

turn charger off and let the batteries cool.

3. Batteries not fully charged — the charge rate is too low.
4. Insufficient power: Batteries may not be charged. Check for bad connections, an accumulation of corrosion, a poor contact in switches or battery terminals. Check the motor brushes for wear.

Short battery life may be caused by:

1. Overcharging — excessive heat damages plates and separators.
2. Undercharging—batteries remaining discharged may lead to sulphation, damaging positive plates.
3. Low Electrolyte — high acid concentration damages plates and separators.

Maintaining batteries in the off season has been a problem in the past. Batteries are perishable and lose approximately 3 points specific gravity per day at 100 degs. F and  $\frac{1}{2}$  point per day at 50 degs. F. To make certain that your batteries are in good state of charge, it is recommended that you check batteries every 30 days with a hydrometer. If the readings are between 1.230 and 1.260 the battery is all right. However, if the reading is 1.230 or under, it is recommended that the batteries be placed on charge. Normally a 6-hour charge will be sufficient.

#### Several Methods Available

Several methods for converting alternating current to direct current for battery charging are available. These are AC motor generators, tungar bulb-type rectifiers and the dry disc-type rectifier. The most prevalent in golf car charging are selenium rectifiers and silicon diode rectifiers. (Rectification, of course, is a method of changing AC to DC.) Trickle chargers are not suitable for heavy-duty golf car application. Constant current chargers are not readily available for golf car service.

There are several safety precautions in charging that should be remembered. Flammable hydrogen and oxygen gases are by-products of battery charging and good ventilation is essential. Don't work on batteries or disturb connections when the charger is connected and ON as sparks

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## National Golf Day On Television May 31

The National Golf Day Round of the Champions will be telecast live and in color nationally on May 31. Oldsmobile will sponsor the telecast from the Laurel Valley GC, Ligonier, Pa. The event will be carried over NBC coast-to-coast from 5 to 6 pm, EDST.

The PGA champion Bobby Nichols and the current National Open champ, Ken Venturi, will play an 18-hole match with \$10,000 going to the winner. The loser will receive \$5,000.

Beginning May 15, any golfer — man, woman or child — may play an 18-hole round at his or her course with a minimum contribution of \$1 to the PGA for the National Golf Fund. The local pro will certify scores. More than one round may be played and the best score submitted by all players who enter Golf Day competition. The scores are matched against the winner's score of the Nichols-Venturi match. Individual golfers who defeat the winner will receive a 'Beat the Champ' award from the PGA.

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may be created that can cause an explosion. Ground the car before working on it. This will eliminate static electricity. If any electrolyte is splattered, wash it out with plenty of cold water. Should you get any solution in your eyes, wash with cold water cupped in the hand and see a doctor.

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## Good Heads PGA Seniors

Cliff Good, pro at Midland (Mich.) CC, was elected president of the PGA Seniors at the annual meeting of the group in late February. Good succeeds Leonard Schmutte of Findlay (O.) CC. Schmutte was elected honorary president.

The Seniors elected Harry Moffitt of Heather Downs CC in Toledo, O. as first v-p. He will also serve as chairman of the tournament committee. Paul E. Erath of Laurel Valley GC, Ligonier, Pa., was elected second v-p and Denny McGonagle of Elks CC in Hamilton, O. was elected secretary-treasurer.