

*King Enduro
Fuel Pump
#170044*



INSTALLATION AND TUNING INSTRUCTIONS

The BG King Enduro is a completely rebuildable electric fuel pump designed for continuous duty carbureted applications up to 2000HP. This pump is not designed for hard launching drag race only applications with rear-mounted fuel cells. The BG King Enduro pump will flow in excess of 1000 lbs/hr at 18 psi. It features a preset non-adjustable bypass, and does not require the use of a return line. The BG King Enduro pumps feature an integral ultra fine 8 micron filter, and dry break system to aid in changing your elements. The BG King Enduro pump is designed for use on all unleaded, and leaded gasolines. Before installing your King Enduro pump, **PLEASE READ THE INSTRUCTIONS THOROUGHLY.**

If you have any questions please contact our technical department at (706) 864-8544

INCLUDED IN THIS BOX

In this box you will find:
One BG King Enduro Fuel Pump with -10 AN inlet & outlet fittings.
One set of fuel pump instructions

PUMP INSTALLATION

Mounting.

Your BG King Enduro pump should be mounted as close to the fuel tank, or fuel cell as possible. The fuel pump should be mounted level with or below the outlet of the fuel cell.

THE PUMP SHOULD NEVER BE MOUNTED IN THE DRIVERS COMPARTMENT, NEAR ANY MOVING PARTS, OR NEAR THE EXHAUST.

It should be mounted to a solid frame member using the mounting bracket provided on the pump. This pump can be mounted either horizontally or vertically. Do not allow the motor housing to touch any metal components on the vehicle (this can affect the motor and pump performance).

Inlet

The pump should be fed with a minimum of a -10 AN line or equivalent from the cell or tank. This may require the rework of the existing tank or cell. The pump comes with -10 AN inlet fittings included in the pump. To change from a horizontal inlet to the vertical inlet you would remove the plug that is in the side of the inlet, and swap it with the -10 an inlet fitting. BG plumbing kit part # 152287 contains all of the necessary fittings to go from the fuel cell to the pump with -10 AN line. The BG King Enduro features a dry break system to aid in the changing or inspecting of your fuel filter. This dry break prevents fuel from draining out of the fuel cell when disconnected from the tank. To change the filter element (replacement P/N 171049) read the maintenance section of these instructions.

Outlet

The outlet side of the pump (going to the regulator) should be a maximum of a -10 AN line or equivalent. The pump comes with a -10 AN fitting installed in it. To change from horizontal to vertical plumbing, remove the -10 AN plug from the outlet and swap it with the -10 AN outlet fitting. BG plumbing kit part # 150287 has all of the necessary parts to plumb from the pump outlet to a BG regulator.

Vent

For the pump to operate properly, at least a -8 AN or equivalent size filtered vent in the cell or tank is required. Failure to run a vent will cause damage to the pump.

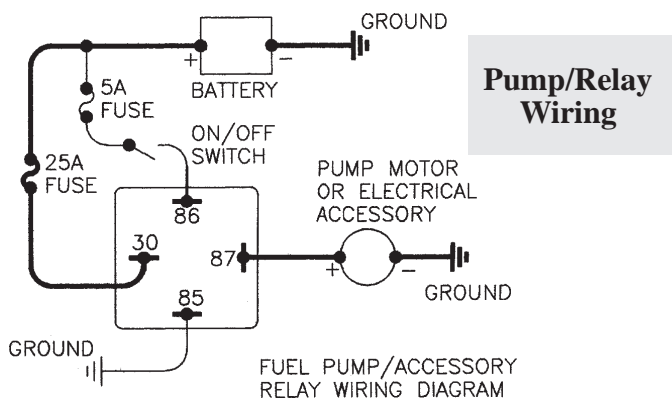
WARNING: DO NOT BLOCK THE VENT IN THE FUEL TANK. MAKE SURE THAT ALL FUEL SYSTEM COMPONENTS ARE LEAK FREE BEFORE USING YOUR SYSTEM... YOUR SAFETY DEPENDS ON IT!

Wiring

BEFORE MAKING ELECTRICAL CONNECTIONS, DISCONNECT THE POSITIVE TERMINAL FROM YOUR BATTERY.

The BG King Enduro pump should be connected to a fully charged 12 or 16-volt battery. A fuel pump, like any other electrical accessory, will perform best if given adequate voltage, it is always recommended to wire the pump through a relay. A 12-gauge wire should be run from the battery to the relay, and from the relay to the pump with a 25-amp fuse in the circuit to protect the pump from overload. The pump has bolt terminals on it to connect the wiring with a ring connector. The pump needs to be grounded to a good chassis ground with a 12-gauge wire. You can use a 16-gauge wire to activate a relay.

WARNING: ALL WIRING CIRCUITS SHOULD BE FUSED



TUNING AND ADJUSTMENT

Be sure the tank is full and fuel is at the inlet of your pump before attempting to run the pump. If the pump does not pickup fuel within 20 seconds, STOP and prime the pump. Operating the pump dry for extended periods will damage the pump. If the system is plumbed properly you should be able to loosen the line up at the fuel pump, and have fuel trickle out. The BG King Enduro Pump provides more fuel than most other pumps on the market it may be necessary to re-jet your carburetor to get optimum performance. Re-jet the carburetor either one size richer or leaner until the car shows an increase or decrease in performance. Proceed in the direction that improves performance until the performance drops off. Return to the jet size that gave you the best overall performance.

BREAK IN

Due to the tolerances on brushes on your new BG King Enduro pump it should be broken in for 1 to 1-1/2 hours achieve optimum performance from it.

MAINTENANCE

The following tips should be followed to ensure maximum performance from your BG King Enduro pump.

1. The fuel pressure at the regulator should be checked prior to usage to make sure the system is operating properly. Note: Barry Grant Inc. recommends using a dampened non-liquid filled gauge. Liquid filled gauges can change a reading based on the temperature, giving a false reading.
2. If the vehicle is going to be stored for long periods of time it is recommended that the pump be operated for several minutes weekly. You can also remove the pump from the vehicle, spray a light lubricating oil into it, and place it in a sealed bag until it is ready to use.

3. Check the steel braided lines on a regular basis. Over time these lines can deteriorate from the inside. Checking lines for soft spots can locate weakness before any of the debris would cause a problem.

4. The fuel filter should be inspected at least once a year if not more depending on usage. To inspect your fuel filter remove the four screws holding the end of the inlet housing to the body. This portion of the pump features a dry break to prevent the fuel from draining out of your fuel cell or tank. The replacement element is BG Part # 171049.

5. If you suspect problems with your BG King Enduro pump it is recommended that you return it to Barry Grant Inc. This pump comes with a lifetime labor warranty. There are no any charges to inspect, flow test, or repair it. The only costs incurred will be for the required repair parts.

WARRANTY

All Barry Grant, Inc. Products are covered by a limited warranty for 90 days from the date of purchase. Proof of purchase must be included with all returns and must include date of purchase. In the event of a defect in workmanship or material of the product, Barry Grant, Inc. will repair or replace the product, or any defective parts or parts thereof, at the election of Barry Grant, Inc. without charge to the consumer for such repair or replacement. The Limited Warranty shall not apply to labor charges, material or other incidentals in connection with removal and/or replacement of such defective product on the Consumer's vehicle.

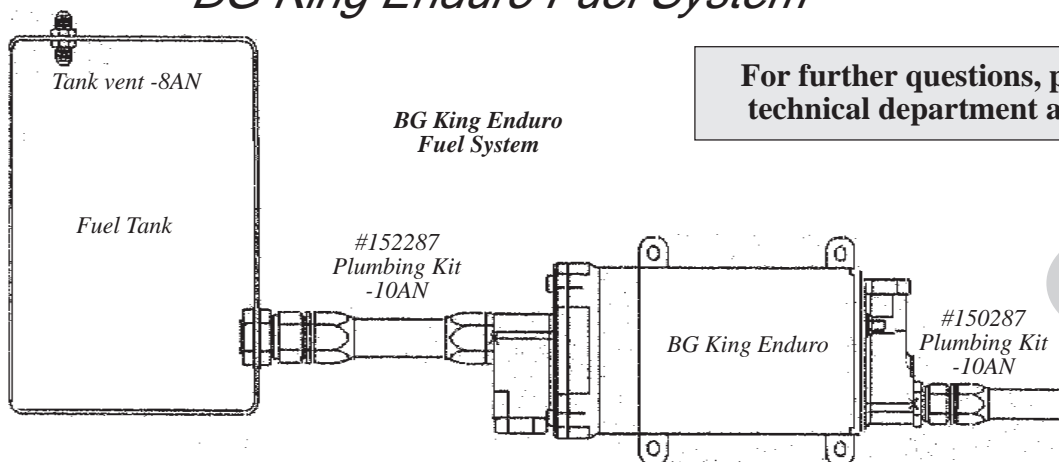
This Limited Warranty is specifically limited to the original purchaser of the product and is enforceable only by such original purchaser.

The maximum liability of Barry Grant, Inc. in connection with this warranty shall not under any circumstances exceed the contract price of the product claimed to be defective.

This Limited Warranty shall *not apply* and shall become fully null and void, in the event of damage to the product resulting from any of the following: Unauthorized repairs; Breakage due to dropping or misapplication; Repair, alteration or modification of the product by anyone other than the manufacturer, or authorized representative thereof; Damage resulting from accidents; Abuse or misuse of the product in any manner whatsoever; Damage resulting from incorrect or improper installation. This Warranty is the only warranty applicable and is expressly in lieu of all other warranties, expressed or implied, including any implied warranty of merchantability or fitness for purpose.

Barry Grant, Inc.
1450 McDonald Road, Dahlonega, Georgia 30533

BG King Enduro Fuel System



For further questions, please contact our technical department at (706) 864-8544.

Remember, when sending in parts for service, please include a description of the problem, a return address, and a day time phone number.