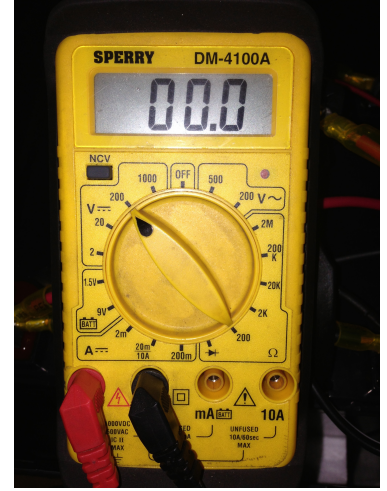


Note: some tests may require an extra person to complete more easily

Caution:

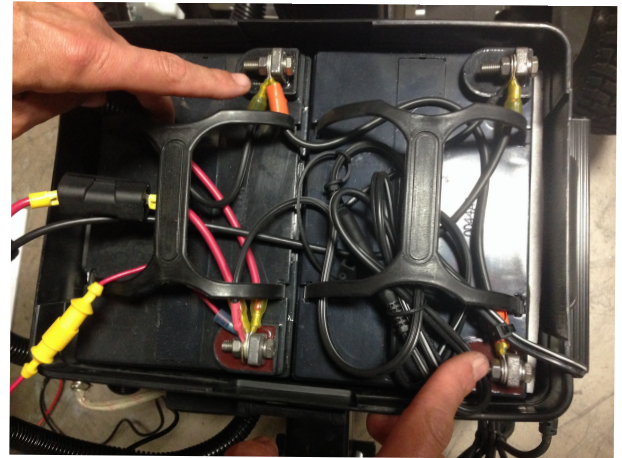
1. Block the unit, so that the drive wheels are off the ground for safety.
2. Use properly insulated tools

Set the electric meter to Volts -- DC power (Scale 30+ Volts)



3. The Airtug drive system is a 24 volt system so two 12 volt batteries are wired in series, by connecting the positive of one battery to negative of other battery using a “Jumper Wire” (which should either have orange tape on the ends or the wire insulation should be orange). For all readings we will be using the terminals that do **NOT** have the Jumper Wire connected to them.

For all tests, the negative probe will remain on the Negative 24V battery terminal (for ease you may want to use an alligator clip to hold it in place)



4. Check 24V system voltage, ie checking batteries:

The battery must NOT be under load and it must NOT be charging. To be accurate, the battery should be in a neutral condition for an hour or two before taking a measurement.

Determine the Terminal Voltage of the batteries by placing the Positive (Red +) probe on the positive 24V terminal and the Negative (Black -) probe on the negative 24V terminal (ie, the terminals that do NOT have the “Jumper” wire attached).

Record Actual Readings on the back page



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If below 24 volts, change meter scale to 20 volt and check batteries individually to ensure both batteries are good. Note voltages of each battery.

If the batteries in series are less than 18 volts, the batteries will need to be charged individually using a 12 volt trickle charger to bring the batteries up to at least 18 volts in series before the Airtug Charger (Schumacher) will function properly.

Voltage:

25.46
25.24
25.00
24.74
24.48
24.20

% Charged:

100%
90%
80%
70%
60%
50%

5. Battery Charger Test:

Plug in the battery charger and the volts should climb (in this example, 24v system was reading 25.11 volts before the charger was plugged in and it increased to 26.77 volts in a minute or so after being plugged in and was slowly continuing to increase).

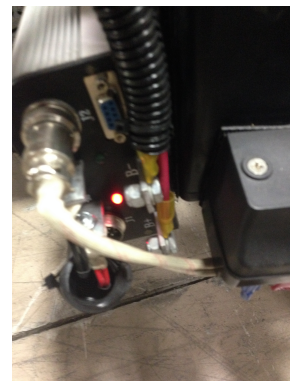
Note: If the battery has not reached at least 18-volts after five minutes of charging or at least 24-volts after four hours of charging, the charger will abort the charging process and turn the yellow LED off. (ie - if the battery is too low or weak - use a 12 volt charger on each battery individually to try to get the volts up to at least 18 volts when in series.).

The batteries may be bad if the charger is working but unable to get batteries to charge.



6. Does the green light on the controller illuminate when turned on?

- if yes, then go to Step 9
- if no, then go "On/Off 2A Fuse Check" and On/Off Switch Test (Step 7)



7. On/Off 2A Fuse check:

Check to see if battery wire connection and 2A fuse are good by disconnecting the yellow fuse holder and touching the Positive (+) probe to the end of the fuse. The reading should be the same as 24V system voltage in Step 4.

If it is not, check that fuse is not blown and check to make sure that the battery connections are tight.



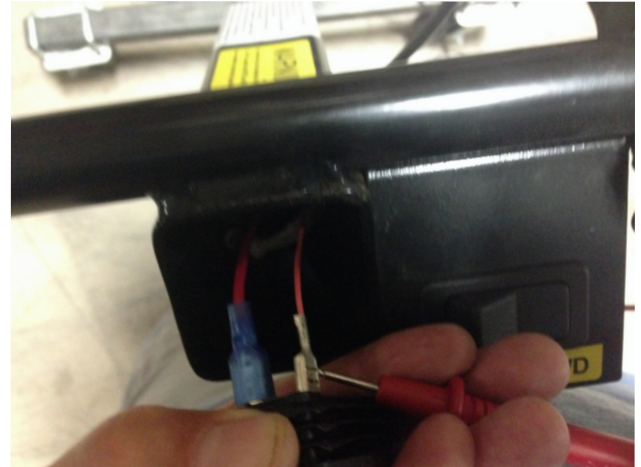
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8. On/Off Switch Test

Test switch by touching the Positive (+) probe to the silver terminal on bottom of “On/Off” switch (not the terminal with the blue insulation)

The reading should be the same as 24V system voltage in Step 4 or “0” if the switch is in the Off position.

If not, replace the switch.



9. J2 Cable

Make sure the connection of the J2 cable at the Controller is tight & is it in the correct receptacle.



10. Thumb Throttle / Twist Grip Connections:

The Green light on the controller will light up whether the thumb throttle is hooked up, good connections or not.

Make sure the connections at the plug at the handle are all secure and nothing is loose. Pull gently on each wire to make sure they are secured.

If connection is bad, repair or replace.

