

vehicle by intercepting the signals of its remote control.

The EWS system consists of a key with a transponder, a loop antenna (coil) around the steering lock cylinder, an EWS control unit and an engine control unit (DME/DDE) with encoded start release input.

BMW stated that integrated in the key is a transponder chip that consists of a transponder, a small antenna coil, and a memory which can be written to and read from. The memory contains its own unique key and customer service data. The transponder is a special transmitter/receiver that communicates with the EWS control through the transceiver module.

BMW states that the EWS control unit provides the interface to the loop antenna (coil), engine control unit and starter. The primary tasks of the EWS control unit will consist of querying key data from the transponder and providing the coded release of the engine management for a valid key. BMW also states that the engine control unit with coded start release input has been designed in such a manner that the ignition and the fuel supply are only released when a correct release signal has been sent by the EWS control unit. The EWS control unit inspects the key data for correctness and allows the ignition to operate and fuel supply to be released when a correct signal has been received.

The vehicle is also equipped with a central-locking system, which locks all doors, the hood, the trunk and fuel filler lid. To prevent locking the keys in the car upon exiting, the driver door can only be locked with a key or by the radio frequency remote control after it is closed. This also locks the other doors. If the doors are open at the time of locking, they are automatically locked when they are closed.

BMW mentioned the uniqueness of its locks and its ignition key. BMW stated that its vehicle's locks are almost impossible to pick, and its ignition key cannot be duplicated on the open market. BMW also stated that a special key blank, key-cutting machine and owner's individual code are needed to cut a new key and that its key blanks, machines and codes will be closely controlled and new keys will only be issued to authorized persons. Spare keys can only be obtained through the BMW dealer because they are not a copy of lost originals, but new keys with original electronic identifications. Additionally, spare keys can only be obtained when all necessary information (*i.e.*, VIN, registration data, customer data) has been provided by the customer or dealer. Every key request is

also documented so that any inquiries by insurance companies and investigative authorities can be followed up.

The battery for BMW's 6 vehicle line will be inaccessibly located and covered as an additional security measure. Disconnecting the battery will not allow unlocking of the vehicle's doors. However, in the event of a crash, an inertia switch will automatically unlock all the doors.

BMW also stated that its antitheft device does not incorporate any audible or visual alarms. However, based on the declining theft rate experience of other vehicles equipped with devices that do not have an audio or visual alarm for which NHTSA has already exempted from the parts-marking requirements, the agency has concluded that the absence of a visual or audio alarm has not prevented these antitheft devices from being effective protection against theft.

BMW compared the device proposed for its new line with devices which NHTSA has previously determined to be as effective in reducing and deterring motor vehicle theft as would compliance with the parts-marking requirements of Part 541, and has concluded that the antitheft device proposed for this new line is no less effective than those devices in the lines for which NHTSA has already granted exemptions from the parts-marking requirements. The antitheft system that BMW intends to install on its 6 vehicle line for the MY 2004 is exactly the same system that BMW installed on its Carline 5 for MY 1997, its Carline 3 for MY 1999, its Carline MINI for MY 2002 and its Z4 for MY 2003. The agency granted BMW's petitions for exemption of its Carline 5 beginning with the 1997 model year, its Carline 3 beginning with the 1999 model year, its Carline MINI beginning with the 2002 model year and its Carline Z4 beginning with the 2003 model year in full (see 61 FR 6292, February 16, 1996, 62 FR 62800, November 25, 1997, 66 FR 33604, June 22, 2001, and 67 FR 45180, July 8, 2002, respectively).

In order to ensure reliability and durability of the device, BMW conducted performance tests based on its own specified standards. BMW provided a detailed list of the following tests it conducted: climatic tests, high temperature endurance run, thermo-shock test in water, chemical resistance, vibrational load, electrical ranges, mechanical shock tests, and electromagnetic field compatibility.

Additionally, BMW stated that its immobilizer system fulfills the requirements of the European vehicle

insurance companies which became standard as of January 1995. The requirements prescribe that the vehicle must be equipped with an electronic vehicle immobilizing device which works independently from the mechanical locking system and prevents the operation of the vehicle through the use of coded intervention in the engine management system. In addition, the device must be self-arming (passive), and must become effective upon leaving the vehicle, or not later than the point at which the vehicle is locked, and must deactivate the vehicle only by electronic means and not with the mechanical key.

Based on evidence submitted by BMW, the agency believes that the antitheft device for the 6 vehicle line is likely to be as effective in reducing and deterring motor vehicle theft as compliance with the parts-marking requirements of the theft prevention standard (49 CFR Part 541).

The agency believes that the device will provide four of the five types of performance listed in 49 CFR 543.6(a)(3): promoting activation; preventing defeat or circumvention of the device by unauthorized persons; preventing operation of the vehicle by unauthorized entrants; and ensuring the reliability and durability of the device. The device lacks the ability to attract attention to the efforts of unauthorized persons to enter or operate a vehicle by a means other than a key (541.6(a)(3)(ii)).

As required by 49 U.S.C. 33106 and 49 CFR 543.6(a)(4) and (5), the agency finds that BMW has provided adequate reasons for its belief that the antitheft device will reduce and deter theft. This conclusion is based on the information BMW provided about its antitheft device.

For the foregoing reasons, the agency hereby grants in full BMW of North America's petition for an exemption for the MY 2004 6 vehicle line from the parts-marking requirements of 49 CFR Part 541.

If BMW decides not to use the exemption for this line, it must formally notify the agency, and, thereafter, the line must be fully marked as required by 49 CFR 541.5 and 541.6 (marking of major component parts and replacement parts).

NHTSA notes that if BMW wishes in the future to modify the device on which this exemption is based, the company may have to submit a petition to modify the exemption. § 543.7(d) states that a Part 543 exemption applies only to vehicles that belong to a line exempted under this part and equipped with the anti-theft device on which the line's exemption is based. Further, § 543.9(c)(2) provides for the submission