

NEUSPEED®

BRAKE UPGRADE

GOLF IV & JETTA IV 1.8T & VR6 / NEW BEETLE 1.8T
PART# 99.10.89D (DRILLED ROTORS) / PART# 99.10.89S (SLOTTED ROTORS)
INSTALLATION INSTRUCTIONS

PART LIST: 2 – SLOTTED OR DRILLED ROTORS 2 – NEUSPEED CALIPER BRACKETS
 2 – BRAKE LINES 2 – M10 BANJO BOLTS
 4 – M10 COPPER CRUSH WASHERS

TOOLS REQ: 1 – 10MM FLAIR WRENCH 1 – RATCHET
 1 – 11MM FLAIR WRENCH 1 – SCREWDRIVER
 1 – 18MM SOCKET 1 – TORQUE WRENCH
 1 – 10MM HEX HEAD DRIVE SOCKET 1 – FRESH BRAKE FLUID
 1 – BLEEDER BOTTLE

STOP! BEFORE INSTALLING, MAKE SURE YOU HAVE PURCHASED THE FOLLOWING PORSCHE PARTS:

- #986.351.422.03 – Boxster right front caliper
- #986.351.421.03 – Boxster left front caliper
- #999.067.041.09 – caliper bolts. Quantity of 4 needed.
- #986.351.939.15 - front brake pad set for Porsche Boxster caliper (non-S model.) Note: Aftermarket brake pads may be substituted in place of the Porsche O.E. brake pads.

NOTE: On the Porsche Boxster, the front brake caliper is mounted behind the rotor. However, on Volkswagen vehicles, the front caliper is mounted ahead of the rotor. As a result, you must swap some of the external fittings on the caliper prior to mounting the caliper on the car.

1. Place the Boxster left and right side brake calipers on a table as shown in Illustration #1. **Make sure the position of the mounting holes, bleed screws and external bridge lines match our illustration.**

2. Use an 11mm flair wrench to remove the 2 bleed screws from the top of each caliper. Set the bleed screws next to the caliper because you will need to re-use them in a moment.

3. Use a 10mm flair wrench or open end wrench to remove the external bridge line from the bottom of each caliper. Place the bridge line next to the caliper it came off of.

4. As shown in Illustration #2, move the bleed screws to the bottom of each caliper and thread them into the holes hand tight.

5. Move the external bridge line from the bottom of the right side caliper up to the top of the left side caliper. Tighten the 10mm fittings with a flair wrench or open end wrench.

6. Move the external bridge line from the bottom of the left side caliper up to the top of the right side caliper. Tighten the 10mm fittings with a flair wrench or open end wrench.

7. Park car on level ground and chock wheels. Raise front of vehicle and secure with jack stands. **NEVER WORK ON A VEHICLE SUPPORTED ONLY WITH A JACK.** Remove front wheels.

8. Use an 11mm flair wrench to disconnect the factory rubber brake line from the hard line located on the inside fenderwell. Place a cap or plug over the factory hard line fitting to prevent brake fluid from leaking out.

9. Remove the two 18mm bolts that secure the VW brake caliper to the spindle. Set the bolts aside as they will be re-used later.

10. Slide the entire VW brake caliper (with pads still loaded inside and rubber brake line attached) off the front rotor. At this time, check to see if your vehicle is equipped with brake pad wear sensor located on driver's side. If equipped, disconnect and set aside for now.

11. Remove the single Phillips head screw that holds the factory brake rotor to the hub. Remove the brake rotor.

12. Clean the mounting face of the hub using steel wool and/or WD-40 to remove any rust and debris. Place the NEUSPEED 12.3" rotor onto the hub. Use the original Phillips head screw to secure the rotor to the hub. Tighten screw to 3 ft-lb (4 Nm.)

13. Bolt the NEUSPEED billet caliper adapter to the factory spindle using the factory 18mm hex bolts. The head of the bolt fits into the round pocket cut in the NEUSPEED adapter. Tighten bolts to 92 ft-lb (125 Nm.)

14. Insert the front brake pads into Porsche Boxster caliper. Slide the Boxster caliper over the brake rotor and bolt it to the NEUSPEED adapter using the 10mm Allen-head Porsche bolts, part # 999.067.041.09. Make sure the bleed screws on the Porsche caliper are located at the top of the caliper. If the bleed screws are pointing down towards the ground, recheck your work from steps 1-6 above. Tighten the two bolts that hold the caliper to the NEUSPEED bracket to 63 ft-lb (85 Nm).

15. Connect and tighten the stainless brake line to the Boxster caliper using the supplied banjo bolts and crush washers. Each banjo bolt uses 2 crush washers – one between the bolt head and the brake line fitting, and one between the brake line fitting and the brake caliper.

16. Connect and tighten the other end of the stainless line to the factory hard line fitting on the inside fenderwell. With the steering wheel centered in the straight ahead position, the front brake line should be centered between the inside fenderwell and the front strut tube.

17. Bleed brakes until firm brake pedal pressure is achieved. Clean the front and back braking surfaces of the brake rotors with soap and water or brake cleaner to remove any grease or dirt that may have settled on the rotor during the installation process.

18. If your vehicle came equipped with brake pad wear sensor, cut sensor wire on pad side of connector. Pull back on protect sheathing to expose two wires. Strip wires and solder or crimp wires together to complete circuit. Use heat shrink tubing or electrical tape to protect exposed wire. Plug modified connector into original harness on driver's side of vehicle.

19. Mount front wheel and torque lug bolts to 87 ft-lb (120 Nm).

20. Bed the new brake pads carefully with at least a dozen gradual stops from 50-to-0 mph. Test drive carefully!

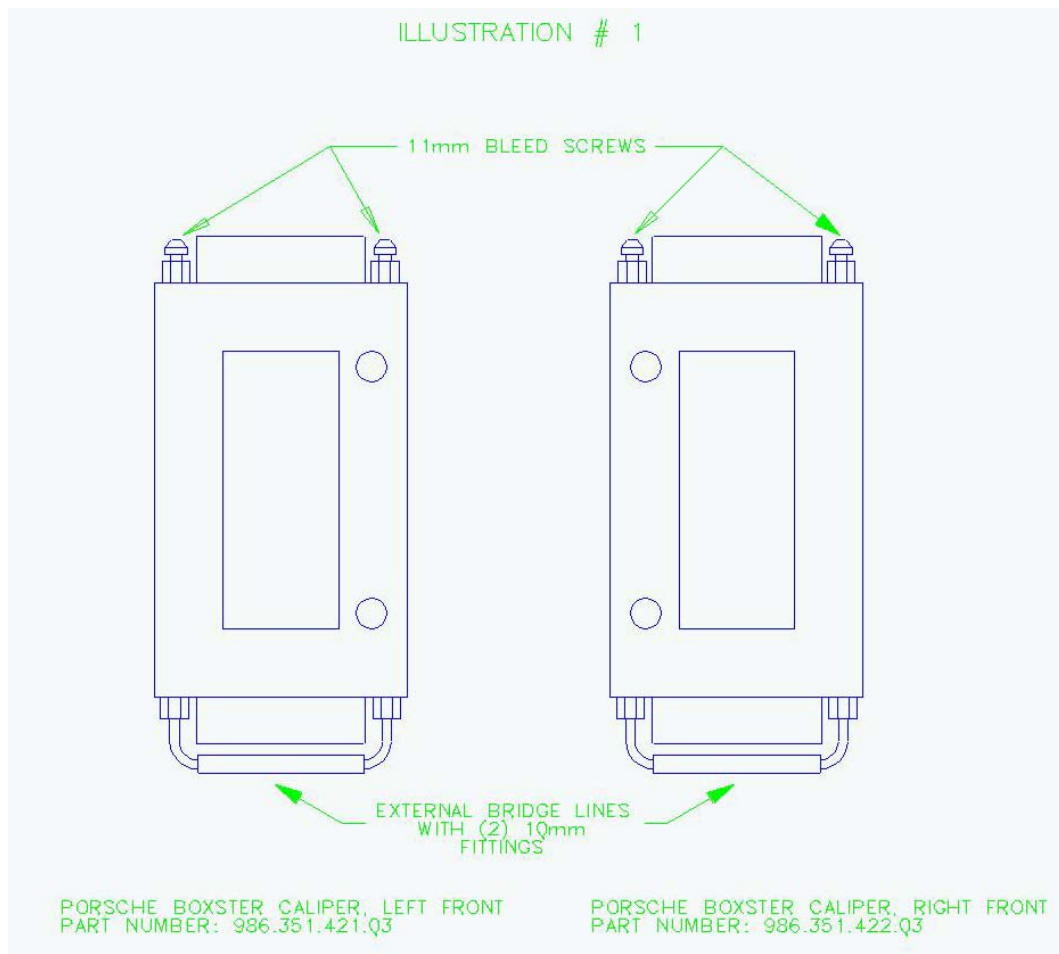


ILLUSTRATION # 2

