

## MSD 5551

# MSD Street Fire 5551 Spark Plug Wire Set Instruction Manual

Brand: MSD | Model: 5551

## 1. PRODUCT OVERVIEW

The MSD Street Fire 5551 Spark Plug Wire Set is engineered to deliver reliable spark energy to your engine's spark plugs. These wires feature a low resistance conductor encased in a durable, sleek black silicone and synthetic jacket, designed to resist heat and abrasion. The terminals are protected by black boots, ensuring consistent spark delivery and longevity.

### Key Features:

- Helically wound conductor for effective suppression of electrical and radio noise.
- 8mm silicone and synthetic jacket provides excellent resistance to heat and abrasion.
- Heavy-duty terminals ensure a secure and reliable connection.
- Kevlar core combination for superior strength and durability.

## 2. SETUP AND INSTALLATION

This spark plug wire set is compatible with V8 engines equipped with HEI (High Energy Ignition) distributors. Proper installation is crucial for optimal performance and safety.

### 2.1. Preparation

1. Ensure the engine is cool before beginning installation.
2. Disconnect the vehicle's battery to prevent accidental electrical discharge.
3. Identify the firing order of your engine. It is highly recommended to replace one spark plug wire at a time to avoid mixing up the firing order.

### 2.2. Installation Steps

1. Carefully remove one old spark plug wire from both the spark plug and the distributor cap. Note its length

and routing.

2. Select a new MSD Street Fire wire that matches the length of the wire you just removed.
3. Firmly push the boot end of the new wire onto the spark plug until you feel it click into place, ensuring a secure connection.
4. Route the new wire along the same path as the old one, using any existing wire looms or clips to keep it tidy and away from hot or moving parts.
5. Firmly push the other boot end of the new wire onto the corresponding terminal on the distributor cap until it clicks into place.
6. Repeat steps 1-5 for each remaining spark plug wire, one at a time, until all wires are replaced.
7. Once all wires are installed, double-check all connections at both the spark plug and distributor cap ends to ensure they are fully seated.
8. Reconnect the vehicle's battery.
9. Start the engine and check for smooth operation. Listen for any misfires or unusual noises.



Figure 1: Complete MSD Street Fire 5551 Spark Plug Wire Set showing all components including wires, boots, and terminals.



Figure 2: A coil of MSD Street Fire Spark Plug Wires, highlighting the black silicone jacket and overall construction.



Figure 3: Detailed view of a spark plug wire boot, designed to protect the terminal from engine heat.

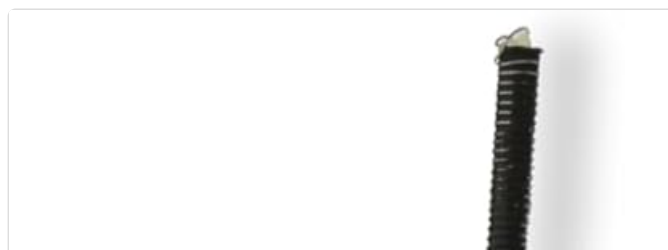






Figure 4: Close-up of the conductor end of a spark plug wire, showing the internal helical winding.

### 3. OPERATING PRINCIPLES

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Spark plug wires are a critical component of an internal combustion engine's ignition system. Their primary function is to transfer high voltage from the ignition coil (via the distributor or coil packs) to the spark plugs. This high voltage creates a spark across the spark plug gap, igniting the air-fuel mixture in the engine cylinders.

The MSD Street Fire wires are designed with a low resistance conductor to minimize energy loss during this transfer, ensuring maximum spark energy reaches the plug. The robust insulation and boots protect against voltage leaks and external interference, contributing to efficient engine operation.

### 4. MAINTENANCE

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While spark plug wires are generally low-maintenance components, periodic inspection can help ensure their longevity and optimal engine performance.

- **Visual Inspection:** Periodically inspect the wires for any signs of wear, cracking, fraying, or damage to the insulation or boots. Look for burn marks or discoloration, which may indicate arcing.
- **Connection Check:** Ensure that all wire boots are securely seated on both the spark plugs and the distributor cap/coil packs. Loose connections can lead to misfires.
- **Routing:** Verify that the wires are properly routed and secured away from hot exhaust components, moving parts (like belts or pulleys), and sharp edges that could abrade the insulation.
- **Cleaning:** If the wires become excessively dirty, they can be gently wiped clean with a damp cloth. Avoid using harsh chemicals or solvents that could damage the insulation.

Replace any wires that show signs of significant damage or degradation to maintain engine efficiency and prevent potential ignition system issues.

### 5. TROUBLESHOOTING

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If you experience issues after installing or while using your spark plug wires, consider the following common problems and solutions:

- **Engine Misfires or Rough Idle:**
  - **Cause:** Loose connection, damaged wire, or incorrect firing order.
  - **Solution:** Check all wire connections at both ends. Inspect wires for visible damage. Verify the firing order is correct for your engine.
- **Reduced Engine Performance or Fuel Economy:**

- **Cause:** Degraded wires leading to energy loss, or arcing.
  - **Solution:** Inspect wires for cracks, burns, or signs of arcing. Replace any compromised wires.
- **Radio Interference (RFI/EMI):**
    - **Cause:** Wires not suppressing noise effectively, or improper grounding.
    - **Solution:** Ensure wires are properly routed and not touching other electrical components. The helically wound conductor in MSD Street Fire wires is designed to suppress noise, but severe interference might indicate other electrical issues in the vehicle.

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

## 6. SPECIFICATIONS

Attribute	Detail
Brand	MSD
Model Name	MSD Street Fire 5551
Item Model Number	5551
Manufacturer Part Number	MSD-5551
OEM Part Number	5551
UPC	085132055517
Cable Type	Spark Plug Wire
Connector Type	Universal
Connector Gender	Male-to-Male
Compatible Devices	V8 engines with HEI distributors
Special Feature	Heat Resistant
Color	Black
Outer Material	Silicone
Item Weight	2 Pounds
Product Dimensions	3.5 x 7 x 9 inches
Number of Items	1 (set)
Manufacturer	MSD Ignition
Date First Available	February 13, 2005

## 7. SAFETY INFORMATION

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**CALIFORNIA WARNING: Cancer and Reproductive Harm -[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

Always exercise caution when working on vehicle electrical systems. Disconnect the battery before installation. Wear appropriate personal protective equipment, such as safety glasses and gloves.

## 8. WARRANTY AND SUPPORT

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For specific warranty details and terms regarding your MSD Street Fire 5551 Spark Plug Wire Set, please refer to the documentation included with your purchase or visit the official MSD website. Warranty coverage typically addresses manufacturing defects.

For technical support or further assistance, please contact MSD customer service directly through their official channels. Contact information can usually be found on the manufacturer's website or product packaging.