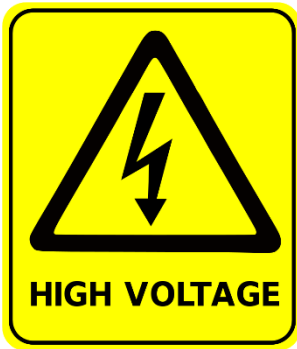


WARNING: HIGH VOLTAGE!

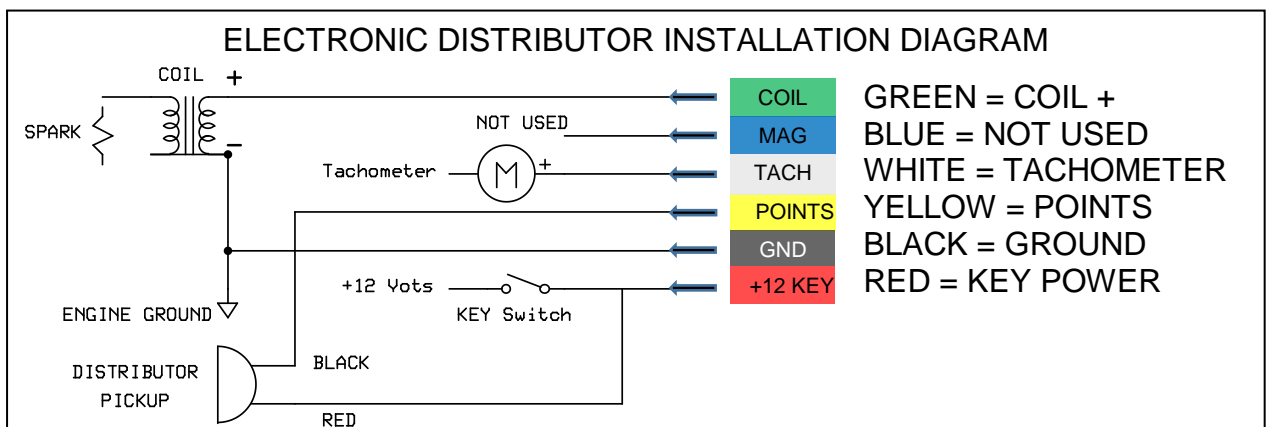
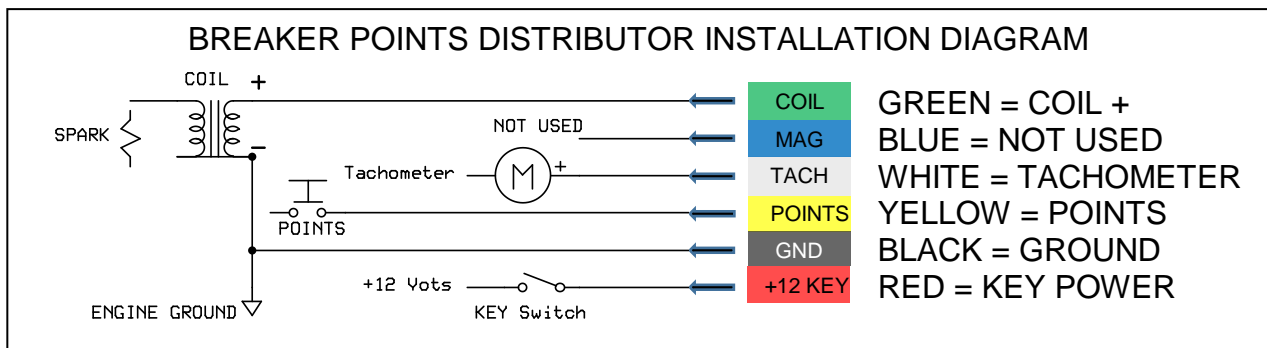


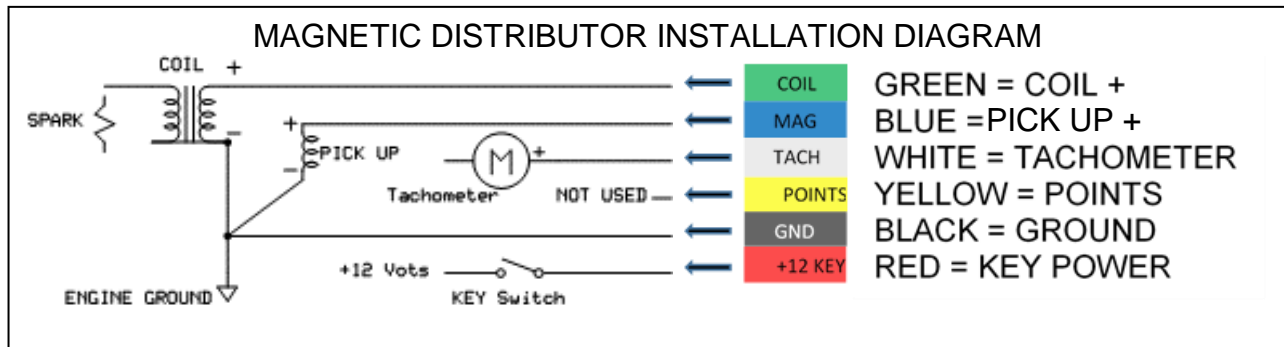
DISCONNECT THE BATTERY BEFORE INSTALLING OR SERVICING ANY IGNITION SYSTEMS COMPONENTS.

Failure to follow these instructions and the vehicle owners' handbook and shop manual could result in serious personal injury, death and or damage to property. This part is designed to be installed by a mechanic that is familiar with European automobiles and safety standards.

Vintage Legacy

The Model 356906 Perma-Tune is the sixth generation version of the original Perma-Tune ignition system co designed by Ferdinand Porsche and Theodore Sturm in the late 1969. The first generation Perma-Tune "blue box" was made in Newport Beach, California and was installed in new Ferrari cars as a factory upgrade part. The blue box became stock equipment on Porsche 911 cars built in the mid 1970's. The Perma-Tune ignition module designers have kept the name at the forefront in ignition technology development here in the USA ever since. The Gen 6 Perma-Tune looks right at home on any pre electronic engine, yet houses the latest ignition technology called Nanopulse Discharge Ignition. Visit our web site for more details on NDI.





WIRE CONNECTIONS

Red Wire, +12 KEY: Connect this wire to +12 Volts keyed power. If your car originally had breaker points, you may splice the red wire to the wire that was on the coil positive terminal. The positive terminal of the ignition coil may be identified by one of these markings: + A 15. Do not connect a resistor to the red wire. You may leave a resistor block in place for originality, just leave it disconnected. If your distributor has been converted to an electronic points replacement, connect this red wire to the red wire of the electronic points replacement module so that both the ignition module and points replacement module get +12 Volts key power.

Black Wire, GND: Connect this wire to the engine directly if possible or to the chassis. For best results connect the black wire and the coil negative terminal wire to the same place on the engine.

Yellow Wire, POINTS: Connect this wire to distributor breaker points. If your car originally had breaker points, you may splice the yellow wire to the wire that was on the coil negative terminal. The negative terminal of the ignition coil may be identified by one of these markings: - B 1. If your distributor is equipped with a condenser, do not connect it. If your distributor has been converted to an electronic points replacement module, connect this yellow wire to the black wire of the electronic points replacement module. If the tachometer of your car connects to the breaker points wire, you may leave it connected there, otherwise, connect the tachometer wire to the white wire of the Perma-Tune ignition module.

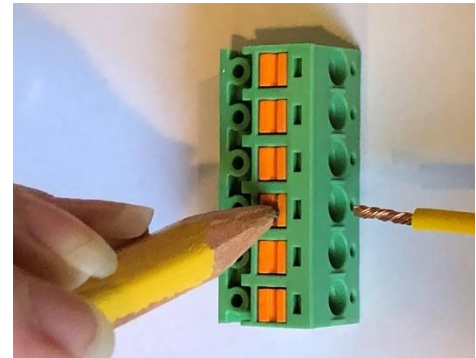
White Wire, TACH: If your car originally had the tachometer wire connected to the coil negative terminal but does not work with the **Yellow** wire, splice the tachometer wire to the white wire. The Perma-Tune ignition module white wire is also compatible with any aftermarket tachometer, shift light or RPM switch. If your tachometer does not work with the **Yellow** or **White** wires, connect it to the **Green** wire. Do not connect the tachometer to the **Green** wire unless it has already been tested on the **Yellow** and **White** wires of the Perma-Tune ignition module.

Blue Wire, MAG: This wire is not used on the Porsche 356 or early 911 cars. The blue wire terminal is for a signal input from magnetic type distributors and requires a program change to enable. For Porsche distributors, connect the Blue wire to the A terminal of the distributor trigger and the B terminal of the distributor trigger to ground. On other brands of distributors, refer to the distributor manufacturers installation instructions.

Green Wire, COIL: Connect this wire to the positive terminal of the coil. The positive terminal of the ignition coil may be identified by one of these markings: + A 15. Connect the negative terminal of the ignition coil to the engine directly if possible or to the chassis. The negative terminal of the ignition coil may be identified by one of these markings: - B 1. For best results, connect the coil negative terminal at the same place as the black wire on the engine. If your tachometer does not function correctly using the yellow wire or with the white wire, you may connect the tachometer wire to the green wire at the coil positive terminal.

HARNESS CONNECTOR

To install wires into the harness connector, depress the orange tab all the way down. Insert the wire into the corresponding hole taking care to insert the conductor all the way into the hole. Do not allow the wire insulator to enter the hole.



SERVICE NOTES

Warning! High Voltage may be present at the ignition coil primary AND/OR secondary circuit. Do not connect a dwell meter or test light to the coil primary terminals. Serious personal injury, death and or damage to property could result. Always disconnect the battery at the negative terminal before working on the car. **To avoid damage to your Perma-Tune and voiding your warranty:** Do not connect 12 volts to the coil. If the ignition coil shows signs of oil leakage, replace it before installing a new ignition module. Do not use a test light or jumper wire on the Perma-Tune ignition module, tachometer or ignition coil. Make sure the engine ground cable and battery negative cable connections are not defective. Unlike other brands of ignition modules, Perma-Tune ignition modules make no audible sounds when the ignition switch is on. The Gen 6 Perma-Tune makes no heat of its own under normal operating conditions. To avoid potential damage to your new ignition module and voiding your warranty, we recommend that you replace the ignition coil when the ignition module is replaced. Use only the Perma-Tune coil part number SC010 or the original German made OE coil.



Programming Function: There is no need to make any changes to the program in order to install this Perma-Tune on the Porsche 356 or early Porsche 911 four cylinder engines. If you wish to customize the programming it is best to first install the module on the car. Then install TEAM VIEWER on your laptop and contact Perma-Tune via phone. A factory technician will install the software and pair the Perma-Tune to your laptop connection. Here are some of the settings that can be changed via the Bluetooth or USB connection:

RPM limit	Number of cylinders from 1 to 12	RPM triggered switch
Multiple strike	Breaker points distributor	Clockwise or counter clockwise
Signal smoothing	Magnetic pulse two wire distributor	rotation distributor
Advance curve	Electronic three wire distributor	Output Voltage control

Here is a download link to [TEAM VIEWER](http://www.teamviewer.com/download). www.teamviewer.com/download

Contact Perma-Tune service:
(631)312.3280

DESCRIPTION OF FEATURES:

PROGRAMMER PLUG: This is the communications connector for the USB Smart Wire, Part Number 90502, which connects your Perma-Tune to your computer. If your computer does not have a built in Bluetooth module, his connector can also be used for connecting the Perma-Tune to your computer using the Bluetooth Smart wire, Part number 90506. For more information refer to the 90502 Smart Wire or 90506 Smart Wire installation and programming manual.

SIGNAL OL: This is the overload protector for the breaker points signal wire. If a short circuit occurs in the yellow POINTS wire circuit, this component will break the circuit in order to protect the Perma-Tune from damage. While tripped, the OL will be hot to the touch. When the circuit fault is cleared the OL will cool down and the Perma-Tune will resume operation.

TACH OL: This is the overload protector for the tachometer output wire. If a short circuit occurs in the white TACH wire circuit, this component will break the circuit in order to protect the Perma-Tune from damage. While tripped, the OL will be hot to the touch. When the circuit fault is cleared the OL will cool down and the Perma-Tune will resume operation.

POWER OL: This is the overload protector for the red power wire. If an over load occurs inside the Perma-Tune module, this component will break the circuit in order to protect the Perma-Tune from damage. Internal over loads of the module are

usually the result of incorrect program settings. While tripped, the OL will be hot to the touch. When the fault is cleared the OL will cool down and the Perma-Tune will resume operation.

GROUND OL: This is the overload protector for the ground circuit wiring of the ignition module. If an open circuit occurs between the engine and the chassis of the car, this component will break the circuit in order to protect the vehicle wiring and Perma-Tune wiring from damage. While tripped, the OL will be hot to the touch. When the circuit fault is cleared the OL will cool down and the Perma-Tune will resume operation.

BLUETOOTH ANTENNA: This is the antenna for the built in Bluetooth module. When mounting the module in the engine compartment, keep in mind that the less the antenna is obstructed the farther the Bluetooth signal will reach. Ideal positioning will allow about a 100 foot range with the hood closed and about a 200 foot range with the hood open. Placing the antenna next to an obstruction can reduce the range to about 25 feet with the hood down.

STROBE LED: The red strobe LED operates exactly like a timing strobe light. It flashes each time the ignition module makes a spark. At slow crankshaft speeds, as when the starter is turning the engine, the strobe light will appear to flash. Due to the increase of engine RPM when the engine starts and idles, the time between the LED light flashes is so short that the LED appears to be dimly lit. As engine RPM is increased the LED will appear to get brighter. The higher the RPM the brighter the LED will appear. Ignition miss fire is easy to detect using the strobe LED. Any interruption in the spark output of the module will make the LED appear to flicker. Even a miss fire that would not be detectable by the driver is easily detected by the strobe LED. Miss fire is usually the result of worn out breaker points or a defective points condenser. If you are experiencing engine miss fire not related to breaker points distributor triggering, contact Perma-Tune for additional troubleshooting help.

ID # : This is the MAC identification number for your particular Bluetooth equipped Perma-Tune module. When pairing the Bluetooth module to your device, the last four alphanumeric digits will identify the Perma-Tune module. The identity will be displayed as "RNBT-" followed by the four digits listed here and on the ID label of the Perma-Tune module. For more information refer to the Bluetooth Smart Wire, part number 90506, installation and programming manual.

STATUS LED: The green status LED indicates the status of the ignition module controller and Bluetooth controller. When the status LED displays a fast flash, this indicates that the module has passed its self diagnostics check and the Bluetooth is discoverable. When the status LED displays a slow flash, this indicates that the

Bluetooth is being paired to the device. When the status LED displays solid on, the Bluetooth is connected to the device and program changes can commence.

RX/TX LED: The red RX/TX LED flashes when receiving commands from the device and will light up while the module is transmitting its settings to the device.

