ANTI-THEFT SYSTEM - PASSIVE

1996 ACCESSORIES & EQUIPMENT Ford Motor Co. Passive Anti-Theft System (PATS)

DESCRIPTION & OPERATION

PASSIVE ANTI-THEFT SYSTEM (PATS)

Passive Anti-Theft System (PATS) vehicle protection system is standard equipment for Sable LS and Taurus LX. This system is designed to prevent driveaway thefts. The system is passive in that it does not require any activity from the user. System uses radio frequency identification technology to verify if proper key is being used to attempt to start the vehicle.

During each starting sequence, the encoded ignition key is interrogated by vehicle anti-theft electronics. If the key's identification code is programmed into anti-theft system, vehicle is capable of starting. If key's identification code is incorrect or missing, vehicle is prevented from starting.

PATS module communicates with the Powertrain Control Module (PCM) via Module Communication Network (MCN). PCM then determines if engine will be enabled to start. PATS varies from anti-theft system in that the passive vehicle protection system enables or disables vehicle from starting and only operates with ignition switch in RUN or START position. Anti-theft system operates only when ignition is off. For information on anti-theft system see appropriate ANTI-THEFT SYSTEM article.

PATS vehicle protection system consists of these components: PATS module, anti-theft indicator (THEFT) light, transceiver electronics, encoded ignition key, module communications network and Data Link Connector (DLC).

ANTI-THEFT INDICATOR (THEFT) LIGHT

PATS uses same THEFT indicator light as the Anti-Theft Alarm System (if equipped). THEFT indicator can be used to proveout system operation status. The anti-theft alarm system uses the THEFT indicator light when ignition is off and PATS uses the THEFT indicator light when ignition is in start or run.

ENCODED IGNITION KEY

When ignition is in start or run, PATS module initiates the encoded ignition key interrogation process. PATS module supplies both power and carrier signal to transceiver to momentarily energize ignition key. After energize period has expired, key transmits its identification code to transceiver module. This encoded ignition key is much larger in size to accommodate the electronics located inside plastic cover.

TRANSCEIVER

Transceiver module receives ignition key identification code and interfaces with PATS module.

PASSIVE ANTI-THEFT SYSTEM (PATS) MODULE