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SMART POWER SYSTEM
SPS-12 AC MEMORY SAVER
Operator's Manual

The Smart Power System SPS-12 is designed to provide regulated voltage to keep electrical system memories alive during routine maintenance which requires removal of the vehicle's battery. In addition the SPS-12 has LED indicators that show relative parasitic current draw.

CONTENTS

NOTES

LIMITED WARRANTY

12 MONTHS FROM DATE OF PURCHASE

The manufacturer warrants to the consumer that this product will be free from defects in material or workmanship for a period of twelve (12) months from the date of original purchase. Products that fail within this 12 month warranty period will be repaired or replaced at the manufacturer's option to the consumer, when determined by the manufacturer that the product failed due to defects in material or workmanship. This warranty is limited to the repair or replacement of parts and the necessary labor by the manufacturer to effect the repair or replacement of the product. In no event shall the manufacturer be responsible for special, incidental or consequential damages or costs incurred due to the failure of this product.

Improper use, accident, water damage, abuse, unauthorized repairs or alterations voids this warranty. The manufacturer disclaims any liability or consequential damages due to breach of any written or implied warranty on its test equipment.

WARRANTY AND SERVICE INFORMATION

Warranty claims to the manufacturer's service department must be transportation prepaid and accompanied with dated proof of purchase. This warranty applies only to the original purchaser and is non-transferable. Shipper damage incurred during return shipments is not covered under this warranty. It is the responsibility of the shipper (the customer returning the Test Equipment) to package the tester properly to prevent any damage during return shipment. Repair costs for such damages will be charged back to shipper (customer returning the Test Equipment). Protect the product by shipping in original carton or add plenty of over-pack cushioning such as crumpled up newspaper.

CONGRATULATIONS!

You have purchased Auto Meter's AC Smart Power System/Memory Saver designed to retain on board computer/vehicle module memory settings while the battery is disconnected. The system back feeds power through the OBDII or optional cigar lighter adapter to keep on board computer/vehicle modules alive. The system also displays the parasitic draw that the vehicle is consuming while the battery is removed to help trouble shooting excessive parasitic draw that would cause the battery to discharge when the vehicle is not being used.

SPECIFICATIONS

- Max continuous output current .....4 Amps
- Output voltage .....> 14 VDC
- Input voltage .....100-240 VAC 50/60 Hz
- Max AC Input current.....2.5 Amps
- Short circuit protection.....Yes
- Operating Temperature.....32° to 104°F
- Storage Temperature..... -4° to 185°F
- Size.....7.5"X5"X1.75"
- Weight .....1.5 lbs

SPS-12 OBDII Cable

OR

SPS-12 Optional Cigar Lighter Cable (Model AC-75 sold separately)

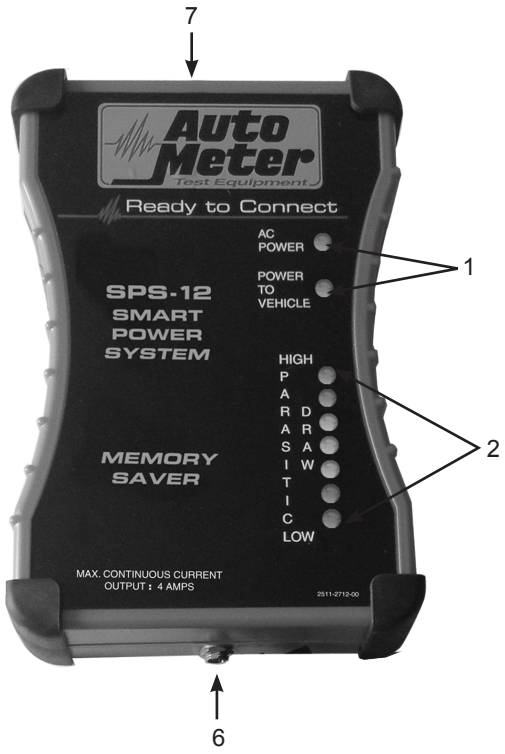
LED INDICATORS CONT.

While the Smart Power System is connected and the battery is disconnected the LED indicators show the amount of parasitic current draw.

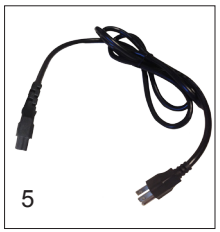
AC Power	Power to Vehicle	Current Range	Condition
On	On	Green	Low Current Draw
On	On	Yellow	Medium Current Draw
On	On	Red	High Current Draw
On	Off	Undetermined	Very High Current Draw – Check for Headlights, Running Fans & Heaters
Flash	Off	Off	Direct Short – Check Whether Positive Battery Cable is Touching Chassis or Negative Cable

Solid Green or Yellow Lights indicate that current is in the normal range.
Solid Red Light indicates that current is in the high range.
An unlit "Power to Vehicle" LED indicates that current draw is very high.
A flashing "AC Power" LED indicates that there is a direct short.

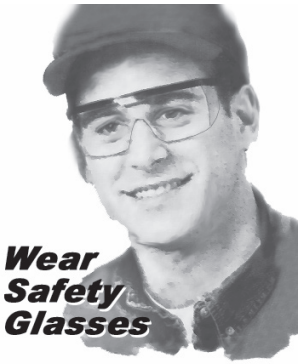
LED INDICATORS



1. Power Status LEDs
2. Current Status LEDs
3. OBDII Adapter Cable
4. Optional Cigar Lighter Adapter Cable
5. Power Cord
6. Plug for OBDII or Cigar Lighter Cable
7. Plug for AC Power Cable



SAFETY



- Carefully read all operating instructions before using the Smart Power System.
- Wear eye protection when working around batteries.
- The Smart Power System is equipped with a power cord. Never use an extension cord that is more than 50ft and it must not be smaller than 12 gauge. Make sure the extension cord and receptacle are properly grounded.
- Be sure to switch the power off before removing the clamps to prevent arcing and potential explosion from battery gases. Never remove the clamps while the unit is on.
- Keep sparks flames or cigarettes away from batteries.
- Provide adequate ventilation to remove car exhaust.
- In extremely cold temperatures, check for frozen electrolytic fluid before connecting the Smart Power System. Do not attempt to Charge a battery under 20°F. Allow the battery to warm to room temperature before connecting the Smart Power System.
- Never connect the clamps to more than one 12 volt battery at a time. Connection to 24 volts will dangerously overload the circuitry.
- Do not expose the Smart Power System to rain or snow.

Warning! *Never attach the* Smart Power System *to a battery that is connected to any other tester or charging unit. Damage may result.*

WARNING!

TESTING OF HYBRID VEHICLES

DO NOT test the starter, alternator and/or 12 volt starting battery while it is in the vehicle.

DO NOT remove, service or test the hybrid battery pack under any circumstances.

Remove the 12 volt starting battery, starter or alternator from the vehicle prior to testing.

USAGE

The SPS-12 Smart Power System can be used to save the vehicle's on board computer diagnostic settings, radio settings, and or other computer codes while the battery is removed for routine maintenance. The Smart Power System converts standard 120 VAC to a regulated 14 VDC. The Smart Power System also measures parasitic current draw. This is current that is drawn from the vehicle's battery when the vehicle is off with the keys removed. It is typically low (20-80mA) and is usually due to the on board computer.

NOTE: Some vehicle manufactures do not allow the use of a memory saver through the OBDII. Consult the vehicle manufacturer before use, to determine if a Memory Saver is acceptable for use on the vehicle.

In preparation for removing the battery it is recommended to open the vehicle's window in order to allow the Smart Power System's power cord to enter the vehicle without the need to have a door open. This is to reduce excess current draw from any interior illumination.

Turn off vehicle, and have it remain off for several minutes before attempting to remove the battery. This will give enough time for the computer and accessories & module to "time-out" and go dormant. Some vehicles will go dormant immediately, while others can take up to 2 full hours (though this length of time is rare). After several minutes have passed, the draw from any such components should be low enough (less than 4A) to be able to use the Smart Power System. If there are still systems drawing power, the parasitic draw indicator will show high, and you may notice the draw dropping after a period of time.

NOTE: The parasitic draw indicator on the Smart Power System will show all indicators lit while the battery is still connected, when you plug the Smart Power System in. This is normal, and will indicate actual draw level once the battery is disconnected.

If using the 6 ft OBDII power feed cable, on 1996 or newer models, plug the cable into the OBDII socket and make sure it is fully seated.

If using the optional 6 ft cigar lighter power feed cable, first make sure the cigarette lighter socket is powered when the vehicle is off. This can be tested by seeing whether the lighter heats or by using another 12 V accessory such as a phone charger. If it is determined that the socket is powered, plug the cigar lighter power feed cable from the Smart Power System into the socket and make sure it vis fully seated.

USAGE CONT.

Disconnect the vehicles battery cables. It is highly recommended that the battery cable connectors be insulated with electrical tape once they have been removed from the battery to prevent them from shorting out against each other or the metal chassis. A short circuit such as this would cause the Smart Power System's short circuit protection to engage causing the voltage to go to zero which would result in a loss of power to the computer memory. The battery can now be removed and replaced.

Reconnect the battery starting with the positive terminal. Remove the insulation and connect to the positive terminal. Then remove the insulation from the negative cable and connect to the negative terminal.

Unplug the Smart Power System.