BYD 2023 Tang DM-i Champion Edition Motor Zero Position Calibration

Tested Model: BYD 2023 Tang DM-i Champion Edition

Function Description:

This function is used to perform zero position calibration of the front drive motor for Tang DM-i Champion Edition.

When replacing the drive motor controller alone, you need to perform the zero position calibration process. Record the zero position bar code on the motor, and use the diagnostic instrument to calibrate the motor electronic control zero position after the assembly is completed.

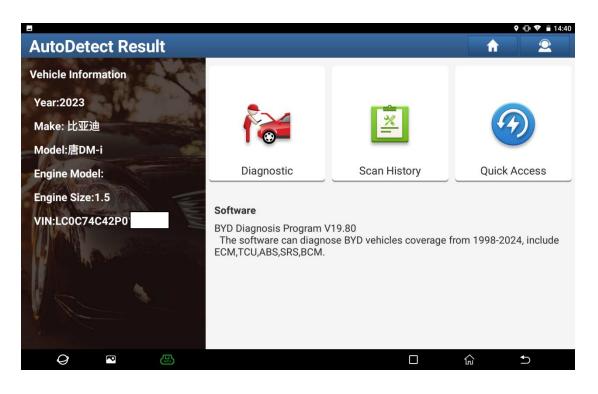
Execution Conditions:

- The drive motor controller is replaced.
- The ignition switch is in the ON position.
- The diagnostic instrument is connected to the network.

Procedure:

1. On an X-431 PAD 5, choose [Intelligent Diagnose] to identify the correct model, and then choose [Diagnostic].

■ X-431 PAD5 V	7.03.057			♥ ⊕ ♥ 🗎 14:40
		i		$\textcircled{\begin{tabular}{ c c c c c } \hline \hline & \\ & \hline & \hline$
Intelligent	Diagnose	Local Diagnose	ose New Energ	Service Function
		*	•	
Online Programming	Remote Diagnose	Extension Module	Software Update	Online support
	R	Ó		
Mall	Information	Business	Used Car	More
<i>Q</i> 	B			ŝ 1



2. Choose [Automatically search car model].

ų, 🖬					•	🕩 💎 盲 14:40
Show Menu	S	f	₫	2		ŀ
BYD V19.80 > Menu				🛜 🕇 505 b	/s 🛛 🕹 450 b/s	🖽12.35V
				Q	Please ente	er keyword
Automatically search car model						
Manually select car model						

SN:989890002 比亚迪 唐DM-i VIN LC0C74C4	2023					
Ø	P	J.		G	€)	

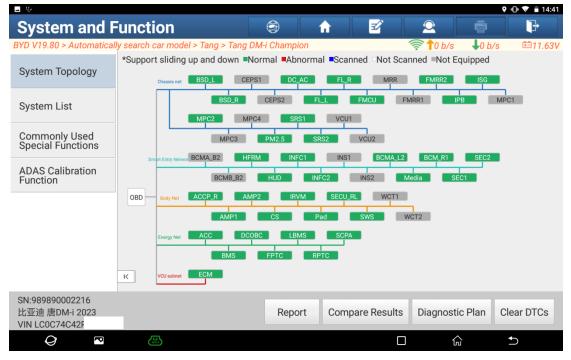
3. Determine whether the identified model is consistent with the actual model. If they are consistent, click [Correct]. Otherwise, click [Manually select car model] to select the correct model for testing.

<u>→</u> Ų.						•	🕩 💎 🛢 14:40
omatically sea	arch car model	3	A	Z	\bigcirc		ŀ
BYD V19.80 > Automatical	y search car model						⊞12.35V
List	Check Vehicle Information						
Country	China						
Make	BYD						
Car model	Tang DM-i Champion						
Manufacturing date	2023						
VIN	LC0C74C42P(
Test suggestions	When the recognized vehicle the correct mo	le model	does not n	natch with th	ne actual	model, plea	ise select
Manually	select car model		Corre	ct		Back	
SN:989890002216 比亚迪 唐DM-i 2023 VIN LC0C74C42F							
Ø P	USI VEI					<u>ن</u>	ſ

4. Click [High-speed Scan].

₩					Q 4	🕒 💎 💼 14:40
System and	Function		♠ 🗹	\mathbf{Q}	ē	ŀ
BYD V19.80 > Automatica	ally search car model > Tang > Tan	g DM-i Champion		🤶 🕇 39 b/s	↓ 22 b/s	€12.31V
System Topology	*Support sliding up and down	Normal Abnor	mal Scanned Not S		uipped	
System List	BSD_R MPC2	MPC4 SRS1	FLL FMCU	FMRR1 IPB	МРСТ	
Commonly Used Special Functions	MPC3	HFRM INFC1	SRS2 VCU2		SEC2	
ADAS Calibration Function	BCMB_B2		INFC2 INS2	Media SEC		
	OBD Body Net ACCP_R	AMP2 IRVM	Pad SWS	WCT2		
	Energy Net ACC BMS	DCOBC LBMS	SCPA RPTC			
	K VCU subnet ECM					
SN:989890002216 比亚迪 唐DM-i 2023 VIN LC0C74C42F	Sr	mart Detection	High-speed Scan	System Scan	Select D	etection
Q 🗖	J.				*)

5. The entire vehicle systems are scanned out. Choose [FMCU] (BYD) front drive motor controller (FMCU_BYD).



6. Click [ENTER].

- ¹					🎙 🕕 🗣 🛢 14:41
System and F	Function		♠ 🗹	9	P
BYD V19.80 > Automatica	lly search car model > Tang > Tang Di	M-i			
System Topology	*Support sliding up and down ING	21	(BYD) Front driv	e motor controller	
System List	BSD_R MPC2 MPC				
Commonly Used Special Functions	MPC3				
ADAS Calibration Function	Smart Entry Networ BCMA_B2 HFR				
	OBD Body Net ACCP_R AMP	2			
	Energy Net ACC DCOB BMS	BC			
	K VCU subnet ECM		El	NTER	
SN:989890002216 比亚迪 唐DM-i 2023 VIN LC0C74C42F		Report	Compare Results	Diagnostic Plan	Clear DTCs
\bigcirc	U VCI			ک	Ð

7. Click [Special Function].

山 存	ହ 🕕 🗢 💼 14:41
Show Menu 😂	
BYD V19.80 > Automatically search car model > Tang > Tang DM-i Cha	mpion > (BYD) Front drive motor controller ⊞12.34V
	QPlease enter keyword
Version Information	Read Fault Code
Clear Fault Memory	Read Data Stream
Special Function	

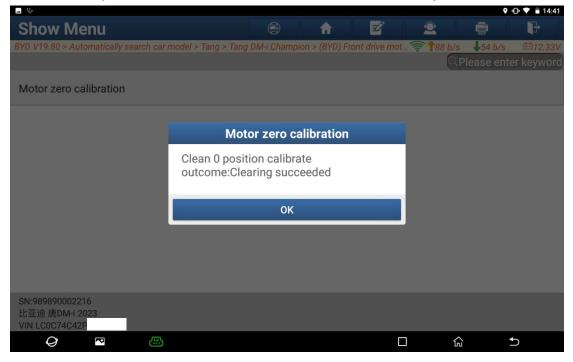
SN:9898900022 ⁻ 比亚迪 唐DM-i 2					
VIN LC0C74C42					
Ø	P	B		<u>ک</u>	€)

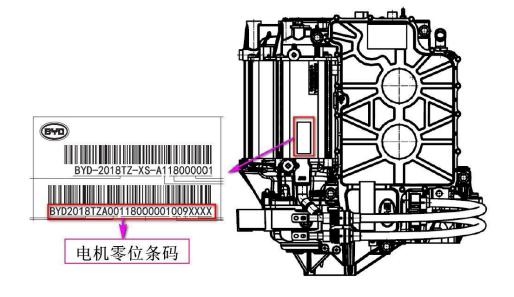
8. Click [Motor zero calibration].

<u>ــــــــــــــــــــــــــــــــــــ</u>					\$) 🕕 💎 🛢 14:41		
Show Menu	6	A	z∕	2	ľ	ŀ		
BYD V19.80 > Automatically search car model > Tang > Tang DM-i Champion > (BYD) Front drive motor controller								
				0	Please ent	ter keyword		
Motor zero calibration								

SN:989890002216 比亚迪 唐DM-i 2023 VIN LC0C74C42					
Ø 🛛			ŝ	Ð	

9. The zero position calibration value is cleared successfully. Click OK.

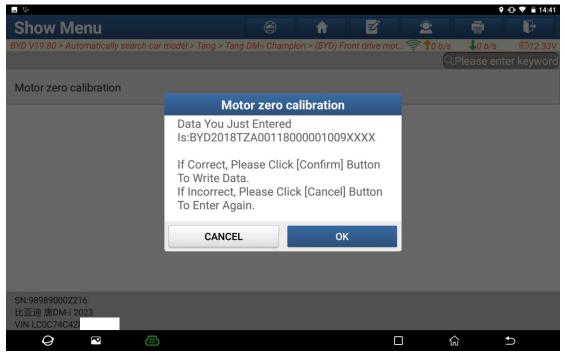




- V						· · · · · · · · · · · · · · · · · · ·	9 🕕 💎 🛢 14:41
Show Menu			A	Ľ	2		P
BYD V19.80 > Automatically search ca	r model > Tang > Tang	g DM-i Champio	on > (BYD) Fro	nt drive mot.	🛜 🕇 0 b/s	🗸 0 b/s	🖽 12.33V
					0		ter keyword
Motor zero calibration							
	Mo	tor zero ca	libration				
	Input 28-digit lal	bel data					
	BYD2018TZA00	0118000001	009XXXX	8			
	BYD2018TZA00)118000001(09XXXX				
	CANCE		ок				
SN:989890002216 比亚迪 唐DM-i 2 <u>023</u> VIN LC0C74C42							
Q D]		Ð

10. Record the 28-digit motor zero position bar code on the motor and enter it. Then, click OK.

11. After confirming that it is correct, click OK.



12. The motor zero position calibration is successful. Click OK to exit.

						9	0 💎 🛢 14:41
Show Menu			A	Z	2		P
BYD V19.80 > Automatically search car	model > Tang > Tang	DM-i Champion	> (BYD) From	nt drive mot.	. 🛜 🕇 0 b/s	📕0 b/s	⊞12.33V
					Q		ter keyword
Motor zero calibration							
	Mot	or zero cali	bration				
	Motor zero c	alibration su	icceeded				
		ОК					
SN:989890002216 比亚迪 唐DM-i 2023 VIN LC0C74C42i							
<i>Q</i> ² ⁽⁴⁾				C] (\sim	€

Statement:

The content of this document is copyrighted by LAUNCH TECH CO., LTD., and no individual or organization may quote or reprint it without consent.