

· · · · ·	GASKET BORE	
	CYLINDER BORE	
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Note: Head gasket bore opening should always be larger than the cylinder bore opening. Image depicts Gas Stopper design (MLS GS) head gasket.

Installation Instructions

Features & Benefits:

- Enhanced sealing properties in high compression, forced induction and nitrous oxide applications.
- Optimized load balancing on cylinder bore.
- Improved engine performance.
- Longer engine life.

Steps:

- **1.** Thoroughly clean and degrease block and cylinder head sealing surfaces.
- 2. Inspect block and head sealing surfaces for:
 - a. Maximum warpage: .002" across shortest section.
 - b. Surface Finish Recommendation: 30-60 Ra (roughness average).
 - c. Gouging: Aluminum surfaces must be free of deep scratches, gouges, or depressions.
- **3.** Chase engine block threads with a thread tap -threads must be clean for accurate torque readings. Unclean threads may result in gasket failure.
- **4.** Inspect new head gasket to insure no damage in shipping. Polymer sealant coating should be uniform and devoid of scratches or scuffs.
- **5.** Use care in handling; SCE Gaskets MLS Spartan and MLS Spartan with Gas Stopper have a proprietary two-part sealant coating: second coating can be damaged by excess handling.
- **6.** Use no sealant; additional sealant will negatively affect sealing at cylinder bores.
- 7. Install head gasket on block sealing surface. Important: make sure each head gasket is properly positioned regarding coolant, oil pressure and oil drain passages.
- **8.** Use new fasteners and lubricate (moly lube is preferred) threads, underside of bolt heads, nuts, and upper side of washers.
- **9.** Torque specifications and sequence; follow cylinder clock and fastener manufacturer recommendations. Failure to do so may prevent fasteners from reaching correct preload leading to gasket failure.
- **10.** Start engine and allow it to reach operating temperature. Check for engine leaks (fluid or vacuum). If there is a leak, stop the engine, let it cool and find/fix cause of leak.
- **11.** Re-Torque head bolts (engine cold) according to block manufacturer instructions; not required but always suggested on racing engines.

MLS Spartan Gas Stopper (MLS GS) technology offers enhanced multilayer head gasket combustion sealing where required. A stainless-steel Gas Stopper layer is folded onto itself around the cylinder bore aperture to provide additional clamp load on the combustion seal for high cylinder pressure (power adder) applications.