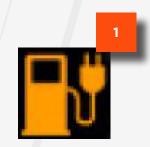
OPERATING YOUR EMV

INSTRUMENT CLUSTER OPERATOR WARNINGS - LOW VOLTAGE

Vehicle operators may encounter instrument cluster warnings related to the vehicle being at a low State of Charge (SOC).

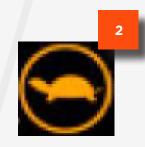
The vehicle will display two main indicators to warn the operator of a low voltage concern related to the high voltage system.

In addition, a 12 volt battery system low voltage indicator can also display for the operator.



When the state of charge on the instrument cluster reaches less than 20%, the first indicator displayed to the operator will be an amber colored range indicator as pictured to the left.

At this time, there is no loss of available power to the operator. The operator should review the remaining available mileage and adjust their route to the nearest available charging location.



The next indicator the operator will encounter will be the turtle indicator. The turtle indicator will illuminate when battery conditions (SOC, temperature, etc.) limit charge or discharge capability of the high voltage batteries. For example, in typical operating conditions, this indicator will illuminate around 9% state of charge as noted on the instrument cluster.

At this time, there will be a slight reduction in available power to the operator. If the vehicle continues to be driven down to 0% state of charge, the power available will be further reduced.



If the 12 volt battery system has low voltage, the red battery indicator will show on the instrument cluster. If this indicator is present, the vehicle will not go into "High Voltage Ready" mode and the vehicle will not be able to start.

If the low voltage battery system is less than 9 volts measured at the batteries, the system voltage is low and many of the control modules will not power up.

In this situations, the low 12 volt battery condition can be corrected by simply charging the 12 volt batteries or installing a 12 volt battery charge pack to the low voltage batteries.