

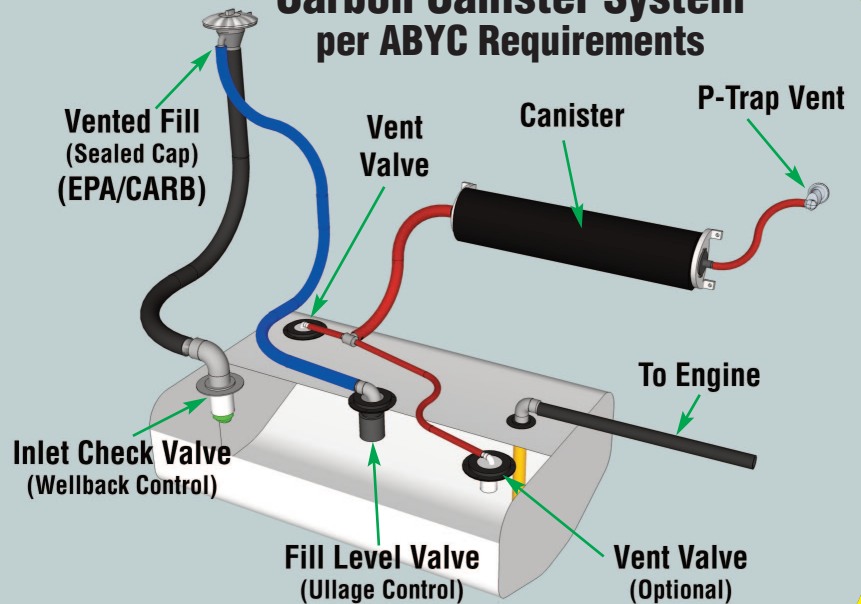
Evaporative Emissions Control Systems

Engineered Fuel System Solutions

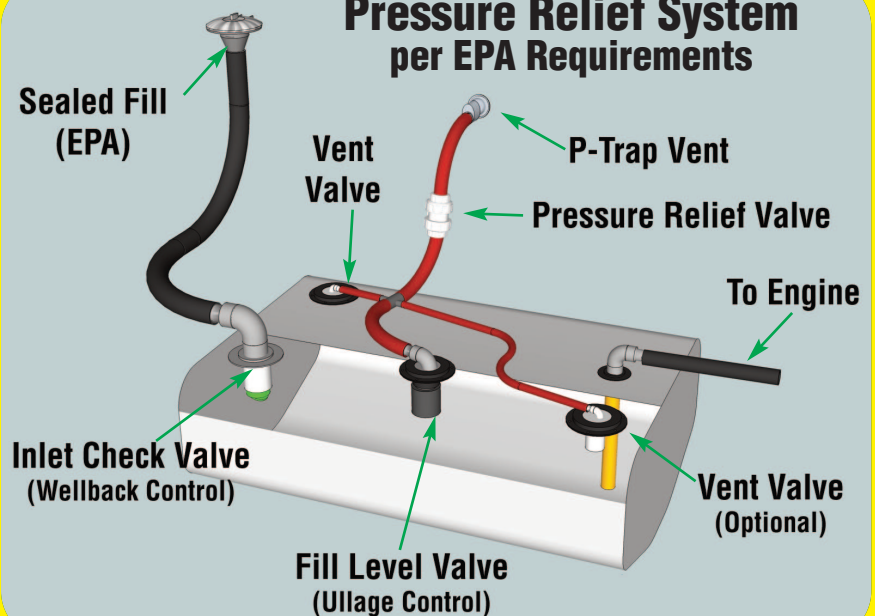
PERKO[®] ENGINEERED FUEL SYSTEMS...

- Canister or pressure relief options
- External or internal tank venting
- “Fail safe” venting under any conditions
- High trouble free fill rates
- Automatic Shut-off (*with auto-shutoff capable nozzles*)
- Establish & maintain proper ullage
- Eliminate spitback & wellback
- Provide for proper venting
 - * +/- 7° port to starboard
 - * +/-17° bow up or down
- Meet EPA regulations
- Meet CARB regulations

Carbon Canister System per ABYC Requirements



Pressure Relief System per EPA Requirements



Leading the Way in Marine Emissions and Fuels System Solutions

PERKO®

YOUR TOTAL FUEL SYSTEMS SOLUTION

PERKO Engineered Fuel Systems meet all of the new EPA & CARB diurnal emission regulations using time proven automotive components. These components have been specifically adapted to marine industry needs and provide a robust, reliable solution regardless of the style, material or size of your tank(s) and boat. Our trained sales staff, along with our partners' engineering support groups, is available to answer technical questions and help guide you throughout the process of designing, installing and certifying your system.

KEY SYSTEM COMPONENTS

Fuel Fills

- Vented for fuel pump vapor recovery
- Sealed to water and/or vapor when closed
- Visual or audible indication
- Tethered or hinged
- Multiple styles and closure options
- Multiple cap materials
 - * Plastic, stainless, chrome bronze, aluminum

Vents

- Standard
- Integral P-trap

Valves

- Vent valves
- Safety relief vent valves
- Fill level valves (ullage control)
- Pressure relief valves
- Anti-siphon valves
- Inlet check valves

Carbon Canisters

- Anti-torque mounting system
- Optional heat shields
- Optional chrome bronze dress covers

UNIQUE SYSTEM CHARACTERISTICS

Venting Methods

- External – Tank mounted valves vent through external vent hose
- Internal – manifold mounted valves vent through in-tank vent lines

Mounting Methods

- Flanged system – Valves are mounted to tank surface with metal flanges
 - * Strong reliable attachment
 - * Stainless or aluminum
 - * Low permeation gaskets
 - * Removable for inspection and/or repair
- Manifold system – Valves are mounted inside the tank onto a common manifold
 - * Strong reliable attachment
 - * Stainless or aluminum
 - * Low permeation gaskets
 - * Removable for inspection and/or repair
 - * Permits all tank connections through a single fixture
- All Valves
- All internal vent lines
- Single or Multiple Fuel pickups
- Level senders

BENEFITS OF CHOOSING A PERKO ENGINEERED FUEL SYSTEM FOR YOUR PRODUCT LINE:

- Independent (Made in America) supplier not affiliated with boat or engine companies
- Designs compatible with all tank materials and available to all tank manufacturers
- Internal venting system eliminates the need for numerous tank access ports
- Creative, innovative approaches to solving problems
 - Integrate multiple tank applications into single vent systems
 - Use canisters in boats with low gunnels
 - Meet regulations without reducing a boat's range of operation
- Reliable automotive style fuel systems that assure proper ullage, automatic shut off (with compatible nozzles) and consistent refueling without spitback or wellback