



Rear Boxster Brake Adapter Kit for Long Wheelbase 911/912/914 - Installation Instructions

2190013

Application -

Caliper Position	Elephant Part#	1969-1989		
		911	912	914
Rear LWB	2190013	X	X	X

Required But Not Included – Available separately from Elephant Racing

Calipers with hardware • Master Cylinder Kit • Rotors • Brake Pads and Fluid • Hardline to replace bias valve

Note: Both steel and aluminum trailing arms are supported. Aluminum trailing arms require the removal of heat shield mounting ears for fitment.

Rear LWB kits use standard type '84-'89 911 rotors 290x24mm (911-352-041-08), requires trimming of pins and sometimes pads depending on brand.

Rear LWB kits may alternative use standard type '69-'83 911 rotors 290x20mm (911-352-041-14), no trim.

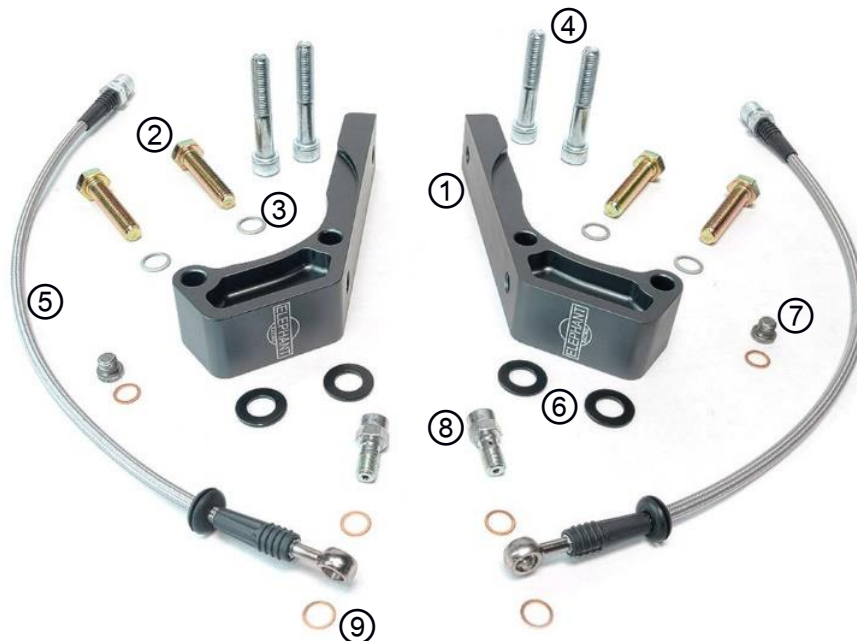
Rear LWB kits use '97-'04 986 Boxster calipers (non-S type, Left 986-352-423-01 / Right 986-352-424-01).

Rear LWB kits for '65-'76 cars without booster need 22.5mm Master Cylinder Kit (Elephant Racing 2190011).

For cars '77 and up with factory booster use the 23mm Master Cylinder (Elephant Racing 1-93035501103)

Parts list:

Ref #	Qty.	Description	Ref #	Qty.	Description
REAR LWB					
①	2	Rear Adapter Bracket	②	4	Bracket Mounting Screw
③	4	Washer M12	④	4	Caliper Mounting Screw
⑤	2	Brake Hose Rear – 20.25 in	⑥	4*	Rear Caliper Spacer - 2mm (*steel trailing arms only)
⑦	2	M10 Plug	⑧	2	Banjo Bolt
⑨	2	Crush Washer			



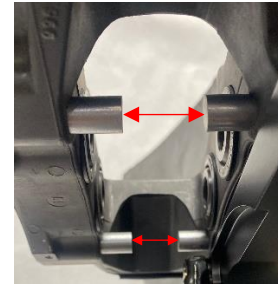
Introduction - Congratulations on your purchase of the Elephant Racing Rear LWB Boxster Caliper Kit. This system is an upgrade over the stock braking system found on a 911/912/914 and allows the use of larger

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calipers and rotors. These 4 piston calipers use larger pads and thicker rotors, offering greater braking performance and increased thermal capacity over the original brakes.

Modifying the rear caliper pins to fit 24mm wide rotors -

1. When using 24mm wide rear 85-89 Carrera rotors, the pins that support the brake pads need to be trimmed to allow the wider rotor to fit between them. Using a cutoff wheel or similar tool, shave approximately 2mm from the end of each pin. It is sometime necessary to trim the pad thickness. Use a belt sander to shave a small amount from the pad face.
2. When using 20mm wide rear 69-83 rotors, no trimming is required



Modifying the rear caliper to accept banjo brake hose -

1. Before mounting the caliper on the car, disconnect the crossover line and add the banjo bolt (8), 2 crush washers (9), and the banjo end of the brake hose (5) to the inboard side of the caliper as shown.

Re-form the crossover line to meet the banjo bolt. Then remove the brake hose so that it can later be installed onto the trailing arm (see steps below).



2. Install the M10 plug (7) and crush washer (9) into the caliper to block off the unused inlet port as shown. Torque to **12Nm**

Plug port



Installing the Rear Calipers – 911/912/914

Remove bias valve for 85-89 (replace with 8" hardline – not included)

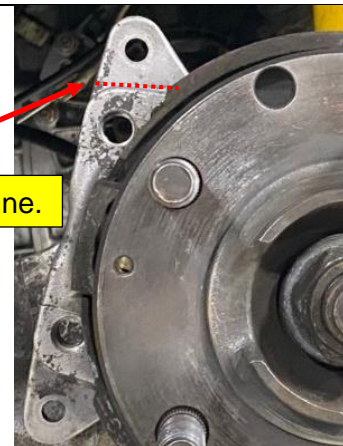
1. Remove old rear calipers, and rotors. Refer to shop manual.

2. On cars with aluminum trailing arms, the backing plate and backing plate mounting ears must be removed. (No trimming is needed on steel trailing arms).





Trim trailing arm along dotted line.

Following along the thick section, trim the backing plate mounting ears and file smooth. Use the caliper and caliper bracket (1) to check clearance, gradually continue to remove material until the caliper fits.

Check fitment after trimming.



3. Install rear rotors. Refer to shop manual.

<p>4. Route brake hose ⑤ along the trailing arm by routing the banjo end of the line through the tab in the trailing arm. Then secure with the grommet.</p>	
<p>5. Install the caliper adapter bracket ① to trailing arm using the bracket mount screws ② and washers ③. The <u>rear caliper spacers ⑥ are only used with steel trailing arms.</u> The spacers install between bracket and trailing arm.</p> <p>Tighten the caliper mounts to the proper torque spec: Aluminum Trailing Arm – 60Nm Steel Trailing Arm – 70Nm</p> <p>Mount the caliper on the adapter bracket using the caliper screws ④ Torque the caliper screws to 60Nm</p> <p>Note: Bleeders will be near the top when installed in the correct orientation.</p>	
<p>6. Connect the banjo end of the brake hose ⑤ through the banjo bolt ⑧ and 2 crush washers ⑨ to the caliper. Clock the banjo as shown so the hose routes over the spring plate on the trailing arm. Then connect the other end to the hardline where the trailing arm meets the chassis.</p> <p>Torque all fluid connections to spec: Brake hose to chassis hardline – 12Nm Banjo Union Bolt – 16Nm Crossover Lines – 12Nm Bleed Nipple – 10Nm</p> <p>Note: Check that throughout the full range of motion the brake hose does not make contact with the body as the suspension travels.</p>	
<p>7. Install pads and bleed system.</p> <p>Note: During bleeding the calipers need to be rotated so that the bleed screws are at the highest point on caliper. This requires the caliper bracket to be loosened and rotated.</p> <p>Note: Before installing wheels, check the clearance to the calipers. Wheel spacers may be needed for some wheel offsets and spoke geometry.</p>	



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