

**Verti-cutting with the  
Triplex Verti-Cut® is good  
for grass and good for golf**

The old and established concept of verti-cutting was an annual fall renovation program where the verticut blades were set deep to cut thru the thatch and penetrate the ground. This method left little furrows which had to be filled in with top dressing. The green then presented a mental hazard to the golfer.

Golf course superintendents realized that a reel mower does not do a complete job of mowing bent grasses, where 35% of the growth is horizontal, even if not walked on by golfers. Brushes and combs are not the answer for bringing up this horizontal growth, so a reel mower would cut it off. This resulted in grain, runners, thatch, and disease in the grass.

Tommy Mascaro, of WEST POINT, who did much pioneer work in the development of machines for aeriating, spiking and verti-cutting, with HAHN engineers, modernized verti-cutting to VERTICAL MOWING of the horizontal portion of the grass.

With VERTICAL MOWING, the blades do not touch the ground. They are set 1/8" above the bottom of the reel rollers. After a green has been properly Verti-cut, you can barely see the fine lines in the grass where the vertical blades have done their work. This should be done once a week, alternating directions each time. You will get more grass in the baskets than with regular mowing, which proves the horizontal mower does not do the complete job.

To properly cut the grass with a vertical blade, it must be sharp and have a tip speed of at least 5,000 feet/min. (Horizontal rotary mowers have a tip speed of 12,000 to 19,000 feet/min.) HAHN VERTI-CUTS are 8 inches in diameter and turn at 2,400 R.P.M. to achieve the 5,000 feet/min. tip speed. HAHN has another advantage, that the reels can be changed in 5 minutes without tools.

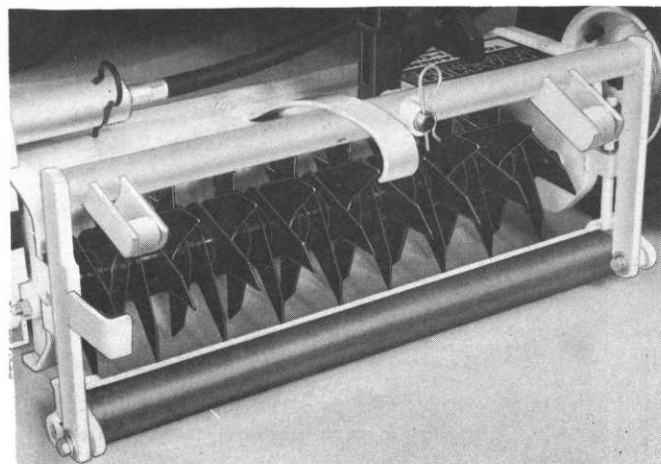
HAHN ALSO PUTS THE CLIPPING IN THE BASKETS.

**Greens managed and  
maintained with the Verti-Cut®  
are a pleasure to putt on**

# **Hahn**

## **the ultimate in fine precision vertical mowing**

When grass is cut with conventional greens mowers, only the grass blades that are erect are cut off and removed. Since all grass blades that grow do not stand erect, but rather lay flat with the surface of the green, these blades form 'grain' which has a pronounced effect on the putt of the ball. The Verti-Cut® is a precision machine designed for this specific purpose — to remove and control 'grain' as it forms.



## **triplex Verti-Cut reels**

Verti-Cut reels use patented, thin offset blades to remove thatch and grain as they begin to form. With 67" of cut (the Verti-Cut reels are the same width, and use the same grass catchers).

**KROMER CO**

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# PRESIDENT'S REPORT

With scorching temperatures in the mid-nineties, a large number of M.G.C.S.A. (64) journeyed to the Northfield Country Club.

As most of the golfers will testify, Allen Ista had the course in excellent shape. The large, rolling greens and the dense rough made the course a fine test of golf.

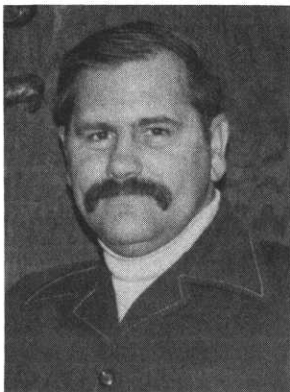
At the evening business meeting, two new members were voted in: Donald Klingelhoets, Braemar, B2; Thomas Westbrook, Carriage Hills, A; Malcolm Colby, Colby Pioneer Peat Co., F; Ken Quandt, Swift Agricultural Chemicals, Fl. Reclassifications: Dale Caldwell, Town and Country Club to B1 and Harvey Boysen, Northern Hills Country Club to A.

Tournament Chairman John Nylund reported that the afternoon shotgun is filled but there is ample room in the 8:00 a.m. shotgun.

Following the meeting, everyone was treated to a fine buffet dinner. The M.G.C.S.A. extends its sincere thanks to the host superintendent, Allen Ista, and the Northfield Country Club for hosting this meeting.

Keith Scott  
President, M.G.C.S.A.

## MEET YOUR SUPERINTENDENTS !



JERRY MURPHY has been the superintendent at the Somerset Country Club in St. Paul for the past fifteen years. Prior to his joining the Somerset staff, Jerry had worked at golf courses in Aberdeen and Watertown, South Dakota. A graduate of the Penn State Turf School, Jerry has furthered his knowledge in agronomy through courses taken at Michigan State University and the University of Minnesota. Jerry has proven to be a very active member of M.G.C.S.A. since joining in 1961, having held every office of the association including one term as president. He has also played a leading role in the national association, serving on their board, speaking at national conferences and becoming one of the first five to complete the requirements for a C.G.C.S. But most of all, Jerry is known as a person who is always willing to help any superintendent solve any type of turf problem.



CLEM McCANN is the only golf course superintendent the Bunker Hills Golf Club in Coon Rapids has ever known. Clem not only has nurtured the course built in 1967 into a championship layout, but he was also very instrumental in the construction of the course. An eleven year member of M.G.C.S.A., Clem has served several years on the association's board of directors. Unfortunately, Clem has announced his retirement effective the end of this year, and he plans to spend more of his time with his wife, Margaret, enjoying their favorite hobbies which include all types of sports and gardening. I am sure Clem will still attend many M.G.C.S.A. functions and we will certainly always be glad to see him as Clem is a man with great spirit and a heart full of kindness.

# 1978 SNOW MOLD REPORT

Dr. Ward C. Stienstra

Snow mold test plots were established at Pierz 10/20, Duluth 10/24, International Falls 10/25, Roseau 1/25, Fargo 10/26, Detroit Lakes 10/26, Bemidji 10/27, Rochester 11/7, Chaska 11/8, and St. Paul Compus 11/9 on golf course greens or green nurseries. Each treatment measured 4x11 ft. and was replicated 31 times. The fungicides were applied in five gallon water/1000 sq. ft. using a carbon dioxide powered wheel mounted boom sprayer at 40 PSI. Granules and fertilizers were applied with a 3 ft. wide drop spreader. Data are recorded as % Disease (Table 1).

Primary interest was on chloroneb, pentachloronitrobenzene and mercury or combination of these compounds and in late fall or dormant applications of nitrogen. The combination of Caloclor and Tersan SP or Caloclor and PCNB was better than Tersan SP and PCNB and slightly better than Caloclor alone. The use of nitrogen at the date of chemical application improved the color and growth in every location and did not increase disease. The slow release products performed poorer in general than the water soluble material. The sulfur containing product performed better in areas known to be sulfur deficient. This is the fourth season with good to excellent results with nitrogen fertilizers applied late in the fall.

Snow mold results at most other locations were poor. Jeffrey Buettner at Bemidji had snow cover on the test plot longer than any others with the exception of International Falls. Jeff provided good readings on the treatments as every time I stopped at the Bemidji Town and Country Club the green was covered with snow. At International Falls the weather remained warm and sunny until November 8 when rain and snow fell. Some icing developed and November 20, twelve inches of snow fell on unfrozen ground. During December and January, some rain fell compacting the snow and very little new snow fell through the rest of January. The test plot area was examined on April 21 by Don Petman and Frank Larson, the county agent and golf course superintendent respectively, who reported very heavy snow mold damage on the check plots and extensive mouse damage to the fungicide plots. I also observed the treatments and damage on April 27. On May 2 the International Falls golf course opened for play which was only one week later than the earliest season on record, 1977. The pictures of that test plot will interest most superintendents this fall. Little to no snow mold developed at the campus, Duluth, Fargo, Chaska or Pierz snow mold plot locations. However, treatments at each of these locations with one pound of actual nitrogen all looked very good. The plot at Roseau was inadvertently oversprayed by the new golf course superintendent and all ratings there were good to excellent.

Golf Green covers. This issue is far from dead and many again report excellent color, survival and growth with the covers. Portions of a green in Duluth and International Falls were covered with the 1976 wood fiber mat. The International Falls location is exposed to the northwest so the wind can (and does) come out of Canada across the Rainy River and over the green. The lower 1/3 was covered. On April 27, the date the mat was removed, approximately 1/2 inch of growth had occurred under the mat and a few diseased spots had developed. No snow mold was seen on the uncovered part. The entire green was treated on October 29 with a Caloclor-PCNB fungicide spray. The collar under the mat was the only area damaged by mice. This green is well drained and with the sunny conditions in April the turf under the mat remained quite dry. The back 1/3 which is the highest portion of the green did show some winter injury. At Duluth a high corner of the #14 green was covered with a mat while other portions received brush. No snow was trapped in the brush so direct comparison cannot be made. The area under the mat, most prone to winter kill, was on April 28 in excellent condition and the other section of the green while not severely damaged did not appear as vigorous. The superintendent, Eino Maki, said after two to three weeks the difference was gone and the entire green was in good shape.



A few summary thoughts on covers. In areas that regularly are damaged by winter kill, covers should be considered. This does not usually mean all 18 greens. For best results, the site should receive the recommended fungicide program. Don't try to reduce any fungicide treatments under the covers because those areas are most prone to disease development. The covered areas should have good surface drainage and tend to dry (internal drainage and direct exposure to spring sun) quickly in the spring. The cover should be placed on the green as late as possible to allow winter dormancy to develop and to promote surface drying. Areas that tend to accumulate water will be problem sites with covers. Removal of covers too early will permit spring low temperature kill. Remember the grass under the cover is more susceptible to spring temperature fluctuations than turf not covered. Late removal rather than early appears to have fewer problems. The exception to this statement is areas which remain wet or areas where snow mold has developed under the cover. Removing the cover to promote drying of the green and the mat for a day or two when the temperature is expected to remain above freezing and then replacing the dry mat on the dry green surface has also been successful. Others also report removing snow from the mat has hastened drying and reduced wet disease conditions.

Continued on Page 5

\*\*\*\*\*  
 \* MARK YOUR CALENDAR \*  
 \* 1978 G.C.S.A.A. FALL SEMINAR \*  
 \* SUBJECT-MANAGEMENT II \*  
 \* MINNEAPOLIS, MINN., OCT. 25-26 \*  
 \* COST \$80.00 MEMBER \*  
 \* \$115.00 Non-member \*  
 \*\*\*\*\*

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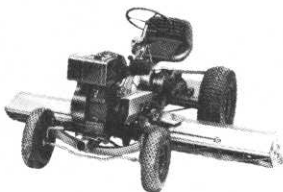


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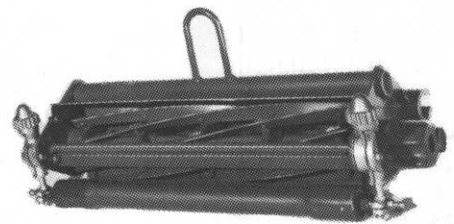
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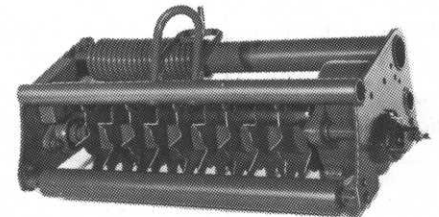
TABLE 1

RESULTS OF SNOW MOLD TEST AT  
ROCHESTER AND DETROIT LAKES

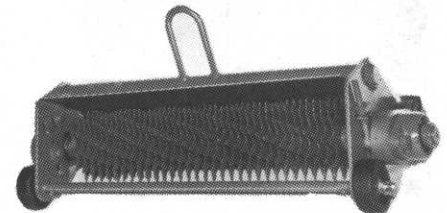
PRODUCTS	RATE	% DISEASE	
		ROCHESTER	DETROIT LAKES
Caloclor	3 oz.	0	.25
Caloclor	5 oz.	0	0
Tersan SP	4 oz.	.75	5.5
Tersan SP	8 oz.	2.5	3.5
PCNB	4 oz.	6	12.75
RP 26019	8 oz.	1.25	7.5
RP 26019	16 oz.	1.25	3
MF 582	9 oz.	.25	.5
MF 582	12 oz.	0	.5
Caloclor & Tersan SP	3 & 4 oz.	0	0
Caloclor & PCNB	3 & 4 oz.	0	0
Tersan SP & PCNB	4 & 4 oz.	.25	7
Caloclor & Tersan SP & Daconil	3 & 4 oz. & 8 f oz.	0	0
Caloclor & PCNB & Daconil	3 & 4 oz. & 8 f oz.	0	0
Tersan SP & PCNB & Daconil	4 & 4 oz. & 8 f oz.	0	1.75
Daconil	8 f oz.	3.25	4
Daconil	12 f oz.	.5	2
Daconil & Exhalt 800	8 f oz.	.75	1.75
Daconil & Exhalt 800	12 f oz.	.5	.25
GA 1-105	10 g	2.75	--
GA 1-105	25 g	.75	--
Ga 1-105	50 g	0	--
Calogran	6 lbs.	4.5	.5
Calogran	10 lbs.	--	.5
Scotts FFII	N	.5	1.5
Scotts FFII	D	--	0
Scotts FII	N	1.5	10.75
Scotts FII	D	--	2.5
PCNB	3 oz. ai	6.75	2.5
Scotts FII & Calogran	N & 6 lbs.	.25	.75
#30 & Milorganite	1# N	6.25	0
#30 & IBDU	2# N	7.25	0
#30 & N-NO <sub>3</sub>	1# N	3.5	0
#30 & N-SO <sub>4</sub>	1# N	1.75	.75
check		33.8	30.7



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**THATCHER**

## GREENSMASTER 31

### 1 AS A GREENSMOWER, the features and benefits include:

Balanced, fully-floating cutting heads — isolated from the traction unit and grass baskets — give uniform cutting height from first green to the last (a Toro exclusive). Low pull point on all cutting units for straight, even tracking. 15-inch turning radius for greater maneuverability, faster handling. Low noise fully-hydraulic drive system smooth and easy on the green. Maximum operator visibility and ease of control. Interchangeable reels, cutting units, baskets. Drive motors save money invested in stocking parts. Minimizing accessories for varying conditions — including a simply engineered and easy to install individual reel shut-off kit that controls the front two cutting units to give a variable track on the clean-up run. Optional reel roller scrapers minimize grass build-up for a beautiful appearance even on wet turf. Proven history of performance on fine greens all over the world lets you be confident of the real value of Greensmaster 31.

### 2 AS A SPIKER, the features and benefits include:

Special Toro patented tooth spike reels that spike cleanly without lifting turf (greens are playable immediately after spiking — no rolling or cutting needed). Power rollers with one-way slip clutch give added traction on slick greens. Adjustable transfer spring transfers weight from traction unit to spiking reels. Reels up to 650 lbs. weigh across 57 inch width for maximum 1/4 inch penetration. Spike spiking area gets more done in less time — you can spike as fast as you mow. And the spikes are less than 2 inches apart. A depth measuring tool is included with each set of spiker units to insure effectiveness of treatment under varying conditions.

### 3 AS A THATCHER, the features and benefits include:

Reel rotation for vertical mowing. Spiral pattern of thatcher blades means less wear on drive motors, more efficient thatching and throwing of thatch into basket. Adjustable gauge wheels tailor cut to various turf conditions. Variable blade spacing (as close as 1/2 inch — depending on the need) permits adjustment to meet varying turf conditions. Gauge plates are provided for easy bench setting of penetration depth, 59" working width makes vertical mowing practical and efficient for the first time. High-strength blades are made of blue-tempered high carbon steel — and they're reversible for double the life.

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# BEING AN EFFECTIVE PUBLIC SPEAKER

Most of us view an invitation to speak to a group with less than overwhelming enthusiasm. The first thing that usually comes to our minds is a thousand and one reasons why we can't possibly accept the invitation. Strange as it may seem, however, public speaking can actually be enjoyable if you remember that knowledge and simplicity are what make a good speaker.

Golf course superintendents are actually in an enviable situation. You know a great deal about a number of topics that interest many people. Almost any group you might be asked to address will have an interest in something you know a lot about, including landscaping, turf care and golf. When you can talk with enthusiasm about a topic you know well, you have taken a giant step toward being an accomplished speaker.

Most audiences are sympathetic. They are listening to you, presumably, to get information, not to hear a polished or humorous speaker talk about nothing. They will remain sympathetic, too, as long as you don't talk down to them. Try to put yourself in their place. If you present your material in a simple, sincere way, using non-technical terms, you're sure to be a hit.

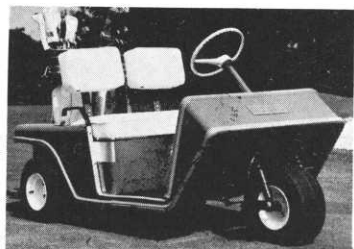
You may find it useful to take along visual aids, such as slides or maps, to illustrate your talk. Not only do pictures make your explanations clearer, but they provide interest and variety to your listeners.

By projecting an image of yourself as an expert, you are contributing greatly to the public's understanding of golf course superintendents and the profession. Consider offering your services as a speaker to other organizations that you are associated with. You'll be surprised at the number of groups who would be delighted to have you as a speaker. For starters, think about garden clubs, your own golf club's membership, service organizations, special interest groups organized by your county agent or extension service and church and school groups.

Once you have established yourself as a willing and able speaker, you will probably have more invitations than you have time for. Sandwich in as many as you can for you are doing both yourself and your profession a great service.

Reprint FORE FRONT

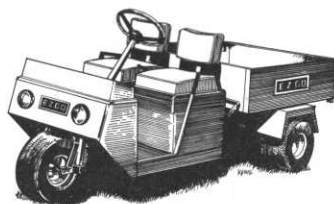
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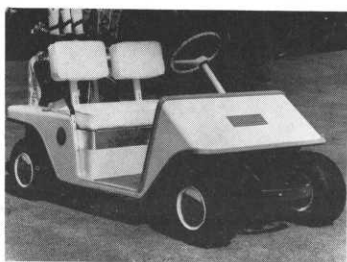
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A soil test in the late summer or early fall will determine if

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# MGCSA ANNUAL GOLF TOURNAMENT



It is time again to be looking ahead to the Annual Minnesota Golf Course Superintendents' Tournament. A time to enjoy golf, fellowship and entertain club officials, managers and professionals from your club. The event this year will be held on September 18, 1978 at Majestic Oaks Country Club. Don Lindblad is the host superintendent.

As this tournament grows in size each year, it becomes more necessary for reservations to be made early. Two shotguns will be held, the first at 8:00 a.m. and the second at 1:30 p.m. Each shotgun will be limited to 32 foursomes. Tee times for the 1:30 p.m. shotgun will be given on a first reservation returned basis and given to Class A and Class B superintendents first, unless they indicate the morning shotgun. Others will be placed in the 8:00 a.m. shotgun.

\*\*\*\*\*  
SPECIAL  
HOLE-IN-ONE PRIZE  
CLUB CAR BY JERRY COMMERS  
\*\*\*\*\*

The cost of the event will be \$19.00 per person which includes prizes and dinner. Carts will be available at a cost of \$7.50 each.

For the early arrivals at Majestic Oaks coffee and rolls will be available. A buffet lunch will be available for golfers coming off the course from the 8:00 a.m. shotgun and available to persons playing in the 1:30 p.m. shotgun. These luncheons are difficult to plan for so please use the facility. The lunch will cost \$3.00. As usual beer and pop will be available on the course for the players.

**(1:30 SHOTGUN FILLED)**

M.G.C.S.A. TOURNAMENT SEPTEMBER 18, 1978  
MAJESTIC OAKS COUNTRY CLUB

Please reserve for \_\_\_\_\_ for the  
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8:00 a.m. - 1:30 p.m. shotgun a spot for the following foursome:  
(circle one)

Names of Players

1. \_\_\_\_\_ @ \$19.00 \_\_\_\_\_
2. \_\_\_\_\_ @ \$19.00 \_\_\_\_\_
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Please reserve \_\_\_\_\_ carts at \$ 7.50 ea. \_\_\_\_\_

Please reserve \_\_\_\_\_ extra dinners @\$15.00 \_\_\_\_\_

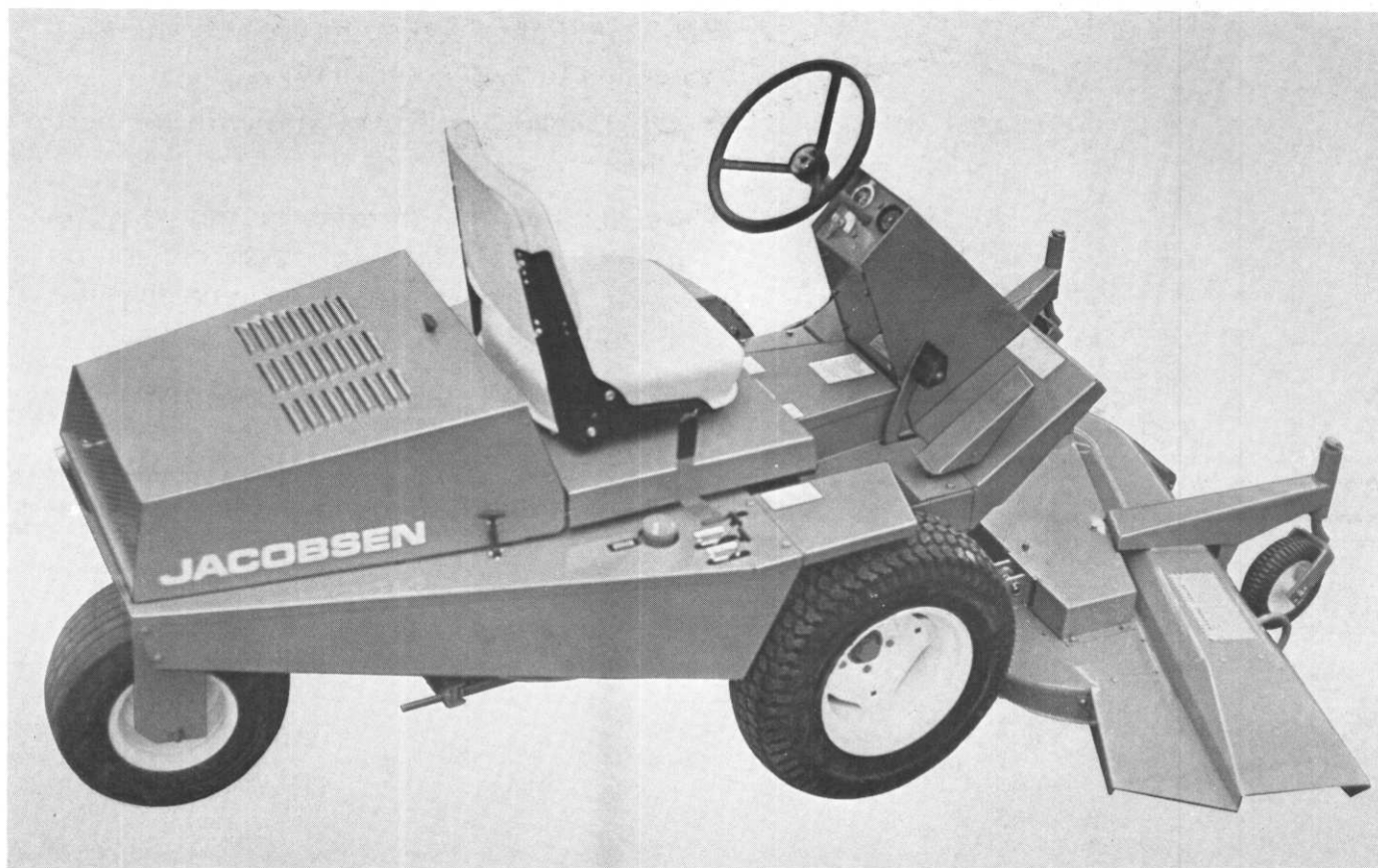
Total \$ \_\_\_\_\_

Payment must accompany reservation. Make checks to M.G.C.S.A. Singles making reservations will be paired to make foursomes. Cancellations made prior to Sept. 11, 1978 will receive a full refund. Cancellations after Sept. 11, 1978 will receive no refund. No reservations (except for dinner) will be taken after Sept. 11, 1978. Send reservations to: JOHN NYLUND, C/O BRAEMAR GOLF CLUB, 6364 DEWEY HILL ROAD, EDINA, MINN. 55435.



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