

LAND - SPAN

FERTILIZER SPREADER OPERATOR'S MANUAL

F/300 METAL – F/500 METAL – F/500 POLY



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INTRODUCTION

In this manual you will find the instructions for the operation and maintenance of the Spreader – Seeder machine, as well as the spreading tables designed as a guideline for spreading various types of fertilizer and seeds.

ASSEMBLING

In the case that the spreader has been supplied unassembled (Fig. A), it is necessary to follow these simple steps:

Join the two tubular parts of the frame and fit the proper bolts without tightening them. Next, attach the lower part of the frame and the spreading assembly, then fit the proper bolts (Fig. A1). Finally, tighten all bolts.

Mount the hopper on the frame and make sure that the five holes of the hopper are lined up with those of the frame. Place the bolts and tighten them up, make sure that the hopper is centered.

Connect the levers to the shutters and adjust them by placing both levers on "0" position. In this position both shutters should be completely closed.

Insert the agitator spindle in the vertical gear box shaft inside the hopper (Fig. B).

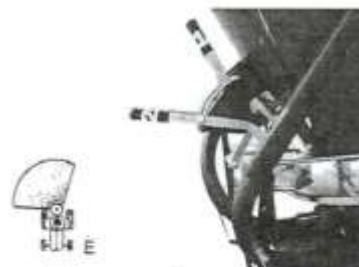
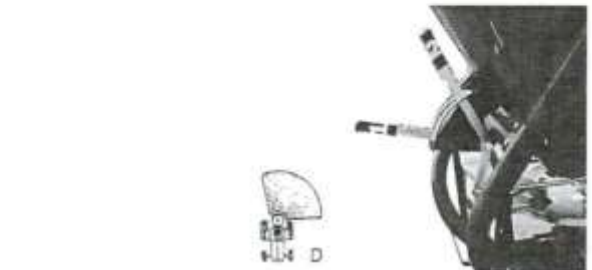
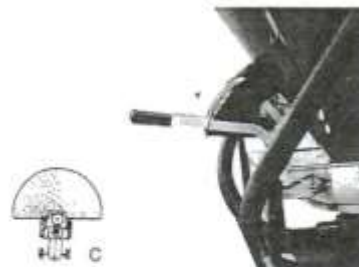
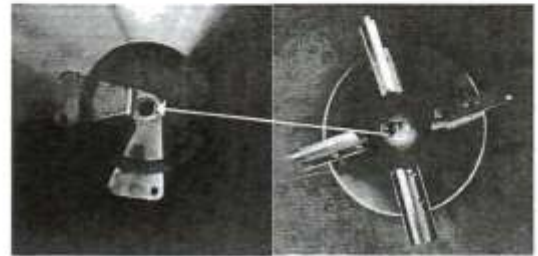
In order to obtain the total spreading width of the fertilizer or seeds, it is enough to move both levers 1 and 2 linked together by a special pin (Fig. C).

To spread to the left side of the driver, simply remove the linking pin from the two levers, lower lever 1 and leave lever 2 in "0" position (Fig. D).

To spread to the right side of the driver, simply remove the linking pin from the two levers, lower lever 2 and leave lever 1 in the "0" position (Fig. E).

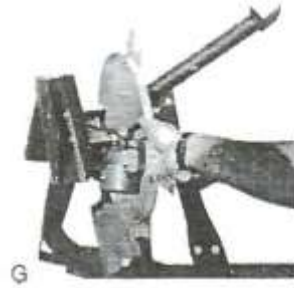
ADJUSTMENT OF THE SPREADER VANES

To obtain maximum uniformity of the spreading, regardless of the different specific gravities of the fertilizer to be spread, it is possible to adjust the spreading vanes on disc by moving them into the most appropriate position (Fig. F).



MAINTENANCE AND LUBRICATION OF THE MACHINE

It is necessary to wash the equipment with water after use. Dry and oil the shutters and slides. It is necessary to perform the a.m. operations immediately after use. Replace the oil or grease in the gearbox after the first 30 working hours and afterwards do it every 250 hours of service. For replacing the oil, unscrew the drain plug and wait until oil has drained completely. Turn equipment upside down (as shown Fig. G) and refill gearbox with about 0.25 kgs. of clean oil. Periodically grease the universal joint shaft as well as the sliding parts.



HIGH STANDARDIZATION OF PARTS

All the components of the Land-Span spreader line are interchangeable except the hoppers.

RECOMMENDATIONS

We recommend that this manual accompanies the machine if it is resold a 2nd time.

WARNING

Before setting the machine into operation, make sure that all the mechanisms run freely. Grease the cardan shaft and check the oil level in the transmission housing. It is important to engage PTO slowly.

END OF WORK PERIOD

At the end of the work day, empty the hopper and completely wash all the mechanisms and hopper until all fertilizer particles are completely removed.

To ensure a longer life of your spreader, at the end of the season,

completely dismount the hopper and the distributor disc, wash with hot water and soda and protect all non-painted parts using protective grease or oil.

SAFETY PRECAUTIONS

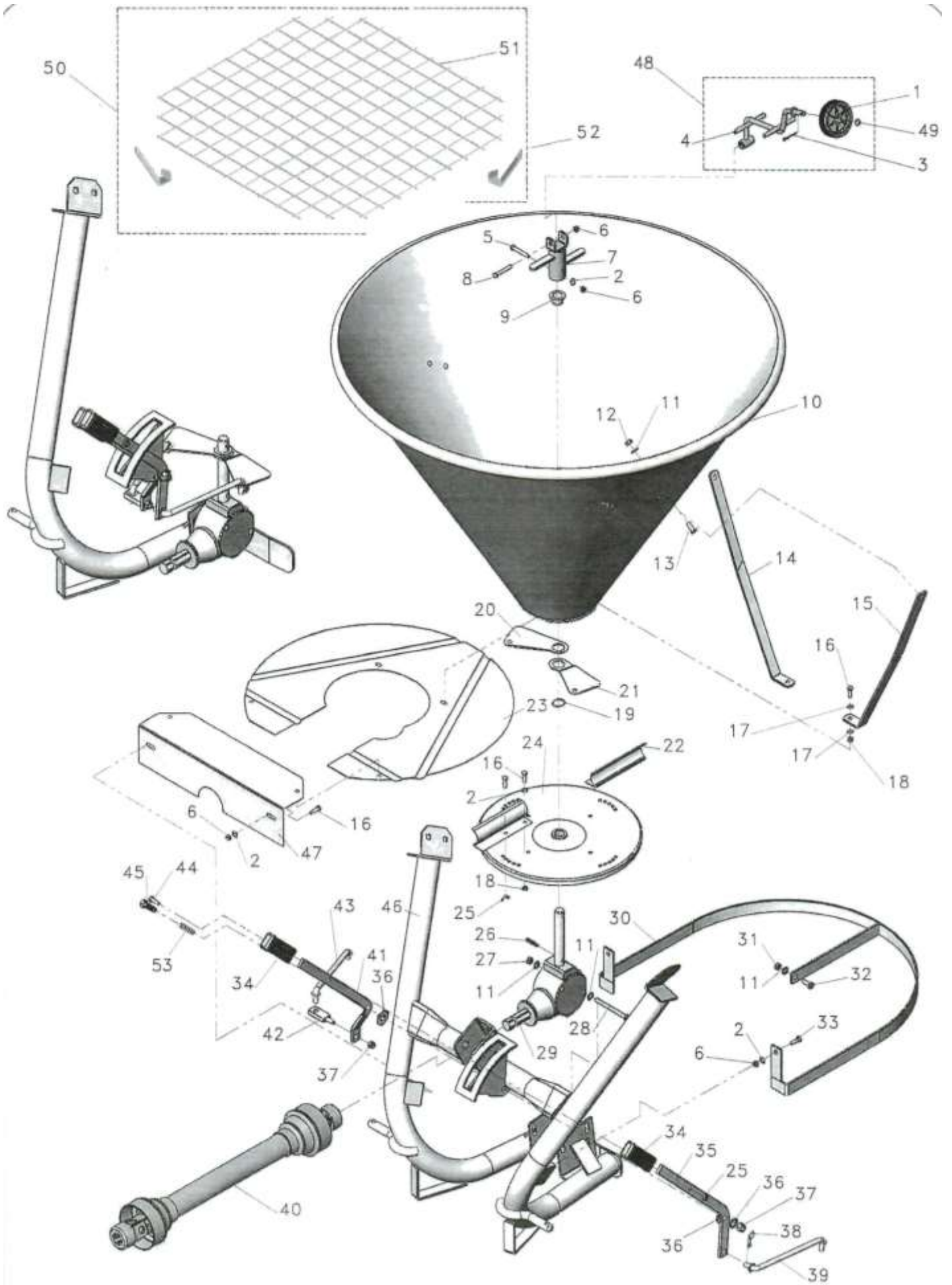
All spreaders are especially dangerous to children and persons who are not acquainted with the operation. We recommend that no one without a full understanding of how the unit operates be allowed use of the machine. The spreader should be used only by responsible people who have carefully read the Operator's Manual and are entrusted to use the machine. Before operating the machine be sure to understand this manual. In case there is any part you do not understand well, or a phase of the machines operation you do not understand, please contact your local dealer or distributor.

SPREADING CHART FOR SEEDS

Seed	PTO Speed (RPM)	Spreading Width in yards	Feed	MPH AND SPREADING RATES BY LBS. PER ACRE				
				1	2.5	5	7.5	10
Wheat	540	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
Oats	540	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
Rye	540	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
Barley	540	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
Rye Grass	540	5.5	1.5	50	20	11	7	6
			2	142	57	30	20	14
			2.5	299	120	61	40	30
Rape Seed	540	7.1	1.5	41	16	8	6	4
			2	214	86	42	29	22
			2.5	427	172	86	57	42
Red Clover	540	7.1	1.5	57	22	11	7	6
			2	196	78	39	26	21
			2.5	481	194	96	65	48

SPREADING CHART FOR FERTILIZERS

Fertilizer Type	PTO Speed RPM	Spreading width in yards	MPH	Quantity to be spread in lb. per acre at the forward speed indicated in the mph column											
				Feed											
				1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7
Coarse Grain Fertilizers	540	24	1	201	335	617	1016	1299	1602	1941	2372	2579	2900	3176	3574
			2.5	95	145	247	415	518	642	791	937	1031	1164	1294	1453
			5	52	70	129	205	261	321	394	473	523	602	662	745
			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
Medium Grain Fertilizers	540	19.7	1	-	467	799	1141	1459	1807	2015	2341	2582	2827	2991	3289
			2.5	-	176	330	468	599	741	827	948	1041	1143	1205	1334
			5	-	105	171	237	303	377	419	479	526	582	610	672
			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
Fine Grain Fertilizers	540	13.1	1	177	289	491	826	1066	1345	1576	1896	2134	2447	2659	2959
			2.5	85	122	204	341	441	552	649	773	866	1001	1086	1188
			5	46	61	108	179	225	281	325	397	443	500	542	604
			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
Medium Crystal Fertilizers	540	8.75	1	335	553	1021	1655	2047	2624	3066	3563	4089	4538	4976	5482
			2.5	117	222	418	670	827	1068	1238	1466	1644	1827	2000	2204
			5	69	113	212	334	422	542	623	740	832	920	1003	1107
			7.5	45	77	142	226	284	369	421	497	554	615	674	738
			10	30	54	102	173	211	278	322	369	414	461	503	557
Calcium Cyanamide & Similar	540	11	1	278	760	1120	1659	2048	2672	2908	3391	4349	-	-	-
			2.5	111	304	457	671	820	1008	1174	1362	1529	-	-	-
			5	59	151	232	301	412	502	592	682	766	-	-	-
			7.5	37	101	150	221	276	337	394	455	509	-	-	-
			10	26	74	113	169	207	254	293	341	381	-	-	-
Ammonium Sulphate	540	11	1	144	573	937	1411	1804	2230	2644	3103	3401	3820	4095	4584
			2.5	62	227	378	565	726	899	1055	1245	1366	1533	1644	1835
			5	29	116	191	285	367	450	526	639	680	767	820	922
			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
Thomas Meal	540	6.6	1	-	-	-	-	2294	5107	6763	7025	-	-	-	-
			3.5	-	-	-	-	580	1295	1709	1760	-	-	-	-
			7.5	-	-	-	-	293	544	855	882	-	-	-	-
			12	-	-	-	-	198	433	562	591	-	-	-	-



Number	Description	Note	Code
1	Wheel for articulated agitator	Option	CZ_001228
2	Washer M8		CG_001009
3	Split Pin D.3 x 35		CV_001435
4	Wheel Holder for articulated agitator	Option	AS_001290
5	Screw TE M8 x 55		CV_001054
6	Self-Locking Nut M8		CD_001091
7	Agitator		CZ_001150
8	Screw M10 x 70	Option	CV_001065
9	Bushing		CZ_001134
10	Hopper		AS_001032 (F150) AS_001031 (F250) AS_001030 (F300) AS_001028 (F400) AS_001027 (F500) GM_001168 (F500PVC)
11	Washer M10		CG_001010
12	Nut M10		CD_001004
13	Screw TTQST M10 x 25		CV_001350
14	L.H. Connecting Rod Guard	For Italy ONLY	SM_003004
15	R.H. Connecting Rod Guard	For Italy ONLY	SM_003005
16	Screw TE 8 x 20		CV_001002
17	Galvanized Washer 8 x 24		CG_001001
18	Nut M8		CD_001003
19	Seeger		CV_001439
20	R.H. Shutter		SM_001122
21	L.H. Shutter		SM_001123
22	Fan		SM_001117
23	Carter Disc	For Italy ONLY	AC_F10
24	Fan Holder Disc		AS_001019
25	Wingnut M8		CD_001050
26	Split Pin 8 x 40		CV_001411
27	Nut M10		CD_001004
28	Screw TE M10 x 110		CV_001069
29	Gearbox		CT_001007
30	Flat Guard	For EC ONLY	AC_F09
31	Self-Locking Nut M10		CD_001092
32	Screw TE M10 x 30		CV_001010
33	Screw TE M8 x 30		CV_001004
34	Handle		CZ_001219
35	L.H. Lever		SM_001090
36	Washer M12		CG_001011
37	Self-Locking Nut M12		CD_001093
38	Split Pin diam. 3 x 35		CV_001435
39	L.H. Connecting Rod		AS_001256
40	PTO Shaft		CA_001001 (EC) CA_001002 (USA)
41	R.H. Lever		SM_001091
42	Lever Return		CZ_001045
43	R.H. Connecting Rod		AS_001219
44	Screw TE M8 x 40		CV_001006
45	Screw TE M12 x 80		CV_001078
46	Frame		AS_001033
47	Guard		SM_001038
48	Articulated Agitator	Option	AC_F04
49	Washer M10 x 30	Option	CG_001002
50	Filtering Net	Option	AC_F05
51	Filtering Net	Option	SM_003006
52	Hook	Option	SM_001032
53	Spring		CM_001016