HITACHI HM007

HITACHI Brake Pad HM007 User Manual for NISSAN Clipper GBD-U72TP

Model: HM007

1. Product Overview

The HITACHI Brake Pad HM007 is a high-quality front brake pad set designed for the NISSAN Clipper GBD-U72TP (03.10-12.01, 660cc, 4WD Panel Van). Hitachi Astemo adopts an ideal friction material that significantly improves wear resistance, noise performance, and low brake dust performance compared to basic NAO materials. This results in a stable friction coefficient, allowing for precise deceleration control and excellent braking performance even on long descents, with reduced likelihood of fade.



Image: HITACHI Brake Pad HM007 Front Left/Right Set.

2. Key Features and Technology

These brake pads incorporate advanced friction material technology to ensure optimal performance and durability.

- **Enhanced Wear Resistance:** Designed for extended lifespan and consistent performance.
- **Reduced Noise Performance:** Engineered to minimize brake squeal and noise during operation.
- **Low Brake Dust:** Helps keep wheels cleaner by producing less brake dust.
- **Stable Friction Coefficient:** Provides predictable and consistent braking force.
- **Fade Resistance:** Maintains braking effectiveness even under high temperatures or prolonged use.
- **Excellent Braking Performance:** Reliable stopping power, even on challenging descents.



Image: Characteristics of Friction Material, showing the balanced performance of Hitachi Astemo material.

Rigorous Durability and Performance Testing

The brake pads undergo extensive testing to ensure reliability and safety:

- Braking force evaluation and wear evaluation.
- Circuit driving simulation evaluation.

- Noise, rust prevention, weather resistance, and friction material property evaluation.
- On-vehicle feeling evaluation.



Image: Brake assembly undergoing rigorous durability and performance testing.

Performance Comparison

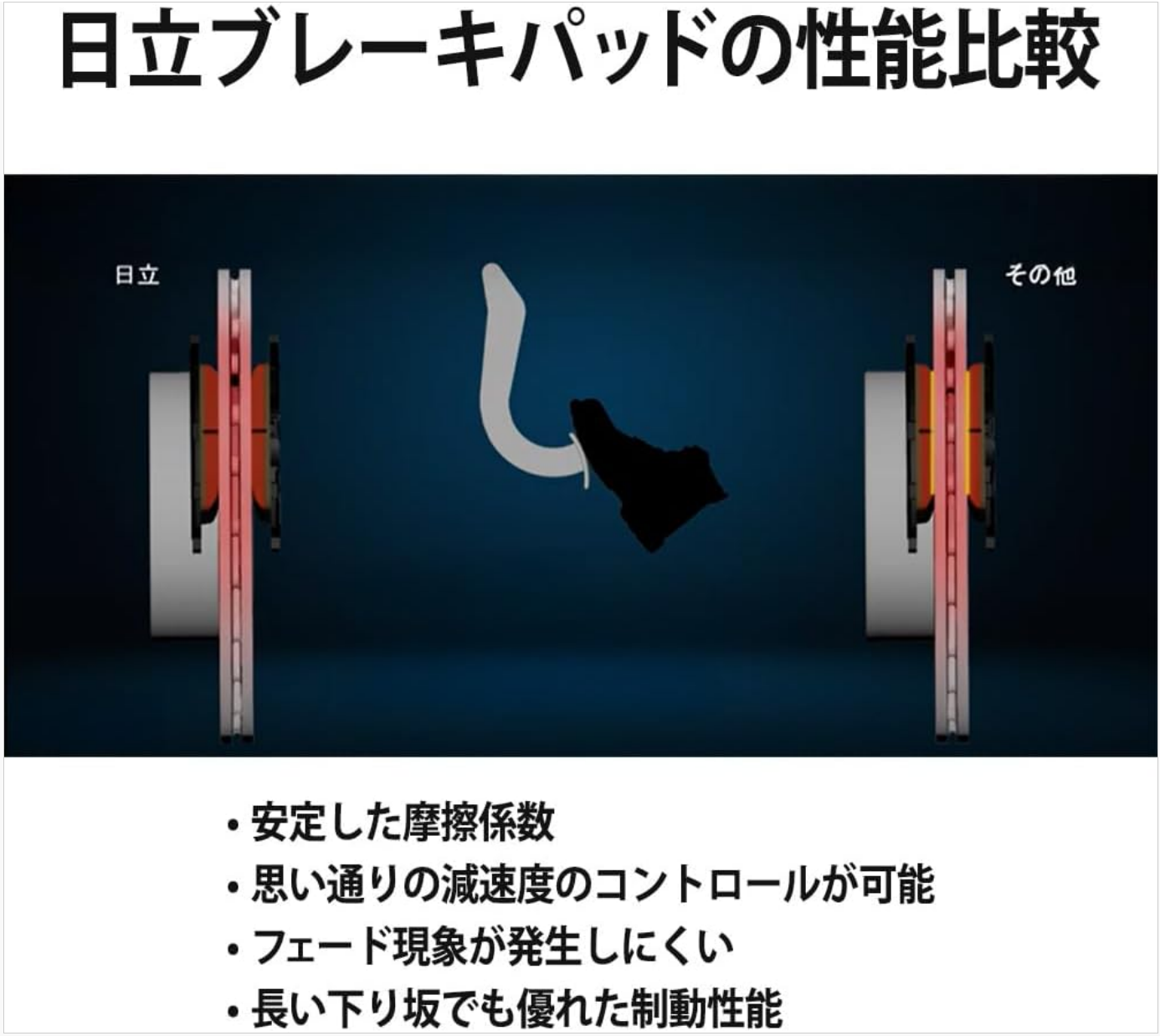


Image: Hitachi Brake Pad Performance Comparison, highlighting advantages such as stable friction and fade resistance.

3. Installation

Brake pad replacement is a critical safety procedure that should only be performed by a qualified mechanic or an individual with appropriate automotive repair experience. Incorrect installation can lead to brake failure and serious injury.

Disc Brake Structure Overview

Understanding the basic components of a disc brake system is essential for proper installation and maintenance.

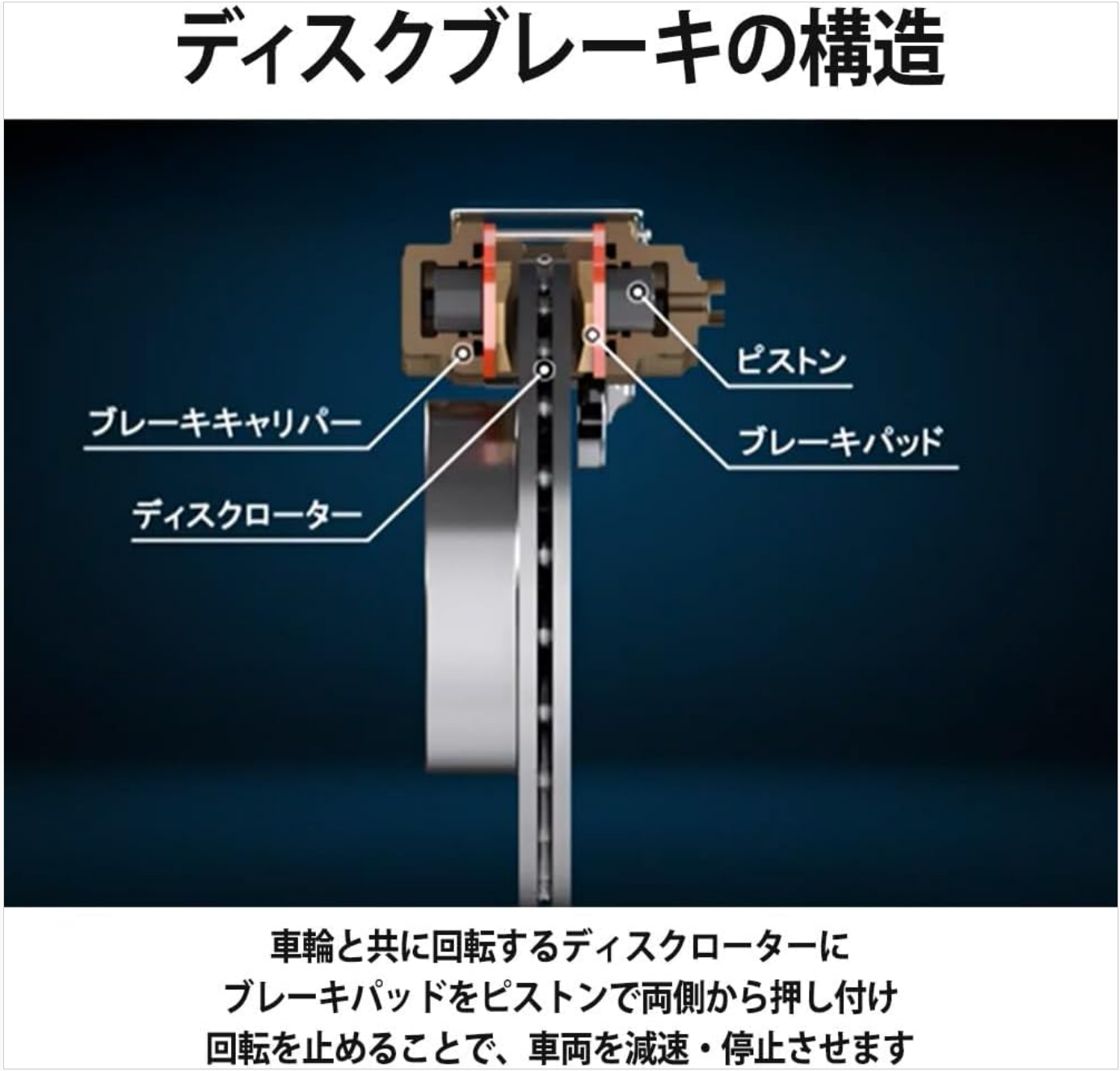


Image: Structure of Disc Brake. Brake pads are pressed against the disc rotor, which rotates with the wheel, from both sides by pistons to stop rotation, thereby decelerating and stopping the vehicle.

General Installation Steps (Consult Service Manual for Specifics):

1. Safely lift and support the vehicle.
2. Remove the wheel.
3. Remove the brake caliper bolts and carefully remove the caliper from the rotor. Do not let the caliper hang by the brake hose.
4. Remove the old brake pads.
5. Clean the caliper and caliper bracket.
6. Install the new HITACHI brake pads, ensuring proper fitment and orientation.
7. Reassemble the brake caliper and secure all bolts to the manufacturer's torque specifications.
8. Reinstall the wheel and lower the vehicle.
9. Pump the brake pedal several times to seat the pads and restore pedal pressure before driving.
10. Perform a test drive in a safe area to ensure proper braking function.

4. Operation

Brake pads function by creating friction against the rotating brake disc (rotor) when the brake pedal is pressed. This friction converts kinetic energy into heat, slowing down and stopping the vehicle. The advanced friction material of HITACHI brake pads ensures consistent and effective braking performance under various driving conditions.

After new brake pads are installed, a 'bedding-in' period is recommended. This involves a series of moderate stops to properly mate the pads to the rotors, optimizing performance and longevity. Consult your vehicle's service manual or a professional mechanic for specific bedding-in procedures.

5. Maintenance and Inspection

Regular inspection of your brake pads is crucial for vehicle safety. Brake pads wear down over time, and their replacement is a standard maintenance item.

Brake Pad Replacement Timing

Replace brake pads promptly when the remaining friction material reaches the replacement guideline. Driving with worn friction material is extremely dangerous and can lead to reduced braking efficiency, damage to other brake components, or complete brake failure.



Image: Brake Pad Replacement Timing, indicating the critical wear level.

Inspection Guidelines:

- Check brake pad thickness regularly, typically during tire rotations or other vehicle services.
- Listen for squealing or grinding noises, which can indicate worn pads or other brake issues.
- Observe any changes in braking performance, such as a soft pedal, increased stopping distance, or pulling to one side.
- Consult your vehicle's owner's manual for specific maintenance schedules and recommended pad thickness limits.

6. Troubleshooting

If you experience any issues with your braking system, it is crucial to have it inspected by a qualified mechanic immediately. Do not attempt to diagnose or repair complex brake problems without proper training and tools.

Common Brake-Related Symptoms:

- **Squealing or Grinding Noise:** Often indicates worn brake pads, especially if a metallic grinding sound is heard.

Could also be due to improper installation or foreign objects.

- **Reduced Braking Performance:** A spongy pedal, increased stopping distance, or a feeling of reduced stopping power can indicate air in the brake lines, worn pads, or other hydraulic issues.
- **Vehicle Pulling to One Side:** May indicate uneven brake pad wear, a seized caliper, or issues with the brake fluid pressure.
- **Vibration During Braking:** Often caused by warped brake rotors, but can also be related to uneven pad wear.

If any of these symptoms occur, cease driving if unsafe and seek professional assistance.

7. Specifications

Attribute	Value
Manufacturer	HITACHI
Brand	HITACHI
Product Model Number	HM007
Color	Black
Certification	Please check the manufacturer's website for details.
ASIN	B0DV51W7MC
First Available Date on Amazon.co.jp	2025/1/24

8. Important Safety Information

The images provided in this manual are for illustrative purposes only and may not represent the exact product appearance. For precise product details, specifications, and the latest information, please refer to the official manufacturer's website or contact HITACHI customer support.

Always prioritize safety when working with automotive components. Wear appropriate personal protective equipment and follow all safety guidelines. If you are unsure about any installation or maintenance procedure, consult a certified professional.

9. Warranty and Support

For information regarding product warranty, technical support, or customer service, please visit the official HITACHI website or contact their authorized distributors. Warranty terms and conditions may vary by region and product. Keep your purchase receipt as proof of purchase.

Manufacturer's Website: HITACHI Brand Store on Amazon.co.jp

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question