KIYOSHI

POWER READY!

SEALED MAINTENANCE FREE AND DRY CHARGE BATTERIES

- ENHANCED STARTING POWER
- LONGER BATTERY LIFE
- SUPERIOR RELIABILITY
- MAXIMUM PERFORMANCE

KIYOSHI

Contents

About The Company

Eastman Auto and Power Ltd is the company behind the brand – "KIYOSHI". -

We are one of the top manufacturers and exporters. We engineer a massive capacity of approx. 10 lakh units of different products per month and at the same time; master a wide range of around 100-120 different models. The promise of quality and an unmatched product mix defines us. we can proudly say that we are one of the finest companies in the automotive industry to provide complete value to our customers.

We also strive to assure our customers that the in-house quality control team constantly monitors every aspect of business, from production to our valued customers. Our expert team ensures that each product supplied is of the highest standards. Each product is tested in our specialized testing centers to ensure that our product suits market conditions. With a focus on value in each phase, we lay emphasis on product quality, packaging as well as distribution.

We also manufacture motorcycle complete units, automotive batteries, tyres and tubes.

Know more about us and other businesses at: www.eaplworld.com

Our Battery Range

KIYOSHI

Reliable And Secure

KIYOSHI batteries are the trusted choice around the world for standby power in applications where system integrity is a paramount. Our batteries incorporate high energy density, advanced plate technology and a sealed construction to provide complete peace of mind. Other features include:

- Superb recovery from deep discharge
- Electrolyte suspension system
- No watering due to gas recombination
- Usable in any orientation but not continuously inverted
- Superior energy density
- Application specific designs

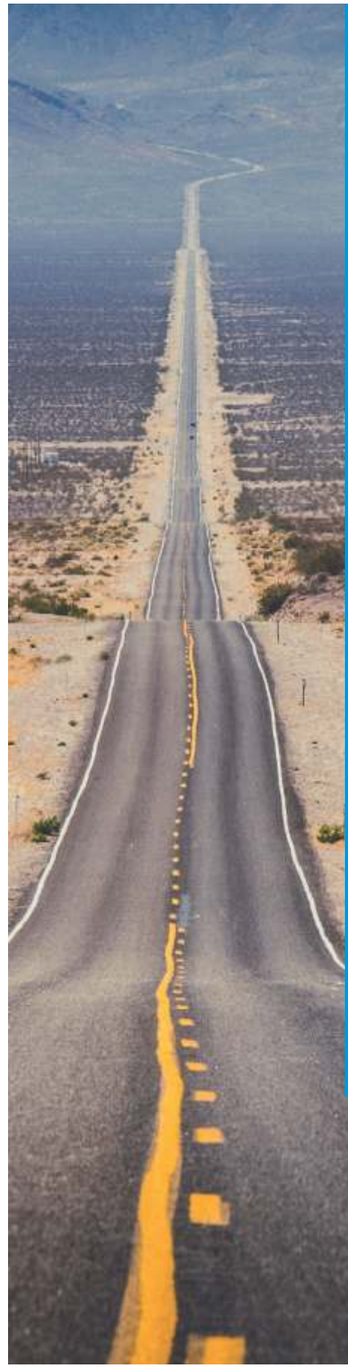
Presenting our range of batteries to outlive every other battery:

1. Sealed Maintenance Free (SMF) Battery
2. Dry Charge Battery

OUR BATTERY RANGE

Every product is a result of countless hours of research combined with an innumerable dedication from our employees. With the following features, we promise complete reliability of our batteries.

Component	Features	Benefits
Cast Grid	Special Grid Design	Severe vibration resistance & improved conductivity
Active Material	Proprietary Formulation	Reduced shedding, maximum utilization, & long service life
Pasted Plates	Specified Thickness & Weight	Ensures vibration resistance through precise compression & proper service life through specified active material balance
Dry-Charged Plates	Tank Formed & Dried Plates	Properly dried plates in a sealed battery have a virtually limitless shelf-life, while still retaining 70-80% state of charge when initially filled with acid
Top Lead Connections	Through-Partition Construction, Large Straps	Shorter current path for increased electrical conductivity & higher starting currents, heavier parts for maximum durability
Case-Cover Seal	Thermal bonded Plastic	Air tight seal to prevent air ingress & acid seepage
Terminal-Cover Seal	Poly-Seal Terminal	Eliminates acid seepage, reduces corrosion, and extends battery life
Case & Cover	Polypropylene	Superior resistance to gasoline & oil, impacts resistant in extreme weather conditions
Additive	Sulphate Stop (Some models)	Sulphate stop is added to reduce the solubility of lead into the acid, which then reduces battery sulphation potential
Grid System	Computer-Designed Radial Grids	Increased conductivity for starting wattage, better vibration resistance
Separator	Puncture Resistant Material	High puncture resistant separator for increased service in high vibration applications



Sealed Maintenance Free Battery

KIYOSHI

Product

We offer a vast range of Sealed Maintenance Free Batteries (SMF) with no requirement to add water and it's completely sealed. SMF batteries look different than other battery types. They are more compact because there is no free electrolyte (it is used in the form of gel which fills the cavity of plates) making them more "volume efficient" and taking less space for their energy storing capacity. Because they are filled with electrolyte only one time during activation, so there are no filler caps. Instead a sealing plug permanently covers the filler ports. Also, there is no vent tube in this battery.

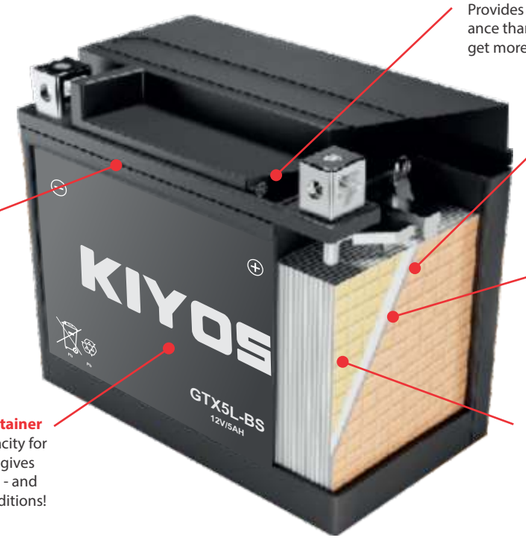
The construction of this type battery causes internal freed gas to recombine inside the battery, so no vent tube is required. SMF battery can be sealed because inside the battery, the negative plates are never fully charged and therefore don't produce hydrogen gas. The positive plates create oxygen during the discharge process but instead of the oxygen being forced out a vent tube, it reacts with the charged active material on the plates to become water until the battery is charged and the water is transformed into acid. This process is called recombinant technology and this design is what makes our batteries unique.

A "factory activated" battery does not require filling before installation. An extensive activation process ensures complete absorption of the electrolyte so no liquid acid is contained within the battery. This process allows these batteries to be shipped from the factory ready to install.

Thru-partition construction
Provides shorter current path with less resistance than "over the partition" construction - you get more cranking power when you need it!

Special Active Material
Is compounded to withstand vibration, prolong battery life and dependability.

Heat Sealed Case to Cover
Protects against seepage and corrosion - bonded unit gives extra strength.



Special Grid Design
Withstands severe vibration, assures maximum conductivity.

Polypropylene Cover and Container
Assures reserve electrolyte capacity for cooler operating temperatures; gives greater resistance to gas and oil - and impact in extreme weather conditions!

Special Separator
Makes the battery spillproof. Valve regulated design eliminates water loss and the need to refill with acid.

Features:

- Fully Sealed & Maintenance Free
- Lead-calcium technology
- Good charge acceptance
- High corrosion resistance
- Higher cold cranking start up
- High vibration resistance
- Spill-Proof
- Higher performance/capacity plus
- Factory charged ready to use
- Low self discharge
- Improved safety
- Leakage proof
- Extreme durability
- Absolute safety and convenience
- Hassle-free installation and use

			Voltage	Capacity		Size (mm)		
S No	Model	Type	(V)	(Ah)	Terminal	L	W	H
1	6N4-2A-4	SMF	6	4	+ ,-	71	71	96
2	12N5-3B	SMF	12	5	-,+	120	61	130
3	YB5L-BS	SMF	12	5	-,+	120	61	130
4	YB7B-B	SMF	12	7	+ ,-	150	60	130
5	12N7A-3A	SMF	12	7	-,+	150	60	130
6	12N7-3A	SMF	12	7	-,+	137	77	126
7	12N7-4B	SMF	12	7	+ ,-	137	77	126
8	12N7-3B	SMF	12	7	-,+	137	77	126
9	12N9-4B	SMF	12	9	+ ,-	133	77	136
10	12N9-4B-1	SMF	12	9	+ ,-	133	77	136
11	12N9-BS	SMF	12	9	+ ,-	133	77	136
12	12N9-3B	SMF	12	9	+ ,-	133	77	136
13	YB2.5L-BS	SMF	12	2.5	-,+	80	70	105
14	GTX3L-BS	SMF	12	3	-,+	98.5	56	109
15	GT4L-BS	SMF	12	4	-,+	114	70	85
16	GTX4L-BS	SMF	12	4	-,+	114	70	85
17	GTZ5S-BS	SMF	12	4	-,+	114	70	85
18	GTZ7S	SMF	12	5	-,+	114	70	105
19	GTX5L-BS	SMF	12	5	-,+	114	70	105
20	GT5AL-BS	SMF	12	5	-,+	114	70	105
21	GB6.5L-B	SMF	12	6.5	-,+	139	66	100
22	12N6.5L-BS	SMF	12	6.5	-,+	139	66	100
23	GTX7A-BS	SMF	12	7	+ ,-	150	87	93
24	GTZ10	SMF	12	8	+ ,-	150	87	93
25	GTX7L-BS	SMF	12	7	-,+	114	70	130
26	GTX12A-BS	SMF	12	10	+ ,-	150	87	105
27	GTX9-BS	SMF	12	9	+ ,-	150	87	105
28	GTX12-BS	SMF	12	12	+ ,-	150	87	130
29	GTX14-BS	SMF	12	14	+ ,-	152	87	145
30	GTZ14S	SMF	12	11	+ ,-	150	87	110

SEALED MAINTENANCE FREE BATTERY

Dry Charge Battery

KIYOSHI

Product

We offer vast range of Dry Charge Batteries or Conventional Batteries. Our batteries are designed to have filler caps and vent tubes. Not all vehicles require SMF batteries and the Dry Charge/Conventional Batteries offer good performance and longevity but at a lower price point.

Important aspects of the our battery include sealed posts to resist corrosion, tough polypropylene covers, containers and heat sealed construction for a strong, bonded unit. In addition, design features include special separators and through-partition construction.

Our batteries have more cranking power (up to 30%) for their physical size than other standard Conventional battery. The plate surface area in the battery is increased by the use of thin, high-tech separators that make room for extra plates within each cell.

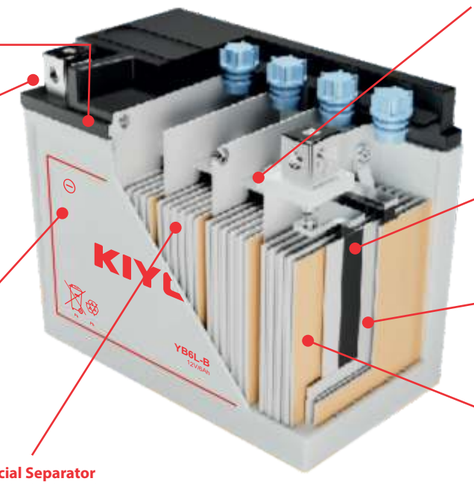
Features:

- 20% - 30% more starting power than conventional batteries
- More plates per cell
- High cranking under different climatic conditions
- Anti Sulfation Protection given for consistent performance
- Battery Containers designed for ultra-low vibrations, high durability and longer service life
- Low self-discharge means longer ideal life even after adding electrolyte

Heat Sealed Case to Cover
Protects against seepage and corrosion bonded unit gives extra strength.

Sealed Post
Prevents acid seepage, reduces corrosion - extends battery life.

Polypropylene Cover and Container
Assures reserve electrolyte capacity for cooler operating temperatures; gives greater resistance to gas and oil - and impact in extreme weather conditions!



Special Separator
Provides high cranking power.

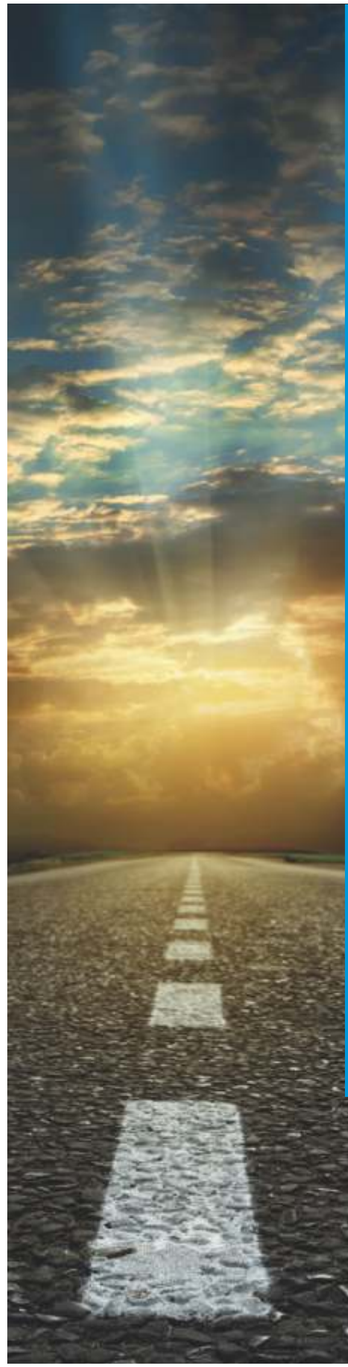
Thru-Partition Construction
Provides shorter current path with less resistance than "over the partition" construction - you get more cranking power when you need it.

Special Active Material
Is compounded to withstand vibration prolong battery life and dependability.

Special Grid Design
Withstands severe vibration, assures maximum conductivity.

Heavy Duty Glass Mat
Resists shredding of active material even under severe vibration.

			Voltage	Capacity		Size (mm)		
S No	Model	Type	(V)	(Ah)	Terminal	L	W	H
1	6N4-2A	DC	6	4	+ ,-	71	71	96
2	6N4-2A-2	DC	6	4	+ ,-	71	71	96
3	6N4-2A-4	DC	6	4	+ ,-	71	71	96
4	6N4-2A-7	DC	6	4	+ ,-	71	71	96
5	6N6-3B-1	DC	6	4	-,+	99	57	111
6	12N5-3B	DC	12	5	-,+	120	61	130
7	12N5-4B	DC	12	5	+ ,-	120	61	130
8	YB5L-B	DC-HD	12	5	-,+	120	61	130
9	12N6-3B	DC	12	6	-,+	137	72	95
10	YB6L-B	DC-HD	12	6	-,+	137	72	95
11	12N6.5-3B	DC	12	6.5	-,+	138	73	107
12	YB6.5L-B	DC-HD	12	6.5	-,+	138	73	107
13	12N7A-3A	DC	12	7	-,+	150	60	130
14	12N7B-3A	DC	12	7	-,+	150	60	130
15	12N7A-4A	DC	12	7	+ ,-	150	60	130
16	12N7B-4A	DC	12	7	+ ,-	150	60	130
17	YB7B-B	DC-HD	12	7	+ ,-	150	60	130
18	12N7-3A	DC	12	7	-,+	135	75	133
19	12N7-3B	DC	12	7	-,+	135	75	133
20	12N7-4A	DC	12	7	+ ,-	135	75	133
21	12N7-4B	DC	12	7	+ ,-	135	75	133
22	YB7L-B	DC-HD	12	7	-,+	135	75	133
23	12N9-3A	DC	12	9	-,+	135	75	139
24	12N9-3B	DC	12	9	-,+	135	75	139
25	12N9-4B	DC	12	9	+ ,-	135	75	139
26	12N9-4B-1	DC	12	9	+ ,-	135	75	139
27	YB9-B	DC-HD	12	9	+ ,-	135	75	139
28	12N10-3B	DC	12	10	-,+	134	90	145
29	YB10L-B	DC-HD	12	10	-,+	134	90	145
30	12N12A-4A-1	DC	12	12	+ ,-	136	76	160
31	YB12A-A	DC-HD	12	12	-,+	134	76	160
32	YB12AL-A	DC-HD	12	12	-,+	134	76	160
33	12N14-3A	DC	12	14	-,+	136	90	164
34	12N14-3B	DC	12	14	-,+	136	90	164
35	YB14-A2	DC-HD	12	14	+ ,-	136	90	164
36	YB14L-A2	DC-HD	12	14	-,+	136	90	164
37	YB2.5L-C	DC-HD	12	2.5	-,+	80	70	105
38	YB2.5L-C2	DC-HD	12	2.5	-,+	80	70	105
39	12N3-3A	DC	12	3	-,+	98	56	110
40	YB3L-A	DC-HD	12	3	-,+	98	56	110
41	YB3L-B	DC-HD	12	3	-,+	98	56	110
42	YB3L-C	DC-HD	12	3	-,+	98	56	110
43	YB4L-B	DC-HD	12	4	-,+	120	70	92
44	YB16L-B	DC-HD	12	16	-,+	175	100	155
45	12N16-3B	DC	12	16	-,+	175	100	155
46	51913	DC	12	19	-,+	185	82	170
47	YB16AL-A2	DC	12	16	-,+	205	70	162



DRY CHARGE BATTERY

Battery Charger

KIYOSHI

A patented product by Eastman.

Eastman's Automatic 12V 1.5 Amp Battery Charger incorporates superior 9-stage charging technology with 10-port charge. This high power unit provides error proof operation to fully charge sealed maintenance free and conventional or dry charge batteries. Controlled by a microprocessor chip, the charger detects the charging mode required to charge the battery. The Chip monitors the state of the battery charge and begins charging automatically when the battery charge drops to a specific voltage.
Below are a few features of this Automatic 12V 1.5 Amp battery charger:

- Designed to prevent overcharging
- AC power LED indicator
- Reverse polarity protection
- Spark-free operation
- 10 ports to charge many batteries at once
- Intelligent charger, controlled by microprocessor chip
- Automatic cut to avoid overload
- Load completion indicator
- Defective battery indicator
- Battery accessory leads and fused ring connectors included

BATTERY CHARGER

- Full load
- Absorption mode
- Loading
- Recovery mode
- Defective battery
- Reverse polarity

Technical Specifications

- Model - ET 10x2A
- Input - 100- 240VAC 50/60 Hz
- Input cable - 2m / 0.75mm2
- Output - 12VDC 2A Per Channel
- Maximum load current: 2 amps - 2A
- Maximum voltage - 14.4 + 0.2V
- Output cable - 10 X 0.1 / 18AWG
- Clamp cable length / AWG - 10x1.8 / 18AWG

How to Charge a Battery

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Sealed Battery Charging Procedure:

Sealed Type Batteries require higher charge than Dry Charge or Conventional types. Make sure you never charge this battery type with Conventional Battery Charger. You should rather choose professional quality chargers.

Sealed types of batteries come pre-activated from factory which means electrolytes are already added in the battery and the case is sealed. Given below are a few instructions to follow:

1. Connect cables to the battery terminals before turning on the charger, red cable goes to positive (+) terminal and black to negative terminal (-)
2. Gel batteries or SMF batteries should never be charged at more than 14.4V as it can damage the battery
3. Initially go for low amperage when charging or look at instructions provided with the battery to charge at a specific amperage
4. Load test the battery at 3 times its ampere hour rating for 15 secs or use and automatic battery tester to determine the battery condition and then check the voltage
5. Voltage should be minimum 12.4V on a 12V battery
6. Battery is then ready to be fitted
7. If the voltage reading is below 12.4V or the battery fails the automatic battery test, loosen the filler caps and repeat the charging and test cycle.

Dry Charge/Conventional Battery Charging Procedure

- Place it on a level surface
- Remove the yellow filler caps, placing them safely on one side
- Remove the sealing cap from the vent, never replace this after the battery has been filled with electrolyte as it may cause the battery to rupture
- Fill each cell with electrolyte to the fill level as indicated on the battery case (Always wear protective eyewear and gloves when working with electrolytes)
- The electrolyte should have a specific gravity of 1.265 and be between 62 - 86°F
- Leave the battery for a minimum of 30 minutes and gently tap occasionally on the case to remove any bubbles trapped between the plates
- If after 30 minutes the electrolyte level has fallen, fill it to the upper fill level as indicated on the battery case
- Replace the filler caps loosely and begin to charge the battery at 1/10 of its rated capacity for 3-5 hours. Charging at higher rate could damage the battery
- Do not connect or disconnect the battery while the charger is switched on as this may cause sparks that could ignite the hydrogen gas emitted from the cells during charging.
- Monitor the electrolyte level during charging and top up the fill line as necessary
- When charging is complete, turn off the charger and disconnect it from the battery
- Push or screw down the yellow filler caps. Make sure not to over-tighten them
- Clean off any spilled electrolyte with water and baking soda solution
- Allow the battery to stand of at least 30 minutes
- Load test the battery at 3 times its ampere hour rating for 15 seconds or use an automatic battery tester to determine the battery condition and then check the voltage
- Voltage should be minimum 12.4V on a 12V battery
- Battery is then ready to be fitted
- If the voltage reading is below 12.4V or the battery fails the automatic battery test, loosen the filler caps and repeat the charging and test cycle

Technical Features

KIYOSHI

Technical Features

1. **Sealed Construction**

   The unique construction and sealing technique ensures no electrolyte leakage from case or terminals.

2. **Electrolyte Suspension System**

   All batteries utilize Kiyoshi unique electrolyte suspension system incorporating a microfine glass mat to retain the maximum amount of electrolyte in the cells. The electrolyte is retained in the separator material and there is no free electrolyte to escape from the cells. No gels or other contaminants are added.

3. **Recombination Technology**

   The design of Kiyoshi batteries incorporates the very latest oxygen recombination technology to effectively eliminate the need for watering during normal use.

4. **Low Maintenance Operation**

   Due to the perfectly sealed construction and the recombination of gasses within the cell, the battery is almost maintenance free.

5. **Terminals**

   Batteries are manufactured using a range of terminals which vary in size and type. Please refer to details as shown below:

Terminal Configurations

Terminal shapes vary from one battery to another. By identifying the correct replacement battery from the listing in this book, you are assured of the proper terminal configuration.

Terminal					Battery Type				
Type	Illustration	Front	Side	Top					
1					YB7C-A YB14L-A1	YTX16-BS-1			
2					YB9L-A2 12N5.5-4A YB16AL-A2				
3					Y60-N24AL-B 12N24-3	Y60 N24-A 12N24-3A			
4					GYZ20L YB30L-B YTX15L-BS YTX20L-BS	Y50-N18L A3 YIX30L-BS YTX16-BS YTX24HL-BS	YB12C-A YIX30L-BS-PW YTX20-BS YTX20HL-BS	YB16B-A YTX14AHL-B YTX20H-BS	YB30CL-B YTX14AH BS YTX20HL-BS-PW
5					GYZ16H GYZ16HL YB4L B YTX14L -BS	YTX 7L BS KMX14-BS YT12A-BS YTX20CH-BS	YTX9-BS YB16C-B YTX12-BS YTX4L-BS	YTZ5S YTZ7S YB16CL-B YTX14-BS	YTX 5L BS YB4L-A YTX14H-BS YTX7A-BS
6					YB3L-A YB7L B YB12A-A YB16-B 12N5-3B 12N7-4A 12N9-4B-1 6N6-3B B54-6	YB3L B YB9A-A YB12AL-A YB-16-B-CX 12N5-4B 12N7-4B 12N10-3A 6N6-3B-1 B38-6A	YB5L B YB9-B YB12AL-A2* YB16L B 12N5.5-3B 12N7D-3B 12N10-3A-1 6N11A-1B	YB7-A YB9L B YB12A-B YB16HL-A-CX 12N5.5A-3B 12N9-3A-1 12N12A-4A-1 6N11-2D	YB7B-B YB10L-B YB14A-A1 SYB16 LB 12N7-3B 12N9-3B 6N12A-2D B39-6
7					HYB16A-AB Y50-N18A-A	YB16B-A1** Y50-N18L-A	YB18-A Y50 N18L-A-CX	YB18L-A SY50-N18L-AT	
8					YB10A-A2 YB14-A2 YB14-B2 12N14-3A	YB10L-A2 YB14A-A2 YB14L-B2	YB10L-B2 YB14L-A2 12N10-3A-2	YB12B-B2 SYB14L-A2 12N11-3A-1	
9					YHD-12H 12N9-3A				
10					51814	51913	53030	YT19BL-BS	
11					YT9B- BS YT7B- BS Note: Terminal is Brass Plated Steel	YTZ10S	YTZ12S YT12B-BS	YTZ14S	YT14B-BS
12					YTR4A-BS				
13					YT4B-BS				
14					GYZ20H GYZ20HL Note: Encapsulated Brass Nut	GYZ32HL			

** Includes terminal adaptor for converting to side mount.
* Includes terminal adaptor for converting to top mount.

Battery Layouts

TECHNICAL FEATURES

Battery Safety

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Batteries can be dangerous, so you have to make sure that some simple safety precautions are always followed. Working with batteries poses two hazards: potentially explosive gases that are given o during charging, and sulfuric acid that are very corrosive.

Here's an 8-point list that'll help keep those hazards under control:

1. Absolutely no smoking, sparks or open flames around batteries. Batteries can produce hydrogen and oxygen; if they ignite the battery can rupture.
2. On conventional batteries, loosen vent caps when charging and ventilate the entire charging area. A build-up of hydrogen and oxygen levels in the battery or in the room where it's being charged can create a hazard.
3. If a battery feels hot to touch during charging, stop charging and allow it to cool before resuming. Heat damages the plates, and a battery that's too hot can rupture.
4. Never put the red sealing cap back on the battery once you take it off. If you do, gases trapped inside can explode. Make sure the vent tube isn't kinked or blocked, for the same reason.
5. Connect the charger to battery properly: positive to positive, negative to negative. Unplug the charger or turn it off before you disconnect the lead; that cuts down on the chance of sparks.
6. Always wear eye protection, protective gloves and protective clothing.
7. Clean up acid spills immediately, using a water and baking soda solution to neutralize (1 lb. baking soda in 1 gal. water).
8. Make sure acid container is clearly marked and the work area is well lighted.

If sulfuric acid is swallowed or splashed in the eyes, take immediate action. While the diluted sulfuric acid used as electrolyte can burn the skin, this type of injury is generally less serious. Sulfuric acid in the eyes can cause blindness. Serious internal injuries or death can result from ingesting sulfuric acid.

Antidotes

- **External** – Flush with water.
- **Internal** – Drink large quantities of milk or water, followed by milk of magnesia, vegetable oil or beaten eggs. Call a poison control center or doctor immediately.
- **Eyes** –Flush for several minutes with water, get immediate medical attention.

Points To Remember

- Ventilate battery charging area.
- Charging gives off gases – no smoking, sparks or flames.
- Safety glasses or face shields protect against eye damage.
- Acid swallowed or in the eyes requires immediate antidotes and medical care.
- All safety considerations are important... review them frequently.

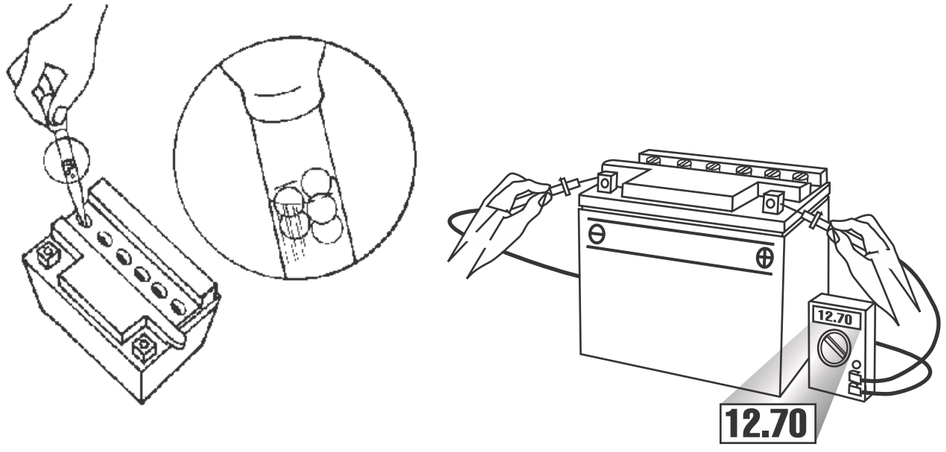
Battery Testing Devices

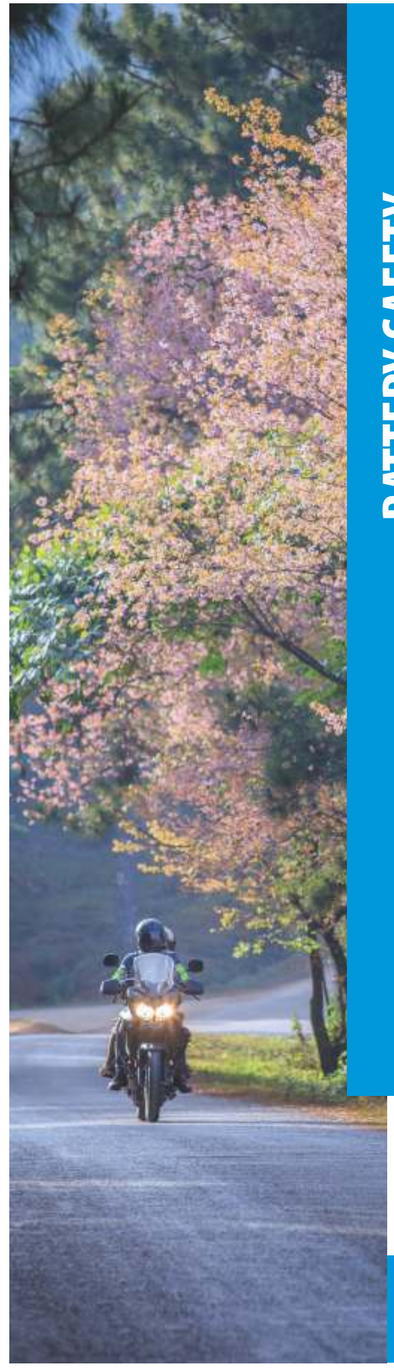
How much of a charge does a battery have? There are two easy and reliable ways to find out: 1) A hydrometer, which comes in floating ball and calibrated float types, or 2) a voltmeter (or multimeter, which gives DC voltage readings).

Which is the best?

If you're choosing between two hydrometers, opt for the calibrated float type. It gives you an exact specific gravity reading (that is, the density of the electrolyte compared to water), that's much more accurate than floating balls. A voltmeter or multimeter can be used where a hydrometer can't. Most sealed VRLA or low maintenance batteries have to be tested with a voltmeter.

Battery testing requires a voltmeter that can measure DC voltage. Remember to always connect a voltmeter parallel to the circuit being tested, observing polarity; otherwise, the pointer will travel in the wrong direction. It's a good idea to periodically check a voltmeter against another one of known accuracy.





Battery Testing

KIYOSHI

There are two types of battery tests: Unloaded and Loaded. An Unloaded Test is made on a battery without discharging current. It's simplest and most commonly used. And if you need a precise reading, Loaded testing is the answer. It's more accurate.

Unloaded Testing

Check charge condition using either a hydrometer or voltmeter. With a voltmeter, voltage readings appear instantly to show the state of charge. Remember to hook the positive lead to the battery's positive terminal, and the negative lead to the negative terminal.

A hydrometer measures the specific gravity of each cell. The specific gravity tells the degree of charge; generally, a specific gravity of about 1.265 to 1.280 indicates a full charge. A reading of 1.230 to 1.260 indicates the battery should be charged before testing. The chart below shows the charge level as measured by syringe float hydrometer, digital voltmeter and five-ball hydrometer.

Methods of Checking Battery Condition

State of Charge	Syringe Hydrometer	Digital Voltmeter	5-Ball Hydrometer
100% Charged w/Sulfate Stop	1.280	12.80v	5 Balls Floating
100% Charged	1.265	12.60v	4 Balls Floating
75% Charged	1.210	12.40v	3 Balls Floating
50% Charged	1.160	12.10v	2 Balls Floating
25% Charged	1.120	11.90v	1 Balls Floating
0% Charged	less than 1.100	less than 11.80v	0 Balls Floating

A battery's specific gravity changes with temperature. Ideally, readings should be taken at 77°F. Is it really going to matter if you're off a couple of degrees one way or another? Probably not. If you're working somewhere that's uncomfortably hot or cold, it's time to use the old conversion factors: add .001 to the specific gravity reading for each 3°F above 77°F or subtract .001 from the specific gravity reading for each 3°F below 77°F. Cell voltage can be found by adding .84 to the specific gravity.

Note: too, that Kiyoshi "Sulfate Stop," a chemical additive that increases battery life by drastically reducing sulfate buildup, changes the specific gravity readings; they'll be higher than with ordinary batteries.

Quality Certifications

KIYOSHI