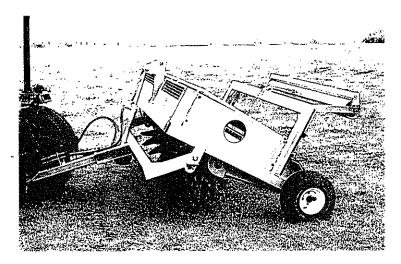
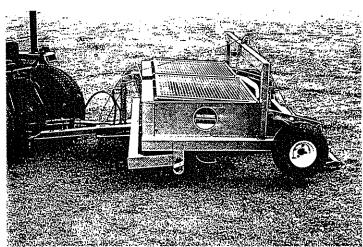
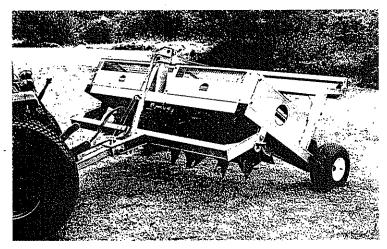
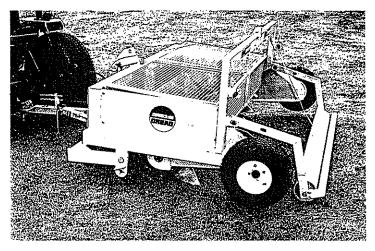
QUICK CHANGE

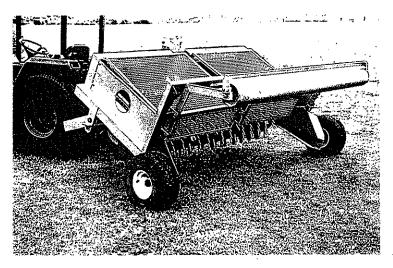
Operation & Spares manual

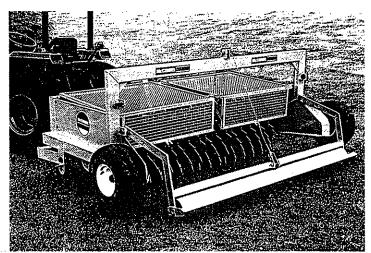












READ THE BOOK FIRST

It might save hours and pounds later

When ordering spare parts always quote the machine type and serial number as well as the part number

Factory re-built service exchange units of the major hydraulic components are available from you dealer.

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FOR NOTES

GENERAL INFORMATION

Read this manual before fitting or operating the machine. Whenever any doubt exists contact your dealer or the McConnel Service Department for assistance.

Use only McConnel spare parts on McConnel equipment and machines. This manual includes an illustrated spare parts breakdown and the interpretation which precedes it should be read before ordering replacement components.

DEFINATION

The following definitions apply throughout this manual:

WARNING

An operating procedure, technique etc., which can result in personal injury or loss of life if not observed carefully.

CAUTION

An operating procedure, technique etc., which can result in the damage of either machine or equipment if not observed carefully.

NOTE An operating procedure, technique etc., which is considered essential to emphasise.

LEFT AND RIGHT-HAND

This term is applicable to the machine when fitted to the tractor and viewed from the rear. This also applies to tractor references.

Record the serial number of your machine on this page and always quote this number when ordering spares. Whenever information concerning the machine is requested remember to also state the type of tractor to which it is fitted. MACHINE INSTALLATION SERIAL DATE NUMBER MODEL **DETAILS DEALERS** NAME **DEALERS TELEPHONE** NUMBER

INTRODUCTION

The McConnel/Dabro 'Quick change' frame can be used with a number of turf care spools and is designed such that spool changeover can be carried out by one person with ease.

The spools available at publication are:-

GREEN SLITTER which has been designed for deep slitting on all types of well cultured fine turf areas. Surface disturbance is minimal

Depth of penetration is variable up to maximum of 7 1/2" to achieve ideal results for all applications.

OUTFIELD SLITTER which has been designed to deal with compaction problems on all types of outfield turf.

Depth of penetration is variable up to maximum of 9" to achieve ideal results for all applications.

CORE TINER which is designed to aerate and remove soil for exchange, it features the Dedoes patented pivoting tine, which provides for the removal and collection of its cores. Operate at a depth of up to 3"

General

Available in a range of sizes to suit tractors 14 to 50+ Hp

Hydraulic operation is available on all models

A ram activated tractor weight transfer system which assists and governs penetration is standard equipment on all machines.

Rear roller is standard equipment on all models.

SAFETY PRECAUTIONS

WARNING					
NEVER		Permit inexperienced personnel to operate the machine without supervision			
		Allow anybody to ride on the equipment whether in transport or at work			
Work und tractors hy		Work under the frame while the machine is suspended on the tractors hydraulic lift-use a substantial support.			
ALWAYS		Keep guards in place, they are for your protection.			
	***	Ensure that hydraulic hoses are not strained, pinched or chafed.			
	***	Keep tight all bolts and nuts and check security of mounting pins.			
	•••	Have safety strut in operation during transport			
	•••	Drive tractor in straight line, do not turn when the machine is working or damage to blades may result.			

FITTING

Preparation

Tractor rating required to suit frame widths.

GREEN SLITTER/OUTFIELD SLITTER				
Tractor rating	Frame width			
14 Hp	3' 6" (1.1m)			
16-18 Hp	4' 6" (1.4m)			
18+ Hp	6' (1.8m)			

CORE TINER			
Tractor rating	Frame width		
16+ Hp	3' 6" (1.1m)		
20+ Hp	4' 6" (1.4m)		
25+HP	6' (1.8m)		

Hydraulics require double acting spool valve on tractor

Taking delivery

The machine may be delivered in two pieces, the main frame and drawbar.

The mainframe is supported at the front on two legs which are fixed to brackets one eitherside of frame.

To assemble, manoeuvre drawbar, until fixing holes on drawbar arms are aligned with top mounting holes in brackets (to which the feet are connected) secure in place.

Position hydraulic ram rod into clevis of bracket on main frame and fasten

Lower jockey wheel to raise machine, so the legs are clear of ground. Un-bolt and remove legs.

Fitting to tractor

Reverse tractor close to machines draw bar.

Adjust jockey wheel height on machine as necessary to position draw bar of machine into clevis on tractors tow hitch.

Connect to tractor by placing and securing hitch pin.

Raise jockey wheel out of way and lock in place.

Connect hydraulic hoses to tractors spool valve using quick release couplings. Make sure the hoses are not pinched, kinked, stretched or chafed and the hydraulic system is oil tight.

Start tractor and operate control lever to fully extend ram. This will release the safety strut, positioned directly behind the ram.

Place strut in horizontal storage position and secure with screw pin provided.

Removal from tractor

Fully extend ram to raise drum above ground

Unscrew pin to allow safety strut to pivot into vertical position. Operate control lever to slowly retract ram until the strut is resting on the top cross member of frame and is taking the weight of the machine.

WARNING Take care by holding safety strut by its stem if required to do so when repositioning.

Release lock and lower jockey wheel to ground and lock.

Switch off tractor release pressure on hydraulic system by moving control lever into all positions.

Disconnect hydraulic hoses using the quick release couplings.

Remove pin to release draw pin from tractors tow hitch.

The tractor can now be driven forward clear of machine.

OPERATION

TRANSPORT POSITION

Extend the ram fully until the drum is at maximum height. Remove the handled pin to allow the safety strut to pivot downwards until it is located against the cross member of the drawbar.

Ensure jockey wheel is clear of the ground.

GREEN SLITTER

Start tractor

When in forward motion, operate control lever to move ram to obtain the correct depth of penetration of slitters for your required application. Max depth 7 1/2" (190mm). When the ram is fully closed.

Drive tractor in straight line, do not turn when the machine is working or damage to blades may result.

To raise machine out of ground fully extend ram so the machine is working or damage to blades may result.

To raise machine out of ground fully extend ram so the machine is on its wheels only.

To assist penetration of blades in severely compacted turf areas up to four cylindrical ballast weights can be added into the vertical channels at the front of the main frame.

OUTFIELD SLITTER

Start tractor

When in forward motion, operate control lever to move ram to

obtain the correct depth of penetration of slitters for your required application. Max depth 9" (230mm). When the ram is fully closed.

Drive tractor in straight line, do not turn when the machine is working or damage to blades may result.

To raise machine out of ground fully extend ram so the machine is on its wheels only.

There are two methods of increasing the weight of the machine to assist penetration of the blades in very severely compacted areas.

- (1) Up to four cylindrical ballast weights can be added into the vertical channels situated at the front of the main frame.
- (11) The drum is manufactured to be water tight. Locate plugs on the left end of drum to fill with water for required ballast weight.

CAUTION

Ensure water ballast has anti freeze during winter months.

CORE TINER

Start tractor.

When working operate control lever to adjust ram to obtain the correct depth of penetration of tines for your required application. Max depth 3 " (90mm). When the ram is fully closed.

Drive tractor in straight line, do not turn when the machine is working or damage to tines may result.

To raise machine out of ground fully extend ram so the machine is on its wheels only.

To assist penetration of tines in severely compacted turf areas up to four cylindrical ballast weights can be added into the vertical channels situated on the front of the main frame.

After each use, clear remaining cores from tines, rinse clean, apply light coat of oil to prevent rust.

To empty drums

Raise the machine until it is resting on its wheels.

Release cover guard, pivot back out of the way.

Open trap door. Rotate drum until cores have emptied. Ensure to secure door after emptying.

Repeat in turn for each drum

WARNING: Work from above drum to locate trap door to empty cores. Never try to carry out this operation from underneath the drum.

CHANGING SPOOL ASSEMBLIES

Removal:-

Raise machine fully and lock the roller in the up position.

Pivot top guard/ guards up and secure in raised position.

Lower machine until spool tines touch ground.

Remove tapered pins, raise machine until weight is taken off the tines and drive forward.

Engagement:-

-Reverse machine squarely up to the spool until the spool bearings locate firmly into their housing. To carry out this manoeuvre it is necessary to apply weight to the spool via the top bearing guide channels by retracting the ram while reversing. With weight still on the spool position the tapered pins with taper forwards to locate the spools firmly in position. Secure with linch pins.

Fully raise machineand release the roller and the top guards.

MAINTENANCE

LUBRICATION

At regular intervals grease drum bearing, all other pivot points and the wire cable. Remember conscientious lubrication pays dividends, in terms of longer machine life and trouble free operation.

FASTENERS

Check daily when in use, that all bolts and nuts are tight, pins are secure and hydraulic connections are not leaking.

HOSES

The condition of all hoses should be carefully checked during routine maintenance of the machine. Hoses that have been chafed or damaged on their outer casing should be securely wrapped in waterproof adhesive tape to prevent the metal braid from rusting. Hose that have suffered damage to the metal braid should be replaced at the earliest opportunity.

Hose replacement

When the hose is screwed to an additional fitting or a union use a second spanner on the fitting to avoid breaking both seals.

Do not use thread sealing, or jointing compounds on the threads.

Avoid twisting the hose. Adjust the hose line to ensure freedom from rubbing or trapping before tightening the hose end connections.

TYRES

Tyre size 18.5 x 8.50 - 8 Tubeless

Inflate to the reccommended maximum pressure indicated on the tyre.

STORAGE

If the machine is to be left standing for an extended period of time, grease all pivot points and the main spool bearings including their outside diameter. Lightly coat the exposed portion of the ram rod with grease. Subsequently this grease on the ram which becomes contaminated with dust and grit must be wiped off before the ram is next moved.

Suspend quick release couplings clear of the ground.

SPARE PARTS MANUAL

FOR BEST PERFORMANCE....

USE ONLY McCONNEL SPARE PARTS

To be assured of the latest design improvements purchase your genuine replacements from the original equipment manufacturer McConnel Ltd. through your local dealer or stockist.

Always quote machine type and serial number as well as the part number.

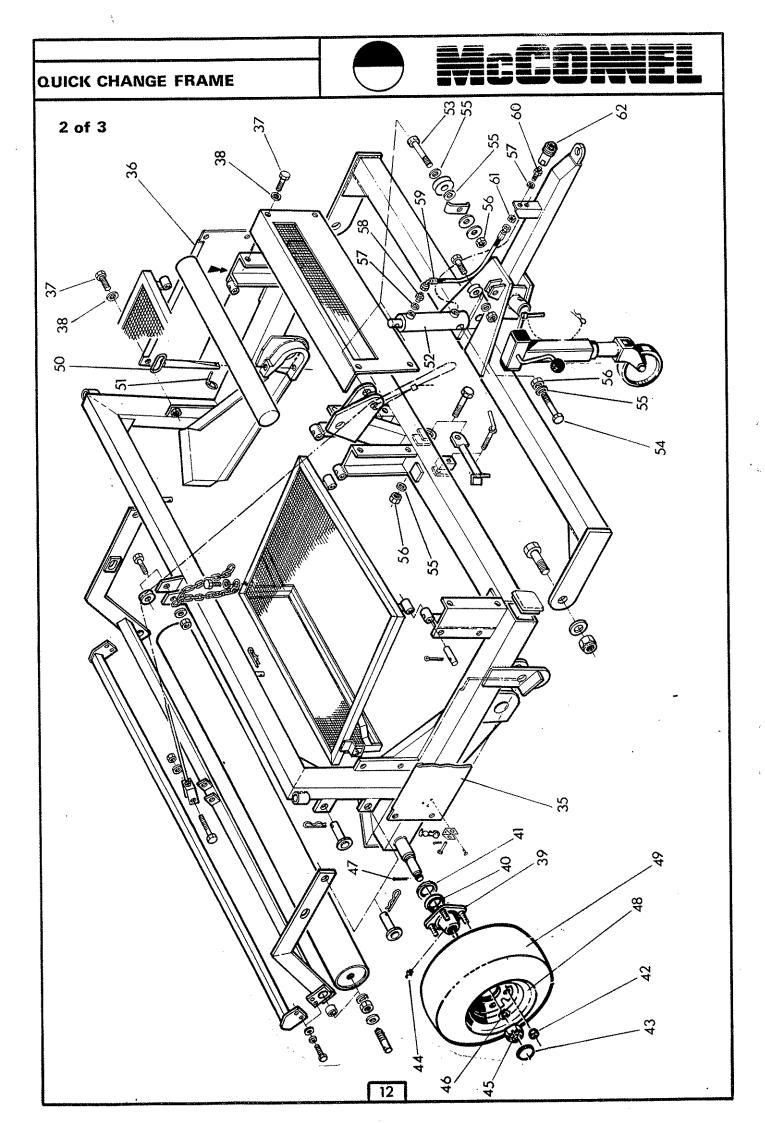
Design improvement may have altered some of the parts listed in this manual - The latest part will always be supplied when it is interchangeable with an earlier one.

McCOMEL QUICK CHANGE FRAME 1 of 3 (5) (2) (5) (2) (5) (2) (7) (2) \(\frac{\partial}{2}\) (S)(S)(e) 886 **%©.9** 10



McComel

Ref	Ref.	Part No.	Qty.	Description
				KWIK CHANGE FRAME ASSEMBLIES
				6' 0" FRAME ONLY
	1	19-90-283	1	Main frame
	2	19-90-272	1	Drawbar
	3	19-90-290	. 1	Top guard R.Hand
	4	19-90-291	1	Top guard L.Hand
	5	19-90-278	2	Front panel
	6	1 9-9 0-258	¹ 1	Roller frame
	7	19-90-261	1	Roller
	8	19-90-264	1	Scraper blade
	9	19-90-009	4	Hinge pin
	10	05-03-123	4	Split pin
	11	91-00-104	2	Plain washer
	12	19-90-015	2	Chain
	13	93-13-054	2	Setscrew
	14	19-00-304	4	Weignt
				4' 6" FRAME ONLY
•	15	19-90-282	1	Main frame
	16	19-90-273	1	Drawbar
	17	19-90-288	1	Top guard - not illustrated
	18	19-90-279	2	Front panel
	19	19-90-285		Roller frame
	20	19-90-262	1	Roller
	21	19-90-265	1	Scraper blade
	22	19-90009	2	Hinge pin
	23	05-03-123	2	Split pin
	24	19-00-303	4	Weight
				3' 6" FRAME ONLY
	25	19-90-281	1	Main frame
	26	19-90-274	1	Drawbar
	27	19-90-286	1	Top guard - not illustrated
•	28	19-90-280	2	Front panel
	29	19-90-284	1	Roller frame
	30	19-90-263	1	Roller
	31	19-90-266	1	Scraper blade
	32	19-90-009	2	Hinge pin
	33	05-03-123	2	Split pin
	34	19-00-302	4	Weight
	J 7	10-00-00Z	~	erengi it





Ref. Part No. Qty. Description

KWIK CHANGE FRAME ASSEMBLIES-continued

The remaining items are common to all 'Kwik Fit' frame assemblies

35	19-90-276	1	Side panel R.Hand
36	19-90-277	1	Side panel L. Hand
37	93-13-025	16	Setscrew
38	91-00-105	16	Plain washer
	19-00-060	2	Hub complete each compr:-
39	19-00-017	1	Hub
40	19-00-031	1	Outer bearing
41	19-00-032	1	Inner bearing
42	19-00-025	. 4	Wheel nut
43	19-00-018	1	Dust cap
44	19-01-161	1	Grease nipple
45	19-00-026	2	Axie nut
46	01-00-107	2	Plain washer
47	05-03-104	2	Split pin
	19-00-086	2	Wheel and tyre compr :-
48	19-00-019	2	Wheel
49	19-00-020	2	Tyre
50	19-90-270	2	Taper pin
51	04-31-204	2	Linch pin
52	1 9-0 0-306	1	Hydraulic ram
53	92-13-247	1	Bolt
54	92-13-267	1	Bolt
55	91-00-107	4	Plain washer
56	91-63-007	3	Self locking nut
57	86-50-103	4	Bonded seal
58	60-00-113	2	Union
59	85-31-403	2	Hose SF - 90 deg.F 3/8 BSP
60	85-81-268	2	Bulk head union
61	01-39-003	2	Backnut
62	85-90-063	2	Quick release coupling
	86-99-219		SEAL KIT FOR HYDRAULIC RAM

QUICK CHANGE FRAME _8 - છ 55/ - 59

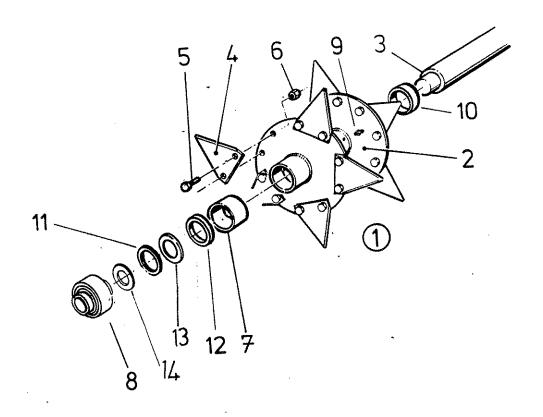


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Ref.	Part No.	Qty.	Description
1 .			KWIK CHANGE FRAME ASSEMBLIES-Continued
63	19-00-305	1	Strut
64	19-00-016	1	Strut pin
65	92-13-147	1	Bolt
66	92-13-149	2	Bolt .
67	91-00-109	2	Plain washer
68	91-63-009	2	Self locking nut
69	19-00-015	2	Rubber latch
70	71-03-230	6	Pop rivet
71	19-00-021	1	Jacking wheel
72	19-90-010	2	Plastic cap
73	19-05-010	2	Bush
74	19-05-001	2	Stub axle
75	91-13-009	2	Nut
76	91-00-209	2	Spring washer
77	19-90-005	2	Roller frame pivot pin
78	19-90-016	2	Roller frame top pin
79	19-90-271	1	Wire rope
80	01-11-005	2	Nut
81	19-90-008	2	Adjuster bracket
82	19-05-002	2	Pulley
83	19-05-003	1	Pulley
84	19-05-004	1	Cable retainer
85	19-90-025	2	Plain washer large o/d
86	19-05-006	2	Cable clamp
87	92-13-186	1	Bolt
`88	92-13-106	2	Bolt
89	91-00-206	3	Spring washer
90	91-63-006	3	Self locking nut
91	04-31-104	2	Spring cotter
92	04-31-105	4	Spring cotter
93	93-13-065	4	Setscrew
94	91-00-205	4	Spring washer
95	91-00-105	4	Plain washer
96	01-00-109	2	Plain washer



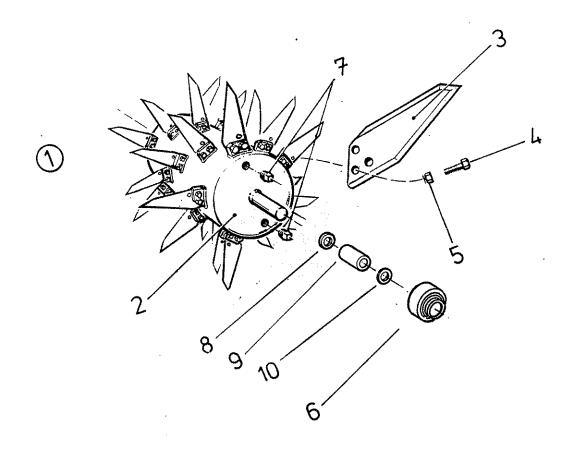
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Key	Part No.	Description	Oty. per Machine 3' 6" 4' 6" 6' 0"
1	19 11 260	3' 6" Spool Assy Complete	1
1	19 11 261	4' 6" Spool Assy Complete	_ 1 -
1	19 11 262	6' 0" Spool Assy Complete	1
2	19 11 004	Disc Assy with Bearings	3 4 6
3	19 00 333	3' 6" Shaft	1
3	19 00 334	4' 6" Shaft	_ 1 -
3	19 00 335	6' 0" Shaft	1
4	19 00 150	Blade	30 40 60
5	93 13 065	Bolt	60 80 120
6	91 63 005	Nyloc Nut	60 80 120
7	19 00 054	Bearing	6 8 12
8	19 90 011	Bearing	2 . 5 . 5
9	09 01 161	Grease nipple	3 4 6
10	19 00 055	Spacer Intermediate	2 3 5
11	19 00 057	Washer	2 2 2
12	19 00 057	Spacer - End	2 2 2
13	19 00 030	Shim	as reqd.
14	19 00 085	Shim	as reqd.
1 12	13 00 003	La 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	



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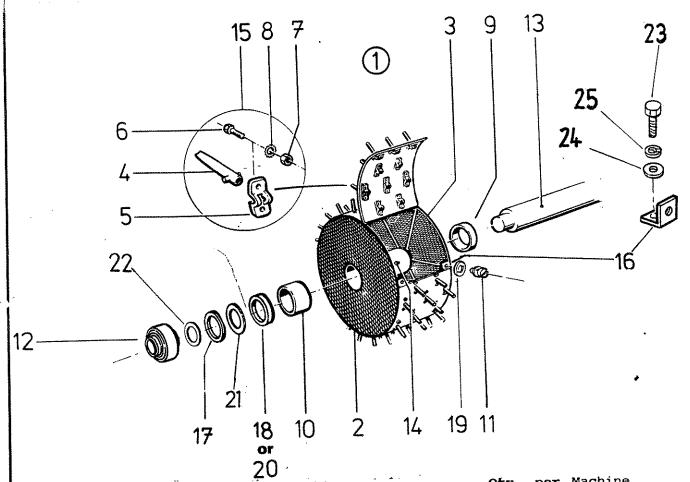
Key	Part No.	Description	Qty. 3' 6"	per Ma 4'6"	chine 6'0"
1	19 01 270	3' 6" SPOOL ASSY COMPLETE	1		***
1	19 01 271	4' 6" SPOOL ASSY COMPLETE	-	1	•••
1	19 01 272	6' 0" 6' 0" ASSY COMPLETE	•••		1
2	19 01 260	3' 6" Drum W.A.	1		
2	19 01 261	4' 6" Drum W.A.	-	1	_
2	19 01 262	6' 0" Drum W.A.	-	****	1
3	19 00 100	Blade	30	40	55
4	92 13 087	Bolt	60	80	110
5	91 63 007	Nyloc Nut	60	80	110
6	19 90 011	Bearing	`2	2	2
7	85 81 203	Screwed Plug	2	2	2
8	19 01 013	Weld Spacer	2	2	2
9	19 01 012	Spacer Tube	2		-
9	19 01 011	Spacer Tube		2	2
10	19 00 085	Shim	i	as regd	

SPOOL ASSY CORE TINER

V.



MCCOMEL



			Qty. per Mach		ine
Key	Part No.	Description	3'6"	4'6" 6'	' 0"
4	19 21 270	3'6" Spool Assy complete	1	-	_
1		4'6" Spool Assy complete	Marts	1	
1	19 21 271	6'0" Spool Assy complete			1
1	19 21 272	9.0 Spoot Assy company	3	4	5 5
2	19 21 253	Drum/Tine Assembly	3	4	5
3	19 21 254	Drum Assembly	180	240 30	
4	19 00 201	Tine	180	240 30	
5	19 00 202	Tine Pivot Block	360	480 60	
6	93 13 043	Bolt	360	480 60	
7	91 11 003	Nut		480 60	
8	91 00 303	Washer-Serrated	360		4
9	19 00 055	Spacer-Intermediate	2	3	0
10	19 00 054	Bearing	6		
11	19 21 003	Fastener	6		0
12	19 90 011	Bearing	2	2	2
13	19 00 333	3'6" Shaft	1 .		-
13	19 00 334	4'6" Shaft		1 .	
13	19 00 335	6'0" SHAFT		-	`1
	09 01 161	Grease nipple	3	4	5
14		Core tine kit	180	240 30	00
15		Bracket flap	6	8 1	10
16		Washer		2	2
17	19 00 057		2 2 6	2	0
18	19 00 056	Spacer End	6		10
19	19 21 004	Retaining Washer	_	-	2
20	19 21 260	End spacer		as reqd	
21	19 01 014	Shim		as reqd	_
22	19 00 085	Shim	6	8 8	10
23	93 13 043	Setscrew	6	8	10
24	91 00 103	Plain washer	6	8	10
25	91 00 203	Spring washer	0	0	, ,

A complete Core Tine Kit is available under Part No 19 00 200

