



INSTRUCTIONS FOR:
**ELECTROSTART® BATTERYLESS POWER
 START 1600A 12V**
 PART NO: **E/START1600**



Refer to
Instruction
Manual



Warning:
Explosive
Risk



Wear Eye
Protection



Wear
Protective
Gloves



Warning:
Electricity

1. SAFETY

- ✓ Read the manufacturer's manual for the vehicle being started: the manufacturer may have specific cautions and instructions regarding emergency starting procedures.
- ✓ Ensure that the vehicle is in a well ventilated area.
- ✓ Apply the handbrake and select neutral or 'park' before attempting to start.
- ✓ Ensure that the ignition switch and all ancillary electrical equipment is switched off.
- ✓ Keep clear of any pulleys, belts etc. that will move once the engine starts.
- ✓ Take care to ensure correct connection polarity; red clamp to positive, black clamp to negative.
- ✓ Energise the E/START1600 only at ambient temperatures between -30°C and 40°C.
- ✓ When not in use, switch off and store in a cool, dry place out of the reach of children.
- * **DO NOT** allow this power pack to become wet.
- * **DO NOT** dismantle this E/START1600: there are no user-servicable parts inside.
- * **DO NOT** use in explosive atmospheres (e.g. the presence of flammable liquids, gases or dust).
- * **DO NOT** use the E/STAR1600 if it appears damaged in any way.
- * **DO NOT** use this product for any purpose other than that for which it is designed.
- * **DO NOT** leave in direct sunlight or expose to heat.
- * **DO NOT** use abrasive or solvent cleaners on this product.
- * **DO NOT** allow children to play with this product
- * **DO NOT** allow the positive and negative clamps to touch.

2. INTRODUCTION

Vehicle jump starting made easy with innovative technology, which unlike traditional boosters does not require an internal battery. Simply connect to a flat vehicle battery and the unit will draw power from it and energise itself fully in approximately 3 minutes. It then pushes full power safely back through the starting system, jump starting the vehicle. If the vehicle battery is faulty or holding less than 5 volts the ElectroStart1600 can be pre-charged via another vehicle's battery, the supplied Micro USB charging cable or the 12V accessory lead. No internal battery means no storage issues. No wait for the battery to charge which means it is ready to use in a matter of minutes. Lightweight and compact in size for easier handling and storage, yet still delivers the same result as heavy, bulky, lead acid battery equivalents. Ideal for the professional mechanics and DIY users. Supplied in storage bag.



Model	Petrol Cold No Battery	Diesel Cold Weak Battery
E/Start 800	Up to 3.0L	Up to 2.0L
E/Start 1100	Up to 5.0L	Up to 3.0L
E/Start 1600	Up to 6.0L	Up to 4.0L

The above chart is a guide only as actual performance depends on factors such as battery condition, temperature, age of the battery etc.

3. SPECIFICATION

Model No: **E/STAR1600**
 Output:12V
 Output Start Peak(EN): 1600A(800A)

4. CONTROL PANEL

4.1. CONTROL PANEL FUNCTIONS

ON/OFF Button:

Switches the E/STAR1600 on to display the level of energy in the E/START1600. Enables the E/STAR1600 to energise from a 12V battery via the clamp leads.

Hold the ON/OFF button down to select Override mode (see section 6.3).

Press to turn E/START.1600 off.

Energising Indicator (EI) (fig.1):

Press the ON/OFF button. The EI will show the internal energy of the E/START1600.

With the E/START1600 switched off, and connected to a battery, the EI indicates the charge in the battery. When the ON/OFF button is pressed, the EI flashes to indicate the internal charge being accumulated from that battery until the E/START1600 is fully energised, indicated by a steady 14V green LED.

GLOW Button:

Only used in special circumstances with some diesel engines (see section 6.2).

Fault/Glow/Override Indicator:

Steady red display when the ON/OFF button is pressed indicates incorrect polarity, short circuit or battery voltage less than 3V.

Flashing red/green indicates that the Glow function is selected.

Flashing green indicates that the Override function is initialising, steady green indicates that Override is ready.

Steady red indicates low charge in the vehicle battery.



fig.1

5. ENERGISING

5.1. ENERGISING THE E/START1600 (Charging)

The E/START1600 may be energised in 3 ways (times will vary).

- 12V battery. Connect the E/START1600 clamps to the battery terminals and press the ON/OFF button.
- USB lead. Plug the USB(A) plug into a 2A USB outlet and the micro USB into the port in the base of the E/START1600.
- 12V dc lead. Plug the adaptor into a 12V dc accessory socket and the jack plug into the pin jack socket in the base of the E/START1600. When using the USB lead, or 12V dc lead, the charging process is automatic. The E/START1600 will dissipate its energy over a couple of days if not used.

6. OPERATION

6.1. NORMAL STARTING

Ensure that the E/START1600 is switched off. Connect the clamps to the vehicle battery terminals, observing correct polarity.

The Energising Indicator display shows the charge in the vehicle battery. An initial battery indication of below 12V **may** suggest that there is an internal fault. If the normal starting procedure fails, consider using the Override mode at 6.3.

Press the ON/OFF button. If the E/START1600 is not already fully energised, the Energising Indicator LED's will flash until a steady green 14V LED indicates that it is energised fully (the E/START1600 will switch off if not used within 2 minutes; restart the process if this happens). When the 14V LED is steady the E/START1600 is ready. Operate the vehicle ignition switch to start the engine.

Switch the E/START1600 off and disconnect from the battery.

6.2. GLOW MODE (Only use if the GLOW symbol appears on the vehicle instrument panel)

Ensure that the E/START1600 is switched off. Connect the clamps to the vehicle battery terminals, observing correct polarity.

The Energising Indicator display shows the charge in the vehicle battery. An initial battery indication of below 12V **may** suggest that there is an internal fault. If the GLOW procedure fails, consider using the Override mode at 6.3.

Press the ON/OFF button. If the E/START1600 is not already energised fully, the Energising Indicator LED's will flash until a steady green 14V LED indicates a full charge.

When the 14V LED is steady, the E/START1600 is ready (the E/STAR1600 will switch off if not used within 2 minutes; restart the process if this happens).

Press the GLOW button. The Fault/Glow/Override Indicator will flash red/green to show that the glow mode is active. Operate the vehicle ignition switch and wait for the **GLOW** symbol on the vehicle instrument panel to extinguish. Start the engine.

Switch the E/START1600 off and disconnect from the battery.

If the Normal or GLOW start procedures are unsuccessful, the following mode may need to be used.

6.3. OVERRIDE MODE (Faulty battery)

NOTE: The GLOW function will not operate in this mode.

Always read the vehicle manufacturer's instruction manual.

An initial battery indication of below 12V **may** suggest that there is an internal fault.

The E/START1600 will need to be energised using one of the methods in Section 5.

Remove the vehicle's positive (red) lead from the battery terminal (fig.2).

Ensure that the E/START1600 is switched off. Connect the E/START1600 positive clamp to the vehicle positive lead, **NOT** the battery terminal (fig.2).

Press the On/Off button (the E/START1600 will switch off if not used within 2 minutes; restart the process if this happens).

Then press and hold the ON/OFF button until the Fault/Glow/Override Indicator flashes green.

This indicates that Override mode is initialising.

When the Indicator shows a steady green, the Override mode is active.

Operate the ignition switch to start the engine (the ability for an engine to continue to run without a battery connected will vary, depending on the make and model of the vehicle).

- WARNING: Do not leave the engine running without the E/START1600 or the battery being connected. Failure to comply could result in damage to the vehicle ECU. Sealey will not accept responsibility for any damage caused by incorrect use of this product.**

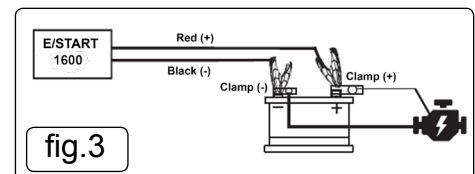
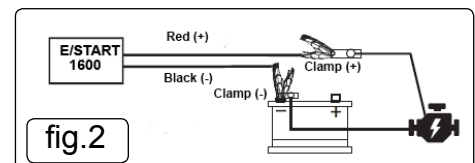
As soon as the engine starts, and keeping the E/START1600 clamp and battery lead connected, attach the positive lead to the positive battery terminal and tighten the terminal clamp (fig.3). After the positive lead has been secured to the battery terminal switch off the E/START1600 and disconnect from the battery.

- Warning!** Modern vehicles contain extensive electronic systems.

You are required to check with the vehicle Manufacturer, for any specific instructions regarding the use of this type of equipment on each vehicle.

6.4. Duty Cycle

Maximum Successive Start Attempts in a Session.....5
Minimum Rest Period Between Sessions.....15minutes



Environmental Protection
Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, dispose of it according to local regulations.



WEEE Regulations
Dispose of this product at the end of its working life in compliance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE). When the product is no longer required, it must be disposed of in an environmentally protective way. Contact your local solid waste authority for recycling information.

NOTE: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.
IMPORTANT: No liability is accepted for incorrect use of this product.

WARRANTY: Guarantee is 12 months from purchase date, proof of which will be required for any claim.



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