

TEMOT
INTERNATIONAL



Korea No.1
Aftermarket Brand

SpeedMate

Sealed Maintenance Free
Automotive Battery



Made in Korea

 **SK networks**



The Winner of
Korea Quality Excellence Index
for 10 consecutive years!

The Winner of
Korea Brand Power Index
for 13 consecutive years!

Experience!

Korea No.1 Aftermarket Brand



Speed Mate

Sealed Maintenance Free
Automotive Battery

ULTRA POWER

TECHNOLOGY

QUALITY

STRONG



Calcium
Maintenance
Free



ISO9001



ISO14001



ISO/TS16949:2002

Manufactured by
**Johnson Controls
Delkor Battery Corporation**

STRUCTURE & CHARACTERISTICS

Hydrometer

- At full charge, the electrolyte specific gravity is 1.280 while at 50% of charge considered the minimum serviceable condition, the specific gravity is typically 1.220. In a typical situation when the specific gravity drops to 1.100, the battery is fully discharged.

Heat-Sealed Cover

- Prevents leakage and contamination.
- Adds to case strength and rigidity.
- Includes permanent flame arresters to prevent an accidental explosion from external sparks or flame.
- Has hydrometer built in for faster checking.

Exclusive Patented Liquid Gas Separator

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

Flame Arrester

- Safety system
- Prevents possibility of explosion from spark of outside
- Minimizes acid-leakage
- Prevents inflow of dust

Low-Resistance Envelope Separators

- Encapsulate negative plates
- Improve vibration durability
- Prevent "treeing" and internal shorting between positive and negative plates

Centered Cast-on Plate Straps

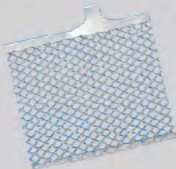
- Stronger than the thinner gas-burned conventional connectors.
- Reduce the lever action movement resulting from road shock.

Wrought Lead-Calcium Grids

- Offer considerable strength
- Resistant to grid corrosion
- Over-charge resistant
- Minimal gassing and water usage
- Less self-discharge
- Resist thermal runaway

Polypropylene Case

- Reinforced design is precisely tailored to support the battery elements for resistance to vibration and road shock damage
- Material is light weight, exceptionally strong, durable and resistant to handling and impact damage.



Battery Specification

for JAPANESE & KOREAN VEHICLES **JIS** Type

No.	Group No.	Model No.	Capacity (20HR)	CCA SAE	Dimensions (mm)			Terminal Type	Cell Layout	Bottom Hold Down
					L	W	TH			
01	B19	42B19L	35	300	187	127	227	B	0	B0
02		42B19R	35	300	187	127	227	B	1	B0
03		44B19L / LS	40	350	187	127	227	B / A	0	B0
04		44B19R / RS	40	350	187	127	227	B / A	1	B0
05	B20	38B20L	35	310	197	129	227	A	0	B0
06		38B20R	35	310	197	129	227	A	1	B0
07		42B20L	38	340	197	129	227	A	0	B0
08		42B20R	38	340	197	129	227	A	1	B0
09	B24	46B24L / LS	45	325	238	129	227	B / A	0	B0
10		46B24R / RS	45	325	238	129	227	B / A	1	B0
11		55B24L / LS	45	430	238	129	227	B / A	0	B0
12		55B24R / RS	45	430	238	129	227	B / A	1	B0
13		60B24L / LS	47	460	238	129	227	B / A	0	B0
14		60B24R / RS	47	460	238	129	227	B / A	1	B0
15		65B24L / LS	55	490	238	129	227	B / A	0	B0
16		65B24R / RS	55	490	238	129	227	B / A	1	B0
17	D20	50D20L	50	525	208	173	207	A	0	B7
18		50D20R	50	525	208	173	207	A	1	B7
19	D23	55D23L	60	490	231	173	225	A	0	B7
20		55D23R	60	490	231	173	225	A	1	B7
21		75D23L	65	520	231	173	225	A	0	B7
22		75D23R	65	520	231	173	225	A	1	B7
23		80D23L	68	600	231	173	225	A	0	B7
24		80D23R	68	600	231	173	225	A	1	B7
25	D26	48D26L	50	350	260	173	225	A	0	B7
26		48D26R	50	350	260	173	225	A	1	B7
27		55D26L	55	475	260	173	225	A	0	B7
28		55D26R	55	475	260	173	225	A	1	B7
29		65D26L	55	540	260	173	225	A	0	B3
30		65D26R	55	540	260	173	225	A	1	B3
31		80D26L	75	580	260	173	225	A	0	B7
32		80D26R	75	580	260	173	225	A	1	B7
33		90D26L	80	700	260	173	225	A	0	B7
34		90D26R	80	700	260	173	225	A	1	B7
35	D31	65D31L	70	530	306	173	225	A	0	B7
36		65D31R	70	530	306	173	225	A	1	B7
37		75D31L	75	540	306	173	225	A	0	B7
38		75D31R	75	540	306	173	225	A	1	B7
39		95D31L	80	620	306	173	225	A	0	B7
40		95D31R	80	620	306	173	225	A	1	B7
41		105D31L	90	680	306	173	225	A	0	B7
42		105D31R	90	680	306	173	225	A	1	B7
43	115D31L	100	780	306	173	225	A	0	B7	
44	115D31R	100	780	306	173	225	A	1	B7	
45	100G	MF100GL	100	900	325	172	225	A	0	B7
46		MF100GR	100	900	325	172	225	A	1	B7
47	26H	MF100DL	100	730	263	247	225	A	0	B0
48		MF100DR	100	730	263	247	225	A	1	B0
49	E41	95E41L	100	750	408	174	234	A	0	B0
50		95E41R	100	750	408	174	234	A	1	B0
51	F51	115F51L	120	800	505	182	234	A	4	B0
52		115F51R	120	800	505	182	234	A	5	B0
53	G51 / 4D	150G51L	150	950	508	215	234	A	4	B0
54		150G51R	150	950	508	215	234	A	5	B0
55		MF170L	180	1090	508	215	234	A	4	B0
56		MF170R	180	1090	508	215	234	A	5	B0
57		H52 / 8D	200H52L	200	1000	512	277	241	A	4
58	200H52R		200	1000	512	277	241	A	5	B0
59	225H52L		220	1300	512	277	241	A	4	B0
60	225H52R		220	1300	512	277	241	A	5	B0

Battery Specification

for EUROPEAN VEHICLES **DIN** Type

No.	Group No.	Model No.	Capacity (20HR)	CCA		Dimensions (mm)			Terminal Type	Cell Layout	Bottom Hold Down
				SAE	EN	L	W	TH			
01	LBN1	53518	35	340	340	209	175	175	A	0	B3
02		53519	35	340	340	209	175	175	A	1	B3
03		53646	36	340	340	209	175	175	A	0	B4
04		54316	43	400	430	209	175	175	A	0	B3
05	LN1	54459	44	400	400	209	175	190	A	0	B3
06		54464	44	400	400	209	175	190	A	1	B3
07	LBN2	54519	45	410	410	244	175	175	A	0	B4
08		54549	45	410	410	244	175	175	A	1	B1
09		55044	50	500	500	244	175	175	A	0	B4
10		55046	50	500	500	244	175	175	A	0	B3
11		55457	54	500	500	244	175	175	A	0	B3
12		55458	54	500	500	244	175	175	A	1	B3
13	LN2	55559	55	525	500	244	175	190	A	0	B3
14		55565	55	525	500	244	175	190	A	1	B3
15		56030	60	525	525	244	175	190	A	0	B3
16		56031	60	525	525	244	175	190	A	1	D3
17		56219	62	580	580	244	175	190	A	0	B3
18		56217	62	580	580	244	175	190	A	1	B3
19	LBN3	56318	63	580	580	279	175	175	A	0	B4
20		57539	75	630	650	279	175	175	A	0	B3
21	LN3	56638	66	500	500	279	175	190	A	0	B3
22		56633	66	500	500	279	175	190	A	1	B3
23		57220	72	600	600	279	175	190	A	0	B3
24		57219	72	600	600	279	175	190	A	1	B3
25		57412	74	680	680	279	175	190	A	0	B3
26		57413	74	680	680	279	175	190	A	1	B3
27		57540	75	680	680	279	175	190	A	0	B3
28		58014	80	780	720	279	175	190	A	0	B3
29	LBN4	58039	80	730	710	314	175	175	A	0	B3
30	LN4	59095	90	912	860	314	175	190	A	0,1	B3
31	LN5	58827	88	600	660	354	175	190	A	0	D3
32		58821	88	660	660	354	175	190	A	1	B3
33		59218	92	660	660	354	175	190	A	0	B3
34		60038	100	760	760	354	175	190	A	0	B3
35	LN6	60044	100	800	800	354	175	190	A	0	B3
36		61038	110	900	850	394	174	188	A	0	B3
37	B20	53520	35	340	340	197	129	227	B	0	B0
38		53522	35	340	340	197	129	227	B	1	B0
39		54087	40	320	310	197	129	227	B	0	B0
40	B24	54523	45	405	370	238	129	227	A	0	B0
41		54524	45	405	370	238	129	227	A	1	B0
42	D23	56068	60	490	490	231	173	225	A	0	B7
43		56069	60	490	490	231	173	225	A	1	B7
44	D26	56048	60	480	480	272	173	225	A	0	B3
45		56049	60	480	480	272	173	225	A	1	B3
46		57029	70	550	550	272	173	225	A	0	B9
47		57024	70	550	550	272	173	225	A	1	B9
48	D31	57512	75	540	540	307	173	225	A	0	B7
49		57513	75	540	540	307	173	225	A	1	B7
50		58513	85	710	710	307	173	225	A	0	B7
51		58514	85	710	710	307	173	225	A	1	B7
52	8D	70029	200	1000	1000	512	277	241	A	4	B0
53		70027	200	1000	1000	512	277	241	A	5	B0
54		71015	210	1300	1300	512	277	241	A	4	B0
55		71014	210	1300	1300	512	277	241	A	5	B0
56		72018	220	1300	1300	512	277	241	A	5	B0

Battery Specification

for AMERICAN VEHICLES **BCI** Type
A-1. Passenger Car & Commercial Batteries 12 Volt (6 Cells)

No.	Group No.	Model No.	Cranking Ampere at 0°F / -18°C (Amps.)	Reserve Capacity at 80°F (Min.)	Dimensions (mm)			Terminal Type	Figure No.
					L	W	TH		
01	21	21-410	410	80	208	173	222	A	24
02		21-500	500	80	208	173	222	A	24
03	21R	21R-410	410	80	208	173	222	A	24
04		21R-500	500	80	208	173	222	A	24
05	22NF	22NF-330	330	60	240	135	205	A	25
06	22F	22F-420	420	85	241	173	208	A,H	18,30
07		22F-450	450	90	241	173	208	A,H	18,30
08		22F-520	520	95	241	173	208	A,H	18,30
09		22F-610	610	90	241	173	208	A,H	18,30
10	24	24-350	350	81	260	173	225	A	4
11		24-475	475	90	260	173	225	A	4
12		24-525	525	95	260	173	225	A	4
13		24-550	550	110	260	173	225	A	4
14		24-600	600	110	260	173	225	A	4
15		24-630	630	130	260	173	225	A	4
16		24-680	680	130	260	173	225	A	4
17		24-750	750	130	260	173	225	A	4
18	24R	24R-350	350	81	260	173	225	A	4
19		24R-475	475	90	260	173	225	A	4
20		24R-525	525	95	260	173	225	A	4
21		24R-550	550	110	260	173	225	A	4
22		24R-600	600	110	260	173	225	A	4
23		24R-630	630	130	260	173	225	A	4
24		24R-680	680	130	260	173	225	A	4
25	24R-750	750	130	260	173	225	A	4	
26	24F	24F-450	450	90	272	173	225	A	26
27		24F-480	480	101	272	173	225	A	26
28		24F-525	525	95	272	173	225	A	26
29		24F-550	550	110	272	173	225	A	26
30	24F-550	550	120	272	173	225	A	26	
31	25	25-520	520	112	230	173	225	A	4
32		25-550	550	90	230	173	225	A	4
33		25-580	580	110	230	173	225	A	4
34		25-650	650	116	230	173	225	A	4
35	26	26-410	410	75	208	173	205	A	24
36		26-500	500	80	208	173	205	A	24
37	26R	26R-410	410	75	208	173	205	A	24
38		26R-500	500	80	208	173	205	A	24
39	27	27-530	530	120	306	173	225	A	4
40		27-630	630	130	306	173	225	A	4
41		27-650	650	140	306	173	225	A	4
42		27-710	710	160	306	173	225	A	4
43		27-780	780	160	306	173	225	A	4
44	27R	27R-530	530	120	306	173	225	A	4
45		27R-630	630	130	306	173	225	A	4
46		27R-650	650	140	306	173	225	A	4
47		27R-710	710	160	306	173	225	A	4
48	27R-780	780	160	306	173	225	A	4	
49	34	34-535	535	110	260	173	205	A	17
50		34-610	610	110	260	173	205	A	17
51		34-700	700	115	260	173	205	A	17
52	34R	34R-535	535	110	260	173	205	A	17
53		34R-610	610	110	260	173	205	A	17
54		34R-700	700	115	260	173	205	A	17
55	35	35-520	520	112	230	173	225	A	4
56		35-550	550	90	230	173	225	A	4
57		35-580	580	110	230	173	225	A	4
58		35-650	650	116	230	173	225	A	4
59	41	41-550	540	110	279	175	175	A	12
60		41-630	630	120	279	175	175	A	12
61		41-650	650	100	279	175	175	A	12
62		41-680	680	120	279	175	175	A	12
63	42	42-410	410	75	243	175	175	A	11
64		42-500	500	90	243	175	175	A	11
65		42-540	540	100	243	175	175	A	11
66		42-600	500	95	243	175	175	A	11
67	42R	42R-410	410	75	243	175	175	A	11
68		42R-500	500	90	243	175	175	A	11

Battery Specification

for AMERICAN VEHICLES **BCI** Type
A-2. Passenger Car & Commercial Batteries 12 Volt (6 Cells)

No.	Group No.	Model No.	Cranking Ampere at 0°F / -18°C (Amps.)	Reserve Capacity at 80°F (Min.)	Dimensions (mm)			Terminal Type	Figure No.
					L	W	TH		
69	42R	42R-540	540	100	243	175	175	A	11
70		42R-600	500	95	243	175	175	A	11
71	47	47-525	525	90	244	175	190	A	11
72		47-580	580	95	244	175	190	A	11
73	48	47-610	610	95	244	175	190	A	11
74		48-500	500	110	279	175	190	A	12
75	48	48-600	600	120	279	175	190	A	12
76		48-680	680	120	279	175	190	A	12
77	49	49-650	650	170	354	175	190	A	12
78		49-800	800	180	354	175	190	A	12
79	49-850	800	170	170	354	175	190	A	12
80	51	51-325	325	75	238	129	227	A	3
81		51-370	370	75	238	129	227	A	3
82	51R	51-430	430	80	238	129	227	A	3
83		51-460	460	85	238	129	227	A	3
84	51R	51R-325	325	75	238	129	227	A	3
85		51R-370	370	75	238	129	227	A	3
86	58	51R-430	430	80	238	129	227	A	3
87		51R-460	460	85	238	129	227	A	3
88	58	58-530	530	80	243	185	177	A	27
89		58-560	560	80	243	185	177	A	27
90	58R	58-600	600	90	243	185	177	A	27
91		58R-530	530	80	243	185	177	A	27
92	58R	58R-560	560	80	243	185	177	A	27
93		58R-600	600	90	243	185	177	A	27
94	65	65-750	750	160	304	191	192	A	28
95		65-850	850	160	304	191	192	A	28
96	70DT	70DT-525	525	80	208/217	179	205	A+G	13
97	74	74-350	350	81	260/269	180	206	G	14
98		74-450	450	90	260/269	180	206	G	14
99	74	74-525	525	95	260/269	180	206	G	14
100		74-600	600	125	260/269	180	206	G	14
101	75	74-680	680	130	260/269	180	206	G	14
102		75-550	525	90	230/239	179	186	G	14
103	75	75-610	610	90	230/239	179	186	G	14
104		75-650	650	90	230/239	179	186	G	14
105	75DT	75-680	680	130	230/239	179	186	G	14
106		75DT-630	630	90	230/239	179	186	A+G	15
107	78	75DT-650	650	90	230/239	179	186	A+G	15
108		78-630	630	105	260/269	179	186	G	14
109	78	78-670	670	110	260/269	179	186	G	14
110		78-730	730	125	260/269	179	186	G	14
111	78DT	78-790	770	120	260/269	179	186	G	14
112		78DT-520	520	100	260/269	179	205	A+G	15
113	78DT	78DT-630	630	100	260/269	179	205	A+G	15
114		78DT-730	730	125	260/269	179	205	A+G	15
115	85	78DT-790	790	115	260/269	179	205	A+G	15
116		85-525	525	90	230	173	205	A	24
117	85	85-550	550	90	230	173	205	A	24
118		85-680	680	100	230	173	205	A	24
119	86	86-525	525	90	230	173	205	A	24
120		86-550	550	90	230	173	205	A	24
121	90	86-680	680	100	230	173	205	A	24
122		90-410	410	75	243	175	175	A	11
123	90	90-500	500	90	243	175	175	A	11
124		90-540	540	100	243	175	175	A	11
125	90R	90-600	600	100	243	175	175	A	11
126		90R-410	410	75	243	175	175	A	11
127	90R	90R-500	500	90	243	175	175	A	11
128		90R-540	540	100	243	175	175	A	11
129	91	90R-600	600	100	243	175	175	A	11
130		91-500	500	95	279	175	175	A	12
131	91	91-550	550	110	279	175	175	A	12
132		91-630	630	110	279	175	175	A	12
133	91	91-650	650	120	279	175	175	A	12
134		91-680	680	120	279	175	175	A	12
135	92	92-730	730	135	315	175	175	A	12
132	93	93-750	750	165	354	175	175	A	12

Battery Specification

for AMERICAN VEHICLES **BCI** Type
B. Heavy-Duty Commercial Batteries 12 Volt (6 Cells)

No.	Group No.	Model No.	Cranking Ampere at 0°F / -18°C (Amps.)	Reserve Capacity at 80°F (Min.)	Dimensions (mm)			Terminal Type	Figure No.
					L	W	TH		
01	4D	4D-950	950	300	508	215	234	A	8
02		4D-1050	1050	320	508	215	234	Λ	8
03	8D	8D-1000	1000	430	512	277	241	A	9
04		8D-1100	1100	430	512	277	241	A	9
05		8D-1300	1300	440	512	277	241	A	9
06		8D-1500	1500	440	512	277	241	A	9
07	31	31-625	625	160	330	173	239	A	6
08		31-625	625	180	330	173	239	A	6
09		31-710	710	180	330	173	239	A	6
10		31-750	750	160	330	173	239	A	6
11		31-900	900	160	330	173	239	A	6
12	31T	31-625T	625	160	330	173	239	F	5
13		31-625T	625	180	330	173	239	F	5
14		31-750T	750	160	330	173	239	F	5
15		31-900T	900	160	330	173	239	F	5
16		31-580TE	580	180	330	173	239	F	5

for AMERICAN VEHICLES **BCI** Type
C. General Utility Batteries 12 Volt (6 Cells)

No.	Group No.	Model No.	Cranking Ampere at 0°F / -18°C (Amps.)	Reserve Capacity at 80°F (Min.)	Dimensions (mm)			Terminal Type	Figure No.
					L	W	TH		
01	U1	U1-230	230	33	197	130	186	C	1
02		U1-260	260	33	197	130	186	C	1
03	U1R	U1R-230	230	33	197	130	186	C	1
04		U1R-260	260	33	197	130	186	C	1

for AMERICAN VEHICLES **BCI** Type
D. Deep Cycle

No.	Group No.	Model No.	Reserve Capacity (min.)	Terminal Type	Dimensions (mm)			Figure No.
					L	W	TH	
01	24	DC24	120 (70AH/20HR)	SAE Posts / Wing Nut	277	174	231	16
02	27	DC27	150 (80AH/20HR)	SAE Posts / Wing Nut	322	174	231	16
03	31	DC31	180 (100AH/20HR)	SAE Posts / Wing Nut	332	172	234	16

for AMERICAN VEHICLES **BCI** Type
E. Marine & RV

No.	Group No.	Model No.	Cranking Ampere at 0°F / -18°C (Amps.)	Cranking Ampere at 32°F / 0°C (Amps.)	Reserve Capacity (Min.)	Dimensions (mm)			Terminal Type	Figure No.
						L	W	TH		
01	24	M24	500	620(MCA)	115 (65AH/20HR)	277	174	231	SAE Posts / Wing Nut	29
02	27	M27	570	720(MCA)	145 (80AH/20HR)	320	172	229	SAE Posts / Wing Nut	29
03	27	M27	570	720(MCA)	160 (100AH/20HR)	320	172	229	SAE Posts / Wing Nut	29
04	31	M31	625	790(MCA)	180 (100AH/20HR)	330	172	234	SAE Posts / Wing Nut	29

Korea No.1
Aftermarket Brand

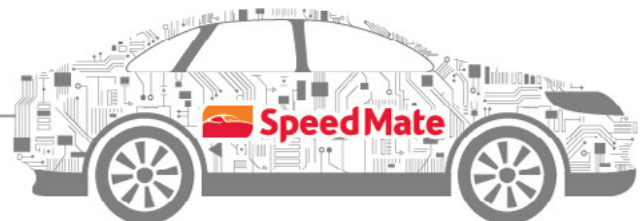
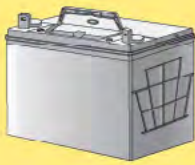


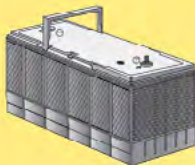



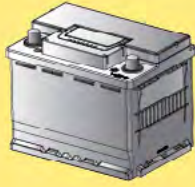
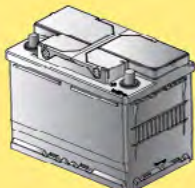
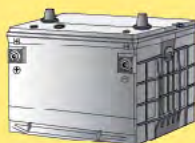

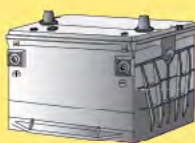
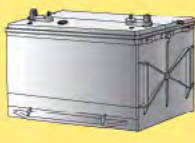
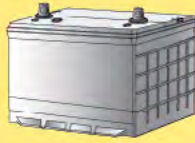
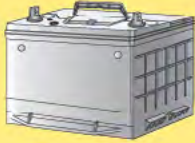

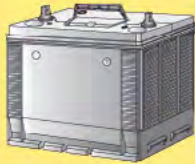
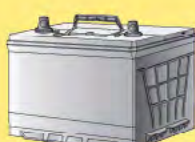
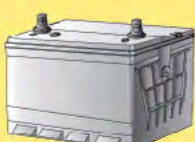
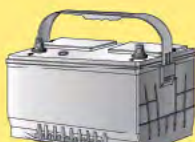
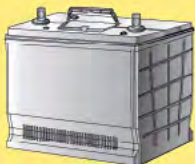
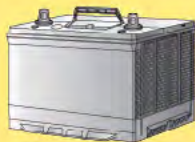


Figure No.

Figure No.	Image	Figure No.	Image	Figure No.	Image	Figure No.	Image
1		3		4		5	
6		8		9		11	
12		13		14		15	
16		17		18		24	
25		26		27		28	
29		30					

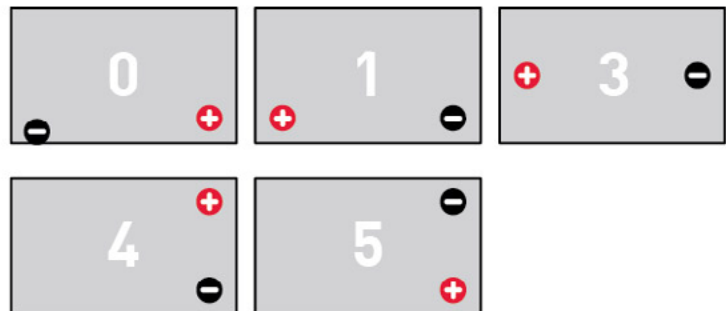
TERMINAL TYPE & CELL LAYOUT

Terminal Type

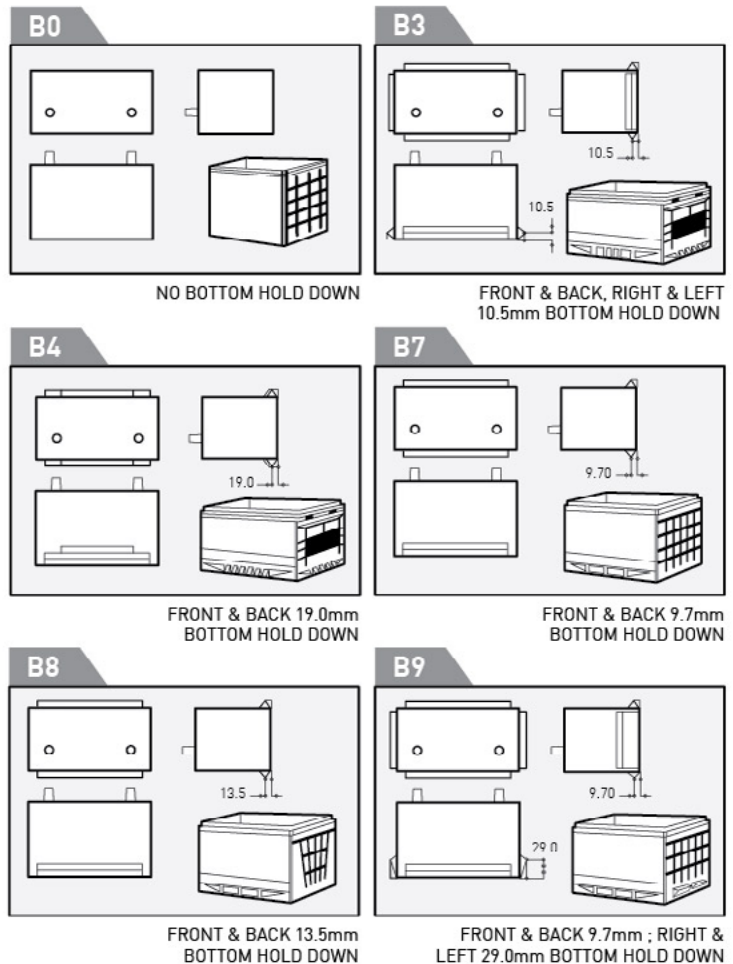
TYPE A		Standard
TYPE B		Small (JIS)
TYPE C		FRD (Ford LUG)
TYPE D		LUG
TYPE E		Marine
TYPE F		STUD
TYPE G		SIDE
TYPE H		Dual Fit



Cell Layout



Bottom Hold Down



BENEFITS OF CALCIUM LEAD GRID TECHNOLOGY

Benefit 1.

Distilled water supplementation free

As the lead-antimony conventional battery incurs unnecessary local action inside battery due to the effects of antimony ion during battery use and discharges gas by electrolyzing water contained in electrolyte, the amount of electrolyte is decreased rapidly. The battery performance is deteriorated and operating life reduced unless distilled water is supplemented frequently to compensate for such decrease of electrolyte. Speedmate battery, however, uses specially alloyed calcium-lead, which leads to extremely low level of electrolyte decrease. Hence, if the charging system of vehicle remains error-free until the battery is worn out there is no need to supplement distilled water at all.

Benefit 2.

Recharging free

Due to the phenomenon of self-discharge, the lead-acid battery is characterized by its charged power being consumed even when the battery is not in use, such as during storage. The reason behind such phenomenon is that the impurities contained in lead alloy induces local action, causing electric energy to be consumed. Compared with the lead-acid battery, Speedmate battery uses carefully selected, highly refined lead alloy, rendering extremely low rate of self-discharge, and maintaining high performance even during long-term standing.

Benefit 3.

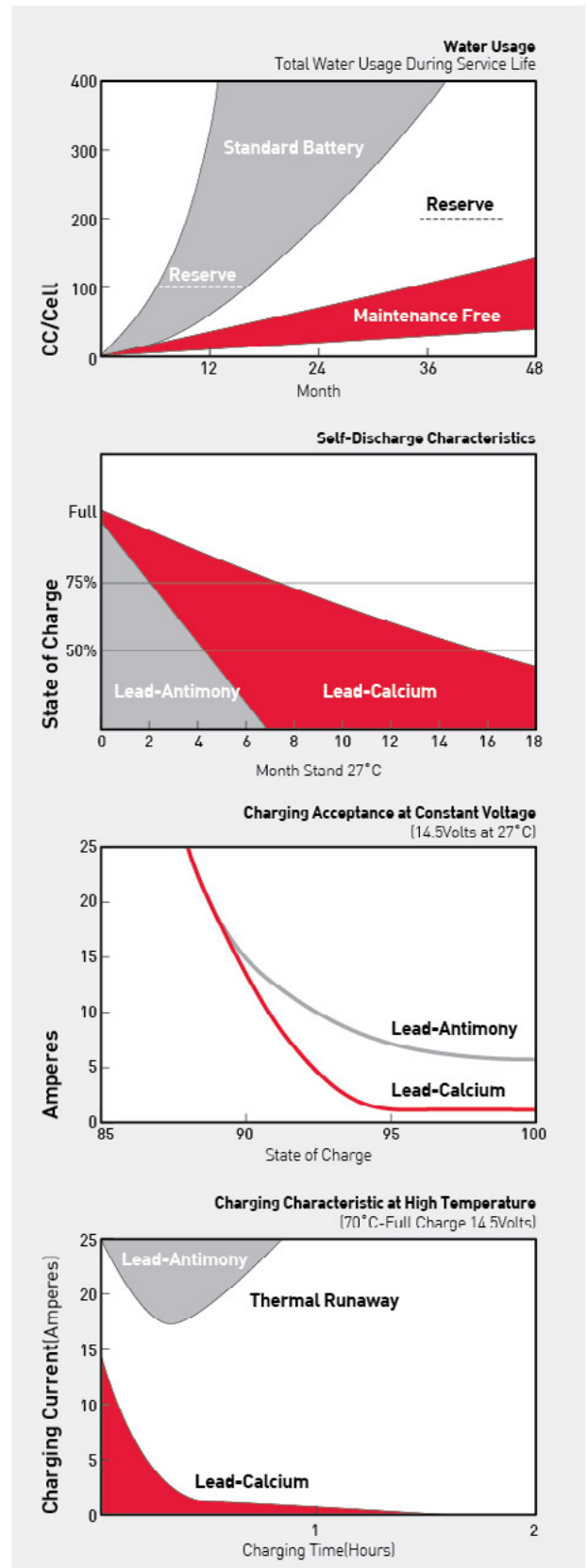
Overcharge risk free

The battery mounted on vehicles can always be charged while vehicles are in operation. In general, the current being charged is adjusted to high or low level by the regulator which controls the size of voltage. When battery is in the state of near full charge under the condition of voltage already set, the value of current being charged must be decreased to prevent battery from being overcharged to maintain high performance for a long time. As shown on graph, the charging current of Speedmate's Calcium battery is reduced to extremely low level when the battery is in near full-charge state, eliminating to near zero the danger of battery being overcharged.

Benefit 4.

Thermal runaway free

When battery is in near full-charge state while battery is being used in hot places (temperature approximately 70°C), the current being charged must be decreased to prevent battery damage resulting from overcharging. The charging current level of lead-acid battery decreases at initial stage but rises again soon due to the effects of a few kinds of substance contained in the grid alloy, and the grid is damaged and performance deteriorated due to this thermal phenomenon. Speedmate battery, however, is free of substance containing such harmful effects, and the current being charged becomes extremely low level when battery is fully charged in high-temperature, leading to the prevention of overcharging.



Happy Auto Life



<http://parts.speedmate.com>


SK networks
www.sknetworks.com