## **Installation Note #236**

Fax On Demand Section 6 - Document #236 - Sheet 1 of 1

## Ford Passive Anti-Theft System (PATS)

The new Ford Passive Anti-Theft System is only available on the new 1996+ Ford Taurus LX, Mercury Sable LX, 1997+ Mustang GT, Lincoln Mark VIII, 1998+ F-Series Pickup Trucks, Expedition and Navigator. It is optional on Ford/Lincoln/Mercury vehicles that are equipped with Factory Remote Keyless Entry Only!!! If the vehicle does not have the Factory Remote Keyless Entry the vehicle will not be equipped with this system.

The way this system works is....

When the key is inserted into the lock cylinder and turned to the on position, a sensor within the lock cylinder will transmit a signal to the key and the key will transmit back to an antenna (located within the lock cylinder) a code. This code will be sent to the Passive Anti-Theft Module located underneath the steering column. This code will then be verified by the Passive Anti-Theft Module and recorded into memory. When the engine is started by the key, the Power train Control Module will communicate with the Passive Anti-Theft. The Passive Anti-Theft Module will then transmit back a digital multiplexed signal, in a sense, telling the Power train Control Module whether or not to continue running the engine. If the correct code from the key was received, then the engine will continue to run. If no code or an incorrect code was processed, then the Power train Control Module will shut off fuel and spark to the engine. Pretty cool huh? There are over 4 Trillion different codes stored in these keys and each time the key is entered into the lock cylinder the key will transmit a different code. So in other words it code hops.

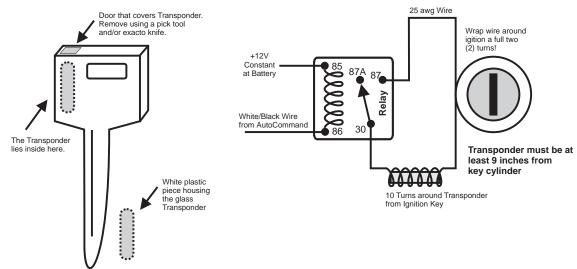
If the vehicle is equipped with the Factory Remote Keyless Entry you only have one option available to connect a remote starter to the vehicle and it's not an easy one.

Ford Transponder Key Systems are more complicated than most security systems.

DesignTech now offers the Universal Alarm Bypass Module (Part #20401) which has all the parts and materials necessary for bypassing this type of alarm system. You can purchase this module for \$39.95 or follow these directions below.

You must remove the transponder from the key. See Diagram:

- 1. Use about 12" of #28 Gauge wire and connect one end to pin #20 on the 30 Relay, tehn wrap the wire around the transponder that you removed from the key (make roughly ten turns), then continue the wire to the ingnition switch and wrap it around the switch 2 times. Continue the wire back to the relay and connect to Pin #87 on the relay (see diagram).
- 2. Connect Pin #85 to a +12v constant power.
- 3. Connect Pin #86 to your Ignition 3 wire from the AutoCommand.
- 4. Test your operation, clean up installation.



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