Flambeau
FLUID SYSTEMS DIVISION

Emission-related Installation Instructions

Failing to follow these instructions when installing the components listed in these instructions in a piece of nonroad equipment violates federal law (40 CFR 1068.105(b)), subject to fines or other penalties as described in the Clean Air Act.

Fuel Tank Installation Guidelines

Note: These installation instructions are intended for use by qualified personnel. Attempting fuel tank system installation and/or service without the proper training, tools, and equipment may cause injury to you or others. It could also cause damage to the engine and/or create an unsafe condition.

Note: Fuel tank systems and components that are supplied assembled should not be altered.
Modifying any part of the tank assembly may adversely affect evaporative emissions, resulting in fines or other penalties as stated above.

Item #

1. Tank

Locate tank in a protected area on the equipment that will not be subject to abuse.
Tank should be shielded from excessive heat.
Mount tank on equipment using proper support for your intended use and size tank.
Secure tank with metal straps & bolts or with recommended mounting hardware.
Emission and warning labels must not be removed.
(Tank shown in schematic requires a mounting strap method; tank may use an alternate mounting method).

2, 3. Cap

Insert tether into tank opening *(see schematic, item 3)* and secure tether end in tank. Thread cap onto tank inlet and seal.
Cap should include a physical indication cap has been sealed (visual, audible, or other).
Ratchet Style Cap - Rotate Cap onto tank threads and tighten until 3 clicks.
Use a Low permeation sealing gasket (Such as Viton) or an EPA certified cap with FEL <30 g/m^2/day *(ref 28°C test parameter).*
Thread type should match tank *(See Flambeau catalog or visit website www.flambeau.com).*

4, 5. Fuel Output / Engine Intake Line

Locate the fuel tank outlet port (*see schematic, item 5)* and connect one end of the engine fuel feed line to the tank outlet port and one end to the engine intake. Use EPA compliant and properly sized fuel line for tank style used and clamp ends securely. Use of Flambeau components is recommended. Contact Flambeau for further information.
Fuel lines should meet the US EPA evaporative emission permeation standard *(see 40 CFR 1060.102).*
For additional information see the following websites:
CARB – http://www.arb.ca.gov/regact/sore03/sore03.htm
EPA – http://www.epa.gov/oms/equip-ld.htm
Vapor lines are not required to meet the EPA evaporative requirements (Note: System must be designed so that liquid fuel does not enter line).
(*Schematic shows a fuel outlet pick-up tube on upper part of tank. Tank purchased may have an output port in a different location)* .

6. Carbon Canister

Locate canister in an area on the equipment that has proper support for the style/size canister purchased and will not be exposed to abuse and/or excessive heat. If needed, Flambeau mounting brackets (schematic, item 9) and Canister Straps *(schematic, item 10)* are available, 2 each are recommended. Contact Flambeau for more information.
Canister may be mounted in any orientation, but consideration must be made so liquid does not enter the canister *(i.e. water spray from cleaning, etc).*
Locate the vent port on the fuel tank and connect a vent line *(schematic, item 7)* from the tank vent port to the tank input port on the canister. Then connect a vent line from the canister purge/output port to engine purge port.
Use appropriate hose clamps to secure lines. See item 4,5 for Flambeau clamps.
Flambeau recommends that the canister be located above the fuel tank to avoid fuel being inadvertently routed to the carbon canister.
Vacuum must exceed 4"/H2O Vacuum in order to actuate canister purge valve.
(Note: The installation schematic shows the tank vent port located at the neck of the fuel tank. The vent port may be in a different location).

Important notes:

- Equipment manufacturers must comply with the requirements of 40 CFR Part 1060.202.
- Users of listed components must insure compliance with all Emission related regulations per 40 CFR and the Clean Air Act.
- Never overfill the fuel tank. Fill only to level indicated on fill tube/tank.

Emission-related Installation Schematic

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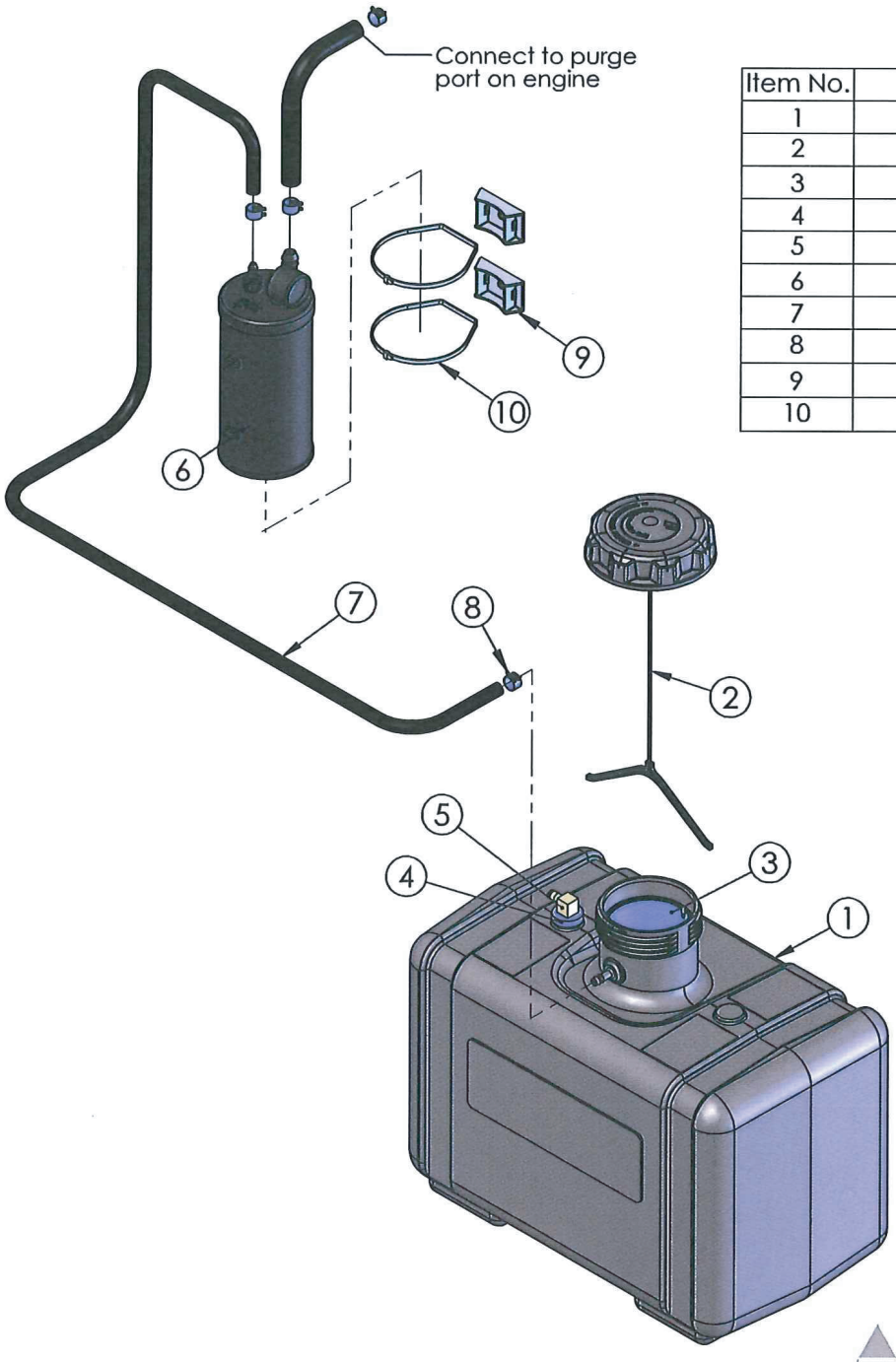
Important Notes:
1. Equipment manufacturers must comply with the requirements of 40 CFR Part1060.202.
2. Users of listed components must insure compliance with all emission related regulations per 40 CFR and the Clean Air Act.
3. Never overfill fuel tank. Fill only to level indicated on fill tube/tank.



Item No.	Description
1	Tank
2	Cap
3	Fill Tube
4	Grommet
5	Pick-up Tube
6	Carbon Canister
7	Vent Tube
8	Hose Clamps
9	Canister Brackets
10	Tie Straps

Above schematic depicts a generic installation.
Actual installation may be different.

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