wrong use of the spreader.
- It is strictly forbidden to spread iron pieces, stones, gravel, glass and similar materials as they may injure people and cause damages to things.
- Before starting the spreader, make sure all protection devices and guards are mounted correctly.
- Make sure no bystanders (especially children) or animals are in the working area. This is extremely important when the spreader is being used near public or easily accessible roads.
- During work, wear close-fitting and laced-up garments, heavy safety shoes, safety gloves and mask specially while spreading powdery fertilizers in windy weather.
- It is strictly forbidden to transport persons while the spreader is in operation or during transfers.
- Note: when the spreader is attached to the tractor the blades are activated and start moving.
- After using the spreader, turn the engine off, apply the handbrake, lower the spreader to the ground, disengage the P.T.O. and , if the hopper is still partially full, even the product up in order to avoid accidental tipping.
- When travelling on public roads, connect the spreader to the tractor as described on pag.12 of the present guide. A wrong connection may alter the vehicle stability. It is necessary to abide by the national traffic code.
- We remind you that a careful operator is the best insurance against accidents.

6 - USE OF THE MACHINE

It is possible to spread various types of fertilizers, seeds, salt and sand. The machine can be attached to any type of self-propelled vehicle or tractor which is sufficiently powerful.

The machine must only be started up in the open and when there is enough visibility to see the distance to which the product is being spread.

The quantity of the product scattered can be increased by means of the opening lever. The quantity is increased by pushing the lever down and decreased by pulling it up. The spread of the product is determined by the speed of the tractor.

YOU ARE ADVSED NOT TO:

. • load the hopper with wet products as these may clog the machine.
. • use the spreader to scatter stones or other dangerous materials.
. • dismantle safety devices and the covers protecting them.
. • transporting people is prohibited both while working and during transfers.

The fertilizer spreader must never be used by employees under the age of eighteen.

7 -ASSEMBLING THE FERTILIZER SPREADER *(Fig.5)*

Pay attention while assemblying the spreader. The operators must be instructed on the hazards and the precautionary measures to be taken. Use safety gloves and tools suitable for the operation to be carried out.

A -Assemble shafts 3-4 and 5 on the transmission unit, with the same rotation direction as shown in the drawing.

B -Fix the transmission unit 1 to the frame 2.

C -Fix the drawbar 6 to the frame 2.

D -Fix the tie-rod 7 and the casing P TO the frame 2.

E -Fit the disc 8 on the central transmission shaft.

F -Fix the fertilizer opening lever 9 to the bow on the frame 2.

G -Fit the space washer 10 on the unit axle .

H -Fix the wheels 11 to the unit axle.

I -Fit the agitator guide bushing 15 in the hopper cone, with the dosing disc, the sealing washer and the snap ring. (N°12) .

L -Introduce the agitator 13 into the central hole in the hopper 14 and fix it to the shaft 5; fit the casing 17 on the attachment holes of the hopper and fix the hopper to the frame 2.

M -Connect the opening tie-rod 16 to the dozer disc 8 and the opening lever 9.

8 - FUNCTIONING OF THE MACHINE

HITCHING

The machine can be attached to any type of self-propelled vehicle or tractor which is sufficiently powerful.

Position the tractor close to the machine, apply the handbrake and secure the drawbar to the tractor ***using the special pin (Fig.6).***

> *NOTE: When the spreader is attached to the tractor the blades are activated and start moving*

LOADING

> *Before loading the hopper the self-propelled vehicle or tractor must be switched off and the parking brake applied. It is advisable for the same operator to load the hopper after having switched off the tractor motor.*

Everytime the spreader has to be filled up it is advisable to check that there aren't any foreign particles on the bottom that may obstruct the shutter.

REGULATING THE QUANTITY SUPPLIED

The quantity of product scattered can be increased or decreased by means of the opening lever. The quantity is increased by pushing the lever downwards and decreased by pulling it upwards, until the supply is shut off. ***(Fig.7)***

DISC WITH ADJUSTABLE BLADES

According to the specific weight of the fertilizer to be spread, it is possible to direct the blades by moving them in the special clamps from N° 1 to N° 5, to obtain even scattering to the right and left. The blades are normally in position N° 3. By moving the blades towards N° 1 the scattering range to the left of the driver is increased. By moving them towards clamp N° 5 the scattering range to the right of the driver is increased. ***(Fig.8)***

9 -ACCESSORIES

The fertilizer spreader can be equipped with the following accessories:

MANUAL TOWING KIT

This accessory allows the fertilizer spreader to be easily maneuvered once it has been detached from the tractor. ***(Fig.9)***

SALT AND SAND SPREADER CONE

This is composed of a steel cone section with two adjustable side supports which hook onto the frame. By varying the height of the cone the scattering range is regulated, making it possible to scatter the product over the area beneath the hopper. ***(Fig.10)***

MECHANIC REMOTE CONTROL

For the regulation of the spread of the product from the driver's seat of the tractor - ***Fig.11***

10 - MAINTENANCE

All maintenance operations must be carried out by skilled personnel strictly adhering to the instructions given in this booklet.

For efficient maintenance: disconnect the spreader from the tractor , clean the working area and use suitable utensils suitable to the type of work that the spreader is used for.

At the end of the maintenance routine, check and reposition all safety devices and the covers protecting them.

After every ***50 hours*** of work:

- Grease the wheel-hub by way of the special lubricator

-check that the screws are tight

-check the pressure of the tyres

11 - STORAGE

At the end of each season, or in the event of long periods of disuse it is necessary to:

- Carefully clean the spreader and its discs of fertilizer.

-check transmission, distribution and regulation parts. Replace overused or damaged parts.

-tighten all bolts.

-Grease well in order to avoid rusting.

-Park the machine in a closed area if possible and cover it, to protect it from damage caused due to climatic conditions. Only the user will benefit when finding the machine in optimal conditions after a period of disuse.

12 - TRANSPORTING THE MACHINE

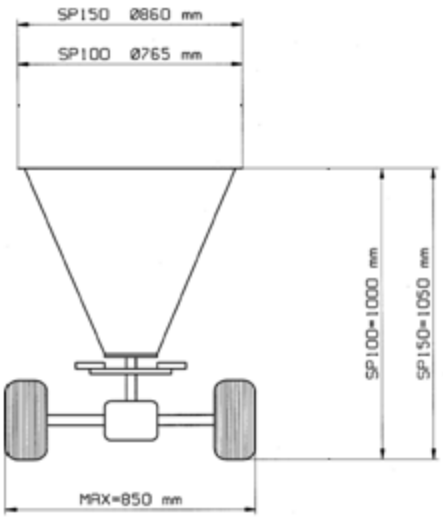
The machine is supplied disassembled and packed in cardboard and polythene; therefore read this instruction and maintenance booklet carefully.

Dispose of the packing properly in binds provided for this purpose.

13 - THECNICAL SPECIFICATIONS

OVERALL DIMENSION

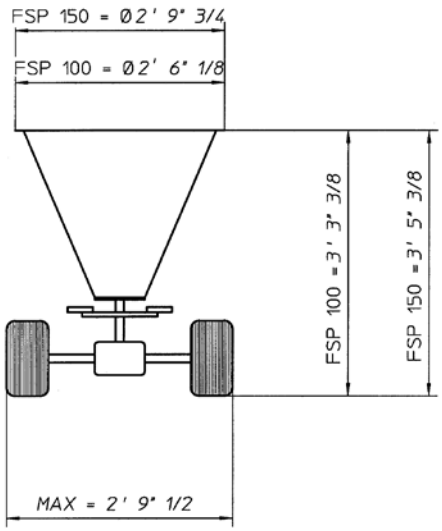
Mod.	Height mm	Width mm	Wheight kg	Capacity l
FSP100	1000	850	46	100
FSP150	1050	850	61	143



TECHNICAL DATA

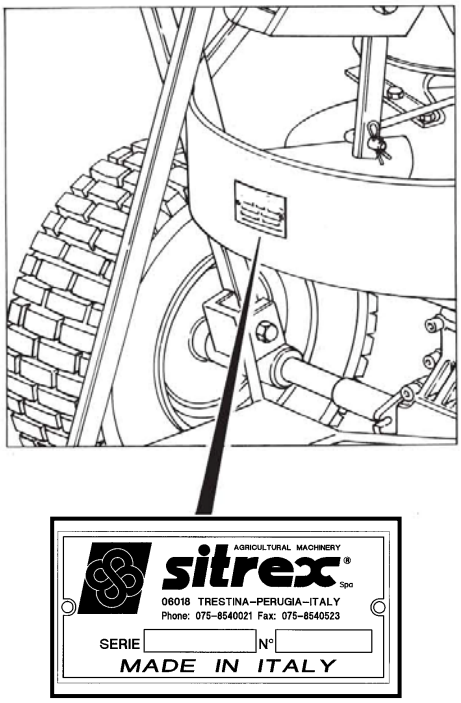
Required power (for all models).....3 kW

Spreading range 4-8 m. (according to the speedy and the type of fertilizer)



14 - DISPOSAL OF THE MACHINE

To protect the environment and to prevent people from being harmed, do not throw away the spreader or its components, but have it demolished by an authorized demolisher. The demolition should comply to the laws regulating the country of the demolisher.


AGRICULTURAL MACHINERY
sitrex
Spa
06018 TRESTINA–PERUGIA–ITALY
Phone: 075–8540021 Fax: 075–8540523
SERIE
N°
MADE IN ITALY

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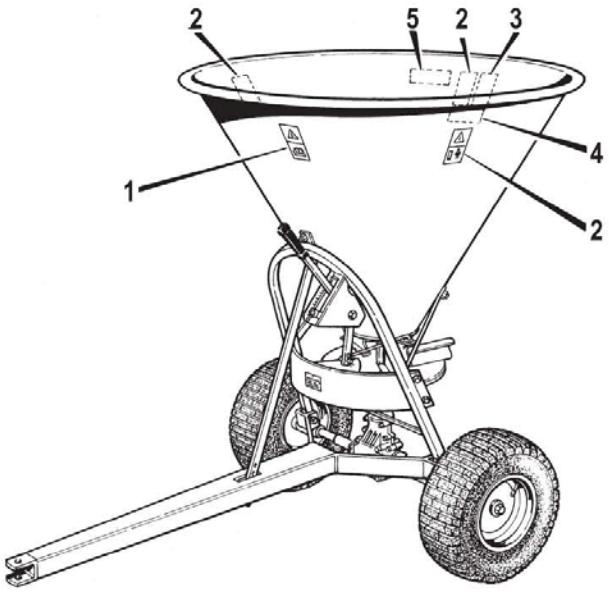
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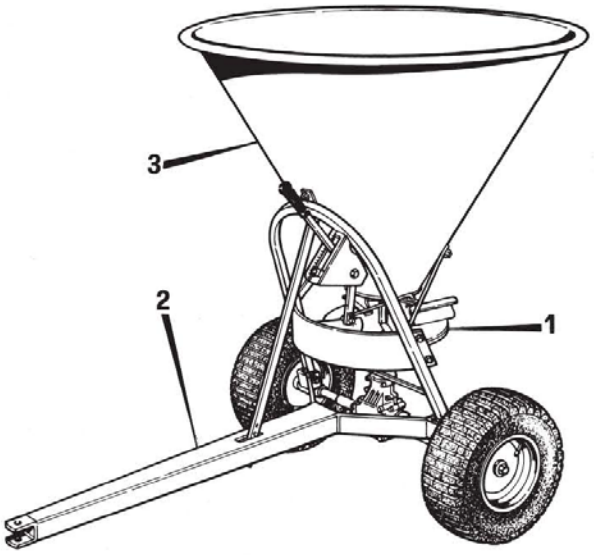
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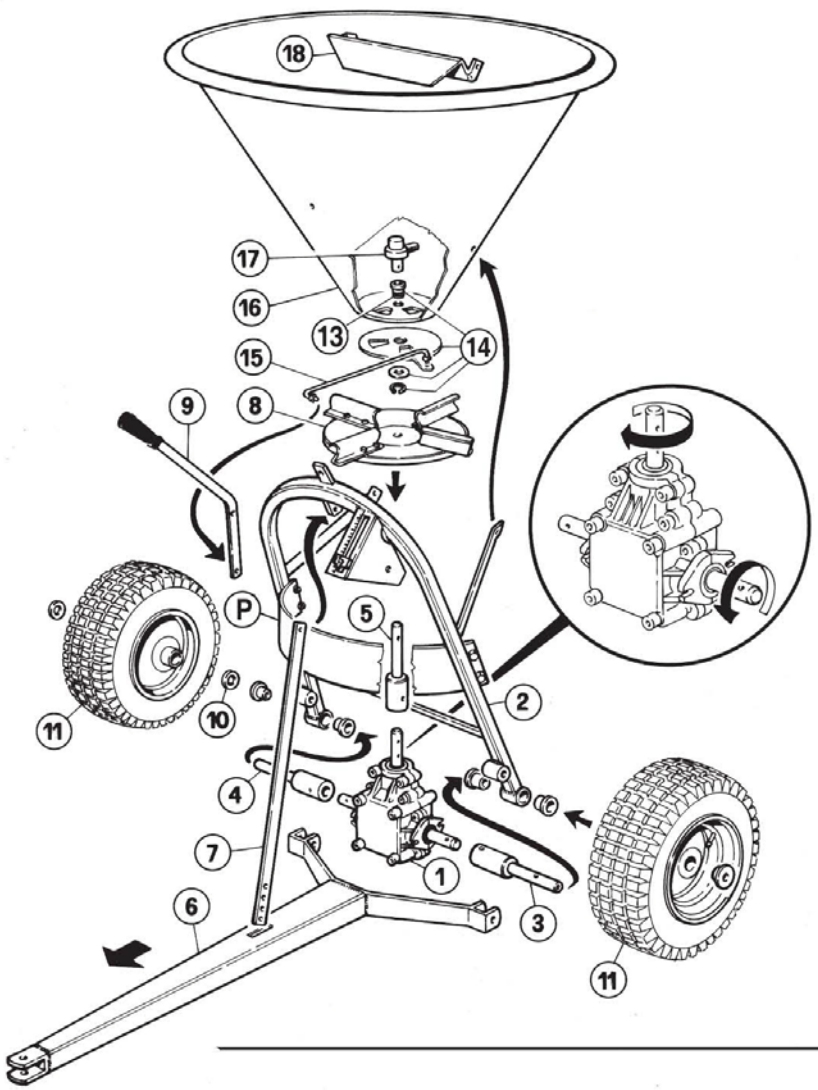

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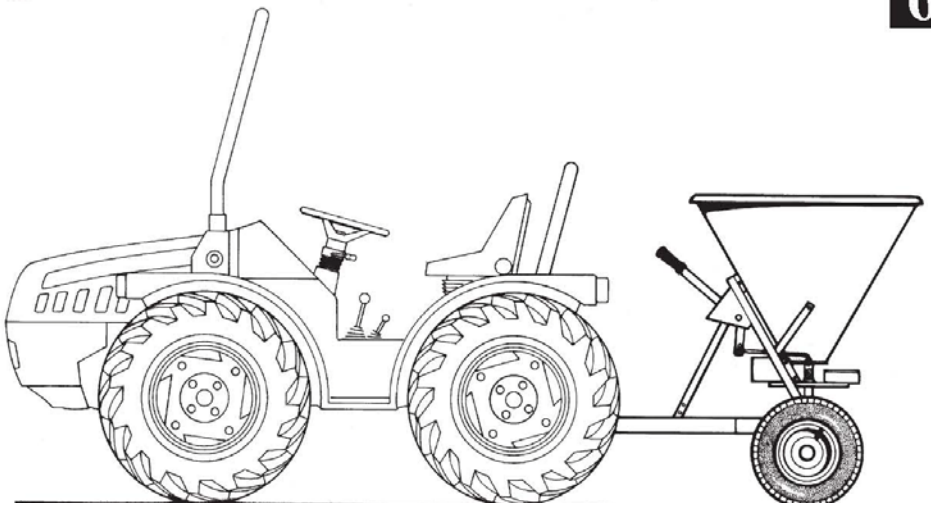

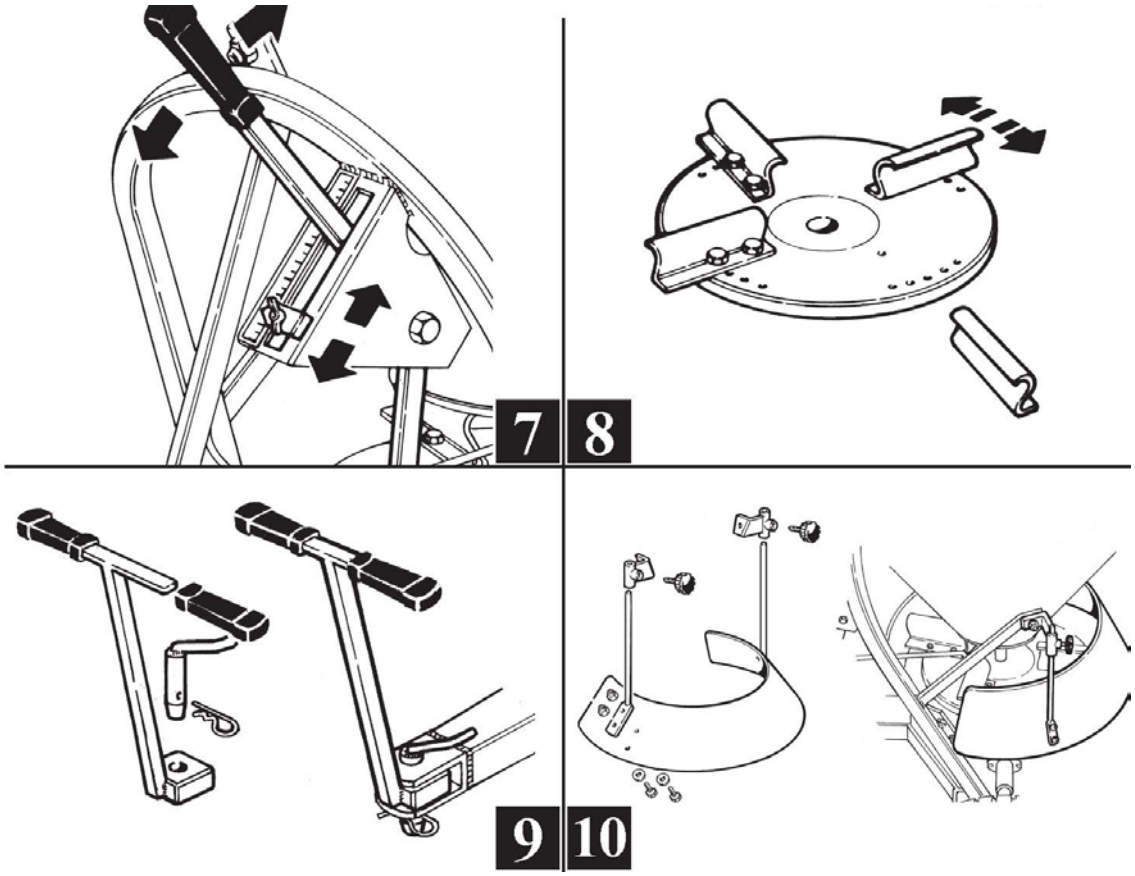
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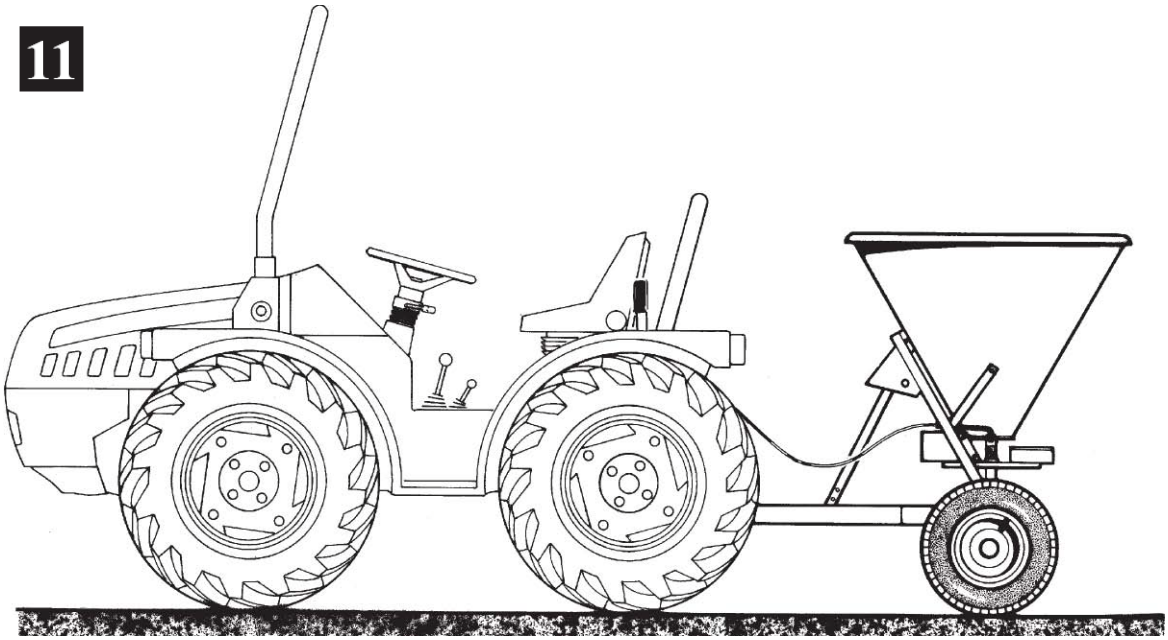
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FERTILIZER SPREADING TABLE (METRIC)

TIPO DI CONCIME TYPE D'ENGRAIS TIPO DE ABONO FERTILIZER TYPE ART DES DÜNGERS TIPO DE ADUBO	Larghezza di spaglio (m) Largeur d'epandage (m) Anchura de esparcimiento (m) Spreading width (m) Streubreite (m) Distribuição (m)	km/h	Quantità da spargere in kg/ha alla velocità di marcia indicata nella colonna km/h Quantitè à épandre en kg/h à la vitesse indiquée dans la colonne km/h Cantidad a esparcir en Kg/ha a la velocidad de marcha indicada en la columna Km/h Quantity to be spread in kg/ha at the forward speed indicated in the km/h column Streumenge in kg/ha bei hierdaneben angezeigter km/h fahrgeschwindigkeit Quantidade distribuída em kg/ha à velocidade de marcha indicada na coluna km/h											
			APERTURA - OUVERTURE - APERTURA - FEED - OEFFNUNG - ABERTURA												
			1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7
Concimi a grana grossa Engrais a gros grains Abonos de Grano Grande Coarse grain Fertilizers Dünger, grosskörnig Adubo a Diâmetro Grosso	8	1,5	225	375	691	1139	1455	1795	2175	2628	2890	3250	3560	4005
		4	106	156	277	465	580	720	887	1050	1155	1305	1450	1628
		8	58	78	145	230	292	360	441	530	586	675	742	835
		12	39	60	96	156	197	245	292	363	385	450	485	552
		16	23	39	72	120	150	192	225	270	290	335	369	420
Concimi a grana media Engrais à grains moyens Abonos de Grano Medio Medium grain fertilizers Dünger, mittelkörnig Adubo a Diâmetro Médio	7	1,5		523	896	1279	1635	2027	2258	2624	2894	3169	3352	3686
		4		197	370	525	671	830	927	1062	1167	1281	1350	1495
		8		118	192	265	340	422	469	537	590	652	684	753
		12		82	127	183	223	284	321	365	398	449	465	512
		16		60	92	130	174	212	232	276	300	331	350	382
Concimi a grana fine Engrais à petits grains Abonos de Grano Fino Fine grain fertilizers Dünger, feinkörnig Adubo a Diâmetro Fino	6	1,5	198	324	550	926	1195	1507	1766	2125	2392	2743	2980	3317
		4	95	137	229	382	494	619	727	866	971	1122	1217	1332
		8	52	68	121	200	252	315	364	445	496	561	608	677
		12	33	46	105	137	172	217	248	296	334	382	415	454
		16	19	34	59	98	128	154	189	224	263	288	317	335
Concimi cristallini medi Engrais à cristallins moyens Abonos Cristalinos medios Medium cristalline fertilizers Dünger kristallin mittelgrösse Adubo a Cristalinos Médios	4	1,5	375	620	1144	1855	2294	2940	3436	4094	4583	5086	5577	6144
		4	131	249	468	751	927	1197	1387	1643	1842	2047	2242	2470
		8	77	127	237	374	473	607	698	829	933	1031	1124	1241
		12	50	86	159	253	318	414	472	557	621	689	755	827
		16	34	61	114	194	236	312	361	413	464	517	564	624
Calciocianamide e simili Cyanamide Calcique et sim. Cianamida de calcio y Símiles Calc. Cyanamide ans sim. Kalkstickstoff und ähnl. Calciocianamide e simili	6	1,5	312	852	1255	1859	2295	2095	3259	3801	4874			
		4	124	341	515	752	919	1129	1316	1526	1714			
		8	66	169	260	337	462	562	664	764	858			
		12	42	113	168	248	309	378	441	510	571			
		16	29	83	127	189	232	285	328	382	427			
Solfato di ammonio (Cr) Sulfate d'ammonium (Cr) Sulfato de amonio (Cr) Ammonium Sulph. (Cr) Ammoniumsülfat (Kr) Sulfato de amônio (Cr)	6	1,5	161	642	1050	1581	2022	2499	2963	3478	3812	4281	4590	5138
		4	69	254	424	633	814	1007	1182	1395	1531	1718	1842	2057
		8	32	130	214	319	411	504	590	699	762	860	919	1033
		12	26	83	139	215	274	335	396	475	513	577	618	690
		16	17	66	107	162	204	252	298	350	382	429	466	515
Scorie Thomas Scorie Thomas Escorias Thomas Thomas meal Thomasschlacke Scorie Thomas	4	1,5					2571	5724	7580	7874				
		6					650	1451	1915	1973				
		12					330	610	658	988				
		19					222	485	337	662				

SEEDS SPREADING TABLE (METRIC)

Sementi Graines Simientes Seeds Saatkörner Sementes	Larghezza di spaglio (m) Largeur d'epandage (m) Anchura de epsarcimiento (m) Streubreite (m) Spreading width Distribuição (m)	Apertura Ouverture Apertura Feed Oeffnung Abertura	Velocità di marcia in km/h Vitesse de marche en km/h Velocidad de marcha en km/h Fahrgeschwindigkeit in km/h Forward speed in km/h Velocidade de marcha em km/h				
			1,5	4	8	12	16
Frumento Ble Trigo Wheat Weizen Trigo	16	2	306	122	61	40	29
		2,5	495	197	98	65	48
		3	677	270	135	89	67
		3,5	830	354	177	118	88
Avena Avoine Avena Oat Hafer Aveia	8	1,5	235	92	46	30	22
		2	389	155	77	51	38
		2,5	580	231	115	77	56
		3	777	310	154	103	77
Segala Seigle Centeno Rye Roggen Segale	16	2	395	156	81	51	39
		2,5	615	242	122	82	62
		3	843	336	167	111	86
		3,5	1025	410	205	136	102
Orzo Orge Cebada Barley Gerste Cevada	12	2,5	405	161	80	52	40
		3	492	197	97	64	49
		3,5	680	273	135	91	66
		4	837	334	166	110	82
Leglio Ivraie Cizaña Rye Grass Raigras-lolch Joio	5	1	56	22	12	8	6
		1,5	159	64	33	22	16
		2	335	134	68	45	34
Seme di rapa Graine de navet Nabo Rape seed Rübensamen Semente De Nabo	6,5	1	43	18	9	7	4
		1,5	240	96	47	32	24
		2	478	192	96	64	47
Trifoglio rosso Trefle rouge Trébol rojo Red clover Inkarnatklee Trevo Vermelho	6,5	1	64	25	12	8	7
		1,5	220	88	44	29	23
		2	539	217	108	73	54

FERTILIZER SPREADING TABLE (US)

SPREADING TABLE FOR FERTILIZER SPREADERS SERIES FSP														
FERTILIZER TYPE	SPREADING RANGE (yards)	MPH/h	Lbs/acre OF FERTILIZER TO BE SPREAD WITH ENGINE R.P.M. AS IN COLUMN Mph/h											
			OPENING											
			1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7
COARSE-GRAINED FERTILIZERS	15,5	2,5	201	335	616	1016	1298	1601	1940	2343	2578	2899	3176	3573
		3,5	95	139	247	415	517	642	791	937	1030	1164	1294	1452
		5	52	70	129	205	260	321	393	473	525	602	662	745
		6	35	54	86	139	176	219	260	324	343	401	433	492
		7,5	21	35	64	107	134	171	201	241	259	299	347	375
MEDIUM-GRAINED FERTILIZERS	12	2,5		467	799	1141	1459	1808	2014	2341	2582	2827	2990	3288
		3,5		176	330	468	599	740	827	947	1041	1143	1204	1334
		5		105	171	236	303	376	418	479	526	582	610	672
		6		73	113	163	199	253	286	326	355	401	415	457
		7,5		54	82	116	155	189	207	246	268	295	312	341
FINE-GRAINED FERTILIZERS	9	2,5	177	289	491	558	1066	1344	1575	1896	2134	2451	2658	2959
		3,5	85	122	204	341	441	552	649	773	866	1001	1086	1188
		5	46	59	108	178	225	281	325	397	442	500	542	604
		6	29	41	94	122	153	194	221	264	298	341	370	405
		7,5	17	30	53	87	114	137	169	200	235	257	283	299
MEDIUM-CRYSTAL FERTILIZERS	6,5	2,5	335	553	1021	1655	2046	2623	3065	3652	4088	4537	4975	5481
		3,5	117	222	435	670	827	1068	1237	1466	1643	1826	2000	2203
		5	69	113	211	334	422	541	623	740	832	920	1003	1107
		6	45	77	142	226	284	369	421	497	554	615	674	738
		7,5	30	54	102	173	211	278	322	368	414	461	503	557
CALCIUM CYANAMIDE AND SIMILAR	7,5	2,5	278	760	1120	1658	2047	1869	2907	3391	4348			
		3,5	111	304	459	680	820	1007	1174	1361	1529			
		5	59	151	232	301	412	501	592	682	765			
		6	37	101	150	221	276	337	393	455	509			
		7,5	26	79	113	169	207	254	293	341	381			
AMMONIUM SULPHATE	7,5	2,5	144	573	937	1410	1804	2229	2643	3103	3401	3819	4095	4583
		3,5	62	227	378	565	726	898	1054	1244	1366	1533	1643	1844
		5	29	116	191	285	367	450	526	624	680	785	820	922
		6	23	74	124	192	244	299	353	424	458	515	551	794
		7,5	15	59	95	145	182	225	266	321	341	383	416	459
THOMAS MEAL	4,5	2,5					2294	5106	6762	7024				
		3,5					580	1294	1708	1760				
		5					294	544	587	881				
		6					198	433	301	591				

SEEDS SPREADING TABLE (US)

SPREADING TABLE FOR SEEDS SPREADERS SERIES **FSP**									
SEEDS	SPREADING RANGE (yards)	MPH/h	Lbs/acre OF SEEDS TO BE SPREAD WITH ENGINE R.P.M. AS IN COLUMN Mph/h						
			OPENING						
			1	1,5	2	2,5	3	3,5	4
WHEAT	12	1			273	442	604	740	
		2,5			109	176	241	316	
		5			54	87	120	158	
		7,5			36	58	79	105	
		10			26	43	60	79	
OAT	6,5	1		210	347	517	693		
		2,5		82	138	206	277		
		5		41	69	103	137		
		7,5		27	45	69	92		
		10		20	34	50	69		
RYE	12	1			352	549	752	914	
		2,5			139	216	300	366	
		5			72	109	149	183	
		7,5			45	73	99	121	
		10			35	55	77	91	
BARLEY	9	1				362	439	607	747
		2,5				144	176	244	298
		5				71	87	120	148
		7,5				46	57	81	98
		10				36	44	59	73
RYE GRASS	4	1	50	142	299				
		2,5	20	57	120				
		5	11	29	61				
		7,5	7	20	40				
		10	5	14	30				
TURNIP SEEDS	5	1	38	214	426				
		2,5	16	86	171				
		5	8	42	86				
		7,5	6	29	57				
		10	4	21	42				
RED CLOVER	5	1	57	196	481				
		2,5	22	79	194				
		5	11	39	96				
		7,5	7	26	65				
		10	6	21	48				

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OPTIMA
CROPLANDS

ASSEMBLY
USE AND MAINTENANCE

SITREX FS SPREADER

FERTILIZER SPREADER

1 FOREWORD

This guide is integral part of the machine and contains all necessary information for use and maintenance.

Before using or servicing the machine, operators and technical staff are required to read this guide carefully.

This guide, or a copy of it, must be kept in a convenient place for reference.

It is advisable to contact the manufacturer for any further information.

2 WARRANTY

The manufacturer warrants new machinery to be free from defects in material and workmanship at the time of delivery to the original purchaser if correctly set up and operated according to this Operator's Handbook.

The manufacturer undertakes to repair or replace free of charge any defective part which should be returned by the purchaser (freight prepaid) and found to be defective on inspection authorised by the manufacturer during the warranty period.

This warranty shall be valid for 12 (twelve) months from the delivery of the goods to the original purchaser.

If the customer is unable to return the defective part to the manufacturer, the manufacturer cannot be held responsible for any cost due for repair or replacement of any part of the machine. He shall only supply the part(s) required for such repair and/or replacement.

The warranty shall be considered null and void when it is evident that the machine has been improperly used or at least repaired without authorisation.

The manufacturer shall not be held responsible for any obligation or agreement reached by any manufacturer employers, agents or dealers who do not comply with the above warranty. The manufacturer cannot be held responsible for the subsequent damages. This warranty replaces any other warranty, either explicit or implied, as well as any other obligation of the manufacturer.

3 CONFORMITY STATEMENT

The machine is identified by means of the following technical data:

- Type of machine
- Registration number

Stamped on the rating plate fastened to the frame of the machine. This data should be mentioned when requesting any replacements or information.

NOTE:

ALL WARRANTY WORK OR REPAIRS MUST BE APPROVED BY THE MANUFACTURER BEFORE WORK BEGIN.

ANY WORK OR REPAIRS MADE BEFORE APPROVAL MAY NOT BE COVERED UNDER WARRANTY.

PLEASE NOTIFY YOUR SALES & SERVICE DEPARTMENT OF THIS POLICY.

4 IDENTIFICATION PLATE

The machine identification plate (Fig.2) containing all relevant identity information is located on the guard. (Fig.1)

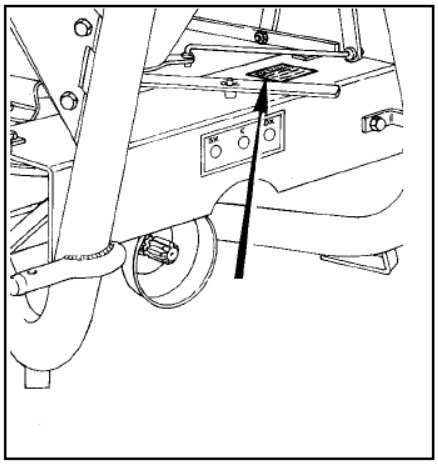


Fig. 1

Fig. 2

5 WARNING SIGNS

The warning sings are affixed to the hopper and the frame.

6 MACHINE DESCRIPTION

This centrifugal spreader is suitable for spreading granular, dry or humid fertilizers and is designed to be hitched to tractors or self-propelled machines. The fertilizer is spread by means of a rotating disc equipped with 4 blades.

The machine consists of :

1 - spreading disc with blades
2 - frame and protections
3 - hopper

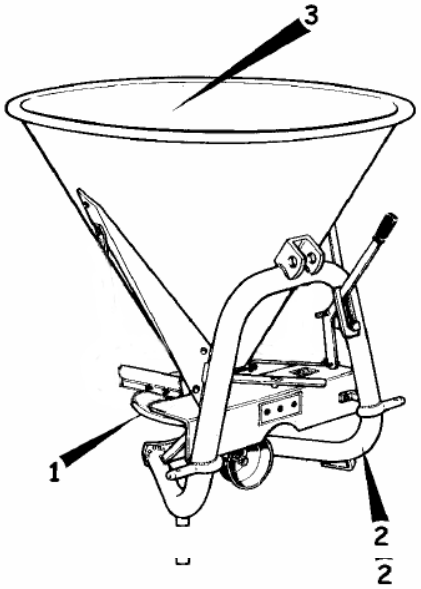


Fig. 4

7 ACCIDENT PREVENTION STANDARDS

HOW TO AVOID ACCIDENTS

In order to avoid accidents, pay close attention to the warning signs affixed to the machine and read this guide carefully.

Make sure no bystanders (especially children) or animals are in the working area.

Wear close fitting and laced-up clothing, safety shoes, safety gloves, mask and glasses especially while spreading powder fertilizers and in windy weather conditions.

While driving the tractor, make sure the P.T.O shaft is disengaged.

When the spreader is not being used, turn the motor off, put the handbrake on, disengage the P.T.O. and lay the spreader down on the ground.

Never carry out any maintenance work with the spreader in operation or while the tractor is running.

Never carry out any maintenance work with the spreader connected to the 3-point-hitch of the tractor: the spreader may suddenly fall down.

Before connecting the P.T.O. shaft, make sure the revolution number is the same of that of the tractor.

Abide by the national traffic code when transporting the machine on public roads.

Do not carry anyone while the machine is operating or during transfers.

Noise level under 70dB.

A careful operator is the best insurance against accidents.

8 MACHINE USE

The machine can be hitched to any kind of tractors of suitable power.

We recommend to start the spreader only outdoors and in good visibility conditions.

IMPROPER USE

It is forbidden to use the spreader differently from what described and specified in the present guide.

It is forbidden to remove safety devices and chain guards.

It is forbidden to make changes to any part of the spreader.

It is forbidden to put hands, arms or any other part of the body inside the rotating parts.

Never load the hopper with wet products; the machine may get obstructed.

Never use the spreader to spread dangerous substances i.e. glass, pebbles or similar products as they may injure people or cause damages.

Disabled personnel are not allowed to use the spreader.

Minors are not allowed to use the spreader.

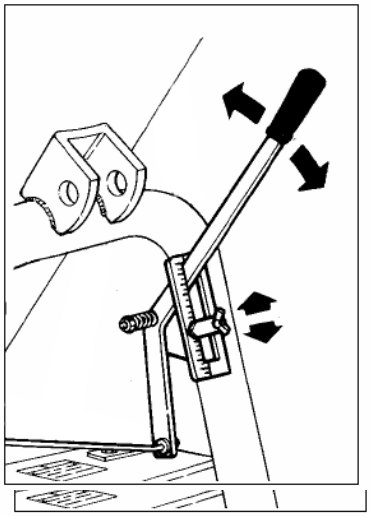
9 LOADING

Before loading the hopper, make sure the tractor is off and the P.T.O. shaft disconnected.

We recommend that the whole loading operation is carried out by the same operator. Lay down the spreader on the ground and then load the hopper.

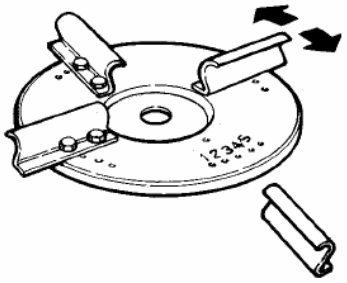
10 DISTRIBUTION

By means of a lever positioned near the third point it is possible to increase or reduce the quantity of fertilizer to be spread. By pulling the lever down, the quantity is increased, by pulling the lever up the quantity is reduced till complete flow stop.



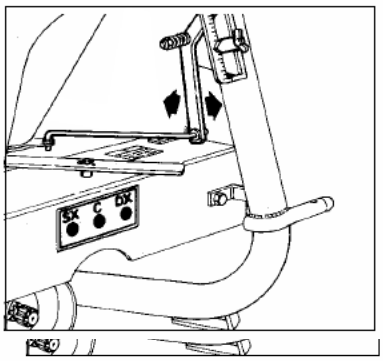
11 BLADE ADJUSTMENT

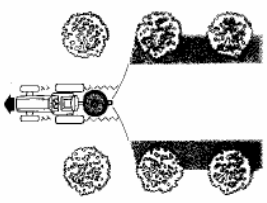
According to the different specific weights of the fertilizers to be spread, so as to get spreading uniformity to the right as well as to the left, the blades can be fixed on the spreading disc into 5 different positions marked by the stops 1-2-3-4-5. The blades are usually fixed into the stop nr.3. By fixing the blade towards the stop nr.1, the spreading is increased to the left. By fixing the blade towards the stop nr.5, the spreading is increased to the right.



12 SPREADING PATTERNS

By simply changing the position of the lower lever, it is possible to spread exclusively to the right or to the left of the tractor driver. The lever has 3 holes: a uniform full-width spreading pattern is obtained by fixing the lever into the central hole, and a localized spreading pattern (to the left as well as to the right) is obtained by fixing the lever into the other two holes.





ASSEMBLY

Operators are required to be extremely careful during assembly.
The assembly must be carried out following the instructions of the user's guide. **The accident prevention standards must be observed: always use suitable tools.**

1 - Fix the gear-box (1) to the frame (T).

2 - Mount the spreading disc (2) on the drive shaft of the gear box (1) and fix with a pin.

3 - Fix the guard (3) to the frame (T).

4 - Fix the two side supports (4) to the frame.

5 - Insert the circlip, the washer and the dosing discs in the drive shaft of the gear box (see 5).

6 - Fix the hopper (6) to the side supports (4) and to the frame.

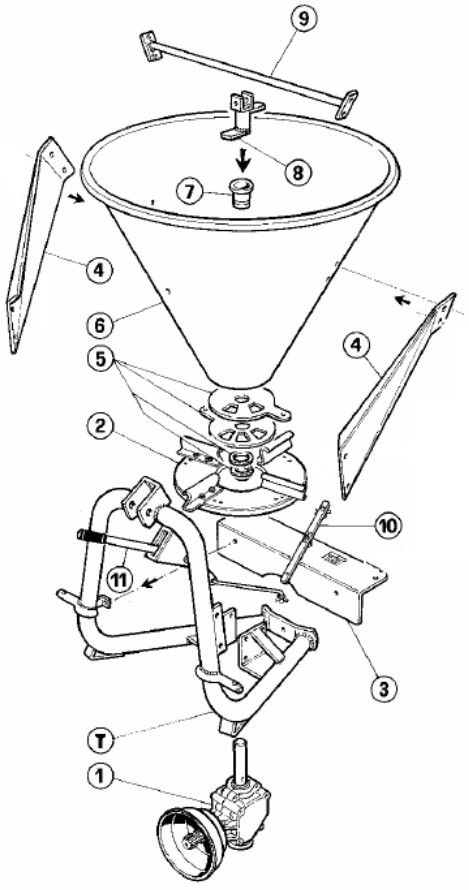
7 - Intsert the agitator bush guide (7) in the discharging hole.

8 - Fix the agitator (8) to the drive shaft of the gear box.

9 - Mount the hopper reinforcement bar (9) and fix it together with the side supports (4) by means of screws.
the supporting bars (13) by means of screws.

10 - Mount the selector rod and connect it to the 3-hole dosing disc.

11 - Mount the adjustment lever (11) and connect the flow adjustment bars to the 2-hole



14 HITCHING

Before hitching the spreader to the tractor, turn the motor off, disengage the P.T.O. and put the handbrake on.

Insert the lower bars of the tractor-lifter into the inside or outside lower coupling pins of the spreader, according to the pinhole diameter, and secure with split pins. Connect the third point with a split pin and piston pin.

Connect the P.T.O. shaft, making sure the safety lock has gone off.

To secure the stability of the spreader, fasten the lower bars of the 3-point-hitch to the tie-rods. (Fig.9)

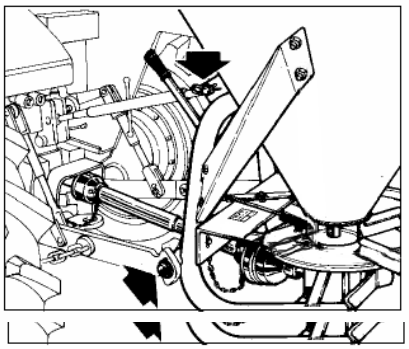


Fig.9

Adjust the length of the third point so that the spreader, while operating (70-80 cm from the ground), is perfectly level (fig.10).

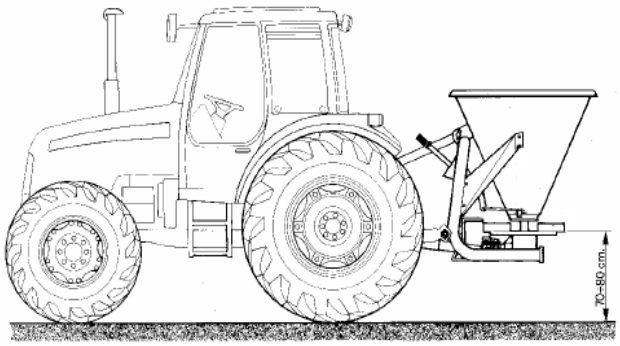


Fig.10

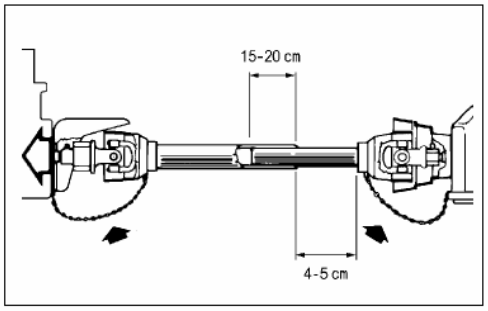


Fig.11

Make sure there is always a distance of at least 4-5 cm between the outer cardan tube and the joint spiders when the P.T.O. shaft is in its closing position; when the P.T.O. shaft is at its maximum extention, the two inner tubes must overlap for at least 15-20 cm (read the attached P.T.O. shaft guide carefully).

15 ACCESSORIES

The fertilizer-spreader can be equipped with the following accessories:

- Articulated agitator kit for powder fertilizers (Fig.12)
- Mechanic remote control (Fig.13)
- Deflector for salt/sand (Fig.14)
- Single fertilizer conveyor (Fig.15)
- Dual fertilizer conveyor (Fig.16)

ARTICULATED AGITATOR KIT FOR POWDER FERTILIZERS

This accessory together with the agitator permits the spreading of powder or damp fertilizers; its function is to keep the fertilizer flowing down into the discharging hole.

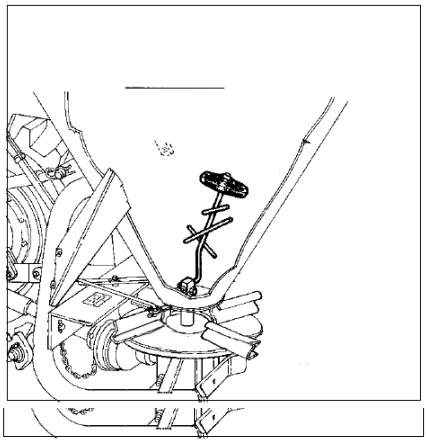


Fig.12

MECHANIC REMOTE CONTROL

Supplied on request. It consists of a 2.5 m extension containing a steel wire that, connected to the adjustment lever makes the adjustment possible from the tractor seat, so as to assure a safe and handy work.

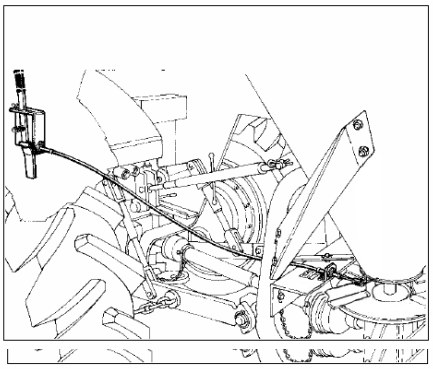
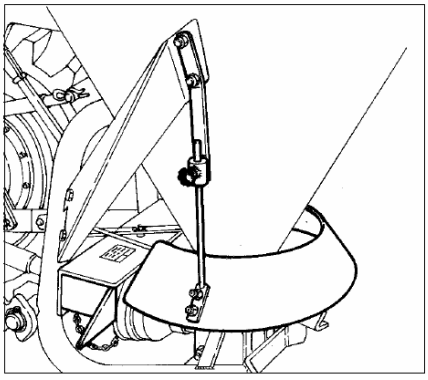


Fig.13

DEFLECTOR FOR SALT/SAND

It consists of a section of a steel cone and of two adjustable lateral supports; with this accessory the product is spread in the area right below the hopper.



SINGLE FERTILIZER CONVEYOR

It consists of 2 steel hulls that cover the spreading disc and allows a precise and localized distribution.

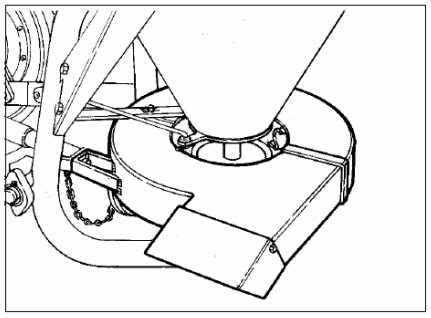


Fig.15

DUAL FERTILIZER CONVEYOR

It allows to throw the fertilizer on the right and on the left side of the machine.

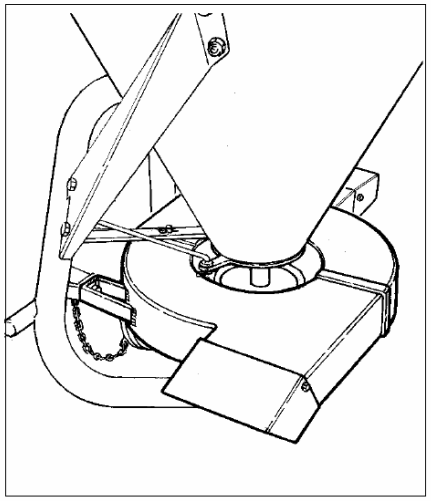


Fig.16

16 MAINTENANCE

Before any maintenance operation or replacing of spare parts, make sure the spreader is detached from the tractor or at least laid on the ground.

Always switch the tractor motor off, remove the ignition key and make sure the spreader is securely fixed. **It is forbidden to service the spreader while it is working or the tractor is on.**

Abide by the instructions of this user's guide.

Always clean the spreader before carrying out any maintenance work or servicing it. Always wear protective gloves and always use suitable tools.

STANDARD MAINTENANCE

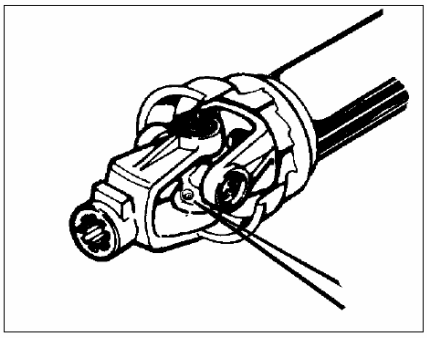
Before using the spreader make sure that the hopper bottom is not obstructed.

After use, clean the hopper carefully and remove fertilizer residues. Before storing the spreader, it is advisable to unload the hopper completely so as to prevent product residues from obstructing the hopper or blocking the bottom shutter.

PROGRAMMED MAINTENANCE

Every 10 hours:
- grease the joint spiders of the drive-shaft

Every 50 hours:
- make sure all screws are firmly tightened



17 STORAGE

At the end of the season or before long periods of inactivity, it is necessary to:

- clean the spreader carefully
- check the worn-out or damaged parts and, if necessary, replace them
- make sure all bolts are firmly tightened

It is in the user's interest to find the spreader in good working condition at the beginning of a new season.

18 TRANSPORT

The machine is supplied disassembled, packed in cardboard and nylon. It is important to read this guide to mount it up correctly.

Respect the natural environment. Throw the carton boxes in the proper containers

19 TECHNICAL FEATURES

• MEASURES

MODEL	HEIGHT	WIDTH	WEIGHT	CAPACITY
XA-150	93 cm	90 cm	42 Kg	143 l
XA-250	100 cm	100 cm	56 Kg	250 l
XA-300	107 cm	107 cm	58 Kg	300 l
XA-400	113 cm	113 cm	64 Kg	385 l
XA-500	118 cm	118 cm	67 Kg	450 l
XL-250	100 cm	100 cm	43 Kg	250 l
XL-300	107 cm	107 cm	45 Kg	300 l
XL-400	113 cm	113 cm	47 Kg	385 l
XL-500	118 cm	118 cm	49 Kg	450 l

• TECHNICAL DATA (All versions)

Powered by Tractor P.T.O. shaft at 540 RPM
Required power 6 kW

20 MACHINE DISPOSAL

At the end of its working life, the spreader must be demolished. Its various components must be sorted out and accordingly disposed of. For a correct disposal, abide by the regulations in force in the user's land.

SPREADING TABLE

Fertilizer type	PTO	Spreading width (m)	km/h	kg/ha of fertilizer to be spread at the speed indicated in column km/h											
				OPENING											
				1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7
Coarse grained fertilizers	540	18	1,5	225	375	691	1139	1455	1795	2175	2628	2890	3250	3560	4005
			4	106	156	277	465	580	720	887	1050	1155	1305	1450	1628
			8	58	78	145	230	292	360	441	530	586	675	742	835
			12	39	60	96	156	197	245	292	363	385	450	485	552
			16	23	39	72	120	150	192	225	270	290	335	369	420
Medium grained fertilizers	540	16	1,5		523	896	1279	1635	2027	2258	2624	2894	3169	3352	3686
			4		197	370	525	671	830	927	1062	1167	1281	1350	1495
			8		118	192	265	340	422	469	537	590	652	684	753
			12		82	127	183	223	284	321	365	398	449	465	512
			16		60	92	130	174	212	232	276	300	331	350	382
Fine grained fertilizers	540	12	1,5	198	324	550	926	1195	1507	1766	2125	2392	2743	2980	3317
			4	95	137	229	382	494	619	727	866	971	1122	1217	1332
			8	52	68	121	200	252	315	364	445	496	561	608	677
			12	33	46	105	137	172	217	248	296	334	382	415	454
			16	19	34	59	98	128	154	189	224	263	288	317	335
Medium cristal fertilizers	540	8	1,5	375	620	1144	1855	2294	2940	3436	4094	4583	5086	5577	6144
			4	131	249	468	751	927	1197	1387	1643	1842	2047	2242	2470
			8	77	127	237	374	473	607	698	829	933	1031	1124	1241
			12	50	86	159	253	318	414	472	557	621	689	755	827
			16	34	61	114	194	236	312	361	413	464	517	564	624
Calcium cyanamide and similar	540	10	1,5	312	852	1255	1859	2295	2095	3259	3801	4874			
			4	124	341	515	752	919	1129	1316	1526	1714			
			8	66	169	260	337	462	562	664	764	858			
			12	42	113	168	248	309	378	441	510	571			
			16	29	83	127	189	232	285	328	382	427			
Ammonium sulphate (Cr)	540	10	1,5	161	642	1050	1581	2022	2499	2963	3478	3812	4281	4590	5138
			4	69	254	424	633	814	1007	1182	1395	1531	1718	1842	2057
			8	32	130	214	319	411	504	590	699	762	860	919	1033
			12	26	83	139	215	274	335	396	475	513	577	618	690
			16	17	66	107	162	204	252	298	350	382	429	466	515
Thomas meal	400	6	1,5					2571	5724	7580	7874				
			6					650	1451	1915	1973				
	500		12					330	610	658	988				
			19					222	485	337	662				

In order to make the reference to the spreading table as clear as possible, we have listed only a few FERTILIZERS that differ in composition, quality, shape and specific weight. We remind you that the above indicated data are intended for reference only and are not binding. The data of the spreading table were obtained with the P.T.O. at 500 revolutions per minute and with the spreading disc at a height of 70/80 cm from ground. The tractor may run at a

SEEDS SPREADING TABLE

SEED	PTO	Spreading width (m)	FEED	Forward speed in km/h				
				1,5	2	2,5	3	3,5
WHEAT	500	16	2	306	122	61	40	29
			2,5	495	197	98	65	48
			3	677	270	135	89	67
			3,5	830	354	177	118	88
OAT	500	8	1,5	235	92	46	30	22
			2	389	155	77	51	38
			2,5	580	231	115	77	56
			3	777	310	154	103	77
RYE	500	16	2	395	156	81	51	39
			2,5	615	242	122	82	62
			3	843	336	167	111	86
			3,5	1025	410	205	136	102
BARLEY	500	12	2,5	405	161	80	52	40
			3	492	197	97	64	49
			3,5	680	273	135	91	66
			4	837	334	166	110	82
RYE GRASS	500	5	1,5	56	22	12	8	6
			2	159	64	33	22	16
			2,5	335	134	68	45	34
RAPE SEED	500	6,5	1,5	43	18	9	7	4
			2	240	96	47	32	24
			2,5	478	192	96	64	47
RED CLOVER	500	6,5	1,5	64	25	12	8	7
			2	220	88	44	29	23
			2,5	539	217	108	73	54

kg/ha of fertilizer to be spread at the speed indicated in column km/h

In order to make the reference to the spreading table as clear as possible, we have listed only a few SEEDS that differ in composition, quality, shape and specific weight. We remind you that the above indicated data are intended for reference only and are not binding. The data of the spreading table were obtained with the P.T.O. at 500 revolutions per minute and with the spreading disc at a height of 70/80 cm from ground. The tractor may run at a different speed from what indicated in the spreading table: we remind you that by increasing or reducing the speed, the quantity of SEEDS to be spread per hectare is accordingly increased of

SPREADING TABLE

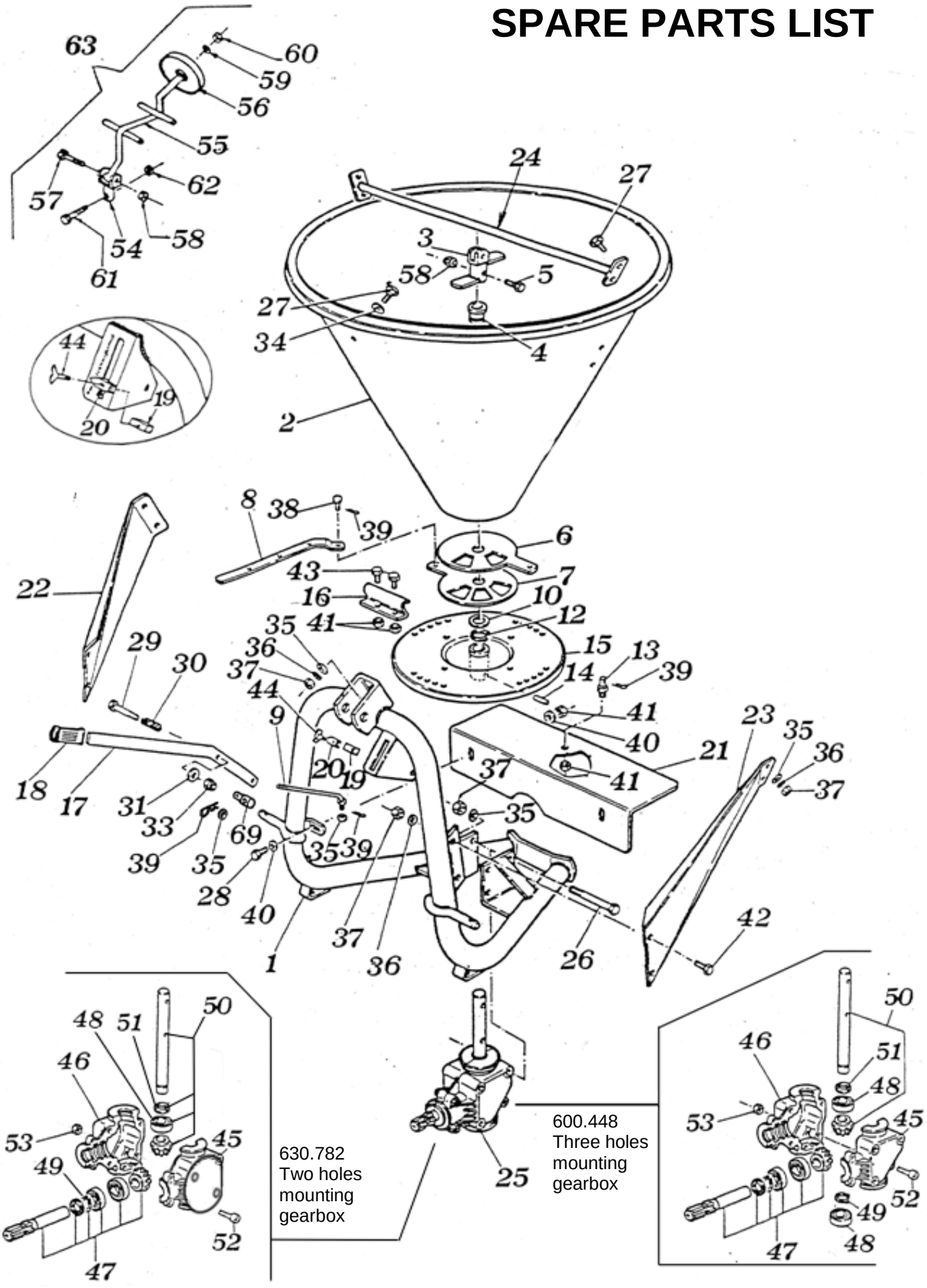
TIPO DI CONCIME TYPE D'ENGRAIS FERTILIZER TYPE ART DES DÜNGERS	Giri PTO Vitesse PTO PTO speed (R.P.M.) Undreh-ungen PTO	Largh. Spand. Yards Largeur epand Yards Spread-ding width in Yards Streu-breite Yards	Miglia ora Milles horaires MPH Meilen Stunde	Quantità da spargere in LBS/ACRO alla velocità di marcia indicata nella colonna miglia/ora Quantité à épandre en LBS/ACRE à la vitesse indiquée dans la colonne milles horaires Quantity to be spread in LBS/ACRE at the forward speed indicated column MPH Streumenge in LBS/AKRO bei hierdaneben angezeigter Meilen/Stunde fahrgeschwindigkeit											
				Apertura - Ouverture - Feed - Oeffnung											
				1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7
Concimi a grana grossa			1	201	335	617	1016	1299	1602	1941	2372	2579	2900	3176	3574
Engrais a gros grains			2,5	95	145	247	415	518	642	791	937	1031	1164	1294	1453
Coarse grain fertilizers	500	24	5	52	70	129	205	261	321	394	473	523	602	662	745
Dünger, Grosskörnig			7,5	35	54	86	139	176	219	261	324	344	402	433	493
			10	21	35	64	107	134	171	201	241	259	299	329	375
Concimi a grana media			1		467	799	1141	1459	1807	2015	2341	2582	2827	2991	3289
Engrais a greins moyens			2,5		176	330	468	599	741	827	948	1041	1143	1205	1334
Medium grain fertilizers	500	19,7	5		105	171	237	303	377	419	479	526	582	610	672
Dünger, Mittelkörnig			7,5		73	113	163	199	253	287	326	355	401	415	457
			10		54	82	116	155	189	207	246	268	295	312	341
Concimi a grana fine			1	177	289	491	826	1066	1345	1576	1896	2134	2447	2659	2959
Engrais a petits grains			2,5	85	122	204	341	441	552	649	773	866	1001	1086	1188
Fine grain fertilizers	500	13,1	5	46	61	108	179	225	281	325	397	443	500	542	604
Dünger, Feinkörnig			7,5	30	41	94	122	153	194	221	264	298	341	370	405
			10	17	30	53	88	114	137	169	200	235	257	283	299
Concimi cristallini medi			1	335	553	1021	1655	2047	2624	3066	3653	4089	4538	4976	5482
Engrais a cr. moyens			2,5	117	222	418	670	827	1068	1238	1466	1644	1827	2000	2204
Medium cristalline fert.	500	8,75	5	69	113	212	334	422	542	623	740	832	920	1003	1107
Dünger, Kristallin.			7,5	45	77	142	226	284	369	421	497	554	615	674	738
Mittelgrösse			10	30	54	102	173	211	278	322	369	414	461	503	557
Calciocianamide e assim.			1	278	760	1120	1659	2048	2672	2908	3391	4349			
Cyanamide calc. e sim.			2,5	111	304	457	671	820	1008	1174	1362	1529			
Calc. cyanamide and s.	500	11	5	59	151	232	301	412	502	592	682	766			
Kalkstickstoffe und ähnl.			7,5	37	101	150	221	276	337	394	455	509			
			10	26	74	113	169	207	254	293	341	381			
Solf. di ammonio (cr.)			1	144	573	937	1411	1804	2230	2644	3103	3401	3820	4095	4584
Sulfate d'ammon. en (cr.)			2,5	62	227	378	565	726	899	1055	1245	1366	1533	1644	1835
Amminuim sulph. (cr.)	500	11	5	29	116	191	285	367	450	526	639	680	767	820	922
Ammoniumsülfat (kr.)			7,5	23	74	124	192	244	299	353	424	458	515	551	616
			10	15	59	95	145	182	225	266	312	341	383	416	460
Scorie thomas			1					2294	5107	6763	7025				
Scorie thomas	400/		3,7					580	1295	1709	1760				
Thomas meal	500	6,6	7,5					293	544	855	882				
Thomasschlacke			11,8					198	433	562	591				

SEEDS SPREADING TABLE

SEMENTI GRAINES SEEDS SAATKÖRNER	GIRI PTO VITESSE PTO PTO SPEED (RPM) UMDREHUNGEN PTO	LARGH. DI SPAND. YARDS LARGEUR D'EPANDAGE YARDS SPREADING WIDTH IN YARDS STREUBREITE YARDS	APERTURA OUVERTURE FEED ÖFFNUNG	VELOCITÀ IN MIGLIA ALL'ORA E RELATIVE QUANTITÀ DA SPARGERE IN LIBBRE PER ACRO ALLE VARIE POSIZIONI DI APERTURA VITESSE DE MARCHE EN MILLES HORAIRES ET ÉPANDAGE EN LIVRES PAR ACRE MILES PER HOUR AND SPREADING RATES OF LBS PER ACRE GESCHWINDIGKEIT LBS PRO STUNDE U. STREUMENGE LBS PRO AKRO				
				1	2,5	5	7,5	10
FRUMENTO BLE WHEAT WEIZEN	500	17,5	2	273	109	55	36	26
			2,5	442	176	88	58	43
			3	604	241	121	79	60
			3,5	741	316	159	106	79
AVENA AVOINE OAT HAFER	500	8,7	1,5	209	83	41	27	20
			2	347	139	69	46	34
			2,5	518	206	103	69	50
			3	693	277	139	92	69
SEGALA SEIGLE RYE ROGGEN	500	17,5	2	353	139	72	46	35
			2,5	549	216	109	73	55
			3	752	300	149	99	77
			3,5	915	366	183	121	91
ORZO ORGE BARLEY GERSTE	500	13,1	2,5	362	144	71	47	36
			3	439	176	87	57	44
			3,5	607	244	121	82	59
			4	747	298	148	98	73
LEGLIO IVRAIE RYE GRASS RAIGRAS-LOLCH	500	5,5	1,5	50	20	11	7	6
			2	142	57	30	20	14
			2,5	299	120	61	40	30
SEME DI RAPA GRAINE DE NAVET RAPE SEED RÜBENSAMEN	500	7,1	1,5	41	16	8	6	4
			2	214	86	42	29	22
			2,5	427	172	86	57	42
TRIFOGLIO ROSSO TREFLE ROUGE RED CLOVER INKARNATKLEE	500	7,1	1,5	57	22	11	7	6
			2	196	78	39	26	21
			2,5	481	194	96	65	48

SPARE PARTS LIST

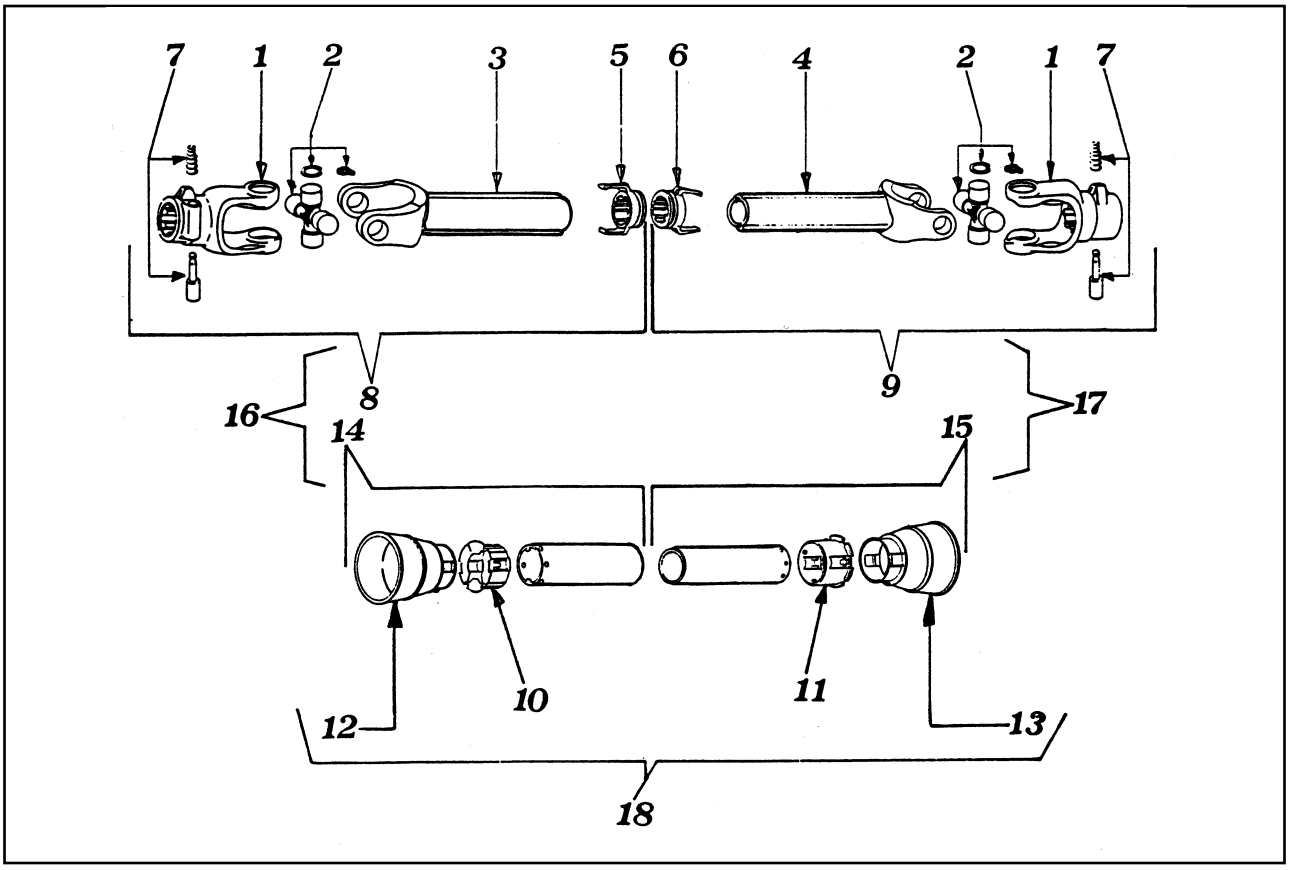
SPARE PARTS LIST



SPARE PARTS LIST - LISTE DBS PIECES DETACHEES					
Part.No.- Rèf	**Qty. - Q.tè**	**Code**	**DESCRIPTION**	**DESCRIPTION**	
1	1	400.050	Frame	Chàssis	
2	1	400.051	FS 50 Hopper	Trèmie FS 50	
2	1	400.052	FS 100 Hopper	Trèmie FS 100	
2	1	400.053	FS 150 Hopper	Trèmie FS 150	
2	1	400.054	FS 250 Hopper	Trèmie FS 250	
2	1	400055	FS 300 Hopper	Trèmse FS 300	
2	1	400.056	FS 400 Hopper	Trèmie FS 400	
2	1	400.057	FS 500 Hopper	Trèmie FS 500	
3	1	400.046	Agitator	Agitateur	
4	1	400.058	Bushing	Bague	
5	1	600.551	Screw	Vis	
6	1	400.059	Disc	Disque dosage	
7	1	400.060	Spreading adjustment disc	Disque reglage èpandage	
8	1	400.061	Spreading adjustment lever	Tige règlage èpandage	
9	1	400.260	Rate adjustment rod	Tige règlage quantitè	
10	1	400.063	Washer	Rondelle	
12	1	600.110	Snap ring	Seeger	
13	1	400.047	Pin	Pivot	
14	1	600.108	Pin	Goupille	
15	1	400.065	Spinner	Disque epandage	
16	4	400.066	Fin	Disque	
17	1	400.067	Rate adjustment lever	Levier	
18	1	600.450	Handle	Poignee	
19	1	400.001	Locking device	Etrier	
20	1	400.021	Indicator	Indicateur	
21	1	400.068	Crankcase	Carter	
22	1	400.069	R. H. Arm	Droite	
23	1	400.070	L H. Arm	Gauche	
24	1	400.071	Tie rod	Tirant	
25	1	600.448	Gearbox assy	Boite	
		630.782	Gearbox assy	Boite	
26	3	600.074	Screw	Vis	
27	5	600.319	Screw	Vis	
28	10	600.057	Screw	Vis	
29	1	600.528	Screw	Vis	
30	1	400.048	Spring	Ressort	
31	1	400.049	Washer	Rondeile	
33	1	600.554	Nut	Ecrou	
34	1	600.092	Washer	Rondelle	
35	8	600.322	Washer	Rondelle	
36	5	600.097	Washer	Rondelle	
37	12	600.627	Nut	Ecrou	
38	1	400.072	Pin	Pivot	
39	4	600.113	Split pin	Goupille	

SPARE PARTS LIST - LISTE DBS PIECES DETACHEES					
Part.No.- Rèf	**Qty. - Q.tè**	**Code**	**DESCRIPTION**	**DESCRIPTION**	
40	4	600.115	Washer	Rondeile	
41	10	600.553	Nut	Ecrou	
42	4	600.006	Screw	Vis	
43	4	600.060	Screw	Vis	
44	1	600.184	Screw with wing	Vis	
45	1	600.313	R.H. Semi-Gearbox	Demi carter, droite	
	1	630.783	R.H. Semi-Gearbox	Demi carter, droite	for 630.782
46	1	600.314	L.H. Semi-Gearbox	Demi carter, gauche	
	1	630.784	L.H. Semi-Gearbox	Demi carter, gauche	for 630.782
47	1	600.315	Inlet shaft assy	Arbre entrèe complet	
	1	630.790	Inlet shaft assy	Arbre entrèe complet	for 630.782
48	2	600.320	Bearing	Palier	
49	3	600.316	Snap ring	Seeger - Anneau ressort	
50	1	600.449	Outlet shaft assy	Arbre sortie complet	
	1	630.789	Outlet shaft assy	Arbre sortie complet	for 630.782
51	1	600.318	Grommet	Joint à huile	
	2	630.785	Grommet	Joint à huile	for 630.782
52	3 - 6	600.312	Screw	Vis	
53	3 - 6	600.037	Nut	Ecrou	
54	1	400.041	Agitator pin	Goupille agitateur	
55	1	400.042	Agitator arm	Bras agitateur	
56	1	400.201	Agitator washer	Rondelle agitateur	
57	1	600.134	Screw	Vis	
58	1	600.076	Nut	Ecrou	
59	1	600.089	Washer	Rondeile	
60	1	600.366	Self-locking nut	Ecrou autobloquant	
61	1	600.404	Screw	Vis	
62	1	600.029	Nut	Ecrou	
63	1	400.200	Agit. assy (for powder fertilizer)	Agitat. complet (fert. en poudre)	
69	1	400.259	Pin	Pivot	

CARDAN SHAFT 600.396



CARDAN SHAFT/ARBRE A CARDAN 600.396				
ITEM	PART NO	Q.ty	DESCRIPTION	NOTE
1	610.099	2	YOKE	
2	610.100	2	CROSS JOURNAL ASS.	
3	610.101	1	YOKE WITH OUTER TUBE	
4	610.102	1	YOKE WITH INNER TUBE	
5	610.103	1	RING FOR OUTER TUBE	
6	610.104	1	RING FOR INNER TUBE	
7	610.057	2	COMPLETE PUSH BUTTON	
8	610.105	1	HALF SHAFT-WITHOUT GUARD	
9	610.106	1	HALF SHAFT-WITHOUT GUARD	
10	610.107	1	OUTER BEARING	
11	610.114	1	INNER BEARING	
12	610.108	1	OUTER BASIC CONE	
13	610.108	1	INNER BASIC CONE	
14	610.109	1	OUTER HALF GUARD	
15	610.110	1	INNER HALF GUARD	
16	610.111	1	OUTER HALF SHAFT-WITH GUARD	
17	610.112	1	INNER HALF SHAFT- WITH GUARD	
18	610.113	1	COMPLETE GUARD	

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