Pertronix 1847V/40511

Pertronix 1847V Ignitor and 40511 Flame-Thrower Coil Instruction Manual

1. Introduction

This manual provides detailed instructions for the installation, operation, and maintenance of the Pertronix 1847V Ignitor electronic ignition system and the Pertronix 40511 Flame-Thrower 40,000 volt ignition coil. These components are designed to work together to enhance vehicle ignition performance.

Pertronix 1847V Ignitor

The Ignitor system replaces traditional breaker points and problematic factory electronic ignitions with a reliable, self-contained, and maintenance-free electronic ignition. It is designed for quick installation and remains largely undetectable under the distributor cap, eliminating the need for external control boxes.

Pertronix 40511 Flame-Thrower Coil

The 40511 Flame-Thrower coil is a 40,000 volt canister-style ignition coil. Its higher voltage output allows for larger spark plug gaps, which can contribute to increased power, smoother engine response, and improved fuel economy. This coil is internally resisted, simplifying installation and wiring. The oil-filled design provides effective heat control for street-driven vehicles.

2. Setup and Installation

Proper installation is crucial for optimal performance and safety. Always disconnect the vehicle's battery before beginning any work on the ignition system.

2.1 Ignitor Installation (Model 1847V)

1. **Disconnect Battery:** Disconnect the negative terminal of the vehicle's battery to prevent accidental electrical discharge.
2. **Remove Old Components:** Carefully remove the existing breaker points and condenser from the distributor. Retain any screws or hardware that may be needed for the Ignitor installation.
3. **Install Ignitor Module:** Position the Pertronix Ignitor module within the distributor, ensuring it aligns correctly with the mounting holes. Secure it using the provided hardware or original screws if applicable.
4. **Connect Wiring:** Follow the specific wiring diagram provided with your Ignitor kit. Typically, the Ignitor will have two wires: one for positive (+) ignition power and one for the negative (-) side of the ignition coil.

Ensure all connections are clean and secure.

5. **Reassemble Distributor:** Reinstall the distributor cap and rotor.

Image 1: Pertronix 1847V Ignitor module with associated mounting hardware and wiring. This image shows the compact design of the electronic ignition module and the components required for its installation within the distributor.

2.2 Flame-Thrower Coil Installation (Model 40511)

1. **Disconnect Old Coil:** Disconnect the wiring from your existing ignition coil and remove it from its mounting bracket.
2. **Mount New Coil:** Install the Pertronix 40511 Flame-Thrower coil in the same location as the old coil, using the existing bracket or a suitable replacement. Ensure it is securely mounted.
3. **Connect Wiring:** Connect the positive (+) terminal of the coil to the ignition switch's 12-volt power source (or the Ignitor's positive wire, if applicable). Connect the negative (-) terminal of the coil to the Ignitor's negative wire (or the distributor's negative terminal in a points system). Since this coil is internally resisted, external ballast resistors are typically not required.
4. **Connect High Tension Lead:** Connect the high tension lead from the coil to the center terminal of the distributor cap.


3.0 ohm
Flame-Thrower
CARB E.O.#D-57-10
PERTRONIX

Image 2: Pertronix 40511 Flame-Thrower 40,000 volt ignition coil. This image displays the black canister-style coil with its terminals and the 'Flame-Thrower' branding.

2.3 General Wiring Considerations

- Ensure all electrical connections are clean, tight, and free from corrosion.
- Verify proper polarity for all connections to avoid damage to the ignition components.
- Route wiring away from hot engine components and moving parts to prevent damage.
- Reconnect the battery's negative terminal after installation is complete.

3. Operating Principles

The Pertronix Ignitor system replaces the mechanical action of breaker points with a magnetic trigger and solid-state electronics. This eliminates point bounce and wear, providing a more consistent and powerful spark across the engine's RPM range. When paired with the Flame-Thrower coil, the system delivers a higher voltage spark to the spark plugs.

This results in several operational benefits:

- **Improved Starting:** More consistent spark helps with easier engine starts.
- **Smoother Engine Operation:** Eliminates misfires caused by worn points, leading to a smoother running engine.
- **Increased Power and Fuel Economy:** The higher voltage and larger spark plug gaps can lead to more complete combustion.

4. Maintenance

One of the primary advantages of the Pertronix Ignitor system is its maintenance-free design. Unlike traditional breaker points, there are no mechanical parts to wear out or adjust. Regular maintenance is generally limited to:

- **Periodic Inspection:** Periodically inspect all wiring connections for tightness and signs of wear or corrosion.
- **Coil Condition:** Ensure the ignition coil is free from physical damage or leaks.
- **Spark Plugs and Wires:** Maintain spark plugs and ignition wires according to your vehicle manufacturer's recommendations. The higher voltage output of the Flame-Thrower coil may allow for slightly wider spark plug gaps; consult Pertronix recommendations for specific settings.

5. Troubleshooting

If you experience issues after installation, perform the following basic checks:

- **No Spark / Weak Spark:**
  - Verify that the Ignitor and coil are receiving proper 12-volt power from the ignition switch.
  - Check all wiring connections for looseness or corrosion.
  - Ensure the coil's primary resistance is within specifications (the 40511 is internally resisted).
  - Inspect the distributor cap and rotor for cracks or carbon tracking.

- **Engine Misfire / Rough Running:**
  - Check spark plug gaps and condition.
  - Inspect spark plug wires for damage or improper routing.
  - Ensure the Ignitor module is correctly positioned and secured in the distributor.
- **Engine Cranks but Won't Start:**
  - Confirm that the fuel system is functioning correctly.
  - Verify that the engine has compression.
  - Check for spark at the spark plugs.

If troubleshooting steps do not resolve the issue, it is recommended to consult a qualified automotive technician or contact Pertronix technical support.

6. Specifications

Feature	Specification
Brand	Pertronix
Ignitor Model Number	1847V
Coil Model Number	40511
Combined Manufacturer Part Number	1847V/40511
OEM Part Numbers	1847V, 40511
Vehicle Service Type	Car, Tractor
Ignitor Installation Type	Distributor Cap
Ignitor Connector Gender	Female
Automotive Fit Type	Universal Fit
UPC / GTIN	192019023856

7. Warranty and Support

For specific warranty information regarding the Pertronix 1847V Ignitor and 40511 Flame-Thrower Coil, please refer to the official Pertronix website or the documentation included with your product at the time of purchase. Warranty terms and conditions may vary.

For technical support or further assistance, please visit the official Pertronix website or contact their customer service department directly.