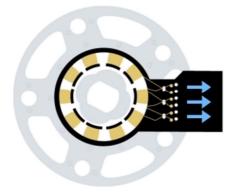
Motor Angle Calibration Introduction

Function Introduction

A resolver is a type of rotation angle sensor for controlling the drive motor that is the power source of EVs. By efficiently controlling the motor, power consumption can be suppressed. To control the motor according to various driving conditions of a vehicle, it is necessary to detect the magnetic pole position of the motor and accurately grasp its rotational speed. The resolver serves as a sensor for these tasks.



- 1. The rotor rotates with the motor.
- The angle is detected by means of an electric signal generated due to a change in the reactance of the rotating rotor and fixed stator.
- **3.** Speed is controlled by sending an electric signal to the motor.

Rotation angle sensor (resolver) for EV/HEV electric motor

The speed of the motor that is the heart of the electric vehicle, when the motor is working in a high temperature environment or in a humid, dusty and other environment for a long time, the



resolver (rotation angle sensor) is prone to failure. After the failure, the rotation angle sensor signal is faulty, resulting in the motor not working normally, reducing the system reliability, and affecting the normal driving of the vehicle.

At this time, it is necessary to calibrate the rotation angle sensor of the motor.

Device Requirement

PAD VII, European Euro Tab III, MM4.0 Other devices can buy "Motor Angle Calibration" function in Mall module.

Support Vehicles

BMW, MINI, Toyota, Lexus, Honda, Acura

Operation Guide:

Take Toyota as an example:

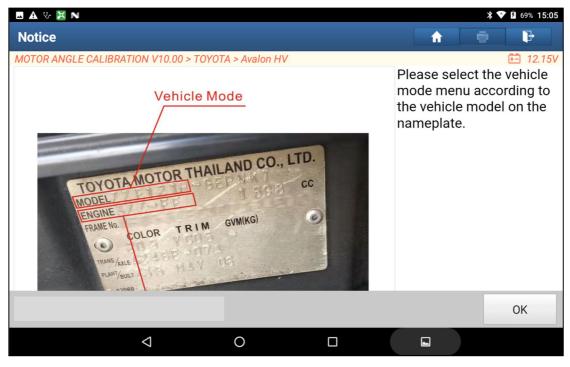
1. Enter Motor Angle Calibration V10.00, Click "TOYOTA".

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MOTOR ANGLE CALIBRATION V10.00 > Menu	🖽 12.03V
FUNCTION INTRODUCTION	ACURA
BMW	HONDA
LEXUS	MINI
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Motor Angle Calibration	

2. Click "Avalon HV".

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MOTOR ANGLE CALIBRATION V10.00 > TOYOTA >	🔁 12.15V
Avalon HV	Camry HV
C-HR EV	C-HR HV
Corolla Cross HV	Corolla HV
Corolla PHV	Harrier HV
Highlander HV	Izoa EV

3. Note "select the vehicle mode menu according to the vehicle model on the nameplate", and click "OK" to continue.



4. Click "AXXH50".

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AXXH50			
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5. Click "A25A-FXS".

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6. Confirm the info and click "OK".

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MOTOR ANGLE CALIBRATION V10.00 > TOYOTA > Avalon HV	/ > AXXH50 > A25A-FXS 🗄 12.15V
Item	Information
Area	Europe and Other
VIN	LFMA180C
Vehicle Name	Avalon HV
Model	AXXH50
Engine Type	4254-FXS
Cancel	ОК
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7. If communication abnormality occurs during the test, please ensure whether the vehicle is equipped with other parts. If other parts are installed, you can try to remove the parts and then perform the test. Click "OK" to continue.

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VIN	If communication ensure whether other parts are in	the vehicle is e	equipped with ot	her parts. If					
Vehicle Name	then perform the Thank you!								
Model	CANCE	CANCEL OK							
Fngine Type			4254-FXS						
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8. Click "Motor generator".

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Motor Generator						
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9. Notice "this ECU controls the power conversion apparatus for driving two motors and the voltage conversion device", click "OK" to continue.

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Motor Generator							
		Noti	ce				
	This ECU controls the power conversion apparatus for driving two motors and the voltage conversion device.						
	CANCEL						
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10. Click "Special Function".

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Special Function				
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11. Select the resolver you want to relearn or initialization; here we select "Resolver Learning/Initialization".

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Resolver Learning/Initialization					
Front Resolver Learning/Initialization					
Rear Resolver Learning/Initialization					
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Resolver Learning/Init	tialization						
	Res	olver Learnin	g/Initializatio	า			
Front Resolver Learn	<usage> To execute re-lea</usage>	rnina for the re	solver when par	ts was			
Rear Resolver Learni	replaced.	0					
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12. This function is used to learn and initialize the correction amount for resolver variations. Refer to the repair manual when you use this function. Press "OK" to proceed.

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Resolver Learning/Init	ialization						
	Resol	ver Learnin	g/Initialization				
Front Resolver Learn	This function is use amount for resolve		d initialize the co	rrection			
Rear Resolver Learni	Refer to the repair r Press 'OK' to proce		you use this func	tion.			
	CANCEL		ОК				
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13. Select "Initialization".

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Initialization				
Learning				
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14. The initialization is ready, turn the IG off; after the IG is OFF, follow the instructions in the repair manual.

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Initialization								
	Res	olver Learning/Ini	tialization					
Learning	The initialization is ready. Turn the IG off. After IG OFF,follow the instructions in the repair manual.							
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