

Solution for 2007 Porsche Panamera Brake Pad Clearance Out of Tolerance

Product Model	Date	Number
X-431 Series	20160624	—

Tested Model:

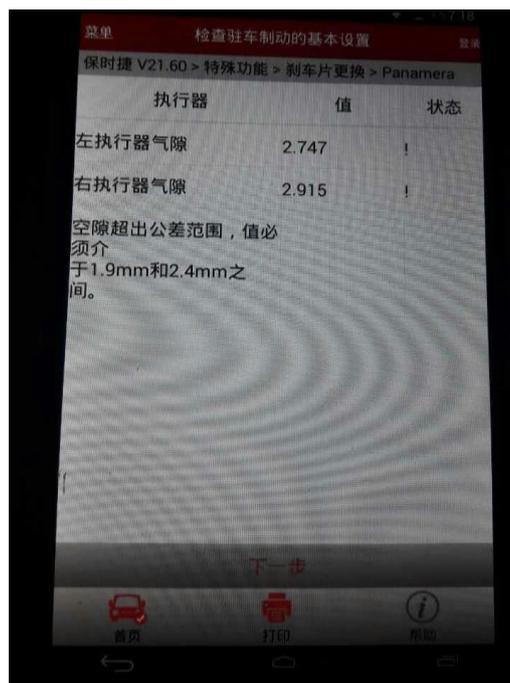
- Porsche Panamera, 2007, VIN=WPOAA2979d10****, see Picture 1



Picture 1

Failure Description:

When replacing the brake pad, it prompts: Left actuator air gap: 2.747, right actuator air gap: 2.915, gap is out of tolerance, the value shall be between 1.9mm and 2.4mm, see Picture 2.



Picture 2

Function Explanation:

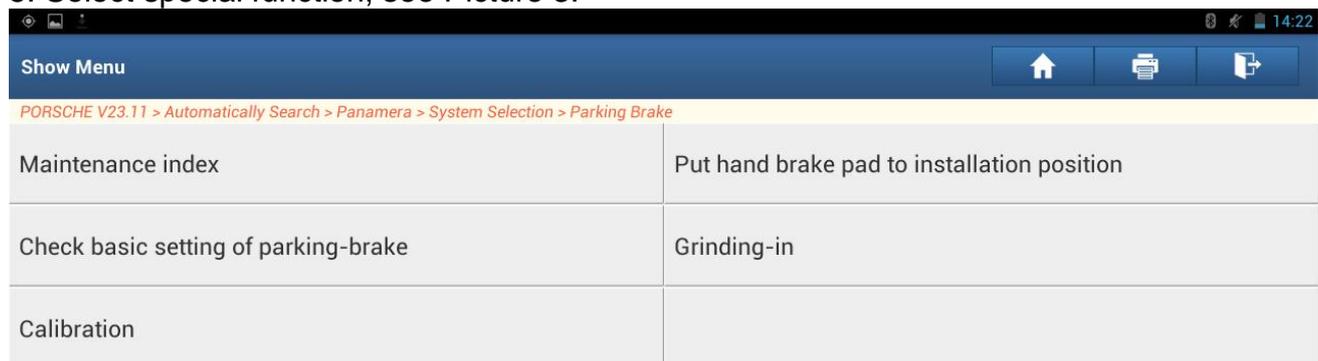
This function allows you to maintain the electronic parking brake system safely and efficiently. Main functions include: Put the handbrake pad to the installation position, check the basic setting of the parking brake (check the gap of the handbrake pad), handbrake pad run-in and calibration.

Caution:

- The procedure of replacing brake pad on Porsche Panamera must be strictly performed according to the requirement listed in the service index.
- After the replacement of brake pad, check the basic setting of the parking brake. Check the gap of the handbrake pad (standard gap is 1.9mm-2.4mm). Continue if it is OK.
- For the replacement of steel brake pad, calibration is performed only after the run-in.

Operation Guideline:

1. Select Porsche Version V21.26 or above.
2. Select automatic search.
3. Select system selection.
4. Select parking brake.
5. Select special function, see Picture 3.



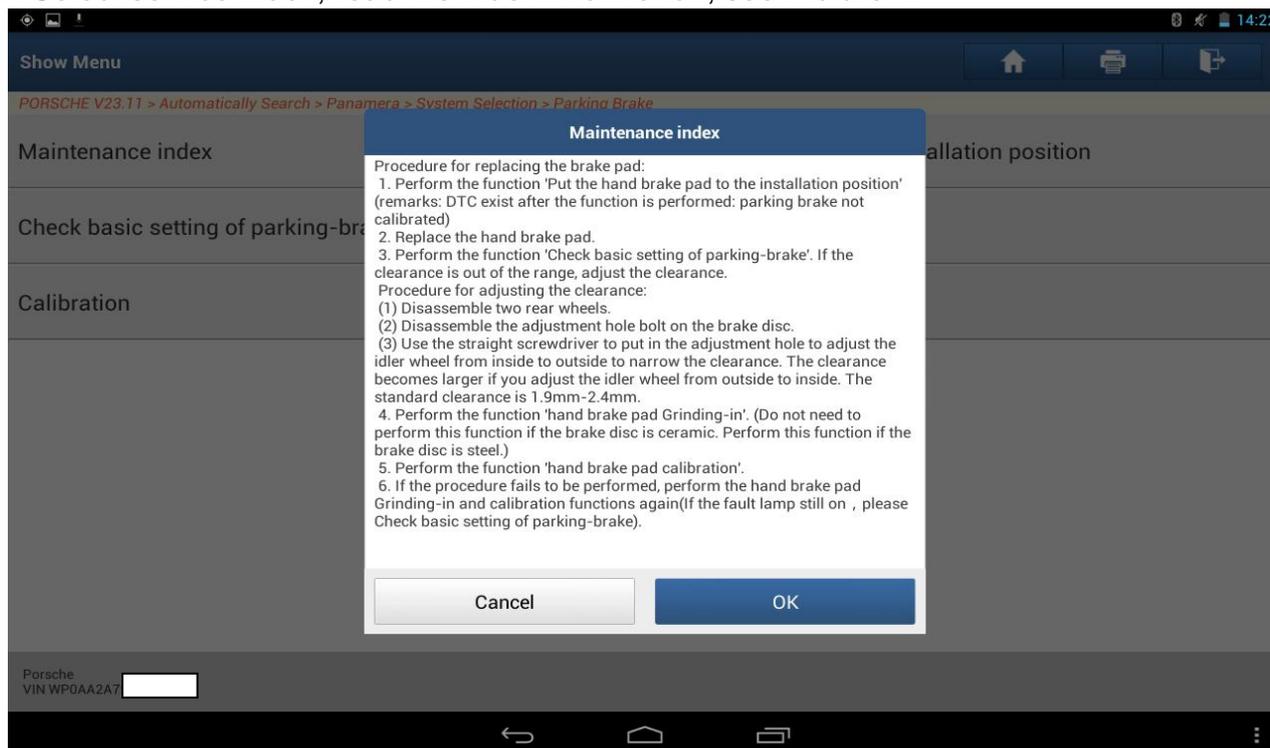
The screenshot shows the software interface with a navigation path: PORSCHE V23.11 > Automatically Search > Panamera > System Selection > Parking Brake. Below this path is a table with three rows of options.

Maintenance index	Put hand brake pad to installation position
Check basic setting of parking-brake	Grinding-in
Calibration	



Picture 3

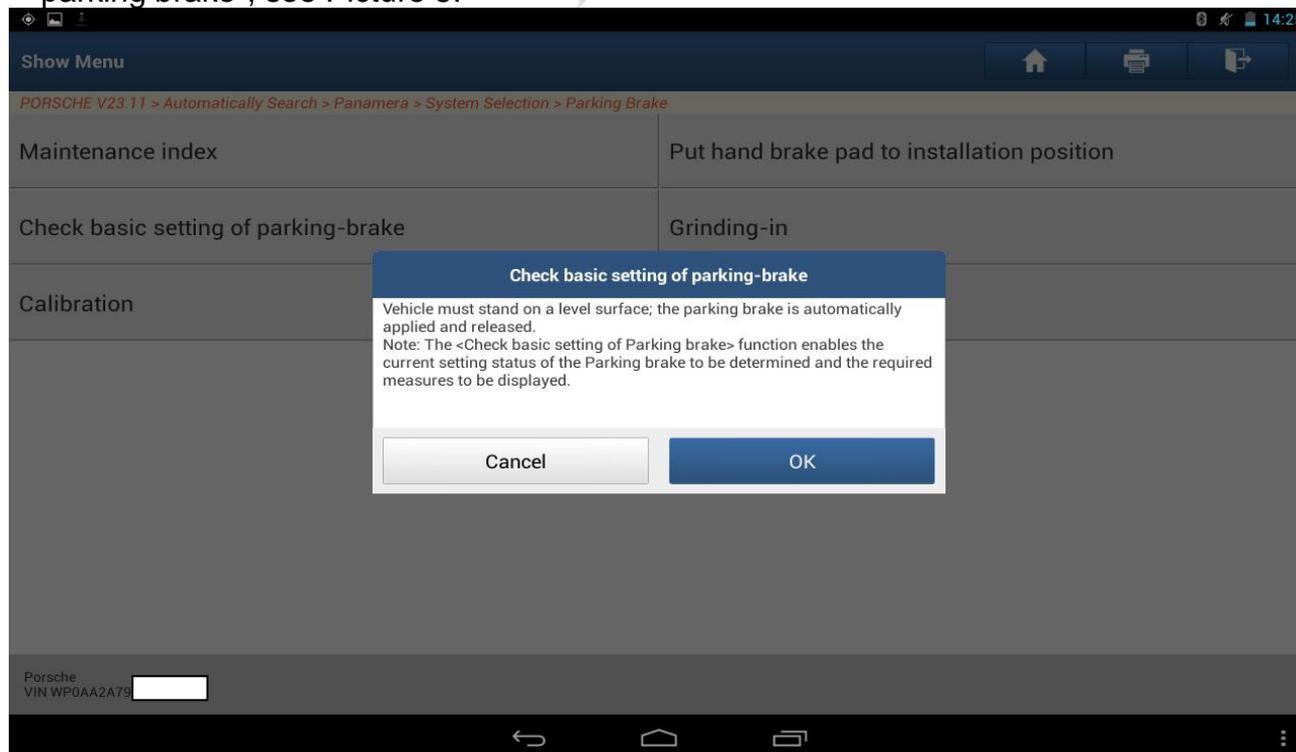
6. Select service index, read the index information, see Picture 4.



Picture 4

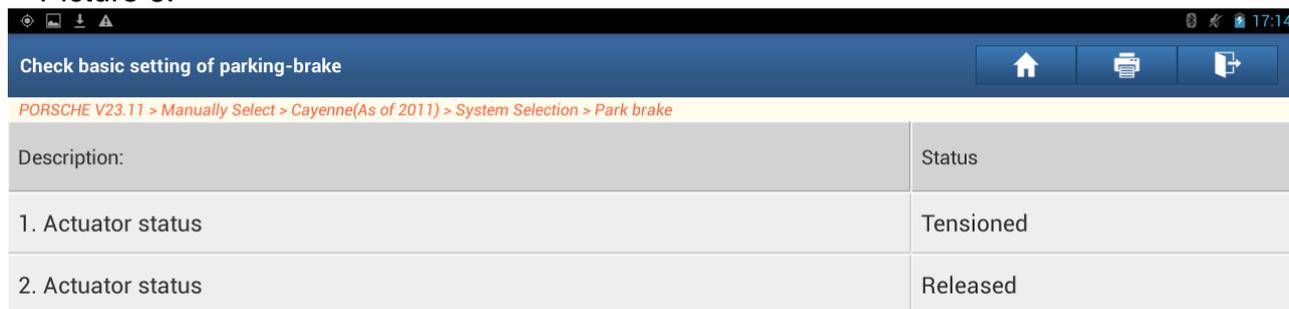
7. To replace the brake pad, select the function of "Put the brake pad to the installation position". After carrying out the function successfully as prompted, replace the brake pad.

8. After the installation of new brake pad, select the function of "Check the basic setting of parking brake", see Picture 5.



Picture 5

9. Click "OK" button, the actuator will complete a process of tension and release, see Picture 6.

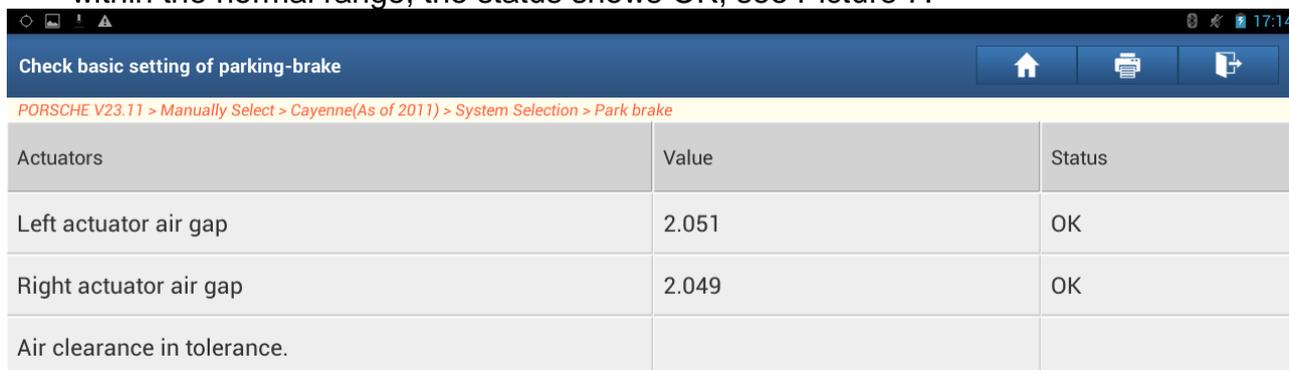


Description:	Status
1. Actuator status	Tensioned
2. Actuator status	Released



Picture 6

10. Click "Next" to check the gap of the brake pad, see Picture 5. Note, the standard gap for Porsche Panamera (as of 2011) is 1.9mm-2.4mm. If out of this range, please manually adjust it. If the value is not in the normal range, the status is an exclamation mark. If within the normal range, the status shows OK, see Picture 7.

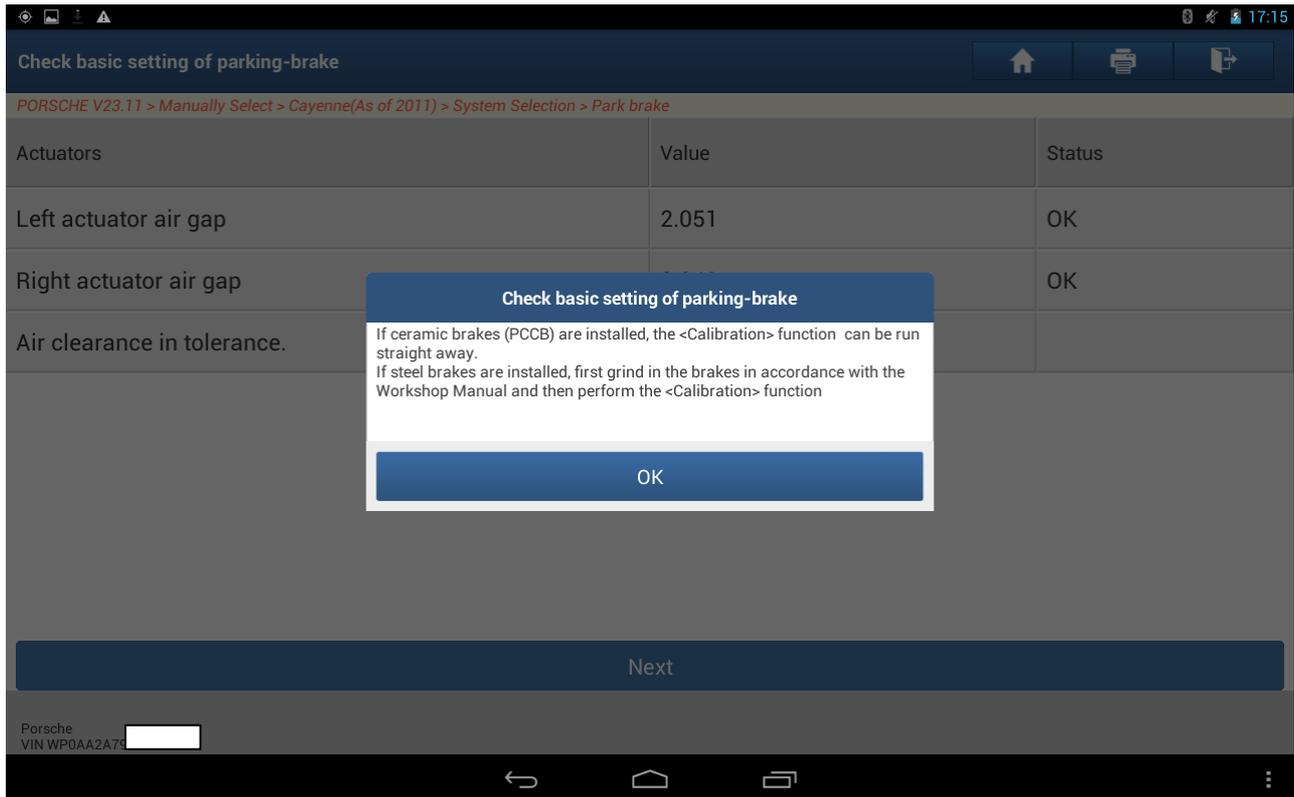


Actuators	Value	Status
Left actuator air gap	2.051	OK
Right actuator air gap	2.049	OK
Air clearance in tolerance.		



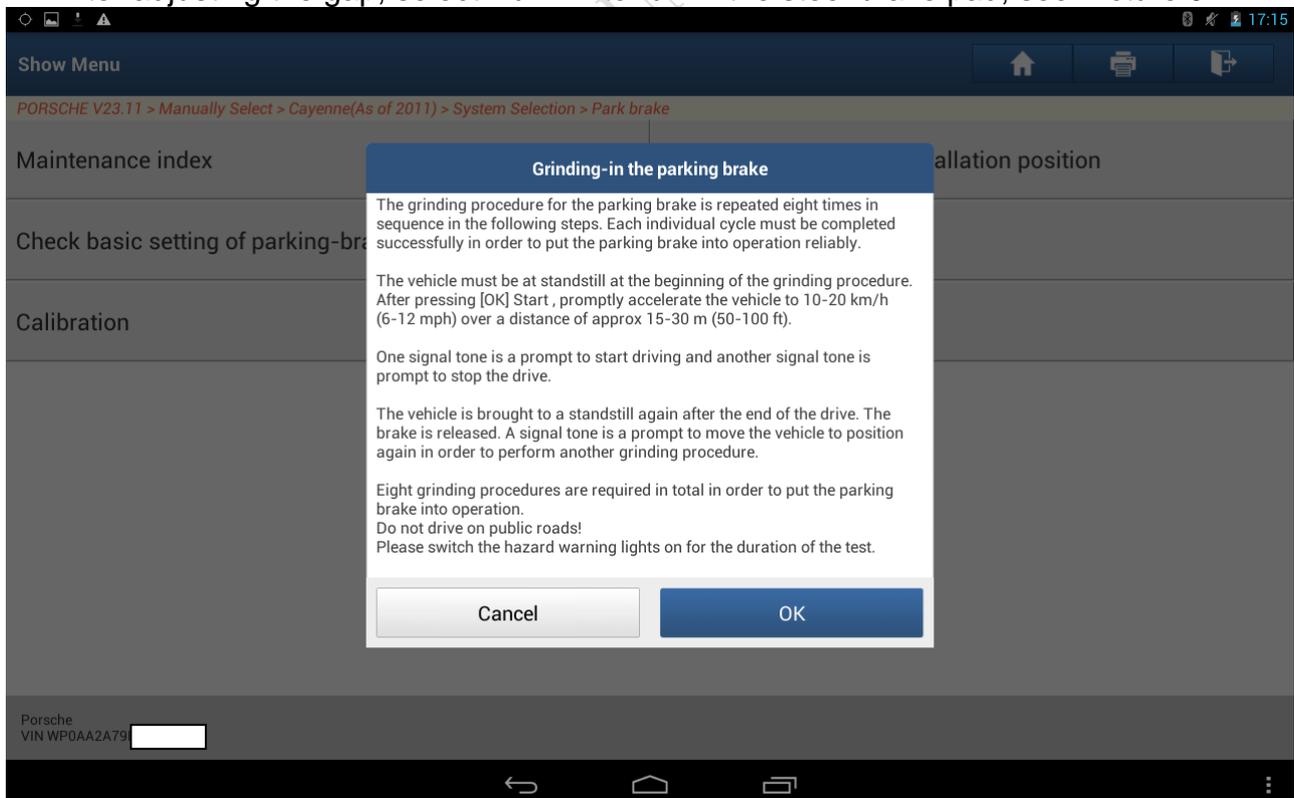
Picture 7

11. Click "Next" to complete the function of "Check the basic setting of parking brake", see Picture 8.



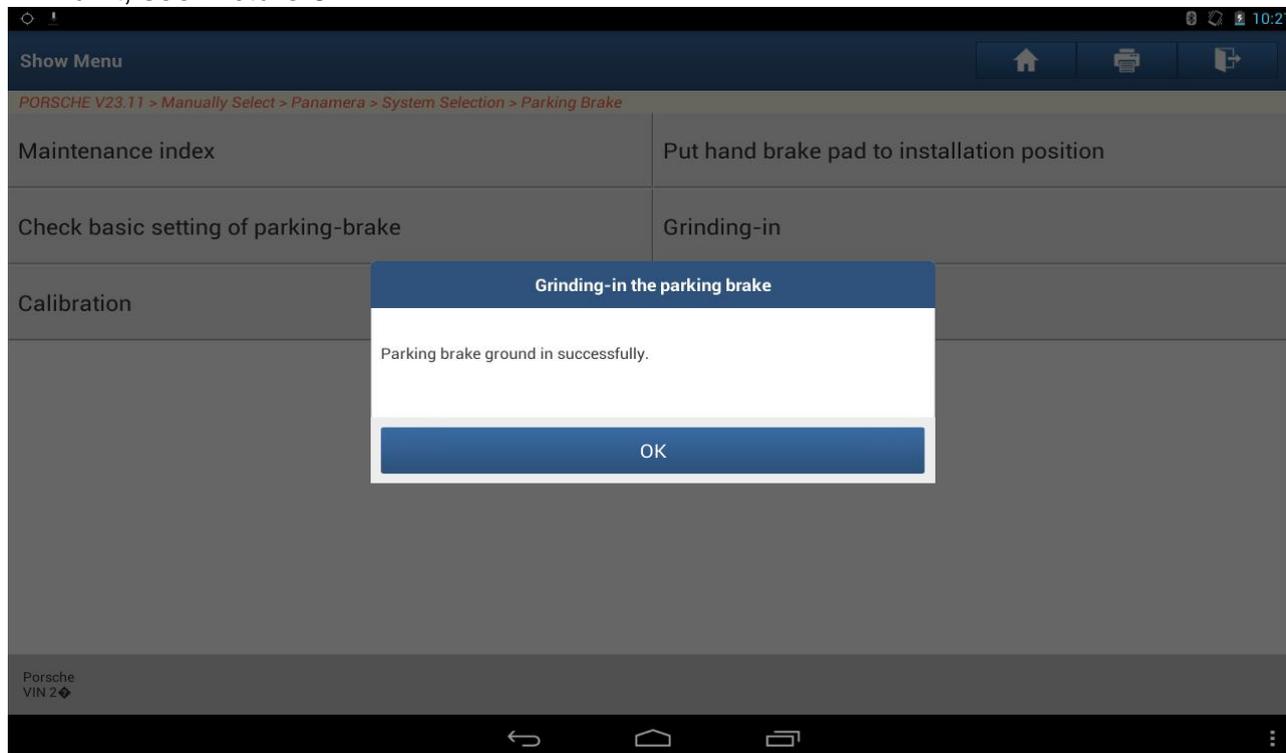
Picture 8

12. After adjusting the gap, select "run-in" to run in the steel brake pad, see Picture 9.



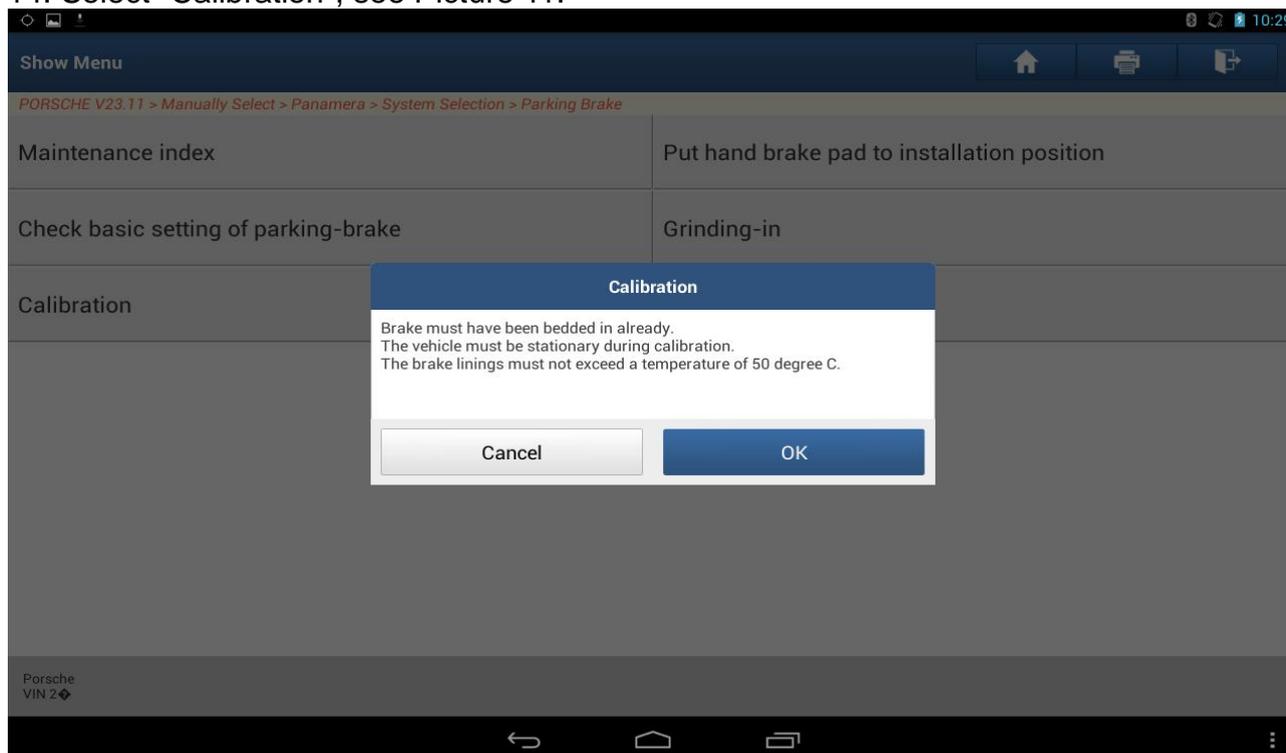
Picture 9

13. After the replacement of brake pad, perform run-in! This function equals to adaptive learning. The instrument panel will prompt "Parking system enters maintenance mode". This function requires one person to drive and another person to operate the decoder software. It also has strict requirement to the site. Be well prepared. Follow the decoder software's prompt, after 8 times of correct operations of driving speed and time and stop time, the decoder software will prompt successful run-in and write into the control unit, see Picture 8.



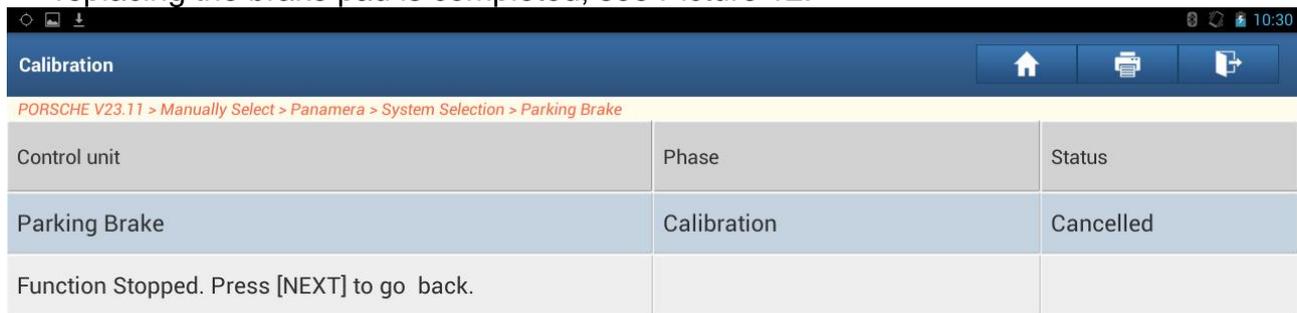
Picture 10

14. Select "Calibration", see Picture 11.



Picture 11

15. After satisfying the calibration conditions, click OK to perform the "Calibration" of the parking brake. When it prompts the calibration completed, the software operation of replacing the brake pad is completed, see Picture 12.



Control unit	Phase	Status
Parking Brake	Calibration	Cancelled
Function Stopped. Press [NEXT] to go back.		



Picture 12

16. Click "Next" to complete and exit. Turn ignition off and on again to test the vehicle. When everything is OK, the procedure of replacing brake pad is completed.