





STEP	TEST POINTS	TEST SPECIFICATION	TEST CONDITION	TEST FAILURE COMMENTS	TEST FAILURE ACTION
1	ESS J80-U to ESS J80-c	>20 V DC	ESS J80 disconnected and the ignition switch on	Voltage <20 V DC indicates the power to ESS is low.	Troubleshoot Vehicle Wiring and Electrical System.

Perform all Tests with the Battery Isolation / Master Disconnect Switch open

Fault Code F133: Loss of Communication from System Control Unit (SCU) to Energy Storage System (ESS).

System Control Unit (SCU) has lost communication with ESS. Refer to possible cause listed above.

Diagnostics:

1. Verify Energy Storage System (ESS) has power. Refer to SCU to ESS CAN Wiring verification procedure, steps 1 and 2.
2. Refer to CAN wiring verification procedure substituting ESS J80 pins V and W for steps 1 through 3 respectively and J80 pin f for step 4.
3. Refer to SCU to ESS CAN wiring verification procedure, steps 2 through 5.
4. Replace Battery Management System (BMS).

2 **SCU to ESS CAN wiring verification procedure**

Note:

ESS J80-U to ESS J80-c should not be less than 20V..

and SCN P50-30 to ESS J80-V should be < 5 Ohm

J80-V: signal CAN Hi

J80-W: signal CAN Lo

J80-f: shield, should be connected to chassis.

SCU P50-29 is shield and is connected to chassis