

Ford M-6007-A52XS

Ford Racing M-6007-A52XS Aluminator 52XS Crate Engine User Manual

Model: M-6007-A52XS

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your Ford Racing M-6007-A52XS Aluminator 52XS Crate Engine. Please read this manual thoroughly before proceeding with any installation or operation to ensure safety and optimal performance.

The Ford Racing M-6007-A52XS is a genuine Ford part, manufactured to meet precise specifications for fit, form, and function, ensuring compatibility and reliability for your specific vehicle application.

2. PRODUCT OVERVIEW

The Ford Racing Aluminator 52XS Crate Engine (Part Number: M-6007-A52XS) is a high-performance racing engine designed for specific automotive applications. It is delivered as a complete long block assembly, ready for integration into a compatible vehicle chassis.



Figure 1: Front-right view of the Ford Racing M-6007-A52XS Aluminator 52XS Crate Engine, showcasing the intake manifold, valve covers, and front accessories.



Figure 2: Rear-left view of the Ford Racing M-6007-A52XS Aluminator 52XS Crate Engine, showing the exhaust manifolds and rear engine components.



Figure 3: Top view of the Ford Racing M-6007-A52XS Aluminator 52XS Crate Engine, highlighting the "ALUMINATOR 52XS" branding on the valve cover.



Figure 4: Side view of the Ford Racing M-6007-A52XS Aluminator 52XS Crate Engine, displaying various accessories and mounting points.

3. SETUP AND INSTALLATION

Installation of a crate engine requires specialized tools, knowledge, and experience. It is highly recommended that installation be performed by a certified automotive technician or a professional engine builder.

3.1 Pre-Installation Checks

- **Inspect for Shipping Damage:** Carefully inspect the engine for any signs of damage that may have occurred during transit. Report any damage immediately.

- **Verify Components:** Ensure all included components, as listed in the packing slip (if applicable), are present. The product typically includes the main engine component only.
- **Review Vehicle Compatibility:** Confirm that your vehicle chassis and drivetrain components are compatible with the M-6007-A52XS engine.
- **Prepare Work Area:** Ensure a clean, well-lit, and organized work environment with appropriate lifting equipment.

3.2 Installation Steps (General Guidelines)

1. **Mounting:** Securely mount the engine to the vehicle's engine mounts using appropriate hardware and torque specifications.
2. **Accessory Installation:** Install necessary accessories such as the alternator, power steering pump, and air conditioning compressor (if applicable) according to vehicle-specific requirements.
3. **Fuel System Connection:** Connect the fuel lines, ensuring proper sealing and routing.
4. **Cooling System Connection:** Connect radiator hoses and fill the cooling system with the recommended coolant.
5. **Electrical Connections:** Connect all electrical harnesses, sensors, and ignition components. Ensure all connections are secure and properly routed.
6. **Exhaust System:** Connect the exhaust manifolds or headers to the exhaust system.
7. **Fluid Filling:** Fill the engine with the recommended type and quantity of engine oil.
8. **Initial Startup Preparation:** Before the first start, perform a thorough check of all connections, fluid levels, and clearances.

Refer to your vehicle's service manual and any supplementary documentation provided by Ford Performance for detailed, vehicle-specific installation procedures and torque specifications.

4. OPERATING INSTRUCTIONS

Proper break-in and operation are crucial for the longevity and performance of your new engine.

4.1 Engine Break-In Procedure

- **Initial Start-Up:** Ensure adequate oil pressure is established immediately upon initial start-up. Monitor all gauges closely.
- **Vary RPMs:** During the first 500 miles, avoid sustained high RPMs or lugging the engine. Vary engine speed frequently to properly seat piston rings.
- **Avoid Full Throttle:** Do not operate at full throttle for extended periods during the break-in period.
- **Check for Leaks:** Regularly inspect for oil, coolant, and fuel leaks.
- **First Oil Change:** Perform an oil and filter change after the initial break-in period (e.g., 500-1000 miles) to remove any manufacturing debris.

4.2 General Operation

- **Monitor Gauges:** Always monitor engine temperature, oil pressure, and other vital signs during operation.
- **Warm-Up:** Allow the engine to reach operating temperature before applying heavy loads or high RPMs.
- **Fuel Quality:** Use the recommended octane fuel for optimal performance and to prevent engine damage.

5. MAINTENANCE

Regular maintenance is essential for the longevity and reliable performance of your Ford Racing engine.

5.1 Scheduled Maintenance

- **Oil and Filter Changes:** Follow the recommended intervals for oil and filter changes, using high-quality engine oil

and filters specified for performance engines.

- **Fluid Checks:** Regularly check and maintain proper levels of engine oil, coolant, brake fluid, and power steering fluid.
- **Spark Plugs:** Inspect and replace spark plugs as recommended by Ford Performance.
- **Air Filter:** Inspect and clean or replace the air filter element regularly.
- **Belt Inspection:** Check accessory drive belts for wear, cracks, and proper tension.
- **Hose Inspection:** Inspect all hoses for leaks, cracks, or deterioration.

5.2 Cleaning

Keep the engine bay clean to prevent debris buildup and allow for easier inspection of components. Avoid direct high-pressure water spray on electrical components.

6. TROUBLESHOOTING

This section provides general guidance for common issues. For complex problems, consult a qualified technician.

Symptom	Possible Cause	Action
Engine will not start	Low battery, fuel supply issue, ignition system fault, security system engaged	Check battery charge, fuel level, inspect spark plugs/coils, consult vehicle manual for security system reset.
Engine misfires or runs rough	Fouled spark plugs, faulty ignition coil, fuel injector issue, vacuum leak	Inspect spark plugs, check ignition system components, verify fuel pressure, check for vacuum leaks.
Overheating	Low coolant level, faulty thermostat, clogged radiator, water pump failure	Check coolant level, inspect radiator for obstructions, test thermostat, check water pump operation.
Low oil pressure	Low oil level, faulty oil pump, clogged oil filter, sensor malfunction	Check oil level, replace oil filter, consult technician for oil pump or sensor diagnosis.

7. SPECIFICATIONS

Specification	Value
Brand	Ford
Model	M-6007-A52XS
Manufacturer Part Number	M-6007-A52XS
Item Weight	502 pounds
Product Dimensions	45 x 36 x 42 inches
ASIN	B085MQYYWD
Manufacturer	Ford Performance Parts

8. WARRANTY AND SUPPORT

For specific warranty information regarding your Ford Racing M-6007-A52XS Aluminator 52XS Crate Engine, please refer

to the documentation provided with your purchase or contact Ford Performance Parts directly. Warranty terms and conditions can vary based on purchase location and application.

For technical support, installation guidance, or parts inquiries, please contact Ford Performance Parts customer service or visit their official website. Always provide your engine's model number (M-6007-A52XS) and any relevant purchase details when seeking support.

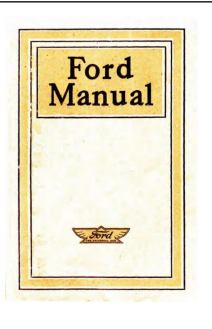
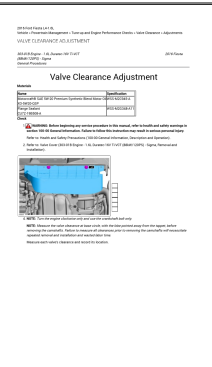
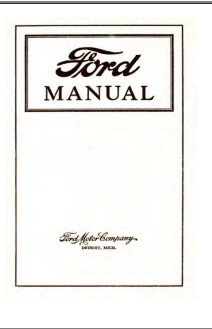
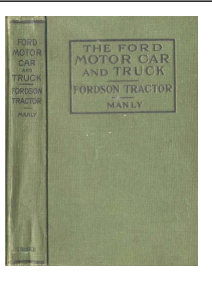
Important: Unauthorized modifications or improper installation may void your warranty.



© 2023 Ford Performance Parts. All rights reserved.

This manual is for informational purposes only. Ford Performance Parts reserves the right to make changes without prior notice.

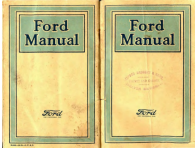
Related Documents - M-6007-A52XS

	<p>Ford Manual: A Comprehensive Guide for Owners and Operators (1915)</p> <p>This 1915 Ford Manual provides essential information for owners and operators of Ford cars, covering operation, maintenance, and engine details for the Model T. Learn about the car's components, how to start and stop it, and basic adjustments.</p>
	<p>2016 Ford Fiesta 1.6L Duratec Valve Clearance Adjustment Guide</p> <p>Step-by-step instructions and specifications for adjusting valve clearance on a 2016 Ford Fiesta with the 1.6L Duratec-16V Ti-VCT Sigma engine. Includes materials, torque specs, and clearance measurements.</p>
	<p>Ford Manual for Owners and Operators of Ford Cars and Trucks (1926)</p> <p>This 1926 Ford Manual provides comprehensive guidance for owners and operators of Ford Cars and Trucks. It covers essential topics such as engine gear operation and maintenance, cooling and ignition systems, transmission, rear axle, running gear, lubrication, and starting/lighting systems, offering detailed answers to common questions.</p>
	<p>The Ford Motor Car and Truck, Fordson Tractor: Construction, Care, and Operation Manual</p> <p>A historical manual by Harold P. Manly detailing the construction, care, and operation of Ford motor cars, trucks, and the Fordson tractor, published by Frederick J. Drake & Co. Covers power plant, transmission, upkeep, and troubleshooting.</p>



[2022 Ford Maverick Owner's Manual](#)

Comprehensive owner's manual for the 2022 Ford Maverick, covering features, operation, maintenance, and safety information. Includes details on climate control, safety systems, infotainment, and more.



[Ford Manual for Owners and Operators of Ford Cars and Trucks \(1921\)](#)

Comprehensive 1921 Ford Manual for owners and operators of Ford Cars and Trucks, covering operation, maintenance, engine, transmission, lubrication, and electrical systems. Includes detailed answers to common questions and diagrams.