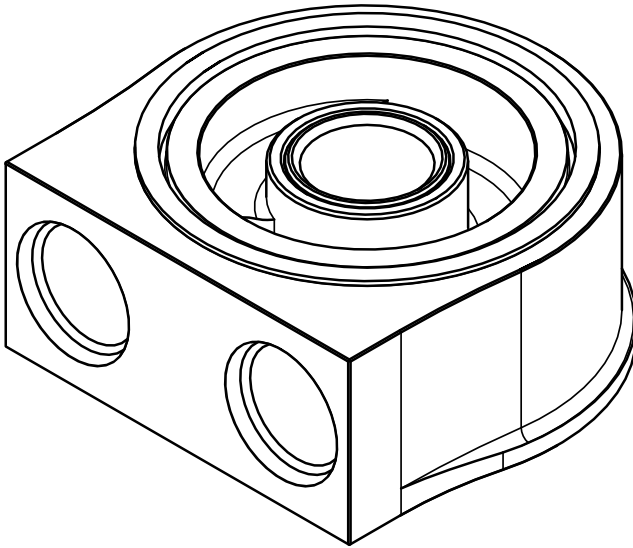




UNIVERSAL OIL COOLER SANDWICH PLATE

PART NO. ENV-139

MADE IN USA



IMPORTANT: Please read these instructions in their
entirety prior to installation.

For contact information, visit www.improvedracing.com
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APPLICATIONS

- ENV-139 is compatible with vehicles that use canister oil filters.
 - Cartridge filters (European vehicles) are not directly supported.
- ENV-139 is offered in the following oil filter thread sizes:
 - $\frac{3}{4}$ " - 16 UNF - 2A
 - $\frac{3}{16}$ " - 16 UN - 2A
 - M20x1.50 - 6h
 - M22x1.50 - 6h

PARTS LIST & SCHEMATIC

Item	Qty	Part Number	Description
1	1	ENV-139	Thermostatic Sandwich Plate
2	1	HSC-104X	Oil Filter Adapter Screw (Choose Thread Size)
3	2	HRG-1022	AS568 -230 Square O-Ring

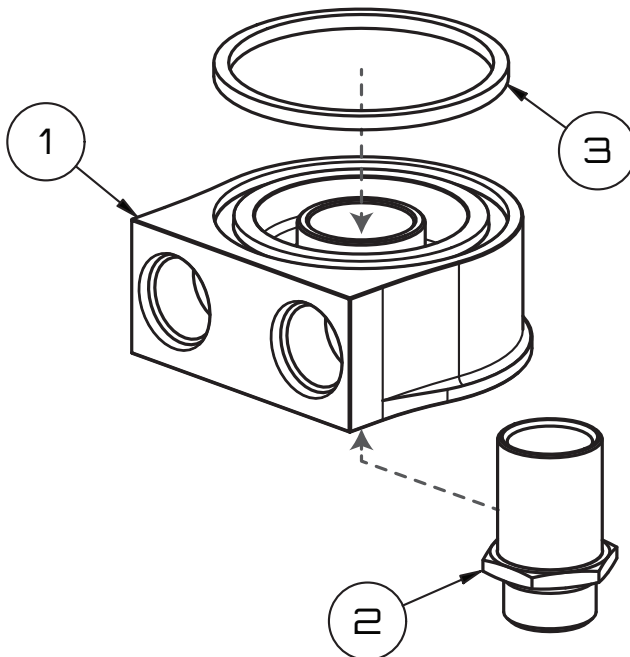
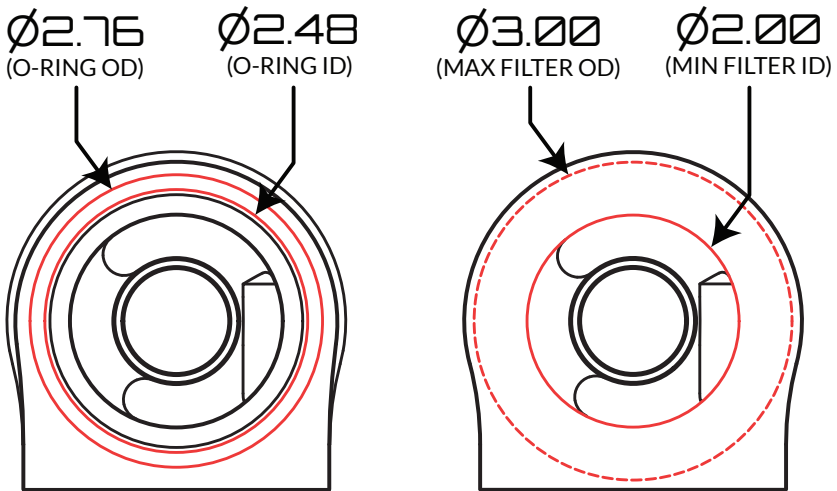


Figure 1 - ENV-139 Schematic

TECHNICAL SPECIFICATIONS

Max. Operating Temp.	302°F (150°C)
Min. Operating Temp.	-22°F (-30°C)
Max. Operating Pressure	300 psi (20.68 bar)
Dimensions (W x H x D)	3.2" x 1.4" x 4.6" (81.3 mm x 35.6 mm x 117 mm)
Weight	13.1 oz (373 g)
Connections	-10 SAE J1926-1 ORB - 7/8"-14 UNF - 2A
Housing Material	CNC-Milled 6061-T6 Billet Aluminum
Housing Finish	MIL-A-8625, Type II Anodizing
Seal Material	Viton (FKM) Elastomer
Filter Screw Material	CNC-Milled 410 Stainless Steel

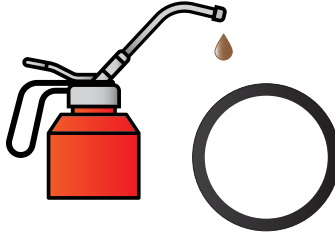


BEFORE YOU BEGIN

⚠ WARNING: DO NOT CAP OFF THE OIL COOLER PORTS after the adapter is installed. Running the engine with the ports capped will block oil flow and result in catastrophic engine damage. If not using an oil cooler, the IN/OUT ports must be looped together to prevent engine damage.

⚠ WARNING: NEVER work under a vehicle supported only by a jack.

⚠ 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.

PREPARING FOR INSTALLATION



1. Open the hood and / or raise the vehicle to access the oil filter.
2. Support the vehicle with automotive-certified jack stands, power lift, or wheel ramps.
- 💡 Lift points can be found in the vehicle owners manual.
3. Remove any covers or panels necessary to access the oil filter.
4. Place a drain pan under the oil filter and remove the filter.
- ⚠ **Oil may be hot!**
5. Secure the oil cooler to the vehicle.
- 💡 Ensure the oil cooler is isolated from vibration.
- 💡 Pre-fill the cooler with oil to prevent a dry startup.
6. Plan, measure and assemble the hydraulic fittings and lines.

INSTALLING ENV-139

1. Ensure that the O-ring is properly seated in the top of ENV-139 as shown in Figure 1.
2. Lubricate the O-ring with oil.
3. Using a 1 1/4" socket, secure ENV-139 to the oil filter threads on the engine block or oil pan using the included filter screw (HSC-104X).
4. Torque HSC-104X to 20 lb-ft (27 N-m).

5. Lubricate the sandwich plate fitting flares with oil and connect the oil lines.
 6. Torque both fitting connections on ENV-139 to 25 lb-ft (34 N-m).
-  Use aluminum tools to avoid damage to fittings.

COMPLETING THE INSTALLATION

1. Fill a new oil filter with oil and install the filter onto the sandwich plate.
-  Lubricate the oil filter seal with engine oil prior to installation.
2. Check the engine oil level and add oil if needed.
 3. Remove the fuel pump fuse(s) or disconnect the ignition circuit.
-  Consult the vehicle's factory owners manual for the fuse location.
4. Crank the engine over to build oil pressure.
 5. Replace any fuse(s) removed and/or reconnect the ignition circuit.
 6. Start the vehicle and inspect for leaks.
 7. Turn-off the vehicle and inspect the engine oil level. Add oil if necessary.
 8. Reinstall any underbody panels and safely lower the vehicle back onto the ground.
 9. Re-inspect the oil lines and fittings for leaks after 100 miles of driving.

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