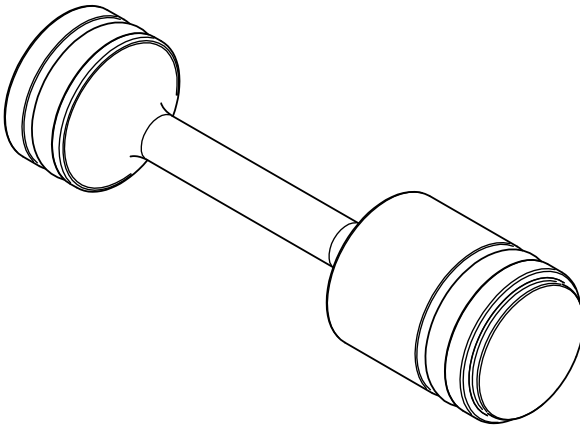




**REAR OIL PASSAGE PLUG "BARBELL"
FOR GM LS SERIES ENGINES**

**PART NO. EGM-501
MADE IN USA**



**Important: Read these instructions in their
entirety prior to installation.**

For contact information, visit www.improvedracing.com
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APPLICATIONS

- All Gen III and IV GM LS / Vortec family engines

SCHEMATIC & PARTS LIST

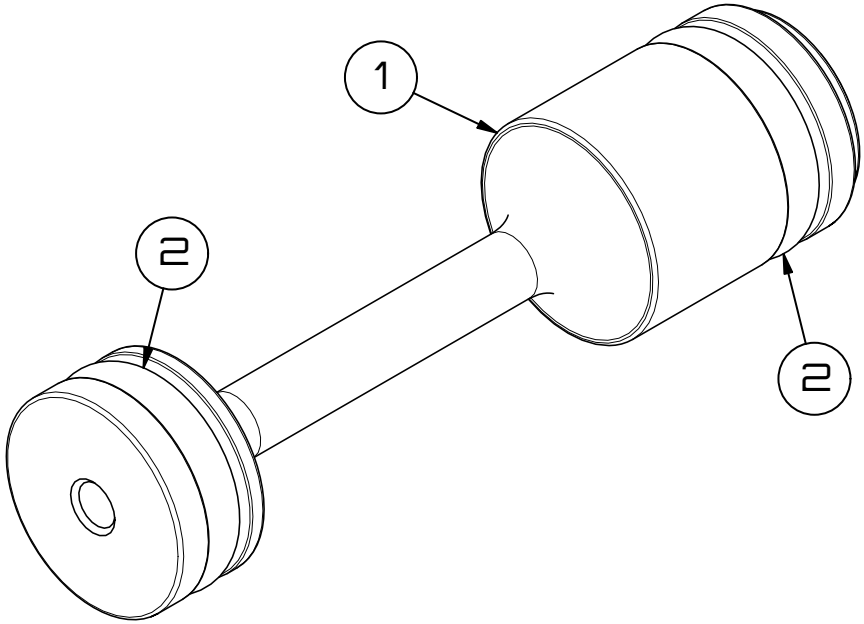


Figure 1 - EGM-501 Schematic

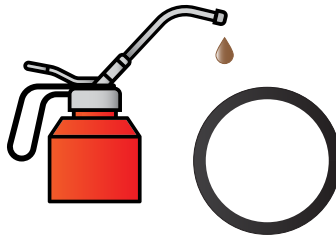
Item	Qty	Part Number	Description
1	1	EGM-501-01	Improved Racing rear oil passage plug "barbell"
2	2	HRG-1024	Front and Rear Plug O-rings

TECHNICAL SPECIFICATIONS

Maximum Operating Temperature	400°F (204°C)
Minimum Operating Temperature	-22°F (-30°C)
Plug Material	CNC-Machined 6061-T6 Billet Aluminum, M4 x 0.7 Thread
O-ring Material	FKM (Viton Rubber), 75A

BEFORE YOU BEGIN

⚠️ WARNING: This product should only be installed by a qualified mechanic. Improper installation could result in severe engine damage.



💡 Lubricate O-rings prior to installation to prevent damage and ensure a leak-free seal.

INSTALLATION INSTRUCTIONS

💡 NOTE: The rear engine cover must be removed to install this product. It is critical that the instructions, tightening torques, and tightening sequences detailed in the GM factory service manual for the engine be followed during removal and reinstallation of the rear engine cover.

1. Use a flat prying tool to remove the OEM plastic plug from the left rear oil passage of the engine block (see Figure 2 for hole location).
2. Inspect the inside of the oil passage for dirt and debris and clean if necessary.

⚠️ WARNING: Debris left in the oil passage may damage the O-rings and/or prevent a proper seal.

3. Generously lubricate both O-rings on the Improved Racing rear oil passage plug with engine oil.

⚠️ WARNING: O-rings will be damaged if they are not lubricated prior to installation.

4. To assist with installation, a M4x0.7 screw may be loosely threaded into the rear of the plug. Carefully insert the plug into the left rear oil passage as shown in Figure 2. If installed correctly, the rear of the plug should sit flush with the engine block's sealing surface for the rear engine cover.

⚠️ IMPORTANT: If the plug is difficult to insert during installation, remove it and inspect both the oil passage and plug for possible interference

issues.

⚠ IMPORTANT: Inspect the O-rings for damage prior to reinstallation. Do not reuse damaged O-rings.

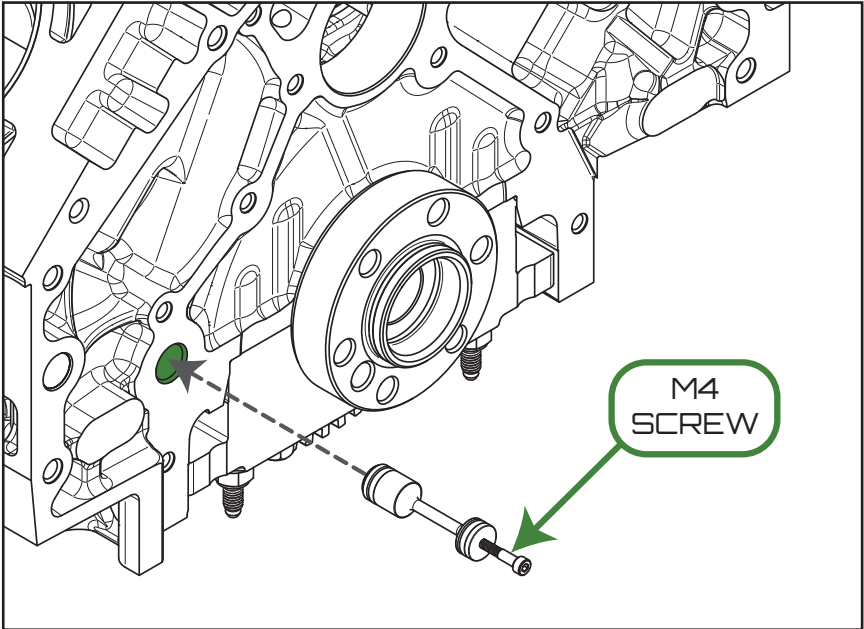


Figure 2 - Rear galley plug installation

5. Carefully follow the instructions, tightening torques, and tightening sequences detailed in the GM factory service manual to reinstall the rear engine cover and any other components that were removed.

Installation is now complete. Thank you for purchasing an Improved Racing product!

REMOVING THE IMPROVED RACING PLUG

💡 Tip: The Improved Racing rear oil passage plug features a threaded M4x0.7 screw hole in the rear of the plug to aid in removal. To remove the plug, loosely thread a M4x0.7 screw into the plug, then use the screw to pull out the plug.

⚠ WARNING: Always inspect the O-rings for damage or wear after removing the plug and replace the O-rings prior to reinstallation if necessary.