



UPDATE

<u>3rd Party Trend Power Battery Diagnostic Testing Procedures</u>

Thank you for purchasing the Battery Diagnostic Tool 915800-003 to diagnose the in-tube battery in your Norco VLT bike. Please follow the procedures below.

You will need **TP-SMN Dealer 1.0.0** software located on LTP Dealer site/Resource Center/Forms & Guides to use the diagnostic tool (#915800-003 and harness accessories. Please download software to your desktop.

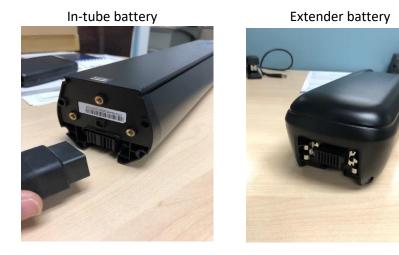
A) Bench Test Procedure.

- To Bench test battery drive unit must be dropped from bike frame, (**please refer to motor removal* video in DLC). All Gen1/Gen2 in-tube batteries and 360w extender battery can be bench tested.
- In order to access the in-tube battery terminal port, you must remove the silver alloy mounting bracket from bottom of battery (3 screws).



915800-003 Diagnostic tool with bench test harness

*Large end of harness plugs into battery terminals on next page



B) Testing via Charge Port.

*Prior to Diagnosing Gen1 & Gen2 in-tube batteries, adapter harnesses below must be used. *Testing through charge port confirms internal wiring is working correctly.

(Gen1) 7pin 915800-003-1



(Gen2) 11pin 915800-003-2





Harness plugs into diagnostic tool, then into charge port on bicycle.

Diagnostic procedure:

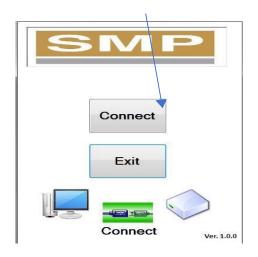
*Procedure below is the same for Bench test or Charge port testing.

- Plug USB from diagnostic tool into computer USB port.
- Open Downloaded software TP-SMN Dealer 1.0.0
- Open executable Software TP-SMN Dealer 1.0.0

- Bench Testing:

Battery must be initialized when using software... Green lights will turn on for 4 seconds.

- **Charge port testing**: Bike must be turned on to run software.
- click "Connect"



- Then Click START button

Battery Info			Event	t-har	ndling	g Me	thod		_		STA	RT
Item	Value U	Unit										
Pack_ID	v	alue									EXPO	BT
Model_Name	A	SCII	Safet	v Inf	0						LAIC	
Hardware_Version	Ver			Over Voltage					C+-+		DDT	
Firmware_Version Ver		Under Voltage				Battery Status				PRINT		
Pack_Voltage	n	nV	Charge Over Temperature									
Pack_Current	n	nA	Charge Under Temperature								EX.	IT
Production_Date	D	0/M/Y	Discharge Over Temperature									
Real_Time_Clock	D	0/M/Y	Discharge Under Temperature									
Last_Charge_Date	harge_Date D/M/Y			Discharge Over Current								
Cycle_Count Times			Charge Over Current									
StateOfHealth	0/	Short Circuit										
	-		Permane		e Status							0%
tate Of Charge		ture	Cel	l Volt	age(mV)						
	Temp1	°C	Cell 1	Cell 2	Cell 3	Cell 4	Cell 5	Cell 6	Cell 7	Cell 8	Cell 9	Cell 10
0000 Ah 000 %	Temp2	്റ	mV	mV	mV	mV	mV	mV	mV	mV	mV	mV

Batteries have 10 cells.

- All 10 cells should show approximately the same level of charge to obtain OK/PASS status.

Battery Info			Even	t-har	ndling	g Me	thod				STO	סר	
Item	Value	Unit									510		
Pack_ID	0	Value									EXPC	DET	
Model_Name	TP02	ASCII	Safety Info							LAPC			
Hardware_Version	re_Version 2.0 Ver		Over Voltage				Better Chetres DDINIT						
Firmware_Version 1.2 Ver		Ver	Under Voltage				Battery Status				PRI	PRINT	
Pack_Voltage	35451	mV	Charge Over Temperature										
Pack_Current	0 mA		Charge Under Temperature				EXIT					IT	
Production_Date	12/09/18	D/M/Y	Discharge Over Temperature										
Real_Time_Clock	07/03/19	D/M/Y		Discharge Under Temperature									
Last_Charge_Date	00/00/00	D/M/Y	-			ture							
Cycle_Count 1 Times		Times	Discharge Over Current Charge Over Current				OK						
StateOfHealth 10		%	Short Cir	0200	rent			U	N				
			Permane									100%	
State Of Charge	a hereite		-		tage((mV)							
	24.3		Cell 1	Cell 2	Cell 3	Cell 4	Cell 5	Cell 6	Cell 7	Cell 8	Cell 9	Cell 10	
3.05 Ah	Temp:	2											
3 115 40		സ			A					A			

*If Battery does not show OK/Pass status, then a new battery is required.

*The software also allows you to <u>print</u> a copy for your files.

*The Export button has been disabled.

To Exit Trend Power Software click the EXIT button.

*It is now safe to unplug diagnostic tool from your computer and battery.

Norco Bicycles