

# OptiMate III<sup>SP</sup>

## DESULPHATING CHARGER

Unique : diagnoses, recovers, charges, checks & maintains safely, for months

**OptiMate III<sup>SP</sup>** is the most advanced fully automatic diagnostic battery charger and maintainer for all 12V lead-acid batteries from 2,5 to 32 Ampère-hours capacity.



**OptiMate III<sup>SP</sup>**'s unique diagnostic function automatically identifies deeply discharged (sulphated) batteries and applies a controlled high voltage with small fixed current for a limited period to recover them.

All major starter battery manufacturers recommend maintaining such batteries FULLY CHARGED during periods of non-use.

**OptiMate III<sup>SP</sup>** is totally safe for months-long connection and maintenance of irregularly or seasonally used batteries even while still connected to the vehicle. No risk of over-charging. Electronically protected against user errors.

Just connect the **OptiMate III<sup>SP</sup>** to your battery, the rest is automatic. There is no switch, no fuse... and there are no sparks. De-activates automatically if connections are broken.



[www.optimate3.com](http://www.optimate3.com)

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### 5-stage automatic programme :

**1. DESULFATE** ☉ Tests the battery for possible deep discharge or sulphation. If necessary, the **OptiMate III<sup>SP</sup>** automatically engages a special high voltage recovery mode (up to 20V) with controlled very low fixed current, so as to desulphate very flat batteries, for up to 2 hours, controlled by an internal timer.

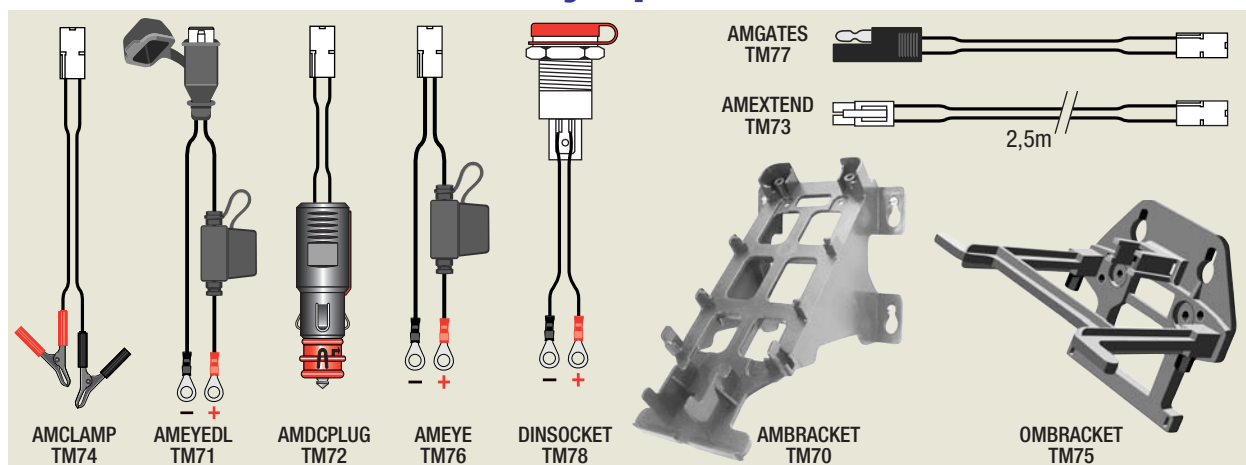
**2. CHARGE** — ☉ Charges at 0,6 Amps constant current («bulk charging» stage) for maximum safe rate recharge until such time as the battery is normally able to crank the engine.

**3. CHARGE** — ☉ During a 30 minute timed verification stage the **OptiMate III<sup>SP</sup>** ensures that even well-used batteries are brought to full charge saturation. If necessary within this period, the programme reverts automatically to the bulk charging stage, repeating steps 2 & 3 as many times as may be necessary until the battery is thoroughly charged.

**4. TEST** --- ☉ During a timed 30-minute pause in its programme, the circuit monitors the battery's voltage retention when «off charge». This identifies batteries unable to hold their charge adequately, or, if the battery remains connected to the vehicle's electrical system, that an excessive power drain is occurring some-where in the system.

**5.**  The green LED indicates for batteries which pass the voltage retention test.  They are then offered charge current according to need for 30 minutes so as to support connected electronic alarms or other small loads. The voltage retention check (step 4) is then repeated and alternates thereafter with step 5 for as long as **OptiMate III<sup>SP</sup>** and battery remain connected. Problems are identified by the red LED indicating. The circuit will continue to offer the battery float charge support until disconnected.

### Connection and accessory options



Delivered with two interchangeable connection sets, one with clamps for bench charging (TM74), the other with in-line battery protection fuse and eyelet terminals for permanent attachment to the battery posts of on-vehicle batteries (TM71) for subsequent easy connection and disconnection of the charger.

**This accessory, order code TM71, has a unique weatherproof rubber cover which protects the 2-pole charging cable connector against dirt & damp when the charger is not connected.**

Other connection & accessory options are illustrated above.

Limited 2 year warranty, except on cables, plugs and connectors.