DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

Petition for Exemption from the Federal Motor Vehicle Motor Theft Prevention Standard; General Motors Corporation

AGENCY: National Highway Traffic Safety Administration, Department of Transportation (DOT).

ACTION: Grant of petition for exemption.

SUMMARY: This document grants in full the General Motors Corporation's (GM) petition for an exemption of the Chevrolet Spark vehicle line in accordance with 49 CFR Part 543, Exemption from Vehicle Theft Prevention Standard. This petition is granted because the agency has determined that the antitheft device to be placed on the line as standard equipment is likely to be as effective in reducing and deterring motor vehicle theft as compliance with the parts-marking requirements of 49 CFR Part 541, Federal Motor Vehicle Theft Prevention Standard (Theft Prevention Standard).

DATES: The exemption granted by this notice is effective beginning with the 2016 model year (MY).

FOR FURTHER INFORMATION CONTACT: Ms. Deborah Mazyck, Office of International Policy, Fuel Economy, and Consumer Standards, NHTSA, W43-443, 1200 New Jersey Avenue, S.E., Washington, D.C. 20590. Ms. Mazyck's phone number is (202) 366-4139. Her fax number is (202) 493-2990.

SUPPLEMENTARY INFORMATION: In a petition dated November 7, 2014, GM requested an exemption from the parts-marking requirements of the Theft Prevention Standard for the Chevrolet Spark vehicle line beginning with MY 2016. The petition requested an exemption from parts-marking pursuant to 49 CFR Part 543, Exemption from Vehicle Theft Prevention Standard, based on the installation of an antitheft device as standard equipment for the entire vehicle line.

Under 49 CFR Part 543.5(a), a manufacturer may petition NHTSA to grant an exemption for one vehicle line per model year. In its petition, GM provided a detailed description and diagram of the identity, design, and location of the components of the antitheft device for the Chevrolet Spark vehicle line. GM will install the PASS-Key III+ antitheft device as standard equipment on the Chevrolet Spark vehicle line. The PASS-Key III+ is a passive, transponder-based, electronic immobilizer device. GM stated that it will offer two types of ignition systems on its Chevrolet Spark vehicle line. Specifically, GM stated that the Spark vehicle line will be offered with a keyed ignition or a keyless ignition system; however the basic antitheft functionality and immobilization features will be the same. The keyless ignition system will be installed as standard equipment on its BEV (battery electric vehicle) and LTZ model vehicles. The keyed ignition system will be installed as standard equipment on its LS and LT models.

The major components of the keyed ignition system are the PASS-Key III+ controller module, engine control module (ECM), electronically-coded ignition key, immobilizer exciter module, radio frequency (RF) receiver, and passive antenna module. The optional keyless ignition system components are the PASS-Key III+ controller module, ECM, immobilizer exciter module, engine controller, radio frequency (RF) receiver, and passive antenna module,

low frequency antennas and electronic key (remote key fob). The remote key fob also contains buttons to perform normal remote keyless door entry functions. GM stated that the device will provide protection against unauthorized use (i.e., starting and engine fueling), but will not provide any visible or audible indication of unauthorized vehicle entry (i.e., flashing lights or horn alarm).

GM's submission is considered a complete petition as required by 49 CFR 543.7, in that it meets the general requirements contained in §543.5 and the specific content requirements of §543.6.

The PASS-Key III+ device is designed to be active at all times without direct intervention by the vehicle operator (i.e., no separate intentional action to specifically turn on the security system is needed to achieve protection). With the keyed ignition system, activation of the device occurs when the ignition has been turned off and the key removed. Deactivation of the immobilizer occurs when a valid key and matching immobilization code is verified, allowing the engine to start and continue normal operations. GM stated that the PASS-Key III+ uses a special ignition key and decoder module. The key's electrical code must be sensed and be properly decoded by the PASS-Key III+ controller module before the vehicle can be operated. The conventional code of the key is used to unlock and release the transmission shift lever and steering wheel.

GM further stated that the ignition key contains electronics in the head of the key, providing billions of possible electronic combinations. The electronics in the head of the key receive energy and data from the antenna module. Upon receipt of the data, the key will calculate a response to the data using an internal encryption algorithm and transmit the response

back to the vehicle. The antenna module then translates the radio frequency signal received from the key into a digital signal and passes the signal on to the controller module. The controller module then compares the received response to an internally calculated value. If the values match, the key is recognized as valid and a password is then transmitted through a serial data link to the ECM to enable fueling and vehicle starting. GM also stated that a secondary data challenge and response process using another encryption algorithm must be validated by the engine controller to allow continued operation. If an invalid key code is received, the PASS-Key III+ controller module will send a "Disable Password" to the engine control module and starting, ignition, and fuel will be inhibited.

With the keyless ignition system, activation of the device occurs when the operator pushes the engine Start/Stop switch to the "OFF" position. Deactivation of the immobilizer device occurs when a valid key and matching immobilization code is verified, allowing the engine to start and continue normal operations. Specifically, the electronic key resides in the form of a remote key fob. When the operator pushes the engine Start/Stop button to begin vehicle operation, the vehicle transmits data and a vehicle identifier within the passenger compartment of the vehicle thru low-frequency antennas, controlled by the passive antenna module. The electronic key receives the data and compares its vehicle identifier with the identifier previously assigned to the vehicle. If the vehicle identifier matches, the electronic key will transmit a response through the RF channel to a vehicle mounted receiver. The PASS-Key III+ control module receives the RF transmission and compares the received response with an internally calculated response. If the values match, the key is recognized as valid and a password is then transmitted through a serial data link to the ECM to enable fueling and vehicle starting. If

a valid key is not detected, the system will not transmit a password to the ECM to allow operation of the vehicle. Additionally, if an invalid electronic key code is received, the vehicle will not be allowed to transition from the "Off" mode to the "Accessory", "On", or "Start" mode positions inhibiting starting, ignition, and fuel flow of the vehicle.

In addressing the specific content requirements of 543.6, GM provided information on the reliability and durability of its proposed device. To ensure reliability and durability of the device, GM conducted tests based on its own specified standards. GM provided information on the specific tests it uses to validate the integrity, durability and reliability of the PASS-Key III+ device and believes that the device is reliable and durable since the components must operate as designed after each test. GM also stated that the design and assembly processes of the PASS-Key III+ subsystem and components are validated for 10 years of vehicle life and 150,000 miles of performance.

GM stated that the PASS-Key III+ device has been designed to enhance the functionality and theft protection provided by its first, second and third generation PASS-Key, PASS-Key II, and PASS-Key III devices. GM also referenced data provided by the American Automobile Manufacturers Association (AAMA) in support of the effectiveness of GM's PASS-Key devices in reducing and deterring motor vehicle theft. Specifically, GM stated that the AAMA's comments referencing the agency's Preliminary Report on "Auto Theft and Recovery Effects of the Anti-Car Theft Act of 1992 and the Motor Vehicle Theft Law Enforcement Act of 1984", (Docket 97-042; Notice 1), showed that between MYs 1987 and 1993, the Chevrolet Camaro and Pontiac Firebird vehicle lines experienced a significant theft rate reduction after installation of a Pass-Key like antitheft device as standard equipment on the vehicle lines.

GM also noted that theft data have indicated a decline in theft rates for vehicle lines equipped with comparable devices that have received full exemptions from the parts-marking requirements. GM stated that the theft data, as provided by the Federal Bureau of Investigation's National Crime Information Center (NCIC) and compiled by the agency, show that theft rates are lower for exempted GM models equipped with the PASS-Key like systems than the theft rates for earlier models with similar appearance and construction that were parts-marked. Based on the performance of the PASS-Key, PASS-Key II, and PASS-Key III devices on other GM models, and the advanced technology utilized in PASS-Key III+, GM believes that the PASS-Key III+ device will be more effective in deterring theft than the parts-marking requirements of 49 CFR Part 541.

Additionally, GM stated that the PASS-Key III+ is installed as standard equipment on the GMC Terrain vehicle line. The agency notes that the GMC Terrain vehicle line has been equipped with the device since introduction of its MY 2010 vehicles. GM was granted an exemption from the parts-marking requirements by the agency for the GMC Terrain vehicle line beginning with the 2010 MY (See 74 FR 3132, January 16, 2009). The average theft rate for the GMC Terrain vehicle line, based on NHTSA's theft data, using 3 MYs theft data (MYs 2010-2012) is 0.3235, which is substantially below the median theft rate established by the agency.

GM further stated that it believes that PASS-Key III+ devices will be more effective in deterring theft than the parts-marking requirements and that the agency should find that inclusion of the PASS-Key III+ device on the Chevrolet Spark vehicle line is sufficient to qualify it for full exemption from the parts-marking requirements.

Based on the evidence submitted by GM, the agency believes that the antitheft device for

the Chevrolet Spark 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 541).

Pursuant to 49 U.S.C. 33106 and 49 CFR 543.7 (b), the agency grants a petition for exemption from the parts-marking requirements of Part 541 either in whole or in part, if it determines that, based upon substantial evidence, the standard equipment antitheft device is likely to be as effective in reducing and deterring motor vehicle theft as compliance with the parts-marking requirements of Part 541. The agency finds that GM has provided adequate reasons for its belief that the antitheft device for the Chevrolet Spark 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). This conclusion is based on the information GM provided about its device.

The agency concludes that the device will provide the four of the five types of performance listed in §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.

GM's proposed device lacks an audible or visible alarm. Therefore, this device cannot perform one of the functions listed in 49 CFR Part 543.6(a)(3), that is, to call attention to unauthorized attempts to enter or move the vehicle. Based on comparison of the reduction in the theft rates of Chevrolet Corvettes using a passive antitheft device along with an audible/visible alarm system to the reduction in theft rates for the Chevrolet Camaro and the Pontiac Firebird models equipped with a passive antitheft device without an alarm, GM finds that the lack of an

alarm or attention-attracting device does not compromise the theft deterrent performance of a device such as PASS-Key III+ device. In these instances, the agency has concluded that the lack of an audible or visible alarm has not prevented these antitheft devices from being effective protection against theft.

For the foregoing reasons, the agency hereby grants in full GM's petition for exemption for the Chevrolet Spark vehicle line from the parts-marking requirements of 49 CFR Part 541. The agency notes that 49 CFR Part 541, Appendix A-1, identifies those lines that are exempted from the Theft Prevention Standard for a given model year. 49 CFR Part 543.7(f) contains publication requirements incident to the disposition of all Part 543 petitions. Advanced listing, including the release of future product nameplates, the beginning model year for which the petition is granted and a general description of the antitheft device is necessary in order to notify law enforcement agencies of new vehicle lines exempted from the parts-marking requirements of the Theft Prevention Standard.

If GM decides not to use the exemption for this line, it should formally notify the agency. If such a decision is made, the line must be fully marked according to the requirements under 49 CFR Parts 541.5 and 541.6 (marking of major component parts and replacement parts).

NHTSA notes that if GM 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. Part 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 antitheft device on which the line's exemption is based. Further, Part 543.9(c)(2) provides for the submission of petitions "to modify an exemption to permit the use of an antitheft device similar to but differing from the one specified in that

exemption."

The agency wishes to minimize the administrative burden that Part 543.9(c)(2) could place on exempted vehicle manufacturers and itself. The agency did not intend in drafting Part 543 to require the submission of a modification petition for every change to the components or design of an antitheft device. The significance of many such changes could be *de minimis*. Therefore, NHTSA suggests that if the manufacturer contemplates making any changes, the effects of which might be characterized as *de minimis*, it should consult the agency before preparing and submitting a petition to modify.

Under authority delegated in 49 CFR part 1.95.

_____

Raymond R. Posten,
Associate Administrator for
Rulemaking.

BILLING CODE: 4910-59-P

[FR Doc. 2015-04161 Filed 02/27/2015 at 8:45 am; Publication Date: 03/02/2015]