Vehicle drives slow

Start

Make sure vehicle is fully charged. Plug in vehicle and test the battery pack voltage. With charger on pack voltage should reach above 87 volts before turning off. If charging is in question see Battery charger test flowchart.

DC Drive Only

AC Drive Only

AC drive system can approximately maintain 25 MPH at full GVW (3000 lbs) up a 10% grade hill. Uses above these specifications typically would see a decrease in top speed.

If vehicle is only maintaining a top speed of 5 MPH first check speed controller for error codes. If error code is present see Troubleshooting error codes which can be found in section 4.4 of the service manual.

Otherwise if speed is greatly reduced measure pack voltage while driving vehicle in its reduced speed scenario. Is voltage continually?

In the case of a battery issue the dash display will not represent the correct state of charge.

Flooded and AGM batteries only.

Above 72 volts

Battery pack voltage would be in the normal range. If speed is extremely low (less than 15 MPH) then either system is loaded beyond its capability or issue would be related to either a loose connection, a bad controller or bad motor.

72-68 volts

Batteries are becoming weak. Voltages this low shouldn’t affect the top speed as much but is indicating a battery issue. See section 3 of service manual for testing batteries. If batteries test good amp draw may be high. Typically a DC drive will max out at 120 amps at higher speeds. If amperage is continually higher than 120 issue could be related to either a loose connection, a bad controller or bad motor.

67.9-63 volts

Batteries are below 0% state of charge. Voltages this low will affect the top speed. See section 3 of service manual for testing batteries.

Below 63 volts

Lithium batteries only.

Above 77 volts

Battery pack voltage would be in the normal range. If speed is extremely low (less than 15 MPH) then either system is loaded beyond its capability or issue would be related to either a loose connection, a bad controller or bad motor.

76.9-74 volts

Cells are becoming weak. Voltages this low shouldn’t affect the top speed as much but is indicating a battery issue. If batteries test good amp draw may be high. Typically a DC drive will max out at 120 amps at higher speeds. If amperage is continually higher than 120 issue could be related to either a loose connection, a bad controller or bad motor.

73.9-60 volts

Typically at an amp draw of 80 amps battery pack should be measuring 77 volts or below. The DC drive typically draws 80 amps at a constant speed of about 25 MPH. In this case I would test what the amp draw is and if its low (10-60 amps) then issue would be related to either a loose connection, a bad controller or bad motor.

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