

Battery System Tester

NF-512



Button and test clamp function introduction



Function instructions

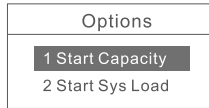
1. Start Capacity

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.

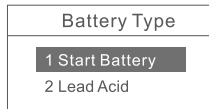
1.1 Quick test

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.

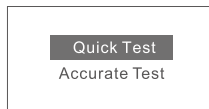
② Select "Start Capacity", and press "Enter" to continue.



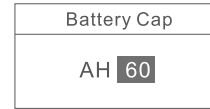
③ According to the battery type, select "Start battery" or "Lead Acid", and press "Enter" to continue



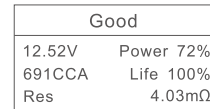
④ Select "Quick test", and press "Enter" to continue.



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



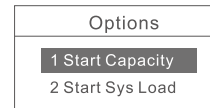
⑥ Press "Enter" to start testing, and the results will display on the screen.



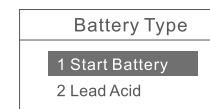
1.2 Accurate test

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.

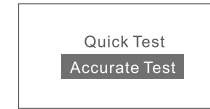
② Select "Start Capacity", and press "Enter" to continue.



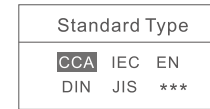
③ According to the battery type, Select "Start battery" or "Lead Acid", and press "Enter" to continue.



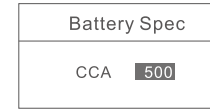
④ Select "Accurate test" and press "Enter" to continue



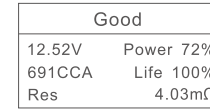
⑤ Select the battery type.



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.

Reference Table for Cranking Test		
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 Chrg 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 Chrg 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	500	
26A17L		200		55B24LS	NT80-S6LS	430	420	500	
26A19R	12N24-L	200	220	264	55D26R	N50Z	350	440	525
26A19L	12N24-L	200	220	264	55D26L	N50ZL	350	440	525
28A19R	NT50-N24	250			60D23R		520		
28A19L	NT50-N24L	250			60D23L		520		
32A19R	NX60-N24	270	295		65D23R		420	540	580
32A19L	NX60-N24L	270	295		65D23L		420	540	580
28B17R		200			65D26R	NS70	415	520	625
28B17L		200			65D26L	NS70L	415	520	625
28B17R		245			65D31R	N70	390	520	630
28B17L		245			65D31L	N70L	390	520	630
28B19R	NS40S	245			70D23R	35-60	490	540	580
28B19L	NS40LS	245			70D23L	35-60	490	540	580
32B20R	NS40	270			75D23R		500	520	580
32B20L	NS40L	270			75D23L		500	520	580
32C24R	N49	240	325	400	75D26R	F100-S	490		
32C24L	N49L	240	325	400	75D26L	F100-SL	490		
34B17R		280			75D31R	N70Z	450	540	735
34B17L		280			75D31L	N70ZL	450	540	735
34B19R	NS40ZA	270	325	400	80D23R		580		
34B19L	NS40ZAL	270	325	400	80D26L		580		
36B20R	NS40Z	275	300	360	85B60K		590		
36B20L	NS40ZL	275	300	360	85B60KL		590		
36B20RS	NS40ZS	275	300	360	95D31R	NX120-7	620	660	850
36B20LS	NS40ZLS	275	300	360	95D31L	NX120-7L	620	660	850
38B20R	NX60-N24	330	340	410	95E41R	N100	515	640	770
38B20RS	NT60-N24S	330	340	410	95E41L	N100L	515	640	770
38B20L	NX60-24L	330	340	410	105E41R	N100Z	580	720	880
38B20LS	NX60-24LS	330	340	410	105E41L	N100ZL	580	720	880
40B20L		330			105F51R	N100Z	580		
40B20R		330			105F51L	N100ZL	580		
42B20R		330			115E41R	NS120	650	800	960
42B20L		330			115E41L	NS120L	650	800	960
40B20RS		330			115F51R	N120	650	800	960
40B20LS		330			115F51L	N120L	650	800	960
46B24R	NS60	325	360	420	130E41R	NX200-10	800		
46B24L	NS60L	325	360	420	130E41L	NX200-10L	800		
46B24RS	NS60S	325	360	420	130F51R		800		
46B24LS	NS60LS	325	360	420	130F51L		800		
46B26R		360			145F51R	NS150	780	920	
46B26L		360			145F51L	NS150L	780	920	
46B26RS		360			145G51R	N150	780	900	1100
34B19RS	NS40ZAS	270	325	400	80D26R	NX-110-S	580	280	630
34B19LS	NS40ZALS	270	325	400	80D26L	NX110-SL	580	280	630
46B26LS		360			145G51L	N150L	780	900	1100
48D26R	N50	280	360	420	150F51R	NT200-12	640		
48D26L	N50L	280	360	420	150F51L	NT200-12L	640		
50D20R		310	380	480	165G51R	NS200	835	980	
50D20L		310	380	480	165G51L	NS200L	835	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	50D20R		370		195G51R	NX300-S1	1145		
50D26L	50D20L		370		195G51L	NX300-S1L	1145		
55D26R		355	480	500	190H52R	N200	825	1100	1300
55D26L		355	480	500	190H52L	N200L	825	1100	1300
55B24R	NX100-S6	435	420	500	245H52R	NX400-20	1530	1250	
55B24L	NX100-S6L	435	420	500	245H52L	NX400-20L	1530	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	56420	56322	88066	300	510	
53517		175	300	56530	56618	56638	300	510	
53520	53521	53522	150	240	56618	56619	56620	300	510
53625	53638	53636	175	300	56633	56647	56641	300	510
53646	53621	88038	175	300	56820	56821		315	540
53653	53624	53890	175	300	57024	57029		315	540
54038	54039		175	300	57113	57539		400	680
54232			175	300	57114	56821	88074	400	680
54313	54324	54464	220	330	57218	57219		420	720
54317	54312	88146	210	360	57220	57217		420	720
54437	54466	54459L	210	360	57230		380	640	
54459	54434	88046	210	360	57412	57413	57412L	400	680
54469	54449	54465	210	360	57512	57513	57531	350	570
54519	54533	54612	210	360	58515	58424		450	760
54523	54524		220	300	58521	58513		320	540
54537	54545	54801	190	300	58522	58514		320	540
54551	54580		220	300	58815	58821		395	640
54533	54577	54579	220	300	58820	58515	58527	395	640
54584	54578		220	300	58827		400	640	
54590	54574		210	330	58838	58833	88092	400	680
54827			240	360	59040	59017	59018	360	600
55040	88056		265	450	59218	59219		290	480
55041	55042		220	360	59226	59215		450	760
55044	55414	88056	265	450	59514			320	540
55046			300	510	59518	59519		395	640
55056			320	540	59615	59616		360	600
55057	54827	88156	320	540	60018	30019		250	410
55068	55069	55548	220	390	60026	58811		440	720
55218			255	420	60044	60038		500	760
55414	55415	55421	265	450	60527	60528		410	680
55422	55566	55040	265	450	61017	61018		400	680
55428	55423	55427	300	510	61023	62529		450	760
55457			265	450	61047	61048		450	760
55529			220	360	62034	62038	62045	420	680
55531	55545	55559L	255	420	63013			470	680
55559	55530	88056	255	420	63545	63549		420	680
55564	55552	55563	255	420	64020	64317	64318	325	550
55564	55565	55548	255	420	64028	64035		520	760
55570	55567	55565L	255	420	64036			460	760
56012			230	390	64317	64318	64323	540	900
56048	56068	56069	250	390	65513			540	900
56049	56069	56073	250	390	65514	65515		570	900
56077	56530		300	510	67043	67045		600	1000
56091	55800		360	540	68032	68034		600	1000
56111	55048		300	540	70029	70038	70027	630	1050
56218	55092		300	510	70036	68040	68021	570	950
56219	56216		300	510	71014	71015		700	1150
56220			280	510	72512			680	1150
56225	56323		300	510	73011			740	1200
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			