ECCPP 051258-5211-1514484187

ECCPP Ignition Coil Pack UF296 Instruction Manual

1. Product Overview

The ECCPP Ignition Coil Pack UF296 is a high-quality replacement component designed to restore and optimize your vehicle's ignition system. This coil pack is engineered to meet or exceed original equipment (OE) specifications, ensuring reliable performance and efficient fuel combustion. It is constructed with durable materials to withstand harsh engine conditions, including high temperatures and vibrations.

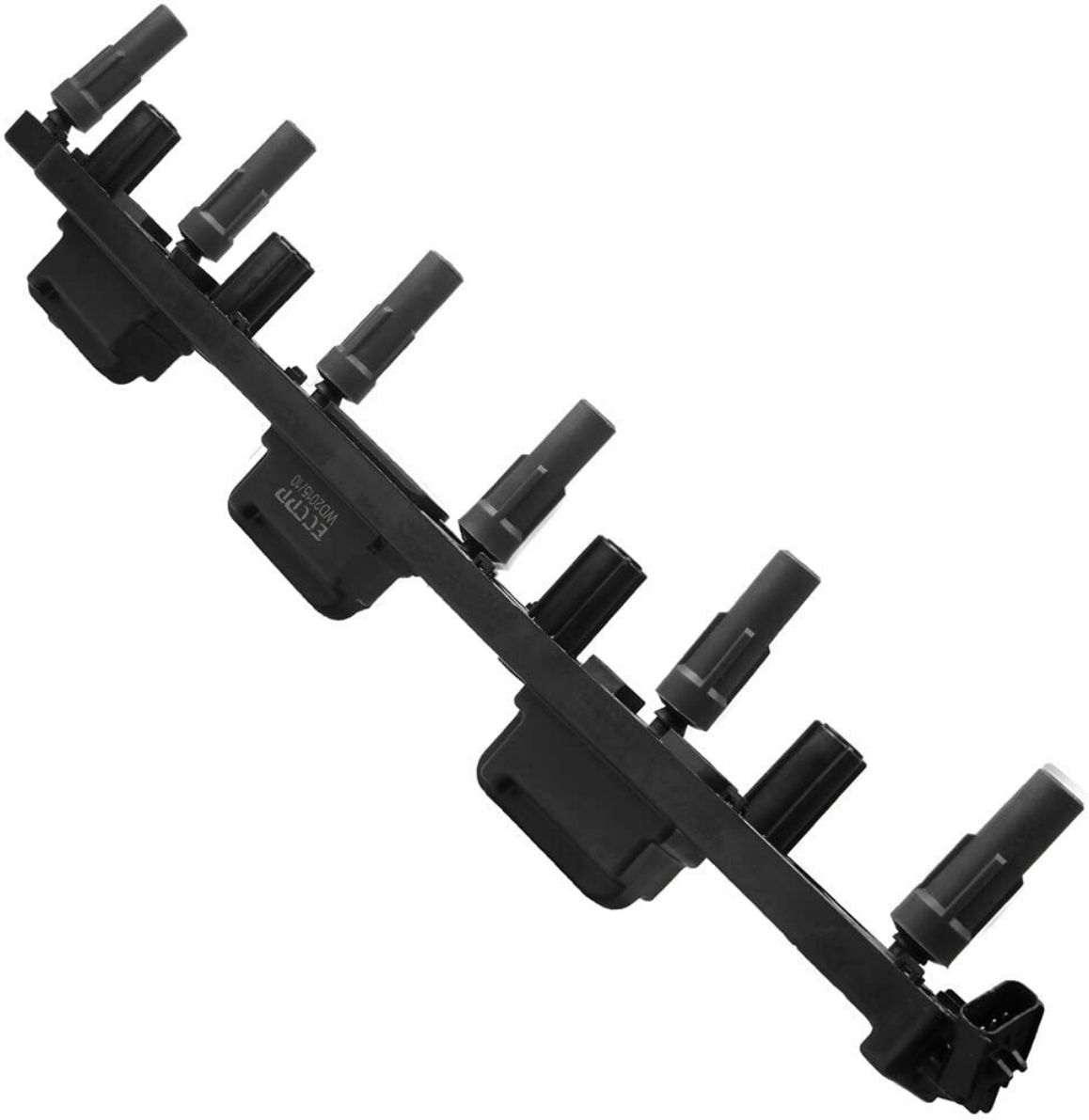

Image: The ECCPP Ignition Coil Pack UF296, showing its overall design.

2. Compatibility

This ignition coil pack is compatible with the following vehicle models and engine sizes:

- **For Jeep Wrangler:** 4.0L (2000-2006), 2.5L (2000-2002), 2.4L (2003-2006)
- **For Jeep TJ:** 4.0L (2000-2006), 2.5L (2000-2002)
- **For Jeep Grand Cherokee:** 4.7L (2000-2004), 4.0L (2000-2004)
- **For Jeep Cherokee:** 4.0L (2000-2001), 2.5L (2000)

Please verify your vehicle's make, model, year, and engine size to ensure proper fitment before installation.

3. Product Features

The ECCPP Ignition Coil Pack UF296 incorporates several design and material features for optimal performance and durability:

- **OE Standard Design:** Manufactured to meet or exceed original equipment specifications for form, fit, and function, ensuring direct installation without modification.
- **Durable Materials:** Constructed with high-quality materials, including a robust coil connector,

isolator, high-temp boot, stainless-steel spring, neodymium permanent magnet core, reinforced bobbins, and copper wires.

- **Temperature Resistance:** Designed to operate stably in extreme temperatures, from -22°F (-30°C) to 122°F (50°C), ensuring quick ignition in cold conditions and durability in hot environments.
- **Quality Tested:** Each unit undergoes rigorous quality inspection to ensure stable performance and extended service life.

Image: Detailed view highlighting OEM standard, durable material, and silicone boot.

Image: Illustration of the coil's cold and heat resistance capabilities.

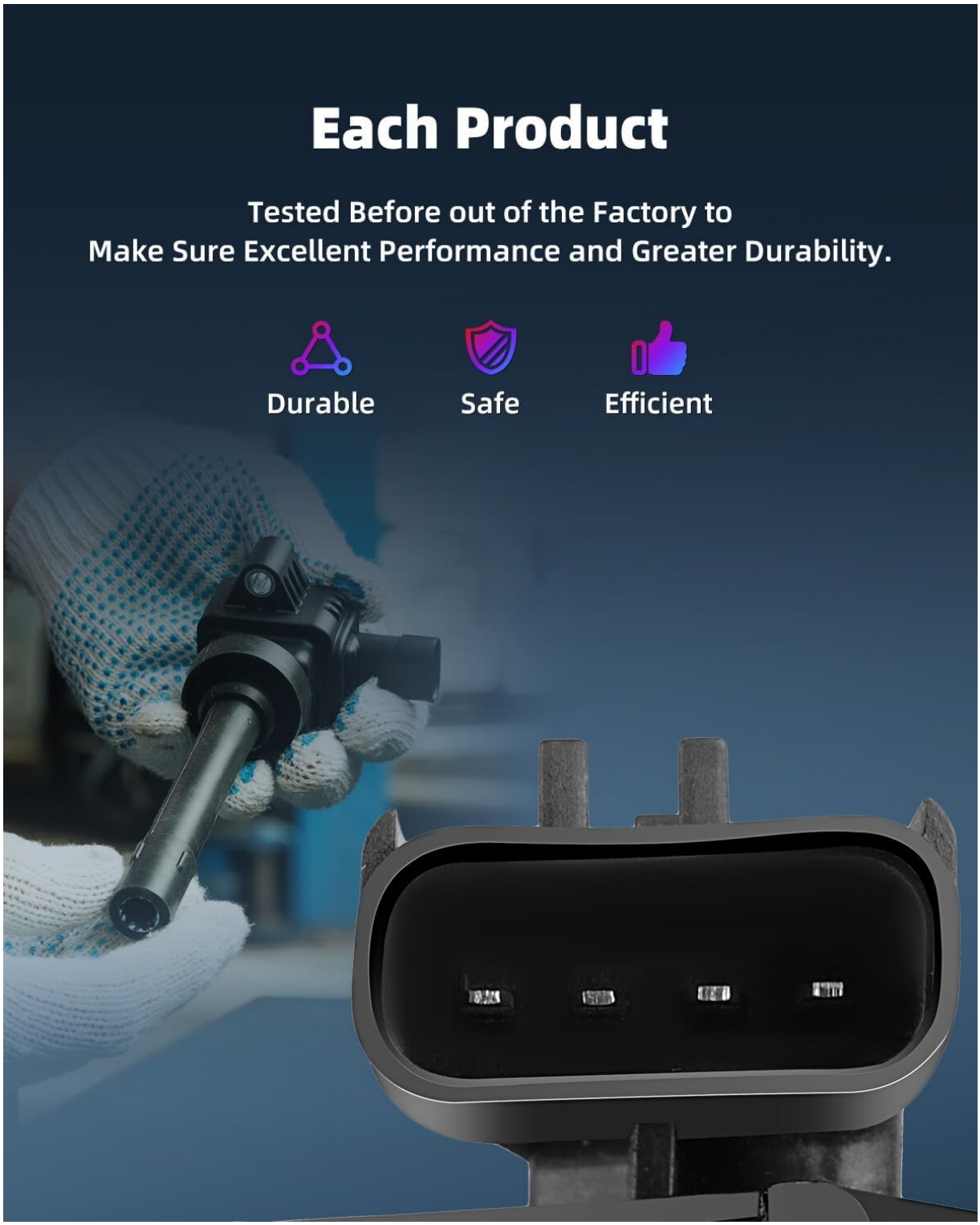

Image: Depiction of the product being tested for performance and durability.

Image: Close-up views of the coil's high-quality material, original plug space, epoxy resin, and rubber contact.

4. Installation Instructions

Safety First: Always disconnect the vehicle's battery before performing any work on the ignition system. Allow the engine to cool down completely to avoid burns. Wear appropriate safety gear, including gloves and eye protection.

1. **Locate Ignition Coils:** Identify the location of the ignition coils on your engine. Refer to your vehicle's service manual for specific diagrams if needed.
2. **Disconnect Electrical Connector:** Carefully disconnect the electrical connector from each ignition coil by pressing the release tab and pulling. Avoid pulling on the wires.
3. **Remove Mounting Bolts:** Use the appropriate wrench or socket to remove the mounting bolts securing the ignition coils to the engine.
4. **Remove Old Coils:** Gently pull the old ignition coils straight up and out of the spark plug wells. Inspect the spark plug wells for any debris or oil, and clean if necessary.
5. **Install New Coils:** Insert the new ECCPP Ignition Coil Pack UF296 into the spark plug wells, ensuring they are seated properly. Apply a small amount of dielectric grease to the rubber boot for easier installation and better sealing.
6. **Secure Mounting Bolts:** Reinstall the mounting bolts and tighten them to the manufacturer's specified torque.
7. **Reconnect Electrical Connectors:** Reconnect the electrical connectors to each new ignition coil until they click into place.
8. **Reconnect Battery:** Reconnect the vehicle's battery.
9. **Test Vehicle:** Start the engine and check for any warning lights or unusual operation. It is recommended to clear any stored diagnostic trouble codes (DTCs) using an OBD-II scanner.

Note: For optimal performance and to prevent future misfires, it is highly recommended to replace spark

plugs when replacing ignition coils.

Image: An ECCPP Ignition Coil Pack shown in the context of a vehicle engine.

5. Operating Principles

Ignition coils are crucial components in a vehicle's ignition system. They transform the low voltage from the vehicle's battery into the high voltage required to create a spark across the spark plug gap. This spark ignites the air-fuel mixture in the engine's cylinders, initiating combustion and powering the vehicle.
The ECCPP Ignition Coil Pack UF296 is designed to deliver a consistent and powerful spark, which is essential for efficient engine operation, optimal fuel economy, and reduced emissions. The internal components, such as the neodymium permanent magnet core and copper windings, are optimized to maximize high-voltage output at all engine speeds.

Your browser does not support the video tag.

Video: An animation demonstrating the internal workings of an ignition coil and its role in engine ignition.

Image: Diagram illustrating how upgraded ignition coils optimize engine energy saving and fuel consumption.

6. Maintenance

Ignition coils are generally maintenance-free components. However, regular inspection of related parts can help prolong their lifespan and ensure optimal engine performance:

- **Spark Plug Replacement:** Replace spark plugs according to your vehicle manufacturer's recommended intervals. Worn spark plugs can put additional strain on ignition coils, leading to premature failure.
- **Wiring Inspection:** Periodically check the electrical connectors and wiring harnesses connected to

the ignition coils for any signs of damage, corrosion, or loose connections.

- **Cleanliness:** Keep the engine bay clean and free of excessive oil or debris, which can degrade coil materials over time.

7. Troubleshooting

If you experience issues with your vehicle's ignition system, consider the following common symptoms that may indicate a faulty ignition coil:

- **Hard Starts:** Difficulty starting the engine, especially in cold weather.
- **Check Engine Light:** Illumination of the Check Engine Light, often accompanied by specific diagnostic trouble codes (DTCs) related to misfires (e.g., P030X, where X is the cylinder number).
- **Increased Fuel Consumption:** A noticeable decrease in fuel efficiency.
- **Engine Misfire:** Rough idling, hesitation, or a loss of power during acceleration.

If you encounter these symptoms, it is recommended to have your vehicle diagnosed by a qualified mechanic or use an OBD-II scanner to identify the specific cylinder experiencing a misfire. Replacing a faulty ignition coil can restore peak performance, stabilize idle speed, and improve fuel consumption.

Image: Visual representation of common issues caused by failing ignition coils and the benefits of replacing them.

8. Specifications

Specification	Detail
Brand	ECCPP
Model Number	051258-5211-1514484187
Item Weight	1.82 Kilograms (approx. 4 pounds)
Product Dimensions (L x W x H)	9.84 x 5.91 x 2.36 inches
Connector Gender	Female-to-Male
Installation Type	Bolt-On
Vehicle Service Type	Car
Automotive Fit Type	Vehicle Specific Fit

UPC	840342732494

9. Warranty and Support

ECCPP products are designed for quality and reliability. This ignition coil pack typically comes with a manufacturer's warranty. For specific warranty details, including duration and coverage, please refer to the product packaging or contact ECCPP customer support directly. In case of any issues or questions regarding installation, compatibility, or performance, please reach out to the seller or ECCPP customer service for assistance.
Return Policy: This product is eligible for a 30-day refund/replacement policy. Please consult the retailer's return policy for full details.