FERTILIZER SPREADER

metal hopper



owner's manual spare parts list

WORK SAFELY - FOLLOW THESE RULES A CAREFUL OPERATOR IS THE BEST INSURANCE AGAINST ACCIDENTS.

CAUTION Read manual before operating.

Operational safety

- Know your controls and how to stop tractor and engine quickly in an emergency. READ THIS MANUAL AND THE ONE PROVIDED WITH YOUR TRACTOR.
- To avoid accidents or injury, do not allow anyone to operate this equipment without proper instructions. Any
 person who operates this equipment must be instructed in an be capable of the safe operation of the unit, its
 attachments and all controls.
- Always wear relatively tight and belted clothing to avoid entanglement in moving parts. Wear sturdy, rough soled work shoes. Never operate tractor or implements in bare feet, sandles or sneakers.
- Never permit any person other than the operator to ride or board the tractor at any time.
- Do not allow rides on spreader at any time.
- Operate only in daylight or in good artificial light.
- Ensure spreader is properly mounted, adjusted and in good operating condition.
- Disengage power take off and shift tractor into neutral before attempting to start engine.
- Never allow anyone in front of tractor or behind spreader while operating. Always look behind spreader before operating tractor in reverse.
- Do not stop or start suddenly when going up or down hill. Avoid operation on steep slopes.
- Disengage power to spreader and stop engine before dismounting from tractor.
- Never transport spreader with PTO engaged.
- Never place hands or feet under spreader while tractor engine is running. Stay clear of all moving parts.
- Take all possible precautions when leaving tractor unattended: disengage PTO, shift into neutral, set parking brake, stop engine and remove key from ignition.
- Never work without safety blocks.
- Remove spreader from tractor and clean it accurately.

SAFETY

Included here is a list of Safety Messages which should be followed. Serious injury or death may occur unless care is taken to follow these Safety Messages and use good common sense in avoiding hazards.

DANGER!

Driveline Shields and Gearbox Shields should be used and maintained in good working condition. They should be inspected carefully, at least daily.

WARNING!

Before leaving the tractor seat, always engage the brake and or set the tractor transmission in parking gear. Disengage the PTO, stop the engine, remove the key, and wait for all moving parts to stop. Place the tractor shift lever into a low range or parking gear to prevent the tractor from rolling. Never mount or dismount a moving tractor. Operate the tractor controls from the tractor seat only.

WARNING!

The rotating parts of this machine continue to rotate even after the PTO has been turned off. The operator should remain in his seat for 60 seconds after the brake has been set, the PTO disengaged, the tractor turned off, and all evidence of rotation has ceased. "Wait a minute... Save a life!".

WARNING!

Remove hydraulic pressure, disengage the PTO and turn off the engine prior to doing any maintenance.

WARNING!

Inspect the entire machine periodically. Look for loose fasteners, worn o broken parts. Make sure all pins have cotter pins and washers. Serious injury may occur from not maintaining this machine in good working order.

DANGER!

Do not mount or dismount the spreader while the tractor is moving. Mount and dismount the tractor only when it is completely stopped.

CAUTION!

It may be necessary to shorten PTO shaft before operation to prevent damage to gear-box, shaft or operator.

DANGER!

Do not turn sharp enough to get severe "knocking" of the driveline which will cause accelerated wear and breakage of drive train components and possible injury from the separated driveline sections.

DANGER!

Never allow riders on either tractort or spreader. Falling off can kill.

DANGER!

Never allow children to operate or ride on the tractor or spreader.

DANGER!

Never work under the spreader unless it is securely supported or blocked up. A sudden or inadvertent fall by any of these components could cause serious injury or even death.

WARNING!

Never operate the tractor and spreader until you have read and completely understand this manual, the Tractor Operator's Manual, and each of the Safety Messages found on the decals on the tractor and spreader.

WARNING!

Always mantain the safety decals in good readable condition. If the decals become damaged or unreadable, order replacement decals immediately.

CAUTION!

PROLONGED EXPOSURE TO LOUD NOISE MAY CAUSE PERMANENT HEARING LOSS! Tractors with or without spreaders attached can often be noisy enough to cause permanent, partial hearing loss. We recommend that you wear hearing protection on a fulltime basis if the noise in the Operator's position exceeds 80 db. Noise over 85db on a long-term basis can cause severe hearing loss. Noise over 90 db adjacent to the Operator over a long-term basis may cause permanent, total hearing loss. Note: Hearing loss from loud noise (from tractors, chain saws, radios and other such sources close to the ear) is cumulative over a lifetime without hope of natural recovery.

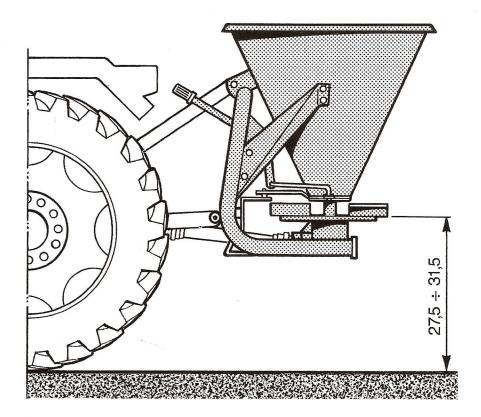
In addition to the design and configuration of this implement, including Safety Signs and Safety Equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training of personnel involved in the operation, transport, maintenance, and storage of the machine. Refer also to Safety Messages and operation instruction in each of the appropriate sections of the Tractor and Spreader Manuals. Pay close attention to the Safety Signs affixed to the Tractor and the Spreader.



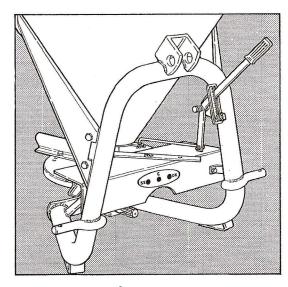
CAUTION IT MAY BE NECESSARY TO SHORTEN PTO SHAFT BEFORE OPERATION TO PREVENT DAMAGE TO GEARBOX, SHAFT OR OPERATOR.

FERTUIZER TYPE	RPM	SPREA- DING	1	QUANTITY TO BE SPREAD IN LB/ACRE AT SPEED LISTED IN MPH COLUMNS											
FERTILIZER TYPE		WIDTH (FT)	МРН.	FEED OPENING											
		(1.1)		1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7
,	540	72'	1	198	330	608	1002	1280	1580	1916	2313	2543	2860	3132	3524
			2.5	93	137	244	409	510	634	781	924	1016	1148	1276	1433
COARSE GRAIN FERTILIZERS			5	51	69	128	202	257	317	388	466	516	594	653	735
			7.5	34	53	84	137	173	216	257	319	339	396	427	486
			10	20	34	63	105	132	169	198	238	255	295	325	370
	540	59'	1		460	788	1126	1439	1784	1987	2309	2546	2788	2950	3244
			2.5		173	326	462	590	730	816	935	1027	1127	1188	1316
MEDIUM GRAIN FERTILIZERS			5		104	169	233	299	371	412	473	519	574	602	663
			7.5		72	112	161	196	250	282	321	350	395	409	451
			10		53	81	114	153	187	204	243	264	291	308	336
		39'	1	174	285	484	815	1052	1326	1554	1870	2105	2414	2622	2919
	540		2.5	84	121	202	336	435	545	610	762	854	987	1071	1172
FINE GRAIN FERTILIZERS			5	46	60	106	176	222	277	320	392	436	494	535	596
			7.5	29	40	92	120	151	191	218	260	294	336	365	400
			10	17	30	52	86	113	136	166	198	231	253	279	295
			1	330	546	1007	1632	2019	2587	3024	3603	4033	4476	4908	5407
	540	26.3'	2.5	115	219	412	661	816	1053	1221	1446	1621	1801	1973	2174
MEDIUM CRISTALLINE FERTILIZERS			5	68	112	209	329	416	534	614	730	821	907	989	1092
			7.5	44	76	160	223	280	364	415	490	546	606	664	728
			10	30	54	100	171	208	275	318	363	408	455	496	549
			1	275	750	1104	1636	2020	1844	2868	3345	4289			
,			2.5	109	300	453	662	809	994	1158	1343	1508			
CALC. CYANAMIDE AND S.	540	32.8'	5	58	149	229	297	407	495	584	672	753			
			7.5	37	99	148	218	272	333	388	449	502			
			10	26	73	112	166	204	251	285	336	376			

SEEDS	PTO SPEED (RPM)	SPREADING WIDTH	FEED Opening	SPREADING CHART IN LB/ACRE AT SPEED LISTED IN MPH COLUMNS FORWARD SPEED IN MILES PER HOUR						
		IN FEET								
				1	2.5	5	7.5	10		
		52	2	269	107	54	35	25.5		
			2.5	436	173	86	57	42		
WHEAT	540		3	596	238	119	78	59		
			3.5	730	312	156	104	77		
		26	1.5	207	81	40	26	19		
			2	342	136	68	45	33		
OATS	540		2.5	510	203	101	68	49		
			3	684	273	136	91	68		
RYE	540	52	2	348	137	71	45	34		
			2.5	541	213	107	72	55		
			3	741	296	147	98	76		
			3.5	902	361	180	120	90		
*			0.5	050			40	0.5		
BARLEY	540	39	2.5	356	142 173	70 85	46 56	35 43		
			3	433 598	240	119	80	58		
			3.5 4	737	294	146	97	72		
W						10.5	_			
RYE GRASS	540	16	1.5	49	19	10.5	7	5		
			2 2.5	140 295	56 118	29 60	19 40	14 30		
			1.5	38	16	8	6	3.5		
RAPE SEED	540	21	2	211	84	41	28	21		
			2.5	421	169	84	56	41		
RED CLOVER	540	21	15	EG	22	10.5	7	6		
			1.5	56 194	77	39	25.5	20		
			2 2.5	474	191	95	64	48		



Before operating the spreader, make sure that the spreading disc is set to the horizontal position and at about $27.5 \div 31.5$ in from ground level.



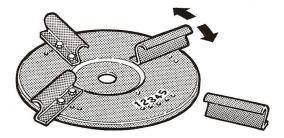






Three spreading possibilities

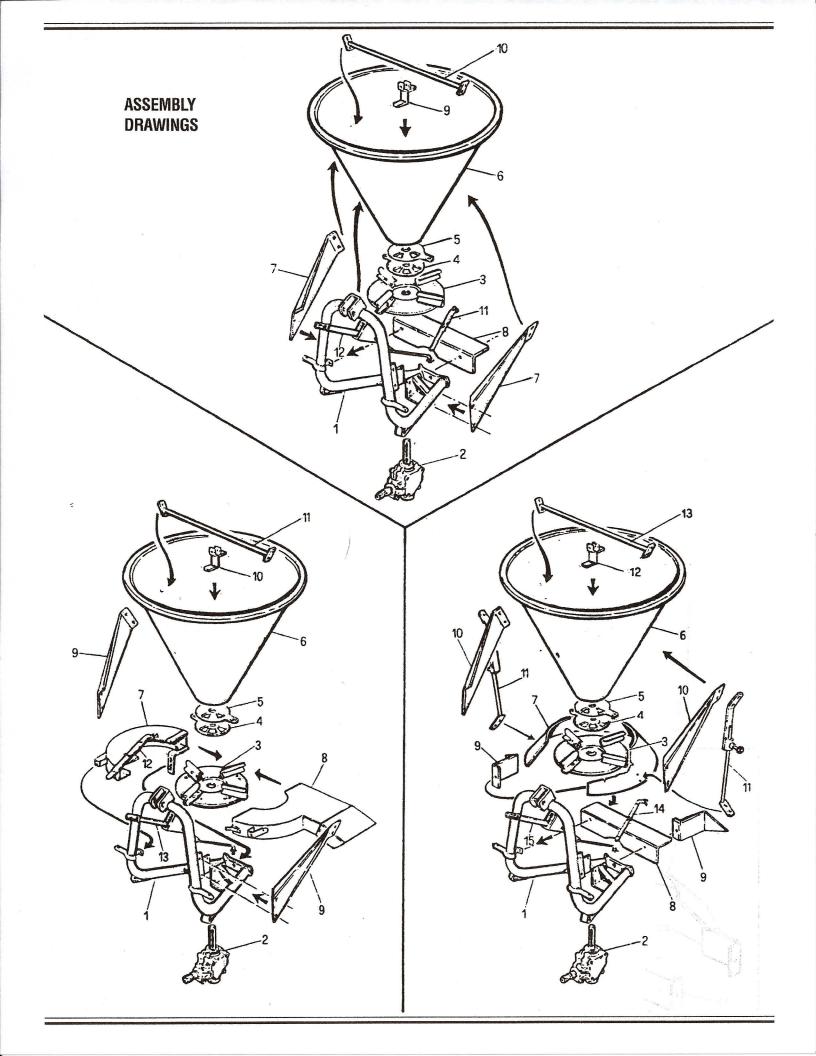
A simple adjustment of the lower level allows directioning of distribution towards the right side or towards the left side of the tractor operator.

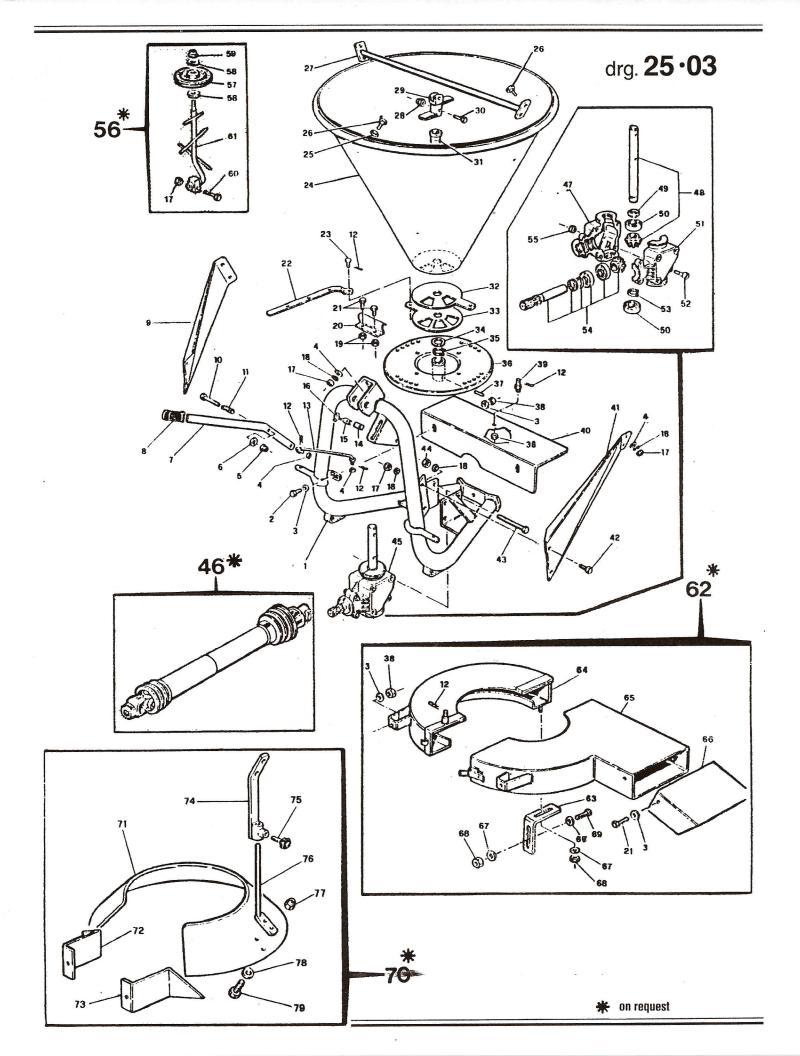


Spreading disc with revolving vanes

As the fertilizers have relatively different absolute weights, in order to obtain a perfect spreading it is necessary to adjust the vanes in order to compensate for the differences.

The vanes are usually set to position n° 3; by moving the vanes to position n° 1, distribution is increased towards the left side of the tractor operator, whereas moving them to position n° 5 causes distribution to be increased towards the right.





REF.	CODE	DESCRIPTION	N.	REF.	CODE	DESCRIPTION	N.
1	XA251100	FRAME	1	39	XA251014	ADJUSTMENT PIN	1
2	52390820	CAP SCREW M8×20 DIN 933	2	40	XA251001	GUARD	1
3	659208ZN	PLAIN WASHER M8 DIN 125/A	6	41	XA251009	SIDE SUPPORT LH	1
4	659210ZN	PLAIN WASHER 10 DIN 125/A	7	42	52391025	BOLT M10×25 DIN 933	4
5	747310ZN	LOCKNUT M10 DIN 982	1	43	50371010	BOLT M10×100 DIN 931	3
6	PA251027	BAKELITE WASHER	1	44	558810ZN	HEX NUT M10 DIN 934	3
7	XA251010	ADJUSTMENT LEVER	1	45	+XA251016	GEAR-BOX 3 HOLES	1
8	IMG00820	RUBBER HANDLE 8×20	1	46	C3170000	DRIVE-SHAFT L. 700	1
9	XA251008	SIDE SUPPORT RH	1	47	XA251018	HALF BOX RH	1
10	50371065	CAP SCREW M10×65 DIN 931	1	48	XA251020	SHAFT C/W CROWN GEAR	1
11	PA251026	COMPRESSION-SPRING	1	49	SM253705	OIL SEAL 25×37×5	1
12	80100250	COTTER PIN D. 2	4	50	62050000	BALL BEARING 6205	2
13	PA251017	FLOW ADJUSTMENT BAR	1	51	XA251017	HALF BOX LH	1
14	PA251024	FIXING BLOCK	1	52	59310845	BOLT M8×45 DIN 912	3
15	PA251025	INDICATOR	1.	53	74352500	SNAP RING D. 25 DIN 471	1
16	54490616	WING SCREW 6X16 DIN 316	1	54	XA251019	KEYED SHAFT C/W PINION	1
17	558710ZN	HEX NUT M10 UNI 5587	10	55	55880800	NUT M8 DIN 934	3
18	679810ZN	WASHER M10 DIN 6798	12	56	PA251400	ARTICULATED AGITATOR	1
19	55870800	HEX NUT M10 UNI 5587	8	57	PA251312	AGITATOR WHEEL	1
20	PA251023	VANE	4	58	PA251313	Washer 12	2
21	52390816	BOLT M8×16 DIN 933	10 `	59	747312ZN	LOCKNUT M12 DIN 982	1
22	XA251007	SELECTOR ROD RH-LH	1	60	52371065	BOLT M10×65 DIN 931	1
23	PA251014	CONNECTION PIN	1	61	PA251402	ARTICULATED AGITATOR STEM	1
24	XA251021	150 STEEL HOPPER	1	62	CON2000	BANDING KIT	1
24	XA251022	250 STEEL HOPPER	1	63	CON1023	SUPPORT	1
24	XA251023	300 STEEL HOPPER	1	64	CON100A	LEFT BANDING	1
24	XA251024	500 STEEL HOPPER	1	65	CON100B	RIGHT BANDING	1
24	XA251026	400 STEEL HOPPER	1	66	CON1005	BAFFLE	1
25	PV251004	Washer for hopper fixing	1	67	659212ZN	PLEIN WASHER 12 DIN 125/A	3
26	57321025	CUPHEAD SCREW DIN 603	5	68	558812ZN	HEX NUT M12 DIN 934	2
27	XA251011	HOPPER REINFORCEMENT BAR	1	69	52391235	BOLT M12×35 DIN 933	1
28	747308ZN	LOCKNUT M8 DIN 982	1	70	PAR3000	DEFLECTOR FOR SALT/SAND	1
29	XA251002	AGITATOR	1	71	PAR3003	DEFLECTOR	1
30	52370845	BOLT M8×45 DIN 931	1	72	PAR3004	SUPPORT BRACKET RH	1
31	PA251016	AGITATOR BUSH GUIDE	1	73	PAR3005	SUPPORT BRACKET LH	1
32	PA251018A	QUANTITY ADJUSTMENT DISC	1	74	PAR3001	DEFLECTOR SUPPORT	2
33	PA251019A	ADJUSTMENT DISC - 3 HOLES	1	75	VB408150	KNOB M8×20	2
34	PA251021	LOCK WASHER	1	76	PAR3002	ADJUSTING TUBE	2
35	74353200	SNAP RING D. 32 DIN 471	1	77	559006ZN	HEX NUT C/W WASHER	2
36	PA251010	SPREADING DISC	1	78	659206ZN	PLAIN WASHER M6	2
37	XA251044	PIN D. 8 L. 40	1	79	52390616	BOLT M6×6 DIN 933	2
38	558708ZN	HEX NUT M8 UNI 5587	3	*			