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› UnayKolb Radiator Cooling Fan Assembly User Manual (Models 620-653, 620-654)

UnayKolb 620-653, 620-654

UnayKolb Radiator Cooling Fan Assembly User Manual

Models: 620-653, 620-654

1. PRODUCT OVERVIEW

This manual provides instructions for the installation, operation, and maintenance of the UnayKolb Radiator Cooling Fan Assembly. This assembly is designed to replace original equipment in compatible vehicles, ensuring proper engine cooling and air conditioning performance.

1.1. Key Features

- Manufactured to OE standards for direct fit and function.
- Designed for efficient engine cooling.
- Durable construction with metal components.
- 2-Pin power connector.
- Operates at 12 Volts with a maximum rotational speed of 2500 RPM.

1.2. Compatibility

This radiator cooling fan assembly is compatible with the following vehicle models:

- **Cadillac:**
 - 2007-2014 Cadillac Escalade
 - 2007-2014 Cadillac Escalade ESV
 - 2007-2013 Cadillac Escalade EXT
- **Chevrolet:**
 - 2007-2013 Chevrolet Avalanche
 - 2007-2013 Chevrolet Silverado 1500
 - 2007-2014 Chevrolet Suburban 1500
 - 2007-2013 Chevrolet Suburban 2500

- 2007-2014 Chevrolet Tahoe
- 2008-2013 Chevrolet Tahoe Hybrid
- 2012-2014 Chevrolet Tahoe PPV
- 2012-2014 Chevrolet Tahoe SSV

- **GMC:**

- 2007-2013 GMC Sierra 1500
- 2009-2013 GMC Sierra 1500 Hybrid
- 2007-2014 GMC Yukon
- 2007-2014 GMC Yukon XL 1500
- 2007-2013 GMC Yukon XL 2500

OE/OEM Part Numbers: 620-653, 620-654, 15780788, 89023366, 89023368, 89024933.



Image 1.1: The UnayKolb Radiator Cooling Fan Assembly, showing the dual fan design within its shroud.

2. SAFETY INFORMATION

Always prioritize safety when working on your vehicle. Failure to follow safety precautions can result in injury or damage to the vehicle.

- Ensure the vehicle's engine is off and cool before beginning any work.
- Disconnect the vehicle's battery to prevent accidental electrical shorts or fan activation.
- Wear appropriate personal protective equipment, including safety glasses and gloves.
- Refer to your vehicle's service manual for specific procedures and torque specifications.
- Keep all tools and parts away from moving engine components.
- Dispose of old parts and fluids responsibly.

3. PACKAGE CONTENTS

Upon opening the package, verify that all components are present and undamaged:

- 1x UnayKolb Radiator Cooling Fan Assembly (with dual fans and shroud)
- Necessary mounting hardware (clips, bolts, etc.)

If any items are missing or damaged, contact customer support immediately.

4. SPECIFICATIONS

Feature	Specification
Brand	UnayKolb
Power Connector Type	2-Pin
Voltage	12 Volts
Cooling Method	Air
Compatible Devices	Radiator
Material	Metal
Maximum Rotational Speed	2500 RPM
Number of Items	1
Package Dimensions	40 x 23 x 9 inches
Weight	19 Pounds

5. INSTALLATION INSTRUCTIONS

Professional installation is recommended. If performing installation yourself, ensure you have the necessary tools and technical knowledge.

5.1. Pre-Installation Checklist

- Vehicle is parked on a level surface with the parking brake engaged.
- Engine is completely cool.
- Battery is disconnected (negative terminal first).

- All necessary tools are available.

5.2. Tools Required (Typical)

- Socket wrench set
- Screwdriver set
- Pliers
- Coolant drain pan
- New engine coolant (if draining is required)
- Safety glasses and gloves

5.3. Step-by-Step Installation

1. **Prepare the Vehicle:** Ensure the engine is cool and disconnect the negative battery terminal.
2. **Drain Coolant (if necessary):** Depending on your vehicle's design, you may need to drain some or all of the engine coolant to access the fan assembly. Refer to your vehicle's service manual.
3. **Remove Obstructions:** Carefully remove any components that block access to the radiator fan assembly, such as air intake ducts, engine covers, or hoses.
4. **Disconnect Electrical Connector:** Locate and disconnect the electrical connector(s) from the old fan assembly. Be gentle to avoid damaging the wiring or connector.



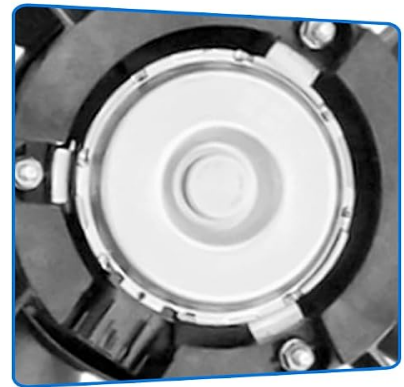
RADIATOR FAN ASSEMBLY SYSTEM



DETAILS



COOLING



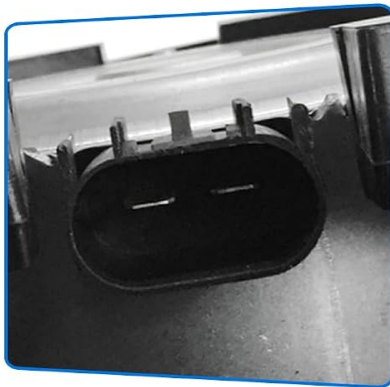
DURABLE

Image 5.1: Detail of the 2-pin electrical connector for the fan assembly.

5. **Unbolt/Unclip Old Assembly:** Remove all bolts, clips, or fasteners securing the old fan assembly to the radiator or vehicle frame. Note their locations for reinstallation.
6. **Remove Old Assembly:** Carefully lift the old fan assembly out of the engine bay. Be mindful of any remaining hoses or wires.
7. **Install New Assembly:** Position the new UnayKolb Radiator Cooling Fan Assembly into place. Ensure it aligns correctly with the mounting points.



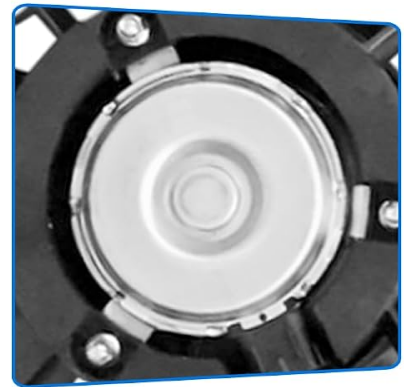
RADIATOR FAN ASSEMBLY SYSTEM



DETAILS



COOLING



DURABLE

Image 5.2: View of the fan blades, designed for optimal airflow.

8. **Secure New Assembly:** Reinstall all bolts, clips, and fasteners to secure the new fan assembly. Tighten to manufacturer specifications (refer to vehicle service manual).

COMPATIBLE MODEL

For 2007-2014 Cadillac Escalade

For 2007-2014 Cadillac Escalade ESV

For 2007-2013 Cadillac Escalade EXT

For 2007-2013 Chevrolet Avalanche

For 2007-2013 Chevrolet Silverado 1500

For 2007-2014 Chevrolet Suburban 1500

For 2007-2013 Chevrolet Suburban 2500

For 2007-2014 Chevrolet Tahoe

For 2007-2013 GMC Sierra 1500

For 2007-2014 GMC Yukon

For 2007-2014 GMC Yukon XL 1500

For 2007-2013 GMC Yukon XL 2500

TIPS

The radiator fan is suitable for the indicated models. Please place the order according to your own model to avoid more misunderstandings.



Image 5.3: Detail of the fan motor, indicating its robust construction.

9. **Reconnect Electrical Connector:** Plug the electrical connector(s) firmly into the new fan assembly. Ensure a secure connection.
10. **Reinstall Obstructions:** Reattach any components removed in step 3.
11. **Refill Coolant (if drained):** If coolant was drained, refill the system with the appropriate type and amount of coolant. Bleed the cooling system as per your vehicle's service manual to remove air pockets.
12. **Reconnect Battery:** Reconnect the positive battery terminal first, then the negative terminal.
13. **Test System:** Start the engine and allow it to reach operating temperature. Monitor the temperature gauge and observe the fan operation. Ensure the fan cycles on and off as expected and that there are no leaks.

6. OPERATION

The radiator cooling fan assembly operates automatically to maintain optimal engine temperature and assist the air conditioning system.

6.1. Normal Function

- The fan will activate when the engine coolant temperature reaches a predetermined level, drawing air through

the radiator to dissipate heat.

- The fan will also activate when the air conditioning system is turned on, helping to cool the condenser.
- The fan may operate at different speeds depending on the cooling demand.

6.2. Monitoring

Regularly monitor your vehicle's temperature gauge. If the engine consistently runs hotter than normal, or if the fan does not activate when expected, further investigation may be required.

7. MAINTENANCE

The UnayKolb Radiator Cooling Fan Assembly is designed for durability and requires minimal maintenance. However, periodic checks can help ensure its longevity and proper function.

- **Visual Inspection:** Periodically inspect the fan blades for any cracks or damage. Check the shroud for integrity and ensure it is securely mounted.
- **Electrical Connections:** Ensure the electrical connector remains clean and securely attached.
- **Cleanliness:** Keep the radiator and condenser fins clear of debris (leaves, insects, dirt) to allow for efficient airflow.
- **Coolant Level:** Regularly check and maintain the proper engine coolant level.

8. TROUBLESHOOTING

If you experience issues with your cooling system, consider the following common problems and solutions:

Problem	Possible Cause	Solution
Fan does not turn on	Blown fuse, faulty relay, wiring issue, faulty fan motor, temperature sensor issue.	Check relevant fuses and relays. Inspect wiring for damage. Test fan motor for continuity. Consult a mechanic for sensor diagnosis.
Engine overheating	Fan not operating, low coolant, clogged radiator, faulty thermostat, water pump issue.	Verify fan operation. Check coolant level. Inspect radiator for blockages. Diagnose other cooling system components.
A/C not cooling effectively	Fan not operating when A/C is on, low refrigerant, clogged condenser.	Ensure fan activates with A/C. Check refrigerant levels. Clean condenser fins.
Excessive noise from fan	Damaged fan blades, loose mounting, worn motor bearings.	Inspect fan blades for damage. Check mounting bolts. If motor bearings are worn, fan assembly replacement may be necessary.



Image 8.1: Visual indicators for when a radiator fan replacement might be necessary.

9. WARRANTY AND SUPPORT

9.1. Warranty Information

This UnayKolb Radiator Cooling Fan Assembly comes with a **1-Year Warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use. It does not cover damage resulting from improper installation, accident, misuse, abuse, or unauthorized modifications.

For warranty claims, proof of purchase is required.

9.2. Customer Support

If you have any questions regarding the installation, operation, or troubleshooting of your UnayKolb Radiator Cooling Fan Assembly, please contact UnayKolb customer support through the retailer where the product was purchased.

