

# Starklite Cycle Tech Article #15

## Gas Cap Venting Trouble

Have you ever been riding down the road, and all of a sudden your Indian appears to run out of gas, yet you just filled up 5 miles ago? This is caused by Vapor Lock. The gas caps on your Indian are vented. This allows air to replace the space occupied by the fuel while you are riding. If the vent is blocked or working improperly it will cause vapor lock. You can tell your bike is vapor locked by loosening your gas caps while riding and the problem is gone. However, this can be dangerous.

Original Indian caps were vented to allow both air to enter and leave the tanks, while the cap is locked in place. Unfortunately, new caps must be vented to only allow air to enter the tank. This is due to Air quality laws. It has become very common for these one-way valves to

### Gas Cap Venting

by Gary Stark

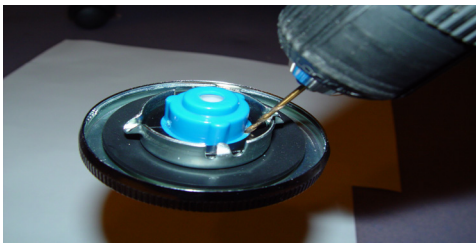
stick and not function properly.

To solve this problem, extra vent holes can be drilled in the caps.

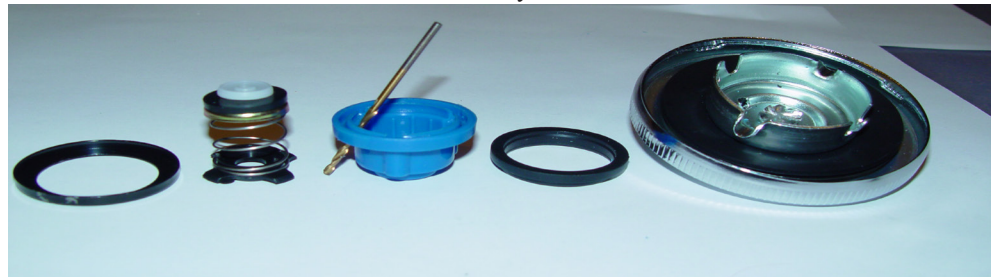
1. Use a 5/64" drill bit, in your drill. Drill your holes at the base of the inner portion of the cap (see picture). Be careful that once you go through the plastic valve that you stop drilling so you don't drill to the outside of your cap.
2. Drill a total of two holes 180 degrees apart.
3. This is the best fix, for modern caps, and allows your tank to breath just like original caps.

To prevent gas from running on the outside of your tanks your gas cap should contain a gasket made from a combination of cork and neoprene or plain neoprene to obtain a good seal. We also recommend a 1/4 inch thick felt gasket cut to fit up inside the cap itself will absorb any slight leak from gas or oil sloshing or vibrating out the tank neck. (If you do not have access to these felts or gaskets, Starklite Cycle offers both gaskets. Secondly, the gas level should always be kept about 1 1/2" below the lowest part of the tank neck. This helps to prevent splash leaks and it gives room for expansion of the gasoline. If a tank is filled with cold gas on a cool morning it will expand as the sun and engine heat get to it. If the tank is clear to the top to start with, the gas will expand and run out over the tank.

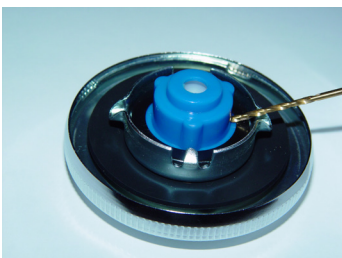
Good luck with these tips, and we will see you on the road!



Proper Angle to drill 5/64" vent hole



Gas cap valve (left to right) Retaining ring, Valve assembly, Plastic center holds valve, rubber seal (seals previous part against the cap)



By carefully following these directions you will get the best results installing your transmission gears. All *Starklite Cycle* parts are manufactured to surpass original factory specifications. If you have any questions please feel free to call or write. Our goal is to provide you with the highest quality parts to get your *INDIAN* back on the road. Thank You

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