BG 280 Fuel System #170002



INSTALLATION AND TUNING INSTRUCTIONS

The BG 280 is a completely rebuildable electric fuel pump providing 280 gallons of fuel per hour at 18 psi. The BG 280 features a non-adjustable internal bypass to regulate pump pressure. The BG 280 is designed for gasoline and is not recommended for alcohol. Before installing your BG 280 pump, PLEASE READ THE INSTRUCTIONS THOROUGHLY. This pump is designed for off highway and competition use only. Any usage in street driven vehicles is strictly prohibited.

PUMP INSTALLATION

Mounting

The best location for mounting your BG280 Fuel System in the vehicle is as close to the fuel tank as possible. The fuel pump inlet should be level or below the fuel pickups if at all possible.

THE PUMP SHOULD NEVER BE MOUNTED IN THE DRIVER'S COMPARTMENT OR NEAR ANY HOT ENGINE COMPONENTS.

It should be mounted on a solid member, such as a chassis, in a vertical position; motor on top. A mounting bracket comes with the fuel pump. If desired, an optional band clamp kit (part number 170030) is available. Do not allow the motor housing to touch any metal parts on the vehicle. This will affect the motor and pump performance.

Inlet

The fuel pump should be fed by a single #10 or equivalent line from the tank. This may require rework of your existing fuel cell. A BG5000 (part number 170018) fuel filter should be installed before the pump as it will prolong pump life and does not restrict flow. Plumbing kit (part number 152287) has all the necessary parts including a pump to filter adapter fitting (part number 140019).

Outlet

The outlet side of the pump, going to the regulator, should be a single #8 or equivalent line. BG plumbing kit (part number 150288) has all the necessary parts from the pump outlet to the BG regulator inlet.

WARNING: DO NOT BLOCK THE VENT, RETURN LINE OR PUMP FEED. MAKE SURE THAT THE SYSTEM IS LEAK FREE AT ALL CONNECTIONS...YOUR SAFETY DEPENDS ON IT!

Wiring

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

Your BG280 Fuel System should be connected to a fully charged 12 or 16 volt battery. A fuel pump, like any other electrical accessory, will only perform at its best when given adequate voltage. The black wire is a ground (-) and the remaining wire is a switched hot lead from a (+)12 or 16 volt source. If wired incorrectly, the pump will run backwards and will not pump. It is recommended that a relay (part number 171000) be used for best performance and lower current draw from the battery. A 12 gauge wire should be used on the pump power supply and a 16 gauge wire from the switch to activate the relay. For best performance, keep all wiring runs as short as possible. Many electrical boxes now being sold will have circuits and fuses wired for smaller twin pumps, which is adequate if a relay is used. Power wiring to the pump should be capable of handling 25 amps as this will take care of the start up voltage surge.

WARNING: ALL WIRING CIRCUITS SHOULD BE FUSED!!

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

TUNING AND ADJUSTMENT

Be sure the tank is full and fuel is at pump inlet before attempting to run the pump. If the pump does not pickup fuel within 30 seconds, **stop** and prime the pump. The pump should not be operated dry for extended periods. The BG 280 will provide more fuel volume at the carburetor than other fuel pumps, so your jetting requirements may have changed. Rejet the carburetor either one size richer or leaner until the car shows an increase or decrease in performance. Proceed in the direction that shows the most improvement until the performance falls off. Then return to the jet size that gave you the quickest ET and MPH.

MAINTENANCE

The following tips should be followed to insure maximum performance from your BG280 Fuel Pump:

- 1. Fuel pressure to the regulator and after the regulator should be checked before every racing event to assure proper fuel system operation.
- 2. If the vehicle is to be stored for long periods, it is recommended that the pump be operated, with fluid flowing, for several minutes weekly to keep fluid passages clean and the bypass working freely. The system may also be drained and the pump lubricated with a light oil spray to extend life.
- 3. If you suspect any drop in performance from your BG280 pump, it is recommended that you return your pump to BG Fuel Systems for a free flow test. If any repairs are needed, the pump can be serviced at this time to return it to optimum operation.

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



