SUMP
SEPARATOR
FOR STORAGE
TANKS

BULLETIN 22
(09-04)

SUMP SEPARATOR FOR STORAGE TANKS
MODEL GTP-616

The Sump Separator separates water from fuel that is drained from storage tank sumps. Fuel-free water is discharged from one port. Water-free fuel is returned to the storage tank.

The fuel and water mixture from the bottom of a storage tank or from the sump of a filter is discharged to the Sump Separator through a nozzle that causes a swirling action to concentrate most of the dirt in the center of the cone-shaped bottom. Water and fuel are allowed to separate by gravity.

The Gammon Sump Separator:
- Prevents fuel contamination of ground water.
- Allows for pollution control of soil and streams.
- Saves valuable fuel.
- Requires minimal maintenance.
- Eliminates the need for conventional waste or "slop" tanks.
- Features an internal epoxy white coating (stainless steel available on request).
- Has a capacity of 50 gallons standard & up to 300 gallons on special order.

CLEAN CUT
Only the Gammon Sump Separator makes possible a **CLEAN CUT**. The operator can easily see when the fuel/water interface has reached the bottom of the cone. When closing the water drain valve, the operator makes a **CLEAN CUT**, preventing any fuel from leaving with the water. Only fuel remains at the bottom of the cone.

VISUAL CERTAINTY
Direct **VISUAL** observation of the fuel/water interface is achieved by swinging the cover on its davit so that the operator sees through the fuel to the interface. This provides **VISUAL CERTAINTY** to make a **CLEAN CUT**.

Other sump separator designs on the market rely on a sight glass that the operator observes when draining off the water. Invariably, some of the fuel leaves with the water because the level in the sight glass always lags behind the level in the vessel. The operator can overcome this problem by closing the water drain valve ahead of time. The result is that some of the water is then pumped back to the storage tank.

Gammon originated the sump separator in 1965 and has always used a stainless steel foot valve at the bottom of the cone as shown on page 2. All other manufacturers use common pipeline valves that cause some of the settled water to be pumped back to the storage tank.

No other manufacturer in the world can claim more than 30 years of experience in the sump separator business. In fact - we originated the name "sump separator"!
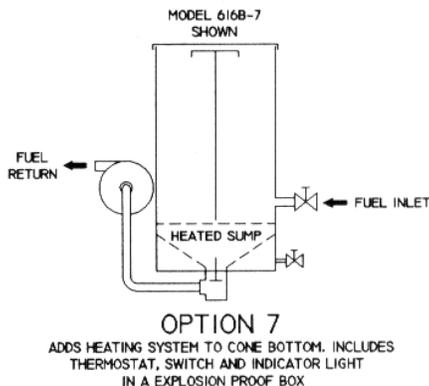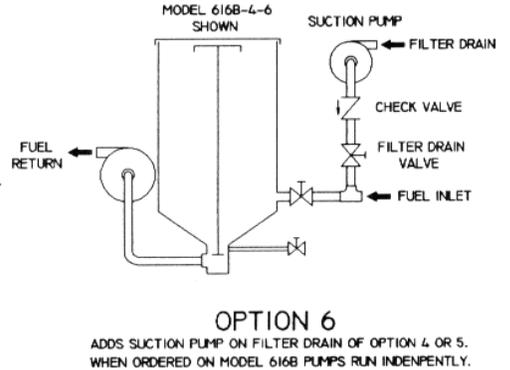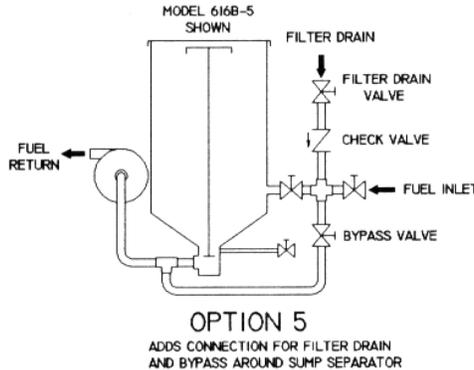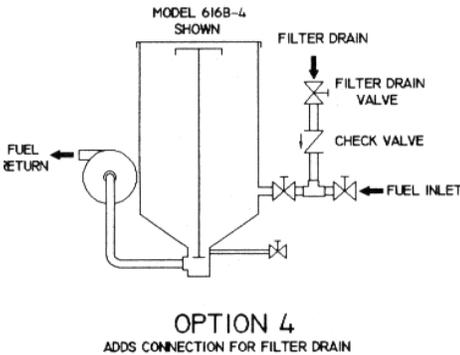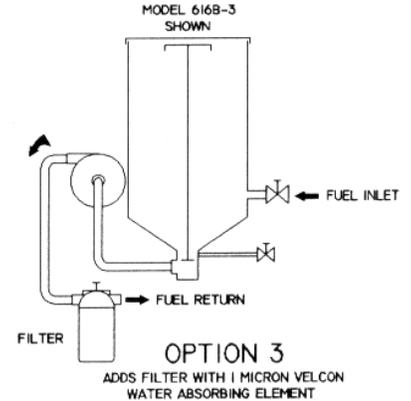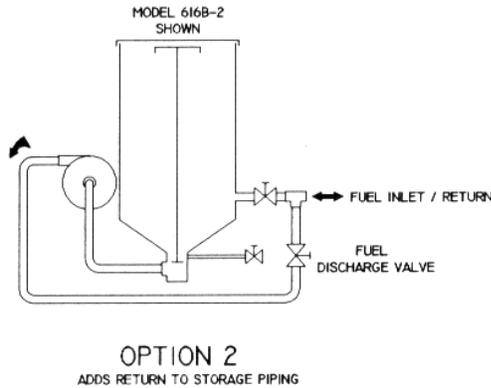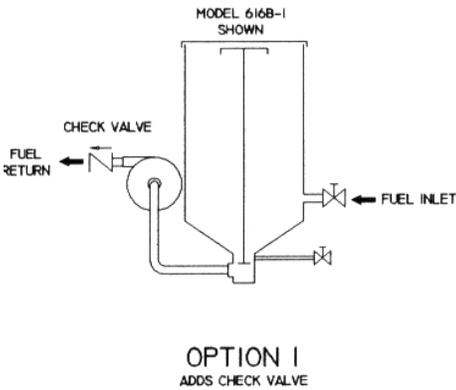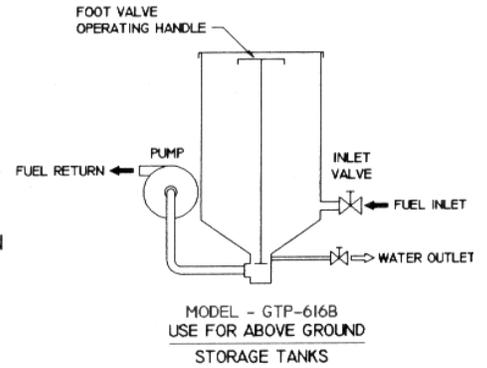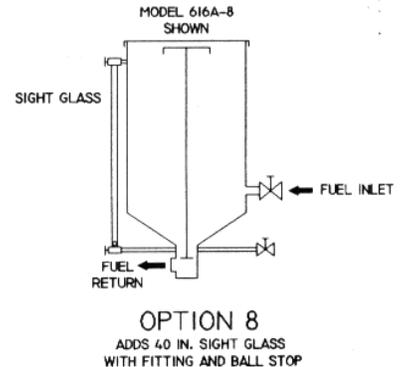
FUEL RECOVERY SYSTEMS
SUMP SEPARATORS
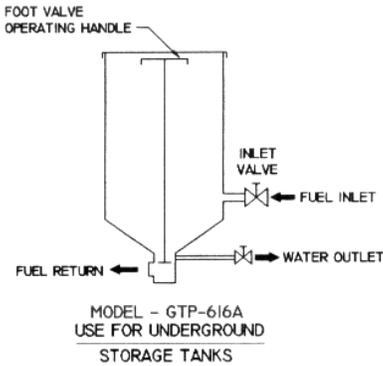
ALL MODELS INCLUDE THE FOLLOWING :

- I IN. BALL VALVE AT INLET
- I/2 IN. BALL VALVE AT WATER OUTLET
- COVER WITH SWING-AWAY DAVIT STYLE MOUNT
- TWO 3/4 IN. AUXILIARY FITTINGS FOR CONNECTION OF DISCHARGE PIPING FROM AIR ELIMINATORS, PRESSURE RELEIF VALVES AND DRAINS FROM FILTER SEPARATORS.
- TWO I/2 IN. AUXILIARY FITTINGS FOR CONNECTION OF SIGHT GLASS.

MODEL - GTP-616A
USE FOR UNDERGROUND STORAGE TANKS

FOOT VALVE OPERATING HANDLE
INLET VALVE
FUEL INLET
WATER OUTLET
FUEL RETURN

MODEL - GTP-616B
USE FOR ABOVE GROUND STORAGE TANKS

FOOT VALVE OPERATING HANDLE
PUMP
FUEL RETURN
INLET VALVE
FUEL INLET
WATER OUTLET

MODEL 616B-I SHOWN
CHECK VALVE
FUEL RETURN
FUEL INLET

OPTION I
ADDS CHECK VALVE

MODEL 616B-2 SHOWN
FUEL INLET / RETURN
FUEL DISCHARGE VALVE

OPTION 2
ADDS RETURN TO STORAGE PIPING

MODEL 616B-3 SHOWN
FUEL INLET
FUEL RETURN
FILTER

OPTION 3
ADDS FILTER WITH I MICRON VELCON WATER ABSORBING ELEMENT

MODEL 616B-4 SHOWN
FILTER DRAIN
FILTER DRAIN VALVE
CHECK VALVE
FUEL RETURN
FUEL INLET

OPTION 4
ADDS CONNECTION FOR FILTER DRAIN

MODEL 616B-5 SHOWN
FILTER DRAIN
FILTER DRAIN VALVE
CHECK VALVE
FUEL RETURN
FUEL INLET
BYPASS VALVE

OPTION 5
ADDS CONNECTION FOR FILTER DRAIN AND BYPASS AROUND SUMP SEPARATOR

MODEL 616B-4-6 SHOWN
SUCTION PUMP
FILTER DRAIN
CHECK VALVE
FILTER DRAIN VALVE
FUEL RETURN
FUEL INLET

OPTION 6
ADDS SUCTION PUMP ON FILTER DRAIN OF OPTION 4 OR 5. WHEN ORDERED ON MODEL 616B PUMPS RUN INDENPENTLY.

MODEL 616B-7 SHOWN
FUEL RETURN
FUEL INLET
HEATED SUMP

OPTION 7
ADDS HEATING SYSTEM TO CONE BOTTOM. INCLUDES THERMOSTAT, SWITCH AND INDICATOR LIGHT IN A EXPLOSION PROOF BOX

ALL MODELS INCLUDE THE FOLLOWING :
CONTINUED

- FOOT VALVE , O-RING SEALED ; RELEASES FUEL FOR RETURN TO STORAGE. (I IN. N.P.T. PORT)
- PIPE AND FITTINGS: STEEL OR DUCTILE IRON. CAST IRON NOT USED. STAINLESS STEEL AVAILABLE UPON REQUEST.
- VALVES ARE BRASS BALL TYPE. STAINLESS STEEL AVAILABLE UPON REQUEST.

MODEL 616A-8 SHOWN
SIGHT GLASS
FUEL INLET
FUEL RETURN

OPTION 8
ADDS 40 IN. SIGHT GLASS WITH FITTING AND BALL STOP

ORDERING INFORMATION

MODEL GTP-616A   Use for <u>underground</u> storage tanks. Fuel returns to storage by gravity when foot valve is opened.

MODEL GTP-616B   Use for <u>above-ground</u> storage tanks that will gravity drain to the sump separator. Includes a 10 gpm, 65 foot head ductile iron centrifugal pump with explosion-proof switch, (120 volt, 60 Hz, 3/4 Hp, single phase, explosion-proof motor) to return fuel to storage.

OPTION 1   Adds discharge swing check valve.

OPTION 2   Piping connected to pump fuel back to storage through the storage tank drain line.

OPTION 3   Adds a filter rated at 1 micron, 150 psi design. Recommended only for GTP-616B.

OPTION 4   Adds connection with 1" ball valve and swing check valve. Use for draining filter tanks when elements are to be replaced.

OPTION 5   Same as Option 4, except bypass piping also included. When draining a filter tank with a capacity greater than the 50 gallon sump separator, the first 50 gallons will flush out the filter sump water and dirt. The excess can then bypass the sump separator and go directly to storage.

OPTION 6   A positive displacement pump is added to either Option 4 or 5. Pump will self-prime and draw fuel from a low filter sump, an underground storage tank sump, or from a mobile filter having a hose connection. Includes explosion-proof control box (120 volt, 60 Hz, 3/4 Hp., single phase, explosion-proof motor). When ordered on Model B, circuit arranged to prevent both pumps operating at one time.
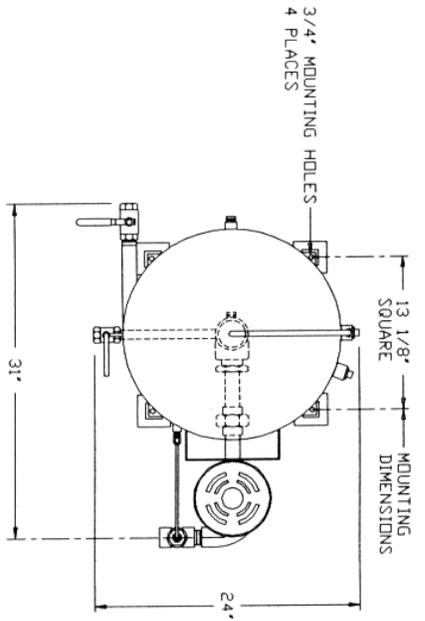
OPTION 7   Adds oil bath heating system under the cone-shaped bottom. Includes explosion-proof thermostat, switch and indicator light. 300 watts, 220 volts.

OPTION 8   Adds 40" sight glass with fittings and ball stop, to prevent flow if glass breaks. Option 8SS is stainless. Option 8B is bronze.
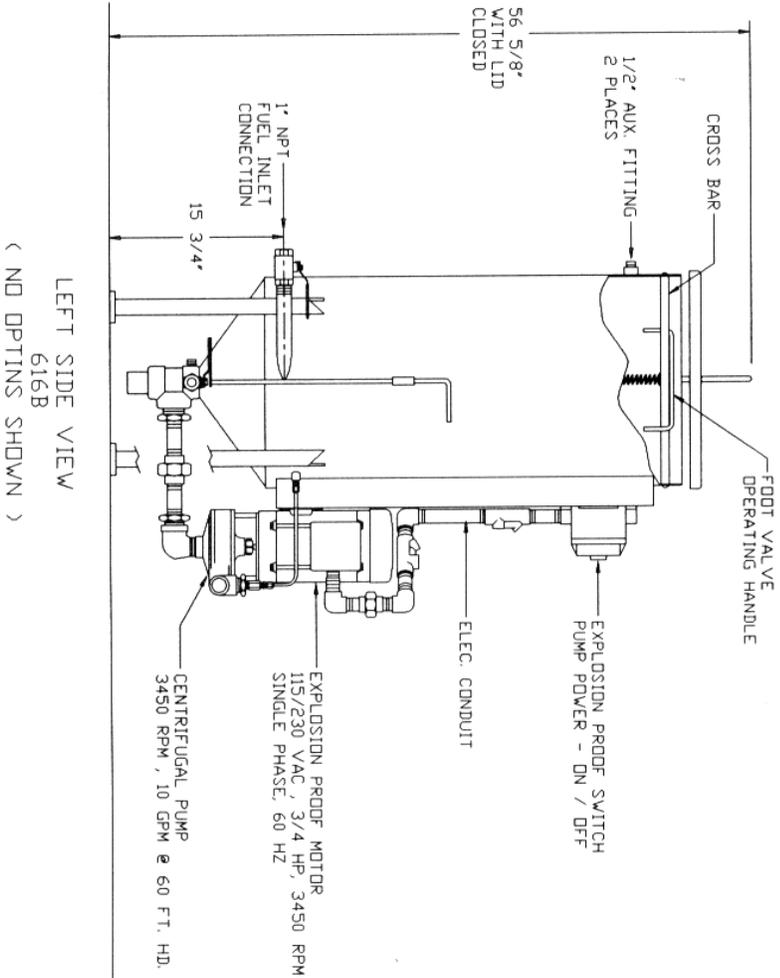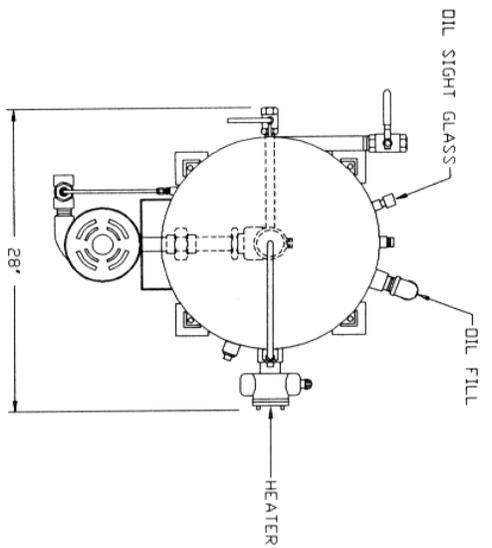
EXAMPLE: Model GTP-616A47 - This is a sump separator for use with an underground storage tank. No return pump is required because the fuel will drain by gravity back to storage. A connection has been added for taking the drained fuel from a filter and the cone bottom is equipped with a heater.

Model GTP-616B1246 - This sump separator is for use with an above-ground storage tank and is equipped with a pump, check valve, and return piping so that the fuel can be pumped back to the storage tank through the storage tank drain line. A connection has been added with a positive displacement pump for taking the drained fuel from a filter that has a sump that is lower than the sump separator.
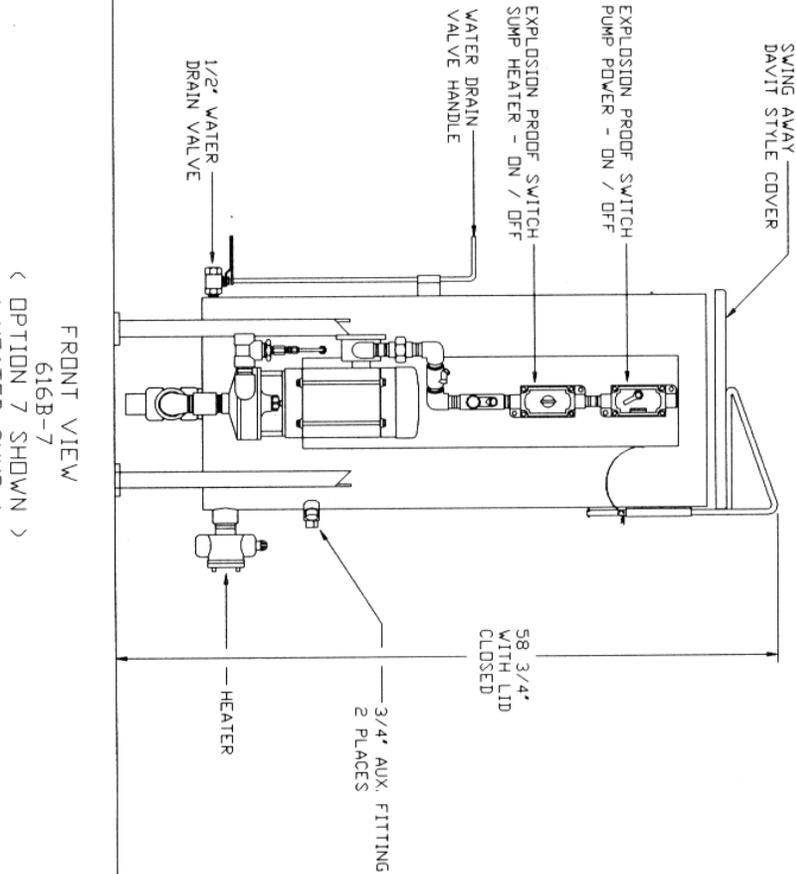
TOP VIEW

3/4" MOUNTING HOLES
4 PLACES

13 1/8"
SQUARE

MOUNTING
DIMENSIONS

31"

24"

56 5/8"
WITH LID
CLOSED

1/2" AUX. FITTING
2 PLACES

CROSS BAR

1" NPT
FUEL INLET
CONNECTION

15 3/4"

FOOT VALVE
OPERATING HANDLE

EXPLOSION PROOF SWITCH
PUMP POWER - ON / OFF

ELEC. CONDUIT

EXPLOSION PROOF MOTOR
115/230 VAC, 3/4 HP, 3450 RPM
SINGLE PHASE, 60 HZ

CENTRIFUGAL PUMP
3450 RPM, 10 GPM @ 60 FT. HD.

LEFT SIDE VIEW
616B
(NO OPTINS SHOWN)

TOP VIEW

OIL SIGHT GLASS

OIL FILL

28"

HEATER

58 3/4"
WITH LID
CLOSED

SWING AWAY
DAVIT STYLE COVER

EXPLOSION PROOF SWITCH
PUMP POWER - ON / OFF

EXPLOSION PROOF SWITCH
SUMP HEATER - ON / OFF

WATER DRAIN
VALVE HANDLE

1/2" WATER
DRAIN VALVE

HEATER

3/4" AUX. FITTING
2 PLACES

FRONT VIEW
616B-7
(OPTION 7 SHOWN)
(HEATED SUMP)