



ISO 9001:2000 CERTIFIED

## BAR'S LEAKS TECHNICAL BULLETIN

Tech Bulletin #: TB-1111-1

Page 1 of 2

Date 1<sup>st</sup> Issued: December 18, 2007

Date Revised: N/A

Bar's Leaks Head Gasket Fix

Part #: 1111

# BLOCK SEAL HEAD GASKET FIX

Bar's Leaks Block Seal Head Gasket Fix product is the easiest solution to stop head gasket coolant leaks. No draining of the cooling system is required. Patent pending formulation contains a combination of antifreeze compatible sodium silicate sealing liquid and various size gasket sealing particles which penetrate gaps & cracks and harden to permanently stop leaks. This seals because of the extreme heat inside the combustion chamber (5000°F) that works as a catalyst to permanently harden the material to make it stronger than the actual head gasket itself. Use on ALL water cooled gasoline and diesel engines. Heavy duty formula works on aluminum and cast iron heads & blocks, along with sealing all other engine cooling system leaks better than a traditional stop leak. This includes repairing head gaskets, cylinder heads, intake gaskets, cracked blocks and freeze plugs. Use with ALL types of antifreeze including conventional green or blue (Silicate-Based) and extended life red/orange or yellow (OAT/HOAT) coolant.



### DIRECTIONS

1. Allow engine to cool. Make sure engine is cool enough so radiator cap can be safely removed.
2. Shake well. Pour *HEAD GASKET FIX* directly into radiator. If using in a small cooling system under 1.5 gallon capacity, such as 4 cylinders with no air conditioning, install ½ bottle.
3. Tip: If you do not have access to your radiator, remove top hose where it connects to the top of the radiator and install product in hose. Reattach hose and tighten clamp.
4. Fill radiator and overflow tank to proper level and reinstall radiator cap. Start engine.
5. Turn heater on hot and fan on high.
6. Idle engine for 15 minutes.
7. Allow engine to cool.
8. Top off radiator and leave Bar's Leaks *HEAD GASKET FIX* in cooling system for continued protection. Drive vehicle as normal.

Part Number:	1111
UPC Item:	0 46087 01111 9
UPC Case:	1 00 46087 01111 6
Bottle Size:	Net. Wt. 24 oz. (680g)
Bottle Dimensions:	2.6 x 2.6 x 9.4
Bottle Cube:	64
Case Pack:	4 bottles per case
Case Size:	6.9 x 5.9 x 10
Case Cube:	348
Case Weight:	7 pounds
Pallet:	TI 48 HI 4 Total 192
Pallet Height:	45 inches
Tariff Code:	2939.19.0000

### DOSAGE

1 to 1.5 gallons cooling capacity use ½ bottle. 1.5 gallon to 4 gallon cooling capacity use 1 bottle. Larger systems use 1 bottle for every 4 gallons of coolant capacity.

**ASTM D3147 LABORATORY TEST**

Standard Test Method for Testing Stop-Leak Additives for Engine Coolants.

This test method covers screening procedures for the preliminary evaluation of leak-stopping materials intended for use in engine cooling systems.

Gum		Particles		Screen	Final Round	Final Slot	Fluid Lost
Before	After	Before	After				mL
No	No	Yes	No	0.03	0.03	0.015	1350

The results of this test show that a .030 round hole and a .015 wide slot can be successfully sealed with this product.

**PURPOSE OF A COOLING SYSTEM**

Your engine creates up to 5,000 degrees of heat within the combustion chamber. Enough heat to melt the entire engine in less than 30 minutes! Approximately 1/3 of gasoline's energy is converted into usable power to propel the vehicle, 1/3 of the energy is dissipated out through the exhaust system, and the remaining 1/3 is carried off by the cooling system.

**HOW DOES A COOLING SYSTEM WORK?**

Coolant, which is a mixture of water and ethylene glycol (Antifreeze), is pumped throughout the engines water jacket drawing heat from the head, pistons, combustion chambers, cylinder walls, valves, etc. The heated coolant travels from the water jacket through a radiator hose, to the radiator, where aided by a fan, its air cooled and returned via the other radiator hose to the engine. Gas is SAVED and engine life INCREASED when the cooling system quickly reaches and maintains a very narrow operational range regardless of outside temperature extremes or engine load demands. Upon engine start up, the temperature must rise quickly, and then remain balanced – not too hot and not too cold! It's important to understand how the condition of the coolant and the condition of the cooling system components can affect the operational economy and life of your engine!