

Faultless gives you the best advertising support

Tonight.



Heeeere's Johnny!

The same Johnny Carson who hosts the Tonight Show seen on 208 NBC-TV stations by millions of people. (The kind with money to spend for things like golf balls.)

The same Johnny Carson who'll introduce America to the new 1968 Faultless Cut-Proof Golf Ball—the ball that Ed McMahon will sell.

Amiable Ed will prove—with live demonstrations—why the '68 Faultless is the best all-around performing golf ball in the world.

So next time you see Ed's pal Johnny open the show with that characteristic golf swing of his, you'll know what ball he's driving at.

And so will everybody else.

**As seen on The Tonight Show
starring Johnny Carson, NBC Television.**



best advertising support day in and day out

Today.



We know a lot of people can't stay up every night to watch The Tonight Show because they have to get up early for work.

People like Hugh Downs.

So we're going to help sponsor The Today Show, too.

It's great viewing for early risers.

There's the news, weather, topical interviews—and Frank Blair selling the new '68 Faultless.

No doubt about it. Faultless gives you more TV advertising support than any other golf ball. And that's the way it should be.

Because Faultless has more to talk about than any other golf ball.

**As seen on The Today Show
starring Hugh Downs, NBC Television.**

and in between.



After getting The Tonight Show and The Today Show, there's not much more we can do for you in the way of advertising support. Except maybe run a great magazine campaign.

So we are.

But you would find out about it even if we didn't tell you. Just by thumbing through magazines like Sports Illustrated, Esquire, Look, Golf Digest, Golf Magazine or Golf World.

Because you'd find an ad inside selling the all-around superior performance of the '68 Faultless Golf Ball.

Just like your customers will.

Faultless gives you the best advertising support day

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And so will everybody else.

**As seen on The Tonight Show
starring Johnny Carson, NBC Television.**



Faultless gives you the best traffic builders

Free lifetime supply of Faultless Golf Balls



(Lifetime supply.)

Just fill in and sign the coupon.

Take it to your pro shop or favorite sporting goods outlet. You'll receive a free lifetime supply of the amazing new 1968 Faultless Long-Distance Golf Ball. One ball.

That's right. One ball.

You could spend the rest of your life clubbing it—and not cut hitting a new ball every time you swing.

Faultless is a one-piece solid ball. (Made the way most all golf balls will be made in the future.) There's no cover to smile up at your mistakes. Nothing inside to get out of round, out of balance. That's why a '68 Faultless shoots straighter, putts truer than conventional balls.

You'll like the new satisfying click and feel of the 1968 Faultless. It takes off for the pin like it's got eyes. And you can hit one just as far—or farther—than a conventional ball.

Pick up your free lifetime supply and give it a try. Whether you use the pro-shop Professional, or the Futura model available at sporting goods stores, your free ball will conform with USGA rules. (We don't call them Faultless for nothing.)

Sorry. Only one free lifetime supply to a customer. So if you lose yours, good for us. Because we think you'll be back for another lifetime supply or two. Or more. Even if you have to pay for them.

This coupon good for one free Faultless Golf Ball. Fill in the coupon. Then take it to any participating pro shop or sporting goods outlet and exchange it for one new Faultless Golf Ball absolutely free. This free offer expires June 1, 1968.

Your Name _____

Address _____

(Please print.)

City _____

State _____

Zip _____

To the dealer: To be valid, each coupon must be signed by you. You will be shipped a replacement ball for every coupon you mail to us. Your Faultless coupon good only for product specified. Offer void wherever taxed, restricted, or prohibited by law. Cash redemption value: 1/20 cent.

Dealer's signature _____

Address _____

Faultless Rubber Co., Box 800, Ashland, Ohio

Yes, I'd like a traffic jam in my place. Please have your representative call me with complete details about the Faultless free golf ball offer. I'm interested. But not obligated in any way.

Your Name _____

(Please Print)

Dealer or Country Club Name _____

Street _____

City _____

State _____

Zip _____

Phone _____

Traffic builders you know about. But what we have is, well....different.

More like a traffic jam.

Because millions of Sports Illustrated and Esquire readers are going to run across a most unusual ad—an ad with a coupon good for one free 1968 Faultless Golf Ball.

That's right: One *free* 1968 Faultless Cut-Proof Golf Ball.

(We like to call it a lifetime supply because the Faultless ball is virtually indestructible.)

Now here's the part you'll like best: To get his free ball, a customer has to bring in his coupon to you!

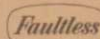
So we put a customer right where you want him—in your place of business.

(Bet you've got a lot of things to sell that would go just great with the free ball you give him.)

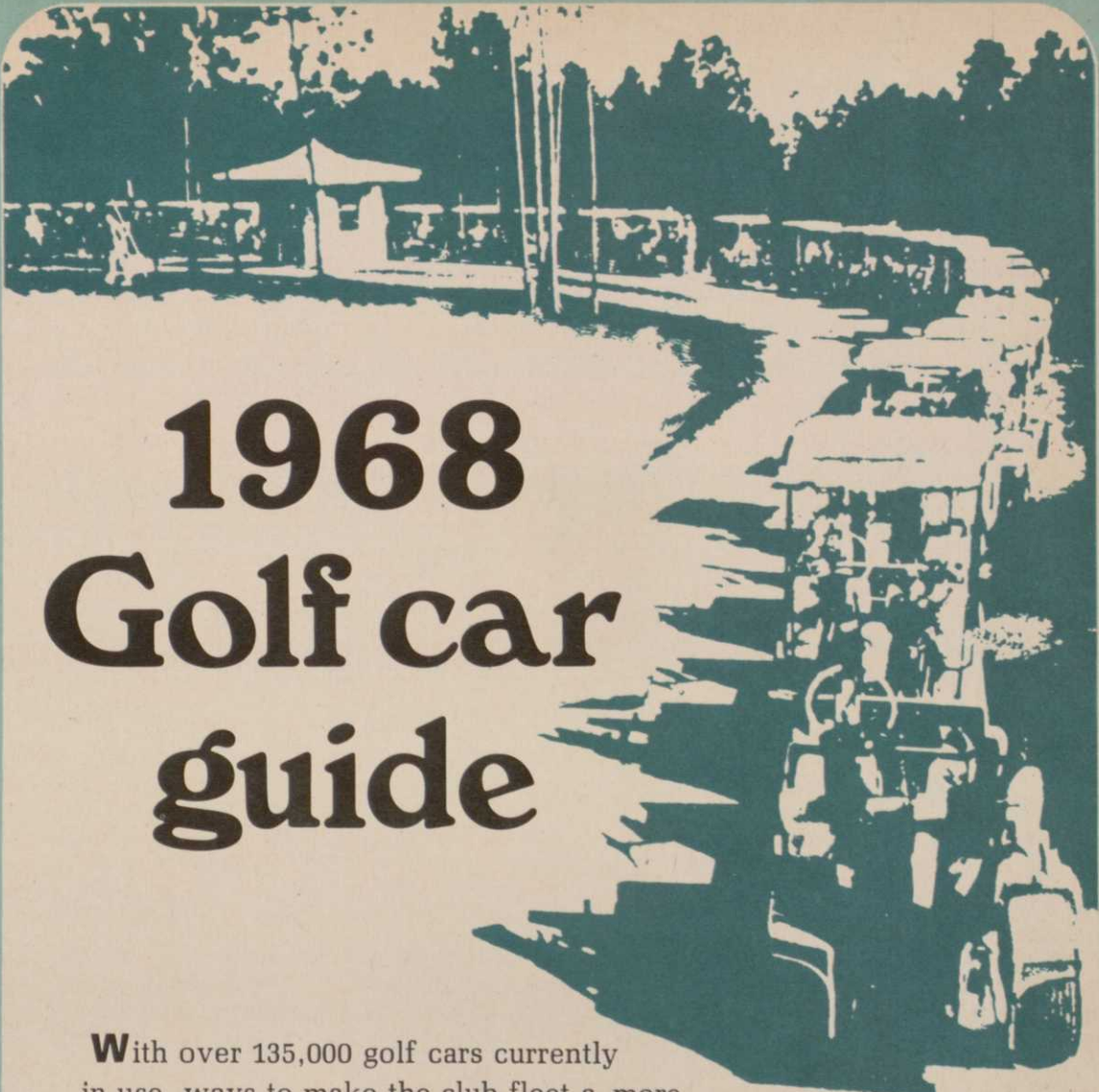
Why help us give away a lifetime ball?

- 1) A '68 Faultless is as easy to lose as any other ball.
- 2) And, confidentially, it doesn't float.

So let's hear from you. We mean business.



FAULTLESS RUBBER COMPANY
Ashland, Ohio



1968 Golf car guide

With over 135,000 golf cars currently in use, ways to make the club fleet a more profitable operation are at a premium. With this in mind, GOLFDOM has assembled experts who tell you how to cope with the turfgrass problems caused by cars, the question of leasing vs. ownership, maintenance of golf car engines and batteries and the club's safety program. In this issue:

- p. 26 NO MORE WEAR AND TEAR
- p. 28 GET THE MOST OUT OF CAR BATTERIES
- p. 30 TO LEASE OR NOT TO LEASE
- p. 32 KEEP THOSE ENGINES PURRING
- p. 45 THE NEED FOR DRIVER SAFETY

In March GOLFDOM, additional articles will deal with making your fleet pay off, the design of the golf car building and trends in car paths.

No more wear and tear

With more than 100,000 golf cars rolling on today's courses, the problem of preventing grass damage is mounting—but solutions are in sight.

by Tom Mascaro

Since the advent of the golf car, turfgrass problems and, in turn, the problems of the superintendents have increased tremendously. Today, after many meetings, discussions, and clinics, we can begin to draw some conclusions from the experiences of many superintendents, and from the necessary supporting data from the experimental work done at Tifton, Georgia, by Dr. Glenn W. Burton, principal geneticist, Coastal Plain Experiment Station, and graduate assistant, Clarence Lance.

Here are the problems: soil compaction; turfgrass wear; routing of cars; golf car paths; bridges; closing the course to cars; car maintenance, service and storage; budget increases and budget funds for cars.

Now for some solutions.

Soil compaction is perhaps the most serious problem created by golf cars. The weight of the cars, the golfers, and their equipment, plus the pounding and thrust of wheels, tend to injure soil structure. The width, size, pressure, and design of the tires is only important to prevent formation of deep ruts. The degree of compaction remains severe no matter what size tire is used. When soils are wet, they puddle. (Puddling is compaction in its severest form.)

Puddling of soil means the almost complete breakdown of soil structure. And without good structure, soil cannot take in water, air or nutrients. Turfgrass cannot survive under these conditions.

A program of aerification must be initiated to keep up with compaction as it forms. If severe compaction exists, intensive aerification must be done. It must then be followed with an aerification management program that will stay ahead of car compaction. Additional fertilizer must also be used to stimulate aggressive growth.

TURFGRASS WEAR

Turfgrass can take just so much wear. Cell reproduction must keep up or exceed cell destruction. Golf car wheels produce a thrust for propulsion or stopping. This force can be transposed to abrasive action. Thrust or abrasion causes the cell walls to rupture, resulting in the dying back of the blade.

Because of this, each golf hole must be analyzed from the standpoint of golf car traffic. Provisions must be made for convenient car use, but still disperse wear over as large an area as possible.

ROUTING OF GOLF CARS

Generally speaking, it is best not to restrict cars in open areas, but only around tees and greens.

Many devices have, and are being tried to keep cars in their place including fences, rope barriers and painted stakes. However, such devices, although effective, often detract from the beauty of the natural surroundings. Other devices include signs and instructions on the car itself, score card instructions, and signs on the turf.

Anything that is effective—without marring the beauty of the course—should be used. Remember, continuing car-user education is really essential.

CAR PATHS

Golf car paths can be a blessing or a curse. An over-all plan carefully executed should be drawn up before money is spent. (Emergency patches of car roads can ruin the appearance of the course.) Car paths should blend with the landscape. They should be used only where absolutely necessary.

Path building materials are many and varied, including concrete, asphalt, wood, fine stone or gravel, sand, tanbark and pine needles. Whatever is used, it should withstand traffic, and require little or no maintenance.

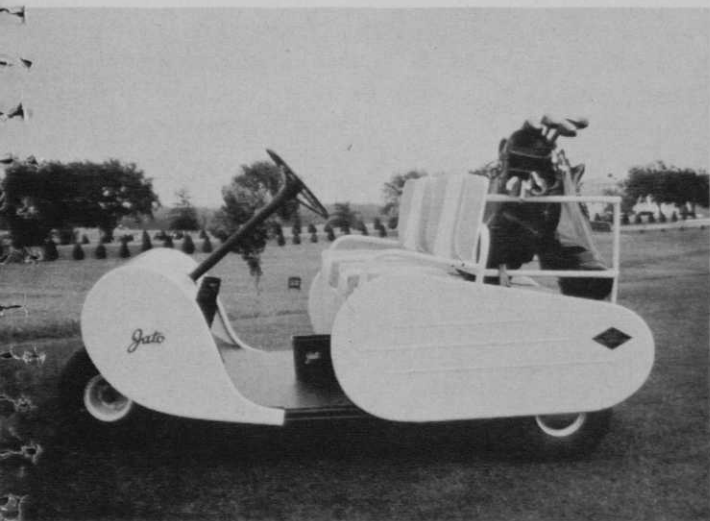
BRIDGES

Golf cars need bridges. Here again the choice of materials ranges from concrete, to wood or steel. Pre-fab concrete slabs have been used very effectively—they are flat and heavy enough to stay put during floods.

Whatever is used, bridges should be wide enough, strong enough and permanent enough, with real consideration given to safety and future maintenance.

CLOSING THE COURSE TO GOLF CARS

Occasionally throughout the year, either because of a drainage problem or foul weather, the course



Above, new this year is the Jato Jr. Executive, in both gas and electric models with automotive steering. The other Jato model, Walker Executive, is available in gas and electric with tiller steering.



Above, E-Z-Go's model x-440 electric golf car, built with an all steel welded construction and all steel body with baked on automotive enamel. Model x-440 comes with tiller or wheel steering.

may have to be closed to golf cars. The decision to close the course should be vested with the superintendent. If the superintendent is overruled, then the club *should* be prepared to supply funds to repair the possible damages.

Planning is the key to success here, and making certain drainage is good is one of the best assurances the golfer can have that the course will be open to cars. Plans should include surface drainage of wet areas, interception of seepage water, and installation of a drainage system that will keep the course open at all times, if at all possible.

MAINTENANCE AND STORAGE

The day-to-day supervisory maintenance, service and storage of golf cars is an important factor in efficient fleet operation. With over 100,000 cars in use, it has become a major responsibility. This vital function should be assigned to someone continually on the job at the club.

If the superintendent is asked to assume this responsibility, the club should be prepared to provide him with funds to cover these additional costs. Equally important, the superintendent becomes worth more.

Throwing these costs into an already overtaxed budget can be

disasterous. The over-all golf course maintenance budget will suffer. Observations of the policies of many clubs show that there are trends in this direction, and every effort should be made to prevent it.

Funds must be provided for car storage, service, and qualified personnel to handle the job. Golf car servicing and storing are almost full time jobs and also somewhat specialized.

BUDGET INCREASES

Analyzing all these problems, it can readily be seen that each problem presented indicates an increase in costs.

Reviewing them in order, we find that:

1. Compaction means cost of aerifying equipment and manpower to operate it. It also means an increase in the fertilizer budget.
2. Wear means that some reconstruction must be done to disperse car traffic.
3. Routing of cars means that signs must be purchased, and printing must be done to educate the members.
4. Car paths are costly, and whether contracted for, or done by your own crew, expenditures of additional funds are involved.
5. Bridges, in their cheapest form,

are still expensive propositions.

6. Closing the course to minimize the problem of reconstruction for surface drainage, elevating areas, tile drains and sumps represent increased costs.

7. Car maintenance, servicing and storing mean increased costs in buildings, manpower and supervision.

BUDGET FUNDS FOR GOLF CARS

Golf cars definitely have proved a profitable source of added income to most of America's golf courses. Properly planned, budgeted and managed, golf car fleet operations are accounting for worthwhile and welcomed net profits after providing a realistic percentage for attendant car and course expenditures.

Each club should analyze its own conditions to establish an over-all plan for its golf car operations, and drawn up in such a way that new committee members could carry it out on a continuing basis.

In future years, we are bound to see the use of the cars increase. If this is true, we will probably see more and more golf course architects planning the original layout to overcome many of the problems which exist now on our present day golf courses. □

Get the most out of car batteries

Keep your fleet charged up and ready to go by following a few simple rules on battery maintenance.

by Lee R. Hill

The proper installation, care and preventive maintenance of golf car batteries are essential for profitable and satisfactory operation. The batteries, the heart of the golf car, are the least understood and the most frequently blamed for car ills. Yet, with good care, two and sometimes three seasons of use can be obtained by fleets, and more by individual golf car owners.

Batteries must be installed so that the positive and negative posts are in the positions specified by the manufacturer of the car. The positive post of the battery is always at the right hand side when the battery is seen from the front or name plate side. Batteries installed backwards or incorrectly may cause chargers to blow fuses, or may result in short range, reduced battery life, or complete failure of the car to run.

The holddown should be firmly tightened but not so tight as to distort the flexible battery case. Too much holddown pressure can cause the case sides to separate from the tar seal and allow acid leaks.

Before connecting the battery cables, the terminals of the batteries and cable ends should be cleaned and wire brushed. Connections must be tight. Loose cables create high electrical resistance, loss of power, improper charging, and, occasionally, melted battery terminals. The spark from a loose connection may cause batteries to explode. Coating the battery terminals and cable ends with a non-metallic petroleum grease will reduce corrosion. Aerosol sprays also are available for the same purpose.

Newly installed batteries, mechanically tight new cars, or batteries that have been stored for the winter will not give maximum range. Cold weather further reduces the power of batteries. These conditions can be overcome by making certain batteries are fully charged and limiting their use to 18 holes for the first several rounds. Placing batteries on charge immediately after use will greatly aid in developing the full battery power.

Good maintenance of golf car batteries should include daily, weekly, monthly, and annual scheduled care. Each day, golf cars should be cleaned and the batteries recharged. Cars used for 9 holes or more should be placed on charge each night.

Charging should start as soon as possible after the car's use. Not only are the batteries warm and better able to accept the charge, but the demand current portion of the electric bill will be reduced. Battery caps should be in place during charging.

To insure adequate charging time and maximum battery life, car rotation is essential. The last car to go on charge at night should be the last car to be used the following day. Many cases of short range can be traced to undercharging from failure to follow rotation procedures.

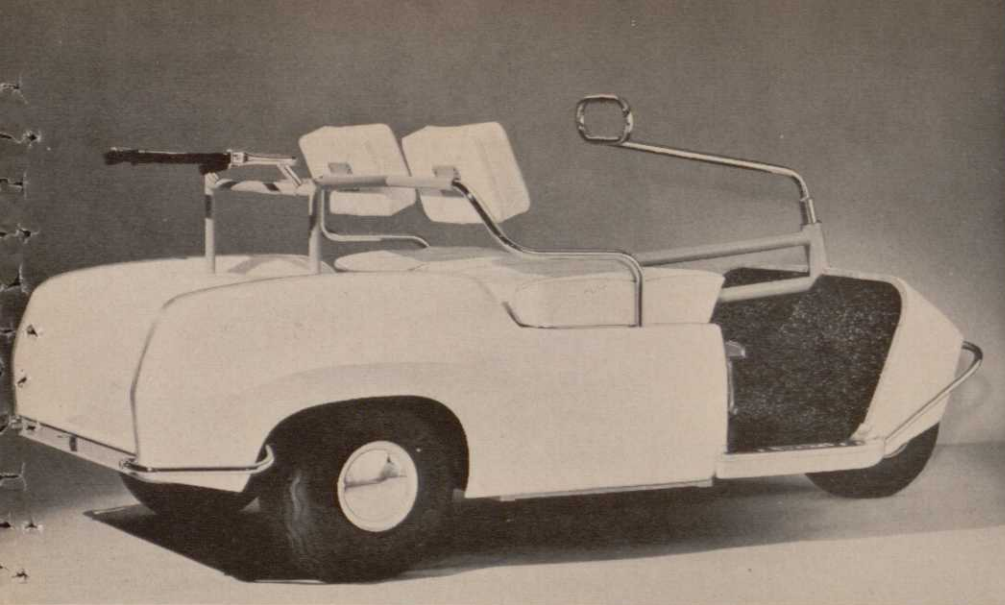
Each week, car batteries should be watered, washed and cleaned. The watering of batteries must be done after coming off charge. They should be filled with water free from minerals or metals; distilled water is preferred. The use of automatic cut-off fillers will help fill to the proper level. This level is usually indicated by a ledge, square, circle or triangle depending upon the brand.

Weekly, bring electrolyte level up to indicator with pure water. All cells must be checked and filled. Overfilling as well as underfilling will shorten battery life and range. Boiling or overflow of electrolyte during charging usually is a result of overfilling the battery.

When the caps have been replaced after watering, a solution of 4 tablespoons of baking soda per gallon of water should be sprayed or brushed on the battery tops, cable ends, battery sides, and carrier to neutralize acid and eliminate corrosion. The soda solution should be applied until the bubbling or fizzing reaction between acid and soda has stopped. The batteries must then be flushed off with water and allowed to air dry.

In very humid climates or damp weather, the tops of the batteries should be dried with compressed air or wiped off. Keeping tops of batteries clean eliminates current drain and corrosion. It also improves charging and range.

Each month the battery connections should be tightened. Twice a year these cables should be removed and cleaned with a wire brush. Monthly, each cell should be checked with a hydrometer, after charge, but before water is added. If the specific gravity is lower by 10 points or more than



that specified by the battery manufacturer for the full charge condition, an additional equalize charge is recommended.

If one battery is lower in all cells by 25 points or more, the low battery should be charged on an individual battery charger to the same state of charge or specific gravity as the other batteries. Should a battery have one or two cells lower by 50 points or more than the other cells, the battery should be individually charged and then given a 75 amp capacity discharge test to determine the condition of the battery. From 60-70 minutes of 75 ampere discharge capacity to 5.25 volts per battery is needed for 36 holes average range.

Should one defective battery need to be replaced in the set, it is better to replace all batteries if the batteries are over one year old. The five good batteries may be used to replace batteries of similar age in other cars of the fleet.

Whether batteries are stored during the winter in or out of the car, both the weekly and monthly maintenance procedures should be followed prior to storage. During the winter, the batteries must be kept fully charged by charging every two weeks. Monthly spot hydrometer checks must be made after charging to be sure batteries are adequately charged.

The cooler the storage area, the less frequent will be the need for charge. Fully charged batteries will not freeze, but partially charged batteries may freeze causing damage to plates and cases.

Proper charging is as important to battery performance as battery care. Adequate wiring, proper fusing and sufficient power supply must be available. Tap set transformer chargers should be correctly adjusted to AC line voltage. All chargers should have good ventilation. All connections, both AC and charger to car, should be tight. Overheating of contacts indicates high resistance and a bad connection.

Excessive water usage indicates overcharging of the batteries. This may cause swelling of battery cases and short battery life. Either the charging rate or the length of the charge time should be reduced to eliminate overcharging. Undercharging, as indicated by low specific gravity or short range, should

be corrected by a higher charging rate or longer charge time.

Completely discharged batteries need 20-25 amps of initial charge and should finish below 5 amps. Non-automatic chargers should be adjusted so they will operate within the above range.

Proper installation of batteries, charging and scheduled preventative maintenance takes time. With the above program and care, however, your car batteries will give the desired range and long life for economical and satisfactory service. □



Above left, the Viking I electric golf car from Versal, Inc. Viking I consists of a three-piece sectional fiberglass body with a hard-finish permanently molded into the body. It features positive automatic breaking system, long-life nylon rear-suspension bushings, single solenoid switch system and a choice of tiller or wheel steering. Viking II golf car, also electric, is made of all-steel construction. Above, Electric Carrier electric golf car available in six models with tiller and automotive steering. It features a vertical bag rack that protects the club grips.

To lease or not to lease

If you have believed that purchase is the only way to fill your car demands, you should look into the advantages of a leasing program.

by John D. Patterson

The thorny problem of whether it is best to lease or to purchase golf cars is one that must be answered by the board of directors of every club in the country. The board must be able to recommend to the membership the most highly profitable and efficient car operation suitable to their club. Therefore, it is not only desirable to take a long, hard look at leasing advantages but also at the lessor or supplier of golf cars.

Let's first consider the advantages to the club of a sound leasing program.

CAPITAL INVESTMENT

There is no capital investment involved to the club that decides to lease. The club's physical investments are basically limited to storage space, maintenance areas and electrical or gas facilities.

There are interest expenses, however, when the club must borrow the money. The five to six per cent interest makes quite a difference and must not only be figured as a cost with car purchase, but as an added income with lease. After all, the old saying, "A penny saved is a penny earned" is true, and interest today is no longer pennies.

OWNERSHIP RISKS

To the leasing club there are no ownership risks—even if the weather is inclement and the greens fees and car rentals plunge to an all time low.

It does not matter to the leasing club that they were sold a "bill of goods" and the wrong kind of cars were purchased. It does not matter that the manufacturer of a certain brand of car has gone out of business and parts are unobtainable or difficult to get. How many clubs have cars that have been purchased but are no longer being manufactured?

Naturally one of the greatest ownership risks is that of obsolescence. The spectacular rise in the popularity of the golf car makes model change a grimy issue to be faced by many clubs.

If your club bought 20 cars two years ago, chances are you now have 40 and undoubtedly will

require 80 in the next two years. This leaves the owning club with either a conglomerate fleet of several brands or several models of the same brand.

With the trade-in market as difficult as it is—who wants the problem? On one hand there is the problem of stocking parts for several brands and on the other the great game, "Who will ride the old car?"

Also, picture this: the club that scheduled a three day tournament, with no caddies available, 12 rusty club-owned cars, and only six charger outlets. If on lease there would be no problem, for this is one of the lessor's obligations. (To furnish extra cars, upon reasonable demand, is one of the services offered by most lessors.)

THE INTANGIBLES

While many boards of directors have felt it is more profitable to own cars rather than lease, have they considered all the costs? Have they considered the ever-present "people problem"? It is becoming increasingly difficult to get trained personnel to care for a multi-thousand dollar investment at a price the club can afford.

Because of limited exposure, insurance rates are bound to go up if an accident occurs on the club grounds. Then, there are the intangible costs of keeping maintenance records and costs, rental receipts, depreciation and member billing records.

Is it possible that many clubs have led themselves down the primrose path of ownership only to find themselves still behind the financial eight-ball? Is it possible that they have spent rental income on an addition to the clubhouse rather than the maintenance of the greatest money-maker they have? Cars and facilities purchased and planned three years ago are hardly adequate to meet today's modern requirements. Treading this primrose path explains why there are so many shoddy ill-kept cars on our fairways today.

"Let's buy them—look at the money we can make." This is a beautiful but not always true statement. Is there any better way to make money