

DB Electrical 400-48170

DB Electrical Alternator User Manual

Model: 400-48170

INTRODUCTION

This manual provides essential information for the installation, operation, and maintenance of your DB Electrical 400-48170 Alternator. Please read this manual thoroughly before installation to ensure proper function and safety. This alternator is designed as a direct replacement for specific Honda Fit models.

PRODUCT SPECIFICATIONS



Figure 1: Front view of the DB Electrical 400-48170 Alternator, showing the pulley and cooling fins.

Alternator Specifications

Specification	Value
Unit Type	Alternator
Voltage	12V
Rotation	CW (Clockwise)
Amperage	95A
Clock Position	9

Specification	Value
Pulley Class	S5
Regulator Type	IR (Internal Regulator)
Fan Type	IF (Internal Fan)
Item Weight	11.48 pounds
Product Dimensions	5.65 x 4.86 x 5 inches

COMPATIBILITY

This DB Electrical Alternator, model 400-48170, is compatible with the following vehicle models:

- **HONDA FIT:** 2009, 2010, 2011, 2012, 2013 (1.5L engines)

It replaces the following OEM part numbers:

- ARROWHEAD: 400-48170, AMT0233
- ARROWHEAD (OEM): VMT0233, A5TJ0091
- HONDA: 31100-RB0-004, 31100-RB0-0041, 31100-RB0A-0243, AHGA77
- J & N: 400-48170, 400-48249
- LESTER: 11410
- MITSUBISHI: A5TJ0091
- REMY LIGHT DUTY: 12948
- VICTORY INDUSTRIAL CORP.: VMN10951001N-A

Always verify part fitment with your vehicle's specific year, make, and model before installation.

SAFETY INFORMATION

Working with automotive electrical systems can be hazardous. Always observe the following safety precautions:

- Disconnect the vehicle's battery (negative terminal first) before beginning any work on the electrical system.
- Wear appropriate personal protective equipment (PPE), including safety glasses and gloves.
- Ensure the vehicle is securely supported on jack stands if working underneath.
- Allow the engine to cool completely before working on engine components.
- Consult a professional mechanic if you are unsure about any step of the installation process.
- Keep all tools and work areas clean and free of debris.

INSTALLATION GUIDE

This section outlines the general steps for replacing an alternator. Specific procedures may vary by vehicle model. Refer to your vehicle's service manual for detailed instructions.

Tools and Materials Required:

- Socket wrench set
- Open-end wrench set
- Torque wrench

- Pry bar (optional, for belt tension)
- Battery terminal cleaner
- New serpentine belt (recommended)

Step-by-Step Installation:

1. Prepare the Vehicle:

Park the vehicle on a level surface and engage the parking brake. Allow the engine to cool down. Disconnect the negative (-) battery terminal first, then the positive (+) terminal. This prevents accidental short circuits.

2. Access the Alternator:

Depending on your vehicle, you may need to remove other components (e.g., air intake, splash shields) to gain access to the alternator. Identify the alternator's location.

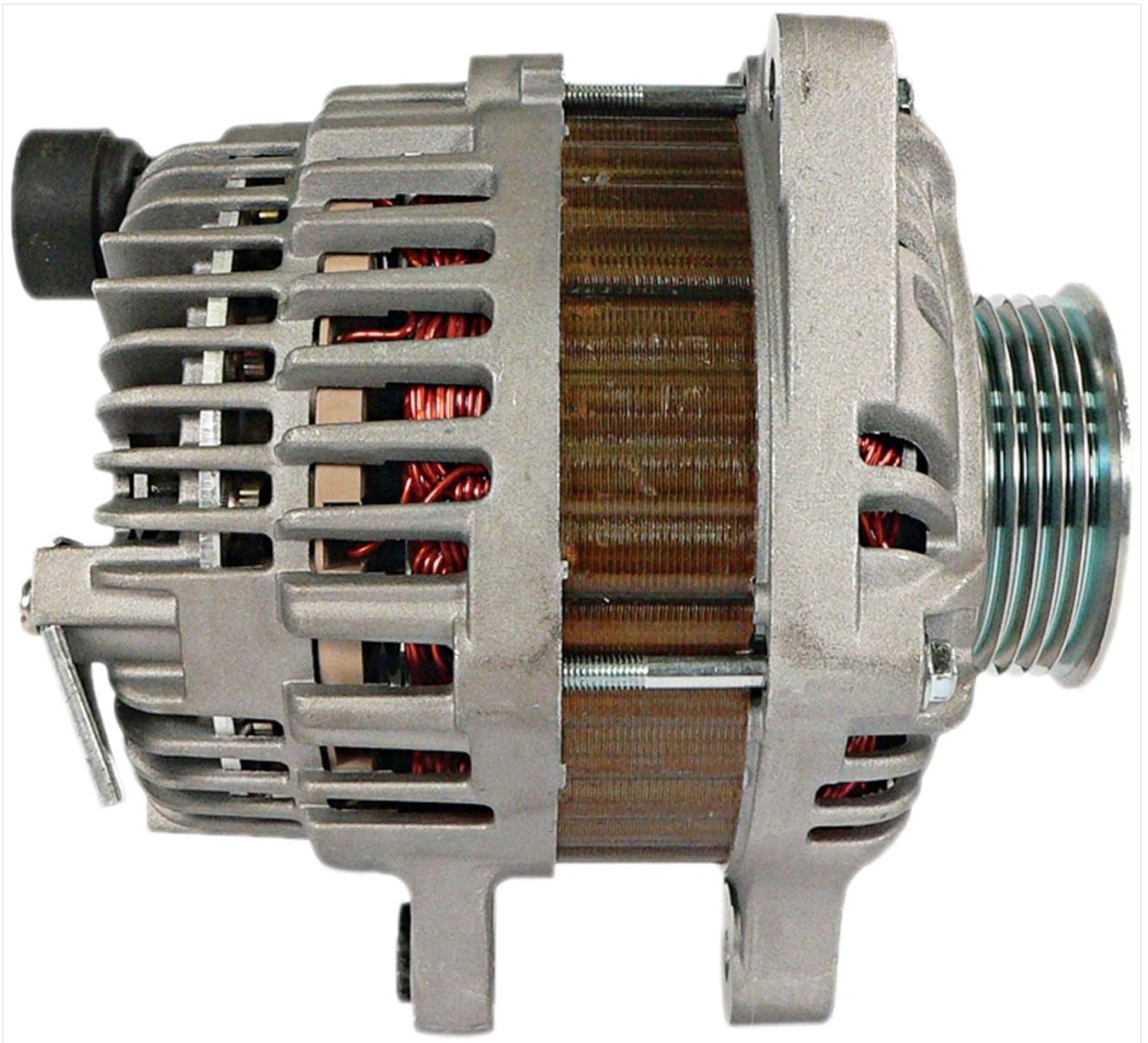


Figure 2: Side view of the alternator, showing the mounting points and electrical connections.

3. Remove the Serpentine Belt:

Locate the serpentine belt tensioner. Use a wrench or socket to release the tension on the belt and carefully remove the belt from the alternator pulley. Note the belt routing for reinstallation.

4. Disconnect Electrical Connections:

Disconnect the main power wire (usually a large cable with a nut) and any smaller electrical connectors from the

back of the alternator. Be careful not to damage the terminals.

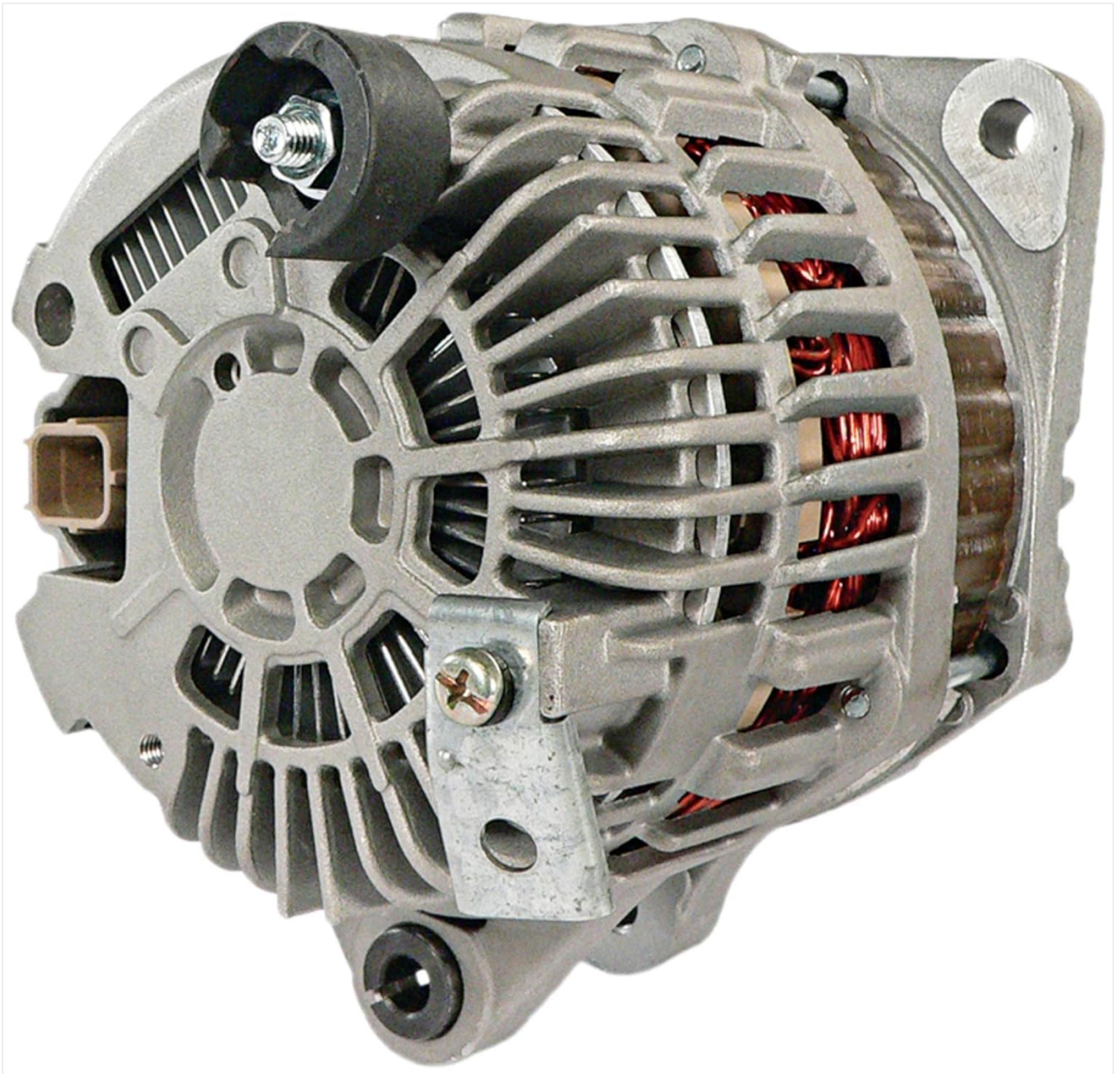


Figure 3: Rear view of the alternator, highlighting the electrical connector and mounting bracket.

5. Remove Mounting Bolts:

Unbolt the alternator from its mounting brackets. There are typically two or three mounting bolts. Support the alternator as you remove the last bolt to prevent it from falling.

6. Install the New Alternator:

Position the new DB Electrical alternator into place and loosely install the mounting bolts. Ensure proper alignment before tightening the bolts to the manufacturer's specified torque. Do not overtighten.

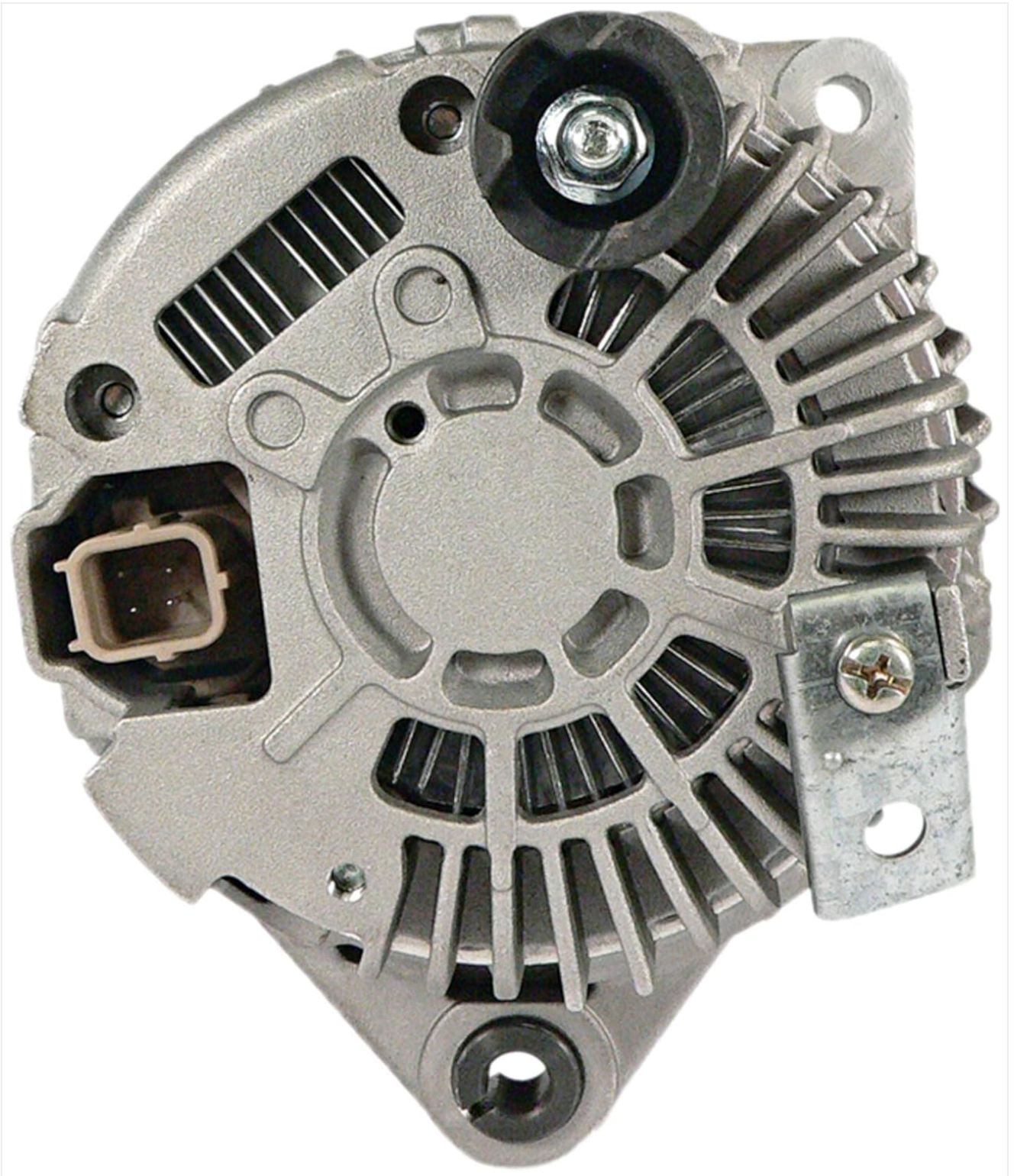


Figure 4: Angled rear view, showing the overall compact design and mounting points.

7. Reconnect Electrical Connections:

Reconnect all electrical connectors and the main power wire. Ensure all connections are clean and secure. Use battery terminal cleaner if necessary.

8. Reinstall Serpentine Belt:

Route the serpentine belt correctly around all pulleys, including the alternator pulley. Use the tensioner to apply tension to the belt. Double-check that the belt is seated properly on all grooves.

9. Final Steps:

Reinstall any components removed for access. Reconnect the positive (+) battery terminal first, then the negative (-) terminal. Start the vehicle and check for proper charging system operation (e.g., battery light off, voltage reading around 13.5-14.5V).

OPERATION

Once installed, the alternator operates automatically to generate electrical power for the vehicle's systems and recharge the battery. It is driven by the engine's serpentine belt.

Normal Operation:

- The battery warning light on your dashboard should turn off shortly after the engine starts.
- A voltmeter should show a reading of approximately 13.5 to 14.5 volts across the battery terminals when the engine is running.
- There should be no unusual noises (e.g., grinding, squealing) coming from the alternator area.

MAINTENANCE

Alternators are generally low-maintenance components. However, regular checks of related systems can prolong its life and ensure optimal performance.

- **Serpentine Belt:** Inspect the serpentine belt regularly for cracks, fraying, or excessive wear. Replace it if necessary. Ensure proper belt tension.
- **Battery Terminals:** Keep battery terminals clean and free of corrosion. Corroded terminals can impede proper charging.
- **Electrical Connections:** Periodically check all electrical connections to the alternator for tightness and corrosion.
- **Battery Health:** A weak or failing battery can put undue strain on the alternator. Ensure your vehicle's battery is in good condition.

TROUBLESHOOTING

If you experience issues with your vehicle's charging system, consider the following common problems and solutions:

Troubleshooting Guide

Problem	Possible Cause	Solution
Battery Warning Light On	Loose or corroded battery terminals; faulty alternator; loose or broken serpentine belt.	Clean and tighten battery terminals. Check serpentine belt tension and condition. Test alternator output.
Dim Headlights/Interior Lights	Undercharging by alternator; weak battery.	Test battery and charging system. Replace battery or alternator if faulty.
Squealing Noise from Engine	Loose or worn serpentine belt; worn alternator pulley bearing.	Inspect and replace serpentine belt. If noise persists, inspect alternator pulley and bearings.
Battery Drains Repeatedly	Alternator not charging; parasitic drain; faulty battery.	Test charging system output. Check for parasitic drains. Test and replace battery if needed.

If troubleshooting steps do not resolve the issue, it is recommended to consult a certified automotive technician.

WARRANTY AND SUPPORT

DB Electrical provides a **1-year warranty** on this alternator from the date of purchase. This warranty covers defects in materials and workmanship under normal use.

If you encounter any issues with your product within the warranty period, please contact DB Electrical customer support. They are committed to assisting you and will facilitate a replacement if the product does not perform as expected. For support, please refer to the contact information provided with your purchase or visit the official DB Electrical website. Ensure you have your purchase details and product model number (400-48170) ready when contacting support. For more information about DB Electrical products, you can visit their store: [DB Electrical Store on Amazon](#).

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