

RAIN BIRD® 91DR & 95DR ROTORS **COMPARE... THERE IS NO COMPARISON!**

Feature	Rain-Bird 91-95 DR Series	Toro 674-06 Series	Toro 694-06 Series	Benefit
Inlet Size	1 1/2" FPT	1 1/2" FPT	1 1/2" FPT	Less pressure loss—cuts pumping cost
Rotation Speed (60 PSI)	1:30 minutes	3:07 minutes	3:07 minutes	Faster rotation speeds—less time to syringe
Pop-Stroke	3"	1 3/8"	7/8"	Higher pop-up height—less matting around head
Arc—Adjustable	Yes 30-360 degrees	No	No 90-180-360 degrees	Adjustable arc is more versatile Model #95DR is full or part circle
Valve Type	Diaphragm	Piston	Piston	Diaphragm valve—less flow loss, cuts pumping cost, less sticking, cuts maintenance cost. Longer life 10X piston.
Internal Porting	Yes Bleeds water into sprinkler inlet	No Bleeds water into case	No Bleeds water into case	Internal bleed—does away with wet spots around head Case does not fill up with water
Drive Mechanism	Brass impact	Plastic gears	Plastic gears	Impact drive—has 2 moving parts—less expensive to service & repair. Less pressure loss.
Pressure Regulation	Field adjustment	Factory set	Factory set	Field adjustment—allows individual head regulation for more even distribution
Maximum Working Pressure	150 PSI	150 PSI	150 PSI	
Energy Efficiency	85%-95%	70%-80%	70%-80%	Impact drive more efficient—less pressure loss thru head, cuts pumping costs
Pressure Loss Thru Head	< 15.0	>23.0	>20.0	Saves pumping/power costs
Positive Retract Spring	Yes	Yes	Yes	
High Strength Plastic Case	Yes	Yes	Yes	
Cover	Aluminum	Plastic	Plastic	Aluminum less susceptible to striking damage from equipment, golf clubs etc.
Manual Override	Yes	Yes	Yes	Can still operate if power is not available
Nozzles	2	3	2	
Nozzle Interchangeable	Yes	Yes Must change stator	Yes Must change stator	Impact drive—allows nozzle to be changed without replacing a costly part
Screen Accessibility From the Top	Yes	No	No	Impact drive—allows screen to be removed thru top so head does not have to be removed from riser
Self Flushing Valve Seat	Yes	No	No	Diaphragm valve—has less hang-ups and sticking, cuts maintenance cost
Solenoid Grit Filter	Yes	No	No	Grit filter—filters water to valve ports, less hang-up problems, cuts maintenance costs
Solenoid	24V-2W	24V	24V	24V-2W Solenoid requires less power—allows longer runs on smaller wire
Radius	68' - 98'	76' - 102'	78' - 108'	
GPM Range	28 - 75	31 - 65	45 - 82	
Maximum Spacing No Wind	Square Triangular	55% 60%	55% 60%	55% 60%
List Price	\$138.00	\$133.00	\$213.95	

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HOLE NOTES

OFFICIAL PUBLICATION OF THE MINNESOTA
GOLF COURSE SUPERINTENDENTS' ASSOCIATION

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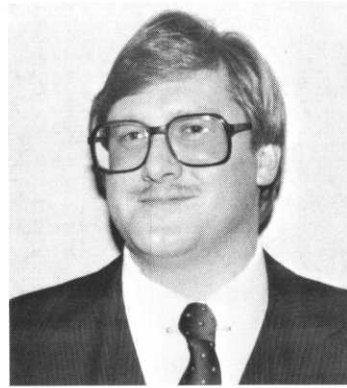
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FROM THE PRESIDENT'S DESK

KERRY GLADER

At a recent meeting the Board of Directors passed a new policy regarding monthly meetings. In order for our association to give support to the clubs that open their doors for our monthly meetings, we will be making all outings a set, "Price for the Day" for lunch and golf. As we must guarantee members at our meetings for meal count and as these clubs are blocking out income producing time for us, we must show our support through use of the restaurant or green fees. I strongly believe that our good association name would soon have become unwelcome by our area clubs and result in restricted or unavailable use. A cost limit will be placed on our lunch outings to keep control over the expense to you, the members. I hope that you all understand and support this policy.

The USGA Regional Seminar held at Town and Country Club was very well attended. USGA Green Section Director, James Latham; USGA Regional Affairs Manager, James Farrell, and Chris Hague all developed an excellent program. Many thanks go to the Town and Country Club, host superintendent Tom Fuller, and the seminar chairman.

The Research Committee is actively preparing for 1986 donations and project funding. You will be receiving mailings soon about the need for donation funds, to continue our research efforts. It can not be said enough times that the MGCSA has a well respected and model research program. Every year we develop further and the results benefit all golf clubs and the industry. Please see to it that the proper committee members at your club receive our donation solicitation letter so they may consider supporting our research program.

As the spring thaw emerges, the ever wary golfer will be eager to get out and play

Continued on Page 7

THE SHAPE OF THINGS

by GERRY PIRKL
GOLF COURSE ARCHITECT

Hey, here's an update on what some of your fellow supt's have done to their courses. Some totally new concepts, some innovative concepts, and some just new changes. Your MGCSA board wants you to know what's happening.

1985 began with the City of Red Wing (owner) advertising for submittals for an 18 hole golf course proposal on a design and construct basis; this is certainly a new concept to our area. In this method the contractor and golf course architect team up to prepare a graphic, such as a Master Plan, for a golf course on the city's land. The city furnished a five page specification which outlines the information and instructions to bidders, and the minimum design and construction specifications. In this case the course was to range from 6200 to 6400 yards; 18 holes; 6000 square foot average greens using a USGA green section; 4000 square foot tees; clearing and grubbing; excavation and grading; automatic irrigation system using a 10 hour watering cycle per night; a pumping station; and seeding of penncross greens and bluegrass fairways and roughs. Also accompanying the specification was a sample set of drawings prepared by a Chicago area golf course architect. This plan was bid but not awarded for construction several years earlier. Bidders could bid on this sample layout rather than provide a design submittal.

The city (owner) provided a superb parcel of land on the east edge of the corporate city limits. The topography ranged from flat land to extremely hilly. More than half of the useable land had been farmed in earlier years, and the remainder was heavily wooded. The type of woods where mature holes could be designed and constructed to look like they had existed for tens of years. Beautiful vistas were possible as the layout worked its way up and down the hills. There was also the challenging portion of the property which presented severe ravines, steep hills, typical river valley rock and rock

outcropping, low marshy wetlands, large watersheds, and heavy clay soils. A true opportunity for a beautifully innovative and creative golf course.

In addition to the land the city also provided an irrigation supply, access roads and relocation of some existing roads, rock pickup, and tree plantings.

Nine submittals were received on March 6, resulting from a 2 day delay from the March 3 snow storm. Seven submittals had their own design and two had bid on the sample layout. Three firms were from Minnesota and the remaining 6 represented five other states. Four submittals were approved for final interview of the golf course committee on March 13. They included two sample layout bids and two redesigns. Midwest Irrigation from East Dubuque, Ill. was the successful bidder, and construction began in early spring. The course was completed, except for part of the driving range, and seeded in 1985. Heavy rains last fall took their toll on erosion, and this rework will be done in spring of 1986. The maintenance building is complete and functional. The clubhouse will be bid this spring. Opening day for the total facility is anticipated to be about August 1, 1986. Note: the city has entered into a 25 year lease with Mississippi National Golf Course Corp., who also lease and operate a facility in Rochester, Minn.

Brooklyn Park commissioned and received a golf course feasibility study in mid 1983. On a personal note Evelyn Schmidt, a non-golfer, and owner of one of the largest real estate firms in the city, represented most of the properties in the study area. It was her dream to see the city have a major golf course. Assembly of the property owners and negotiation with the city resulted in an approval of the project, and preparation of the bid documents by a California architect. Lloyd R. Olsen, Assistant Director of Parks, monitored the project, labeled Edinburgh U.S.A., for the city. Project bids were received late in 1984 and construction began in November. Bids were received from golf course contractors on both coasts and one local contractor. Park Construction was awarded the contract for the course construction and the lake contract. Enebek was later awarded a contract for the Maplebrook Creek, an

adjoining project to supply fill material to the course project. The project consisted of 41 acres of clearing and grubbing, 120,000+ yards of topsoil, 323,000 yards of excavation, modified USGA greens, and a Toro automatic sprinkler system. Most of the construction was completed in 1985, a small amount of irrigation work remains, plus seeding, sodding, bunker sand, and tree planting by the owner crews. The clubhouse is scheduled to begin this winter and be complete August 1, 1986, at the approximate time of the course opening.

The Brooklyn Park course, dubbed Edinburgh U.S.A. course plays from 5035 to 6680 yards, with a par of 72. 18 hole rates are \$17 and residents with a \$50 patron card are \$13. The course meanders through future housing areas, providing a one to two fairway width ribbon of golf stretching out a mile each in two directions from the clubhouse. The perimeter areas on this layout will accommodate many hundreds of dwelling units. The existing topography was fairly flat land, however a great deal of fairway mounding has been done along with the creation of many ponds to change the

character of the land. The adjacent Meadowbrook Creek and path system will allow the non-golfer to also enjoy this green space.

Wedgewood Valley Golf Club located in Maplewood, Minnesota received its start in the fall of 1982 as a private golf-housing venture with the owner hiring equipment and operators for the owner directed construction. After approximately a year the owner ran short of funds and the property fee owner, Minnesota Mutual Life Insurance Company (MMLI) reclaimed the property. MMLI in turn hired a representative to continue the construction, and began developing a housing tract as the first stage of the 2000 acre project. Dennis Hendrickson was hired as the golf course superintendent to oversee and participate in the further development of the course.

The course is laid out to obtain as much housing frontage as possible, and in all but one case has a ribbon of single fairways. Yardage runs from 5480 to 6735, with a par of 72. Greens average about 6500 s.f. and are a USGA layered section

Continued on Page 5

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SHAPE OF THINGS from Page 4

with tile. Tees average approximately 5000 s.f. and are bentgrass, and the fairways are bluegrass. Irrigation is a two row Thompson automatic. Tree planting was contracted to Minnesota Valley Nursery. The amount of earthwork involved on the project is not accurately known but the back 9 involved in excess of 1/2 million yards. It's anticipated that the course and the first stage housing area ran in excess of one million yards. The clubhouse is very elegant with flagstone exterior. Half of the building space will serve as a sales office for the housing development.

Most of MMLI construction was done in 1985. The course is primarily complete and seeded. Several mowings were completed in fall of 1985. The remaining items to complete are fixing the fall and spring washouts and the construction of approximately 40 traps. A June 15, 1986 opening is scheduled, and the course will play as semi-private. No greens fee rates have been set to date.

Chomonix Golf Course will compete with the best in the SE Anoka County area. The

course is being changed from 9 to 18 holes by the abandoning of 3 holes and the construction of 12 new holes. The course and several hundred acres surrounding the facility are part of a regional park preserve owned by Anoka County Park and Recreation Department, under the directorship of Dave Torkildson. The planning was completed by a local golf course architect in 1984 and the construction contract was awarded to Glenn Rehbein Excavating, Inc., and seeded in fall 1985. Spring 86 repair of washouts and touch-ups will complete the job.

The course will play 6400 yards from the middle tees, to a par of 72. Greens average 6000 s.f., and the tees 4500 s.f. The expansion lands afforded a variety of terrain from flat to rolling to hilly, and most of it densely covered with woods. The holes were cut out of the woods and graded to create new holes with the maturity of many, many years. Old holes were reallocated to provide a fairly even balance of wooded holes on each nine. Low frequently flooding holes were eliminated and the flood level raised approximately 1 1/2'. This should eliminate most of the

Continued on Page 7

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SHAPE OF THINGS from Page 5

course closings due to past flooding levels. Rice Creek cuts across the property and was put in play with two bridge crossings. The present course was in regular play until after Labor Day, at which time golfers were allowed to play approximately seven holes on a no charge basis. The irrigation system is a Toro automatic centerline as per the original installation.

A new clubhouse is being planned by Patch, Erickson, Madson, Watten, Inc. Architects, and should be started by spring 86. Chomonix will open as usual this spring, in the capable hands of superintendent Hank Lemm, with three temporary tees and one temporary green. The full 18 holes should open in late July or early August.

If I haven't mentioned your project, RELAX. I will catch you on my follow-up article. If I haven't been able to touch base with you, feel free to call me at (612) 455-4205. Keep those news notes coming. Remember, the goal here is to inform all members of all projects. "No project too big, no project too small."

PRESIDENT'S DESK from Page 2

those early rounds. Communication with the membership or club about the problems of early spring play could be very favorable. Several articles over the years have been written about early spring play damage such as: Weeds, Trees & Turf 1981 - Dr. J. R. Watson.

See you on the course at Faribault on April 21!

NOTES GETS ECKHOFF AWARD

The Harry C. Eckhoff Committee of the National Golf Foundation has announced the recipients of its 1985 awards for excellence in Golf Journalism. We were very proud to learn that HOLE NOTES was judged Second Place in the category for Professional Association Newsletters. The committee received more than 130 entries from the U.S. and Australia, so it is indeed an honor to be chosen. The National Golf Foundation is preparing the awards at this time and they will be presented in the very near future. HOLE NOTES is very happy and thankful for this recognition and also offers thanks to its many contributors whose efforts are acknowledged by this award.

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Rear: Two multiple leaf-type springs and shock absorbers

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Rear: 18-9.50 x 8, 6-ply turf softtrac

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EDITOR'S CORNER

RANDY NELSON

The weatherman said spring will arrive on Thursday, March 20 but the storm that is supposed to hit today while I write this article sounds like the same one that hit last November. After shoveling the snow off my driveway onto my lawn all winter, now I'm doing the process in reverse to speed up the melting. I guess that is why we Minnesotans are considered weather tough, however, it sure makes a person think about those beautiful desert courses and 80 degree weather last February.

While listening to the news last night I heard that the Minnesota House of Representatives and Senate passed the bill dealing with preferential weekend tee times based on sex at golf clubs

throughout the state. Past policies at most clubs up to this point let men have the early starting times on weekends with the ladies to follow shortly thereafter. Sorry, guys, no longer starting in 1987. Clubs which do not comply to the bills guidelines will be subject to substantial property tax increases. There may be some negotiating still to come, but it sounds pretty firm at this point. Look on the bright side, gentlemen, besides the contoured mowed fairways to look at we will have the contours of our feminine club members to concentrate on as well.

I am about halfway through our association's roster asking superintendents to write articles for our newsletter. Apparently my plea for articles through the HOLE NOTES wasn't enough to stir the grey matter of our silent majority of members to write an article. I sometimes wonder what kind of reaction our MCCSA members would voice if they received a newsletter with twelve pages of advertising and not one page of information or experience sharing knowledge from our members. Fortunately, the following list of superintendents and

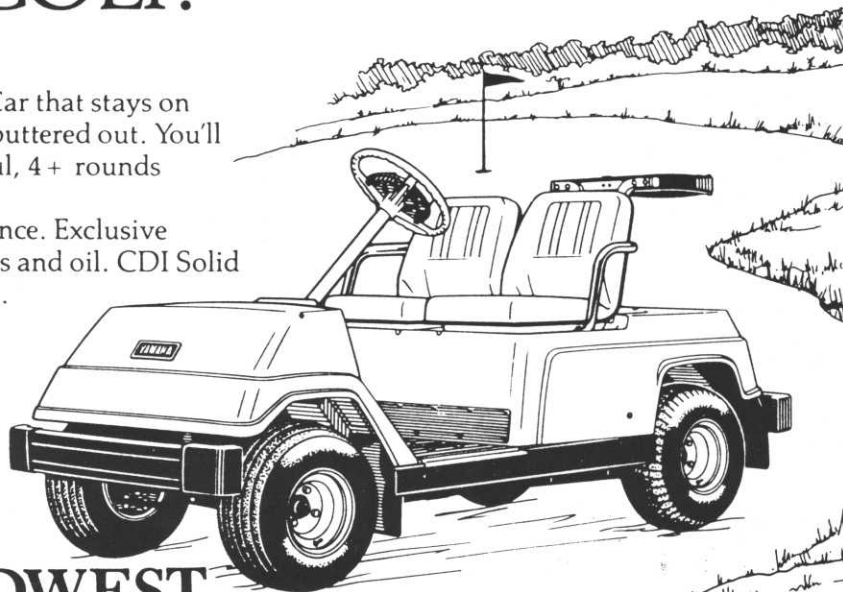
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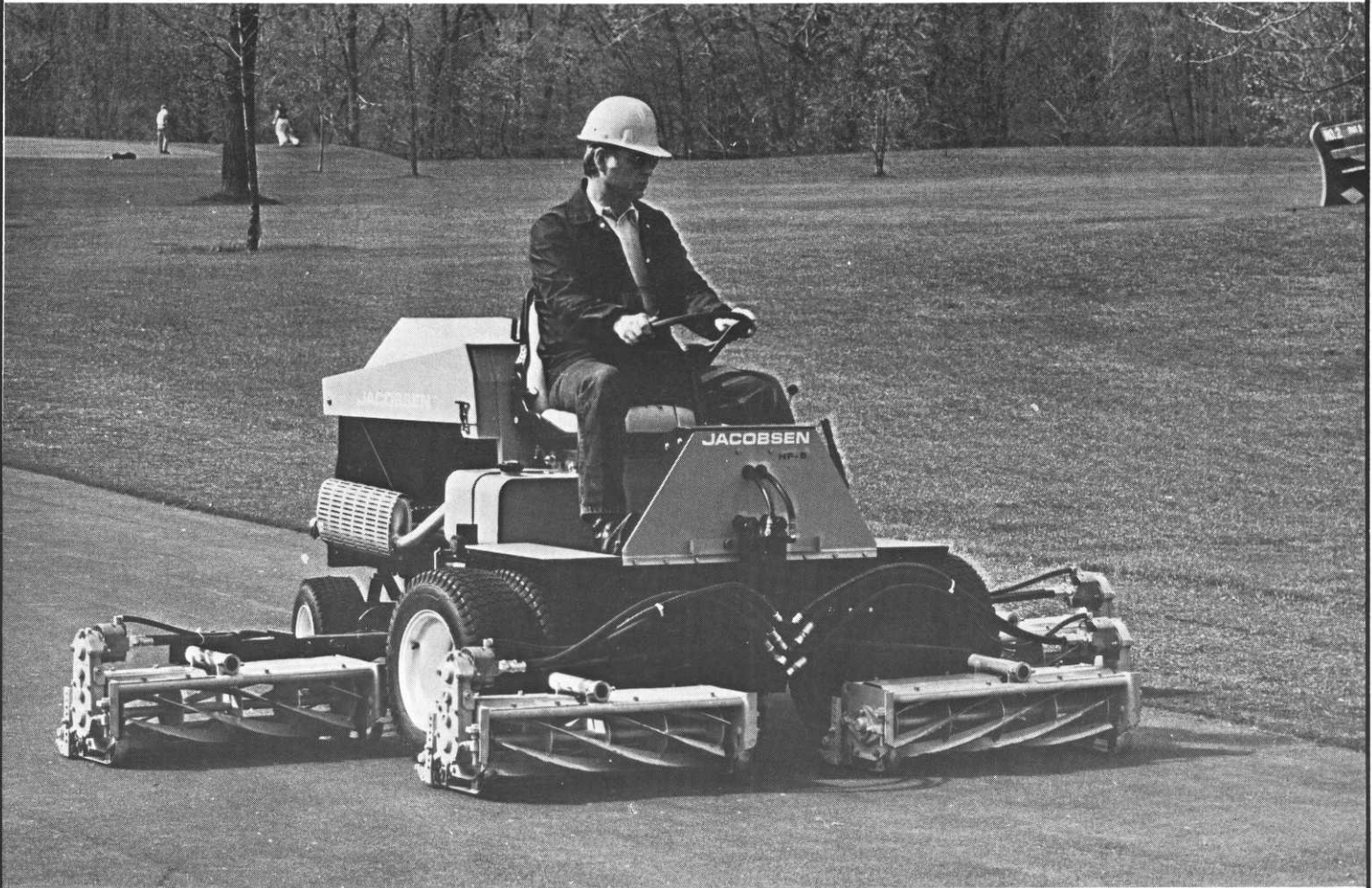


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EDITOR'S CORNER from Page 8

others have committed to me their intent to submit an article for the upcoming issues of HOLE NOTES. The rest of you can look forward to reading some interesting information from these people.

Russ Adams	Dan Hanson
Fred Anderson(recd)	John Harris(recd)
Scott Austin(recd)	Johnny Helget
John Bichner	D.Hendrickson
Walter Braunig	G.Jennrich
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Tom Fischer	Jerry Pirkli(recd)
Boots Fuller	S. Schumacher
Tom Fuller	Mark Smith
Don Groff	John Steiner
Chris Hague	Larry Thorton
Steve Hamelea(recd)	

Fred Anderson, our MGCSA Arrangements Chairman, has compiled the following list of meeting sites for 1986. Remember the dates are tentatively firm. Fred is also taking meeting site reservations for 1987 and 1988, so if any of you are interested in hosting a monthly meeting get in touch with Fred.

April 21.....Faribault Country Club
May 6.....Hastings Country Club
June 16.....Detroit Lakes Country Club
July 14.....Purple Hawk Country Club
August 11.....Stillwater C.C.
MGCSA Amateur Championship
Sept. 8.....Midland Hills C.C.
Guest Day Scramble
Oct. 13.....Wedgewood Valley Golf Club
Nov. 3.....Edinburgh U.S.A.
Pending clubhouse completion
Dec. 3,4,5....MGCSA Annual Conference

By the time you read this article most of our golf courses will be ready for play. I know our first association golf outing is usually well attended so I informed Dale Wysocki at Faribault to expect a good crowd. Our speaker at Faribault will be Tom Clark from the Minnesota Pollution

Control Agency. He will be presenting information which should be of concern to all of us...Underground Storage Tank Registration, and Pesticide Storage, Use, and Cleanup Procedures.

Dale promised excellent weather for his meeting so let's all swing into spring and come out in force on April 21. See you there.

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