

Vehicle Electrical Power Sensor (VEPS, Power Sensor)

System Summary

About 70% of vehicle breakdowns are due to electrical power system component failures, such as battery, alternator, regulator, starter, alternator driving belt or power circuit failures. If your car's electrical system breaks down, leaving you miles away from assistance, you will realize the importance of Power Sensor.

Developed with patented technology, VEPS detects and warns driver about electrical faults in advance. It helps drivers avoid inconvenience and losses due to vehicle power failure. It improves vehicle reliability, and indirectly, reduces traffic jams and improves road usage.

VEPS performs the following system check or display system status whenever the ignition key is turned on or engine is running. Drivers can ignore the LED display if no musical beeping sound is heard due to the following:

1. Power sensor starts up with power circuit check, followed by initial beep when check is completed,
2. LED is a color volt/charge meter - green for high voltage/charge status, red for low status,
3. Battery cranking capability or cranking power check,
4. Electrical power usage condition - green for low usage, red for high usage,
5. Battery cells, plates, and circuitry conditions and acid level check,
6. Alternator operating condition check - green for charging, red for no/low charge,
7. Alternator charging capability and battery capacity matching check,
8. Driving belt slacking condition check,
9. At perfect electrical operating conditions, the LED displays a dimmed green,
10. A musical beep tone will be played when the vehicle system is restored to norm.

The LED displays the following early warnings, together with 2 types of musical beeps. Attentive warnings are short-lived, and drivers may ignore it. Critical warnings are non-stop, and it is advised that drivers take remedy action as soon as possible, sometimes requiring to head straight to the workshop:

1. Battery poor cranking capability warning,
2. Battery overcharged warning,
3. Battery failing soon, battery plates aging or sulphated, or poor inter-cell joint warning,
4. Battery in bad condition, having low acid level, plates or cells damaged warning,
5. Under size alternator warning,
6. Faulty alternator driving belt warning,
7. Faulty alternator, i.e. rectifier, regulator, carbon brush or slip ring failure warning,
8. Faulty starter warning,

9. Poor electrical power supply circuit quality warning.
10. Warning to switch off Unnecessary Power Usage (UPU).