RACINGLINE

Big Brake Kit

Stage 2 4 Piston
Stage 3 6 Piston

FITTING INSTRUCTIONS

WHAT'S IN THE KIT?

- 2 x RacingLine 6 Pot Caliper
- 2 x Calliper Bracket
- 2 x 380 / 355 / 345mm Brake Rotor
- 4 x M12 Cap Head Bolts
- 2 x Braided Brake Line
- 2 x Brake Pad Pairs
- 2 x Banjo Bolt
- 4 x Copper Washers

REQUIRED TOOLS AND PARTS

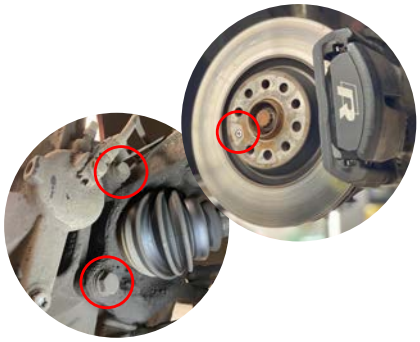
- 21mm Socket
- 18mm Spanner
- 17mm Spanner
- 10mm Allen Key
- 13mm Brake Spanner
- T30 Torx
- Torque Wrench
- Brake Bleeding Kit

FITTING NOTES

- It is recommended that they are fitted by persons possessing the necessary expertise i.e. a trained vehicle technician.
- Brake disc and caliper mounting surfaces should be clean and free from excessive high spots rust etc.
- Ensure the caliper fixing bolts are correctly fitted and fully torqued (M14 bolts VWR kit 80-90Nm).
- Brake system should be fully bled ensuring there is no air present.
- The brake fluid reservoir should be filled within the maximum / minimum conditions specified.
- Pads should be gently bedded for a min of 100 miles with no heavy braking being done within this time.
- Finally, before driving off, double check all fittings and torques, and ensure that the wheel bolts are correctly fitted and torqued (refer to vehicle/wheel manual).
- The brake fluid reservoir should be filled within the maximum / minimum conditions specified.
- For fitment of either the Stage 3 or Stage 3+ (Ceramic Rotor) brake kits, on RS3 Sportback/Saloon or TTRS, shims between the bearing housing/upright and caliper mounting bracket are required to correct caliper offset and therefore centralise the disc between the pad surfaces – failure to do so will cause caliper and rotor damage.

Step 1:

Stock Brake Removal – With the vehicle securely raised, remove all wheels. Disconnect pad wear indicator plug Remove stock caliper from upright by removing the 2 x M14 OEM bolt from the rear of the caliper with a 21mm socket. Secure caliper away from disc and brake lines (ensuring brake lines are still connected). Remove stock disc using a T30 torx and clean any high spots on mating faces of the wheel hub to ensure correct fitment.



Step 2:

Installation of RacingLine Disc, Bracket & Caliper – Locate and mount the 380/355/345mm disc ensuring location and direction of rotation are correct. Next align the disc correctly with the M6 locating screw hole on the hub. Install new bell and rotor using the original countersunk locating screw through the M6 countersunk hole on the bell into the hub (VW P/N N10648301 if you require a replacement) . Install caliper bracket onto suspension upright using bolts OEM Bolts. Torque to 200N/m. Install RacingLine caliper to brake caliper bracket using 10mm allen key for 2 x M12 cap head bolts Torque to 90N/m ensuring the bleed nipple is at the top. Plug pad wear indicator into vehicle harness. Please note: the RacingLine 6 piston brake kit does not have a brake wear indicator. You will need to bridge the circuit on the vehicle multiplug to ensure the warning light remains off.

Step 3:

Installation of braided brake lines – Connect braided brake line to the new caliper. Place the banjo bolt through the female end of the braided line with a copper washer either side of the fitting. `Orientate the other end of the brake line fitting as shown in. Disconnect brake line location clips of OEM brake line and run braided line in its place. Before removing the OEM brake fitting, ensure brake fluid reservoir is filled to MAX. Using 13mm and 17mm spanners detach the OEM brake union and remove from vehicle. Attach braided brake line to the vehicle brake line ensuring a complete hydraulic seal and reattach retaining clips.

Step 4:

RacingLine Performance recommend RacingLine 5.1 Race Brake Fluid VWR69000BF1 for all our 4 & 6 Pot RacingLine Performance brake kits. You will need 3 bottles for a full car bleed.

Brake Bleeding and Wheel Refit – It is recommended to use a vacuum bleeder when bleeding the braking system. If one is not available, this will be a two-person job. In order to bleed the system properly it must be bled in a specific sequence, listed as follows: Passenger rear, Driver rear, Driver front, Passenger front. Before you start refill the reservoir to a level between the maximum and minimum mark with the new brake fluid and check this level throughout the sequence.

- One person will operate the brake pedal throughout the sequence.
- Press brake pedal slowly three times, not allowing pedal to travel completely to the floor. (Hint: Use something under the pedal to keep the pedal two inches from the floor.) On the third pump, hold pressure to the pedal.
- Starting with passenger rear, open bleeder screw and release fluid until stream dies.
- With pressure still applied to the pedal, tighten bleeder screw and repeat steps 1-4 until fluid flows smoothly with no air.

Continue bleeding each brake in the suggested sequence always checking the level in the brake reservoir. Once sequence is completed, check the pedal for firmness. If the pedal feels spongy, repeat bleeding sequence.
Note: Once brakes have been successfully installed, allow 100 miles for brake pads to fully seat.

Refit Wheels, if using OEM wheels a 5mm hub adaptor VWR620005MM may be required to allow wheel/brake clearance. Torque wheel bolts to 120N/m.

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Bedding-In Procedure

Typically, heavy braking on the road will generate approximately 1 to 1.1G of deceleration. At this rate, ABS will be activated on such equipped vehicles. A moderate braking effort is needed to properly break in rotors and pads. A stopping force of approximately 0.8G's, just short of ABS intervention is a general estimate of pedal effort you are trying to achieve.

After completing installation, make a series of 10 stops from 60mph (100kph) to 5-10mph (10-15kph). At the end of each stop, immediately accelerate to 60 mph (100kph) again for the next stop. The exact speed is not critical. Accelerate to approximately 60mph (100kph) and begin the braking cycle. As you approach 5-10 MPH (10-15kph), it is not necessary to watch the speedometer, keep your eyes on the road and approximate your speed at the end of each cycle. Do not come to a complete stop, as you will imprint pad material onto the disc, risking a vibration.

There are several indicators to look for while bedding in the system. On the 8th or 9th stop, there should be a distinct smell from the brakes. Smoke may be evident after several stops as well. Also on the 8th or 9th stop, some friction materials will experience "green fade". This is a slight fading of the brakes. The fade will stabilize, but not completely go away until the brakes have cooled. After the bedding-in cycle is finished, there will be a blue tint colour on the disc with a light grey film on the disc face. The blue tint indicates the rotor has reached the proper bedding-in temperature and the grey film is pad material starting to transfer onto the disc face. If racing or higher performance pads are being used, add four stops from 80mph (130kph) to 5-10mph (10-15kph) and if a full race pad, four stops from 100mph (160kph) to 5-10 mph (10-15kph).

RacingLine does not endorse speeding on public roads. Ensure you complete this procedure so in a safe area, away from traffic at your own risk. After the final stop, drive with minimal use of the brakes to cool off the system. Ideally, the brakes should be allowed to cool to ambient temperature before using again.

DO NOT COME TO A COMPLETE STOP WHEN THE SYSTEM IS HOT AND LEAVE YOUR FOOT ON THE PEDAL. PAD MATERIAL WILL IMMEDIATELY TRANSFER TO THE ROTOR CAUSING A VIBRATION.

After the first bedding-in cycle shown above, the brakes will still not be operating at their best capacity. A second or third heat cycle is typically necessary before the brakes really start to "come in".