



World-class turf maintenance equipment

OPERATING INSTRUCTIONS

4ft POWASPRED

MACHINE REFERENCE	TDM/48PT
SERIAL NUMBER
CN CODE	8432 40 10



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EC DECLARATION OF CONFORMITY

We the undersigned
SISIS EQUIPMENT (Macclesfield) LTD

Certify that the Top Dresser

Make SISIS

Type Topspred

Series 48PT

Conforms to EC Directives
and amendments 2006/42/EC

Standard BS7370

This certificate applies only to NEW equipment supplied
by SISIS or our authorised dealer

J.W. Hargreaves
Director

Certificate Number
CEFS780

We want you to obtain the best performance from this machine. If you have any difficulty in carrying out the following instructions please contact us or your local SISIS Territory Manager or SISIS Dealer.

The operating principle of the original, highly successful Topspred has been retained. The efficiency and adaptability of the patented principle is unmatched and the new tractor PTO drive extends the simplicity of varying application rates for specific spot treatment while the new design hopper greatly facilitates material loading. The hopper capacity is 14cu.ft. (396 litres).

The ability of the Powaspred to handle the following materials efficiently gives some indication of its versatility.

- a) Topdressing on turf with controlled accuracy.
- b) Redgra and other similar hard play area top dressing
- c) Sharp sand for playing field application
- d) Rock salt for winter maintenance on access roadways and pathways

With PTO drive the facility now exists to vary the discharge mechanism speed in relation to the tractor forward travel speed allowing the operator to increase or decrease the application density of simple gear change of the tractor.

IMPORTANT POINTS AND SAFETY HINTS

ALWAYS

read the operating instructions carefully and understand the controls before commencing work.

empty the hopper before removing the Powaspred from the tractor unit

thoroughly clean the Powaspred after each days work.

if the Powaspred is used for the application of rock salt for winter maintenance on footpaths and carparks always pressure wash the machine immediately after use.

check tyres (when wheels are fitted) daily for cuts and ensure that the tyre pressure is maintained at 26lbs/inch² (1.7 bar)

be extra careful when using petrol or diesel fuel. **DANGER** no smoking or naked lights.

use safety guards and make sure they are correctly in position. they are supplied for your protection.

before starting work, visually check machines for damage or wear to working parts such as blades or tines.

watch out for children or pedestrians. always look behind before starting to reverse.

respect powered machines. always keep hands and feet clear of moving parts and remember that tine drums or cylinders can continue to rotate even after the power unit is switched off.

switch off the power before making adjustments or repairs and never lift or carry a machine whilst any parts are moving.

NEVER

operate the Powaspred at high speed. for maximum efficiency the operating speed should be maintained between 2 and 4mph (3 and 6kmph)

never drop top dressing material from a height into the hopper as this will compact the bottom layers of material and affect the application rate.

never overload with smaller horse power tractors. take extra care to ensure that the total weight of the Powaspred with top dressing does not exceed the pulling power or the braking capacity of the tractor being used.

allow any unauthorised person to handle machines in any way at any time.

PTO DRIVES FROM TRACTORS

before attaching or adjusting PTO driven implements, always stop the engine and disengage the PTO drive.

never operate PTO shafts at extreme angles and take particular care to avoid high linkage lift positions with the PTO in operation (i.e. at the end of working runs)

many tractors now have multi speed PTO systems. take special care that the PTO speed selected is suitable for the implement being used. e.g. never use 1000rpm on an implement designed for 540rpm.

CONTROLS

One simple adjustable quadrant control combines effective discharge gate closure with instant reset to the preselected discharge aperture.

PRINCIPLE

The bottom of the hopper comprises a flat steel plate which has a reciprocating motion and discharges material through an adjustable aperture to a full width rotating brush. Drive to the reciprocating mechanism and the brush is obtained from the tractor via a PTO shaft, a gearbox and a chain drive.

ATTACHING THE POWASPRED TO THE TRACTOR

The Powaspred is designed to be operated by tractors of 16hp and over, fitted with category 1 or 2 hydraulic linkage and front weights.

ALWAYS USE STABILISERS TO ENSURE FULL CONTROL OVER THE MACHINE

Align the tractor with the Powaspred; fit the hydraulic lift arms (fitting the left hand side arm first) and secure with the retaining pins. Fit and secure the tractor top link and adjust its length until the top edge of the Powaspred is horizontal and parallel with the ground.

Raise the Powaspred on the tractor hydraulics and, standing behind the machine, visually check that the top for the hopper is horizontal with the ground - adjusting the side arm levelling screw as necessary. (Always check that the tractor rear wheels have equal inflation pressures).

Fit the end of the PTO shaft on to the tractor spline and the other end on to the gearbox spline.

IMPORTANT there must be a minimum clearance of 2ins (50mm) between the sliding members of the PTO shaft in their closed position. (see makers leaflet for information on adjusting the length).

Check that the bevel gearbox is filled with oil (SAE90 or equivalent).

Remove the side drive covers. Grease the rose bearings of the eccentric drive rods and lightly oil the drive chain. Replace the drive cover guards.

Start the tractor and raise the machine clear of the ground. With the engine at idling speed, gently engage the PTO drive clutch and visually check that the mechanisms are operating freely.

OPERATING THE POWASPRED

The Powaspred is designed to operate on a PTO speed of 540rpm. Never use a higher tractor PTO speed as any damage resulting from operation at

speeds in excess of 540rpm cannot be considered for component replacement under Warranty.

To check the application rate of your particular material the hopper should be half filled. Ensure that stones or foreign materials, which could block the discharge aperture, are removed.

The material should be as dry as possible and should not be loaded from a height with a mechanical shovel as this will compact the material in the lower half of the hopper and reduce the spreading rate.

With the rate control lever set at 'B' engage the PTO drive and move forward at approximately 3mph (4.8kmph) over a smooth concrete area (or a square yard or square metre plastic sheet). Collect and weigh the material. If a higher rate is needed, set the control lever towards 'C' and repeat the test as necessary until the desired application rate is achieved.

Carefully note your engine RPM when doing the test runs and maintain the same engine speed when applying top dressing on the greens.

The hopper discharge gate should always be closed while the hopper is being filled with material. The discharge gate quadrant control lever, which is spring loaded towards the closed setting, ensures effective cut-off of free flowing materials at the end of each swath.

Before detaching the Powaspred always empty the hopper and lower the drop leg to ensure the machine is stable when it is removed from the tractor. Never operate the machine with the drop leg in the lowered position.

When spreading 'clinging' materials the adjustable baffle plate, fitted above the rotating brush, may be angled rearwards, to improve irregularities in the application pattern. Tighten the 2 securing screws after adjustment.

IMPORTANT - LUBRICATION NEEDS

Additional greasing is recommended when working in very dusty conditions and when fine dry sand is being spread.

The grease nipple, located in the centre (at each end), of the ground wheel axle should be greased after every 2 operating hours, to help prevent very fine abrasive particles gaining access to the wheel bearings.

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PARTS LIST & DRAWINGS

4ft POWASPRED

MACHINE REFERENCE	TDM/48PT
SERIAL NUMBER
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<i>item</i>	<i>part</i>	<i>description</i>	<i>qty</i>	<i>item</i>	<i>part</i>	<i>description</i>	<i>qty</i>
1	1/1039	hex head setscrew	4	59	8036	socket setscrew	4
2	1/1063	flat section spring washer	6	60	8040	hex head setscrew	2
3	1064	flat section spring washer	4	61	8049	bearing	2
4	1044	split pin	4	62	8053	oilite bearing	2
5	1/1072	plain washer LP	10	63	8153	socket stscrow	4
6	1/1073	plain washer LP	61	64	8154	socket setscrew	3
				65	8161	sel lok pin	1
8	1075	plain washer LP	8	66	8165	parallel key	3
9	1/1081	plain washer	4	67	8189	circlip retainer (external)	4
10	1/1079	plain washer LP	8	68	8298	bearing	2
11	1/1105	hex head setcrew	6	69	8299	bearing	2
12	1/1117	hex head setscrew	3	70	8303	mudugard washer	13
13	1/1118	hex head setscrew	10	71	8351	half nut	8
14	1/1120	hex head bolt	4	72	8353	hex head setscrew	20
15	1/1125	hex head setscrew	2	73	8457	jubilee clip	2
16	1/1139	hex head setscrew	2	74	20280	gear box	1
17	1/1154	hex head setscrew§	4	75	8190	circlip retainer (inernal)	4
18	1/1208	coach bolt	1	76	31194	sleeve	1
19	1/1217	nyloc nut	20	77	31076	fabricated chassis	1
20	1/1220	nyloc nut	16	78	21077	pinion	1
21	1/1222	half nut	6	79	31078	tension pinion screw	1
22	1/1223	nyloc nut	29	80	1919	bearing	4
23	1/1228	nyloc nut	4	81	20274	locking pin	2
				82	31271	bearing link arm	2
25	1/1231	nyloc nut	4	83	31081	pinion and stud	1
26	1358	hand grip	1	84	31082	drive shaft	1
27	1/1436	hex head setscrew	2	85	31083	feed plate	1
28	1480	standard nameplate	1	86	31085	hopper support bracket LH	1
29	1/1620	wing nut	1	87	31086	hopper support bracket RH	1
30	1/1671	hex head setscrew	6	88	31087	gate support bracket LH	1
31	1706	roller chain	2	89	31088	gate support bracket RH	1
32	1948	grease nipple	4	90	31089	hopper assembly	1
33	1/1823	shakeproof washer	8	91	31090	hopper stay	2
34	1871	pop rivet	2	92	31091	front plate	1
35	1951	hex had setscrew	24	93	31092	sealing strip	2
36	1956	hex head bolt	4	94	31093	clamp plate	2
37	8617	top link pin	1	95	31094	collar stud	1
38	1989	socket setscrew	2	96	31095	guard LH	1
39	2992	oilite bearing	1	97	31096	guard RH	1
40	3171	rubber strip	1300mm	98	31097	guard cover	2
41	4894	spacer	1	99	31098	drive guard	1
42	6316	brush shaft collar	2	100	31099	drive guard cover	1
43	6507	transfer	2	101	31100	hopper support arm	2
44	6686	sprocket	1	102	31101	stand	2
45	6754	adjustable gate assembly	1	103	21102	brush strip	1
46	6769	roller shaft	2	104	31135	sealing strip	1
47	6771	sprocket	1	105	6744	brush	1
48	6783	gate adjusting handle	1	106	31084	brush shaft	1
49	6785	sprocket	1	107	8458	sel lok pin	2
50	6789	follower adjustable guide	2	108	30510	PTO shaft	1
51	6791	transfer	1	109	31143	transfer	1
52	6792	transfer	1	110	31154	transfer	1
53	8326	linch pin and ring	3	111	1934	parallel key	1
54	6929	clamp plate	1	112	31273	spacer	6
55	6930	clamp plate	1	113	1/1127	hex head setscrew	2
56	7491	roller	2	114	1/1218	nyloc nut	6
57	8032	bearing	2				
58	8035	parallel key	1	116	5536	spacer	1

item	part	description	qty	item	part	description	qty
117	20279	countersunk head setcrew	4	138	31141	collar	2
118	31161	clamp	1	139	33012	wheel hub	4
119	31704	arm	1	140	33136	drop leg	2
120	31616	clamp plate	1	142	8656	linch pin and ring	1
121	31165	cable control	1	143	20301	top link pin	1
122	8955	platic end cap	1	144	31159	drawbar	1
123	1/1096	setscrew	2	145)	31166	mod. to eye coupling	1
124	20373	straight grease niple	2)	20297	eye coupling	1
125	1/1076	LP plain washer	8	146	31193	turnbuckle assembly	1
126	1/1150	hex head bolt	4	148	31198	deflector plate RH	1
127	1/1154	setscrew	6	149	31199	deflector plate LH	1
128	1/1221	half nut	4	150	82345	plain washer LP	6
129	1/1228	nyloc nut	10				
130	1938	socket setscrew	4	1/1141	bolt	2	
131	7094	wheel screw	16	1/1039	setscrew	4	
132	20171	wheel and tyre	4	31290	guard bracket	2	
133	20722	bearing	8	1734	cone - plastic	1	
134	31137	shaft and bracket	1	1/1091	setscrew	14	
135	31138	end plate	2	31781	lever bracket	1	
136	31139	spacer	4				
137	31140	spacer	2				



