



## TROUBLE SHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE/CHECK	SOLUTION
<b>JUMPER LEADS TROUBLESHOOTING - GENERATION 2 LEADS WITH 'JUMP START SAFE' TECHNOLOGY</b> (REFER TO THE LED LIGHT SYSTEM ON THE 'JUMP START SAFE DEVICE' ON THE JUMPER LEADS) <b>DO NOT CRANK ANY VEHICLE UNTIL A SOLID GREEN LIGHT IS INDICATED ON THE 'JUMP START SAFE' DEVICE WHEN THE POWER PACK HAS BEEN CONNECTED TO THE VEHICLE BATTERY.</b>		
<b>Solid red</b> LED when jumper leads are connected to the <b>power pack</b> .	Power pack is in 'standby' mode.	Device is working properly.
<b>Solid red</b> LED when jumper leads are connected to the <b>vehicle battery</b> .	Indicates low battery voltage detection in the vehicle battery.	The vehicle battery is below 5.5 V and jump starting is not recommended. * * Please refer to section below
<b>Flashing red</b> LED when jumper leads are connected to the <b>vehicle battery</b> .	Indicates reverse polarity or power pack has gone into timeout mode (after 1 min).	Check and correct reverse polarity. The red (+) clamp must be connected to the positive (+) terminal on the battery and the black (-) clamp must be connected to the (-) terminal on the battery.
<b>Flashing red/green</b> LED when jumper leads are connected to the <b>vehicle battery</b> .	Indicates high voltage detection/reverse current detection. The vehicle battery has a higher voltage than the power pack.	Disconnect the power pack and jumper leads from the vehicle battery immediately. Check that the power pack is fully charged.
<b>Slow green flash</b> LED when the jumper leads are connected to the <b>vehicle battery</b> .	Jumper leads are over heating from continuous cranking or overload.	Allow the leads to cool down. No output until the leads have cooled down.
<b>Fast green flash</b> LED when the jumper leads are connected to the <b>power pack</b> .	Low power pack voltage.	Fully recharge the power pack. No output until the power pack is fully charged.

### LOW BATTERY VOLTAGE OVERRIDE

**NOTE: THE PROCEDURE OUTLINED BELOW IS ADVISED FOR TESTING OR EMERGENCY USE ONLY AND MUST ONLY BE CARRIED OUT BY A QUALIFIED AUTOMOTIVE TECHNICIAN.**

Jump starting a vehicle using LBV override with vehicle battery in place.	Connect the jumper leads to the vehicle battery, the LED will remain solid red.  Hold the ignition key or starter button in the 'ON' position for 5 seconds. The LED will turn solid green which indicates vehicle is ready for cranking and the engine will then turn over automatically.	Engine will start, LED will flash red/green and the power pack will shut down.  Note: The engine may stop due to the low vehicle battery voltage.  Disconnect the power pack and jumper leads from the vehicle battery immediately.
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### **\*IMPORTANT\***

**All SMART JUMP START CHARGERS are designed to be used as an EMERGENCY JUMP STARTER and a PORTABLE POWER SUPPLY to enable charging of most digital devices. They are capable of jump starting most vehicles with flat batteries. They are NOT a vehicle battery charger. They will not rectify existing starting system problems in vehicles.**

**THEY ARE NOT TO BE USED OR ATTEMPTED TO BE USED AS A PERMANENT POWER SUPPLY FOR ANY VEHICLE.**