

## PRODUCT BULLETIN

PB No. 120  
Rev. 0

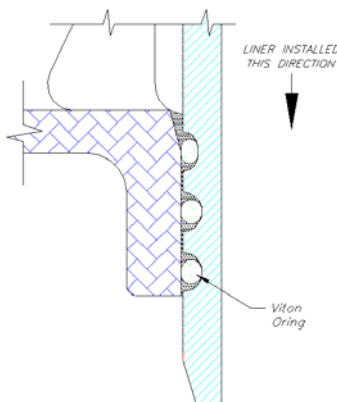
### **Subject:** Viton Liner-to-Block O-rings for Improved Performance and Protection

**PROBLEM:** Deterioration of the standard Buna-N (P-4A-1383) liner-to-block o-ring can lead to catastrophic engine failure with coolant entrainment into the lube oil system.

**SOLUTION:** Upgrade to the Viton (P-033-150-001) liner-to-block o-ring can increase o-ring durability and life.

The condition of the Superior lower o-ring block landing has remained a critical component in the proper sealing of the jacket water cavity from the oil sump and lubrication system. Additionally, new cleanburn/low emission technology has resulted in increased BMEP, peak firing pressures, and heat load – thus creating a tougher environment for the sealing o-ring.

In response to meeting customer demands for an improved o-ring seal, **EnDyn** has developed a special Viton blend o-ring (P-033-150-001) that exceeds oem specifications based on a recent test. In comparison to the standard Buna-N o-ring, the improved Viton allows for increased heat exposure as well as compression set properties.



For installation, EnDyn recommends installing either o-ring type on the liner dry, then applying a light coat of engine oil on the exposed portion of the o-ring. Heavy lubricants, such as grease, are not recommended, as this can lead to a “hydraulic effect”, which reduces piston to liner clearance. Alternatively, a 50/50 mixture of STP and engine oil can be used as installation lubricant. Last, run a hone in the liner o-ring area after liner installation to ensure proper clearance – wash all cast iron dust with soap and water prior to operation.

Note that our in-house procedures call for every EnDyn exchange engine to have at least one Viton o-ring in the lower o-ring position (closest to the oil sump) for added protection.

For additional information, pricing, or delivery, please contact your **PowerParts**® Distributor ([www.endyn.com](http://www.endyn.com)) or the **EnDyn** Sales Department (1-800-72-ENDYN).

5/28/10

MARKETING DEPT  
300 West First  
Alice, Texas 78332 USA  
361.668.8311  
800.723.6396  
fax 361.668.3906  
[www.endyn.com](http://www.endyn.com)