

The Torrent™ Separator



Made in USA

# Installation Manual

## The Torrent™ Separator

### Vapor Oil Separator Unit

### Installation Instructions



# Table of Contents

<b>Safety Precautions .....</b>	<b>3</b>
<b>Notes for Hose Connections.....</b>	<b>3</b>
<b>Pre installation.....</b>	<b>3</b>
<b>Parts Identification.....</b>	<b>4</b>
<b>Location for the Separator.....</b>	<b>5</b>
<b>Positioning the Separator.....</b>	<b>6</b>
<b>Installing Pressure Fittings.....</b>	<b>7</b>
<b>Check for proper oil flow.....</b>	<b>8</b>
<b>Installing the drain line.....</b>	<b>9</b>

## **Recommended hoses.**

### **Drain Lines**

Gates GMV (12gmV ID 3/4") Global MegaVac Return Line  
and Suction Hose – SEA 100R4 or equivalent hose.

or

Gates 12LOC (ID 3/4")

### **Pressure Line**

Gates 4MGT hose or equivalent.

## **Safety Precautions:**

- Before installing the Separator, make sure that the engine has cooled down sufficiently to prevent burn injuries.

## **Hose Connections:**

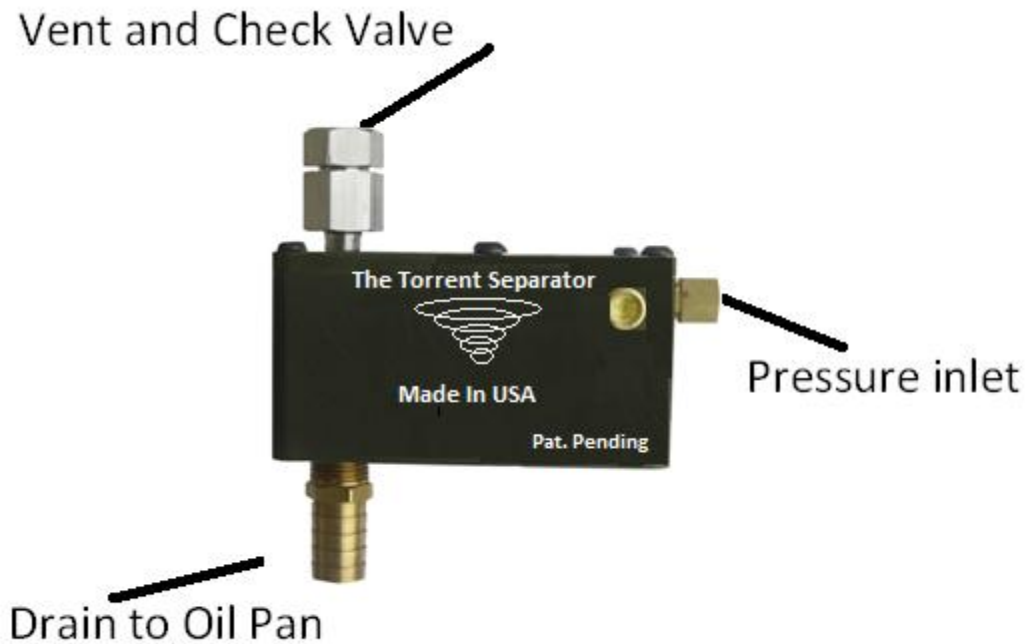
When installing the hose ends on the barbed fittings please note the following instructions

- Use a heat gun or soak the hose ends in hot water to expand them. This will help when assembling.
- Apply light oil such as a silicon spray or WD40 on the end of the hose before pushing the hose on to the barbed fitting. DO NOT use grease or engine oil.
- Before installing the fittings on the pressure hose install insulation to keep the oil as hot as possible. Use ties to secure the hose from coming in contact with any metal or moving parts.
- Route all hoses away from extremely hot components, such as exhaust pipes and the turbo.
- Route all hoses away from moving parts.
- Ensure all hoses are the proper length before sliding them over the barbed hose fittings.
- Leave enough slack in the hoses to allow for engine movement. Use high temperature thread seal on all NPT fittings.

## Before installing The Torrent Separator:

- Change the oil before installing The Torrent Separator
- Be sure to handle the used oil in compliance with all applicable laws.
- Always wear oil resistant gloves when handling used oil.

Technical Support.....801-882-0222



## Supply Line

Locate a source for the pressurized oil that goes to The Torrent Separator. This can be the engine's oil filter housing or an auxiliary port.

- The recommended supply line hose is a Gates 4MGT hose or equivalent. Good for 1000 psi, 300 degrees Fahrenheit.
- Install the insulation on the pressure hose before installing the pressure fittings.

## Drain Line

The recommended drain line is a Gates GMV (12gmV ID 3/4") Global MegaVac Return Line and Suction Hose – SEA 100R4 or equivalent hose.

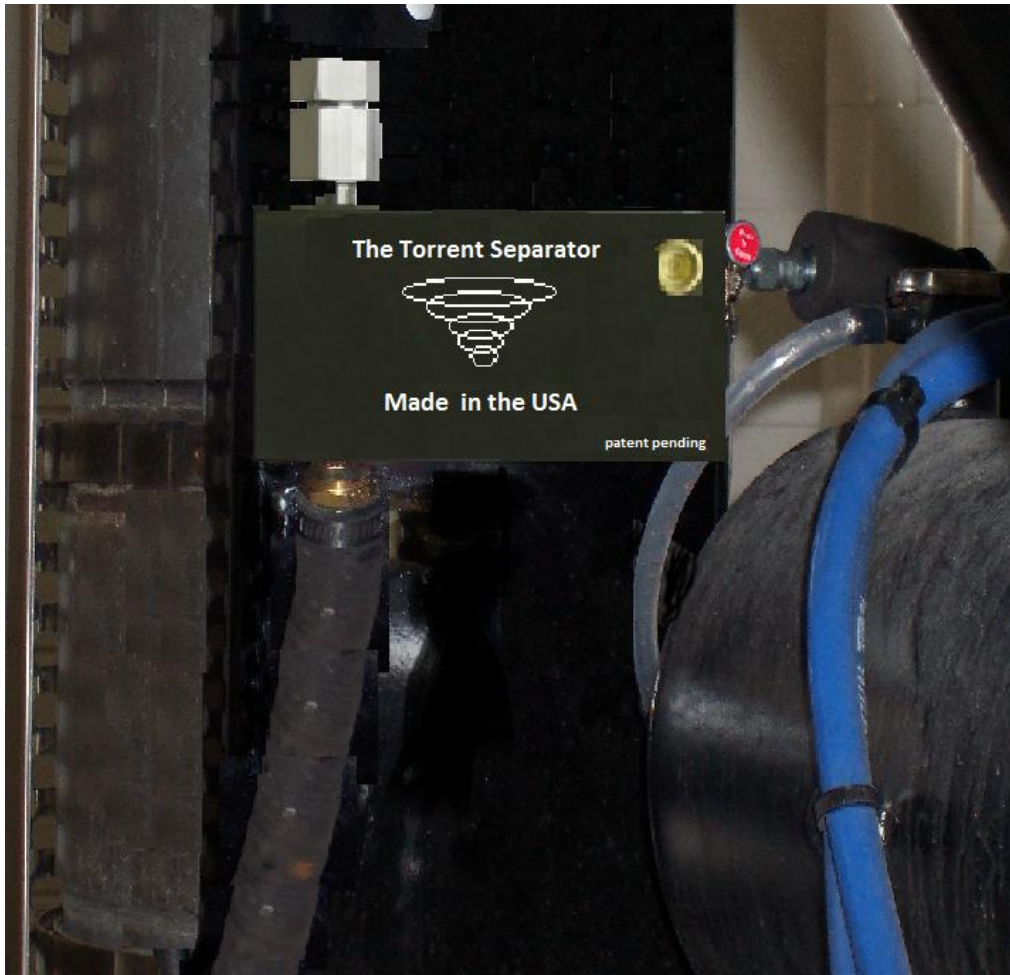
The oil must drain into lower part of the oil pan or into the Auxiliary Drain Plug or the main oil plug.

## Vent line

Use a gas line hose for the vent line. The vent line can either be vented to atmosphere or into a vent bottle.

## Finding the proper location for The Torrent.

- 1- The clean oil drains directly into the oil pan. For best results the separator should be located on the same side of the spare inspection plug on the oil pan and at least 16 inches above the top of the oil pan. **The higher the better**
- 2- The location must allow the separator to be kept as warm as possible (for example, close to the exhaust). If the location is in an area where cold air can get to the separator it is recommended to insulate the separator for maximum efficiency. If you can't determine if the separator needs to be insulated or not it would be best to insulate it.
- 3- The pressure line should also be insulated to keep the oil hot going into The Torrent Separator.



Determine a mounting location by placing The Torrent Separator in a number of locations to ensure that oil pressure line doesn't come in contact with other parts of the vehicle such as the tire, hood etc. and the drain line has a clear path to the oil pan. The steeper the slope the better it will drain.

## IMPORTANT!

The Torrent Separator must also be installed with the logo and writing on the side. The Torrent Separator must be level with the engine. Failure to do so will jeopardize the proper operation of The Torrent Separator, and will void your warrantee

Do not install the unit in any other position other than shown in the picture above.

The Torrent separator must be mounted at least **16** inches from the top of the oil pans lip (the higher the better). This will allow for proper draining into the oil pan. The higher you can go the better.

## Installing Pressure Fittings & Line



Find an oil pressure line or oil galley on the engine and install the pressure fitting. You might have to adapt an elbow as shown above to better route the pressure line.



Measure the pressure hose from the oil galley fitting to The Torrent Separator and cut it to length. Make sure that you have enough hose to connect to both fittings and still have enough slack for engine movement.

After the hose has been cut to size, clean out the inside of the hose with air pressure, install the insulation on the hose, and install the pressure fittings.

After you are sure all of the fittings are installed properly, install the pressure hose onto the engine only and start up the engine. Check for proper flow out of the hose.



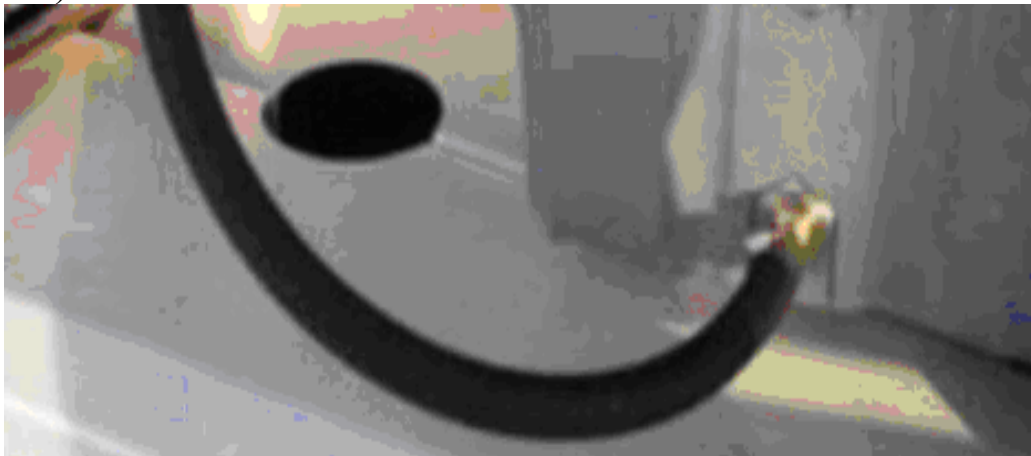
After flow is confirmed, connect the hose to The Torrent Separator and secure the pressure hose to avoid contact with hot or moving parts. Use tie wraps if needed.



At this point make sure that all of the fittings are tightened properly.

## Installing the drain line and oil pan adapter

The recommended drain line is a Gates GMV (12gmV ID  $\frac{3}{4}$ " Global MegaVac Return Line and Suction Hose – SEA 100R4 or Gates 12LOC (ID  $\frac{3}{4}$ "



Make sure that the drain line is sloping sharply to the oil pan adapter unobstructed. Remember the separator can be close to the exhaust to keep the Torrent Separator as hot as possible. Use tie wraps to keep the hose from rubbing on other metals and leave at least 7 inches of slack for engine movement.

Let the engine run for 45 minutes and check for leaks, making sure the Separator is hot. During this time you should take an oil sample for the reference point of the oil. The oil sampling valve is optional and you could install a 1/8 inch tee valve for the sampling.

It is recommended that The Torrent Separator is checked for proper operation often. To do this all you have to do is put your hand on the drain fitting to make sure that it is HOT, Be careful not to leave your hand to long on the separator because it will be up to 220 degrees F.

If The Torrent Separator is only warm all you have to do is take the metering fitting out and clean it out with some kind of solvent. This is the only maintenance that needs to be done.

Put the fitting back and run the engine for 15 minutes and check for leaks.

You have purchased the most reliable separator unit that is available on the market. There are no moving parts and the separator can never wear out. It will last the life time of your engine and will work as good then as it does now.