

Eastwood

DO THE JOB RIGHT.

Part #13538

BATTERY SUSTAINER PLUS

12V 2A-10A BATTERY MAINTAINER

INSTRUCTIONS



Your **Eastwood Battery Sustainer Plus** is designed with the most current intelligent switching circuitry and pulsing technology to safely keep your 12 volt automotive, marine, motorcycle and powersports batteries at their peak power and efficiency. It is fully automatic with cross polarization protection and is switchable for use on standard lead/acid AGM and gel type batteries as well as offering a choice of 2 Amp or 10 Amp Charging. With care, it will provide many years of trouble free service.

WARNINGS

- **Use only with 12 volt batteries.** Do not attempt to use on batteries of lesser or greater voltage.
- Use only in a well ventilated area. Charging batteries may release potentially explosive gases. Keep away from sparks or flame.
- Do not allow the Sustainer or any of its connections to become wet. If this occurs, do not use.
- Keep the Sustainer as far from the battery as feasible. Never place the Sustainer directly on or near a battery.
- Be aware of the location of 120 volt input and 12 volt output cords. Do not allow them to be pinched in hood or door openings. Keep them away from rotating components such as belts fans etc.. Keep cords and Sustainer away from heat sources.
- Avoid using extension cords unless absolutely necessary. If required, be sure it is of a polarized blade type and is 18 gauge or greater.
- Never attempt to use on a frozen battery, explosion may occur.
- Check battery periodically for excessive heat buildup. Slight warming of the battery case is normal however excessive heat buildup (excess of 115°F) is a clear indication of danger.
DISCONNECT UNIT IMMEDIATELY!
- This Sustainer has automatic cross-polarization, overload and thermal shut-off protection however as with any electrical device, check periodically for malfunction.

SPECIFICATIONS

- 120V AC~2.55 Amp, 60 Hz input. 12 V DC, 2 Amp or 10 Amp selectable output with 4 stage charge modes and automatic pulsing to minimize battery sulphation while charging.
- 6 foot 120V AC input line, 5-1/2 foot DC output line with choice of 6" lead and 3-1/2" insulated "alligator" clamps or 6" lead and 3/8" insulated ring terminals.
- Automatic cross-polarization protection (instantly switches off if the opposite terminals are contacted).

SET UP AND CONNECTION

- Place the Sustainer in a firm, secure, dry location as far from the battery as feasible.
- Select the proper battery type switch position, standard lead/ acid AGM or gel type. If unsure, consult a certified automotive technician or contact the battery manufacturer.
- The Sustainer is equipped with a choice of battery connections; 3/8" ring terminals for bolt-on motorcycle type terminals or insulated "alligator" type clamps. Choose the preferred connection type and attach to the 5-1/2' long, 12 Volt output cord by plugging the white offset connectors together until the catch snaps in place.
- **RED** is attached to the positive battery terminal **FIRST** while **BLACK** is attached to the negative **SECOND**. Always "wiggle" the clamps allowing them to "bite" into the battery terminals when attaching to ensure a good connection.
- Make sure both cords are free of pinching hood or door openings, rotating fans, belts or other components.
- Plug the 120 Volt input cord into a polarized 120 VAC outlet.

OPERATION

- **Standard Lead/Acid or Gel button** – Depress this button on the panel to toggle between settings. The adjoining Red LED will illuminate. This switch must be set in the correct position for charging lead/acid batteries or gel type batteries. Failure to set switch in the correct position could affect performance or cause damage to internal circuitry. If unsure about battery construction, consult a battery professional or contact the battery manufacturer.
- **Current Setting button** - Depress this button on the panel to toggle between settings. The adjoining Red LED will illuminate. **Note:** The unit will default to the 2 Amp setting. Choosing the 10 Amp setting is generally recommended for initially charging full size automotive batteries in a low state of charge and must be manually selected by depressing the button to select 10 Amp. The 2 AMP setting is highly recommended for smaller motorcycle, lawn equipment or power sports batteries as selecting the 10 Amp setting may cause excessive battery heat buildup and permanent damage.
- The Sustainer is fully automatic in use and requires no additional user adjustments. The illuminated LED indicators are explained as follows:
 - **Green** = Power / Standby.
 - **Red** = Charging. (Note: after connecting, there may be a slight delay for the Amber Charging LED to illuminate while the intelligent sensing technology "reads" the battery condition).
 - **Amber** = 60% Charged.
 - **Amber** = 80% Charged.
 - **Green** = 90% to Fully Charged.
 - **Flashing Red** = **DISCONNECT IMMEDIATELY!** This indicates an abnormal condition such as crossed polarity, an internally shorted battery or pinched cable. Do not reconnect until the source of the warning is found.

TROUBLESHOOTING

- No LED illumination.
 - Check 120 VAC input plug connection.
- Red Abnormal LED Flashes.
 - **DISCONNECT IMMEDIATELY!** This indicates an abnormal condition such as crossed polarity, an internally shorted battery or pinched cable. Do not reconnect until the source of the warning is found.
- Stays in Power/Standby Mode (Solid Green).
 - Check white snap-together connection.
 - Check clamp or ring terminal to battery terminal contact. Clean battery terminals if required.
 - Battery may be fully discharged and will not accept charging.
- Red charge LED stays illuminated or will not go beyond Amber 60% or 80%. Green charged LED's never illuminate.
 - Battery may expired and no longer capable of holding a charge. Have battery load tested.
- Red charge LED illuminates then unit shuts off.
 - Battery may expired and internally shorted. The Sustainer's internal circuit breaker has tripped. Disconnect 120 VAC input supply and 12 DC output to battery connections. Unit will reset within 15 minutes. Have battery load tested.

OPTIONAL ACCESSORIES

- **#13536 – 12" Long Battery Sustainer Adapter Cable.** (allows adaptation from the Eastwood Battery Sustainer Plus white plastic snap-connector the other manufacturers rubber, weather-pac style offset connectors).

If you have any questions about the use of this product, please contact

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