



Landscaping Roller Blade

... for Complete
LAWN BUILDING and
LAWN CARE from the Tractor Seat



*This catalog contains all the information
to sell, service, operate, and maintain*
The Landscaping Roller Blade
*Also contained is educational material
about lawn building and lawn care.*
See inside cover index



Patents Nos. 2,940,640 2,965,053
Other Patents Pending

INDEX

**Read This
And You will
Learn How
To Sell
Roller Blades**

**This is the
information you
need to complete
the Sale, and
Service the Roller
Blade after it is
sold.**

PAGE NO.	DESCRIPTION
1	Sales Literature
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4	Pitch Effect
6	How to Build New Lawns
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MODEL 33 VIKING *Landscaping* ROLLER BLADE

IT'S A
SEEDER

IT'S A
SCARIFIER

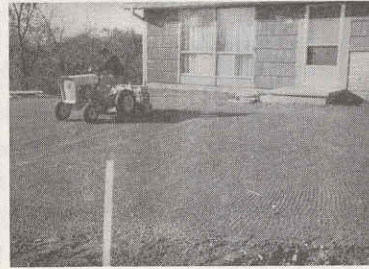
IT'S AN
AERATOR

IT'S A
FERTILIZER
SPREADER

IT'S A
CLOD BUSTING
ROLLER

IT LEAVES
A QUILTED
PATTERN
SEED BED

IT'S A
LEVELING
BLADE



BUILDING NEW LAWNS

BEGINNING OF JOB. Yard should be brought to grade by shearing off high spots and filling in low places until general rough shape is achieved.

SCARIFIER TEETH TEAR up ground and Grid Roller pulverizes clods. Fertilizer can be worked deep into soil.

MINUTES LATER, a level quilted seed bed is established and seeding is accomplished without hand work.

RENOVATING

SLICING ATTACHMENT aerates lawn to better receive air, water, fertilizer and seed. It also makes possible overseeding.

APPLICATION CHART

For Model 33 Viking Roller Blade

To apply from 1 to 100 lbs. per 1,000 square feet use dial settings shown in chart below.

SEEDS	Pounds Per Thousand Square Feet										BRAND NAME PRODUCT	Pounds Per Thousand Square Feet										BRAND NAME PRODUCT	Pounds Per Thousand Square Feet																												
	1	2	3	4	5	7	10	15	20	30		40	50	60	1	2	3	4	5	7	10		15	20	30	40	50	60	1	2	3	4	5	7	10	15	20	30	40	50	60	1	2	3	4	5	7	10	15	20	30
NON-BRAND MATERIALS AND FERTILIZERS											Hercules Powder Co.											Hercules Powder Co.																													
Chemical Fertilizers (Most Types)											Nitroform 38-0-0											Nitroform 38-0-0																													
Cattle Manure—Dehydrated											Hi-Yield Fertilizer Co.											Hi-Yield Fertilizer Co.																													
Sheep Manure—Dehydrated											"Ferti-Lome"											"Ferti-Lome"																													
Chlorine Powder											"Ferti-Lome" Chelated Iron											"Ferti-Lome" Chelated Iron																													
Lime-Carbonate (Ground Lime Stone)											The Hubbard-Hall Chemical Co.											The Hubbard-Hall Chemical Co.																													
Lime-Hydrated											HH Turf & Tree Food											HH Turf & Tree Food																													
Muriate of Potash											HH Lawn Fertilizer with Chloridane											HH Lawn Fertilizer with Chloridane																													
Sulphate of Ammonia											HH Weed-Kill Lawn Food											HH Weed-Kill Lawn Food																													
Super Phosphate											HH Nitrogen											HH Nitrogen																													
Bone Meal											HH Blade 20-6-4											HH Blade 20-6-4																													
BRAND AND PRODUCT											HH Lunara 10-5-5											HH Lunara 10-5-5																													
Allied Chemical Corporation											HH Lawn Insect Killer											HH Lawn Insect Killer																													
Arcadian 12-12-12											HH Lawn Weed Killer											HH Lawn Weed Killer																													
Arcadian Ammonium Nitrate											International Minerals & Chemical Co.											International Minerals & Chemical Co.																													
Urea 45-45-0											Fertilis											Fertilis																													
Sulvay Flake Calcium Chloride											Mello-Green											Mello-Green																													
Urox 22% Granular Weed Killer											Thrive											Thrive																													
Aluminum & Chemical Corp.											Thrive											Thrive																													
Gibron 4-8-8											Viva											Viva																													
Amchem Products, Incorporated											Duct											Duct																													
Amchem Lawn Weed Killer											Void											Void																													
Weedone Dry Formulation											Xain Bros. Co.											Xain Bros. Co.																													
Amchem Crabgrass Killer											Kay-Bee All Organic 5-5-0											Kay-Bee All Organic 5-5-0																													
Solar Dry Formulation											Kay-Bee Mor-Life 5-10-5											Kay-Bee Mor-Life 5-10-5																													
The American Agricultural Chemical Company											Kay-Bee Mor-Life 10-5-5											Kay-Bee Mor-Life 10-5-5																													
Agrico Tonic for Lawns											Kay-Bee Weed & Feed 5-5-0											Kay-Bee Weed & Feed 5-5-0																													
Agrico for Lawns, Trees & Shrubs											Kay-Bee Stop N Grow 8-0-0											Kay-Bee Stop N Grow 8-0-0																													
Agriette											Lawn & Garden Supply Co.											Lawn & Garden Supply Co.																													
Agrico Insect Control with Fertilizer											Organo Mulch											Organo Mulch																													
Agrico Weed Control with Fertilizer											Turf W'Tree 10-5-5											Turf W'Tree 10-5-5																													
Agrico Pre-Emerge Crabgrass Control											Turf W'Tree 16-8-4											Turf W'Tree 16-8-4																													
American Cyanamid Co.											Lawn-Tex, Inc.											Lawn-Tex, Inc.																													
Aero Dynamid Special Grade Lawn & Garden Cyanamid 20-0-0											Organ-Green 5-5-5											Organ-Green 5-5-5																													
Armour Agricultural Chemical Co.											Organ-Green 5-5-5 with Weed Killer											Organ-Green 5-5-5 with Weed Killer																													
Armogranic 5-5-0											Organ-Green 5-5-5 with Crabgrass Killer											Organ-Green 5-5-5 with Crabgrass Killer																													
Cattle Manure 2-1-2											Lebanon Chemical Corp.											Lebanon Chemical Corp.																													
Sheep Manure 1.25-1.2											Cow Manure											Cow Manure																													
											Turf Organic 5-4-0											Turf Organic 5-4-0																													
											Uni-Firm 10-6-4											Uni-Firm 10-6-4																													
											Green Gold											Green Gold																													
											Hi Organic 10-6-4											Hi Organic 10-6-4																													
											Crabgrass Destroyer											Crabgrass Destroyer																													
											The Chas. H. Lilly Co.											The Chas. H. Lilly Co.																													
											Super Rich Microcrop											Super Rich Microcrop																													
											Organic Microcrop											Organic Microcrop																													
											Double Acting Microcrop											Double Acting Microcrop																													
											Lux Microcrop											Lux Microcrop																													
											O. E. Linck Co. Inc.											O. E. Linck Co. Inc.																													
											Di-Met PCC											Di-Met PCC																													
											Old New England Fert.											Old New England Fert.																													
											Regular 68-3											Regular 68-3																													

BRAND NAME PRODUCT	Pounds Per Thousand Square Feet												
	1	2	3	4	5	7	10	15	20	30	40	50	60
Old New England Fert. with Uramite 6-8-3						9	11						
Mahleson Chemical Corp.													
Ammo-Phos 13-13-13	10												
Turf Food 20-0-0 with 2-4-D		8 3/4											
Turf Food 20-10-5		7											
2,4-D Broadleaf Weed Killer		8 1/2											
Chickweed & Clover Killer		8 1/2											
Chickweed & Clover Killer		8 1/2											
Craigrass & Insect Killer	6 1/2												
Craigrass & Insect Killer	6 1/2												
Monanto Chemical Co.													
Lion Brand Ammonium Nitrate	6	7	8	9									
Lion Brand Sulphate of Ammonia	5	6	7	8									
Monanto Chemical Co. (cont'd)													
Krilium Soil Conditioner	5	7	9										
Loamaker Soil Conditioner													
Natural Plant Food Co.													
Loughorn Cow Manure													
Ramsborn Sheep Manure	12 1/2	19											
Northrup King & Co.													
Goif Brand Crab X	9												
Goif Brand Lawn Food 20-8-5		9	11										
Goif Brand Triple Tonic 7-3-2													
Goif Brand Crabgrass Preventer						7 3/4							
Nulife Fertilizers													
Nulife Deluxe Lawn Food 10-4-6													
Nulife Lawn & Garden Fert. 6-10-4													
Nulife Organic Lawn Food 5-3-2													
Nulife Turf Aid (Weed & Feed)													
Nulife Winterizer 4-10-3													
Organic Compost Corp.													
Dairy Organic Compost													
Fertiflife Organic Compost	14	14	14	14	14	14	14	14	14	14	14	14	14
Fertile Cattle Manure													
Fertile Sheep Manure													
Pacific Coast Borax Co.													
UREABOR Weed & Grasskiller	4	5	7										
Lee Patten Seed Co.													
Patco Lawn Food 9-8-3	6 1/2												
Patco Featherweight 20-10-5													
Patco Combo 10-6-4	6 1/2												
Patco Weedkill	5 1/2												
Patco Pestkill	6 1/2												
Patco 'Stop'													
Pax Company													
Pax Craigrass & Soil Pest Control													
Phillips Petroleum Co.													
Ammonium Nitrate													
Ammonium Sulphate 21-0-0	4	5	6	7	8								

Note...
 **These products are applied by volume rather than weight. Lawn Beauty dial settings given for these products closely approximate desired application rates.

BRAND NAME PRODUCT	Pounds Per Thousand Square Feet												
	1	2	3	4	5	7	10	15	20	30	40	50	60
Potash Rock Co. of America													
Hydro-Tite										8 1/4			
The Reliance Fertilizer Co.													
Reliance Lawn & Garden 5-10-5												12	13
Religo 5-10-5												10	14
Reliance "FUN" for Turf & Green 12-5-8													
Reliance "FUN" for Turf & Green 12-5-8											9 1/4		12
O. M. Scott & Sons Co.													
Bonus									4 3/4				
Clout	3												
Seaboard's Craigrass Seed Killer													
Seacoast Laboratories Inc.													
Chlorane 12% Granular in Vermiculite	5 1/4												
Chlorane 10% Granular in Attaclay	3												
Sewerage Commission, Milwaukee													
Milorganite 5-5-3-0						11							
Milorganite 5-5-3-0							7 1/2	9 1/4	11 1/4	13			
Milorganite Plus 2,4D								10 1/4	12 1/4				
Milorganite Plus, 2,4D								9 1/4	1				
Milcyanate										10 1/4			
Smith-Douglas Co.													
Nutro Supreme Lawn Food 15-5-5						6							
Nutro Plant Food Pellets 8-8-8							8			10	11	12	13
Nutro Turfgrass Food								7 1/2		9 1/4			
Nutroite								10 1/4					
Sacco G & F 10-6-4							5 1/2			7			
Nutro Weedo Plus 2,4-0 10-6-4									5 3/4				
Sacco Plant Food 4-12-4									7 1/2				
So-Green Industries													
So-Green 7-7-7							4 1/2			7 1/4			9 3/4
The Stadler Fertilizer Co.													
Triple XXX Lawn & Tree Food 10-6-4													
Triple XXX Ban-A-Weed 10-6-4													
Triple XXX Summer Safe 10-6-4													
Triple XXX Light Weight Lawn Food 10-10-5													
Triple XXX Ban							5 3/4						
Triple XXX Gone							8 1/2						
Triple XXX Vanish							6 1/2						
O. M. Scott & Sons Co. (cont'd)													
Cope													
4-XD Weed Control													
Kansel													
Lawn & Turf Pest Control													
New Turf Builder 20-10-5													
Organic Fertilizer Scott											3 1/2		

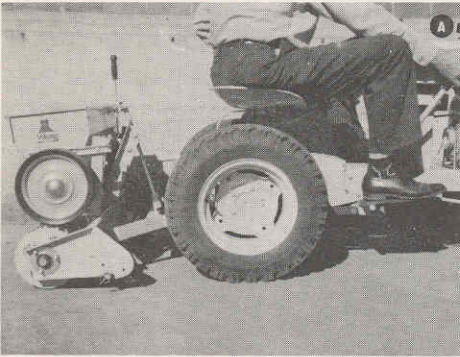
This Lawn Beauty dial setting is for spreading in a straight across and back pattern.
 This Lawn Beauty dial setting is for spreading in a "Criss-Cross" pattern.

BRAND NAME PRODUCT	Pounds Per Thousand Square Feet												
	1	2	3	4	5	7	10	15	20	30	40	50	60
Soil Improver													
Weed & Feed													
Insect Control						7 1/2							
Seaboard Seed Co.													
Seaboard's Lawn & Plant Food 20-10-5													
Seaboard's Craigrass Plant Killer													
Seaboard's Lawn Feeding Weed Killer													
Summers Fertilizer Co.													
Kapco Turf Food 6-10-4							6	7					
Kap-Organic Plant Food 5-5-0													
Sup-Ro Mfg. and Sales													
Sup-Ro Fertilizer Swift & Co.													
Golden Vigoro 6-10-4													
Vigoro Plant Food 6-10-4													
Rid Crabgrass Preventive													
L. Tewelus Seed Co.													
Tewelus Lawn Fertilizer							5	7					
Tewelus Weed & Feed													
Tewelus Craigrass Killer													
Tewelus Craigrass Preventer													
Tewelus Dandelion Killer													
Nu-Turf Lawn Fertilizer													
Nu-Turf Craigrass Killer													
Nu-Turf Dandelion Killer													
Union Stock Yards Co. of Omaha													
Yardo Cattle Manure 2-1-2													
Yardo Sheep Manure 2-1-2													
Valley Feed & Supply Co.													
Adorna 3-1-1													
Soilite													
Vaughan's Seed Co.													
R. O. Craigrass Killer													
One Shot													
Pre-Kill													
Organic Lawn Food 10-6-4													
Turf-Lite 20-10-5													
Feeder-Weeder Plus 2,4-D													
Walker-Gordon Laboratory Co.													
Bovung Cow Manure													
The Wayside Gardens													
Plant Food													
Western Peat Co., Ltd.													
Hi-Press Peat Mess													
Whitney Seed Co.													
Vital Lawn Fertilizer 20-10-5													
Vital Weed & Feed 20-10-5 Plus 2,4-D													
Vital Craigrass Killer													
Wilson & Toomer Fertilizer Co.													
Gro-Tone Lawn & Garden 5-9-5													
S. D. Woodruff & Sons Co.													
Turf Food 20-10-5													
Turf Food 10-6-4													
Two-For-One 10-6-4 Plus Weed Killer													
Craigrass Killer													
Wyandotte Chemicals Corp.													
Turfacc													

OPERATING INSTRUCTIONS

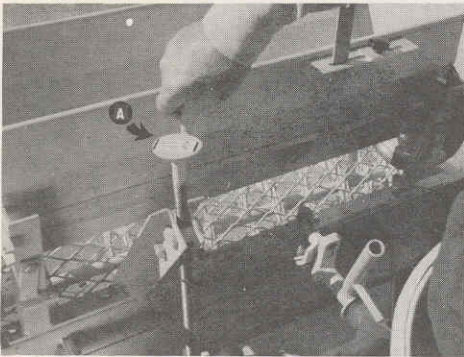
MODEL 33 VIKING ROLLER BLADE

Figure 1



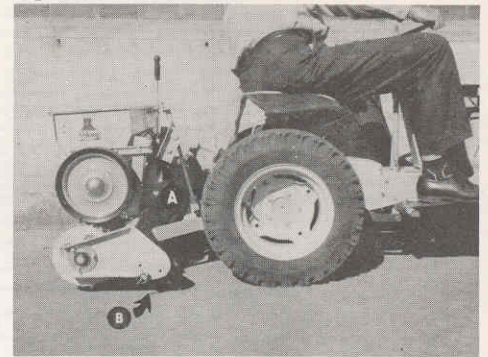
After Roller Blade is mounted on tractor according to mounting instructions, entire machine may be raised by means of lifting lever of tractor as shown at (A) in Figure 1. Lever should be in complete down position for proper operation.

Figure 2



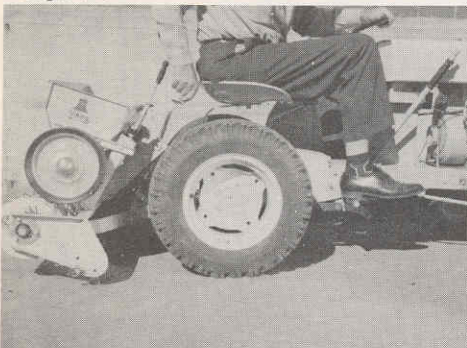
Pitch of the machine is controlled by pitch crank (A) in Figure 2. Turning the crank clockwise pitches the roller blade back and raises the blade up off the ground. As in (B) Figure 3.

Figure 3



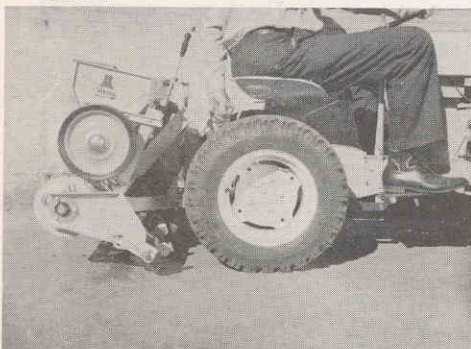
Turning the crank counter clockwise pitches the Roller Blade forward or lowers the blade toward ground. As in Figure 4.

Figure 4



There are two catches, (right one shown at (A) in Figure 3) which hold the hopper up off grid, roller and out of operation. To lower hopper into operating position lift rear of hopper slightly, disengage both catches and lower hopper until wheels ride firmly on Grid Roller.

Figure 5



With slicing attachment installed, entire weight of machine can be placed on slicing blades for deep penetration, by turning pitch crank counter clockwise which lowers blades and raises grid roller. See Figure 5 (additional weight may be added by filling hopper with fertilizer or coarse sand) Figure 5.

Same Instructions Apply to Scarifier Attachment.

Patents Nos. 2,940,640 2,965,053
Other Patents Pending



VIKING MANUFACTURING CO.

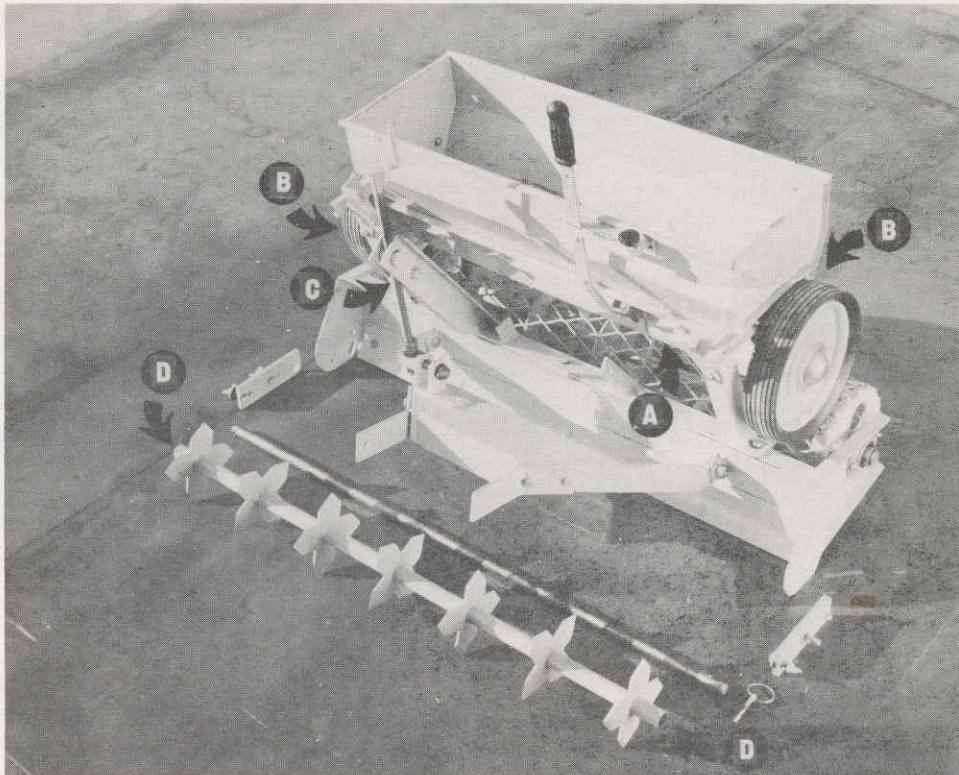
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PRescott 8-3578

Quality Machinery Since 1931

MAINTENANCE INSTRUCTIONS

MODEL 33 VIKING ROLLER BLADE



Patents Nos. 2,940,640 2,965,053

Other Patents Pending

There is no maintenance required on the Model 33 Roller Blade other than to keep the hopper clean.

To do this: Remove bottom slide, (A). Wipe clean with dry cloth then coat hopper bottom and slide with oil.

Wheel bearings and agitator (B) may be oiled from outside of hopper.

Threads of pitch control screw (C) should be oiled periodically to insure ease of operation.

A heavy grease should be put into pipe (D) of slicing attachment before sliding shaft through it.



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SET-UP INSTRUCTIONS

MODEL 33 VIKING ROLLER BLADE

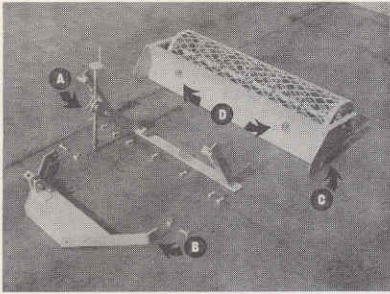


Figure 1

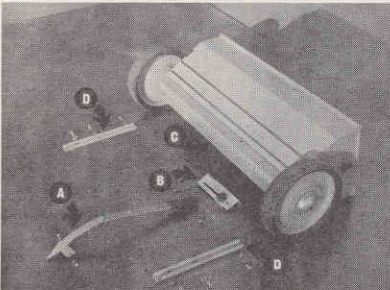


Figure 2

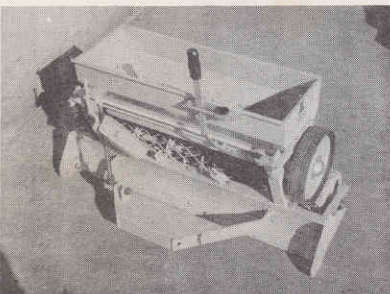


Figure 3

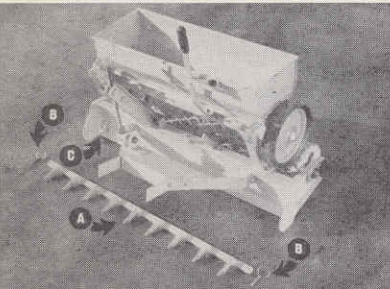


Figure 4

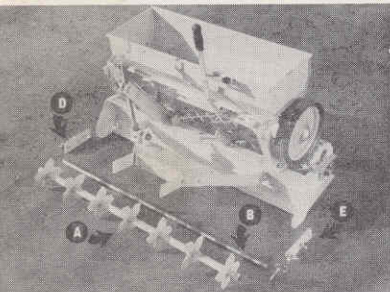


Figure 5

Bolt bracket (A) Figure 1 to top of blade (C) Figure 1 using eight $\frac{3}{8}$ " x $\frac{3}{4}$ " capscrews and lockwashers. Bolt frame (B) Figure 1 to brackets (D) Figure 1 using two $\frac{1}{2}$ " x $1\frac{1}{4}$ " bolts and self locking nuts. Caution: Do not draw these nuts up too tightly.

Insert slide lever (A) Figure 2 into slot of regulator plate (B) Figure 2 and engage tip into slot of bottom slide (C) Figure 2. Fasten slide lever bracket to hopper using two $\frac{3}{16}$ " x $\frac{3}{8}$ " bolts lockwashers and nuts, with nuts inside hopper. Fasten regulator plate (B) Figure 2 to hopper using two $\frac{1}{4}$ " x $\frac{1}{2}$ " bolts, lockwashers and nuts. Before tightening these nuts, set adjusting plate on No. 19. Move slide lever so that openings in bottom slide (C) Figure 2 form perfect rectangular openings with the openings in the hopper bottom. Move regulator plate (B) Figure 2 until lever rest against adjusting plate of No. 19, then tighten very securely.

Attach braces (D) Figure 2 to hopper using four $\frac{1}{4}$ " x $\frac{5}{8}$ " bolts, lockwashers and nuts.

Assemble seed hopper to Roller Blade, using two $\frac{3}{8}$ " x 1" bolts and self locking nuts. Draw nuts tight then back off $\frac{1}{2}$ turn.

To attach scarifying bar (A) Figure 4 remove klik pins, (B) Figure 4 insert bar into slots of wings at (C) Figure 4. Reinsert klik pins outside of wings.

To attach slicing attachment (A) Figure 5 insert shaft (B) Figure 5 through pipe of slicing attachment (A) Figure 5. Bolt brackets (D) Figure 5 and (E) Figure 5 to outside of wings of blade using four $\frac{3}{8}$ " x $1\frac{1}{4}$ " bolts, washers and wing nuts. Large holes in brackets should be nearest to ground. Shaft (B) Figure 5 should be inserted into large hole of bracket so that klik pin hole in shaft is on same side as bracket with klik pin hole. Klik pin is then inserted through pin hole in bracket and pin hole in shaft as shown at (A) in Figure 5A.

Patents Nos. 2,940,640 2,965,053
Other Patents Pending

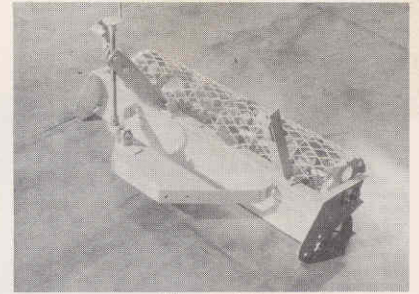


Figure 1A

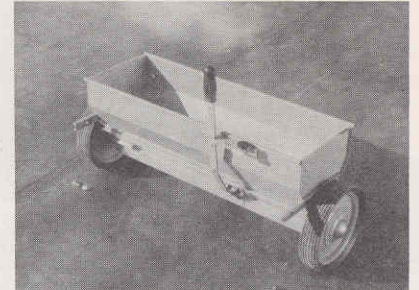


Figure 2A

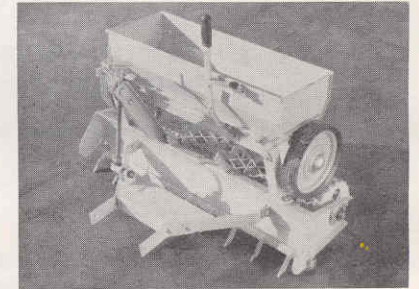


Figure 4A

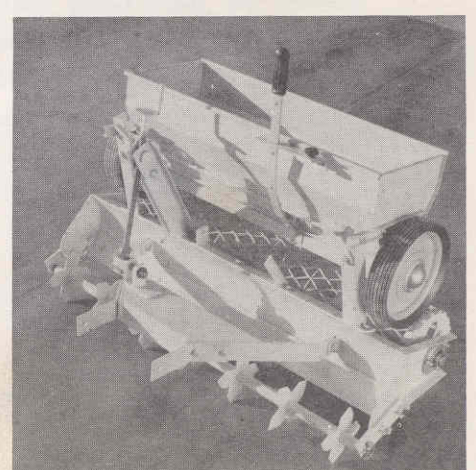


Figure 5A



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PARTS LIST

MODEL 33 VIKING ROLLER BLADE

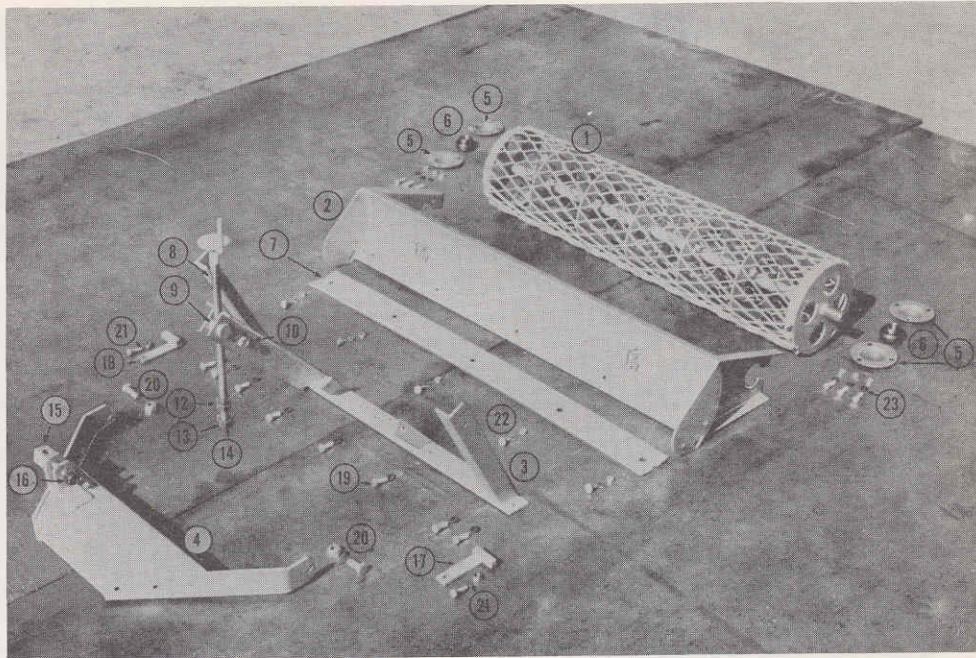
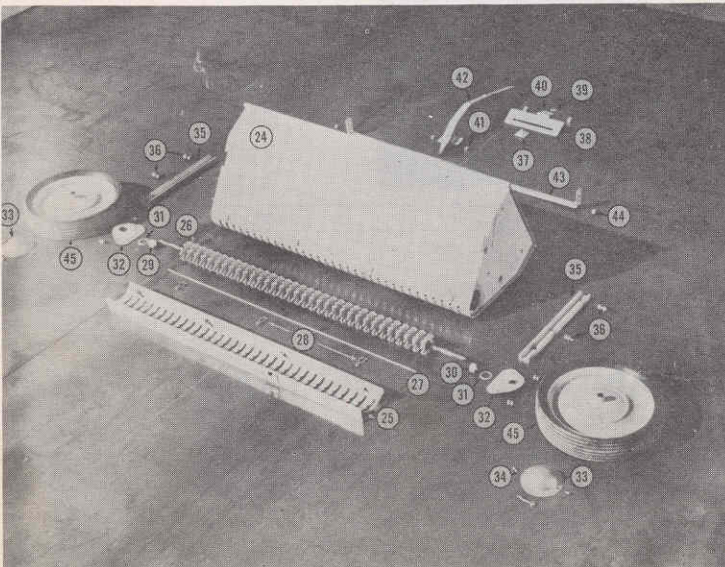


FIG. NO.	DESCRIPTION	PART NO.	FIG. NO.	DESCRIPTION	PART NO.
1	Grid Roller	33001	15	Anchor Pin	33015
2	Blade Frame	33002	16	5/8" Self Locking Nut	33016
3	Pitch Bracket	33003	17	Hopper Catch Left	33017
4	Wishbone	33004	18	Hopper Catch Right	33018
5	Bearing Flange (4 used)	33005	19	3/8" x 3/4" Capscrews and LW (8 used)	33019
6	Sealed Ball Bearing	33006	20	1/2" x 1 1/2" Bolt and Nut (2 used)	33020
7	Replacement Blade	33007	21	3/8" x 3/4" Bolt and Nut (2 used)	33021
8	Pitch Screw	33008	22	3/8" x 1" Carriage Bolts, Lockwashers and Nuts (5 used)	33022
9	Threaded Bushing	33009	23	5/16" x 3/4" Bolts, LW and Nuts (6 used)	33023
10	1/2" x 1 3/4" Bolt Spacer and Nut	33010	24	Hopper	33024
12	5/8" Jam Nuts (2 used)	33012	25	Bottom Slide	33025
13	5/8" Castelated Nut	33013	26	Agitator	33026
14	1/8" x 1" Cotter Pin	33014	27	Agitator Rod	33027
			28	Spring Clip (3 used)	33028
			29	Left End Spacer	33029
			30	Right End Spacer	33030
			31	Shaft Washer, R and L	33031
			32	Bearing Assembly (2 used)	33032
			33	Hub Cap (2 used)	33033
			34	3/4" Screws (6 used)	33034
			35	Hopper Hangers (2 used)	33035
			36	1/4" x 5/8" Bolts, Lockwashers and Nuts (4 used)	33036
			37	Weld Plate	33037
			38	Regulator Plate	33038
			39	Knob	33039
			40	Slide Adjusting Plate	33040
			41	1/4" x 3/4" Bolts and Nuts (2 used)	33041
			42	Slide Lever	33042
			43	Baffle	33043
			44	1/8" x 1/2" Stove Bolts and Nuts (2 used)	33044
			45	Wheel (2 used)	33045

SEEDER SECTION



37	Weld Plate	33037
38	Regulator Plate	33038
39	Knob	33039
40	Slide Adjusting Plate	33040
41	1/4" x 3/4" Bolts and Nuts (2 used)	33041
42	Slide Lever	33042
43	Baffle	33043
44	1/8" x 1/2" Stove Bolts and Nuts (2 used)	33044
45	Wheel (2 used)	33045

MODEL 33-2 SLICING ATTACHMENT

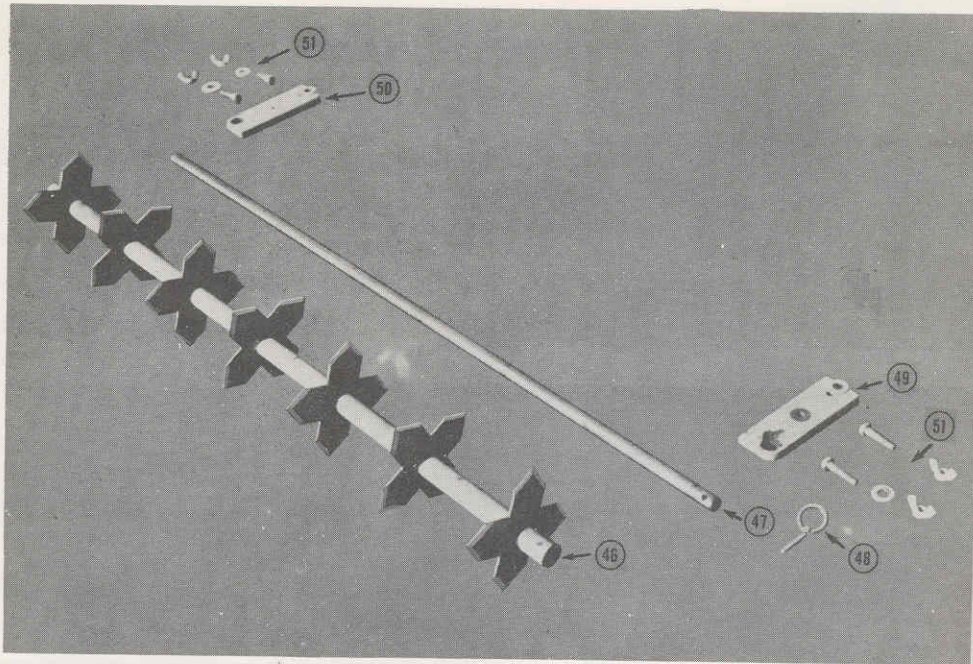


FIG. NO.	DESCRIPTION	PART NO.
46	Slicing Blades and Tube	33046
47	Shaft	33047
48	1/4" Klik Pin	33048
49	Left Hand Bracket	33049
50	Right Hand Bracket	33050
51	3/8" x 1 1/4" Bolts Washers and Wing Nuts (4 used)	33051

MODEL 33-1 SCARIFIER ATTACHMENT

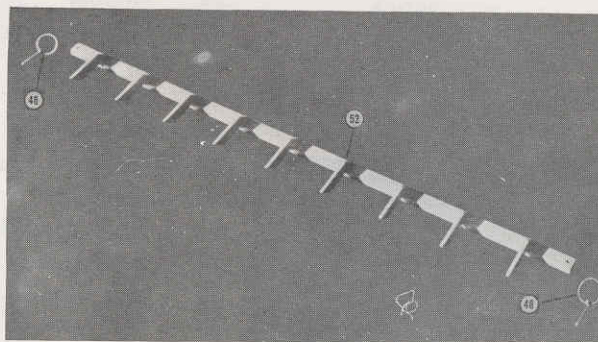


FIG. NO.	DESCRIPTION	PART NO.
52	Scarifier Bar	33052



VIKING MANUFACTURING CO.

MANHATTAN, KANSAS

PRescott 8-3578

Quality Machinery Since 1931

PARTS PRICES MODEL 33 ROLLER BLADE

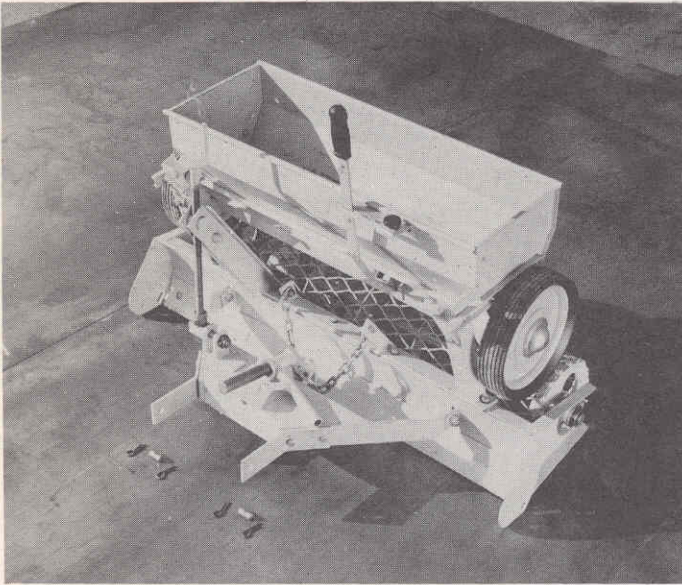
F. O. B. Manhattan, Kansas Effective March 1, 1965

PARTS NO.	DESCRIPTION	PRICE
33001	Grid Roller	49.00
33002	Blade Frame	38.00
33003	Pitch Bracket	12.00
33004	Wishbone	11.00
33005	Bearing Flange (4 used) . . . . .	.45
33006	Sealed Roller Bearing (2 used)	3.45
33007	Replacement Blade	9.00
33008	Pitch Screw	8.50
33009	Threaded Bushing	1.40
33010	Bolt, Nut, and Spacer . . . . .	.20
33012	Jam Nuts (2 used) . . . . .	.30
33013	Castellated Nut . . . . .	.50
33014	Cotter Pin . . . . .	.03
33015	Anchor Pin	3.90
33016	Self Locking Nut . . . . .	.50
33017	Hopper Catch Left	1.40
33018	Hopper Catch Right	1.40
33019	Cap Screws and Lock Washers (8 used) . . . . .	.06
33020	Bolt, and Self Locking Nuts (2 used) . . . . .	.40
33021	Bolt, and Self Locking Nuts (2 used) . . . . .	.35
33022	Carriage bolts, Washers and Nuts (5 used) . . . . .	.11
33023	Bolts, Lockwashers and Nuts (6 used) . . . . .	.09
33024	Hopper	17.50
33025	Bottom Slide	4.50
33026	Agitator	11.50
33027	Agitator Rod . . . . .	.35
33028	Spring Clip (3 used) . . . . .	.15
33029	Left End Spacer . . . . .	.20
33030	Right End Spacer . . . . .	.20
33031	Shaft Washer (2 used) . . . . .	.15
33032	Bearing Assy. (2 used) . . . . .	.50
33033	Hub Caps (2 used) . . . . .	.35
33034	3/4" Screws (6 used) . . . . .	.05
33035	Hopper Hangers (2 used)	1.80
33036	1/4" x 5/8" Bolts, Lockwashers and Nuts (4 used) . . . . .	.10
33037	Weld Plate . . . . .	.55
33038	Regulator Plate	1.35
33039	Knob . . . . .	.35
33040	Slide Adjusting Plate . . . . .	.40
33041	1/4" x 3/4" Bolts and nuts (2 used) . . . . .	.10
33042	Slide Lever	1.65
33043	Baffle	1.45
33044	1/8" x 1/2" Stove Bolts and Nuts (2 used) . . . . .	.05
33045	Wheel (2 used)	4.35
33046	Slicing Blades and Tubes	16.00
33047	Shaft	3.50
33048	1/4" Klik Pins . . . . .	.40
33049	Left Hand Bracket	3.60
33050	Right Hand Bracket	3.60
33051	3/8" x 1 1/4" Bolts, Washers, and Wing Nuts (4 used) . . . . .	.15
33052	Scarifier Bar (Order as Attachment)	

VIKING ROLLER BLADE

SPECIFICATIONS and PRICES

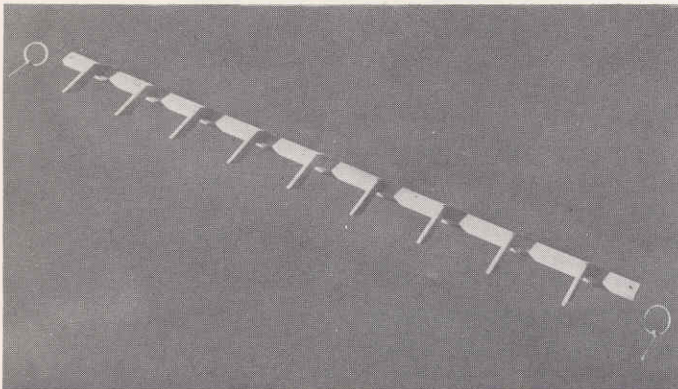
Prices F. O. B. Factory and Subject To Local Taxes Effective March 1, 1965



Model 33

ROLLER BLADE and SPREADER **\$160.50**

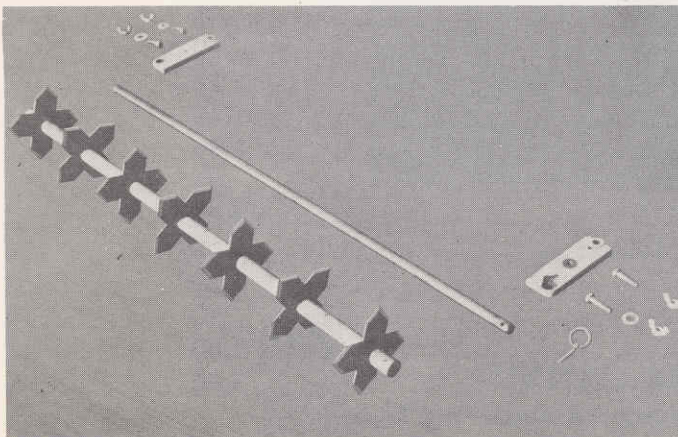
Weight 120 lbs.
 Blade Width 40"
 Roller Width 36"
 Hopper Width 30"
 Seed Capacity 30 lbs.
 Fertilizer Capacity 85 lbs.
 Mounting or Hitch — Specify make and model of tractor when ordering.



Model 33-1

SCARIFIER ATTACHMENT **\$9.00**

No. of Teeth 9
 Spacing of Teeth 4 1/2"
 Maximum Soil Penetration 3"
 Weight 10 lbs.



Model 33-2

SLICER ATTACHMENT **\$19.00**

No. of Blades 7
 Diameter of Blades 6"
 Spacing of Blades 6"
 Maximum Penetration 2"
 Weight 15 lbs.

ORDER BLANK

MAIL TO
VIKING MFG. CO. Manhattan, Kans.



Telephone
PR 8-3578

Ship to _____ Date _____
 _____ Customer Order No. _____

Ship Via	Ship When	<input type="checkbox"/> Payment Enclosed <input type="checkbox"/> Please Bill Us
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QUANTITY	MODEL NO.	PART NO.	DESCRIPTION
	33		Roller Blade and Seeder
	33-1		Scarifier Attachment
	33-2		Slicer Attachment
	Hitch		(State make and model tractor)

Firm Name _____
 Address _____
 City and State _____

By _____
 Signature of duly authorized officer.

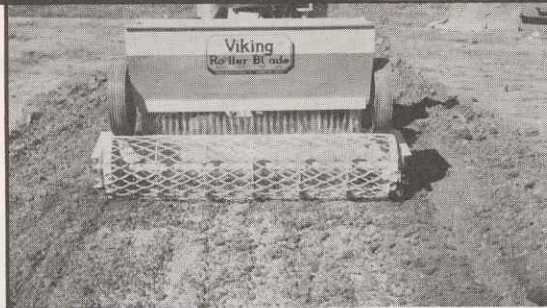
HOW ALL 4 MODELS OPERATE

(Model 33 is shown)



Scarifying

With scarifier attachment you can rip up hard packed ground. Additional down pressure caused by scarifying teeth help Grid Roller pulverize clods.



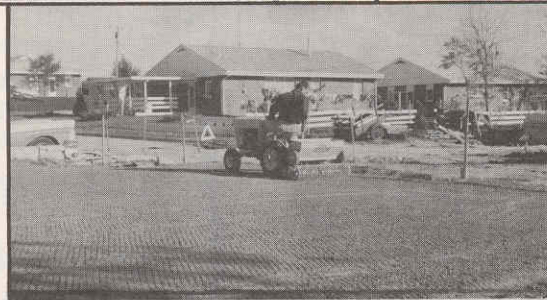
Fertilizing

Accurate spreading of recommended amounts is easily done. To work fertilizer more deeply into the soil, spread during scarifying or grading operation.



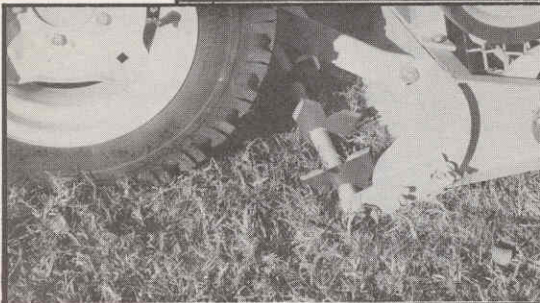
Leveling

With blade floating between Grid Roller and tractor wheels, it can be raised or lowered by the pitch control for a perfect levelling job.



Seeding

The grid pattern of the roller has an excellent pulverizing effect on clods. Dirt which is pulverized to the inside of the roller filters out the rear as you drive forward. The grid pattern also leaves an excellent quilt pattern on the completed seed bed with thousands of small conservation pockets to hold water.



Aerating

With slicing attachment in operating position, weight of machine will cause blades to slice through grass mat and thatch so that the soil will be aerated and openings will be provided for seed and/or fertilizer. Also, the root system and runners will be sliced.



Slicing

With slicing attachment in operating position spread fertilizer and seed. The grid roller will work seed into freshly sliced sod and will compact it around seed.

Let a Roller Blade Do YOUR Work!



RB 101-1161

VIKING MANUFACTURING CO.

MANHATTAN, KANSAS

PRescott 8-3578

Quality Machinery Since 1931

ORDER BLANK

MAIL TO
VIKING MFG. CO. Manhattan, Kans.



Telephone
PR 8-3578

Ship to _____ Date _____
_____ Customer Order No. _____

Ship Via	Ship When	<input type="checkbox"/> Payment Enclosed <input type="checkbox"/> Please Bill Us
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QUANTITY	MODEL NO.	PART NO.	DESCRIPTION
	33 33-1 33-2 Hitch		Roller Blade and Seeder Scarifier Attachment Slicer Attachment (State make and model tractor)

Firm Name _____
Address _____
City and State _____

By _____
Signature of duly authorized officer.

ORDER BLANK

MAIL TO
VIKING MFG. CO. Manhattan, Kans.



Telephone
PR 8-3578

Ship to _____ Date _____
Customer Order No. _____

Ship Via	Ship When	<input type="checkbox"/> Payment Enclosed <input type="checkbox"/> Please Bill Us
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QUANTITY	MODEL NO.	PART NO.	DESCRIPTION
	33		Roller Blade and Seeder
	33-1		Scarifier Attachment
	33-2		Slicer Attachment
	Hitch		(State make and model tractor)

Firm Name _____
Address _____
City and State _____

By _____
Signature of duly authorized officer.



For over thirty years, tools of modern agriculture and industry have flowed from Viking craftsmanship.

Tools of tomorrow are being designed, tested and developed today at this modern factory.

The sound growth of this company has been and always will be, built on quality materials, pride of craftsmanship, a desire to serve and the concept that good machinery of today can be improved for tomorrow.

We cordially invite you to visit our plant or call us at any time.

We appreciate it when you sell or use machines from Viking.



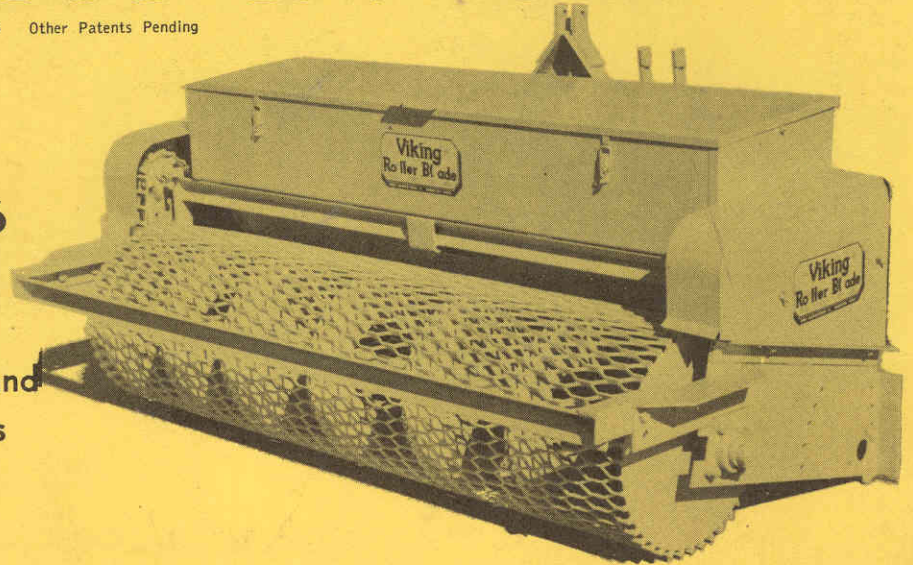
Big Brothers to the Model 33

Landscaping **Roller Blade**

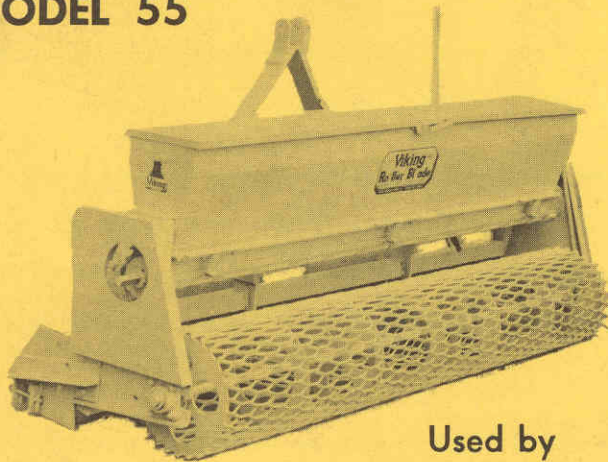
Patents Nos. 2,940,640 2,965,053 Other Patents Pending

PRO MODEL 66

Used by Golf Courses and
Professional Landscapers

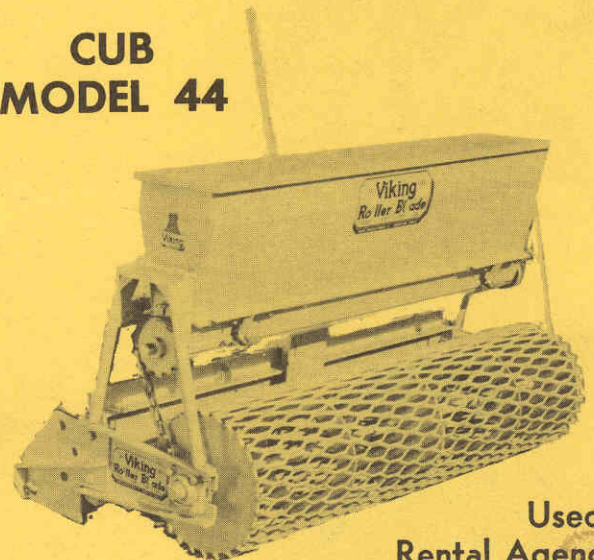


UTILITY MODEL 55



Used by
Institutions, Parks and
Utility Landscapers

CUB MODEL 44



Used by
Rental Agencies,
Lawn and Garden Shops
and Small Landscapers



PRINTED IN U.S.A.

VIKING MANUFACTURING CO.

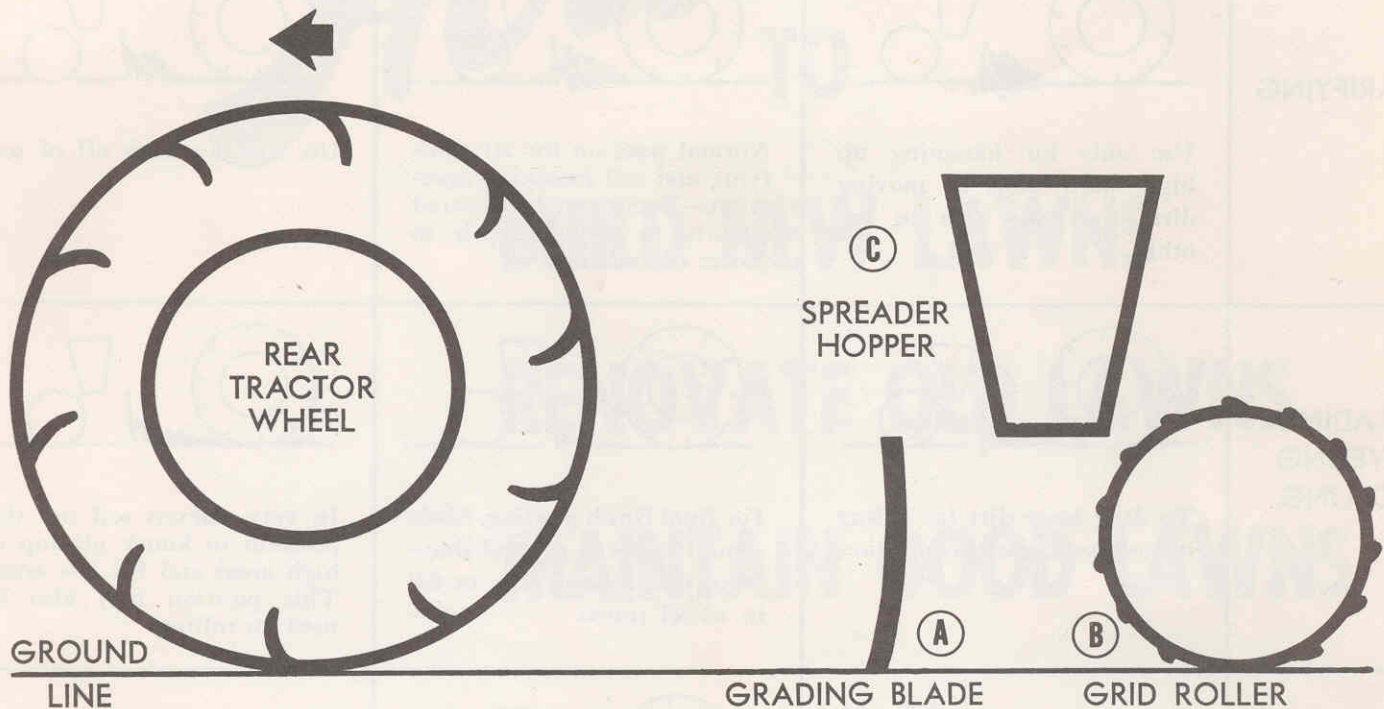
Phone PRescott 8-3578

Manufacturers of Quality Machinery Since 1931

MANHATTAN, KANSAS

The ABC's of the Roller Blade

Covered by Patents Nos. 2,940,640 2,965,053 Other Patents Pending




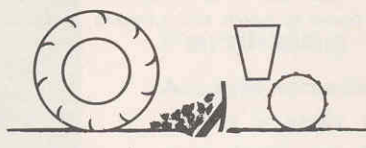
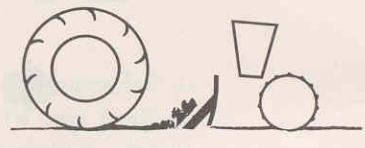
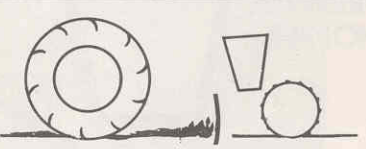
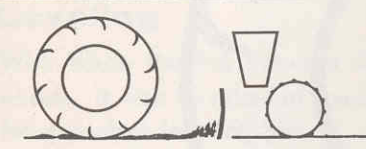
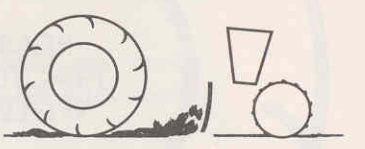
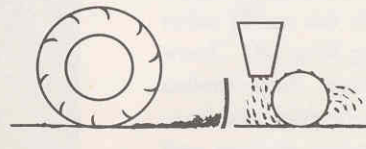
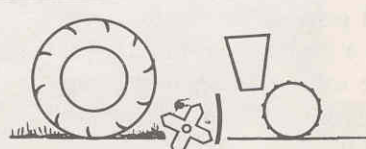
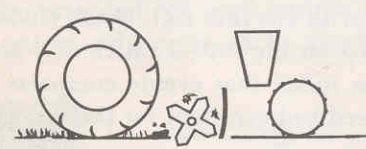
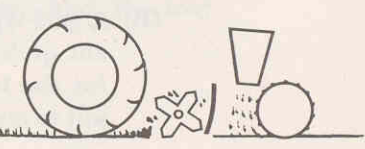
(A) A blade for grading and leveling, mounted between two wheels just like a road grader—The rear wheel of the tractor and the wheel B of the grid roller—A blade on which can be mounted scarifiers, slicers, and other attachments—A blade which can be controlled by the pitch of the machine.

(See pitch effect)

(B) A grid-type roller to cut into soil, break clods, and provide an erosion resistant quilt pattern on the soil—a roller that acts as a guide or leveling wheel for the blade—a roller that evenly compacts loose soil or breaks up lumpy soil to make a seed bed excellent for the best grass stand.

(C) A spreader for accurate spreading of grass seeds of all common types and fertilizers or plant foods in their many free-flowing forms—Both seeds and fertilizer are dropped on the leading edge of the grid roller B to achieve a precise broadcast pattern accurately controlled by operator.

PITCH EFFECT

	FORWARD	LEVEL	BACK
SCARIFYING	 <p>Use only for loosening up high, hard spots or moving dirt from one area to another</p>	 <p>Normal position for all scarifying and soil loosening operations—Teeth can be lowered slightly to adjust depth to power of tractor</p>	 <p>Use to rake trash off of soil</p>
GRADING LEVELING ROLLING	 <p>To drag loose dirt for filling in low spots, use this position</p>	 <p>For final finish grading, blade should be set at ground line—Drag just enough dirt to fill in wheel tracks</p>	 <p>In very uneven soil use this position to knock off top of high areas and fill low areas. This position may also be used for rolling</p>
SEEDING AND FERTILIZING		 <p>This position will be used for most spreading operations — Blade should be lowered just enough to fill wheel tracks</p>	
SLICING AERATING OVERSEEDING	 <p>For maximum depth penetration of soil, thatch and grass, use this position — weight can be added to hopper in form of sand or fertilizer</p>	 <p>For lesser penetration use this position, with or without weight in hopper</p>	 <p>In overseeding use this position with enough pressure of roller on ground to turn agi-weight in hopper</p>

How TO

BUILD NEW LAWNS

RENOVATE OLD LAWNS

MAINTAIN GOOD LAWNS

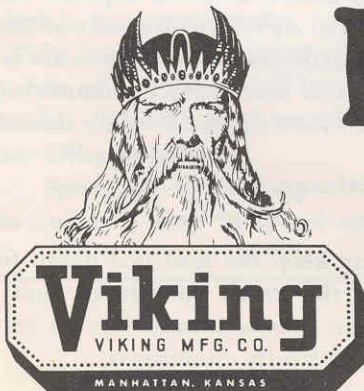
with the

VIKING

Landscaping

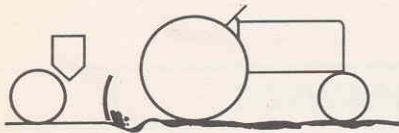
Roller Blade

Patents Nos. 2,940,640 2,965,053 Other Patents Pending



BUILD NEW LAWNS

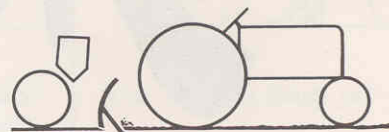
Step 1



Rough grading should be done before any leveling or finish work. Dirt should be dragged into extreme low spots and extreme high spots should be cut down. To do this you may need to alternately use the scarifier and blade.

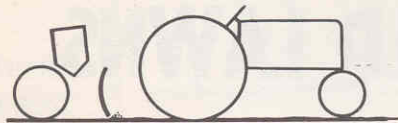
Step 2

After rough grade is established, scarifying teeth should be used over entire area. The pitch of the blade should be set, so that teeth penetrate ground but dirt does not build up in front of blade. In this position as teeth pull into ground additional down pressure is put on grid roller to help pulverize clods.



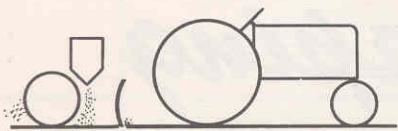
Step 3

After ground is thoroughly loosened, remove or raise scarifying teeth and begin leveling. The pitch of the blade should be set so that blade rides up off ground between rear wheels of tractor and grid roller. In this position it will shear off high spots and spill out dirt into low spots. By gradually lowering blade, so that a small amount of dirt is always carried in front of blade, your Roller Blade will do a perfect finish job on your lawn.



Step 4

Next spread a complete plant food fertilizer over entire area. (See application chart) To do this you should use scarifying teeth so that soil is opened up to work fertilizer down deep. These ruts left by scarifying teeth will be filled up by Step No. 5.



Step 5

Loosen knob on seed regulator and set regulator according to application chart. Keep hopper bottom closed and fill seed hopper. With scarifying teeth removed or raised set pitch of blade so that it always carries a small amount of dirt in front of blade to cover wheel tracks and ruts. (Trial and error will determine this before you start spreading seed) When Blade and regulator have been set properly open hopper by pushing lever firmly against regulator and drive straight across lawn. Close hopper when you reach other side.

Blade will relevel the ground covering the fertilizer deeply. The seed will fall on the front side of the grid roller which will spread it into a precise broadcast pattern; the grid roller will compact part of the seed into the top $\frac{1}{4}$ -inch of soil and part of the seed will be left exposed. As the roller passes over the seed, light pulverized dirt will filter out of the inside of the roller onto the seed behind. Furthermore the grid roller will leave a perfect quilt pattern on the finished seed bed. Thousands of tiny conservation pockets will help prevent rainfall runoff while the seedlings are getting established.

Step 6

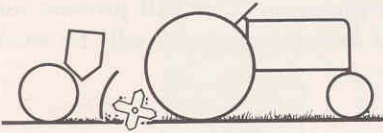
With a fine spray keep the seed bed damp for the first few days until the seeds germinate and gradually lengthen the time between waterings as the stand of grass becomes more firmly established.



RENOVATE OLD LAWNS

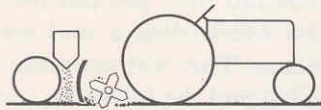
Step 1 If your lawn has bad infestations of crab grass or weeds, secure a good commercial crab grass or weed killer and apply to lawn with Viking Roller Blade in advance of renovation work. Follow recommendations as to length of time to

elapse, before renovating and seeding. Mow existing grass close and remove clippings. Renovation work is best done in early spring or early fall but may be done anytime during growing season.



Step 2 With slicing attachment installed or lowered, and with blade pitched forward so that entire weight of machine is on slicing attachment, fill hopper with fertilizer or coarse sand for additional weight. Drive over entire lawn several times. Where your grass stand is good, this will aerate the soil, cut the thatch, slice the runners and root systems so that the plants will propagate. It will also provide openings for fertilizer, seed, and moisture to go deep into soil. Over areas which may be

dead from the chemical weed or crab grass killer or which are bare, drive in a figure 8 or circular pattern. This will churn up the soil into a more pulverized seed bed. It may be necessary to use the scarifying teeth, if some of the bare spots are hard packed, in order to further loosen soil.



Step 3 Set the pitch of the Viking Roller Blade so that the slicing attachment is penetrating the ground slightly and the grid roller is firmly on the

ground. Lower the hopper by releasing the two catches which hold it off the grid roller. Set the regulator according to the application chart for the fertilizer to be used. Fill hopper with fertilizer, open slide by moving lever over against regulator slide. Drive straight across lawn. Close slide when you reach other side or when you stop.

Step 4 Apply seed according to application chart. It is a good idea to use only half of the recommended volume and spread seed in one direction, then use the other half and spread seed in the cross direction. This will help eliminate the possibility of skips. Keep the lawn watered well until the seedlings become well established.



An explanation of "thatch", is necessary because it is a condition which is not readily apparent to the average person and it is a condition which can stifle the healthy growth of a lawn.

As clippings and dead leaves settle down to the soil between the grass blades they form a thatch over the ground. In time this thatch will decompose and add valuable humus to the soil, however if this thatch builds up faster than it decomposes it forms what is known as mat.

This mat will prevent moisture and plant food from entering the soil. The root system of the grass will begin to grow in the thatch instead of down into the soil as it should. Remember: A small amount of thatch is a healthy condition but too much is an unhealthy condition.

Speeding up decomposition is a good solution to this problem. Aerating or slicing the soil is a way to speed up decomposition.

MAINTAIN GOOD LAWNS

Step 1 As soon as the growing season gets underway it is time to put on the first complete plant food application. Install the slicing attachment to the Viking Roller Blade and aerate your entire lawn well. This will (1.) Speed up the decomposition of thatch. (2.) Open up the soil so that air, and water can work deep into the root system. (3.) Slice runners and root systems so that healthy new plants will spring up.

Step 2 Fungicides, insecticides, herbicides and fertilizer can be spread accurately with the Viking Roller Blade. These should be spread at the rates recommended by the manufacturers. Consult application chart to find setting on regulator slide of the seed and fertilizer hopper.

Step 3 On Bermudagrass, nitrogen should be applied often during the growing season. It is a good practice to aerate your lawn deeply several times before spreading nitrogen. This will provide many deep openings so that the nitrogen will be worked deep into soil.

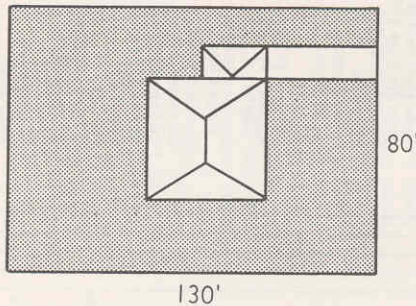
Step 4 If your lawn is a warm weather grass, such as Bermudagrass, and you wish to maintain a good green color longer in the fall then **you can** use the Viking Roller Blade for overseeding a cool season grass such as rye or fescues. This will maintain the green color later in the fall and the following spring the warm weather grass will take over again.



VIKING MANUFACTURING COMPANY
MANHATTAN, KANSAS

How to Estimate Your Seed and Fertilizer Requirements

How to Set Your Viking Seed Hopper Accurately



EXAMPLE

$80 \times 130 = 10,400$ Sq. Ft. Total Lot Size
 Subtract for House
 $30 \times 45 = 1,350$
 Garage $15 \times 20 = 300$
 Drive $10 \times 45 = 450$
 2,100
 $10,400 - 2,100 = 8300$ Sq. Ft. to be seeded

To apply 20 pounds of fertilizer per one thousand sq. ft. multiply $20 \times 8.3 = 166$ lbs. Fertilizer needed.

How to Use Application Chart

Find Brand Name in this column such as

Armour Vertigreen 6-12-6

Pounds Per 1000 Square Feet													
1	2	3	4	5	7	10	20	30	40	50	60	75	100
							12						

Read over to column giving 20 lbs. per 1000 sq. ft.

This is setting on Viking Seeder

OVERLAP AT LEAST 6" ON EACH PASS OF ROLLER BLADE TO AVOID SKIPS.