

Steps for troubleshooting and resolving vehicle with

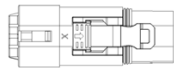
indicator faults

1, Fault reason

 indicator means an insulation fault, which means that the 73.6V (Bange) positive or negative pole of the vehicle is connected to the 12V negative pole of the vehicle.

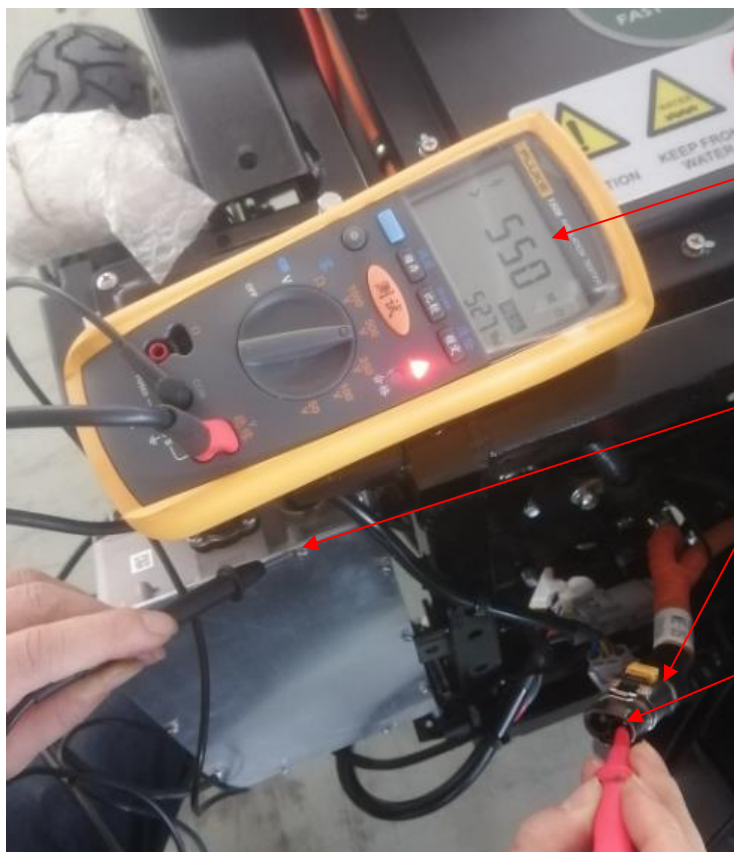
2, Troubleshooting

① Power off the vehicle, uninstall on-board charger output connector



(Charger output 73.6V connector), then power on vehicle, check

 disappear or not. If  disappear, means the insulation fault caused by the charger (you can also check whether there is an insulation problem at the 73.6V output end of the charger according to the following figure); If  does not disappear, please continue with the next step.



The insulation meter reading $\geq 550M\ \Omega$ indicates that the insulation is normal; Reading $\leq 20M\ \Omega$ indicates an issue with insulation

The negative probe of the insulation meter is connected to the charger connector housing or the vehicle 12V negative electrode

Connect the positive lead of the insulation meter to the positive pole of the charger connector, and then test the negative pole after testing the positive pole

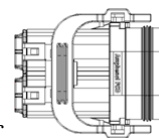
② Power off the vehicle, uninstall DCDC output connector



(DC

input 73.6V), then power on vehicle, check  disappear or not. If 

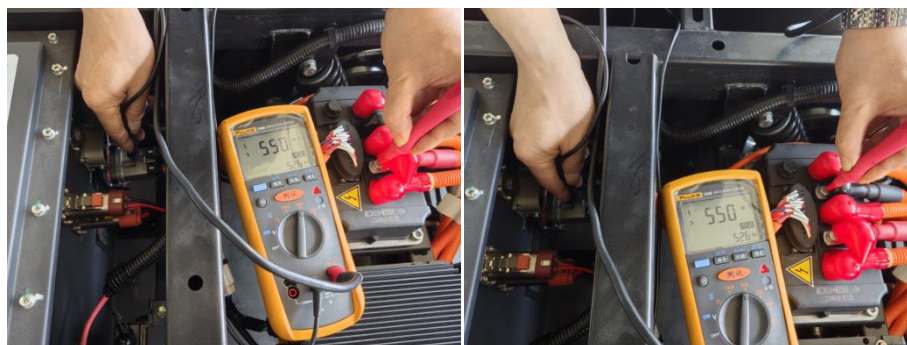
disappear, means the insulation fault caused by DCDC (you can also check if there is an insulation problem with the 73.6V plug-in at the DC input end according to the above figure); If the fault identification does not disappear, please continue with the next step.



③Power off the vehicle, uninstall 73.6V power wire connector

then power on vehicle, check  disappear or not. If  disappear, means Insulation faults caused by power lines or motor controllers or main cables, as both motor controllers and main cables are connected to the power lines, must be investigated one by one.

③-1, Firstly, completely remove the power wire assembly connector, connect the positive and negative terminals of the power wire harness assembly with the positive probe of the insulation meter, and connect the negative terminal of the insulation meter to the power wire connector housing. Adjust the voltage of the insulation meter to 500V and apply pressure to the power wire harness assembly. Check if the insulation meter value is $\geq 550\text{M } \Omega$. If the insulation meter value is $550\text{M } \Omega$, it indicates that the power wire harness assembly is normal. If the insulation meter value is less than $550\text{M } \Omega$, There is a problem with the power harness assembly;



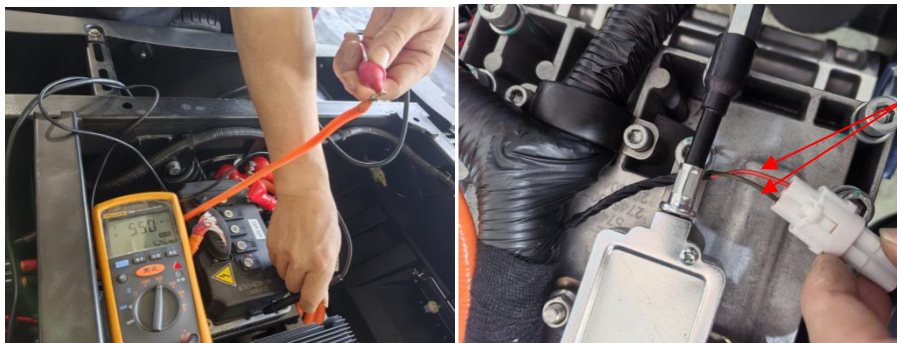
③-2, Use an insulation meter to check the motor controller for insulation faults using the same method. Connect the positive electrode of the insulation meter to the positive or negative electrode of the motor controller, and connect the negative probe of the insulation meter to the aluminum alloy base of the motor controller (if the insulation resistance value of the motor controller is $\geq 50\text{M } \Omega$, it can be determined as unqualified);



③-3, Use an insulation meter to check if there is an insulation problem with the 72V+power line of the cable using the same method.

If the Insulation meter displays $\geq 50M \Omega$ the cable is considered qualified.

If is less than 550 M Ohm the cable is considered faulty Please refer to the second figure below to check if the speed limit wire of the swing device is damaged. If these two wires are damaged, it can also cause insulation failure.



Check if the two speed limiting cables of the swing device below the seat are damaged and connect to the 12V negative pole of the vehicle body. If this cable is damaged and connected to the scheduled housing, insulation problems may occur. This step is quite important

4, Check for insulation faults in the drive motor assembly

Disconnect the U, V, and W phase wires of the drive motor assembly, and use a multimeter to measure the insulation resistance between the U, V, and W phase wires and the drive motor assembly housing, If $\geq 50M \Omega$, it is considered qualified (if the vehicle has an insulation fault during driving, measure the insulation resistance of the U, V, and W phase lines of the drive motor assembly within 1 minute after reproducing the

insulation fault as much as possible. It is possible that the drive motor assembly is due to a lower insulation level caused by temperature rise but the probability of such a fault is very low)



Measure the insulation resistance of the U, V, and W phase wires of the drive motor assembly. Connect the positive pole of the insulation meter to the U, V, and W phase wires respectively, and connect the negative pole of the insulation meter to the drive motor assembly housing.