Installing Extra Performance Ignition Systems

By ROBERT LYONS For The Mustang Times

One of the great things about Ford's Motorsports program is that many of their late model performance pieces can easily be retro-fitted into early model Fords.

One of the most rewarding swaps that can be made is replacing a stock ignition system (either breaker point or electronic) with the MSD designed Motorsport extra performance ignition system. With an afternoon's worth of work, you can forego the pleasure of adjusting an early model's breaker points or dealing with a weak electronic system for the low maintenance and high capacity of the Motorsports upgrade.

Your shopping list for the project can be as long or short as you like. The necessary items include the Motorsports coil No. M-12029-A302 and ignition module No. M-12199-C302.

For early model cars, add a Dura-Spark vacuum advance distributor, three 1/4 x 20 nuts and bolts, Motorsports wire harness No. M-12071-A301, and late model spark plug wires (Motorsports wires are nice.) Optional items include Motorsports tach, RPM limiting chips, chromed coil and distributor hold downs, aftermarket adjustable vacuum advance and weight kits.

The first step is to swap in the distributor and any related parts, if necessary. On an electronic ignition car, replace the stock coil and module with the Motorsports pieces, connect to the stock wire hamess, and splice the included red wire between the coil and module as per instructions.

On breaker point cars, installation is more time-consuming. The coil can be mounted in the stock position, but you will have to locate a good position, away from major heat sources, for the module and attach it with three 1/4 X 20 bolts.

Next, connect the Motorsports wire harness to the coil and module as per instructions (the wire harness comes covered with a plastic loom, which can be removed so the harness can be wrapped to appear stock.)

This harness also has a plug-in connector for the Motorsports tach. The connector, along with the system's power line, should be passed into the passenger compartment (the installation looks great if you use the A/C knockout).

Behind the dash, there is a pink wire that connects into the ignition switch harness. Disconnect it, tape it, and connect the ignition power line to the switch. The tach

hookup should be tied out of the way unless the tach is to be used.

On both installations, there are a couple of remaining steps. Plug one of the three enclosed RPM limiting chips (6000, 7000 and 8000) in the side of the module. The 6000 RPM is fine for a street engine, and other chips are available separately. Lastly, there are two wire loops, red and

blue, hanging from the module. For eight cylinder operation, ignore them. On a six cylinder engine, cut the red wire and insulate the ends. Cut both wires and insulate on a four cylinder application.

And there you have it. A complete, high energy system that can handle your ignition needs just short of all out racing. Courtsey of Ford.

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Ignition and Electrical

"EXTRA PERFORMANCE" IGNITION SYSTEM (SELF-SUPPORTING)

One each of the following three components will provide a complete self-supporting ignition system when used with a Motorsport or DuraSpark II Distributor. Cannot be used with TFI-IV equipped vehicles with EEC-IV engine control.

IGNITION CONTROL MODULE(1)

M-12199-C301* Extra Performance Ignition Module. Replaces Ford DuraSpark II units with "blue" or "yellow" wire strain relief. Fits most 1976 and later 4-cylinder, 6-cylinder, and M-19 Provided Ingregored Replace Rep

and V-8's. Provides increased spark energy over production Duraspark II module and coil. Bult to meet the heat, temperature, shock and vibration requirements of high performance applications. Includes built-in Rev Control. Three RPM limiter modules (6000, 7000- and 8000 RPM) supplied. Other RPM modules available (see page 74).

NOTE: Must be used with coil M-12029-A302. Not compatible with electronic engine control (EEC) systems.

IGNITION COIL

M-12029-A302* High energy coil. Accepts standard Ford "horseshoe" coil connector. Low primary resistance. Heavy duty construction.

NOTE: Must be used with control module M-12199-C301, B301 or A302.

IGNITION WIRING HARNESS

M-12071-A301* Race quality wiring harness. Includes connectors and sufficient wire lengths to install "extra performance" ignition system on cars not factory equipped. Includes connector for direct plug-in to either Motorsport tachometers (see page 80). NOTE: Not compatible with factory Duraspark III Ignition Module.

NOTE (1): Module M-12199-C301 is identical to the previously released M-12199-B301, except for a new rev control designed to improve engine performance and maintain protection from engine over-revving.

"Extra Performance" Ignition System EEC-III

IGNITION CONTROL MODULE

M-12199-A302* Extra Performance Ignition Module. Replaces Ford DuraSpark III (EEC) units with "brown" wire strain relief. Built to meet the heat, temperature, shock and vibration requirements of high performance applications. Includes built-in Rev Control. Three RPM limiter chips (6000-, 7000- and 8000 RPM) supplied. Other RPM chips available (see page 74). Programming modules supplied to select number of cylinders (4-6-8).

NOTE: Must be used with coil M-12029-A302. This module (M-12199-A302) requires input from the EEC-III module and cannot be used as a self-supporting lightion system.

EXTRA PERFORMANCE MOTORSPORT IGNITION SYSTEM

