Anti-Theft

The Passive Anti-Theft System (PATS) consists of the following components:

- Anti-theft indicator (located in the Instrument Cluster (IC))
- Encoded (the key contains a transponder) ignition key(s)
- PATS transceiver
- PCM

<u>PATS</u> uses radio frequency identification technology to deter a drive-away theft. Passive means that it does not require any activity by the user.

Passive Anti-Theft System (PATS) Function

The <u>PATS</u> function is controlled by the PCM. <u>PATS</u> uses the PCM to carry out all of the <u>PATS</u> functions such as receiving the identification code from the <u>PATS</u> key, controlling the starter and fuel injectors enable, and initiates the key interrogation sequence when the ignition key is turned to the ON or START position. All elements of <u>PATS</u> must be functional before the vehicle will start. If any of the components are not working correctly, the vehicle will not start. If the PCM must be replaced for any reason (<u>PATS</u> concerns or driveability concerns), the <u>PATS</u> keys must be programmed into the new PCM. Refer to <u>Key Programming Using Diagnostic Equipment</u> in this section.

<u>PATS</u> is active only for a few seconds when the vehicle is starting. It is not a <u>PATS</u> concern if the vehicle stalls after it has been running for a minimum of 3 seconds. <u>PATS</u> will not disable a running vehicle.

<u>PATS</u> is not compatible with aftermarket remote start systems, which allow the vehicle to be started from the exterior of the vehicle. These systems may reduce the security of the vehicle, and also may be the cause of no-start concerns. Remote start systems must be removed from the vehicle before any <u>PATS</u>-related no-start concerns are investigated. If the remote start system is a Power Code system, make certain it is not the cause of the no-start. Removal of the system may be necessary.

A <u>PATS</u> no-start may involve a vehicle no-start due to either the fuel injectors not operating or the starter not operating (starter relay does not close) or both. Always check for <u>PATS</u> DTCs from the PCM when a no-crank or no-start condition exists. A low state of charge in the vehicle battery may cause the <u>PATS</u> to allow starter operation, but prevent the fuel injectors from operating. If the <u>PATS</u> anti-theft indicator does not prove out (it may be either flashing or glowing steadily) and one (or both) of the previous conditions (fuel injectors and/or starter inoperative) are present, it may be due to a <u>PATS</u> issue. If the anti-theft indicator proves out, and the vehicle does not start, it is probably not a <u>PATS</u> issue. Refer to the Powertrain Control/Emissions Diagnosis (PC/ED) manual. If the anti-theft indicator does not illuminate at all, it may be an <u>IC</u> issue. GO to the Symptom Chart in this section for additional diagnostic direction.

PATS will disable the vehicle from starting if there is:

- a damaged PATS key.
- an unprogrammed PATS key.
- a non- PATS key (a conventional key or a key that does not have any electronics).
- · damaged wiring.
- · a damaged transceiver.
- a damaged PCM.

Unlimited Key Mode

<u>PATS</u> contains a feature called unlimited key mode. This feature allows a customer to program more than 8 vehicle keys, if requested. Each vehicle in unlimited key mode is set up with a special, unlimited transponder security key code. This allows all the customer vehicles (or, one vehicle) to share the same mechanically cut keys (more than 8 keys). For an individual customer, any randomly selected security key that has been previously mechanically cut and electronically programmed to the vehicle is acceptable. Refer to <u>Spare Key</u>

Programming —	Unlimited	Key Mode	in this	section.
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