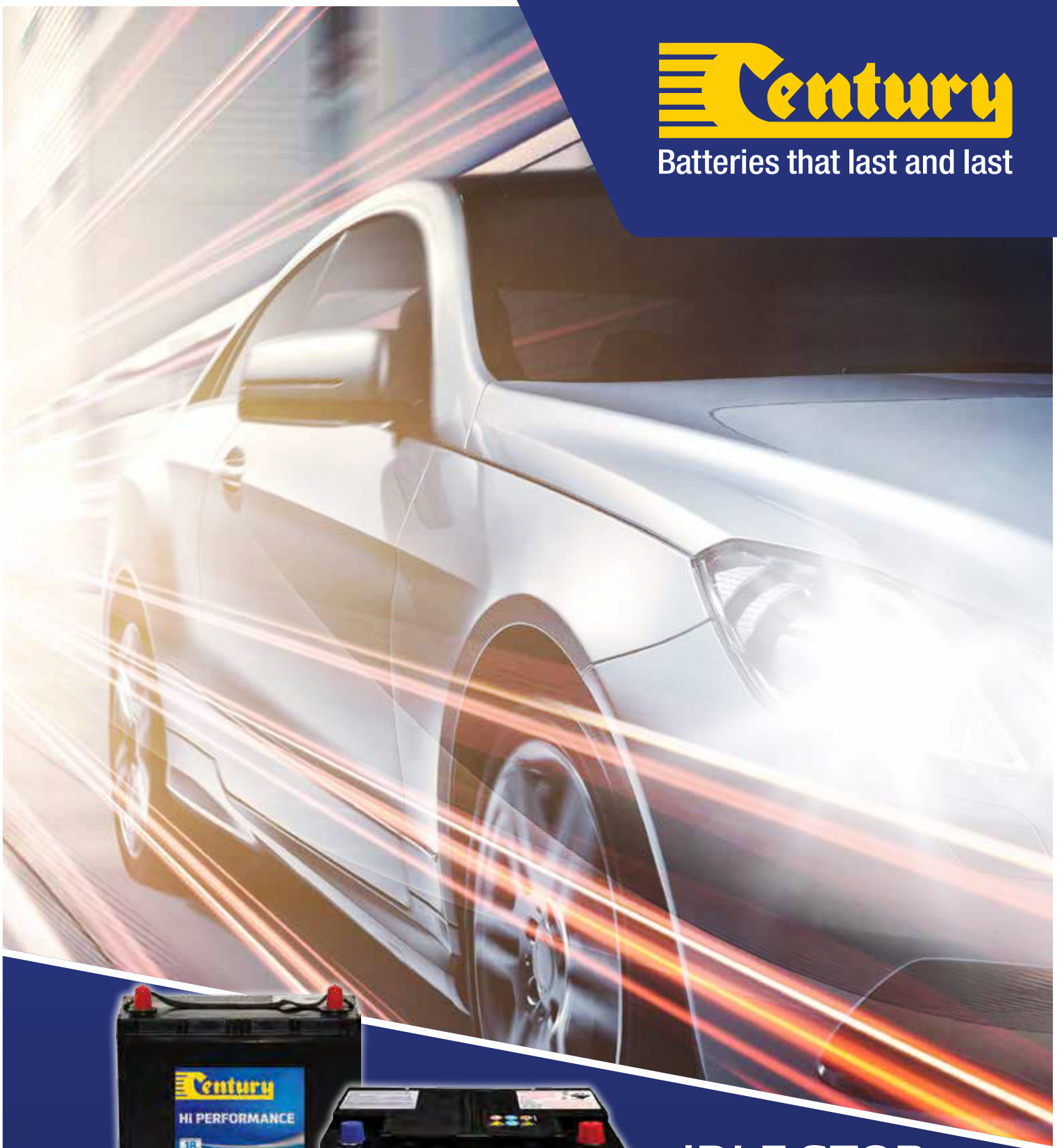
Century

Batteries that last and last



IDLE STOP START & HYBRID AUXILIARY BATTERIES

BATTERY TECHNOLOGY FOR THE NEXT GENERATION OF VEHICLES

WITH THE INTRODUCTION OF NEW CO_2 PRODUCTION CONTROL SYSTEMS SUCH AS SMART CHARGING AND IDLE START STOP (ISS) IT IS ESSENTIAL THAT A VEHICLE HAS THE CORRECT BATTERY TYPE AND SPECIFICATIONS.

Century's ISS Active & Hybrid Auxiliary battery range represents the latest in performance and technology for Idle Stop Start systems and micro hybrid vehicles. The range incorporates innovative design features and advanced raw materials to deliver superior cycling performance, high charge acceptance for rapid recharge in between engine off modes and the extra power to run on-board electrics and computer management systems.

CENTURY BATTERIES IS AUSTRALIA'S OLDEST AND MOST RECOGNISED BATTERY MANUFACTURER WITH A PROUD HISTORY OF DESIGNING AND MANUFACTURING BATTERIES IN AUSTRALIA SINCE 1928.

Our reputation for quality and innovation has been refined and demonstrated over many decades. In this time we have developed the manufacturing expertise and technical know-how to develop a wide range of batteries better suited to Australia's extreme climate and harsh conditions.

Today we pride ourselves in offering our customers a range of market leading products and services which continue to set new standards in technology and performance.

CHOOSING THE RIGHT BATTERY

Idle Stop Start vehicles are becoming increasingly complex, the battery must be able to handle the rigours associated with constant Idle Stop Start demands, regenerative braking technology and advanced engine management systems even when in a partial state of charge, all of which are placing extra demands on a battery's performance.

ISS & HYBRID AUXILIARY RANGE			
Battery Type	AGM	EFB	Hybrid
Fitment	For higher specification vehicles with Advanced ISS Systems	For lower specification vehicles with Standard ISS Systems	Auxiliary battery for Hybrid vehicles
Application	For ISS vehicles with multiple accessories	For ISS vehicles with standard accessories	Power for onboard electrics & computer management systems
Performance	760 CCA	590 CCA	
SPECIFICATIONS			
Special Features	» Superior starting power » AGM technology » 3 x cycling performance^ » OE replacement	» Dependable starting power » EFB technology » 2 x cycling performance^ » OE replacement	» AGM technology » Enhanced cycle life » OE replacement
Design	MAINTENANCE FREE DESIGN	MAINTENANCE FREE DESIGN	MAINTENANCE FREE DESIGN
Warranty	24 MONTH WARRANTY†	24 MONTH WARRANTY†	18 MONTH WARRANTY†

Based on a DIN65LH MF, DIN65L MF and S46B24R battery comparison. † Terms and conditions apply. Refer to individual warranty statement located on battery.
^ Compared with conventional flooded batteries.

ONLINE BATTERY FINDER

Are you short on time?

Use Century's online battery finder to quickly and easily find the most suitable battery for your needs.

1. Visit www.centurybatteries.com.au
2. Key in the vehicle make, model and year
3. The online Battery Finder quickly finds the most suitable battery for your needs

ISS ACTIVE

WHAT ARE IDLE STOP START SYSTEMS?

Vehicles fitted with Idle Stop Start systems are often referred to as mild or micro hybrids. They have been developed by vehicle manufacturers to improve vehicle fuel efficiency and reduce CO_2 emissions to satisfy global carbon emission targets.

HOW DO IDLE STOP START SYSTEMS WORK?

Basic Idle Stop Start systems work by shutting off the engine whilst the vehicle is stationary. When the brake pedal is released or the accelerator depressed, the engine quickly re-starts enabling the vehicle to be driven.

In more advanced Idle Stop Start systems, the vehicle may also incorporate regenerative braking or engine power assistance technology. This technology has the ability to switch off the engine when the vehicle is coasting or braking as well as whilst stationary. Shutting off the engine eliminates the amount of fuel that would otherwise have been used, reducing both vehicle emissions and fuel consumption.

IDENTIFYING VEHICLES FITTED WITH IDLE STOP START SYSTEMS

Idle Stop Start technology can be incorporated into both petrol and diesel vehicles with a manual or automatic powertrain.

It may not be possible to identify whether a vehicle incorporates Idle Stop Start technology, as manufacturers will not always promote this technology on engine components. Some vehicle manufacturers include a device on the dash board which enables the Idle Stop Start system to be deactivated as required.

To avoid fitting a conventional or incorrect battery into an Idle Stop Start vehicle, run through the following checklist.

- Does your vehicle turn off whilst stationary?
- Can you see an Idle Stop Start Symbol on the dash board?
- Do you have a switch that allows you to disable the Idle Stop Start function as required?
- Check the battery that is fitted, is it marked as an ISS AGM or ISS EFB battery?

If you are still unsure contact your vehicle manufacturer or visit **www.centurybatteries.com.au.**

Idle Stop Start Systems VS Conventional Batteries

IN CONSTANT IDLE STOP START ENVIRONMENTS SUCH AS THOSE EXPERIENCED IN CITY DRIVING, AN IDLE STOP START VEHICLE MAY STOP AND START AT LEAST ONCE PER KILOMETRE. THIS PLACES EXTREME DEMANDS ON A BATTERY WHICH MUST BE ABLE TO CYCLE CONSTANTLY AND START THE VEHICLE, EVEN WHEN IN A PARTIAL STATE OF CHARGE.

In vehicles fitted with Idle Stop Start systems, the battery must be able to handle the rigours associated with constant Idle Stop Start demands, rapid recharging and the power requirements needed to run electrical accessories whilst the engine is switched off.

The battery must also deliver the necessary cranking capacity to start the vehicle in a fraction of a second when the brake is released or the accelerator depressed.

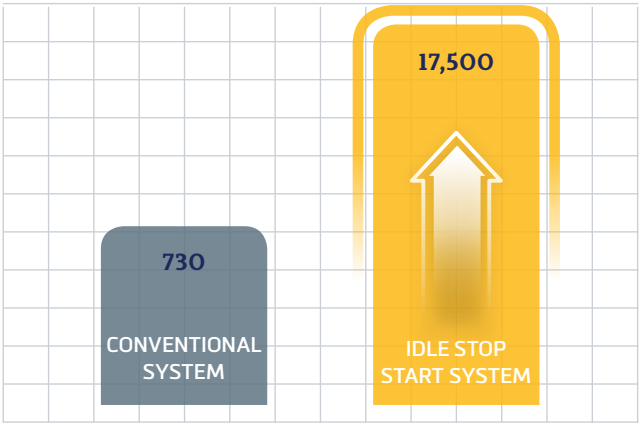
Conventional batteries are not designed to handle the cycling requirements of Idle Stop Start systems.

In a conventional system the battery operates in a high state of charge and starts the vehicle two or three times per day.

The capacity used to start the engine is replaced by the alternator throughout the duration of the journey. The battery is not subjected to constant cycling or required to operate in a partial state of charge.

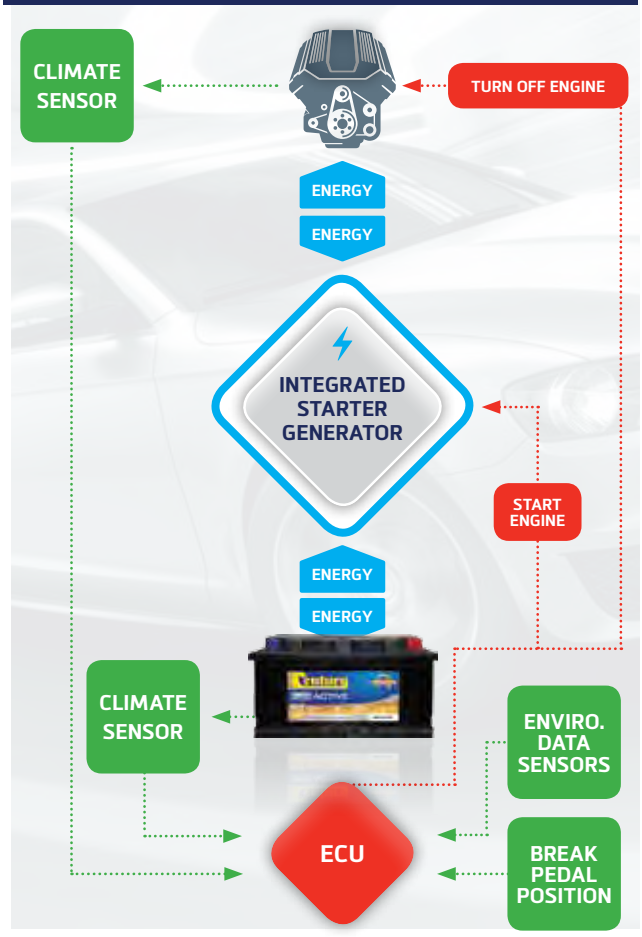
Using a conventional battery in an Idle Stop Start system can effect the ISS and CO_2 emission controls in the vehicle and lead to premature battery failure.

AVERAGE ANNUAL STARTS



CONVENTIONAL SYSTEM	IDLE STOP START SYSTEM
Starts vehicle 2 to 3 times per day	Starts vehicle every 1 to 2 kilometres
730 average annual starts	17,500 average annual starts
Minimal cycling required	Battery is constantly required to cycle
Accessories draw from a fully charged battery	Accessories draw from battery when engine is off
Battery maintained in a near to full state of charge	Battery operates in a partial state of charge
Battery is recharged overtime during the journey	Battery has to recharge rapidly in between engine off modes

Auto Idle Stop Start System Simplified



ISS Active AGM

A range of premium batteries incorporating Absorbed Glass Mat (AGM) technology that deliver superior starting power, extreme cycle life and discharge capability in advanced Idle Stop Start systems.

» Superior starting power

» 3 x higher cycling performance*

» Deep discharge capabilities

24 MONTH WARRANTY†

FOR ADVANCED STOP START SYSTEMS

ABSORBED GLASS MAT TECHNOLOGY

SUPERIOR CYCLING PERFORMANCE

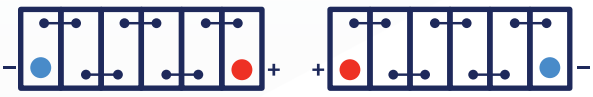
MAINTENANCE FREE DESIGN

ITEM ID	BATTERY TYPE	CCA -18°C	RC @ 25°C	AH @ 20HR	H / TH / L / W (all measurements in mm)				POLARITY	WEIGHT (KG)	TERM. TYPE	HOLD DOWN	SPECIAL FEATURES
					L	W	H	TH					
ISS ACTIVE AGM													
106104	DIN53LH MF	680	100	60	242	175	190	190	C	22.32	STD	SIDE/END	AGM, CH, CV, FA, MF, RP
106105	DIN65LH MF	760	120	70	278	175	190	190	C	25.77	STD	SIDE/END	AGM, CH, CV, FA, MF, RP
106106	DIN75LH MF	800	140	80	315	175	190	190	C	28.19	STD	SIDE/END	AGM, CH, CV, FA, MF, RP
106107	DIN85LH MF	850	160	95	353	175	190	190	C	33.4	STD	SIDE/END	AGM, CH, CV, FA, MF, RP

†Conditions apply. Refer to individual warranty statements attached to each battery. *Compared with conventional flooded batteries.

CELL LAYOUT

12 Volt



TERMINAL TYPES

Standard Terminal Post (STD)

Small Terminal Post (SP)

SPECIAL FEATURES GLOSSARY

AGM	Absorbed Glass Mat	**FA**	Flame Arrestor	**MF**	Maintenance Free
CH	Carry Handles	**LM**	Low Maintenance	**PV**	Pressure Valve
CV	Central Venting	**EFB**	Enhanced Flooded Battery	**RP**	Recessed Post

Australian Standard Specifications as shown AS 2149

ISS Active EFB

A range of Enhanced Flooded Batteries (EFB) designed to aid the reduction of CO_2 emissions and fuel consumption in vehicles fitted with standard Idle Stop Start systems. The range includes DIN style batteries for popular European vehicles, plus flooded batteries for Asian manufactured vehicles.

- Dependable starting power
- 2 x higher cycling performance*
- Durable grid design

FOR STANDARD STOP START SYSTEMS

ENHANCED FLOODED BATTERY

ADVANCED CYCLING PERFORMANCE

36 MONTH WARRANTY† ^

ITEM ID	BATTERY TYPE	CCA -18°C	RC @ 25°C	AH @ 20HR	L (all measurements in mm)	W	H	TH	POLARITY	WEIGHT	TERM. TYPE	HOLD DOWN	SPECIAL FEATURES
EFB													
106100	Q85	650	112	67	232	173	200	225	C	17.3	STD	-	EFB, LM
106110	Q85R	620	116	60	232	173	200	225	D	17	STD	-	EFB, LM
106111	S95	760	127	68	260	173	200	225	C	19.4	STD	-	EFB, LM
106101	T110	810	155	80	303	173	200	225	C	22.2	STD	-	EFB, LM
EFB MF													
116100	Q85 MF**	550	110	52	230	171	202	222	C	17.0	STD	-	CH, CI, EFB, MF
116110	Q85R MF**	550	110	52	230	171	202	222	D	17.0	STD	-	CH, CI, EFB, MF
116111	S95 MF**	680	130	70	258	172	199	220	C	19.9	STD	-	CH, CI, EFB, MF
116101	T110 MF**	760	150	95	302	170	200	222	C	22.5	STD	SIDE	CH, CI, EFB, MF, SL
EFB DIN													
106108	DIN65L MF**	590	120	70	278	175	175	175	C	22	STD	SIDE/END	CH, CV, EFB, FA, MF, RP
106109	DIN75L MF**	700	135	75	315	175	175	175	C	25.94	STD	SIDE/END	CH, CV, EFB, FA, MF, RP

† Conditions apply. Refer to individual warranty statements attached to each battery. ^Selected items only. *Compared with conventional flooded batteries.
** 24 Month warranty.

BATTERY HOLD-DOWN

Side Hold-Down

DIN STYLE
Side Hold-Down

DIN STYLE
End Hold-Down

ADVANCED TECHNOLOGY FOR HYBRID VEHICLES

CENTURY'S RANGE OF HYBRID AUXILIARY BATTERIES INCORPORATE ABSORBED GLASS MAT (AGM) TECHNOLOGY AND A VALVE REGULATED RECOMBINANT LEAD ACID (VRLA) DESIGN, TO PROVIDE ENHANCED CYCLING CAPABILITIES AND DEPENDABLE POWER TO RUN THE VEHICLES ON-BOARD ELECTRICS AND COMPUTER MANAGEMENT SYSTEMS.

The range features products that have low self-discharge and low internal resistance which enables them to be recharged more efficiently using a lower voltage.

The sealed non-spillable design eliminates the need for regular topping up of electrolyte levels and enables the products to be fitted in hard to reach locations without the need for regular accessibility.

Century's range of Hybrid Auxiliary batteries have been specially developed as an OE replacement for the auxiliary battery fitted in range of Hybrid vehicles.

HYBRID

18 MONTH WARRANTY†

Hybrid Auxiliary

Century Hybrid Auxiliary batteries provide enhanced cycling capability and the power required to run the vehicle's on-board electrics and computer management system. The advanced design features improve cycling ability and enable the battery to recharge faster.

» Superior cycling endurance

» Low internal resistance and low self-discharge

» Enhanced cycling ability to run the vehicle's electrics and computer management system

FOR HYBRID VEHICLES

ABSORBED GLASS MAT TECHNOLOGY

MAINTENANCE FREE DESIGN

ITEM ID	BATTERY TYPE	CCA -18°C	RC @ 25°C	AH @ 20HR	(all measurements in mm) L	W	H	TH	POLARITY	WEIGHT	TERM. TYPE	HOLD DOWN	SPECIAL FEATURES
HYBRID VEHICLE (AUXILIARY BATTERY)													
118100	S46B24R	325	68	45	238	128	200	227	D	12.9	SP	-	AGM, CH, CV, FA, MF, PV
118101	S34B20R	272	47	27	192	123	200	227	D	10.5	SP	-	AGM, CH, CV, FA, MF, PV
118102	S55D23R	550	85	50	170	220	221	221	D	15.1	SP	-	AGM, CH, CV, FA, MF, PV

†Conditions apply. Refer to individual warranty statements attached to each battery.

BATTERY REPLACEMENT

WHEN REPLACING THE BATTERY IN AN IDLE STOP START VEHICLE, ENSURE THAT THE BATTERY USED IS A 'LIKE FOR LIKE' REPLACEMENT.

Only replace EFB with EFB and AGM with AGM Stop Start compatible batteries. Never fit a conventional battery in a vehicle with Idle Stop Start technology as this may disable the ISS functionality and lead to premature battery failure.

In Idle Stop Start vehicles the battery is vital to maximising the environmental benefits of these technologies. Battery replacement in Idle Stop Start vehicles should be conducted in conjunction with a compatible Battery Management System (BMS) or Intelligent Battery Sensor (IBS). This ensures that all relevant sensors and electrical components are reset and subjected to a 'memory test' which ensures compatibility of the replacement battery.

YU-FIT CONFIGURATOR BATTERY REPLACEMENT MADE EASY

WITH THE INTRODUCTION OF NEW CO_2 PRODUCTION CONTROL SYSTEMS SUCH AS SMART CHARGING AND IDLE START STOP (ISS) IT IS ESSENTIAL THAT THE VEHICLE HAS THE CORRECT BATTERY TYPE AND SPECIFICATION INSTALLED.

An increasing number of automotive manufacturers have introduced systems that now require a replacement battery to be correctly configured to the vehicle after installation.

Failure to configure the correct specification battery could result in:

- Undercharging or overcharging of the battery resulting in damage which is not covered by the manufacturer's warranty
- Loss of the ISS CO_2 production control system functionality
- Possible loss of non-critical vehicle system functions

Battery configuration prevents incorrect battery charging, ensures the correct operation of the ISS CO_2 production control system and prevents the loss of non-critical vehicle systems.

The Century Yu-Fit battery configurator tool allows the configuration process to be carried out on a growing number of vehicles equipped with new technology smart charge and ISS systems.

BATTERY CARE & MAINTENANCE

TESTING

DUE TO THE INCREASED ELECTRICAL DEMANDS ON THE BATTERY, LITTLE WARNING IS GIVEN BEFORE FAILURE.

Pre-emptive battery replacement can help eliminate many of the costs and problems associated with a flat or end of life battery.

Before testing a battery, it is important that the battery is fully charged. Even a slightly discharged battery can give a false reading and deem the battery faulty when all that is required is a recharge.

There are many different types of testing equipment available. A digital battery tester is the preferred option as they are safe, easy to use, and offer a quick diagnosis of the condition of the battery.

Standard battery testing equipment should not be used to test Idle Stop Start batteries. Century ISS Active batteries are designed to operate in a partial state-of-charge. Using a tester configured for conventional batteries will not provide an accurate test result.

Ensure that you are using a digital tester that has a preprogramed Idle Stop Start function.

CHARGING

FOR OPTIMUM PERFORMANCE ENSURE THE BATTERY IS MAINTAINED IN A FULLY CHARGED CONDITION.

Always read the manufacturer's instructions before attempting to charge a battery and ensure you use a good quality, Australian approved battery charger. The battery type and the internal technologies will determine which type of charger is required.

The following should be used as a guide when charging **Century ISS Active batteries**

TYPE (ISS)	RECHARGE IF OCV IS BELOW	MAXIMUM RECHARGE VOLTAGE (25°C)
AGM (DIN)	12.60	14.8V
EFB (DIN)	12.50	14.8V

Century Batteries offer a range of battery testers and chargers ideal for ISS Active batteries.

For more information visit centurybatteries.com.au

For more information on Century's range of products and services, visit www.centurybatteries.com.au

Century

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