



Thank you for your purchase of WeaponX Smart Direct Fire Ignition Coil System for your vehicle. The following are the instruction manuals for your ignition system kit. Please read carefully and enjoy your new direct fire ignition system.

PLEASE READ BEFORE CALLING OR RETURNING PRODUCT. EXTREMELY IMPORTANT!!!

INSTALLATION - ** DEPENDING ON WHICH VEHICLE THE INSTALLATION PROCEDURE WILL VARY. THE INTAKE MANIFOLD WILL NOT ALLOW ALL THE COILS TO MOUNT THE HEATSINK TO THE COIL, SO THEY MAY BE INSTALLED REMOTELY. EXAMPLES ARE PROVIDED IN THE KIT.

The PRIMARY reason customers run into issues with their ignition coils are due to improper installation.

Die-electric grease IS NOT a conductor. It is an insulator. This means by applying die-electric grease to any connectors on the ignition coil you are PREVENTING the ignition coil from working properly and can cause permanent damage. Die-electric grease is meant to coat the rubber boot or ceramic portion of the spark plug ONLY.

It is intended to prevent the boot from sticking to the spark plug or spark plug bore when the cylinder head gets hot so please do not use the product on the connections as it may void your warranty due to improper installation.

Coils applied with this to the connection point are not serviced or accepted by WeaponX for ANY reason.

Also, unlike the OEM units, the XCOPS have a positive retention clip much like spark plug wires and do not need any other form of retention in the heads. PUSH FIRMLY down on the ignition coils until you HEAR and FEEL them

CLICK into place. If they do not you may experience issues due to an improper spark plug connection. The ignition coil terminal can be **EXTREMELY** tight from factory. This is to improve the connection and performance

characteristics of the ignition coil. If you are uncertain about the installation use a socket extension, place it firmly on the end of the ignition coil and tap down on the top extension until the ignition coil seats in place. Do not use

excessive force. Also, it is **HIGHLY recommended to plug in and unplug the ignition coil several times on a**

removed spark plug to loosen the terminal connection for insertion into the cylinder head. PLEASE NOTE THE

FOLLOWING - IF THE INSTALLER DOES NOT HEAR A SNAP THE IGNITION COILS ARE NOT INSTALLED PROPERLY. The

SNAP tells the installer that the ignition coil is installed and connected properly to the spark plugs. If engine does

not start, performance decreases or if the ignition coils are popping out of the spark plug bore soon after

installation, or engine missing is observed, the ignition coil was not installed correctly. Please pull out, RE-SEAT and

re-install the ignition coils and be sure to listen to the SNAP. All coils should noticeably “snap” into place. Please see

appendix B for installation suggestions to reduce effort on install.

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INTRODUCTION

WeaponX XCOPS are a total balanced ignition coil package that makes no sacrifices in material or ignition quality.

Top notch construction ensures you won't have any broken tabs or connectors, zero spark arching due to inferior boot quality, no misfire due to improper wire alignment and weather tight seals that perform to OEM specs.

XCOPS allow super fast removal and installation of spark plugs and offer our top notch progressive gain design that reliably increases power output as you improve your ignition without the worries or hassles of an ignition coil not meant for increased input power. Unlike other brands as your ignition grows so do the XCOPS.

WeaponX stands by our products and know they are a reliable investment now and years down the road.

- 1) Install the supplied umbrella seals on the body of the ignition coil if not installed, they may need to be adjusted slightly during installation for a water proof seal.
- 2) Remove the heat sink and ignition amplifier assembly from the supplied boxes. Part number WXINI 100001.
- 3) Fit and snap the ignition coil module assembly to the top of the ignition coil using the supplied adaptor bracket. It can be fitted with or without the Heatsink assembly. See IMAGE 1 below on next page.
- 4) Tighten the assembly using the side bolt. SEE IMAGE 3
- 4) Remove the supplied wiring harness from the supplied bag, install the connector to the ignition coil first, then the amplifier module.
- 5) Ignition coil is ready for installation into the spark plug bore. Press firmly down on the ignition coil until it "snaps" down onto the spark plug and make sure installed umbrella seal is covering the spark plug bore. Do not use excessive force.
- 6) Repeat for remaining cylinders.
- 7) It is recommended to use the supplied 12AWG wire or larger to supplement the grounding system on your vehicle. Install from your negative battery post to the engine head for best results.
- 8) Reset your ECU by pulling off the negative battery terminal for 5 minutes. This is so your computer can re-learn the air fuel curves required with the new ignition coils.

IMAGE 1

The supplied plastic bracket slips on the top of the ignition coil. The ignition module, if not assembled, is mounted to the adaptor.



IMAGE 2

WITHOUT HEATSINK

Self tap screw into coil adaptor.



The ignition module can be assembled with or without the heatsink assembly. For a lower profile mount the ignition module amplifier with the metal surface facing downwards and with the connector facing the closed portion of the coil adaptor.

WITH HEATSINK



Note WeaponX is upside down, screw stainless hardware in from bottom.

To mount the ignition module with the heatsink mount the ignition amplifier with the labeling upside down, and the metal surface facing up, again with the module connector facing the closed portion of the coil adaptor. Screw in the stainless hardware from the bottom, do not over tighten, snug is all that is required or damage to the plastic adaptor can occur

Without heatsink, plastic tabs must be trimmed from the adaptor, please be sure to add thermal paste to the assembly process, at the ignition module base.

IMAGE 3

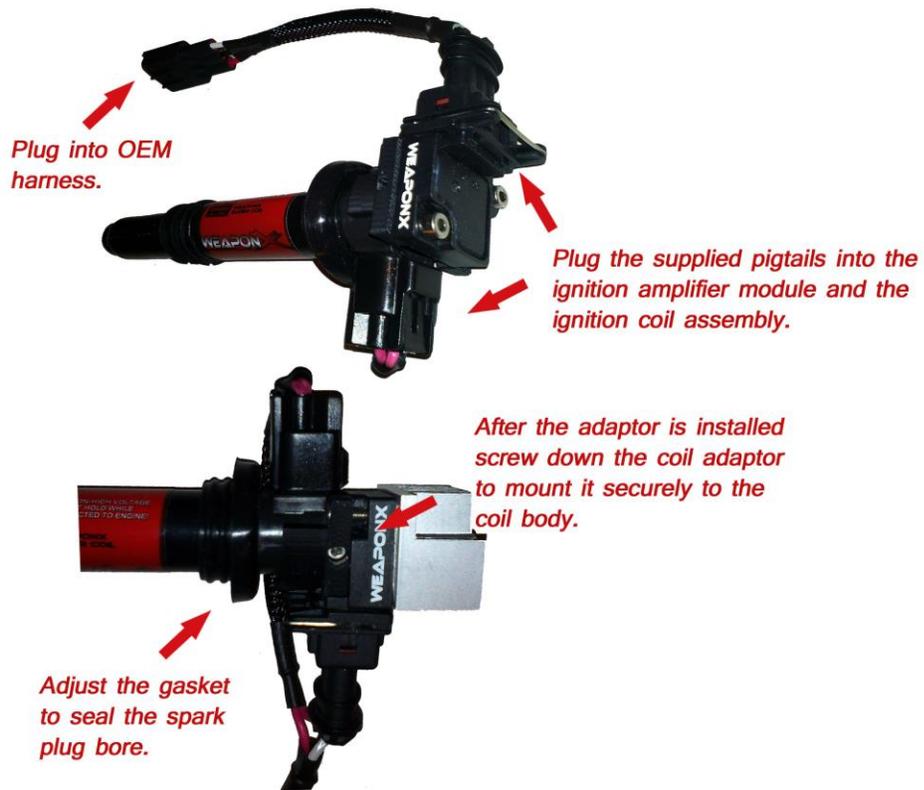


IMAGE 4



Legal for use on racing vehicles.

APPENDIX (A)Information on further reducing PCM EFI and RFI issues.

WeaponX Part Number WPXIE-v1 (Interference Eliminator)

WeaponX has developed a 2 wire solution that successfully removes unwanted interference in any automotive application. Also, please refer to our technical article (RFI/EMI/EMC Reduction Manual.pdf) for further information on reducing in car interference issues.

IMPORTANT NOTES - APPENDIX (B)Installation of Ignition Coils

1) Never remove ignition coils while engine is still hot. Proper engine cool down should take place or damage to the ignition coil may result.

FREQUENTLY ASKED QUESTIONS

What gap size should I use?

WeaponX highly suggests to initially use a gap size that you know works. Our ignition coils will compensate by adding extra spark duration automatically making spark gap adjustment much less critical than on other ignition coil setups. NOTE: On forced induction applications greater spark duration seems to be more advantageous than larger spark gap. This is the first step in optimizing your ignition system. When things are operating properly it is suggested to open up gap in 0.002 increments until optimal gap size without blowout is reached then back off gap size by 0.004. It should also be noted that inoperable or poorly functioning charging systems greatly reduce the output and capability of the system and ignition coils.

I am experiencing problems with misfire after testing for EMI issues any suggestions?

For fault codes, please click the link below.

<http://www.weaponxperformance.com/manuals/Misfire%20Diagnosis.pdf>

If you are still experiencing problems with your setup after firmly installing the ignition coils we highly recommend data logging your output voltage. It is possible that certain combinations are exceeding the specifications of the OEM charging system. If after logging you experience a significant voltage drop during wide open throttle (below 13 volts) it is highly recommended to upgrade the alternator, ground and power wires. Size grounding and power wires to handle the upgraded potential of the new alternator in question. For optimizing output power of the XCOPS the system power should be stable at over 13 volts. If not you may not be providing the optimum power required to properly operate the XCOP ignition coils. OEM ignition coils can operate at very low voltages because of the lower power requirements where the XCOP ignition coils require a steady state 13+ volt charge to work properly. Also, inspect the sleeves of the ignition coils for any cracks or splits and for any liquid or debris in the

spark plug bore such as oil or water. If any obvious fluids are in the bore or cracks are on the sleeves there may be a voltage leak from the ignition coil to ground. The outer sleeves and lack of fluids prevent high voltage from sparking to the cylinder head, which may cause the spark to be created external to the spark plug.

Why are my ignition coils still not snapping into place?

WeaponX ignition coils are very tight from factory for improved electrical conductivity. Use of force is necessary at times to install the spark plug. Please attempt to install spark plug into ignition coil by hand first. Also, inspect the inner spark plug boot of the XCOPS for any molding flash where the spark plug fits through. In some rare cases this leftover rubber flashing may inhibit full spark plug insertion. In this case use a small bit, screwdriver or knife to remove the flashing on the inside of the boot.

***WARRANTY**

WeaponX guarantees this product free from defects and workmanship for a period of 2 years from the date of purchase if installed by a qualified professional. Products that fail will be replaced at WeaponX's option when product quality has been marked as the failing issue. This warranty does not include abuse, misuse, modification or improper installation of the product. Warranty is limited to the ignition coils only and shall not be liable in part or whole for any special, incidental or consequential damages or costs that may occur with this product. The foregoing is exclusive and in lieu of any other warranties either expressed or implied and is valid only to the original purchaser. During a return product must be accompanied by an RGA number and must be received within 30 days of RGA issue. WeaponX may at our discretion charge appropriate handling and shipping fees back to original purchaser if product is found to be in operating condition. Minimum \$9 handling fee on returned product to be charged for processing.