



## GZ EVACUATION PUMP INSTALLATION INSTRUCTIONS

By creating a negative pressure (relative to atmospheric pressure), this crankcase evacuation system is designed to reduce crankcase pressure build-up, providing better ring seal, less intake charge contamination, and a reduction in oil leakage. This kit employs a belt driven pump to eliminate positive crankcase pressure.

Evacuation Kit Includes (see picture):

- Assembled Pump With Pulley
- Drive Mandrel With Pulley
- Mounting Kit With Fasteners
- Belt
- Valve Cover Bung
- Catch Can With Breather
- Assembly Instructions
- Hoses And Fittings

1. Remove crankshaft pulley bolts (if used) and replace with correct length to install crankshaft drive mandrel. If not using standard crankshaft pulley use bolts supplied to install the mandrel on the harmonic damper.

2. The slotted adjustment arm is mounted from the supplied 3/8" hardware and spacer below the water pump (see picture). Install the supplied aluminum spacer behind the slotted arm. Install nut and secure arm.

3. Install aluminum bracket to the passenger side cylinder head using the 3/8"-16x2.5" bolt and washer. Install the 3/8"x 6.0" pivot bolt with aluminum spacer and hardened washer through the pump and bracket. Install 3/8" x 1" adjustment bolt and washer into the slotted adjustment arm and pump finger-tight at this time.

4. Install the belt around the drive and pump pulley. (To facilitate installation of the belt, the drive pulley can be removed and reinstalled with the belt around it). Align the drive pulley with the pump pulley by repositioning it on the shaft. Swing pump outward to tighten belt and secure pump bolts at the adjustment point. At this time, Loc-Tite and tighten set screws in drive pulley and check all mounting bolts to assure that they are also secure.

5. Mount the catch can/breather to the firewall or inner fender as space dictates. NOTE:  
FASTENERS FOR THIS PROCEDURE ARE CUSTOMER SUPPLIED.

6. Install the valve cover bung, recommended in the passenger side cover only. See pictures for correct location. You can also weld a baffle under the bung. Plug hole in driver side valve cover with supplied oil fill cap. Plug off PCV valve and line. You may also want to cap off the dipstick tube to prevent vacuum leakage.

7. Install one end of the rubber or braided hose (with fitting) to the pump inlet port (this port is closest to the water pump). Measure the length of the hose needed to reach the valve cover

breather or fitting from the pump. Cut the hose to desired length and install. Install the braided hose to the pump outlet. Measure and cut the hose to length as needed to reach the breather/catch can. Assemble the hose and fitting. At this time tighten the remaining loose fittings.

--In the event that the pulleys do not line up correctly (especially if used with a March Serpentine system w/AC), the aluminum pivot bracket may be shortened to accommodate realignment--



**PARTS LIST:**

- |   |  |
|---|--|
| Vacuum Pump   | 3/8" Pipe to #10AN Straight Fitting for Tank           |
| 2-Bolt Aluminum Bracket (pump to head)  | 2- 1/2" Pipe to #10AN Straight Fitting for Pump        |
| Belt Tension Adjustment Bracket   | 2- #10AN Straight Hose Ends                            |
| *4.5" Pulley for Pump   | 1 ea. #10AN 45 & 90 Degree Fittings                    |
| *2.75" Drive Pulley   | 5' Braided Hose  |
| Breather Tank   |  |
| Pulley Drive Mandrel for Crank  |  |
| V-belt (91.5 cm)  |  |
| #10 AN AL. Weld-in Bung   |  |
| Oil Fill Cap  |  |
| 5- 3/8" Flat Washers  |  |
| 3/8" x 6 1/2" Bolt (thru pump/lower hole in mounting bracket to head)   |  |
| 3/8" x 2 1/2" Bolt (top hole in bracket to cyl head)  |  |
| 3/8" x 3 1/2" (adjustment bracket to timing cover-center bolt under water pump)   | 1- 5/8 x 3/4 aluminum bushing                          |
| 3/8" x 3 3/4" (for slotted pump adjustment bracket) (top hole in bracket to cyl head)   |  |
| <b>March</b> – 3/8" x 7" Bolt (thru pump/lower hole in mounting bracket to head)  |  |
| <b>March</b> – 3/8" x 3" Bolt (top hole in bracket to cyl head)   |  |
| <b>March</b> – 3/8" x 4" (3/8 x 4 1/2 bolt for style track) (adjustment bracket to timing cover-center bolt under water pump)                   | 2- 5/8 x 3/4 aluminum bushing (style track 1" X 3.450" |
| Custom AL Bushing w/ 3/8" Hole  |  |
| 6 1/2" 3/8" Bolt (this takes place of TPR-TEK302))(style track use 1"x.450" AL Bushing w/ 3/8 hole between pump and slotted adjustment bracket) |  |

**March** - 3/8" x 3 3/4" (for slotted pump adjustment bracket) (top hole in bracket to cyl head)

## Evac Fitting and Baffle Installation

When using fabricated aluminum valve covers as pictured, we typically position the evac fitting on the passenger side in the center on the upper corner of the cover.



If using the existing valve cover breather holes you can use a Moroso Oil Separator 68788 as shown below.

