

VACUUM PUMP

1 AEROSPACE COMPONENTS 727.347.9915



INSTALLATION TIPS:

- 1. The vacuum pump bracket is designed to be bolted to a flat surface. If you are running a motor plate, this would be an ideal place to mount the pump. If you own a BBC engine, the pump will directly bolt to the front of a cylinder head. When mounted to a BBC head gates v-belt part# 7380 xl works great.
- 2. The pulley can be removed and turned over for additional belt positions. The vacuum pump shaft has more than one locating hole for the pulley. NOTE: The pulley has TWO set screws in it. One set screw has a dog point which must register in a hole on the shaft and the other set screw acts as a jam bolt.
- 3. The pump can spin in either directions and deliver the same vacuum . If the pump is spinning clockwise, the "A" fitting will be the exhaust. (Refer to page 3 for illustration).
- 4. We recommend plumbing the inlet side of the vacuum pump to the front face of a valve cover. This position is not only effective at creating maximum vacuum, but also allows some oil mist to flow through the hose and into the pump for proper lubrication.
- 5. The exhaust side of the pump must be plumbed into a breather tank that cam be drained periodically.

OPERATION:

- 1. The suggested amount of vacuum at maximum RPM is 10-12 in/hg for a wet sump engine. For dry sump systems, consult with your engine builder. Mounting a gauge in the valve cover is the only way to see the exact amount of vacuum in your engine.
- 2. The pump MUST be lubricated. If you have good amount of oil in your breather tank with little to no water after a few passes, then the pump is receiving proper lubrication. If the breather tank is dry, or only has moisture in it, the pump needs oil. To do this, simply pull off a fitting on the pump and squirt about 2-3 ounces of motor oil into the pump. This needs to be done about every 8-10 passes. Lubrication is vital to the longevity and maximum performance of the pump.









- 1. USING THE THREE 3/8-24 BOLTS; ATTACH THE DRIVE HUB TO THE DAMPENER, THEN TORQUE TO FACTORY SPECS.
- 2. THERE ARE THREE SPACERS OF DIFFERENT THICKNESS. USE THESE TO ADJUST PULLEY POSITION.
- 3. ONCE THE PULLEY POSITION IS ACHIEVED, TIGHTEN DOG POINT SET SCREW SECURELY ON DRIVE HUB SLOT USING LOCTITE THREAD LOCK COMPOUND.
- 4. FINALLY INSTALL THE CAP USING 1/2-13 BOLT TO TIGHTEN COMPLETE ASSEMBLY TOGETHER. MAKE SURE CAP IS TIGHTENED ON PULLEY OR SPACERS AND NOT ON THE END OF THE DRIVE HUB. TORQUE TO 70 FT. LBS. AND USE LOCTITE.



TECHNICAL TROUBLESHOOTING / FAQ

Q. My pump doesn't pull enough or any vacuum, what's wrong?

A. In order for the Aerospace Components Vacuum Pump to pull any vacuum at all, the motor must be completely sealed up and be within reasonable leak-down tolerances. Make sure all seals on the motor (i.e. distributor gasket, valve cover gaskets, intake end seals, crank seals, intake gaskets, oil pan gaskets, dip stick, etc.) are in good condition and no leaks are possible. It is highly advisable to use grey silicone to help seal the motor.

Q. How do I set the relief valve?

A. Start with the relief valve tightened completely and back it off two full turns. This will give you a good starting point. To create more vacuum, tighten the relief valve down. To create less vacuum, loosen the relief valve up. Always make sure the jam nut is tight to keep the adjustment part of the relief valve from backing out or turning on its own.

Q. How do I know how much lubrication the vacuum pump requires?

A. Other than the required amount of lubrication listed, no other maintenance is required. Although, if you are running alcohol, it is recommended that you remove the inlet and outlet lines from the vacuum pump after a day of racing to keep the pump from retaining moisture. This step greatly increases longevity of the Aerospace Components Vacuum Pump.

Q. Is the Aerospace Components Vacuum Pump able to be rebuilt and if so, how long can it go until having to be rebuilt?

A. The pump can be fully rebuilt and replacement parts are available directly from Aerospace Components. Depending on how many passes are made with the vacuum pump and how well it is maintained, anywhere from two or more seasons of use is fully possible.

Q. My Aerospace Components Vacuum Pump makes a "clicking" noise, is this normal?

A. Due to the nature of centrifugal-type pump, a "clicking" noise will be more evident the higher the RPM of the motor.





After an initial run of your vehicle, check all nuts and bolts that hold the brackets, hats, hubs, etc. and re-torque as necessary.

Also, periodically check tightness of all nuts, bolts, and brackets. *This is critical.*

Make sure Red Loctite[®] is used on all nuts, bolts, and fasteners.

WARNING:

MOTORSPORTS ARE EXTREMELY DANGEROUS AND MAY RESULT IN SEVERE INJURY OR EVEN DEATH. RACE AT YOUR OWN RISK.