

KT south suwon branch UPS batteries (AGM 80-12)

Sample: Sebang Rocket ES 80-12 AGM(12V 80Ah:Korean Products) 8pcs(2set Serial connection, 1set is 4pcs)+3pcs



Process : 1. Repowertek visited KT south suwon branch on Aug 24th 2011 and chose 8pcs batteries as sample.

Repowertek charged with the KT style after checking voltage and internal resistance.

2. Checked RC after discharging all of the batteries on Aug 25th 2011. Restored 1se(4pcs) with ZEUS regenerator and charged another set(4pcs) with KT style.

2-1. Decided sample's cut off voltage(10.5V) and discharging current(20.5A per 3hours) after discussed with person in charge of KT. We referred Rocket battery's specification.

2-2. Restored 1,2,3,4 of sample(produced on 2004) with ZEUS regenerator and charged 5,6,7,8 of sample with KT style.

3. Finished the 1st restoration, charging, discharging of 8 samples on Aug 26th. 2011.

4. Finished restoration and discharging of sample 5,6,7,8 (produced on 2005) on Aug 30. 2011.

5. Additionally finished restoration and discharging of 3pcs batteries(Produced on 2005) on Sep 15th. 2011

Results : No.1 sample : 13.23V / 9.206mΩ / RC 2:09 ---> **12.99V / 7.396mΩ / RC 2:41 (ZEUS the 1st restoration figures)**

No.2 sample : 13.29V / 7.683mΩ / RC 2:06 ---> **13.05V / 6.285mΩ / RC 3:10 (ZEUS the 1st restoration figures)**

No.3 sample : 13.19V / 9.030mΩ / RC 2:22 ---> **13.11V / 7.009mΩ / RC 3:20 (ZEUS the 1st restoration figures)**

No.4 sample : 13.24V / 8.683mΩ / RC 2:08 ---> **13.02V / 7.244mΩ / RC 2:43 (ZEUS the 1st restoration figures)**

No.5 sample : 13.26V / 6.790mΩ / RC 2:44 ---> **13.12V / 5.144mΩ / RC 3:35 (ZEUS the 1st restoration after recharging by KT)**

No.6 sample : 13.31V / 7.439mΩ / RC 2:37 ---> **13.14V / 5.480mΩ / RC 3:32 (ZEUS the 1st restoration after recharging by KT)**

No.7 sample : 13.31V / 6.340mΩ / RC 3:10 ---> **13.15V / 5.389mΩ / RC 3:37 (ZEUS the 1st restoration after recharging by KT)**

No.8 sample : 13.05V / 10.96mΩ / RC 1:00 ---> **13.15V / 10.09mΩ / RC 1:57 (ZEUS the 1st restoration after recharging by KT) : BAD**

Addition sample No. 09-01 : 12.91V / 7.228mΩ / RC 2:34 ---> **13.07V / 5.439mΩ / RC 3:27 (ZEUS the 1st restoration figures)**

Addition sample No. 09-03 : 13.04V / 7.313mΩ / RC 2:38 ---> **13.18V / 5.094mΩ / RC 3:33 (ZEUS the 1st restoration figures)**

Addition sample No. 09-04 : 13.09V / 6.341mΩ / RC 2:57 ---> **13.18V / 5.154mΩ / RC 3:39 (ZEUS the 1st restoration figures)**

Remark : - Producing date of No. 5, 6, 7, 8, 09-01, 09-03, 09-04 is faster than sample No.1, 2, 3, 4 and also the initial state of sample 5, 6, 7, 8, 09-01, 09-03, 09-04 is better than sample 1, 2, 3, 4.

- Please refer www.gbattery.co.kr for information about sample.

- Used IBEX-2000(Internal Resistance Analyzer) of KT's tester

- Judged No.8 sample as junk battery caused by no good internal state.

- Attached measured figure on next page.



Regeneration Report for UPS Battery(AGM) in Korea

No	1	Model	Rocket ES 80-12 AGM (AGM 80-12) (Produced on 2004)		
Voltage	12 V	Ah	80 A	Restored by	Repowertek Inc.
Cut off Voltage	10.5 V	Discharging Ah	20.5 A (3Hrs)	Checked by	Y. S. Ryu

Date	V	I.R.	RC	Remark
25-Aug-11	13.23	9.206		Initial Measurement After Charge
25-Aug-11	11.94	18.170	2:09	After Discharging Process
26-Aug-11	12.99	7.396		1st Regeneration (ZBR-201)
26-Aug-11	11.91	17.660	2:41	Discharging After 1st Regeneration

Regeneration Report for UPS Battery(AGM) in Korea

No	2	Model	Rocket ES 80-12 AGM (AGM 80-12) (Produced on 2004)		
Voltage	12 V	Ah	80 A	Restored by	Repowertek Inc.
Cut off Voltage	10.5 V	Discharging Ah	20.5 A (3Hrs)	Checked by	Y. S. Ryu

Date	V	I.R.	RC	Remark
25-Aug-11	13.29	7.683		Initial Measurement After Charge
25-Aug-11	12.04	13.920	2:06	After Discharging Process
26-Aug-11	13.05	6.285		1st Regeneration (ZBR-201)
26-Aug-11	11.78	15.040	3:10	Discharging After 1st Regeneration

Regeneration Report for UPS Battery(AGM) in Korea

No	3	Model	Rocket ES 80-12 AGM (AGM 80-12) (Produced on 2004)		
Voltage	12 V	Ah	80 A	Restored by	Repowertek Inc.
Cut off Voltage	10.5 V	Discharging Ah	20.5 A (3Hrs)	Checked by	Y. S. Ryu

Date	V	I.R.	RC	Remark
25-Aug-11	13.19	9.030		Initial Measurement After Charge
25-Aug-11	11.85	19.320	2:22	After Discharging Process
26-Aug-11	13.11	7.009		1st Regeneration (ZBR-201)
26-Aug-11	11.65	16.690	3:20	Discharging After 1st Regeneration

Regeneration Report for UPS Battery(AGM) in Korea

No	4	Model	Rocket ES 80-12 AGM (AGM 80-12) (Produced on 2004)		
Voltage	12 V	Ah	80 A	Restored by	Repowertek Inc.
Cut off Voltage	10.5 V	Discharging Ah	20.5 A (3Hrs)	Checked by	Y. S. Ryu

Date	V	I.R.	RC	Remark
25-Aug-11	13.24	8.683		Initial Measurement After Charge
25-Aug-11	11.98	17.370	2:08	After Discharging Process
26-Aug-11	13.02	7.244		1st Regeneration (ZBR-201)
26-Aug-11	11.94	16.970	2:43	Discharging After 1st Regeneration

Regeneration Report for UPS Battery(AGM) in Korea

No	5	Model	Rocket ES 80-12 AGM (AGM 80-12) (Produced on 2005)		
Voltage	12 V	Ah	80 A	Restored by	Repowertek Inc.
Cut off Voltage	10.5 V	Discharging Ah	20.5 A (3Hrs)	Checked by	Y. S. Ryu

Date	V	I.R.	RC	Remark
25-Aug-11	13.26	6.790		Initial Measurement After Charge (1st)
25-Aug-11	11.76	14.380	2:44	After Discharging Process
26-Aug-11	13.04	6.793		2nd Charge
26-Aug-11	11.83	15.360	2:22	After Discharging Process
30-Aug-11	13.12	5.144		1st Regeneration (ZBR-201)
30-Aug-11	11.61	12.610	3:35	Discharging After 1st Regeneration

Regeneration Report for UPS Battery(AGM) in Korea

No	6	Model	Rocket ES 80-12 AGM (AGM 80-12) (Produced on 2005)		
Voltage	12 V	Ah	80 A	Restored by	Repowertek Inc.
Cut off Voltage	10.5 V	Discharging Ah	20.5 A (3Hrs)	Checked by	Y. S. Ryu

Date	V	I.R.	RC	Remark
25-Aug-11	13.31	7.439		Initial Measurement After Charge (1st)
25-Aug-11	11.85	16.220	2:37	After Discharging Process
26-Aug-11	13.1	7.392		2nd Charge
26-Aug-11	11.83	15.350	2:27	After Discharging Process
30-Aug-11	13.14	5.480		1st Regeneration (ZBR-201)
30-Aug-11	11.67	13.220	3:32	Discharging After 1st Regeneration

Regeneration Report for UPS Battery(AGM) in Korea

No	7	Model	Rocket ES 80-12 AGM (AGM 80-12) (Produced on 2005)		
Voltage	12 V	Ah	80 A	Restored by	Repowertek Inc.
Cut off Voltage	10.5 V	Discharging Ah	20.5 A (3Hrs)	Checked by	Y. S. Ryu

Date	V	I.R.	RC	Remark
25-Aug-11	13.31	6.340		Initial Measurement After Charge (1st)
25-Aug-11	11.76	12.490	3:10	After Discharging Process
26-Aug-11	13.06	6.649		2nd Charge
26-Aug-11	11.78	14.240	2:32	After Discharging Process
30-Aug-11	13.15	5.389		1st Regeneration (ZBR-201)
30-Aug-11	11.56	12.480	3:37	Discharging After 1st Regeneration

Regeneration Report for UPS Battery(AGM) in Korea

No	8	Model	Rocket ES 80-12 AGM (AGM 80-12) (Produced on 2005)		
Voltage	12 V	Ah	80 A	Restored by	Repowertek Inc.
Cut off Voltage	10.5 V	Discharging Ah	20.5 A (3Hrs)	Checked by	Y. S. Ryu

Date	V	I.R.	RC	Remark
25-Aug-11	13.05	10.960		Initial Measurement After Charge (1st)
25-Aug-11	12.33	17.620	1:00	After Discharging Process
26-Aug-11	13.37	9.576		2nd Charge
26-Aug-11	12.31	15.500	1:43	After Discharging Process
30-Aug-11	13.15	10.090		1st Regeneration (ZBR-201)
30-Aug-11	12.29	15.480	1:57	Discharging After 1st Regeneration

Regeneration Report for UPS Battery(AGM) in Korea

No	09-01	Model	Rocket ES 80-12 AGM (AGM 80-12) (Produced on 2005)		
Voltage	12 V	Ah	80 A	Restored by	Repowertek Inc.
Cut off Voltage	10.5 V	Discharging Ah	20.5 A (3Hrs)	Checked by	Y. S. Ryu

Date	V	I.R.	RC	Remark
14-Sep-11	12.91	7.228		KT 초기 충전값
15-Sep-11	11.74	16.520	2:34	초기 방전값
15-Sep-11	13.07	5.439		ZBR-201 복원
15-Sep-11			3:27	ZBR-201 복원 후 방전값

Regeneration Report for UPS Battery(AGM) in Korea

No	09-03	Model	Rocket ES 80-12 AGM (AGM 80-12) (Produced on 2005)		
Voltage	12 V	Ah	80 A	Restored by	Repowertek Inc.
Cut off Voltage	10.5 V	Discharging Ah	20.5 A (3Hrs)	Checked by	Y. S. Ryu

Date	V	I.R.	RC	Remark
14-Sep-11	13.04	9.477		KT 초기 충전값
15-Sep-11	11.76	17.530	2:38	초기 방전값
15-Sep-11	13.18	5.094		ZBR-201 복원
15-Sep-11			3:33	ZBR-201 복원 후 방전값

Regeneration Report for UPS Battery(AGM) in Korea

No	09-04	Model	Rocket ES 80-12 AGM (AGM 80-12) (Produced on 2005)		
Voltage	12 V	Ah	80 A	Restored by	Repowertek Inc.
Cut off Voltage	10,5 V	Discharging Ah	20,5 A (3Hrs)	Checked by	Y. S. Ryu

Date	V	I.R.	RC	Remark
14-Sep-11	13.09	6.341		Initial Measurement After Charge
15-Sep-11	11.68	14.990	2:57	After Discharging Process
15-Sep-11	13.18	5.154		1st Regeneration (ZBR-201)
15-Sep-11			3:39	Discharging After 1st Regeneration

Regeneration Report for UPS Battery(AGM) in Korea

No		Model			
Voltage		Ah		Restored by	
Cut off Voltage		Discharging Ah		Checked by	

Date	V	I.R.	RC	Remark
