

Battery System Tester

NF-512



Button and test clamp function introduction



Function instructions

1. Start Capacity

Please ensure engine and all electronic devices are turned off before operating battery test. Voltage will be higher than the normal situation due to the checked battery is fully charged. In this situation, turn off all devices and operate the test when the voltage drops to the normal value.

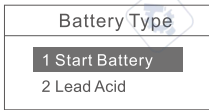
1.1 Quick test

① The red clamp is connected to the positive pole, and the black clamp is connected to the negative pole. Make sure the connecting well to get the accurate test result.

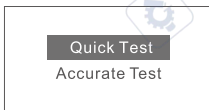
② Select "Start Capacity", and press "Enter" to continue.



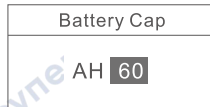
③ According to the battery type, select "Start battery" or "Lead Acid", and press "Enter" to continue



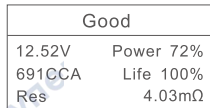
④ Select "Quick test", and press "Enter" to continue.



⑤ Set battery capacity which is displayed on the battery rating label.



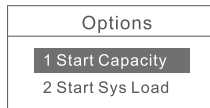
⑥ Press "Enter" to start testing, and the results will display on the screen.



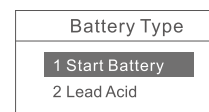
1.2 Accurate test

① The red clamp is connected to the positive pole, and the black clamp is connected to the negative pole. Make sure the connecting well to get the accurate test result.

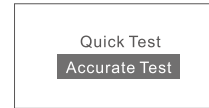
② Select "Start Capacity", and press "Enter" to continue.



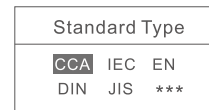
③ According to the battery type, Select "Start battery" or "Lead Acid", and press "Enter" to continue.



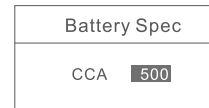
④ Select "Accurate test" and press "Enter" to continue



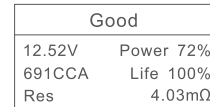
⑤ Select the battery type.



⑥ Set battery specification according to the Spec label showed on the battery.



⑦ Press "Enter" to start testing. And the result will display on the screen.



Reference Table for Battery Status of Health (Life)

Healthy	Test result	Note
>80%	GOOD	GOOD TO USE
>60%	NORMAL	GOOD TO USE
>45%	CAUTION	KEPP CAUTION
<45%	REPLACE	REPLACE IMMEDIATELY

★ When the battery power is lower than 35%, it will prompt "recharge".

★ If the battery power is lower than 18%, it will affect the test effect. At this time, it will prompt "charge and retest".

Start System load

① The red clamp is connected to the positive pole, and the black clamp is connected to the negative pole. Make sure the connecting well to get the accurate test result.

② Select "Start sys load".

Options	
2 Start sys load	
3 Run Max Load	

③ Press "Enter" to come into the testing interface.

Static-V	12.51V
Start-V	12.51V
Start-V	> 9.60V

④ Turn on the engine, the tester will automatically test and record the minimum voltage output by the battery during the starting process. Under normal circumstances the minimum voltage should be over 9.6V.

Start System Test Instructions

- ★ Reading over 9.6V means cranking is good.
- ★ Reading below 9.6V means cranking is abnormal.

Please check associated parts, such as connections, wires, starter and battery's terminal corrupted or no.

VOLTAGE	CRANKING ABILITY	ACTION TO BATTERY
>10.7V	GOOD	NO ACTION
10.2~10.7	NORMAL	KEPP CAUTION
9.6~10.2	BAD	REPLACE IT SOON
<9.6	VERY BAD	REPLACE IT IMMEDIATELY

Max load test

Please turn on the engine before test.

① The red clamp is connected to the positive pole, and the black clamp is connected to the negative pole. Make sure the connecting well to get the accurate test result.

② Select "Run Max Load".

Options	
3 Run Max Load	
4 Charg sys test	

③ Press "Enter" it will display the following prompt on the screen.

Full load to 2~2.5KR/M,	
Press Enter	

④ Must operate according to the prompt, press "Enter" to test load, And the result will show on the screen.

Run Load Test	
Now	12.51V
Min	12.51V < 12.8V

⑤ If Min reading over 12.8V means cranking is good.

PLEASE NOTE

★ If the reading below 12.8V, please check whether the generator belt is worn out and whether the wire is short-circuited.

Charge system test

Please turn on engine before test.

① The red clamp is connected to the positive pole, and the black clamp is connected to the negative pole. Make sure the connecting well to get the accurate test result.

② Select "Charge sys test".

Options	
4 Charg sys test	
1 Start Capacity	

③ Press "Enter" it will display the following prompt on the screen.

Start Engine to 2.5~3.5KR/M,	
Press Enter	

④ Must operate according to the prompt, press "Enter" to test, and the result will be shown on the screen.

Max	12.51V < 15.0V
Now	12.51V
Min	12.51V < 13.3V

PLEASE NOTE

- ★ If the reading > 15.0V, check the voltage regulator.
- ★ If the reading < 13.3V, check the connection points, wires, and motor.

JIS Battery Specification Comparison

Specification		Cold Start Current CCA		Specification		CCA	
JIS New	JIS Old	MF	CMF	JIS New	JIS Old	MF	CMF
26A17R		200		55B24RS	NT80-S6S	430	420
26A17L		200		55B24LS	NT80-S6LS	430	420
26A19R	12N24-L	200	220	55D26R	N50Z	350	440
26A19L	12N24-L	200	220	55D26L	N50ZL	350	440
28A19R	NT50-N24L	250		60D23R		520	
28A19L	NT50-N24L	250		60D23L		520	
32A19R	NX60-N24L	270	295	65D23R		420	540
32A19L	NX60-N24L	270	295	65D23L		420	540
26B17R		200		65D26R	NS70	415	520
26B17L		200		65D26L	NS70L	415	520
28B17R		245		65D31R	N70	390	520
28B17L		245		65D31L	N70L	390	520
28B19R	NS40S	245		70D23R	35-60	490	540
28B19L	NS40LS	245		70D23L	35-60	490	540
32B20R	NS40L	270		75D23R		500	520
32B20L	NS40LS	270		75D23L		500	520
32C24R	N40	240	325	75D26R	F100-S	490	590
32C24L	N40L	240	325	75D26L	F100-SL	490	590
34B17R		280		75D31R	N70Z	450	540
34B17L		280		75D31L	N70ZL	450	540
34B19R	NS40ZA	270	325	80D23R		580	
34B19L	NS40ZAL	270	325	80D26L		580	
36B20R	NS40Z	275	300	85B60K		800	900
36B20L	NS40ZL	275	300	85B60KL		800	900
36B20RS	NS40ZS	275	300	95D31R	NX120-7	620	660
36B20LS	NS40ZLS	275	300	95D31L	NX120-7L	620	660
38B20R	NX60-N24	330	340	95E41R	N100	515	640
38B20RS	NT60-N24S	330	340	95E41L	N100L	515	640
38B20L	NX60-24L	330	340	105E41R	N100Z	580	720
38B20LS	NX60-24LS	330	340	105E41L	N100ZL	580	720
40B20L		330		105F51R	N100Z	580	
40B20R		330		105F51L	N100ZL	580	
42B20R		330		115E41R	NS120	650	800
42B20L		330		115E41L	NS120L	650	800
40B20RS		330		115F51R	N120	650	800
40B20LS		330		115F51L	N120L	650	800
46B24R	NS60	325	360	130E41R	NX200-10	800	
46B24L	NS60L	325	360	130E41L	NX200-10L	800	
46B24RS	NS60S	325	360	130F51R		800	
46B24LS	NS60LS	325	360	130F51L		800	
46B26R		360		145F51R	NS150	780	920
46B26L		360		145F51L	NS150L	780	920
46B26RS		360		145G51R	N150	780	900
34B19RS	NS40ZAS	270	325	80D26R	NX-110-S	580	280
34B19LS	NS40ZALS	270	325	80D26L	NX110-SL	580	280
46B26LS		360		145G51L	N150L	780	900
48D26R	N50	280	360	150F51R	NT200-12	640	
48D26L	N50L	280	360	150F51L	NT200-12L	640	
50D20R		310	380	165G51R	NS200	935	980
50D20L		310	380	165G51L	NS200L	935	980
50D23R	85B60K	500		170F51R	NX250-12	1045	
50D23L	85B60K	500		170F51L	NX250-12L	1045	
50B24R	NT80-S6	390		180G51R	NT250-15	1090	
50B24L	NT80-S6L	390		180G51L	NT250-15L	1090	
50D26R			370	195G51R	NX300-61	1145	
50D26L			370	195G51L	NX300-61L	1145	
55D26R		355	480	190H52R	N200	925	1100
55D26L		355	480	190H52L	N200L	925	1100
55B24R	NX100-S6	435	420	245H52R	NX400-20	1330	1250
55B24L	NX100-S6L	435	420	245H52L	NX400-20L	1330	1250

EN and DIN Battery Specification Comparison

Specification		CCA		Specification		CCA	
Model	Same model	DIN	EN	Model	Same model	DIN	EN
52805	52815	180	240	56322	88066	300	510
53517		175	300	56530	56618	56638	300
53520	53521	150	240	56618	56619	56620	300
53625	53638	175	300	56633	56647	56641	300
53646	53621	88038	175	300	56820	56821	315
53653	53624	53890	175	300	57024	57029	315
54038	54039		175	300	57113	57539	400
54232		175	300	57114	56821	88074	400
54313	54324	54464	220	330	57218	57219	420
54317	54312	88146	210	360	57220	57217	420
54437	54466	54459L	210	360	57230		380
54459	54434	88046	210	360	57412	57413	400
54469	54449	54465	210	360	57512	57531	350
54519	54533	54612	210	360	58515	58424	450
54523	54524		220	300	58521	58513	320
54537	54545	54801	190	300	58522	58514	320
54551	54580		220	300	58815	58821	395
54533	54577	54579	220	300	58820	58515	58527
54584	54578		220	300	58827		400
54590	54587		210	330	58838	58833	88092
54827			240	360	59040	59017	360
55040	88056		265	450	59218	59219	290
55041	55042		220	360	59226	59215	450
55044	55414	88056	265	450	59514		320
55046			300	510	59518	59519	395
55056			320	540	59615	59616	360
55057	54827	88156	320	540	60018	30019	250
55068	55069	55548	220	390	60026	58811	440
55218			255	420	60044	60038	500
55414	55415	55421	265	450	60527	60528	410
55422	55566	55040	265	450	61017	61018	400
55428	55423	55427	300	510	61023	62529	450
55457			265	450	61047	61048	450
55529			220	360	62034	62038	62045
55531	55545	55559L	255	420	63013		470
55559	55530	88056	255	420	63545	63549	420
55564	55552	55563	255	420	64020	64317	64318
55564	55565	55548	255	420	64028	64035	520
55570	55567	55565L	255	420	64036		460
56012			230	390	64317	64318	64323
56048	56068	56069	250	390	65513		540
56049	56069	56073	250	390	65514	65515	570
56077	56530		300	510	67043	67045	600
56091	55800		360	540	68032	68034	600
56111	55048		300	540	70029	70038	630
56218	55092		300	510	70036	68021	570
56219	56216		300	510	71014	71015	700
56220			280	510	72512		680
56225	56323		300	510	73011		740
56318	56312	56311	300	510			

设计	品名	样式	印刷要求
CZG	NF-512说明书骑马订英文-V1 20230725	6折页	彩色
日期	品号	页码	
2023.07.25			
样品	尺寸	材质	
	468×105mm	128g铜版纸	
变更记录			