

INSTALLATION INSTRUCTIONS

ACTIVE FUEL INJECTION / TACHOMETER ADAPTER PART # 29074

Before electronic ignitions were common (and even after they were, in some cases), tachometer designs were geared toward the existing point-type ignition systems. This meant that a parallel-connection tachometer (one that is triggered by the coil '-' terminal) usually required a relatively high voltage (50-100v) to function properly. The other style of tach commonly used was the 'series' tach, which was triggered by the current pulse in the ignition supply wire whenever the breaker points closed.

When aftermarket electronic ignitions started becoming more popular, there arose a need for a way to trigger the tachometer, most of which were OEM designs. In addition, more cars were using electronic fuel injection systems, and many of these required a HV pulse on the coil '-' terminal to tell the injection controller that the ignition was working before the controller would activate the fuel injectors.

The first tachometer / fuel injection adapters were just a coil of wire that simulated a weak coil primary. Our version is the Mallory part #29074. When connected between the points trigger lead and the ignition power supply wire ('+' and '-' sides of the coil), the adapter would provide a HV pulse on the trigger wire when the ignition was triggered. In addition, the adapter drew a couple of amps through the ignition wire, and this was generally enough to signal a series style tach that was in the circuit. See **FIGURE 1**.

As distributors with magnetic pickups became popular triggering sources, the #29074 style adapter would not work, because the point lead was no longer available as a trigger lead. In this case a more complex adapter was designed (Mallory part #29078). This unit receives its trigger information from the "Tach" terminal of the ignition amplifier and then generates a HV pulse for parallel tachometers or fuel injection systems, and also pulls a couple of amps on the ignition wire to trigger series style tachometers.



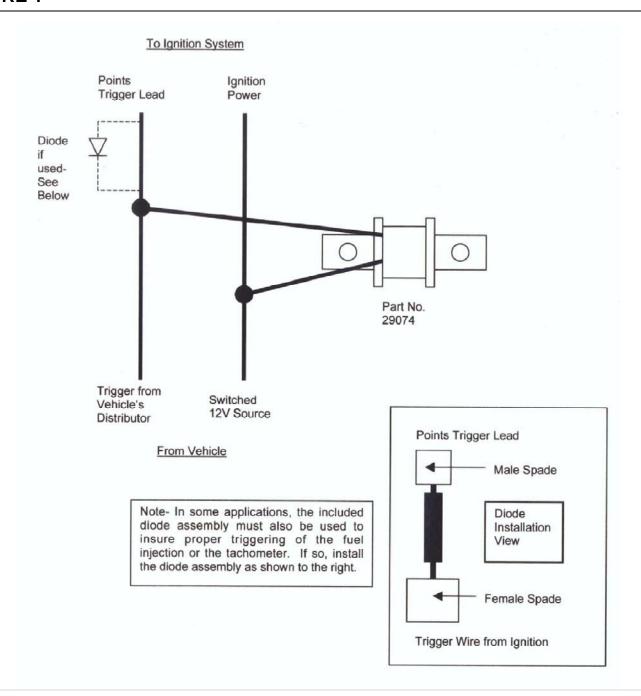
NOTES:

Parallel Tachometer – Tachometer trigger wire is connected to (-) side of the ignition coil

Series Tachometer – Tachometer trigger wire is connected to the (+) side of the ignition coil

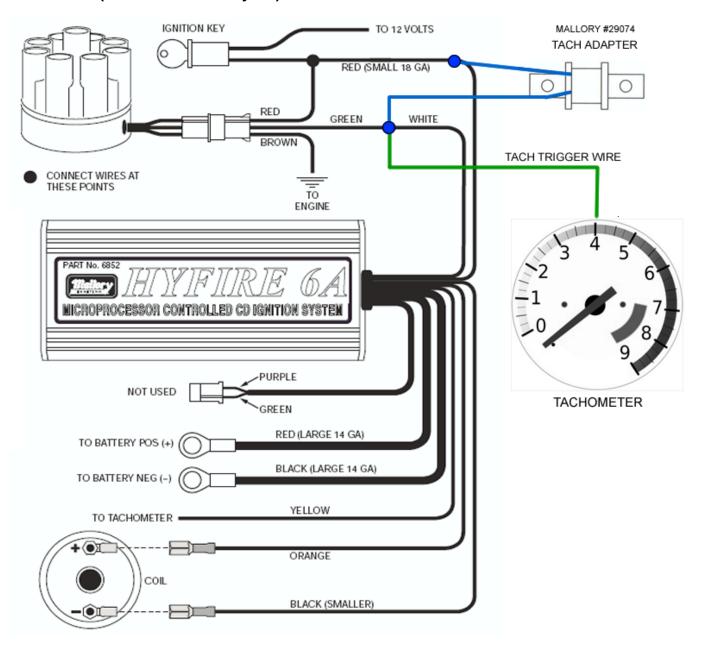
If you are using the points trigger lead (points, OEM electronic, Unilite®, or 50-Series Mallory M.B.I.) for your ignition, then #29074 is the appropriate adapter. It should work with both parallel and series tachometers. Even though the 50-series Mallory distributors are Magnetic Breakerless, they are a 3-wire design that includes a coil driver/amplifier as the Unilite®. If you are using the 2-wire magnetic pickup design (where an external amplifier is required), using the purple and violet wires, then the #29074 will not work and you need the Mallory #29078.

FIGURE 1



With an ignition system that includes a Mallory Hyfire® or other brand ignition amplifier and a Unilite® or M.B.I. distributor (with a WHITE wire trigger from the Hyfire®), you may or may not have problems with your tachometer. If you have a parallel tach you will connect your tachometer to the tachometer lead or tachometer port from the amplifier unit (pretty easy). But, with a serial tach you need to bring a trigger signal to the red wire (power supply side). See **Figure 2** below.

FIGURE 2 (Serial Tach with Hyfire)



The previous image shows the <u>Mallory #29074</u> connecting across the **WHITE** and **RED** Hyfire® leads to the distributor (Mallory Unilite® or M.B.I.). The connections shown are for a series tachometer.

TACHOMETER COMPATIBILITY

At right is a list of common tachometer compatibility selections when used with the Mallory Hyfire® ignition amplifiers, and if a tach adapter is required.

If your tachometer fails to operate with a Mallory Hyfire®, first try connecting your tachometer's trigger wire to the yellow wire of your Hyfire® unit. This yellow wire produces a 12-volt square wave signal. If the tach still does not operate you will need a tach adapter.

Modern aftermarket tachometers do not require a tachometer adapter.

TACHOMETER COMPATIBILITY LIST		
Aftermarket Tachometer	White Wire Trigger	Magnetic Trigger Connector
Autogage	29074	29078
Autometer	_	_
Ford Motorsport	_	_
Moroso	_	
Stewart	29074	29078
S.W. & Bi Torx	_	_
Sun	29074	29078
VDO	8910	29078
AMC (Jeep)	29074	29078
Chrysler	29074	29078
Ford (Before 1976)	29074	29078
Ford (After 1976)	29074	29078
GM	Bypass in-line filter	Bypass in-line filter
Imports	29074	29078

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You already know that you have electronic issues with these systems. It is a common swap to install a Mallory Unilite® distributor in your application. If you have issues with your tachometer, the procedures described above are your best fix.

But, if you are having issues with an application that is fuel injected while retaining the Lucas computer, we have another document to assist you. Go to our website in the Support section and you will find a download of our #6200M_cpc.pdf installation document.

If you still have problems or questions, please open a support ticket at our website http://www.centuryperformance.com and we'll do our best to help you.