YUASA BATTERY

PRODUCT RANGE
BROCHURE

The Proven Leader In Stored Energy Solutions

Just Got Even Better!

When it comes to our vehicles we push them hard and so does New Zealand's environment.

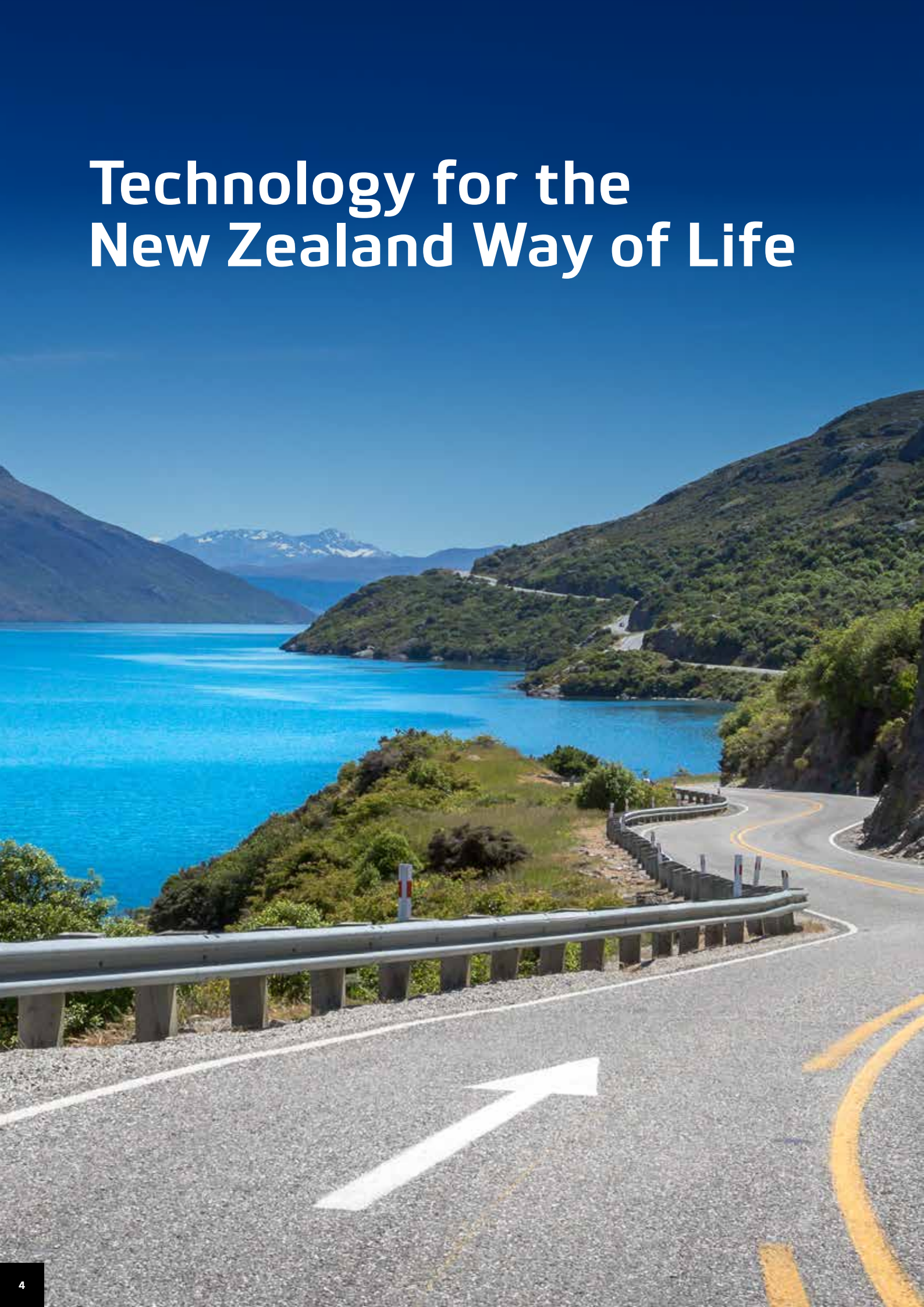
Driving through the high country in winter, under bonnet temperatures could drop below 0°C, a trip to the corner store can be a 15 minute drive - and the hill on the way home a vertical ascent.

Our journeys take in the smoothest of roads and the roughest alpine tracks. We need a battery that we can rely on to power our unique lifestyle. So we delivered one. Then another and another.

And we continue to innovate and improve, because that's the Yuasa way.

YUASA BATTERY

Technology for the New Zealand Way of Life



CONTENTS

Yuasa Batteries, Designed for New Zealand Conditions

Yuasa Batteries is part of the Century Yuasa group, New Zealand's leading battery supplier. Our reputation for quality and innovation has been refined and demonstrated over many decades.

In this time we have developed the engineering expertise and technical know-how to ensure we deliver a range of superior quality batteries better suited to New Zealand's diverse climate and tough 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.

The Yuasa product range includes a comprehensive selection of technologically advanced products for use in a diverse range of applications including:

Idle Stop Start Vehicles

Hybrid Vehicles

Car & Passenger Vehicles

SUV, 4x4 & Light Commercial

Truck, Bus & Heavy Equipment

Deep Cycle

Marine

Lawn & Garden

A True Global Leader

Since its foundation in 1895, GS Yuasa has continually worked to create advanced stored energy solutions under the corporate vision of "innovation and growth". It is this philosophy that has seen GS Yuasa establish itself as the world's leading manufacturer of automotive and motorcycle batteries.

Our parent company GS Yuasa is one of the world's largest battery manufacturers and a global leader in quality and innovation.

Proven Performance

GS Yuasa are original equipment (OE) suppliers to the world's leading vehicle manufacturers.

As an affiliate of the GS Yuasa Corporation, Yuasa has access to some of the most advanced technical and R&D resources available in the battery industry. This gives you the assurance that every battery in the Yuasa range has been developed using state-of-the-art manufacturing processes and technical expertise.

Why You Can Rely on Yuasa Batteries as Your Complete Power Solutions Provider

Innovation and Technology

We invest significantly in research and development to ensure we continue to meet the needs of the market place and the next generation of vehicles.

Extensive Product Range

The Yuasa product range includes a comprehensive selection of technologically advanced products including starting, deep cycle, dual purpose and heavy duty batteries for use in a diverse range of applications.

Nationwide Warranty

Each Yuasa battery is backed by a fully comprehensive warranty^. This provides peace of mind that your battery is covered against faulty materials or workmanship for up to 40 months^.

Key Partnerships

A majority of leading Original Equipment Manufacturers (OEM) and New Zealand's biggest retail brands trust Century Yuasa Batteries for their energy solutions. We continually work with our partners to deliver on design, technology and quality.

Corporate Social Responsibility

We are committed to the environment and building a cleaner future, investing in a range of CSR & Sustainability initiatives focused on reducing our environmental footprint and benefiting New Zealand for future generations.

Nationwide Recycling Program

Yuasa Batteries is proud to be part of the Century Yuasa Battery Recycling Program which recycles more than 40,000 batteries nationwide each year.

Providing sustainable energy solutions for today, tomorrow and the future.

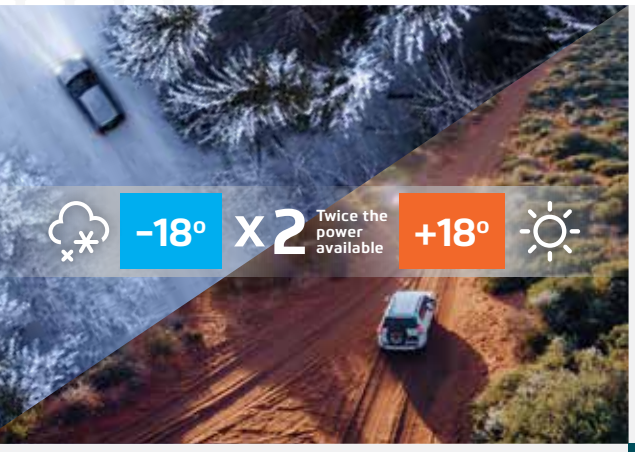
^Conditions apply. Refer to individual warranty statements attached to each product.

Our Network

Our national network of branches and distribution centres are strategically located across New Zealand ensuring access to locally held products and battery experts.

Battery Ratings

Batteries are rated according to a range of specifications and standards. Understanding these ratings and their relevance to the battery's application and operating conditions is key to selecting the right battery.



CCA

(Cold Cranking Amperes)

This is a measurement of the current a fully charged battery can deliver for 30 seconds, whilst also maintaining a voltage of 7.2volts. This test is performed at a temperature of -18°C, and is used to determine a battery's ability to start the engine and maintain sufficient voltage to power the ignition requirements under severe cold starting conditions.

MCA

Marine Cranking Amperes

Similar to CCA, MCA is used to measure the current a marine battery can deliver for 30 seconds at a specific temperature.

MCA tests are conducted at 0°C (instead of -18°C) and the results are often 20 – 25% higher than the equivalent CCA rating. Because of this, it is important to always compare like for like, and never compare CCA to MCA, or vice-versa.

AH

Ampere-Hour @ 20hr

Ah refers to the battery's storage capacity, and is the current a fully charged battery will deliver over a 20 hour period - before the voltage falls to 10.50 volts. An Ah test is always performed at 25°C.

RC

Reserve Capacity

An RC rating refers to the length of time (in minutes) that a battery can deliver a current of 25 amps until the voltage drops below 10.50 volts. This test is performed at 25°C, and represents a typical electrical load on a car under normal running conditions. Therefore, an RC rating is a good indication of how many minutes a vehicle will run for in the event of a charging system or alternator failure.

It is important to note that although a battery may feature an Ah rating, it does not imply suitability for cyclic use. Repeated deep discharge of a standard starting battery will damage the internal components and lead to premature failure. Deep Cycle batteries are designed to withstand repeated cycling and should only be recommended for cycling applications.

How Important is CCA?

For many years, CCA (or Cold Cranking Amperes) has been widely used as a benchmark to measure and compare lead-acid batteries – with the assumption being the higher the CCA, the better the battery. As a result, some manufacturers produce batteries with excessively high CCA ratings to take advantage of this misconception.

Lead acid batteries contain lead plates, wrapped in separators to insulate and prevent them from touching each other directly and creating a short circuit. A battery can be made to achieve a higher CCA rating by simply adding more of these plates to the battery internals. But in order to achieve this, both the lead plates and the separator material needs to be thinner – and this can have an impact on the strength and durability of these components.

In colder climates, adding more plates and increasing the battery's CCA rating may be desirable. However, in hotter climates, having thicker lead plates to combat corrosion and more robust separators are equally important as cranking capacity.

At Yuasa, we believe that it is far more important to strike a balance between CCA and providing a long service life. Our batteries feature expertly designed internal components and an extremely durable construction to combat the causes of battery failure and deliver what New Zealand motorists really want – longer life and superior performance.

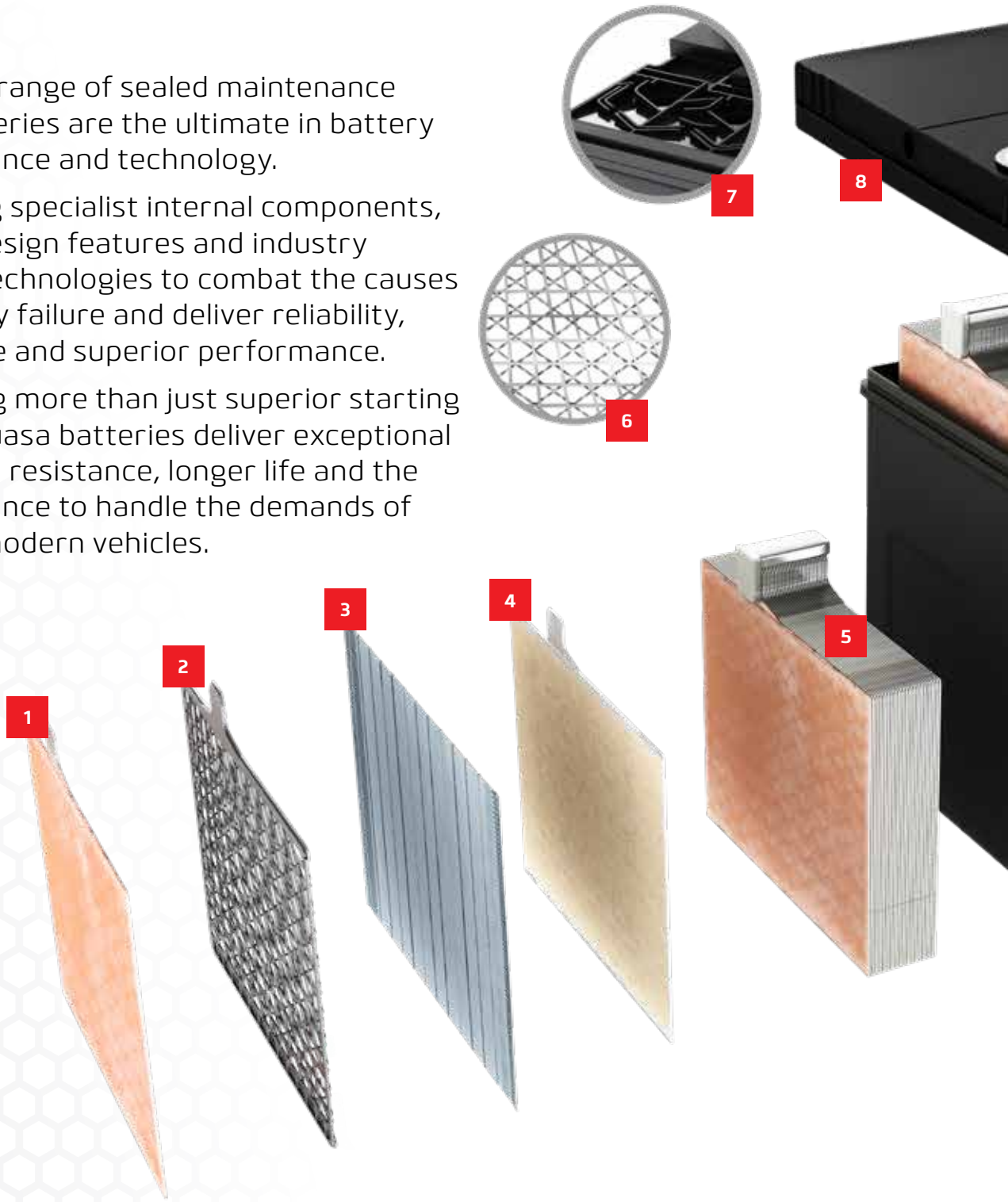
So don't be misled by high CCA ratings – they aren't always better.

The Yuasa Difference

Yuasas's range of sealed maintenance free batteries are the ultimate in battery performance and technology.

Featuring specialist internal components, unique design features and industry leading technologies to combat the causes of battery failure and deliver reliability, longer life and superior performance.

Delivering more than just superior starting power, Yuasa batteries deliver exceptional corrosion resistance, longer life and the performance to handle the demands of today's modern vehicles.



Based on 68EB MF battery.

1 ROLLED EXPANDED HIGH TIN GRID

- Provides improved corrosion resistance and longer life.

2 WROUGHT LEAD-CALCIUM GRIDS

- Improves resistance to grid corrosion & over-charging.
- Minimises gassing and water usage for reduced self-discharge.

3 LOW-RESISTANCE ENVELOPE SEPARATORS

- Helps prevent internal shorts between positive and negative plates.
- Improves vibration resistance.

4 NST PLATE TISSUE

- Special tissue on positive plates prevents active material shedding during frequent charging and discharging.

5 PLATELOCK™ TECHNOLOGY

- Combats vibration shock and damage from rough, uneven conditions.

6 DIAMOND MESH

- Increased conductivity for higher performance.

7 DOUBLE LID WITH LABYRINTH STRUCTURE

- Prevents electrolyte loss by collecting and returning liquid to the reservoir.
- Vents allow the battery to breathe during temperature changes and charging.

8 FLAME ARRESTOR

- Prevents external ignition sources from entering the battery.

9 CAST-ON PLATE STRAPS

- Stronger than conventional connectors.
- Reduces damage from rough uneven conditions, shock & vibration.

10 POLYPROPYLENE CASE

- Reinforced design provides durability to withstand shock and vibration.

11 HEAT SEALED DOUBLE LID

- Prevents contamination, improves strength & reduces water loss.

12 CARRY HANDLE

- Ergonomic easy fold-down carry handle.

13 STATE OF CHARGE INDICATOR

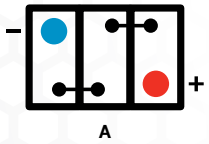
- For on the spot diagnosis of battery condition.

14 COLD FORGED TERMINAL

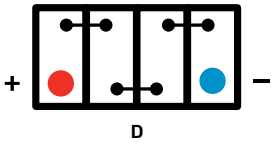
- Improves strength.

Cell Assembly Layout

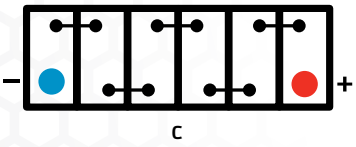
6 VOLT

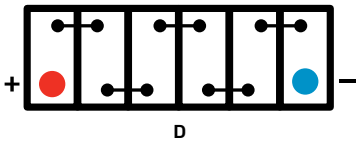


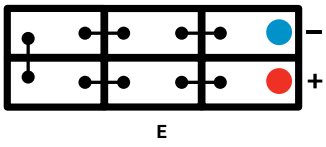
8 VOLT

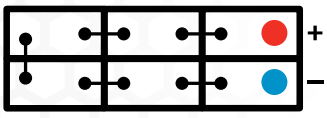


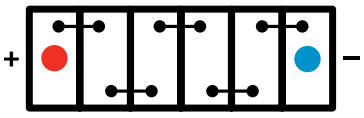
12 VOLT



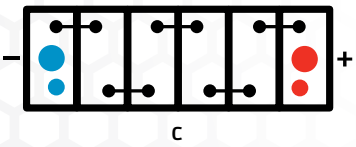


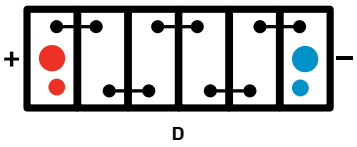




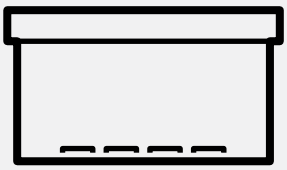


12 VOLT MULTI TERMINALS

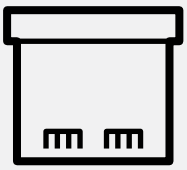




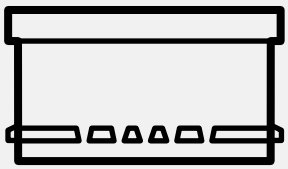
Battery Hold-Down



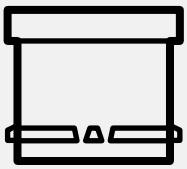
SIDE HOLD-DOWN



END HOLD-DOWN



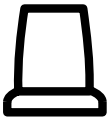
DIN STYLE SIDE HOLD-DOWN



DIN STYLE END HOLD-DOWN

Terminal Types

STANDARD TERMINAL POST (STD)

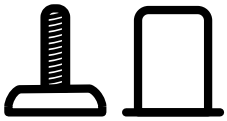


FRONT TERMINAL POST (FRONT)

DUAL FIT TERMINAL POST (DF)

JIS PENCIL

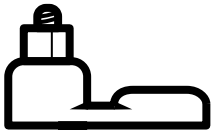
TWIN



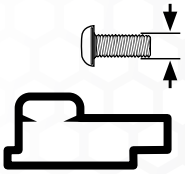
THREADED TERMINAL (TH)

LUG TERMINAL (LUG)

W/NUT



M5 / M6 INSERT



Special Features Glossary

AGM	Absorbed Glass Mat	**GM**	Glass Mat Separator	**PL**	Platelock™ Technology
CH	Carry Handles	**LI**	Lithium Carbon	**PV**	Pressure Valve
CI	State of Charge Indicator	**LM**	Low Maintenance	**RP**	Recessed Post
CV	Central Venting	**MF**	Maintenance Free	**VR**	Vibration Resistant
EFB	Enhanced Flooded Battery	**MIA**	Made in Australia		
FA	Flame Arrestor	**MR**	Mud Rack		

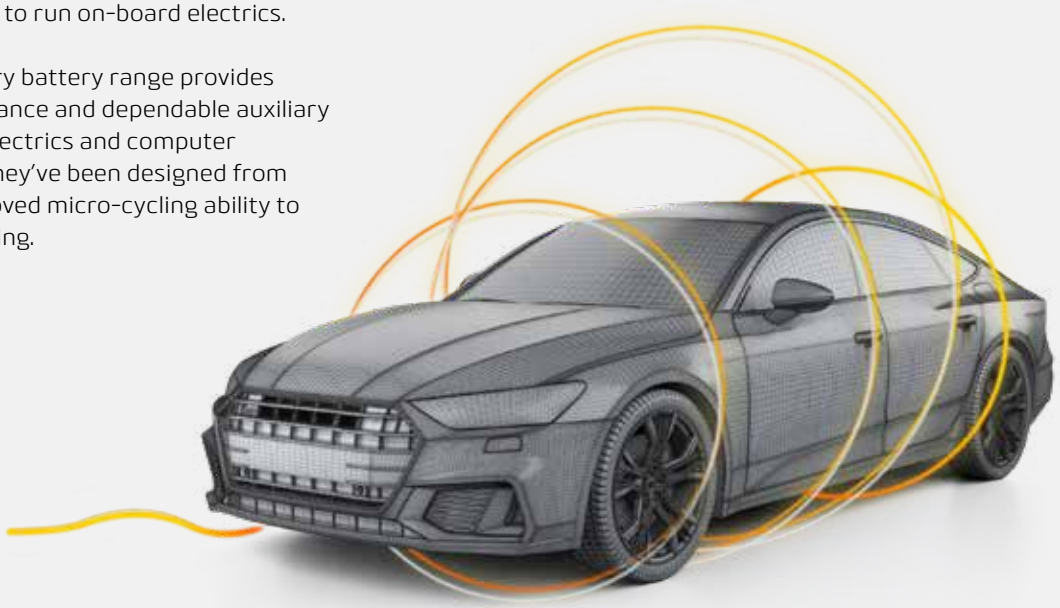
Australian Standard Specifications as per AS 2149.

ADVANCED TECHNOLOGY FOR IDLE STOP START & HYBRID VEHICLES

Yuasa ISS Active & Hybrid batteries represent the latest in performance for vehicles with Stop Start or Micro Hybrid technology. They are specially designed to meet or exceed the requirements of vehicles fitted with Idle Stop Start systems, providing fuel saving and reduced emissions benefits.

Yuasa ISS Active AGM and EFB batteries incorporate innovative design features and are built from the finest raw materials to deliver superior cycling performance, rapid recharging between repeated engine starts, and the extra power required to run on-board electrics.

The Yuasa Hybrid Auxiliary battery range provides superior cycling performance and dependable auxiliary power to run on-board electrics and computer management systems. They've been designed from the ground up with improved micro-cycling ability to facilitate fast re-recharging.



ISS Active

ISS Active AGM

A range of premium batteries incorporating Absorbed Glass Mat (AGM) technology to deliver exceptional starting power, extreme cycle life and superior micro-cycling capabilities. ISS Active AGM batteries are designed and engineered specifically for vehicles fitted with advanced Stop Start engine management, regenerative braking and energy recovery systems.

- Perfect for replacing original equipment (OE) batteries
- Superior charge acceptance for faster recharge between repeated engine starts
- 3 x higher cycling endurance
- Low self-discharge rate for longer shelf life

EXCEPTIONAL STARTING POWER

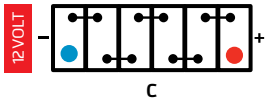
MAXIMUM SERVICE LIFE

SUPERIOR STOP START CYCLING PERFORMANCE

SUPERIOR RECHARGE EFFICIENCY

ITEM ID	BATTERY TYPE	WARRANTY†	VOLTS	CCA -18°C	RC @ 25°C	AH @ 20HR	(ALL MEASUREMENTS IN MM) L	W	H	TH	POLARITY	WEIGHT (KG)	TERMINAL TYPE	HOLD DOWN	SPECIAL FEATURES
ISS ACTIVE AGM^															
618218	DIN44LH AGM	36	12	520	80	50	206	175	190	190	C	15.50	STD	SIDE/END	AGM, CH, FA, MF, MR, PL, VR
618211	DIN53LH AGM	36	12	640	100	60	242	175	190	190	C	17.60	STD	SIDE/END	AGM, CH, FA, MF, MR, PL, VR
618213	DIN65LH AGM	36	12	760	120	70	274	175	190	190	C	19.30	STD	SIDE/END	AGM, CH, FA, MF, MR, PL, VR
618214	DIN75LH AGM	36	12	800	140	80	316	175	190	190	C	23.00	STD	SIDE/END	AGM, CH, FA, MF, MR, PL, VR
618215	DIN85LH AGM	36	12	850	160	95	353	175	190	190	C	27.50	STD	SIDE/END	AGM, CH, FA, MF, MR, PL, VR
618217	DIN110LHAGM	36	12	950	190	105	393	175	190	190	C	30.50	STD	SIDE/ END	AGM, CH, FA, MF, MR, PL, VR

^NOTE - ISS AGM Battery is suitable for under bonnet fitment only when OE battery is an AGM battery.



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

ISS Active

ISS Active EFB

A range of original equipment (OE) Enhanced Flooded Batteries (EFB) which are used and endorsed by some of the world's leading car brands. The ISS Active EFB range is designed to help reduce fuel consumption and CO_2 emissions in vehicles fitted with Idle Stop Start systems.

- Direct OE replacement - perfect for replacing your vehicle's original equipment battery*
- Lithium carbon additive for up to 50% faster recharging and 2x higher cycling performance
- Thicker and stronger internal components for increased shock and vibration resistance
- Recommended upgrade for standard vehicles subjected to repeated short journeys

ISS Active EFB Maintenance Free

A range of Enhanced Flooded Batteries (EFB) designed to aid the reduction of CO_2 emissions and fuel consumption in vehicles fitted with Idle Stop Start systems. They are also a suitable upgrade for standard vehicles that make regular short journeys due to superior recharge efficiency and micro cycling capabilities.

- Superior starting power to handle repeated engine restarts
- Improved recharge efficiency and cycling performance
- Sealed maintenance free design
- Suitable upgrade for standard vehicles subjected to repeated short journeys

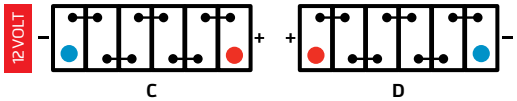
Hybrid Auxiliary

A range of original equipment (OE) Hybrid Auxiliary batteries endorsed by some of the world's leading car brands. Yuasa Hybrid Auxiliary batteries provide superior cycling performance and dependable auxiliary power for hybrid vehicles. Designed to meet and exceed the unique requirements of vehicles with auxiliary battery systems.

- Direct OE replacement*
- Optimum charge acceptance for fast recharging between repeated engine starts
- AGM technology for superior cycling endurance and longer service life^
- Sealed maintenance free design for maximum safety

*Selected vehicles only.
^Selected items only.

ITEM ID	BATTERY TYPE	WARRANTY†	VOLTS	CCA -18°C	RC @ 25°C	AH @ 20HR	(ALL MEASUREMENTS IN MM) L	W	H	TH	POLARITY	WEIGHT (KG)	TERMINAL TYPE	HOLD DOWN	SPECIAL FEATURES
ISS ACTIVE EFB															
606205	N65	36	12	500	76	50	238	128	200	227	C	13.00	JIS PENCIL	-	EFB, LI, LM
606208	N65R	36	12	490	69	50	238	128	200	227	D	13.00	JIS PENCIL	-	EFB, LI, LM
606201	Q85	36	12	650	116	60	232	173	200	225	C	17.30	STD	-	EFB, LI, LM
606202	S95	36	12	760	127	68	260	173	200	225	C	19.40	STD	-	EFB, LI, LM
606200	T110	36	12	780	155	86	303	173	200	225	C	22.20	STD	-	EFB, LI, LM
ISS ACTIVE EFB MF															
616203	N55 MF	24	12	460	80	55	236	127	199	220	C	13.40	JIS PENCIL	-	CH, CI, EFB, MF
616201	Q85 MF	24	12	550	110	65	230	171	202	222	C	17.00	STD	-	CH, CI, EFB, MF
616204	Q85R MF	24	12	550	110	65	230	171	202	222	D	17.00	STD	-	CH, CI, EFB, MF
616202	S95 MF	24	12	680	130	70	258	172	199	220	C	19.90	STD	-	CH, CI, EFB, MF
616200	T110 MF	24	12	760	150	95	302	170	200	222	C	22.50	STD	-	CH, CI, EFB, MF
616205	DIN53LH EFB	24	12	560	100	60	242	175	190	190	C	16.50	STD	SIDE/END	CH, CI, EFB, FA, MF, RP
606206	DIN65L EFB	24	12	650	110	65	275	175	175	175	C	17.00	STD	SIDE/END	CH, CI, EFB, FA, MF, RP
616206	DIN65LH EFB	24	12	720	130	75	275	175	190	190	C	19.60	STD	SIDE/END	CH, CI, EFB, FA, MF, RP
606207	DIN75L EFB	24	12	730	135	75	313	175	175	175	C	19.10	STD	SIDE/END	CH, CI, EFB, FA, MF, RP
616207	DIN75LH EFB	24	12	730	145	80	313	175	190	190	C	21.20	STD	SIDE/END	CH, CI, EFB, FA, MF, RP
HYBRID AUXILIARY BATTERY															
609200	LN0 MF	24	12	280	55	35	174	174	190	190	C	9.70	STD	SIDE/END	CH, CI, CV, MF
616208	LN1 MF	24	12	438	91	52	206	174	190	190	C	12.5	STD	SIDE/END	CH, CI, CV, MF
606209	LN2 EFB	24	12	699	117	67	241	174	190	190	C	17.00	STD	SIDE/END	CH, CI, CV, EFB, MF
601226	S34B20R	24	12	270	47	27	192	123	195	225	D	10.5	JIS PENCIL	-	AGM, CH, CV, FA, MF, PV
601229	34B17L	24	12	280	27	27	167	127	215	235	C	10.2	JIS PENCIL	-	CH, CV, FA, LM, PV
601227	S46B24R	24	12	325	68	45	238	128	200	227	D	12.9	JIS PENCIL	-	AGM, CH, CV, FA, MF, PV
601228	S46A24L	24	12	325	68	45	238	128	170	195	C	12.9	STD	-	AGM, CH, CV, FA, MF, PV

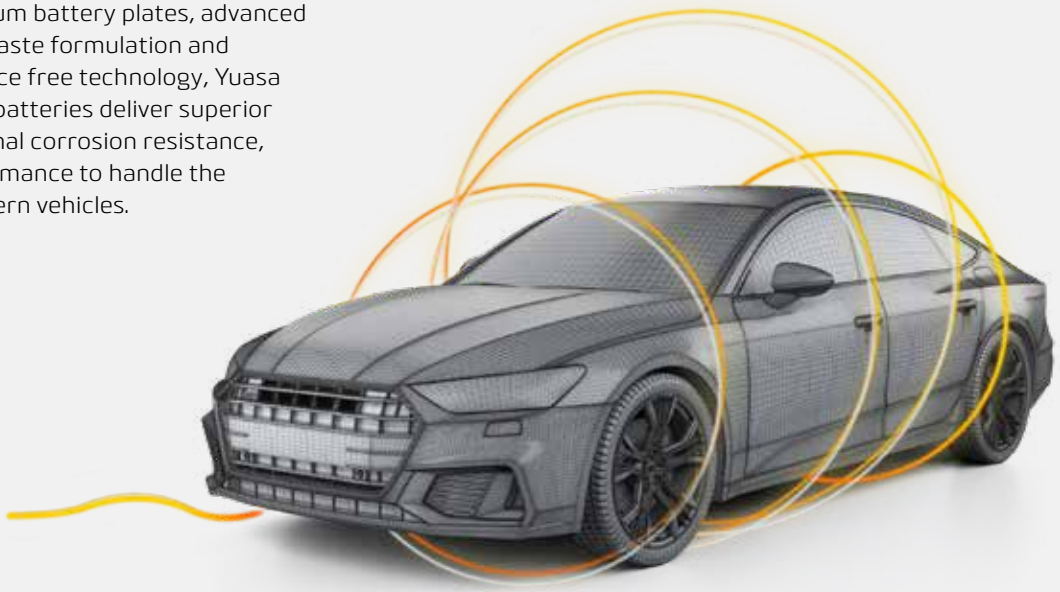


† Conditions apply. Refer to individual warranty statements attached to each battery.

CAR & PASSENGER VEHICLE

Yuasa Car & Passenger vehicle batteries are built tough to provide the ultimate in battery performance and reliability. Featuring internal components which are designed to suit New Zealand conditions. These batteries utilise unique design features and industry leading technologies to combat the causes of battery failure. Yuasa Ultra Hi Performance and Hi Performance batteries deliver reliability, longer life and superior performance.

Manufactured with Calcium battery plates, advanced grid designs, optimised paste formulation and revolutionary maintenance free technology, Yuasa Car & Passenger vehicle batteries deliver superior starting power, exceptional corrosion resistance, longer life and the performance to handle the demands of today's modern vehicles.



Car & Passenger Vehicle

Ultra Hi Performance

Yuasa Ultra Hi Performance batteries are designed and built to suit New Zealand conditions, providing the ultimate in battery performance. Suitable for both old and new vehicles with higher power demands, Yuasa Ultra Hi Performance batteries are engineered to exceed leading vehicle manufacturer's standards for quality and performance, delivering exceptional starting power, maximum service life and extra power for vehicle electrics.

- Suitable for both old and new vehicles with high power demands
- Suitable replacement for original equipment (OE) batteries
- Designed to suit New Zealand conditions
- Maximum service life with a sealed maintenance free design for reduced water loss

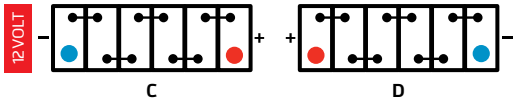
EXCEPTIONAL STARTING POWER

MAXIMUM SERVICE LIFE

EXTRA POWER FOR VEHICLE ELECTRICS

DESIGNED FOR NEW ZEALAND CONDITIONS

ITEM ID	BATTERY TYPE	WARRANTY†	VOLTS	CCA -18°C	RC @ 25°C	AH @ 20HR	(ALL MEASUREMENTS IN MM) L	W	H	TH	POLARITY	WEIGHT (KG)	TERMINAL TYPE	HOLD DOWN	SPECIAL FEATURES
ULTRA HI PERFORMANCE															
605222	50D20L MF	40	12	450	85	50	202	173	200	225	C	13.5	STD	SIDE	CH, CI, FA, MF, MR, PL, VR
605223	75D23L MF	40	12	550	105	65	232	173	202	225	C	15.7	STD	-	CH, CI, CV, FA, MF, MR, PL, VR
605224	75D23R MF	40	12	550	105	65	232	173	202	225	D	15.7	STD	-	CH, CI, CV, FA, MF, MR, PL, VR
605225	67EF MF	40	12	530	86	52	231	171	184	205	D	13.7	STD	-	CH, CI, FA, MF, MR, PL, VR
605226	67 MF	40	12	530	86	52	235	174	184	205	D	13.7	STD	SIDE/END	CH, CI, FA, MF, MR, PL, VR
605227	68EB MF	40	12	530	86	52	231	171	184	205	C	13.7	DF	-	CH, CI, FA, MF, MR, PL, VR
605228	68 MF	40	12	530	86	52	235	174	184	205	C	13.7	STD	SIDE/END	CH, CI, FA, MF, MR, PL, VR
605229	75SX MF	40	12	550	113	60	230	179	180	180	D	14.8	FRONT	SIDE	CH, CI, CV, FA, MF
605230	N65DX MF	40	12	750	140	80	305	190	170	190	D	18.2	STD	SIDE	CH, CI, CV, FA, MF
605231	NS40ZLBX MF	40	12	360	63	38	195	136	200	220	C	10	JIS PENCIL	SIDE	CH, CI, FA, MF, MR, PL, VR
605232	NS40ZLX MF	40	12	360	63	38	195	126	200	220	C	10	JIS PENCIL	-	CH, CI, FA, MF, MR, PL, VR
605233	NS40ZLSX MF	40	12	360	63	38	195	126	200	220	C	10	STD	-	CH, CI, FA, MF, MR, PL, VR
605234	NS40ZX MF	40	12	360	63	38	195	126	200	220	D	10	JIS PENCIL	-	CH, CI, FA, MF, MR, PL, VR
605235	NS40ZSX MF	40	12	360	63	38	195	126	200	220	D	10	STD	-	CH, CI, FA, MF, MR, PL, VR
605236	NS60LX MF	40	12	430	76	45	235	129	199	219	C	11.9	JIS PENCIL	-	CH, CI, FA, MF, MR, PL, VR
605237	NS60LSX MF	40	12	430	76	45	235	129	199	219	C	11.9	STD	-	CH, CI, FA, MF, MR, PL, VR
605238	NS60X MF	40	12	430	76	45	235	129	199	219	D	11.9	JIS PENCIL	-	CH, CI, FA, MF, MR, PL, VR
605239	NS60SX MF	40	12	430	76	45	235	129	199	219	D	11.9	STD	-	CH, CI, FA, MF, MR, PL, VR



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

Car & Passenger Vehicle

Ultra Hi Performance DIN

Yuasa Ultra Hi Performance DIN batteries are designed and built to suit New Zealand conditions, providing the ultimate in battery performance. Suitable for both old and new vehicles with higher power demands, Yuasa Ultra Hi Performance batteries are engineered to exceed leading vehicle manufacturer's standards for quality and performance, delivering exceptional starting power, maximum service life and extra power for vehicle electrics.

- Suitable for both old and new vehicles with high power demands
- Suitable replacement for original equipment (OE) batteries
- Designed to suit New Zealand conditions
- Maximum service life with a sealed maintenance free design for reduced water loss

EXCEPTIONAL STARTING POWER

MAXIMUM SERVICE LIFE

EXTRA POWER FOR VEHICLE ELECTRICS

DESIGNED FOR NEW ZEALAND CONDITIONS

ITEM ID	BATTERY TYPE	WARRANTY†	VOLTS	CCA -18°C	RC @ 25°C	AH @ 20HR	(ALL MEASUREMENTS IN MM) L	W	H	TH	POLARITY	WEIGHT (KG)	TERMINAL TYPE	HOLD DOWN	SPECIAL FEATURES
ULTRA HI PERFORMANCE DIN															
615220	DIN44LX MF	40	12	420	71	43	208	175	175	175	C	11.5	STD	SIDE/END	CH, CI, FA, MF, MR, PL, VR
615234	DIN44LHX MF	40	12	420	85	50	208	175	175	190	C	11.50	STD	SIDE/ END	CH, CI, FA, MF, MR, PL, VR
615221	DIN53LX MF	40	12	500	94	54	245	175	175	175	C	13.5	STD	SIDE/END	CH, CI, FA, MF, MR, PL, VR
615214	DIN53ZLX MF	40	12	600	105	60	242	175	175	175	C	14.4	STD	SIDE/END	CH, CI, FA, MF, MR, PL, VR
615222	DIN53RX MF	40	12	500	94	54	245	175	175	175	D	13.5	STD	SIDE/END	CH, CI, FA, MF, MR, PL, VR
615224	DIN53LHX MF	40	12	500	95	55	242	174	190	190	C	14	STD	SIDE/END	CH, CI, FA, MF, MR, PL, VR
615225	DIN65LX MF	40	12	640	110	63	277	175	175	175	C	15.5	STD	SIDE/END	CH, CI, FA, MF, MR, PL, VR
615226	DIN65LHX MF	40	12	710	140	78	277	174	190	190	C	17.4	STD	SIDE/END	CH, CI, FA, MF, MR, PL, VR
615227	DIN65RHX MF	40	12	710	140	78	277	174	190	190	D	17.4	STD	SIDE/END	CH, CI, FA, MF, MR, PL, VR
615231	DIN75LX MF	40	12	730	135	80	313	175	175	175	C	18	STD	SIDE/END	CH, CI, FA, MF, MR, PL, VR
615228	DIN75LHX MF	40	12	830	170	95	313	175	190	190	C	20.7	STD	SIDE/END	CH, CI, FA, MF, MR, PL, VR
615229	DIN75RHX MF	40	12	830	170	95	313	175	190	190	D	20.2	STD	SIDE/END	CH, CI, FA, MF, MR, PL, VR
615230	DIN85LX MF	40	12	780	150	85	354	175	175	175	C	20	STD	SIDE/END	CH, CI, FA, MF, MR, PL, VR
615232	DIN85LHX MF	40	12	860	170	100	353	175	190	190	C	23	STD	SIDE/END	CH, CI, FA, MF, MR, PL, VR
615233	DIN110LHX MF	40	12	920	195	110	395	175	190	190	C	27	STD	SIDE/END	CH, CI, FA, MF, MR, PL, VR

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

Hi Performance

Yuasa Hi Performance batteries are designed and built to suit New Zealand conditions, providing dependable power and performance. Suitable for both old and new vehicles with standard power demands, Yuasa Hi Performance batteries are engineered to meet leading vehicle manufacturer's standards for quality and performance, delivering superior starting power, longer service life and power to run vehicle electrics.

- Superior starting power
- Suitable for both old and new vehicles with standard power demands
- Designed to suit New Zealand conditions
- Longer service life with a sealed maintenance free design for reduced water loss

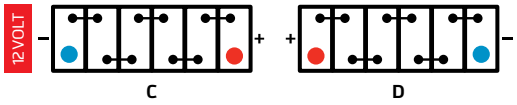
SUPERIOR STARTING POWER

LONGER SERVICE LIFE

POWER FOR VEHICLE ELECTRICS

DESIGNED FOR NEW ZEALAND CONDITIONS

ITEM ID	BATTERY TYPE	WARRANTY†	VOLTS	CCA -18°C	RC @ 25°C	AH @ 20HR	(ALL MEASUREMENTS IN MM) L	W	H	TH	POLARITY	WEIGHT (KG)	TERMINAL TYPE	HOLD DOWN	SPECIAL FEATURES
HI PERFORMANCE															
604208	55D23L MF	30	12	500	100	60	232	173	204	225	C	15.2	STD	-	CH, CI, CV, FA, MF, PL, VR
604211	57 MF	30	12	500	79	47	240	174	180	205	D	13.2	STD	SIDE/END	CH, CI, FA, MF, MR, PL, VR
604212	58 MF	30	12	500	79	47	240	174	180	205	C	13.2	STD	SIDE/END	CH, CI, FA, MF, MR, PL, VR
604200	NS40ZL MF	30	12	330	57	34	187	127	202	226	C	8.9	JIS PENCIL	-	CH, CI, FA, MF, MR, PL, VR
604202	NS40ZLS MF	30	12	330	57	34	187	127	202	226	C	8.9	STD	-	CH, CI, FA, MF, MR, PL, VR
604201	NS40Z MF	30	12	330	57	34	187	127	202	226	D	8.9	JIS PENCIL	-	CH, CI, FA, MF, MR, PL, VR
604203	NS40ZS MF	30	12	330	57	34	187	127	202	226	D	8.9	STD	-	CH, CI, FA, MF, MR, PL, VR
604204	NS60L MF	30	12	400	70	42	238	129	201	225	C	11.5	JIS PENCIL	-	CH, CI, FA, MF, MR, PL, VR
604206	NS60LS MF	30	12	400	70	42	238	129	201	225	C	11.5	STD	-	CH, CI, FA, MF, MR, PL, VR
604205	NS60 MF	30	12	400	70	42	238	129	201	225	D	11.5	JIS PENCIL	-	CH, CI, FA, MF, MR, PL, VR
604207	NS60S MF	30	12	400	70	42	238	129	201	225	D	11.5	STD	-	CH, CI, FA, MF, MR, PL, VR



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

Car & Passenger Vehicle

Hi Performance DIN

Yuasa Hi Performance DIN batteries have been designed and manufactured to deliver longer life and performance while meeting the fitment requirements of imported vehicles. Suitable for both old and new vehicles with standard power demands, Yuasa Hi Performance DIN batteries are engineered to meet leading vehicle manufacturer's standards for quality and performance, delivering superior starting power, longer service life and power to run vehicle electrics.

- Superior starting power
- Suitable for both old and new vehicles with standard power demands
- Designed to suit New Zealand conditions
- Longer service life with a sealed maintenance free design for reduced water loss

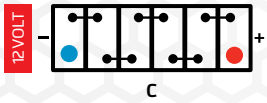
SUPERIOR STARTING POWER

LONGER SERVICE LIFE

POWER FOR VEHICLE ELECTRICS

DESIGNED FOR NEW ZEALAND CONDITIONS

ITEM ID	BATTERY TYPE	WARRANTY†	VOLTS	CCA -18°C	RC @ 25°C	AH @ 20HR	(ALL MEASUREMENTS IN MM) L	W	H	TH	POLARITY	WEIGHT (KG)	TERMINAL TYPE	HOLD DOWN	SPECIAL FEATURES
HI PERFORMANCE DIN															
614200	DIN53L MF	30	12	470	86	52	245	175	175	175	C	13	STD	SIDE/END	CH, CI, FA, MF, MR, PL, VR
614201	DIN65L MF	30	12	560	102	61	277	175	175	175	C	15	STD	SIDE/END	CH, CI, FA, MF, MR, PL, VR
614204	DIN65LH MF	30	12	580	120	72	277	175	190	190	C	16.5	STD	SIDE/END	CH, CI, FA, MF, MR, PL, VR
614202	DIN75L MF	30	12	690	133	80	315	175	175	175	C	17.5	STD	SIDE/END	CH, CI, FA, MF, MR, PL, VR
614205	DIN75LH MF	30	12	720	160	90	315	175	190	190	C	19.9	STD	SIDE/END	CH, CI, FA, MF, MR, PL, VR



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

Hi Performance Maintainable

Yuasa Hi Performance maintainable batteries feature a mix of both Expanded and Hybrid grid designs, using Calcium and Antimonial technologies. Hard wearing components reduce corrosion, limit gassing and minimise water loss, ensuring dependable power when it's needed the most.

- Superior starting power
- For cars with standard accessories
- Specialist plate design to reduce self-discharge and water loss
- Maintainable design for maximum control over battery life

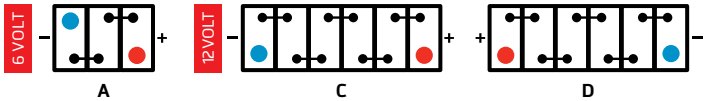
SUPERIOR STARTING POWER

LONGER SERVICE LIFE

POWER FOR VEHICLE ELECTRICS

DESIGNED FOR NEW ZEALAND CONDITIONS

ITEM ID	BATTERY TYPE	WARRANTY†	VOLTS	CCA -18°C	RC @ 25°C	AH @ 20HR	(ALL MEASUREMENTS IN MM) L	W	H	TH	POLARITY	WEIGHT (KG)	TERMINAL TYPE	HOLD DOWN	SPECIAL FEATURES
HI PERFORMANCE MAINTAINABLE															
601204	03	24	6	270	80	65	184	167	163	186	A	10.5	STD	SIDE	LM, MR
601200	41	30	12	350	50	35	230	133	180	199	D	10.73	STD	END	LM, MR
601201	43	30	12	350	50	35	230	133	180	199	C	10.73	DF	END	LM, MR

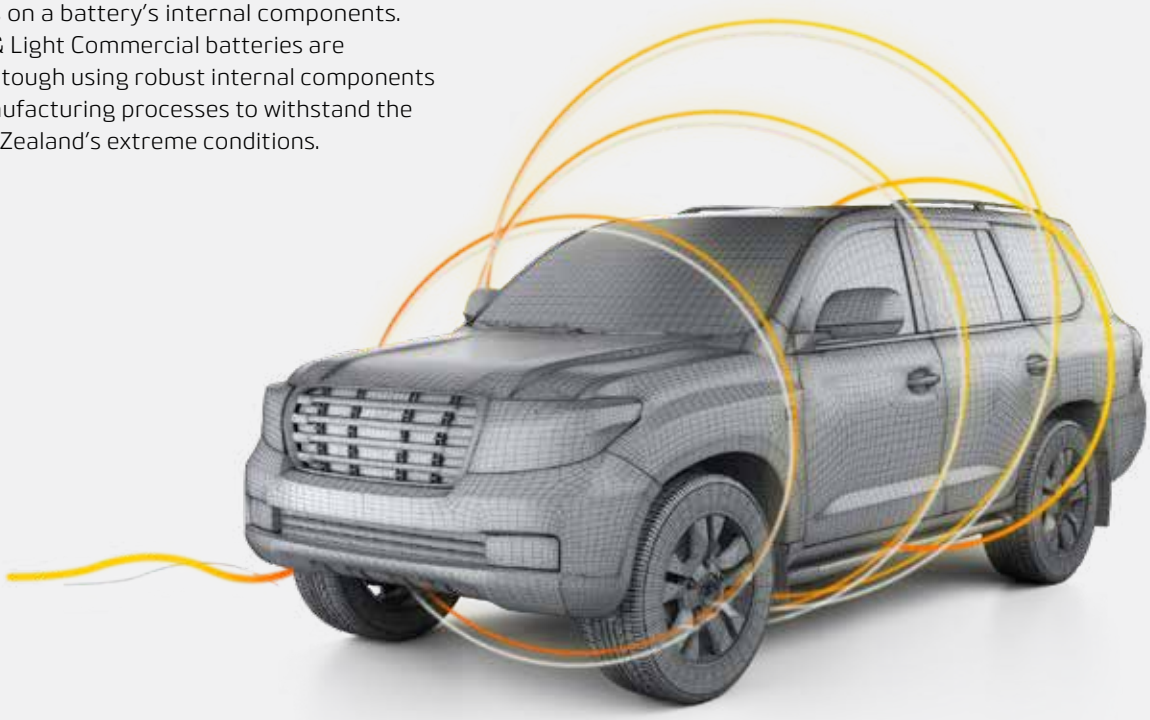


† Conditions apply. Refer to individual warranty statements attached to each battery.

SUV, 4x4 & LIGHT COMMERCIAL

Whether venturing into the high country, traversing sand dunes or on an alpine adventure, it's important to have the right equipment, and that includes the battery.

Excessive under bonnet temperatures, continuous vibration, repeated impact from rough uneven roads and the demands of power hungry accessories, place extreme demands on a battery's internal components. Yuasa's SUV, 4x4 & Light Commercial batteries are designed and built tough using robust internal components and advanced manufacturing processes to withstand the challenges of New Zealand's extreme conditions.



SUV, 4x4 & Light Commercial

Ultra Hi Performance

Yuasa Ultra Hi Performance batteries are designed for more than just starting power, manufactured with thicker and more durable components that are able to sustain constant current loads.

- Calcium technology for superior starting power
- Platelock™ technology providing shock and vibration resistance
- Enhanced active material reduces water loss
- Superior strength and durability
- Maintainable & maintenance free designs

EXCEPTIONAL STARTING POWER

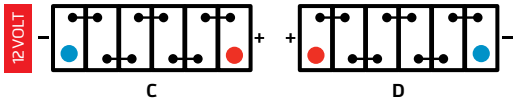
MAXIMUM SERVICE LIFE

EXTRA STRENGTH & ENDURANCE

ENHANCED VIBRATION RESISTANCE

DESIGNED FOR NEW ZEALAND CONDITIONS

ITEM ID	BATTERY TYPE	WARRANTY†	VOLTS	CCA -18°C	RC @ 25°C	AH @ 20HR	(ALL MEASUREMENTS IN MM) L	W	H	TH	POLARITY	WEIGHT (KG)	TERMINAL TYPE	HOLD DOWN	SPECIAL FEATURES
ULTRA HI PERFORMANCE															
625228	N70ZZLX MF	30/24	12	760	165	90	304	172	202	225	C	21	STD	SIDE	CH, CI, CV, FA, MF, MR, PL
625229	N70ZZX MF	30/24	12	760	165	90	304	172	202	225	D	21	STD	SIDE	CH, CI, CV, FA, MF, MR, PL
625235	NS70LX MF	30/24	12	680	140	80	260	174	202	225	C	18.5	STD	SIDE	CH, CI, CV, FA, MF, MR, PL
625236	NS70X MF	30/24	12	680	140	80	260	174	202	225	D	18.5	STD	SIDE	CH, CI, CV, FA, MF, MR, PL
ULTRA HI PERFORMANCE SEVERE SERVICE															
622203	N70ZZLHX	24	12	730	180	95	305	171	202	225	C	23.9	STD	SIDE	CH, CI, GM, LM, MIA, MR, PL, VR
622202	N70ZZHX	24	12	730	180	95	305	171	202	225	D	23.9	STD	SIDE	CH, CI, GM, LM, MIA, MR, PL, VR



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

SUV, 4x4 & Light Commercial

Hi Performance

Yuasa Hi Performance batteries feature hard wearing internal components to reduce corrosion and enhance vibration resistance, while producing dependable power and performance.

- Calcium technology for dependable starting power
- Specialist plate design to reduce self-discharge and water loss
- Platelock™ technology providing shock and vibration resistance
- Maintenance free design

SUPERIOR STARTING POWER

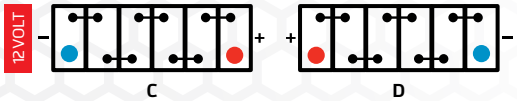
LONGER SERVICE LIFE

ADDED STRENGTH & ENDURANCE

IMPROVED VIBRATION RESISTANCE

DESIGNED FOR NEW ZEALAND CONDITIONS

ITEM ID	BATTERY TYPE	WARRANTY†	VOLTS	CCA -18°C	RC @ 25°C	AH @ 20HR	(ALL MEASUREMENTS IN MM) L	W	H	TH	POLARITY	WEIGHT (KG)	TERMINAL TYPE	HOLD DOWN	SPECIAL FEATURES
HI PERFORMANCE															
624205	N70ZZL MF	24/20	12	680	145	80	304	172	202	225	C	20	STD	-	CH, CI, CV, FA, MF, MR, PL
624206	N70ZZ MF	24/20	12	680	145	80	304	172	202	225	D	20	STD	-	CH, CI, CV, FA, MF, MR, PL
624200	NS70L MF	24/20	12	600	130	70	260	174	202	225	C	17.4	STD	SIDE	CH, CI, CV, FA, MF, MR, PL
624201	NS70 MF	24/20	12	600	130	70	260	174	202	225	D	17.4	STD	SIDE	CH, CI, CV, FA, MF, MR, PL



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

Hi Performance Maintainable

Yuasa Hi Performance maintainable batteries feature hard wearing components to reduce corrosion, limit gassing and minimise water loss, ensuring dependable power when it's needed the most. These batteries utilise a maintainable design to help maximise battery life under harsh conditions.

- Calcium technology for dependable starting power
- Specialist plate design to reduce self-discharge and water loss
- Superior starting power
- Maintainable design for maximum control over battery life

SUPERIOR STARTING POWER

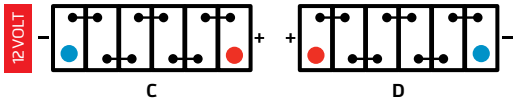
LONGER SERVICE LIFE

ADDED STRENGTH & ENDURANCE

IMPROVED VIBRATION RESISTANCE

DESIGNED FOR NEW ZEALAND CONDITIONS

ITEM ID	BATTERY TYPE	WARRANTY†	VOLTS	CCA -18°C	RC @ 25°C	AH @ 20HR	(ALL MEASUREMENTS IN MM) L	W	H	TH	POLARITY	WEIGHT (KG)	TERMINAL TYPE	HOLD DOWN	SPECIAL FEATURES
HI PERFORMANCE MAINTAINABLE															
621211	N70Z	24/20	12	620	130	75	304	172	202	225	D	19.5	STD	-	CH, FA, LM, MR
621212	N70ZL	24/20	12	620	130	75	304	172	202	225	C	19.5	STD	-	CH, FA, LM, MR
621213	NS70	24/20	12	580	120	70	260	174	202	225	D	17.9	STD	SIDE	CH, FA, LM, MR
621214	NS70L	24/20	12	580	120	70	260	174	202	225	C	17.9	STD	SIDE	CH, FA, LM, MR

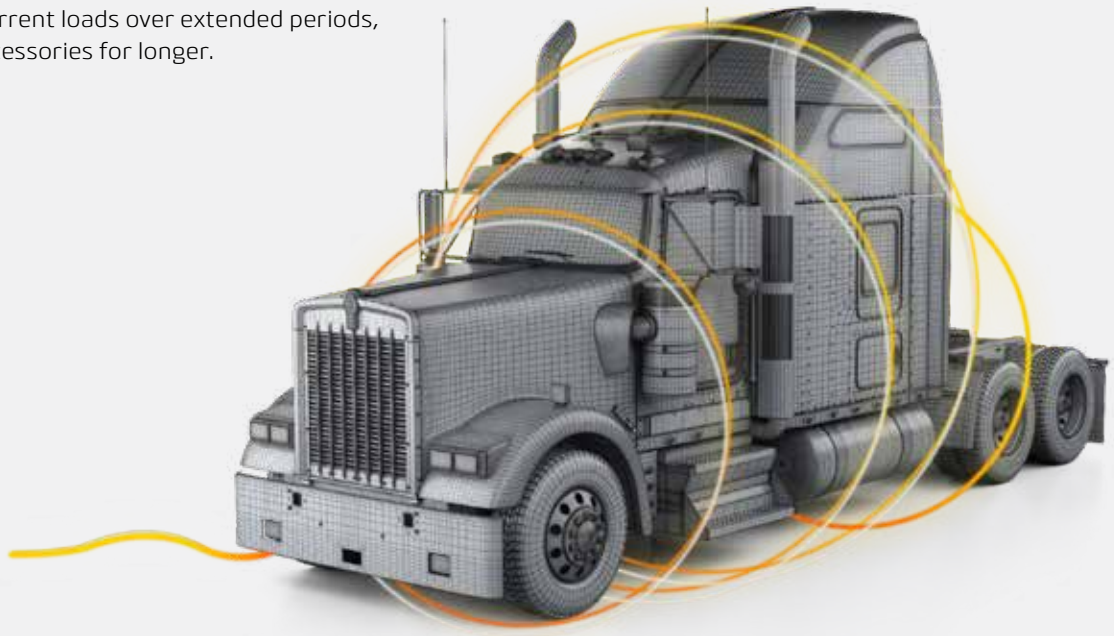


† Conditions apply. Refer to individual warranty statements attached to each battery.

TRUCK, BUS & HEAVY EQUIPMENT

Yuasa Truck, Bus and Heavy Equipment batteries represent the latest in performance and reliability for haulage and heavy commercial vehicles. They deliver what drivers and fleet managers really want – longer life, superior reliability and less down time.

Delivering more than just superior starting power, Yuasa Truck, Bus and Heavy Equipment batteries can sustain constant current loads over extended periods, to run on-board accessories for longer.



Truck, Bus & Heavy Equipment

Heavy Duty AGM

Incorporating Absorbed Glass Mat (AGM) technology and robust positive plates that combine to deliver superior starting power, extreme cycle life and discharge capability.

- AGM technology for enhanced endurance and vibration resistance
- Superior strength and durability for commercial conditions
- Specialist plate design to reduce self-discharge and water loss
- Semi-cycling performance for on-board accessories

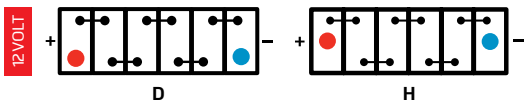
EXCEPTIONAL STARTING POWER

MAXIMUM SERVICE LIFE

SUPERIOR STRENGTH & ENDURANCE

EXTREME VIBRATION RESISTANCE

ITEM ID	BATTERY TYPE	WARRANTY†	VOLTS	CCA -18°C	RC @ 25°C	AH @ 20HR	(ALL MEASUREMENTS IN MM) L	W	H	TH	POLARITY	WEIGHT (KG)	TERMINAL TYPE	HOLD DOWN	SPECIAL FEATURES
HEAVY DUTY AGM															
628201	AXD31-950	24	12	950	200	100	332	172	210	231	D	27.4	TWIN	-	AGM, CH,CV, FA, MF, PV
628202	AXD31-950S	24	12	950	200	100	332	172	210	231	H	27.4	TH	-	AGM, CH,CV, FA, MF, PV
618200	AXD26R	24	12	750	140	75	260	172	200	220	D	19.7	STD	SIDE/END	AGM, FA, MF



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

Truck, Bus & Heavy Equipment

Heavy Duty

Yuasa Heavy Duty batteries are built tough for New Zealand's harsh working conditions. Incorporating industry leading design features, these maintenance free batteries provide exceptional performance & longer life in heavy duty applications.

- Calcium technology for reduced water loss and lower self-discharge
- Improved strength and durability for commercial conditions
- Platelock™ technology providing shock and vibration resistance

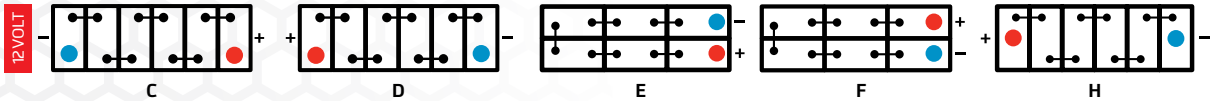
EXCEPTIONAL STARTING POWER

MAXIMUM SERVICE LIFE

EXTRA STRENGTH & ENDURANCE

ENHANCED VIBRATION RESISTANCE

ITEM ID	BATTERY TYPE	WARRANTY†	VOLTS	CCA -18°C	RC @ 25°C	AH @ 20HR	(ALL MEASUREMENTS IN MM) L	W	H	TH	POLARITY	WEIGHT (KG)	TERMINAL TYPE	HOLD DOWN	SPECIAL FEATURES
HEAVY DUTY															
625220	86Z MF	24	12	1000	200	100	330	172	218	242	H	24.8	STD	-	CH, CI, CV, FA, MF, MR, PL
625221	86 MF	24	12	800	180	90	330	172	218	242	H	23.2	STD	-	CH, CI, CV, FA, MF, MR, PL
626205	DIN135L MF	24	12	900	250	135	512	174	183	207	E	34	STD	SIDE/END	CH, CI, MF, PL, VR
625214	N100L MF	24	12	730	180	100	405	175	212	235	C	25.1	STD	-	CH, CI, FA, MF, MR, PL, VR
625202	N100 MF	24	12	730	180	100	410	175	212	235	D	25.1	STD	-	CH, CI, FA, MF, MR, PL, VR
625203	N120 MF	24	12	850	235	125	505	183	212	235	F	32.1	STD	-	CH, CI, FA, MF, MR, PL, VR
625204	N150 MF	24	12	1000	300	155	508	222	213	236	F	38.4	STD	-	CH, CI, FA, MF, MR, PL, VR
625205	N200 MF	24	12	1150	400	200	522	279	220	244	F	51.5	STD	-	CH, CI, FA, MF, MR, PL, VR



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

Heavy Duty Maintainable

Yuasa Heavy Duty maintainable batteries are ideal for short haul/hiab/tail lift applications. Made of thicker battery plates for increased durability and battery life, these batteries feature a low maintenance design for maximum control over battery life.

- Reliable starting power
- Improved strength and durability for commercial conditions
- Platelock™ technology providing shock and vibration resistance^

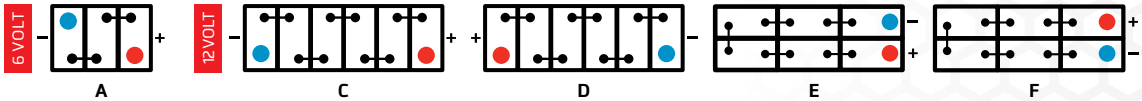
SUPERIOR STARTING POWER

LONGER SERVICE LIFE

EXTRA STRENGTH & ENDURANCE

IMPROVED VIBRATION RESISTANCE

ITEM ID	BATTERY TYPE	WARRANTY†	VOLTS	CCA -18°C	RC @ 25°C	AH @ 20HR	(ALL MEASUREMENTS IN MM) L	W	H	TH	POLARITY	WEIGHT (KG)	TERMINAL TYPE	HOLD DOWN	SPECIAL FEATURES
HEAVY DUTY MAINTAINABLE															
621200	23	24	6	750	245	120	259	172	220	220	A	18.5	STD	-	CH, LM
621201	26	24	6	850	294	150	304	171	201	222	A	21.35	STD	-	CH, LM, PL
621204	86	24	12	680	180	92	348	170	210	238	C	25.6	STD	SIDE	CH, LM, MR, PL
621205	87	24	12	680	180	92	348	170	210	238	D	25.6	STD	SIDE	CH, LM, MR, PL
621203	94	24	12	890	255	135	519	206	181	203	E	35.6	STD	-	CH, CV, LM, PL
621237	N100	24	12	635	192	111	407	175	210	231	D	29.2	STD	-	CV, LM, PL
621238	N120	24	12	860	266	129	506	183	210	240	F	36.5	STD	-	CV, LM, PL
621239	N150	24	12	1000	320	153	506	220	210	240	F	44.4	STD	-	CV, LM, PL
621240	N200	24	12	1300	415	195	519	277	218	248	F	57.0	STD	-	CV, LM, PL

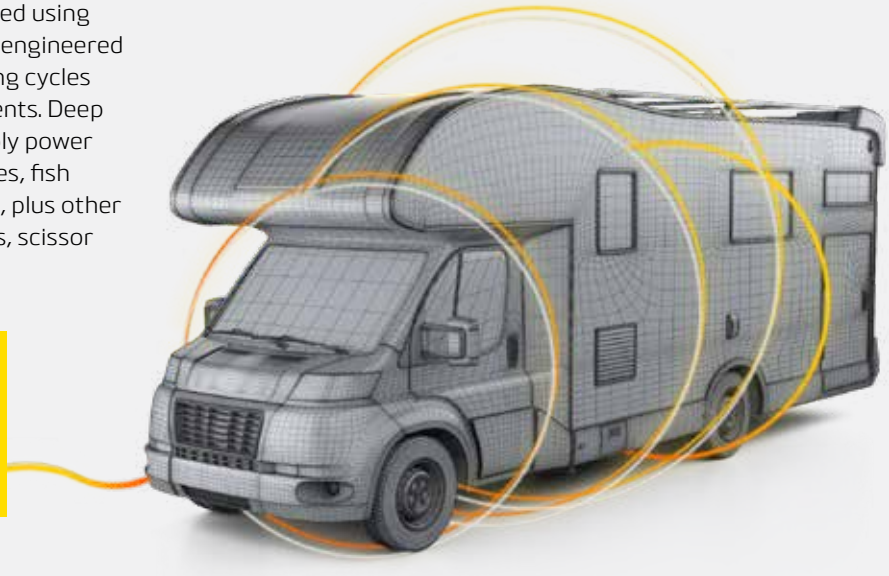


† Conditions apply. Refer to individual warranty statements attached to each battery. ^ Excludes 23.

DEEP CYCLE FLOODED & AGM

Yuasa Deep Cycle batteries are designed and built to last. Available in Flooded and AGM variants, Yuasa Deep Cycle batteries deliver long-lasting, dependable power for accessories and are ideal as secondary batteries in recreational & commercial applications - including 4x4's, caravans and recreational vehicles, golf carts, wheelchairs, mobility scooters, marine systems, dual-battery systems and industrial equipment.

Yuasa Deep Cycle batteries are manufactured using the toughest internal components, and are engineered to withstand heavy discharge and recharging cycles without damaging critical internal components. Deep Cycle batteries are most often used to supply power to accessories such as lights, heaters, fridges, fish finders, navigation devices, winches, pumps, plus other commercial applications including golf carts, scissor and boom lift machines.



SEASONAL USE
For seasonal use, fully recharge the battery before putting into storage. Check the state-of-charge or voltage regularly. Should the voltage drop below 12.5 volts, recharge the battery. It is important to check the battery completely before reconnecting to the electrical devices.

Deep Cycle

Deep Cycle Plus

The all-round dual purpose Deep Cycle battery with cycling and starting capabilities. Designed to provide longer life when continually discharged and recharged. Constructed with premium-grade raw materials and acid electrolytes to ensure reliable deep cycling performance in a diverse range of recreational and commercial applications.

- Superior cycle life
- Designed to withstand repeated recharge and discharge cycles
- Platelock™ technology providing shock and vibration resistance
- Thicker plates for improved strength and durability

DUAL PURPOSE CYCLING & STARTING

SUPERIOR CYCLE LIFE

DEEP DISCHARGE CAPABILITY

SUPERIOR RECHARGE EFFICIENCY

ITEM ID	BATTERY TYPE	WARRANTY†	VOLTS	CCA -18°C	RC @ 25°C	AH @ 20HR	(ALL MEASUREMENTS IN MM) L	W	H	TH	POLARITY	WEIGHT (KG)	TERMINAL TYPE	HOLD DOWN	SPECIAL FEATURES
DEEP CYCLE PLUS															
645200	24DC MF	12	12	600	135	82	260	171	202	225	D	18.6	TWIN	SIDE	CH, CI, CV, FA, MF, MR, PL, VR
645201	27DC MF	12	12	680	160	96	304	172	202	225	D	21.2	TWIN	SIDE	CH, CI, CV, FA, MF, MR, PL, VR
645204	31DC MF	12	12	680	200	110	330	173	217	239	D	25	TWIN	SIDE	CH, CI, CV, FA, MF, MR, PL, VR

Deep Cycle Flooded

A robust and dependable range of batteries designed for applications and installations where reliable, long lasting power supply is required.

- Dependable cycling performance with superior heat resistance
- Designed to withstand repeated recharge and discharge cycles
- Superior deep discharge capabilities
- Designed for under bonnet use in 4x4's, SUV's, recreational and commercial vehicles

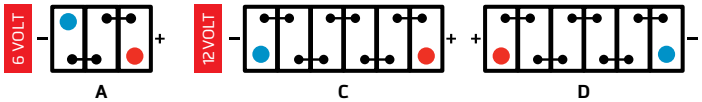
LONG CYCLE LIFE

DEEP DISCHARGE CAPABILITY

IMPROVED RECHARGE EFFICIENCY

ENHANCED HEAT RESISTANCE

ITEM ID	BATTERY TYPE	WARRANTY†	VOLTS	AH @ 20HR	(ALL MEASUREMENTS IN MM) L	W	H	TH	POLARITY	WEIGHT (KG)	TERMINAL TYPE	HOLD DOWN	SPECIAL FEATURES
DEEP CYCLE FLOODED													
641140	12A	12	6	105	227	172	184	210	A	15.8	STD	-	GM, LM, VR
645103	D23LT MF	12	12	65	232	173	200	225	C	17	STD	-	CH, CI, FA, MF



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

Deep Cycle

Deep Cycle REC

Developed by the world renowned GS Yuasa Corporation, Yuasa REC batteries are a range of sealed maintenance free, VRLA batteries designed to deliver superior cycling performance in high rate discharge applications. Yuasa REC batteries incorporate Yuasa's unique electrolyte retention system, heavy duty lead acid calcium alloy grids and specialist raw materials for extra performance in both cyclic and float applications.

- Sealed maintenance free design enables operation in any orientation*
- Superior cycling performance in high rate discharge applications
- REC batteries utilise Yuasa's unique electrolyte suspension system
- Ideal for use in a diverse range of applications

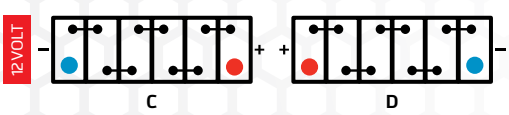
SUPERIOR DEEP DISCHARGE CAPABILITY

FAST RECHARGE CAPABILITY

90° SIDE MOUNT*

EXTREME VIBRATION RESISTANCE

ITEM ID	BATTERY TYPE	WARRANTY†	VOLTS	AH @ 20HR	(ALL MEASUREMENTS IN MM) L	W	H	TH	POLARITY	WEIGHT (KG)	TERMINAL TYPE	HOLD DOWN	SPECIAL FEATURES
DEEP CYCLE AGM													
648002	REC22-12	12	12	22	181	76	167	167	C	6.2	M5 INSERT	-	AGM, MF, VRLA
648003	REC36-12	12	12	36	196	130	158	169	D	11.0	M5 INSERT	-	AGM, CH, MF, VRLA
648000	REC50-12	12	12	50	197	165	175	175	C	15.3	M5 INSERT	-	AGM, MF, VRLA
648001	REC80-12	12	12	80	259	168	210	213	D	27.0	M6 INSERT	-	AGM, CH, MF, VRLA



† Conditions apply. Refer to individual warranty statements attached to each battery.
* Excluding continuous inverted use or end mounting.

Deep Cycle Industrial

Yuasa Deep Cycle Industrial batteries are a range of multi-purpose, maintainable 6 and 8 volt batteries designed to provide long lasting power in recreational and industrial applications.

- Engineered for superior deep cycle performance in commercial applications
- Heavy-duty, internal connections for improved conductivity and current flow
- Thicker full-frame cast plates for deep discharge and recharge efficiency
- Wingnut terminals suits most industrial equipment wiring looms

LONG CYCLE LIFE

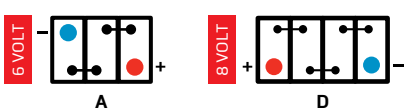
DEEP DISCHARGE CAPABILITY

IMPROVED RECHARGE EFFICIENCY

REDUCED SELF DISCHARGE

ENHANCED HEAT RESISTANCE

ITEM ID	BATTERY TYPE	WARRANTY†	VOLTS	AH @ 20HR	(ALL MEASUREMENTS IN MM) L	W	H	TH	POLARITY	WEIGHT (KG)	TERMINAL TYPE	HOLD DOWN	SPECIAL FEATURES
DEEP CYCLE INDUSTRIAL													
641228	C105	12	6	225	264	181	245	276	A	29.79	W/NUT	-	LM, VR
641229	C145	12	6	260	264	181	264	295	A	39.9	W/NUT	-	LM, VR
641230	C8VGC	12	8	170	264	181	245	276	D	31.88	W/NUT	-	LM, VR



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

MARINE

The ultimate in marine batteries, perfectly adapted to life on the water. Yuasa Seafarer batteries are specifically designed to handle the harsh and demanding environments which boats are often subjected to. Continuous vibration from high-power engines and the relentless hull impacts from waves can all take their toll on the battery – which is why it is important to use a battery which is built to thrive in these conditions.

Engineered for purpose and manufactured using quality components, the Yuasa Seafarer offers a wide range of product options to suit all popular boat types and engine sizes. From a starting battery for a tinny, right through to batteries for starting larger engines and powering accessories – there's a Seafarer battery to suit.

ON-BOARD MARINE ELECTRICS

BASIC ELECTRICS
- » Control instruments
- » Standard lighting
- » Bilge pump
- » UHF / VHF radio

OPTIONAL ELECTRICS
- » Extra lighting
- » GPS / Fish Finder
- » Auto pilot / Trim tabs
- » Fridge

Marine

Yuasa Seafarer batteries are designed and manufactured to handle the rigours of wave pounding and deliver reliable starting power and performance. The Seafarer range can start engines from 70 – 350hp and power multiple on-board accessories^.

- Superior starting power - starts engines from 70 – 350hp
- Dual purpose – starting and semi-cycling capabilities for on-board accessories
- Thicker cast plates for improved strength and durability
- Platelock™ technology to combat the effects of wave pounding and damage from trailer transport

DUAL PURPOSE STARTING & SEMI-CYCLING

STARTS ENGINES UP TO 350HP

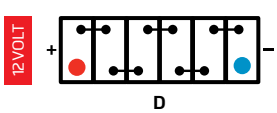
PLATELOCK™ COMBATS WAVE POUNDING

SUPERIOR STRENGTH & ENDURANCE

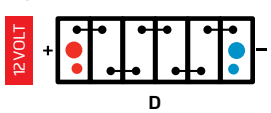
EXTREME VIBRATION RESISTANCE

ITEM ID	BATTERY TYPE	WARRANTY†	VOLTS	CCA -18°C	MCA -0°C	RC @ 25°C	AH @ 20HR	(ALL MEASUREMENTS IN MM) L	W	H	TH	POLARITY	WEIGHT (KG)	TERMINAL TYPE	HOLD DOWN	SPECIAL FEATURES
MARINE																
635207	D23RM MF Seafarer 580#	24	12	580	750	90	50	230	170	185	209	D	13.8	DF	-	CH, CI, FA, MF, MR, PL
635208	NS70M MF Seafarer 680	24	12	680	880	130	75	258	174	200	222	D	17.9	TWIN	SIDE	CH, CI, CV, FA, MF, PL
635209	N70ZM MF Seafarer 780	24	12	780	1000	160	80	302	171	200	222	D	21.6	TWIN	SIDE	CH, CI, CV, FA MF, PL

Do not connect starting cables to threaded terminal posts.
#Suitable for starting only.



MULTI-TERMINAL



†Conditions apply. Refer to individual warranty statements attached to each battery.
*Recommended for starting applications only.
^Excluding Seafarer 580.

LAWN & GARDEN

Power and performance from season to season.

Yuasa Yard Master Lawn & Garden batteries are the perfect partner for your ride-on mower! The Yard Master range represents the latest in small engine starting technology for ride-on mowers, personal watercraft and generators. Available in both maintainable and maintenance free options, they're built tough to handle New Zealand's extreme climate and harsh operating conditions.

Lawn & Garden

Yard Master Maintenance Free

Yuasa Yard Master MF batteries are developed from some of the most advanced technical resources, and built tough to deliver superior starting power and performance in constant stop start applications.

- Maintenance free design – sealed to protect against dirt, dust and grass
- Calcium technology for lower self-discharge and longer life
- Platelock™ technology providing shock and vibration resistance

DEPENDABLE STARTING POWER | **LOW SELF DISCHARGE** | **ADDED STRENGTH & ENDURANCE** | **BUILT TO COMBAT VIBRATION**

ITEM ID	BATTERY TYPE	WARRANTY†	VOLTS	CCA @ -18°C	RC @ 25°C	AH @ 20HR	(ALL MEASUREMENTS IN MM) L	W	H	TH	POLARITY	WEIGHT (KG)	TERMINAL TYPE	HOLD DOWN	SPECIAL FEATURES
YARD MASTER MAINTENANCE FREE															
660202	U1 MF	12	12	330	50	32	195	127	155	182	D	7.8	LUG	-	CH, CV, FA, MF, MR, PL, VR
660203	U1R MF	12	12	330	50	32	195	127	155	182	C	7.8	LUG	-	CH, CV, FA, MF, MR, PL, VR

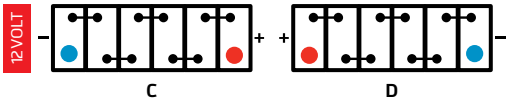
Yard Master Maintainable

Engineered to protect against corrosion and vibration damage. Yuasa Yard Master maintainable batteries incorporate robust internal components to deliver dependable starting power and reliable performance in constant stop start applications.

- Low maintenance design allows easy top up of electrolyte for extended service life
- Robust internal components for improved deep discharge resistance
- Strong, durable antimonial cast plates for longer life

DEPENDABLE STARTING POWER | **LOW SELF DISCHARGE** | **ADDED STRENGTH & ENDURANCE** | **BUILT TO COMBAT VIBRATION**

ITEM ID	BATTERY TYPE	WARRANTY†	VOLTS	CCA @ -18°C	RC @ 25°C	AH @ 20HR	(ALL MEASUREMENTS IN MM) L	W	H	TH	POLARITY	WEIGHT (KG)	TERMINAL TYPE	HOLD DOWN	SPECIAL FEATURES
YARD MASTER MAINTAINABLE															
660200	12N24-3	12	12	240	35	24	185	125	160	178	C	7.4	LUG	-	LM, VR
660201	12N24-4	12	12	240	35	24	185	125	160	178	D	7.4	LUG	-	LM, VR



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

CHARGING, TESTING & DIAGNOSTIC EQUIPMENT

Yuasa's battery charging, testing & diagnostic equipment includes a range of innovative, market leading automotive, powersports & stationary power testers that are designed to take the guess work out of battery testing.

They provide fast, accurate, on-the-spot test results regarding a battery's state of health. They can help identify suspect batteries before they fail and ensure pre-emptive battery replacement to avoid the inconvenience and distress of battery failure.

Yuasa Yu-Fit

The Yuasa YU-FIT is an aftermarket battery configuration tool that provides a cost effective, easy to use solution. The YU-FIT battery configurator provides a complete battery replacement solution for vehicles that require battery and energy management system configuration.

The YU-FIT will reduce battery replacement costs and customer inconvenience, while enhancing the services provided by aftermarket battery suppliers.

ITEM ID	PRODUCT TYPE	APPLICATION	BATTERY TYPE	FEATURES
YU-FIT BATTERY CONFIGURATOR				
695014	YU-FIT Battery Configurator	Idle Stop Start Vehicles	ISS AGM & EFB	Easy to read LED Results, Voltage check, Battery Test, Update via Internet

Testing Equipment

A range of battery testing equipment that features patented Single Load Dynamic Resistance technology to simulate the real-world conditions a battery will face.

The testers will not be misled by common conditions such as high surface voltage, poor cell connections and contact impedance, delivering accurate results test after test.

ITEM ID	PRODUCT TYPE	APPLICATION	TESTING RANGE	BATTERY TYPE	FEATURES
DHC TESTERS					
691013	BT 521	Passenger Vehicle, 4x4, Lawn & Garden, Truck, Marine Cranking, Motorcycle	40 to 2000 CCA	Flooded, AGM, VRLA, GEL, and ISS (EFB, AGM)	• 6V & 12V battery testing • 12V Idle Stop Start battery testing • 12V & 24V Starting & charging system testing • Integrated Printer
691000	BT 002	Passenger Vehicle, 4x4, Lawn & Garden, Truck, Marine Cranking, Motorcycle	40 to 2000 CCA	Flooded, VRLA, Gel and AGM	• 6V & 12V battery testing • 12V & 24V Starting & charging system testing

Chargers & Maintainers

Century's range of 6 Volt & 12 Volt battery chargers can charge batteries rated up to 240Ah* and maintain batteries rated up to 360Ah. Incorporating patented rejuvenation technology, the chargers have the ability to recover heavily discharged batteries, and will activate from as low as 2 Volts.#

ITEM ID	PRODUCT TYPE	BATTERY TYPE	FEATURES
BATTERY CHARGERS & MAINTAINERS			
690012	CC6121.2	6/12V Lead-acid batteries (Calcium SMF, AGM, Flooded, EFB, Gel)	• Selectable 6V & 12V output • Charges batteries rated up to 24Ah • Maintains batteries rated up to 100Ah • Activates on batteries discharged as low as 3V
690010	CC1206	12V Lead-acid batteries (Calcium SMF, AGM, Flooded, EFB, Gel)	• Selectable 1A/3A/6A output • Charges batteries rated up to 120Ah • Maintains batteries rated up to 180Ah • Activates on batteries discharged as low as 2V
690013	CC1212	12V Lead-acid batteries (Calcium SMF, AGM, Flooded, EFB, Gel) and Lithium (LFP) batteries	• Selectable 1A/8A/12A output • Charges batteries rated up to 240Ah • Maintains batteries rated up to 360Ah • Activates on batteries discharged as low as 2V • LFP Wake Up-Power Supply

*Based on 5 to 30% of battery Ah ratings. For optimum charging, 10% of battery Ah rating is recommended for flooded batteries and 20% of battery Ah rating is recommended for AGM & Gel batteries.
#3V/8V activation on the CC6121.2, when 6/12V setting is selected.

Why do Batteries Fail?

Batteries have a finite life, determined by the application and the operating conditions. Battery failure can be attributed to various factors, however the causes of failure fall under two distinct categories: manufacturing and non-manufacturing faults.

Manufacturing Faults

Typically occur within the first 3 months.

Short Circuits/Dead Cells

Where one cell will show a dramatically lower Specific Gravity (SG) reading than the other cells.

Internal Break

Usually resulting from physical damage to a battery during transportation. Yuasa's stringent quality assurance and inspection processes demanded by leading vehicle manufacturers ensure genuine manufacturing faults in Yuasa batteries are negligible.

Non-Manufacturing Faults

These fall outside of Yuasa's strict quality control systems and are more likely to occur the longer the battery is in service. They are often attributed to a problem with the vehicle's electrical system, its operation or the battery application.

Wear and Tear

As a battery ages, grid metal corrodes and active material is lost from the plate. Over time this leads to a point where the battery will no longer be able to start a vehicle. High temperature will accelerate the degradation rates.

Physical Damage

Incorrect fitment, handling and storage often leads to external damage and subsequent battery failure.

Incorrect Application

Fitting a smaller, less powerful battery or a battery designed for another application can lead to early failure.

Sulphation

Occurs when the battery is allowed to stand in a discharged state for an extended period of time.

Negligence

Failure to maintain fluid levels exposes internal components and accelerates battery failure.

Under-Charging

Short journeys, stop start driving or faulty alternators will not fully recharge a battery.

Over-Charging

Often caused if the alternator is incorrectly set or the alternator voltage control fails.

Discharge

Lights or other accessories left on for extended periods.

Factors Affecting Battery Life

As batteries operate and age, they gradually lose their capacity. The constant charge and discharge process eventually leads to failure. Components corrode over time, electrical shorts occur and vibration causes damage; eventually causing failure. Overcharging and undercharging a battery will also have a bearing on battery life.

Early Warning Signs

Batteries often fail when least expected and can be avoided with regular battery testing. Typical warning signs include a slower than normal ability to crank the engine. Other less noticeable factors, such as changed driving patterns and colder/hotter weather will all have an affect on the life of a battery. Regular battery testing can identify suspect batteries before they fail and avoid the inconvenience of a roadside breakdown.

Battery Inspection

Check electrolyte levels of a maintainable battery - fluid below the tops of the separators indicate overcharging or poor maintenance. Overcharging conditions may be due to an incorrect voltage setting, low voltage caused by heat or internal defects, or old age deterioration.

Check the State of Charge Indicator on a sealed maintenance free battery - this gives you a snap shot of the battery's condition and whether the battery needs to be charged or replaced.

- **Is there electrolyte on the top of the battery?**
  This can indicate overcharging or overfilling.
- **Is the battery loose in the carrier?**
  This can cause failure from vibration.
- **Does the battery have signs of damage or mistreatment?**
  This can also cause failure.

Discharged (flat) Batteries

A flat battery should be checked using the State of Charge Indicator on top of the battery, with a voltmeter or hydrometer depending on the type of battery. A low specific gravity reading of 1.240 or less in all cells indicates a discharged battery and it must be charged before further examination and testing can occur.

The discharged condition may be due to a problem in the electrical system (slipping alternator belt, faulty regulator or alternator, high resistance due to corrosion). Internal shorts may also be due to manufacturing defects, the ageing process or vibration damage.

Useful Tips

- Vibration can reduce a battery's life. Always use an approved battery clamp to limit vibration. Yuasa batteries are built tough, using robust internal components to resist damage through abrasion and puncture from vehicle vibration.
- Many alleged 'dead batteries' are merely flat batteries. Drivers simply leave lights on or can have faulty voltage regulators.
- Ensure the battery is properly tested before replacing it.
- It is difficult to know exactly when a battery might fail. A slow starting engine is sometimes an indication.
- Old batteries can give trouble in colder weather.
- Equally, if an engine area becomes overheated in very hot temperatures and the battery is under strain from air conditioners it may fail. Regular battery checks are always advised.

Yuasa Batteries Nationwide Warranty

Each battery supplied by Century Yuasa comes with a warranty against defects for the period and application, as detailed on each battery.

If our testing determines the battery is defective we will replace it, however the costs of delivering it to the warranty location and collecting it and any replacement are yours. The claim must be made within the warranty period featured on the battery. Dated proof of purchase is required. The warranty period for replacement starts on the date of purchase of the defective battery it replaces. **Call 0800 93 93 93** for advice and assistance regarding warranty claims. This warranty does not cover defects due to abuse, damage, neglect, sulphation, over or under charging, normal wear and tear or incorrect application, installation or maintenance.

This warranty is in addition to other rights and remedies available at law. Our goods come with guarantees that cannot be excluded under New Zealand's Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

THIS WARRANTY DOES NOT COVER:

- ✕ A flat battery
- ✕ Normal wear and tear
- ✕ Physical damage
- ✕ Undercharging (sulphation)
- ✕ Incorrect application
- ✕ Negligence (before or during use)
- ✕ Overcharging
- ✕ Spillage from over filling
- ✕ Modifications to the battery
- ✕ Failure arising from the addition of fluids other than water
- ✕ Batteries used for motorsport or racing activities

Private Use Statement

Private use is a vehicle used for private needs, as opposed to business uses. These vehicles are generally defined as having only four wheels and are not used to carry passengers or goods for monetary purposes.

Warranty Periods Explained

BATTERY CATEGORY	PRIVATE USE / STARTING	COMMERCIAL USE / STARTING	RIDE SHARE	TAXI	PRIVATE MARINE STARTING	COMMERCIAL MARINE STARTING	DEEP CYCLE PRIVATE	DEEP CYCLE COMMERCIAL	MOBILITY SCOOTER
All warranty periods are stated in months or kilometres.									
ISS Active AGM	36	12	12	6	-	-	-	-	-
ISS Active EFB	36	12	12	6	-	-	-	-	-
ISS Active EFB MF	24	12	12	6	-	-	-	-	-
Hybrid Auxiliary	24	6	6	6	-	-	-	-	-
Car & PV UHP	40	12	12	6	-	-	-	-	-
Car & PV HP	30	12	12	6	-	-	-	-	-
4x4, SUV, Light Commercial UHP	30	24	12	6	-	-	-	-	-
4x4, SUV, Light Commercial HP	24	20	12	6	-	-	-	-	-
Truck UHP Severe Service	24	24	-	-	-	-	-	-	-
Extra Heavy Duty/Heavy Duty AGM	24	24 or 160,000km	-	-	-	-	-	-	-
Heavy Duty	24	24 or 120,000km	-	-	-	-	-	-	-
Seafarer	-	-	-	-	24	12	-	-	-
Deep Cycle Plus	12	12	12	-	-	-	12	12	-
Deep Cycle Flooded	-	-	-	-	-	-	12	12	-
Deep Cycle AGM	-	-	-	-	-	-	12	12	-
Industrial Deep Cycle	-	-	-	-	-	-	12	12	-
Lawn & Garden	12	6	-	-	-	-	-	-	-

- No warrnty period applicable.

Battery Charging

Safety first

Before attempting to charge a battery with an external battery charger, it is important to be aware of the safety precautions when charging batteries and follow the instructions outlined by the charger manufacturer.

1. Turn the charger off before attaching, rocking or removing the terminal clamps.
2. Keep open flames and sparks away from the battery.
3. Keep vent caps in place.
4. Charge in well ventilated area.
5. Follow the battery charger manufacturer's instructions to avoid overheating.

Dangerous explosive gases are generated during the charging process that can be ignited by a variety of sources including, sparks, naked flames and static electricity.

It is highly recommended to wear PPE (Personal Protection Equipment) including safety glasses, chemical resistant gloves and overalls.

Selecting the correct charger

Lead acid batteries should be charged in 3 stages; constant current (boost), constant voltage (absorption) and float charge.
When choosing a battery charger, it is important to select a charger that delivers the specified charging voltage and current to suit the battery type.
Flooded, Absorbed Glass Mat (AGM), Gel and Lithium battery types require different charging specifications to provide optimum performance and service life.

Charging Voltage (for manual chargers)

Monitoring battery voltage during charging is extremely important to reduce the risk of overcharging and to check the progress of the battery during recharge. Always keep inside the parameters outlined in the below table. Failure to do so can result in permanent damage to the battery.

AUXILIARY CHARGE VOLTAGE BY BATTERY TYPE

TYPE	ABSORPTION CHARGING	FLOAT CHARGING
Flooded (Maintainable / SMF)	14.4 to 14.8V	13.2 to 13.5V*
AGM (Absorbed Glass Mat)	14.6 to 14.8V	13.6 to 13.8V
Gel Electrolyte	14.2 to 14.4V	13.6 to 13.8V

- The recommended temperature during charging is 25°C. Charging must be paused if the battery reaches 50°C.
- The above specifications are for 12 volt lead acid batteries. When charging 6 volt batteries, half the voltage specifications provided.
- When charging Lithium batteries please follow manufacturers recommended guidelines as detailed in user manual or on the battery
- In addition to following the battery charging voltage guidelines, selecting the correct charging current (Amps) for the battery size is crucial to provide performance and service life.

*We do not recommend to float charge flooded Sealed Maintenance Free (calcium) batteries due to risk of drying out of the electrolyte.

Charging Current (for manual chargers)

The recommended safe charging current is 10% of the battery's 20 hour (Ah) rating. For example if you want to charge a 100Ah battery, the recommended charger current for this battery would be 10 Amps.

Slow charging is the best way to recharge a lead acid battery. Fast charging a lead acid battery by increasing the recommended amperes may cause undue stress and shorten battery life.

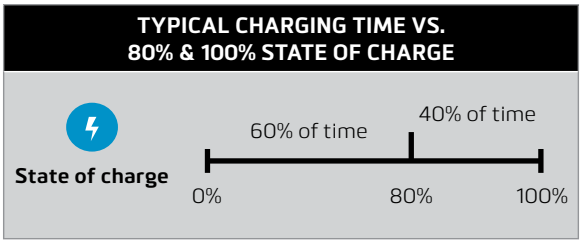
CONSTANT CURRENT CHARGING METHOD (AMPS X HOURS)

AUXILIARY CHARGING CHART		Product Rated Capacity							
		Rc (minutes)	< 65	65-80	81-105	106-120	121-150	151-170	171-185
		Ah @ 20hr	31-40	41-50	51-60	61-70	71-80	81-90	91-100
OCV	SOC %	Charging Current (10% of Ah)	4A	5A	6A	7A	8A	9A	10A
12.42~12.54	70~75%	Charging Time	3 Hours						
12.36~12.48	60~70%		5 Hours						
12.24~12.36	50~60%		6 Hours						
12.12~12.24	40~50%		8 Hours						
12.00~12.12	30~40%		9 Hours						
Below 11.99	<30%		12 Hours						

- Due to efficiency aspects, the charge amount must be more than the discharged amount. This coefficient factor can be between 110% to 150%.
- The deeper the discharge, the higher the coefficient factor.

Note: Charging must be paused when the temperature rises above 50°C

CHARGING TIME



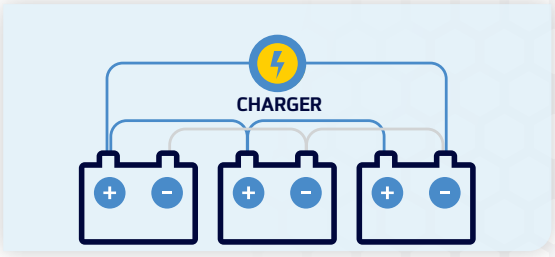
It will take about 60% of the total charging time to charge a lead acid battery to 80%, and the remaining 40% of the time to put the last 20% of charge back into the battery.

IMPORTANT NOTE: Avoid quick charging as this only charges the surface of the battery plates and can increase the chance of overheating, leading to permanent battery damage.

The recharging duration is difficult to determine due to variables such as:

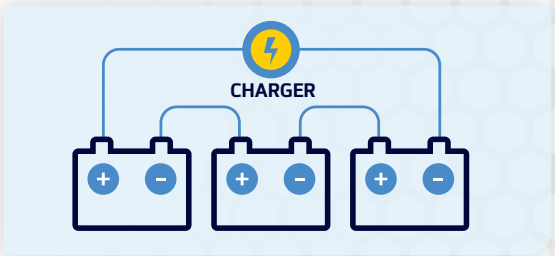
- Depth of discharge
- Temperature
- Size and efficiency of the charger
- Age and condition of the battery
- For a guide, refer to the constant current charging method table

CONNECTING BATTERIES – PARALLEL CONNECTION



- When connecting multiple 12 volt batteries in parallel, you are increasing the capacity of the battery bank while maintaining the voltage. E.g. 3 x 12 volt 60Ah batteries when parallel connected will create a 12 volt 180Ah bank.
- When connected to a battery charger, the charging current is divided between all the batteries in the bank. E.g. A 15 amp charger connected to 3 batteries will provide up to 5 amps current into each battery.

CONNECTING BATTERIES – SERIES CONNECTION



- When connecting 12 volt batteries in series, you are increasing the voltage of the battery bank while maintaining the current. E.g. 3 x 12 volt 60Ah batteries when series connected will create a 36 volt 60Ah bank.
- When charging batteries in series, you must have the correct voltage charger for the number of batteries in the bank.
  E.g. If you have 3 x 12 volt batteries in series, you must use a 36 volt charger.

Battery Care & Maintenance^

Use the following as a guide when examining your batteries:

1. Check the battery's state of charge. Most batteries have a State of Charge Indicator on top of the battery that will give you an on the spot diagnosis of the battery condition. However, a more reliable way to check is with a voltmeter to determine the stabilised voltage or if the vent caps are removable a hydrometer to determine the specific gravity (SG) of the electrolyte. A charged Yuasa battery will have a stabilised voltage above 12.5 volts and an SG reading above 1.240.

2. Ensure the battery top is clean, dry, free of dirt and grime. A dirty battery can discharge across the grime on top of the battery casing.

3. Inspect the terminals, screws, clamps and cables for breakage, damage or loose connections. These should be clean, tight and free of corrosion.

4. Apply a thin coating of high temperature grease to posts and cable connections for added protection.

5. Inspect the battery case for obvious signs of physical damage or warpage. This usually indicates the battery has been overheated or has been overcharged.

6. If you have a maintainable battery, it is important to check if the battery has sufficient electrolyte covering the battery plates. If topping up is required, do not over fill as the fluid levels will rise when the battery is fully charged and may overflow. Top up using distilled or demineralised water and never fill with sulphuric acid.

7. When servicing a sealed maintenance free (SMF) battery, check the State of Charge Indicator. This gives you a snap shot of the battery's condition and whether the battery needs to be charged or replaced. The vehicle may still start the engine although the indicator outlines to replace the battery. If the State of Charge Indicator advises 'Replace' it is important that the battery is replaced as the electrolyte levels may be below the plates which can lead to an internal explosion.

8. For batteries used in seasonal applications and stored long term, fully recharge the battery prior to storing. Check the state of charge or voltage regularly. Should the voltage drop below 12.5V, recharge the battery. It is important to check the battery completely before reconnecting to electrical devices.

^Always follow manufacturers guidelines.

Battery Health & Safety#

Battery Acid

Battery acid can cause burns. Suitable hand, eye and face protection and protective clothing must be worn.

First Aid

For advice, contact the poisons information centre (phone 0800 764 766 in New Zealand) or a doctor immediately. If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by poisons information centre or doctor, or at least 15 minutes.

If skin or hair contact occurs, remove contaminated clothing and flush skin or hair with running water.

Acid Spill Response

Bund and neutralise spills with soda ash or other suitable alkali. Dispose of residue as chemical waste or as per local requirements.

If Electrolyte is Swallowed

Do NOT induce vomiting – give a glass of water. Seek immediate medical assistance.

Exploding Battery

Batteries generate explosive gases during vehicle operation and when charged separately. Flames, sparks, burning cigarettes or other ignition sources must be kept away at all times. Exercise caution when working with metallic tools or conductors to prevent short circuits and sparks.

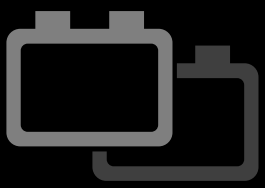
Always Shield Eyes When Working Near Batteries

When charging batteries, work in a well-ventilated area - never in a closed room. Always turn battery charger or ignition off* before disconnecting a battery.

#As extracted and interpreted by product manufacturer from the Battery Council International Service Manual, Chapter 2, Thirteenth Edition. *In some vehicles, ignition may be required to be placed in accessory mode where electronic memory minder is present.

New Battery Installation

Before disconnecting and reconnecting the battery from the vehicle, ensure all electrical equipment is turned off including the ignition system, air-conditioning, lights and radio. Remove the keys from the ignition and if the vehicle has a Frequency Operated Button (FOB) with keyless entry, the FOB should be kept at least 2 metres clear of the vehicle.



In vehicles that have a computerised electrical system, disconnecting the battery may erase memory from the engine control module (ECM), transmission control module (TCM), clock, radio, security codes and navigation systems.

A battery backup can be used to retain memory by plugging a power source into the cigarette lighter socket, OBD (On Board Diagnostic) plug or using jumper leads on the positive terminal lead and earthed to the vehicle body.

If you need to reset the battery management system (BMS), FOB or Idle Stop Start (ISS) system in the case of the warning below, the drivability of the vehicle will be restored after completing at least one drive cycle. The drive cycle is usually defined in your vehicle manual.

Before carrying out any work on the electrical system beyond the battery, the air bag system must be electrically disabled. Never indiscriminately probe the electrical wiring/connectors in the vicinity of the steering column.

The wiring and harness connectors of most air bag systems are bright yellow; do not interfere with any harness of this colour. As an added safety measure it is recommended that no person should remain seated behind the steering wheel while any electrical service work is carried out on the vehicle.

WARNING

» Always read the battery health and safety procedures before new battery installation. **Refer to page 51.**

» Vehicles that have BMS, FOB's and ISS functionality may need to be powered down by disconnecting the battery to reset the system and prevent damage to the vehicle and new battery.

» Before disconnecting the battery from a vehicle fitted with an ISS system, the battery monitoring sensor will need to be disconnected from the battery earth lead.

» Battery backups or battery chargers must not be connected directly to the battery sensor terminal as this can cause damage to the sensor. The earth lead should always be earthed to the engine block or vehicle body.

NOTE: When possible always refer to the vehicles user manual.

Removal of Old Battery

1. Note location of positive terminal and mark polarity on positive cable.
2. Remove the ground (-) terminal first. This precaution is necessary to avoid damage to wiring and the battery by accidentally grounding tools.
3. Remove the second (+) terminal.
4. Undo hold down clamp and remove battery.

New battery installation

1. Check battery height to ensure there is sufficient bonnet clearance.
2. Inspect tray and area for corrosion. If necessary, scrub the area with a water and baking soda mix and rinse with water.
3. Corroded steel parts should be dried and painted with acid proof paint. Terminals should be cleaned and brushed.
4. Cable and starter motor connections should be checked and tightened if necessary.
5. If terminal clamps or cables are badly corroded, they should be replaced.
6. Place the new battery in the tray, ensuring it sits level and that terminal posts are positioned same as the battery.
7. Place and tighten the hold downs securely so that the battery cannot move in the tray.
8. Apply a thin coating of high temperature grease to the posts and cable connections.
9. Replace cables, ensuring positive cable is first followed by the negative. Tighten connections. Note: Do not over tighten.
10. Never hammer cable connections onto battery posts, as this can damage the battery posts and cover.

SAFETY PRECAUTIONS FOR VEHICLES FITTED WITH AIR BAGS

Removal or replacement of battery connections will not unintentionally trigger an air bag system. However removal of battery connections with the ignition remaining "ON" can cause damage to electronic components including the airbag system – always check to ensure the ignition is "OFF" before removing either battery terminal.

Notes

Notes

YUASA BATTERY

For more information on Yuasa's range of products and services, contact your nearest Yuasa sales office on 0800 498 272 or visit yuasabatteries.co.nz

Head Office
259 Church Street, Onehunga,
Auckland 1061

Auckland
149 Captain Springs Road,
Onehunga, Auckland 1061

Whangarei
Unit 7, 7- 11 Nell Place,
Whangarei 0110

Hamilton
75 Colombo Street, Frankton,
Hamilton 3204

Tauranga
Unit 1, 76 Koromiko Street,
Judea, Tauranga 3110

Napier
44 Holden Street,
Onekawa Industrial Estate,
Napier 4110

New Plymouth
14 Mustang Drive, Bell Block,
New Plymouth 4312

Palmerston North
449 Tremaine Avenue, Takaro
Palmerston North 4412

Wellington
453 Hutt Road, Alicetown,
Lower Hutt 5010,

Nelson
6/38 Estuary Place, Richmond,
Nelson 7020

Christchurch
485A Waterloo Road, Islington,
Christchurch 8042

Dunedin
33 Devon Street,
Central Dunedin,
Dunedin 9016

YU103-3289a