

Bunn Breather Kit- User Guide for Royal Enfield Classic, De Luxe & Electra

1.0 **Introduction:** -The Bunn Classic Crankcase Kit manages the crankcase, controlling pressure and air flow. It uniquely pumps air through the crankcase, purging corrosive blow-by gas. Bunn technology is researched, patented and operating in a wide range of classic and modern road and race engines. It's easy to fit. It stops pressure swings, cuts oil leaks and power loss and pumps out toxic blow-by.

2.0 **Bunn Breather Kit Contents:-**

- 2.1 One Bunn Inlet valve. [the smaller valve...note flow direction arrow embossed on valve]
- 2.2 One Bunn Exhaust valve [the larger valve...note flow direction arrow embossed on valve]
- 2.3 The Bunn-Royal Enfield User Guide, a step-by-step guide to installing the Kit.
- 2.4 Tubing, 700mm of 8mm & 500mm of 10mm nitrile rubber [baffled] to connect engine,
- 2.5 One 2-5 micron washable, oilable air filter and clip for the Bunn Inlet breather.
- 2.6 Carlel card. Please retain for technical advice and warranty.
- 2.7 Cable ties in a range of sizes to secure air filter and tubing.
- 2.8 One dust cap for the Electra aircleaner breather union.

3.0 **Installing the Bunn Breather-** For the Royal Enfield Classic, de Luxe and Electra models, the Bunn Breather replaces the OEM breather tubes, duckbills and canister. (Refer Figure 1). The Bunn Inlet breather connects to the existing timing chest union. The Bunn Exhaust breather connects to the existing oil tank union. The existing breather tubes on earlier Bullets may vary. British Bullets connect via the OEM barrel breather and one other union.

NB: While installing valves do a "Blow-Test". Blow in Inlet and check air flows out Exhaust line.

3.1 **Classic Installation-**

3.1.1 **Bunn Inlet Breather**

- (i) Insert Inlet valve [the small valve] in air filter & tighten clip. Check valve arrow points **To** engine.
- (ii) Open the right sidecover and install the Bunn air filter in the top left corner, with double-sided adhesive tape or Velcro; or cable ties or a P-bracket to the bolt. Adhesive foam stops chafing.
- (iii) Remove the black OEM breather tube connecting the timing case union to the OEM canister. Retain the clip for re-use. The canister can be removed or left in place.
- (iv) Fit the 8mm tube (supplied), onto the timing case union. Curve tube across the oil tank. (see pics on the Royal Enfield Australia website. Take it up the frame, into the right sidecover through air inlet. Curve it around to meet the air filter. Push the 8mm nitrile rubber tube onto valve. Ensure it's pressed fully home, over all the valve ribs. Moistening valve helps this.
- (v) Ensure tube rises smoothly to Inlet valve. Avoid dips, P-traps and tight curves for best air flow.

3.1.2 **Bunn Exhaust Breather**

- (i) Remove the existing tube connecting the oil tank roof union to the OEM breather canister.
- (ii) Fit 10mm tube end with Yellow Dot to oil tank union and clip. Curve it up 10cms and back over the oil tank and frame cross-member, dropping down to end behind the gearbox; above the centre stand pivot. Ensure tube curves smoothly up & back. avoiding dips for the best air flow.
- (iii) Insert Bunn Exhaust valve in the tube with arrow facing **Away** from engine. The valve angles down, to drain blow-by vapour. Ensure the valve is pressed fully home into the tube, so the tube covers all the valve ribs. Moistening the valve helps this. Cable tie the valve to frame.

3.2 **Electra Installation-**

3.2.1 **Bunn Inlet Breather**

- (i) Remove the canister and tubes to timing case, aircleaner and oiltank. Lift seat for better access.
- (ii) Stick a square of ¾" insulation tape over the aircleaner union and push on Dust Cap (supplied).

(iii) Terminate the OEM chaincase breather tube at the rear of gearbox, clear of the rear wheel.

(iv) Insert Bunn Inlet valve [the smaller valve] in air filter & tighten clip.

NB: Valve arrow must face **To** the engine. Join 8mm tube to the valve. Ensure tube is pressed fully home onto the valve, so the tube covers all the valve ribs.

(v) Install the Bunn air filter, in the canister position, between battery and mudguard, using adhesive Velcro and cable ties, or a P-bracket to the battery bolt. Adhesive foam rubber stops chafing.

(vi) Run tube from valve down and across oil tank to timing case union. Trim and push onto union. Secure with clip. Ensure tube rises smoothly to valve, avoiding dips & tight curves for best air flow.

3.2.2 **Bunn Exhaust Breather**

(i) Remove the existing OEM black tube from the oil tank roof union.

(ii) Fit 10mm tube end with Yellow Dot to oil tank union, and clip. Curve it up 10cms and back over the oil tank and frame cross-member, dropping down to end behind the gearbox, beside carburettor overflow tube. Ensure tube curves smoothly up & back, avoiding dips and kinks for best air flow.

(iii) Insert the Bunn Exhaust valve fully home in the end of this line. Moistening helps this. The arrow must face **Away** from the engine and the valve angles down, to drain blow-by vapour.

(iv) Cable tie the valve to frame.

NB: While installing valves do a "Blow-Test". Blow in Inlet and check air flows out Exhaust line.

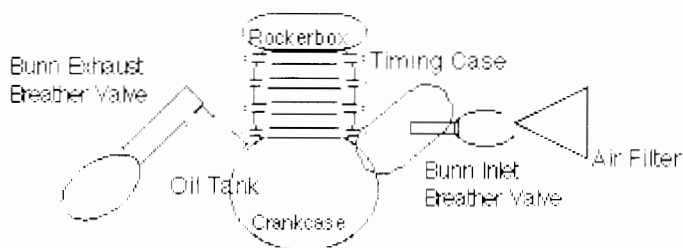


Figure 1- **Bunn Breather Schematic Diagram**

4.0 Annual Cleaning:-The valves open easily. Place valve on a board and insert a Stanley or kitchen knife blade into the join in valve case. Roll the valve along the board with the knife blade. The valve will open. Clean case with a cotton bud, spray seal with WD40 or silicone. Handle the seals carefully, as while durable they dent easily. Note the seal face which seats on the valve, when you re-install it. Firmly twist and tap the valve halves together with a knife handle to close the valve casing. Blow through the valve to check function and refit.

5.0 Technical Data:- The Bunn valves are designed to operate at extremely low pressure and high speed. Valve cases are made from a polypropylene grade, resistant to most chemicals including methanol and nitro. Operating temperature range -10C to +120C-140C. Tubing is a nitrile-rich rubber grade. Air filter media can be washed and re-oiled using air filter oil. Keep flammable exhaust breather gas away from exhaust ports.

6.0 Warranty- Valve seals are warranted for five years over unlimited mileage and valve cases for two years. Spare seals and accessories are available. See <http://bunnbreather.bigblog.com.au>

Carrel Pty Ltd, 18 Yandiah Place, Castle Hill,
NSW 2154 Australia. ACN061003521 ABN7306100352
Classic Motorcycle Breathing Specialists

Disclaimer- I do not warrant the Kit will work on every make and model of classic motorcycle, e.g. some early J.A.Ps. Email for advice if you plan an installation outside the above guidelines, on rexibunn@bigpond.com