



Wherever golf is played . . .

Par Aide Tee Equipment has proven to be practical and also adds beauty to the tee.

The portable tee accessory can be easily moved for mowing and tee changes.



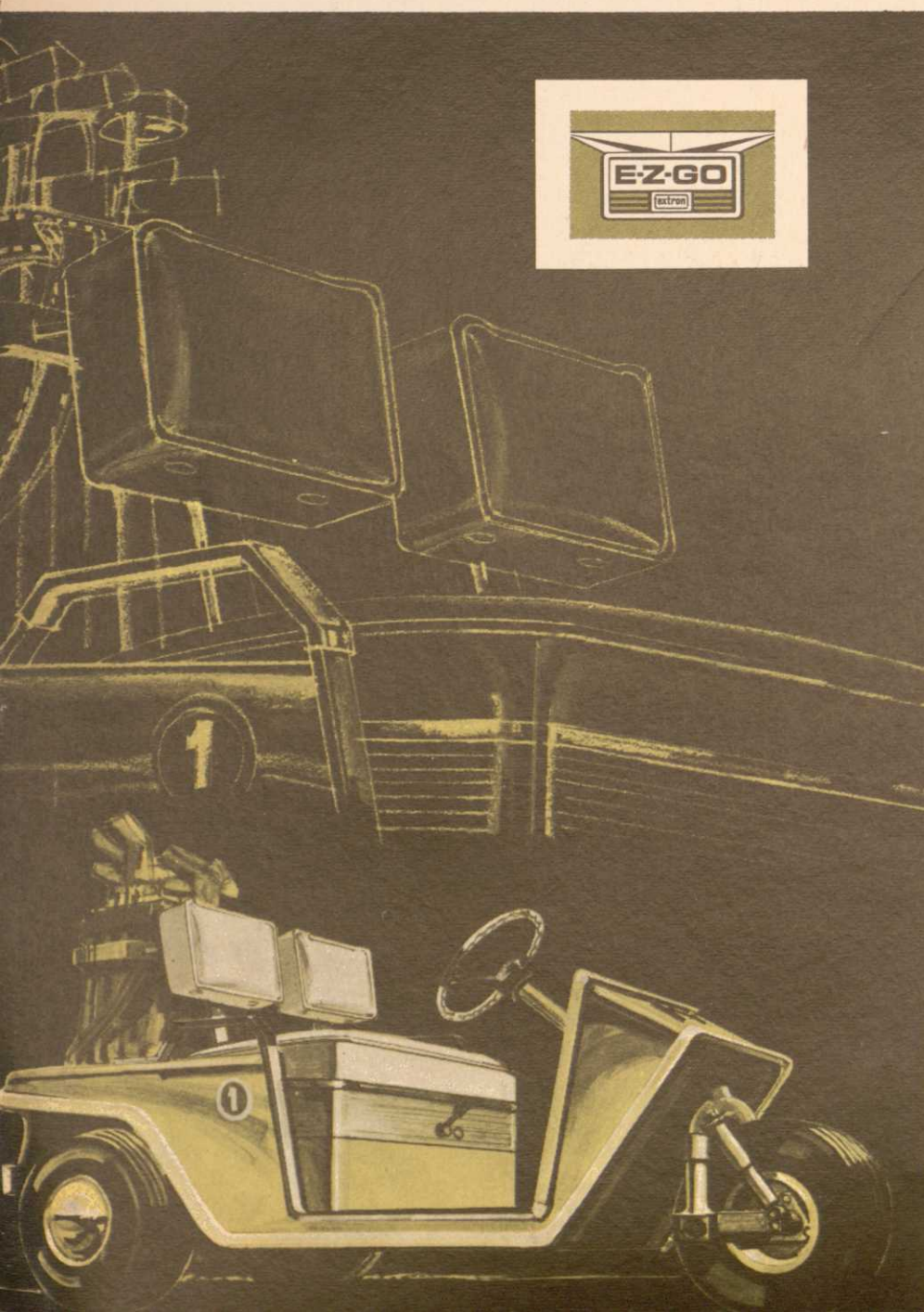
FOR COMPLETE LINE OF PAR AIDE GREENS
AND TEES EQUIPMENT—WRITE FOR CATALOG

PAR AIDE PRODUCTS COMPANY
296 NORTH PASCAL STREET • ST. PAUL, MINNESOTA 55104

The Finest Expression of Quality

There is no finer expression of quality in the world of golf than the new E-Z-GO x-440. Never were superb engineering and traditional craftsmanship more evident than in this car so thoroughly tested and proven under modern fleet conditions. The new x-440—with a life expectancy of five to seven years—is today's success story with tomorrow's greatest promise. More and more people who pay for the ride can enjoy going First Class.

E-Z-GO CAR, TEXTRON INC. / AUGUSTA, GEORGIA 30903



'69 FASHION PREVIEW

Continued from page 47

proximately \$23) to match pocketed culottes (approximately \$18). The Smitty, a dress over shorts (sometimes attached, sometimes not), is offered in new styles for '69. Among the most interesting is a sculptured pique (again, the texture image) with a sailor top (\$27).

Varela out of Los Angeles, promotes the newness of white on the golf course with its white crepe pants (\$58). Hopsacking can also be found in the Varela line with colors true and varied.

From the Haggar Company comes the Expand-O-Matic slack made from 100 per cent Dacron polyester double knit (\$20). Haggar concentrates on the extension waistband and the buckle tab.

At Jockey Menswear, the dolman sleeve has been put to use in the golf shirt; there's one of 100 per cent textured acetate with thin vertical stripes (\$14). The cut of this sleeve lends itself to movement and should become a more common styling in golf shirts in the future. Some of Jockey's v-neck sweaters are made of Nomelle (\$17-\$18). A space dye pattern in a wintuk mock turtle-neck (\$10) is both new and a welcome variant among wintuk sweater wear. Jockey has expanded its nylon jacket line to include both taffeta and an oxford weave surface. Contrasting stripes are being used for novelty and design (\$11-\$12).

Kunik Kausals presents subtle notes of texture in a number of slacks. There is a thin stripe red, black, green or yellow on white (\$20). Strikingly patriotic and in keeping with the red, white and blue notes of the coming season is a gay floral print made into a pants skirt (\$13).

In the field of blazers, Mt. Royal will introduce a new jacket in a Dacron/wool combination in hopsacking. Also new in the line will be double breasted jackets.

Golf Crest has a 100 per cent wool knit sweater blazer—a jump

Continued on page 95



NEVADA \$10,000 OPEN

.....
LAS VEGAS, NEVADA
DECEMBER 9, 10, 11 & 12
PRO-AM-MONDAY, DEC. 9.
.....

FOR MORE INFORMATION AND ENTRY
BLANK WRITE:

SHOWBOAT
HOTEL & CASINO

2800 E. Fremont, Las Vegas, Nev. 89104

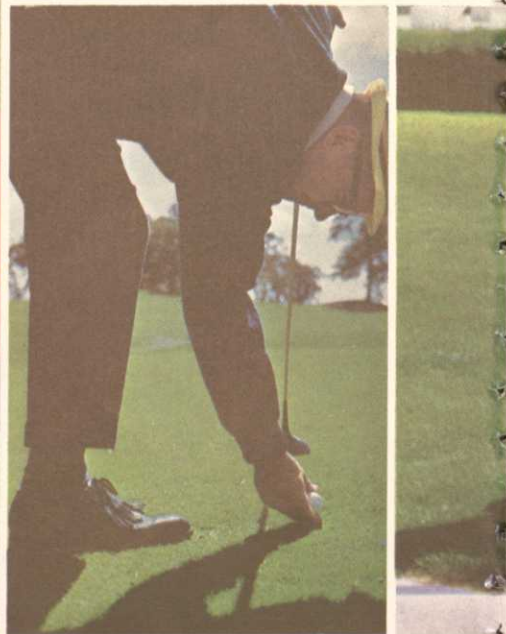
SPONSORED BY THE **SHOWBOAT** HOTEL & CASINO

SANCTIONED BY THE NEVADA STATE GOLF ASSOCIATION

The M

Toro®—From Tee to Gr

Greensmaster† TORO'S exclusive "free-floating" cutting unit hugs the ground, eliminating digging or gouging. Unit maintains constant height of cut... is *not* affected by engine vibration, weight of clippings in basket, or pressure. And you can add brush, Delmonte comb, or roller attachments easily—so your greens stay fine, year after year.

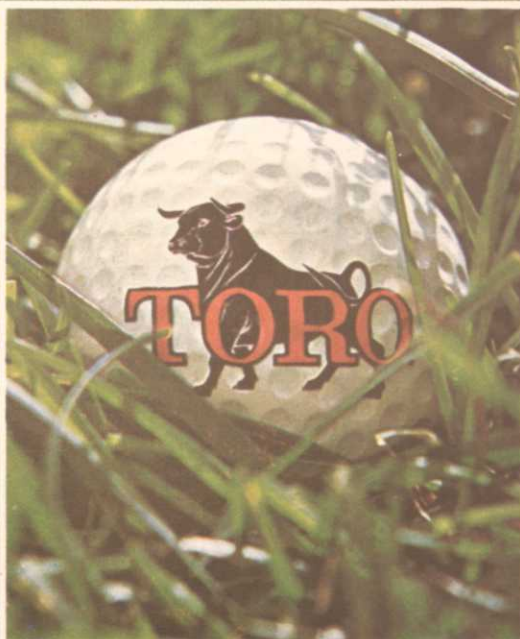


†Exclusive trade names of Toro Manufacturing Corporation

asters

een and In Between

Parkmaster† TORO'S answer to fairway maintenance. Choose either 5 or 7-unit model... the PARKMASTER gang mowers lift hydraulically at the touch of a lever... allow unit to slim down to cut a 7' swath, then fan out to cut a 15' swath. Powered by a 73 hp engine, the PARKMASTER is fast and efficient, with power to spare for steep slopes. Cutting capacity over 60 acres per day.



70" Professional® TORO'S all-around golf course mower... for approaches, tees and bunkers. Powered by a 6¾ hp., 4-cycle engine... cutting capacity over 14 acres a day. The three 25" reels are easily adjustable without tools to a height-of-cut range from ½ to 2½ inches. Equipped with large pneumatic turf tires which minimize compaction... and the Pro is exceptionally stable on hills due to low center of gravity.

TORO MFG. CORP.
8111 Lyndale Ave. So.
Minneapolis, Minn. 55420

For more information circle number 219 on card



This year, half the fun of golf is the new Westinghouse electric car.

Every game's a joyride, because this beauty is all car. Big tires that smooth out the rough spots. Foam-cushioned seat that adjusts to every rider's comfort. Four wheels for ground-hugging stability. Automotive differential. Powerful 4½-hp Westinghouse motor that purrs over the slopes without slowing down. And motor efficiency stretches battery life.

The new Westinghouse four-wheeler is as easy to maintain as it is fun on the fairway. It takes no more space than ordinary three-wheelers. Bolt-on steel body panels make maintenance or replacement a snap.

Send for details today. Write Westinghouse Electric Corporation, Electric Vehicles Dept. 7824, Box 868, Pittsburgh, Pa. 15230.

J-96020

You can be sure...if it's Westinghouse



For more information circle number 220 on card

15	PAR 3	4	5	3
16	PAR 3	4	5	4
17	PAR 4	4	5	4
18	PAR 4	4	5	4
TOTAL		80	78	81
			76	

course checklist

How much equipment is enough?

by H.G. Meyers and G.C. Horn Extension Turf Specialist, Professor of Turf, respectively, University of Florida

The average 18-hole golf course costs approximately \$20-25,000 to equip, exclusive of heavy equipment such as trucks and tractors. Ask any golf course superintendent, however, what equipment is required for an 18-hole golf course and the answer will more than likely be as varied as the number of superintendents asked. The problem is that specific maintenance equipment requirements vary from one golf course to another depending upon budget allowance, amount of play, level of maintenance required and golf course design.

Generally, however, there are

certain basic types of equipment required for all golf courses with quantity being more dependent upon the number of greens being maintained rather than fairway length. For example, a nine-hole course requires three greens mowers, whereas, five to six are normally required for efficient operation on an 18-hole course.

Consideration of cost is necessary, however. Efficiency should also be carefully evaluated before purchasing any piece of equipment or where more than one machine is required. For example, a seven-gang tractor drawn fairway mowing unit is cheaper than

a nine-gang unit but the swath of cut is reduced by approximately 20 percent. Increased cutting time and labor costs soon exceed initial savings. Of course, this comparison is not valid where a nine-gang unit cannot be used for mowing fairways due to width, design, etc.

A further comparison involves a choice between the previous seven-gang tractor drawn unit and the

Continued on page 60

Editor's note: The article and charts were reprinted from the "Florida Turf Grower," department of Ornamental Horticulture, University of Florida, Gainesville. Mr. Meyers is an extension turf specialist and edits the above publication. Mr. Horn is a professor of turf at the University of Florida.

18-Hole Golf Course 9-Hole Golf Course Par 3—18-Hole Executive 18-Hole Quantity					Primary Area Use						
					Greens	Aprons and/or Slopes	Trees	Fairways	Roughs	Trimming—Traps, Trees, etc.	Misc.—Clubhouse, etc.
BASIC EQUIPMENT REQUIREMENTS FOR VARIOUS GOLF COURSES											
MOWING EQUIPMENT											
Reel											
6	3	4	5	Greensmowers	X		X				
1	1	1	1	30" Front Throw (5 blade)			X	X			X
1	1	1A	1	76" Triplex (5 or 6 blade)			X	X		X	X
1			1	7 Gang Hydraulic Fairway Unit (6 blade)					X		
or . . .											
	1B	1B		7-9 Gang (tractor drawn) Fairway Unit w/Universal Frame (6 blade)							
1C	1C	1D	1C	3-5 Gang (tractor drawn) Rough Mower w/Universal Frame (4-5 blade)					X		

A—Optional on par 3's with no sand traps.

B—9-hole and par 3 courses do not require Hydraulic Fairway Units. Both courses may substitute 5 Gang Fairway Units with Universal Frame.

C—A 72" (tractor drawn) Rotary Tow-Type or 3-Point Hitch may be substituted if roughs are not suitable for Reel Mowers, or because of grass type, a lower level of maintenance is desirable.

D—Not required where the whole area (fairways and roughs) is maintained at fairway height. Also, in this event, no riding or tractor drawn rotaries are required.

No. 1



Gran Cushman

The Gran Cushman, the "golf car that thinks it's a sport car", is, in one year, the most successful golf car ever introduced. And no wonder!

In addition to the award-winning design, recognized at the Brooklyn Museum of Fine Arts, it's got the luxury features of the future. In fact, the standard features on the Gran Cushman are almost all "optional additional accessories" on other golf cars. Automotive steering is standard, for instance. Big 9.50 x 8 Terra Tires are also standard. Adjustable bucket seats—standard. Automatic seat brake—standard. And so on. Whatever you want in an absolutely luxurious golf car—the Gran Cushman's got it. See it today for yourself. Try either the gas or electric power. See how this baby floats the course, round after round. If you want the finest—this is it!

Visit your Cushman Distributor's today. He's "Mr. Golf Car". Or send in the coupon for full information.

Cushman Motors, 924 N. 21st St., Lincoln, Nebraska 68501

I'd like to know more about the luxurious Gran Cushman.

Name _____

Address _____

City _____ State _____ Zip _____

CUSHMAN

LINCOLN, NEBRASKA A DIVISION

No. 1 low price car



Cushman Champion

Restyled, with a long-low clean-cut silhouette, the Cushman Champion makes an excellent dependable lease car, good as gold round after round.

It has the famous Cushman 36-volt electric system, with the same dependable switch and long-lasting power plant as the fabulous Gran Cushman. Automotive steering is standard. Three different tire sizes are available including 9.50 x 8 Terra Tires. It is completely and comfortably sprung on all three wheels. The all-steel body, just 39½" wide, is rugged and durable, built for years of toughest wear. Everything is built to last; only the "trimmings" are missing.

And missing also is a big price tag. If you can get along without the luxury features, this is the ground-covering car you want. See it today at our Cushman Distributor's. He's "Mr. Golf Car" in your area. Or send us the coupon today for complete information.

Cushman Motors, 924 N. 21st St., Lincoln, Nebraska 68501

I'd like to know more about the Cushman Champion.

Name

Address

City State Zip

MOTORS

OF OUTBOARD MARINE CORP.

For more information circle number 252 on card

Basic Equipment

Continued from page 57

newer seven-gang hydraulic mower/tractor combinations. Each has advantages and disadvantages that depend on the individual situation.

Following is a basic list of equipment required by 18-hole,

nine-hole, par 3-18-hole and 18-hole executive golf courses. Trade names, prices and certain specifications are purposely avoided due to multiplicity of manufacturers and models available. Also, selection of a basic piece of equipment is dependent on: job requirements, performance, price

and, in many instances, personal preference. Some golf courses manage with less equipment than is listed, whereas, others require more. These variations are normal for reasons previously stated. However, efficiency is usually sacrificed where less equipment is available for maintenance.

Primary Area Use

18-Hole Golf Course				Quantity	BASIC EQUIPMENT REQUIREMENTS FOR VARIOUS GOLF COURSES													Greens	Aprons and/or Slopes	Trees	Fairways	Roughs	Trimming—Traps, Trees, etc.	Misc.—Clubhouse, etc.
9-Hole Golf Course																								
Par 3—18-Hole																								
Executive 18-Hole																								
MOWING EQUIPMENT Cont'd.																								
Rotary																								
1E	1E		1E	72" (tractor drawn) Tow-Type or 3-Point Hitch Rotary Mower															X					
3	2	2	3	20"-21" Rotary Mowers (hand propelled)															X	X				
1	1	1D	1	50"-60" Riding Rotary Mower															X	X				
AERIFIERS AND SPIKERS																								
1	1	1	1	Greens Aerifier (punch type)											X	X	X							
1	1	1	1	Greens Spiker											X	X	X							
1	1	1	1	Fairway Aerifier (plug type)												X	X	X						

D—Not required where the whole area (fairways and roughs) is maintained at fairway height. Also, in this event, no riding or tractor drawn rotaries are required.

E—Not necessary where Reel Mowers are used for maintenance of roughs.

VERTICAL MOWERS AND SWEEPERS												
2	1	1	2		Vertical Mowers (greens)	X	X	X				X
1	1	1	1		Self Propelled Sweeper (36")	X	X	X				X
2	1	1	2		Vacuum Sweeper (greens)	X	X	X				X
1F	1F	1F	1F		Fairway Vertical Mower (tractor drawn)		X	X	X			
1G	1G	1G	1G		Fairway Sweeper (tractor drawn), mechanical or Vacuum pick-up		X	X	X			
SOIL MIXING/HANDLING EQUIPMENT												
1	1	1	1		Soil Shredder 12" (top dressing)	X	X	X				
1	1	1	1		Soil Screen 30" (top dressing)	X	X	X				
1	1	1	1		Top Dresser (self propelled)	X	X	X				
1	1	1	1		3 Gang Power Drag Mat or several individual 3' x 5' Drag Mats	X	X	X				

F—Optional or not necessary where fairways are not Bermudagrass.

G—Fairway Vertical Mowers and Sweepers may be purchased as combined units rather than individually.