# Operation Method for Brake Pad Replacement of Porsche Cayenne (2011-)

Product model	Date	Number:
X-431 Pro series	20160229	

#### Function Description:

The function ensures the electronic parking brake system can be maintained safely and effectively.

The main functions include the operations of placing the brake shoe into the installation position, checking the basic settings of the parking brake (Check the gap of the brake shoe), and running in and calibrating the brake shoe, etc.

## Precautions:

The procedures for replacing the brake pad of Porsche Cayenne must strictly follow the requirements in the maintenance index;

After replaced the brake pad, check the basic settings of the parking brake. Check the gap of the brake shoe (Standard gap 1.9mm-2.4mm), after it reaches the standard, then move on to the next step.

After replaced the steel made brake pad, firstly carry out the run in and then the calibration.

### **Operation Instructions:**

- 1). Select Porsche V21.51 or above;
- 2). Select the Manual Select Cayenne(2011-);
- 3). Select the System Select;
- 4). Select the Parking brake;
- 5). Select the Special Function;



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6). Select the Service index to read;



7). When it is required to replace the brake pad, select the function "Place the brake pad into the installation position", after successfully carry out the function according to the prompts, replace the brake pad.

$\equiv$			Show M	lenu		
PORSCHE V21.80 > Specia	I Function > Bra	ke Pad Change	> Gayenne(As ol	2011)		
Maintenance index						
Put hand brake pad to	installation p	osition				
	And the state of the local division of the l	e pad to instal	lation position			
Check basic setting of		e ignition switc ne electronic h	h and do not st and brake.	tart the engine	12	
Grinding-in						
Calibration		Cancel			ок	
6	3					( <u>†</u> )
New S	ession			Print		Help
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8). After installed a new brake pad, select the function "Check the basic settings of the parking brake";

		Show M	/lenu			Logir
PORSCHE V21.60 > Specia	al Function > Brake Pad Chan	ige ≻ Gayenne(As o	f 2011)			
Maintenance index						
Put hand brake pad to	Check basic setting of pa	arking-brake				
Check basic setting of	Note: The <check basic="" s<="" td=""><td>etting of Parking</td><td>brake&gt; function</td><td>enables the curr</td><td>ent.</td><td></td></check>	etting of Parking	brake> function	enables the curr	ent.	
Grinding-in	setting status of the Park be displayed.	ing brake to be de	termined and in	e required meas	ures to	
Calibration	Cancel			ок		
-	_		-			
New S	<b>ie</b> ssion		Print -		(j) Help	
	$\triangleleft$	0				

9). After clicked the Confirm button, the actuator will complete a process from the application to the release;

≡	Check	basic setting of par	king-brake		Login
PORSCHE V21.80 > Special Function > B	rake Pad Change	> Cayenne(As of 2011)			
	Description:				Status
1. Actuator status				Tensioned	
2. Actuator status				Released	
		Next			
<b>_</b>					(i)
New Session		Print			Help
	$\triangleleft$	0			

10).Click "Next step" to check the gap of the brake pad. Notice: The standard gap of Cayenne (2011-) is 1.9mm-2.4mm. If the gap is outside the range, please manually adjust it;

=	Check basic se	tting of parking	j-brake		Logi
PORSCHE V21.80 > Special Function >	Brake Pad Change > Cayenne	e(As of 2011)			
Actuate	ors		Value	Status	
eft actuator air gap		2.051		V	
Right actuator air gap		2.049		$\checkmark$	
Air clearance in tolerance.					
		Next	_	_	
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		the second se			

11).Click "Next step" to complete "Check the basic settings of the parking brake" function;

		Check basic	setting of parki	ng-brake		Login
PORSCHE V21.80 > Specie	al Function > Brake Pac	l Change > Cayen	ne(As of 2011)			
	Actuators			Value	e i	Status
Left actuator air gap			2.051			/
Right actuator air gap	Check basic setting	of parking-bra	ke			
Air clearance in tolera	If ceramic brakes (F straight away. If steel brakes are in Workshop Manual a	istalled, first grin	id in the brakes i	n accordanc		
			Next			~
New Sea	atom (		Print			
New Sea		٩	0	٥		

12). After adjusted the gap, select the "Grinding in" function to run in the steel made brake shoe;

=	Show Menu	Login
PORSCHE V21.80 > Special Function > Brai	e Pad Change > Cayenne(As of 2011)	
Maintenance index		
Put hand brake pad to installation p	osition	
Check basic setting of parking-brak	B	
Grinding-in		
Calibration		



13). After replaced the brake pad, the Grinding in must be carried out. This function is equivalent to the adaptive learning, the instrument panel will prompt the "Parking system enters into the maintenance mode", this function requires the drive test and repeats eight times with one person driving and one person operating the software, which has strict requirements on the site condition, and the operator must be fully prepared. Only when the eight run-ins successfully completed can the "Calibrate" function be carried out;

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$\equiv$	Show Menu	Logir
PORSCHE V21.80 > Specia	Grinding-in the parking brake	
Maintenance index	The grinding procedure for the parking brake is repeated eight times in sequence in the following steps. Each individual cycle must be completed successfully in order to put the parking brake into operation reliably.	
Put hand brake pad to	The vehicle must be at standstill at the beginning of the grinding procedure. After pressing [OK] Start , promptly accelerate the vehicle to 10-20 km/h (6-12 mph) over a distance of approx 15-30 m (50-100 ft).	
Check basic setting o	One signal tone is a prompt to start driving and another signal tone is prompt to stop the drive.	
Grinding-in	The vehicle is brought to a standstill again after the end of the drive. The brake is released. A signal tone is a prompt to move the vehicle to position again in order to perform another grinding procedure.	
Calibration	Eight grinding procedures are required in total in order to put the parking brake into operation. Do not drive on public roads! Please switch the hazard warning lights on for the duration of the test.	
G	Cancel	(i)
New S	ession Print	
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## 14). <u>Select the "Calibrate" function;</u>

$\equiv$			Show	Menu				Login
PORSCHE V21.80 > Specia	l Function > Brake	Pad Change > Ca	yenne(As	of 2011)				
Maintenance index								
Put hand brake pad to	installation on Calibration	sition						
Check basic setting of	The vehicle mu:	e been bedded in st be stationary d s must not exce	luring cali	bration. perature of	f 50 degre	e C.		
Grinding-in								
Calibration		Cancel			(	ж		
	3			帚			(1)	
New S	ession	⊲	о	Print	D		Helü	

=		Calibration		Login
PORSCHE V21.80 > Special Function > Brake P	ad Change > C	ayenne(As of 2011)	1	
Control unit			Phase	Status
Parking Brake		Calibra	tion	Not started
Press [NEXT] to start, [BACK] to go bac	k			
		Next		
<b>_</b>		-		(i)
New Session		Print		Help
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15). After the calibration conditions have been fulfilled, click Confirm to carry out the "Calibrate" function of the parking brake. After it indicates the calibration is completed, the software operation of the brake pad replacement service is completed.

	Calibration	Log
ORSCHE V21.80 > Special Function > Brake Pad Change > Cayer	nne(As of 2011)	
Control unit	Phase	Status
arking Brake	Calibration	Query ended
alibration completed. Press [NEXT] to continue.		
	News	
0	Next	
New Session	<b>.</b>	(j) Help
New Session	Print	(j) Help
New Session	Print	
New Session	Print	
New Session	Print	