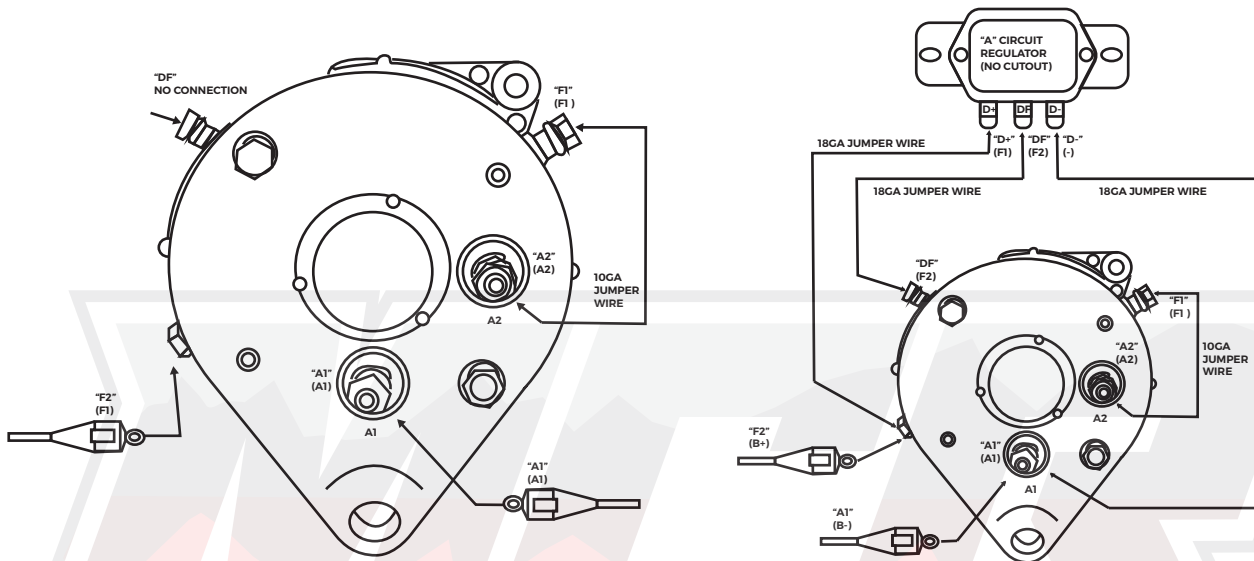


## Golf Cart Starter/Generator Installation and Troubleshooting:

It is recommended that a trained professional install this part. Encourage whoever is installing this part to use safe practices. For example, always tag or mark all connections since reversing connections or polarity may damage your part.

This starter/generator has two functions: **(1)** to start the cart and then **(2)** to act as a generator to maintain a charged battery. On 2-cycle models the starter/generator will turn CW and CCW, 4-cycle models spin in whichever direction the manufacturer chose to set. Below are simplified diagrams of how to test the respective unit types in the field.



### Possible Installation Concerns:

- 1)** Low battery voltage is a common cause of failure for carts. Confirm you have voltage of 12VDC
- 2)** Inspect your cart's belt. Belt tension can impact the ability of the starter/generator to cool. If it is too tight, the part can overheat causing starter/generator failure. If it is too loose, the belt can slip and result in a no charge condition.
- 3)** These types of starter/generators do not begin to have output until approximately 3000 RPM. If you try and test before reaching that RPM it is possible to damage your part or get false readings.
- 4)** To check the starter/generator and regulator:
  - a)** Place the neutral lockout cam in the MAINTENANCE/SERVICE position. Then place the FORWARD/REVERSE handle in the NEUTRAL position and chock wheels.
  - b)** Make certain all wires are correctly connected and not loose.
  - c)** Using a confirmed good, fully-charged battery, run the cart for 3-5 minutes to reach normal operating temperatures. Turn the key to off to kill engine.
  - d)** Set your multimeter to 20VDC. Place the red + probe to the large post on the solenoid via the red wire from regulator. Place the black - probe to the negative battery post.
  - e)** Disconnect the small yellow wire connected to the DF post on your starter/generator. Take a 3-5 inch jumper wire and connect the DF post to negative. Now run the cart again - press accelerator to start the engine and run at full speed. Check voltage.
    - i)** If you have over 15VDC than your voltage regulator is bad and your starter/generator is GOOD. If the reading is between approximately 14-15VDC, the regulator is GOOD.
    - ii)** If you have approximately 12VDC, you are reading only battery voltage and your starter/generator is BAD.
    - iii)** If the reading is lower than 14VDC and not rising steadily, either your regulator or starter/generator is BAD.
    - iv)** If the reading is lower than 14VDC, but rising steadily, your battery may need to be charged.