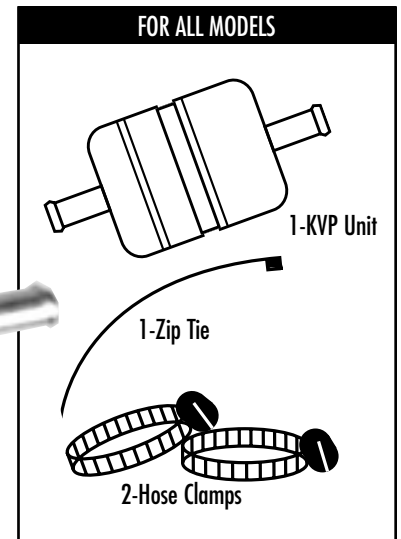


Congratulations on your purchase of the **Krank Vent Plus**. The **Krank Vent Plus** connects inline to your crankcase breathing system, controlling the amount of air within the crankcase, beneath the pistons by creating a negative air flow. This allows your pistons to move up & down easier and with less air friction. This prevents the engine from working against itself and prevents blown or weeping gaskets. You'll gain an added benefit of 2-7% increase in useable rear wheel horsepower. You'll also find your rings seal better due to increased pressure differential across the compression rings. □

## GETTING STARTED

Examine the **Krank Vent Plus** and find the end with the machine tooled groove cut into it. This is the end that will be connected to the air filter. Test this product by blowing air through the opposite end (end connecting to the crankcase hose). You should be able to blow through this end of the unit. If you inhale from this end, you should feel and hear the unit close internally. Keep in mind your bike has much more vacuum ability than your lungs. □



## CRANKCASE-BREATHERS

### PRE '93/STEP 1

Use 3/8 inch hose in good condition - **new is good**. New 3/8 inch power steering hose is better. No sharp bends in hose can be present - ever! You do not want to restrict air flow.

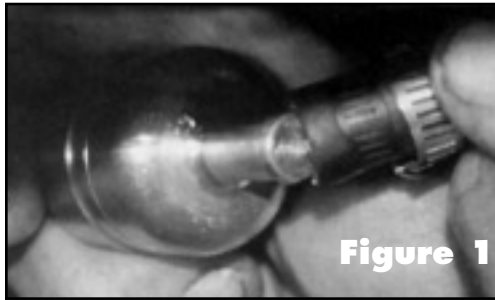


Figure 1

### PRE '93/STEP 2

The **Krank Vent Plus** can be easily installed "in line" on the crankcase hose between the crankcase and a small canister type filter (such as a K&N). Simply cut the existing hose, insert the **Krank Vent Plus**, connect the hose by using the included hose clamps.



Figure 2

### PRE '93/STEP 3

The hose clamps at both ends of the **Krank Vent Plus** must be tight. Use the included mounting pad and zip tie if you wish to attach the **Krank Vent Plus** to the frame or other product. However, this is not a necessity because the length of hose supports the weight of the unit (about 2 ounces).

## HEAD-BREATHERS

### '93-UP/STEP 1

On later model bikes equipped with head breather ports that exit each cylinder head, you will need an after market breather adapter kit and an after market air cleaner, such as Screaming Eagles Part # 29310-93. If you have an after market carburetor then you already have installed a head breather adapter kit. Simply install the **Krank Vent Plus** using a hose connected to the tubing outlet.

### '93-UP/STEP 2

The lines exiting the cylinders will be connected with a "T" or crossover bar, reducing the two lines to one. A length of hose will then lead from the "T" to the air cleaner. The **Krank Vent Plus** will connect between the "T" and the air cleaner. An alternate way of installation is to drop a length of hose from the "T" down to the bottom of the bike near the frame or curved and headed back toward the rear tire. This hose may be a couple of feet long. Attach a small canister type filter to the end of the hose and secure it to the bike. The **Krank Vent Plus** may then be installed just prior to the filter. Make sure, as always, to not install the **Krank Vent Plus** backwards. The end with the machine tooled groove cut into it leads to the filter. (If you choose this installation, be sure to plug any holes in the air cleaner where you disconnected the hose). Make sure there are no crimps or sharp bends in the hose. You do not want to restrict air flow.

**NOTE: The Krank Vent Plus is NOT restricted to position. It will function properly in either a horizontal or vertical position.**



**"Feel the difference!"**

## NOTES & EXCEPTIONS

The **Krank Vent Plus** is installed on the engines existing crank case breather line. On pre '93 Big Twins, pre '91 XL's, and all after market crank cases, this is the timed breather port that exits the rear of the crankcase. On later models equipped with breather ports that exit each cylinder head you will need an after-market breather adapter kit and an after market air cleaner. (Screaming Eagles part #29310-93)

- A. The **Krank Vent Plus** valve may be serviced if for some reason foreign material causes the valve to not function properly. To check the valve, blow firmly in the end without the machine tooled groove. To disassemble, break valve in half with thumbs and fore fingers. To reassemble, lube o-ring and push back together. The **Krank Vent Plus** has been specially designed so that it is impossible for it to ever clog in a closed position. It is highly unlikely that the unit would clog at all, but if it were to, it would clog in an open position, thus being impossible to cause engine damage.
- B. A worn oil pump check valve can cause oil to be purged from the sump and through the breather upon start-up. Especially if the engine has not been started for a while. This is normal.
- C. Worn engine rings, high compression, or new rings not yet seated, can cause oil to be purged from the engine. This is normal and the **Krank Vent Plus** will greatly reduce these problems.
- D. The **Krank Vent Plus** is warranted for a one year period from date of purchase. Hayden Enterprises assumes no liability other than repair or replacement of the unit.