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› All States Engine Oil Cooler Instruction Manual for John Deere Equipment (Model 123952)

## All States 123952

# All States Engine Oil Cooler Instruction Manual

Model: 123952

## 1. INTRODUCTION

This instruction manual provides essential information for the proper installation, operation, and maintenance of your All States Engine Oil Cooler, Model 123952. To ensure optimal performance and longevity of the product, please read this manual thoroughly before proceeding with any procedures. This oil cooler is designed for specific John Deere equipment models to maintain engine oil temperature within optimal ranges, contributing to engine efficiency and lifespan.

## 2. PRODUCT OVERVIEW

The All States Engine Oil Cooler (Model 123952) is a critical component designed to regulate the temperature of engine oil. It features a robust construction with 7 cooling plates, engineered for efficient heat exchange. This unit is a direct replacement for John Deere OEM part numbers RE56690 and RE560752.



Image: All States Engine Oil Cooler, Model 123952. This image displays the compact unit with its multiple cooling plates and integrated mounting points. The package includes necessary gaskets and O-rings for a complete installation.

#### Key Features:

- 7 Cooling Plates for efficient heat dissipation.
- Includes Gasket and O-Rings for a complete seal.
- Direct replacement for John Deere OEM part numbers RE56690, RE560752.
- Dimensions: Overall Height: 1-29/32", Overall Length: 6-3/4", Overall Width: 4-1/4".

### 3. SAFETY INFORMATION

**WARNING: Always prioritize safety when working with machinery and engine components. Failure to follow safety precautions can result in serious injury or damage to equipment.**

- Ensure the engine is completely cool and turned off before beginning any installation or maintenance.
- Disconnect the battery to prevent accidental starting.
- Wear appropriate personal protective equipment (PPE), including safety glasses and gloves.
- Be aware of hot surfaces and fluids. Engine oil can be hot and cause burns.
- Properly dispose of old engine oil and coolant according to local regulations.
- If you are unsure about any step, consult a qualified mechanic or service professional.

### 4. SETUP AND INSTALLATION

Installation of the engine oil cooler requires mechanical aptitude and specific tools. It is highly recommended that installation be performed by a certified technician to ensure correct fitment and function.

**General Installation Steps (Consult your equipment's service manual for specific procedures):**

1. **Preparation:** Park the equipment on a level surface, engage the parking brake, and block the wheels. Allow the engine to cool completely.

2. **Drain Fluids:** Drain the engine oil and, if necessary, the coolant from the system.
3. **Access:** Locate the existing oil cooler assembly. This may require removing other components to gain access.
4. **Removal of Old Cooler:** Carefully disconnect any hoses or lines attached to the old oil cooler. Remove the mounting bolts and detach the old cooler. Be prepared for residual fluid leakage.
5. **Clean Mounting Surface:** Thoroughly clean the mounting surface on the engine block or housing to ensure a proper seal with the new cooler. Remove any old gasket material.
6. **Install New Cooler:** Apply the new gaskets and O-rings (included) to the new All States oil cooler. Position the new cooler and secure it with the mounting bolts. Tighten bolts to the manufacturer's specified torque settings (refer to your equipment's service manual).
7. **Reconnect Lines:** Reconnect all oil and coolant lines to the new cooler, ensuring they are securely fastened and free from kinks.
8. **Refill Fluids:** Refill the engine with the appropriate type and amount of engine oil and coolant.
9. **Inspect for Leaks:** Start the engine and allow it to reach operating temperature. Carefully inspect all connections around the new oil cooler for any signs of leaks.
10. **Final Check:** Turn off the engine, allow it to cool, and recheck fluid levels. Top up if necessary.

**Note:** Always refer to the specific service manual for your John Deere equipment model for detailed, step-by-step instructions and torque specifications.

## 5. OPERATING INSTRUCTIONS

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The All States Engine Oil Cooler operates automatically as part of your engine's lubrication and cooling system. Once properly installed, it requires no direct user interaction during operation. Its function is to continuously regulate the engine oil temperature by transferring excess heat to the engine's coolant system.

### Operational Considerations:

- **Monitor Engine Temperature:** Always monitor your equipment's engine temperature gauge during operation. Abnormal temperature readings may indicate an issue with the cooling system, including the oil cooler.
- **Regular Fluid Checks:** Ensure engine oil and coolant levels are maintained at recommended levels. Low fluid levels can impair the oil cooler's effectiveness.
- **Listen for Unusual Noises:** Any new or unusual noises from the engine area should be investigated promptly.

## 6. MAINTENANCE

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Regular maintenance is crucial for the longevity and efficient operation of your engine oil cooler and the overall engine system.

### Recommended Maintenance:

- **Periodic Inspection:** During routine engine service, visually inspect the oil cooler for signs of external damage, corrosion, or leaks. Check the integrity of hoses and connections.
- **Gasket and O-Ring Integrity:** Over time, gaskets and O-rings can degrade. If leaks are detected, replace the seals immediately.
- **Internal Cleaning (Professional):** In some cases, internal passages of the oil cooler can become clogged with debris or sludge, reducing efficiency. This typically requires professional servicing and specialized cleaning procedures.

- **Coolant Quality:** Ensure the engine coolant is clean and at the correct concentration. Contaminated or old coolant can lead to corrosion and reduced heat transfer efficiency.
- **Oil Quality:** Use recommended engine oil and adhere to oil change intervals. Dirty or degraded oil can contribute to internal clogging of the cooler.

## 7. TROUBLESHOOTING

If you experience issues with your engine's oil temperature, consider the following troubleshooting steps. Always consult your equipment's service manual for detailed diagnostic procedures.

Problem	Possible Cause	Solution
<b>Engine Oil Overheating</b>	<ul style="list-style-type: none"> <li>• Low engine oil level</li> <li>• Low coolant level</li> <li>• Clogged oil cooler (internal)</li> <li>• Damaged oil cooler fins (external)</li> <li>• Faulty thermostat</li> <li>• Cooling system blockage</li> </ul>	<ul style="list-style-type: none"> <li>• Check and top up engine oil.</li> <li>• Check and top up coolant.</li> <li>• Inspect and clean/replace oil cooler.</li> <li>• Inspect and clean/replace oil cooler.</li> <li>• Test and replace thermostat if faulty.</li> <li>• Inspect and clear cooling system blockages.</li> </ul>
<b>Oil Leakage from Cooler Area</b>	<ul style="list-style-type: none"> <li>• Damaged gaskets or O-rings</li> <li>• Loose mounting bolts</li> <li>• Cracked oil cooler housing</li> </ul>	<ul style="list-style-type: none"> <li>• Replace gaskets and O-rings.</li> <li>• Tighten mounting bolts to specifications.</li> <li>• Replace the oil cooler.</li> </ul>
<b>Coolant in Engine Oil (Milky Oil)</b>	<ul style="list-style-type: none"> <li>• Internal leak in oil cooler</li> <li>• Damaged head gasket</li> </ul>	<ul style="list-style-type: none"> <li>• Test and replace oil cooler if internal leak is confirmed.</li> <li>• Diagnose and replace head gasket if necessary.</li> </ul>

*If the problem persists after attempting these solutions, it is recommended to seek professional assistance.*

## 8. SPECIFICATIONS

Attribute	Detail
Model Number	123952
Brand	All States
Compatible OEM Part Numbers	RE56690, RE560752
Number of Plates	7
Overall Height	1-29/32"
Overall Length	6-3/4"
Overall Width	4-1/4"
Item Weight	4 pounds
Included Components	Gasket, O-Rings

## 9. WARRANTY INFORMATION

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For specific warranty terms and conditions pertaining to your All States Engine Oil Cooler (Model 123952), please refer to the documentation provided at the time of purchase or contact the seller directly. Warranty coverage typically includes defects in materials and workmanship under normal use and service.

*Keep your proof of purchase for any warranty claims.*

## 10. SUPPORT

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If you require further assistance, have questions regarding installation, or need to report a product issue, please contact your authorized All States dealer or the retailer from whom you purchased this product. When contacting support, please have your product model number (123952) and proof of purchase readily available.

For general inquiries or to find a dealer, you may visit the official All States website (if available) or search for authorized distributors in your region.