

Keep those engines purring

Regular maintenance will protect your investment, keep your car operation in the black—and your members happy.

by E. L. Fisher

Do your golf car engines purr after two seasons? If not, can it be that you don't take the few minutes necessary to get top performance.

Preventive maintenance is the key to long life for golf car engines, and 99 per cent of this is routine servicing, the daily check any reliable attendant can make to see that engines get a proper diet of gasoline, oil, and *clean air*.

Like an automobile engine, a golf car engine is built for hard work and long hours. It needs no more attention than your car gets or should get at the corner filling station—a quick check of the oil level, an oil change periodically, a quick cleaning to free the engine of dirt and chaff, and a change of spark plugs and air filters when needed.

Simple? Yes. Time-consuming? No. Whether you have five cars in your fleet, or 50, each car needs only minutes of attention a day. With a minimum of care, the engine in a golf car will give top performance week after week and season after season. Without daily servicing, on the other hand, you jeopardize your entire investment.

Neglect ruins engines a thousand times faster than hard use, as anyone who has burned up an engine for lack of oil will testify. Remember, the investment you are protecting by routine maintenance of the engines in your fleet is an investment that may total many thousands of dollars.

Daily servicing keeps a new engine in top condition. It does not keep an engine forever new, of course, and sooner or later engines must be repaired or replaced. Most golf car engines will operate for 1000 hours or more without overhaul. By that time the engines have paid for themselves several times over, and the logical question becomes: Do I overhaul the engines or buy new ones?

Large fleets of golf cars may justify the hiring of a competent mechanic and the setting up of shop facilities for engine overhaul. Most golf course operators, however, prefer to work with a nearby

engine dealer who can keep parts and replacement engines in stock and who is skilled in engine repair. Such a dealer can determine quickly whether it is more economical to repair an engine or more economical to replace it with a new engine.

One factor which influences the decision to repair or replace is the labor rate in the area. In those parts of the country where labor rates are low, extensive overhauling of an engine may be feasible. Where labor rates are high, buying a replacement engine may be more economical than an extensive engine overhaul.

An engine dealer is helpful in another way also. If an engine was defective when it left the factory, the dealer is authorized by the engine manufacturer to handle warranty work on the engine.

Major maintenance aside, it is still the routine servicing day by day that spells dividends or deficits

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Above, the new Gran Cushman, available in both gas and electric models. It features heavy wall steel frame, and individual sports car style bucket seats.

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with golf car engines. Maintenance instructions come with each engine in a manual supplied by the engine manufacturer. The following check list is typical:

Each Day

- a) Check fuel supply and oil level in crankcase. Add oil only as needed to keep the level between the marks on the dipstick. (Use type of oil specified on engine instruction plate.)
- b) Clean oil and dirt from external surfaces. On air-cooled engines, it is especially important that the rotating air screen, flywheel fins, and cooling fins on the cylinder head and block are maintained in clean condition at all times to ensure proper air circulation.
- c) If necessary, clean or replace the filter element in the air cleaner. Dirt is the No. 1 enemy of engines, and the filter keeps dirt out. When the engine loses power or runs erratically, chances are that the filter is clogged. Under extremely dusty conditions, it may be necessary to clean or replace the filter daily. Even on a clean, green course, a filter may need replacing once a month.

Every 25 Operating Hours

- a) Change oil in crankcase. (Change more often under extremely dusty conditions.) Be sure that there are no air leaks at gasket joints between air cleaner, carburetor and cylinder block.
- b) Remove, clean, and replace sediment bowl.

- c) Wipe oil and dirt from engine block, spark plug, and oil fill.

Every 100 Operating Hours

- a) Perform usual 25-hour maintenance.
- b) Check spark plug and reset gap to .025. If plug is dirty, replace it instead of trying to clean it.

Your instruction manual includes a check list for 500-hour maintenance also. It is more comprehensive and should be done by a competent mechanic. Most golf car owners rely on authorized engine dealers for this service.

Here are some additional helpful tips:

- a) Keep a separate maintenance record on each golf car to ensure regular maintenance and help you spot trouble before it becomes serious.
- b) If oil consumption increases suddenly, have the engine reconditioned immediately. Otherwise, the engine may run out of oil on the course and be ruined.
- c) Newer engines are equipped with automatic compression releases for easy starting. When an old engine is reconditioned, have the dealer add an automatic compression release.
- d) Clean air is so important to an internal combustion engine that it deserves extra emphasis. The filter in dry element-type air cleaners is vital protection against dirt. Learn to recognize when a filter needs replacing. Learn to replace it properly. Remember that more engines are wrecked by dirt getting into the combustion chamber than by lack of oil.

Take time to service our golf car engine—just a few minutes a day. Follow the instructions in your engine manual. Your golf car operation will be in the black—and your golfers will be happy. □



Above, Stevens "Four-Bagger" golf car made of fiberglass. An aluminum bracket was mounted on both the right and left rear fenders to the standard Club Car allowing easy access to golf clubs in both bags.



Above, Taylor-Dunn's new electric golf car. The Tee-Bird features tiller or wheel steering, six 170 amp hour electric vehicle batteries, mechanical brakes and a wide choice of colors.