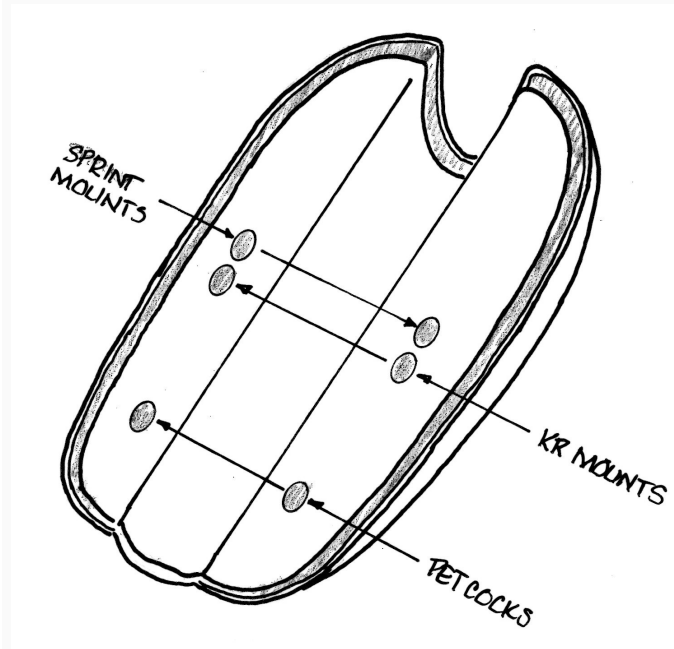


Instructions Cal Rayburn KR/Sprint tank

Up dated 10/3/17

I have installed two 1/4-20 mount holes in the tank bottom. One pair lines up with KR and the other pair are for H-D Sprints. You may have to tweak the holes in your mount bar to match the spread of my mount holes. Use foam rubber between tank and backbone. This acts like a spring to force the tank away from the frame. You can level the tank with differing levels of foam front-to-back.



Petcocks are threaded right into the fiberglass and sealed with 5 minute epoxy. This sealing technique has worked well for years. To remove, simply put a big crescent wrench to them and loosen. It may sound like you are tearing the tank apart but you are not. To re-install, reapply 5 minute epoxy all around the petcock threads and tighten. (Don't get any in the fuel passage hole.) Do not wipe away the little bead of epoxy that appears. Give it a couple of hours to cure even though it says 5 minutes. **Never use 2 ton epoxy.**

The specs on the new Cal Rayburn KR tank are:

- [] Overall length – 19" (end to end)
- [] Length of channel – 18 ¼"
- [] Width – 10"
- [] Height – 6 ¼"
- [] Tunnel width – 2 1/8"
- [] Capacity – about a gallon
- [] Resin – Polyester with new anti-ethanol coating
- [2] ¼-20 steel threaded inserts for mounts
 - Specify KR, rear location
 - Specify Sprint, front location
- [2] 1/4" petcocks with levers
- [] Brushed finish gas cap with internal vent

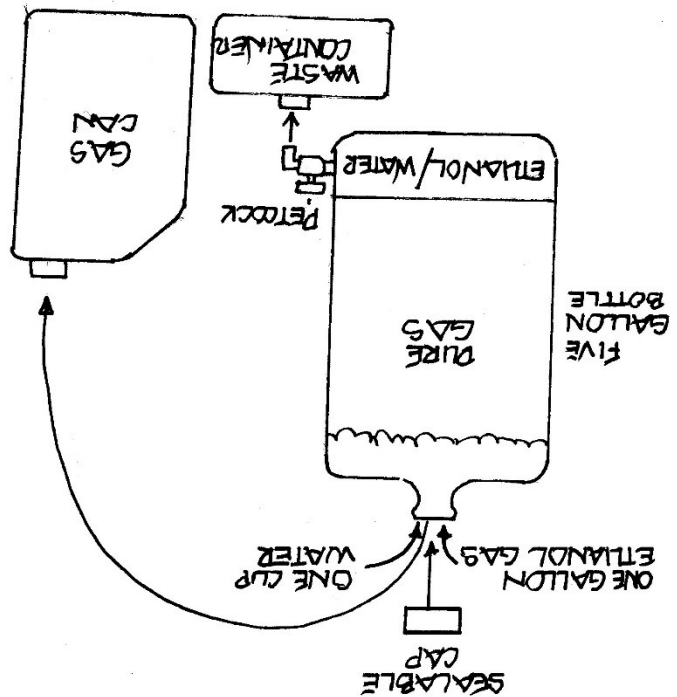
Ethanol fuel

Prior to 2017 our tanks were coated with “blue stuff” that withstood the damaging effects of standard pump gas (E-10). Standard ethanol (E-10) can range in alcohol content from 4% to 12%. BUT not in California. They use ‘Governor Jerry Brown’ gasoline which caused us fits. No other state in the nation was as bad as the left coast. We had to do something to solve the California problem and in so doing have a solution for the rest of the country

In December of 2016 we repeated a test of coatings we had done about five years earlier. We found one that withstood E-30 (really bad stuff) in an emersion test for sixteen days. When we pulled out the coated fiberglass sample no, as in zero, negative effects were noted.

We now use this new coating and it is reported to handle any ethanol with no damage to the tank-thus far it is true. I think for the first time we can say go use any gas. I’m not going to use any ethanol in my tanks. It is shit gas and will crud up carburetors in no time at all. If you are going to use blended fuel you’d be wise to run your carbs dry before storage of the bike for longer than a month. Most stations in most states have pumps with premium non-

ethanol fuel. Be smart and use it. It costs more but how big is your bike tank. To find stations in your area with ethanol free fuel go to <http://pure-gas.org>



DIY. Remove ethanol from gas-at home

We motorcyclists know how evil ethanol is to fiberglass tanks, engine parts and long term storage in a motorcycle. It gums up carbs and fouls tanks. To those who live on the east or west coast-your gas is worse than ethanol in other parts of the country. Here's simple fix and cheaper, long term, than the cost of high octane premium-non-ethanol gas where it's available.

Gather these items

- Sealable 5 gallon bottle
- Petcock
- Tube of JB Weld epoxy
- Hoses, funnels, gloves and eye protection



5 gallon reusable polycarbonate water bottle, about 25 bucks at Walmart and other places



Buy a petcock valve at your hardware store-What, ten bucks!

Basics

When gas and water are mixed, they separate. Water on top/gas below.
When the mixture is shaken for 30 seconds, ethanol molecules combine with the water

Operation

- [] Drill a hole in the bottom or low on the side of the 5 gallon bottle for the male threads of your petcock. Seal the petcock in the bottle with a liberal amount of epoxy putty like JB Weld. Let cure.
- [] Place your 5 gallon bottle on a platform, some bricks or level surface to allow space for a container to catch the waste water/ethanol mix below.
- [] Pour ethanol gasoline into your 5 gallon bottle. Fill bottle to 95% full. The extra space allows for gasoline expansion
- [] Pour water into the gasoline. The ratio is 1 cup-to-one gallon.
- [] Seal the bottle with a tight fitting cap
- [] Shake the bottle for 30 seconds to fully mix the water and gas
- [] Wait at least 4 hours (better overnight) for settling
- [] When done, you will see 2 distinct clear layers
- [] Drain off the bottom water/ethanol layer into a container to be disposed later at a recycling center
- [] What is left is ethanol free gasoline. Pour it into a gasoline container. The higher the octane you originally purchased will now power your happy bike

Add a few drops of food coloring allows you to clearly see the layers. Wear eye protection and gloves, Avoid splashing. Do out-of-doors so the fumes don't combust. Avoid any open flame

How easy was that?
Your Phil Little

Warning filters

ALWAYS USE AN INLINE FUEL FILTER to trap particulates. Keep an eye on the filter and change it when junk builds up. Keep filter(s) away from hot engine parts because they can melt and worse



WARNING PETCOCK

The petcocks in your tank are series B from Dapco (the maker)-they are gold in color. (Series A were silver). Dapco had a seal problem with the silver petcocks some years ago and used updated seals in their newer gold petcocks. Even the gold petcocks are not immune to problems. The petcock internals use fuel for lubrication. When a bike is stored for a length of time (month or more) the seals have a tendency to dry and stick when lever is turned. This may be caused by the drying effects of ethanol (alcohol). **If your bike is going into a rest period pull the tank and drop 3-in-1 oil into outlet tube and gently move the lever a couple of times. This will lub the seals.** You gotta remember to do this because I can't keep sending warranty petcocks out. If there was an alternative petcock I'd be using it. If you have hard-to-turn petcock levers. This is a sign of bad seals. Order two more the cost is 25 bucks.

THE DANGER OF BAD PETCOCKS

If you don't lube the petcocks, the seals can stick and curl up and will allow fuel into the carburetor. If your needle and seat are bad, fuel can leak out the

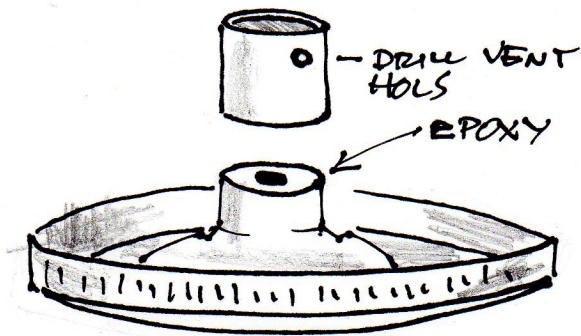
overflow tubes and soon your garage become a lake of fuel. Can you say crispy critter! (Mom why is dad running from the garage on fire?)

Petcock Note

Red levers down is **ON**. Levers to side is **OFF**. If you want a reserve just turn on one lever, that way gas will drain from top and one side. The reserve will be what is left on the other side.

Tank cap warning

The cap seals fuel two ways. Cork gasket presses on filler neck and there is a spring loaded check-valve under the cap. The check valve closes when a fuel surge is detected by the floating ball valve. If you fill your tank completely the cap can weep fuel onto your stickers and paint because the ball doesn't close when fuel sloshes latterly (side-to-side). The upshot is, One) don't fill your tank to the very top or, Two) epoxy a 1/2" length of aluminum pipe over the valve surround. Drill two tiny 1/16" holes in the sides of this short pipe. This remedy stops fuel weeping from sloshing even with a full tank. I had a customer who parked his bike with a full tank and it leaked and lifted his stickers. I don't know whether the valve extension will cure this but a less than full tank will. Use 2 ton epoxy-that stuff is strong but requires curing overnight.



Fuel cap aside

I've never been a fan of this Stant gas cap style they are making now. They used to make a smooth chrome cap which was wonderful but this replacement-not so good. It may help in a small way to take a heat gun after the sticker and remove adhesive residue with lacquer thinner!

Thanks Phil Little
Phil Little Racing.com
Cell 952-607-6063

WARNING

More than a few parts I offer do not met DOT or SAE guidelines for safety. This is especially true of my fiberglass gas tanks. Metal tanks crush upon impact. Fiberglass can break and leak upon impact. This of course is a source of fire and a danger to you and others. By purchasing any of my tanks (and other non-compliant DOT and SAE parts) you are assuming the risks of; danger, injury and death. If you will not accept the risks, don't purchase my products or return them unaltered for a refund.