


# TORO<sup>®</sup>



## GOLFMASTER<sup>®</sup> GOLF CAR

ELECTRIC MODEL 90110

Book No. 880



PRICE 25¢

OWNER'S OPERATING MANUAL

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Your new quality-built Toro Golfmaster merits the same pride and care you would give a new automobile, including storage facilities from the elements and monthly lubrication and check-up. Be sure to read this Owner's Manual very carefully including the Maintenance Instructions before you operate your new Toro Golfmaster. With proper care and maintenance, your Golfmaster will give you years of trouble-free enjoyment.

Study the operating instructions and safety precautions thoroughly to insure proper functioning of your Golfmaster and to prevent injury to yourself and others. It is recommended you keep this manual in one of the two storage compartments behind the seats of your Golfmaster as a ready-aid for the operation of the vehicle.

# OPERATING INSTRUCTIONS

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**TO START:** An ignition key located between the seats turns the master switch "off" and "on," as well as locking the switch when not in use (see figure 1). In addition, the ignition key serves as an electric shift. To go forward simply turn the key to the right (clockwise) until it snaps in place, and your Golfmaster is ready to accelerate ahead. To go backward turn the key to the left (counterclockwise) as far as possible and hold it in this position while accelerating in reverse. The tension spring on the key in the backward position will automatically turn to "off" position when released. It is necessary to manually turn the key to "off" position when in forward. This tension spring feature assures you your Golfmaster will be "off" whenever the key has been turned to the left (counterclockwise). It is advisable to keep your Golfmaster in "off" position whenever it is not in use for any extended length of time to help maintain a longer operating life of the batteries.



FIGURE 1



FIGURE 2

**TO ACCELERATE:** There are three (3) pedals located on the floorboard of the golf car (see figure (2)). The accelerator is the middle pedal. To accelerate, press down on this pedal. Release the pedal to slow down and

stop. Always remove your foot from the accelerator pedal when selecting a direction forward or reverse.

**TO STOP:** The two (2) pedals located on either side of the accelerator pedal are brake pedals. Apply either pedal (depending on seating location) to stop the car. To hold the car on a hill, press either brake pedal as far to the floor as it will go until the brake snap-locks in place. This will prevent your car from rolling down-hill. To release this brake, step lightly on the accelerator and the brake will automatically be set free. This feature will prevent you from ever driving your golf car with the brake gripping.

You may operate your Golfmaster from either the right or left side. The three-position adjustable wheel can be set in the right, middle, or left side position by merely pulling the "swivel lock" lever located on the steering column. (See figure 3.) The dual brake pedals and location of the accelerator pedal allows you complete driving freedom in either seat of your Golfmaster.

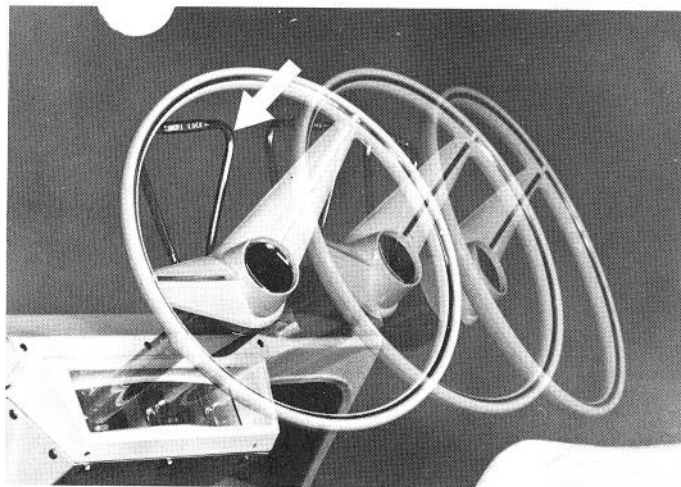


FIGURE 3

Your car is equipped with adjustable swivel seats. On the outside (entering end) of each seat is a lever that when pushed in the direction of the arrow will allow the seat to rotate 90° toward the opening (see figure 4). A second lever located on the inside of each seat will permit the seat to be positioned laterally four (4) different locations to suit each person's individual comfort (see figure 5).

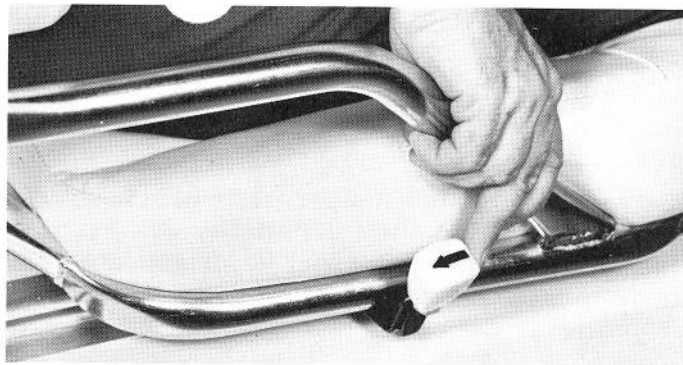


FIGURE 4

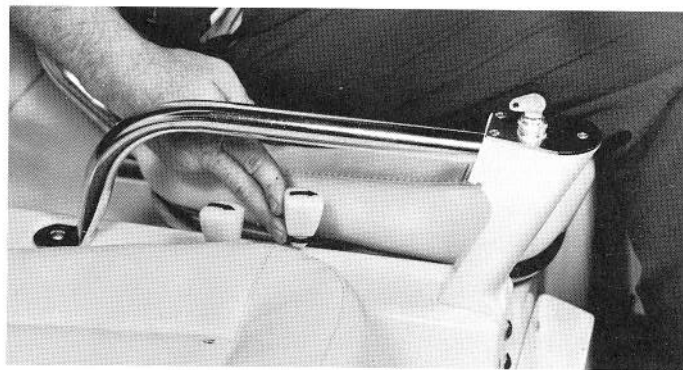


FIGURE 5



Convenient golf bag holders are provided behind each seat in the rear of the golf cart. A snap hook "A" (see figure 6) is furnished on the chain to attach to the ring on the handle or strap of your golf bag. This will keep the bag in the proper semi upright position and will facilitate club removal from golf bag.

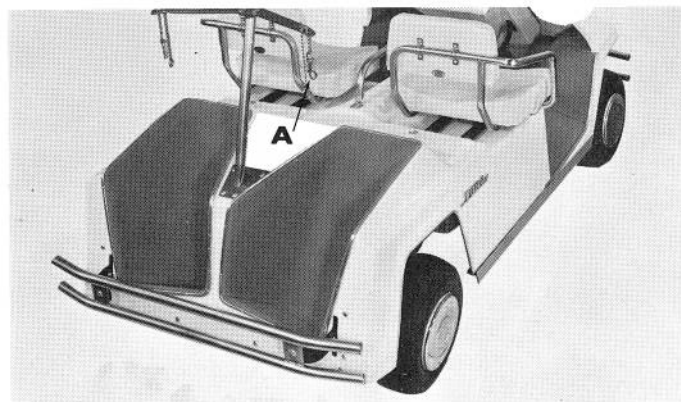


FIGURE 6

## SAFETY PRECAUTIONS

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Although your Toro Golfmaster is equipped with 4-wheel suspension, wide track wheels, and low center of gravity - reasonable caution should be observed in the degree of turn particularly on hills. Sharp turns at high speed should not be made.

The vehicle is engineered to give maximum climbing efficiency on the most severe slopes, but the climbing of any slope or hill is up to the operator's good judgement.

When stopping on a hill, the brake should always be engaged to prevent the car from rolling.

The Toro Golfmaster is designed for two passenger service, and at no time is the transporting of more than two persons advisable. Under no conditions should golfers be allowed to ride on this unit other than in the passenger seats which are provided.

## **DRIVING COURTESY**

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On golf courses where directional signs are posted for golf car operation, it is requested that these trails be used. At all times, every courtesy should be extended to another golfer who is playing an area in which a golf car is operating. Always make certain that no "hot-rodding" is done in the immediate area. Always consider the other golfer as a pedestrian.

The turf on the golf course is maintained in a highly professional manner and is provided for

the golfing pleasure of many hundreds of players. Each golf car operator should take this into consideration when driving the golf car, taking extreme precaution that he at no time operates the car on the greens (regular or putting), tees, in traps, or in exceptionally wet areas where surface water is present. The car is not designed as a water vehicle, so the crossing of water hazards should be avoided. However, your Golfmaster is equipped with Terra tires which are ideal for soft turf without causing noticeable markings.

## **MONTHLY MAINTENANCE INSTRUCTIONS\***

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### **GREASE FITTINGS**

Use a grease lubricant on the following ten (10) fittings.

- A. Front end spindle, 1 fitting each side.
- B. Front end spindle pivot points, 1 fitting at top and 1 fitting at bottom each side.

- C. Rear torsion tube, 1 fitting each side.
- D. Rear axle universal joint, 1 fitting each side.

### **PIVOT POINTS**

Use an oil lubricant on all pivot points.

\* Monthly maintenance is based on an operation of the golf car eight (8) hours a day. When operated less, a proportionable schedule may be used.

## **WHEEL BEARINGS**

Use No. 5 - Fiber bearing grease on wheel bearings.

## **DIFFERENTIAL**

Check the differential monthly and change yearly with No. EP140 oil lubricant. Capacity: 2 pints.

## **TIRES**

Check the tire pressure and maintain 15 pounds of pressure in each tire. The four (4) wheel mounting bolts on each wheel should be checked periodically in event they should loosen.

# **ELECTRICAL SYSTEM**

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Your Toro Golfmaster is operated by a 1-1/2 H.P. - 2800 RPM - 36 volt - 40 ampere electric motor. A new design of electrical control (leaf switch) regulates the motor-speed and does not waste any electrical energy. This

permits a graduating supply of power to the motor, stepping up from 12 to 36 volts - assuring a smooth comfortable ride (see Wiring Diagram). The motor is powered by six (6) special heavy duty golf car batteries of six (6) volts each.

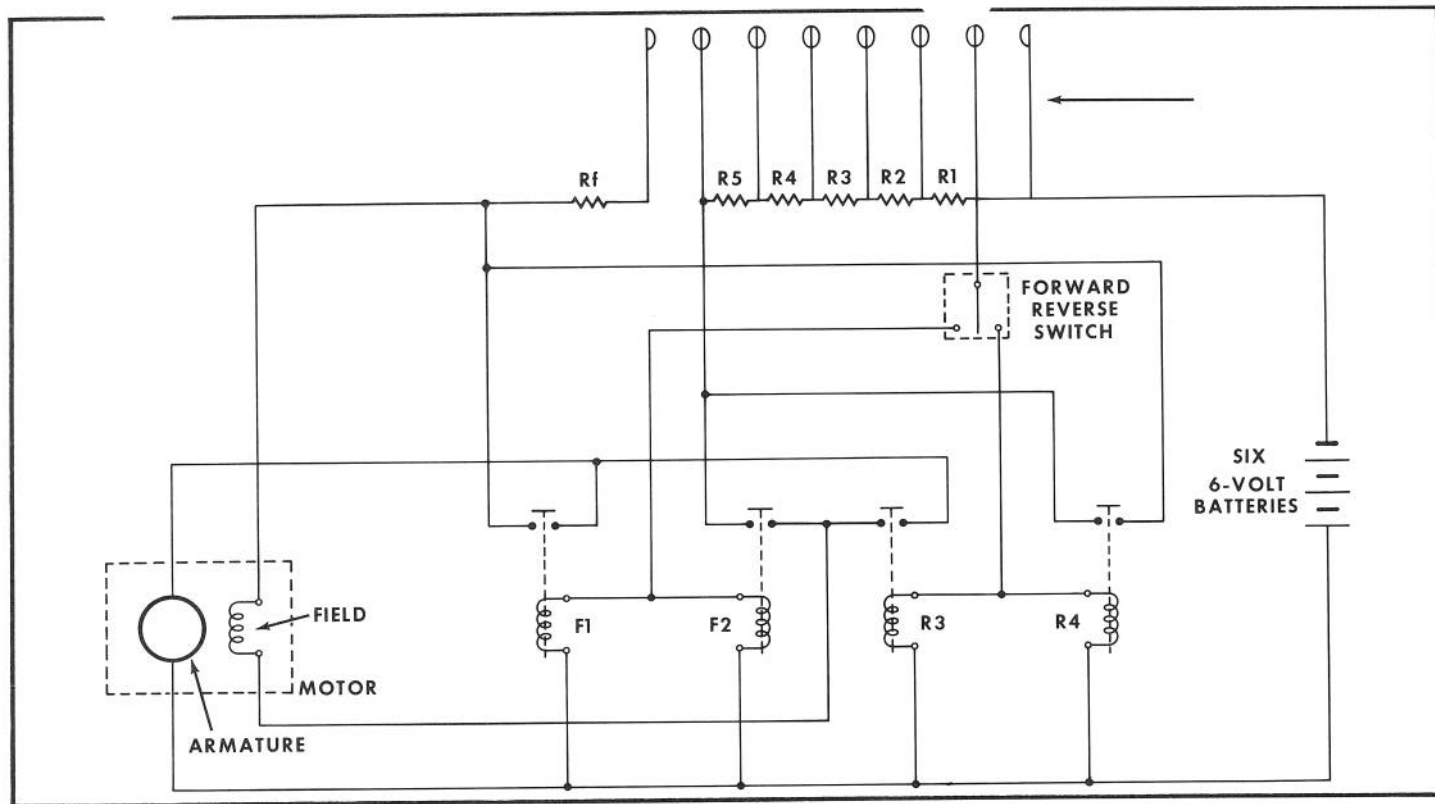
# **BATTERY CHARGING**

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The charger (optional with the golf car) is designed to charge the batteries in a 12 hour period without overcharging. Variations of line

voltage from 105 volts to 128 volts can be tolerated without affecting the charging rate. The batteries should be charged daily after eight





WIRING DIAGRAM

hours of operation or 36 holes. The car has been used for only 18 holes, an eight hour charge should be sufficient.

It is recommended that the body be raised and caps removed from the battery before charging as well as being sure the electrolyte (water) level is sufficient. This will also give you the opportunity to make a quick inspection of the entire motor and drive system.

The entire battery power unit is mounted on a frame which may be lifted out and another fully-charged bank inserted. With the body raised, there is enough clearance to free the battery unit from the car. This feature allows the Golfmaster to be kept in continued operation without waiting for battery recharging.

If a charger other than the one supplied optionally with the Toro golf car is used, the polarity of the charger should be checked. The positive lead of the charger should always be connected to the positive terminal of the batteries, the negative lead of the charger to the negative terminal of the batteries.

When new batteries are put in service, it is always recommended that they be run through a "break-in" period. For the first five cycles, the car should be used for only 18 holes then placed on charge for twelve (12) hours. Such a practice will contribute greatly to the capacity and useful life of the batteries.

#### **CAUTION**

When recharging batteries, be sure ignition key is in the OFF POSITION before plugging in the battery charger.

Although weak or dead batteries will generally be the cause of the Golfmaster becoming inoperative, refer to the Trouble Shooting Guide for other malfunctions.

With proper care, your Toro Golfmaster will not require any other maintenance long after the warranty has expired.

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SYMPTOM	REMEDY
1. Car "dead."	<ol style="list-style-type: none"> <li>1. Check batteries.</li> <li>2. Check electrical connections, electrical panel plugs, and battery disconnect plugs.</li> <li>3. Check electrical panel.</li> <li>4. Check accelerator linkage travel.</li> </ol>
2. Car runs in forward only or reverse only.	<ol style="list-style-type: none"> <li>1. Check electrical panel plugs.</li> <li>2. Check electrical panel.</li> <li>3. Check reversing switch.</li> </ol>
3. Weak brakes.	<ol style="list-style-type: none"> <li>1. Lock brakes with pedal.</li> <li>2. Tighten rear most nut on each brake caliper until rear wheels skid.</li> </ol>
4. Car runs but is sluggish and lacks power.	<ol style="list-style-type: none"> <li>1. Check batteries.</li> <li>2. Check accelerator linkage travel.</li> <li>3. Check dragging brakes or binding in drive system.</li> </ol>
5. Car does not run or runs slowly - chattering of solenoids is heard when accelerator is depressed.	<ol style="list-style-type: none"> <li>1. Check batteries - dead or shorted cell - discharged.</li> <li>2. Check electrical panel.</li> </ol>
6. Car does not run in high speed.	<ol style="list-style-type: none"> <li>1. Check field resistor contact on leaf switch.</li> <li>2. Check field resistor</li> <li>3. Replace electrical panel if in doubt about (1) and (2).</li> <li>4. Check wiring with wiring diagram.</li> </ol>
7. Car runs in reverse when key is turned to forward.	<ol style="list-style-type: none"> <li>1. Check motor wiring.</li> <li>2. Check reversing switch wiring.</li> </ol>

## WARRANTY

The Manufacturer warrants each new piece of equipment sold to be free of defects in material and workmanship. For one year from the purchase date of consumer line equipment or 45 days if sold for commercial use, Toro Manufacturing Corporation will repair or replace for the original purchase, free of charge, through any Authorized Service Dealer, any part or parts found at our factory in Minneapolis, Minn., to be defective under normal use and service. All institutional equipment is warranted for ninety (90) days from the purchase date.

This Warranty does not obligate the Manufacturer to bear the cost of transportation charges in connection with the replacement or repair of defective parts — nor shall it apply to a machine upon which repairs or alterations have been made, unless authorized by the manufacturer.

This Warranty does not include nor cover standard accessories produced by other manufacturers. Such accessories have separate warranties by their respective manufacturers . . . and repair or exchange will be made on the basis of such warranties, and the policies authorized by them shall be adhered to.

This Warranty is in lieu of all other warranties expressed or implied.

For complete Service Manual, write to Toro Service Dept:

**TORO** MANUFACTURING CORPORATION • 300 WEST 82nd STREET • MINNEAPOLIS, MINNESOTA 55420