

Electric Motor Instructions

Since 1989, golf car and utility manufacturers have used a number of different motor/rear axle configurations. For the most part, the process of removal and installation is the same. Safety is a concern, so follow these instructions carefully.

 **Caution!** The electric drive motors used in these vehicles are very heavy! Use great care when removing them, as this process could pose a danger for a sprained back, smashed fingers, broken toes, or other severe injuries!

 **Caution!** If the car is equipped with a Run/Tow switch, always turn the switch to the tow position first. Then disconnect the main battery power connections to the car.

Motor Removal:

1) Each motor terminal is marked with an ID, such as A1, A2, ETC. Take a moment to make sure the heavy motor circuit cables are clearly marked regarding their original connection markings. To remove the motor circuit cables from the motor, you will need two wrenches: one to remove the nut securing each cable and one to hold the nut under each cable connection. Figure A.

Note: Always hold the bottom terminal nut in place to prevent the terminal stud from turning in the motor housing. If the terminal stud turns, internal motor damage could result! Make sure this nut is tight before installing the cable.

2) Some motors are also equipped with smaller gauge wires and a plug exiting the motor end cap. If the motor is so equipped, depress the lock tab and separate this plug.

3) Most drive motors are held in place using three (3) bolts through the rear axle gear case and into the drive motor. Locate and remove these three bolts. Most Club Car models are equipped with one additional bolt and "L" bracket, which is found under the motor, but just above the axle tube. Some motors do not require this bracket and bolt to be re-installed. Three bolts are all that is needed.

Note: Before lifting the motor from the rear axle, be sure the motor is not oily or greasy, your hands are clean and dry, and use proper lifting posture. The motor is extremely heavy and you need to be careful when handling it.

4) Position yourself carefully over the motor, grasp it firmly, and wiggle it while pulling away from the rear axle housing. The motor should slip free from the rear axle input shaft and is now free from the axle and will drop quickly. Be aware of that sudden drop and grasp the motor firmly. You can also use a belt or some sort of strap to assist in motor removal.

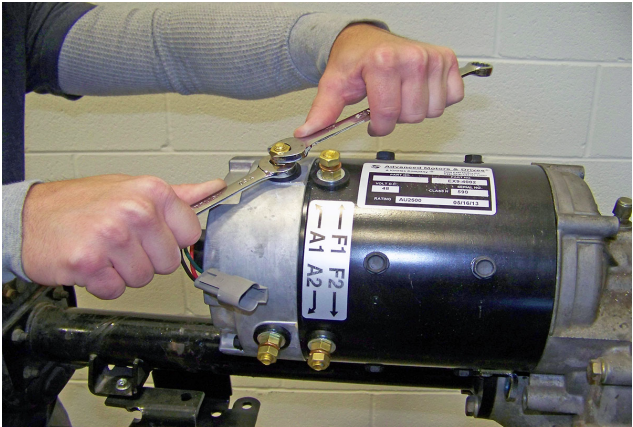
5) Clean the housing area and apply a small amount of thick grease to the input shaft. Do not install too much grease! Install in reverse order.

"It is the motor manufacturer's recommendation, to achieve optimum performance the motor needs to be run (or broken in) at 1/2 (half) throttle for a minimum of 10 minutes". This allows for proper brush seating prior to full throttle operation!

Indemnification And Insurance Agreement

High Performance Enhancement Kit purchaser assumes sole and entire responsibility for, and shall indemnify and save harmless Nivel LLC, from any and all claim, liability, responsibility, and persons or property that may be sustained in connection with the use of any product before or after purchase, including but not limited to high performance enhancement motors. The High Performance Enhancement Kit purchaser also shall indemnify Nivel LLC harmless with respect to any and all liability that may be incurred.

Golf Cars are recommended for use only by those aged 16 and older. Golf cars can be especially hazardous to operate. Always remember that riding and alcohol/drugs don't mix. Never ride on public roads. Never carry more than two passengers (except shuttles and trams). Never engage in stunt driving. Avoid excessive speeds and be particularly careful on difficult terrain. Nivel LLC reserves the right, at any time, to discontinue or change specifications, prices, designs, features, models, or equipment without notice and without incurring any obligation.



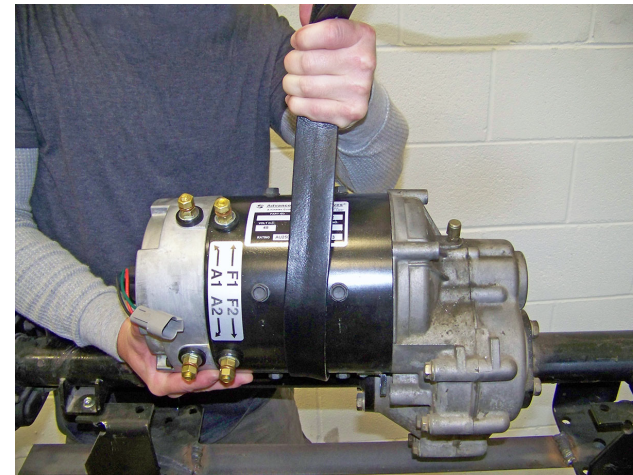
Double Wrench Method



Remove Bolts



Grasp Motor Firmly



Belt Or Strap