

GTank – Auxiliary Fuel Tank Installation Instructions Kawasaki Vulcan 1500 Classic

GTank Install Tool List:

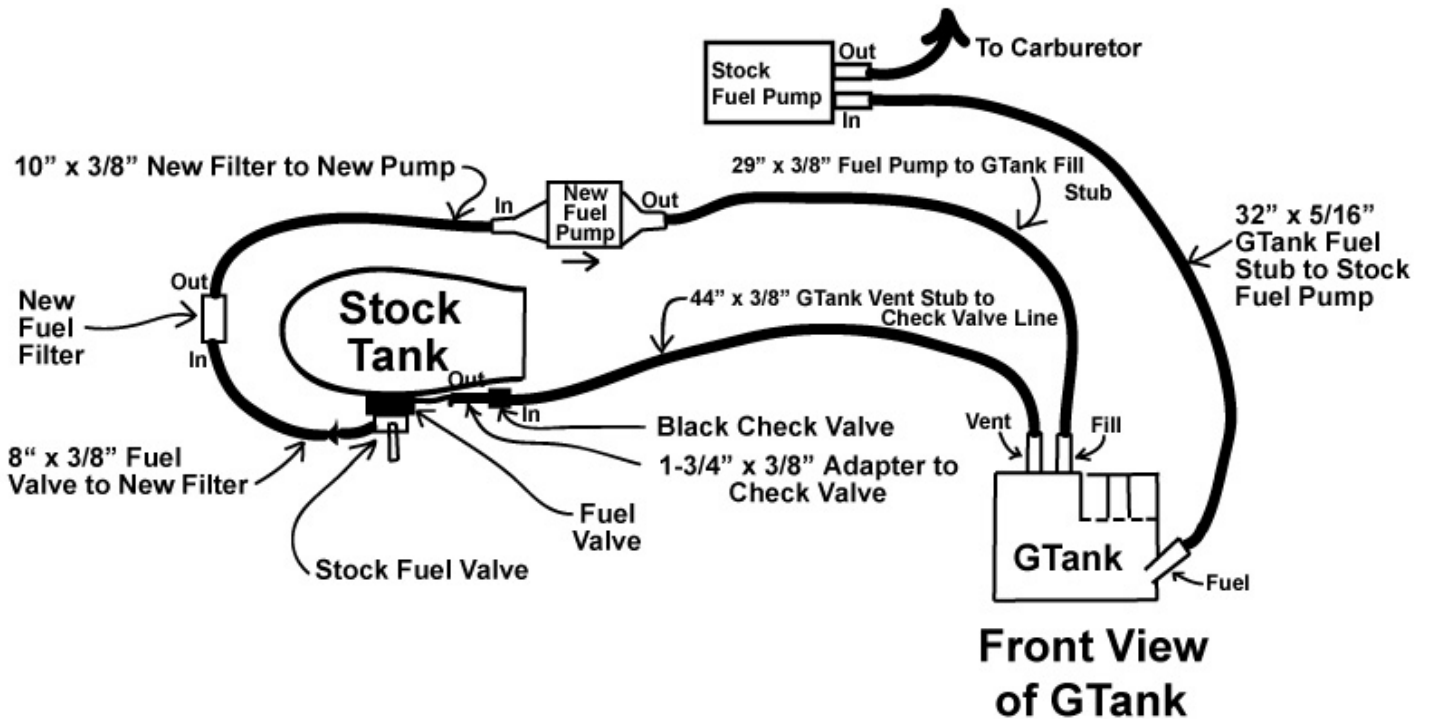
- 5mm Allen Wrench
- 10 mm Box Wrench
- 12 mm Box Wrench
- 10 mm Socket
- 12 mm Socket
- Phillips Screw Driver
- Slot Screw Driver
- Needle Nose Pliers
- Standard Pliers

Remove the following prior to GTank Installation:

- Rider Seat
- Speedometer/Instrument Cluster (gently disconnect electrical plugs)
- Fuel Tank (turn fuel petcock to off position first)
- Right and Left Side under seat Panels.
- Tool Box Assembly under left side of seat.
- Relocate Rectifier from in front of rear tire to under front of bike next to existing rectifier. It will bolt directly to frame without mounting bracket using stock bolts.
- Remove Stock Fuel Line from Fuel Tank to Fuel Pump, including Fuel Filter.



Kawasaki Vulcan Classic Fuel Line Routing



Attach:

- 3/8" X 44" Hose onto GTank Vent Stub (Top Right side of GTank), other end connects to Black Check Valve 'Inlet' side.
- 3/8" X 1-3/4" Hose onto 'Outlet' side of Check Valve to New Fuel Valve Adapter.
- 3/8" X 29" Hose onto GTank Fill Stub (Top middle of GTank; other end to New Fuel Pump)
- 5/16" X 32" Hose onto GTank Fuel Stub (Front left side of GTank), other end connects to Stock Fuel Pump, inlet side.
- 3/8" X 10" Hose Connects from New Fuel Filter to inlet side of New Fuel Pump.
- 3/8" X 8" Hose Connects to Stock Fuel Valve and inlet side of New Fuel Filter.



Installing GTank:

- Attach the three (3) GTank hoses securely to the GTank
- Attach Speed Nut on right tab with nut portion facing right side of GTank.
- Lift GTank into place, route upper two hoses through void in tool box area and towards front of bike.
- Route fuel hose through hose loom and towards existing fuel pump.
- Route remaining two (2) hoses through stock hose loom between frame rails under seat.
- Loosely secure top center Allen bolt, align and secure two outside tab bolts, then tighten all three making sure GTank is lined up properly with frame and rear tire.

Securing GTank:

- **Center Connection Tabs** utilizes the Speed Nut and 2-1/2" Large Allen Bolt with Washer. Press the Speed Nut onto the right tab with the nut portion facing the outside of the GTank. Raise the GTank into place and slide the Large Allen Bolt w/washer through from the left side and loosely secure into place.
- **Right Tab Connection** utilizes the Small 2-1/2" Allen Bolt. Slide this Allen Bolt with Flat Washer onto the right tab from the outside then install the other Flat Washer, then Lock Washer and loosely secure in place with provided Nut.
- **Left Tab Connection** utilizes small 1" X 6mm Bolt with Washer. Secure left Tab with this bolt into existing threaded hole on left frame rail.
- **Final Connection Tightening.** Lift up and forward on GTank removing any slack out of connections then tighten Left Tab Connection first, followed by Right Tab Connection and followed by Center Tab Connection. Your GTank should rest up against the frame and provide ample clearance from your rear tire for smooth operation.

Note: The two remaining 1-3/8" Bolts are to be used on the fuel valve. When the Fuel Valve Adapter is installed the stock bolts are too short and will need to be replaced with these longer bolts. Make sure the stock nylon washers are reused and the rubber gaskets are facing towards the Gas Tank.

Installing New Fuel Pump:

- Set Fuel Pump in old fuel filter location, as shown, with directional arrow on pump pointing towards the rear.
- Secure open end of 29" hose routed from GTank to outlet side of New Fuel Pump. (see Fuel Line Routing)
- Secure open end of 10" hose to inlet end of New Fuel Pump. (see Fuel Line Routing)
- Fuel Pump can be secured by using a zip tie around the fuel line/nipple ends to any adjacent anchor point. Do not over tighten zip ties or risk fuel line kinking.



Hose Routing Specifics:

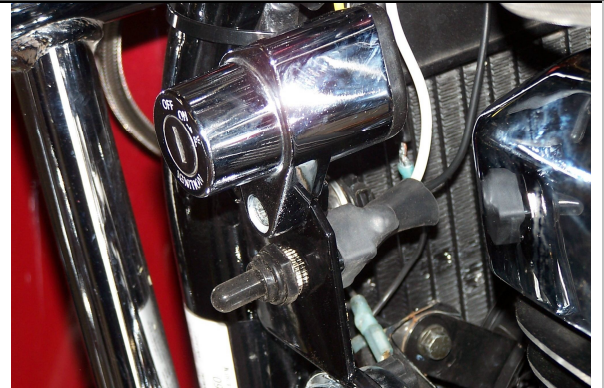
- Route 44" Vent Line from GTank Vent Stub (top right side of GTank) through tool box area, through wire/hose harness, under center frame plate, between radiator hose and air box, over top of motor to Check Valve.
- Route 1-3/4" Vent Line from Check Valve to New Fuel Valve Adapter Nipple.
- Route 29" Fill Hose from GTank Fill stub (top center of GTank) through tool box area, wire/hose harness, under center frame plate, over top of hoses under stock tank, connecting to outside of New Fuel Pump.

- Route 32" Fuel Line from GTank Fuel Stub (lower left) up through wire/hose harness, right side of bike, under center frame plate to inside of stock fuel pump.
- Route 8" Hose from Stock Fuel Valve to inside of New Fuel Filter.
- Route 10" Hose from New Fuel Filter between radiator hose and air box, over top of motor; connect to inlet side of New Fuel Pump.
- Mount new fuel valve adapter with adapter nipple facing inside with rubber gasket against gas tank, using stock nylon washers with new stainless 1-3/8" bolts and tighten properly.

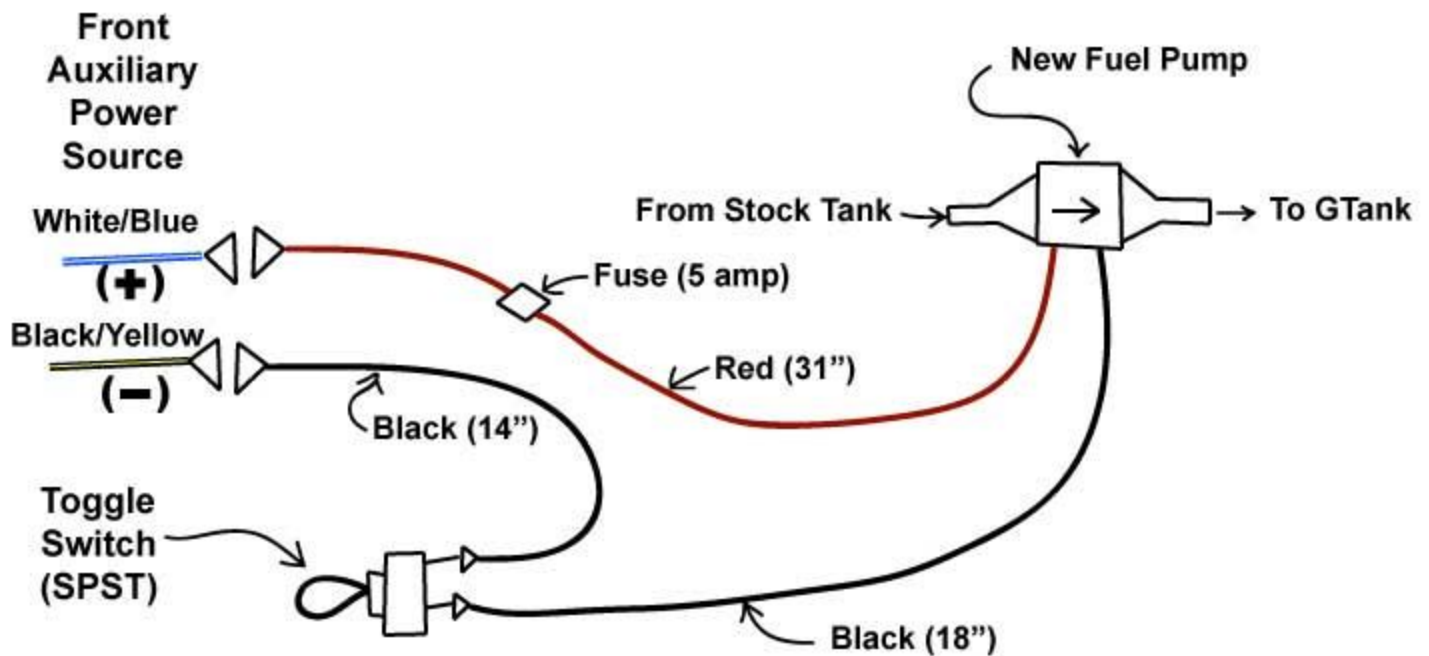


Electrical Connections:

- Preferred attachment location of Toggle Switch and Switch Plate is at left side of the bike adjacent to key switch location.
- Mount Toggle Switch to Powder Coated Mounting Plate then connect wires as noted. Apply mild heat to secure switch coupon.
- Connect red wire with inline fuse from fuel pump to positive plug (white/blue) of auxiliary power leads found at front neck area of bike.
- Route black wire from fuel pump to connection on toggle switch.
- Run black wire from second lead on Toggle Switch to negative plug (black/yellow) of auxiliary power at front neck area of bike.
- Test system by activating toggle switch and briefly operating fuel pump (2-3 seconds). The fuel pump should run loudly, when no fuel is present. Pump will run softly when fuel is present. Do not run the fuel pump without fuel for more than 30 seconds to insure a long pump life. Secure all electrical connections from any potential damage.



Kawasaki Vulcan CLassic Electrical Diagram



Finalizing the Install:

- Visually inspect to make sure the GTank is properly secured with all Hoses and Wires properly routed away from excessive heat, areas of possible wear and exposure, with no kinks visible.
- Re-install under seat tool box, adjusting hoses as necessary for a proper fit.
- Re-attach both side covers under seat.
- Re-install Gas Tank being sure to properly connect hoses and electrical plugs to their proper locations before securing tank in place. Check new hoses/wires making sure they're not affected by placement of the tank
- Re-install Center Speedometer/Instrument Cluster, making sure all wiring has been plugged in and speedometer cable properly secured.
- Connect New Fuel Lines to Fuel Valve and New Fuel Valve Adapter.
- Reinstall Seat making sure no wires or hoses are pinched in the process.

Operational Procedures:

Filling Your Fuel Tanks:

- Turn Fuel Valve to reserve before filling tanks (*insures from run-dry operation*).
- Fill main tank per normal procedure while bike is securely resting on side stand.
- When you have minimum of ½ gallon of fuel in the main tank, flip the toggle switch to activate fuel transfer pump.
- Resume filling the main tank until it reaches the bottom of filler neck.
- Stop filling, temporarily.

Operating with the GTank:

- When filling of both tanks has been completed, operation of your Kawasaki Vulcan 1500 Classic can resume as normal.
- When your bike runs low on fuel and reserve is activated. You may experience a lag in operation caused by the additional fuel hose lengths to your new GTank.
- To minimize the lag in reserve fuel availability flip the toggle switch to 'On' immediately after selecting reserve on your fuel valve. This will assist in moving the fuel into the GTank quicker.
- Once your bike has resumed running on the reserve fuel immediately turn off the fuel transfer pump to keep it from operating dry and causing possible damage.
- Your reserve fuel capacity has been reduced a bit due to the addition of the adapter plate thus reducing your reserve range to approximately 25 miles. Individual mileage and range will vary. Please verify yours to keep from being stranded during your ride.

Legal Disclaimer

As motorcycle fuel tanks are not regulated by the D.O.T., the GTank is sold as an off-road or racing component, and the buyer accepts full responsibility for knowledge and compliance of his/her local and state laws, codes or ordinances regarding addition of a secondary fuel cell or aftermarket exhaust system to a motor vehicle, and agrees to hold GMan Industries, Ltd and it's employees harmless from any loss and/or litigation resulting from misuse, injury, death, including lack of compliance with said laws, codes and/or ordinances resulting from purchase, installation, and use of the GTank or related products.

If you have any questions, please contact us through one of the following:

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