This Service Information bulletin supersedes SI B04 11 02 dated **January 2009.**

Note that some content has been deleted as it is no longer applicable

NEW designates changes to this revision

SUBJECT
Automatic Battery Charger

MODEL
ALL

INFORMATION
The introduction of the E65 and later vehicles has brought with it the need for an intelligent battery charger that, in addition to being used as a conventional charger, can be used for long duration programming without harming the sophisticated vehicle electronics. The Deutronic Automotive Power Processor was developed for just this use.

Distribution of the following battery charger(s) is complete. One charger was supplied for every 4-center work stall (per the 1/2002 work stall count). Additional chargers may be purchased through your PDC at this time.

Automatic Battery Charger

PN 99 00 0 003 944

Price= Refer to Parts system for current pricing

NEW **Note: Power Supply mode must be used for the E65 and later ISTA/P programming.**

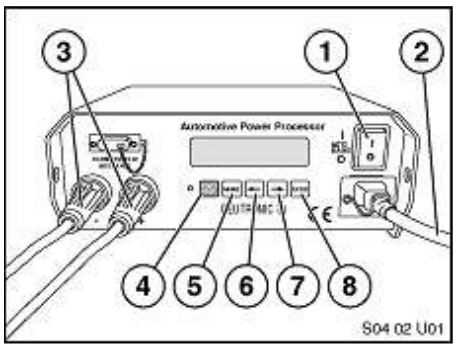
Replacement Battery Charger Cables

PN 81 39 0 309 920

Price= Refer to the Parts system for current pricing

These are the 5 meter 12 volt cables for the Deutronic battery charger. The cables may now be replaced as a set (+ & -).

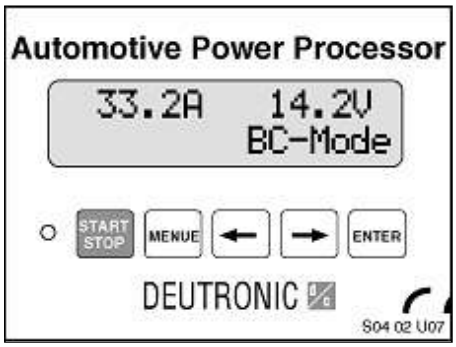
Refer to the Warranty section for defective battery chargers.



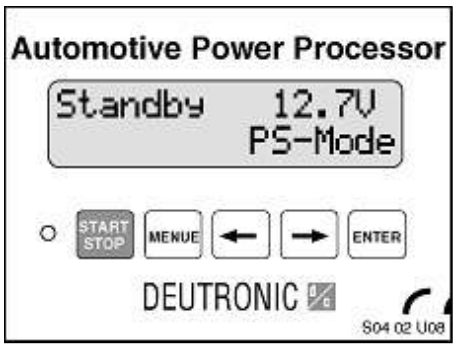
Deutronic
Automatic Battery Charger

FEATURES

- Intelligent battery charger with short circuit and reverse polarity protection
- Microprocessor-controlled charging, measuring and monitoring
- Deep discharge refresh function for sulfated batteries
- Non-sparking due to delayed switch-on
- Input 110VAC
- Output 14.2VDC @ 45 amps
- Charging current is adjusted automatically according to battery status
- Internal cooling fan with convection case (charger will feel warm to the touch)
- Mandatory for all E65 and E66 programming



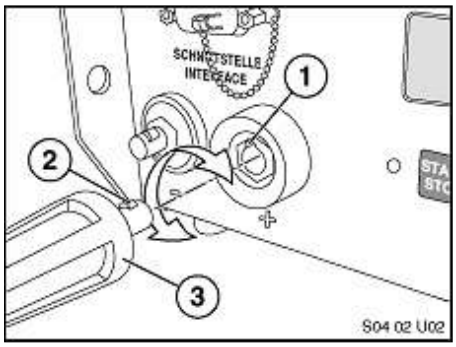
- Battery charger mode (BC) – charges the battery according to the battery requirements



- Power supply mode (PS) – output matches vehicle requirements. **This setting is mandatory for NEW ISTA/P programming.**

- Stand-alone charger – ability to charge severely discharged batteries at higher voltage levels (battery disconnected from the vehicle's electrical system)
- Non-reversible charging cables
- No unit-specific software installation required.

CHARGER AS DELIVERED

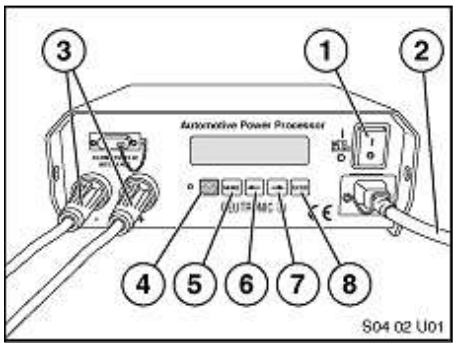


Included with each battery charger are:

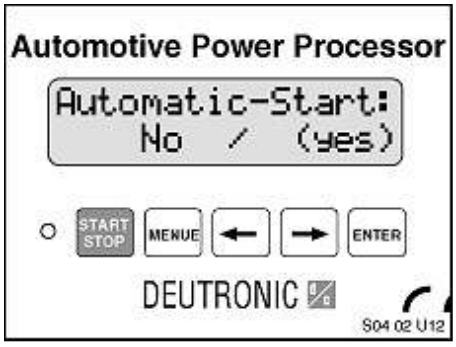
1. Charger
2. Power cable
3. Keyed battery cables (1-3)
4. Instruction booklet.

INITIAL SETUP

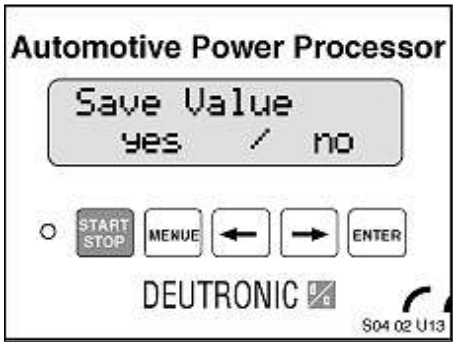
For the initial setup, it is recommended that the charger be set up for Automatic mode. Automatic mode is quicker and easier, especially through the learning stages. To set up for the Automatic mode:



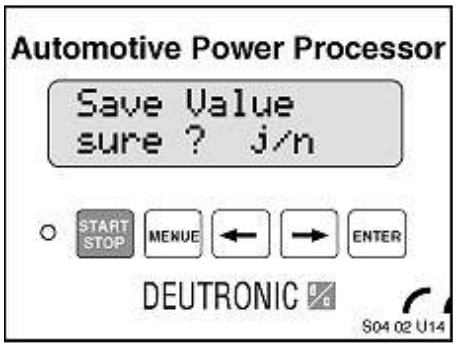
1. Plug the power cord (2) into an 110VAC outlet.
2. Press both arrow keys (6 and 7) for 3 seconds.
3. Press "Menue" (5) once.



4. Press and hold the right arrow until the parentheses are around the word "Yes".
5. Press "Enter".



6. Press the left arrow to save the value.



7. Press the left arrow, and then "Enter" to confirm it.

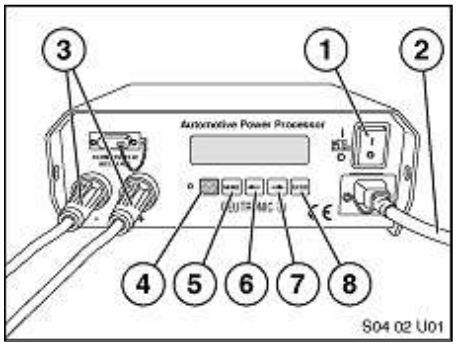
8. NEW For other initial setup settings, refer to SI B61 11 09 attachment entitled "DBL-430 Settings".

POWER SUPPLY MODE "PS"- MUST BE USED FOR ISTA/P PROGRAMMING

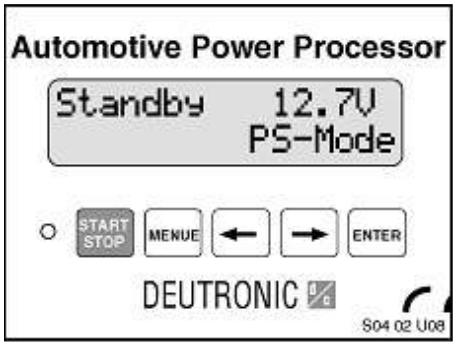
The power supply mode can be used for a vehicle with a good battery (full charge) and extensive "Key-ON" diagnostic work, or when long duration charging is planned. In the Power Supply mode, the charger does not consider the needs of the battery, but instead monitors the amperage draw of the vehicle and adjusts itself accordingly. For example, if the vehicle is currently drawing 32 amps from the battery, the charger (in PS mode) will output 32 amps. This eliminates any reduction in battery capacity.

To enter the "PS" mode:

1. Plug the battery charger into a 110VAC outlet.
2. Plug both battery cables into the charger (cannot be reversed).
3. Turn the charger power on.
4. "Battery Error" is displayed.
5. Attach the battery cables to the NEW vehicle service ports.
6. The amp hour screen is displayed.



7. To change to "PS" mode, press the menu button (5) 3 times in rapid succession.

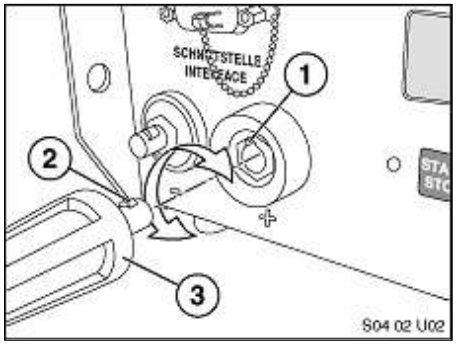


8. The charger will auto-shift to PS mode.

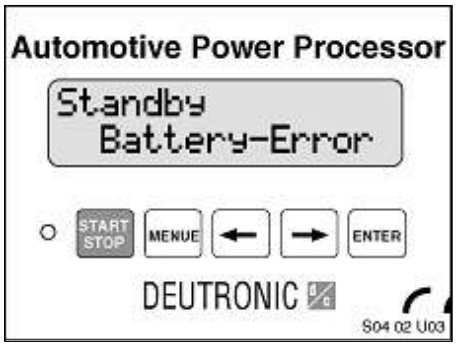
NEW BATTERY CHARGING MODE "BC"

For general information on battery charging, refer to SI B61 11 09.

Once the initial setup has been performed, the charger is ready to charge batteries.



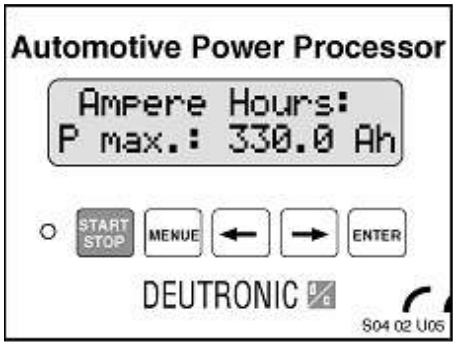
1. Plug the battery charger into a 110VAC outlet.
2. Plug both battery cables into the charger (cannot be reversed). If a cable will not lock onto the charger, check that the cable boot (3) is pulled up all the way.



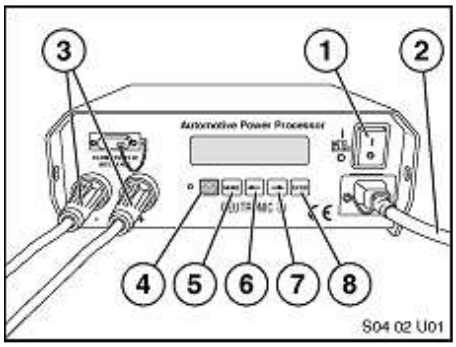
3. Turn the charger power on.
4. "Battery Error" is displayed.
5. NEW Connect the battery cables:

"Out-of-vehicle", direct to the battery
"In-vehicle", to the service ports in the engine compartment. Note that for vehicles with an IBS (Intelligent Battery Sensor), the charger must not be connected directly to the battery.

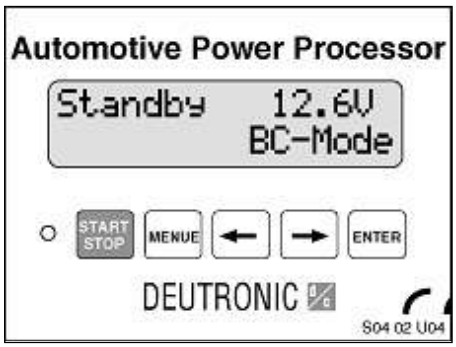
6. The amp hour screen is displayed.



7. NEW Adjust the amps to 15-20% above the rating on the battery with the arrow keys (refer to the battery chart at the end of this SI). If the amps are set lower than the batteries' specified value, the battery will not be fully charged. For a 90Ah battery, set to 110A and for a 110Ah battery, set to 130A.
8. Press "Enter".
9. "Please wait" is displayed.
10. Charging starts.



11. To stop the charging process, press "Start/Stop" (4).



12. "Standby" is displayed. The charger can be reactivated from here by pressing "Enter" or turned off by pressing the power switch.

MISCELLANEOUS NOTES

- When the battery is fully charged (under BC mode), the charger will automatically switch over to a float charge.
- The charger will identify operational malfunctions such as short circuits, over and undervoltage, contact problems with the charging clamps, and overheating of the charger due to poor heat dissipation. (It is helpful on hot days to make a fan blow on the charger for long-duration charging. These problems are identified in the charger display.)
- Charging current is only applied after the unit has automatically tested for correct polarity, so that sparking is eliminated.
- The charger starts the charging process at ~45 amps and then lowers itself to 30 amps. This time period is dependent upon the state of the battery and the outside temperature.
- The charger has a built-in fan without fresh air vents to avoid dirt contamination. Cooling is accomplished through a convection process.
- The PS mode allows the battery to be changed without any control module data loss. This results in substantial time savings.
- The charging current is automatically turned off when the clamps are removed.
- Always make sure that the battery clamps are securely tightened at the charger end. Loose clamps will be read by the charger as a power fluctuation and the charger will shut itself off.
- **Always follow battery and/or charger safety rules and precautions.**

WARRANTY

All Deutronic service is handled through SRI. All information for warranty or out of warranty work can be found on their website. To access the information, follow the instructions below.

- Go to www.subsri.com.
- Click "Enter site here".
- Scroll down to the bottom of the page.
- Click on "For BMW Service center information regarding Deutronic Chargers".
- Follow the instructions.